

SVX-500

VERTICAL MACHINE CENTER

ELECTRICAL MANUAL



July/2013

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1. Alarm & operation message

Alarm message detail list

Message	Define
1000	1000 HEAT EXCHANGE OVER LOAD : QF1
1004	1004 SPINDLE FAN OVER LOAD : QF7
1023	1023 HYDRAULIC MOTOR OVER LOAD : QM14
1024	1024 GREASE PUMP MOTOR OVER LOAD : QM15
1026	1026 CHIP FLUSH MOTOR OVER LOAD : QM6
1030	1030 CTS MOTOR OVER LOAD : QM9
1035	1035 CHIP CONVEYOR MOTOR OVER LOAD : QM3
1047	1047 COOLANT MOTOR OVER LOAD : QM1
1052	1052 OIL SKIMMER OVER LOAD : QM7
1060	1060 MAGAZINE POT EMPTY ALARM
1061	1061 SUB-OPERATION BOARD VALID
1062	1062 ATC DOOR OPEN ALARM
1063	1063 MAGAZINE RETURN ALARM
1064	1064 MAGAZINE MAINTENANCE MODE ON
1070	1070 SPINDLE EMPTY ALARM
1074	1074 SPINDLE ORIENT ALARM
1076	1076 SPINDLE ROTATE ALARM
1077	1077 SPINDLE CLAMP/UNCLAMP ALARM
1081	1081 SPINDLE DRIVER ALARM
1082	1082 SPINDLE OIL & AIR DATA ALARM
1090	1090 Y AXIS COVER OPEN ALARM
1091	1091 OPERATION DOOR OPEN ALARM
1166	1166 EXTERNAL COOLANT TANK LEVEL LOW
1175	1175 SPINDLE LUBE OIL LEVEL LOW
1176	1176 SPINDLE LUBE PRESSURE ERROR
1177	1177 AIR PRESSURE LOW ALARM
1183	1183 COOLANT TANK LEVEL LOW
1186	1186 SPINDLE COOLER ALARM
1197	1197 TOOL LIFE FULL
1245	1245 AIR PRESSURE SWITCH OFF ALARM

Alarm message and troubleshooting description

Message	1000 HEAT EXCHANGE OVER LOAD : QF1
Description	The EC cabinet heat exchange over load .
Troubleshooting	<ol style="list-style-type: none"> 1. Please check heat exchange coolant fan. 2. Please clen the filter of heat exchange.
Message	1004 SPINDLE FAN OVER LOAD : QF7
Description	The external spindle fan is overloaded.
Troubleshooting	<ol style="list-style-type: none"> 1. Check it if a trip of QM7 over current switch in the electrical box occurs. Make sure it functions well. 2. Check if the external spindle fan runs smoothly. Make sure it works well.
Message	1023 HYDRAULIC MOTOR OVER LOAD : QM14
Description	The hydraulic pump motor is overloaded.
Troubleshooting	<ol style="list-style-type: none"> 1. Please check hydraulic oil level is normal. 2. Please check hydraulic oil is clean , if it not , please change it.
Message	1024 GREASE PUMP MOTOR OVER LOAD : QM15
Description	Auto grease lubrication pump alarm.
Troubleshooting	<ol style="list-style-type: none"> 1. Please check grease level is normal. 2. Please made a regular change it.
Message	1026 CHIP FLUSH MOTOR OVER LOAD : QM6
Description	The flash motor is overloaded.
Troubleshooting	<ol style="list-style-type: none"> 1. Check if a trip of QM6 over current switch in the electrical box occurs. Make sure it works well. 2. Check the level of the coolant. Make sure the coolant reaches the required level. 3. Check if the machining motor runs smoothly. Make sure all functions work well.
Message	1030 CTS MOTOR OVER LOAD : QM9
Description	CTS motor is overloaded
Troubleshooting	<ol style="list-style-type: none"> 1. Check if a trip of QM9 over current switch in the electrical box occurs. Make sure it functions well. 2. Check the level of CTS fluid. Make sure the fluid reaches the required level. 3. Check if CTS motor runs smoothly. Make sure it functions well

Message	1035 CHIP CONVEYOR MOTOR OVER LOAD : QM3
Description	The motor for chip conveyor is overloaded.
Troubleshooting	<ol style="list-style-type: none"> 1. Check if a trip of QM3 over current switch in the electrical box occurs. Make sure it functions well. 2. Check if the chip conveyor runs smoothly. Make sure it works well.
Message	1047 COOLANT MOTOR OVER LOAD : QM1
Description	The motor for sending coolant is overloaded.
Troubleshooting	<ol style="list-style-type: none"> 1. Check all motor over-current switches in the electrical box and remove the overloading condition. 2. Press the "RESET" button to relieve the alarm.
Message	1052 OIL SKIMMER OVER LOAD : QM7
Description	The motor for oil skimming is overloaded.
Troubleshooting	<ol style="list-style-type: none"> 1. Check if a trip of QM7 over current switch in the electrical box occurs. Make sure it functions well. 2. Check if the motor for oil skimming run smoothly. Make sure it functions well.
Message	1060 MAGAZINE POT EMPTY ALARM
Description	Magazine pot dose not empty
Troubleshooting	<ol style="list-style-type: none"> 1. Use manual mode to open the ATC door , make sure magazine pot is empty, try auto ATC tool change again. 2. Take that tool out , try auto ATC tool change again. 3. Check that detect sensor , make sure it functions well.
Message	1061 SUB-OPERATION BOARD VALID
Description	The maganize side OP panel be turn on.
Troubleshooting	Please turn the OP panel from manual mode to auto mode.
Message	1062 ATC DOOR OPEN ALARM
Description	ATC door open does not finish
Troubleshooting	<ol style="list-style-type: none"> 1. Use manual mode or MDI mode (M code) to open ATC door. 2. Check ATC door detect switch has normal work.
Message	1063 MAGAZINE RETURN ALARM
Description	Magazine does not return finish.
Troubleshooting	<ol style="list-style-type: none"> 1. Use manual mode or MDI mode (M code) to backward magazine in normal position. 2. Check magazine backward in-position detect switch has normal work.

Message	1064 MAGAZINE MAINTENANCE MODE ON
Description	When keep relay #15.2 enable, magazine maintenance mode be turn on.
Troubleshooting	Disable keep relay #15.2 to turn off magazine maintenance mode.
Message	1070 SPINDLE EMPTY ALARM
Description	When execution auto tool change, spibdle side and tool side have tool at the same time.
Troubleshooting	<ol style="list-style-type: none"> 1. Use manual mode to open the ATC door , make sure magazine pot is empty, try auto ATC tool change again. 2. Take that tool out , try auto ATC tool change again, check that detect sensor , make sure it functions well.
Message	1074 SPINDLE ORIENT ALARM
Description	Spindle orientation fail
Troubleshooting	<ol style="list-style-type: none"> 1. Check spindle driver is ready. 2. Check spindle mechanism , make sure oes not have any interferenc.
Message	1076 SPINDLE ROTATE ALARM
Description	Spindle rotation alarm
Troubleshooting	<ol style="list-style-type: none"> 1. Check spindle driver is ready. 2. Check spindle mechanism , make sure oes not have any interferenc.
Message	1077 SPINDLE CLAMP/UNCLAMP ALARM
Description	An error of tool clamping controlled by the spindle occurs.
Troubleshooting	<ol style="list-style-type: none"> 1. Check the spindle unclamping mechanism for tool clamping and unclamping. Make sure it works well. 2. Check the detection switch for spindle tool clamping and unclamping. Make sure it works wells. 3. Activate spindle tool clamping with M75 command. Press "RESET" button once to relieve the alarm.
Message	1081 SPINDLE DRIVER ALARM
Description	Spindle amplifier alarm
Troubleshooting	Please check amplifier LED display, if it does not “ - - “ , please contact with SHARP.
Message	1082 SPINDLE OIL & AIR DATA ALARM
Description	Spindle lubrication time set error
Troubleshooting	Revise lubrication time, and try to test it again.

Message	1090 Y AXIS COVER OPEN ALARM
Description	Y axis telescopic cover does not be locked.
Troubleshooting	Please make sure Y axis telescopic cover is locked by lock pin.
Message	1091 OPERATION DOOR OPEN ALARM
Description	The safety door is not properly closed.
Troubleshooting	The safety door is not properly closed. Make sure the door is closed to cancel the message.
Message	1166 EXTERNAL COOLANT TANK LEVEL LOW
Description	The level of the external tank gets too low.
Troubleshooting	1. Check the level of the fluid in the external coolant tank. 2. Make sure the fluid reaches the required level.
Message	1175 SPINDLE LUBE OIL LEVEL LOW
Description	Alarm for spindle automatic lubricator level
Troubleshooting	1. Check the automatic lubricator. 2. Make sure the lubricant reaches the required level to automatically cancel the message.
Message	1176 SPINDLE LUBE PRESSURE ERROR
Description	Pneumatic pressure for sliding rail too low
Troubleshooting	1. Relieve the alarm by adding oil and pressing pressure feed button until reaching the required pneumatic pressure for sliding rail for 2 seconds.
Message	1177 AIR PRESSURE LOW ALARMSz
Description	The source of air pressure is too low.
Troubleshooting	Check the air pressure system. Make sure the air pressure reaches to the required level and the message is automatically cancelled.
Message	1183 COOLANT TANK LEVEL LOW
Description	The level of coolant gets too low.
Troubleshooting	Check the level of the coolant. Make sure coolant is sufficient.
Message	1186 SPINDLE COOLER ALARM
Description	alarm for spindle cooling mechanism
Troubleshooting	1. Check the spindle cooling mechanism. 2. Add oil to solve the problem if necessary.

Message	1197 TOOL LIFE FULL
Description	The tool life count reaches the limit.
Troubleshooting	1. Check and replace the tool with full life count. Make sure the tool is properly installed without damage. 2. Reset tool life count to zero.
Message	1245 AIR PRESSURE SWITCH OFF ALARM
Description	The source of air pressure is too low.
Troubleshooting	Check the air pressure system. Make sure the air pressure reaches to the required level and the message is automatically cancelled.

2. Parts list

Index	Name	Type	Spec.	Q'ty
TRANS1/ TRANS2	RELAY PC BOARD	01D-08AC	OMORN	1
		01D-08 DC	OMORN	2
		01D-04-DC	OMORN	2
CB104~107	TRANSPORTOR BOARD	0I-I/O		4
	3 PHASE SPARK KILLER	SQ3-351W	AC220V 3P	9
	3 PHASE SPARK KILLER	SQ1-511W		1
PS1	1 PHASE POWER SUPPLIER	S-250-24	10A	1
PS2	1 PHASE POWER SUPPLIER	S-150-24	6.5A	1
KAA	RELAY	LY-4NJ DC24V	DC24V 10A4P	1
KAA	RELAY	MY-4NJ DC24V	DC24V 10A4P	1
TB1	TERMINAL BLOCK	2002-1201	10A600VAC	63
TB1	TERMINAL BLOCK	2002-1401	10A600VAC	37
TB1	TERMINAL BLOCK	2002-403	30A600VAC	12
TB1	TERMINAL BLOCK	2002-1492	30A600VAC	2
	TERMINAL NAME PLATE			100
	TERMINAL LINK BLOCK	2002-402		1
KAA	1 PHASE FILTER	FN 2030-6-06		1
KAA	GROUND PLATE	20P		2
KAA	GROUND PLATE	3P		1
QF2 / QF6	SAFE TRIP	1P1A	10 KA	1
QF2 / QF6	SAFE TRIP	1P 2A	10 KA	3
QF3 / QF5	SAFE TRIP	1P 4A	10 KA	1
QF3 / QF5	SAFE TRIP	1P 6A	10 KA	1
QF3 / QF5	SAFE TRIP	3P 1A	10 KA	1
QF2 , 3 ,8	ASSISTANT CONNECT OFSAFE TRIP	FAZ-XHIN11 1A1B		2
SN1 / SN2	PROXIMITY SENSOR	E2E2	PNP N0	2
NFB	NONE FUSE BREAKER	EABW250EAG 3P 125A	3P125A	1
NFB	NONE FUSE BREAKER	EABW250EAG 3P 150A	3P150A	1

Index	Name	Type	Spec.	Q'ty
NFB	HANDLE OPERATION MECHANISM	BW9N0GAA		1
NFB	TRIPPER COIL	BW9FKG0	AC220V	1
KMA	MAGNETIC CONTACTOR	DILM150	AC220V	1
KMA	MAGNETIC CONTACTOR	DILM80	AC220V	2
KMA	MAGNETIC CONTACTOR	DILM17	AC220V	1
QM2	OVER RELAY	ZB32-16-24A		1
KM1 / KM2 / KMB	MAGNETIC CONTACTOR	DILM9-01-SOND516	DC24V	10
QM2	OVER RELAY	ZB12-6	4A~6A	2
QM2	OVER RELAY	ZB12-4	2.5A~4A	1
QM2	OVER RELAY	ZB12-10	6A~10A	2
QM2	OVER RELAY	ZB12-2.4	1.6~2.4A	1
QM2	OVER RELAY	ZB12-	0.6-1A	1
QM2	OVER RELAY	ZB12-0.4	0.4A~0.6A	1
	MACHINE INTERLOCK KID	DIL M12-XRL / DILM12-XMV DILM09		1
	ASSISTANT CONTACTOR	DILM150-XHI11	1A1B	2
	TOWER LIGHT	LGL-24V-3-B (R,Y,G(LED))	24V	1
	WORKING LIGHT	GWDCE124G+GS- 108/220V24 3*2M/515L	24W AC220V	1
	LED WORK LIGHT	GTL-24-24R-120°+GS-6		2
	PUSH BOTTON WITH CONNECT	ZB5-AS8 & ZB5-AZ102		1
	ASSISTANT CONTACTOR BOX		PS1809-06	1
	BALL SWITCH	SW(T021B+TOP2)		1
	FOOT SWITC			1
	EMG STOP BOTTON	ZB5-AS844+ZB5-AZ102 1B	§ 22 1B	1
OPERATION BOARD	5 AXIS ONLY			1
MPG UNIT	MPG MODULE			1
RS232 BOX	RS232 INTERFACE	WITH NET CONNECT		1
HE	HEAT EXCHANGER			1

3. M code list

M Code	Define
M0	Program feed hold
M1	Program option stop
M2	Program finish
M3	Spindle CW
M4	Spindle CCW
M5	Spindle Stop
M6	Auto tool change
M7	Spindle air blow
M8	Spindle cutting coolant on
M9	M7・M8 OFF
M10	C axis clamp
M11	C axis unclamp
M12	A axis clamp
M13	A axis unclamp
M19	Spindle orientation
M29	Rigid tapping
M20	ATC door close
M21	ATC door open
M36	OVC close
M37	OVC on
M82	Spindle tool clamp
M83	Spindle tool unclamp
M84~M87	No used
M100	Magazine forward
M101	Magazine backward
M111~M117	Spare M code

4. PLC parameter

4.1 Keep relay

Item	Define = 0	Define = 1
K0.0	Spindle coolant alarm message disable	Spindle coolant alarm message valid
K2.1	Oil skimmer disable	Oil skimmer valid
K3.5	C axis clamp device pneumatic	C axis clamp device hydraulically
K5.0	Chip flush motor No. 1 disable	Chip flush motor No. 1 valid
K5.1	CTS function normally	CTS function shift to be coolant
K5.2	CTS function disable	CTS function valid
K5.3	Air blast mist function disable	Air blast mist function valid
K5.5	Chip flush pump motor disable	Chip flush pump motor valid
K6.0	Chip conveyor disable	Chip conveyor valid
K6.1	Coolant tank level low alarm message disable	Coolant tank level low alarm message valid
K6.5	Chip flush motor disable	Chip flush motor valid
K7.0	Chip conveyor unit disable	Chip conveyor unit valid
K10.3	External coolant tank level low message disable	External coolant tank level low message valid
K10.5	Coolant pump motor alarm message disable	Coolant pump motor alarm message valid
K15.2	Magazine maintenance mode disable	Magazine maintenance mode valid
K29.5	Program protect key valid	Program protect key disable
K29.6	Machine lock PB active machine lock function	Program protect key active machine lock function

Standard setting list

Keep relay	setting	Keep relay	setting	Keep relay	setting	Keep relay	setting
K0.0	1	K2.0	1	K3.5	1	KK5.0	1
K5.1	0	K5.2	1	K5.3	1	K5.5	1
K6.0	1	K6.1	0	K6.5	1	K7.0	1
K10.3	0	K10.5	1	K15.2	0	K29.5	0
K29.6	0						

4.2 Timer detail list

Timer no.		Define	Preset	Unit
1	T0	Lubrication on timer of slider way	60000	60 sec
2	T2	Lubrication off interval timer of slider way	0	
3	T4	Single block stop time out	30000	30 sec
4	T6	Air shut off time after preparation	1200000	1200 sec
5	T8	High speed spindle protect time	2500	2.5 sec
7	T12	Chip conveyor on timer	5000	5 sec
8	T14	Chip conveyor off interval timer	30000	30 sec
10	T18	A axis table clamp finish time	1000	1 sec
11	T20	A axis table unclamp finish time	1000	1 sec
12	T22	C axis table clamp delay time	1000	1 sec
13	T24	C axis table unclamp delay time	1000	1 sec
26	T50	Oil & air blast on timer	25000	25 sec
53	T104	Spindle tool unclamp finish time	1000	1 sec
54	T106	Spindle tool clamp finish time	1000	1 sec

4.3 Counter

Counter detail list

Counter no.	Define	Preset	Unit
C20	Spindle oil & air interval off time	20	20 sec
C60	Auto grease interval off time	24000	400 min

4.4 Data table

Data table detail list

Data	Define	Preset
D88	Oil & air blast off interval timer	-80
D89	Oil & air blast off interval timer	4

Special setting

Parameter :

P1242 : REF. POINT #3 : Upper stand-by position for ATC device




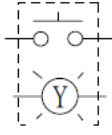
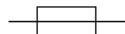

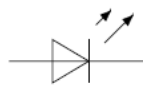
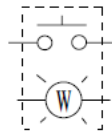

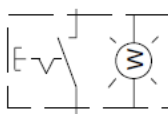
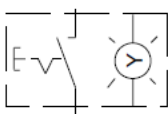
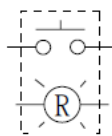

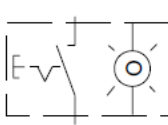
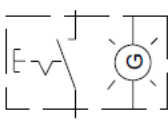
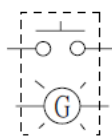
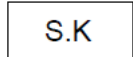

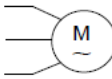




P1243 : REF. POINT #4 : Lower stand-by position for ATC device

P4031 : Shift position of orientation / M19

#1132 : Current tool no. of spindle (Must same as tool no. of operation board)

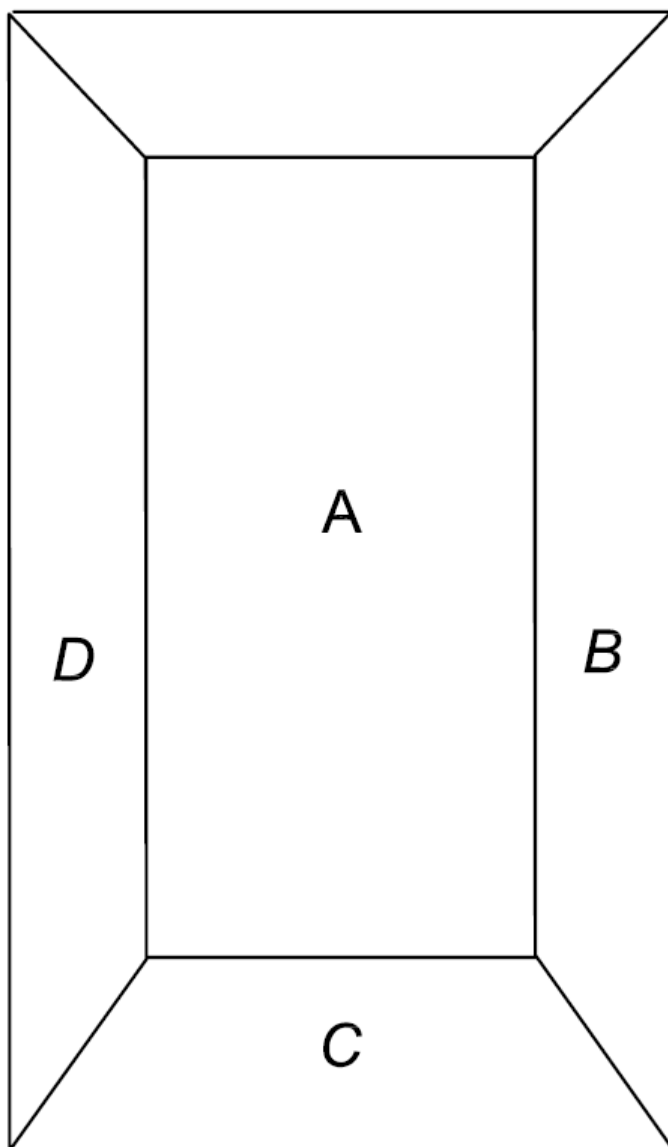
5. ELECTRIC-SYMBOL DETAIL

Proximity switch break contact	Proximity switch make contact	limit switch break contact	limit switch make contact
近接開關 常閉接點	近接開關 常開接點	極限開關 常閉接點	極限開關 常開接點
Pushbutton make contact	Pushbutton break contact	Float switch break contact	Float switch make contact
按鍵開關 常開接點	按鍵開關 常閉接點	浮球開關 常閉接點	浮球開關 常開接點
GREEN LAMP	YELLOW LAMP	ILLuminated Pushbutton Momentary	Transformer
綠色指示燈	黃色指示燈	照光式按鍵開關瞬間型	變壓器
White Lamp	Orange Lamp	Red Lamp	Key Switch
白色指示燈	橘色指示燈	紅色指示燈	鑰匙開關
ILLuminated Pushbutton Alternate	Pushlock Turn Reset Type Pushbutton	Solenoid Valvecoil	PNP Proximity Switch Make contact
照光式按鍵開關交替型	按壓鎖定旋轉釋放型按鍵開關	電磁閥	PNP型近接開關 常開接點
AC MOTOR 1φ	NPN Proximity Switch Break contact	PNP Porximity switch Break contact	NPN Proximity Switch Make contact
交流單向馬達	NPN型近接開關 常閉接點	PNP型近接開關 常閉接點	NPN型近接開關 常開接點

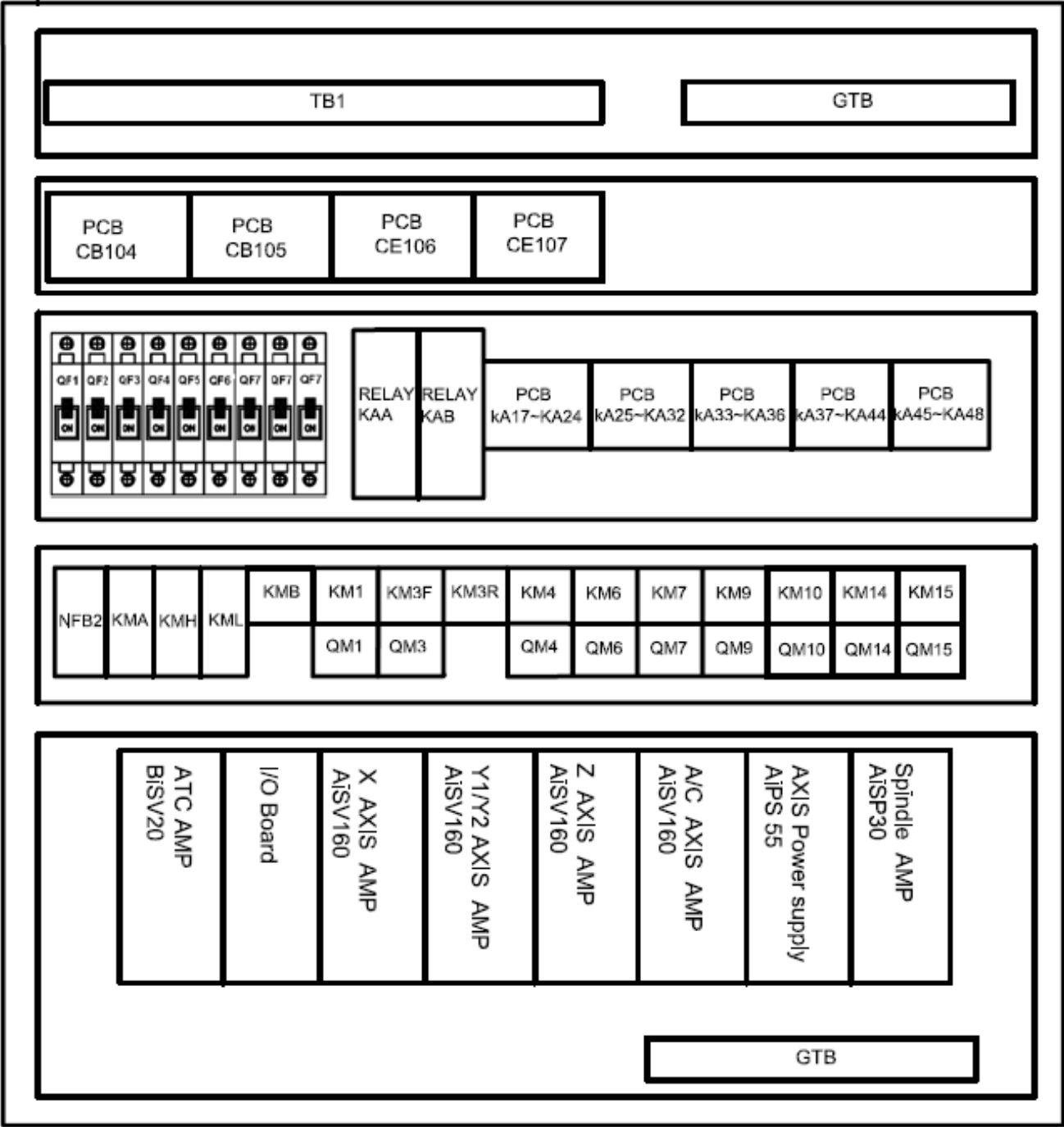
NC INPUT	NC OUT	Ground	ILLuminated Pushbutton momentary(Yellow)
NC信號 輸入	NC信號 輸出	接地	照光式按鍵開關瞬間型 (黃色)
			
FUSE	DIODE	LED	ILLuminated Pushbutton momentary(White)
保險絲	二極體	發光二極體	照光式按鍵開關瞬間型 (白色)
			
Not gate	ILLuminated Pushbutton Alternate(White)	ILLuminated Pushbutton Alternate(Yellow)	ILLuminated Pushbutton momentary(Red)
反閘	照光式按鍵開關交替型 (白色)	照光式按鍵開關交替型 (黃色)	照光式按鍵開關瞬間型 (紅色)
			
Buffer	ILLuminated Pushbutton Alternate(Orange)	ILLuminated Pushbutton Alternate(Green)	ILLuminated Pushbutton momentary(Green)
暫存器	照光式按鍵開關交替型 (橘色)	照光式按鍵開關交替型 (綠色)	照光式按鍵開關瞬間型 (綠色)
			
Spark killer	Resistance	AC MOTOR 3φ	Relay ¹
火花消除器	電阻	交流三向馬達	繼電器
			
Capacitor	Make contact	Break contact	
電容器	常開接點	常閉接點	
			

6. EC BOX LAYOUT

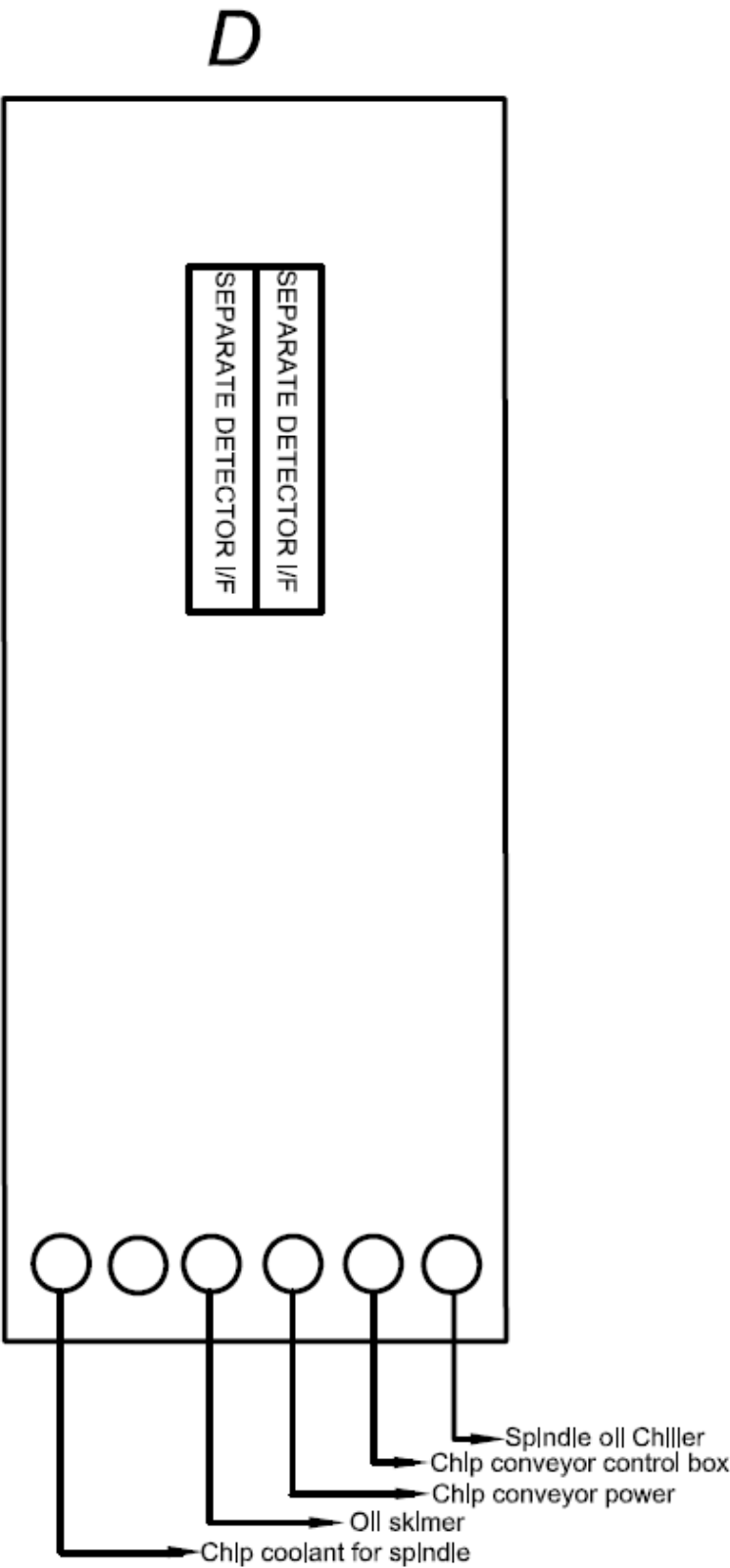
6.1 ELECTRICAL BOARD LAYOUT



A

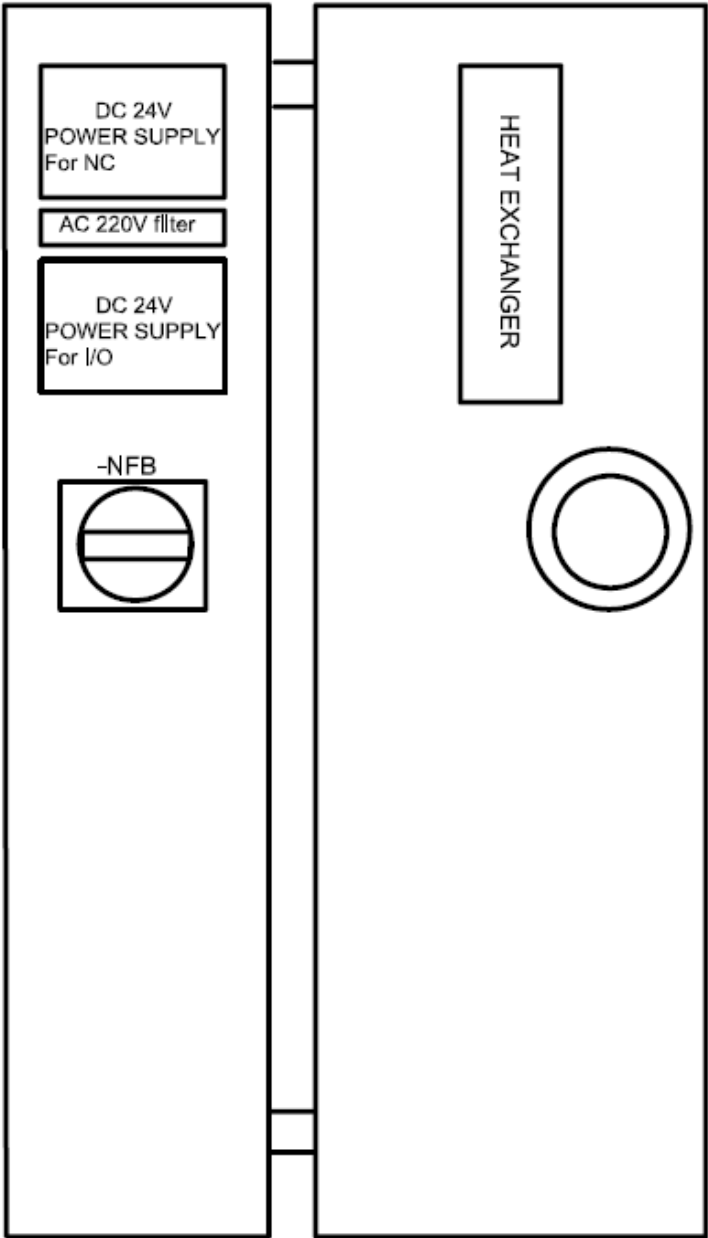


6.2 ELECTRICAL CABINET LEFT SIDE

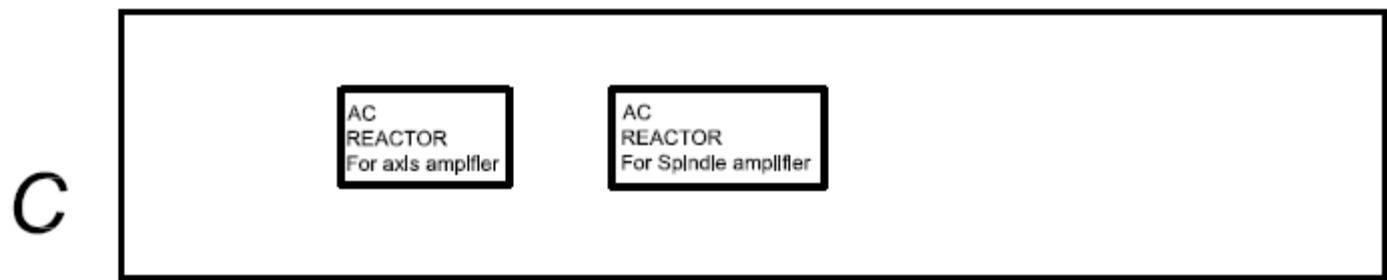


6.3 ELECTRICAL CABINET RIGHT SIDE

B

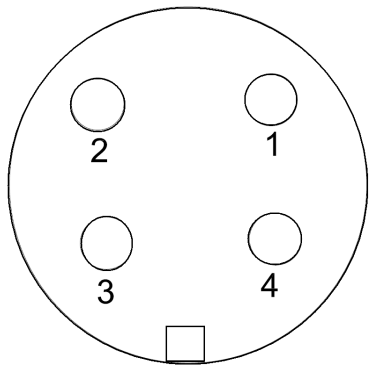


6.4 ELECTRICAL CABINET FLOOR SIDE



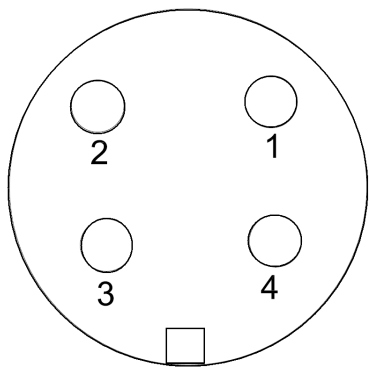
7. AC MOTOR CONNECT DESCRIPTION

7.1 CHIP CONVEYOR MOTOR



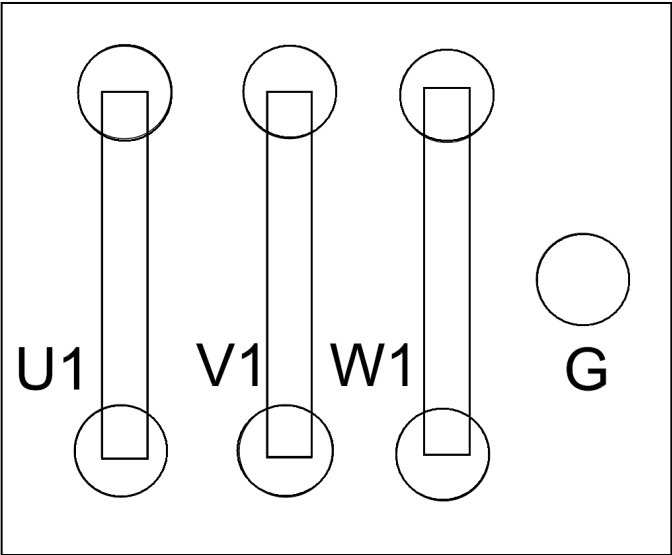
PIN	NAME	WIRE COLOR
1	U3	BROWN
2	V3	BLUE
3	W3	BLACK
4	G	YELLOW

7.2 OIL SKIMMER MOTOR



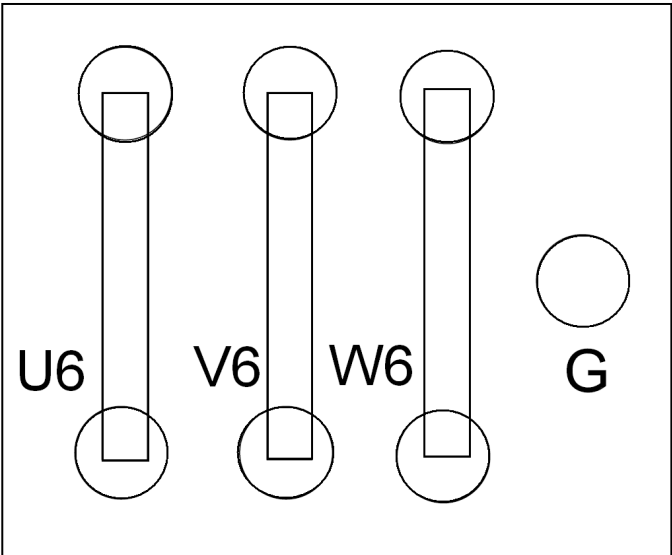
PIN	NAME	WIRE COLOR
1	U7	BROWN
2	V7	BLUE
3	W7	BLACK
4	G	YELLOW

7.3 SPINDLE CHIP COOLANT MOTOR



PIN	NAME	WIRE COLOR
1	U1	BROWN
2	V1	BLUE
3	W1	BLACK
4	G	YELLOW

7.4 CHIP FLUSH MOTOR



PIN	NAME	WIRE COLOR
1	U6	BROWN
2	V6	BLUE
3	W6	BLACK
4	G	YELLOW

7.5 LUBRICATION PUMP

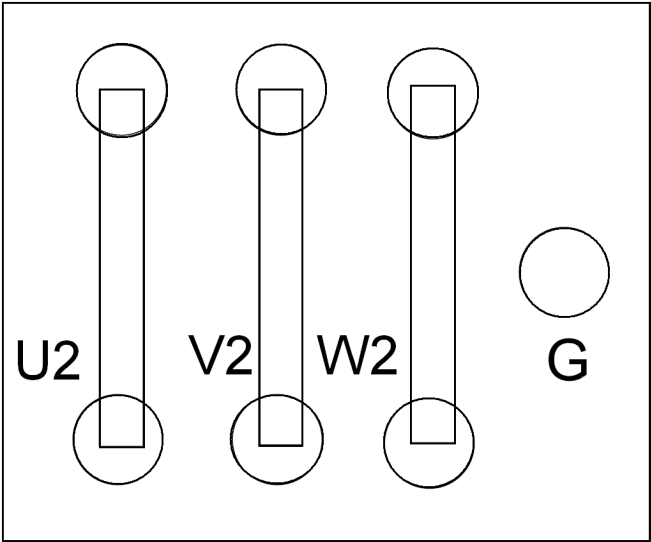
1	2	3	4	5	6	7
17A	L11	L21	24V	131	197	G

PIN	NAME	WIRE COLOR
1	17A	BROWN
2	L11	YELLOW
3	L21	ORANGE
4	24V	BLACK 、 GRAY
5	131	BLUE
6	197	WHITE
7	G	GREE

7.6 SPINDLE OIL COOLANT

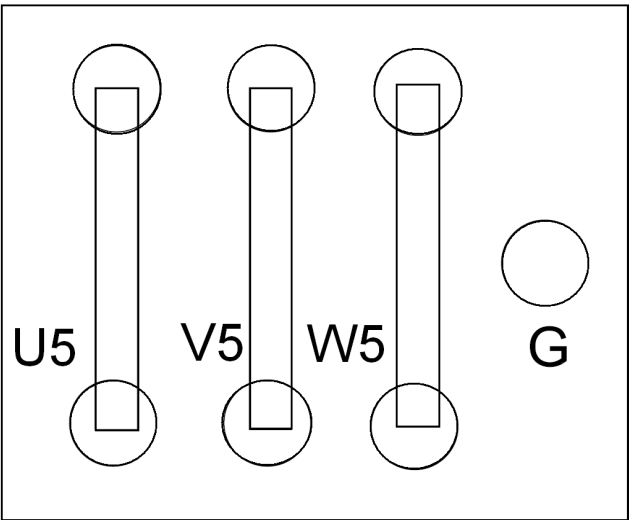
95	93	225	224	E	T	S	R
182	24V			G	W4	V4	U4

7.7 MAGAZINE MOTOR (Option)



PIN	NAME	WIRE COLOR
1	U2	BLACK
2	V2	RED
3	W2	BLUE
4	G	YELLOW

7.8 ATC MOTOR(Option)



PIN	NAME	WIRE COLOR
1	U5	BLACK
2	V5	RED
3	W5	BLUE
4	G	YELLOW

7.9 Terminal Description

TB1 :

ITEM	1	2	3	4	5	6	7	8	9	10	11	12	13	14
NAME	L11	L11	L11	L11	L21	L21	L21	L21	L31	L31	MCC1			

ITEM	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
NAME	U1	V1	W1	U3	V3	W3	U4	V4	W4	U6	V6	W6	U7	V7	W7	L17

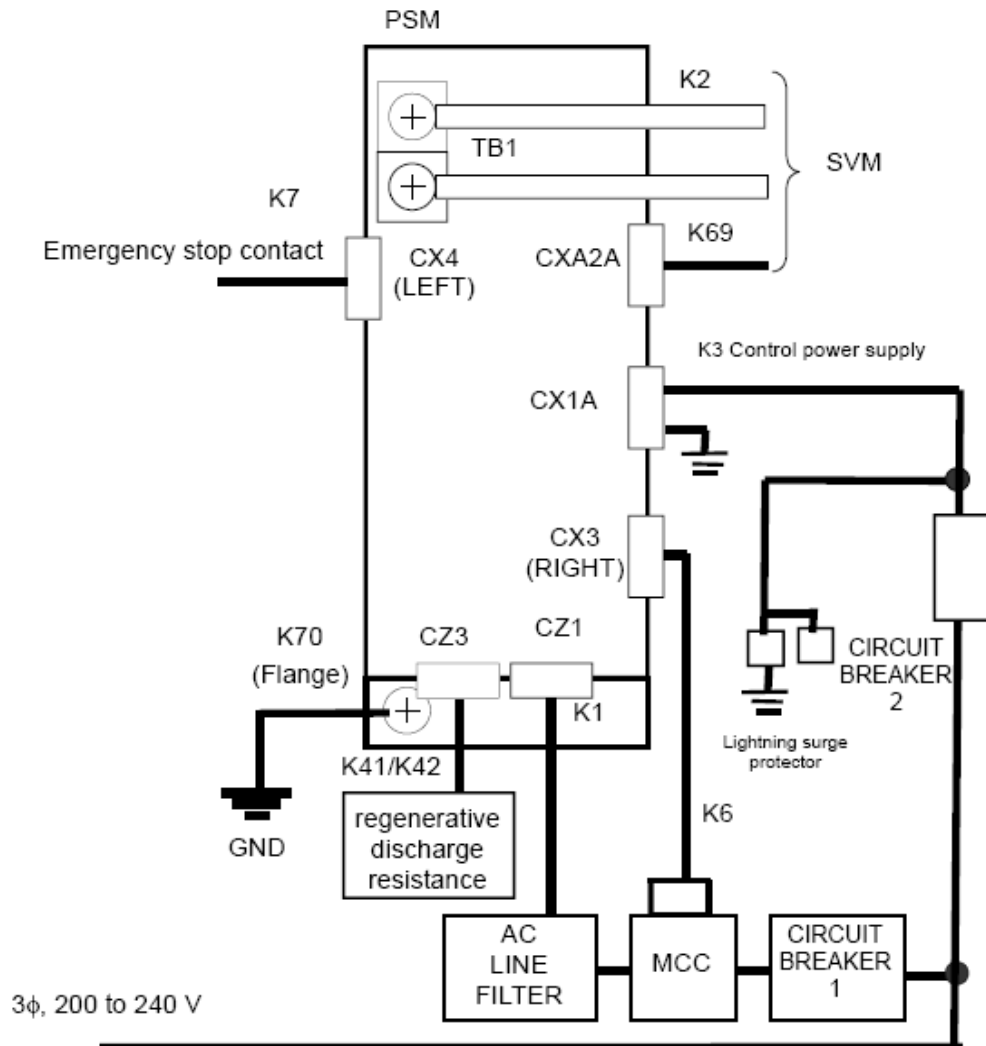
ITEM	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
NAME	L18	L19	U10	V10	W10	U14	V14	W14				L17	L18	L19	17A

ITEM	46	47	48	49	50	51	52	53	54	55	56	57	58	59
NAME	L11	L21	24V	24V	24V	24V	0V	0V	0V	0V	0V	DC24V	DC24V	DC0V

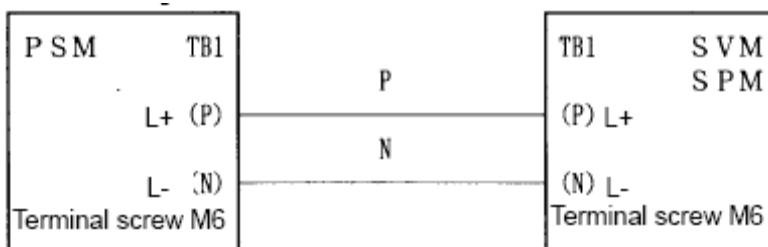
ITEM	60	61	62	64	65	66	67	68	69	70	71	72	73	74
NAME	DC0V	PON	POFF				NC24	POFF	E12	E13	99			

8. CONNECTION PIN ASSIGNMENT

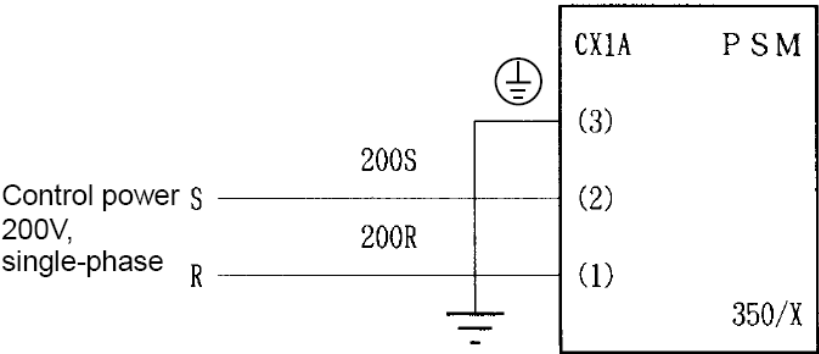
8.1 AMP POWER SUPPLY



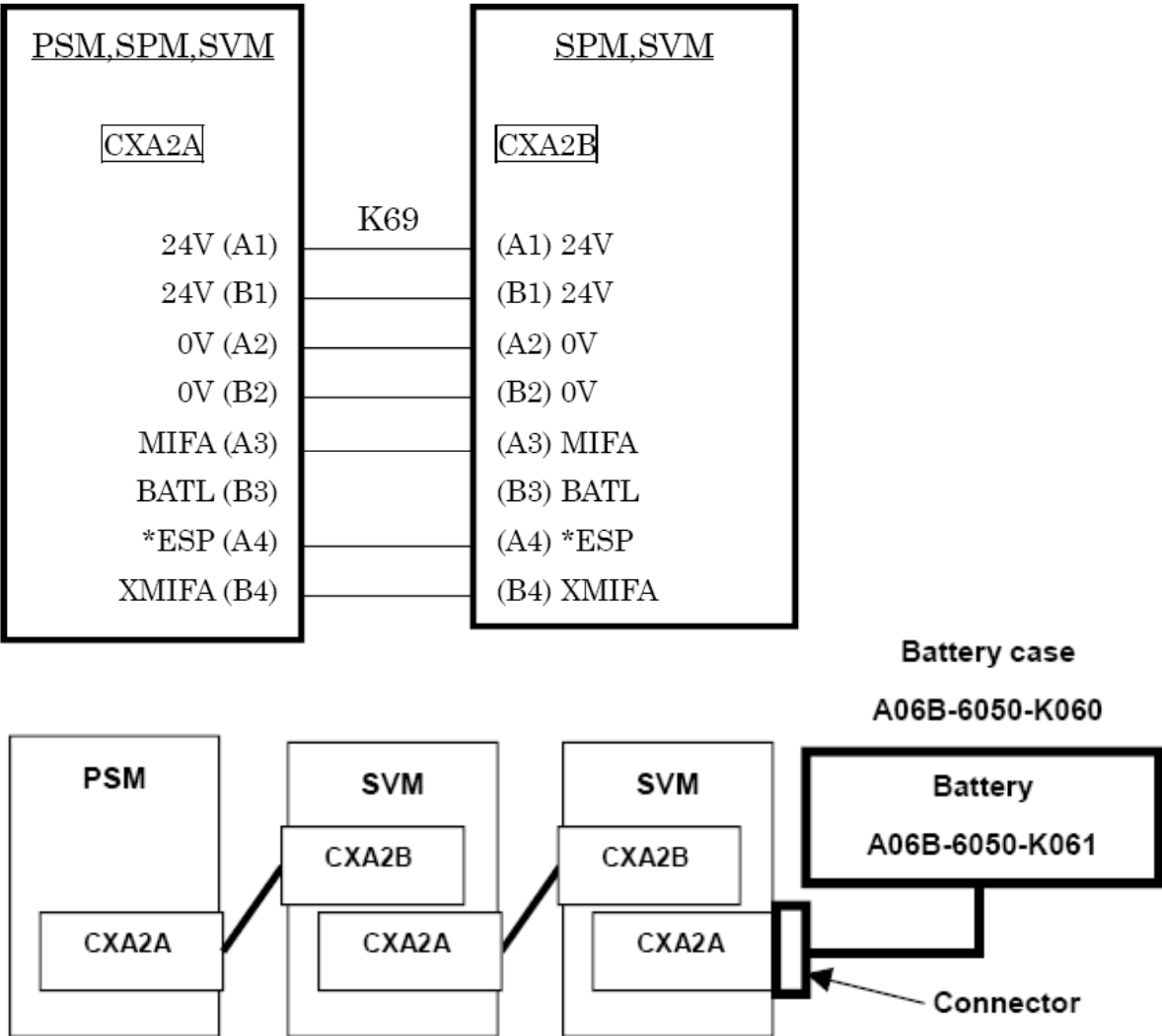
1) K2 :

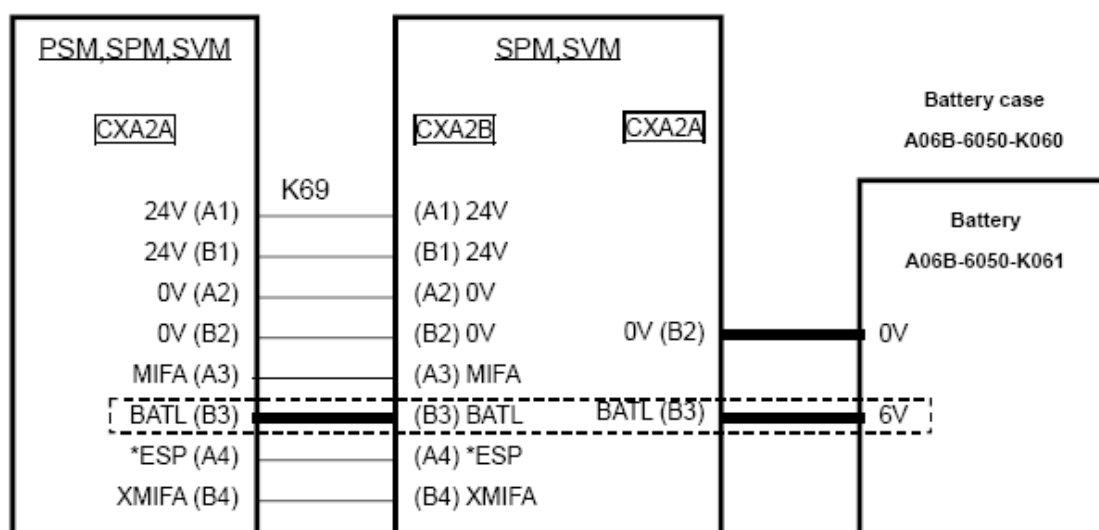
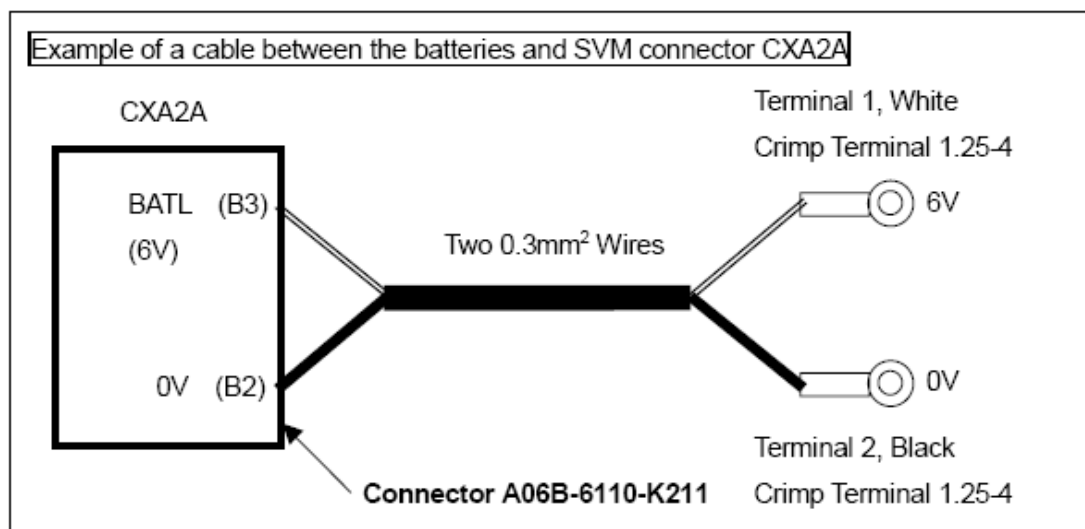


2) K3 :

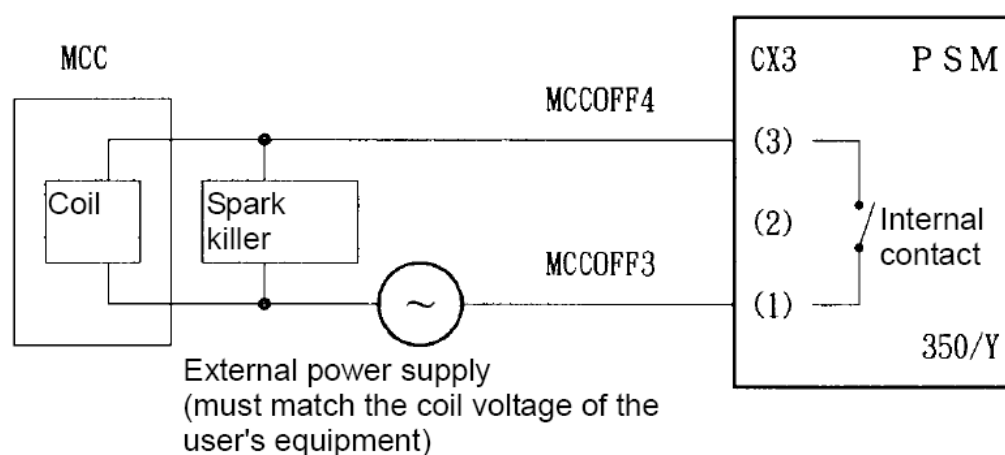


3) K69 :

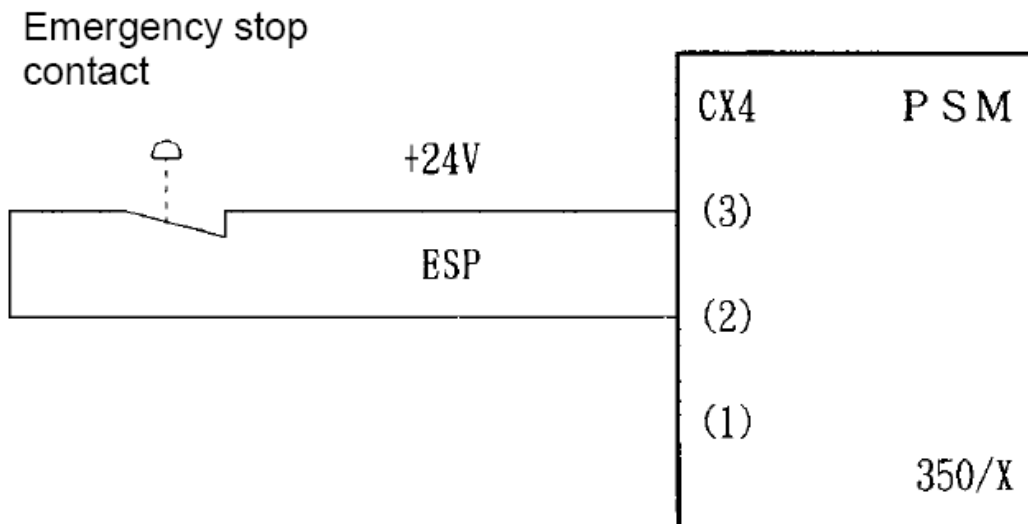




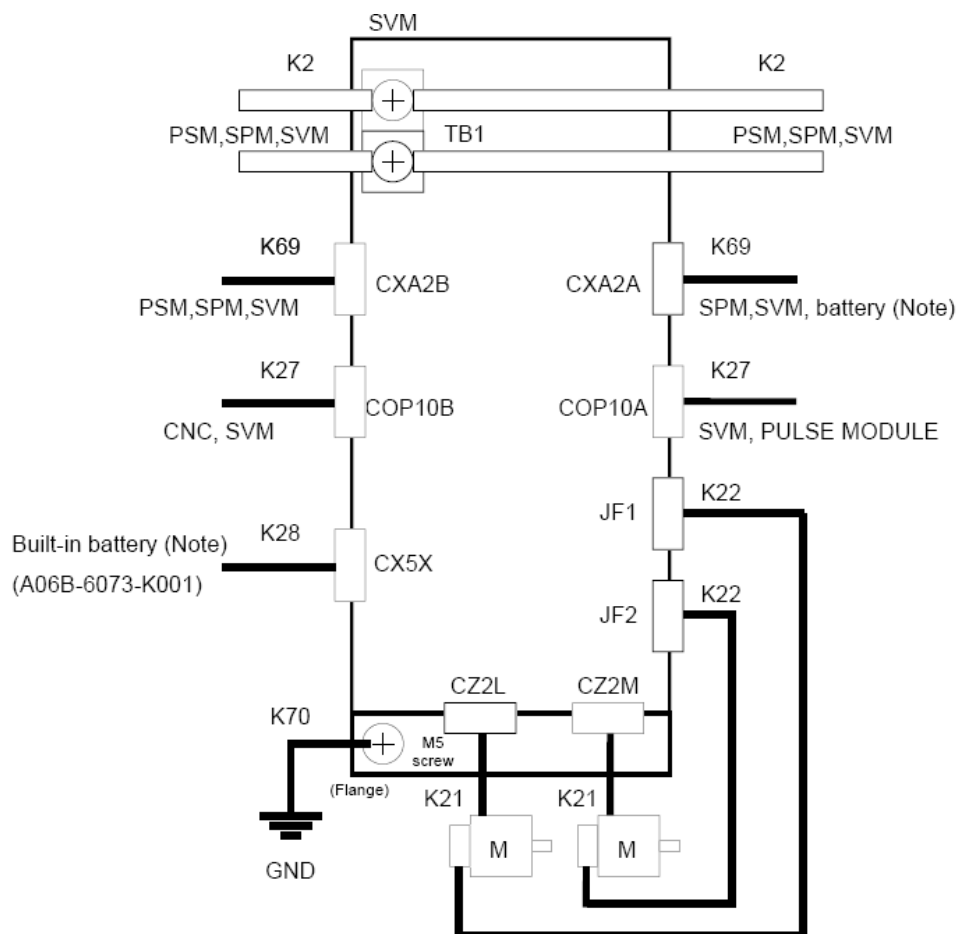
4) K6 :



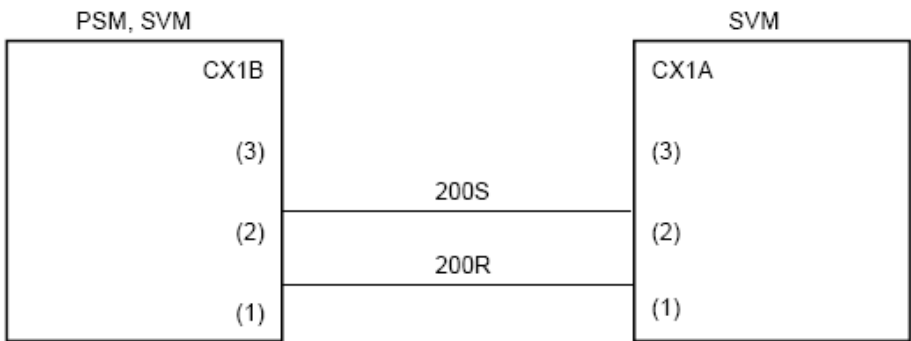
5) K7 :



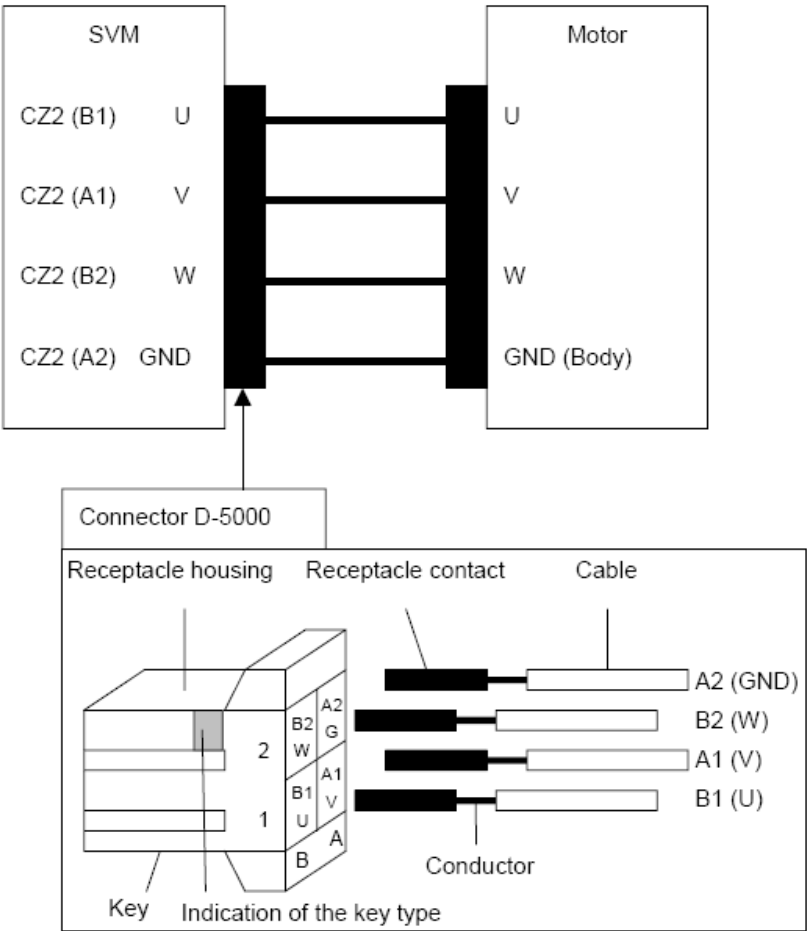
8.2 SERVO AMPLIFIER



1) K4 :

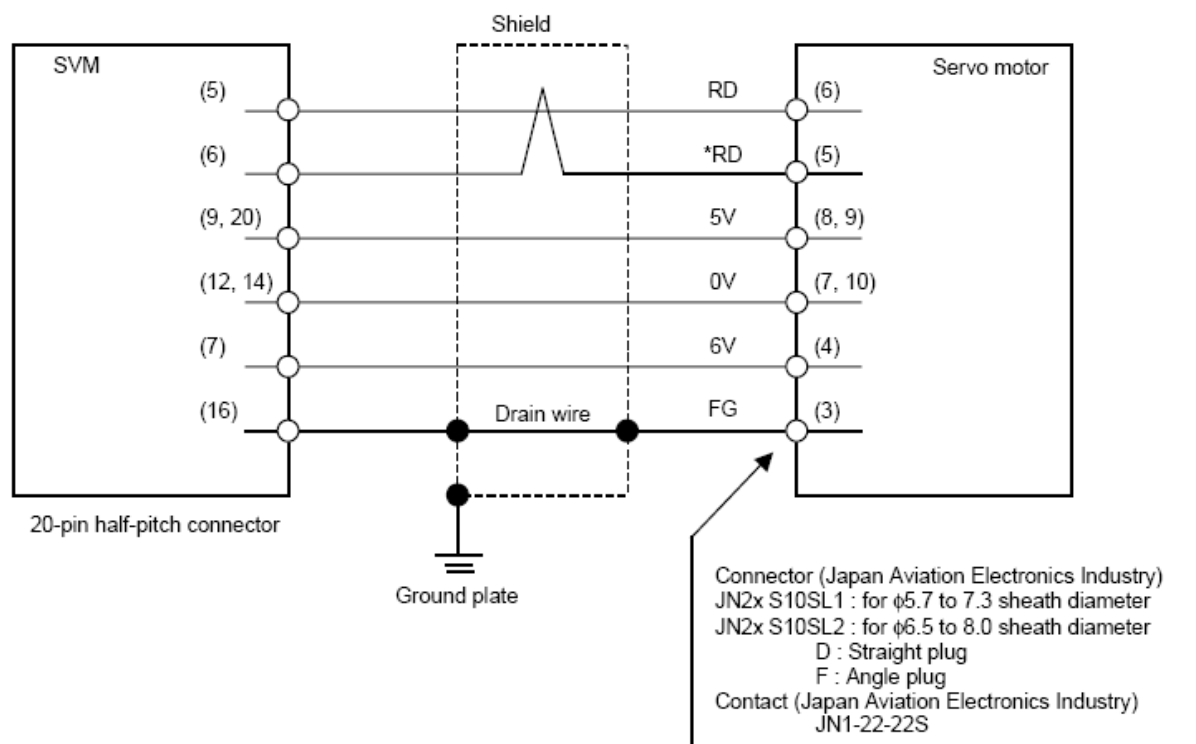


2) K21 :

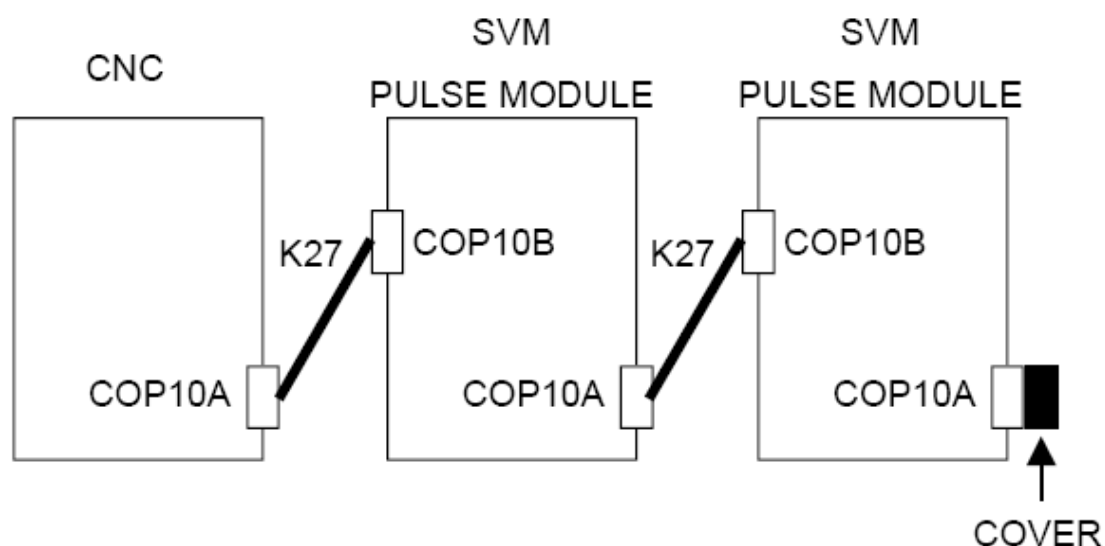


Specification of the key	Applicable SVM
XX	SVM1, SVM2(L), SVM3(L)
XY	SVM2(M), SVM3(M)
YY	SVM3(N)

3) K22 :

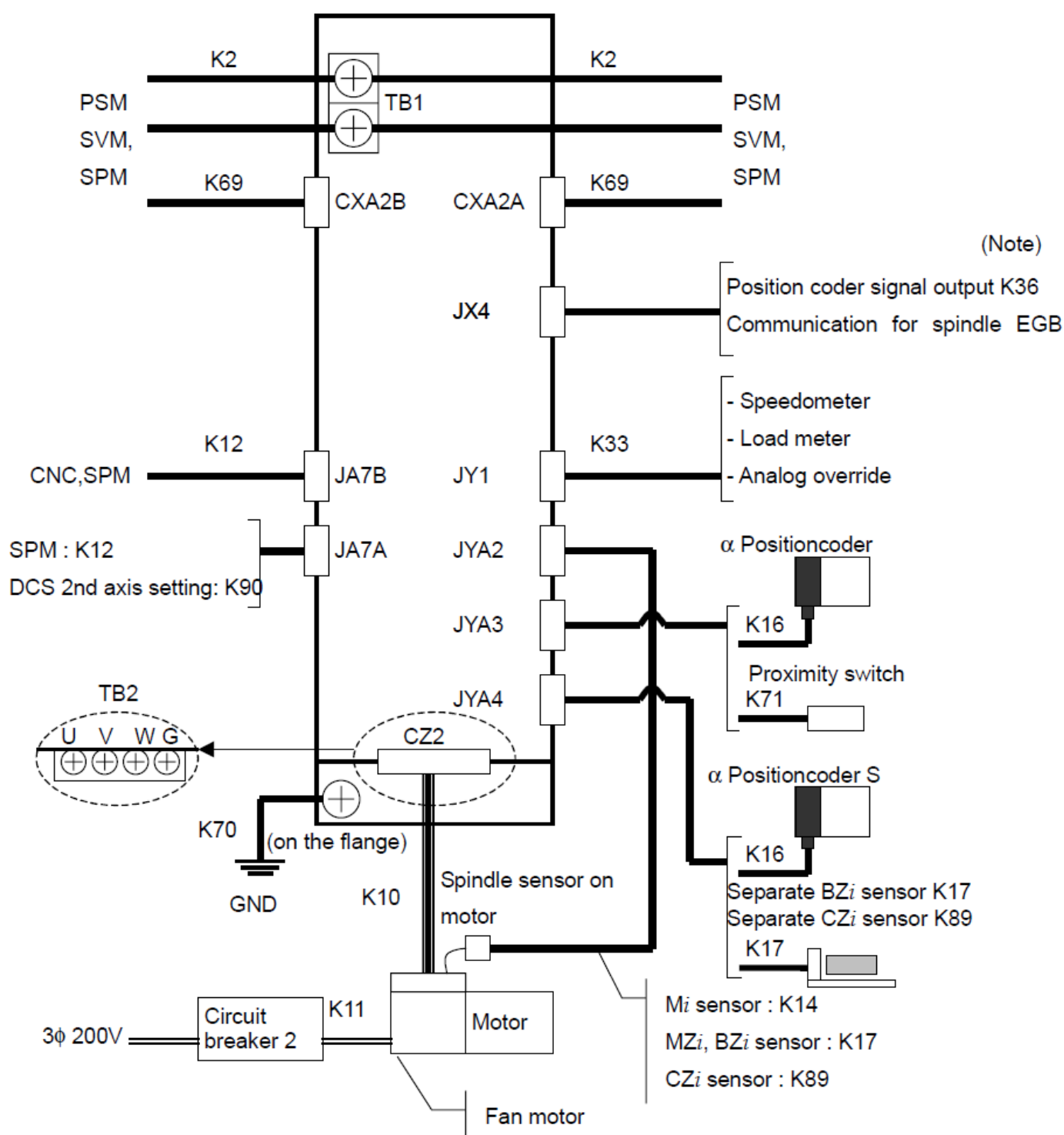


4) K27 :

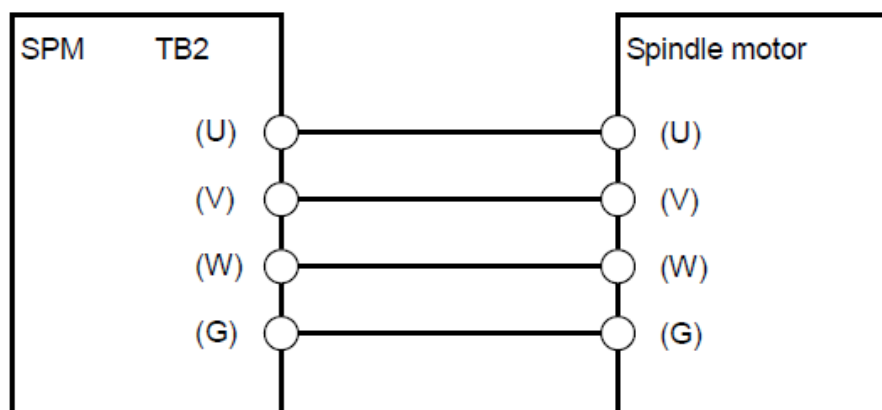


8.3

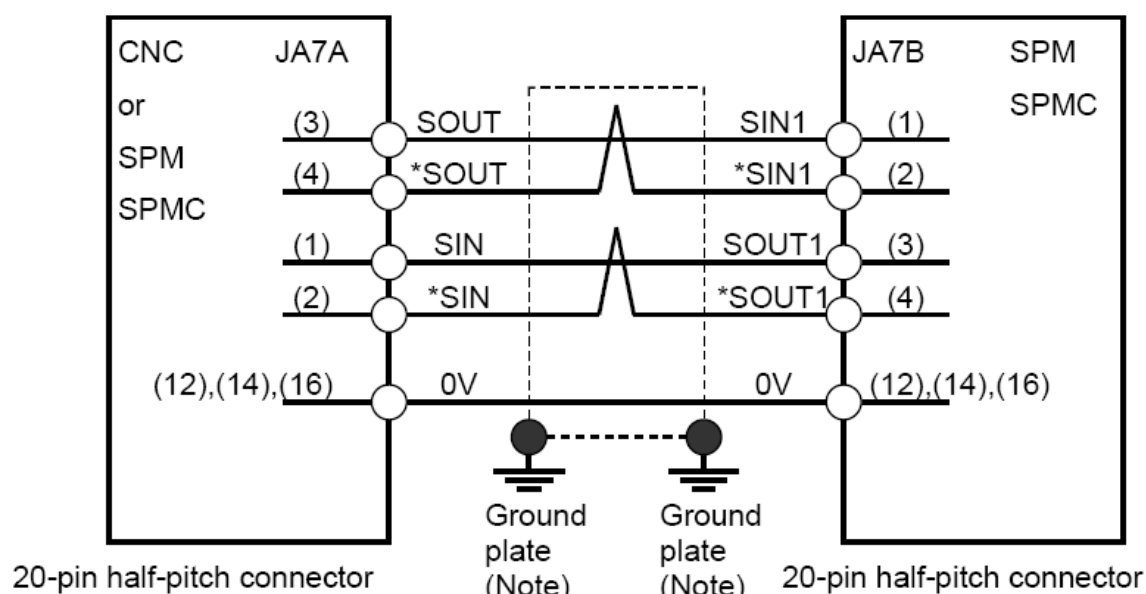
Spindle amplifier module (SPM)



1) TB2

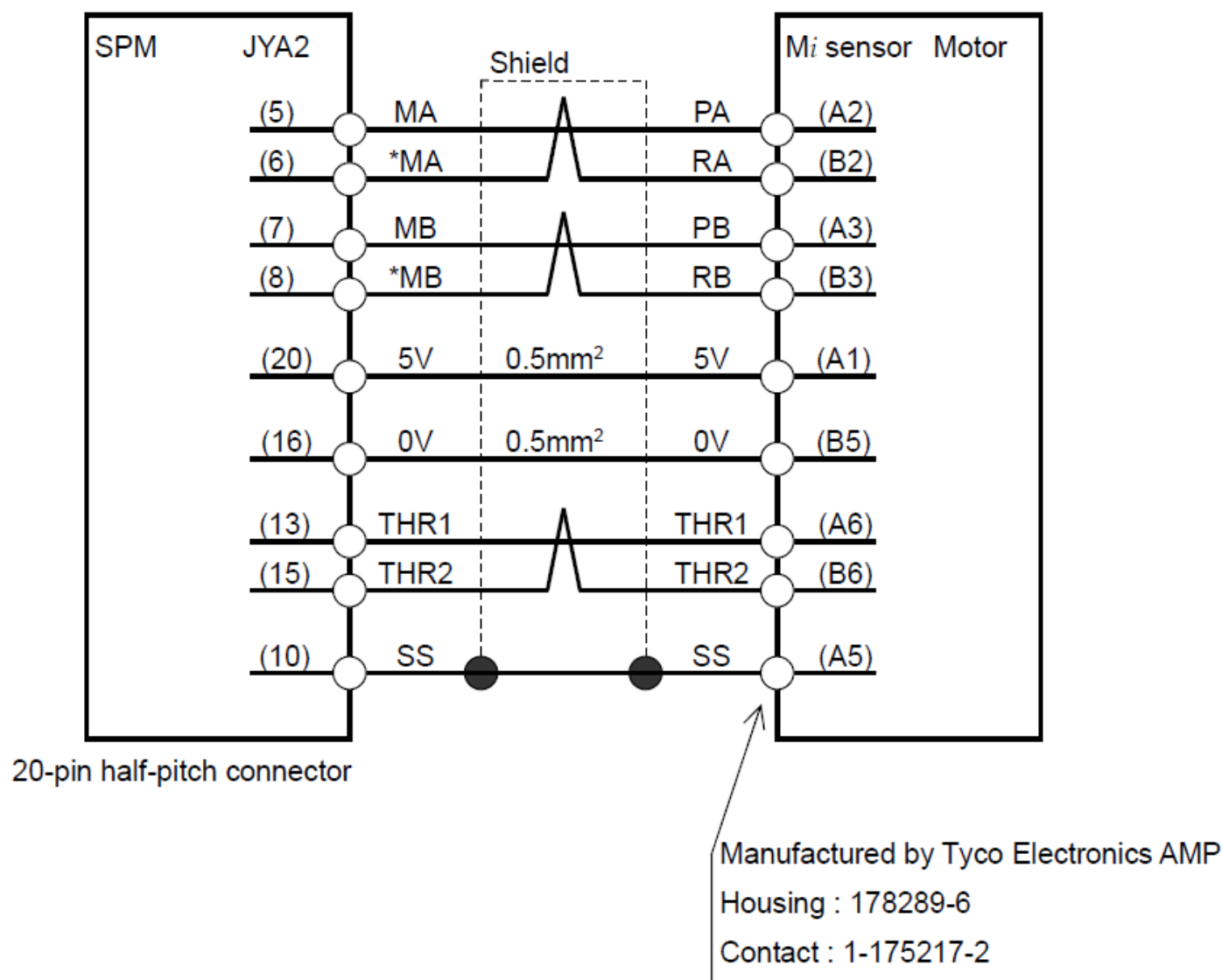


2) K12 :



JA7A and JA7B

9	5V (Note 1)	10		19		20	5V (Note 1)
7		8		17		18	5V (Note 1)
5		6		15		16	0V
3	SOUT	4	*SOUT	13		14	0V
1	SIN	2	*SIN	11		12	0V



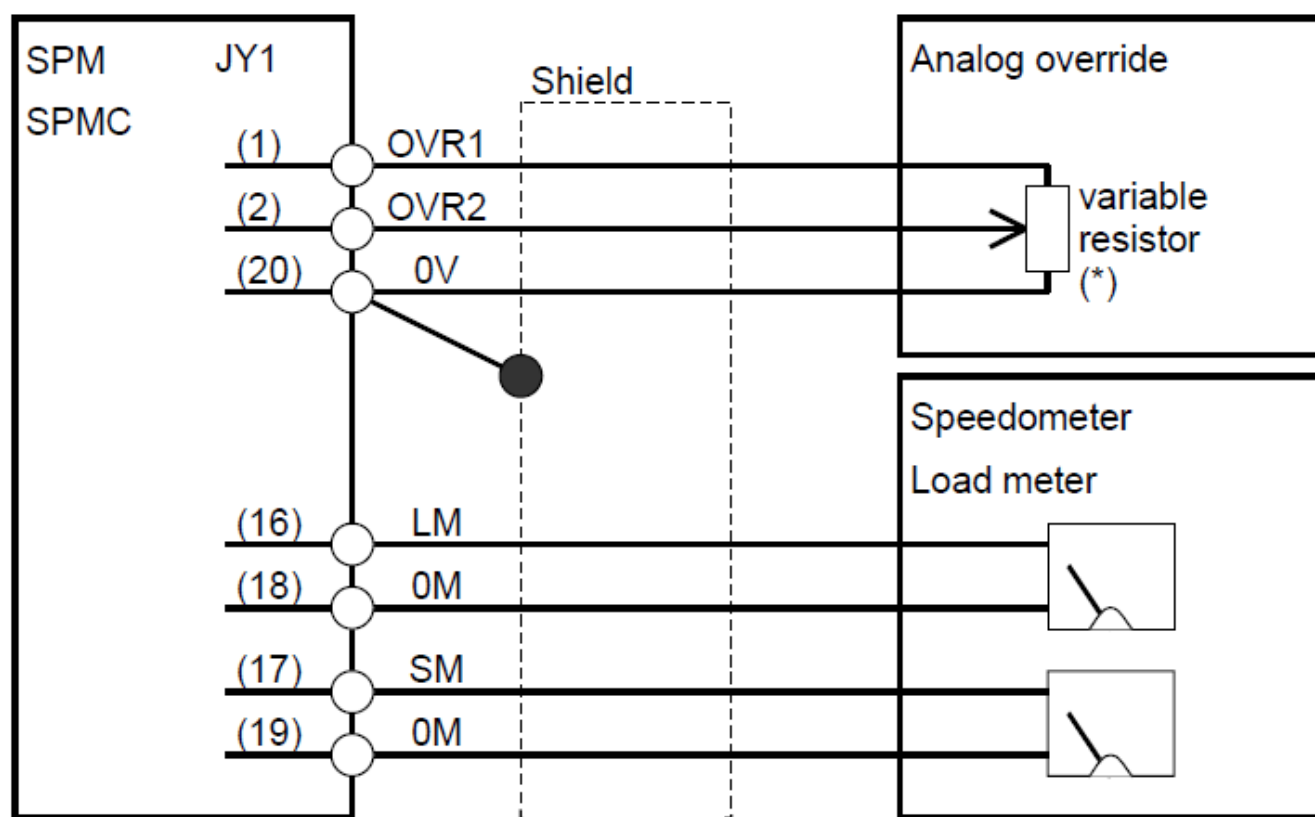
JYA2

9	5V	10	SS	19	#	20	5V
7	MB	8	*MB	17	#	18	5V
5	MA	6	*MA	15	THR2	16	0V
3	#	4	#	13	THR1	14	0V
1	MZ	2	*MZ	11	#	12	0V

Pin arrangement of the connector (manufactured by Tyco Electronics AMP) on the motor side

A1	+5V	B1	
A2	PA	B2	RA
A3	PB	B3	RB
A4		B4	
A5	SS	B5	0V
A6	THR1	B6	THR2

3) K33

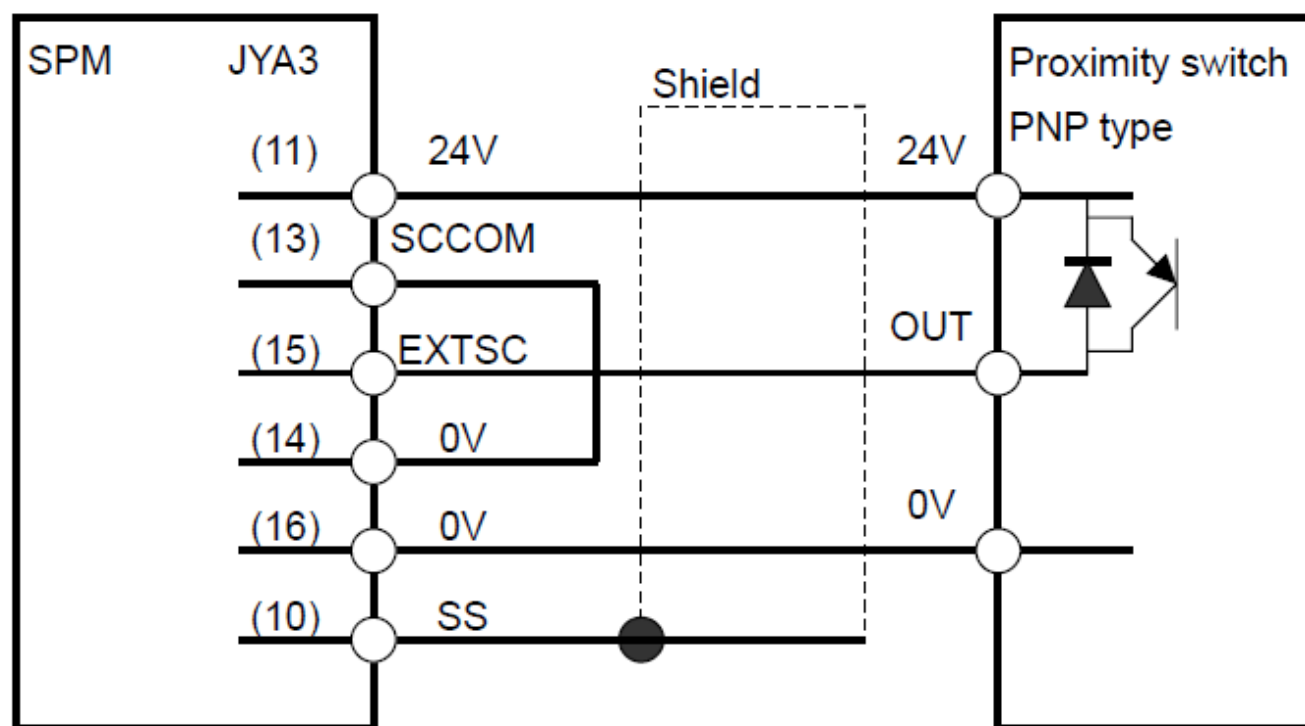


20-pin half-pitch connector

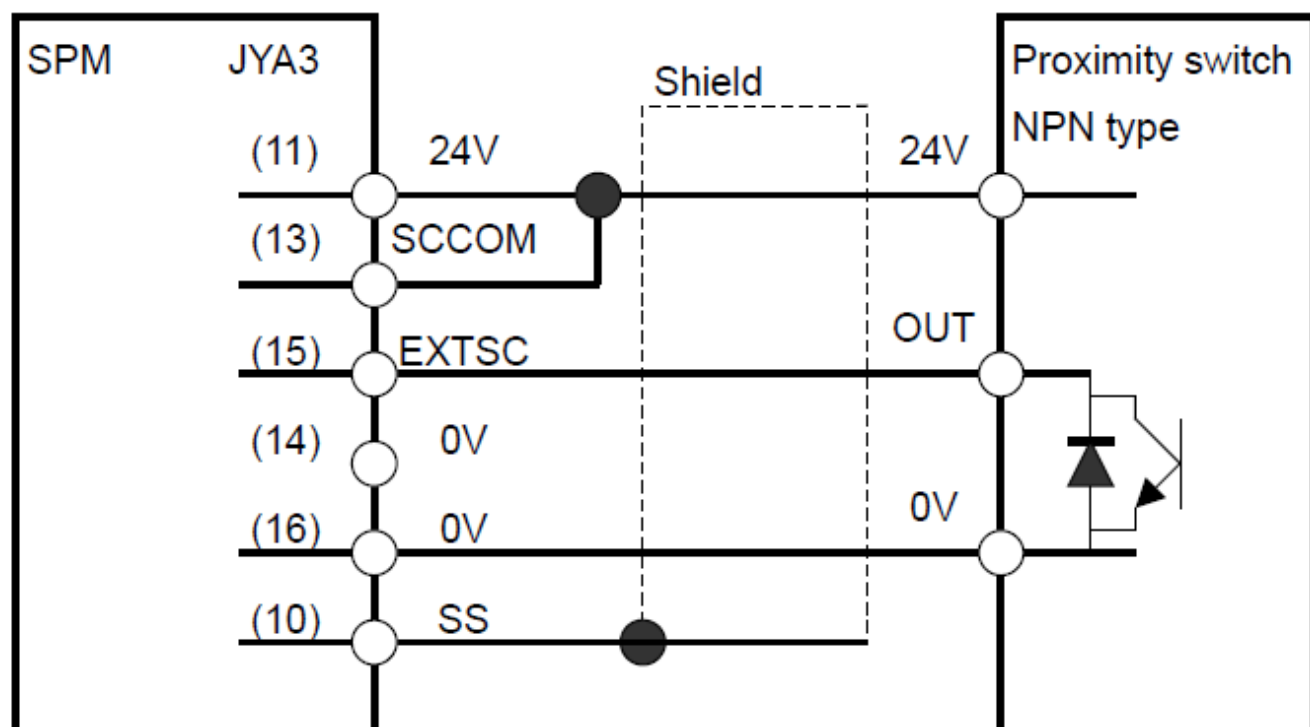
JY1

9	#	10	#	19	0M	20	0V
7	#	8	#	17	SM	18	0M
5	#	6	#	15	#	16	LM
3	#	4	#	13	#	14	#
1	OVR1	2	OVR2	11	#	12	#

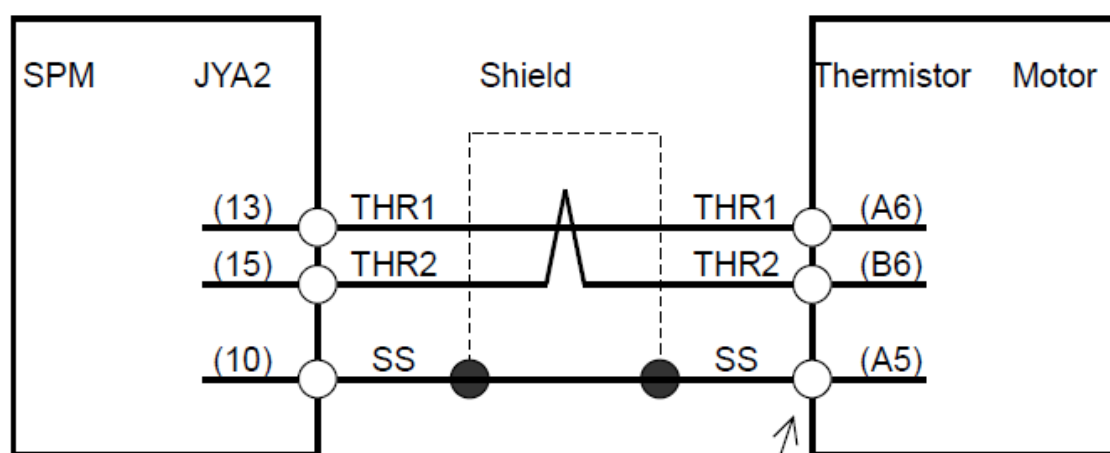
4) K71



20-pin half-pitch connector



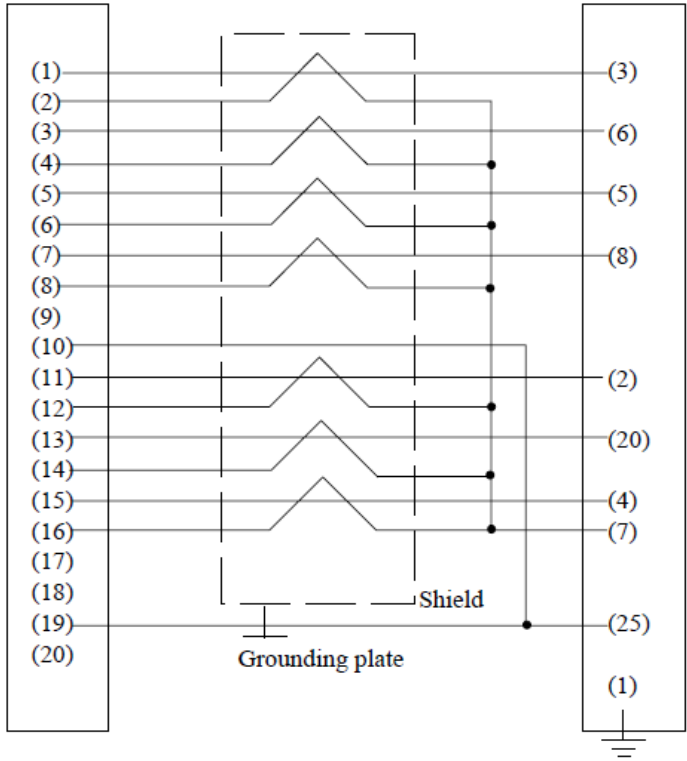
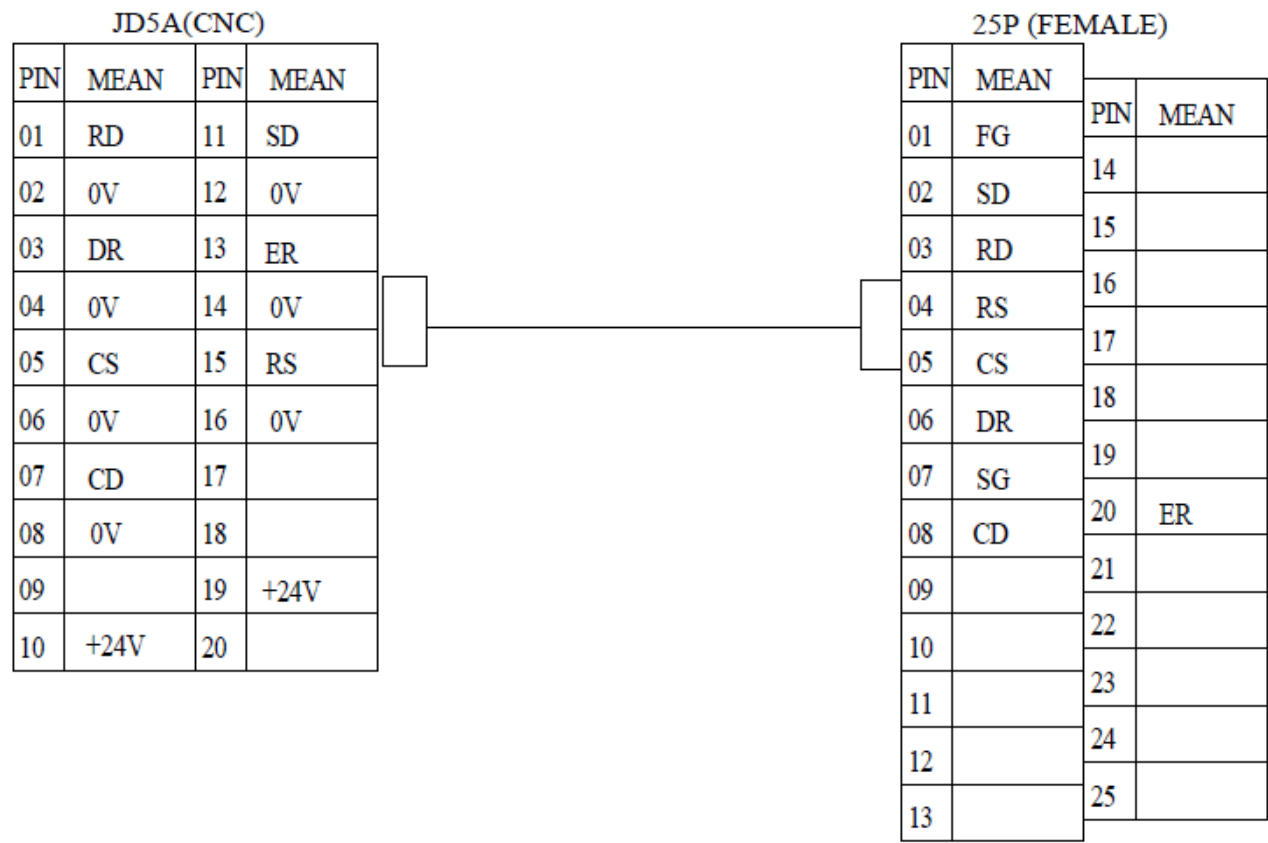
20-pin half-pitch connector



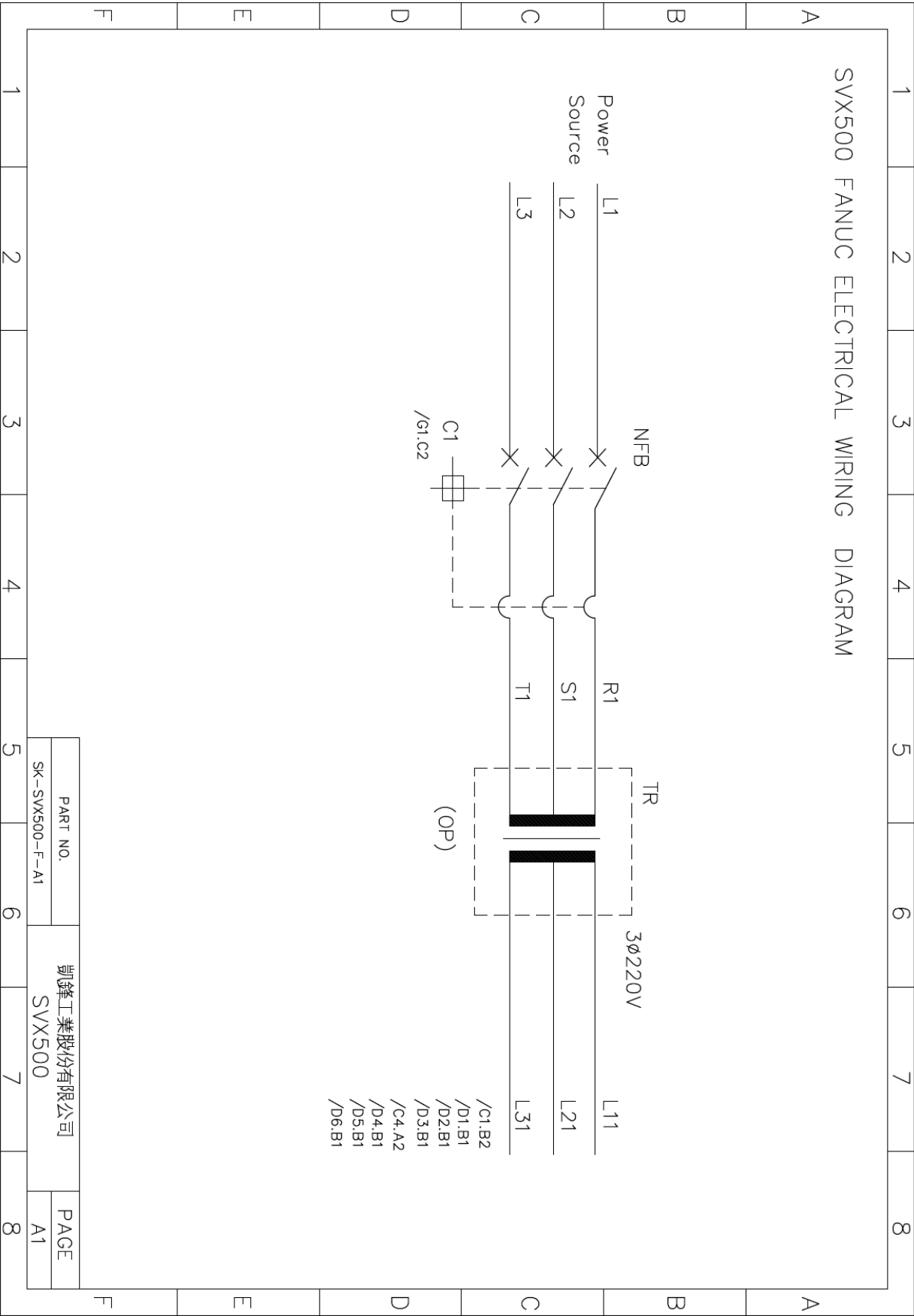
20-pin half-pitch connector

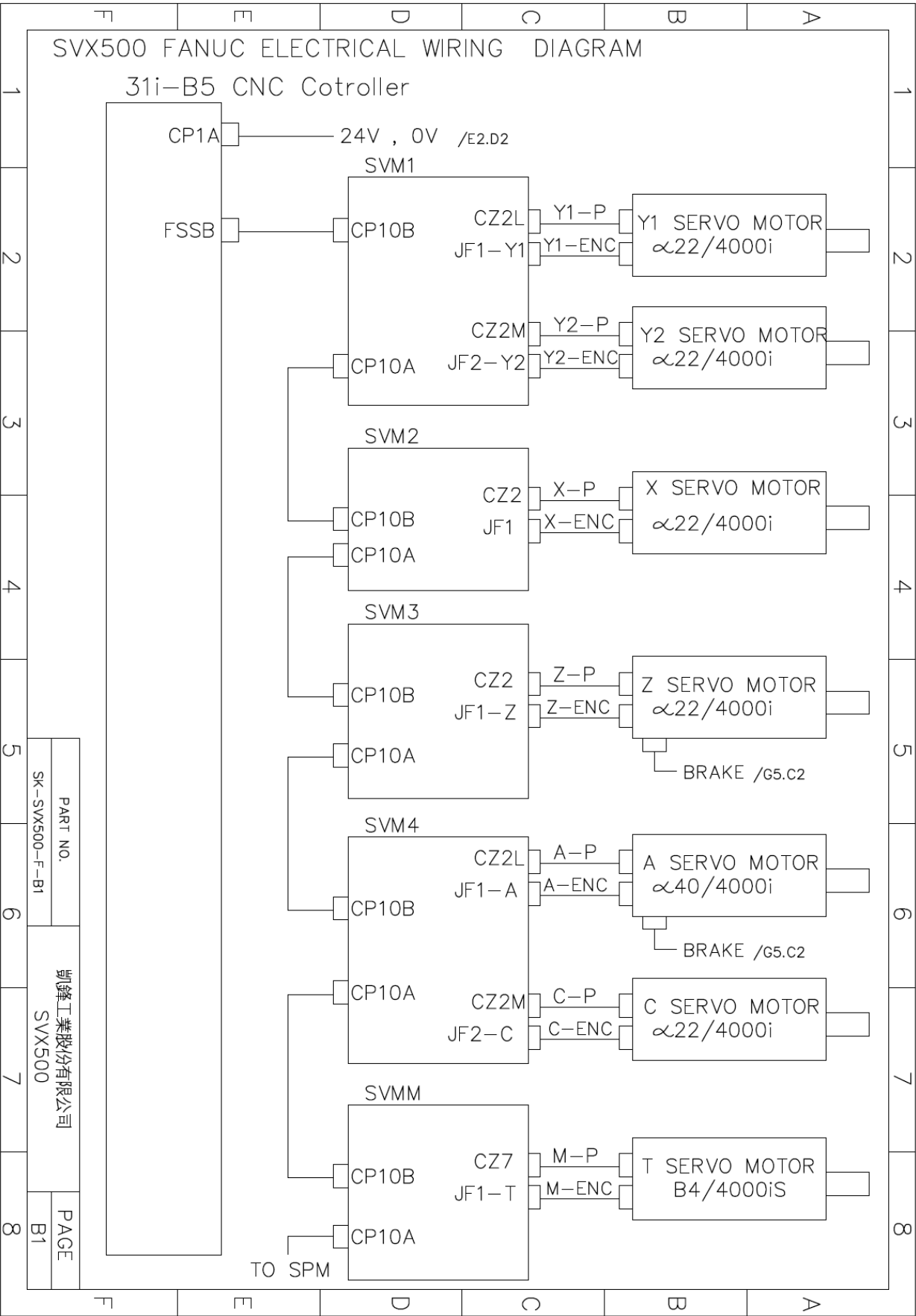
Manufactured by tyco Electronics AMP
Housing : 178289-6
Contact : 1-175217-2

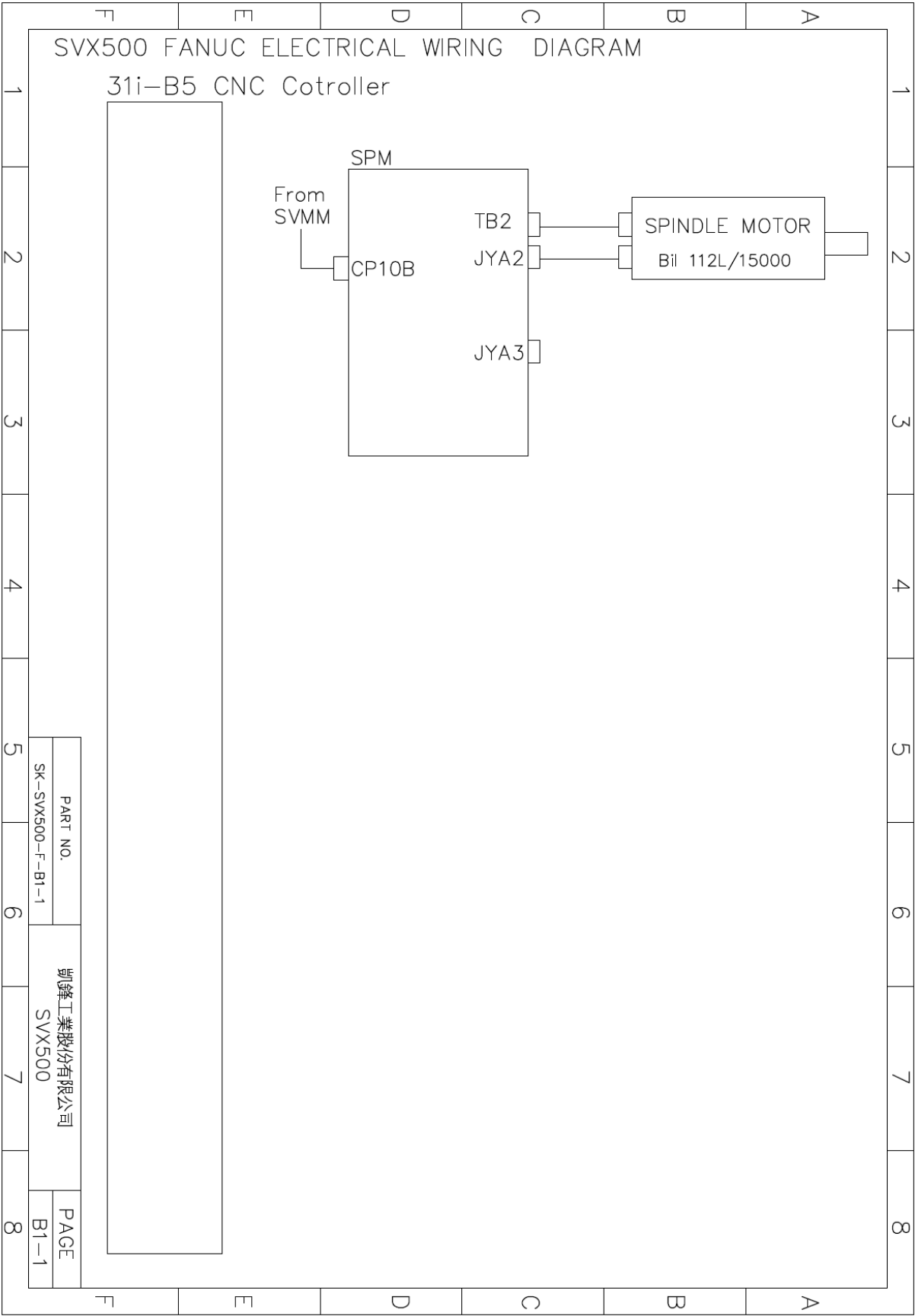
8.4 DATA INPUT / OUTPUT (RS232C / JD5A)

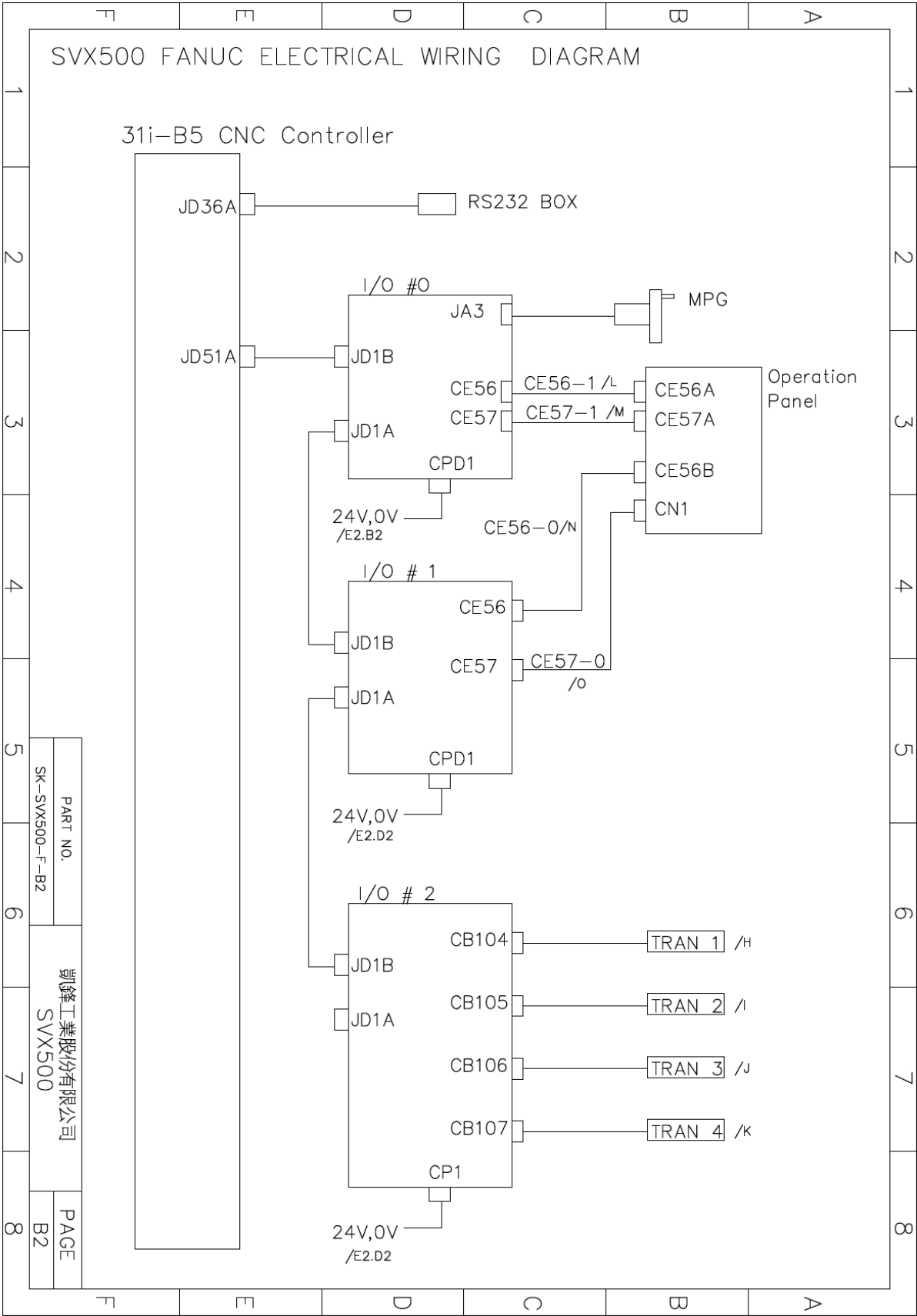


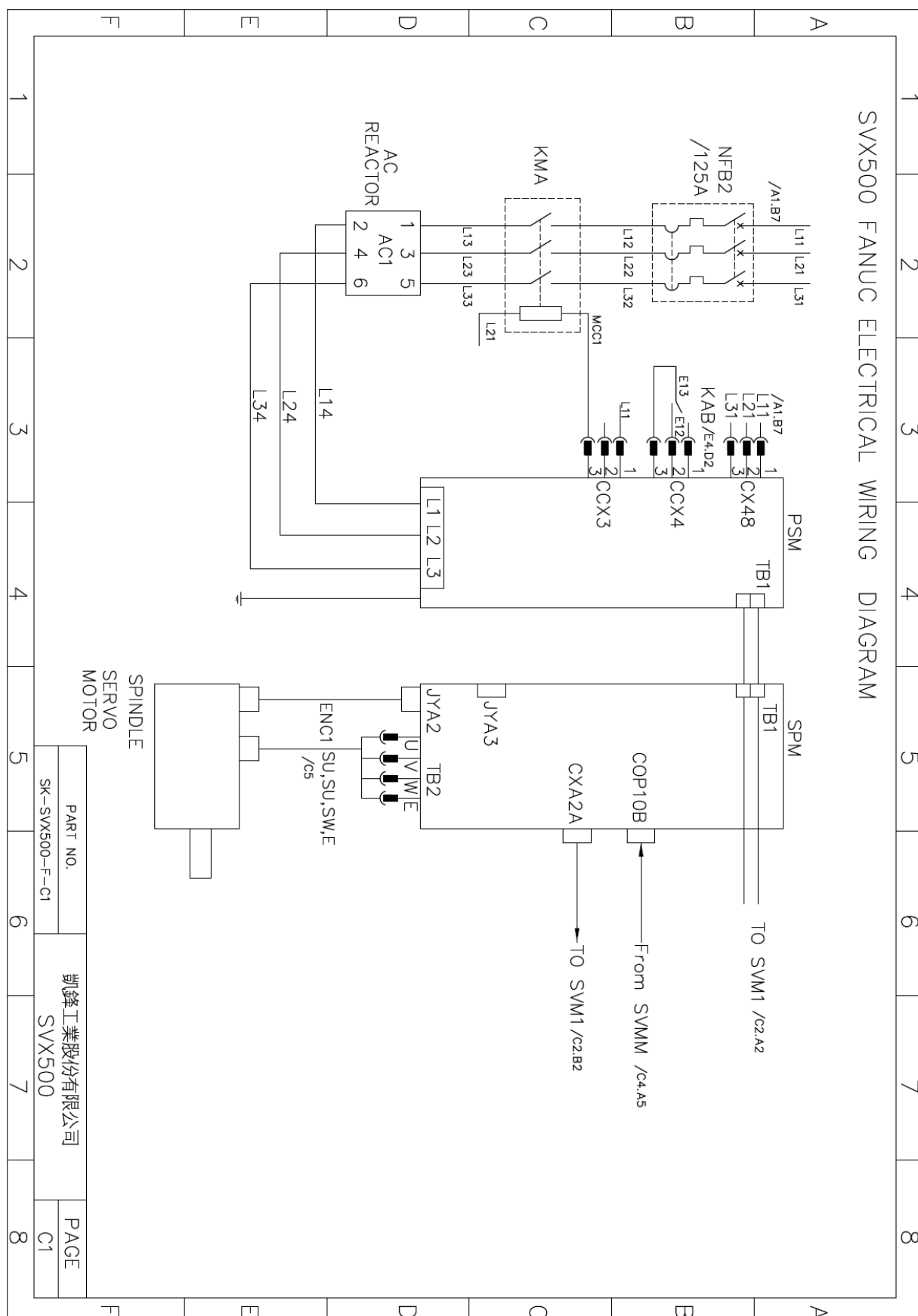
9. Electrical Wiring Diagram

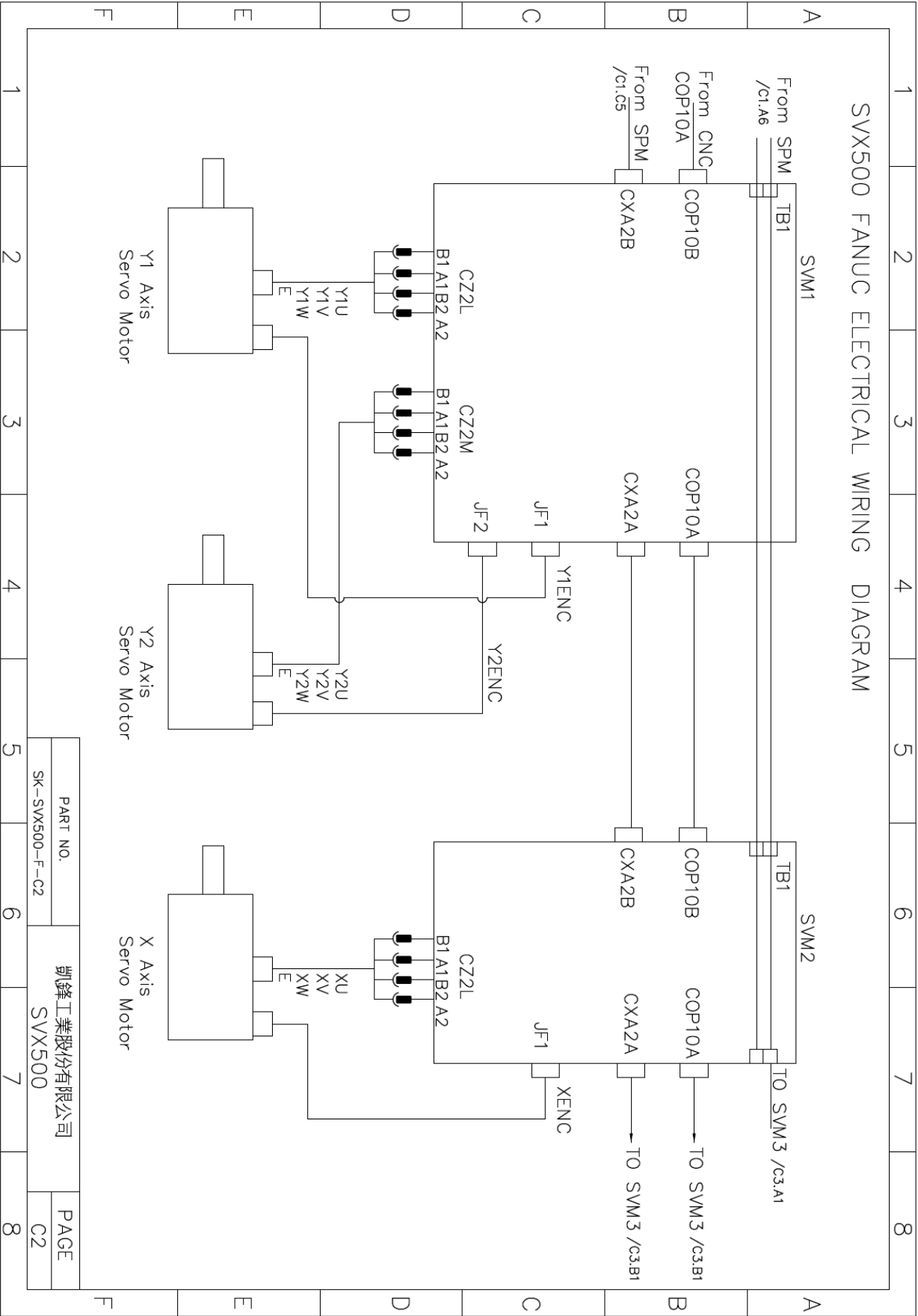


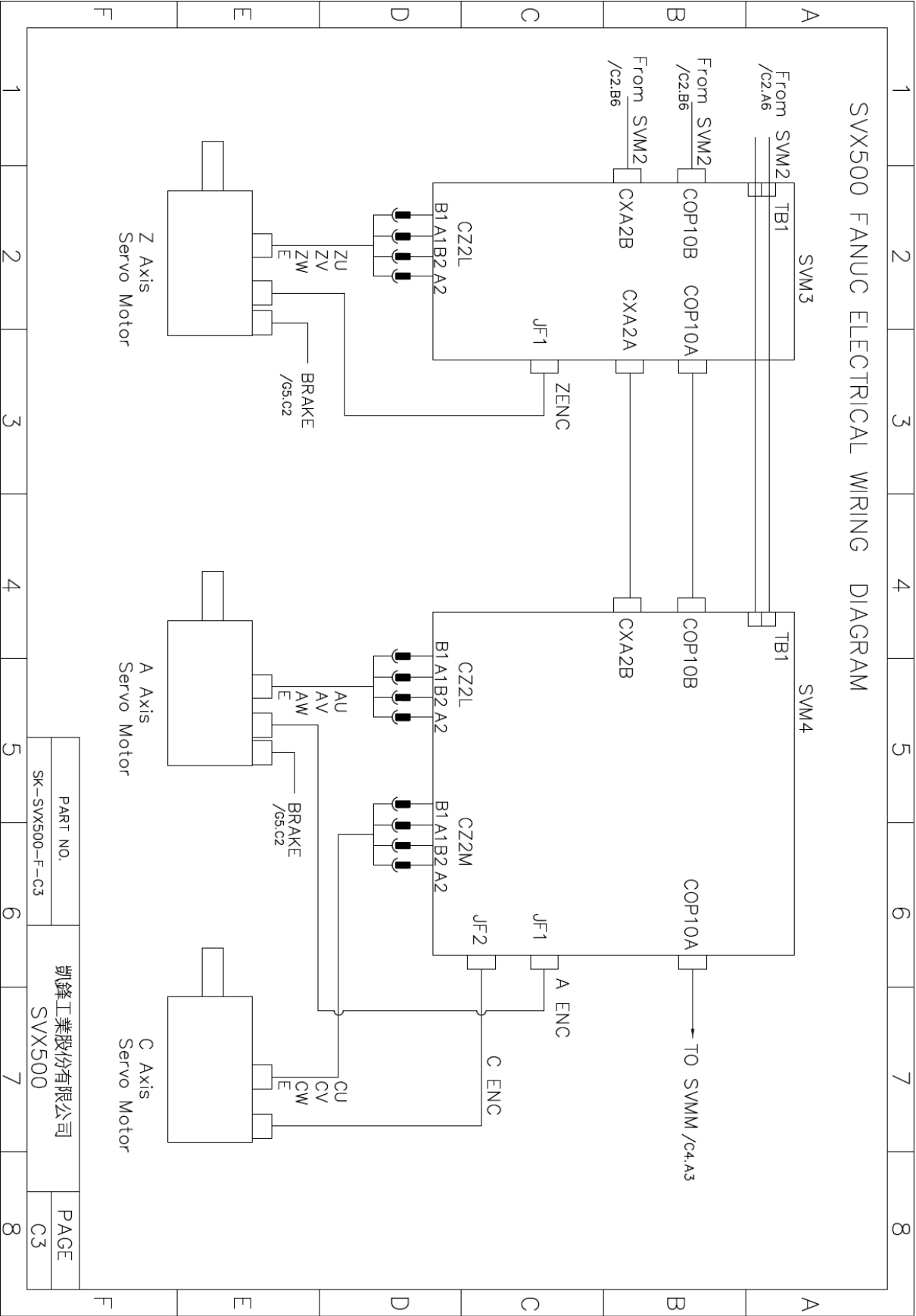


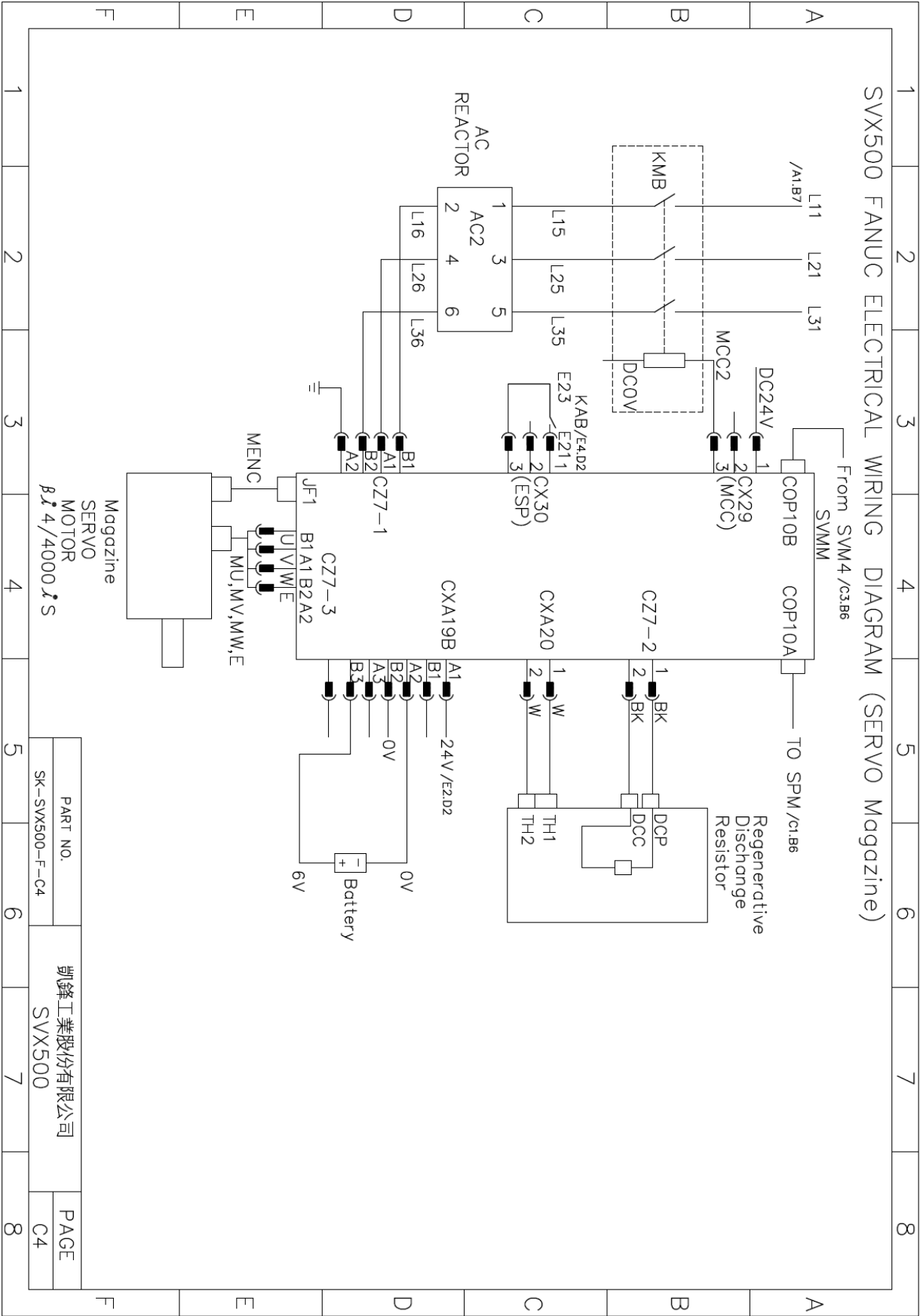




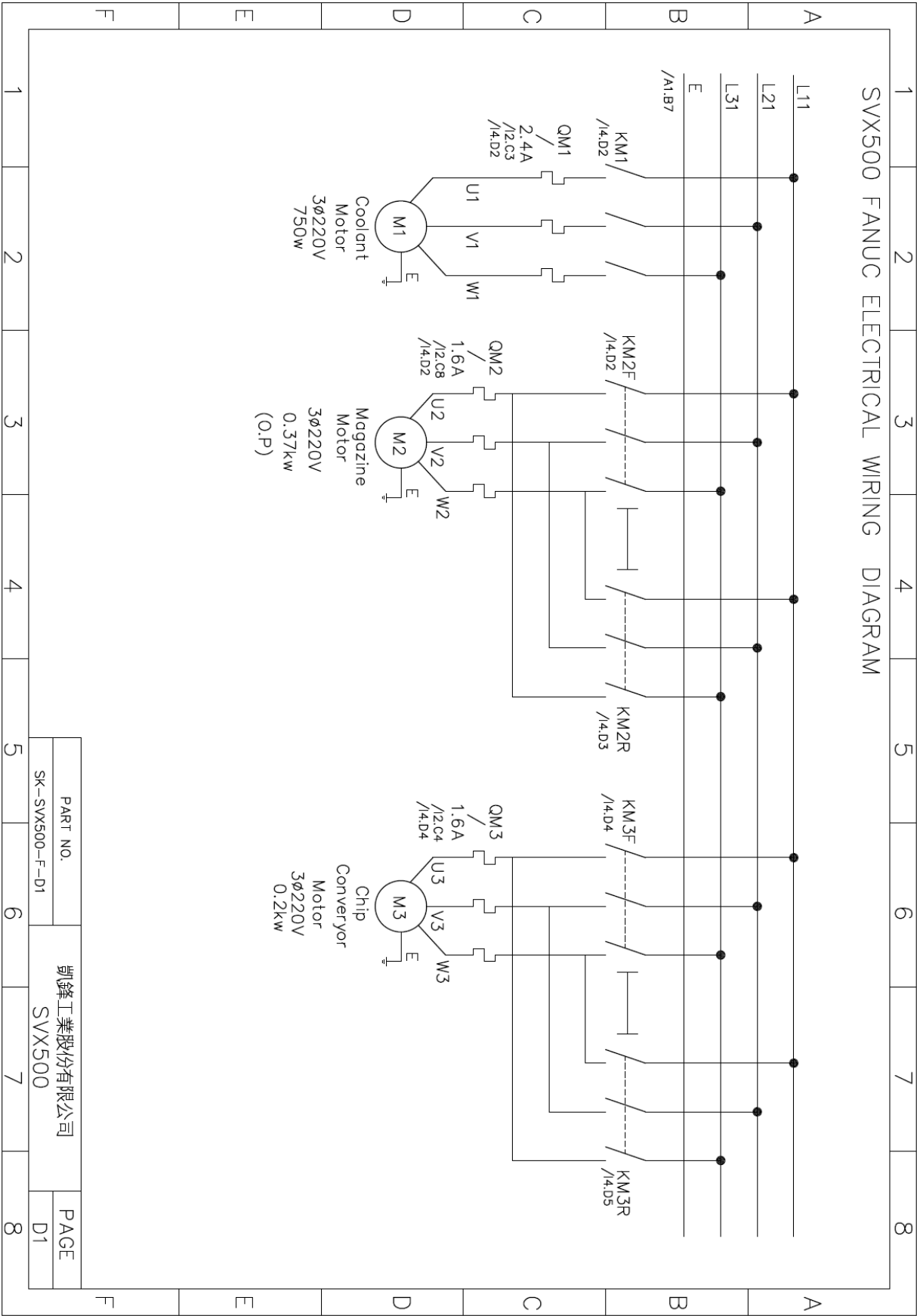


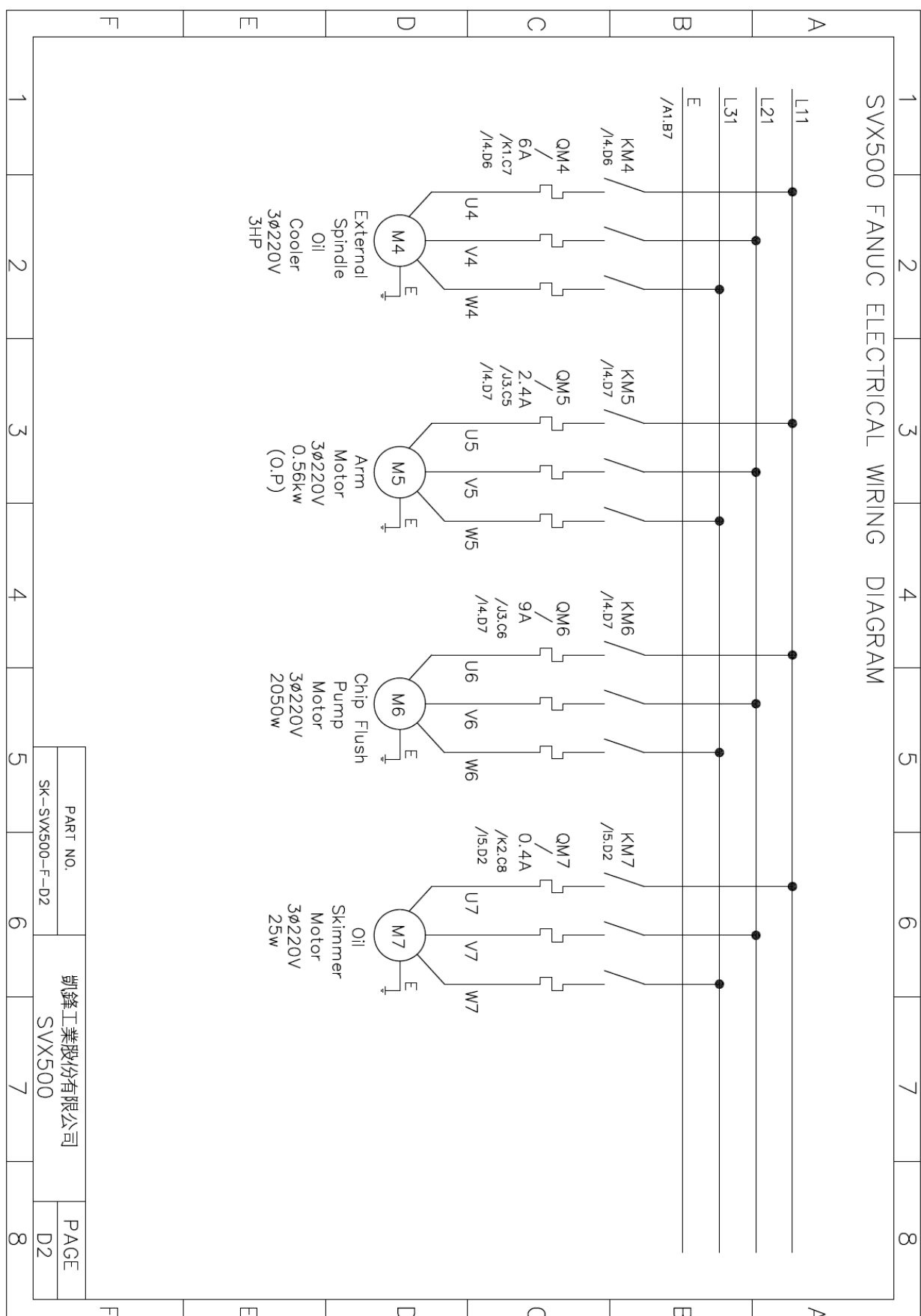


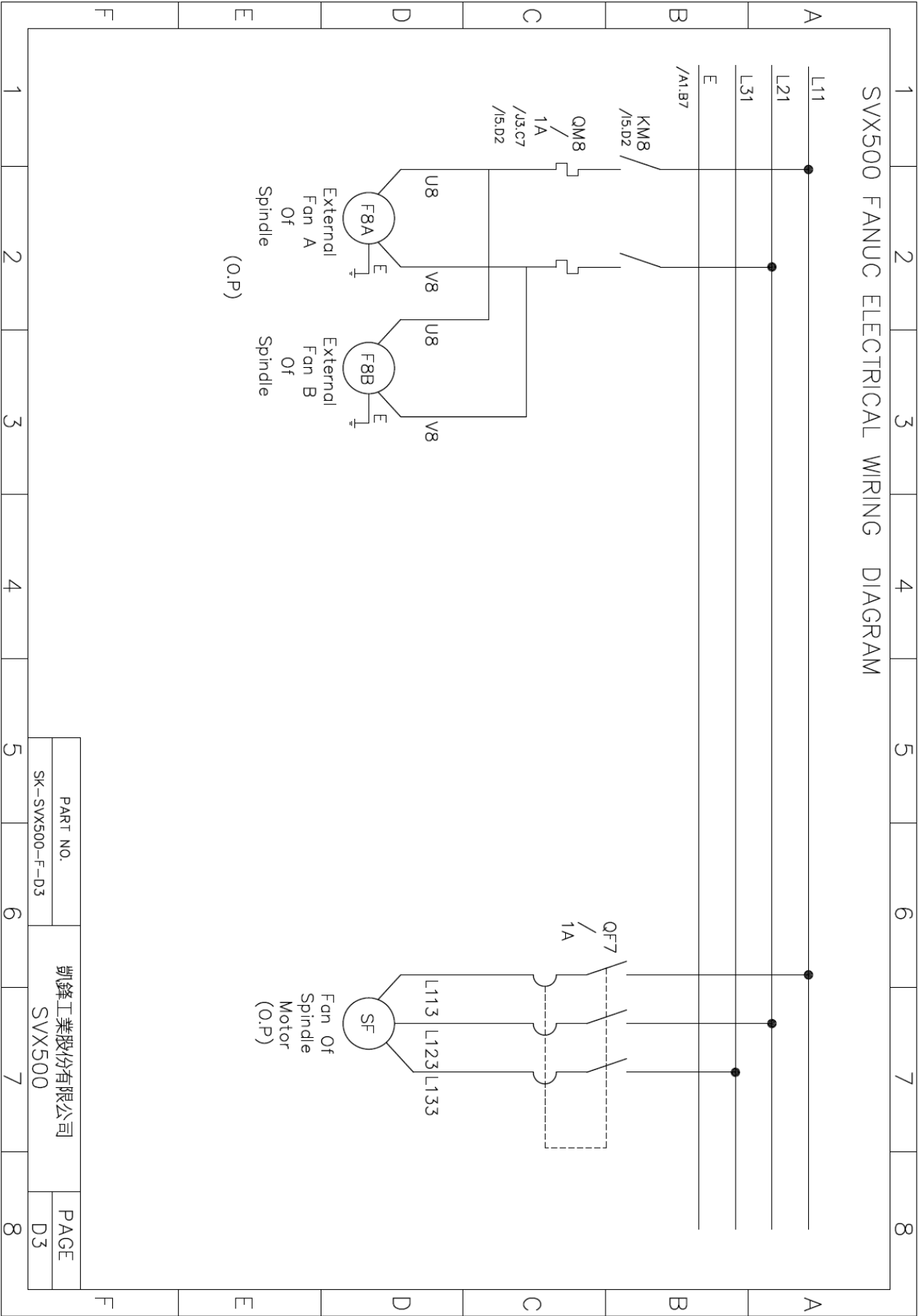


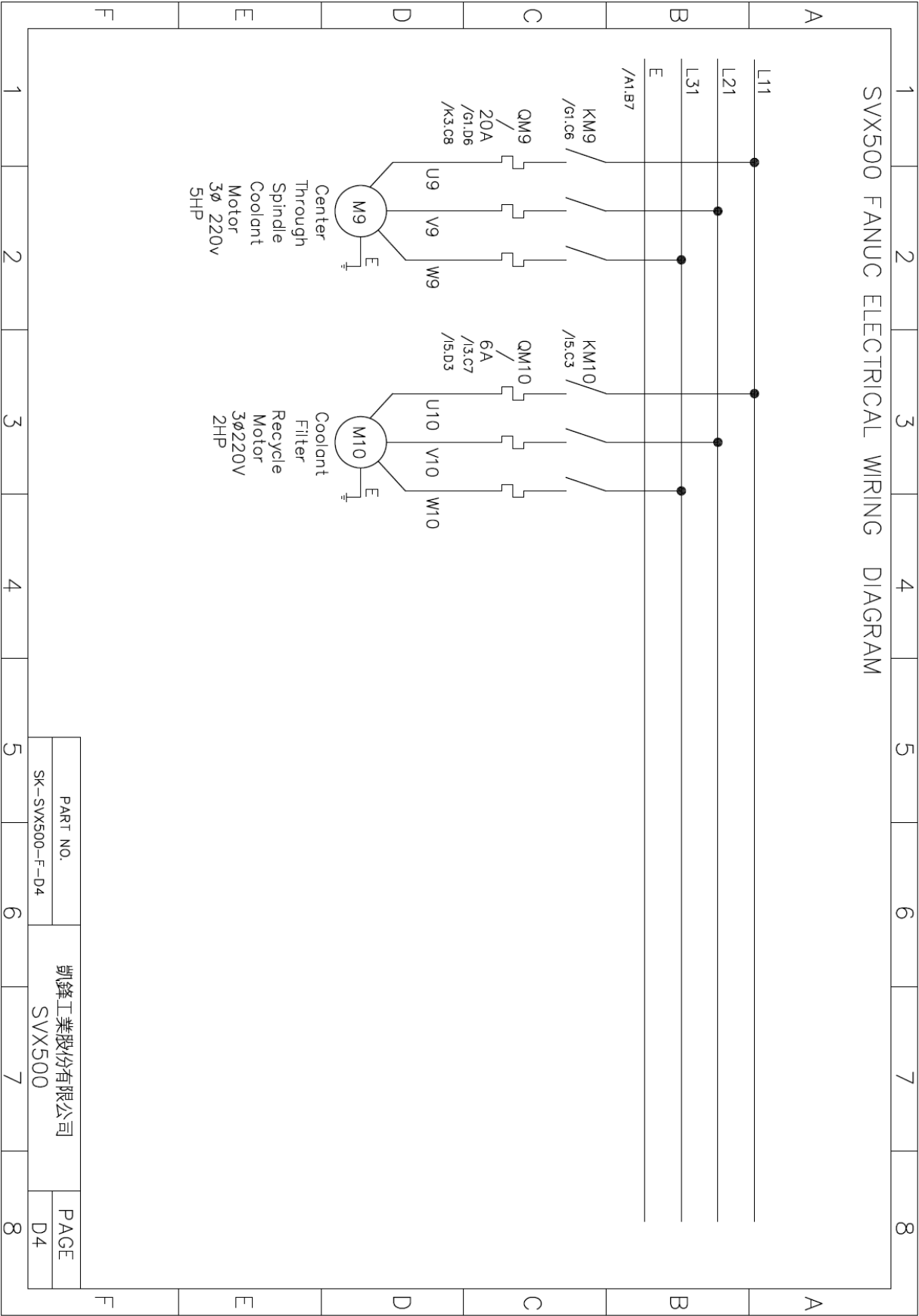


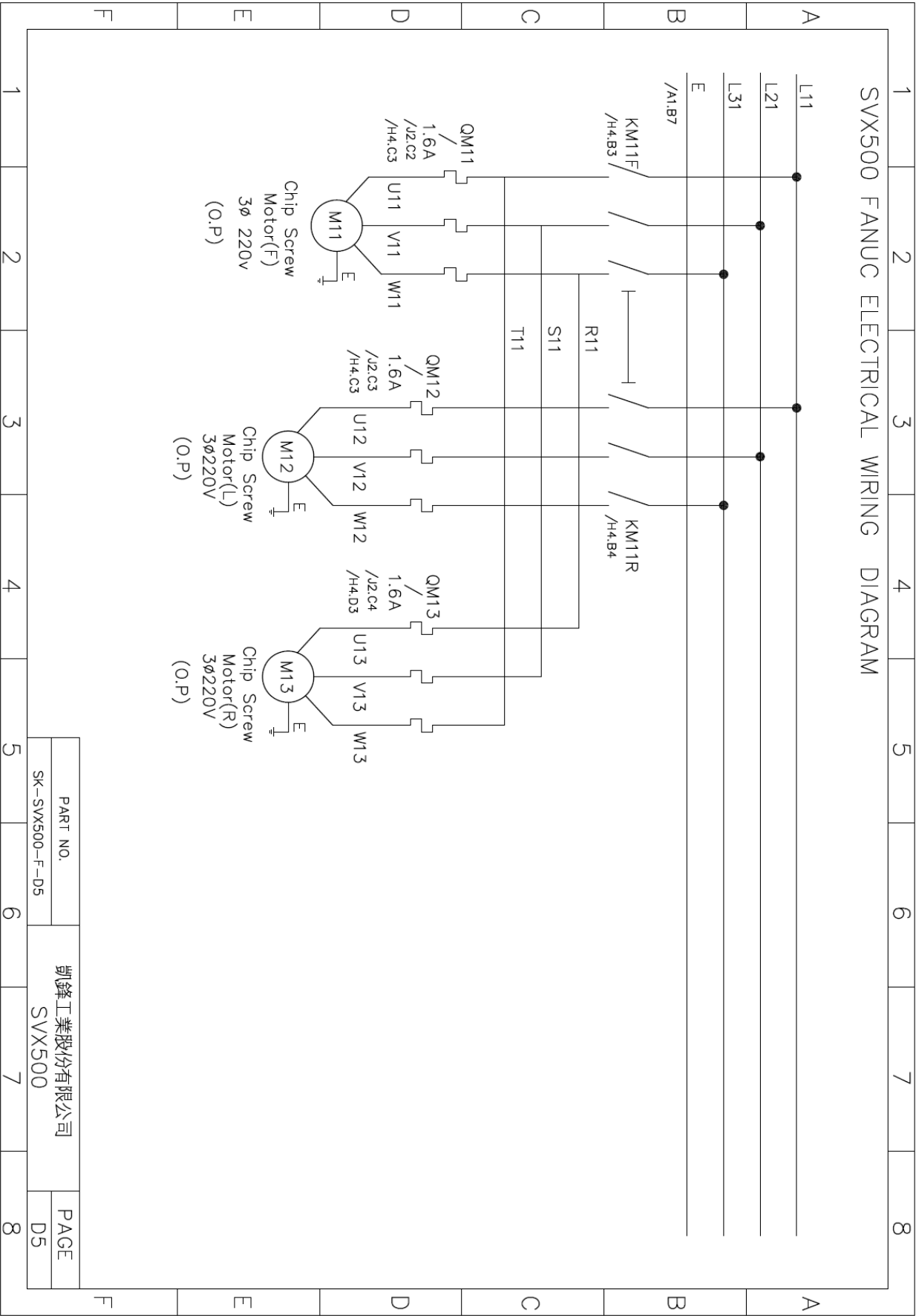


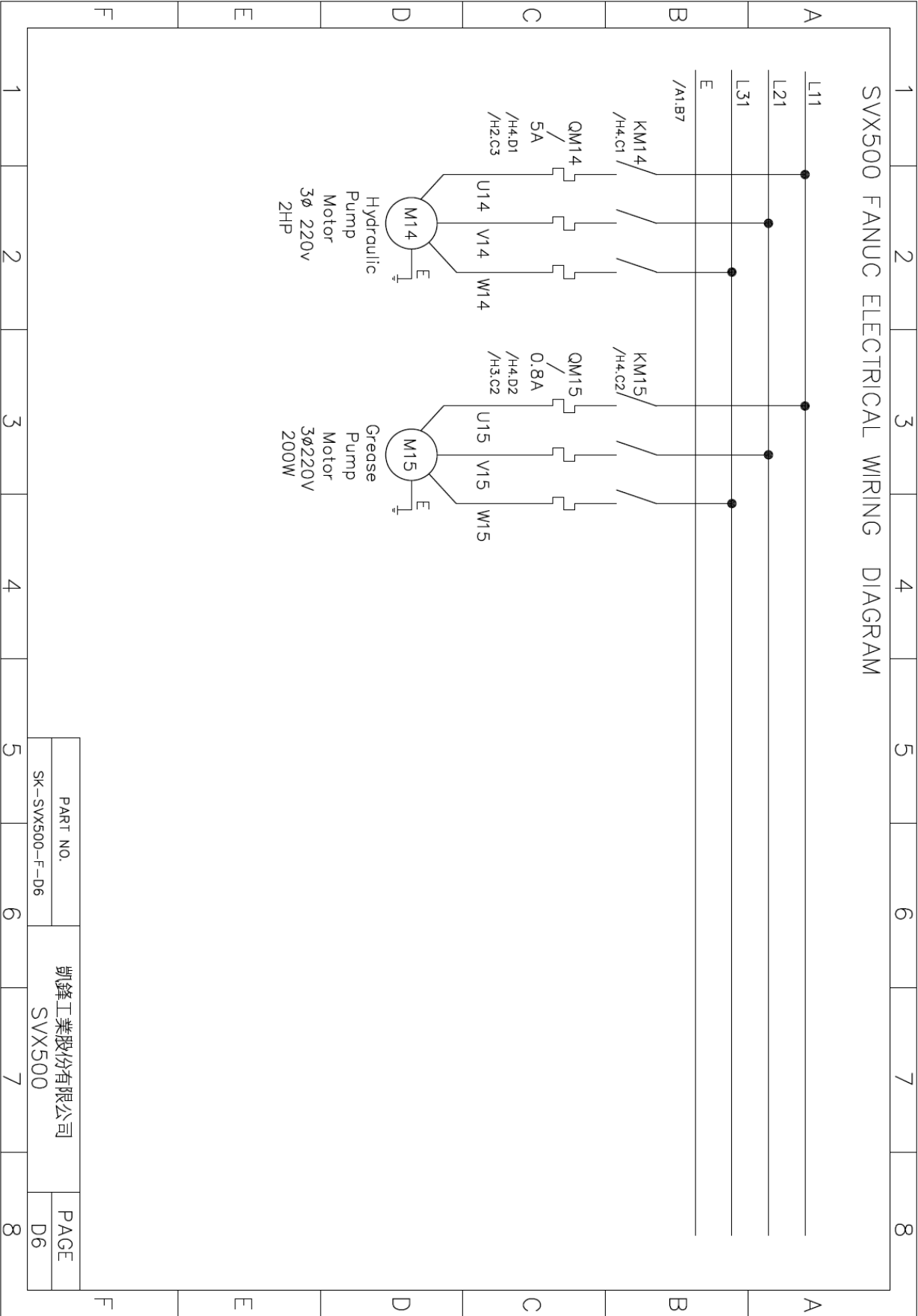


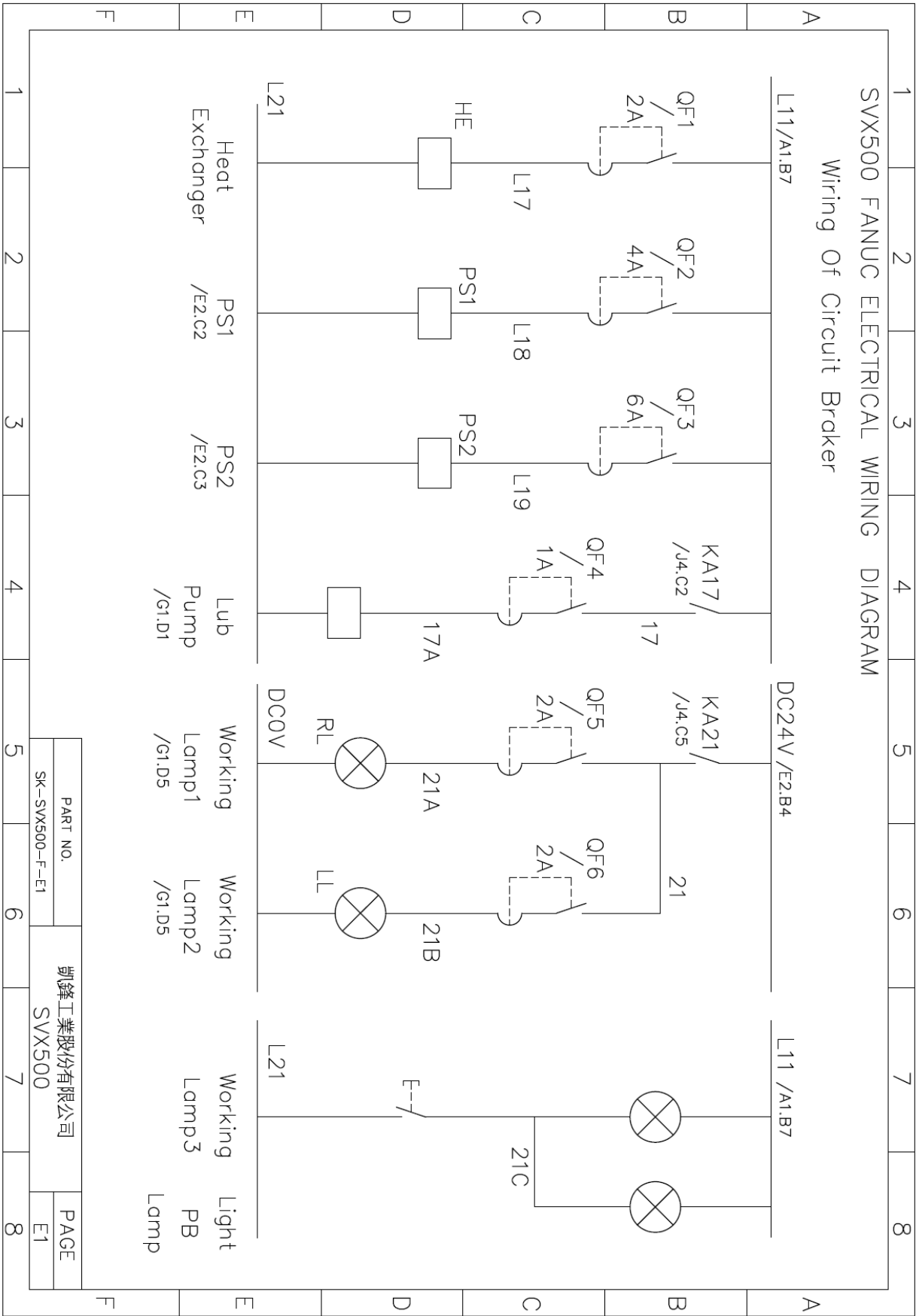


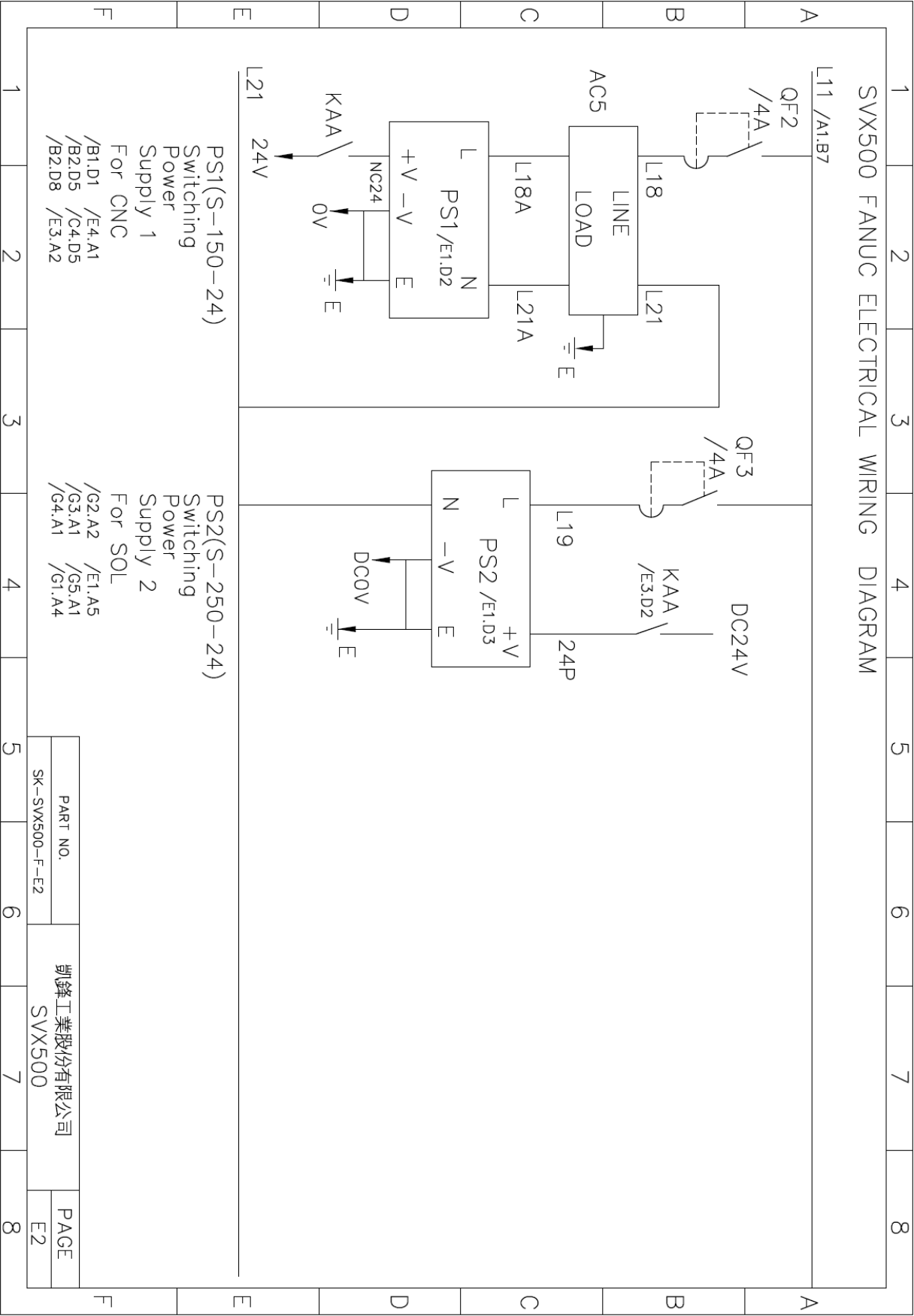


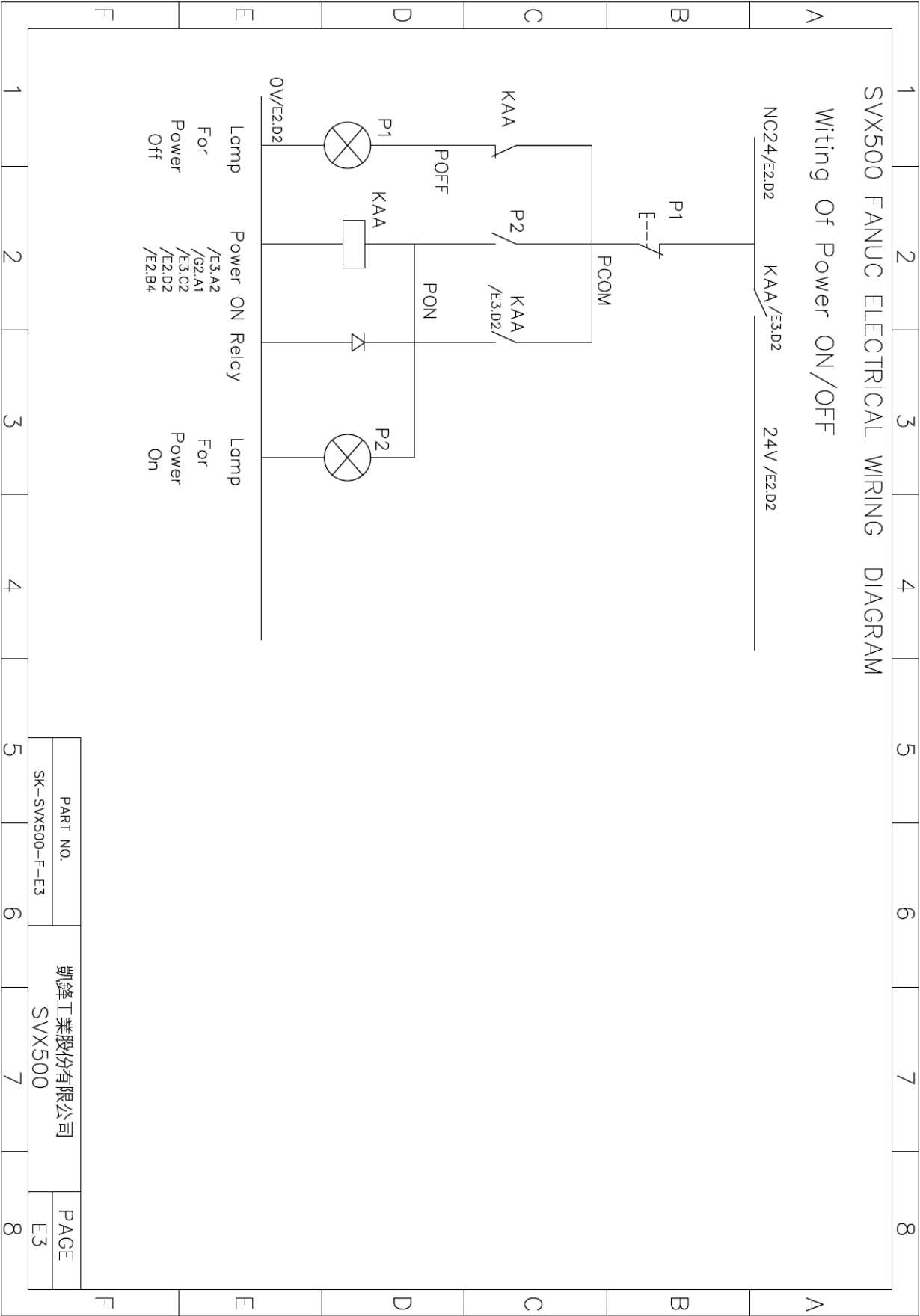


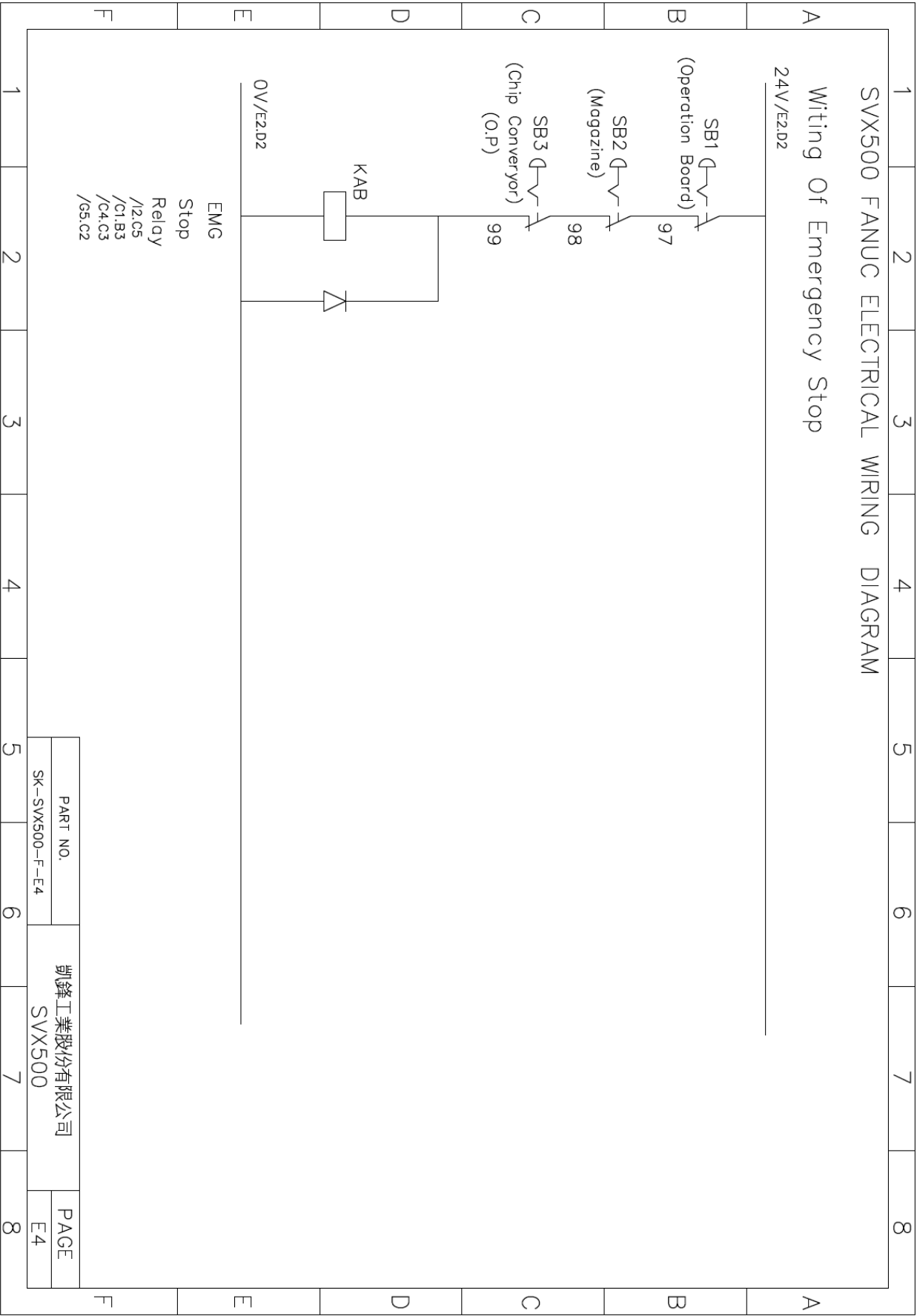


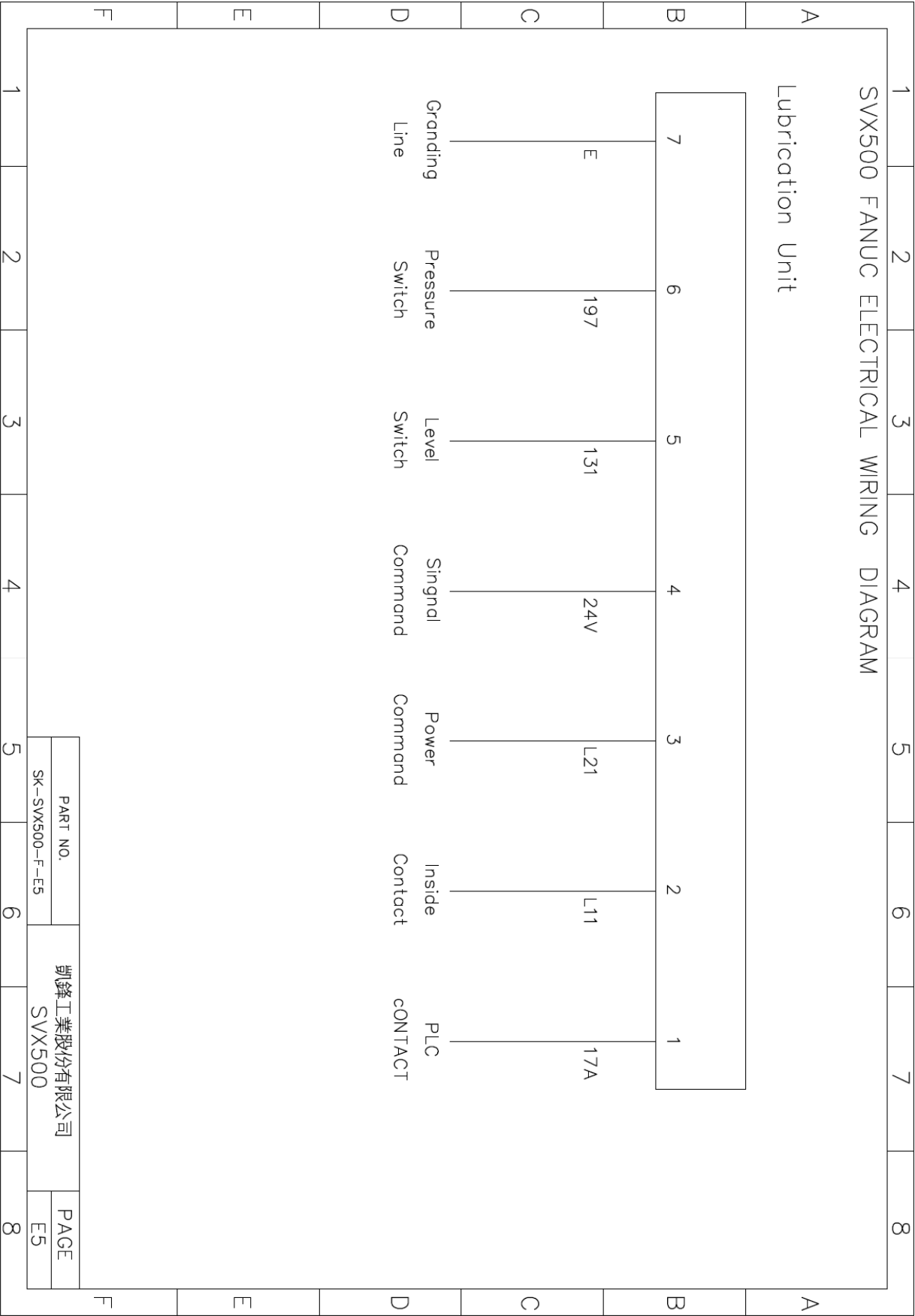


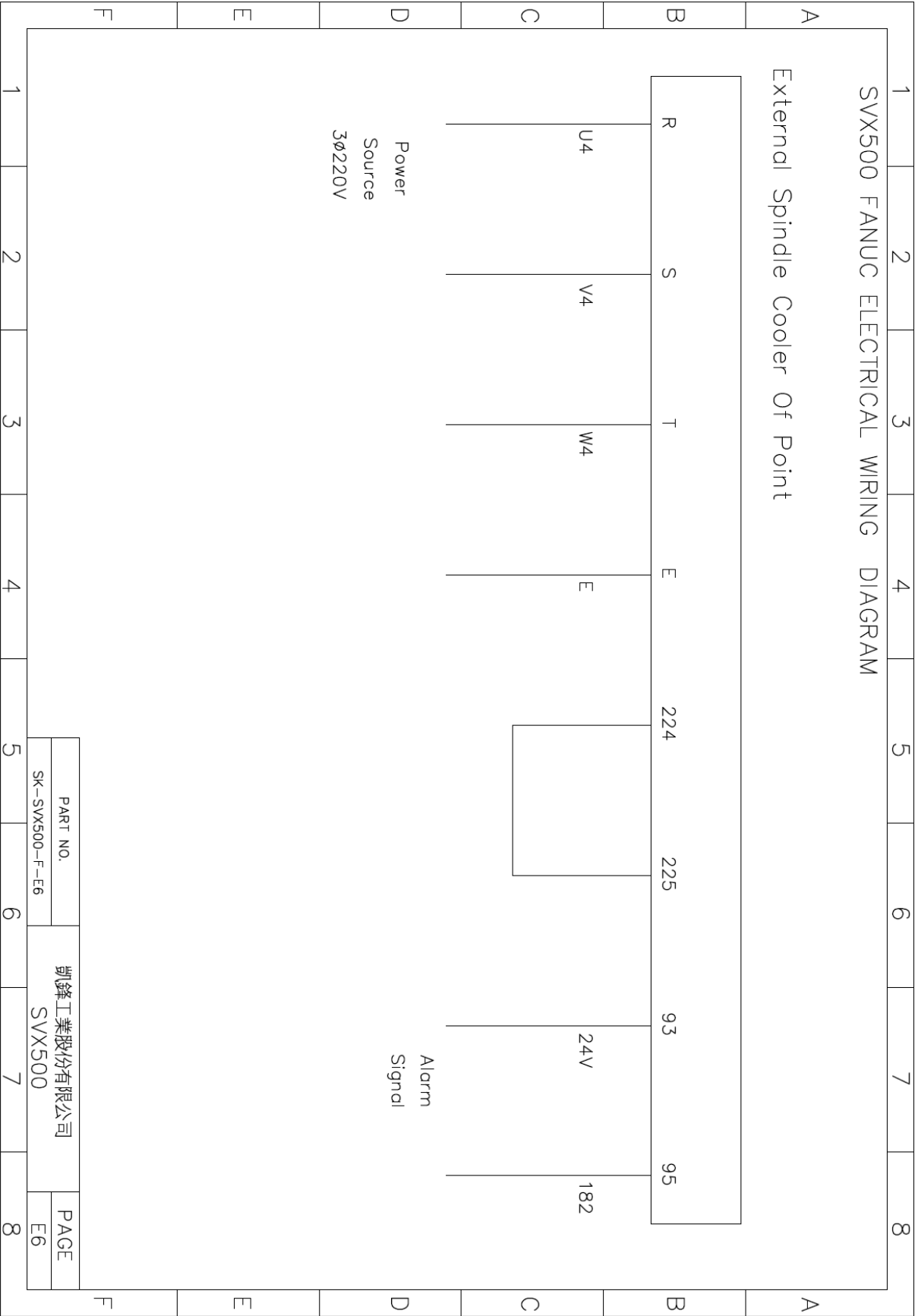


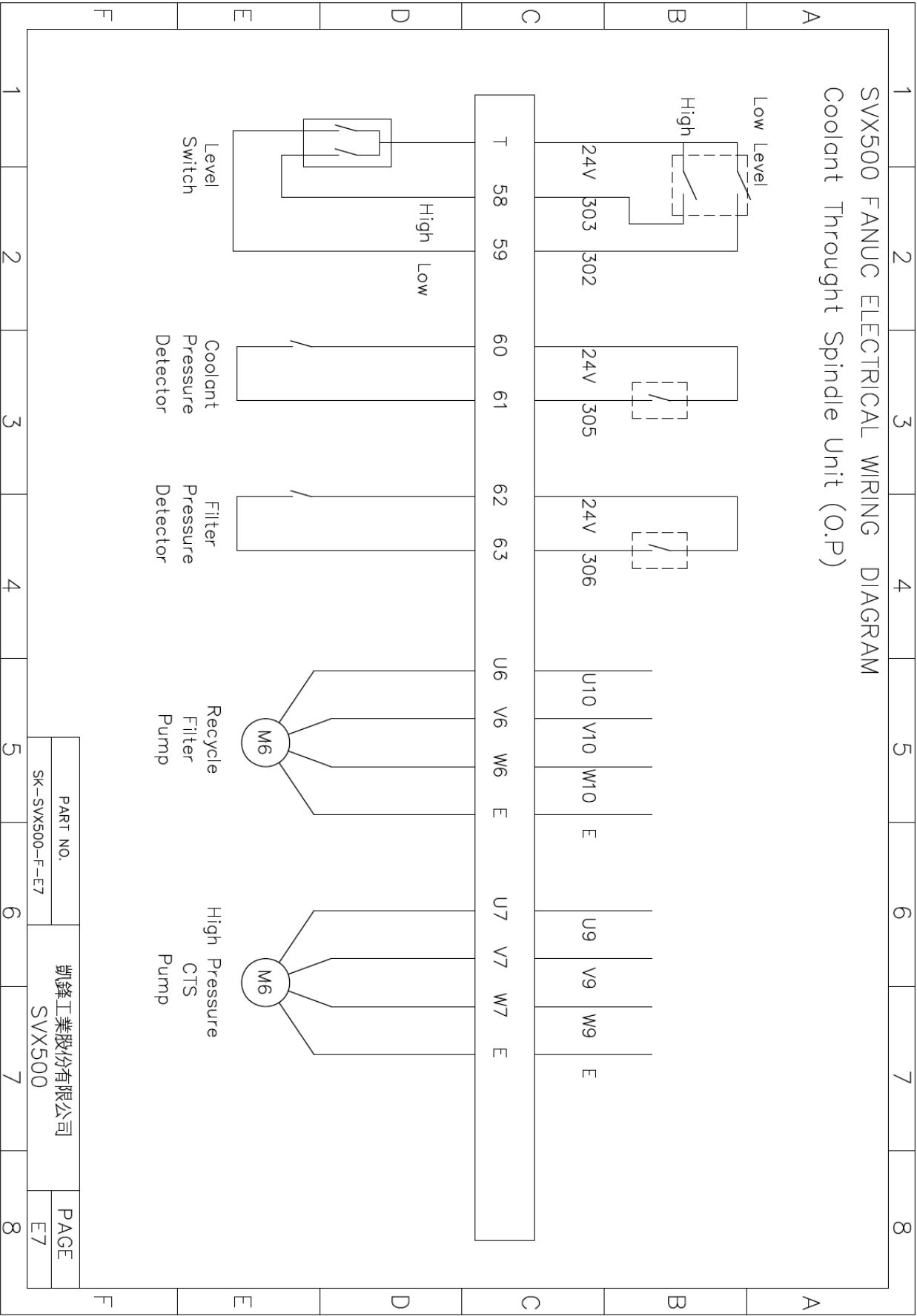


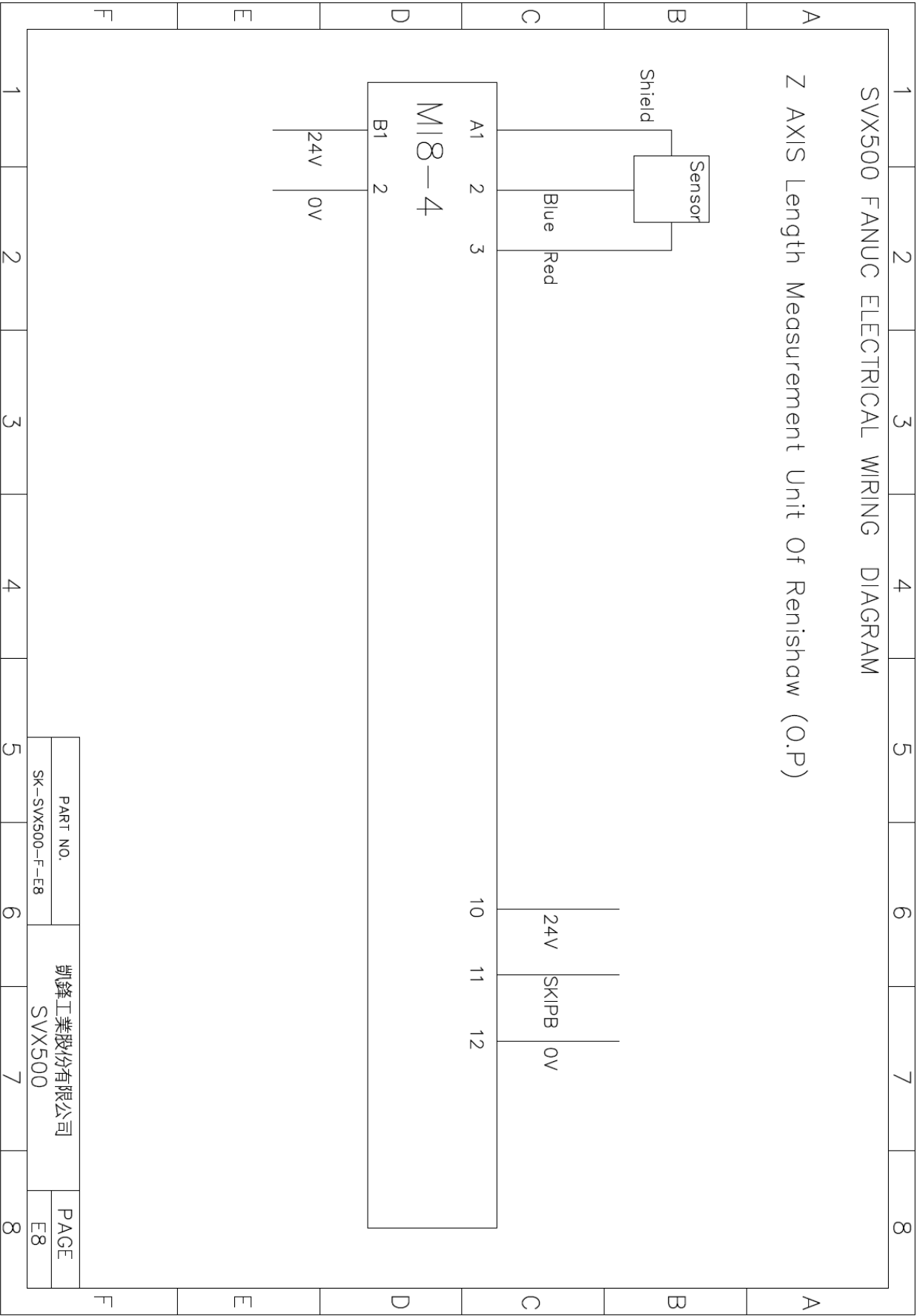


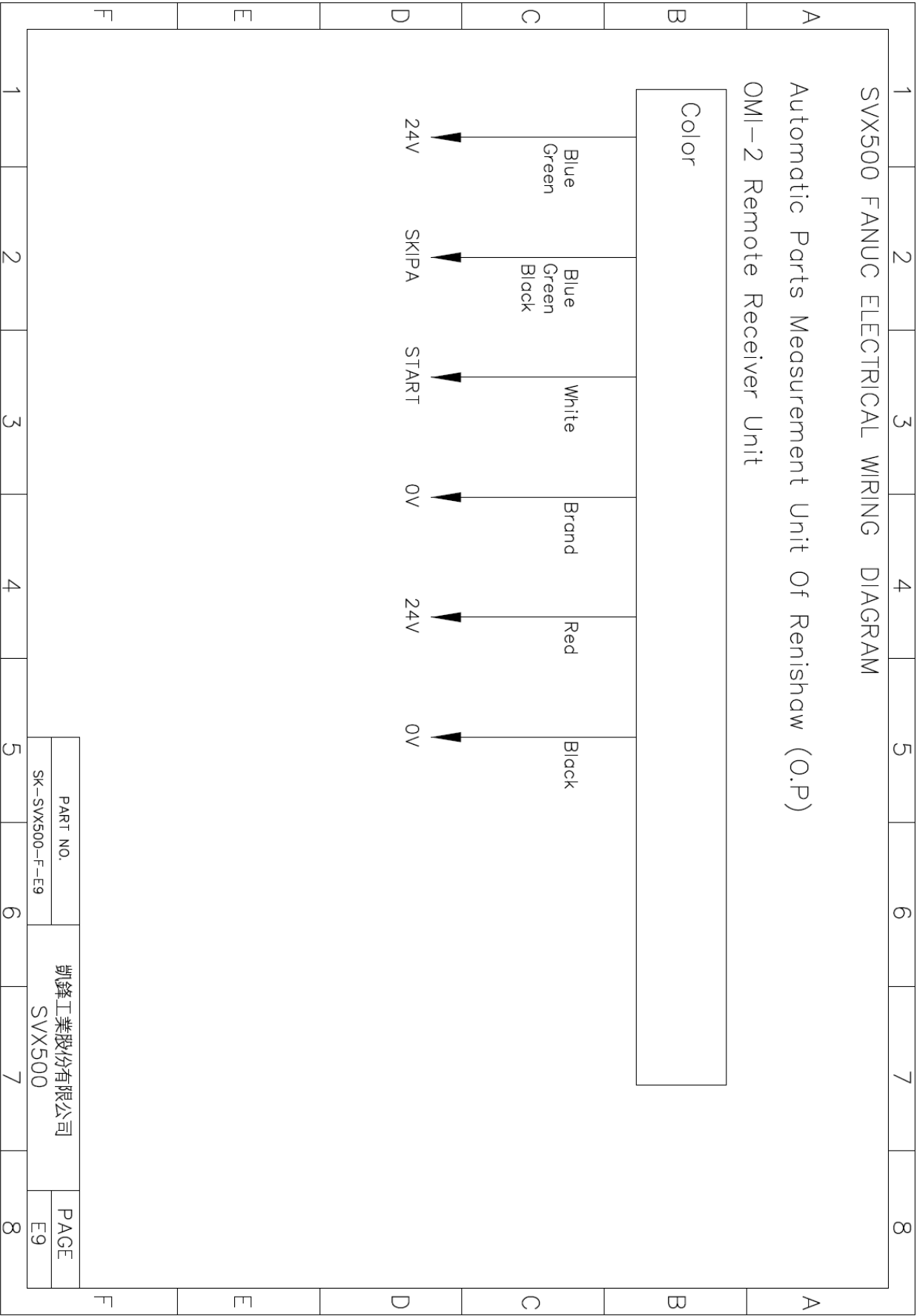


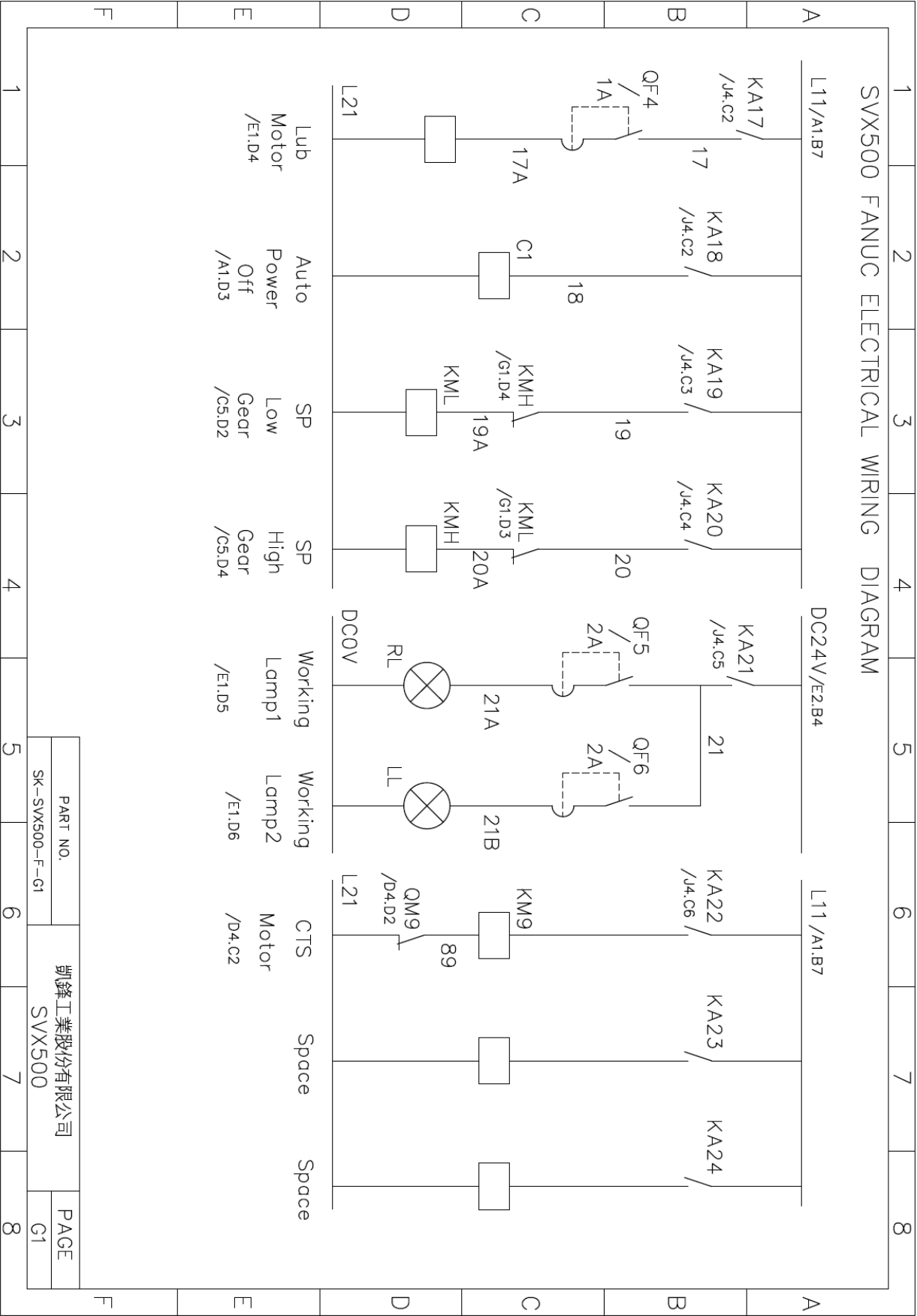


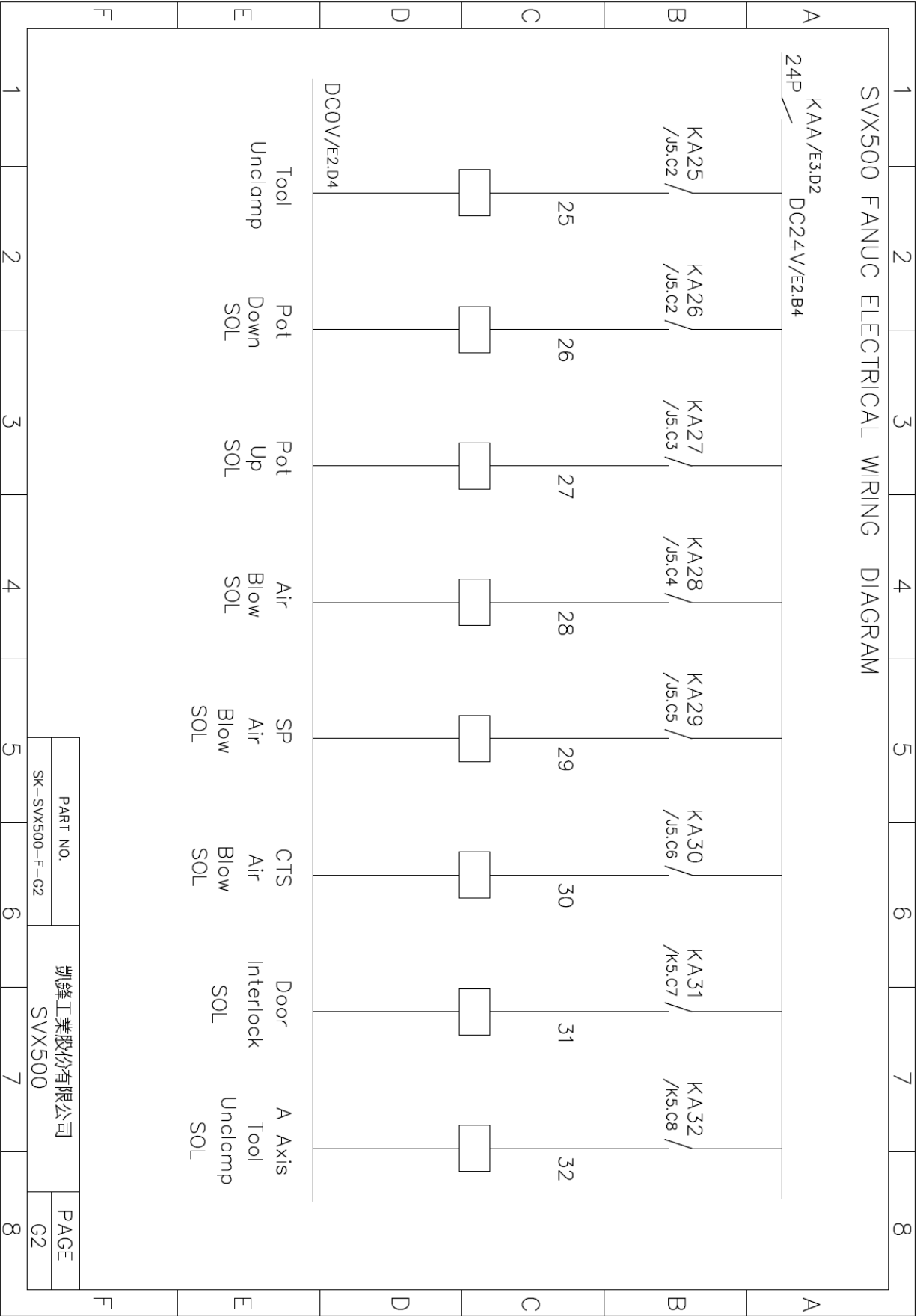


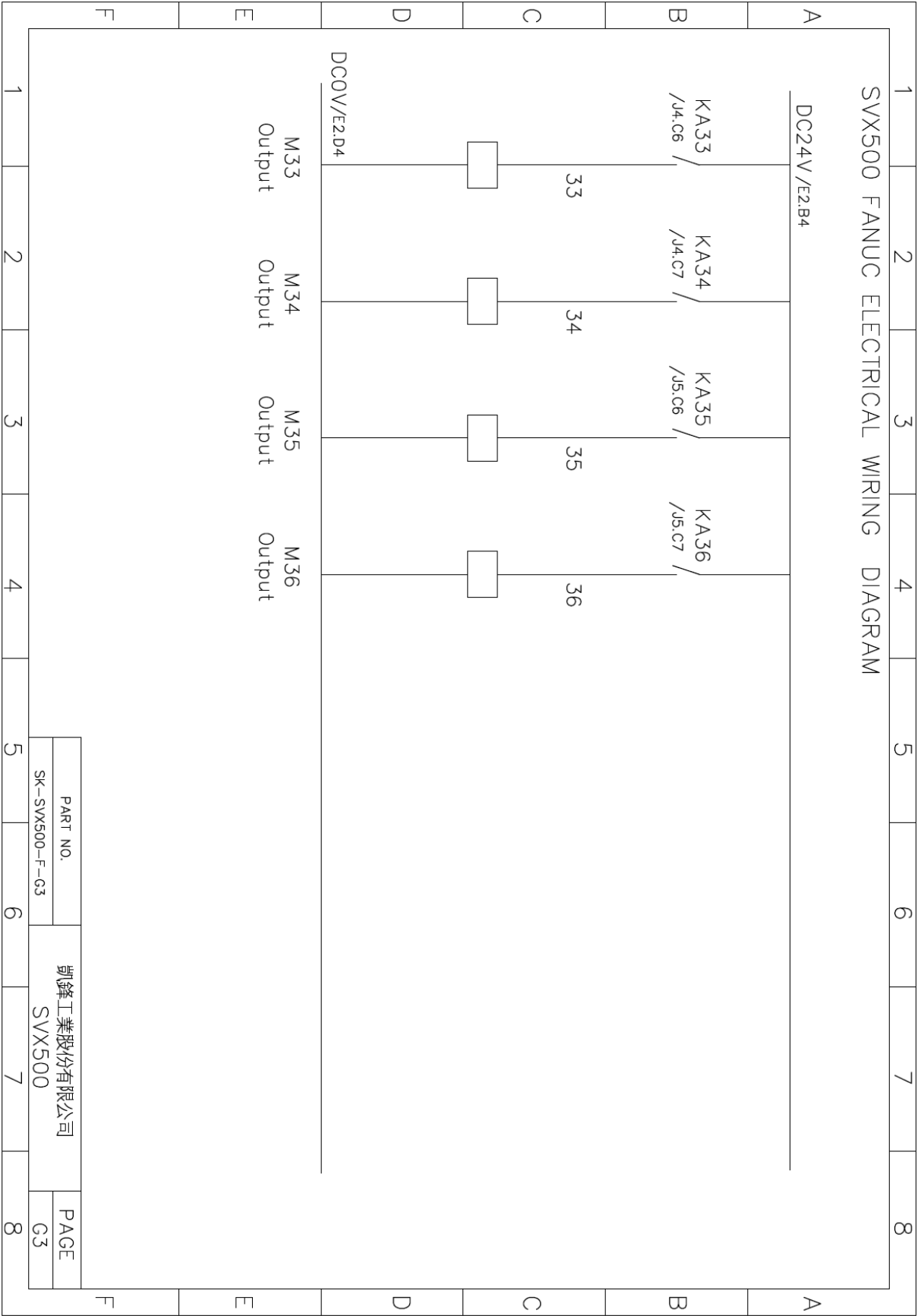


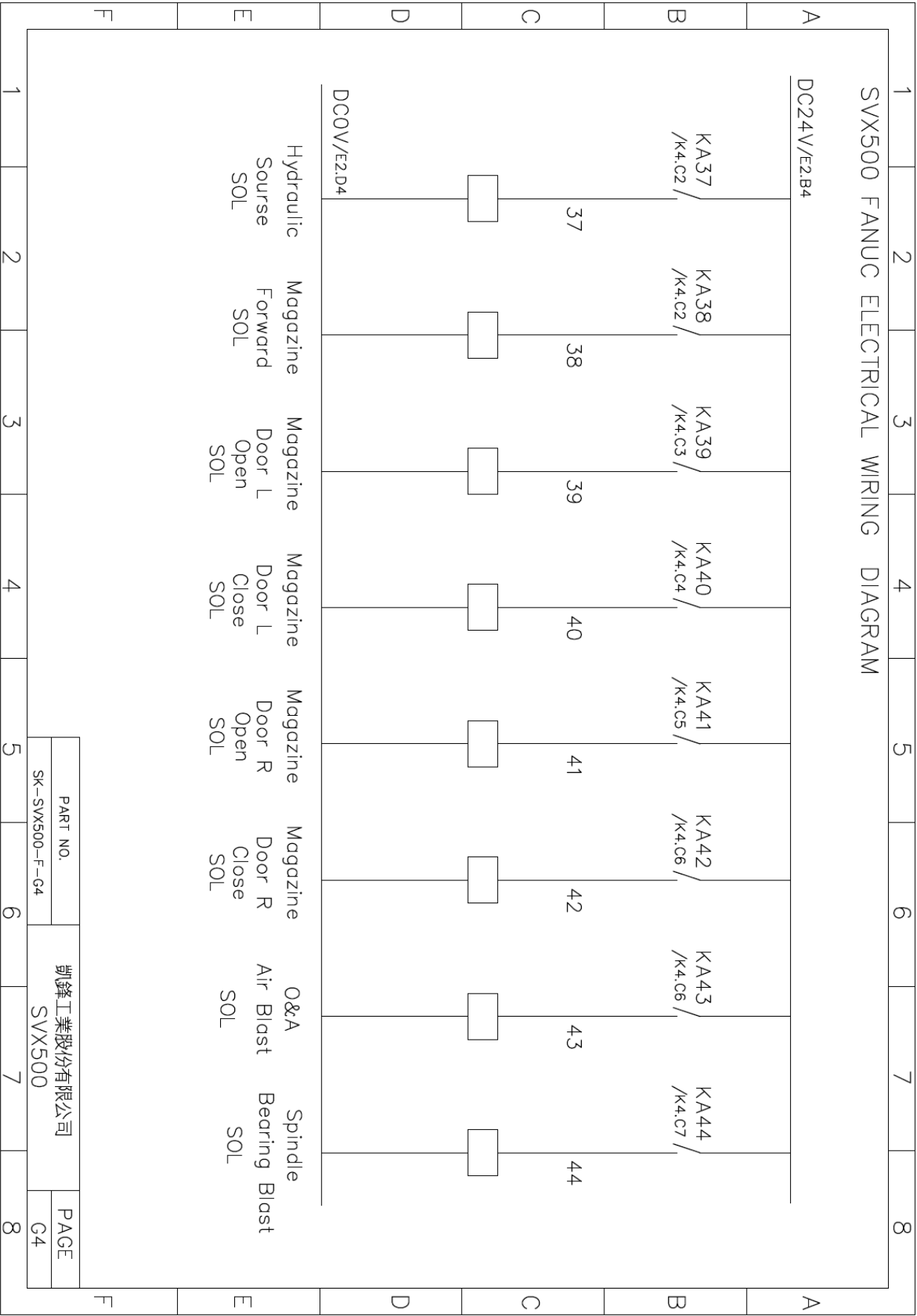


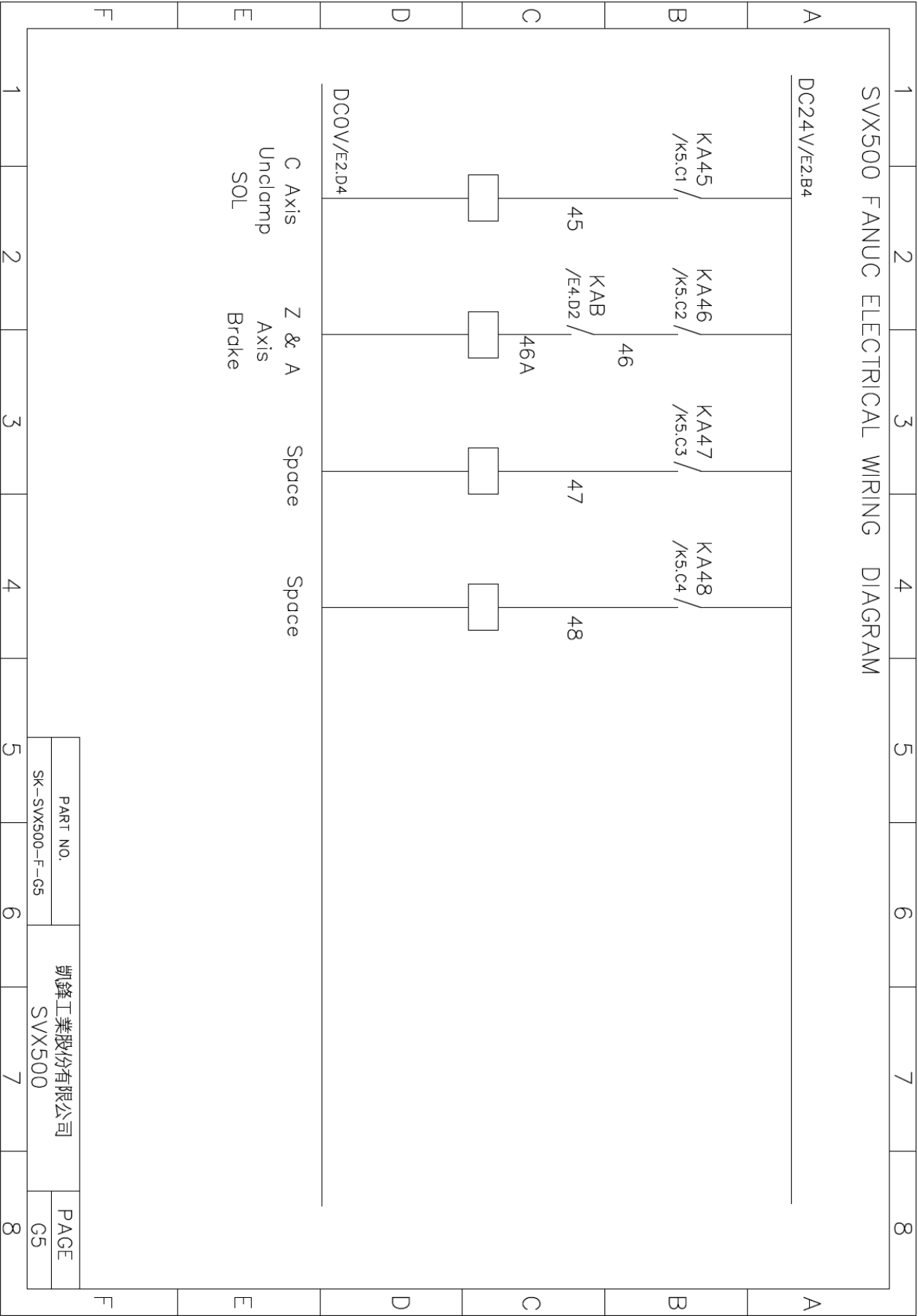


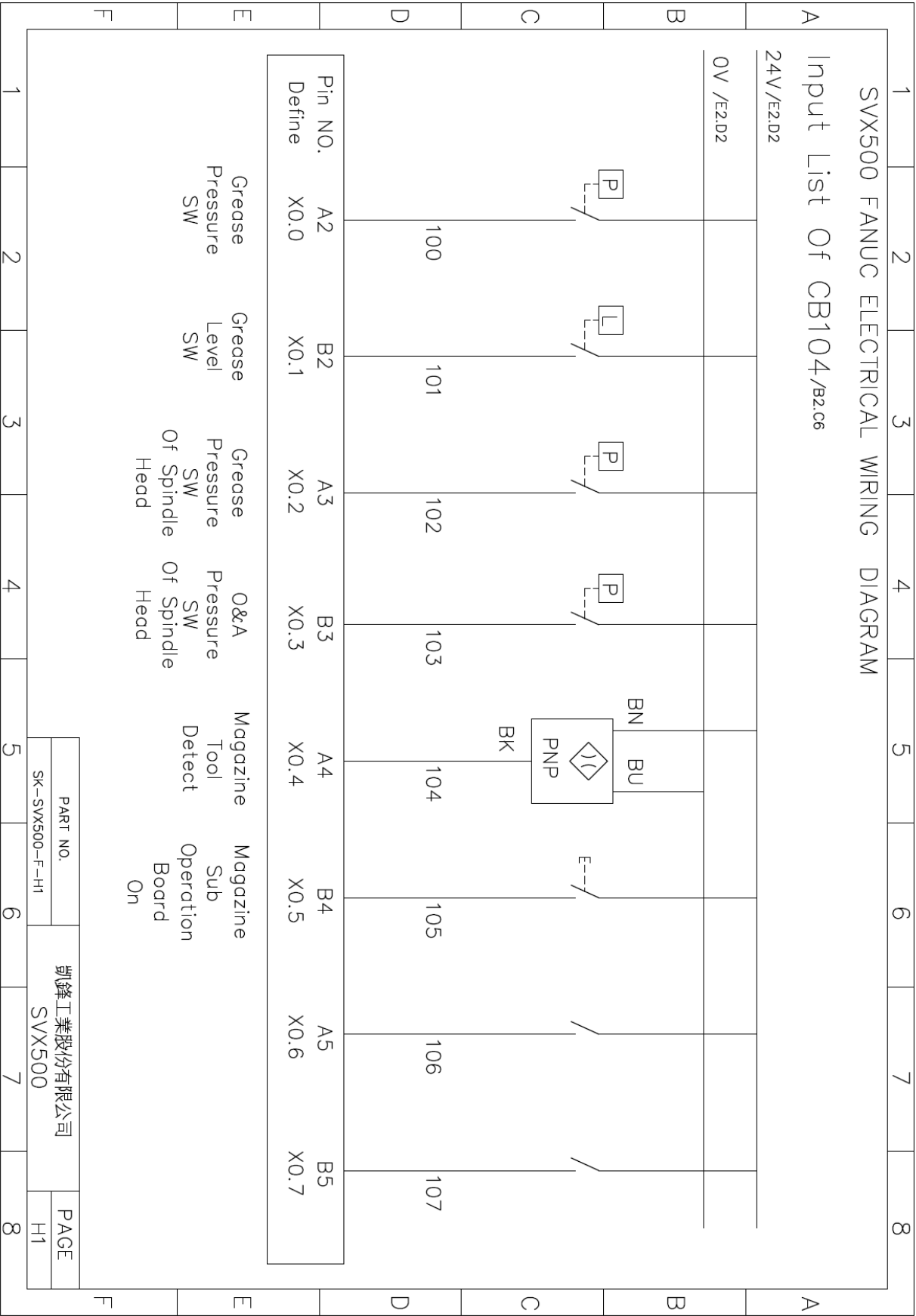


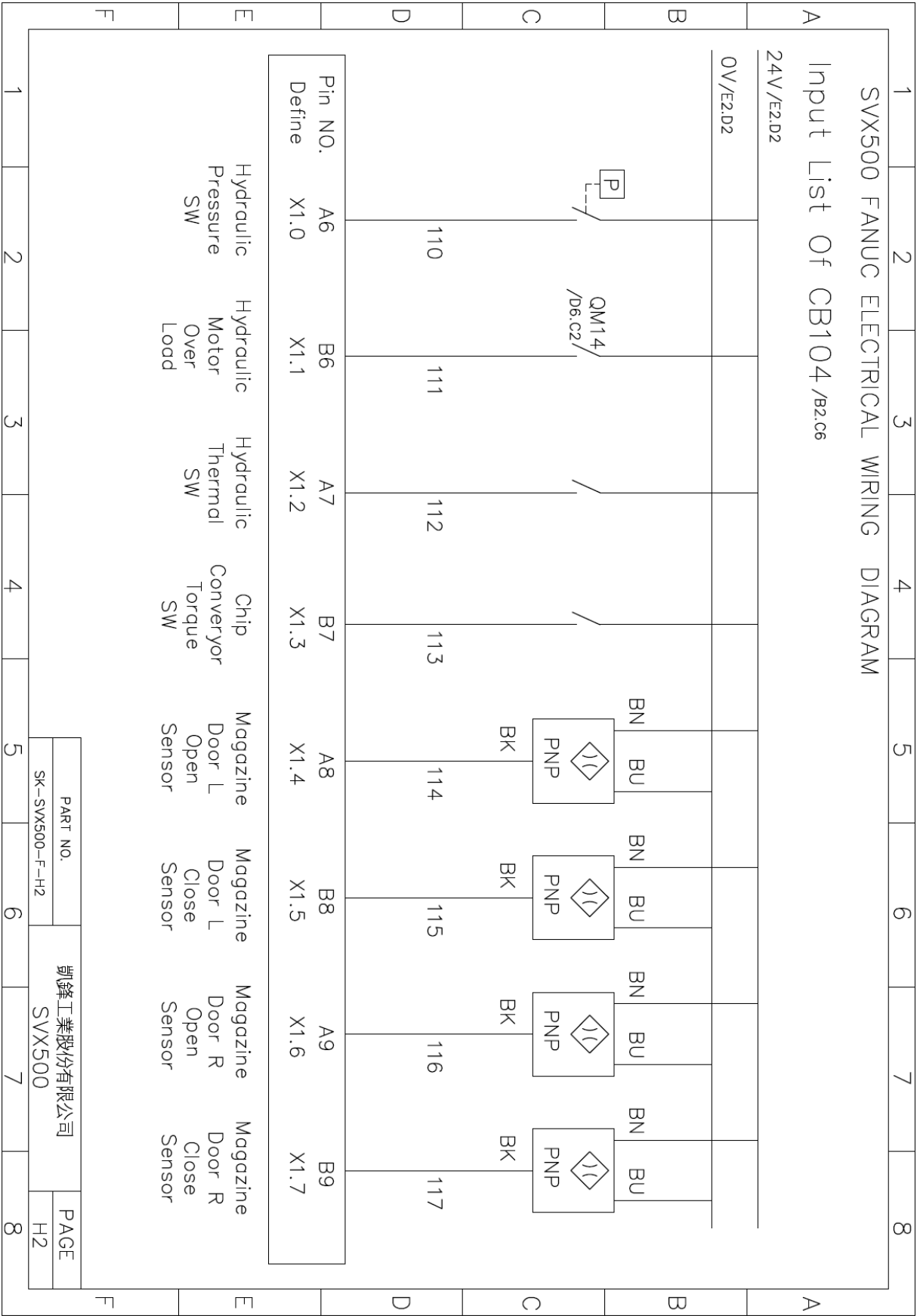


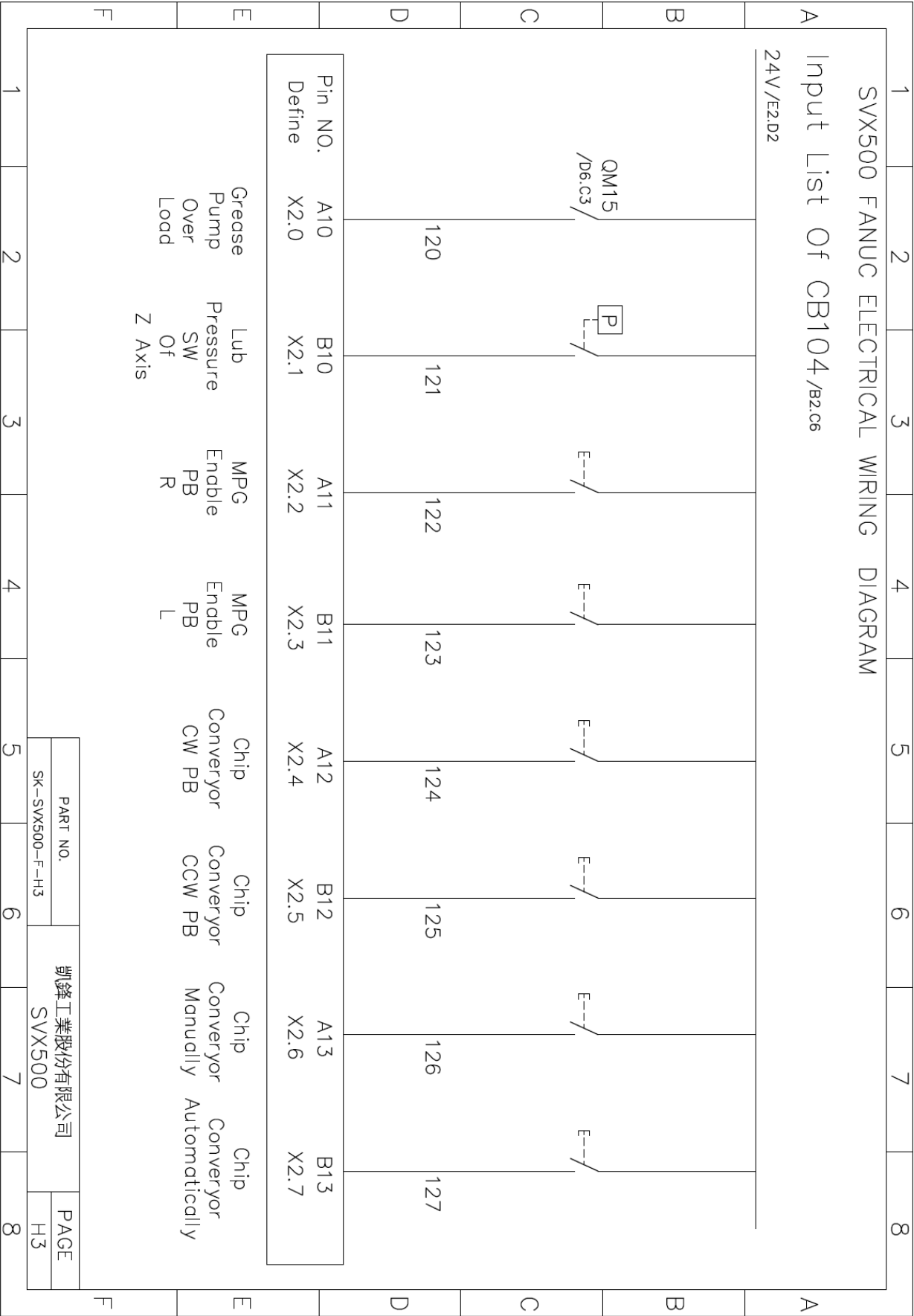


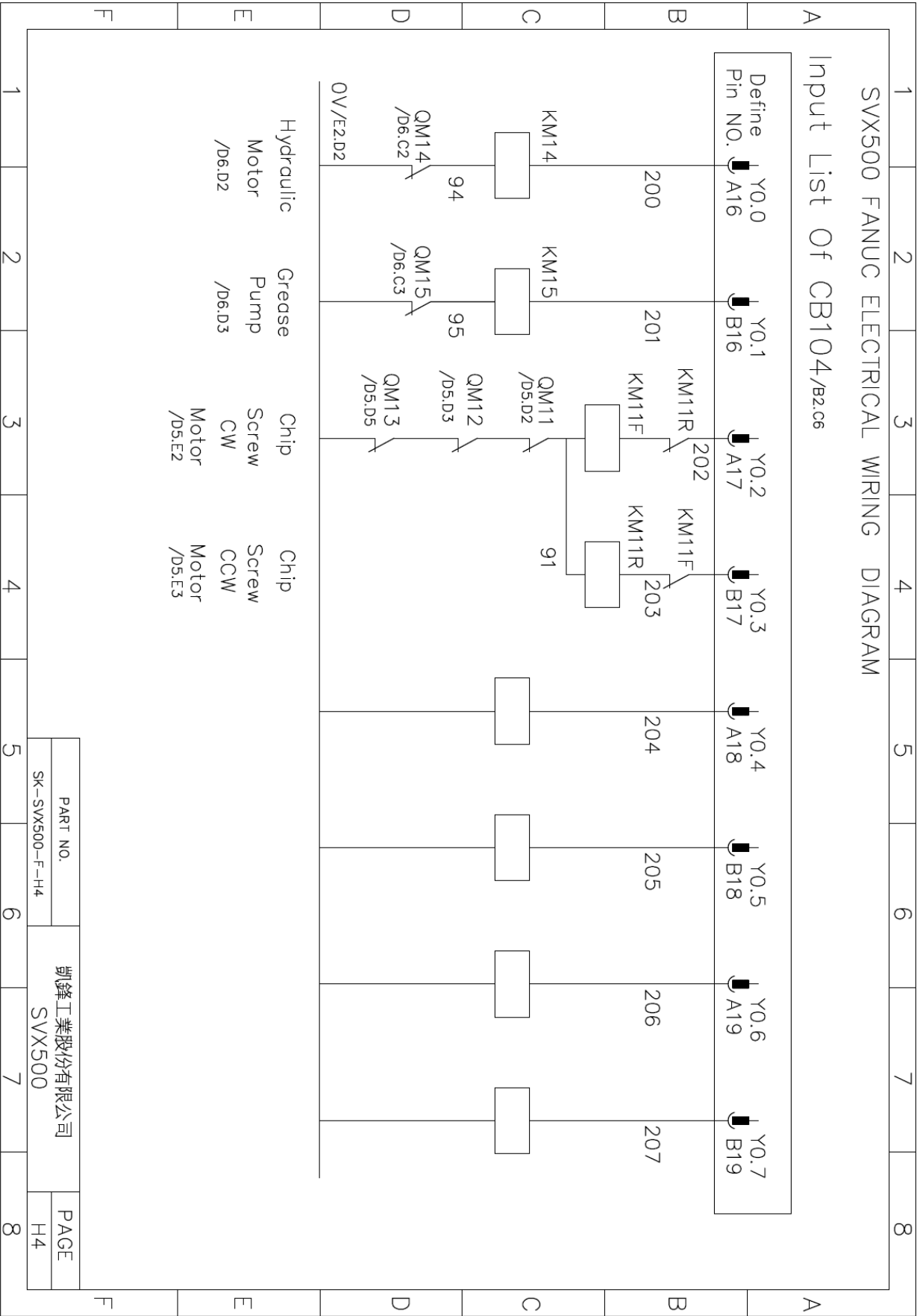






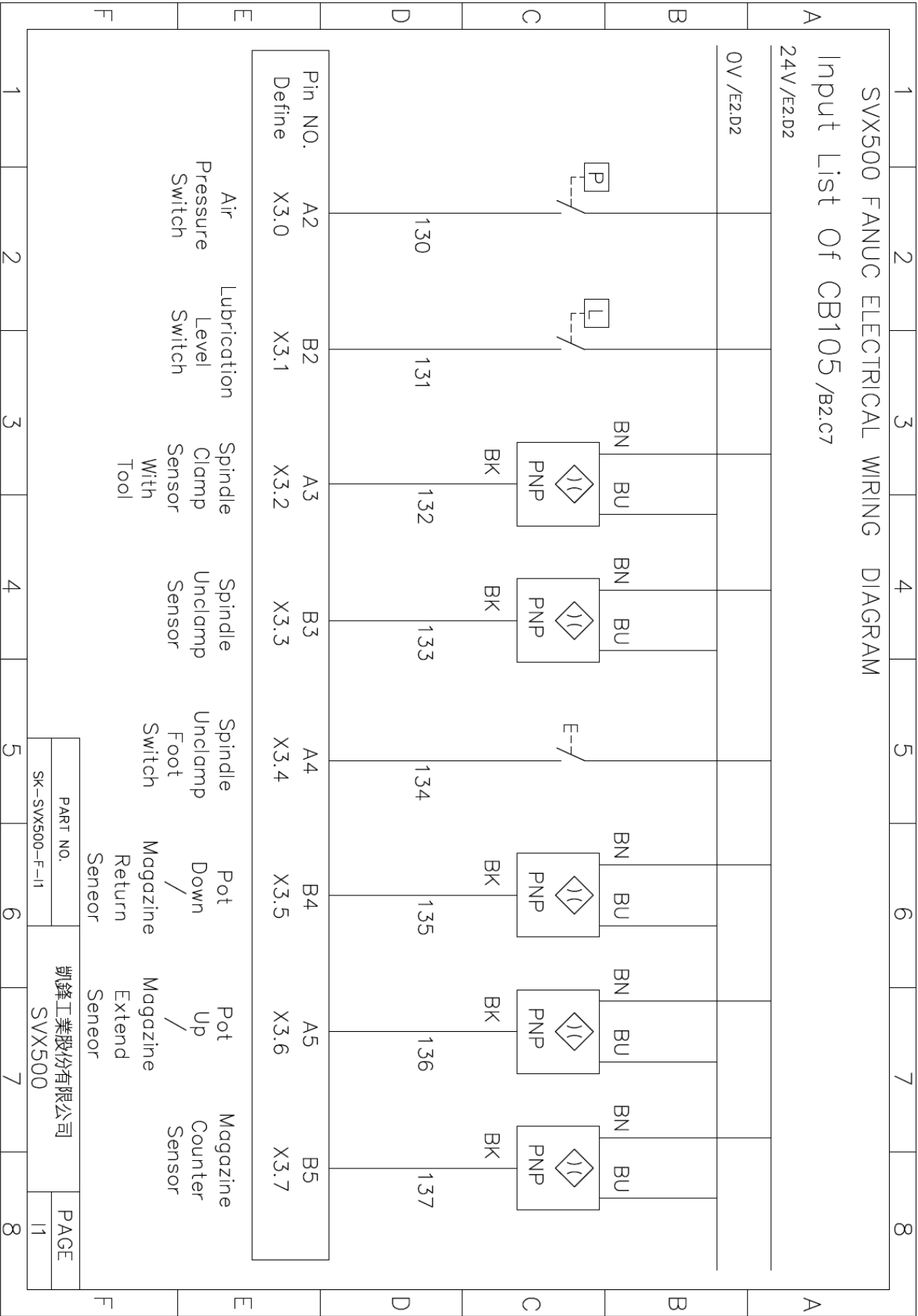






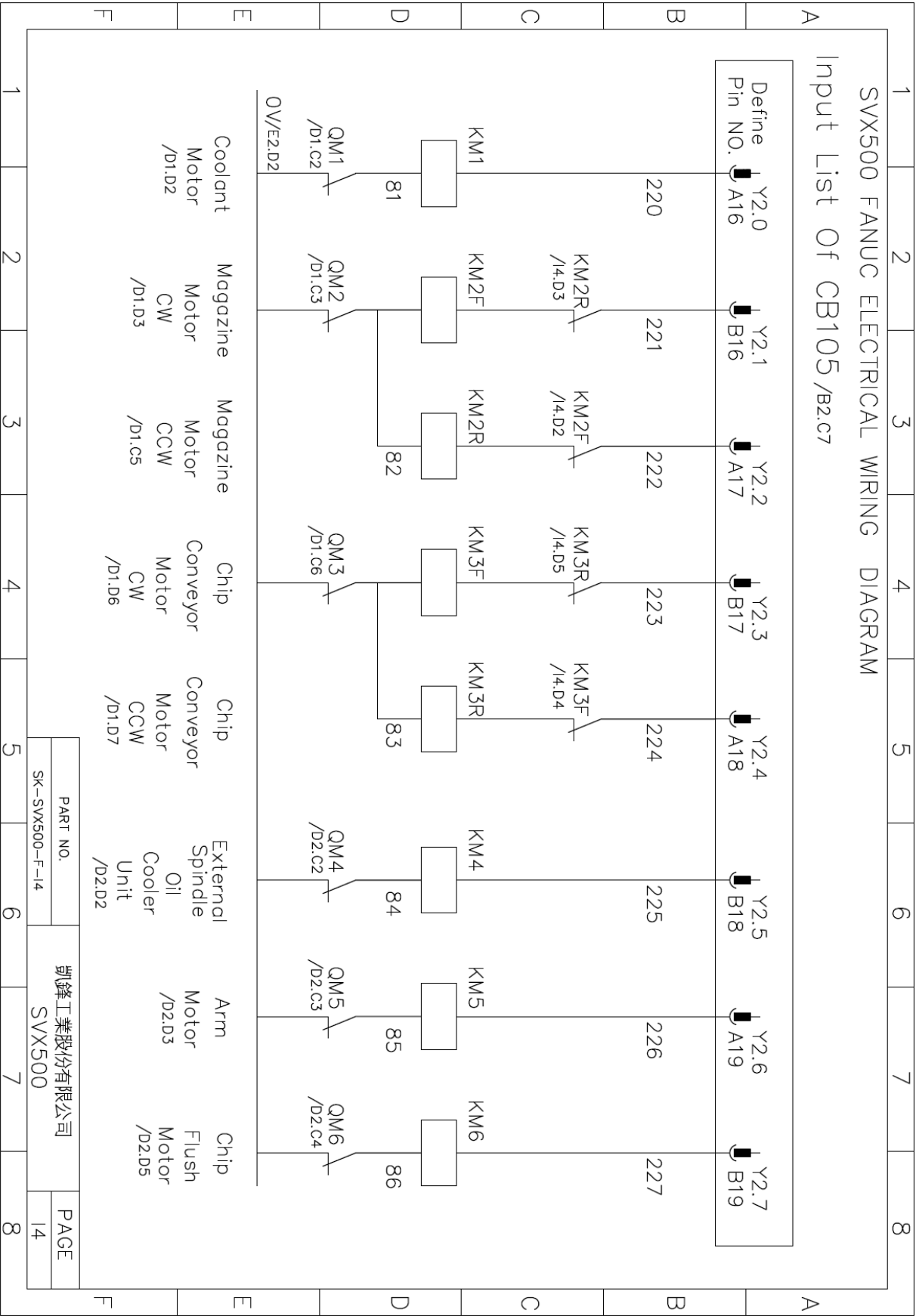
	1	2	3	4	5	6	7	8																											
	SVX500 FANUC ELECTRICAL WIRING DIAGRAM																																		
A	Input List Of CB104/B2.c6																																		
B	<table><tr><td>Define Pin NO.</td><td>0V A1</td><td>24V B1</td><td>D1COM A14</td><td>D1COM B14</td><td>D0COM A24</td><td>D0COM B24</td><td>D0COM A25</td><td>D0COM B25</td></tr><tr><td>24V/E2.D2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>0V/E2.D2</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>								Define Pin NO.	0V A1	24V B1	D1COM A14	D1COM B14	D0COM A24	D0COM B24	D0COM A25	D0COM B25	24V/E2.D2									0V/E2.D2								
Define Pin NO.	0V A1	24V B1	D1COM A14	D1COM B14	D0COM A24	D0COM B24	D0COM A25	D0COM B25																											
24V/E2.D2																																			
0V/E2.D2																																			
C																																			
D																																			
E																																			
F																																			

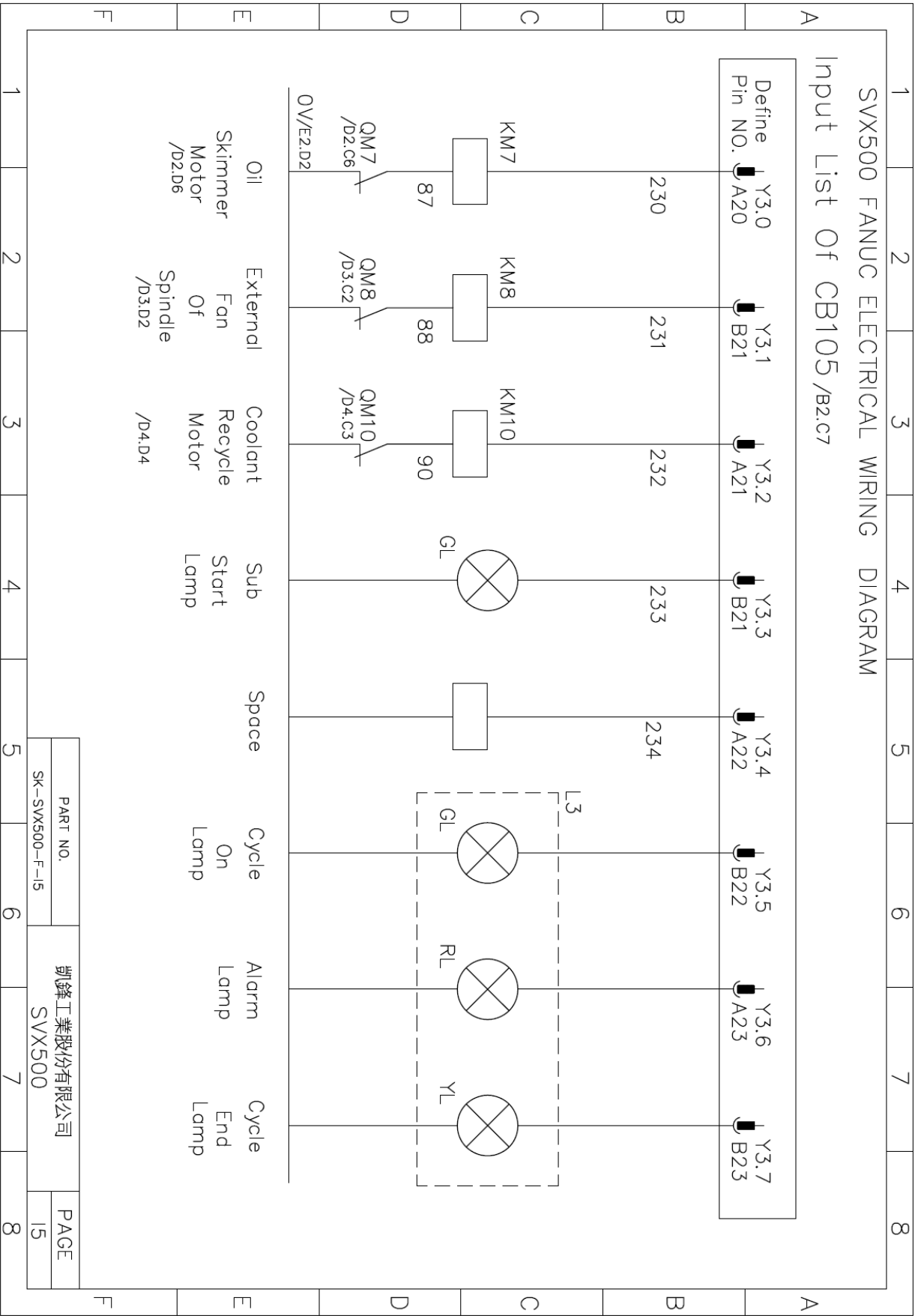
PART NO.		凱鋒工業股份有限公司 SVX500	PAGE H6
SK-SVX500-F-H6			



1	2	3	4	5	6	7	8																		
SVX500 FANUC ELECTRICAL WIRING DIAGRAM																									
Input List Of CB105/B2.c7																									
A	24V/E2.D2																								
B	0V/E2.D2																								
C	<div><div><div>BN</div><div>BU</div></div><div><div>PNP</div><div>11</div></div><div><div>QM1</div><div>/D1.C2</div></div><div><div>BK</div><div>180</div></div></div>																								
D	<div><div>181</div><div>182</div><div>183</div><div>184</div><div>185</div><div>186</div><div>187</div></div>																								
E	<table><tr><td>Pin NO.</td><td>A10</td><td>B10</td><td>A11</td><td>B11</td><td>A12</td><td>B12</td><td>A13</td><td>B13</td></tr><tr><td>Define</td><td>X8.0</td><td>X8.1</td><td>X8.2</td><td>X8.3</td><td>X8.4</td><td>X8.5</td><td>X8.6</td><td>X8.7</td></tr></table>							Pin NO.	A10	B10	A11	B11	A12	B12	A13	B13	Define	X8.0	X8.1	X8.2	X8.3	X8.4	X8.5	X8.6	X8.7
Pin NO.	A10	B10	A11	B11	A12	B12	A13	B13																	
Define	X8.0	X8.1	X8.2	X8.3	X8.4	X8.5	X8.6	X8.7																	
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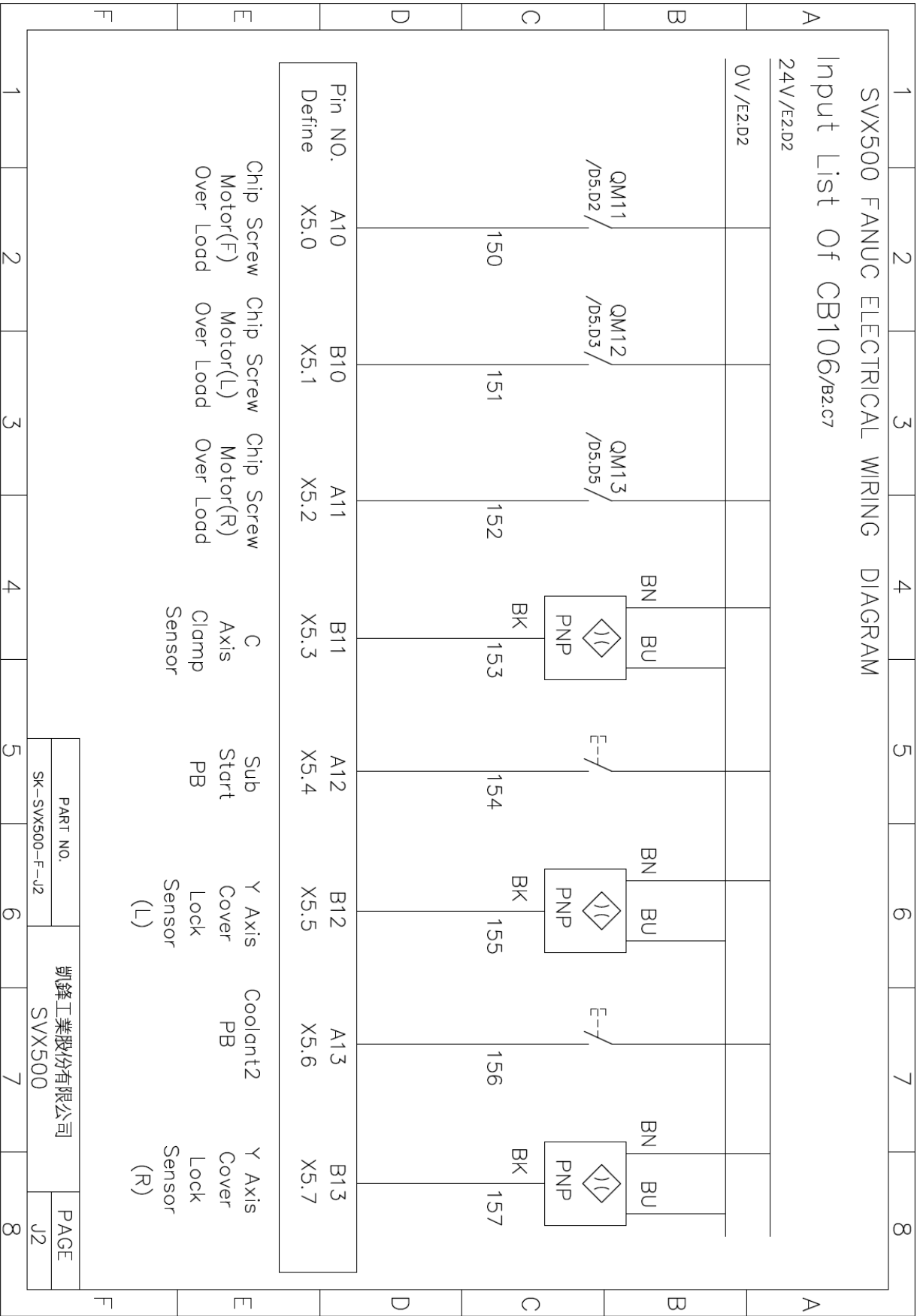
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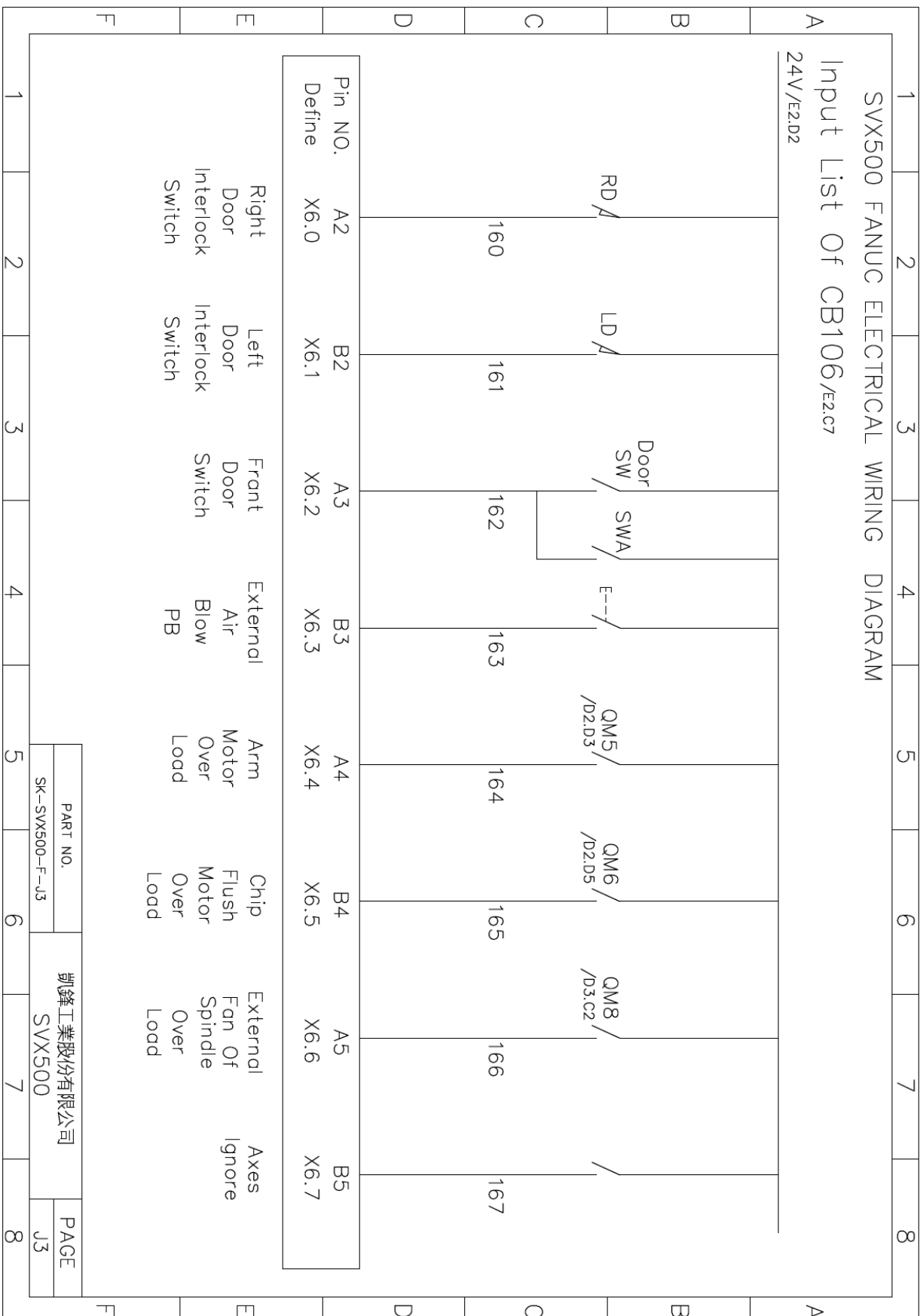


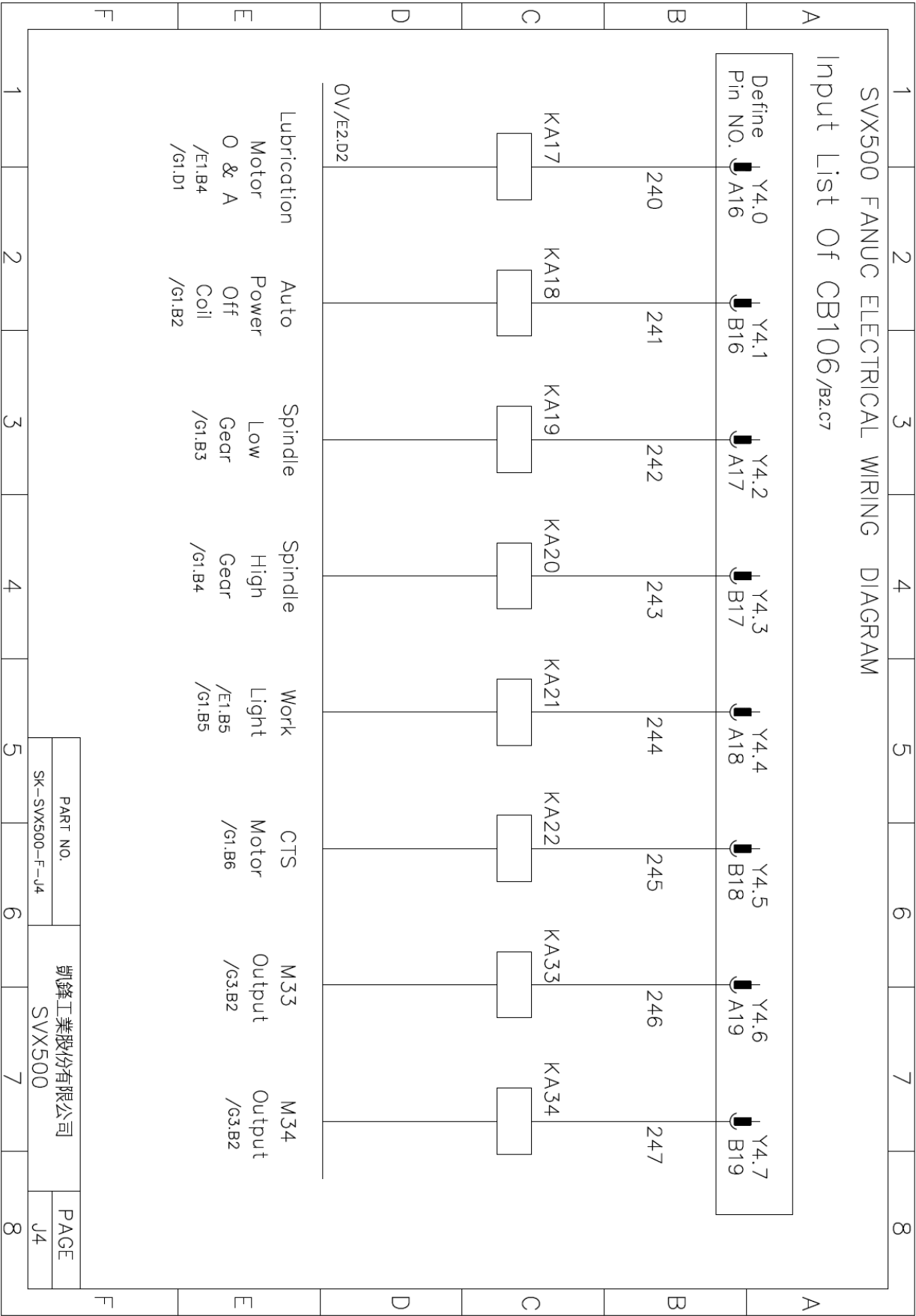


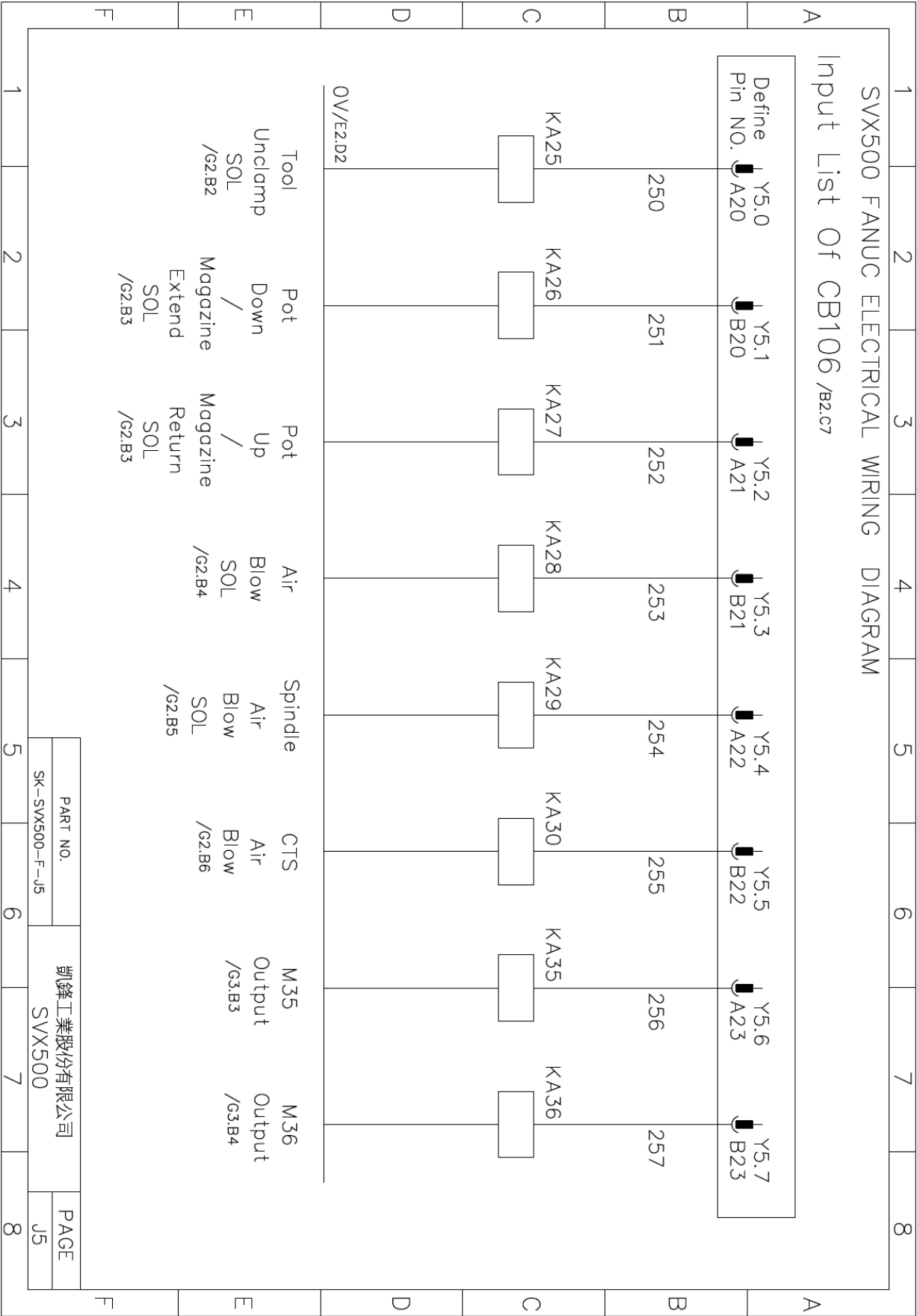
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	24V/E2.D2						
	0V/E2.D2						
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					PART NO. SK-SVX500-F-16		
					凱鋒工業股份有限公司 SVX500		
					PAGE 16		
1	2	3	4	5	6	7	8

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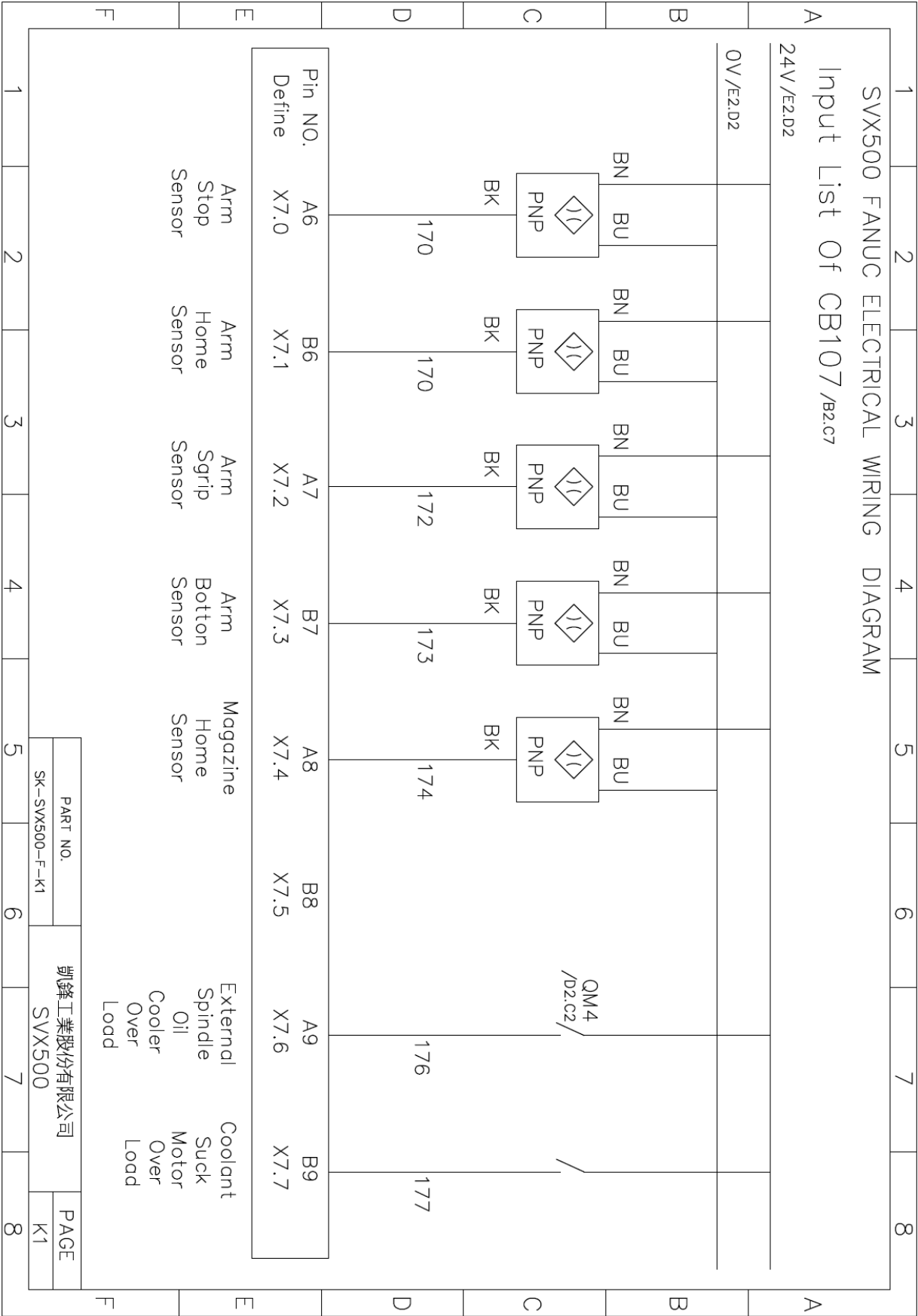






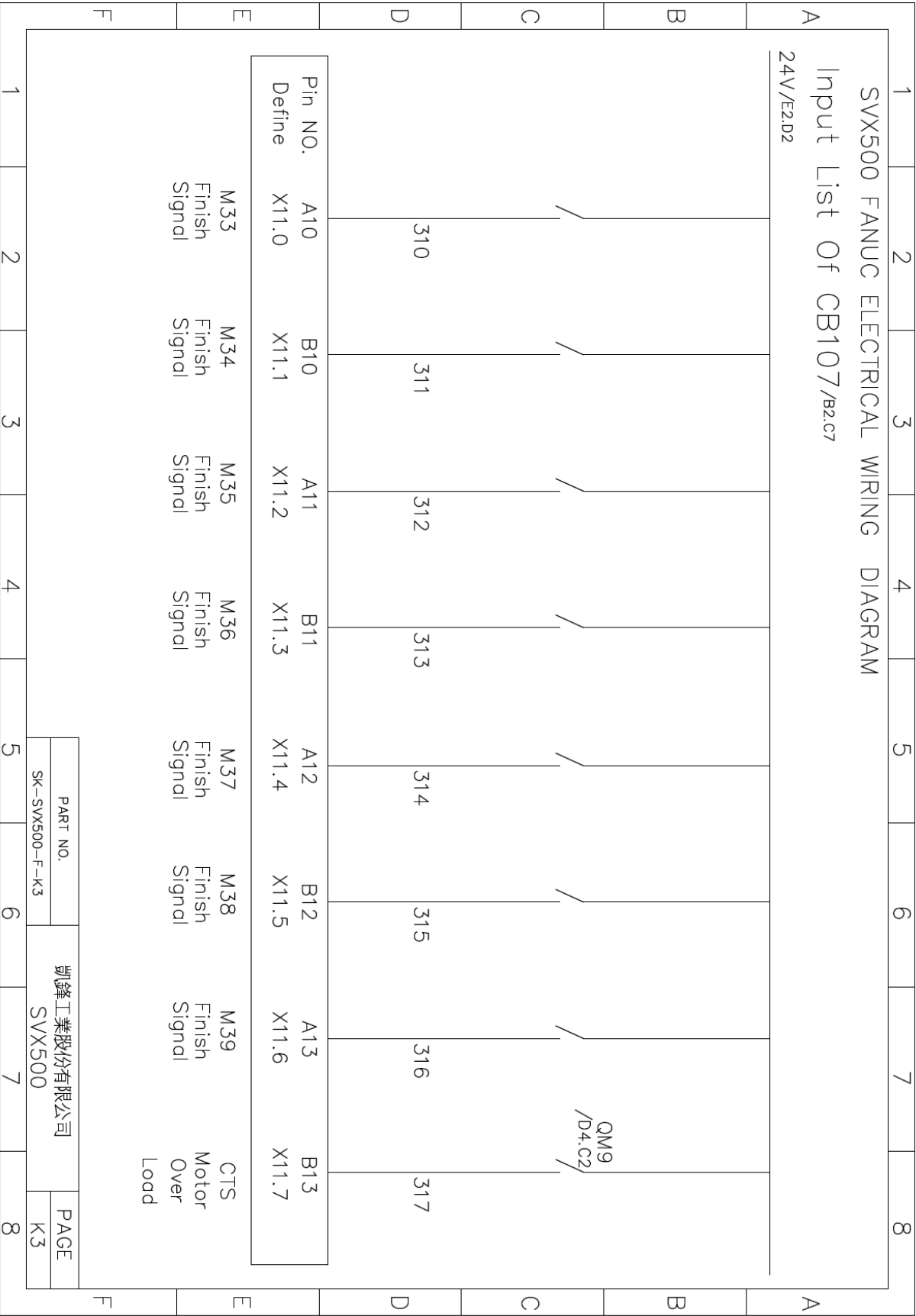
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C	24V/E2.D2								
D	0V/E2.D2								
E									
F									

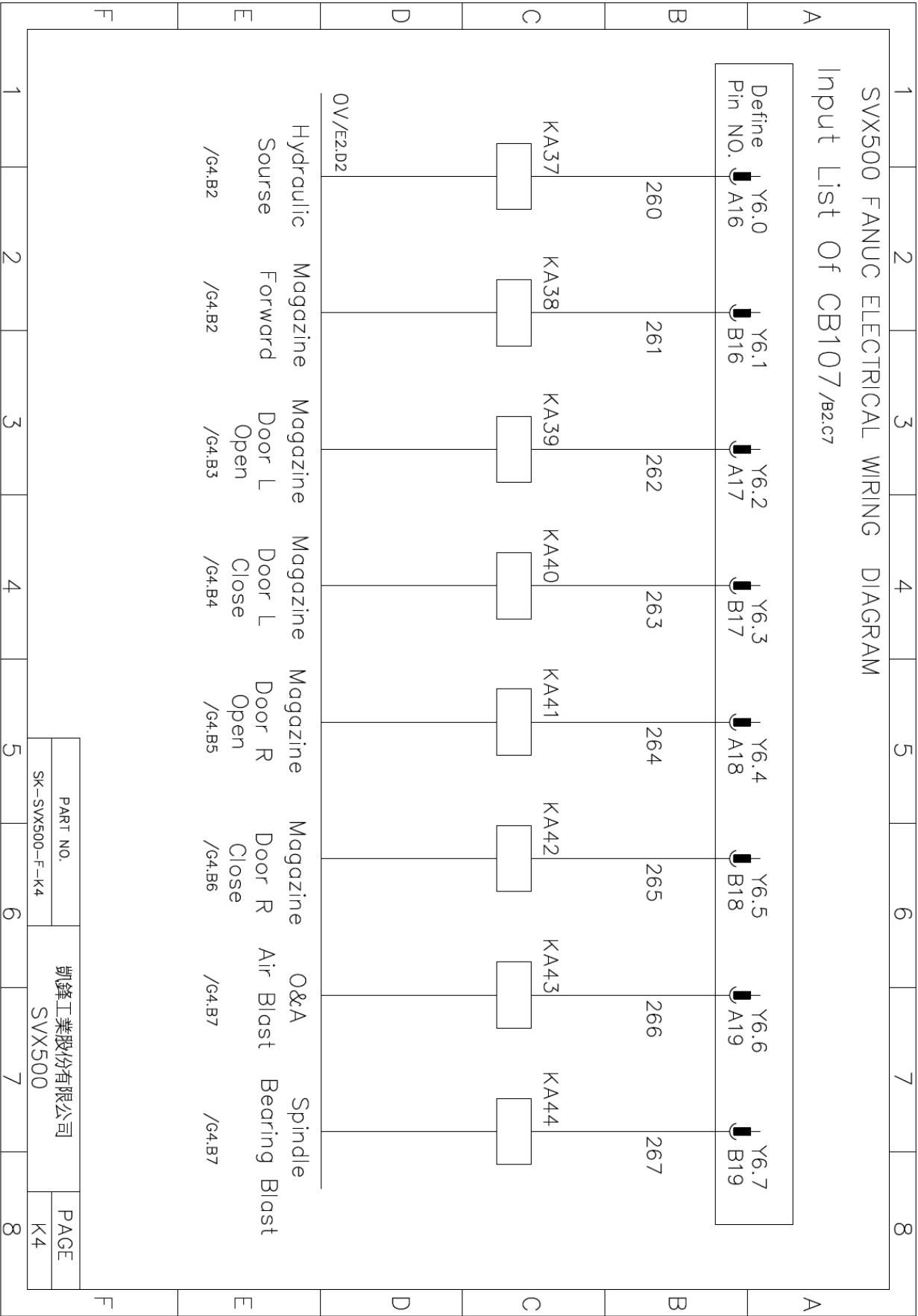
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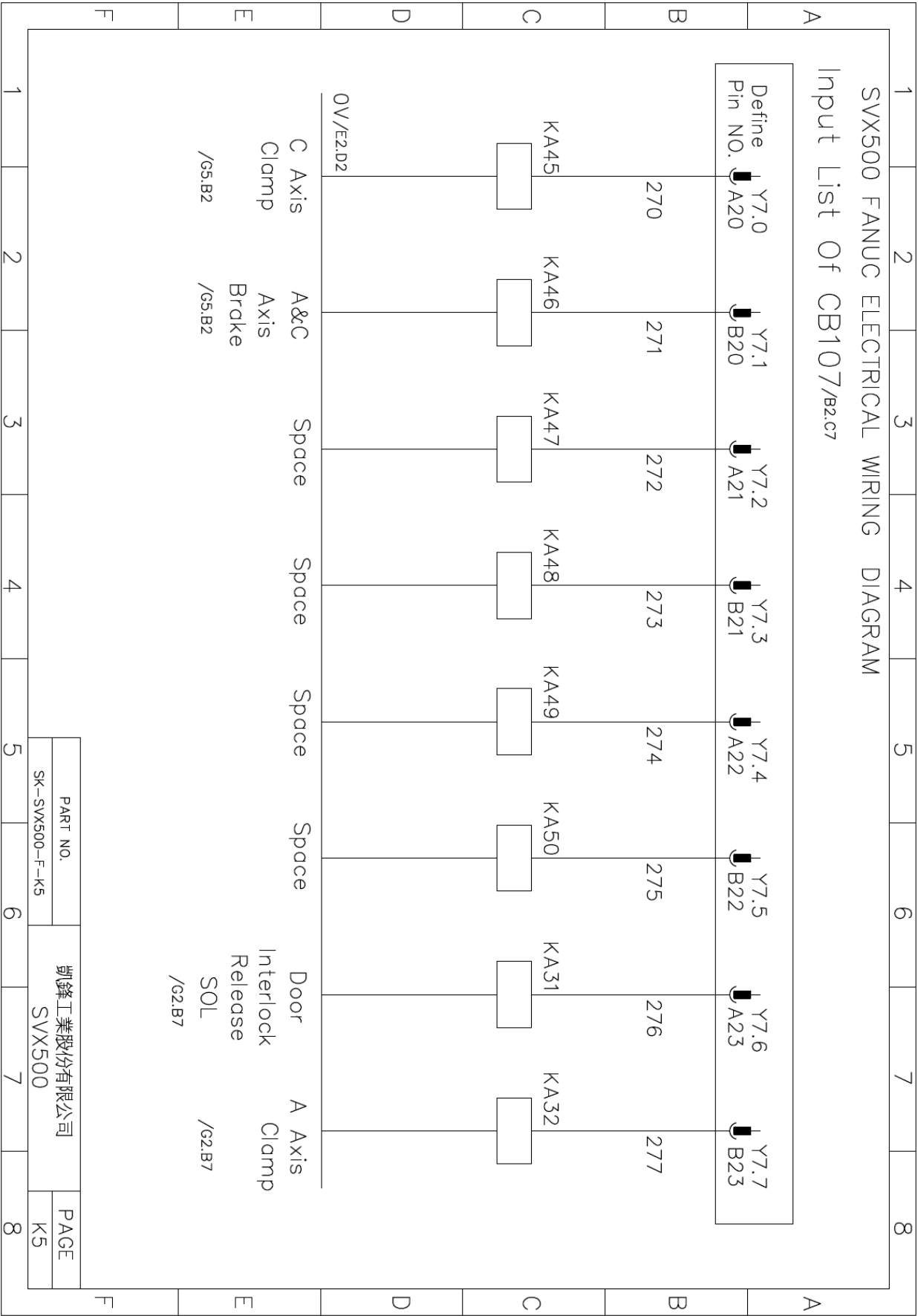


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Input List Of CB107/B2.c7															
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PART NO.		凱鋒工業股份有限公司		PAGE	
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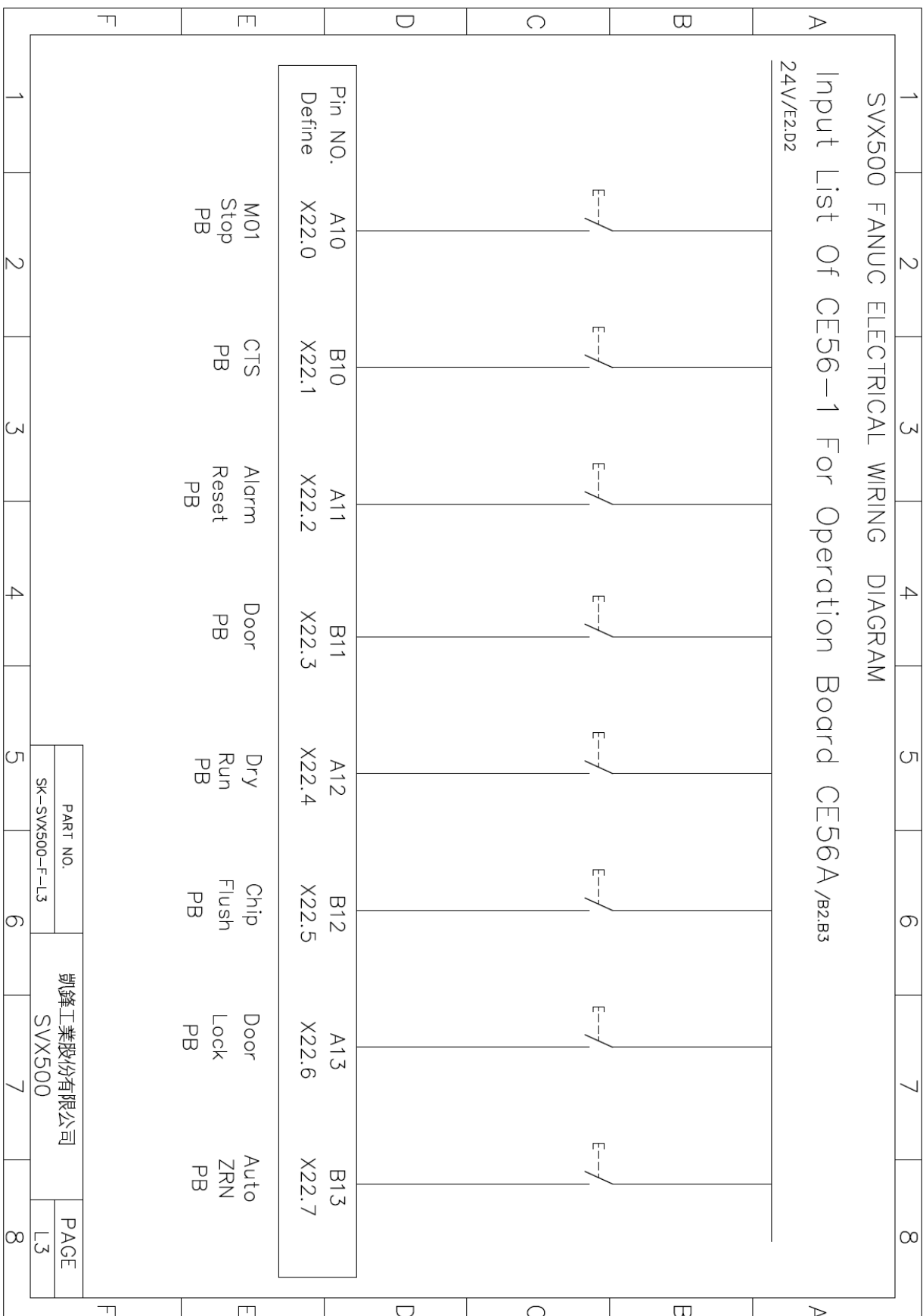


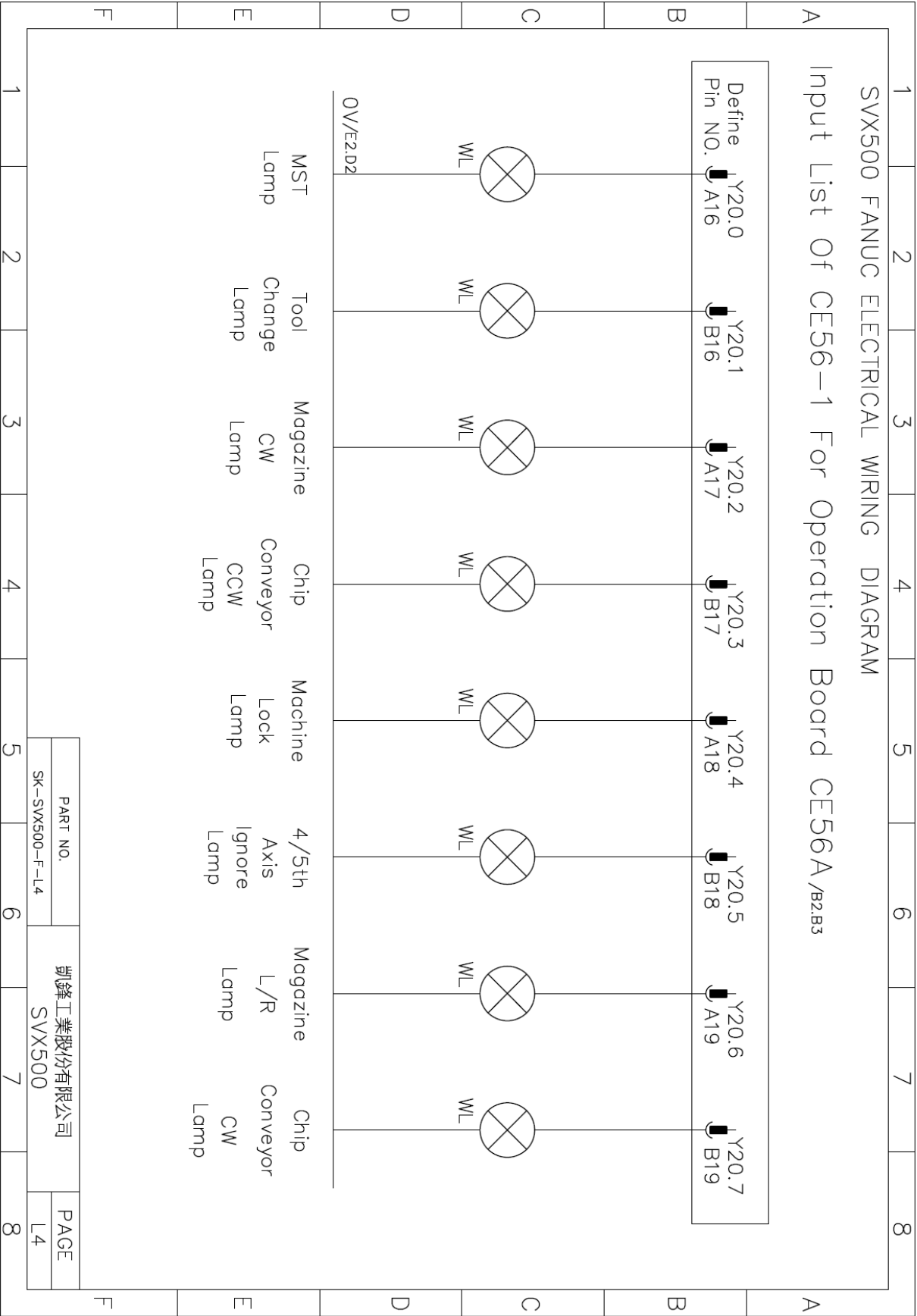


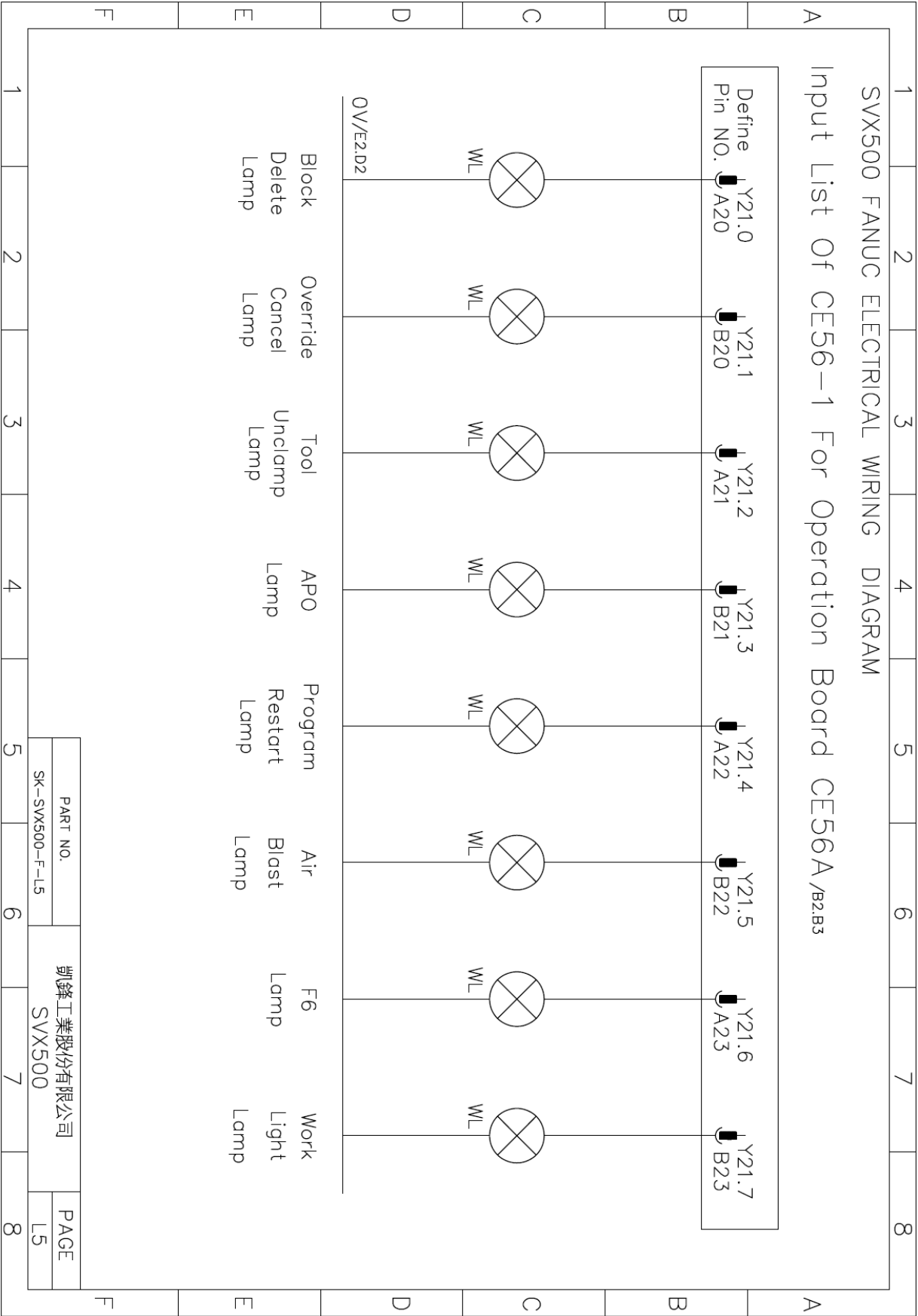
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C									
D									
E	24V/E2.D2								
F	0V/E2.D2								
	1	2	3	4	5	6	7	8	
	PART NO. SK-SVX500-F-K6				凱鋒工業股份有限公司 SVX500			PAGE K6	

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PART NO. SK-SVX500-F-L1					凱鋒工業股份有限公司 SVX500			PAGE L1																											

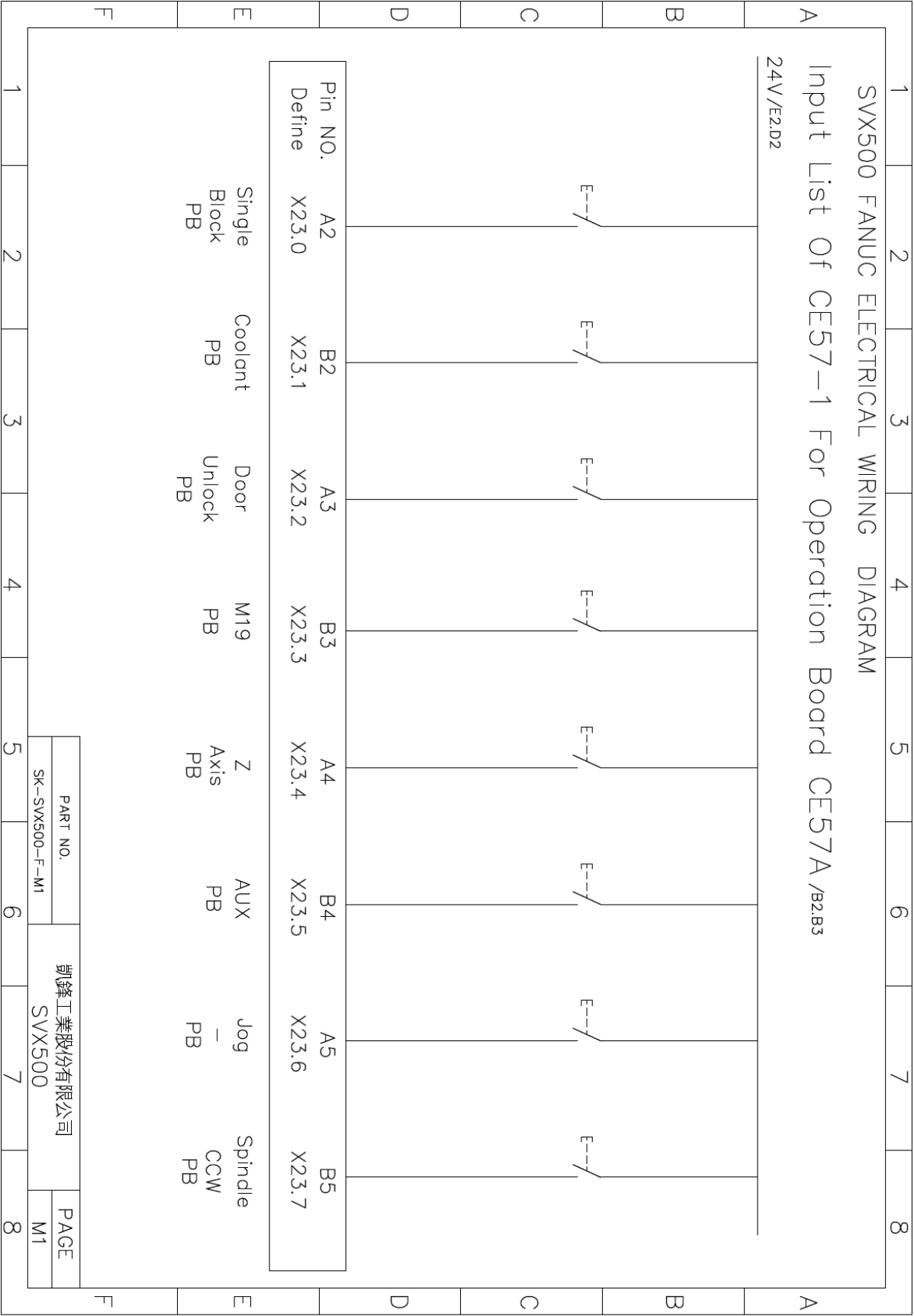
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E								
F								
	1	2	3	4	5	6	7	8
	Pin NO. A6 B6 A7 B7 A8 B8 A9 B9							
	Define X21.0 X21.1 X21.2 X21.3 X21.4 X21.5 X21.6 X21.7							
	Block Delete PB Override Cancel PB Tool Unclamp PB APO PB Program Restart PB Air Blast PB F6 PB Work Light PB							
	1	2	3	4	5	6	7	8
	PART NO.		凱鋒工業股份有限公司				PAGE	
	SK-SVX500-F-L2		SVX500				L2	



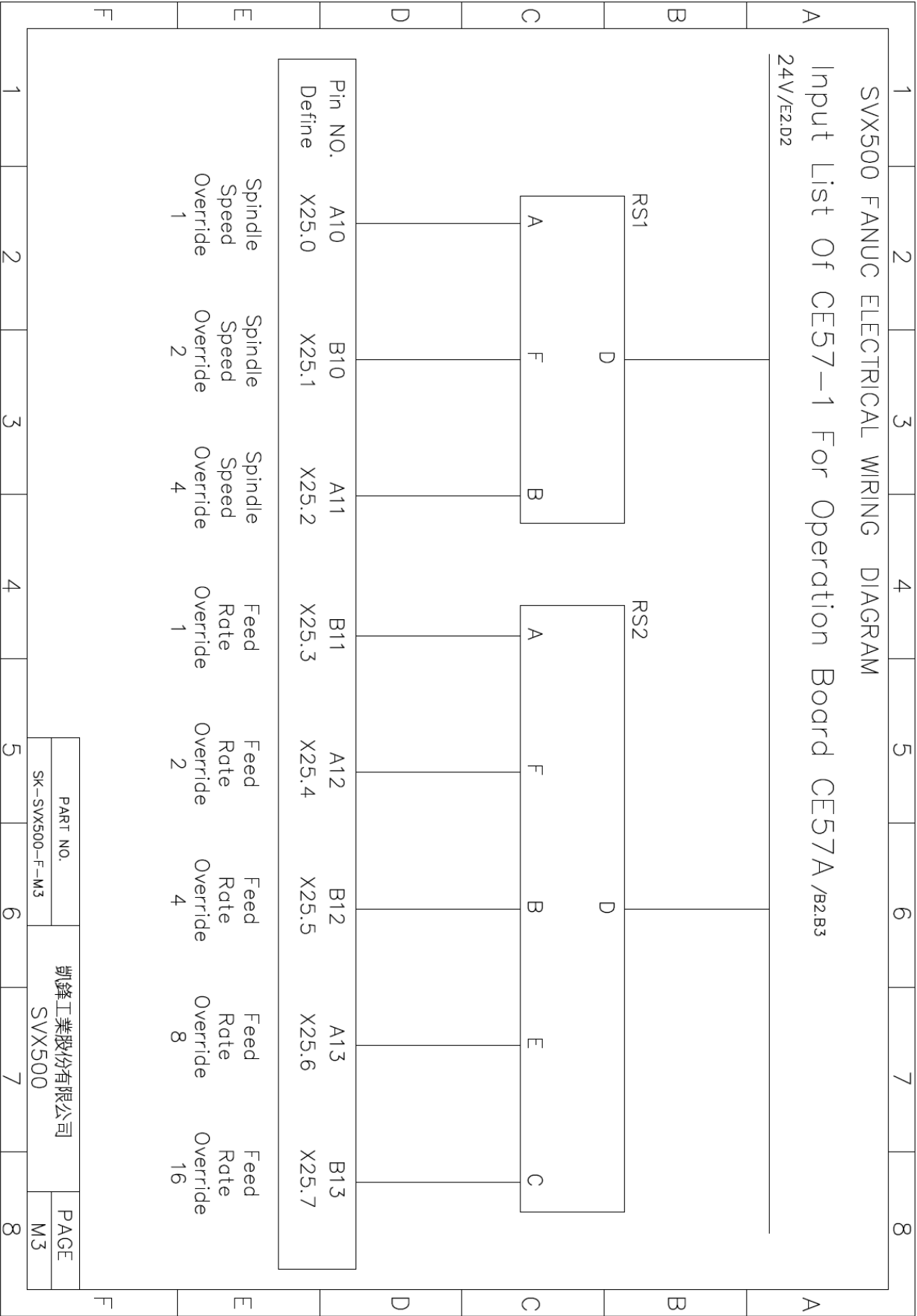


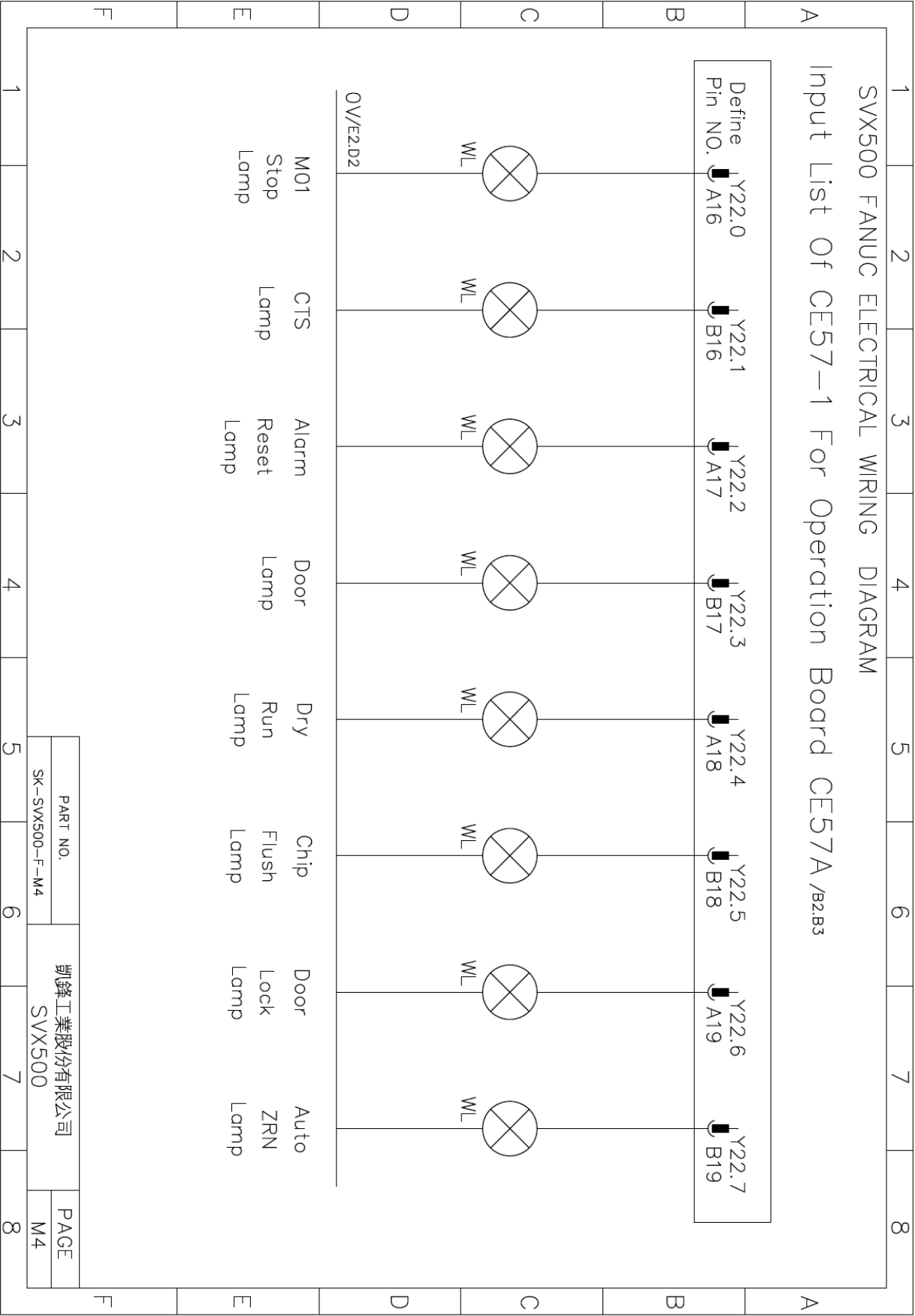


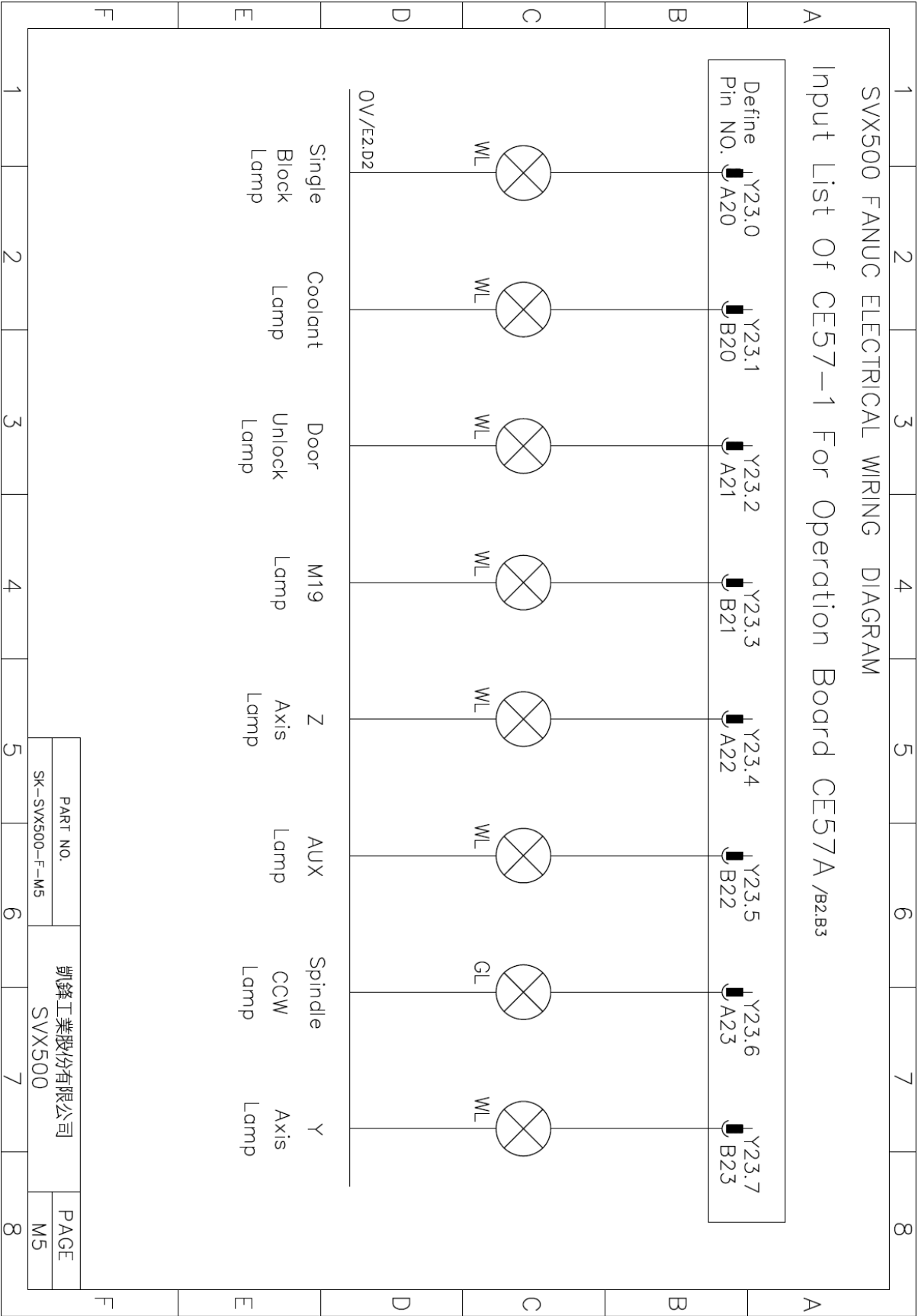
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A	SVX500 FANUC ELECTRICAL WIRING DIAGRAM							
	Input List Of CE56-1 For Operation Board CE56A/B2.B3							
B	<div>Define Pin NO. 0V 24V D1COM B14 D0COM A24 D0COM B24 D0COM A25 D0COM B25</div>							
C								
D								
E								
F								
	1	2	3	4	5	6	7	8



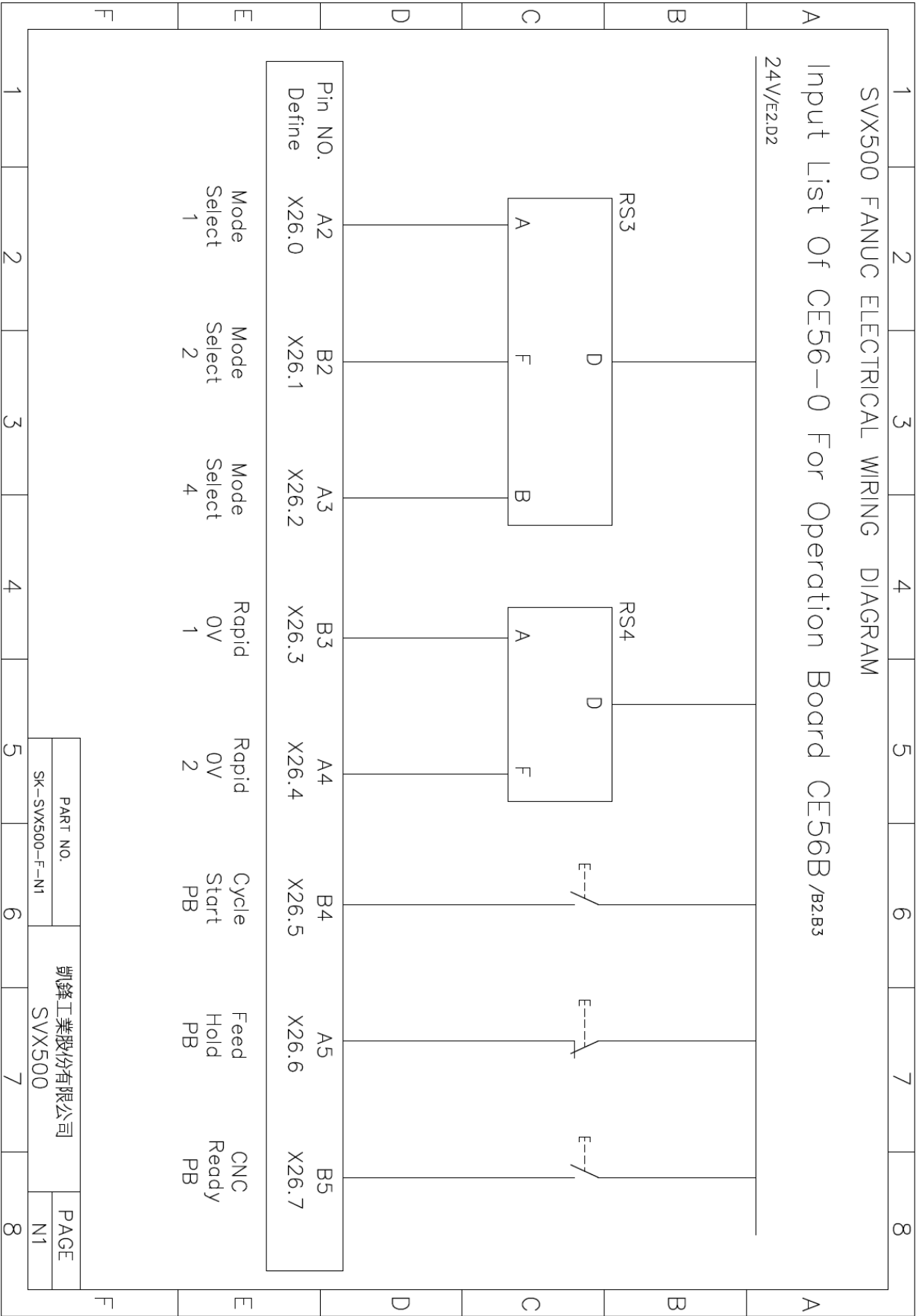
	1	2	3	4	5	6	7	8
A	SVX500 FANUC ELECTRICAL WIRING DIAGRAM							
	Input List Of CE57-1 For Operation Board CE57A /B2.B3							
B	24V/E2.D2							
C	E---	E---	E---	E---	E---	E---	E---	
D								
E	Pin NO. Define	A6 X24.0	B6 X24.1	A7 X24.2	B7 X24.3	A8 X24.4	B8 X24.5	A9 X24.6 B9 X24.7
F	Y Axis PB	5th Axis PB	Rapid PB	Spindle Stop PB	X Axis PB	4th Axis PB	Jog + PB	Spindle CW PB
	PART NO. SK-SVX500-F-M2 凱鋒工業股份有限公司 SVX500 PAGE M2							

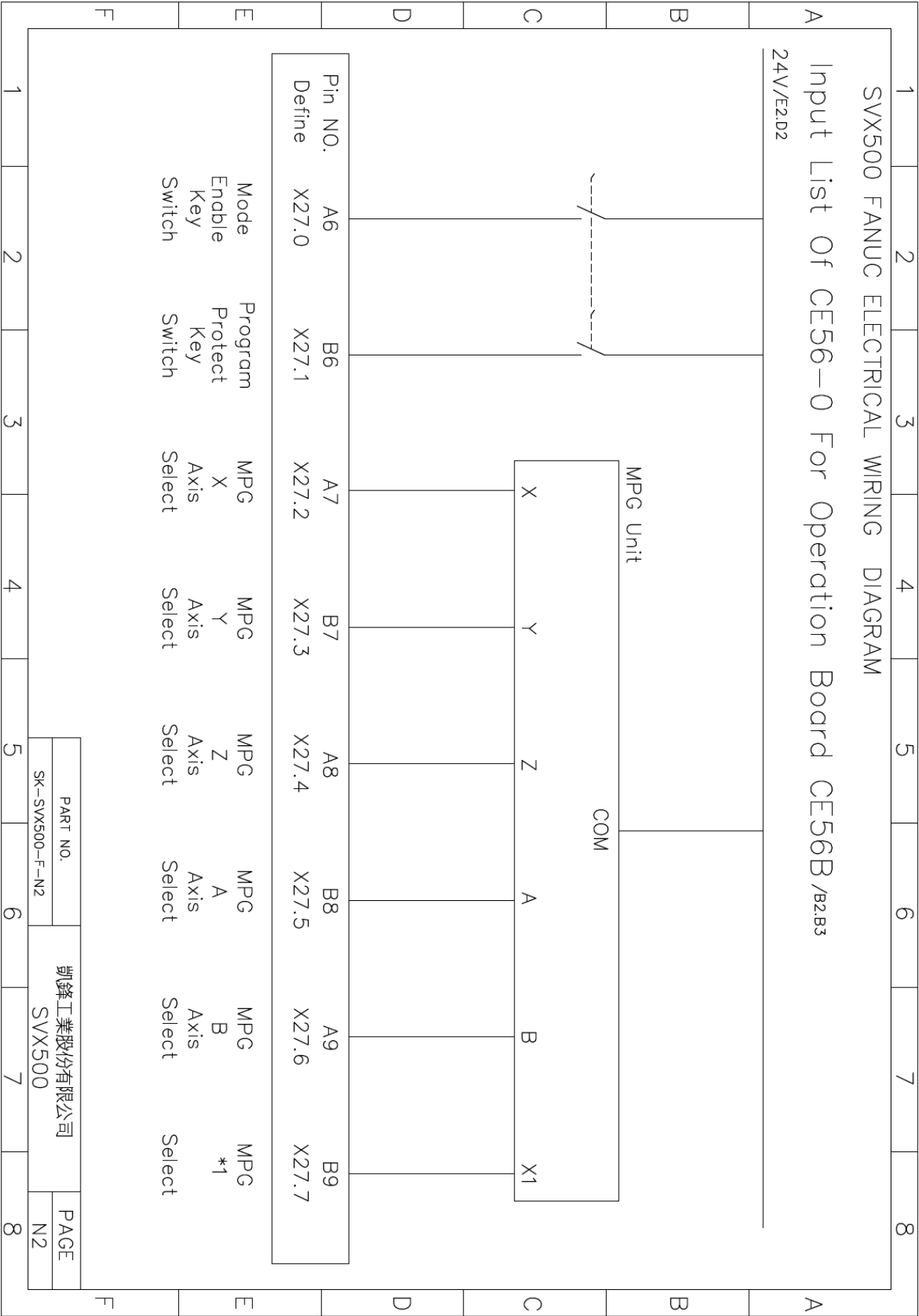


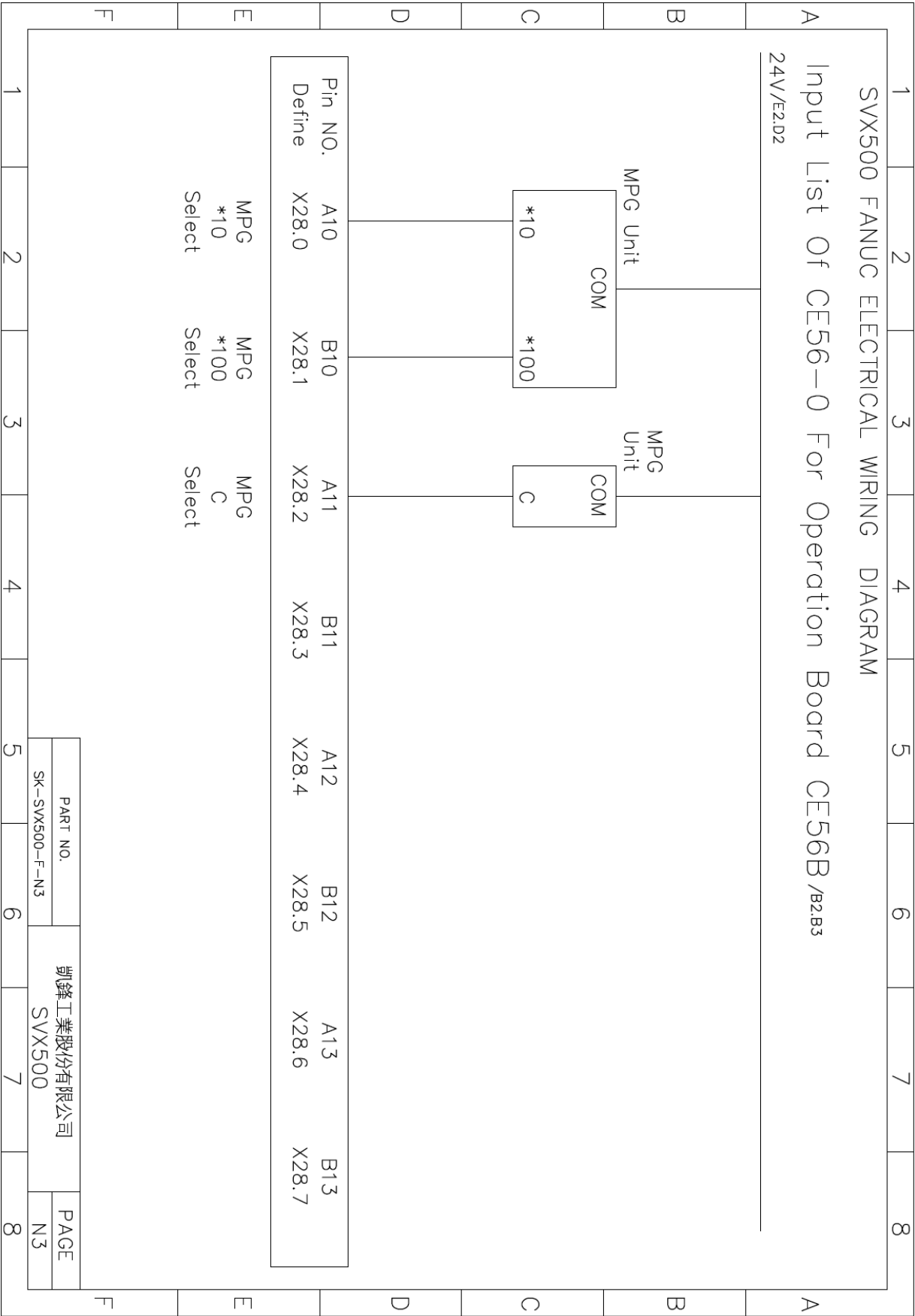


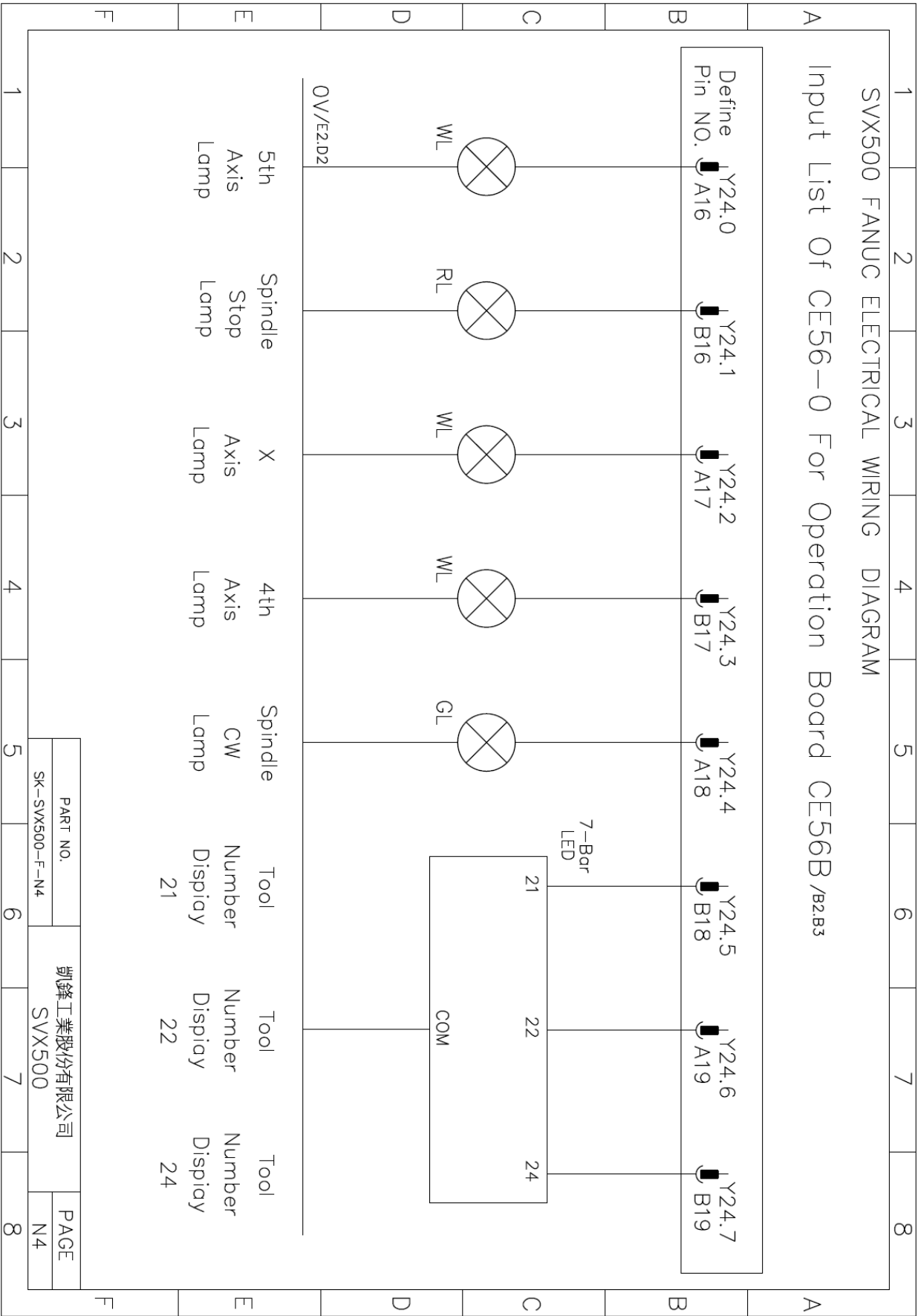


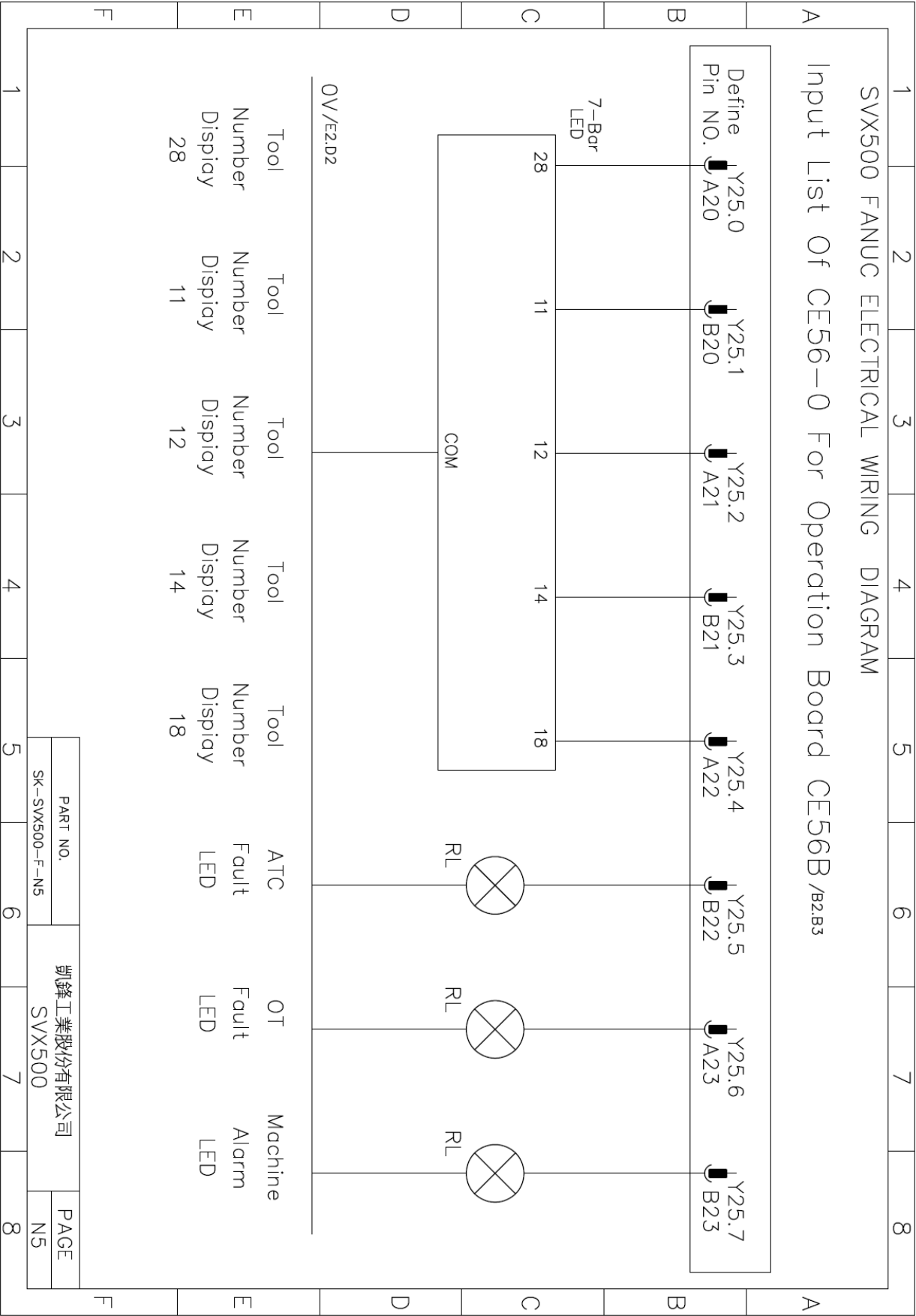
102



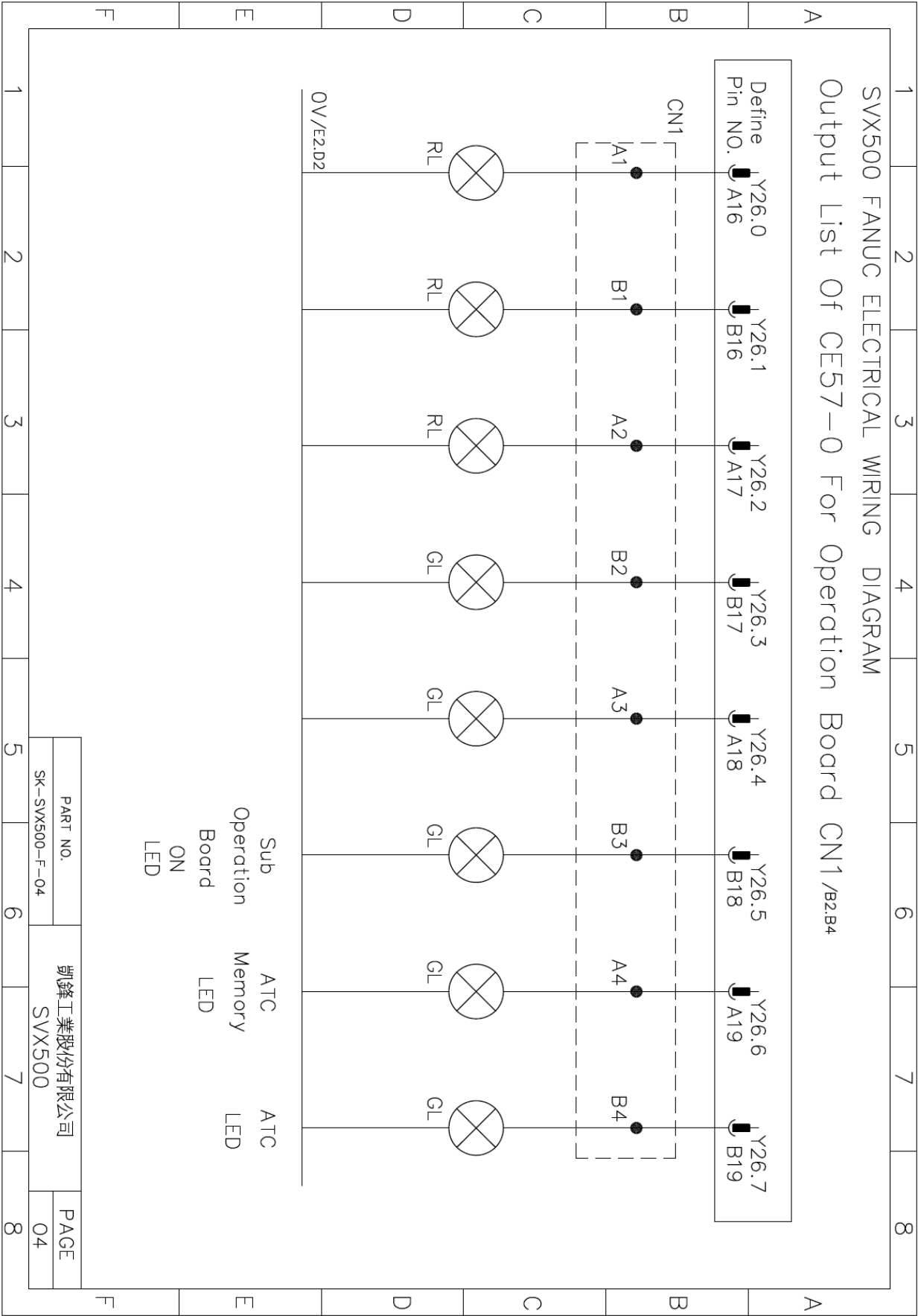


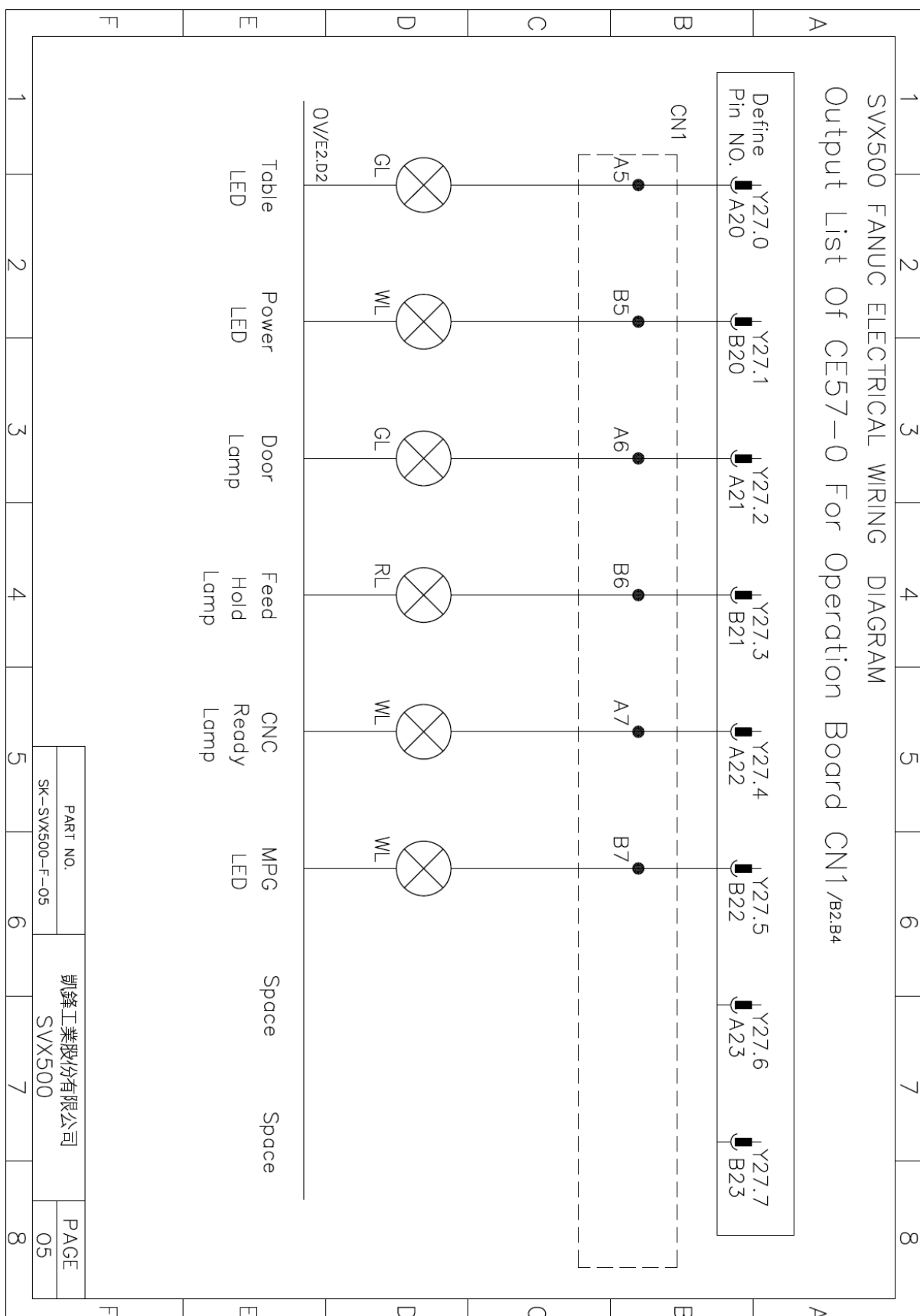






	1	2	3	4	5	6	7	8
A	SVX500 FANUC ELECTRICAL WIRING DIAGRAM							
	Input List Of CE56-0 For Operation Board CE56B /B2.B3							
B	<div>Define Pin NO. 0V A1 24V B1 D1COM A14 B14 D0COM A24 B24 D0COM A25 B25 D0COM B25</div>							
C								
D								
E	<div>24V /E2.D2</div> <div>0V /E2.D2</div>							
F								
	1	2	3	4	5	6	7	8
					PART NO.		凱鋒工業股份有限公司	
					SK-SVX500-F-N6		SVX500	
							PAGE	N6





SVX500 FANUC ELECTRICAL WIRING DIAGRAM							
Output List Of CE57—0 /B2,B4							
Define Pin NO.	0V	24V	D1COM	D1COM	D0COM	D0COM	D0COM
	A1	B1	A14	B14	A24	B24	A25
							B25
24V/E2.D2							
0V/E2.D2							
PART NO. SK-SVX500—F—06							
凱鋒工業股份有限公司						PAGE	
SVX500						06	

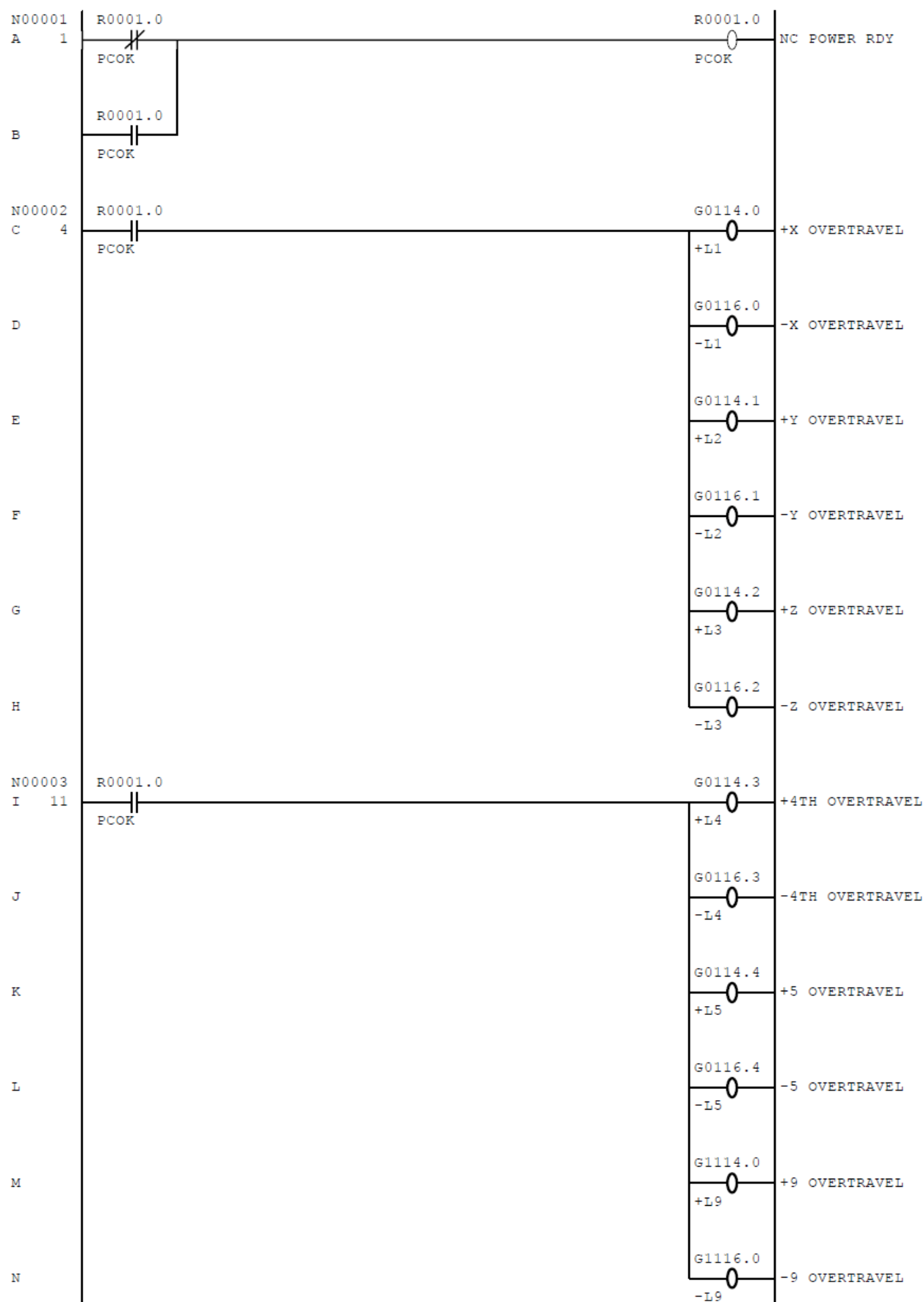
10. PMC Ladder

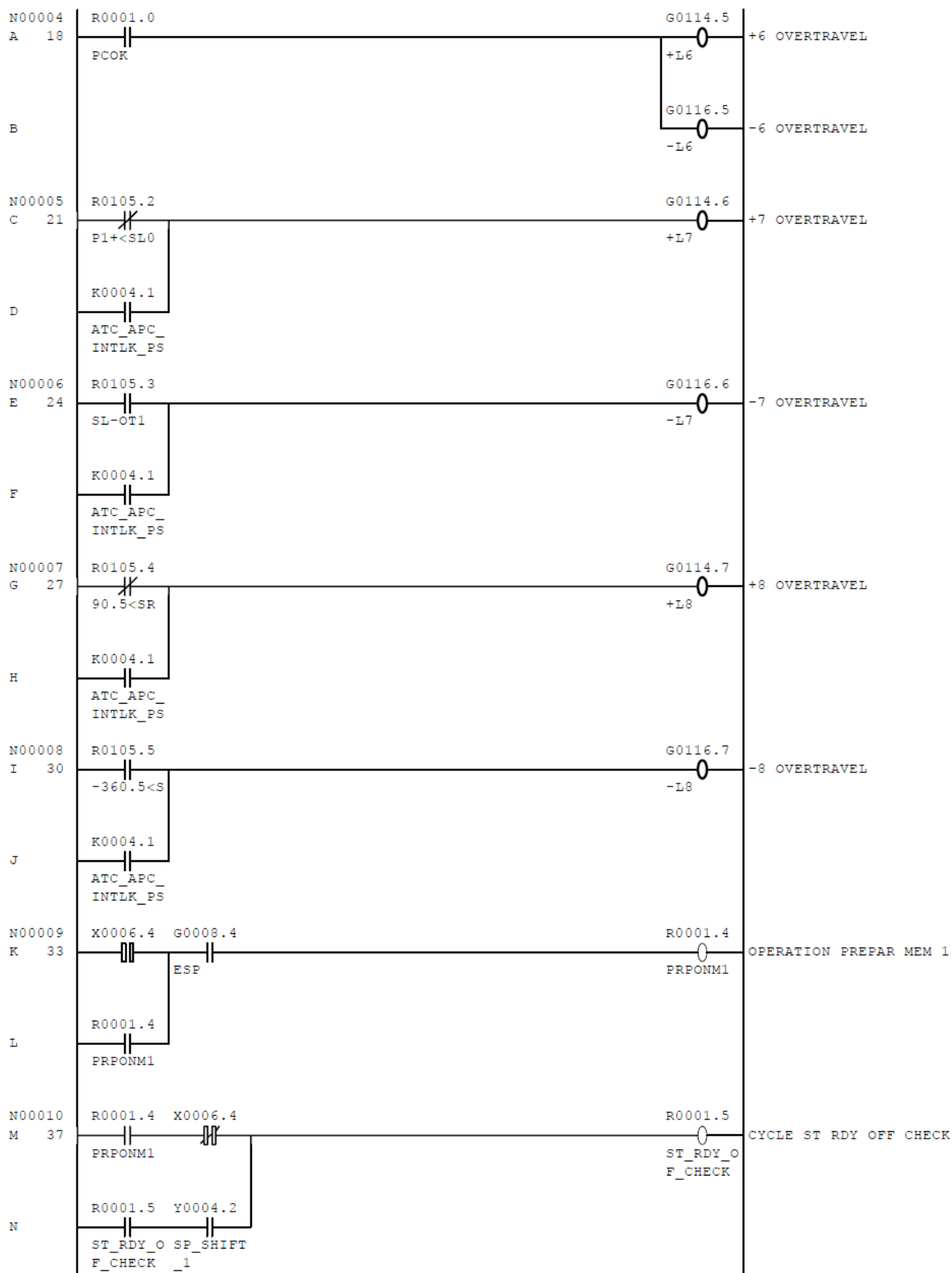
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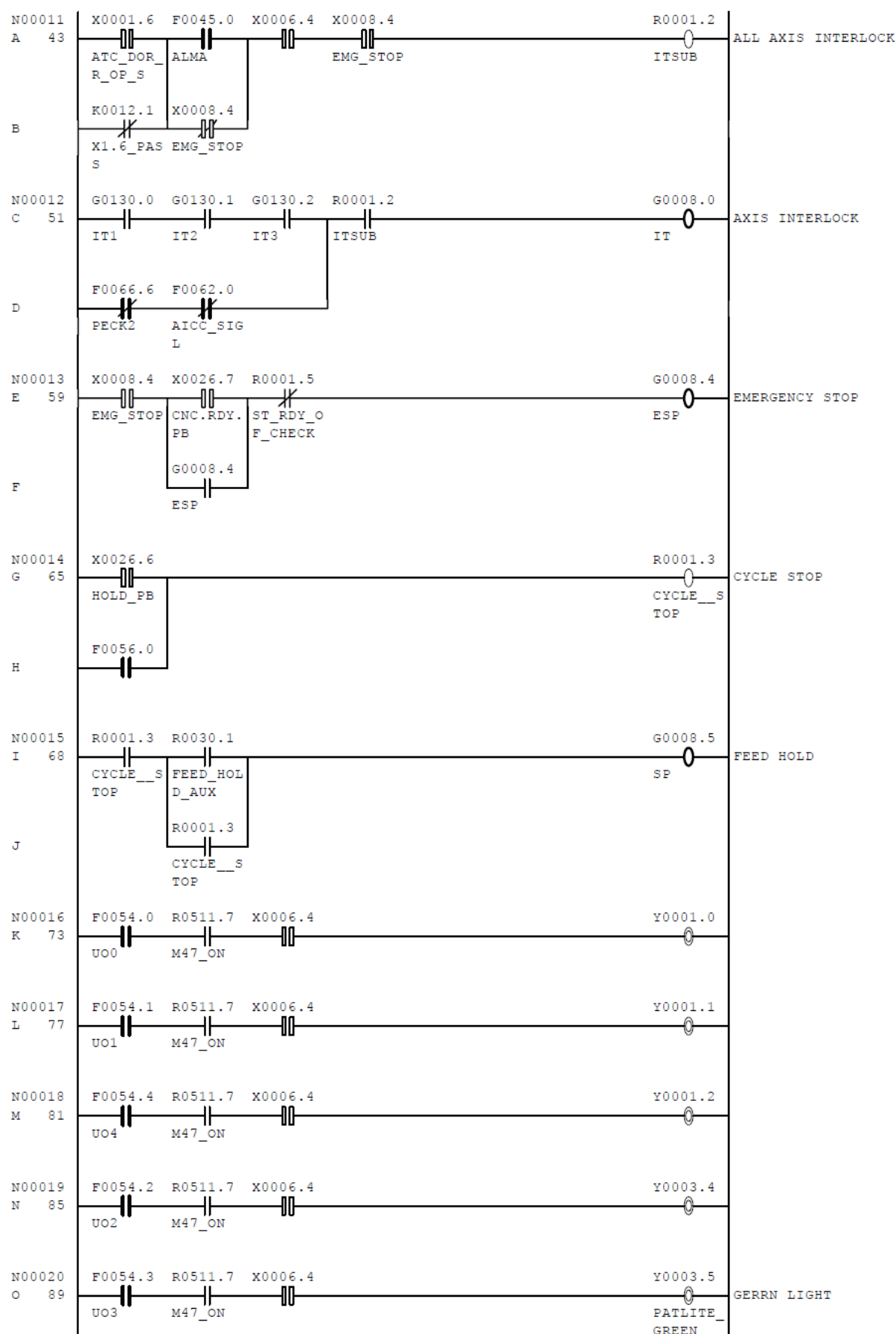
System Parameter

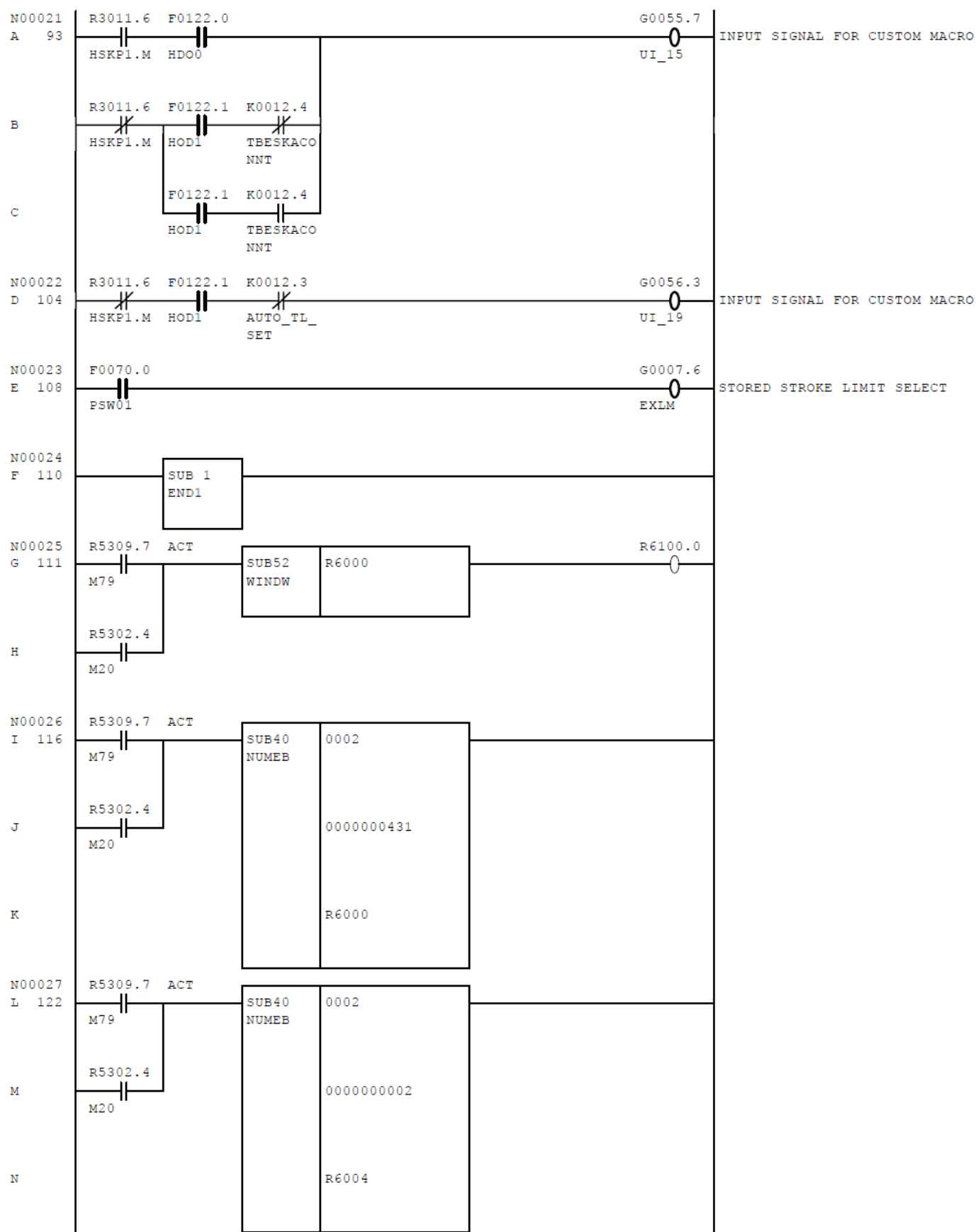
1)	COUNTER DATA TYPE	BINARY	(0: BINARY, 1: BCD)
2)	OPERATOR PANEL	NO	(0: NO, 1: YES)
3)	KEY ADDRESS		
4)	LED ADDRESS		
5)	KEY BIT IMAGE ADDRESS		
6)	LED BIT IMAGE ADDRESS		
7)	SELECTABLE I/O LINK (CHANNEL 1)	NO USE	
8)	BASIC GROUP COUNT		(0-16)
9)	SELECTABLE I/O LINK (CHANNEL 2)	NO USE	
10)	BASIC GROUP COUNT		(0-16)
11)	SELECTABLE I/O LINK (CHANNEL 3)	NO USE	
12)	BASIC GROUP COUNT		(0-16)
13)	SELECTABLE I/O LINK (CHANNEL 4)	NO USE	
14)	BASIC GROUP COUNT		(0-16)
15)	Activate Language No.	1	(1-16)
16)	Setting Language1	-1, 0	

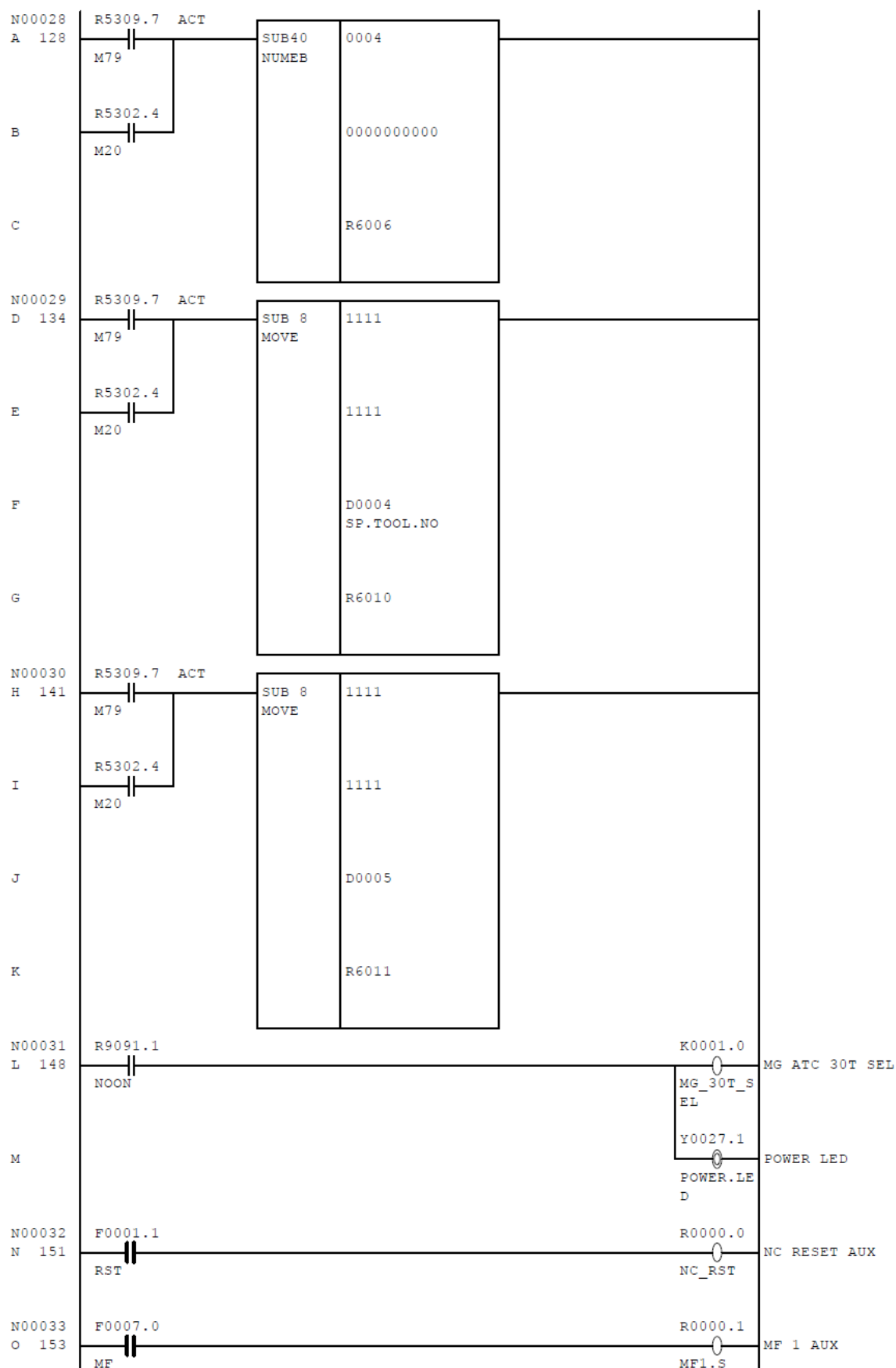
PMC TYPE = 30i-B PMC (MEM-B)

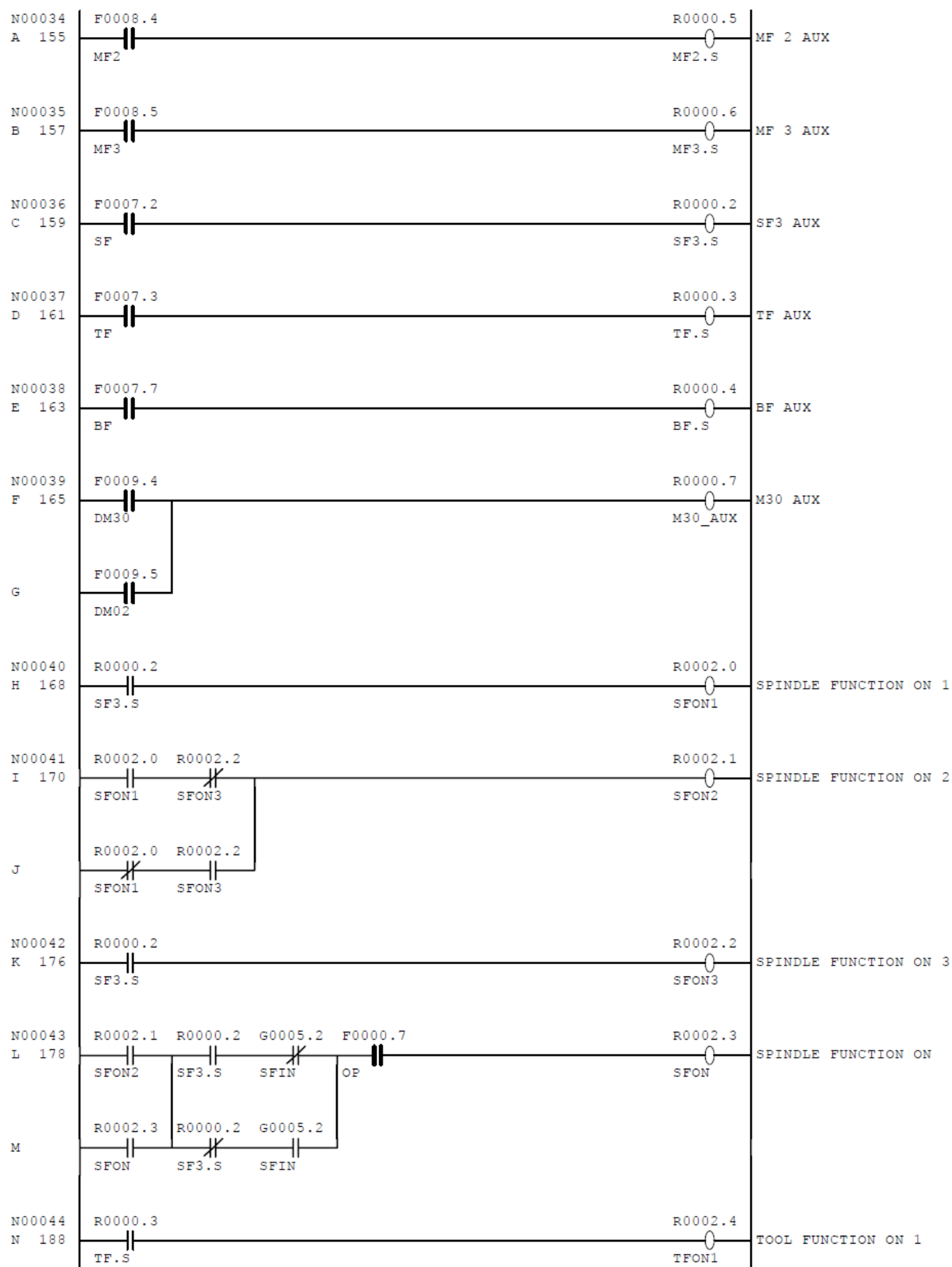


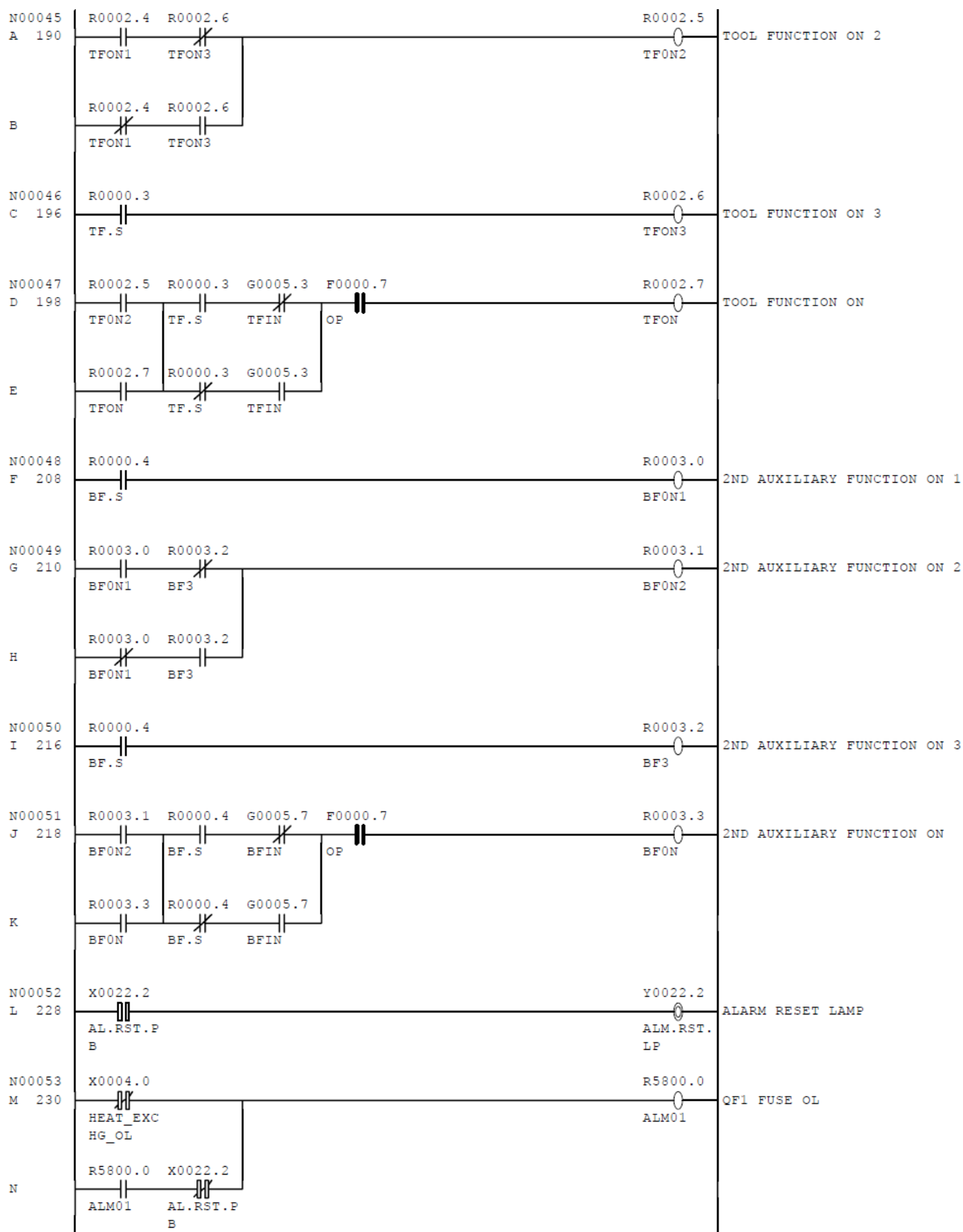


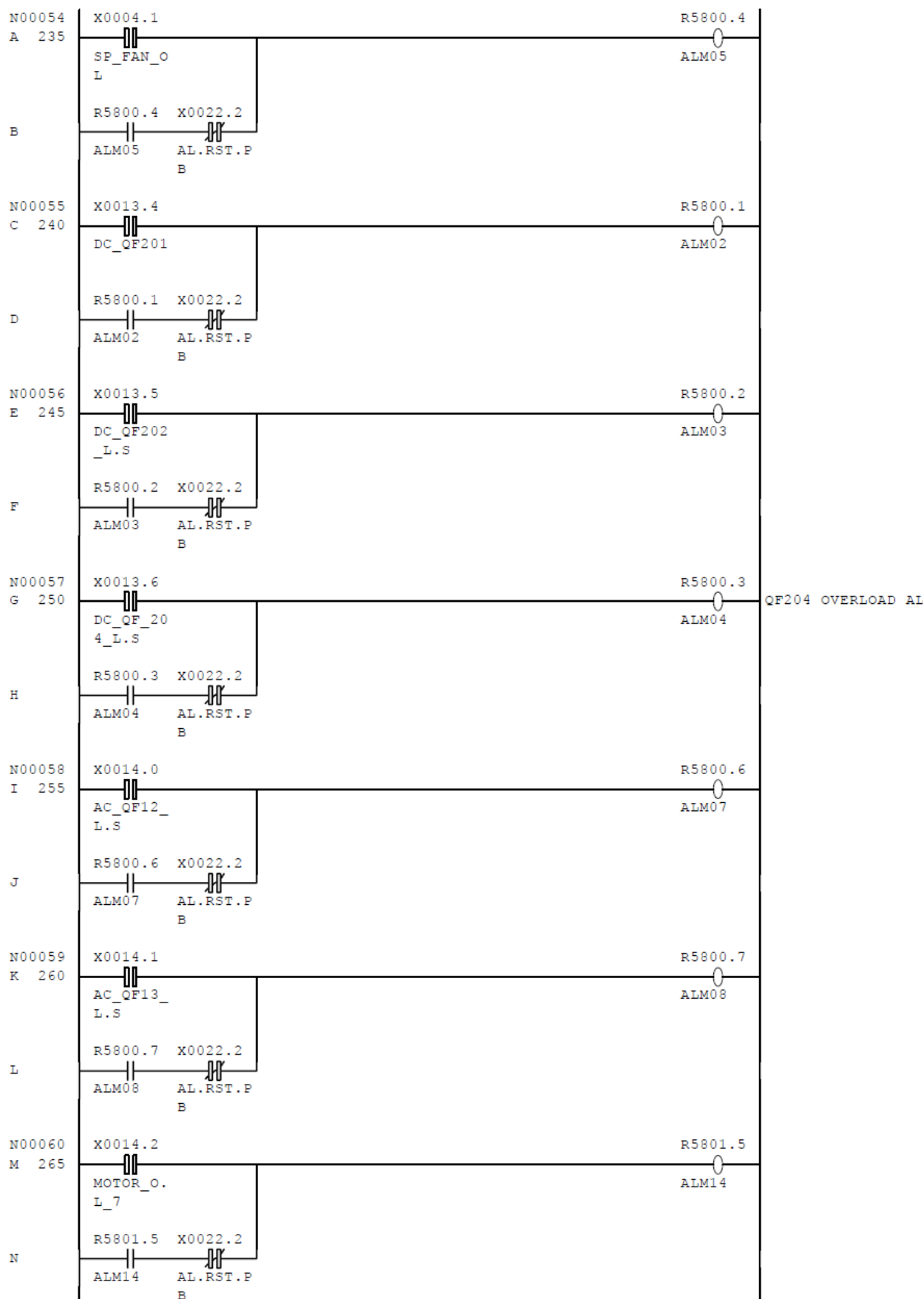


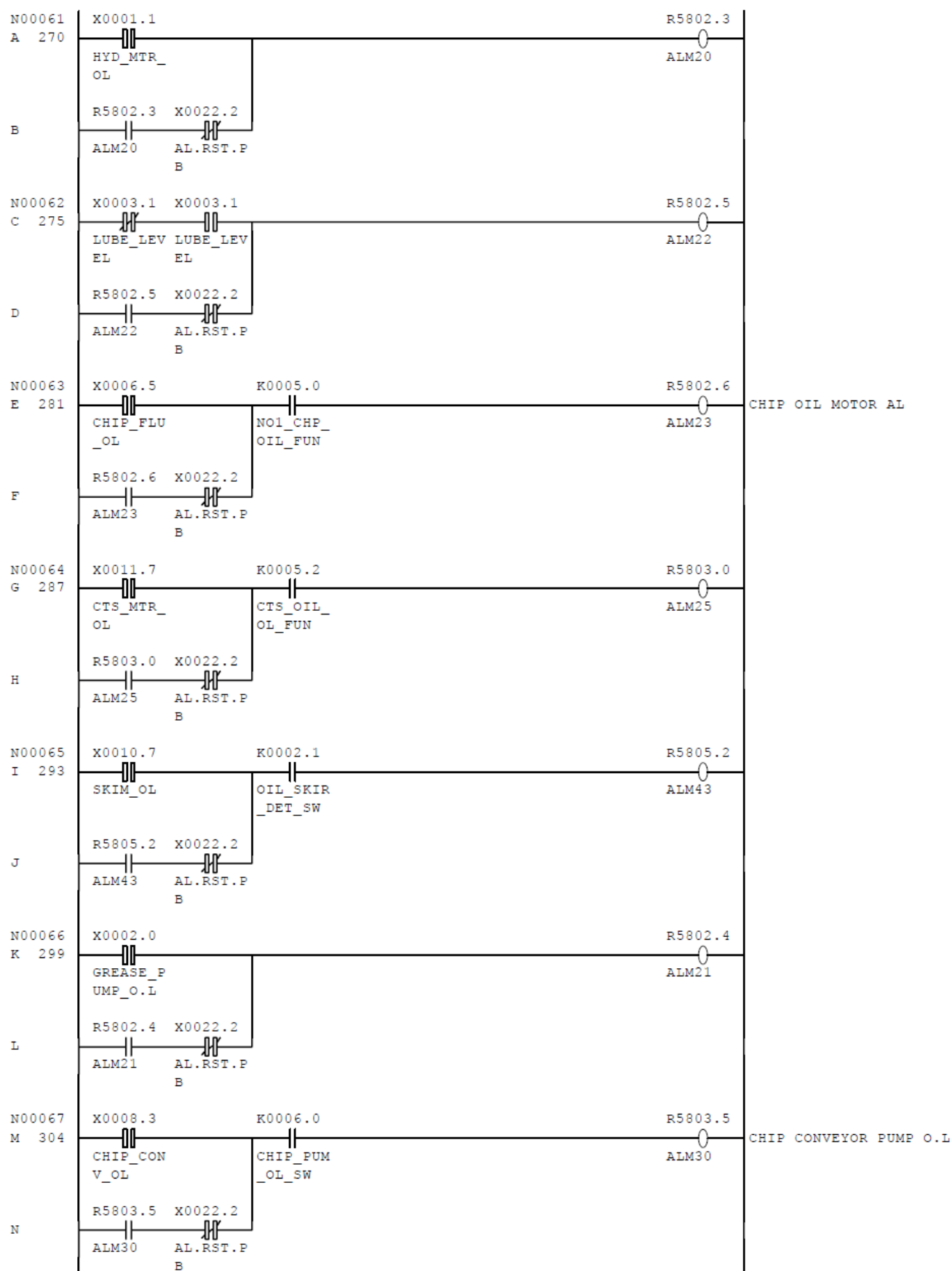


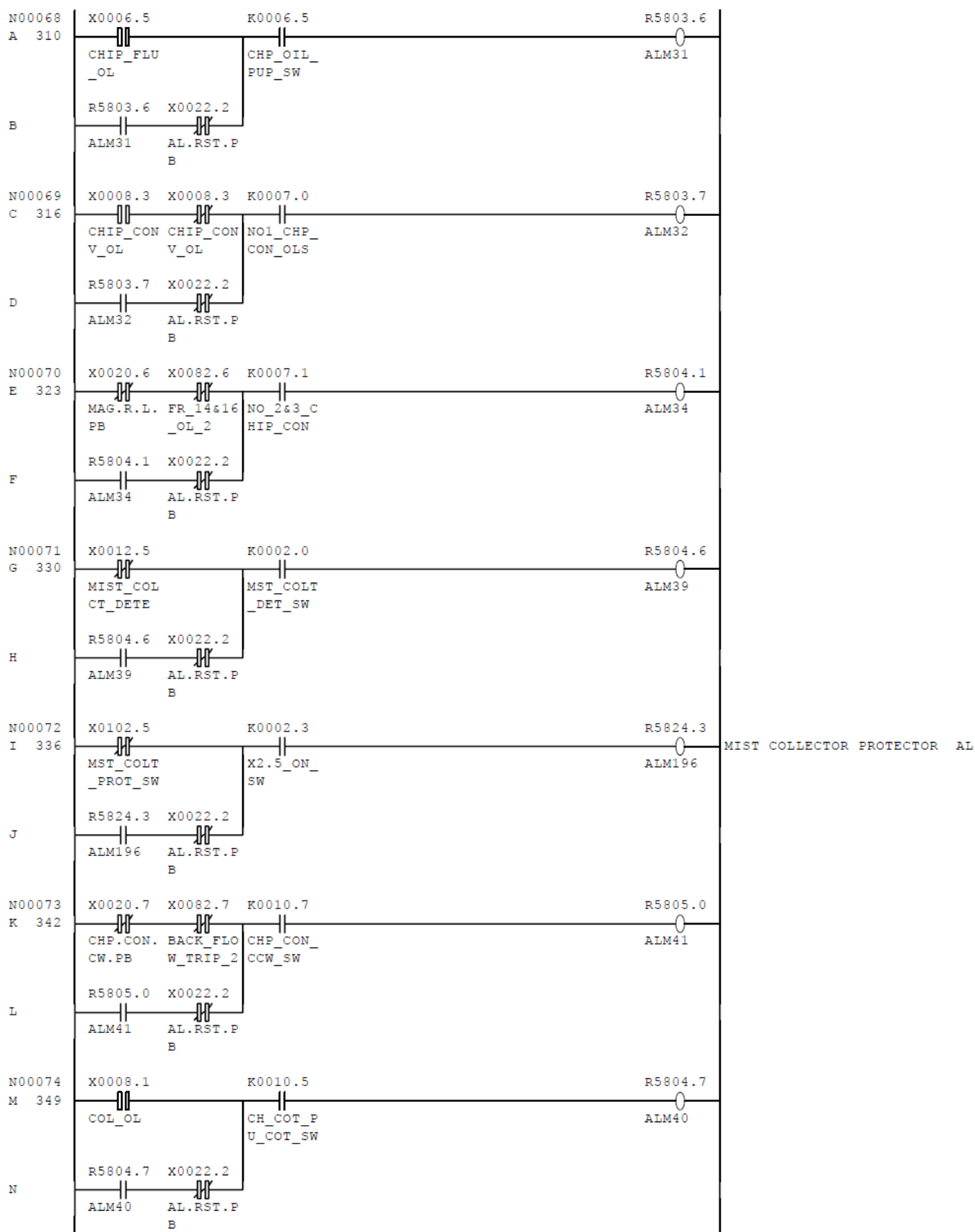


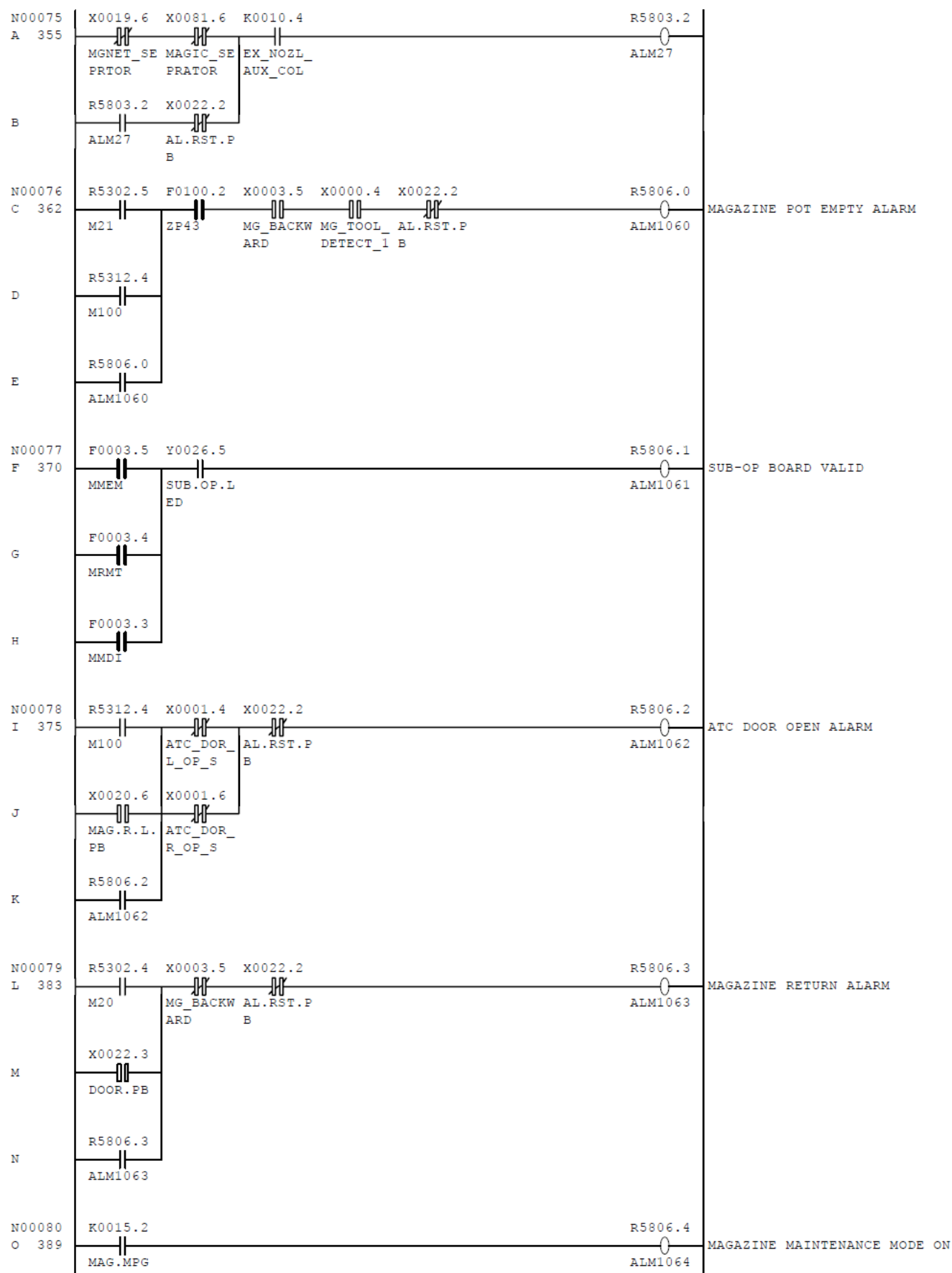


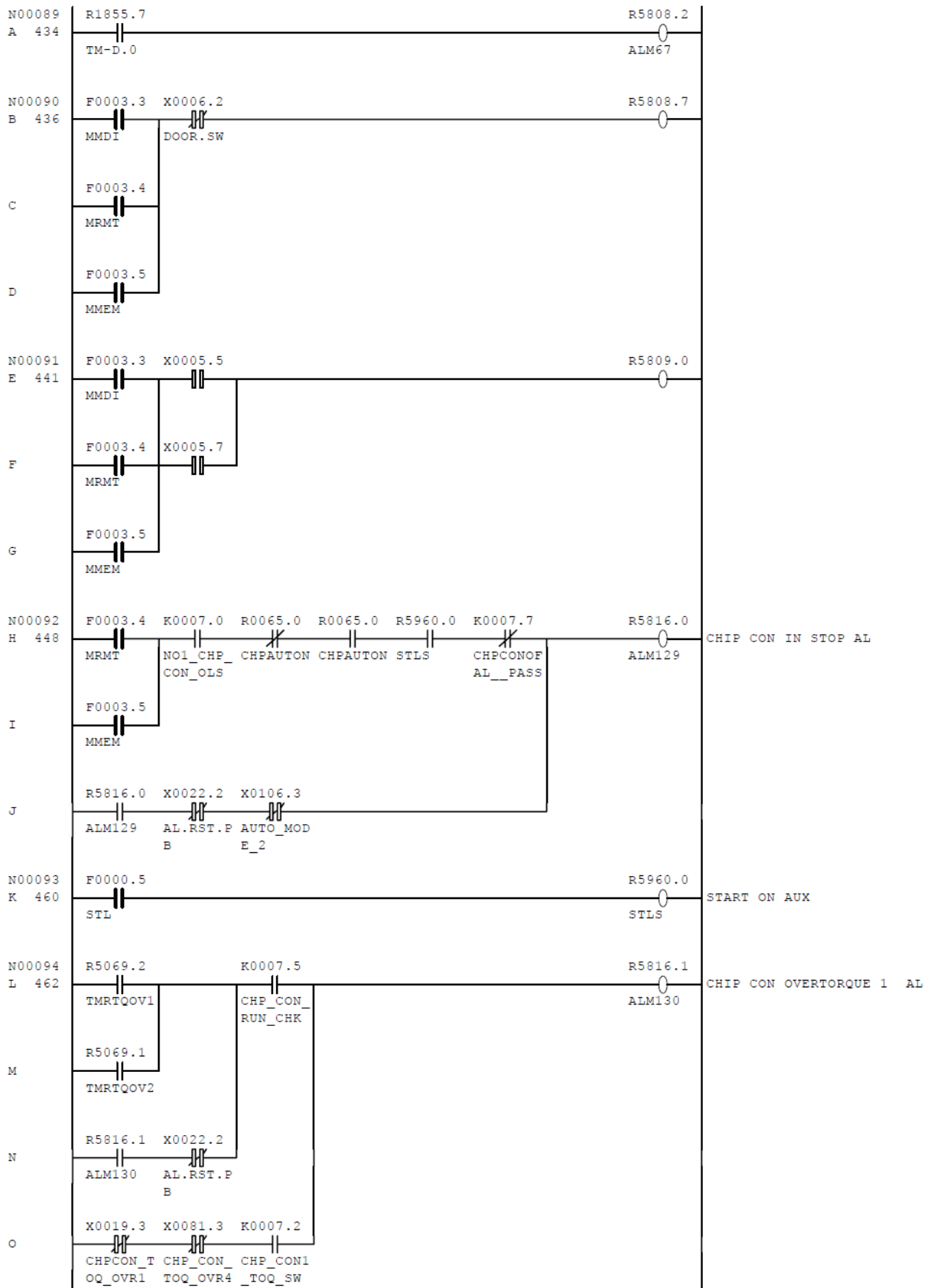


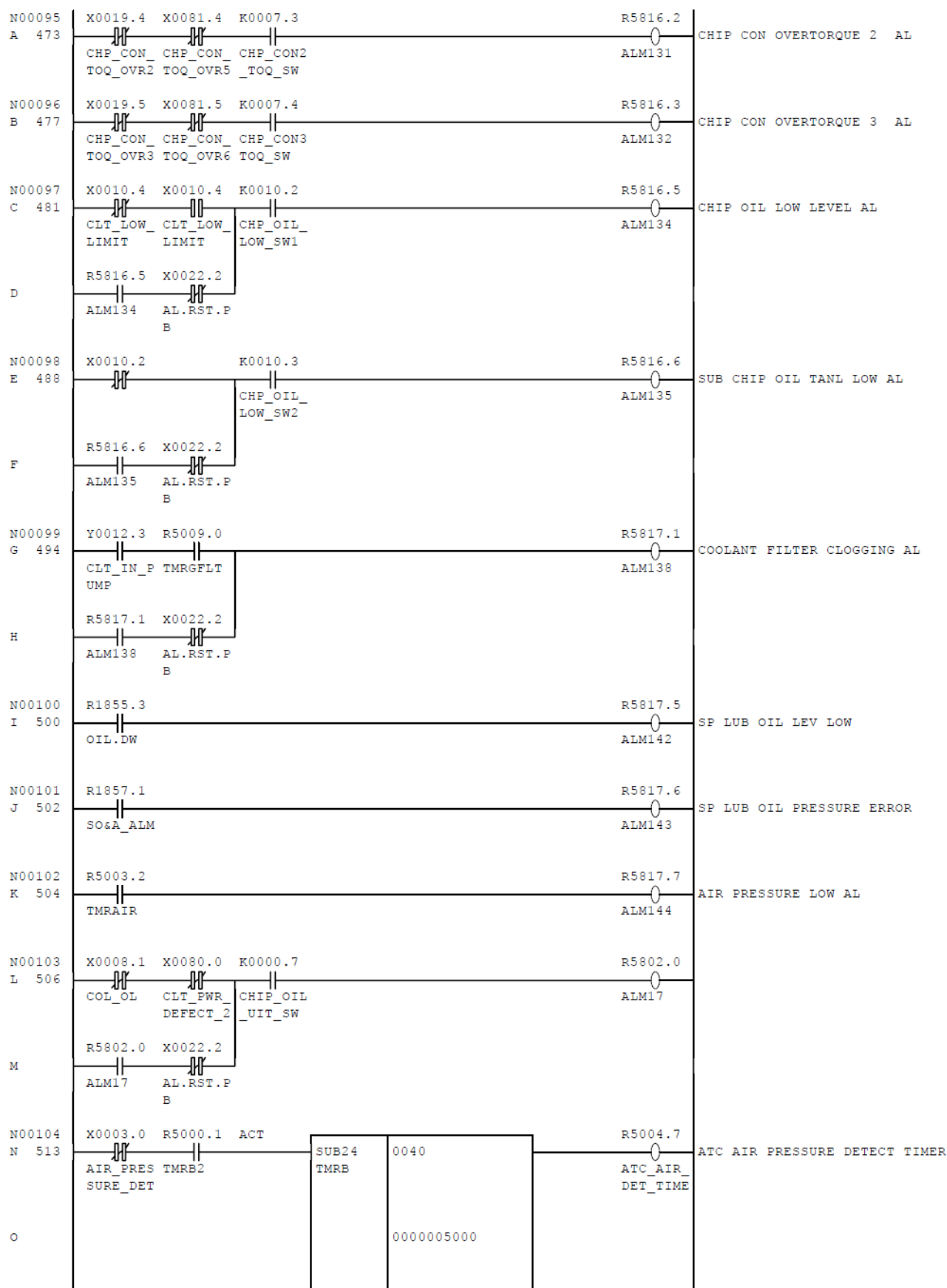


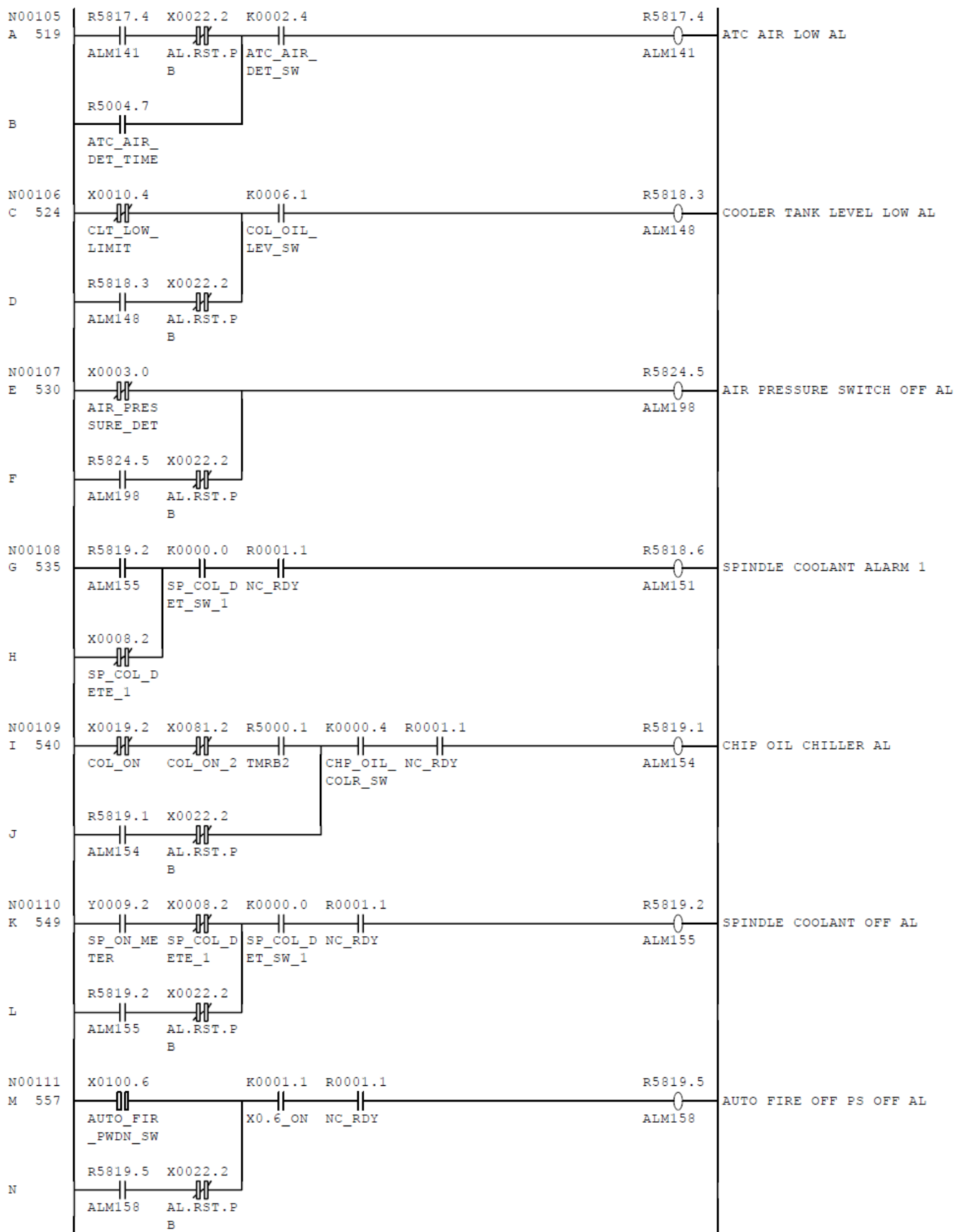


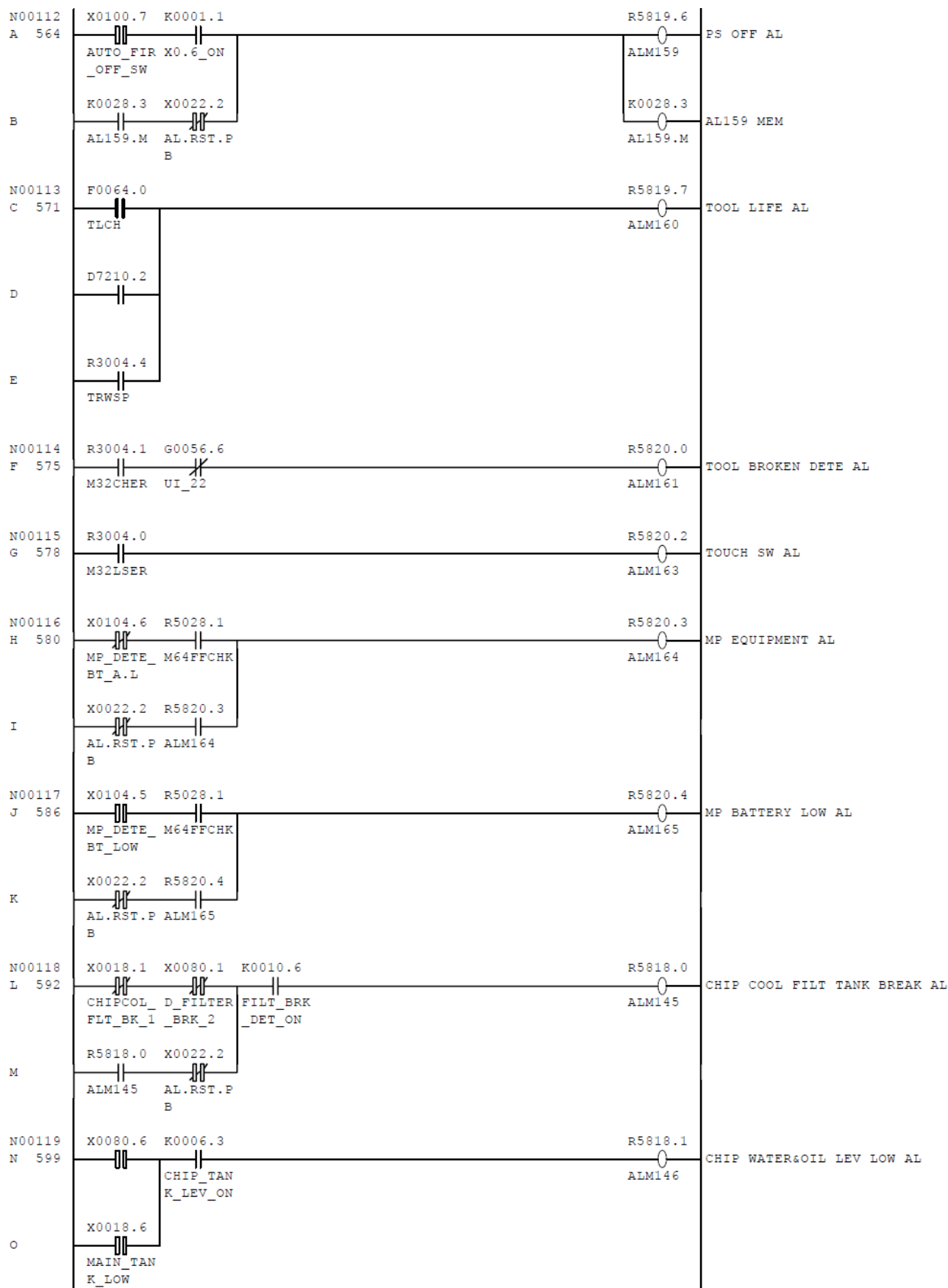


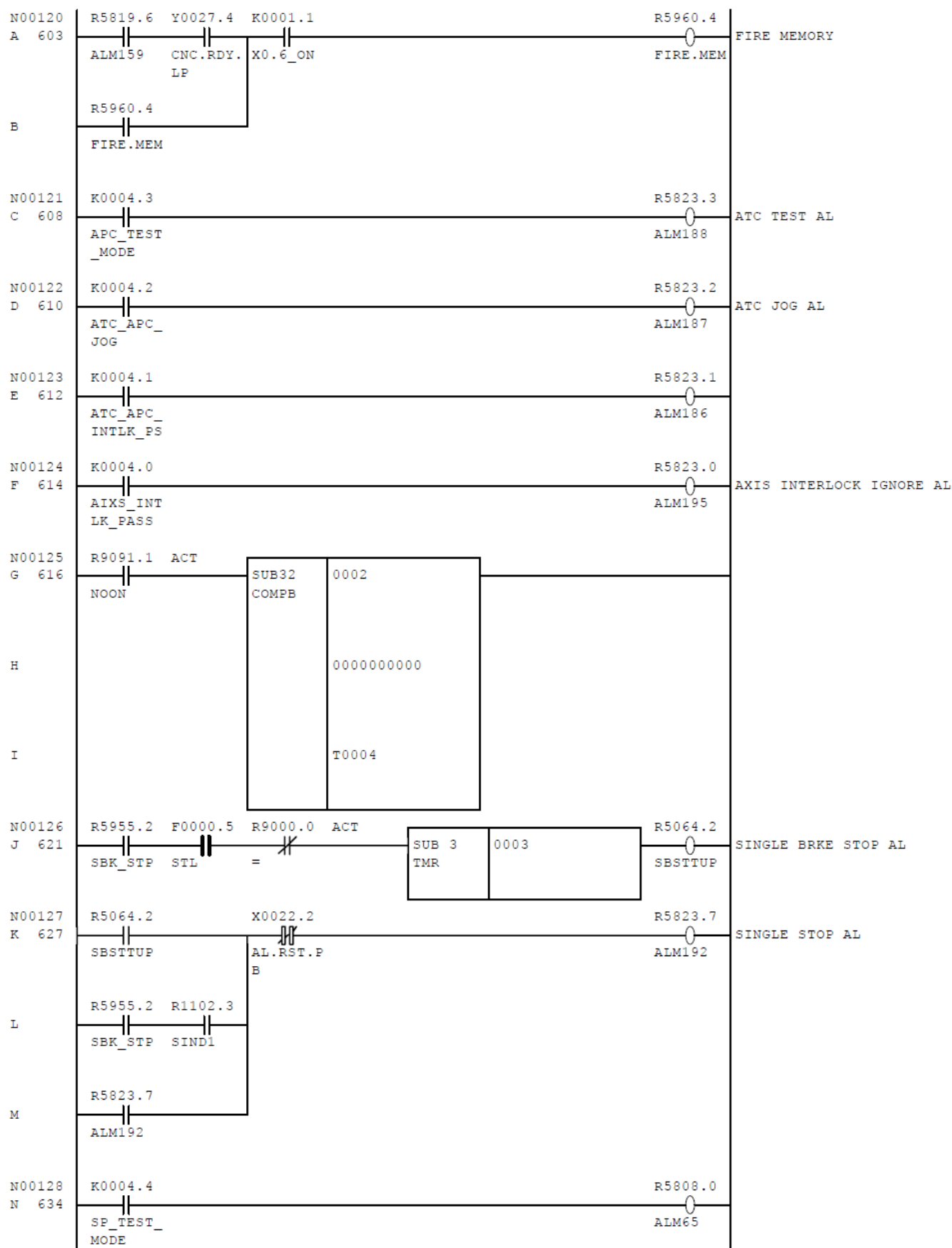


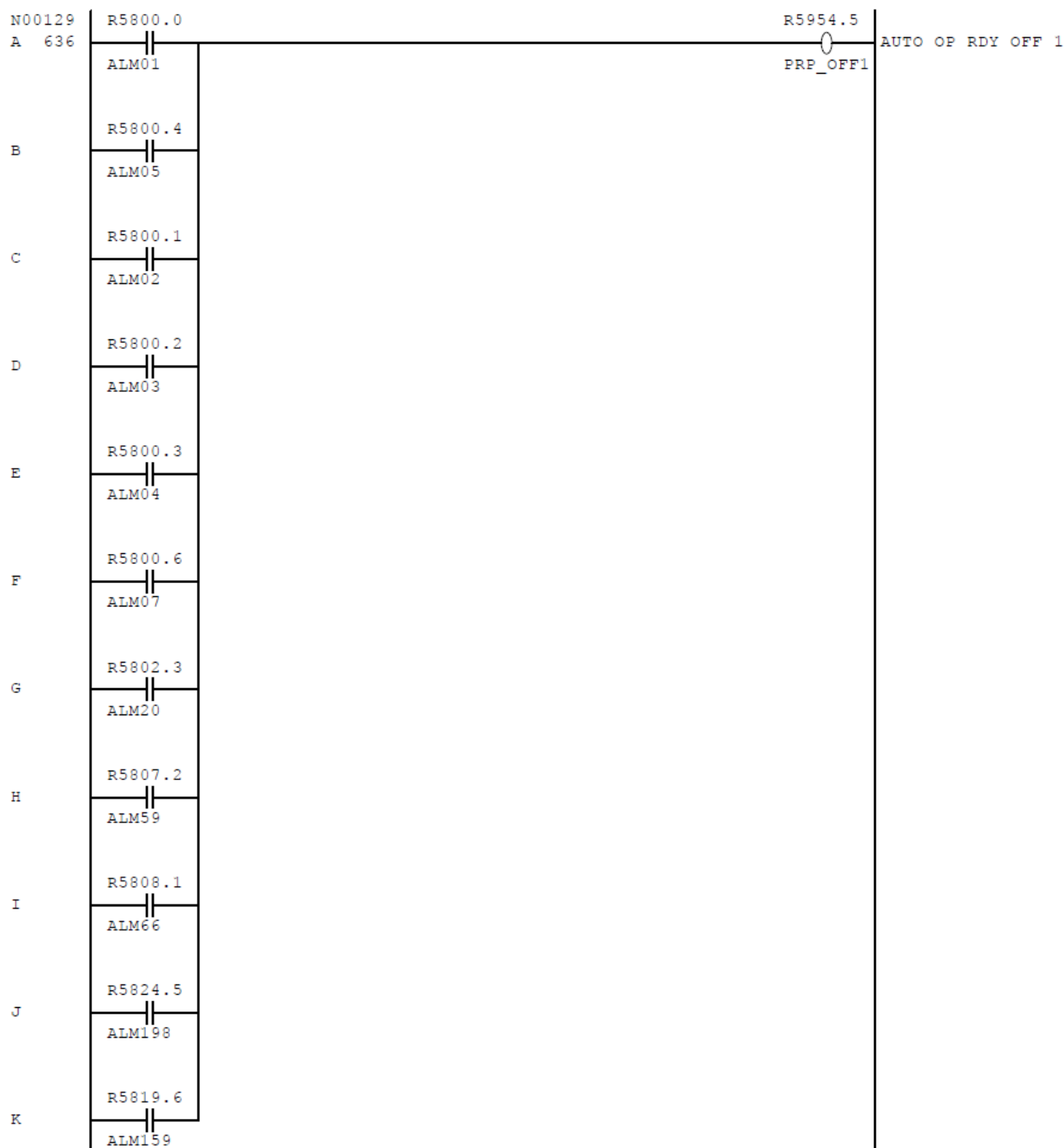


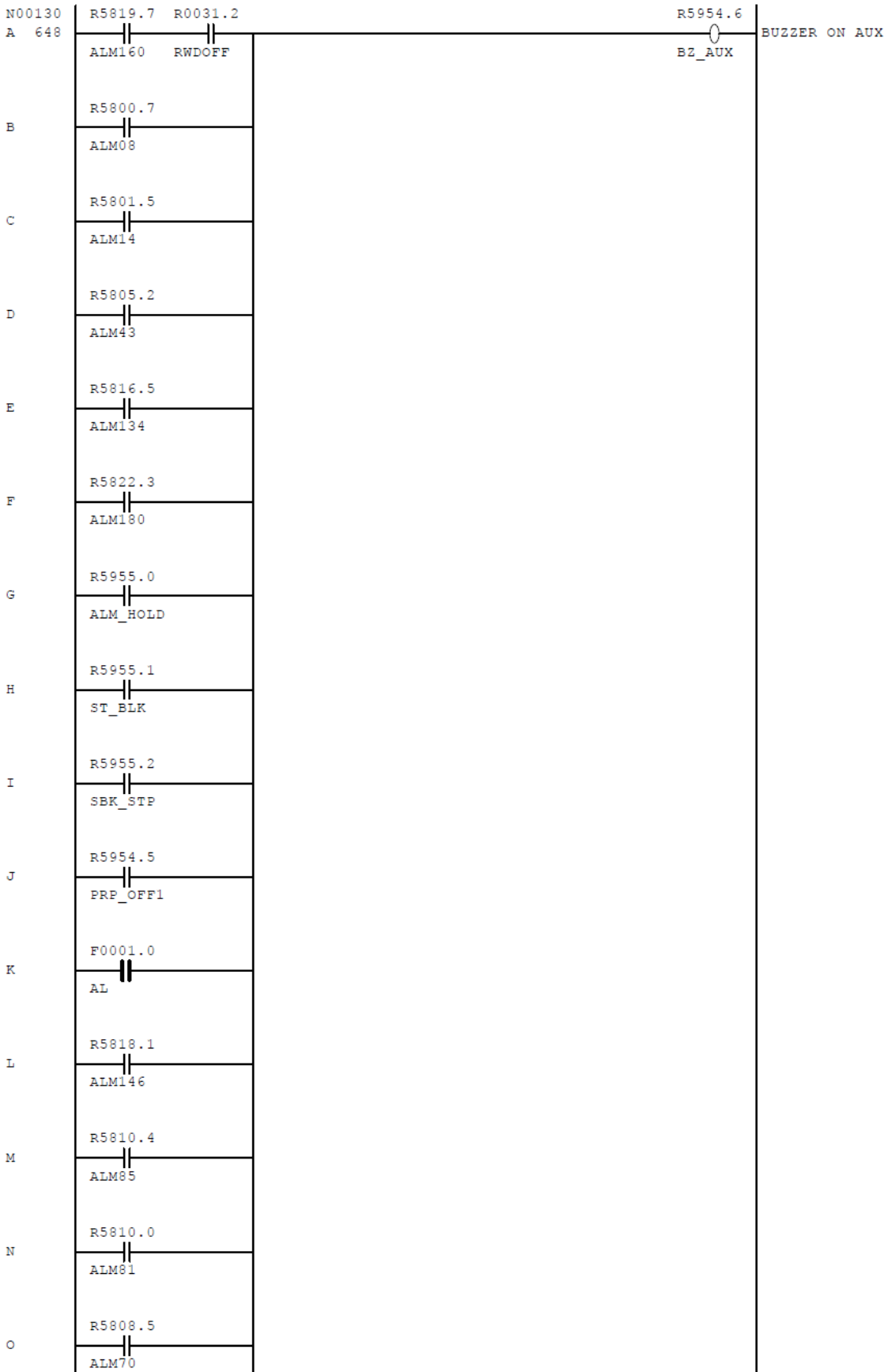




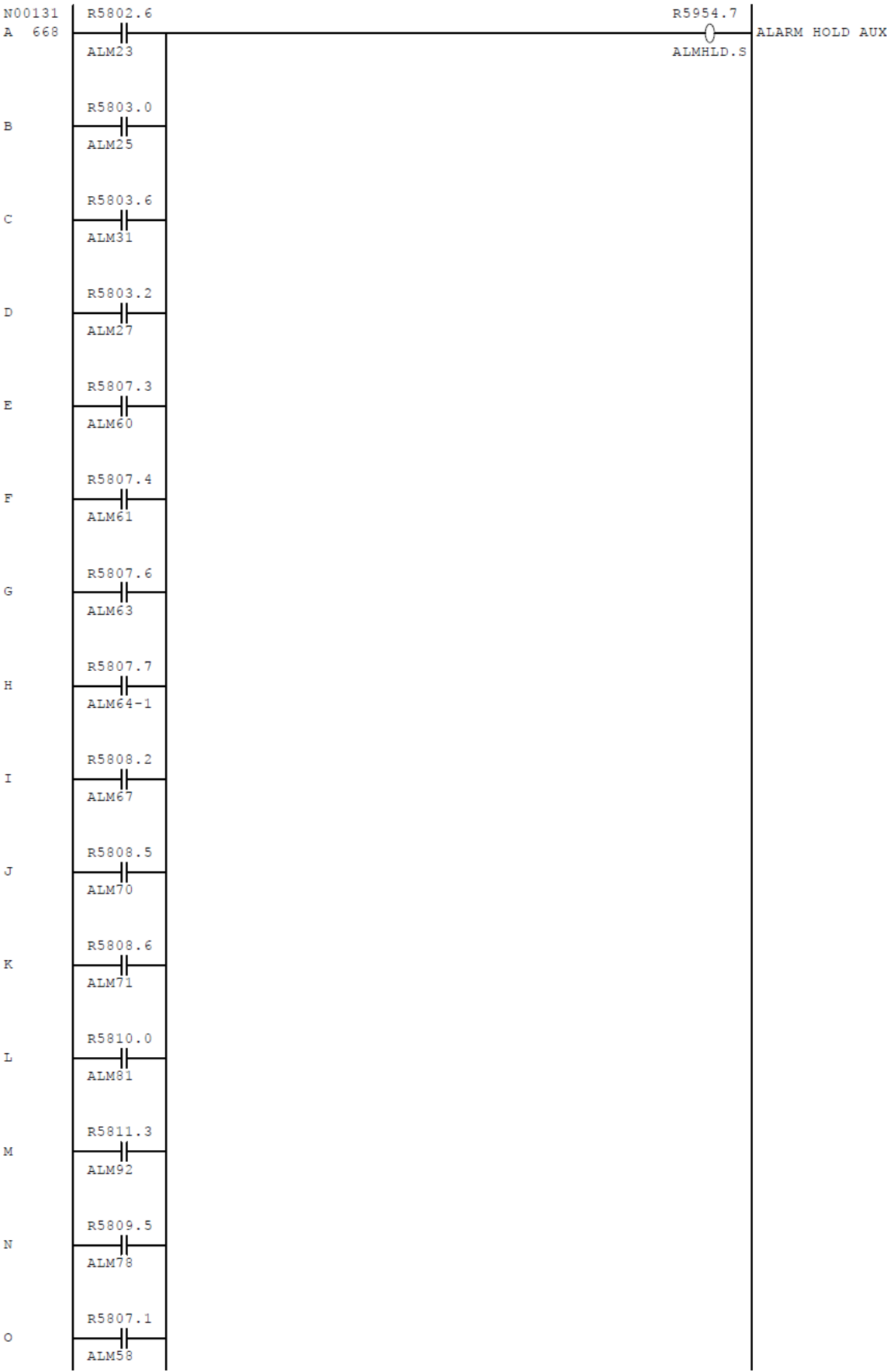




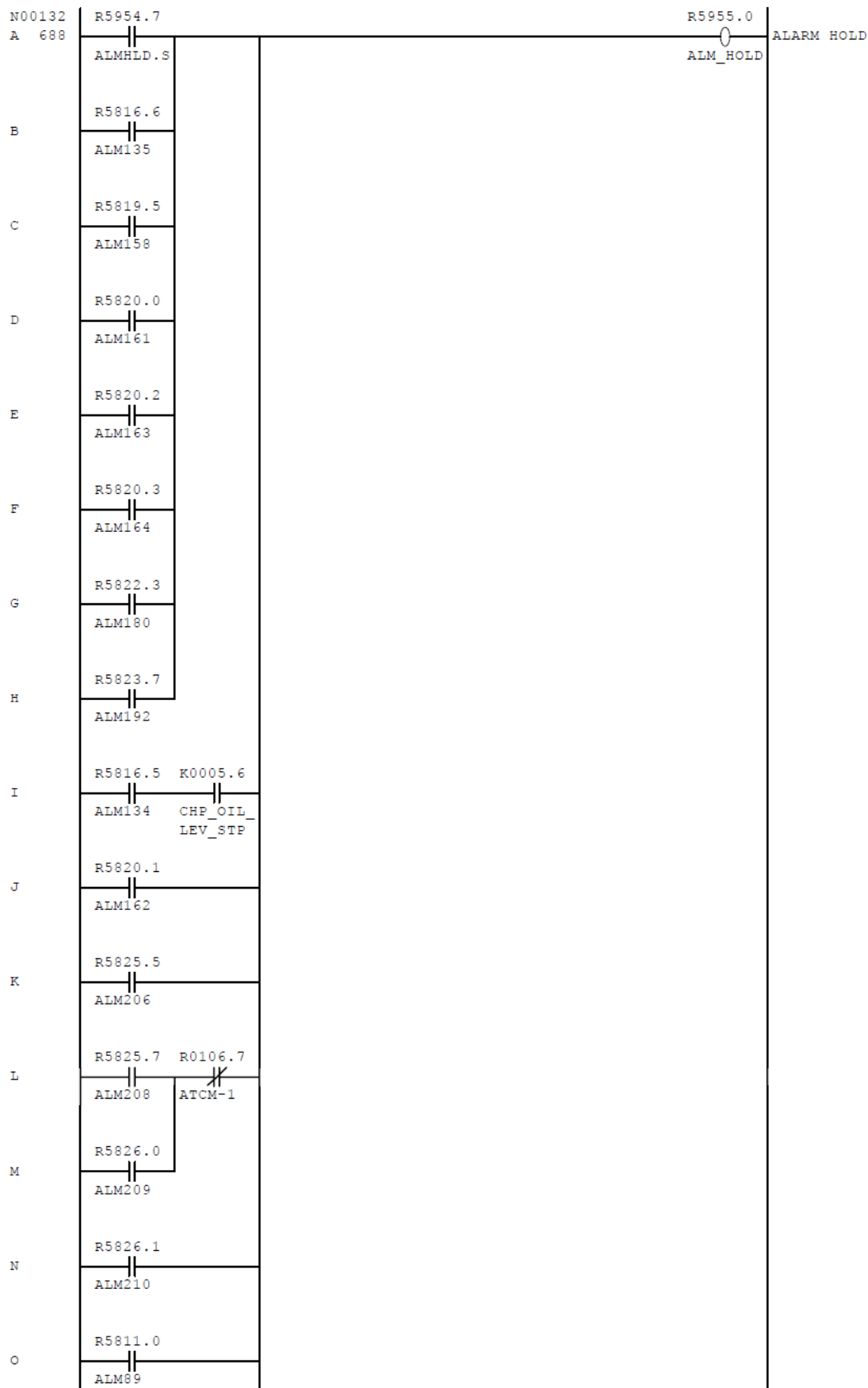


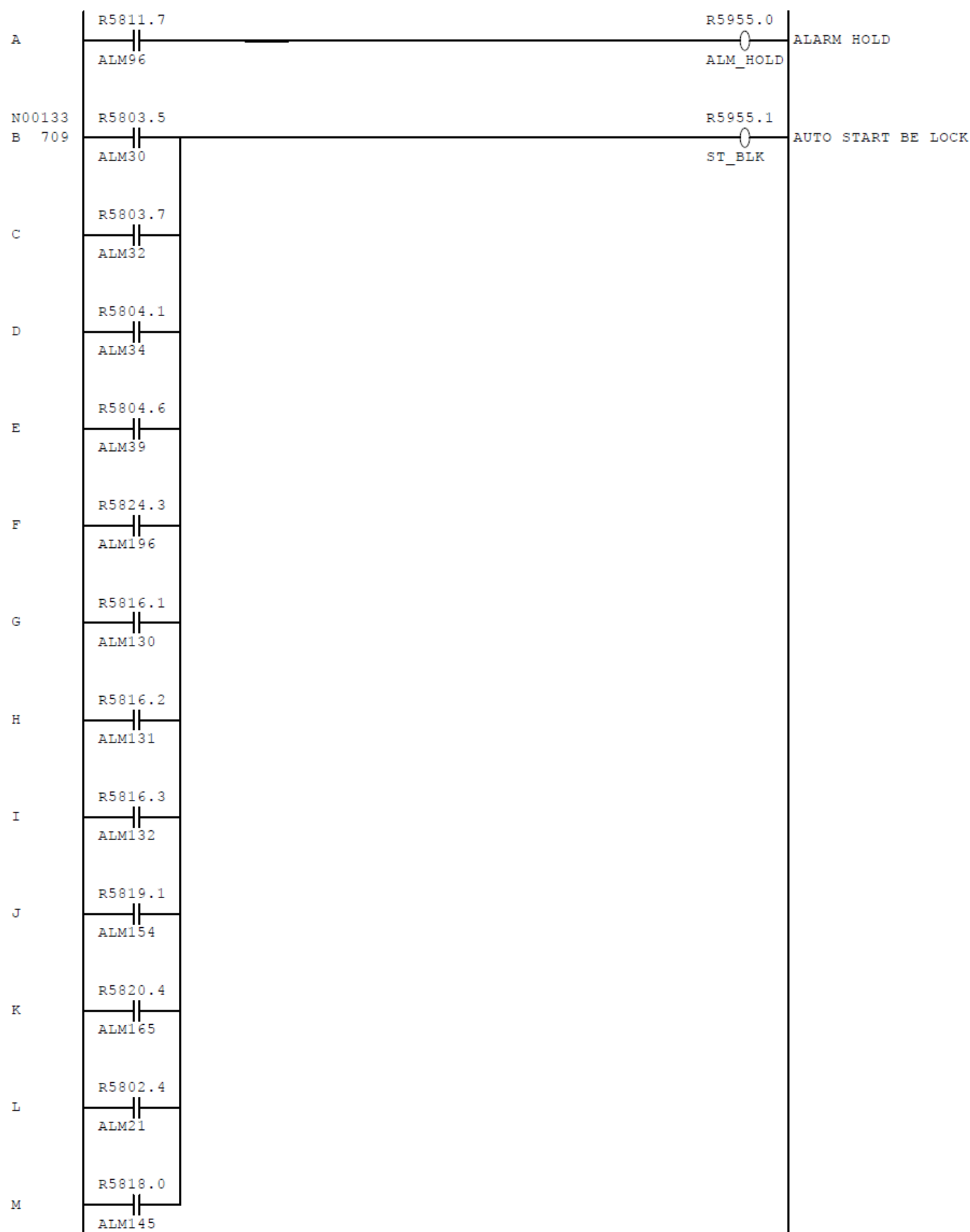


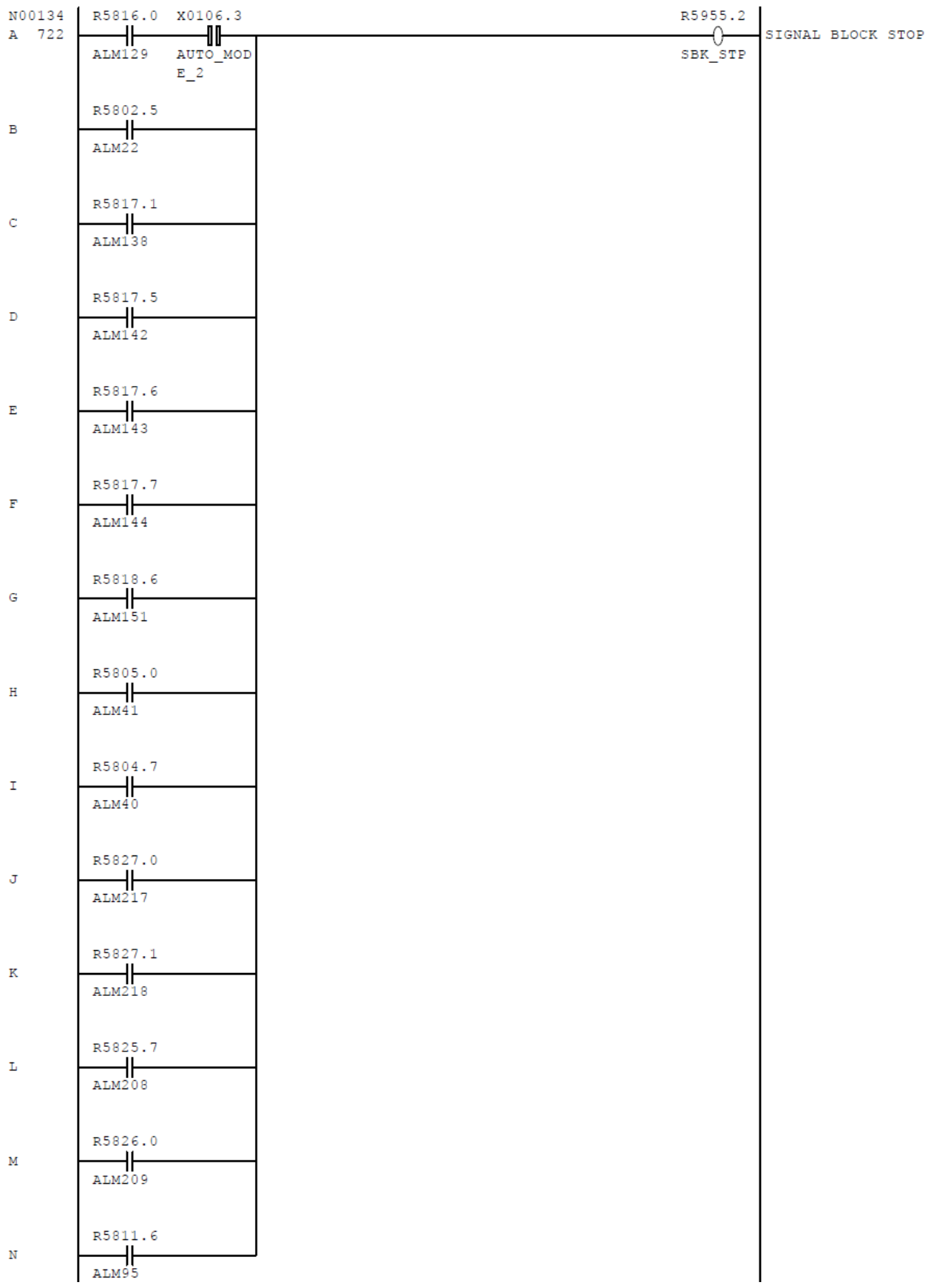


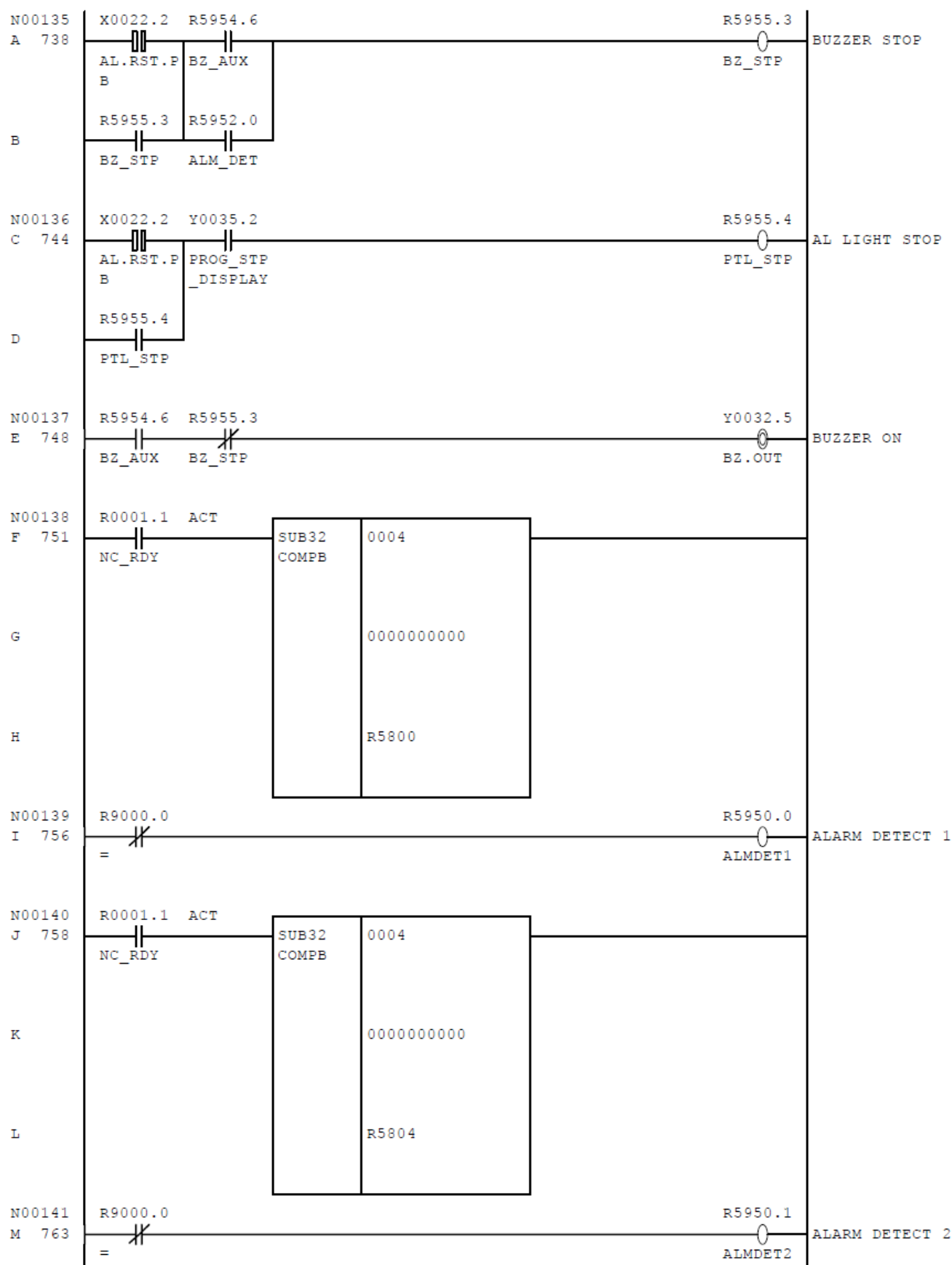


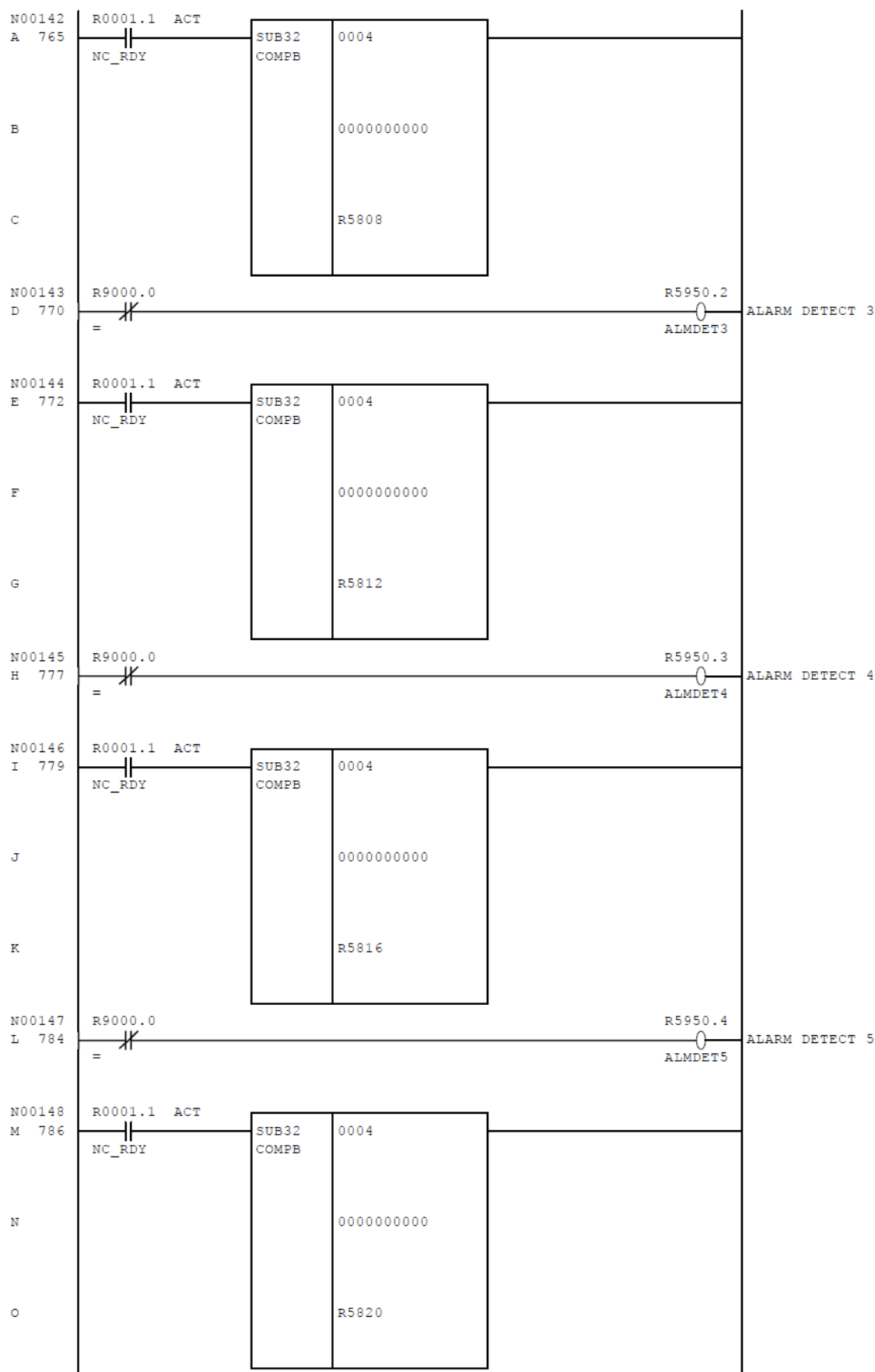


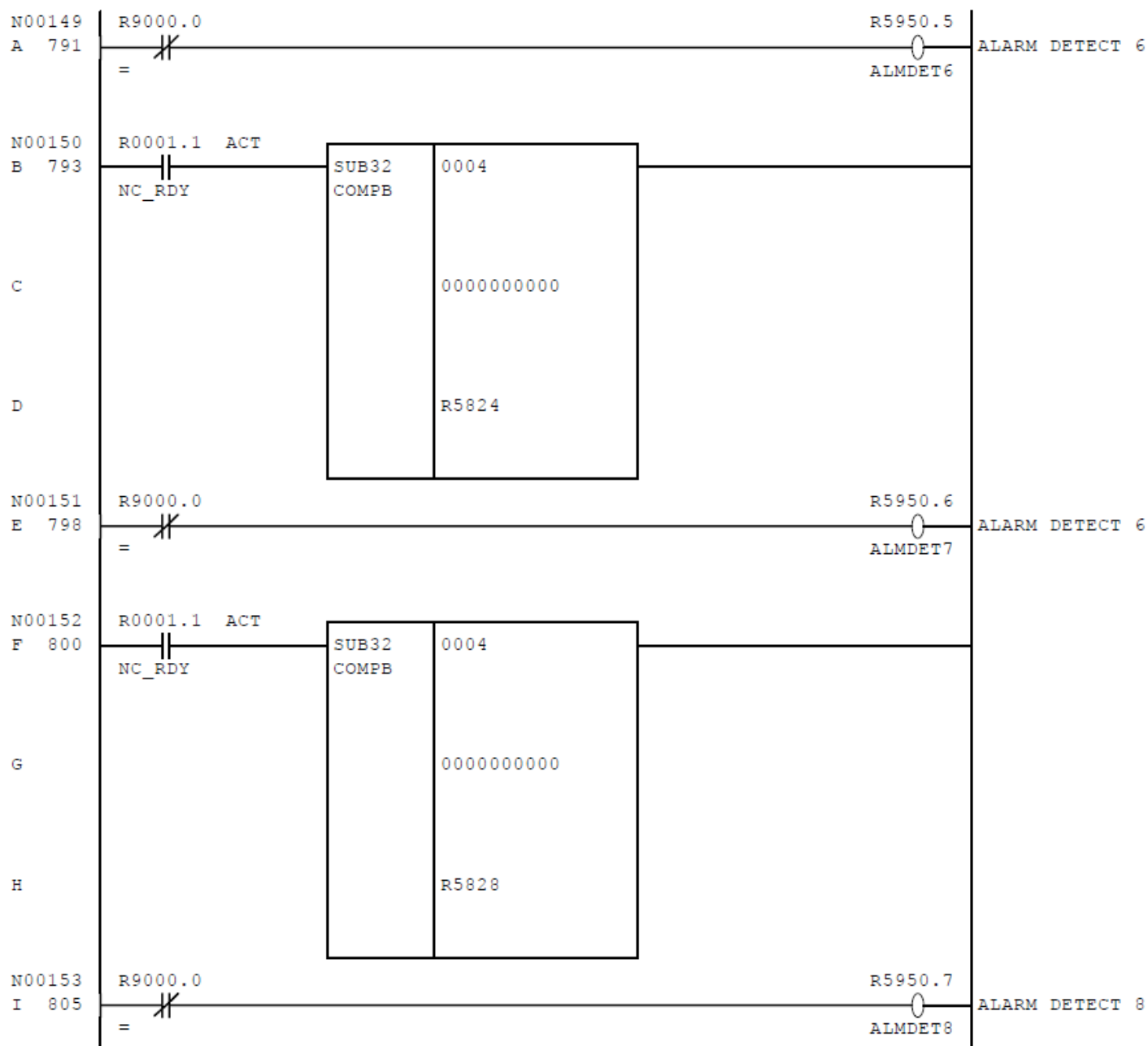


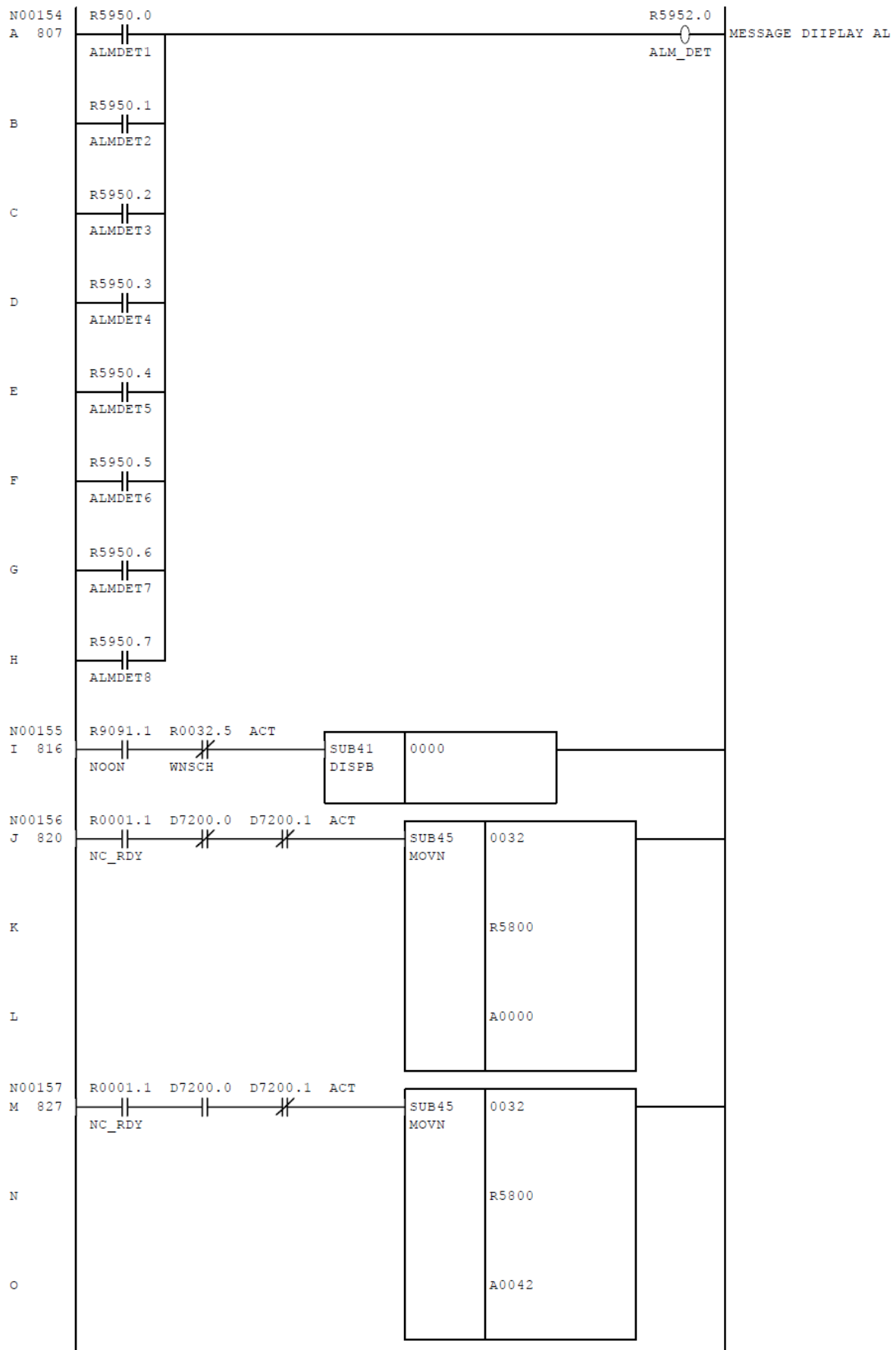


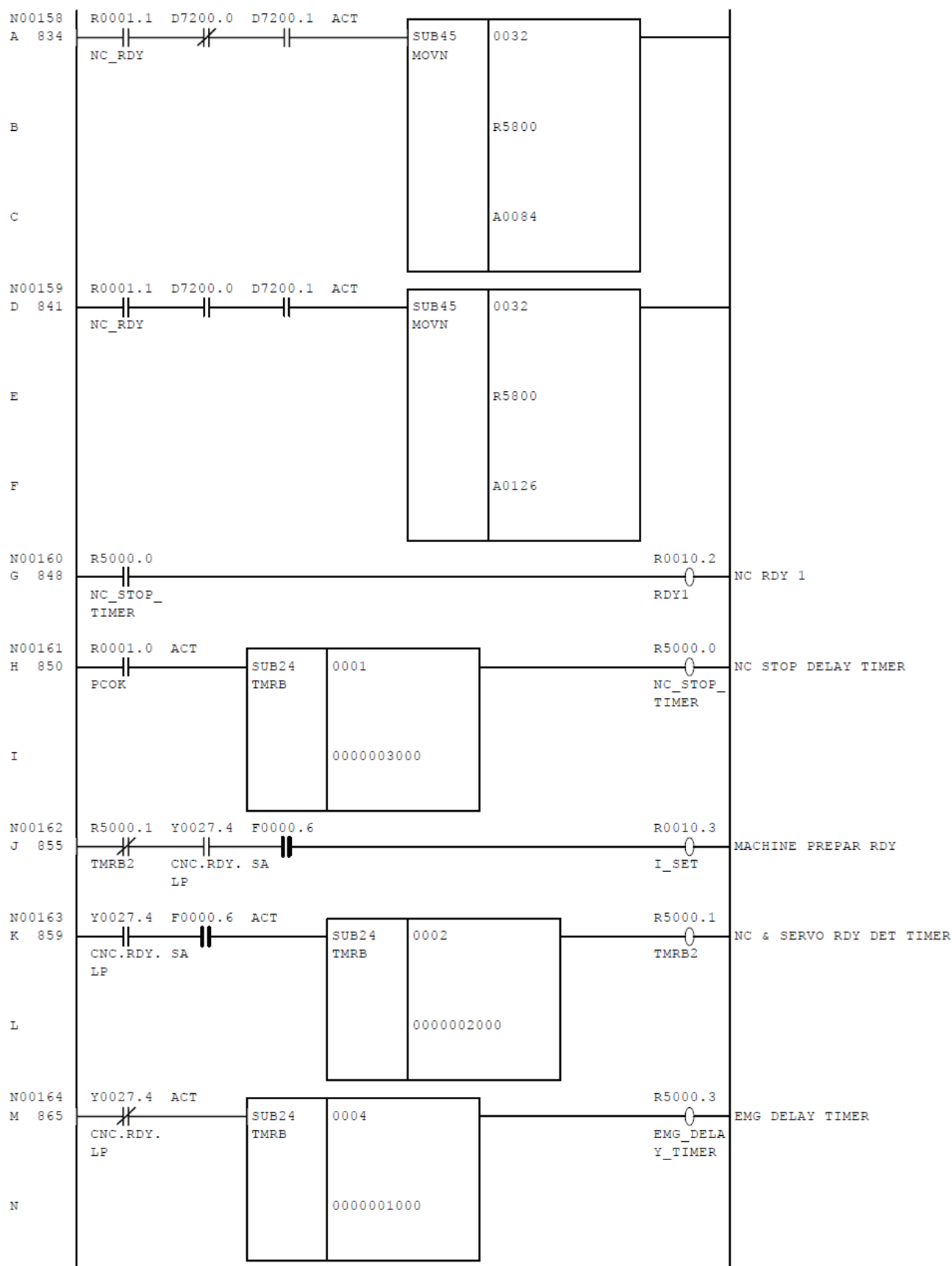


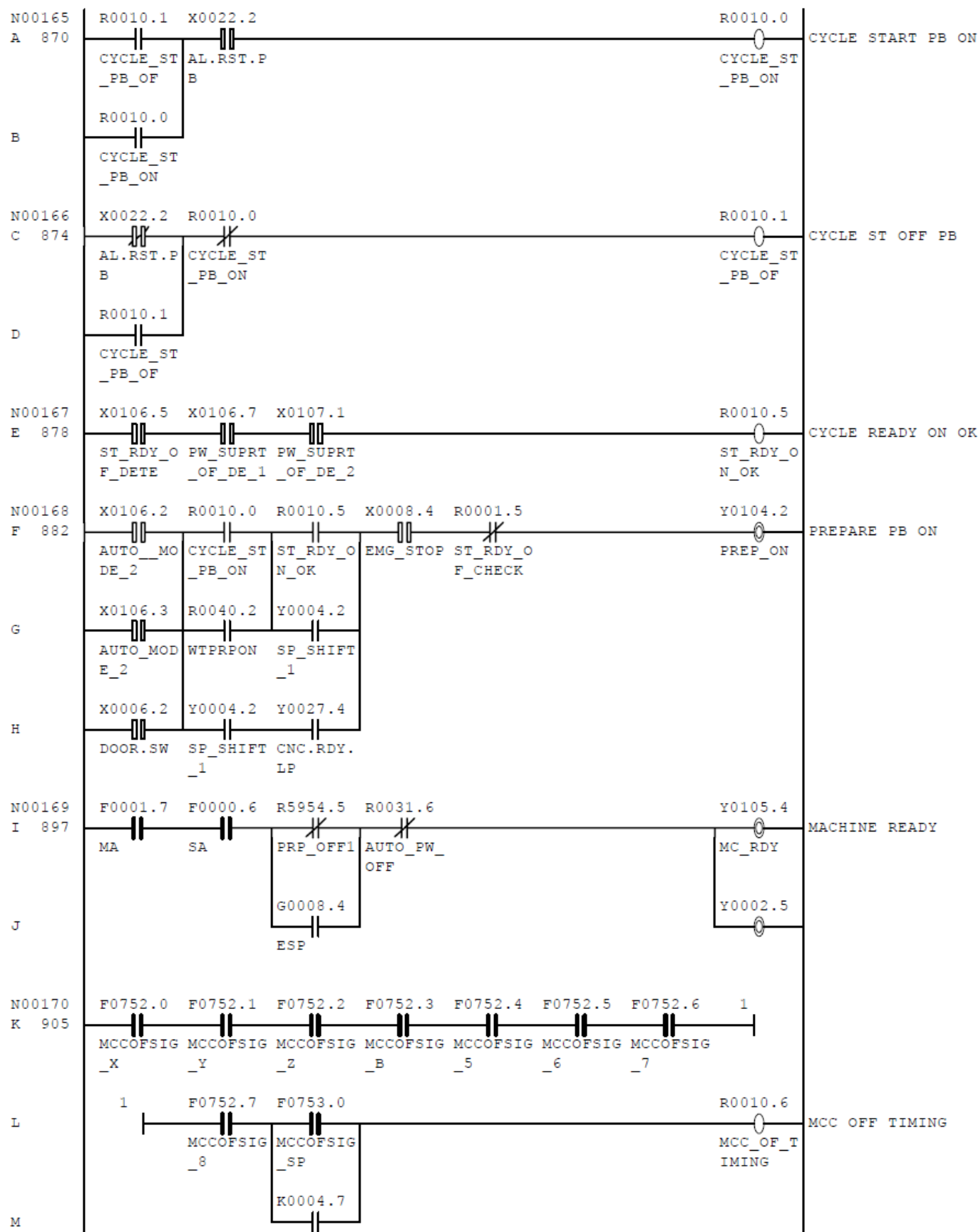


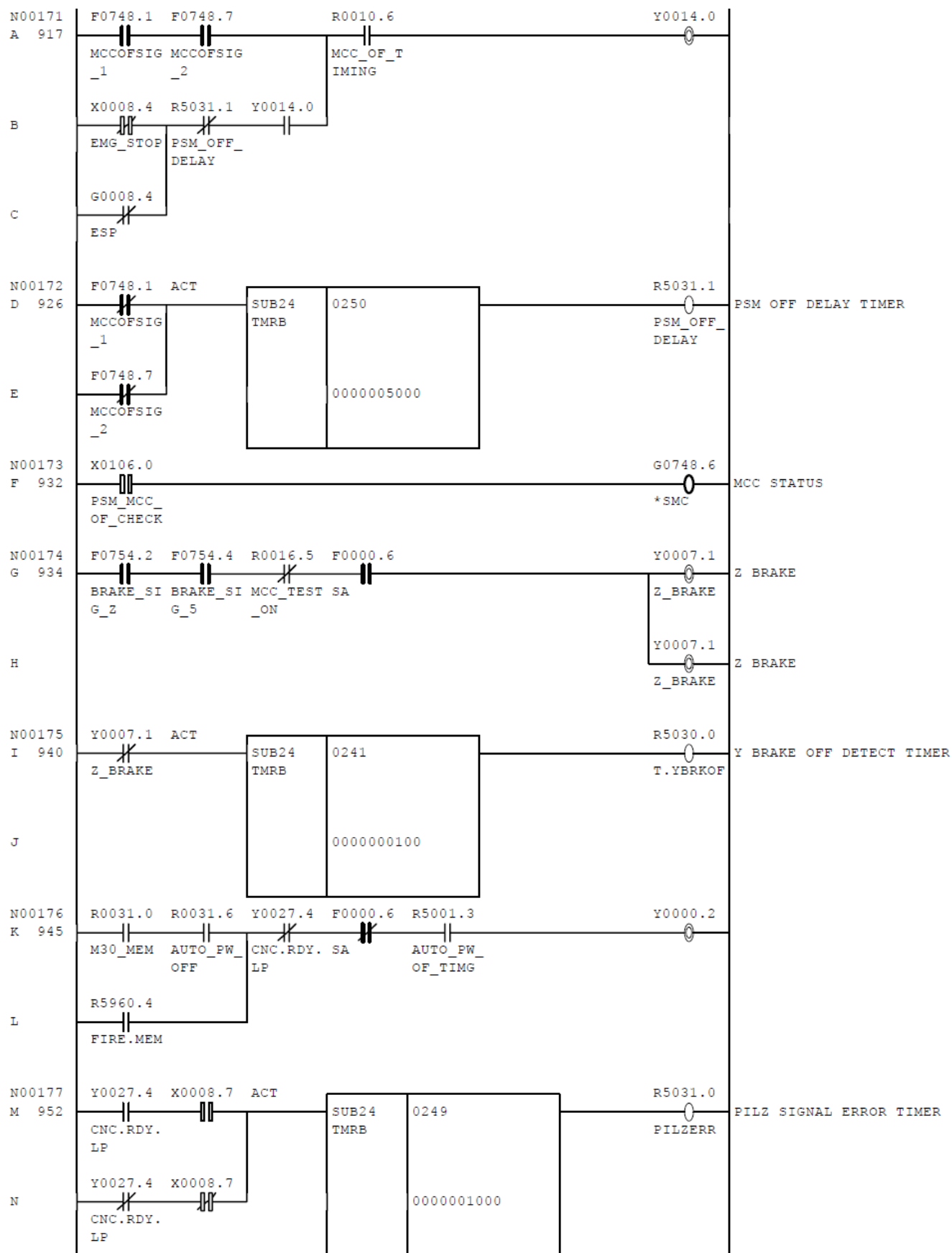


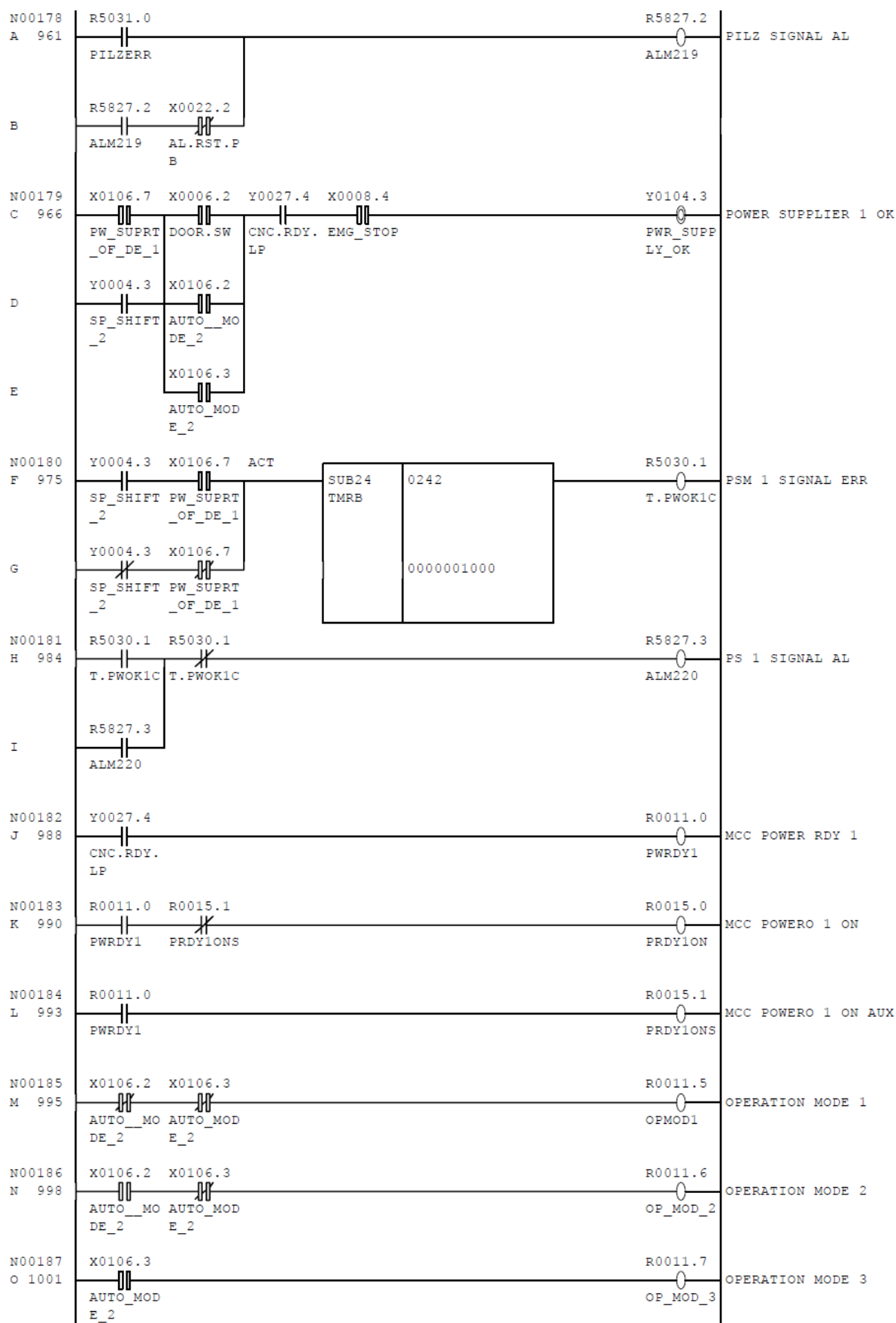


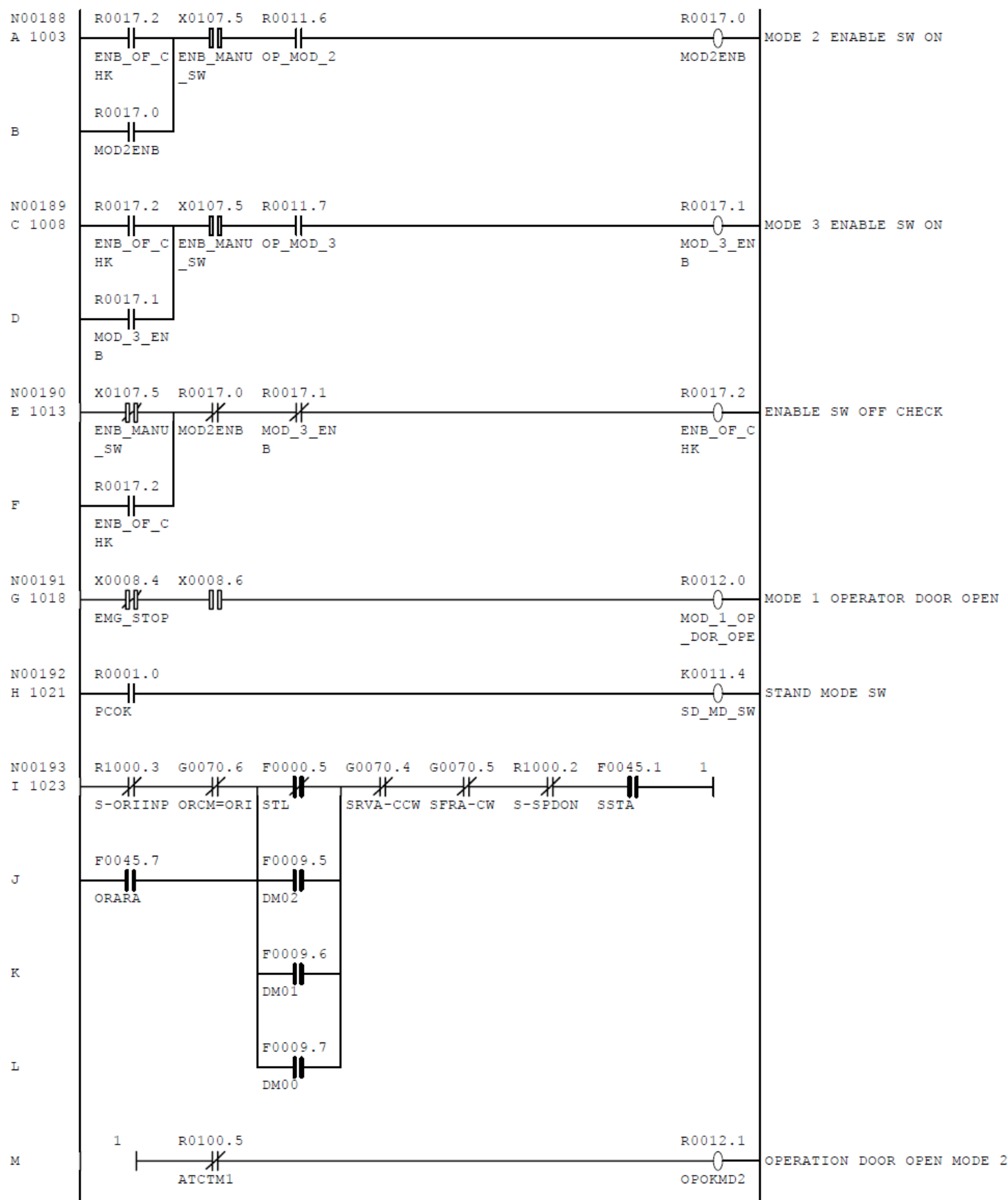


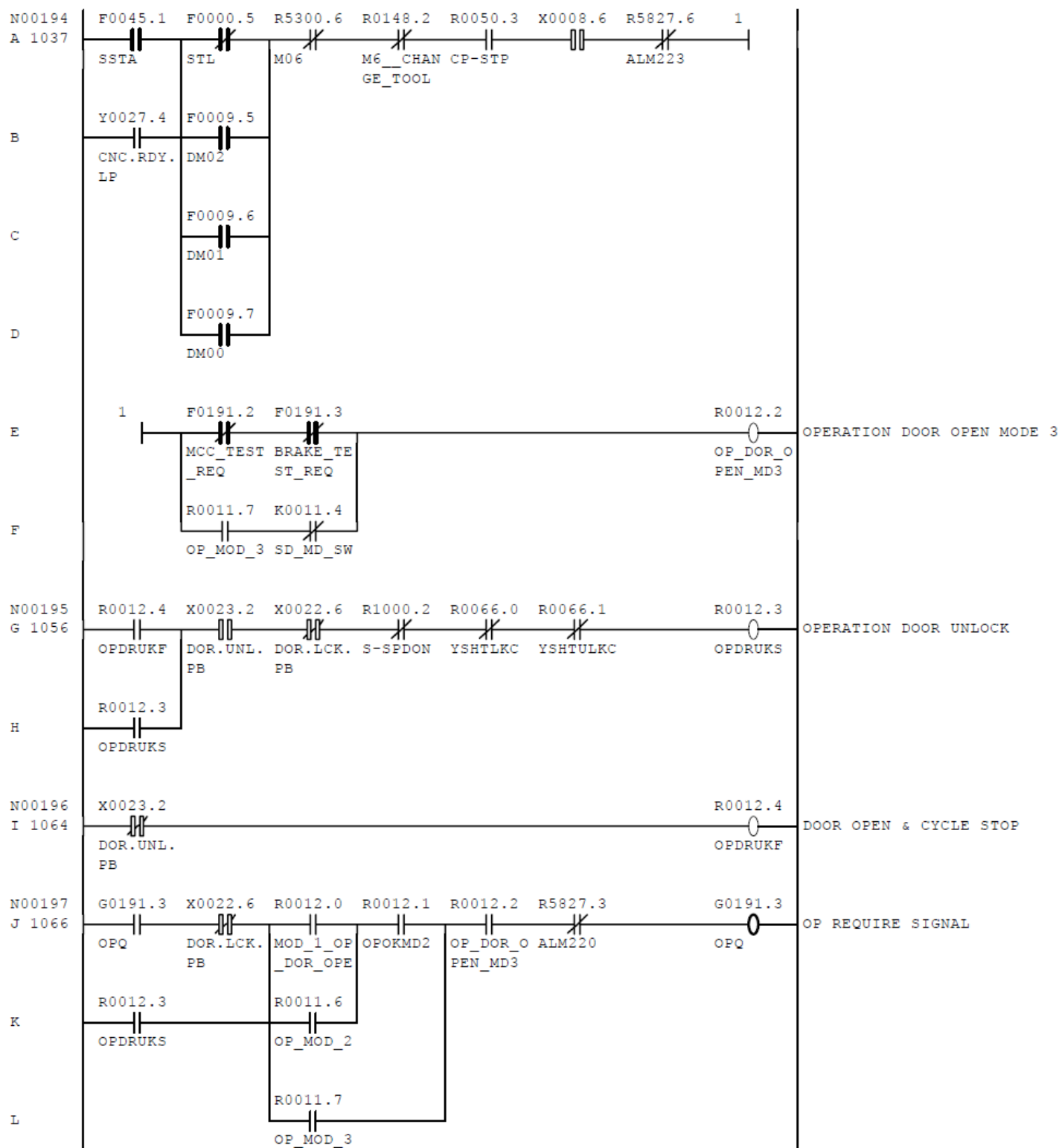




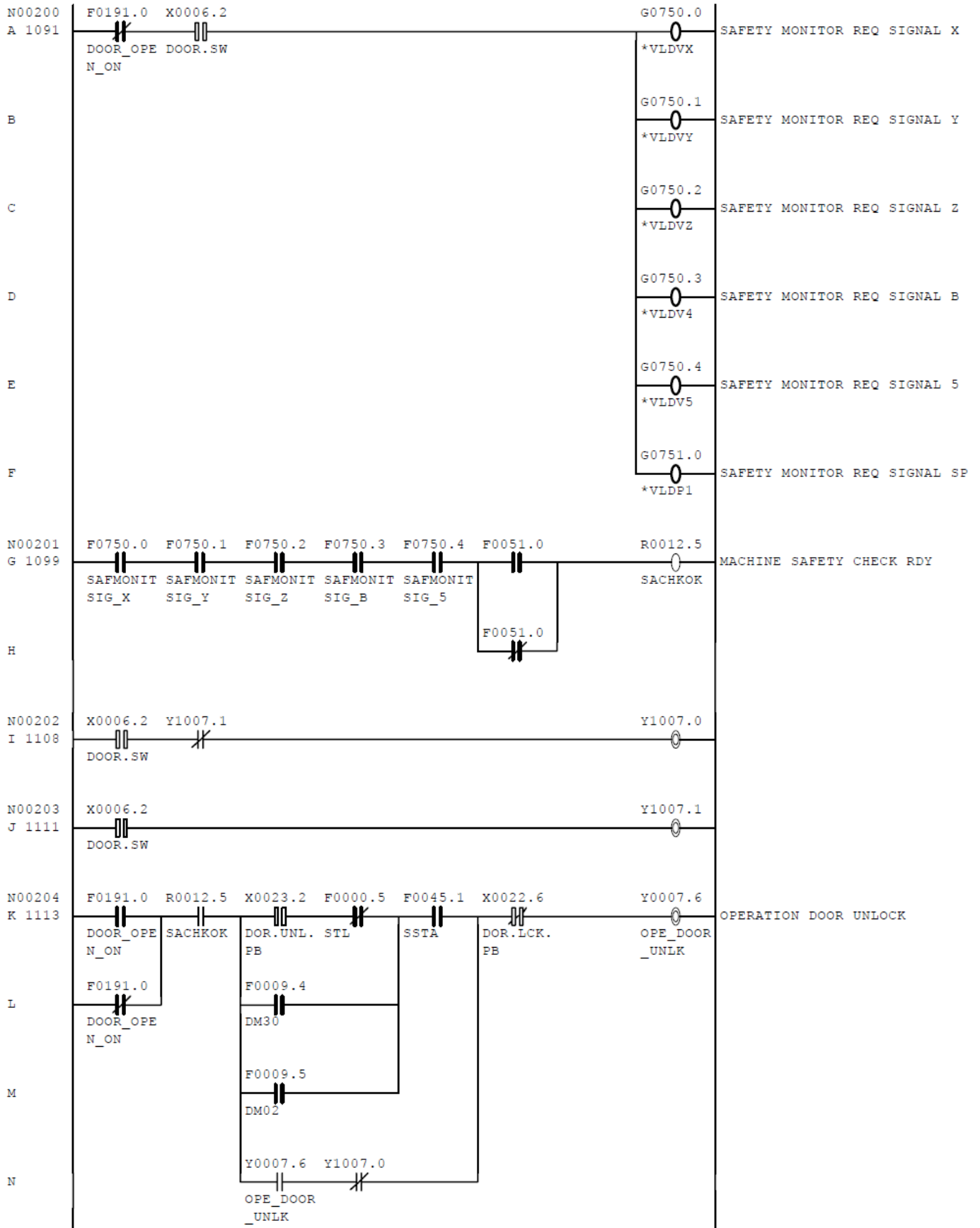


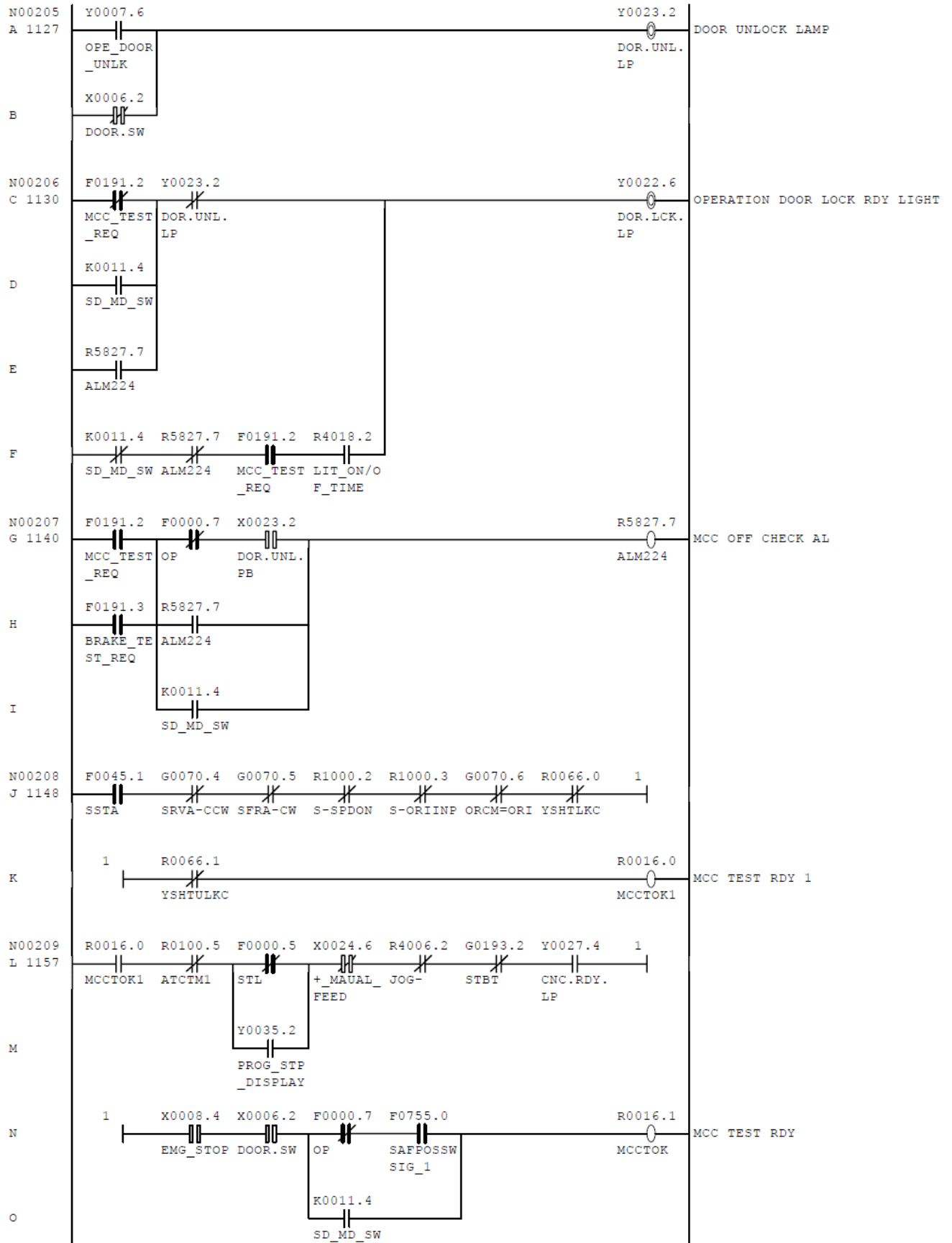


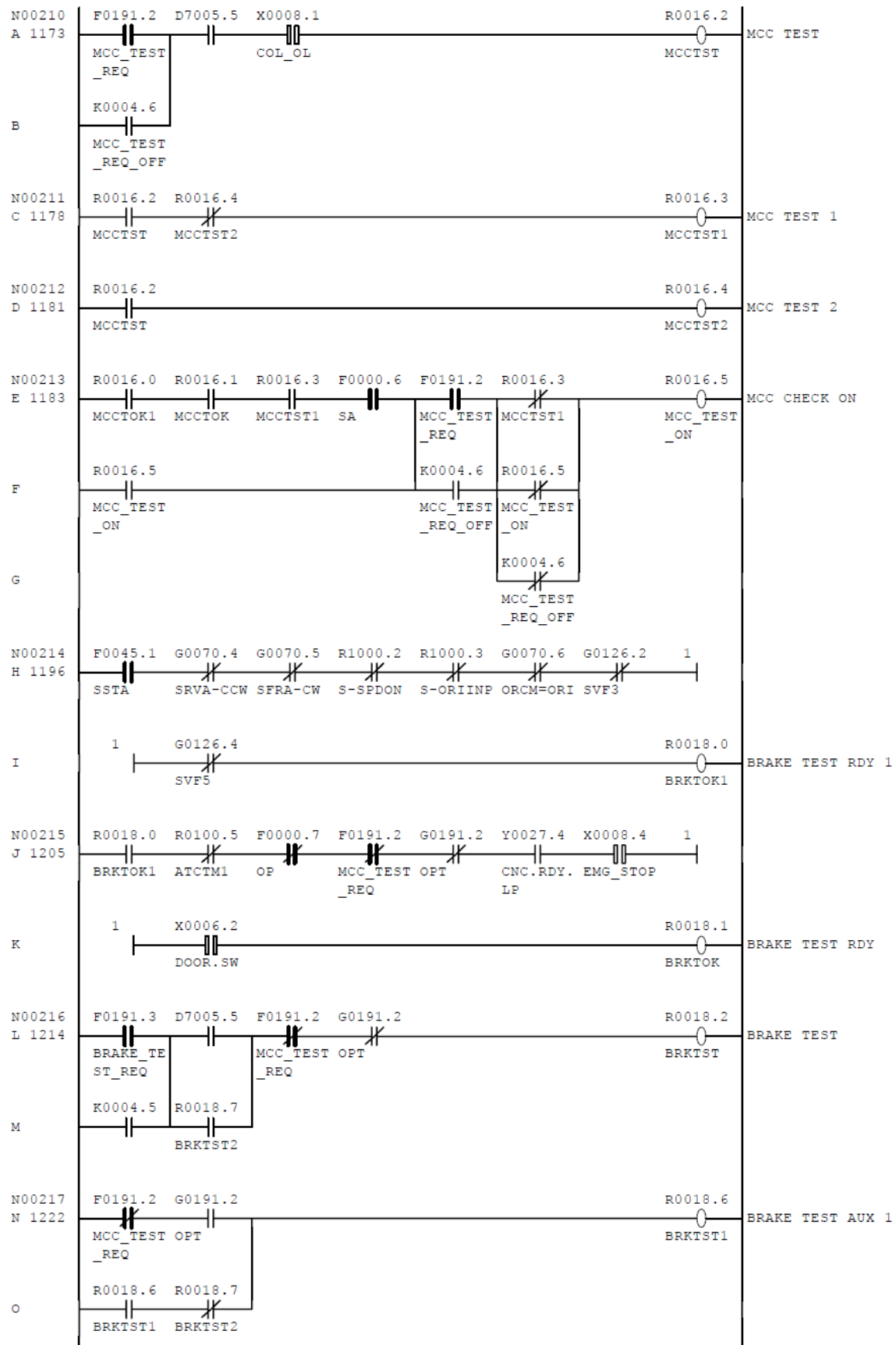


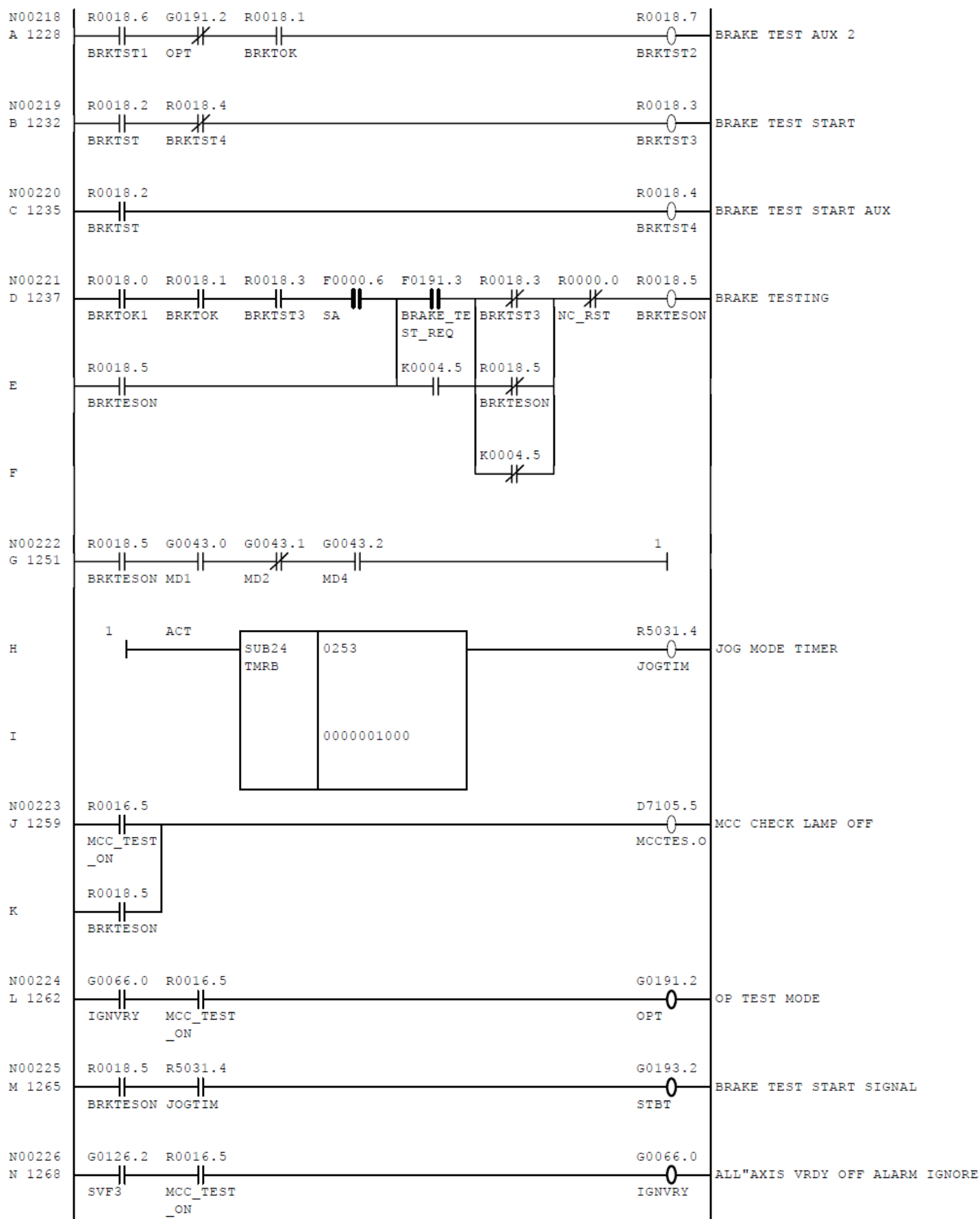


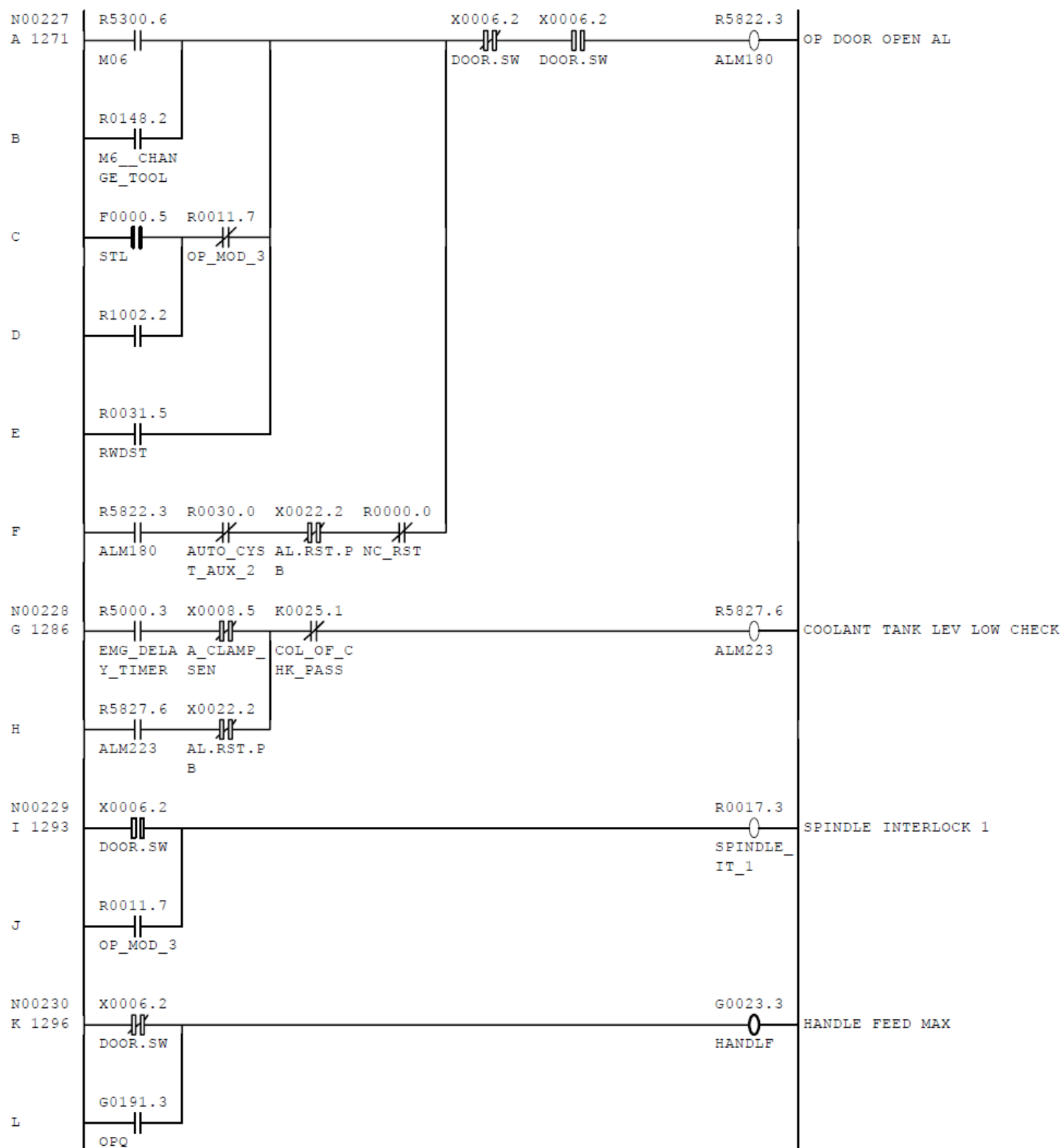


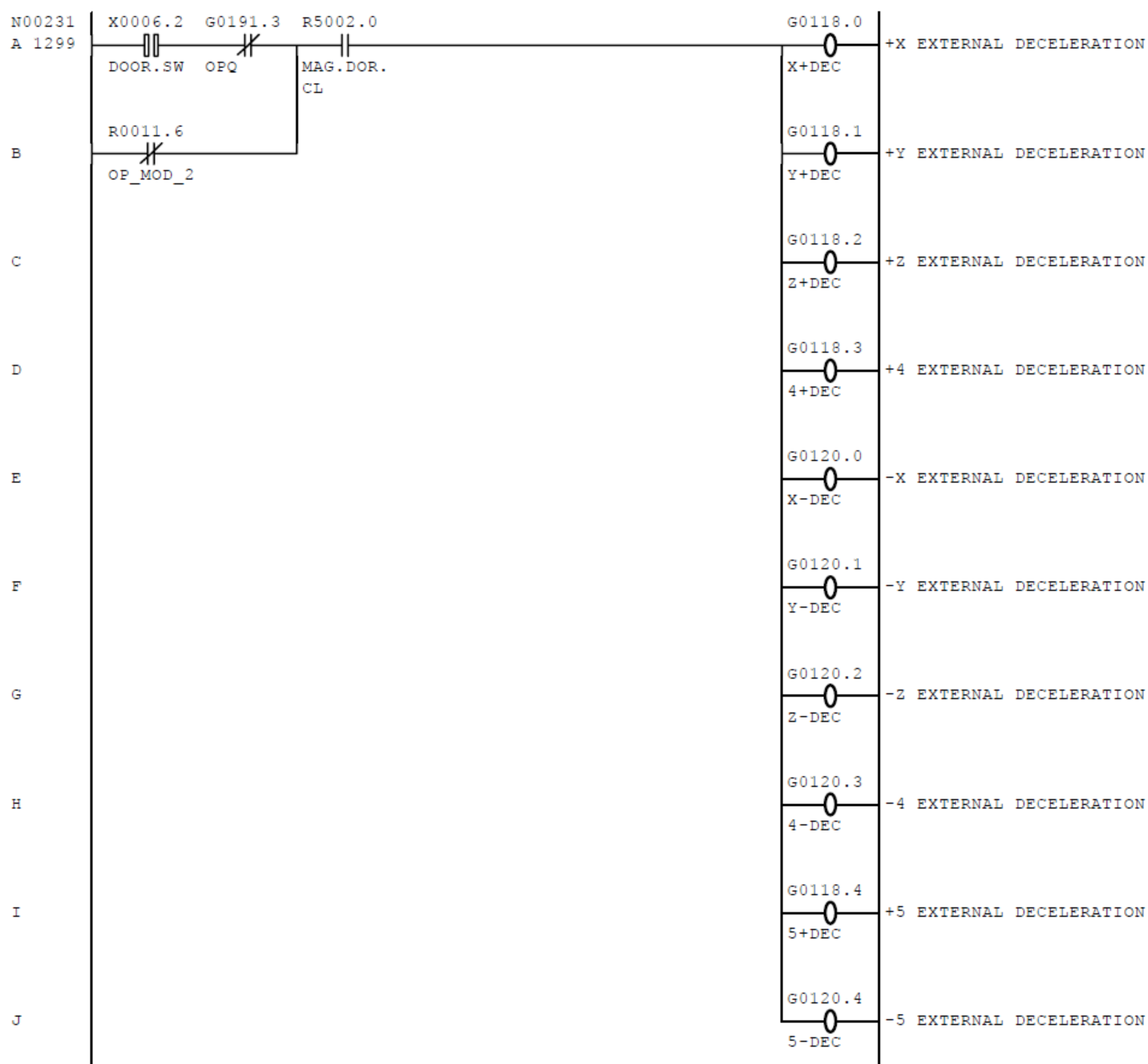


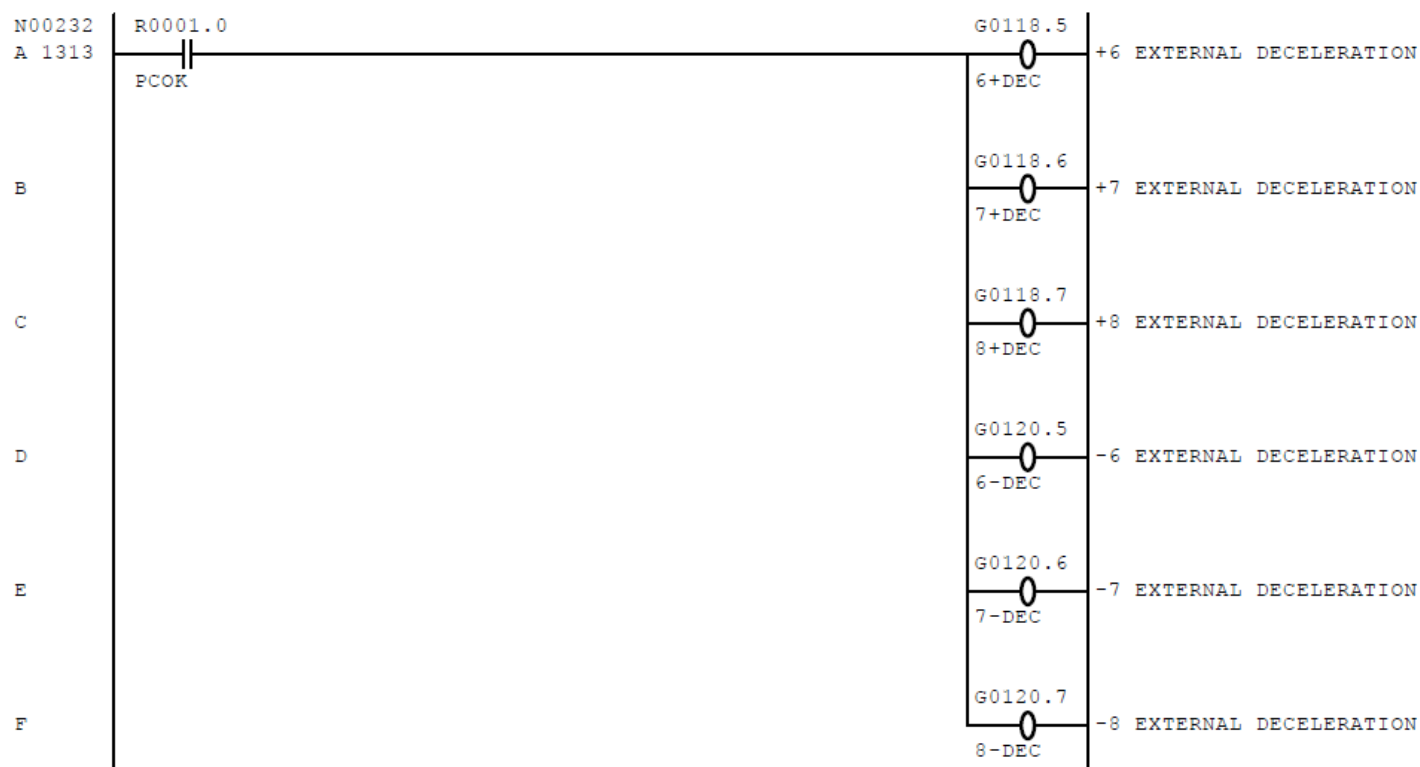


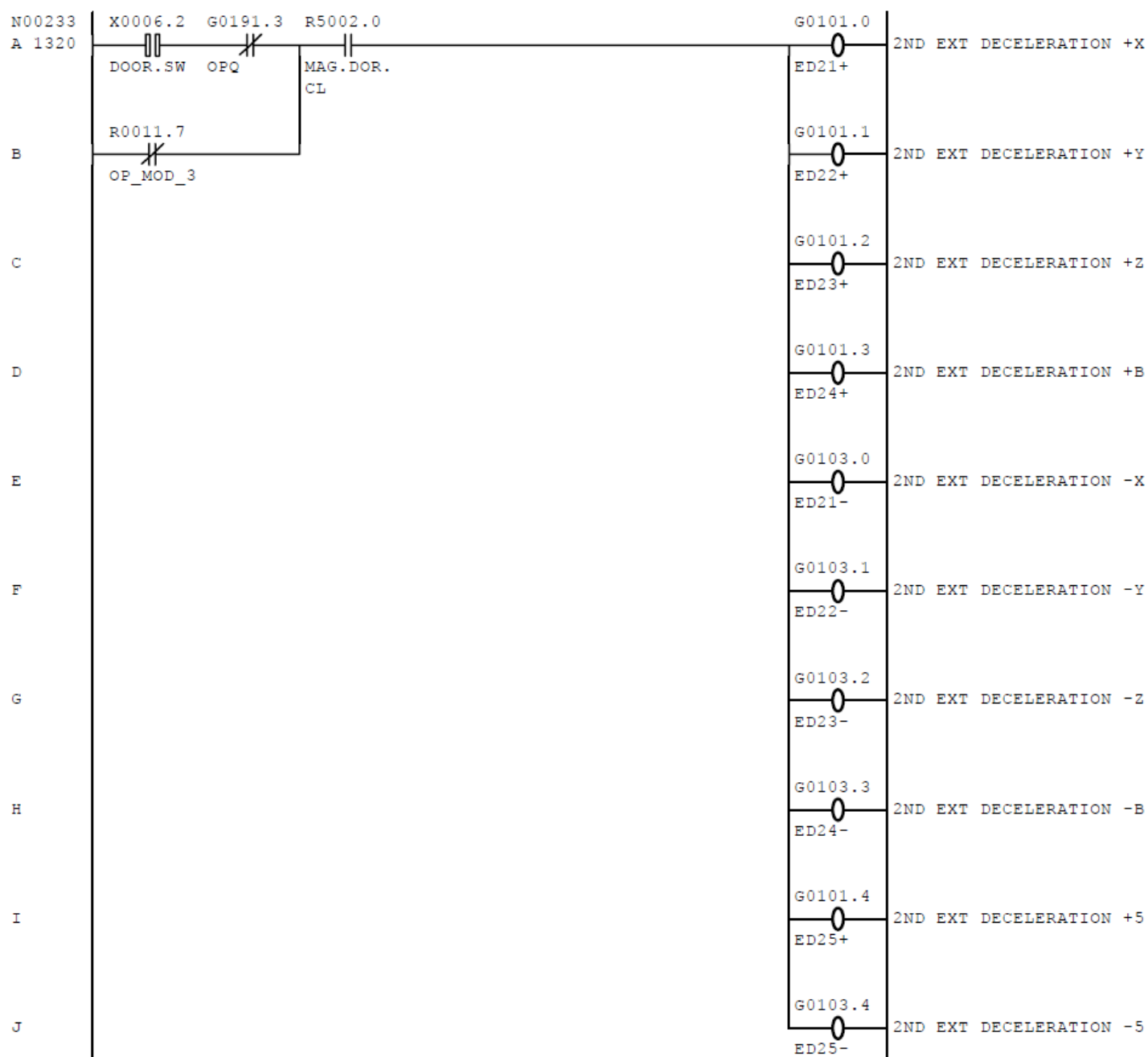


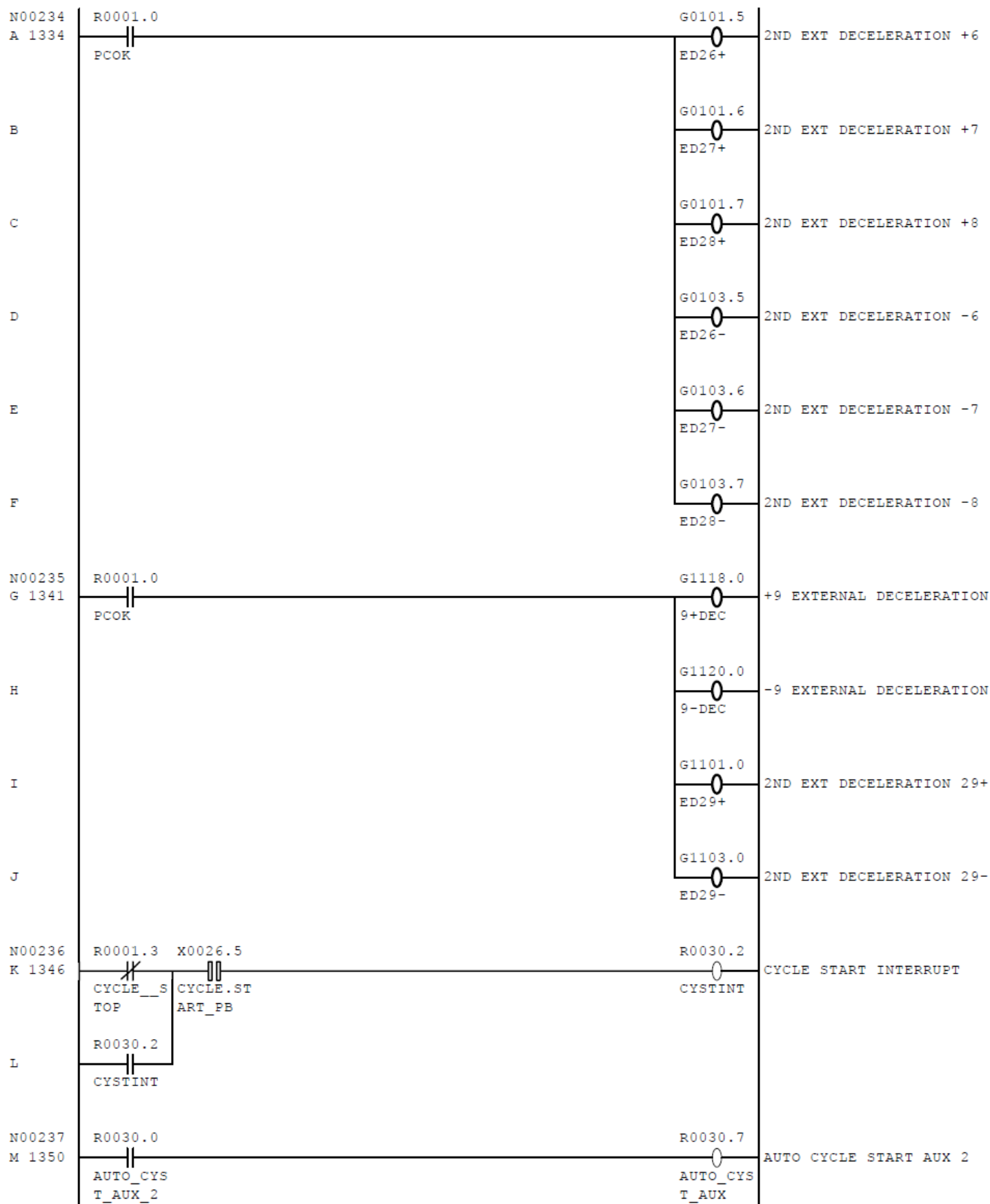


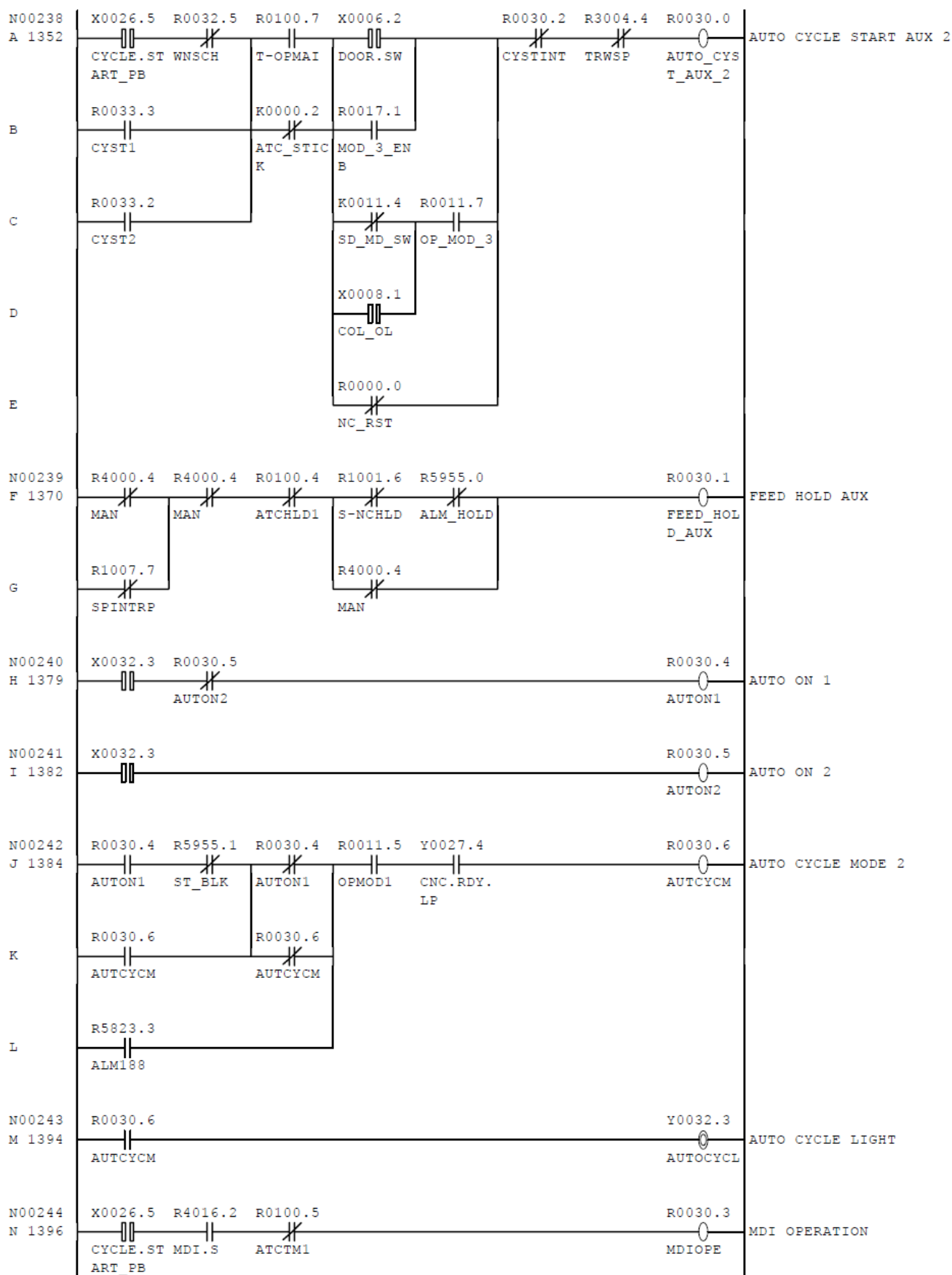


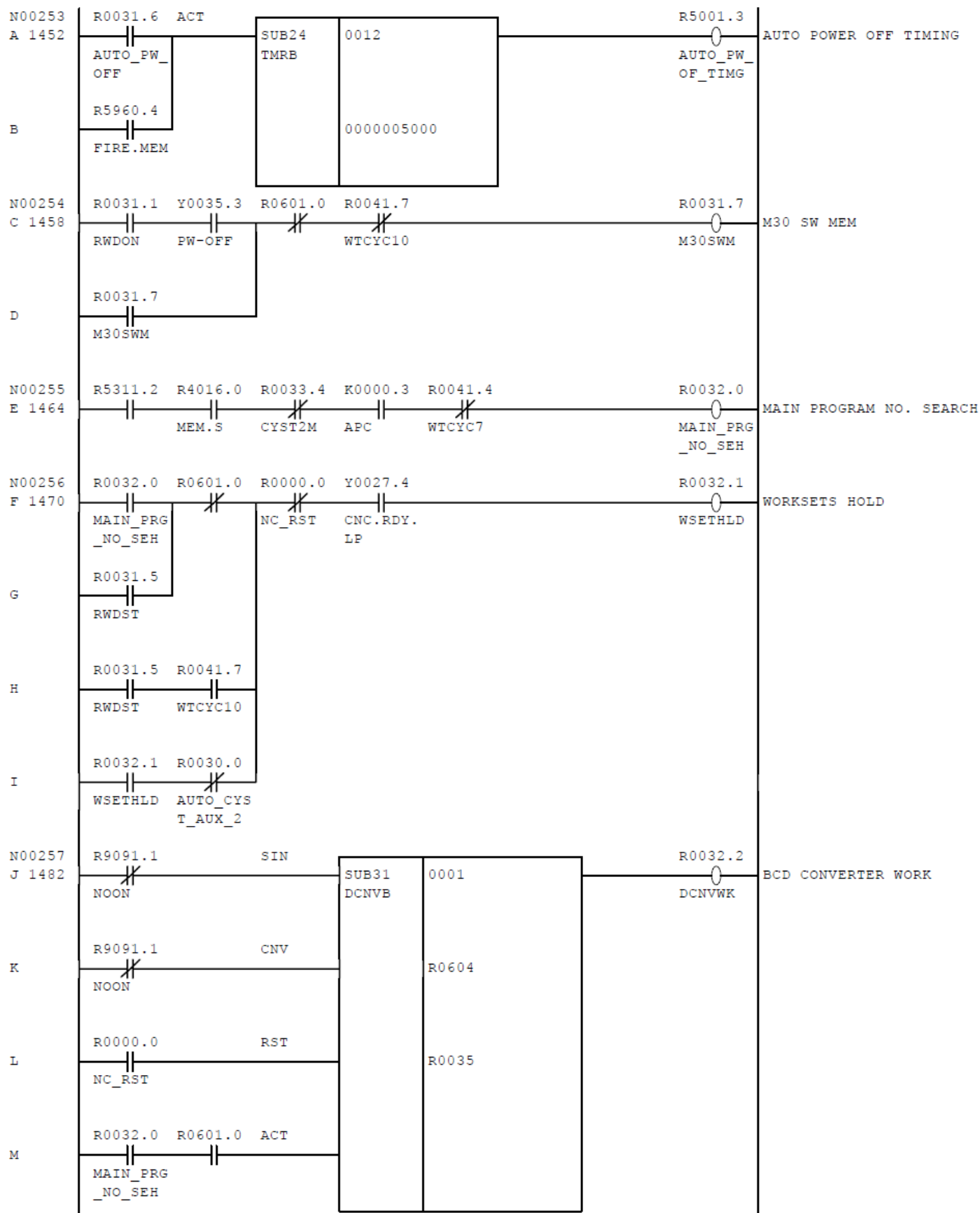


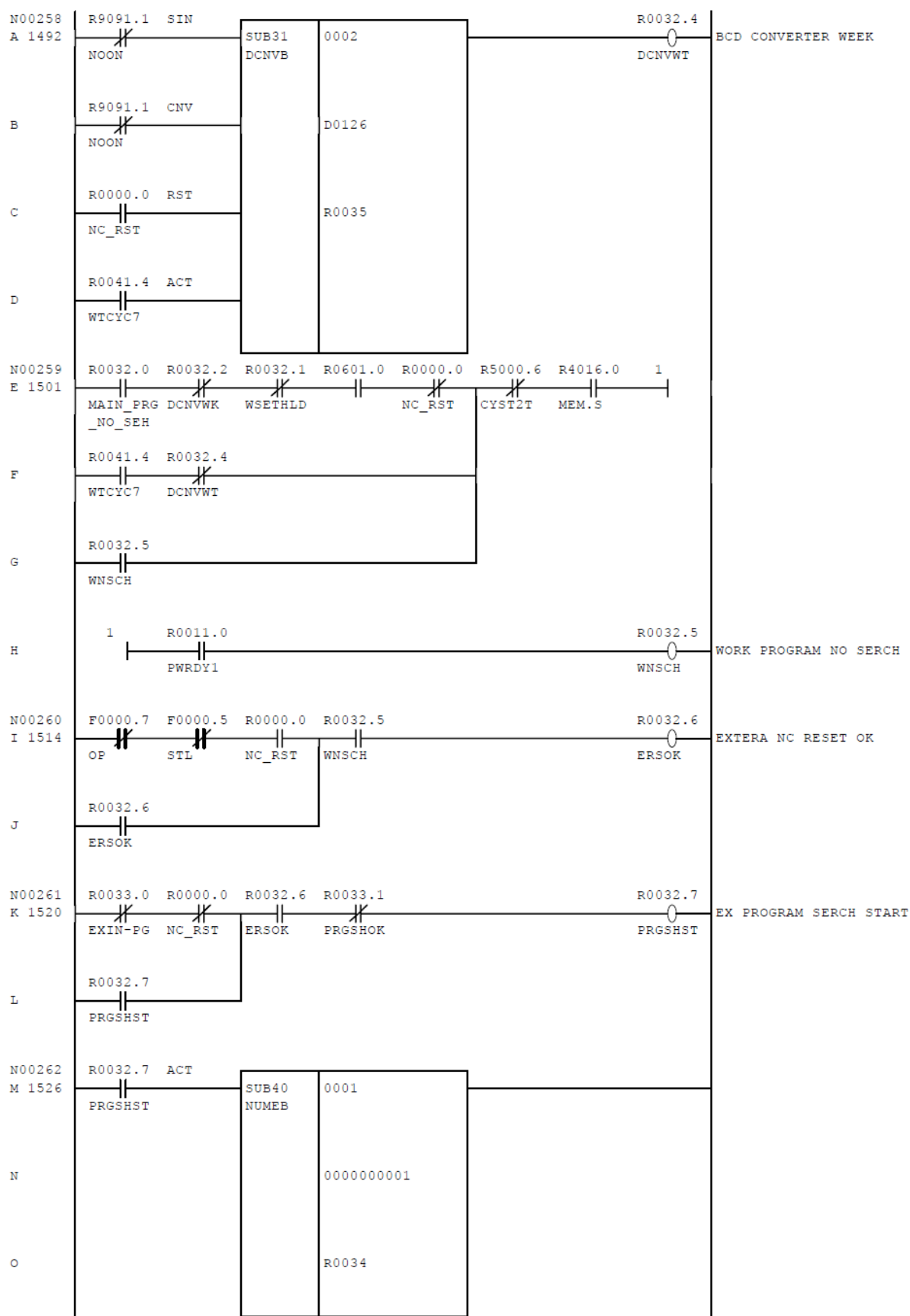


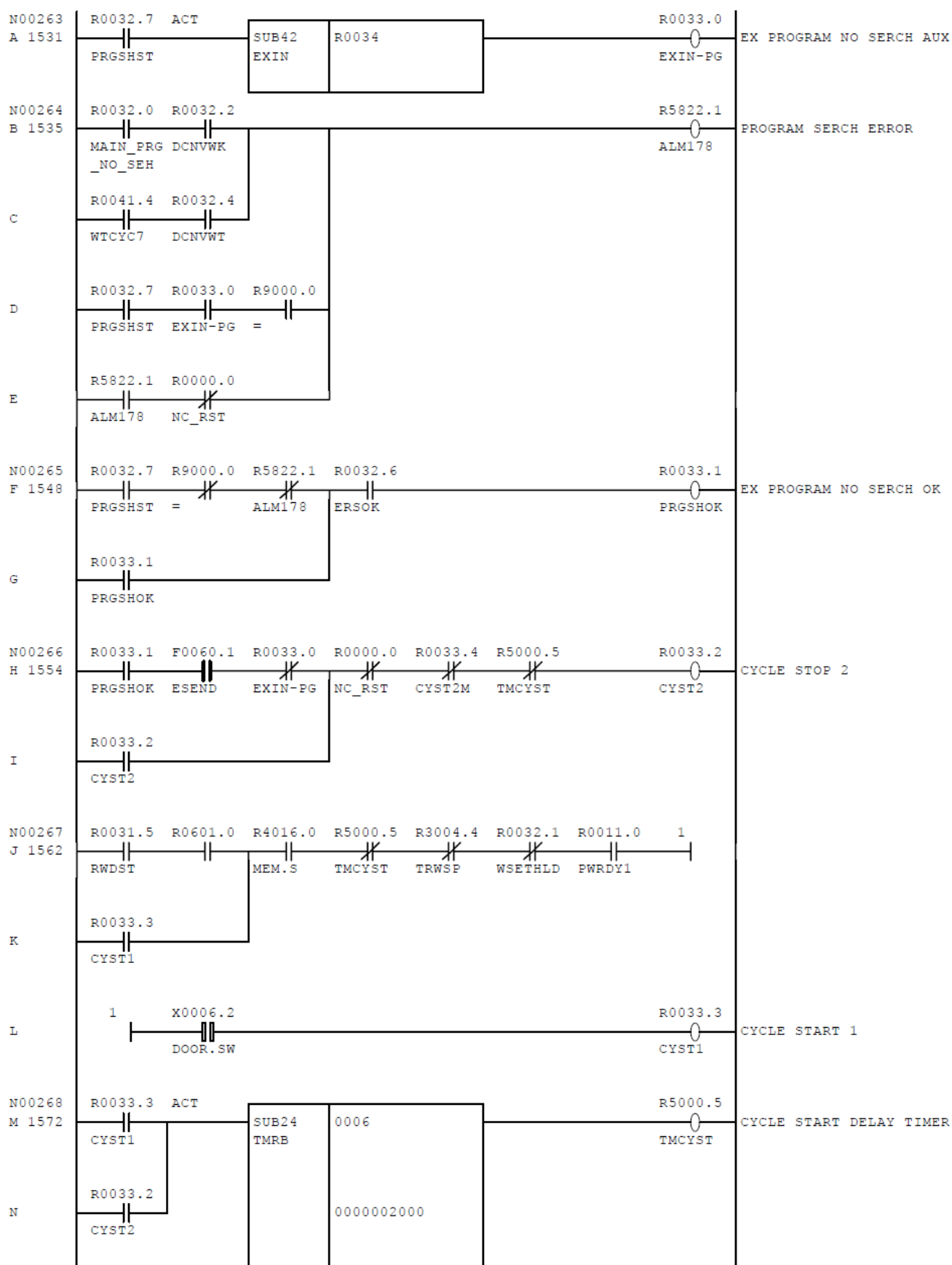


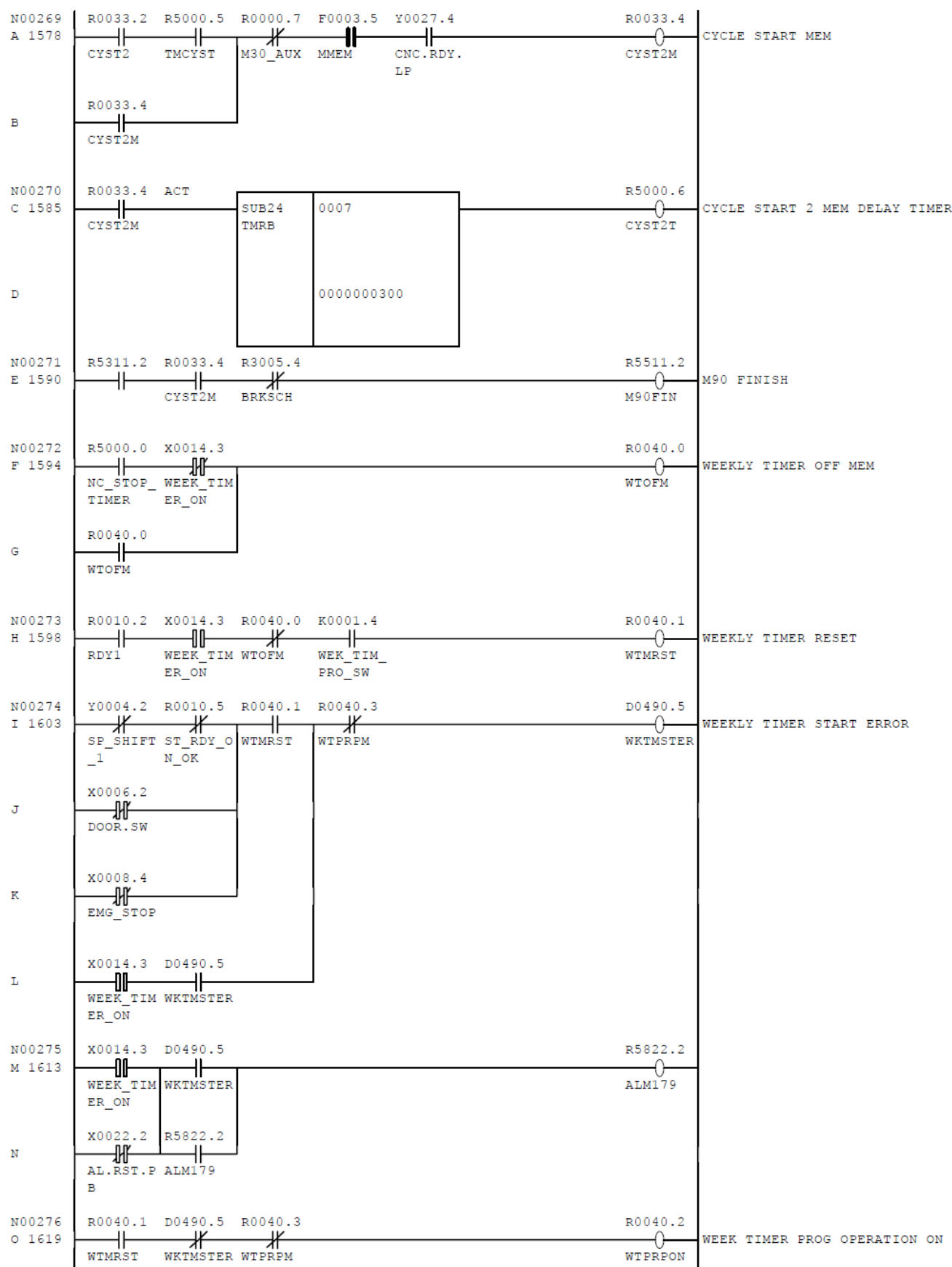


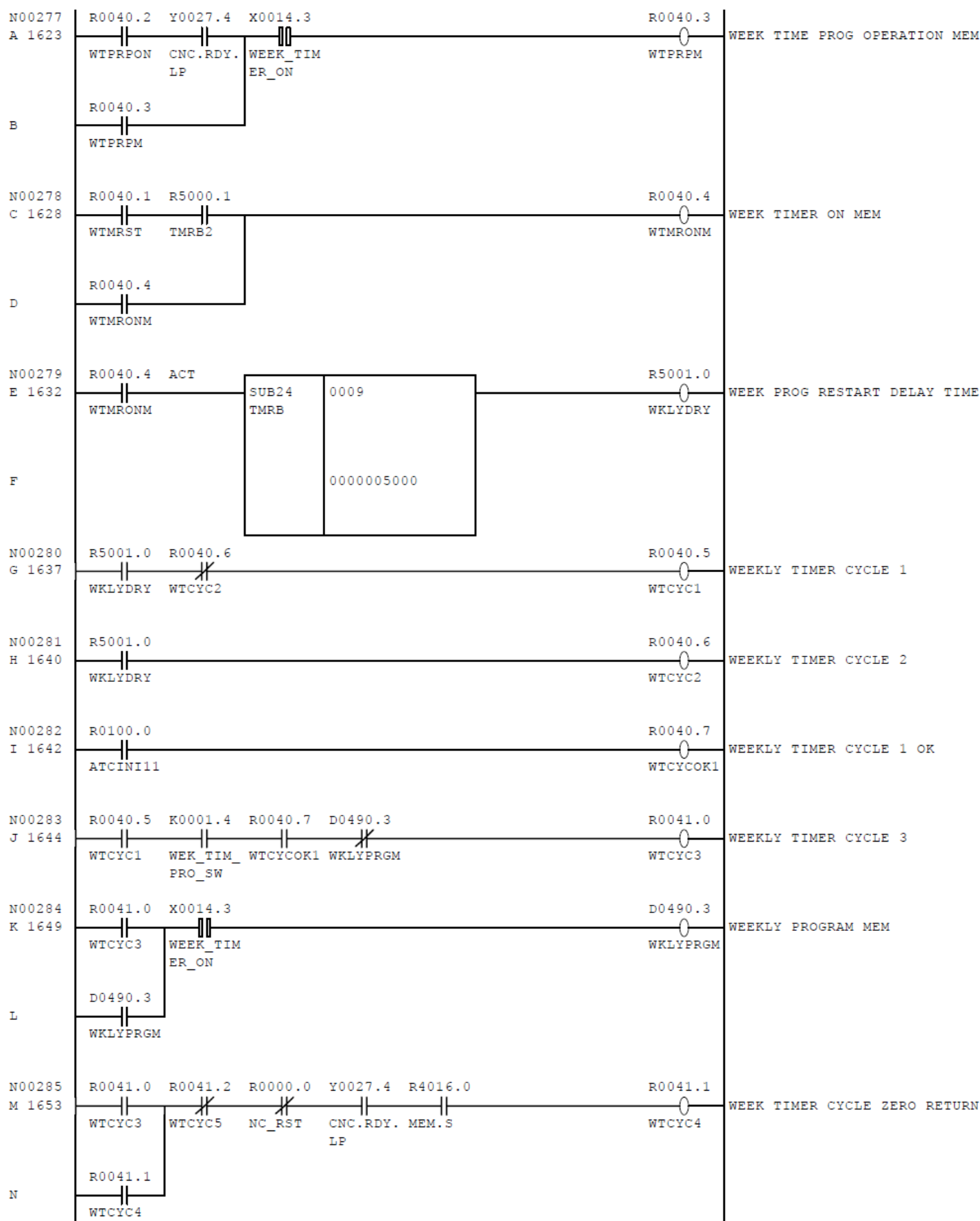


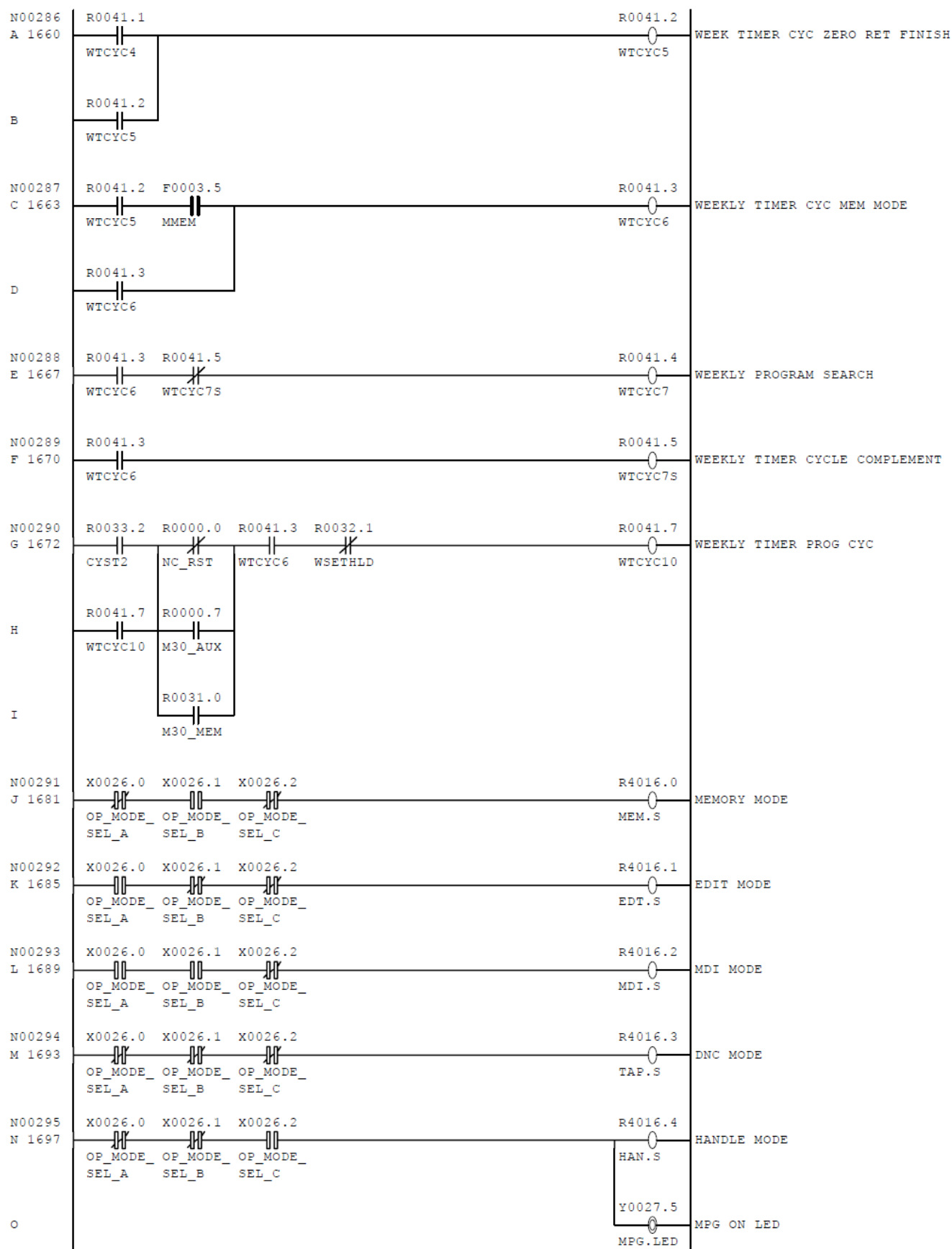


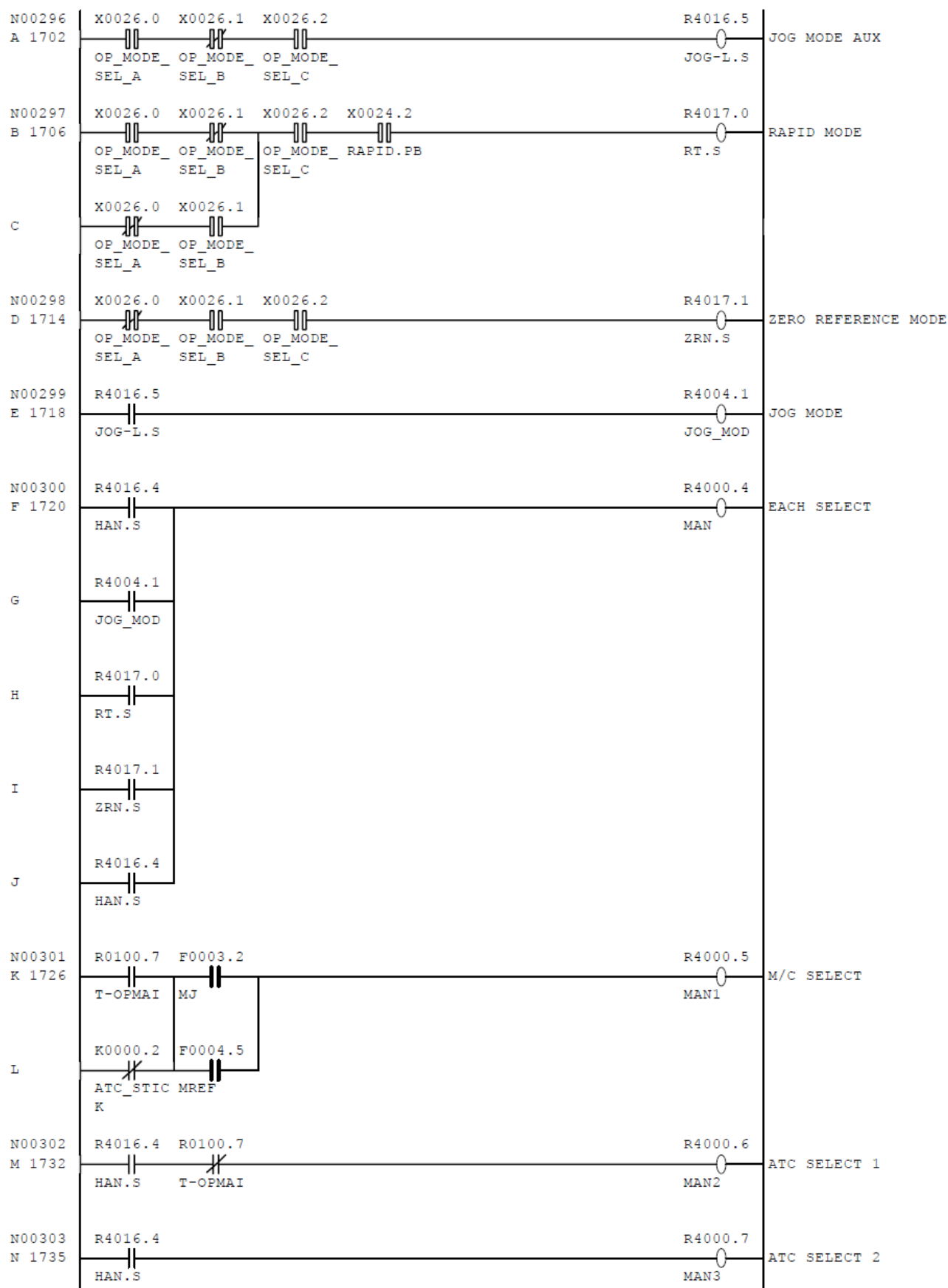


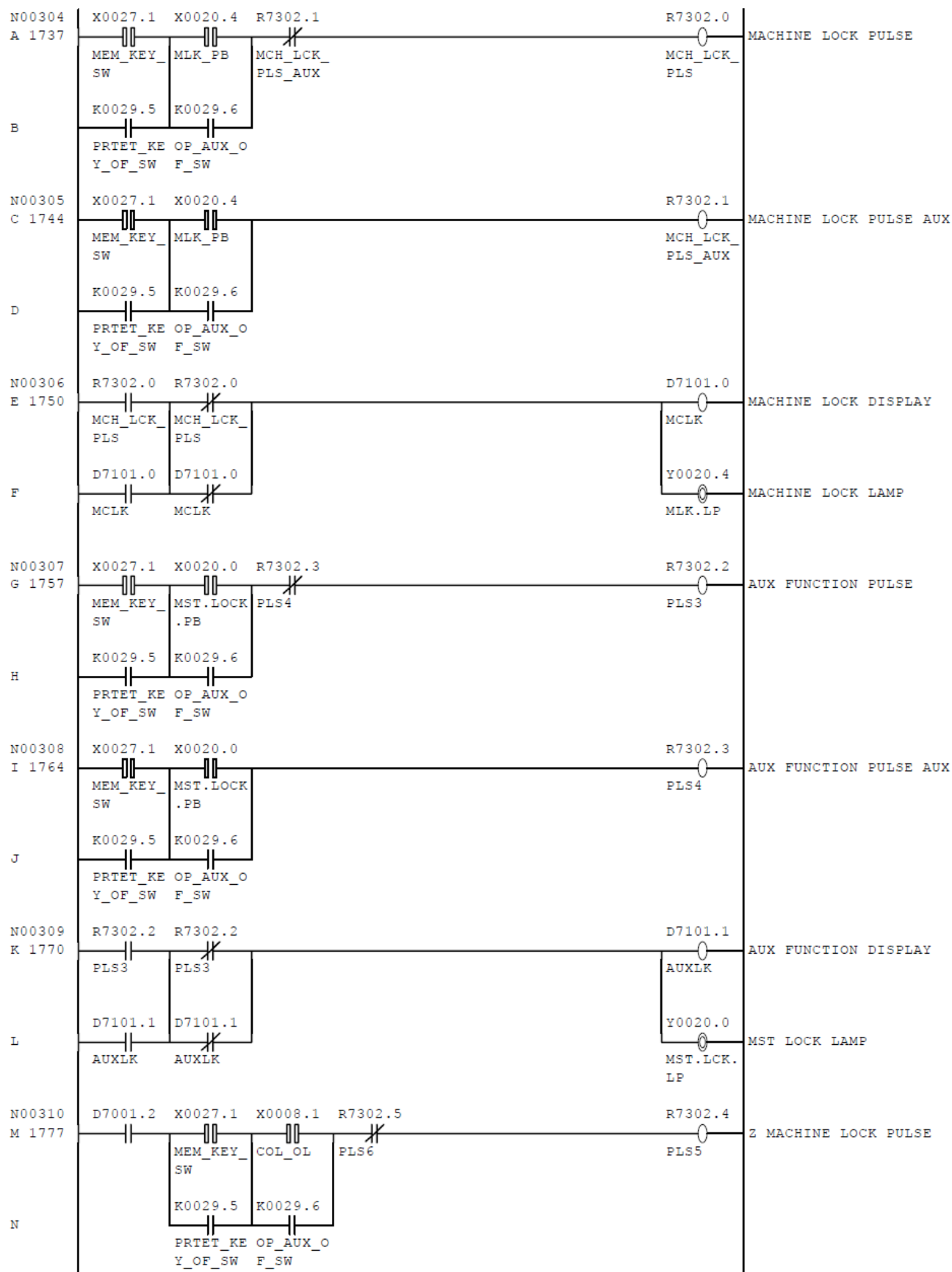


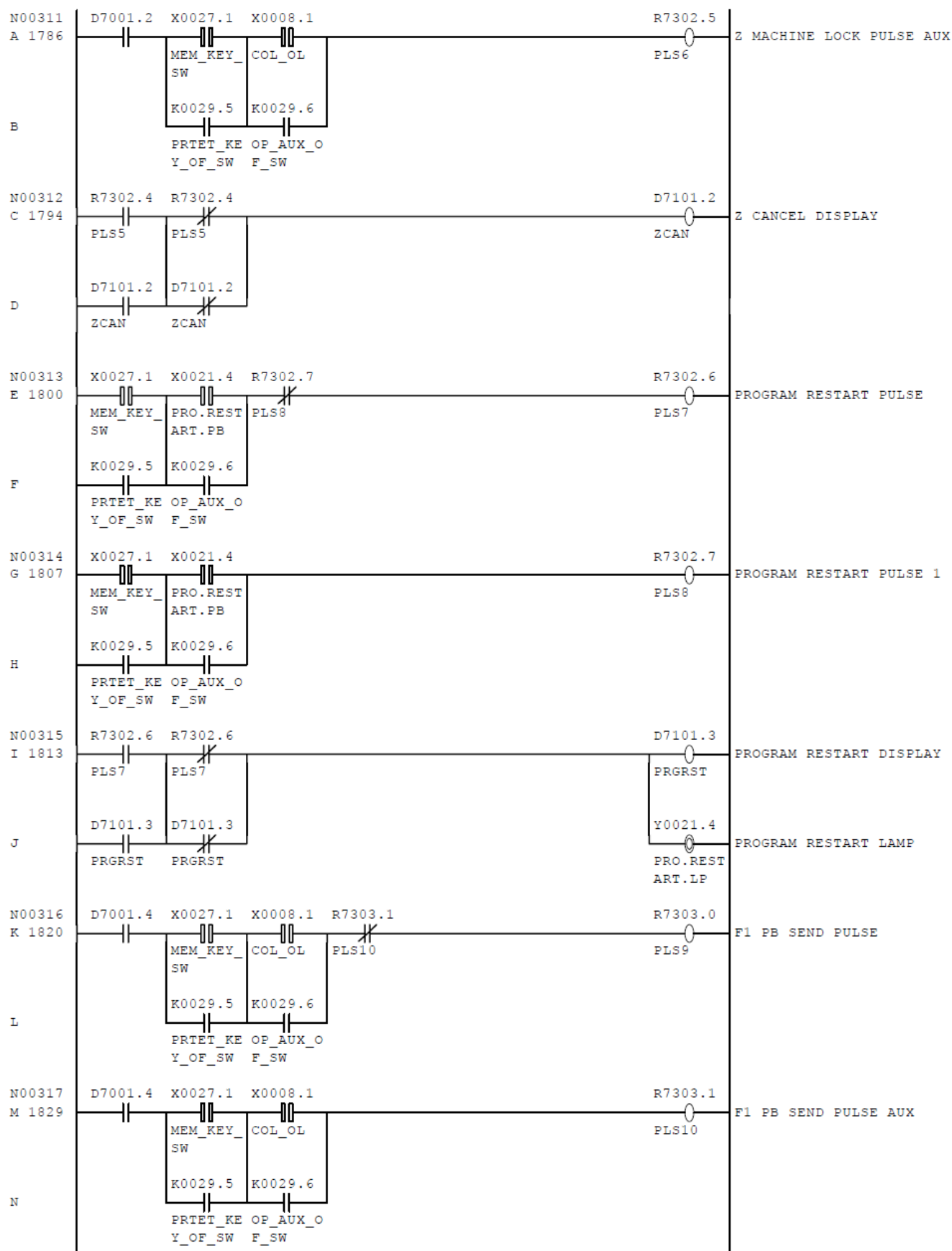


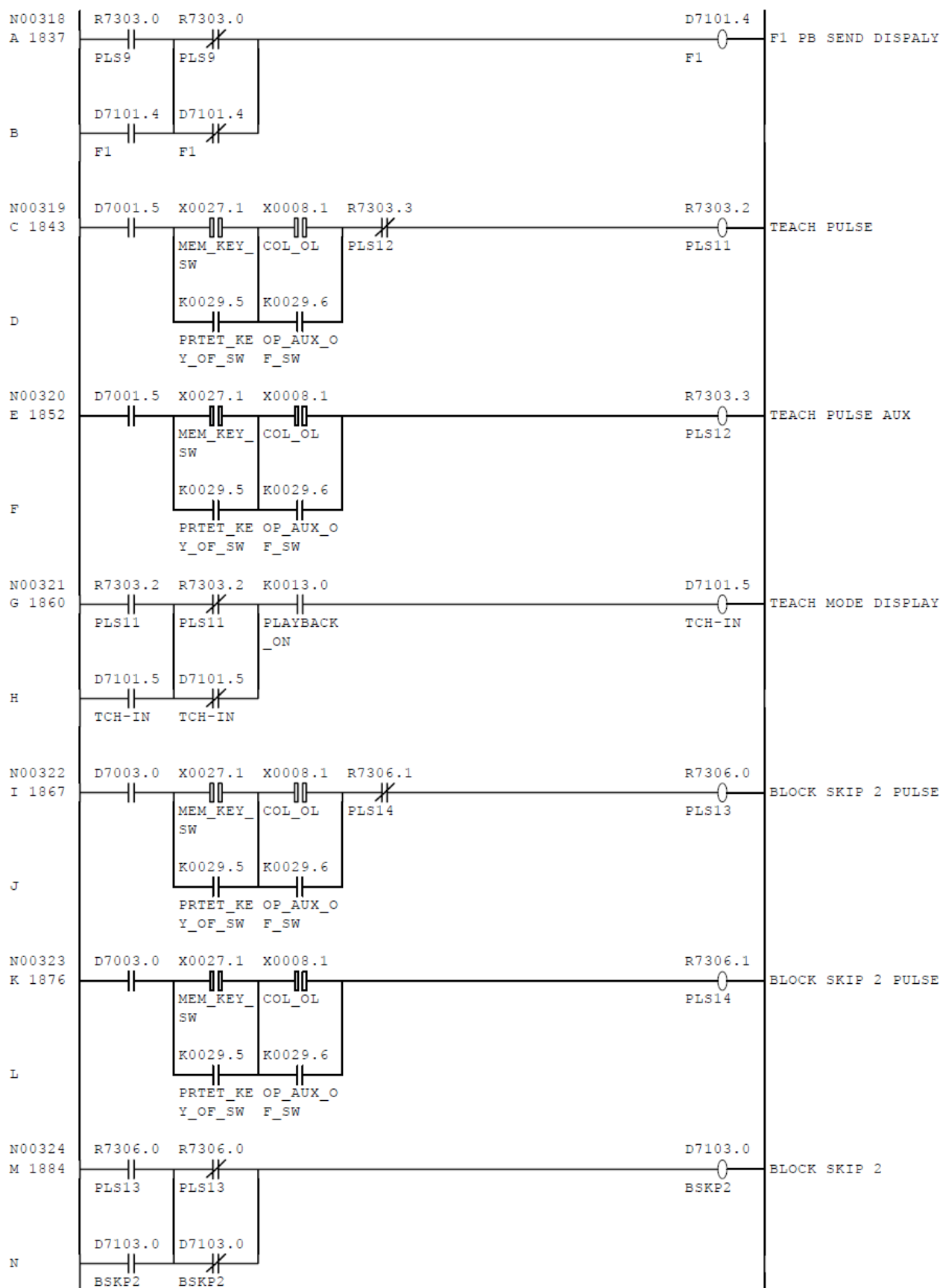


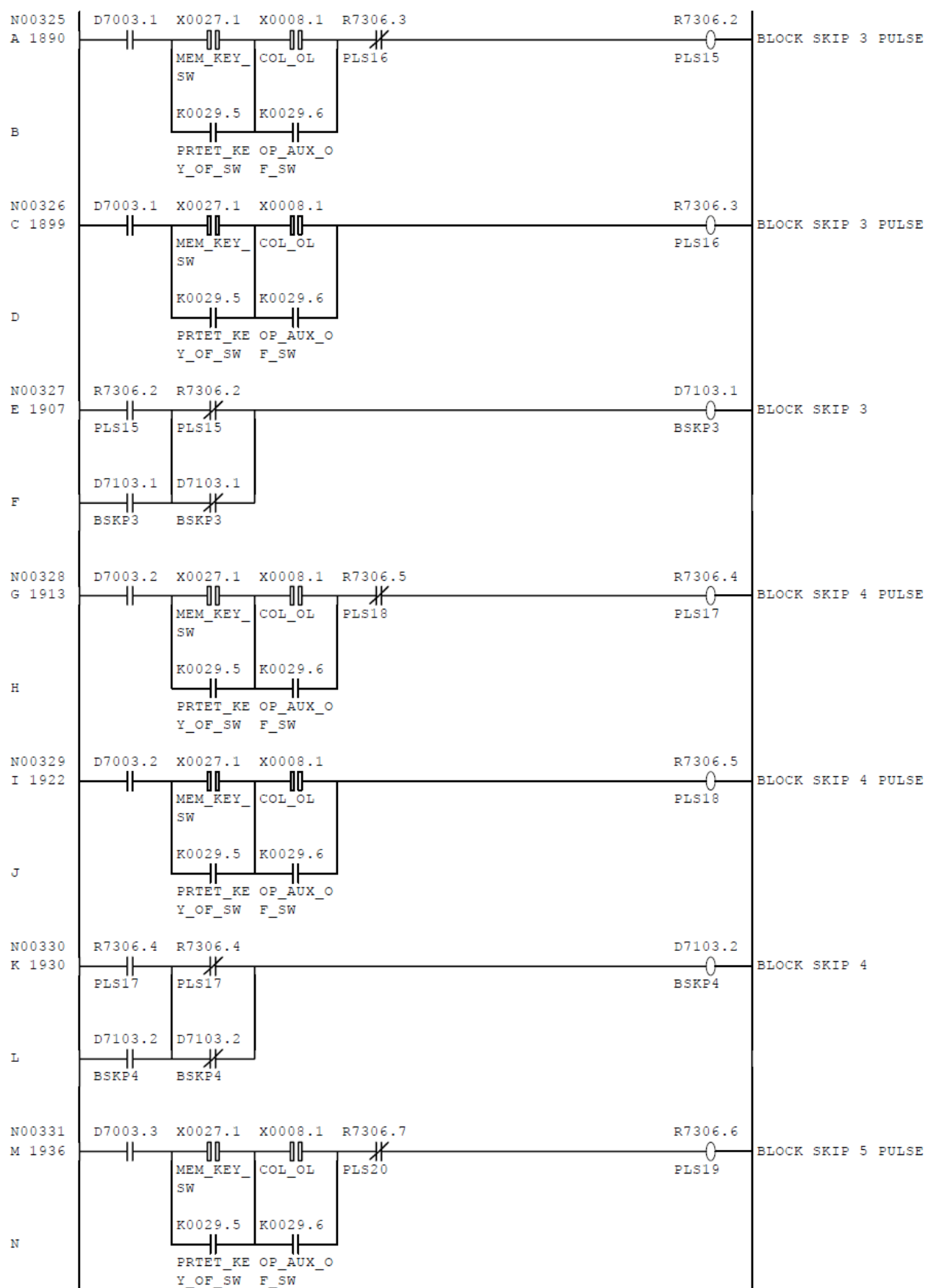


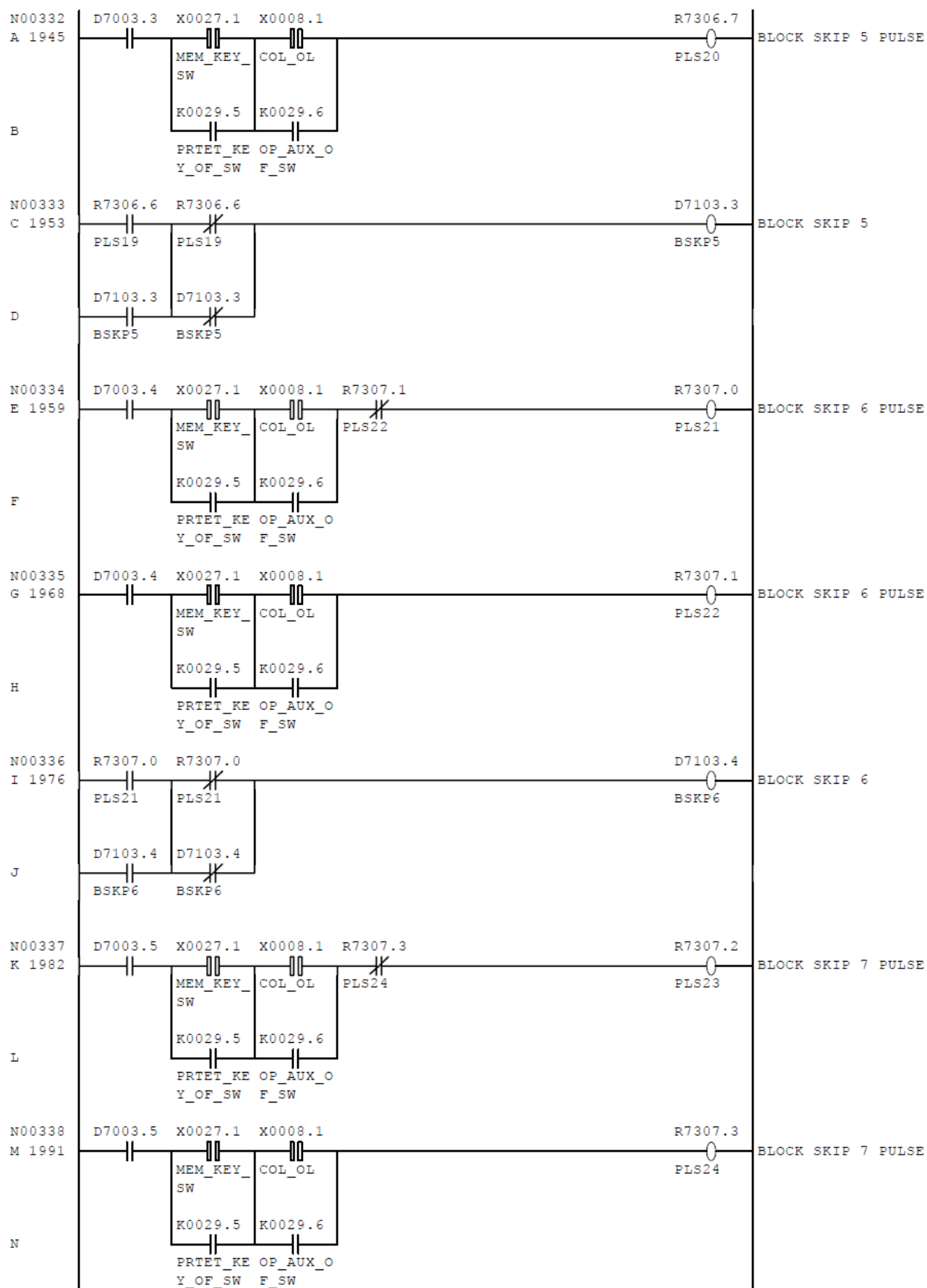


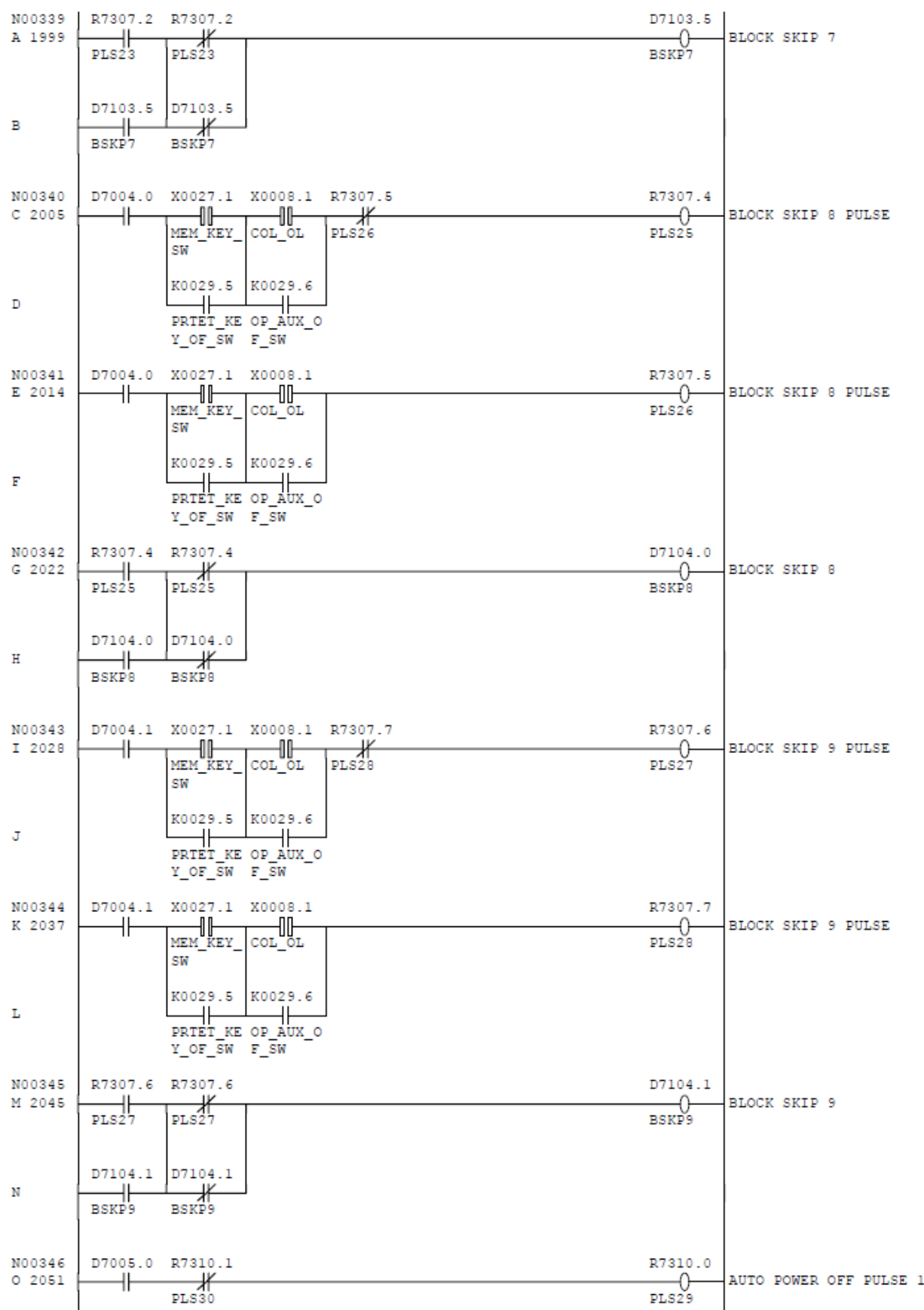


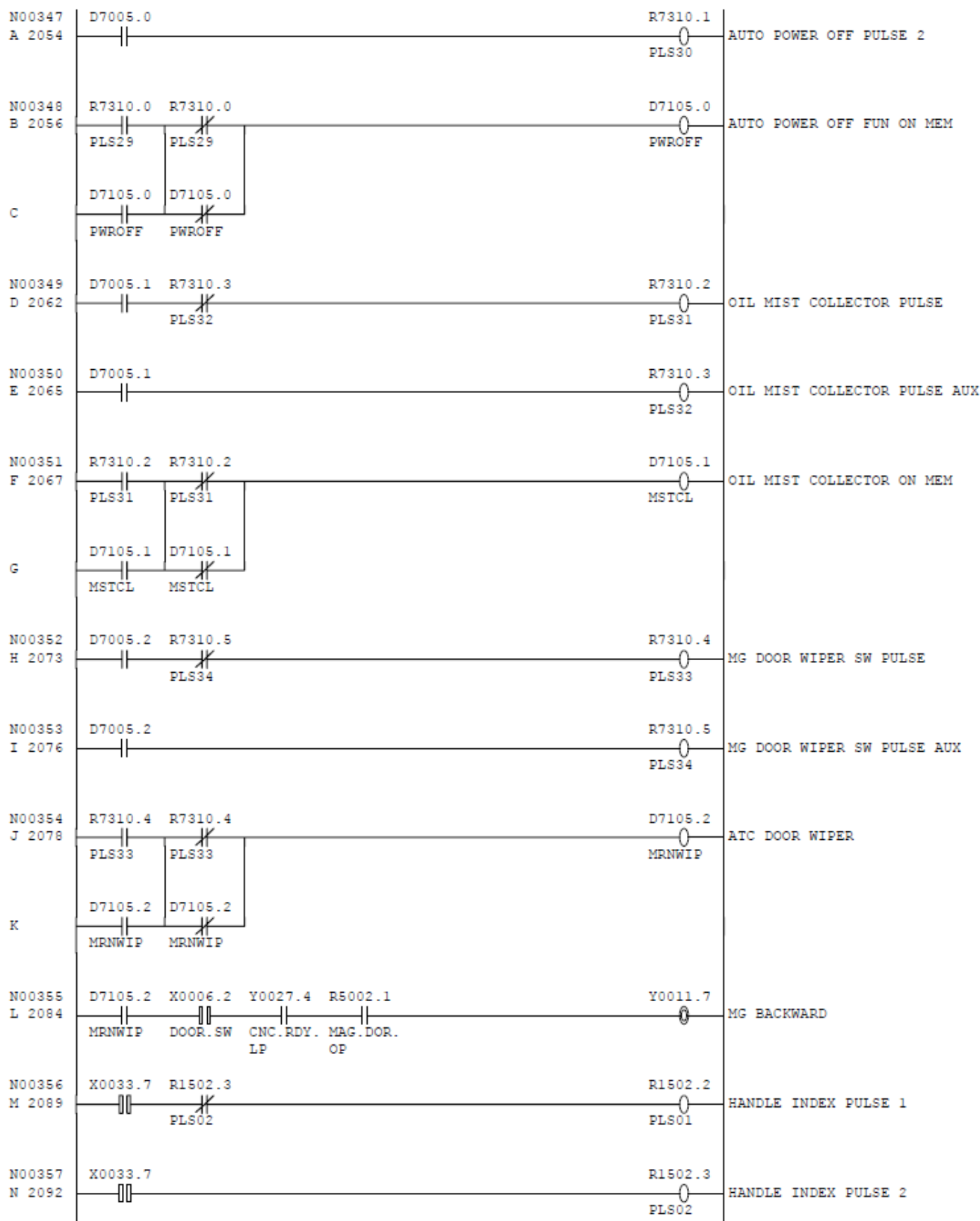


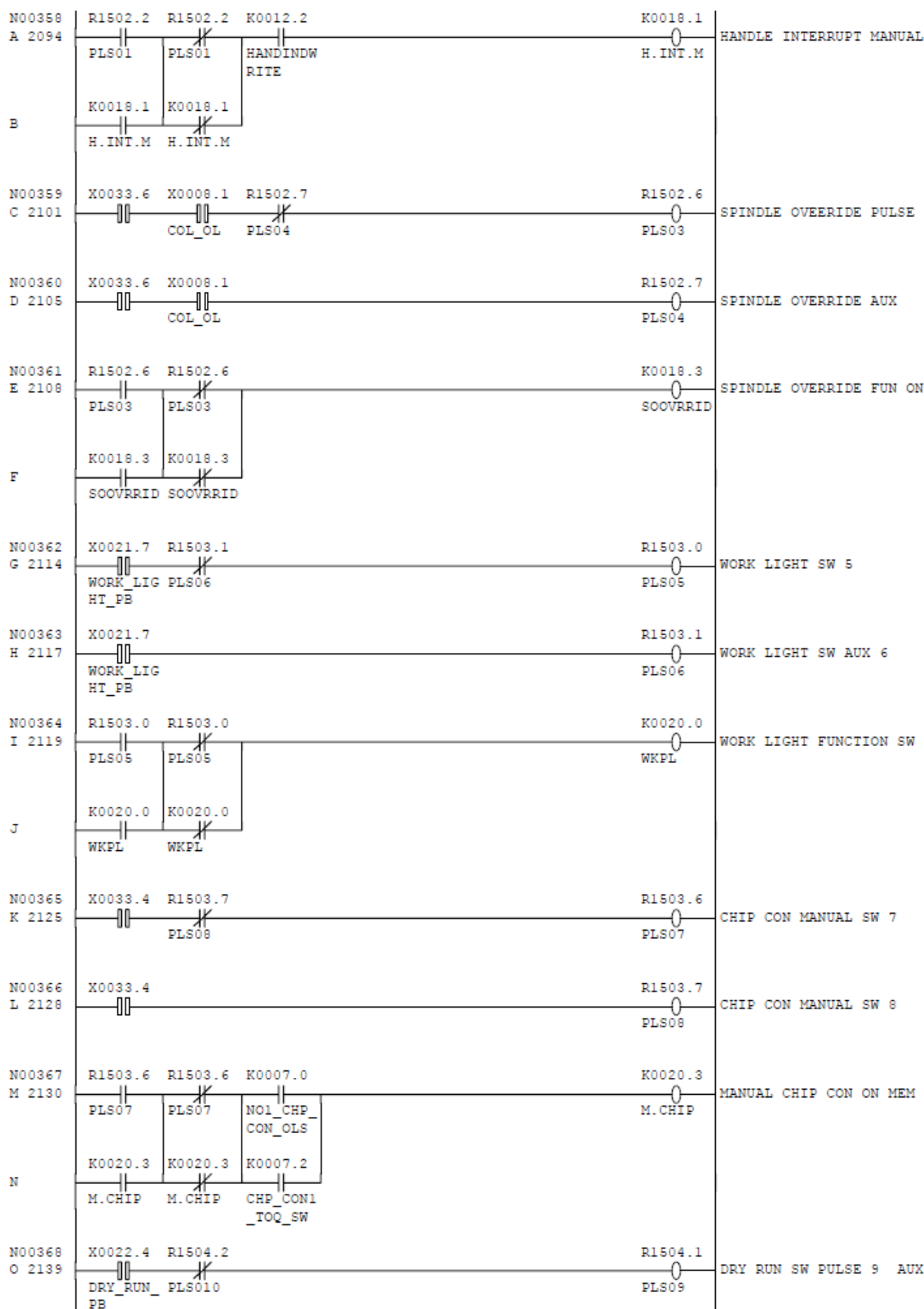


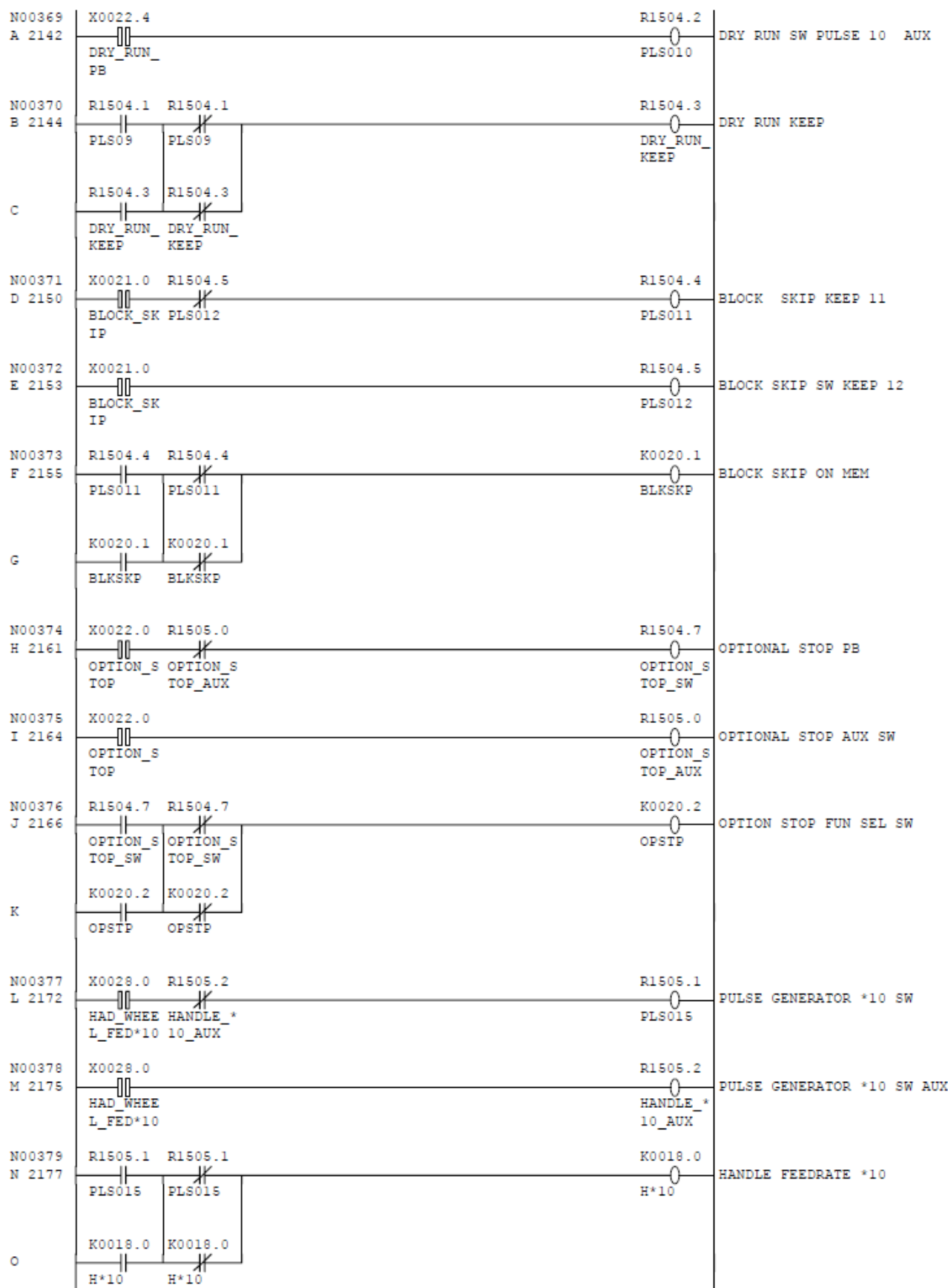


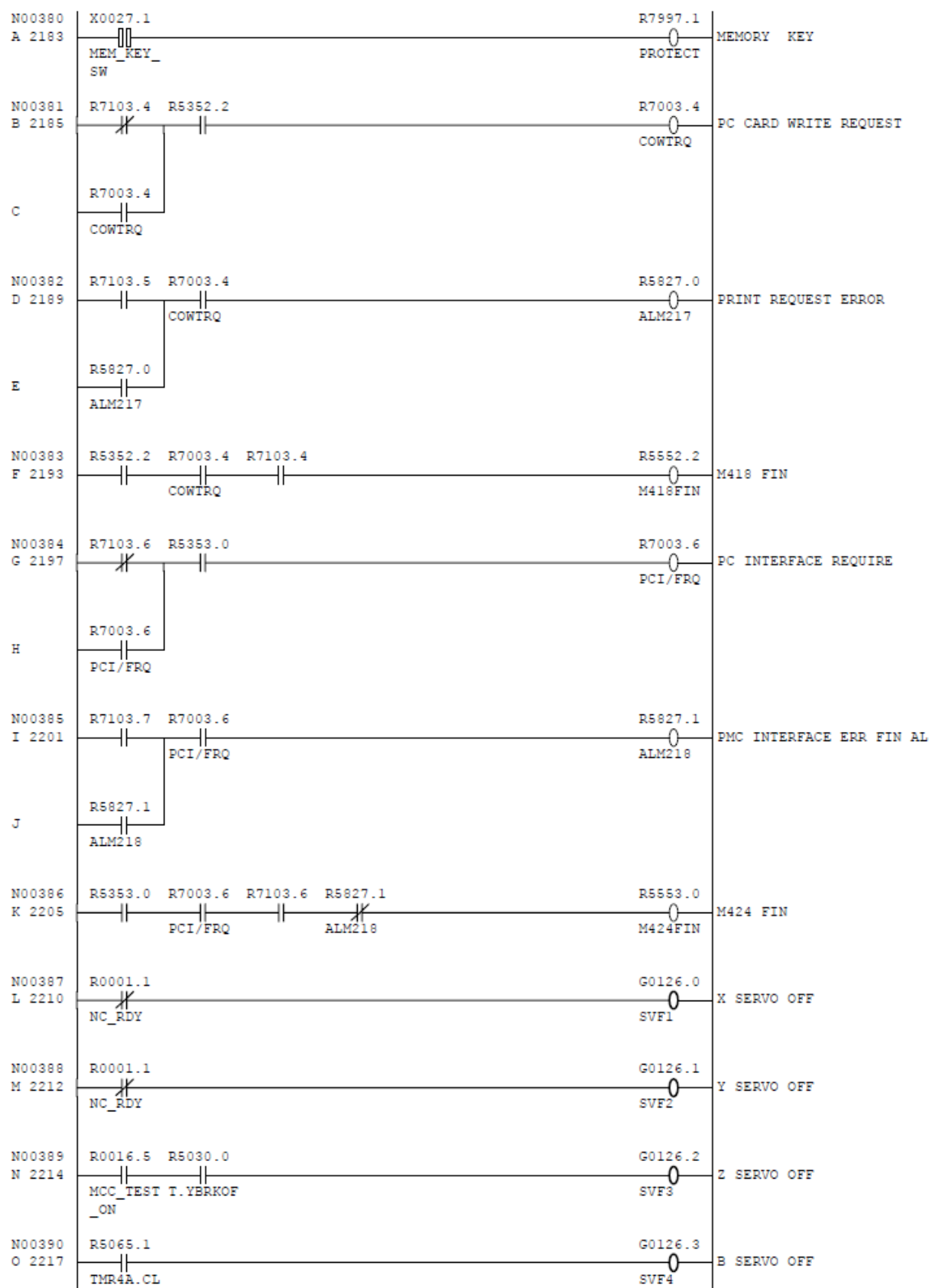


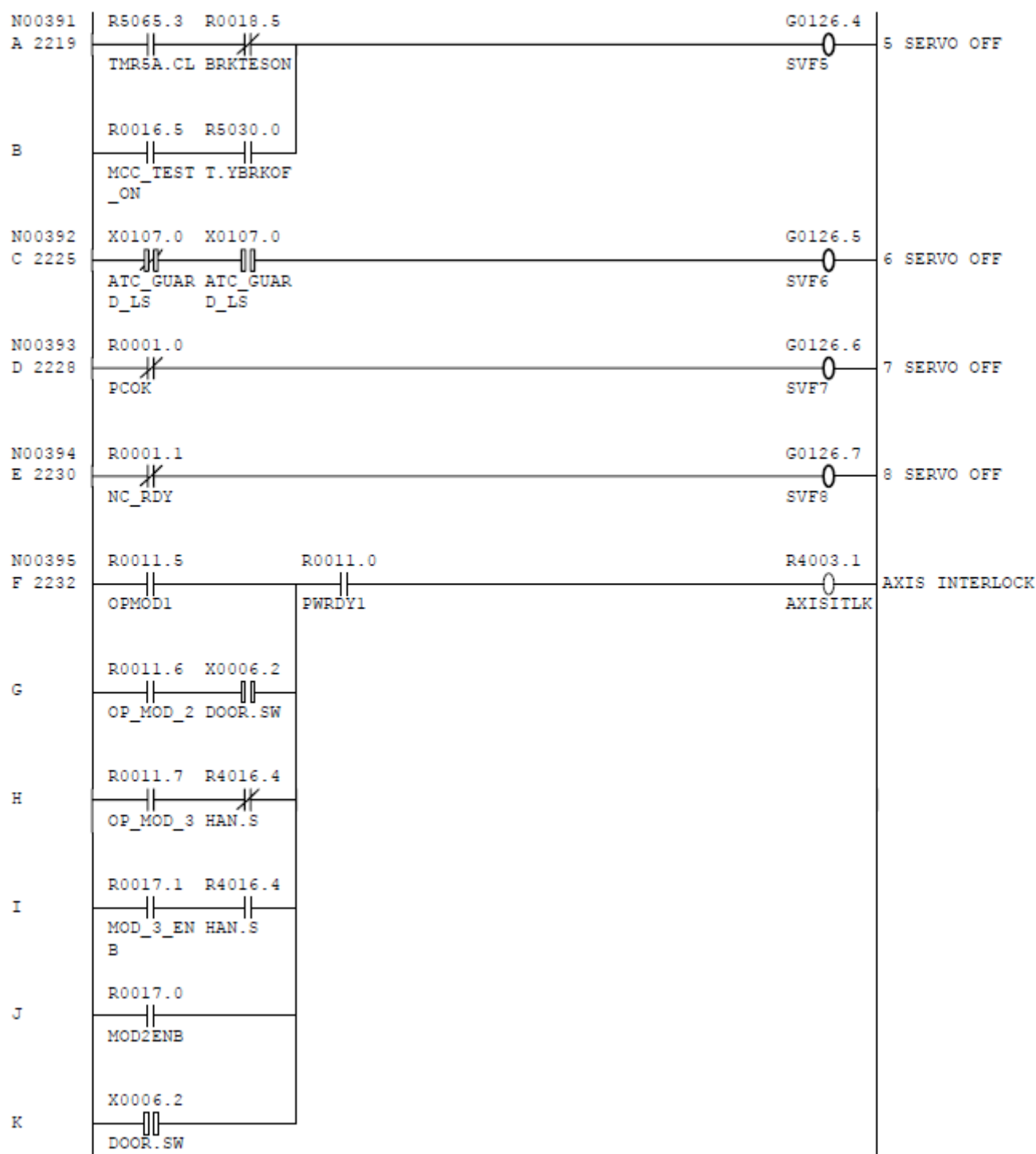


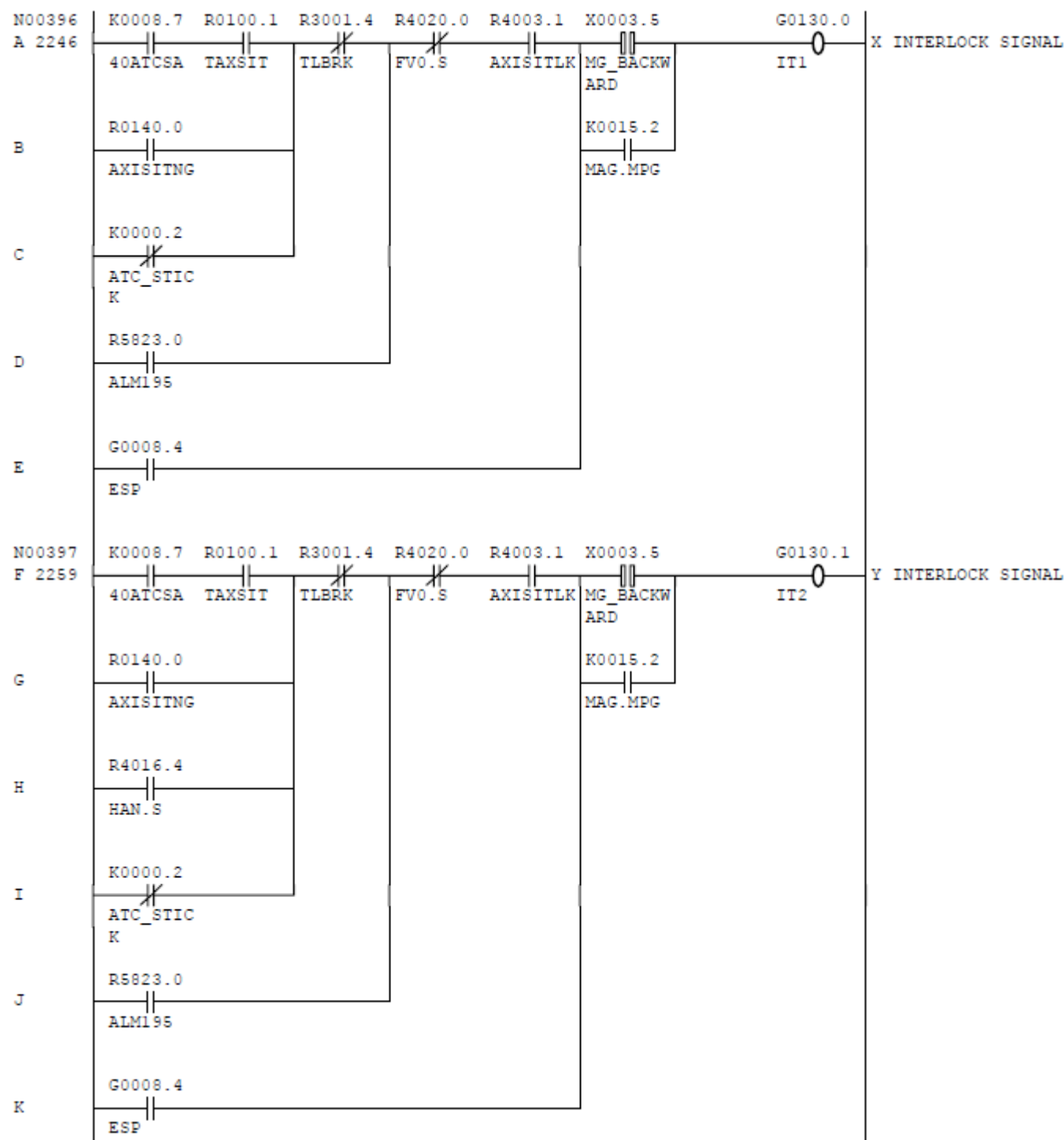


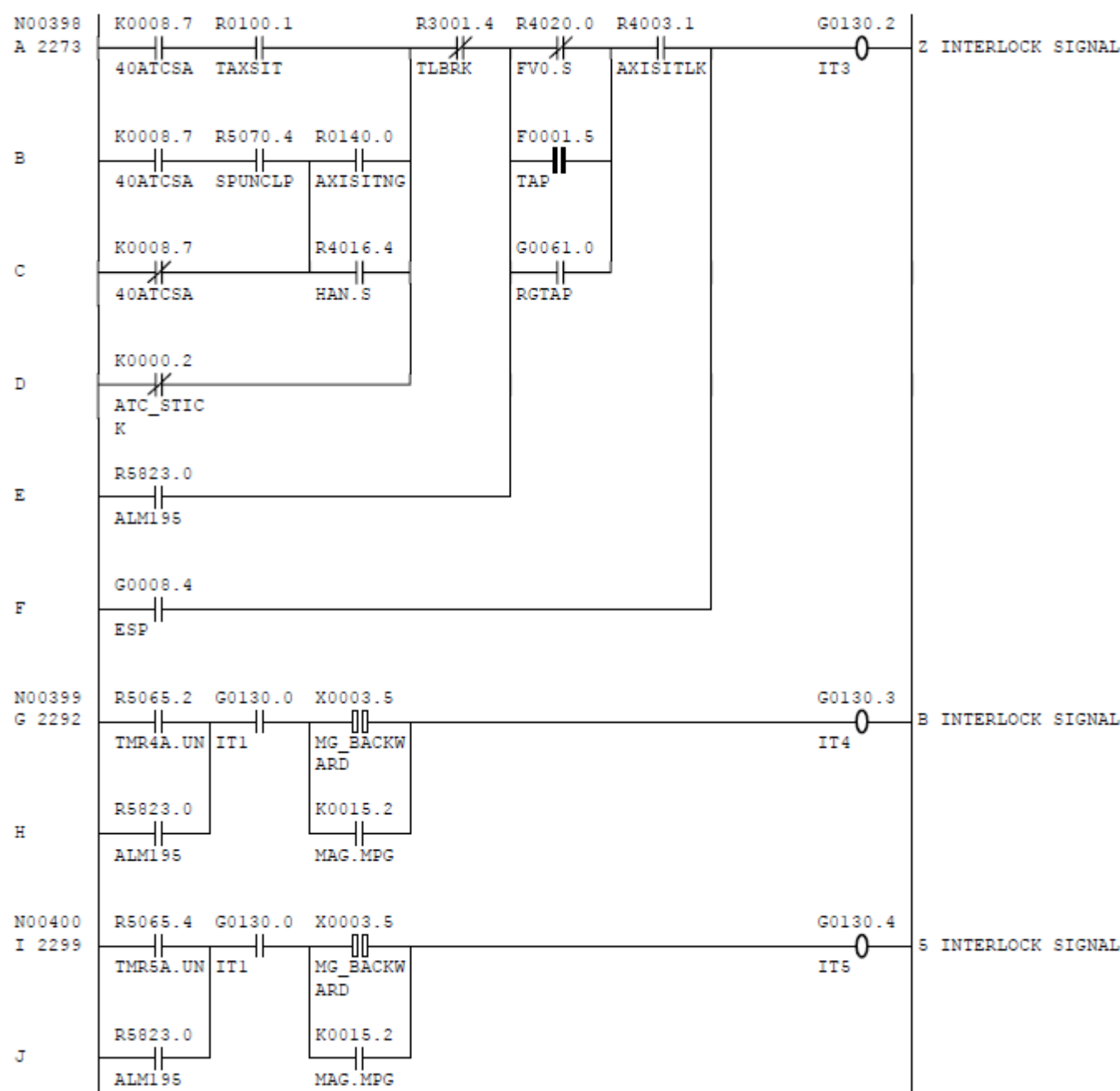


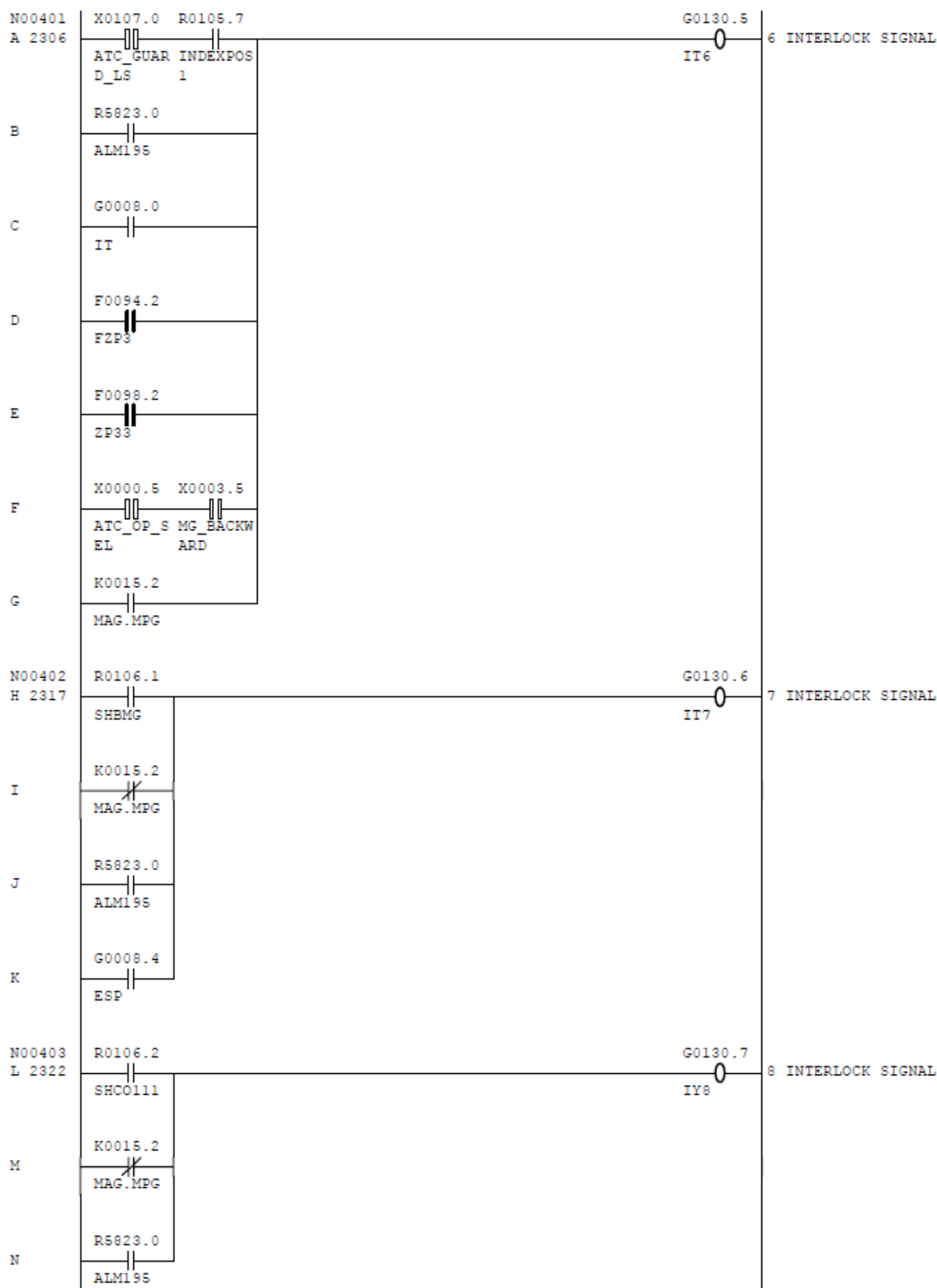


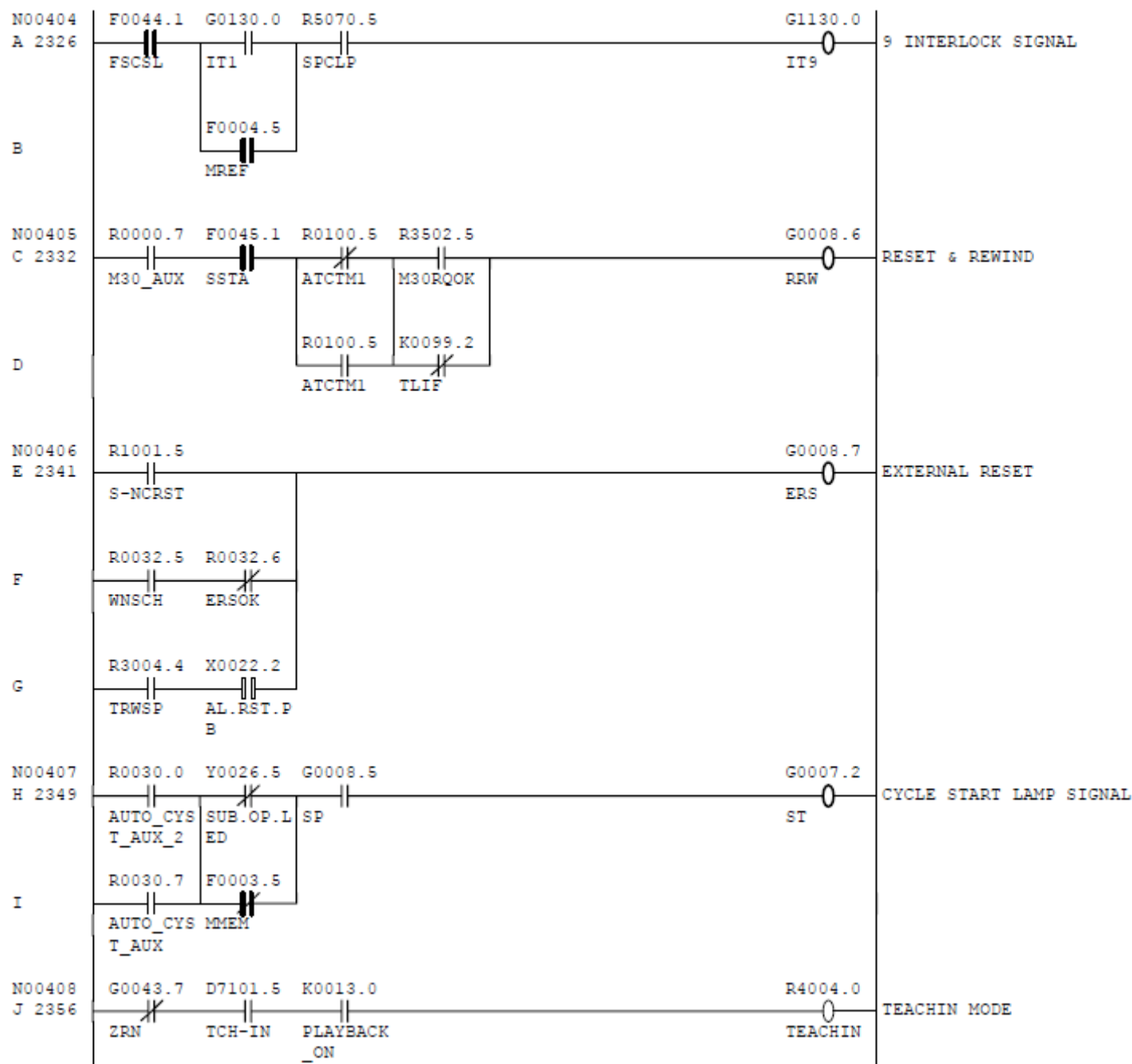


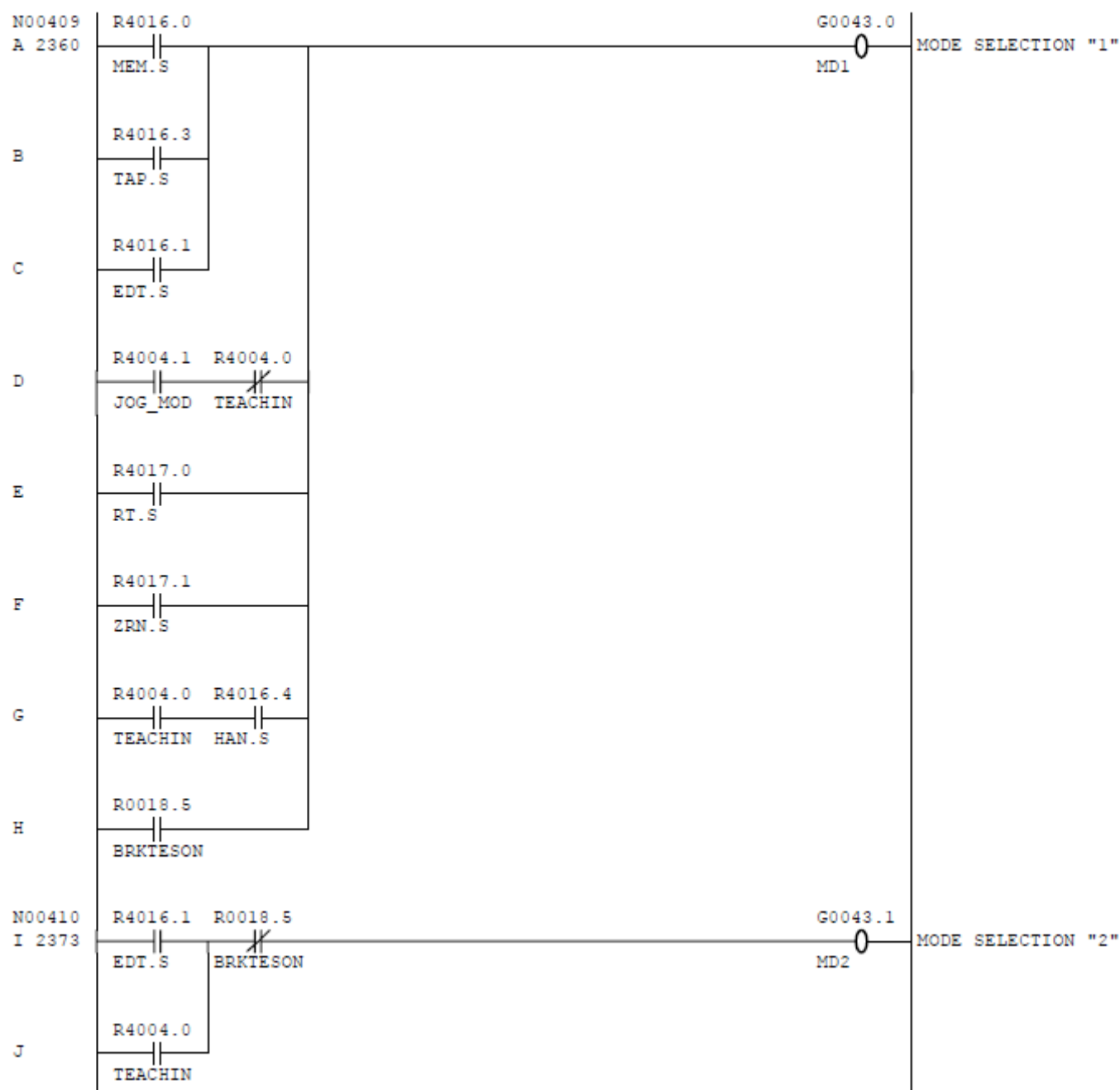


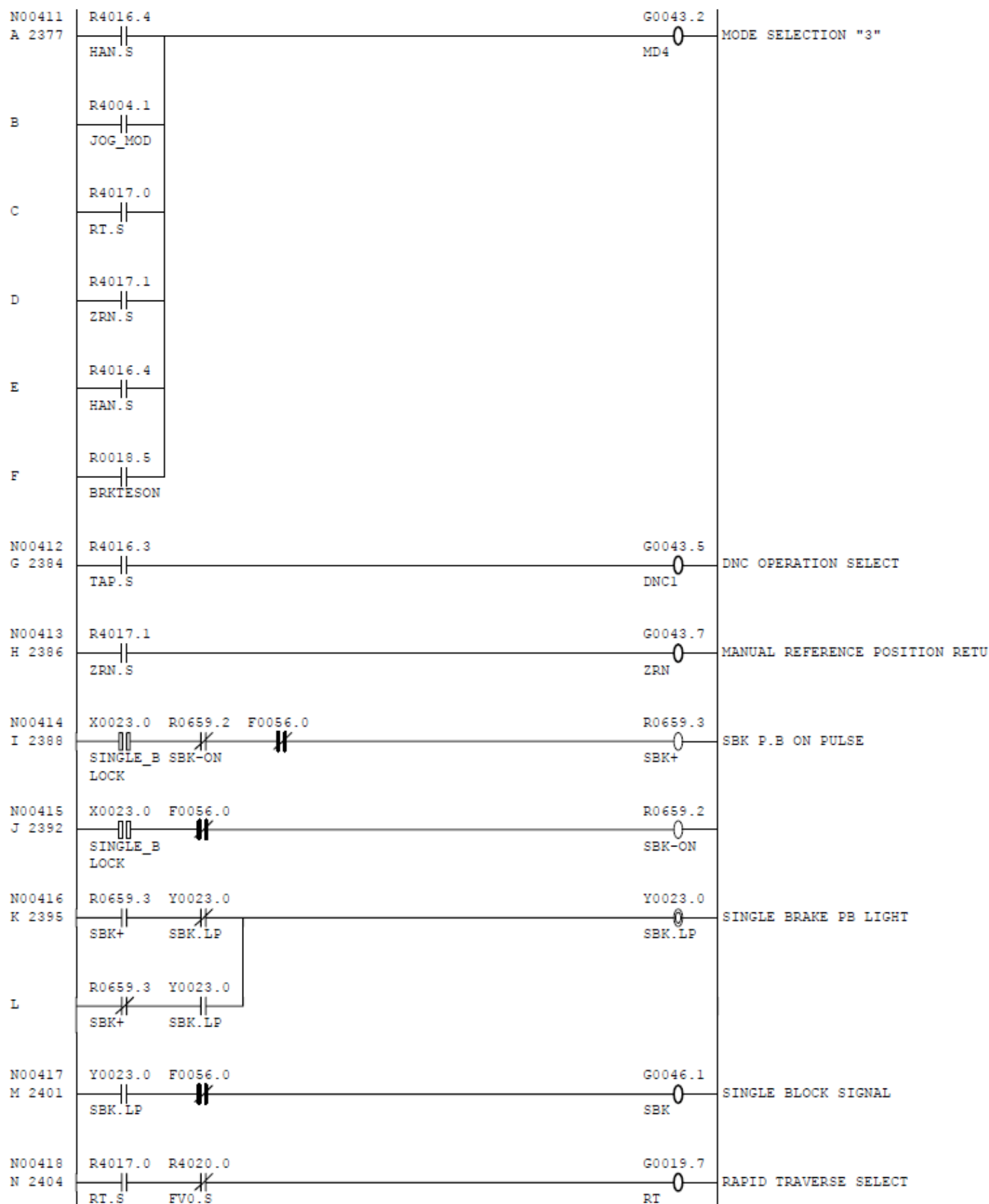


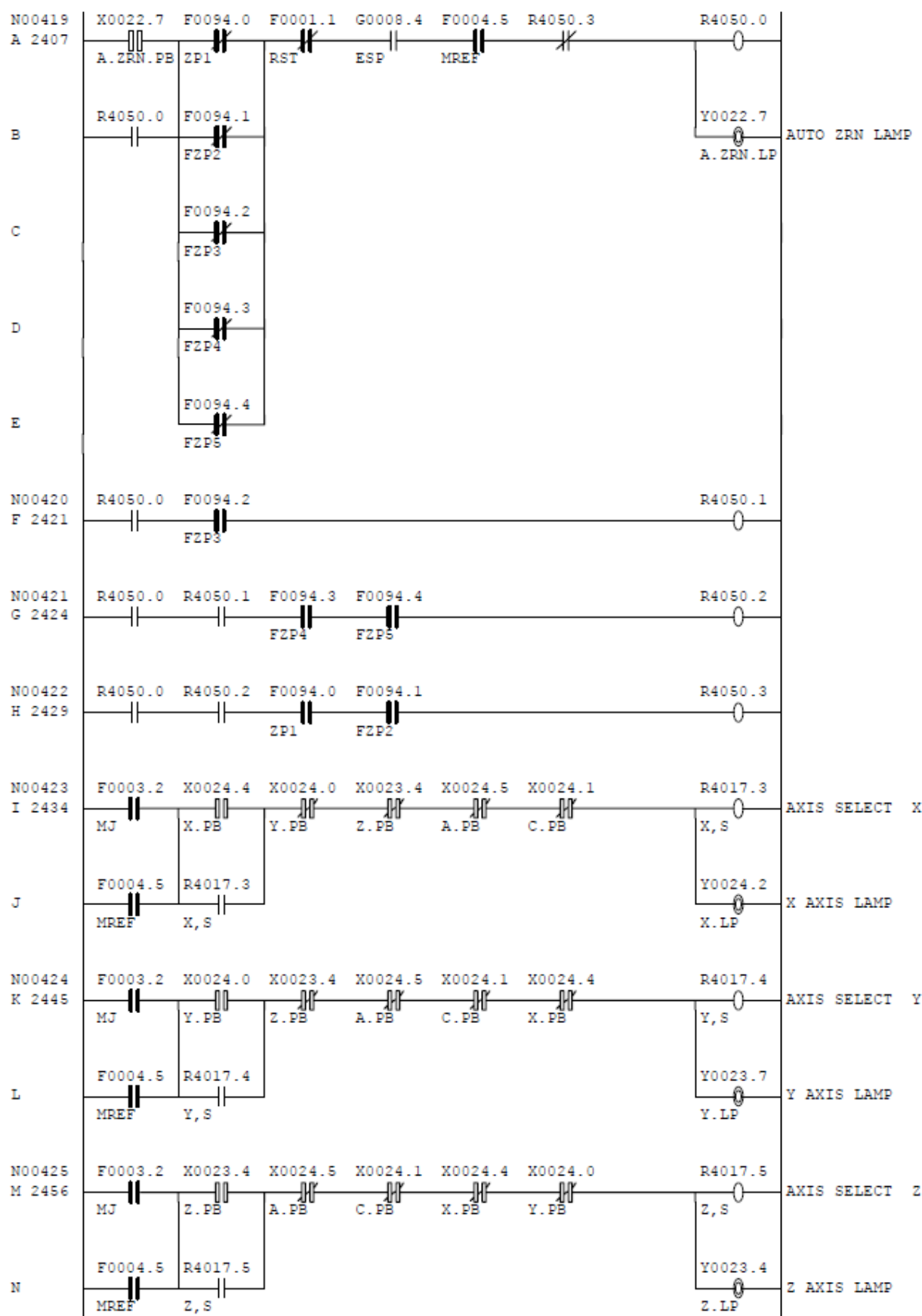


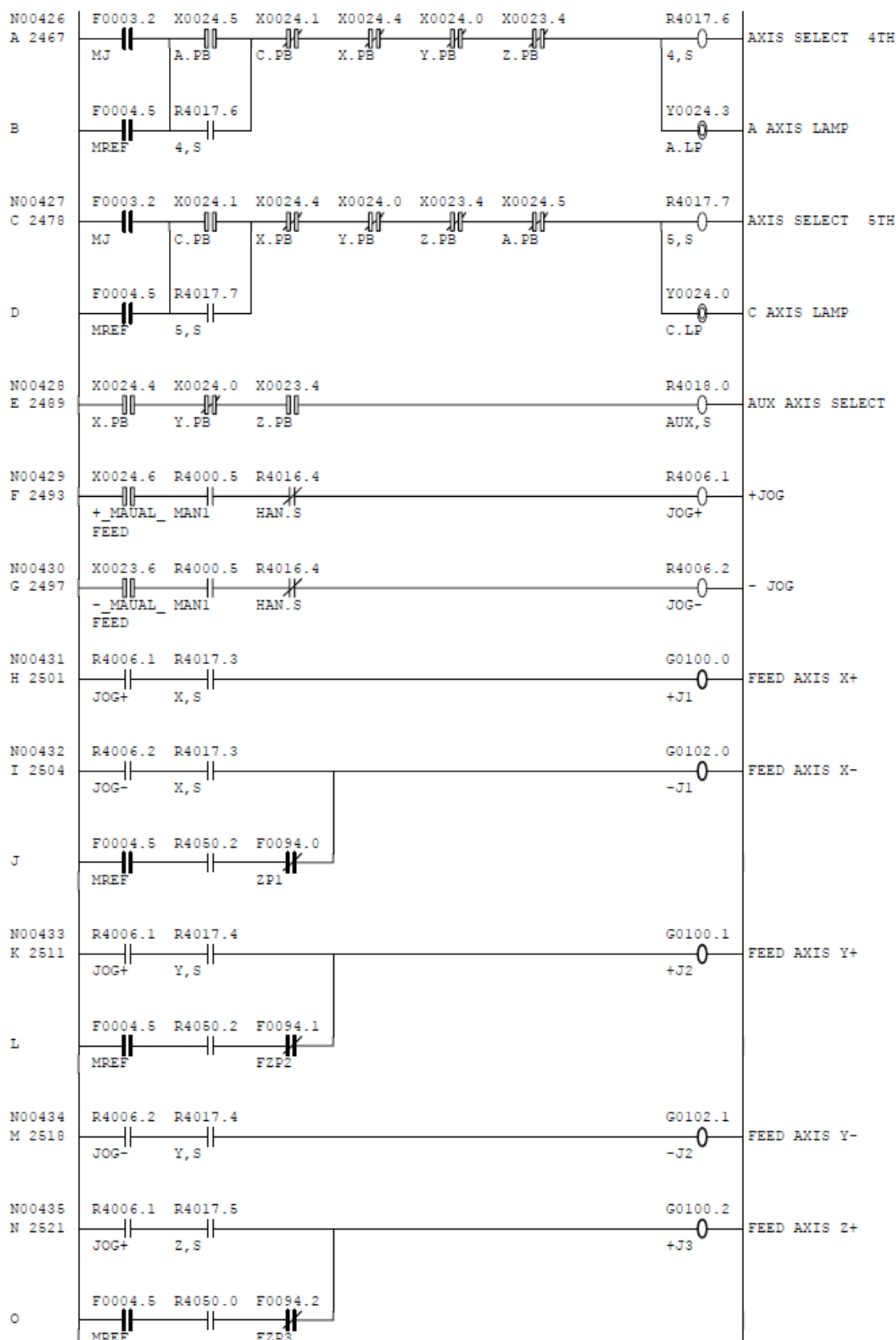


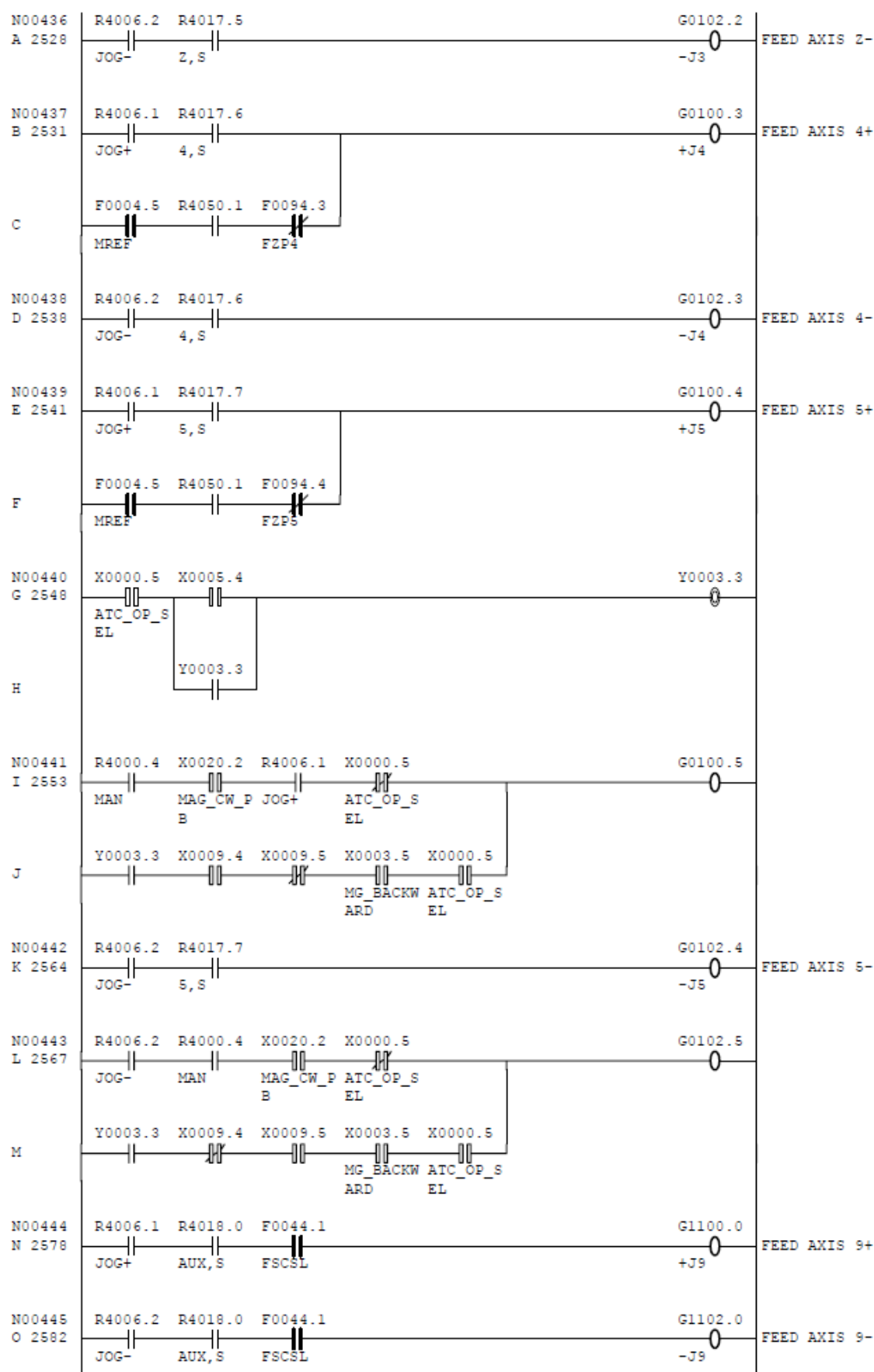


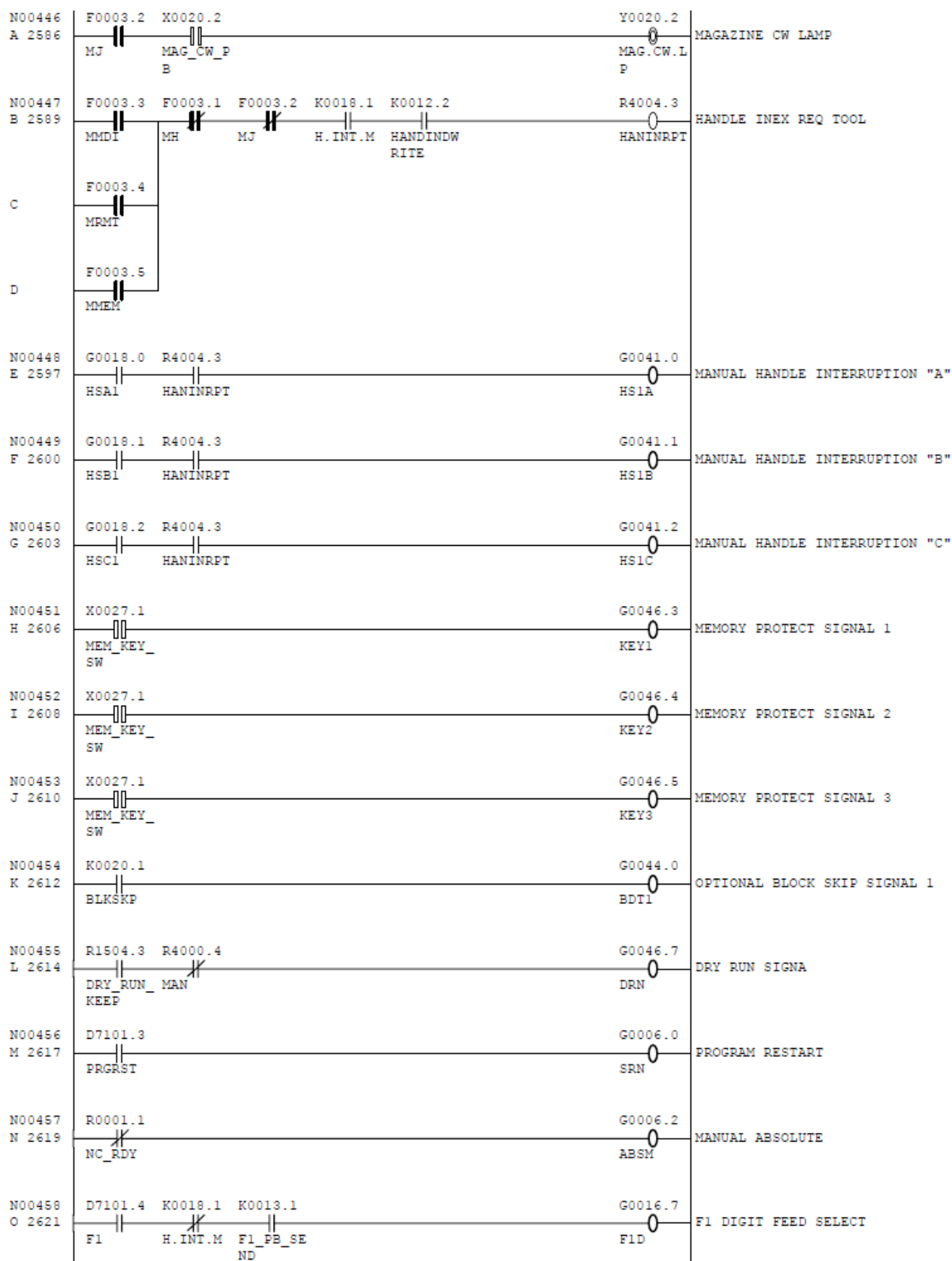


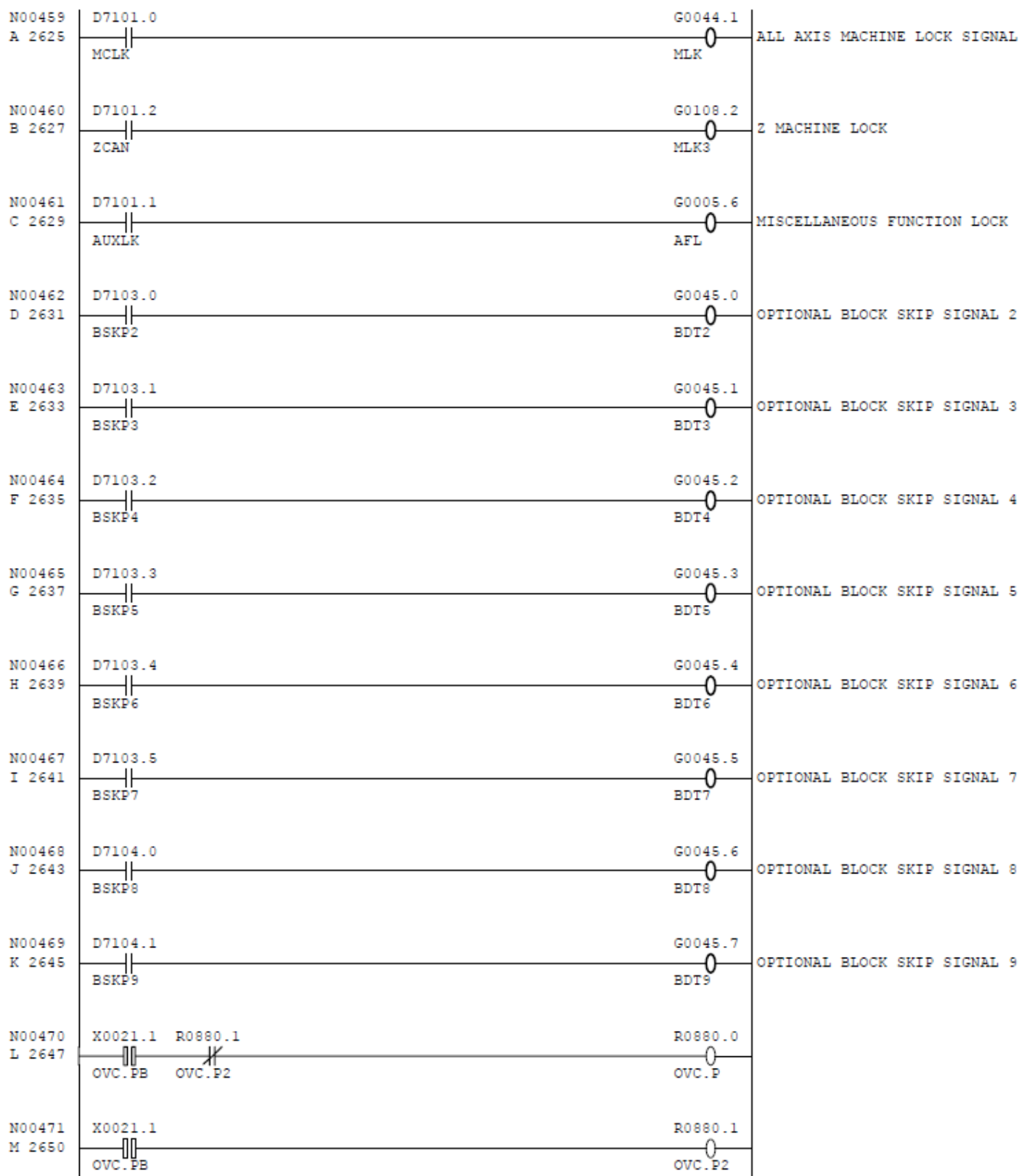


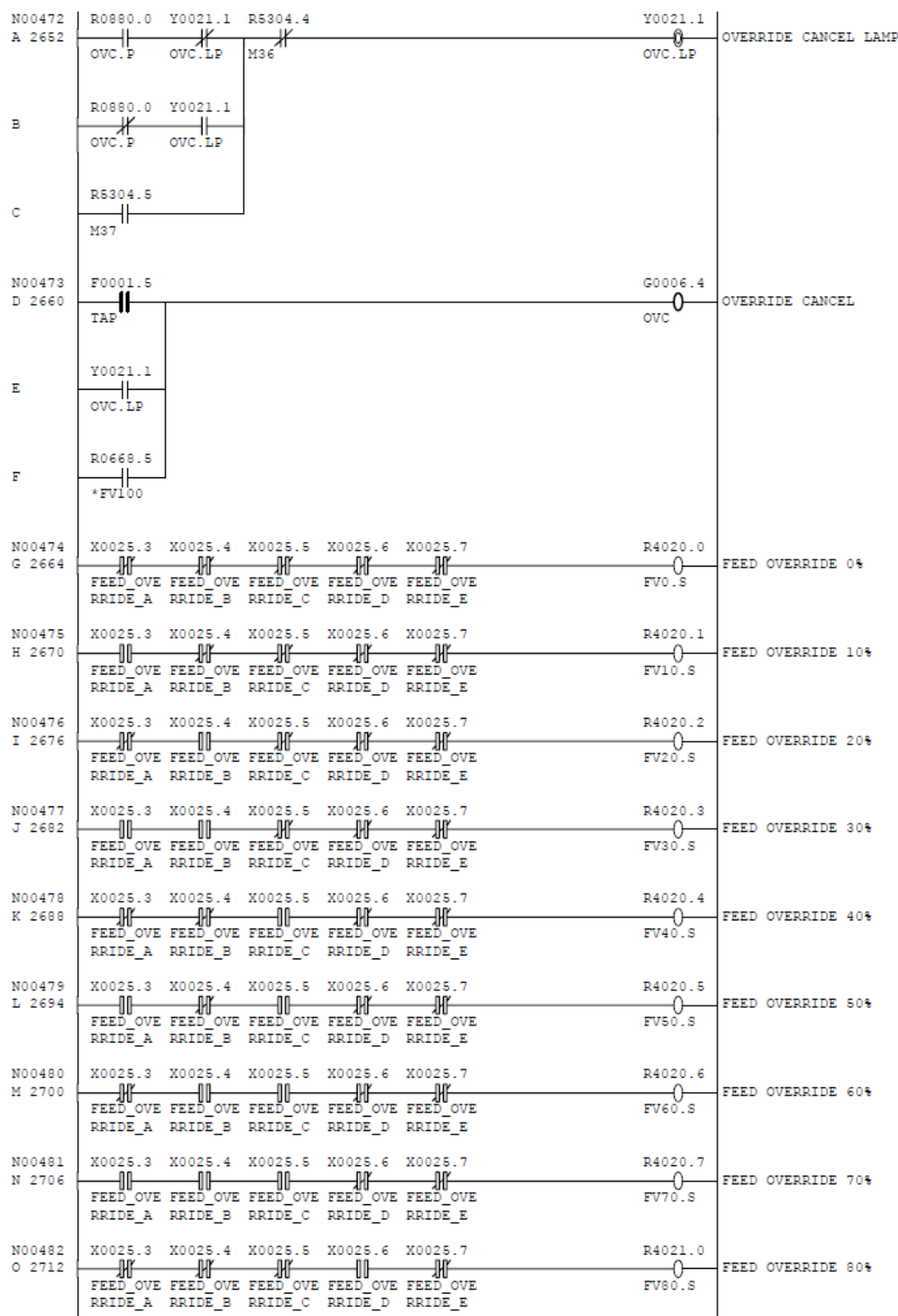




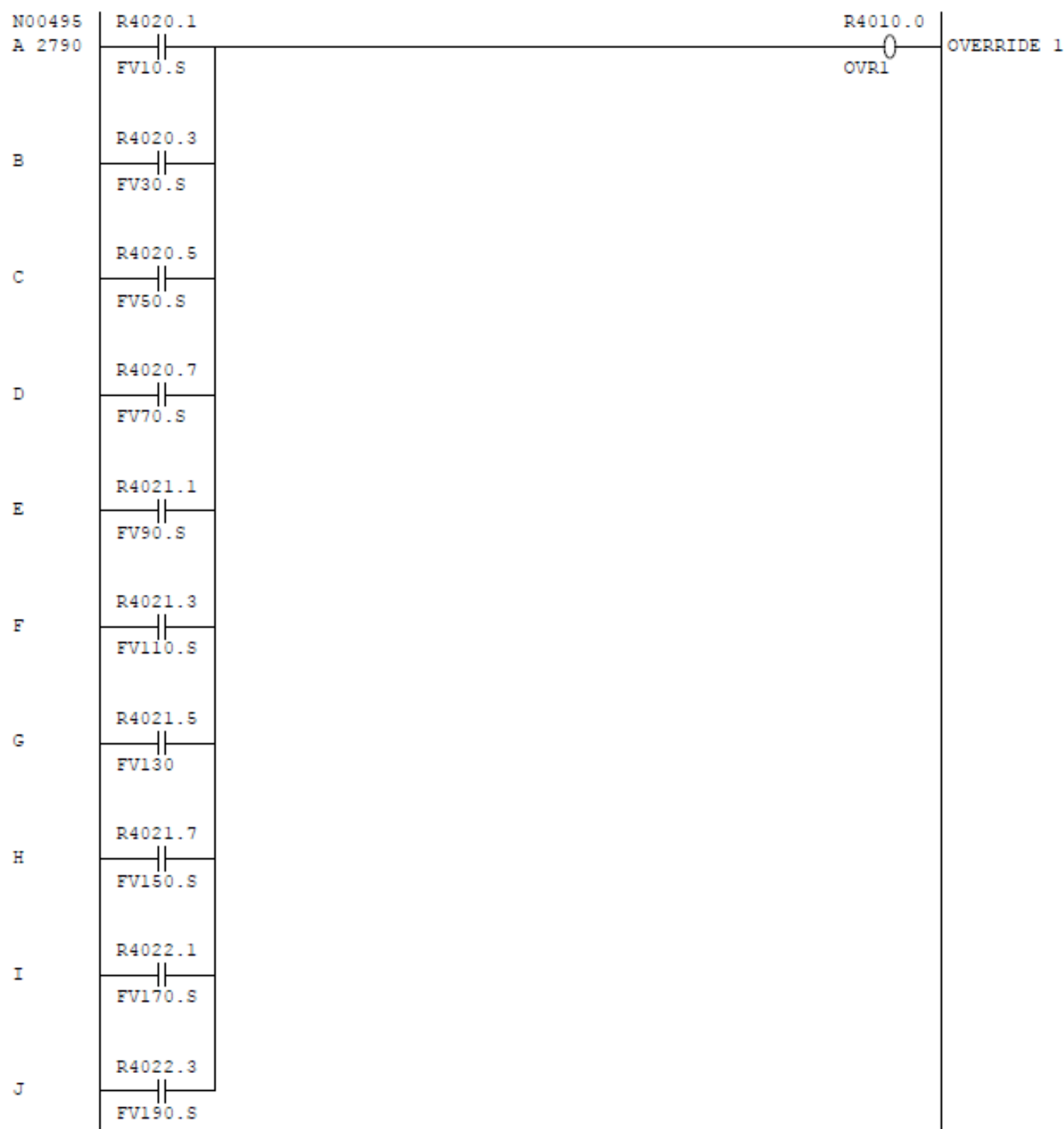


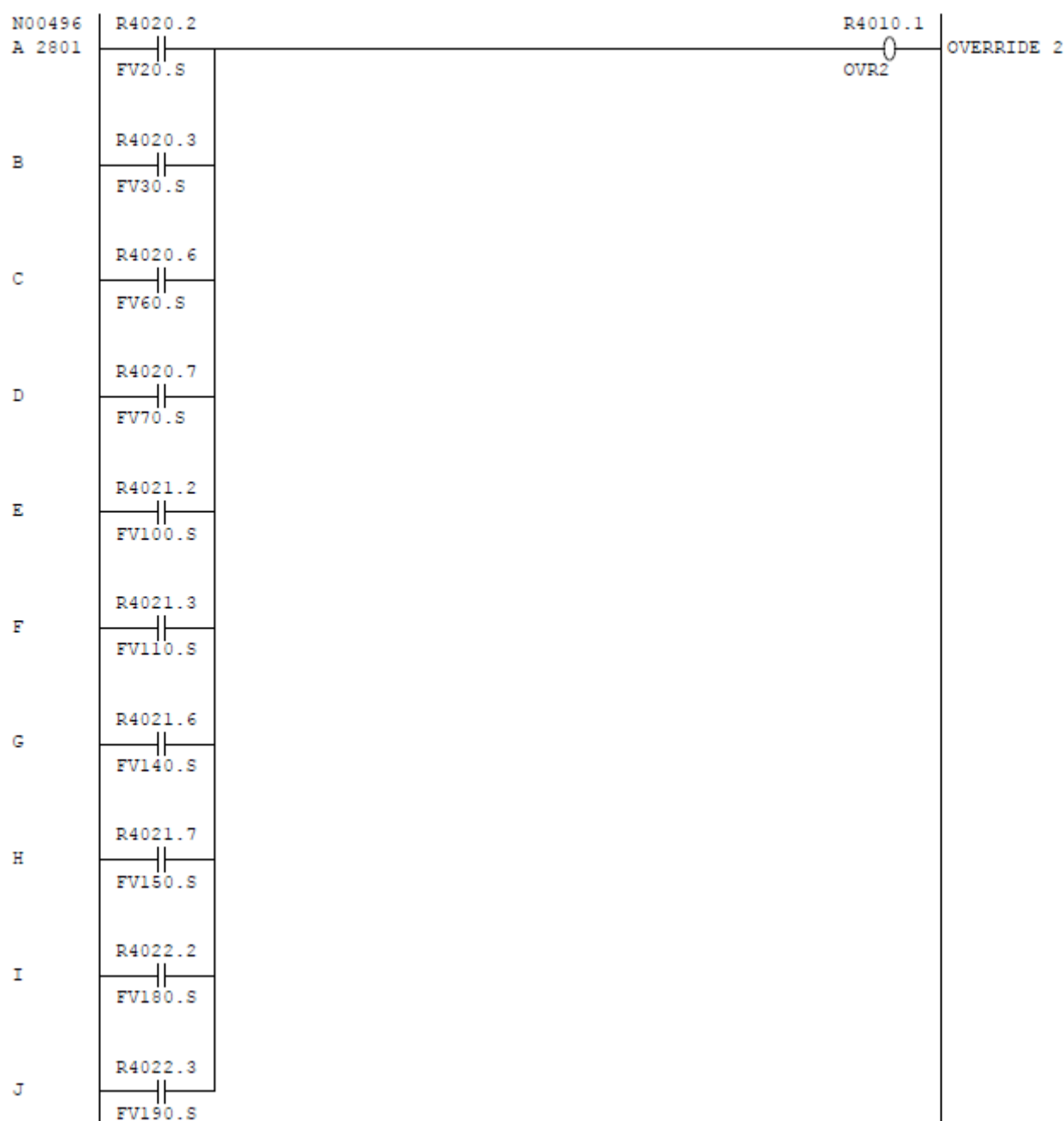


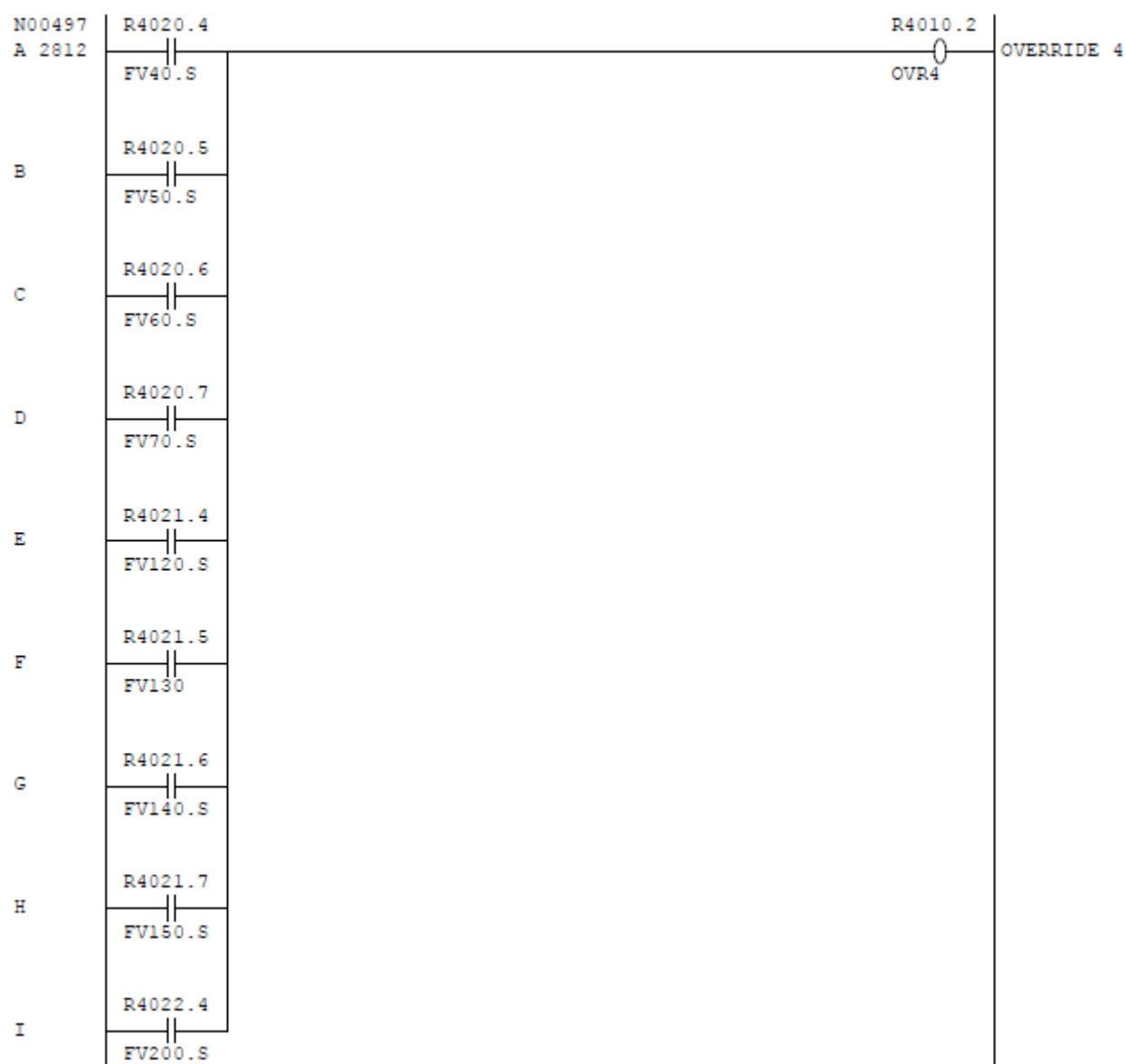


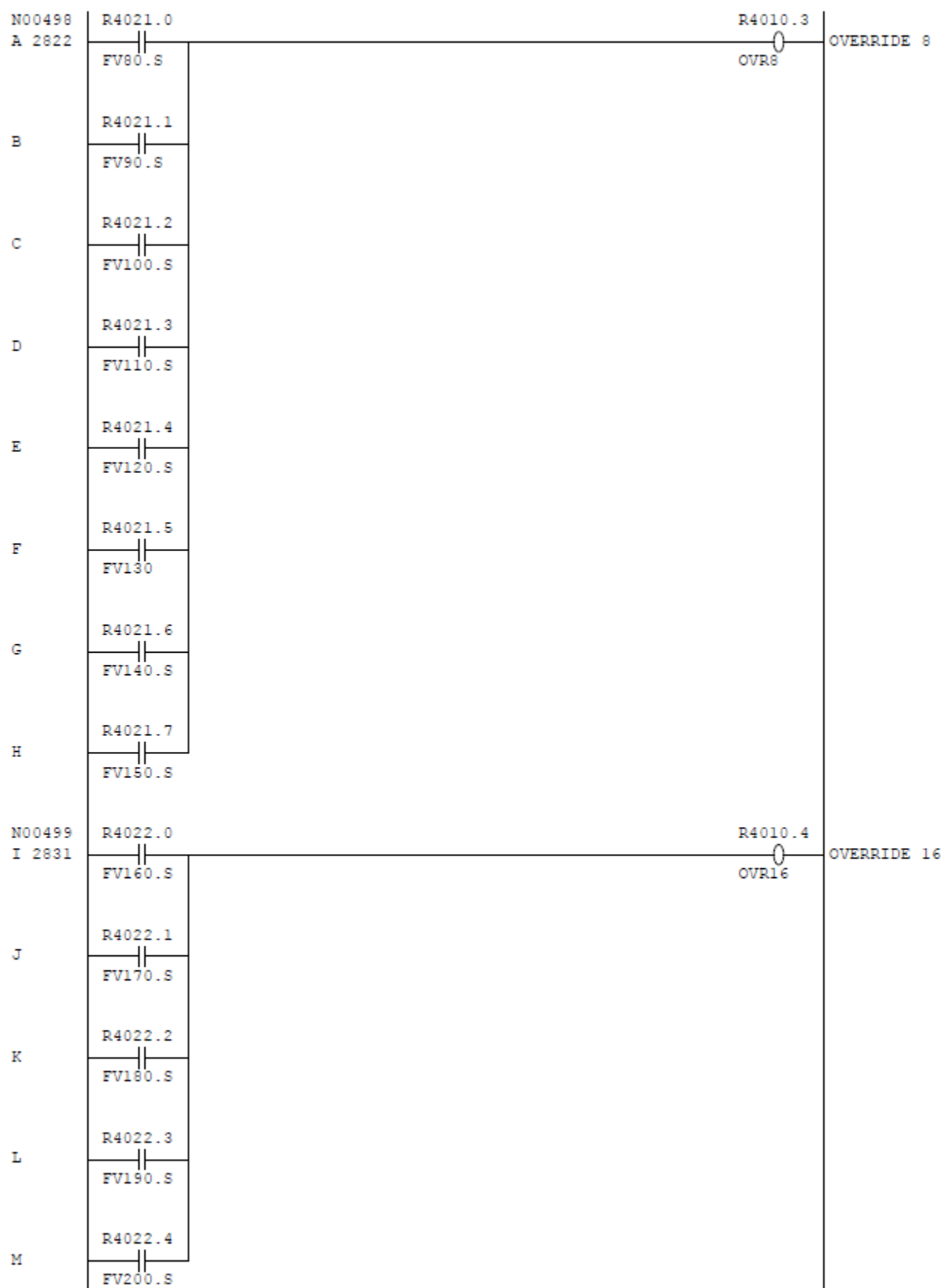


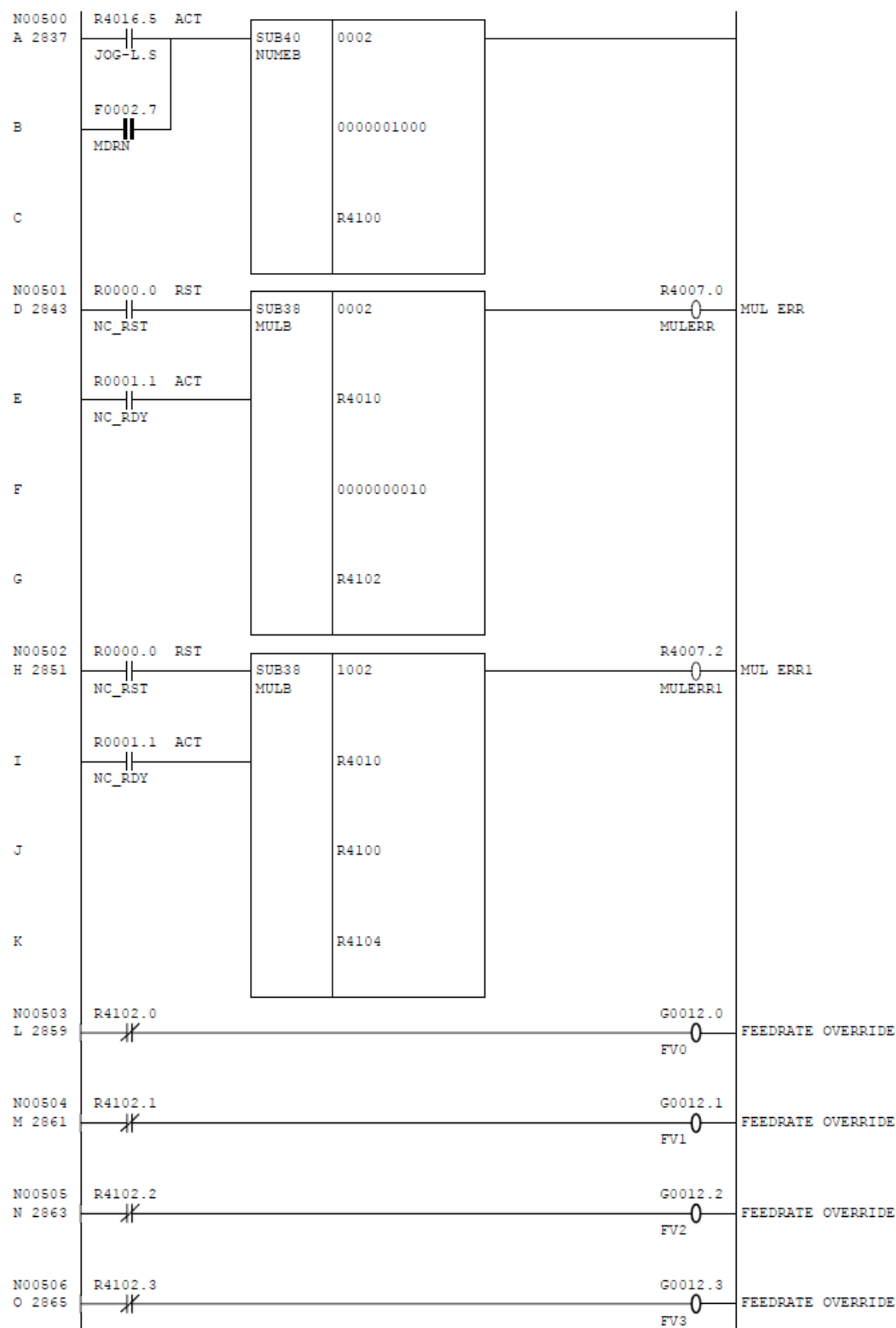
N00483 A 2718	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4021.1	FEED OVERRIDE 90%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV90.S	
N00484 B 2724	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4021.2	FEED OVERRIDE 100%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV100.S	
N00485 C 2730	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4021.3	FEED OVERRIDE 110%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV110.S	
N00486 D 2736	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4021.4	FEED OVERRIDE 120%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV120.S	
N00487 E 2742	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4021.5	FEED OVERRIDE 130%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV130	
N00488 F 2748	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4021.6	FEED OVERRIDE 140%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV140.S	
N00489 G 2754	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4021.7	FEED OVERRIDE 150%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV150.S	
N00490 H 2760	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4022.0	FEED OVERRIDE 160%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV160.S	
N00491 I 2766	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4022.1	FEED OVERRIDE 170%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV170.S	
N00492 J 2772	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4022.2	FEED OVERRIDE 180%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV180.S	
N00493 K 2778	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4022.3	FEED OVERRIDE 190%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV190.S	
N00494 L 2784	X0025.3 X0025.4 X0025.5 X0025.6 X0025.7	R4022.4	FEED OVERRIDE 200%
	FEED_OVE FEED_OVE FEED_OVE FEED_OVE FEED_OVE RRIDE_A RRIDE_B RRIDE_C RRIDE_D RRIDE_E	FV200.S	



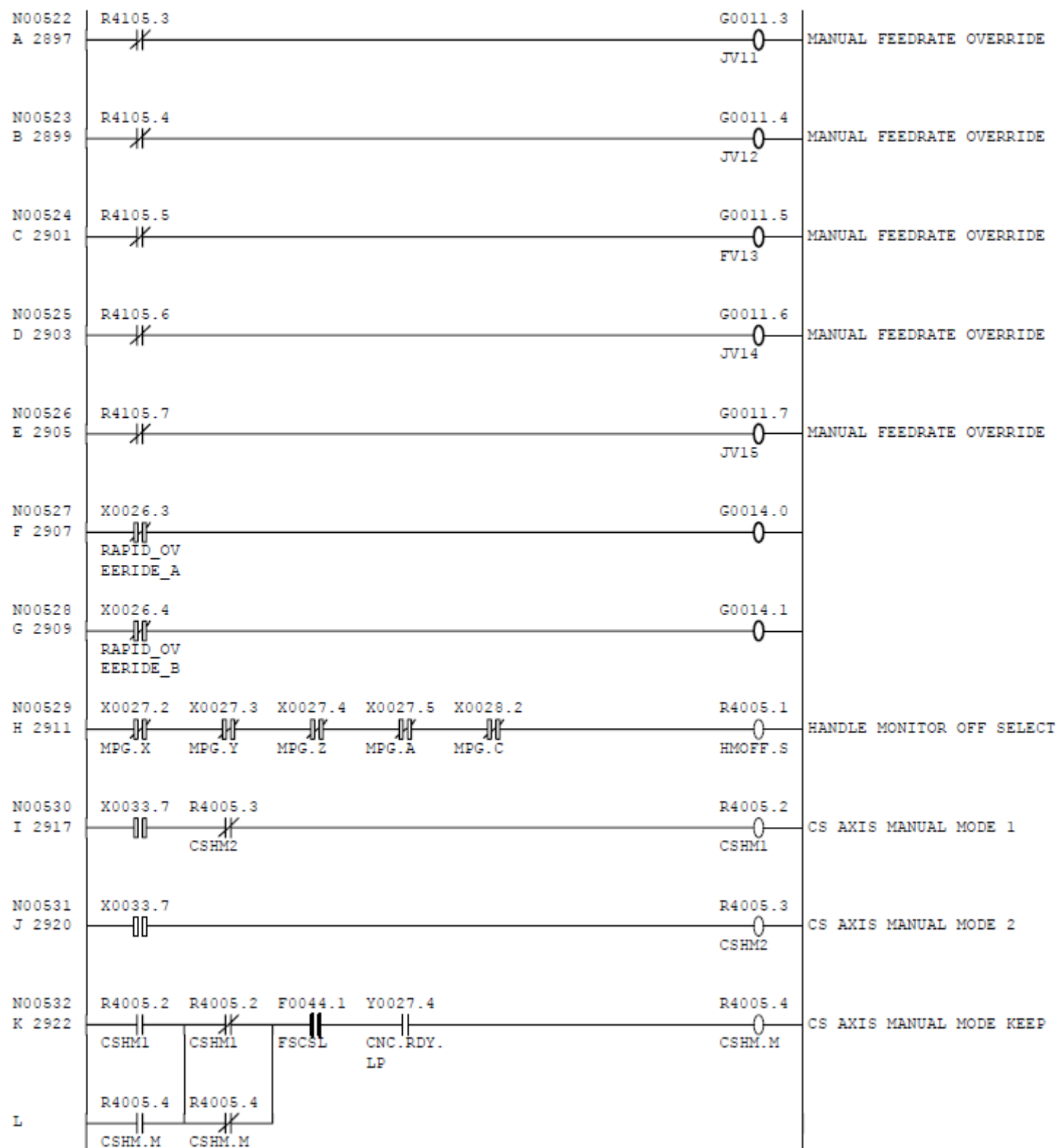


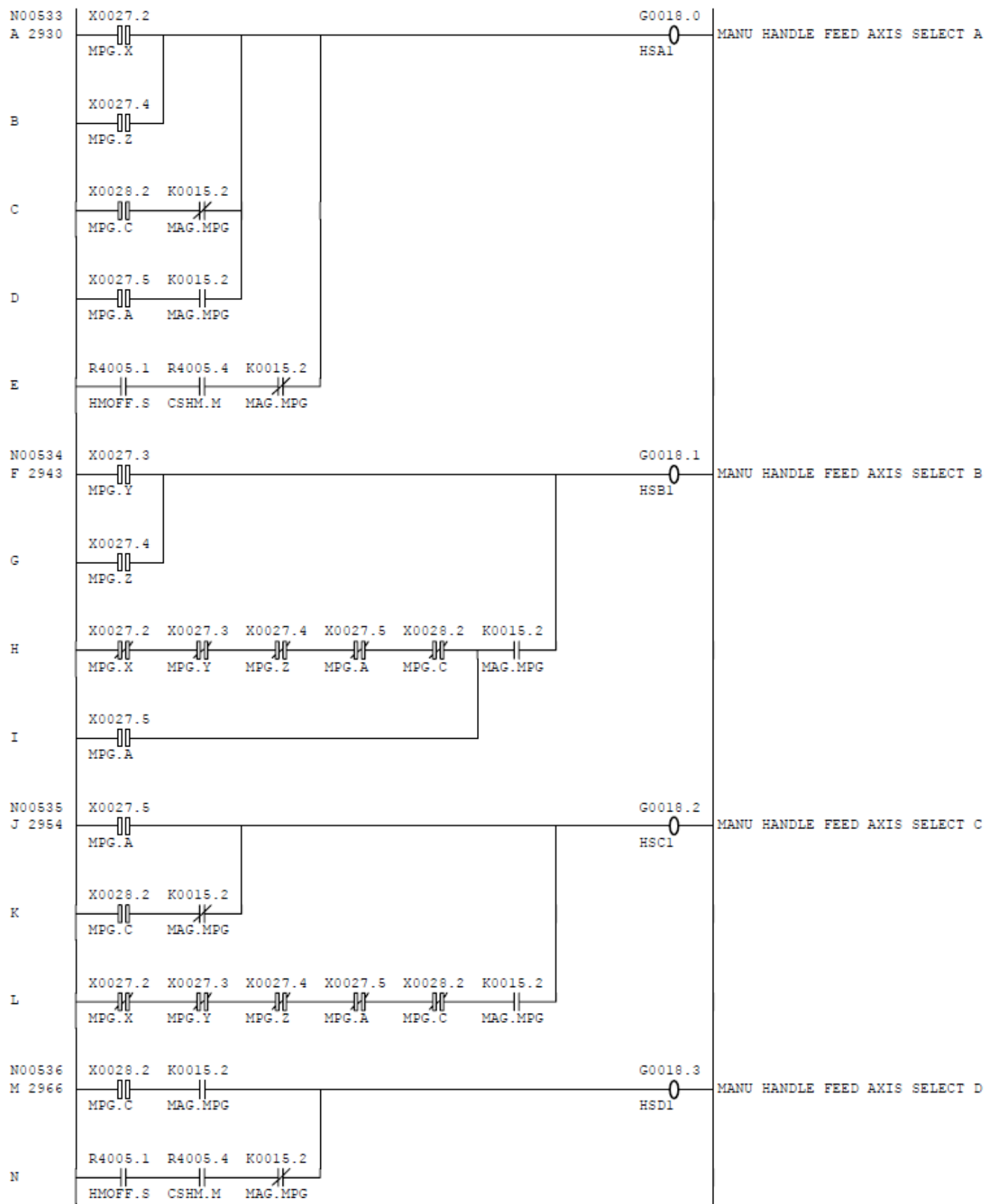


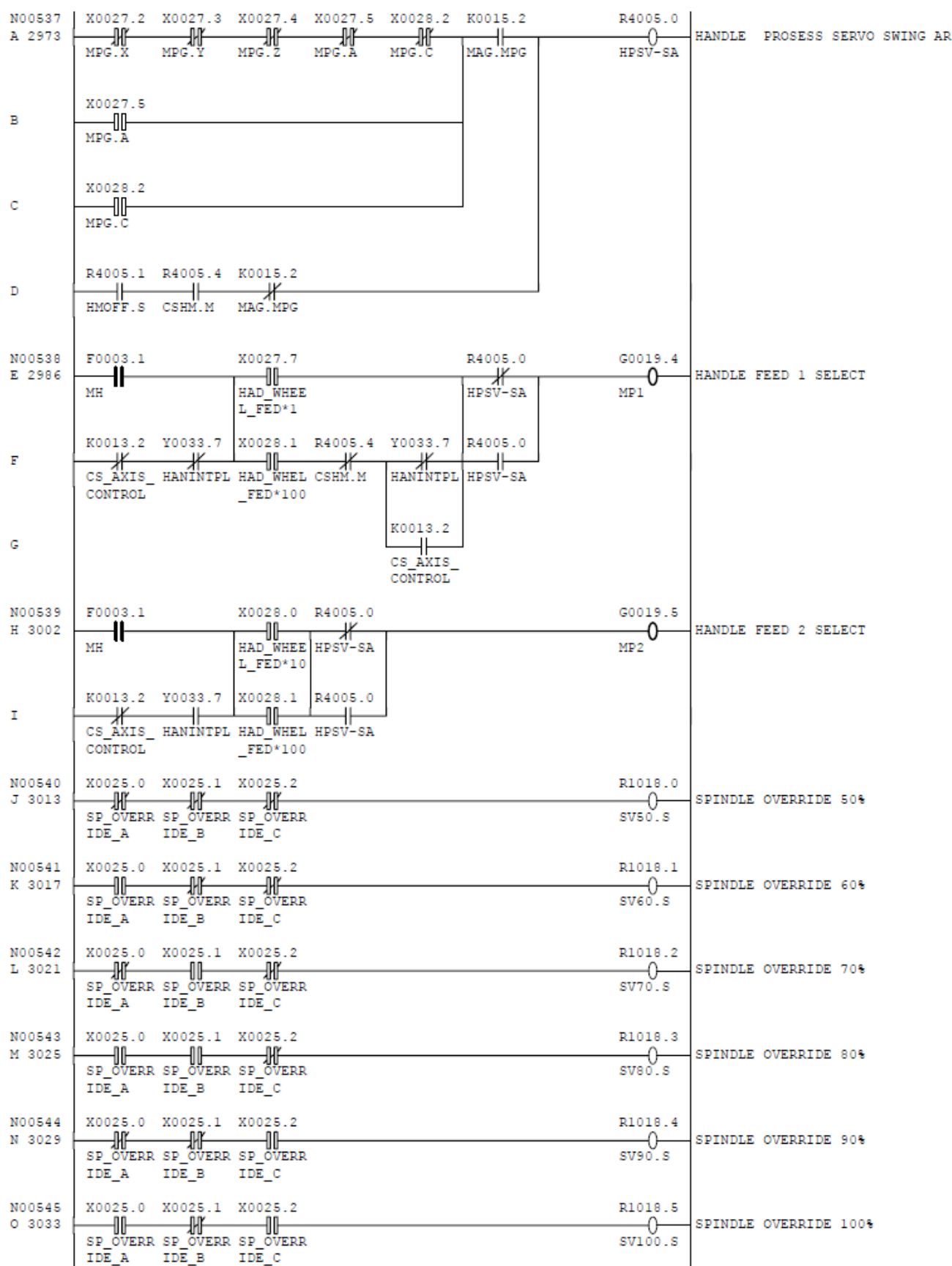


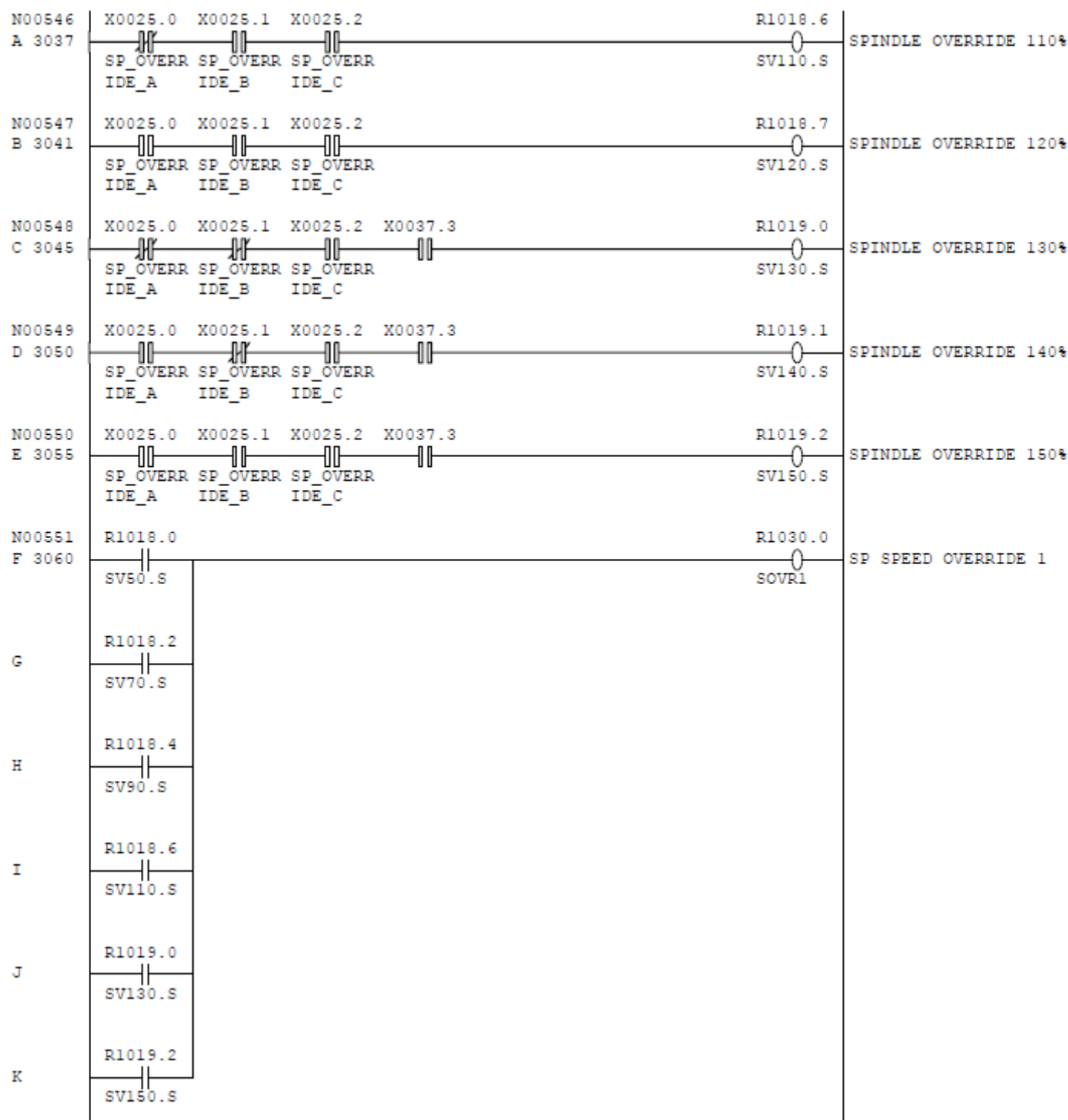


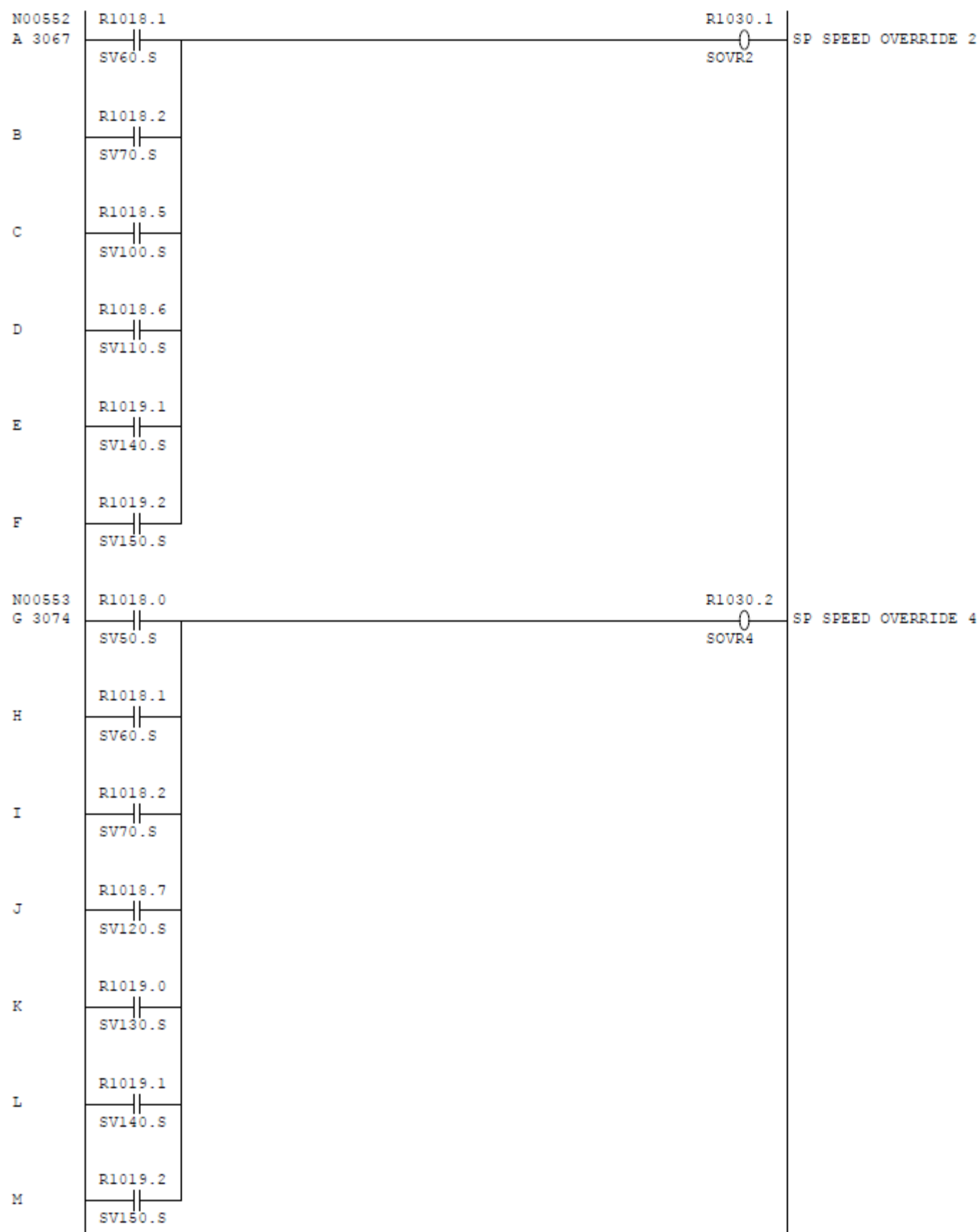
N00507 A 2867	R4102.4	G0012.4 FV4	FEEDRATE OVERRIDE
N00508 B 2869	R4102.5	G0012.5 FV5	FEEDRATE OVERRIDE
N00509 C 2871	R4102.6	G0012.6 FV6	FEEDRATE OVERRIDE
N00510 D 2873	R4102.7	G0012.7 FV7	FEEDRATE OVERRIDE
N00511 E 2875	R4104.0	G0010.0 JV0	MANUAL FEEDRATE OVERRIDE
N00512 F 2877	R4104.1	G0010.1 JV1	MANUAL FEEDRATE OVERRIDE
N00513 G 2879	R4104.2	G0010.2 JV2	MANUAL FEEDRATE OVERRIDE
N00514 H 2881	R4104.3	G0010.3 JV3	MANUAL FEEDRATE OVERRIDE
N00515 I 2883	R4104.4	G0010.4 JV4	MANUAL FEEDRATE OVERRIDE
N00516 J 2885	R4104.5	G0010.5 JV5	MANUAL FEEDRATE OVERRIDE
N00517 K 2887	R4104.6	G0010.6 JV6	MANUAL FEEDRATE OVERRIDE
N00518 L 2889	R4104.7	G0010.7 JV7	MANUAL FEEDRATE OVERRIDE
N00519 M 2891	R4105.0	G0011.0 JV8	MANUAL FEEDRATE OVERRIDE
N00520 N 2893	R4105.1	G0011.1 JV9	MANUAL FEEDRATE OVERRIDE
N00521 O 2895	R4105.2	G0011.2 JV10	MANUAL FEEDRATE OVERRIDE

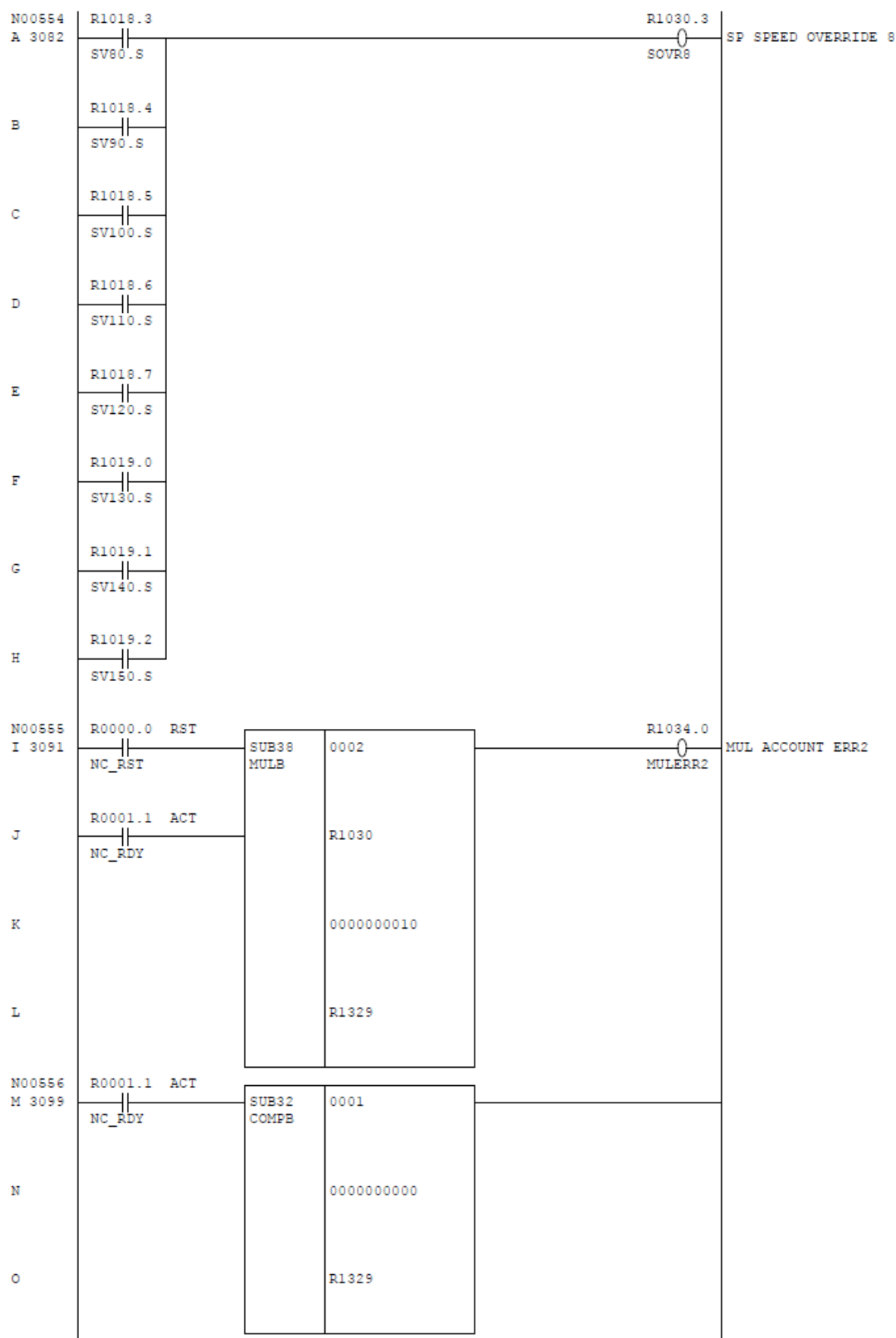


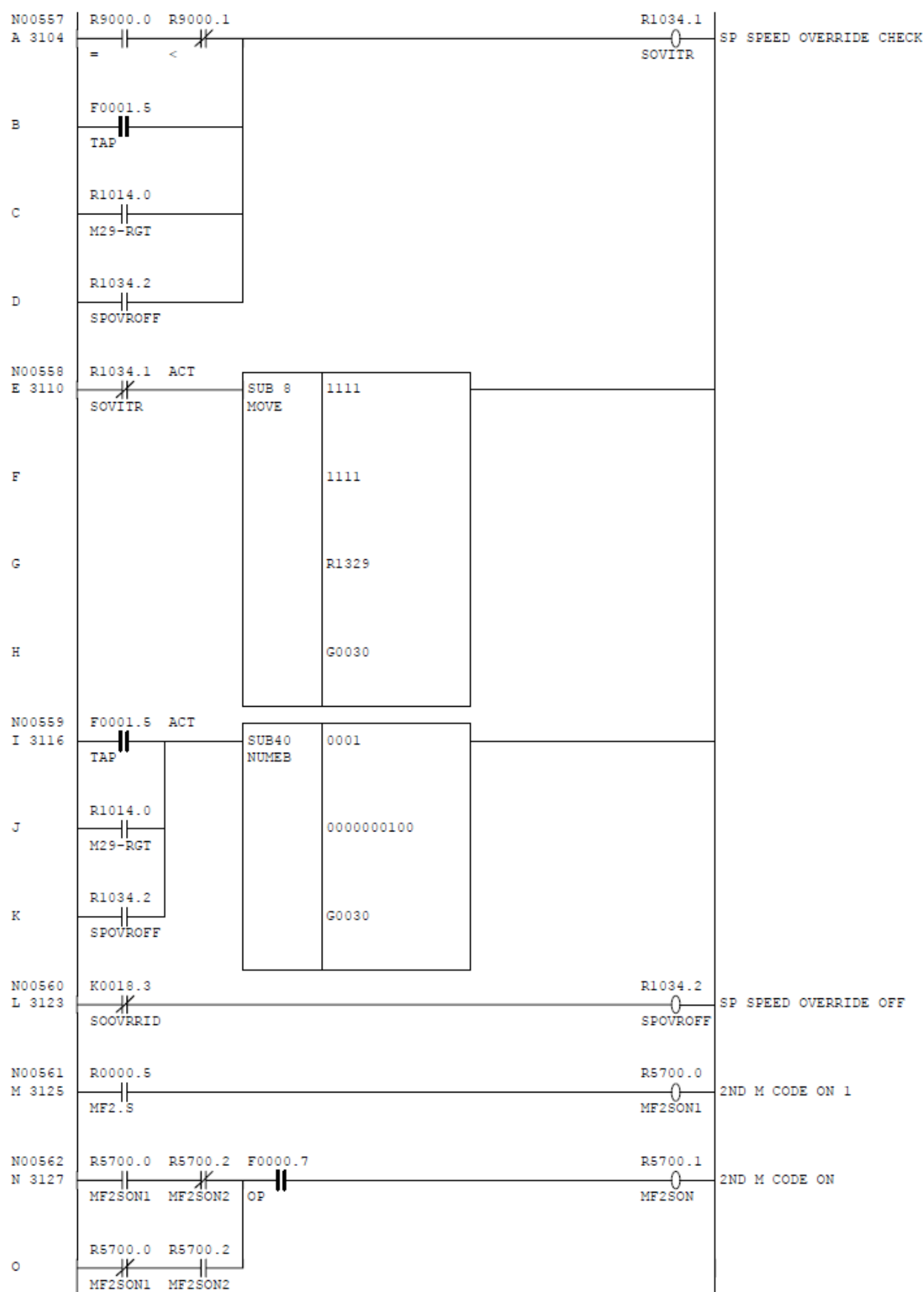


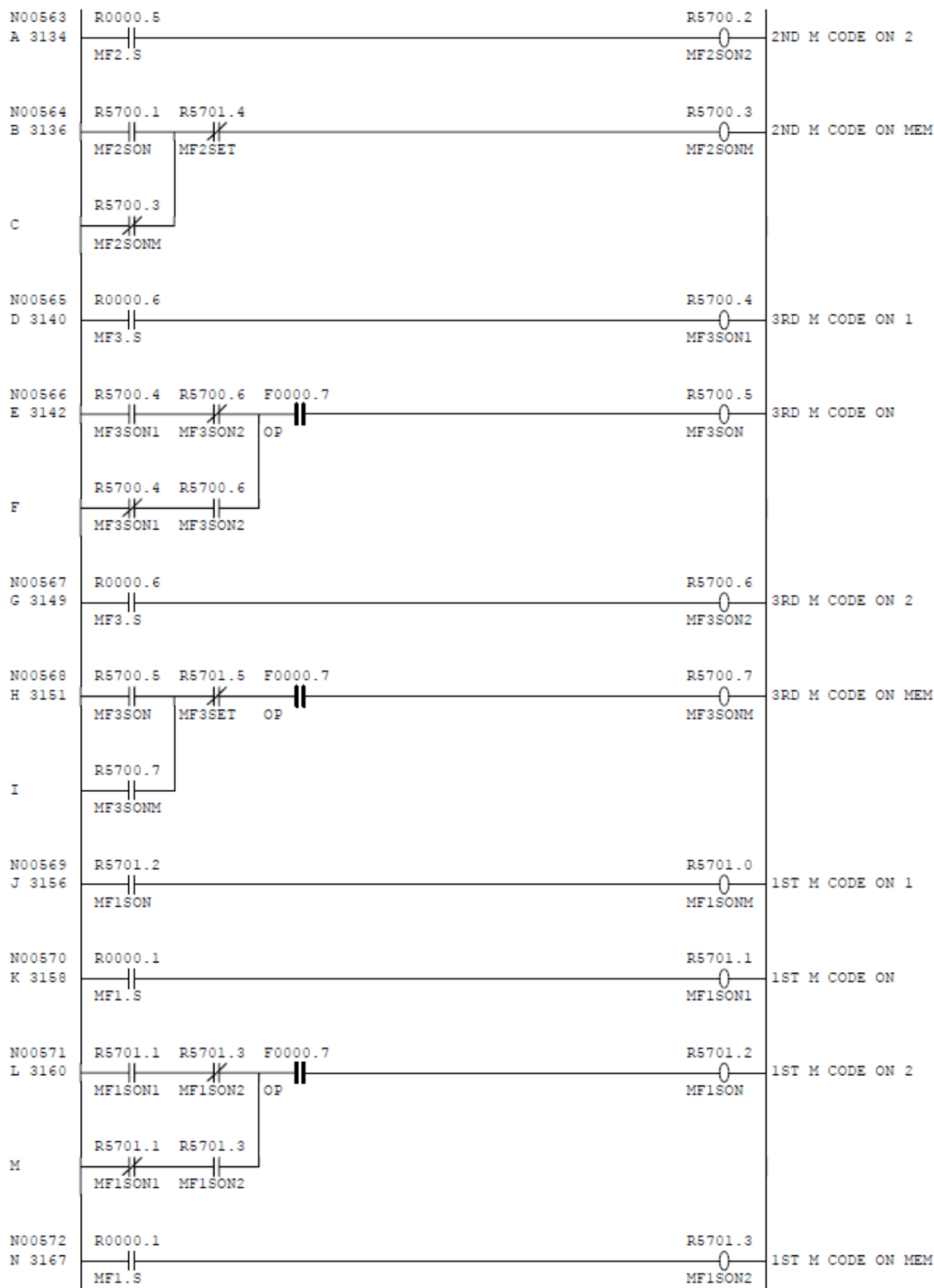


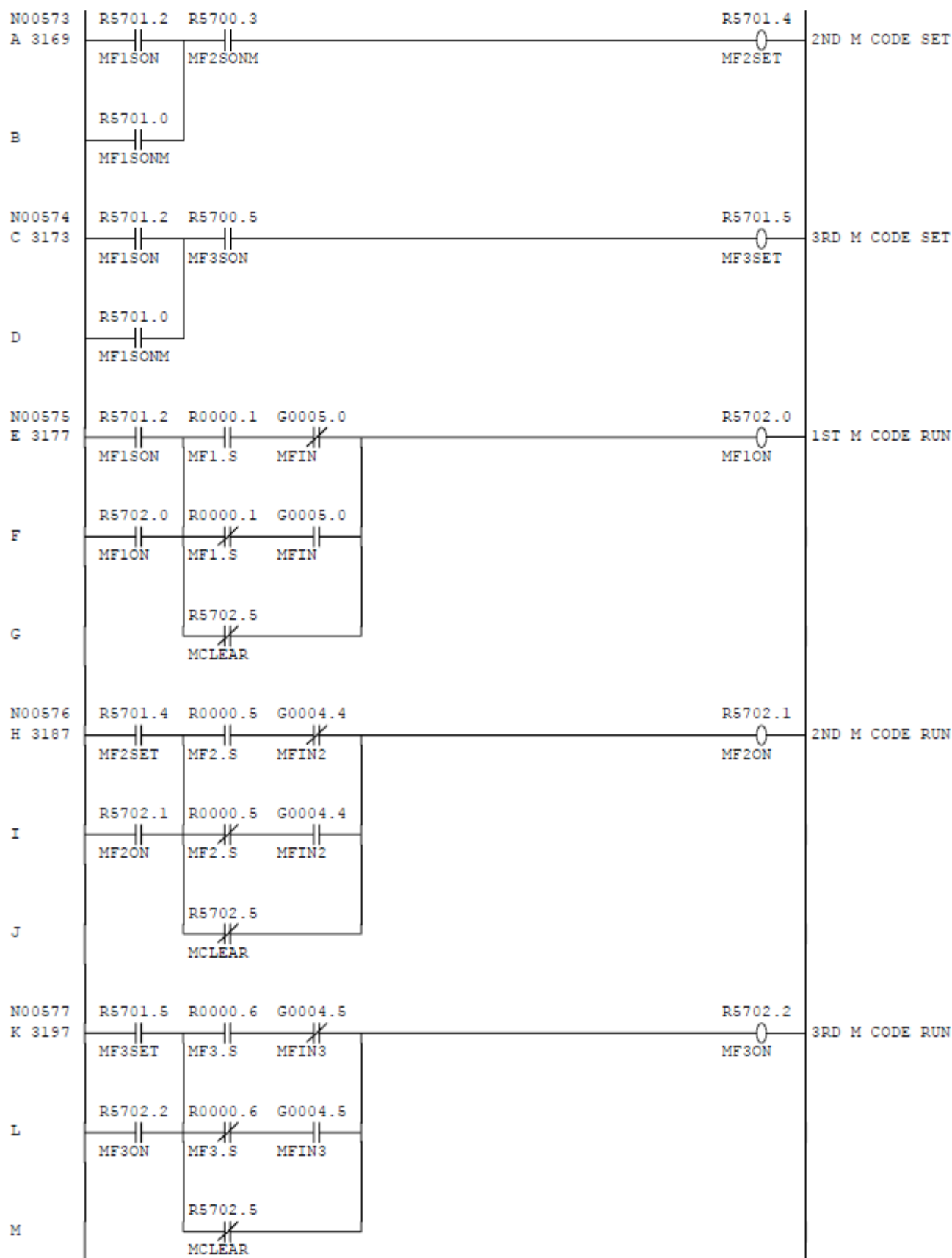


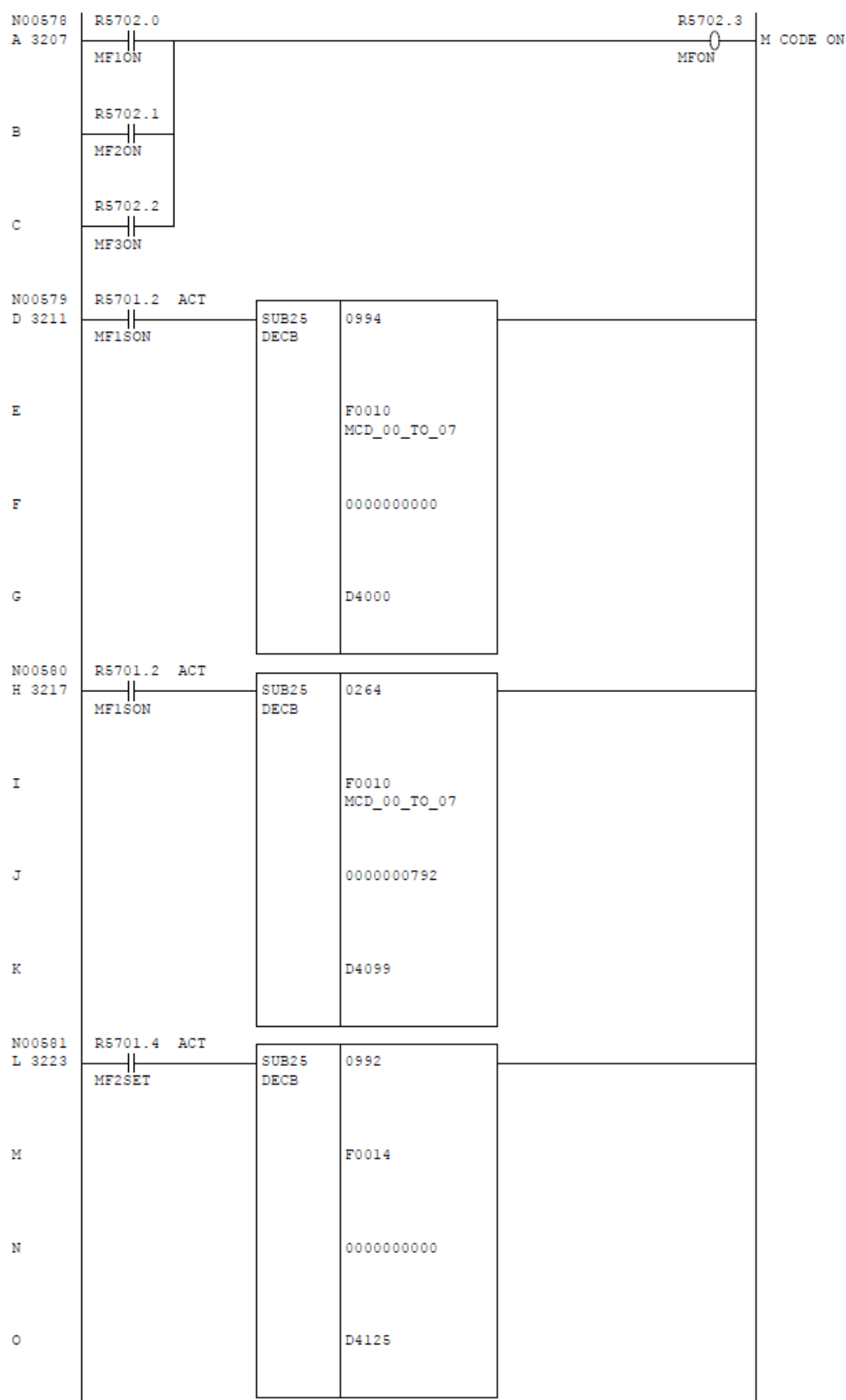




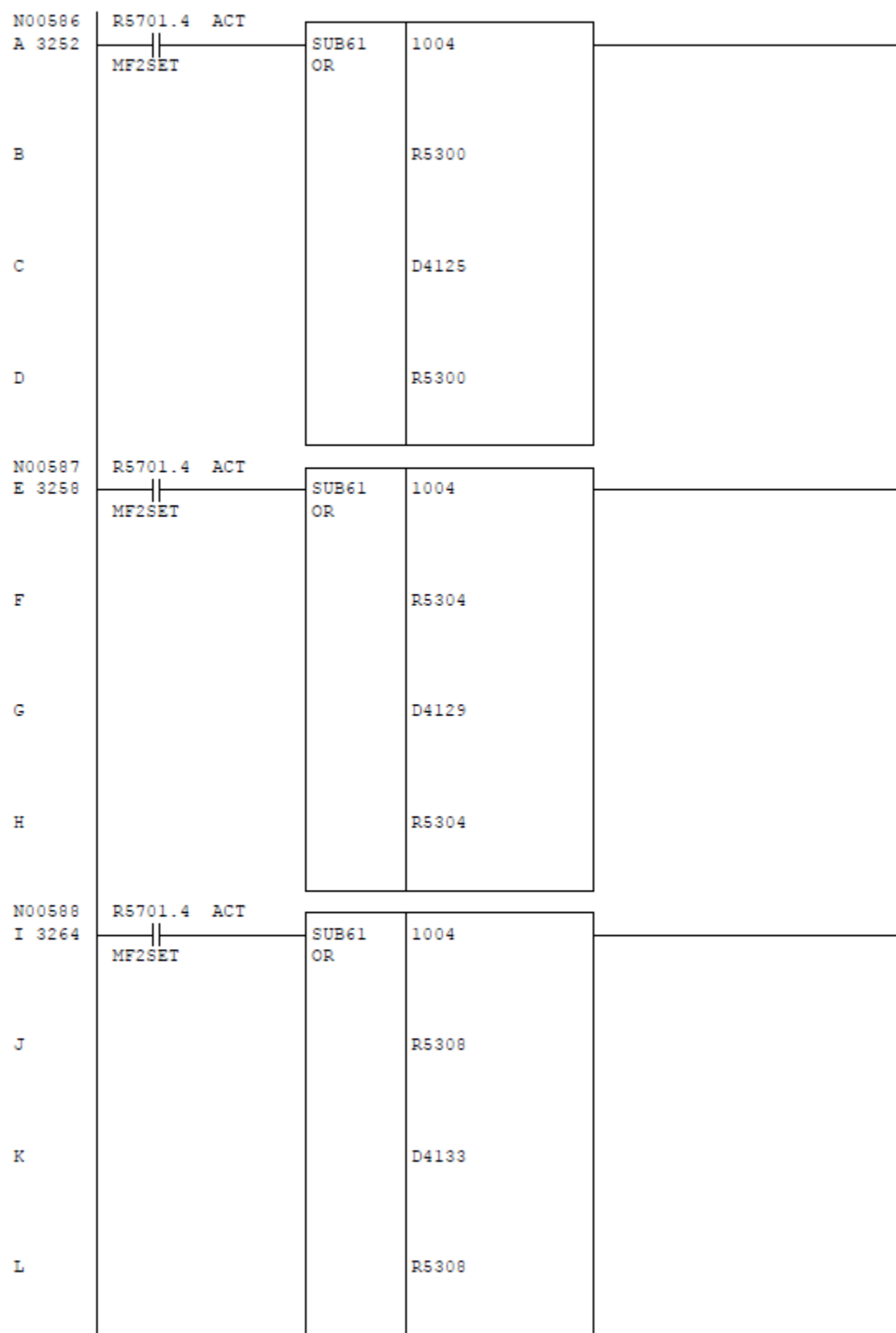




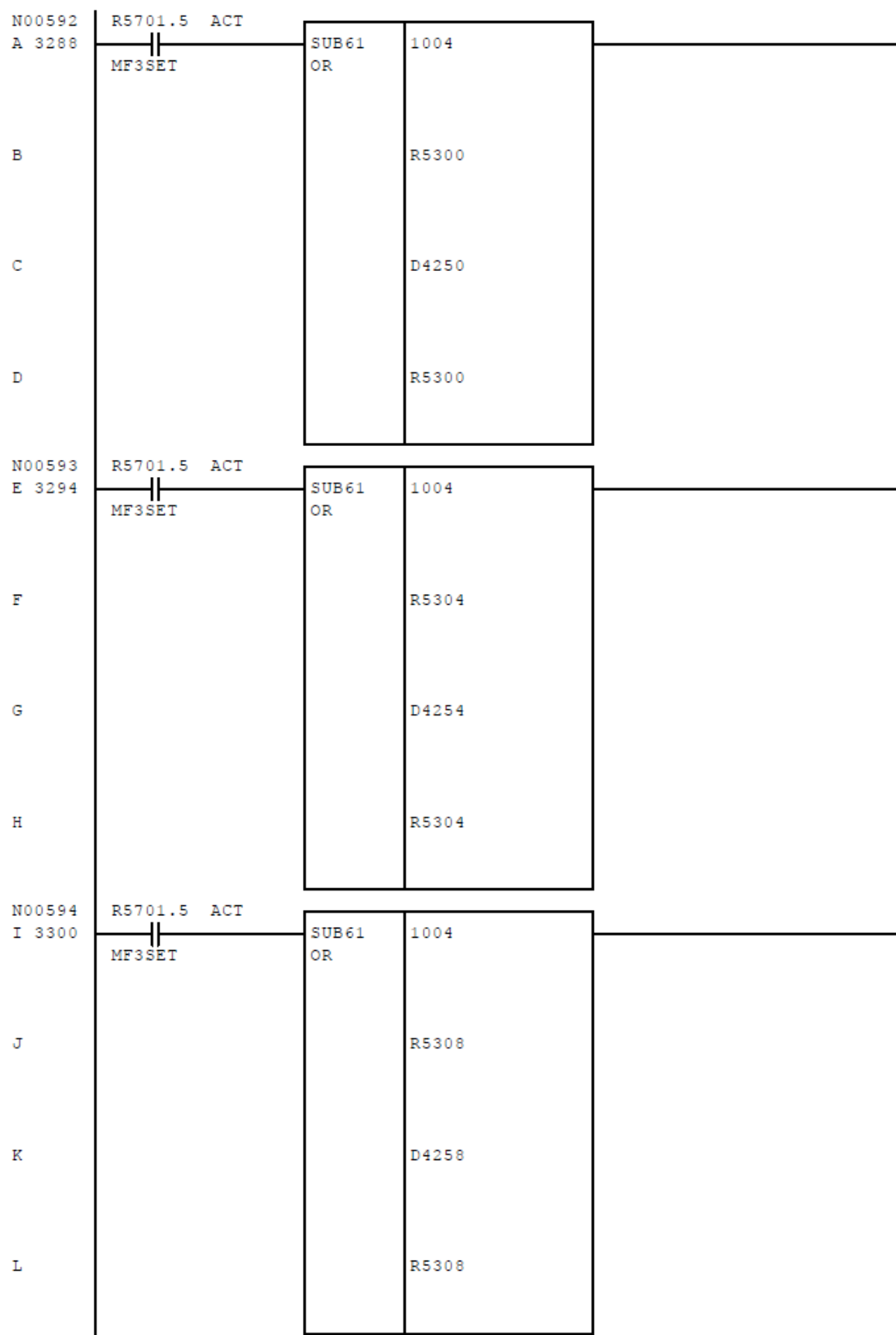


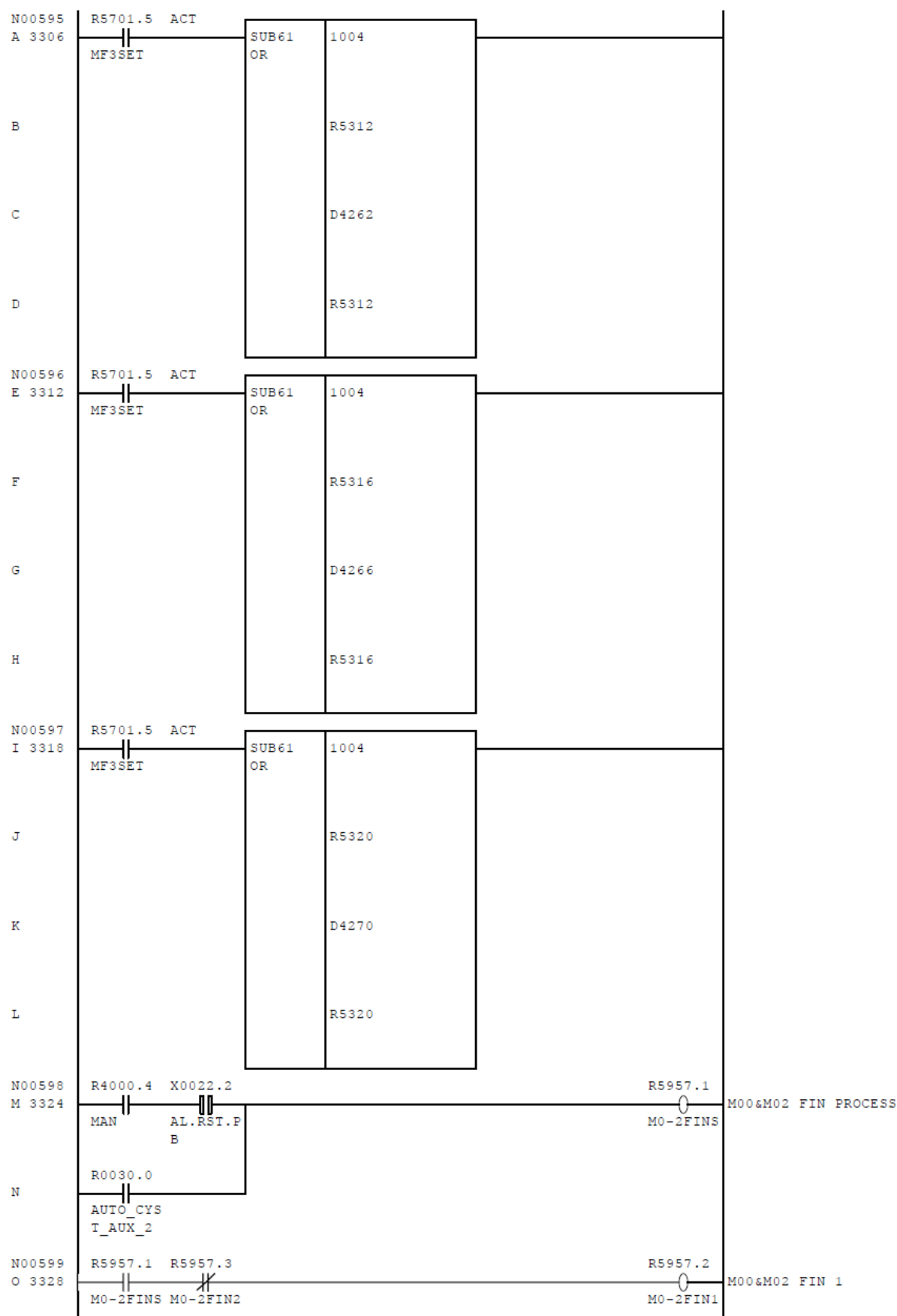


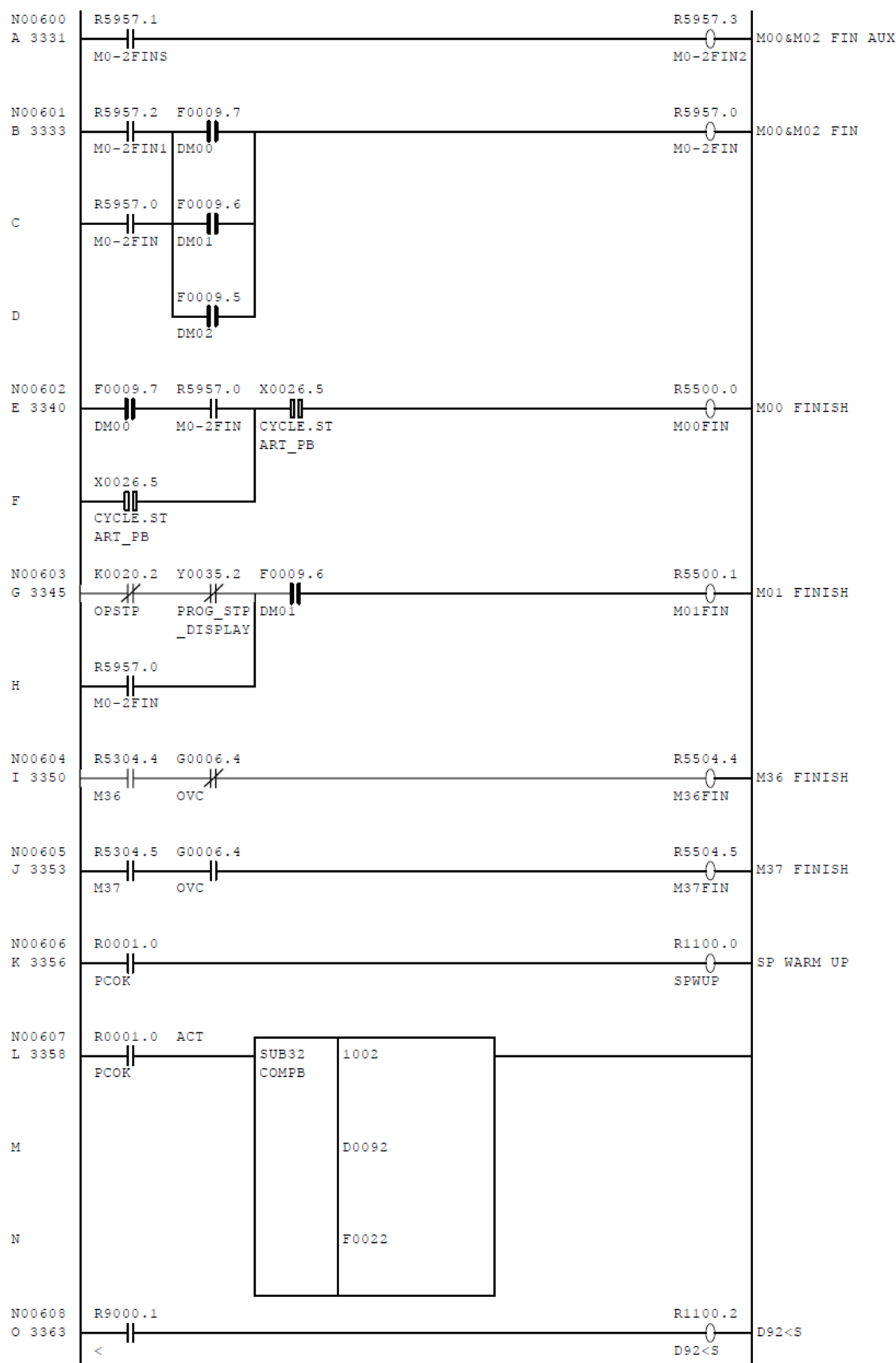
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B			F0014
C			0000000792
D			D4224
N00583 E 3235	RS701.5 ACT MF3SET	SUB25 DECB	0992
F			F0016
G			0000000000
H			D4250
N00584 I 3241	RS701.5 ACT MF3SET	SUB25 DECB	0262
J			F0016
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L			D4349
N00585 M 3247	RS701.2 ACT MF1SON	SUB45 MOVN	0125
N			D4000
O			R5300

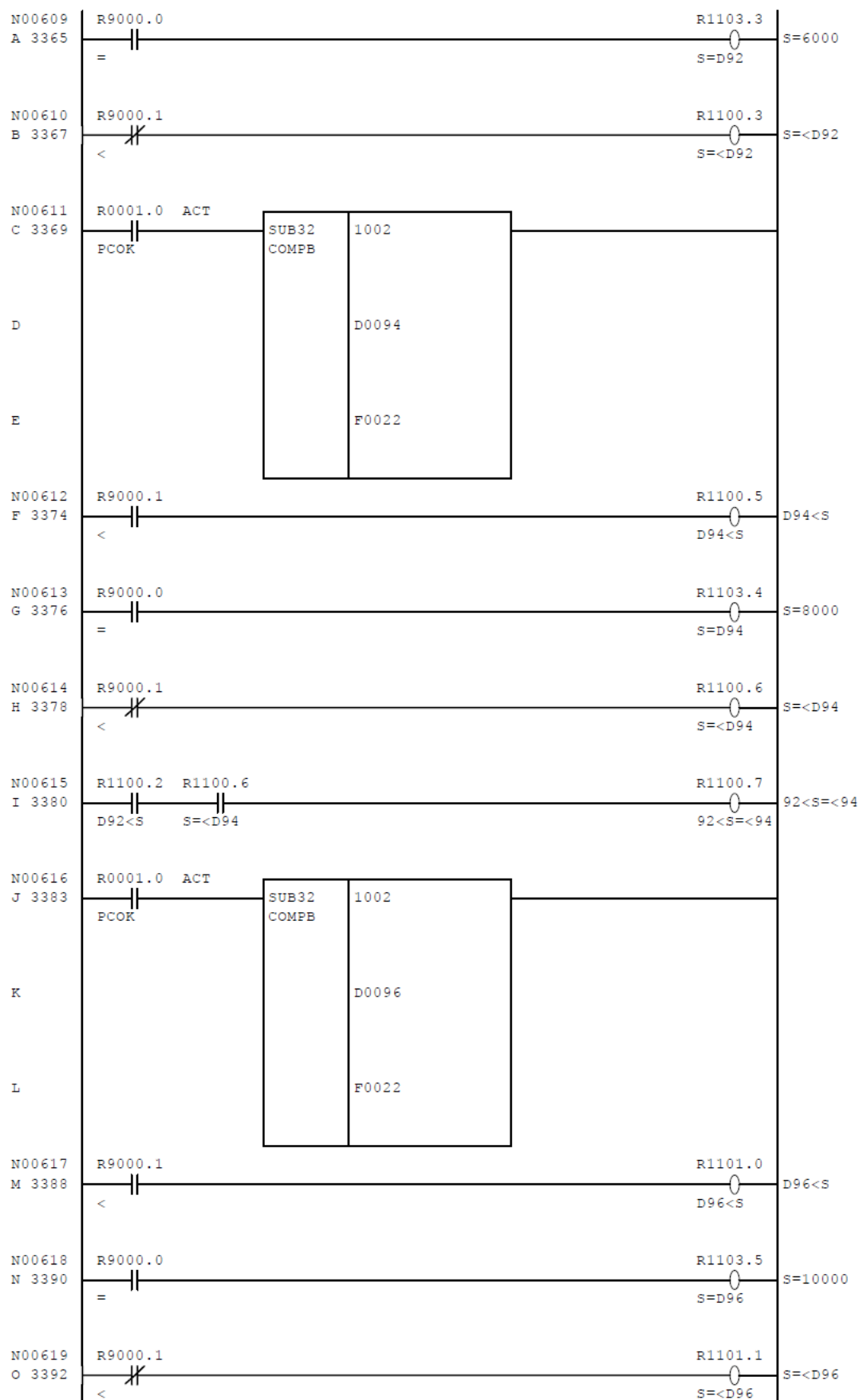


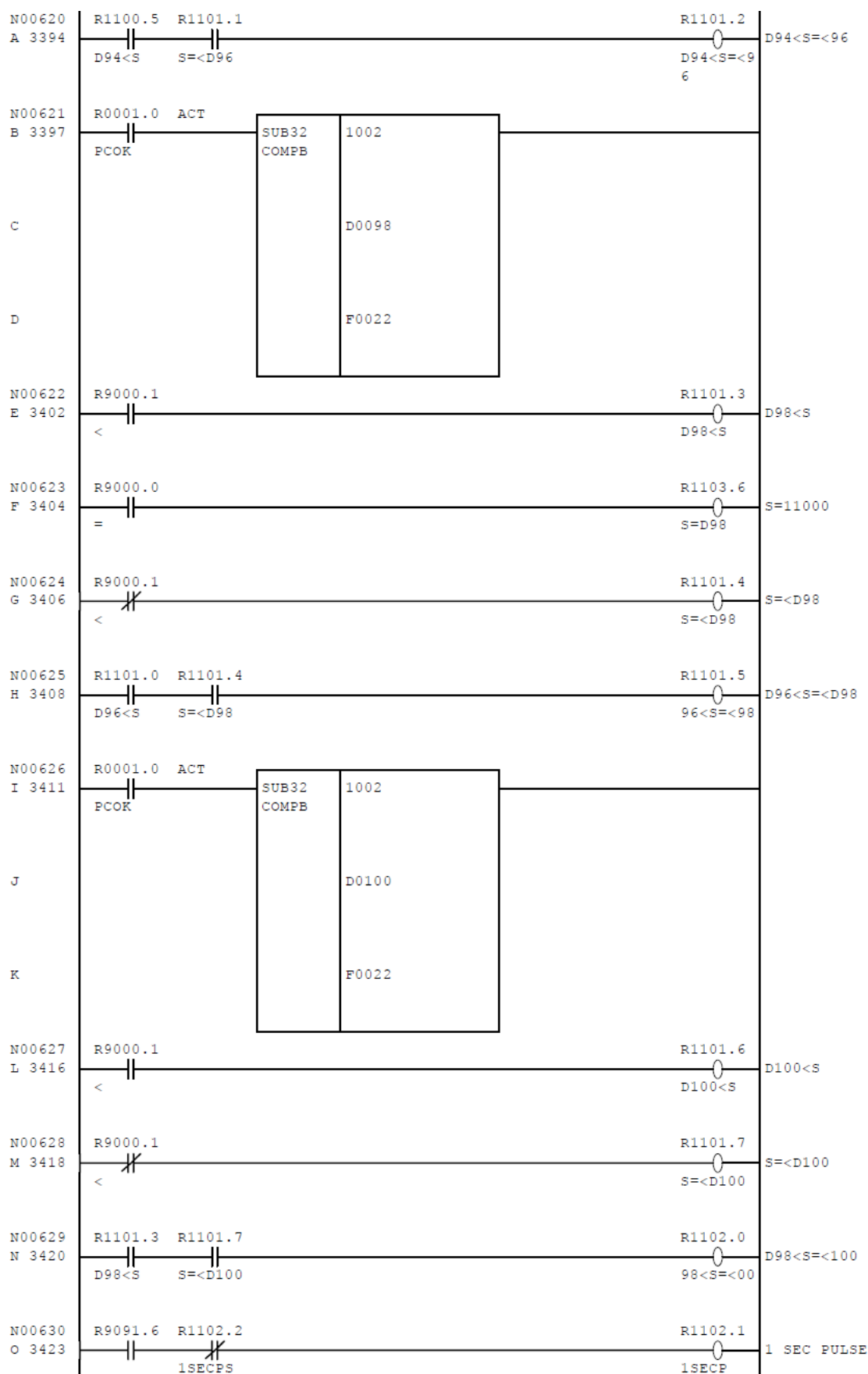
N00589 A 3270	R5701.4 ACT MF2SET	SUB61 OR	1004	
B			R5312	
C			D4137	
D			R5312	
N00590 E 3276	R5701.4 ACT MF2SET	SUB61 OR	1004	
F			R5316	
G			D4141	
H			R5316	
N00591 I 3282	R5701.4 ACT MF2SET	SUB61 OR	1004	
J			R5320	
K			D4145	
L			R5320	

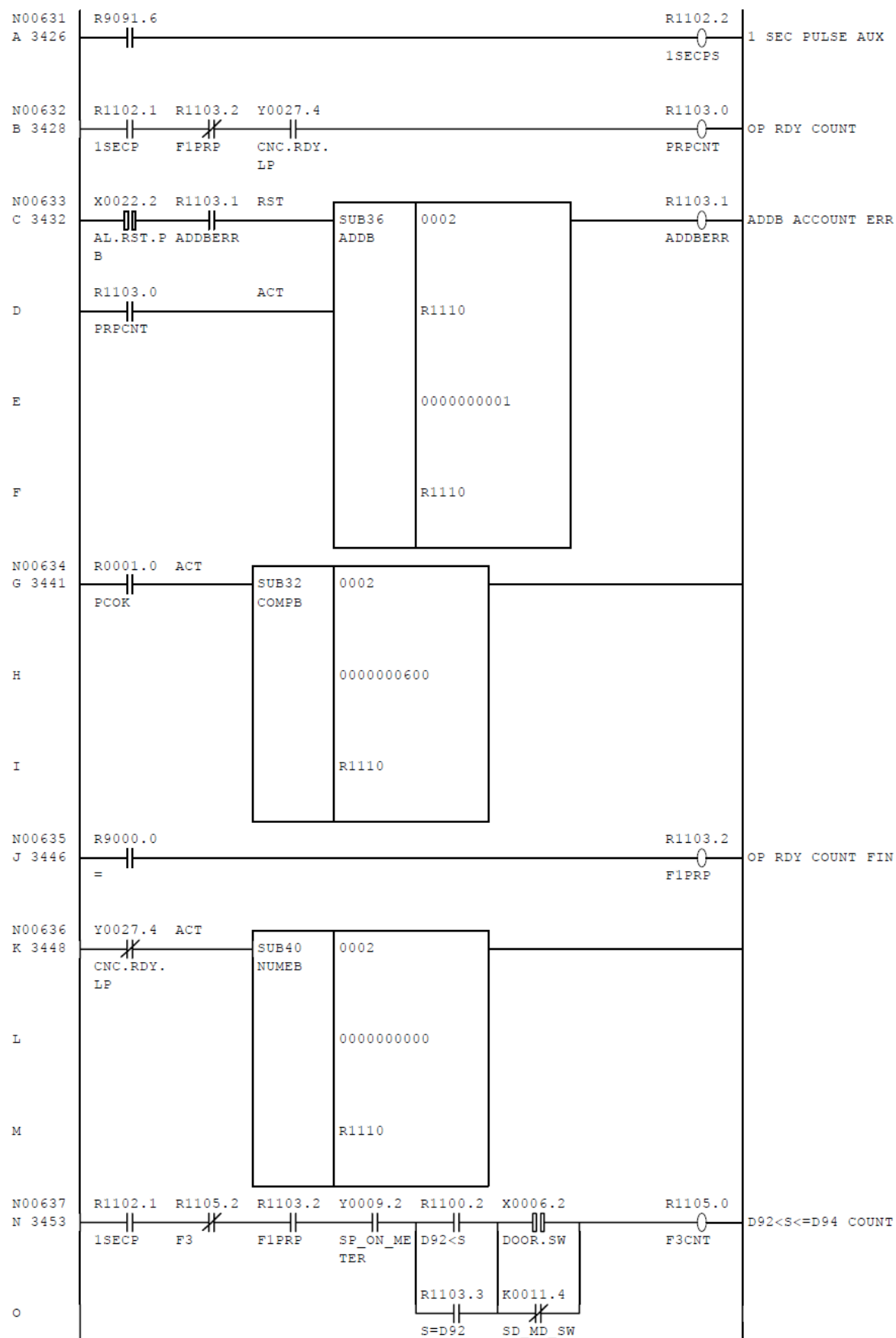


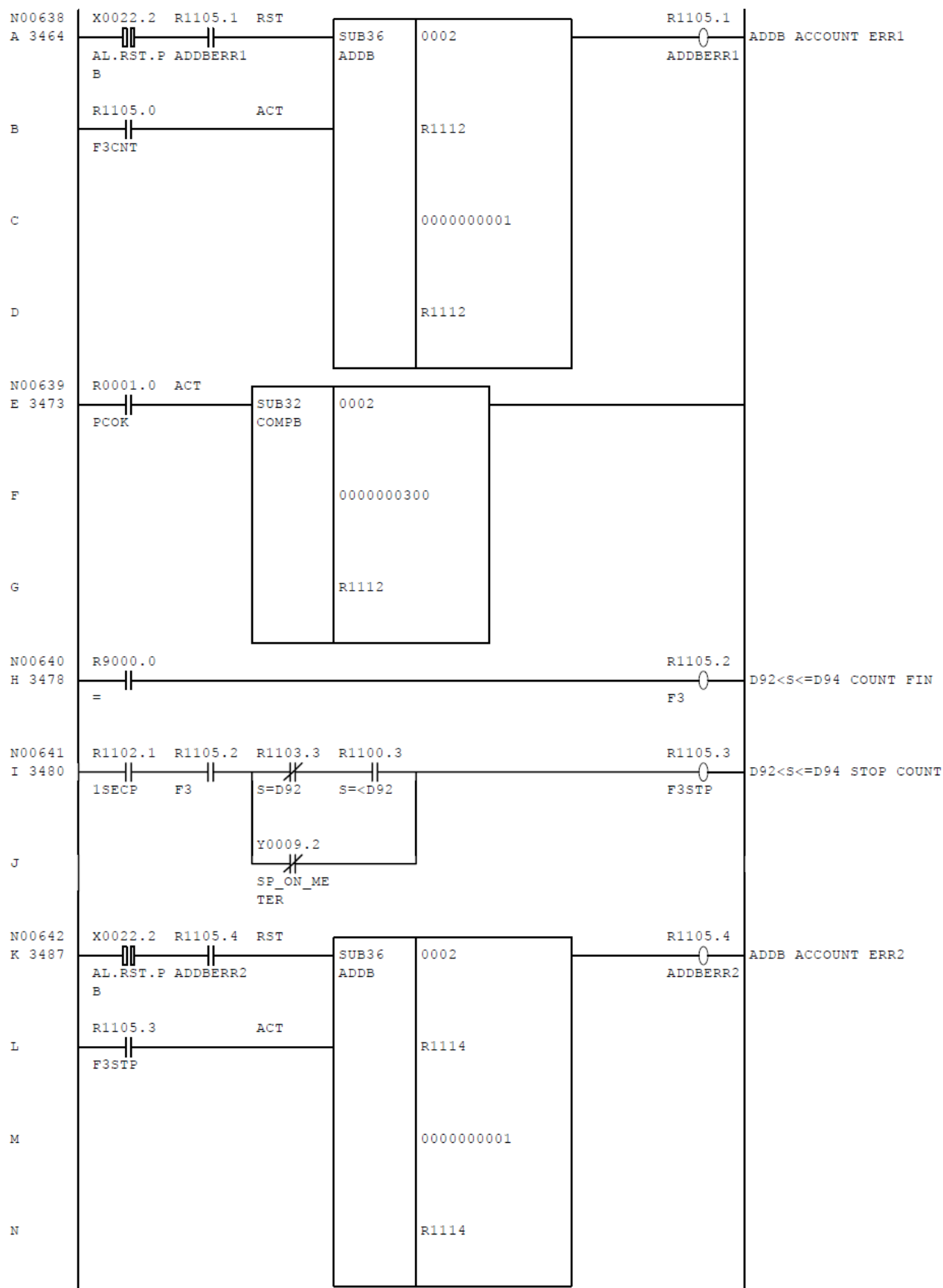


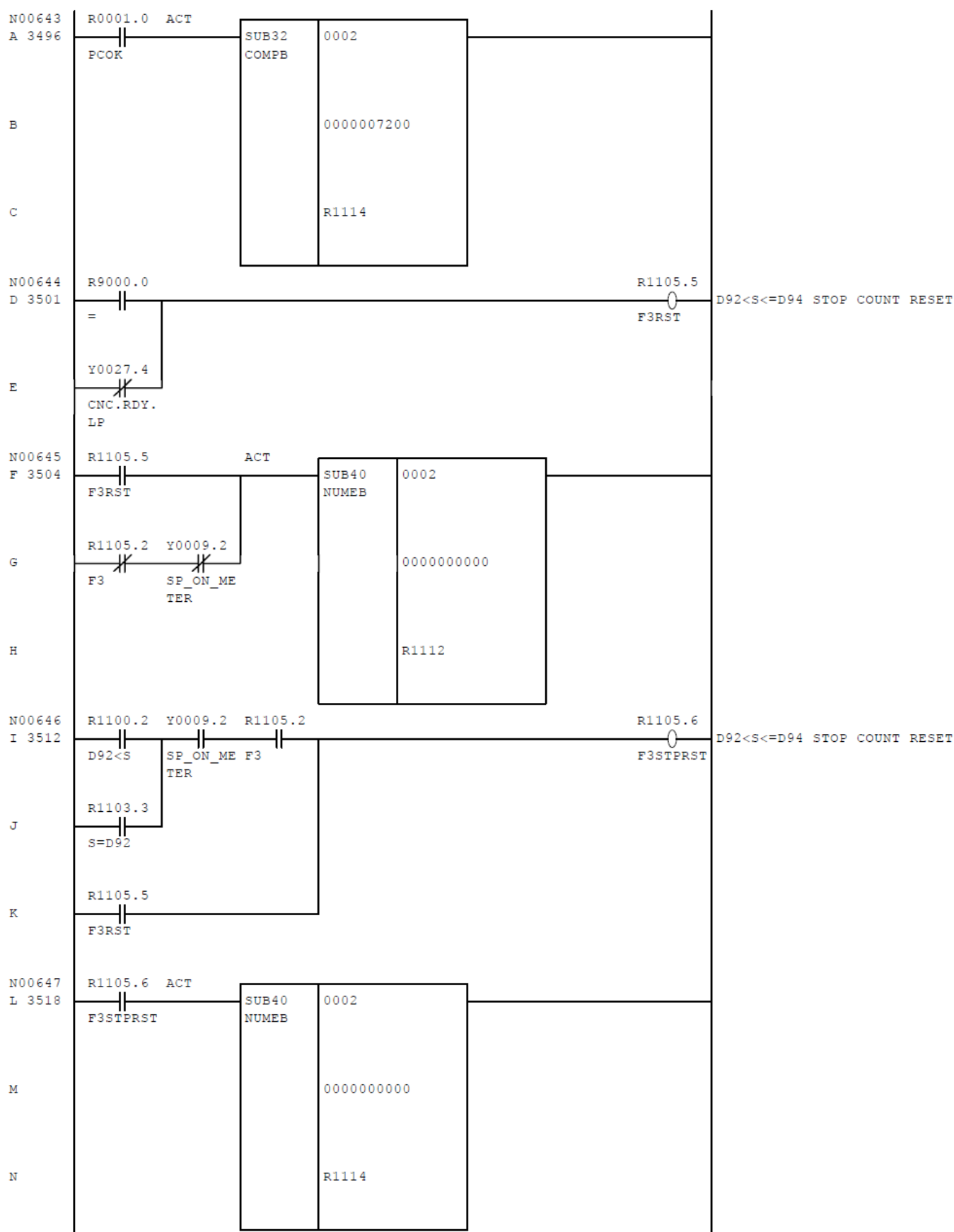


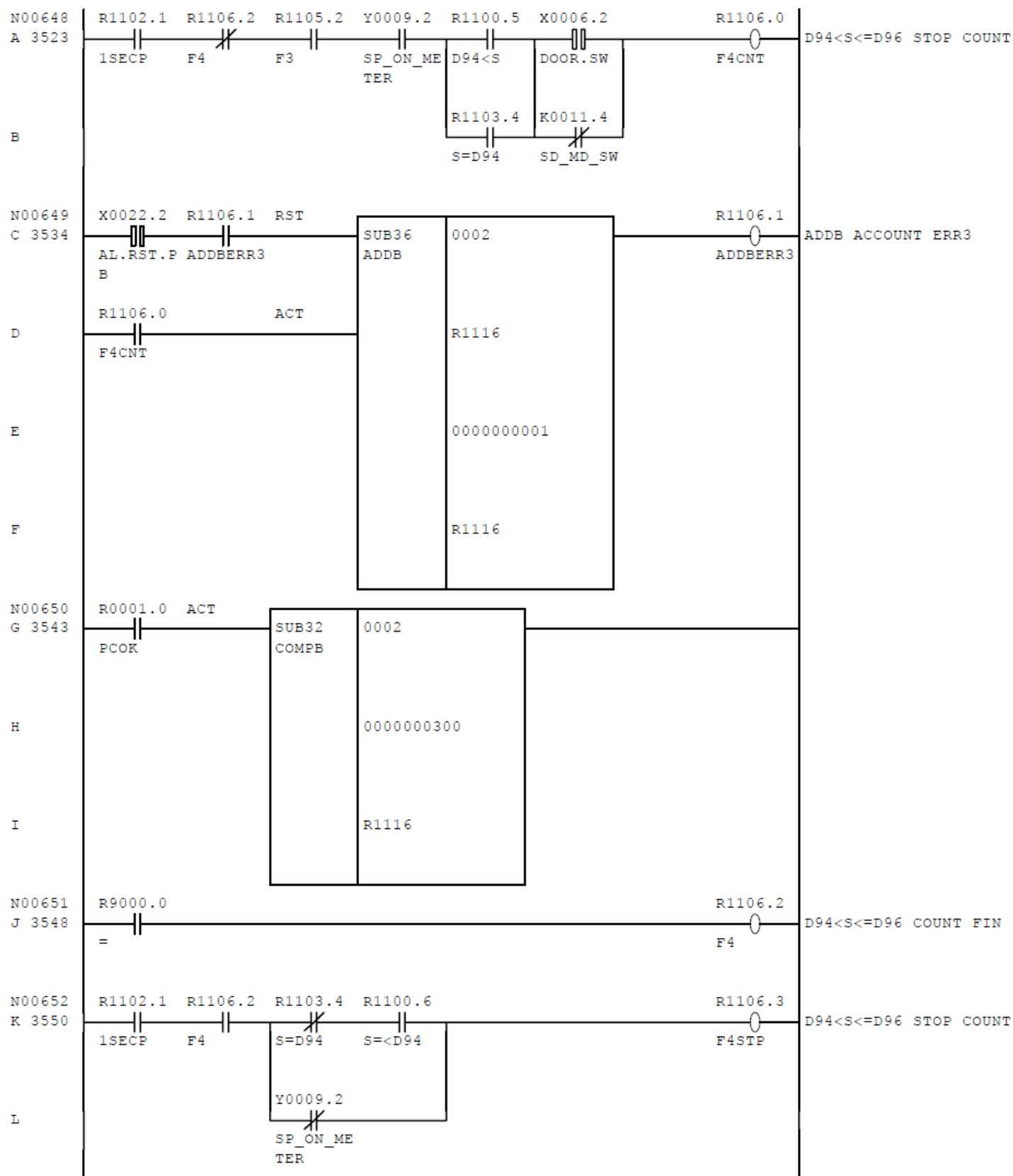


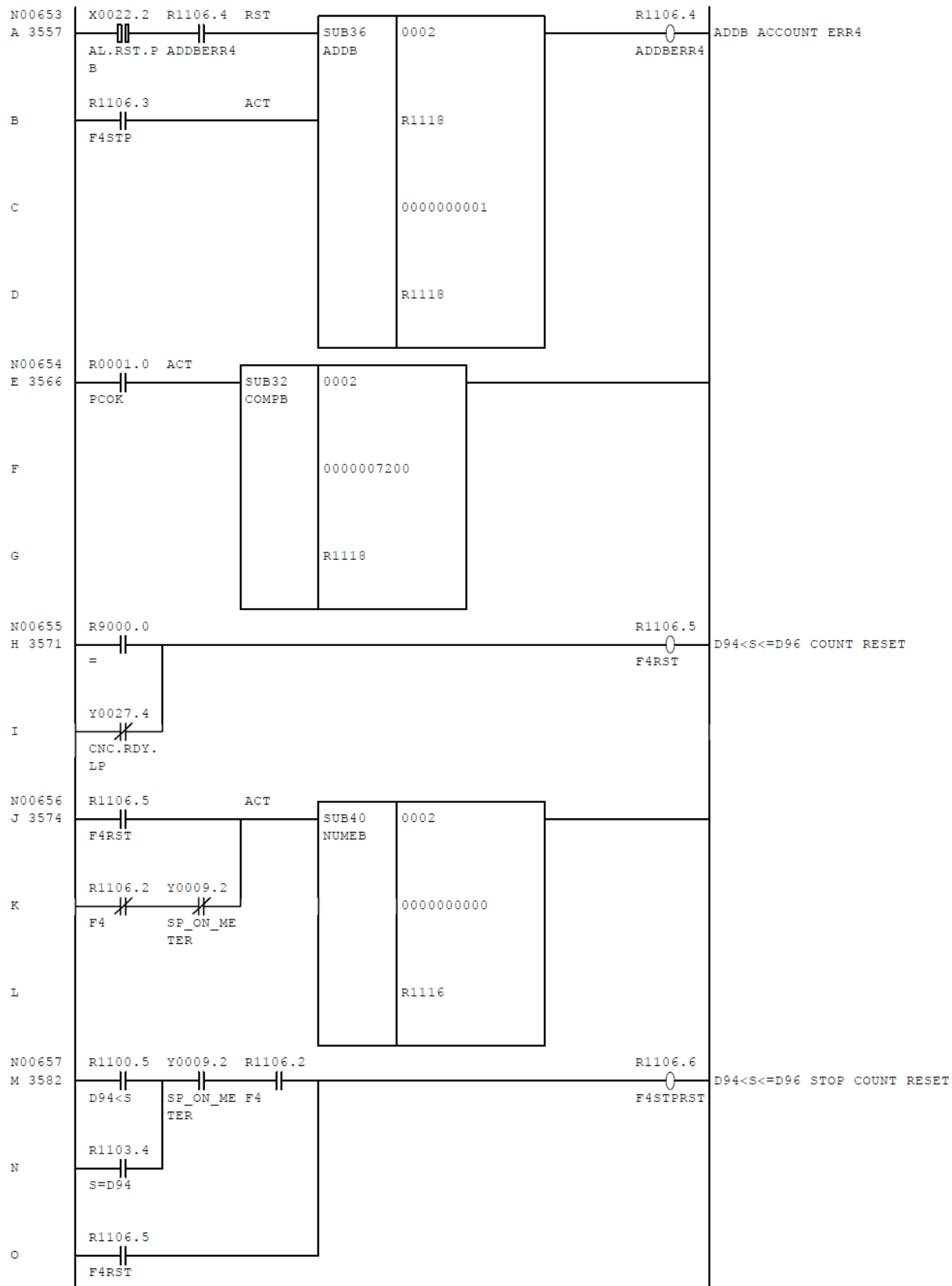


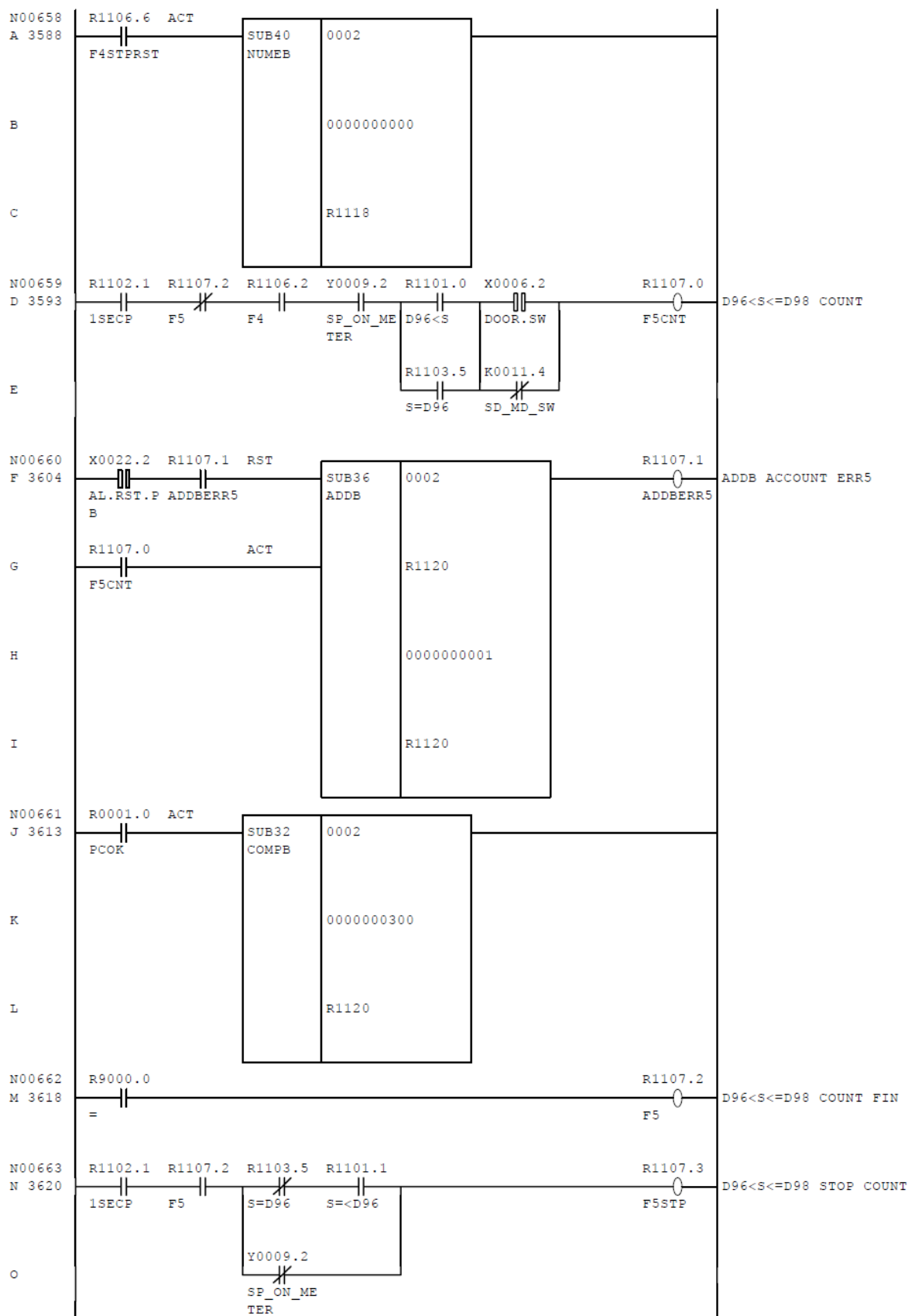


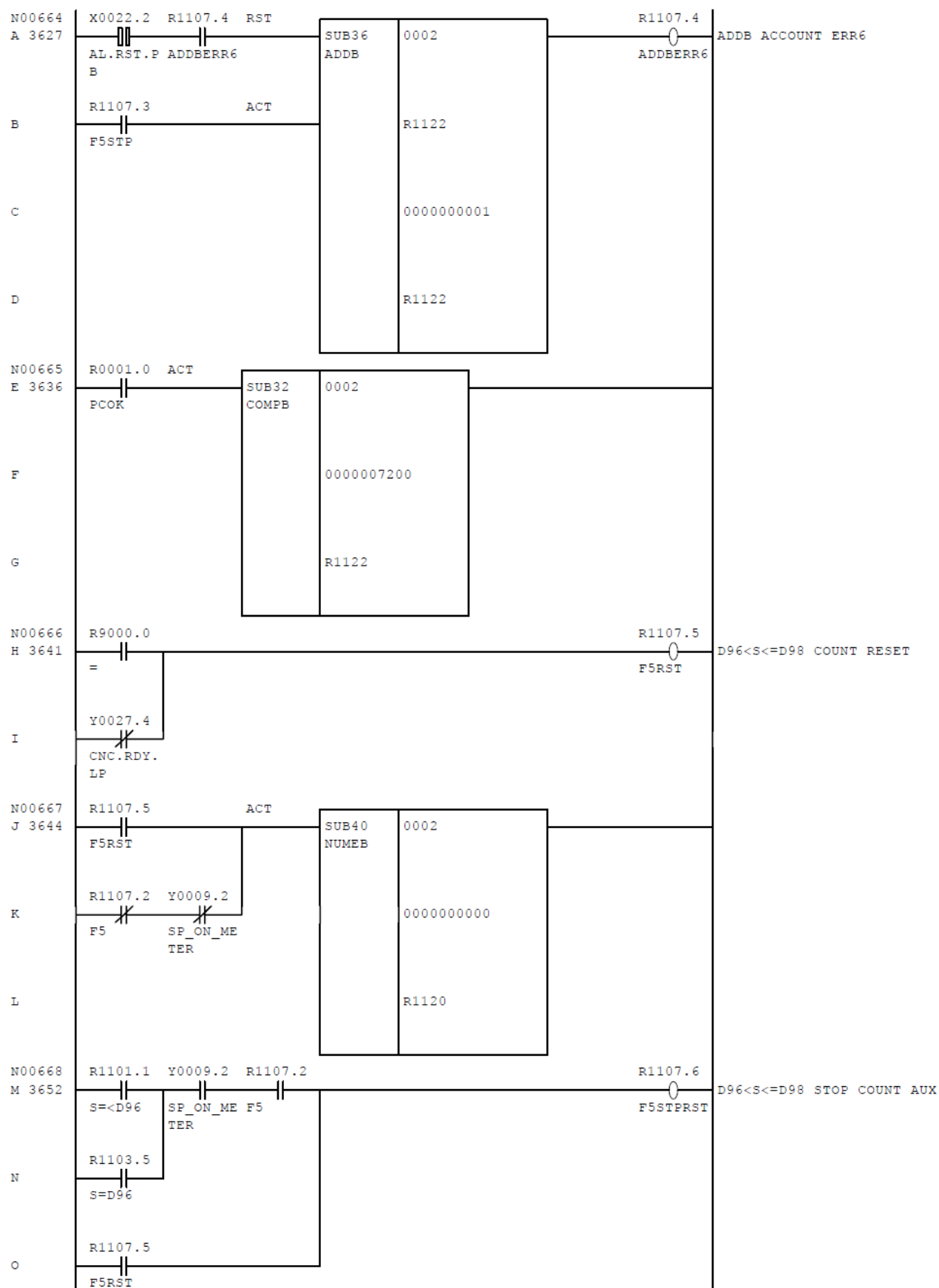


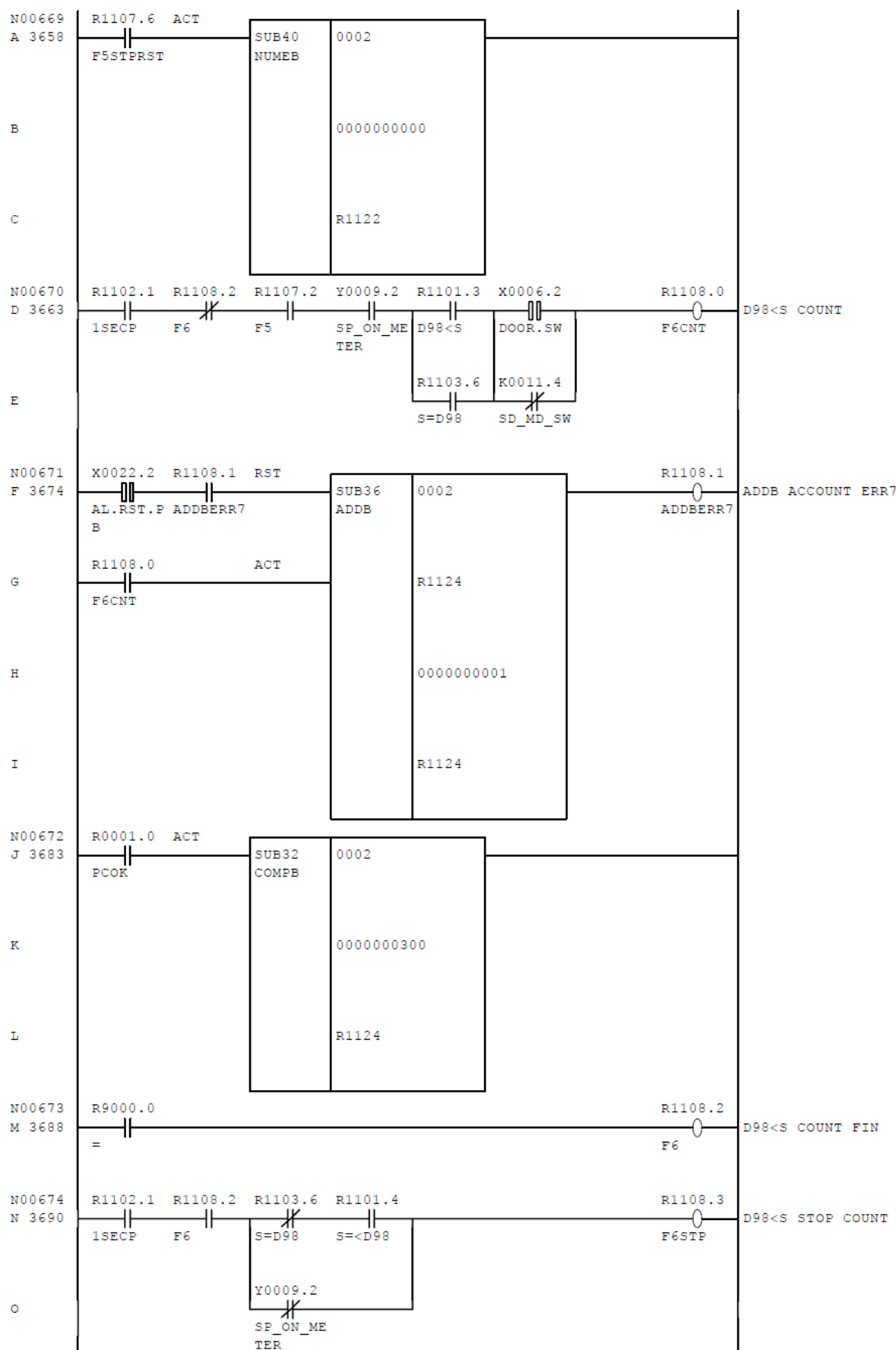


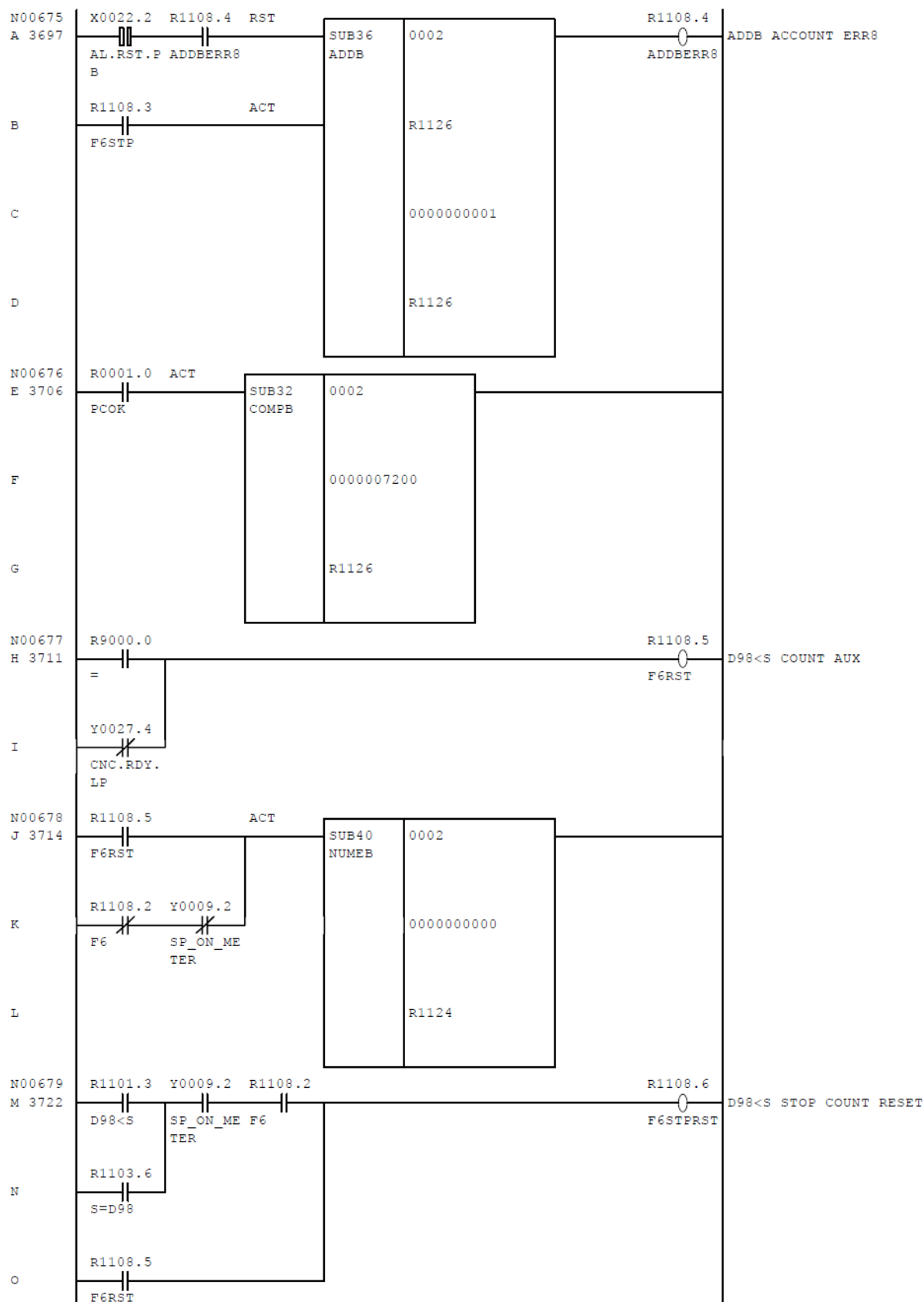


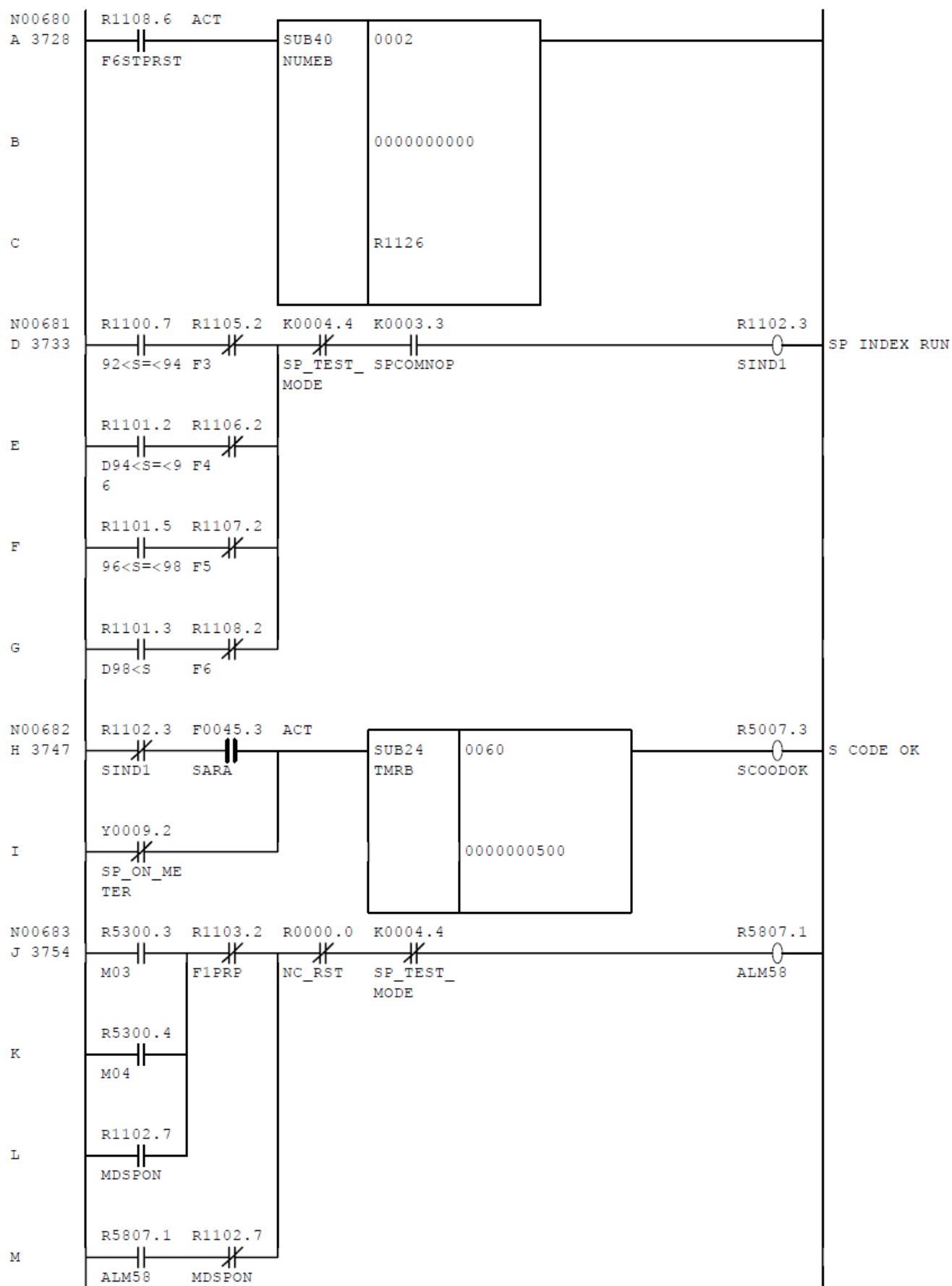


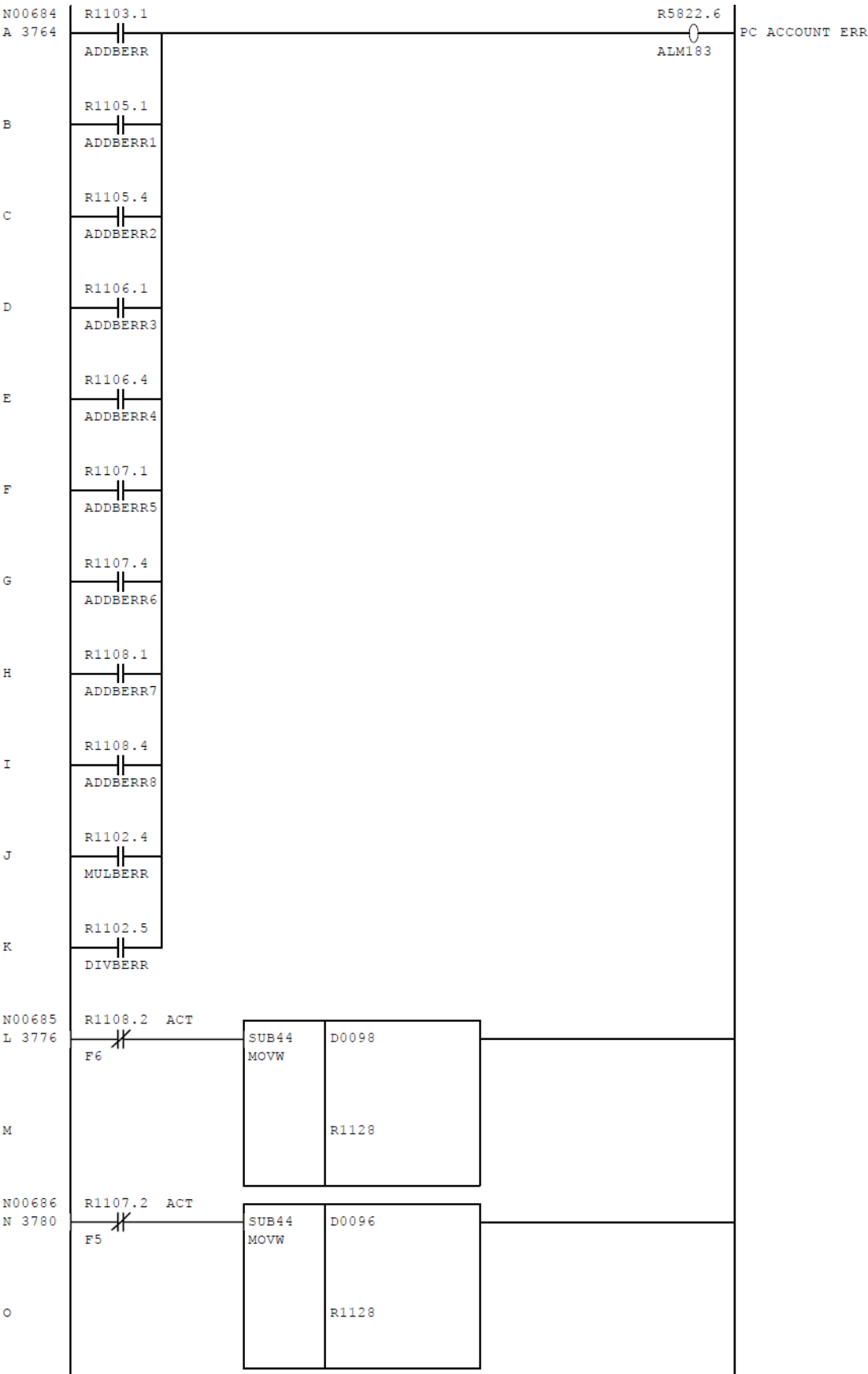


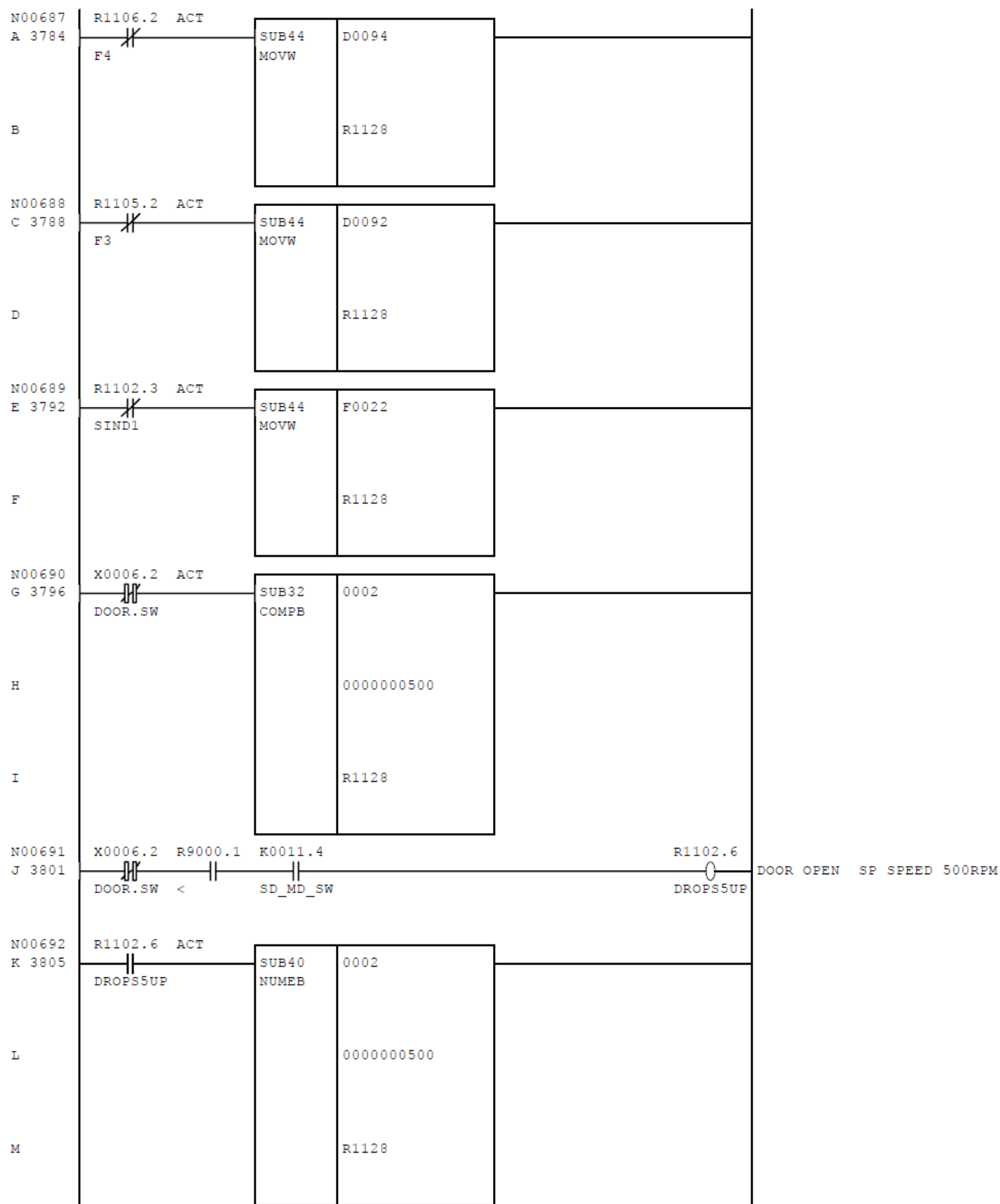


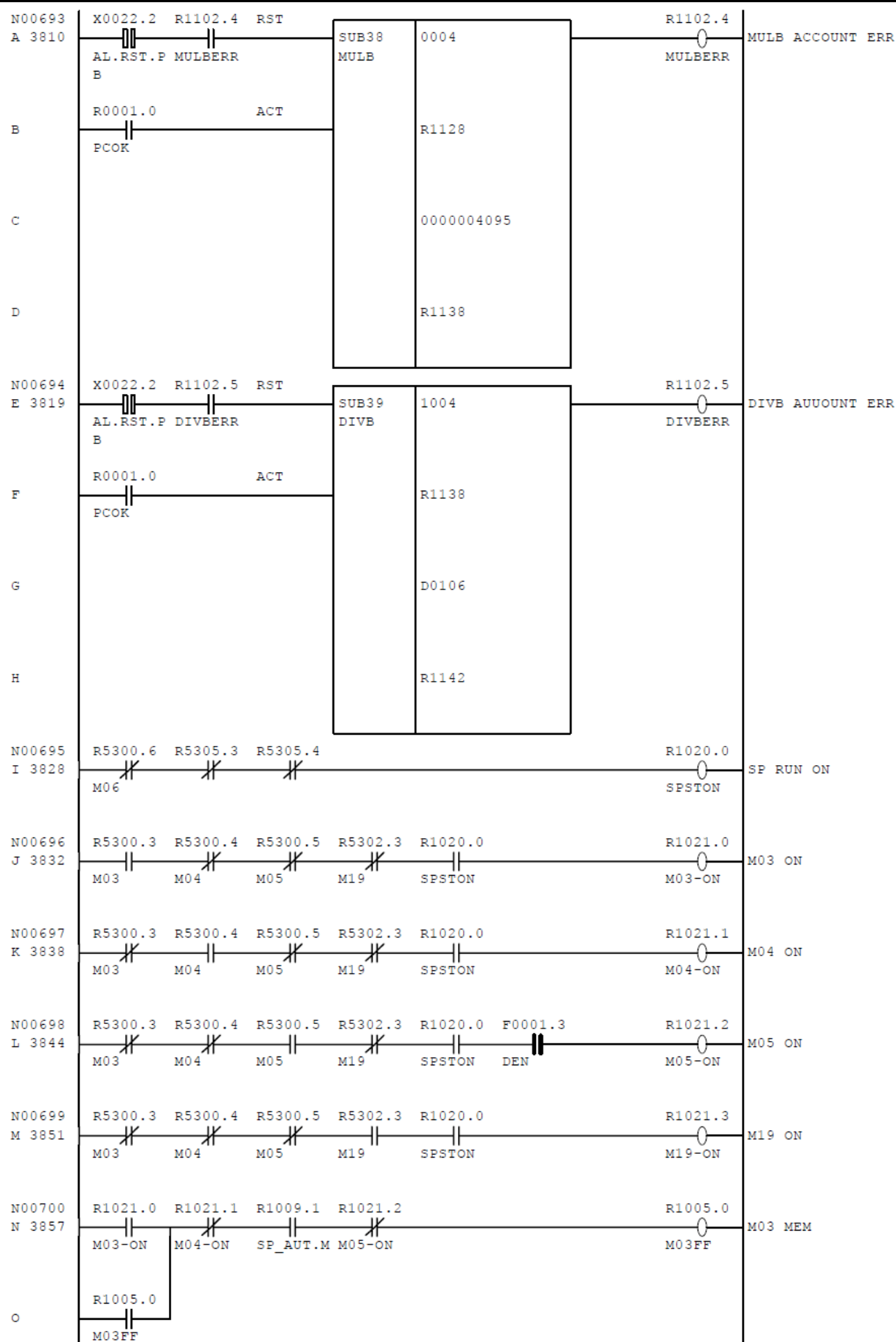


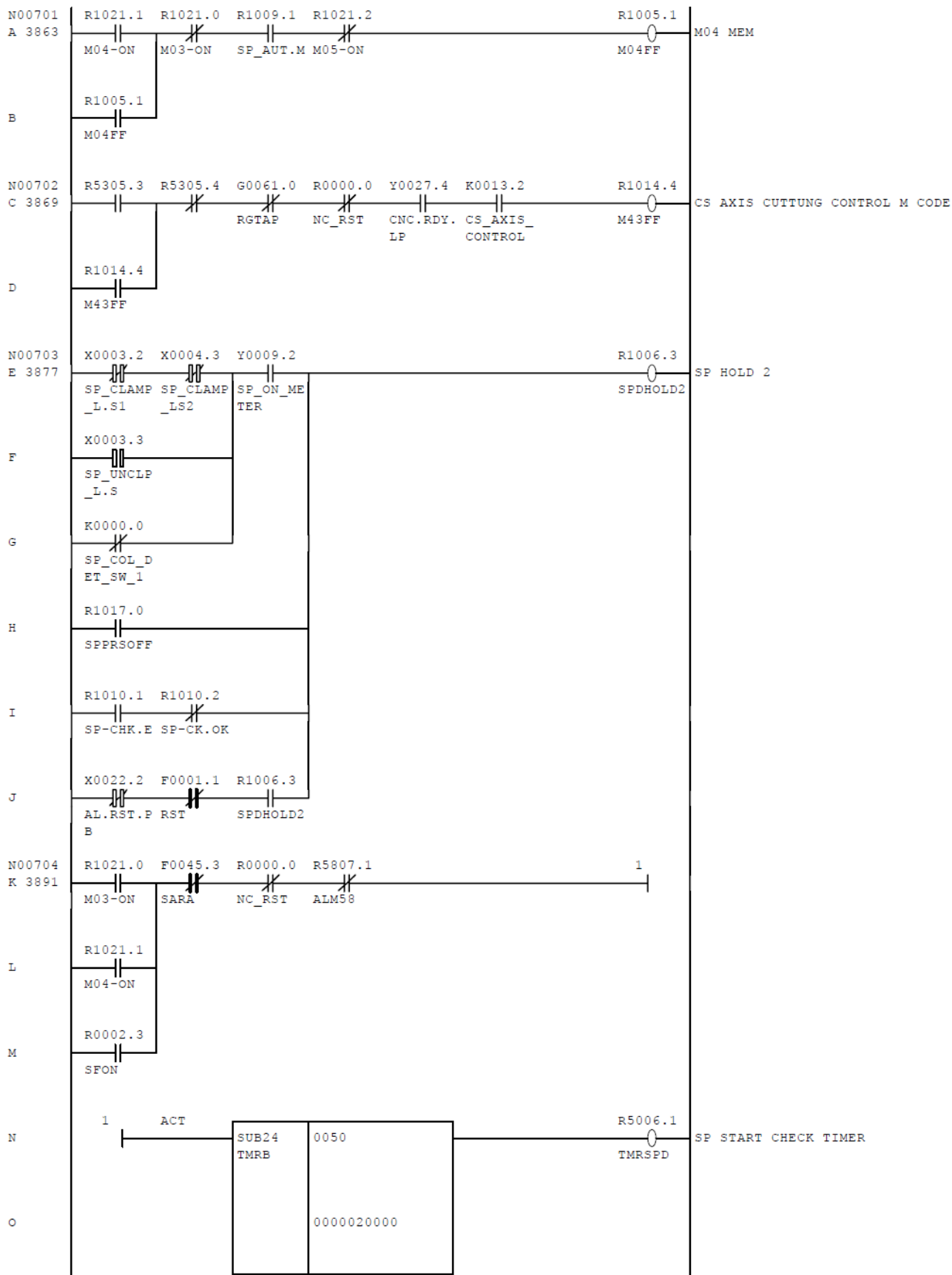


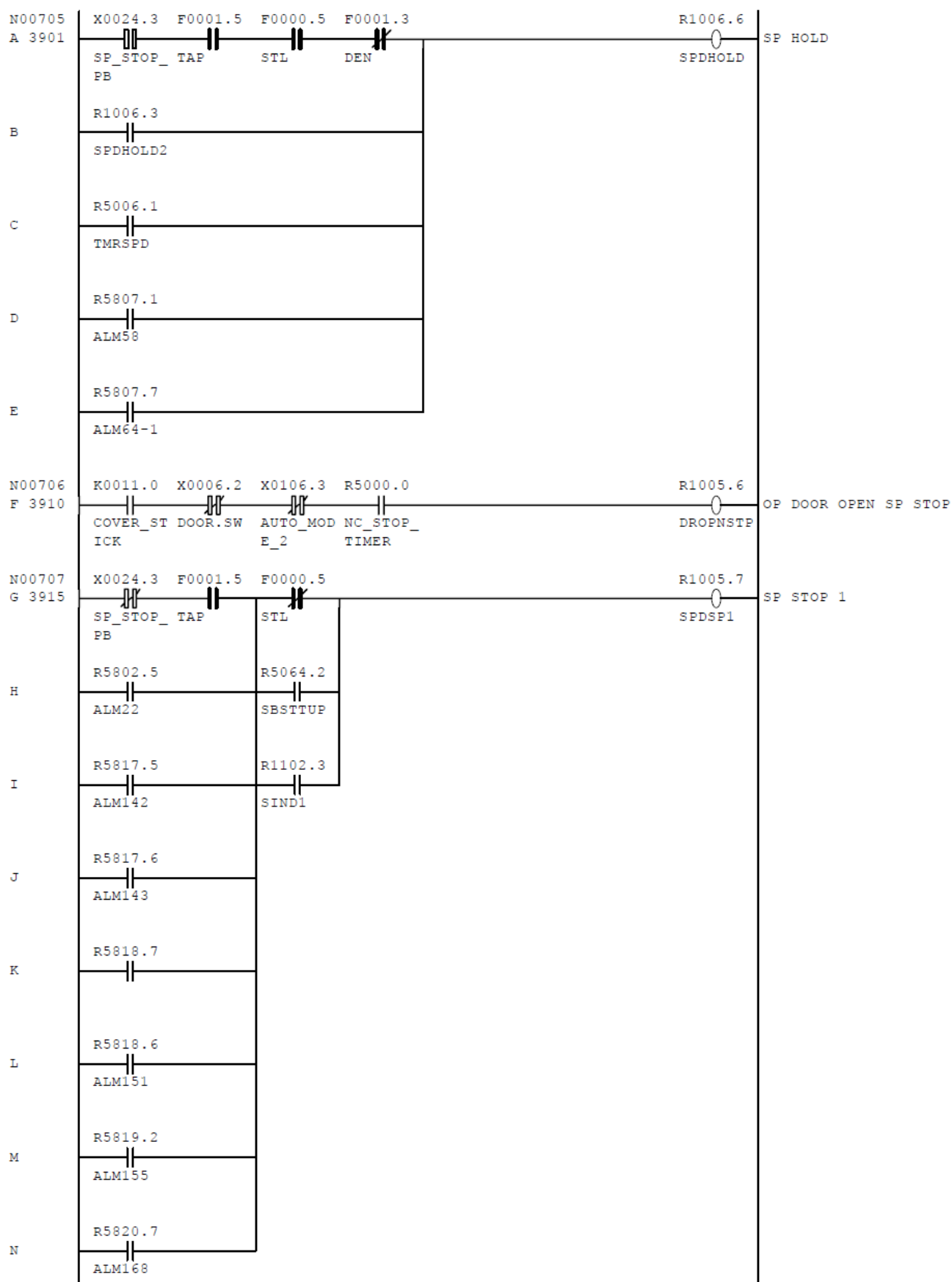


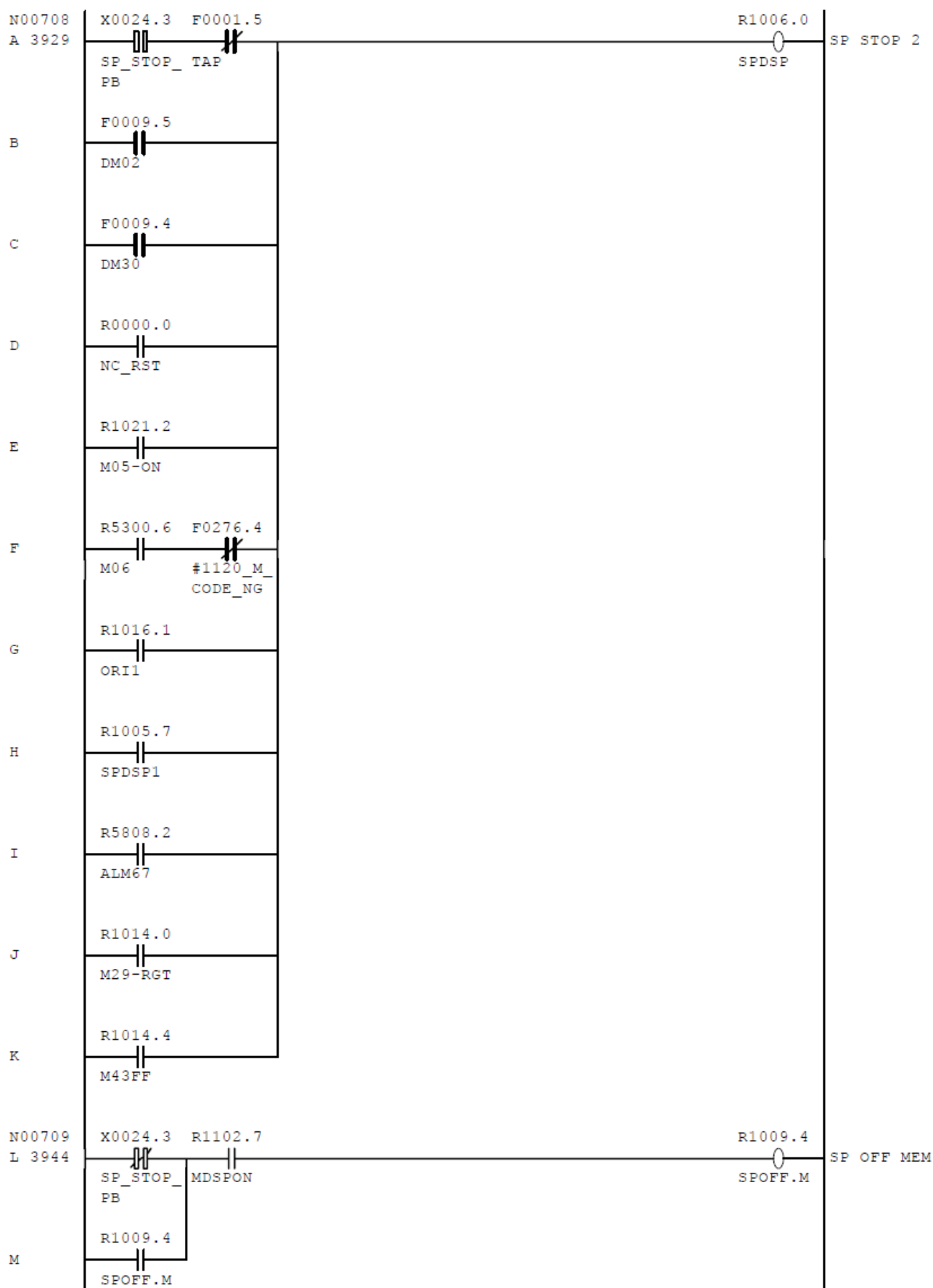


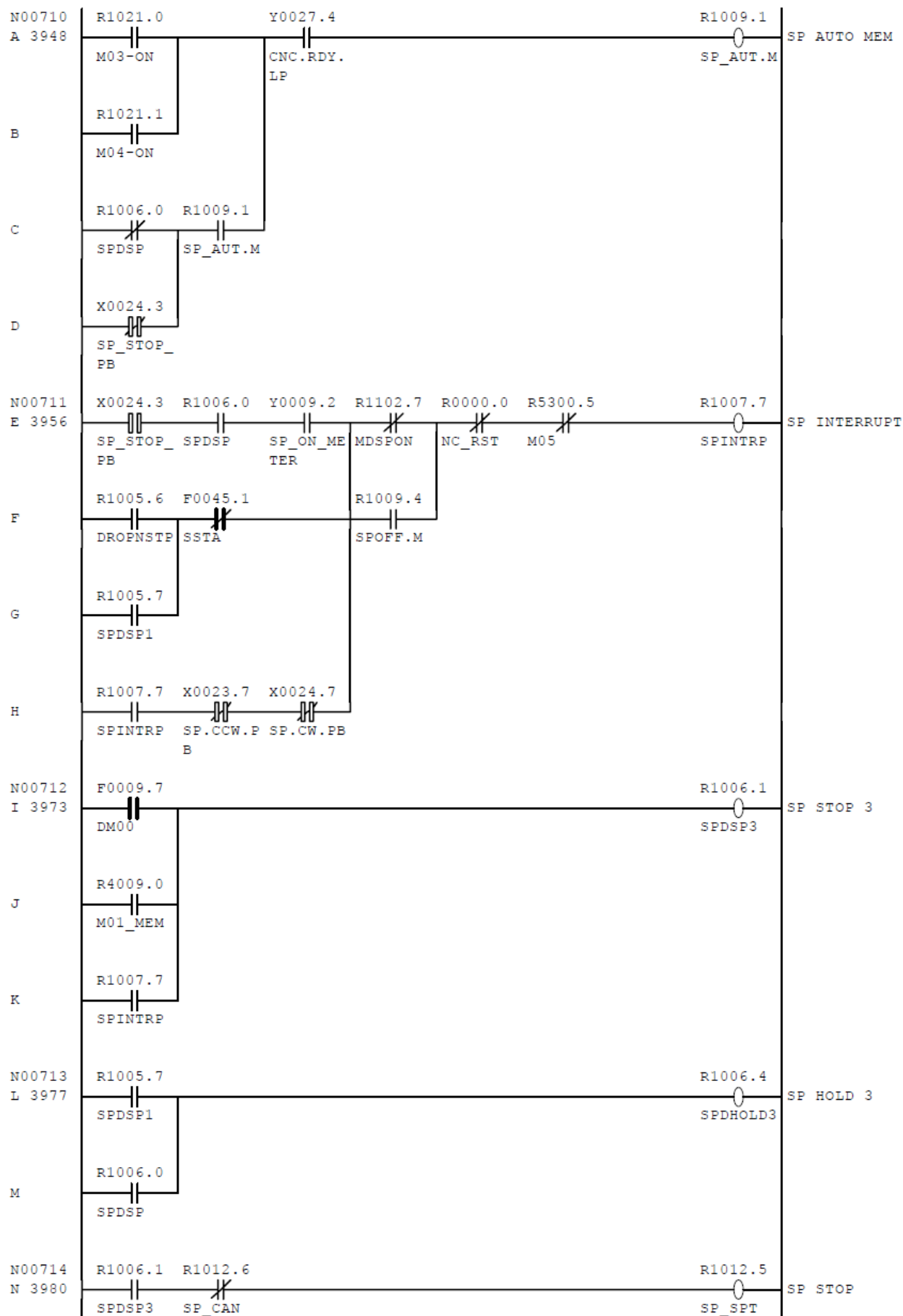


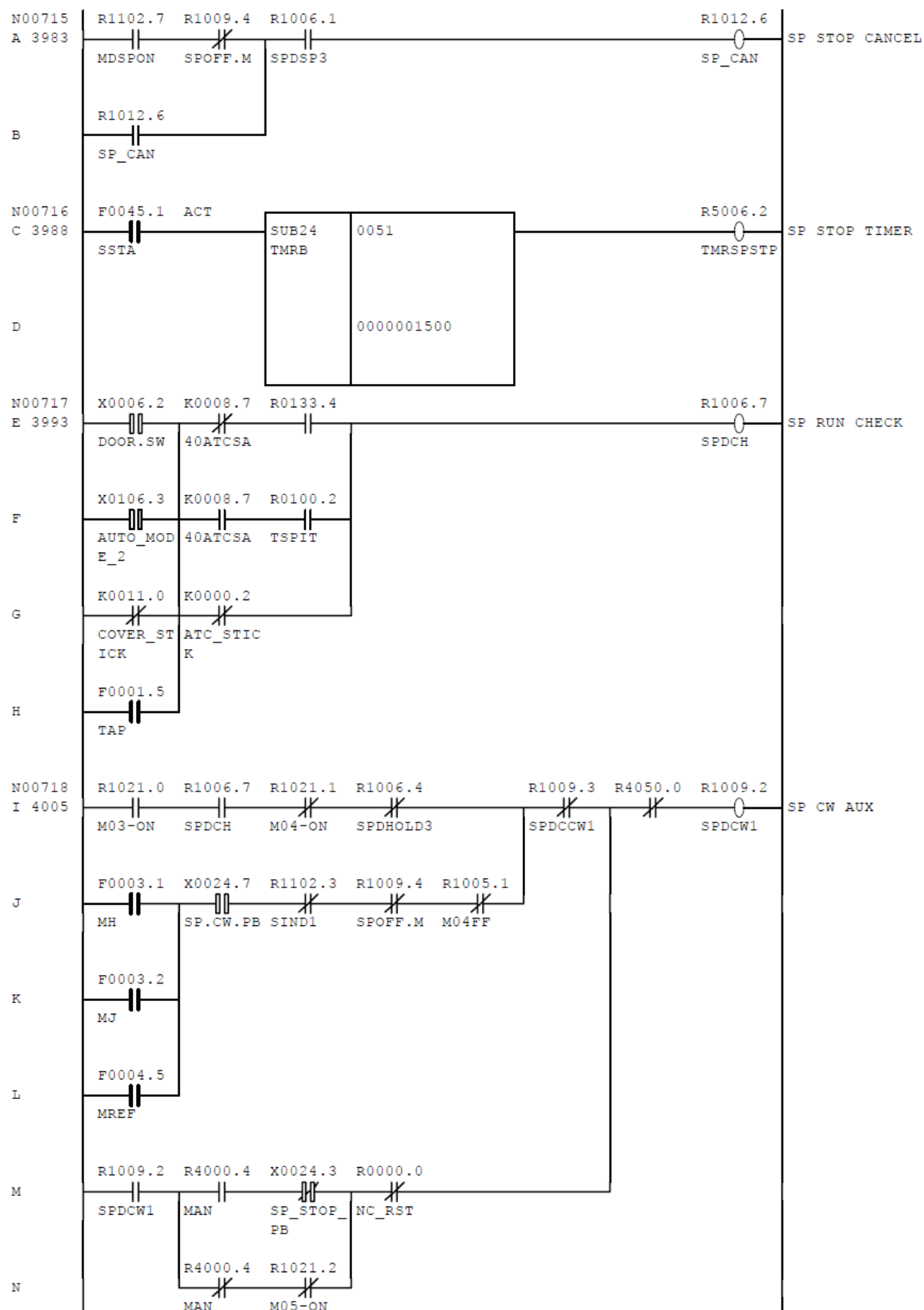


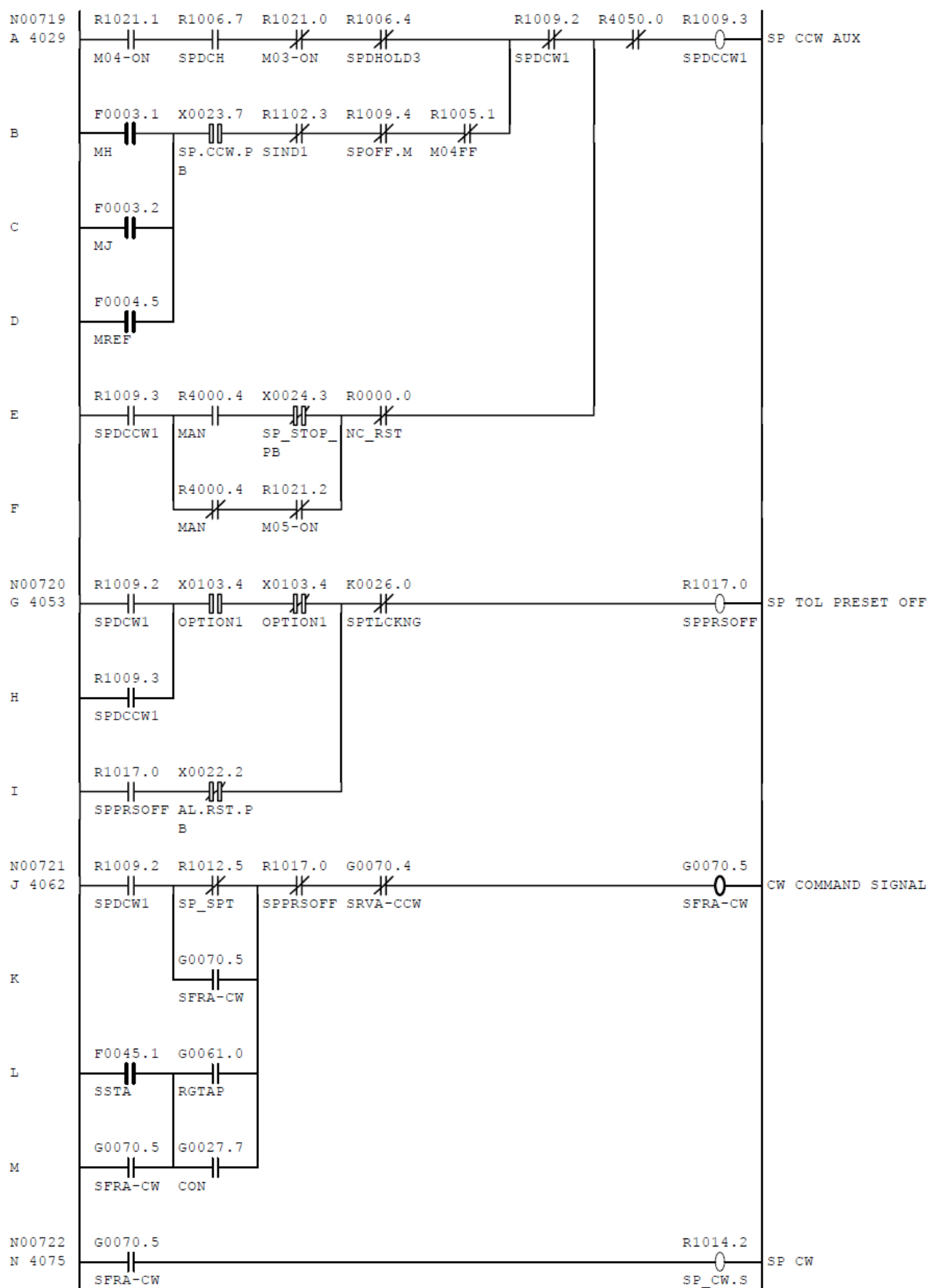


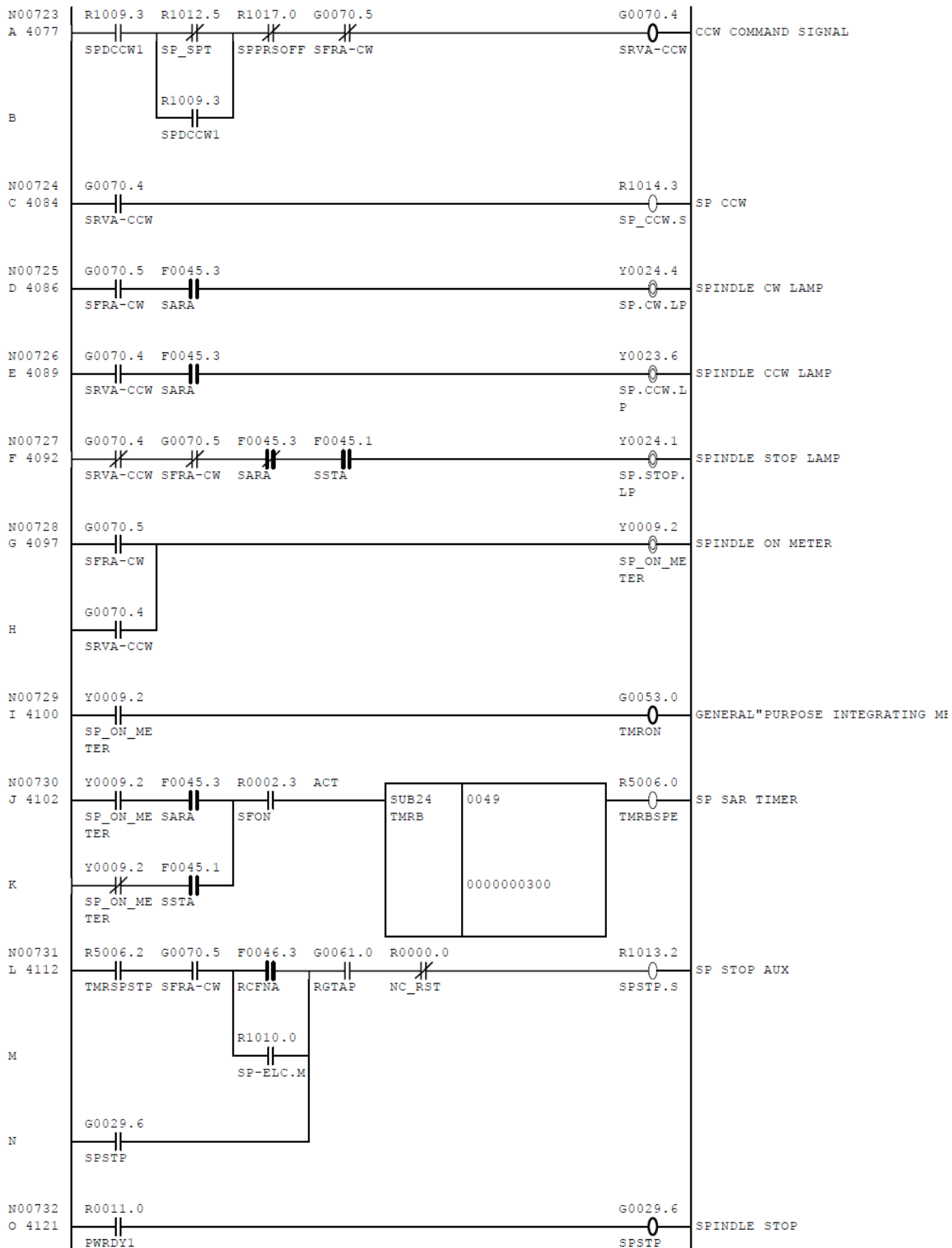


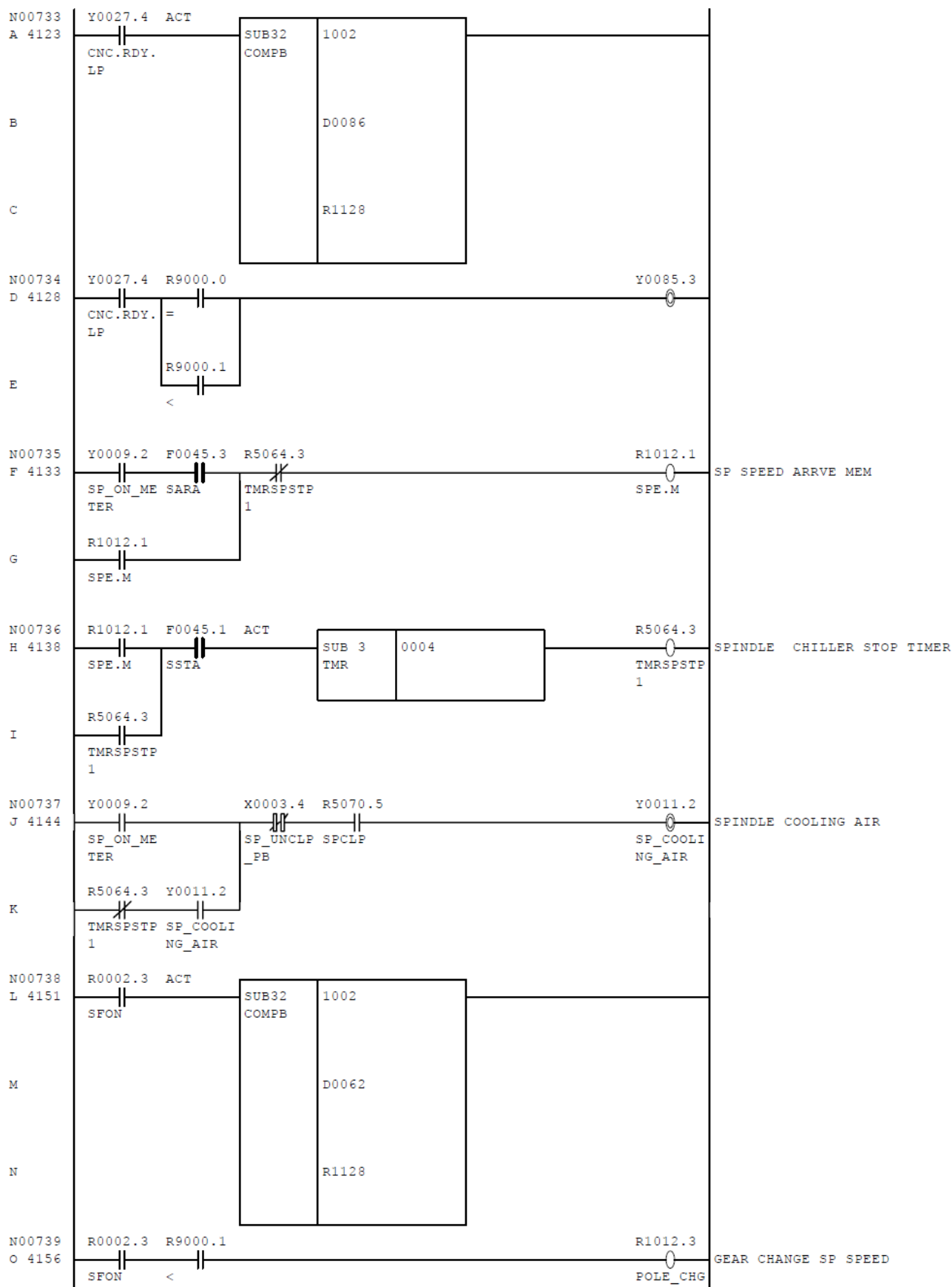


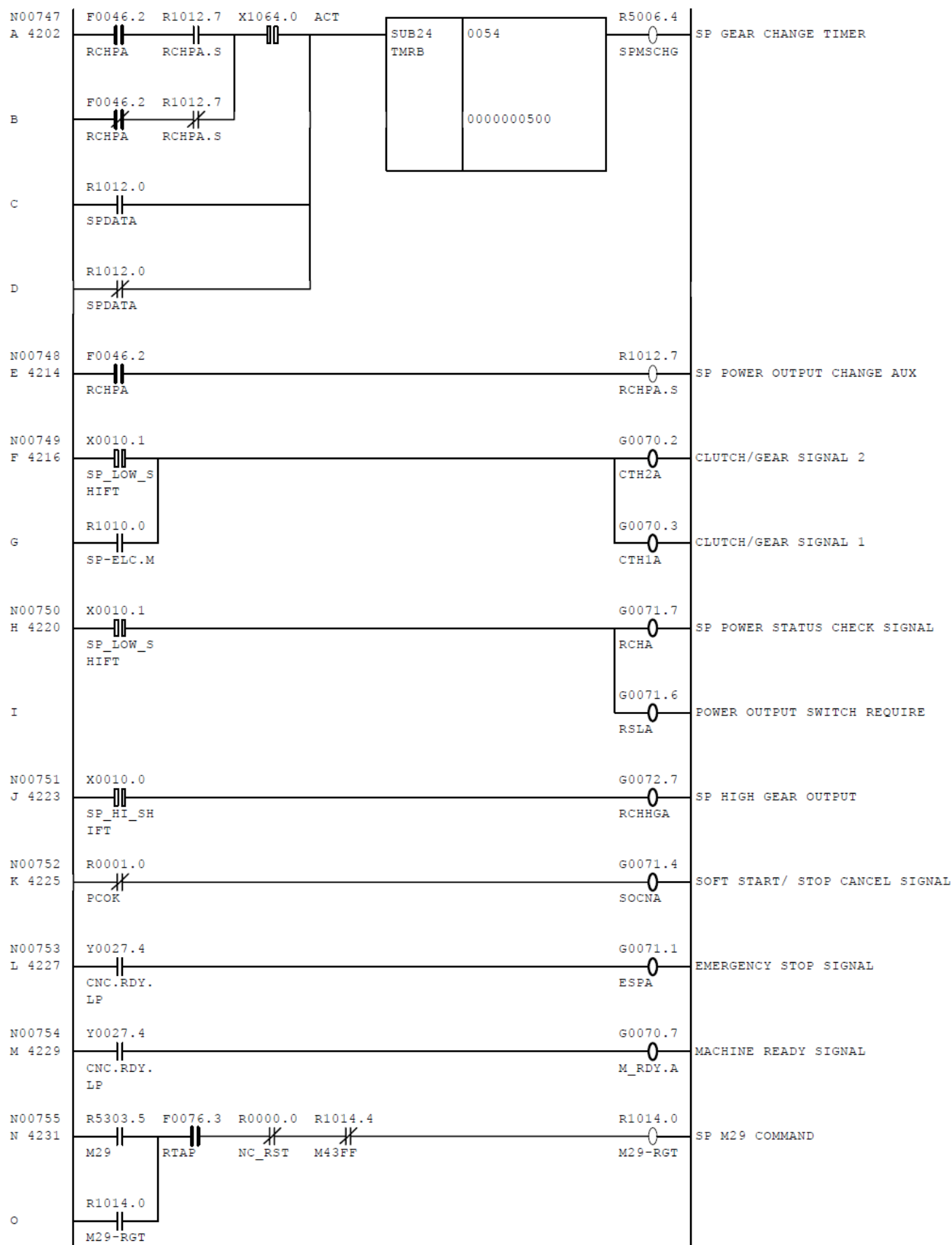


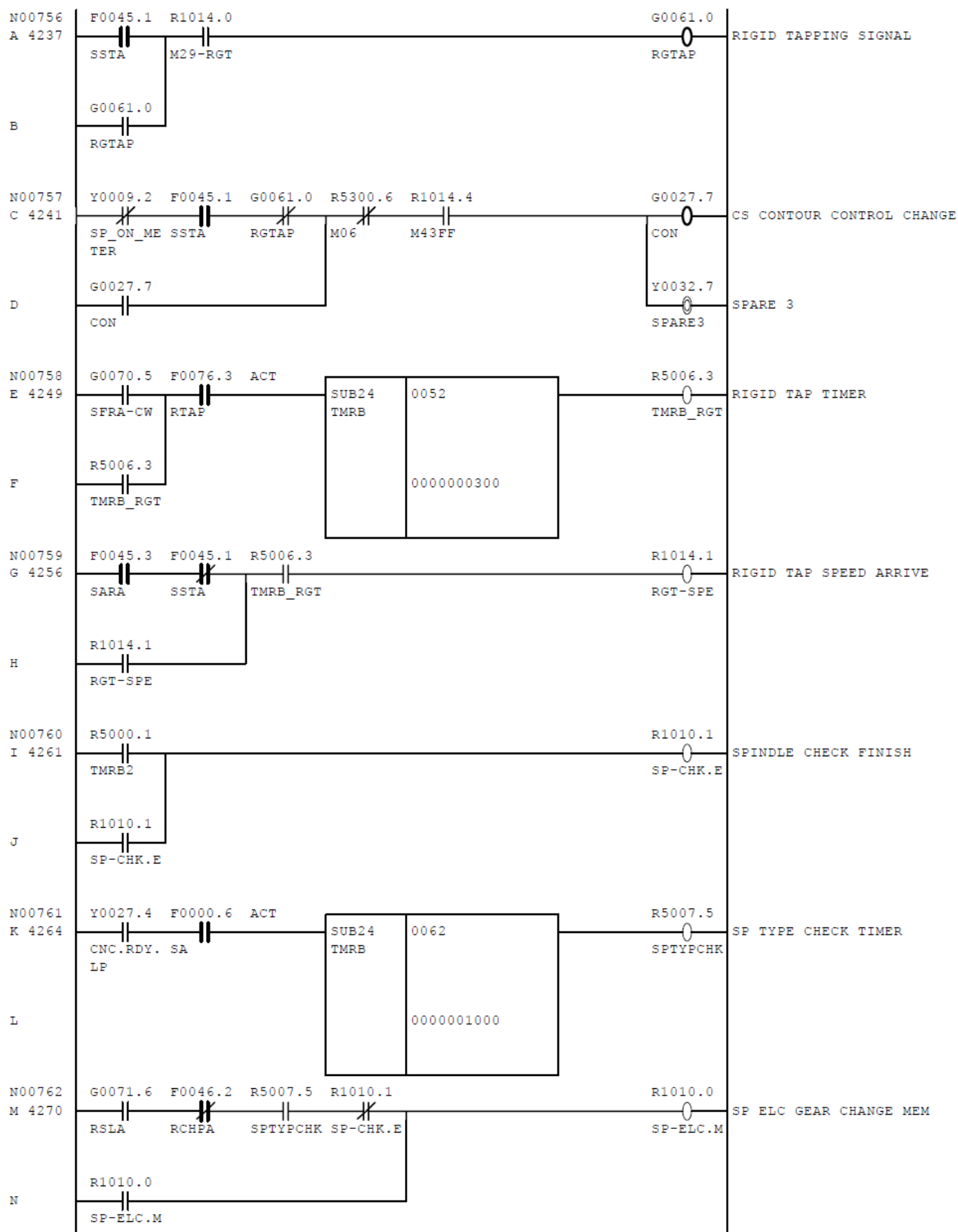


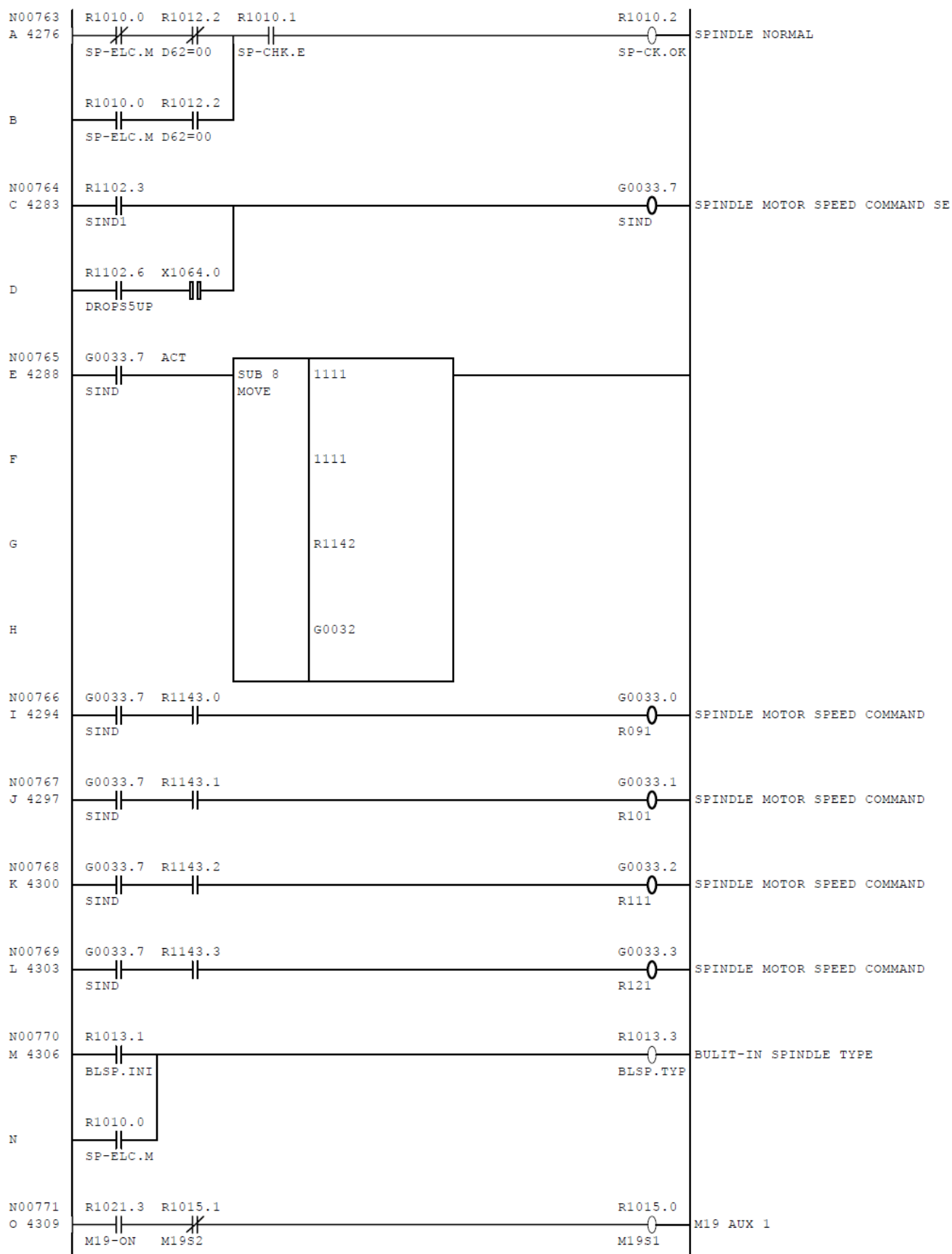


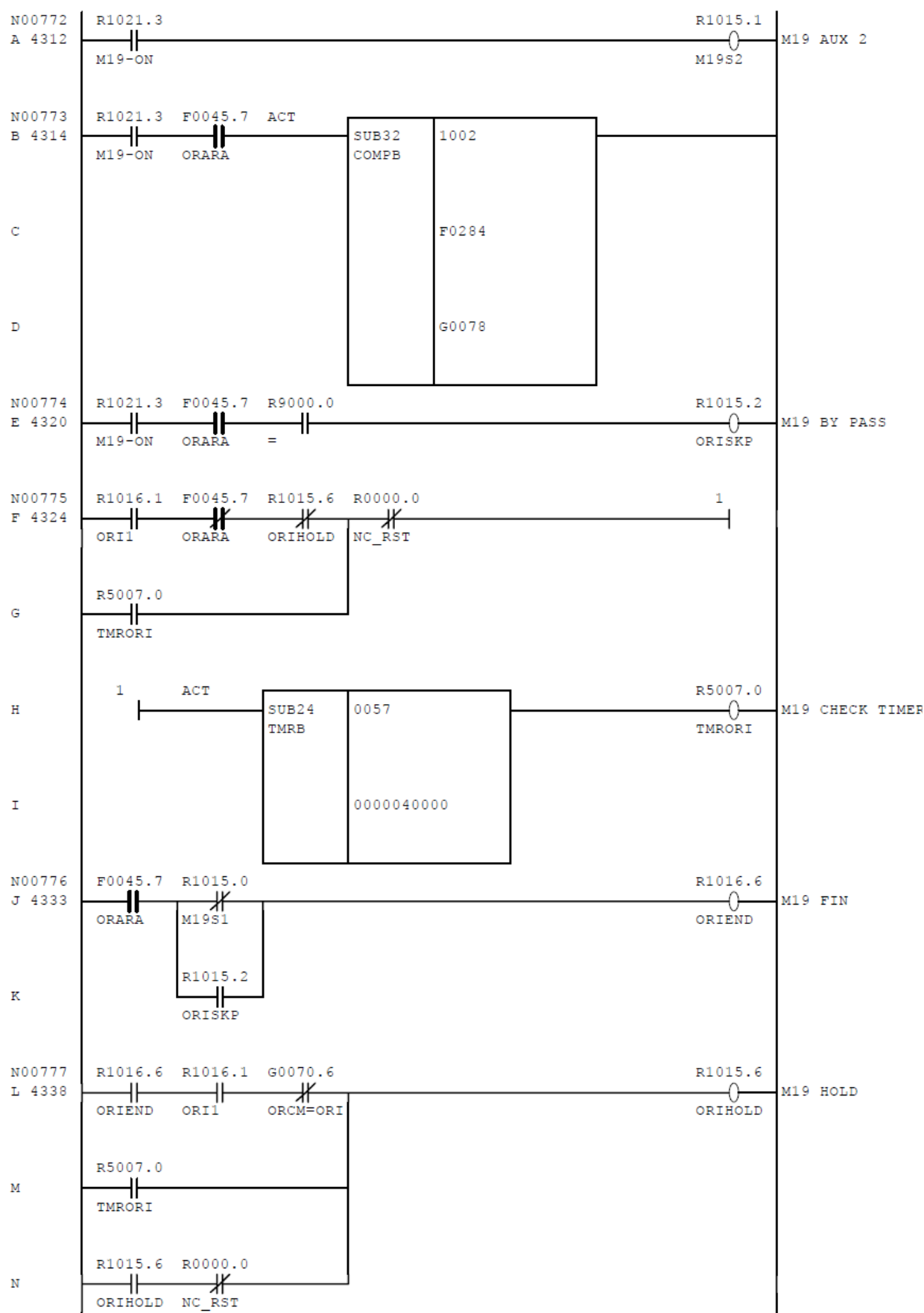


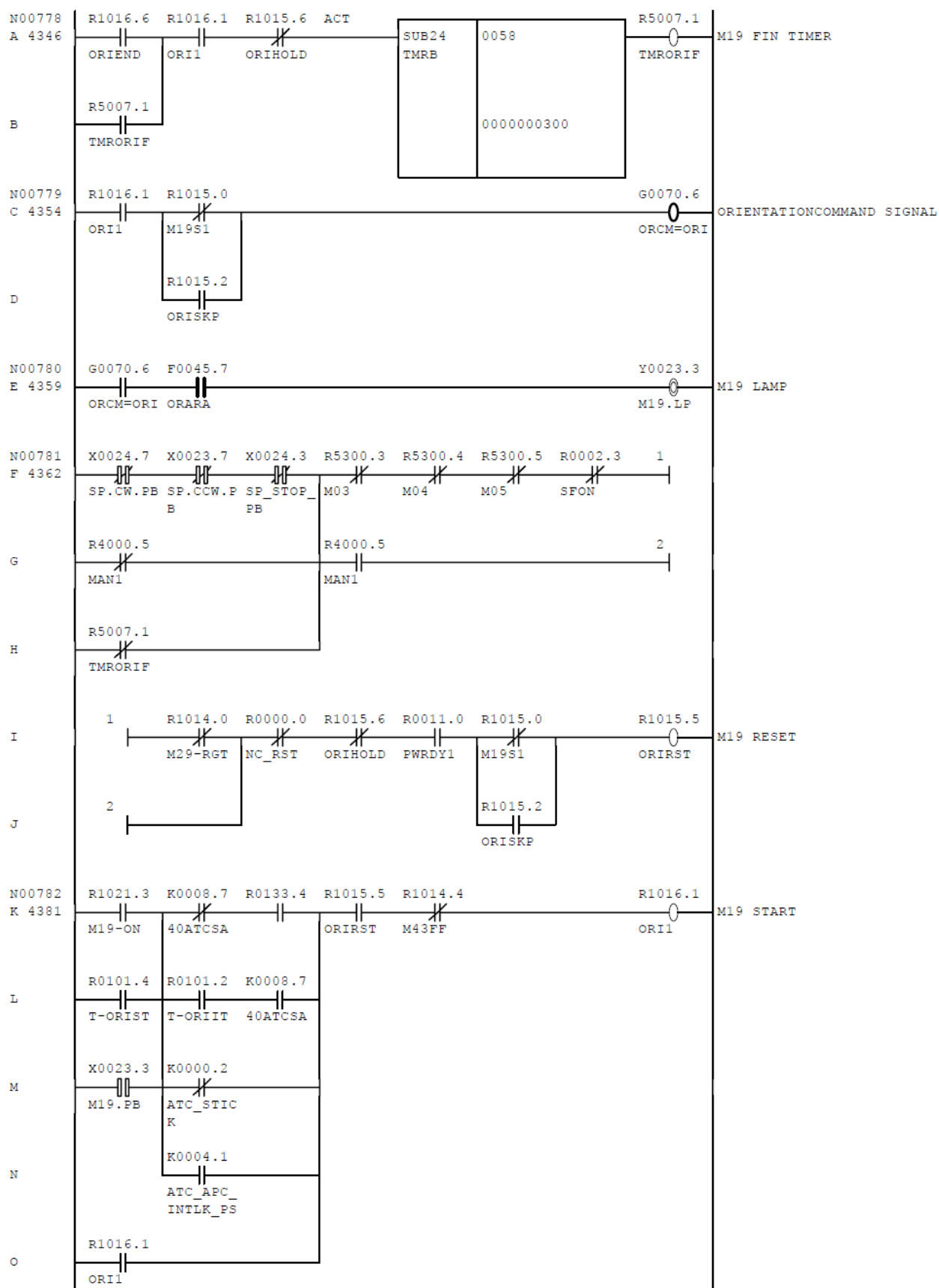


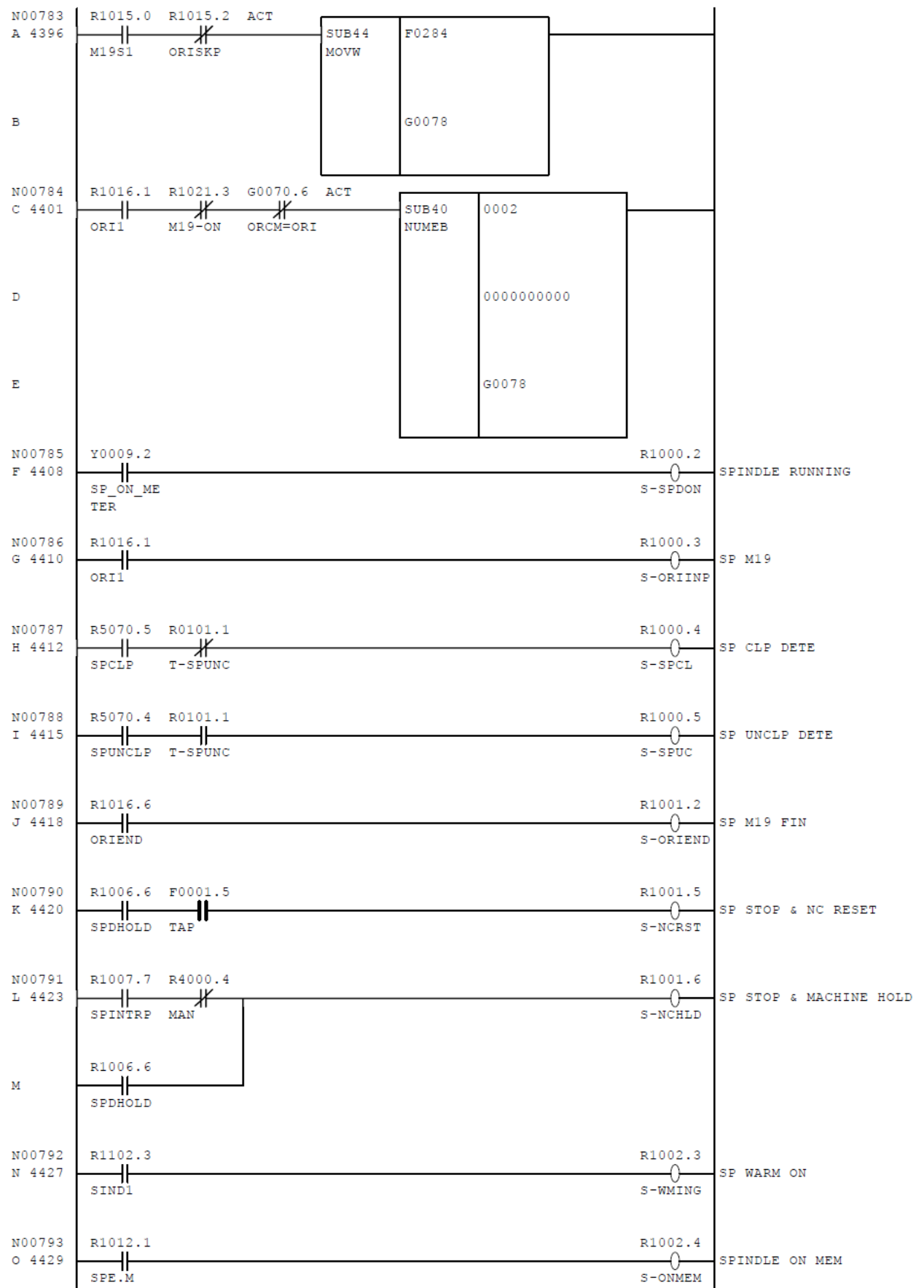


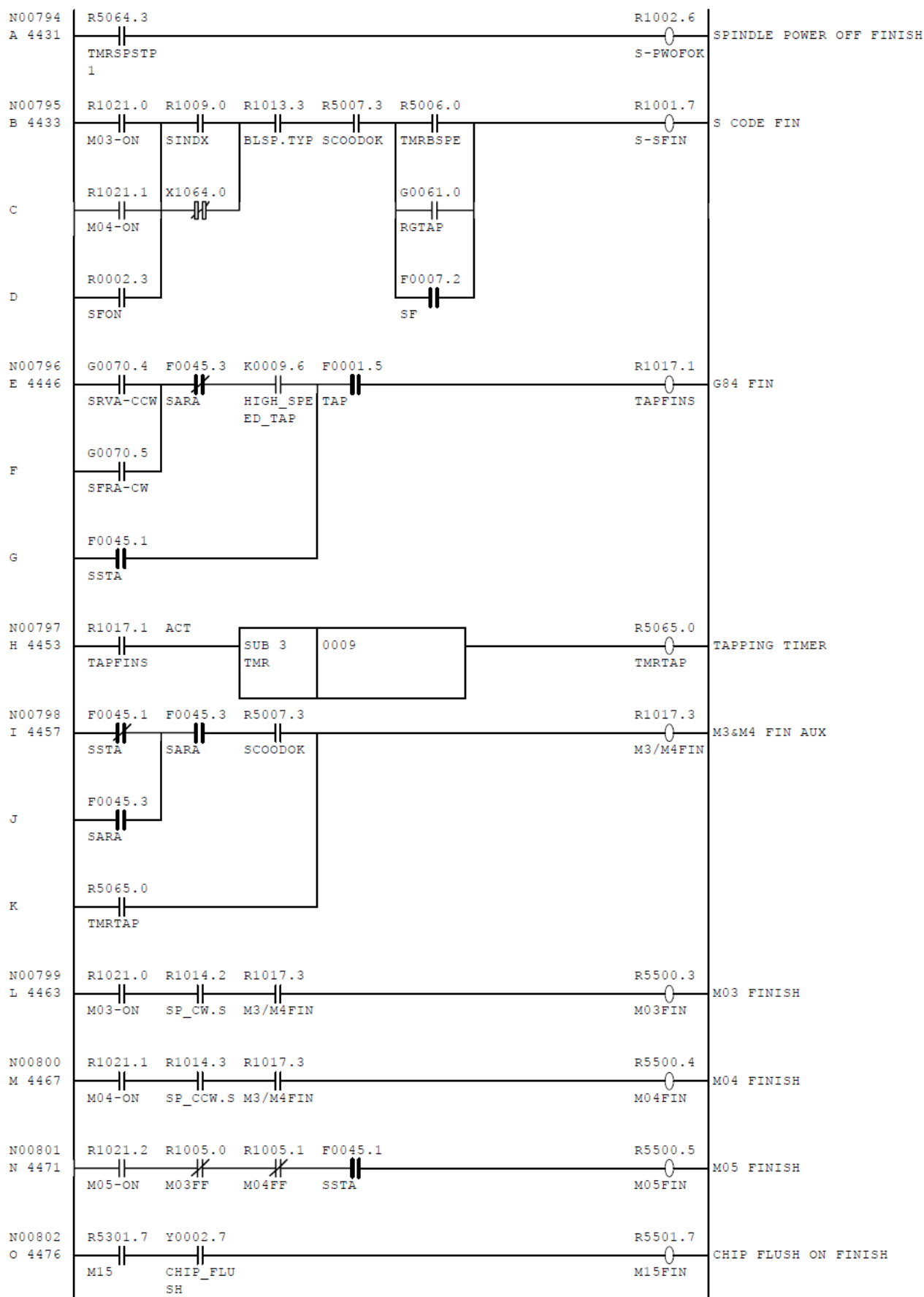


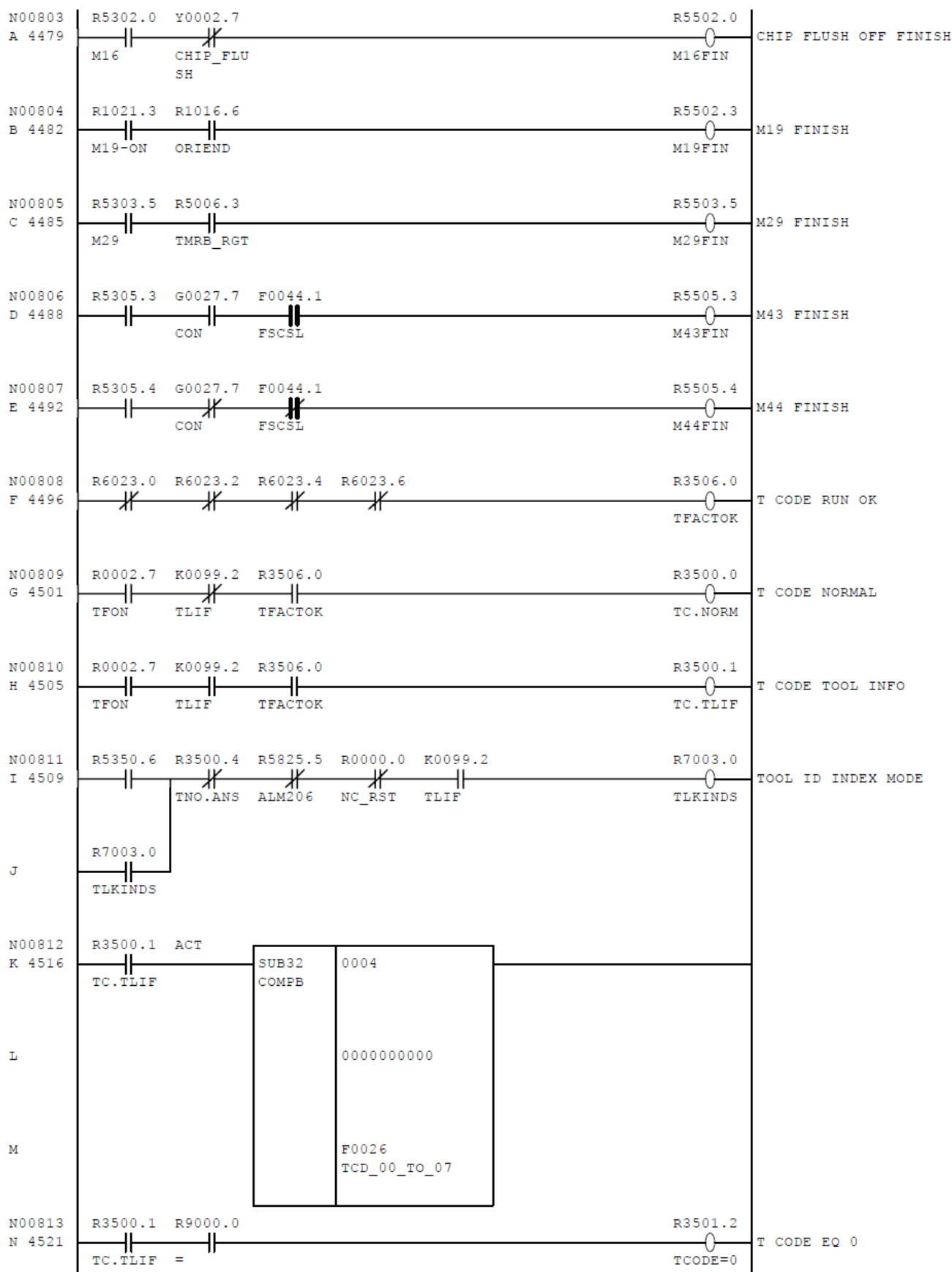


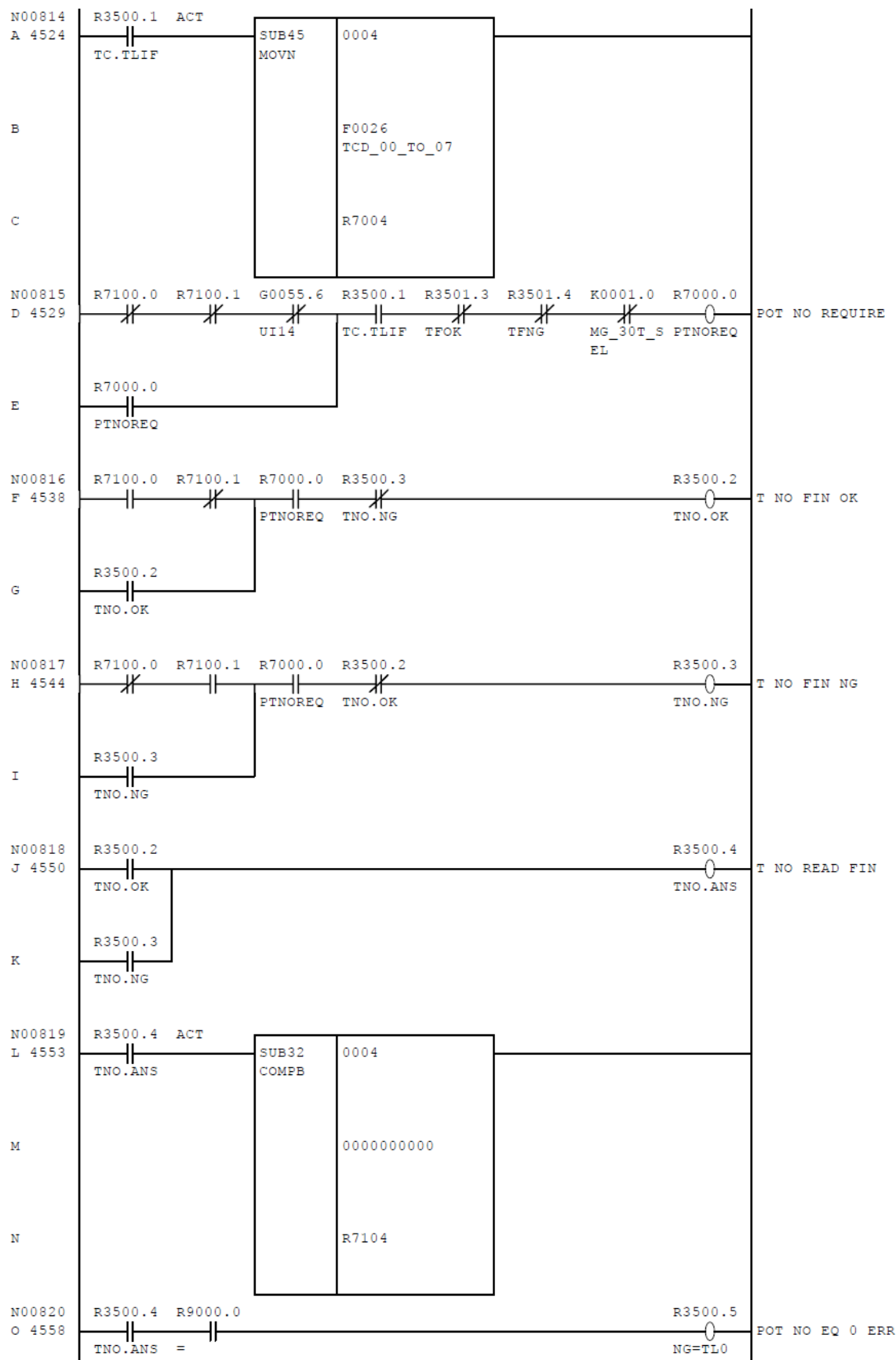


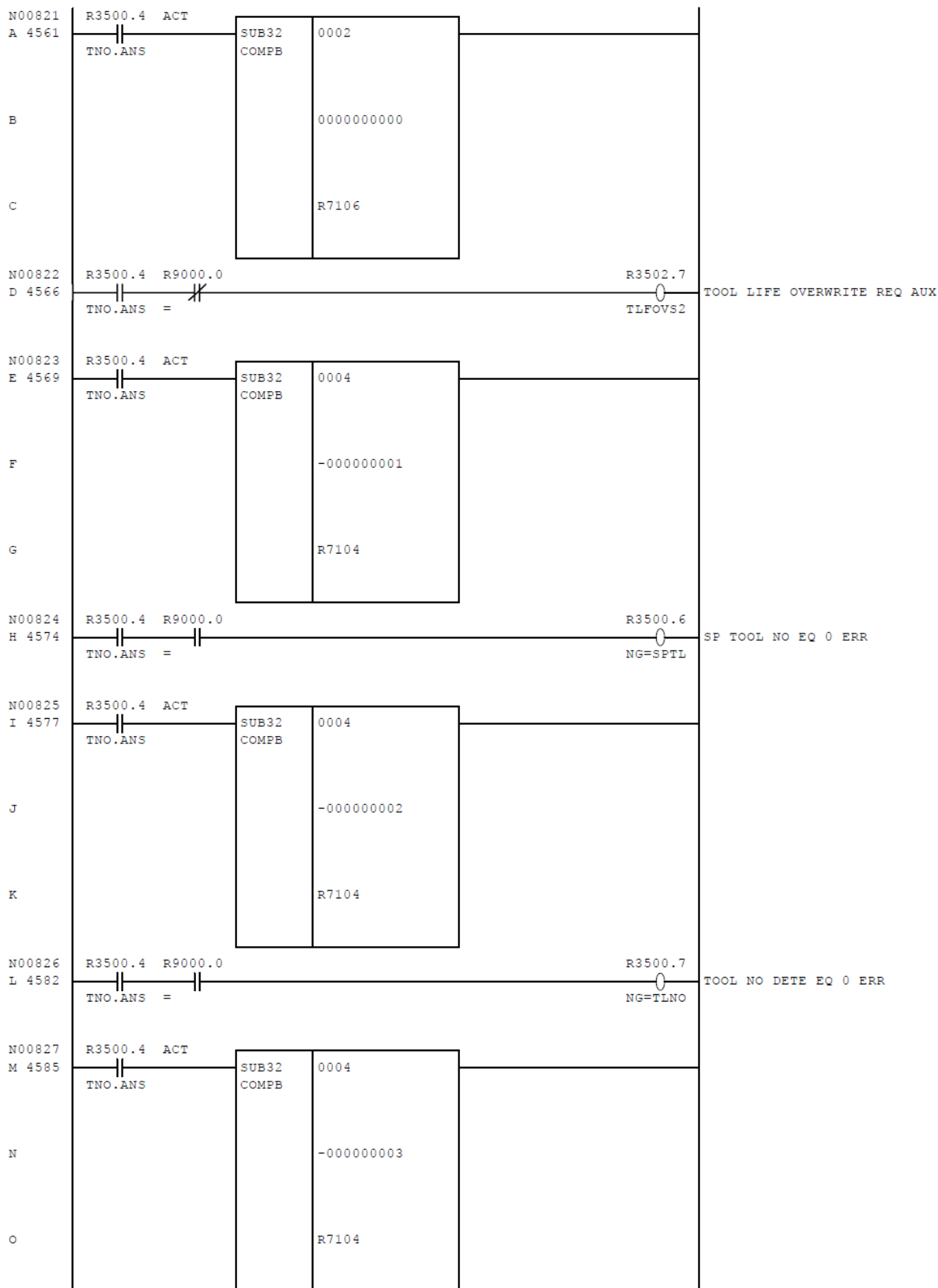


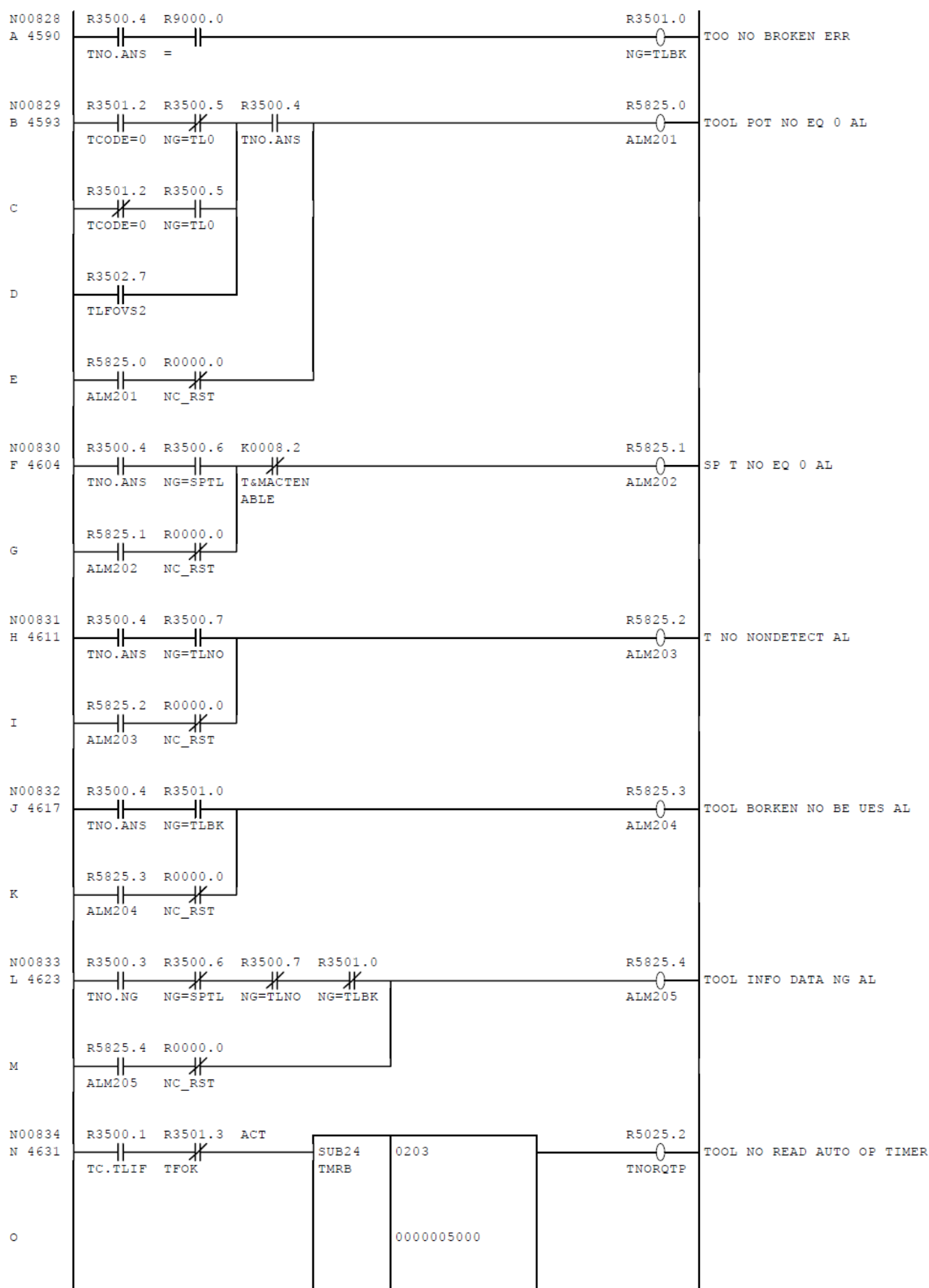


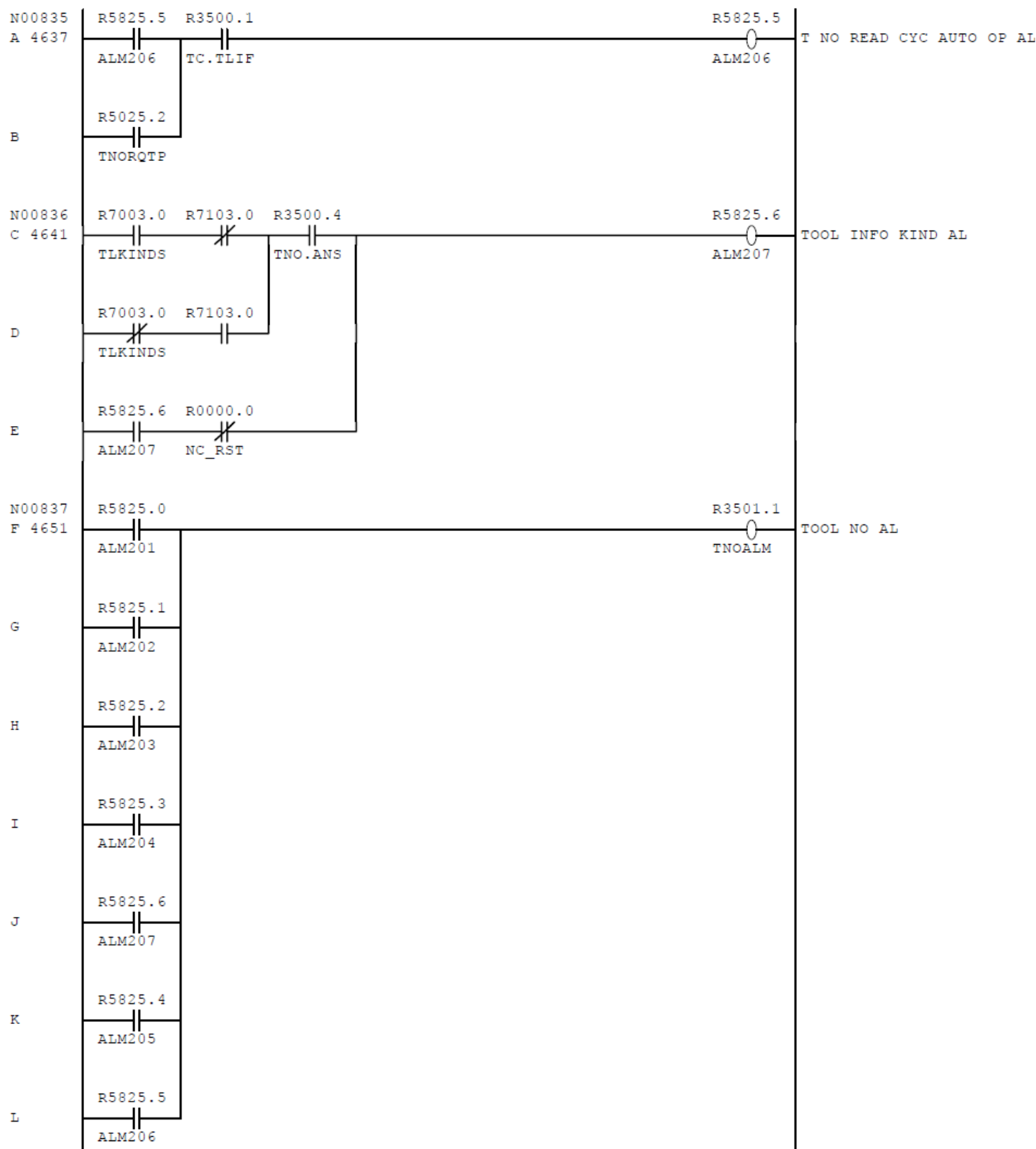


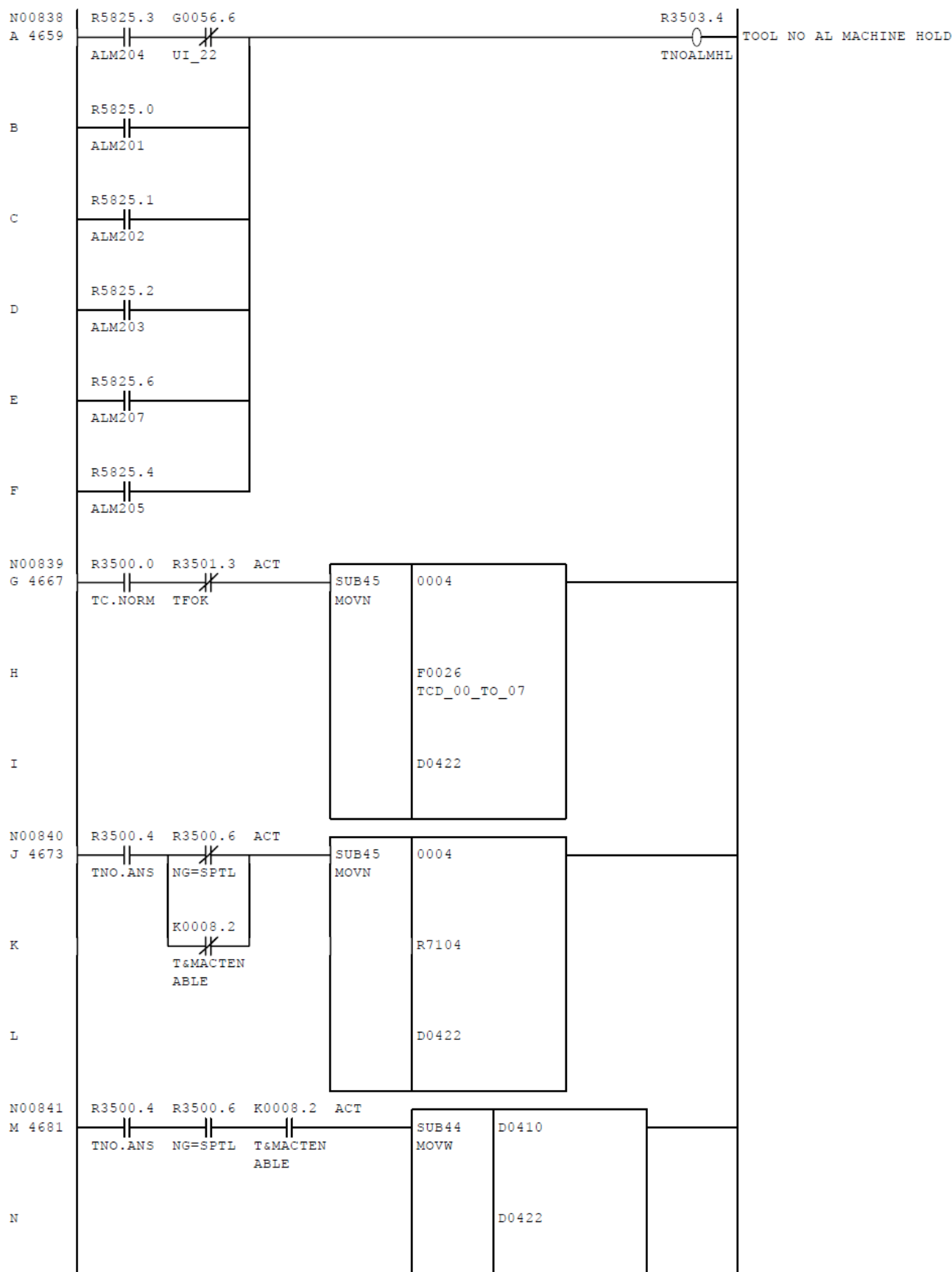


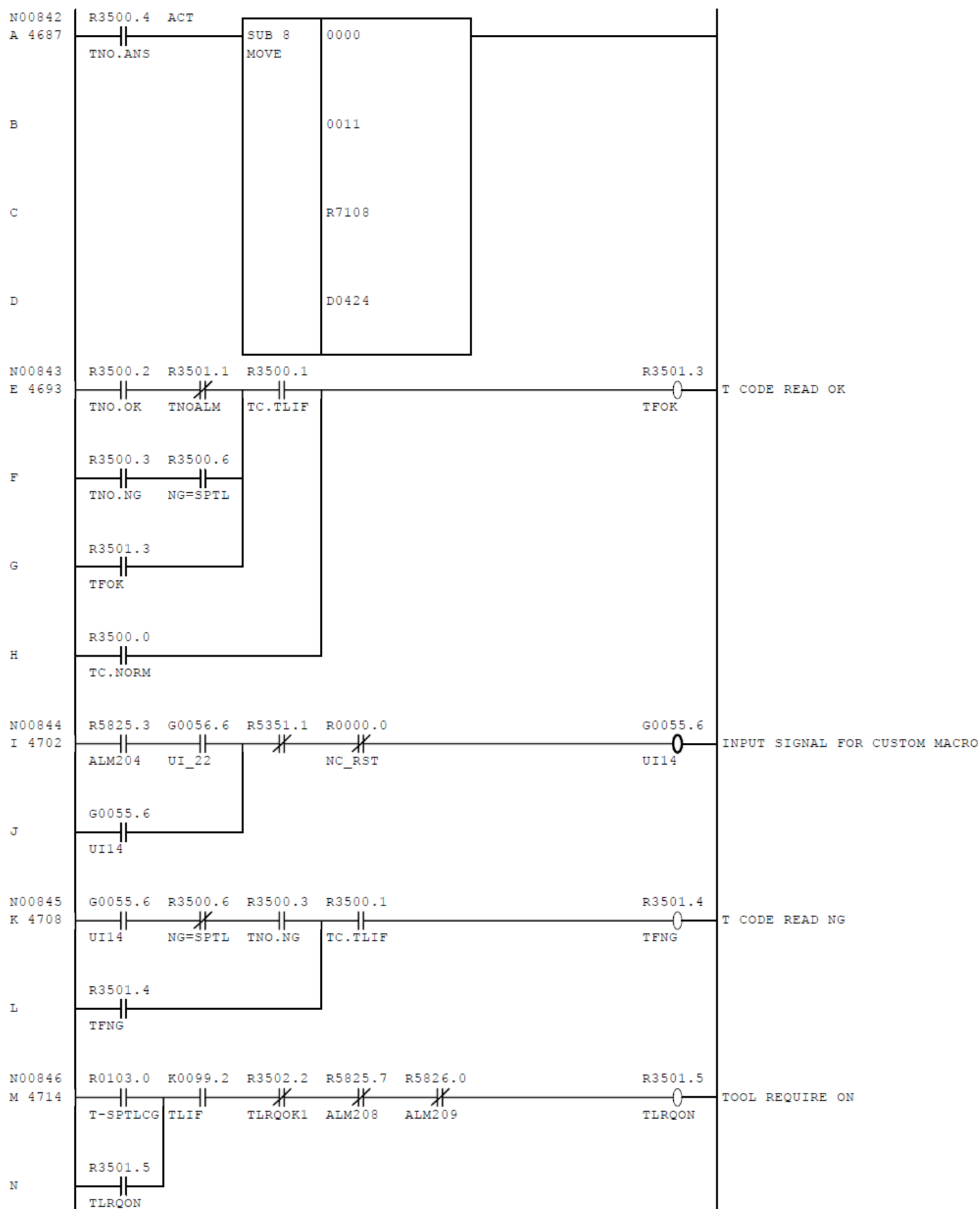


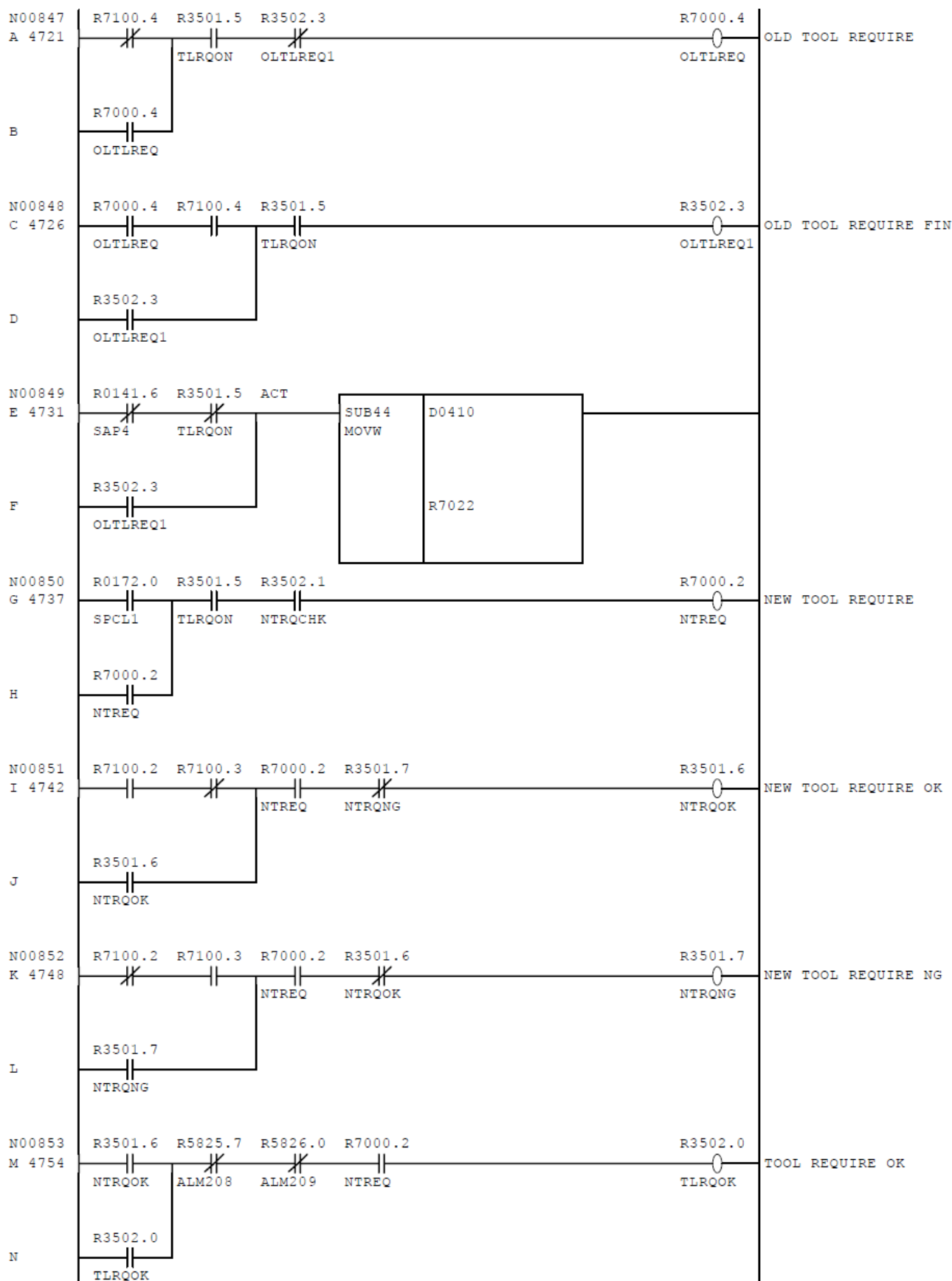


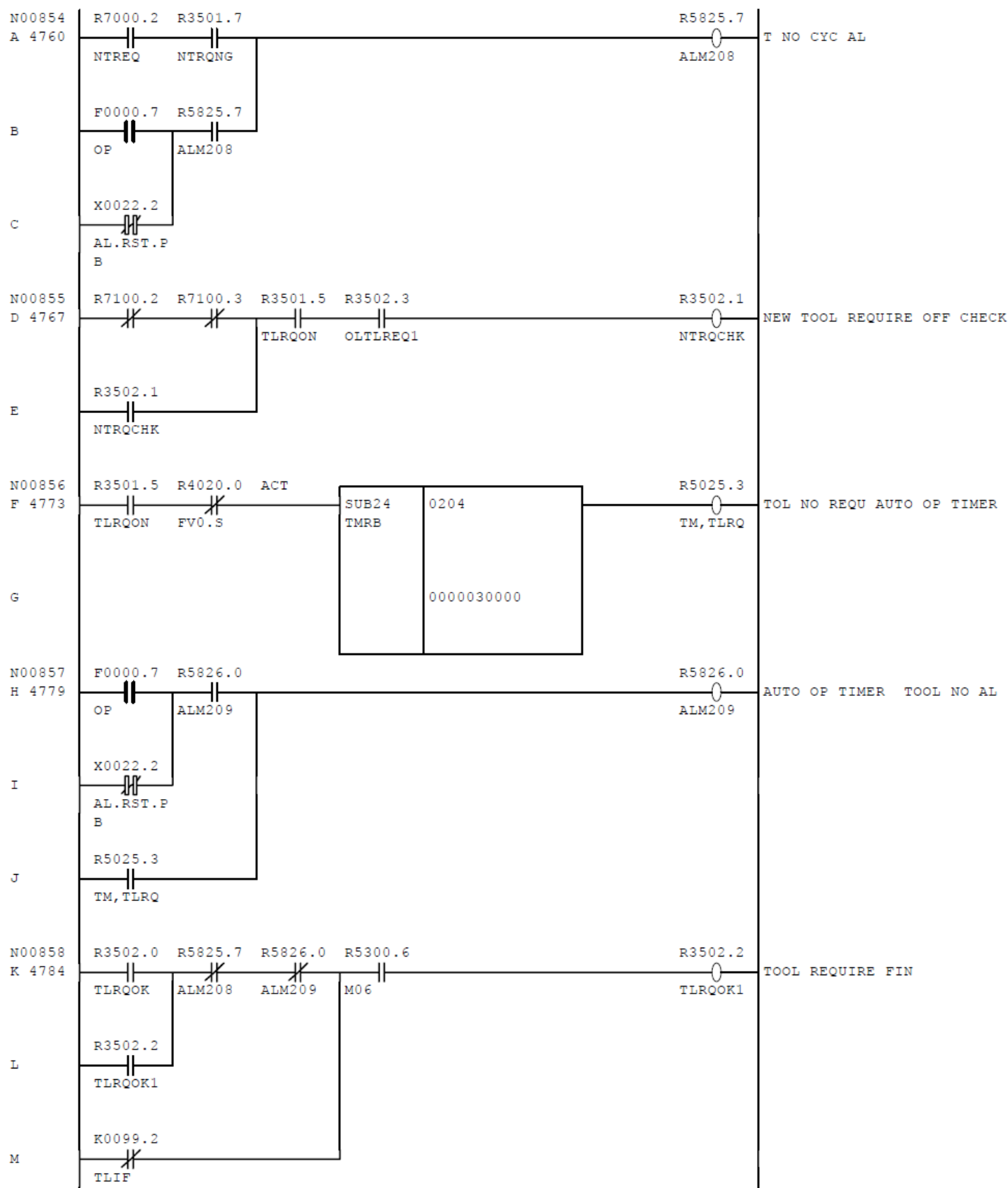


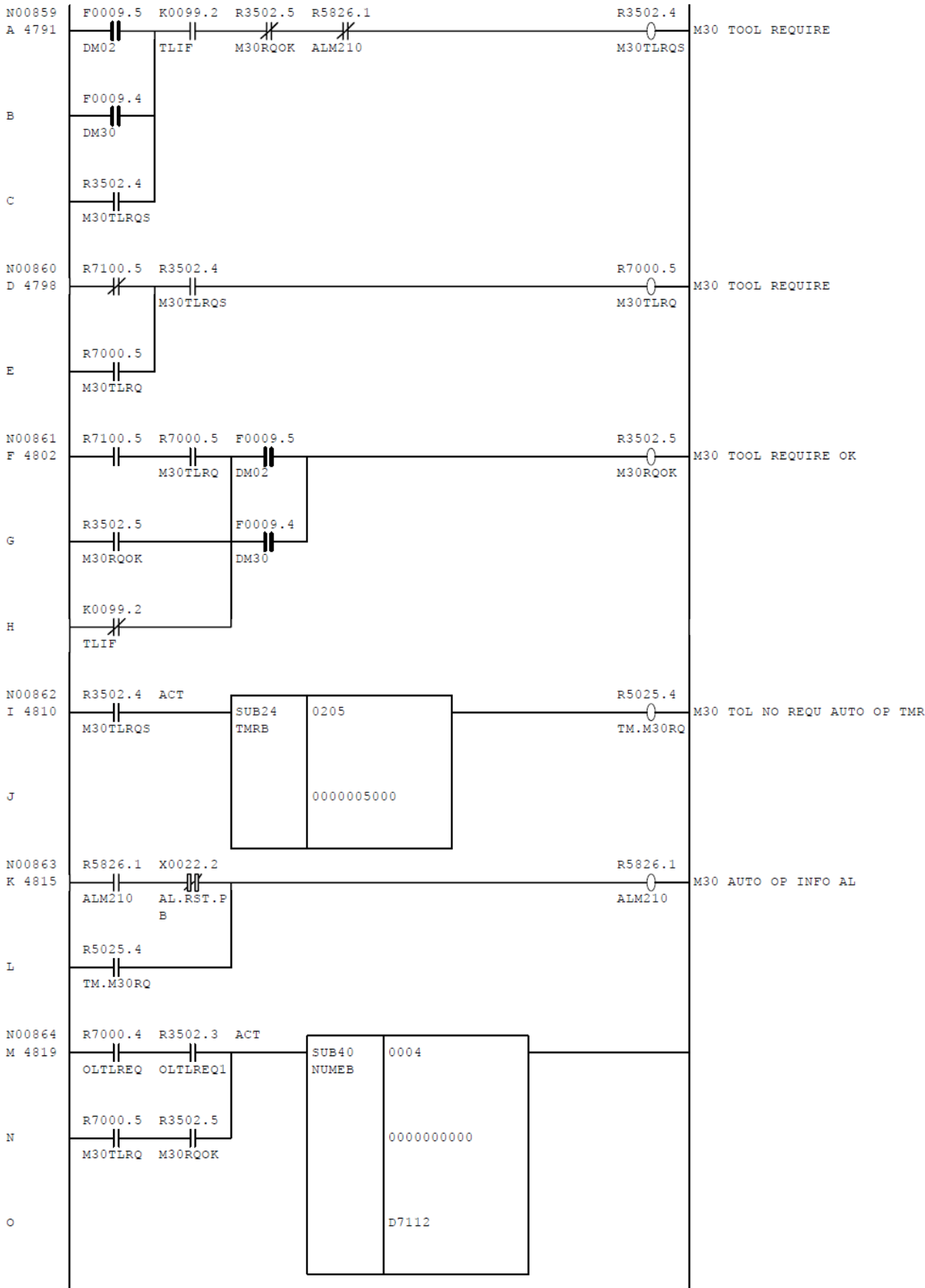


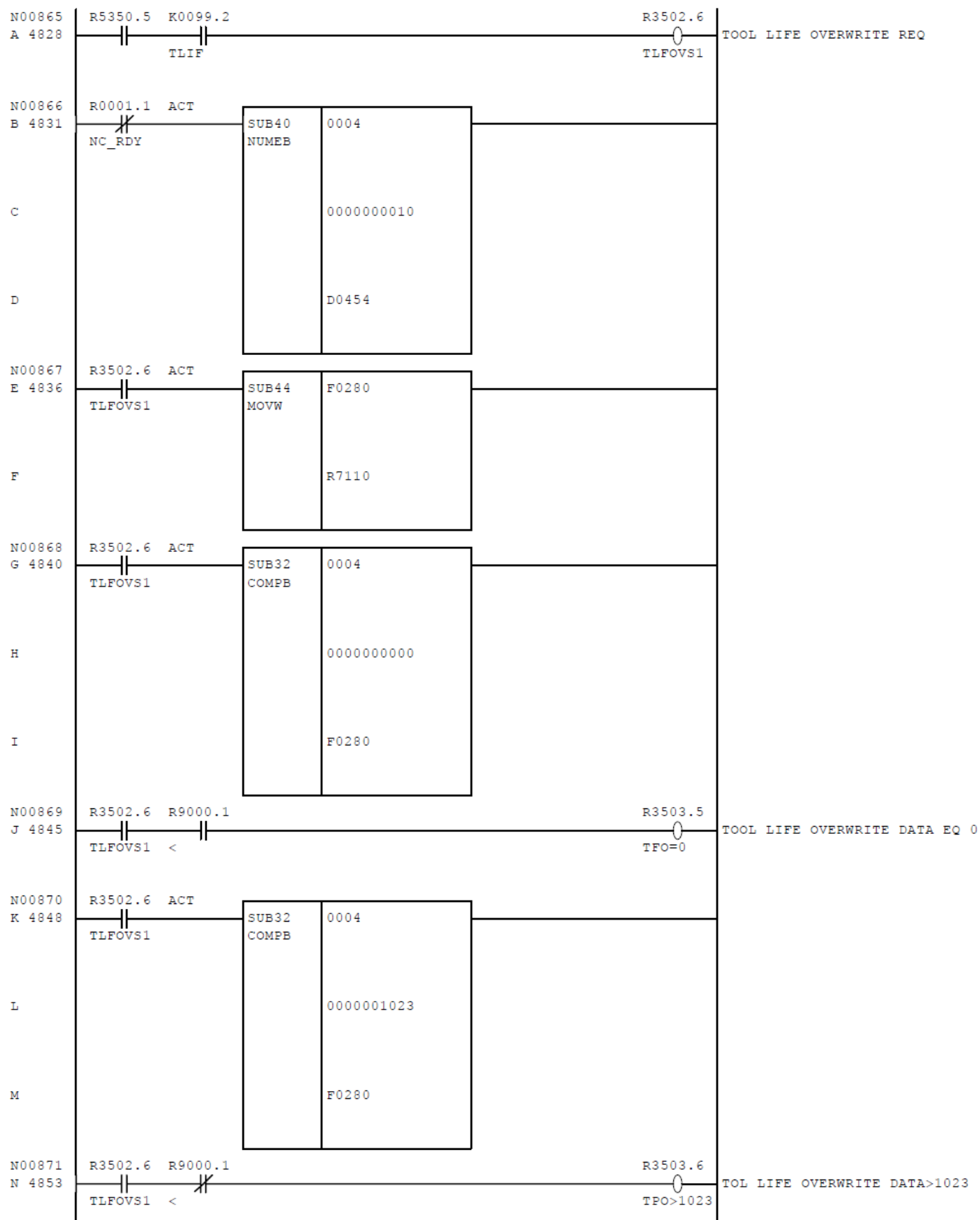


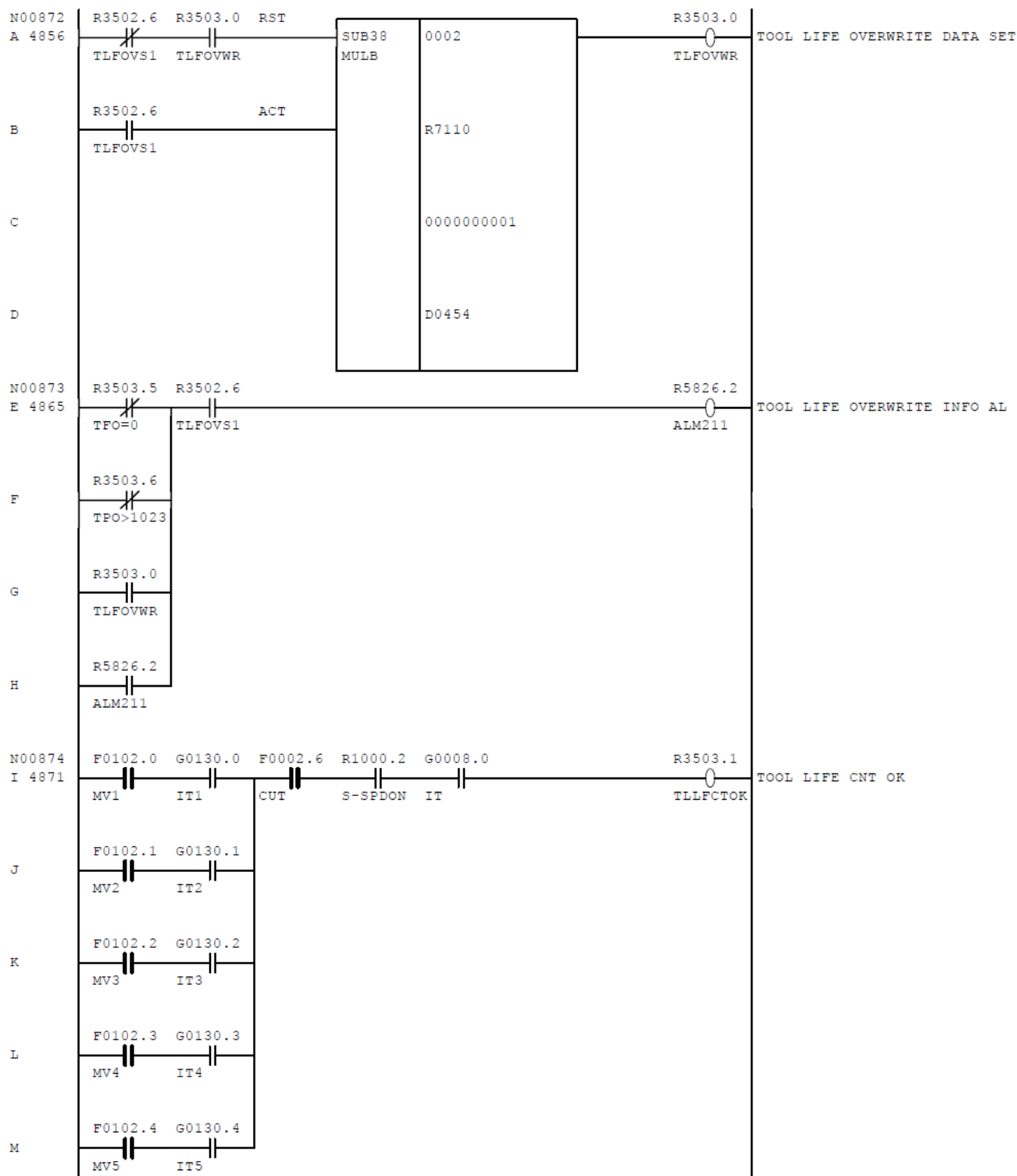


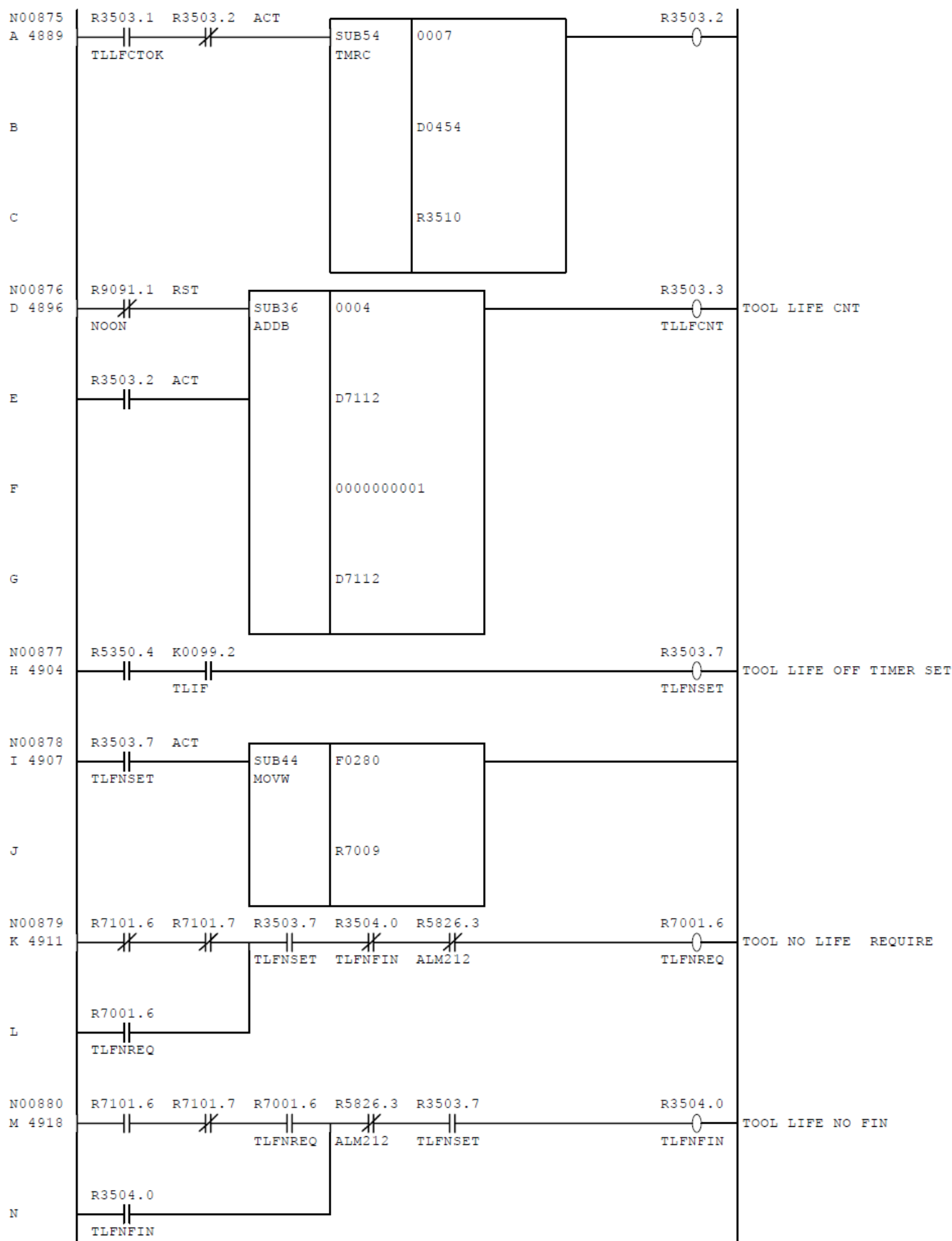


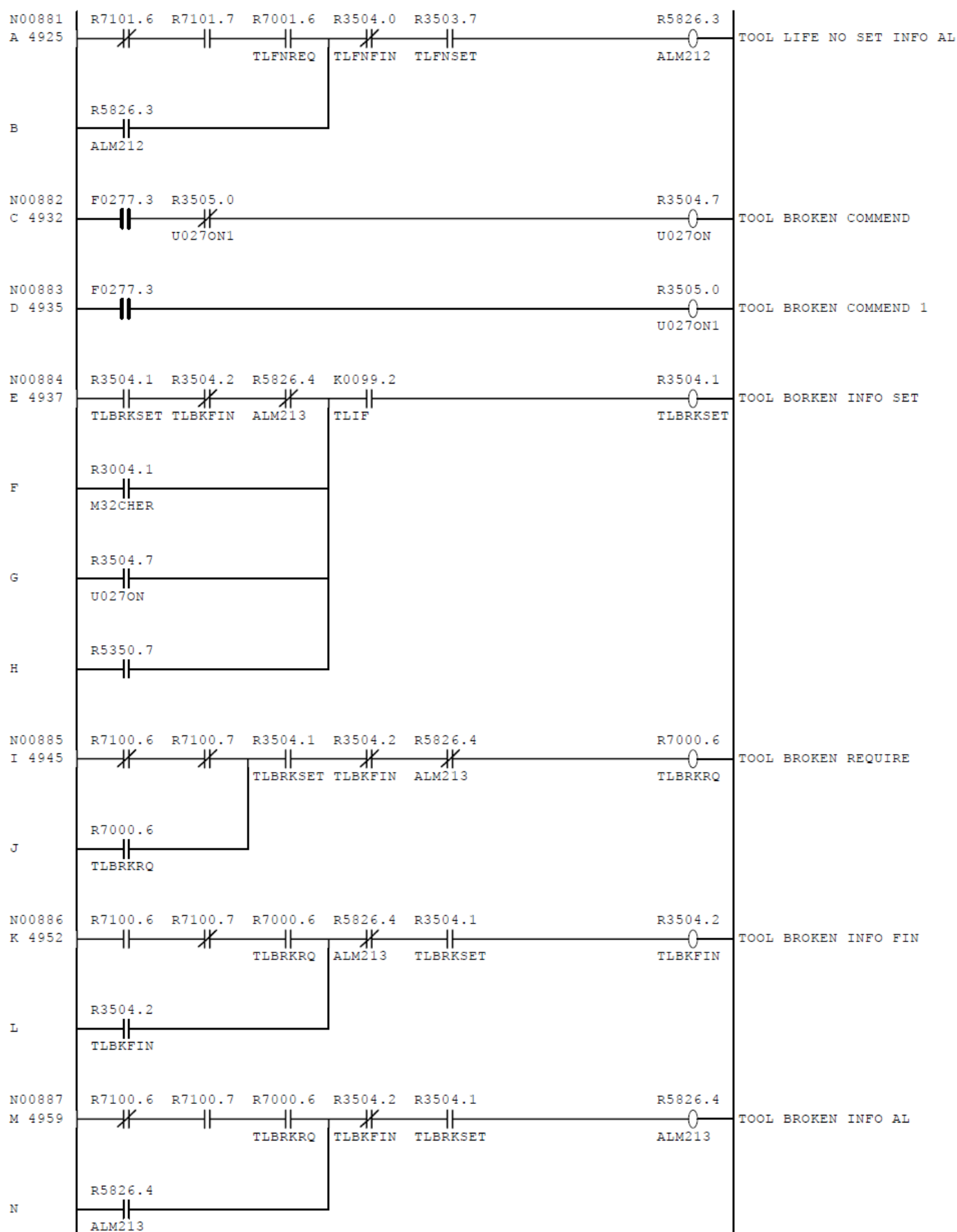


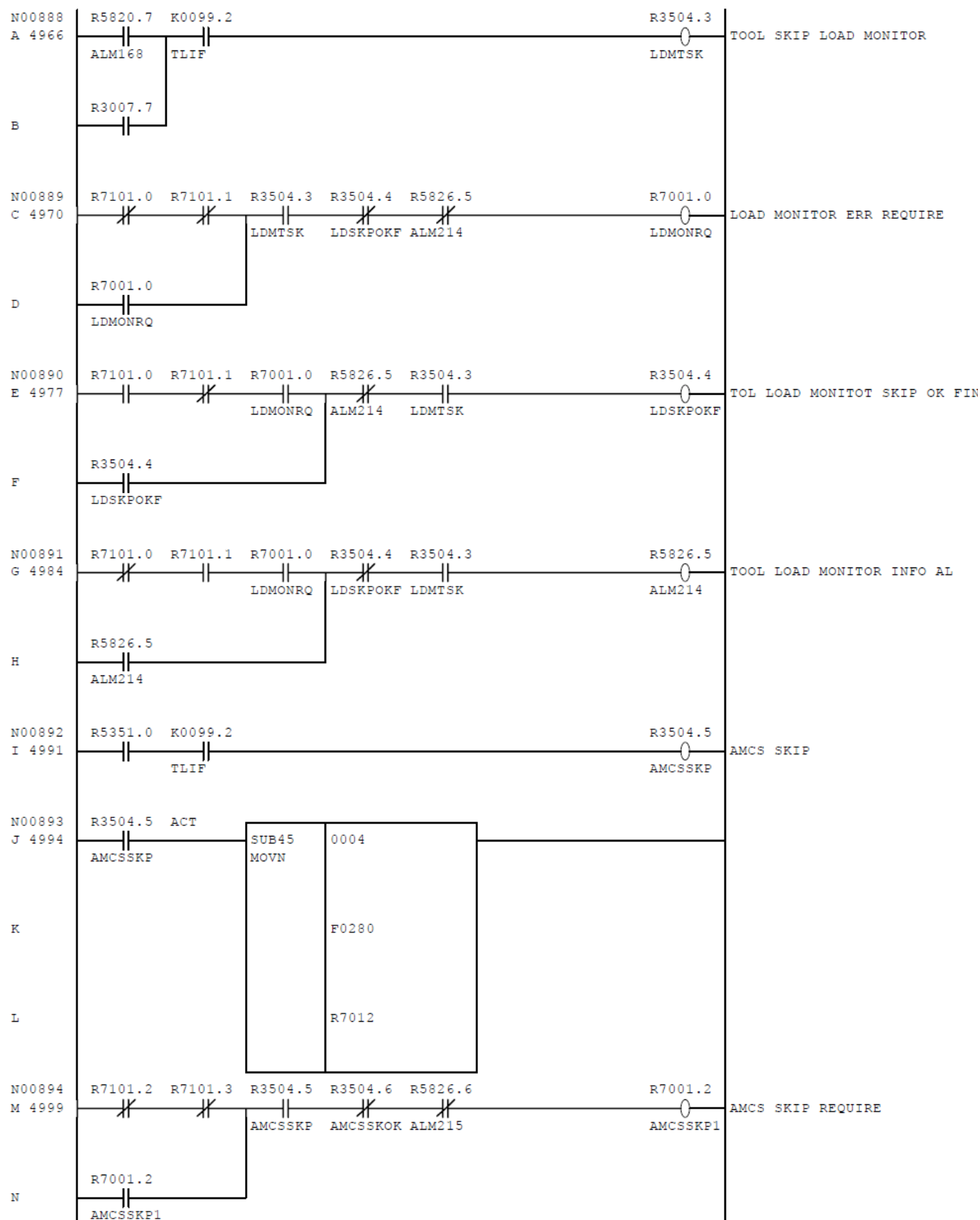


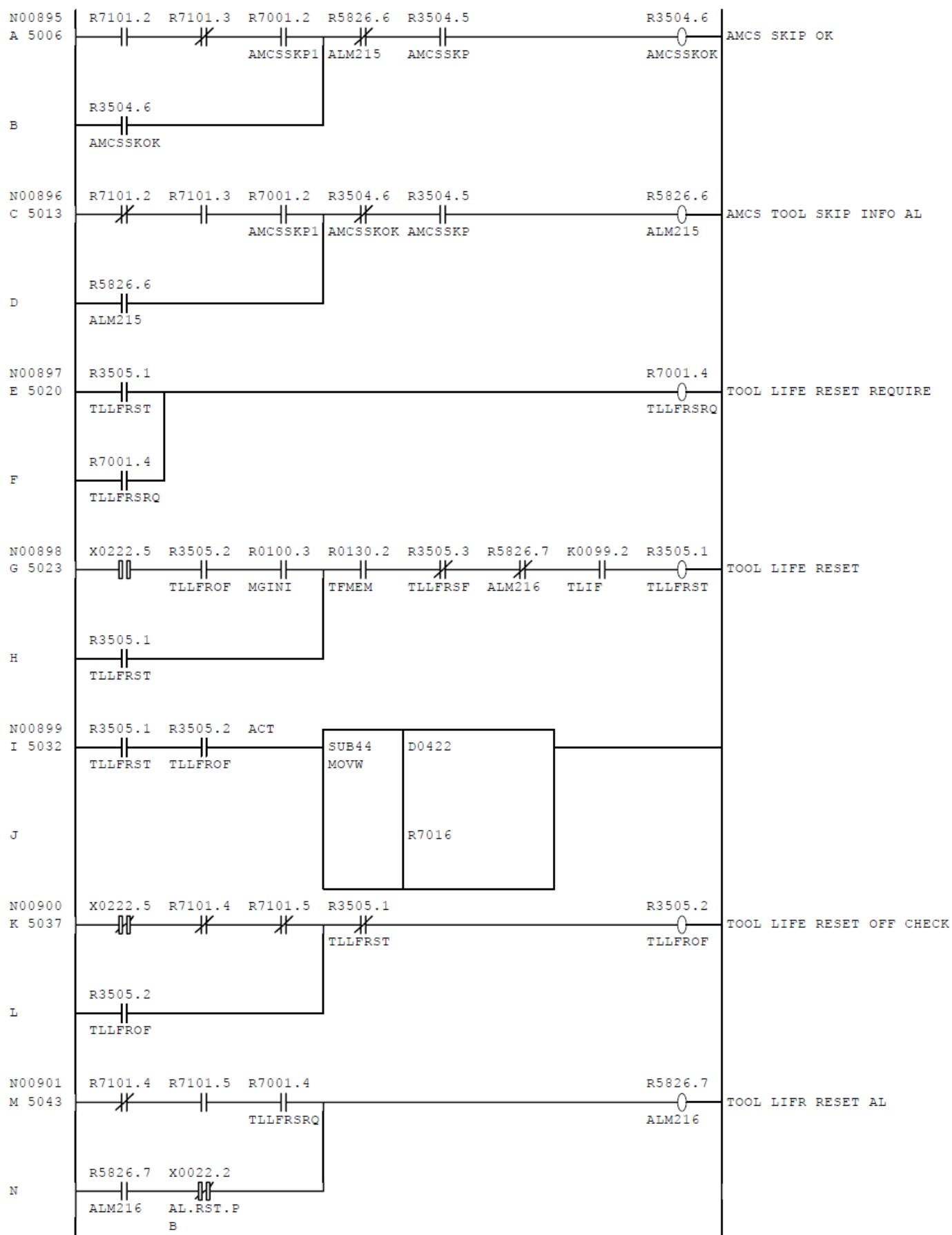


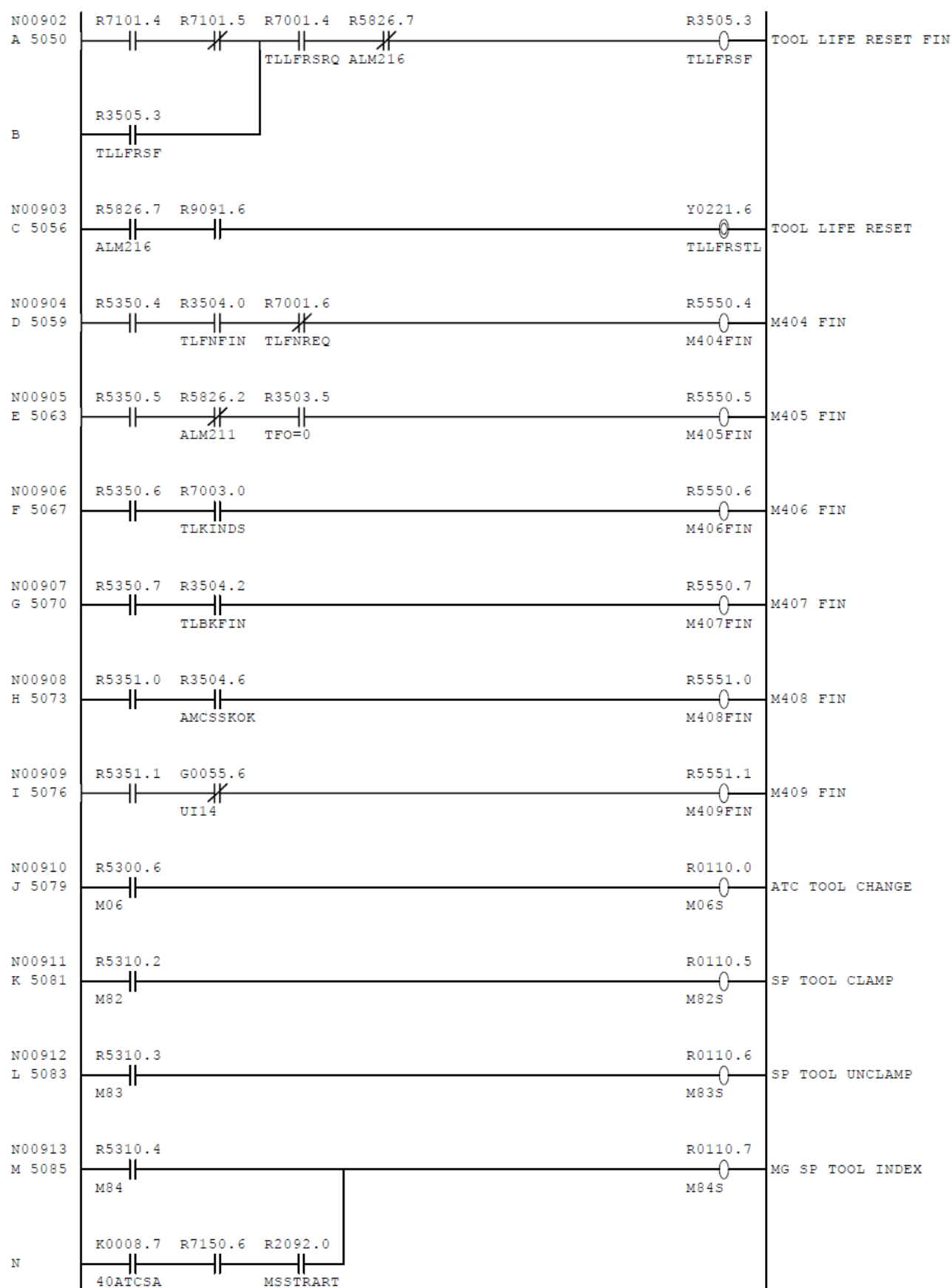


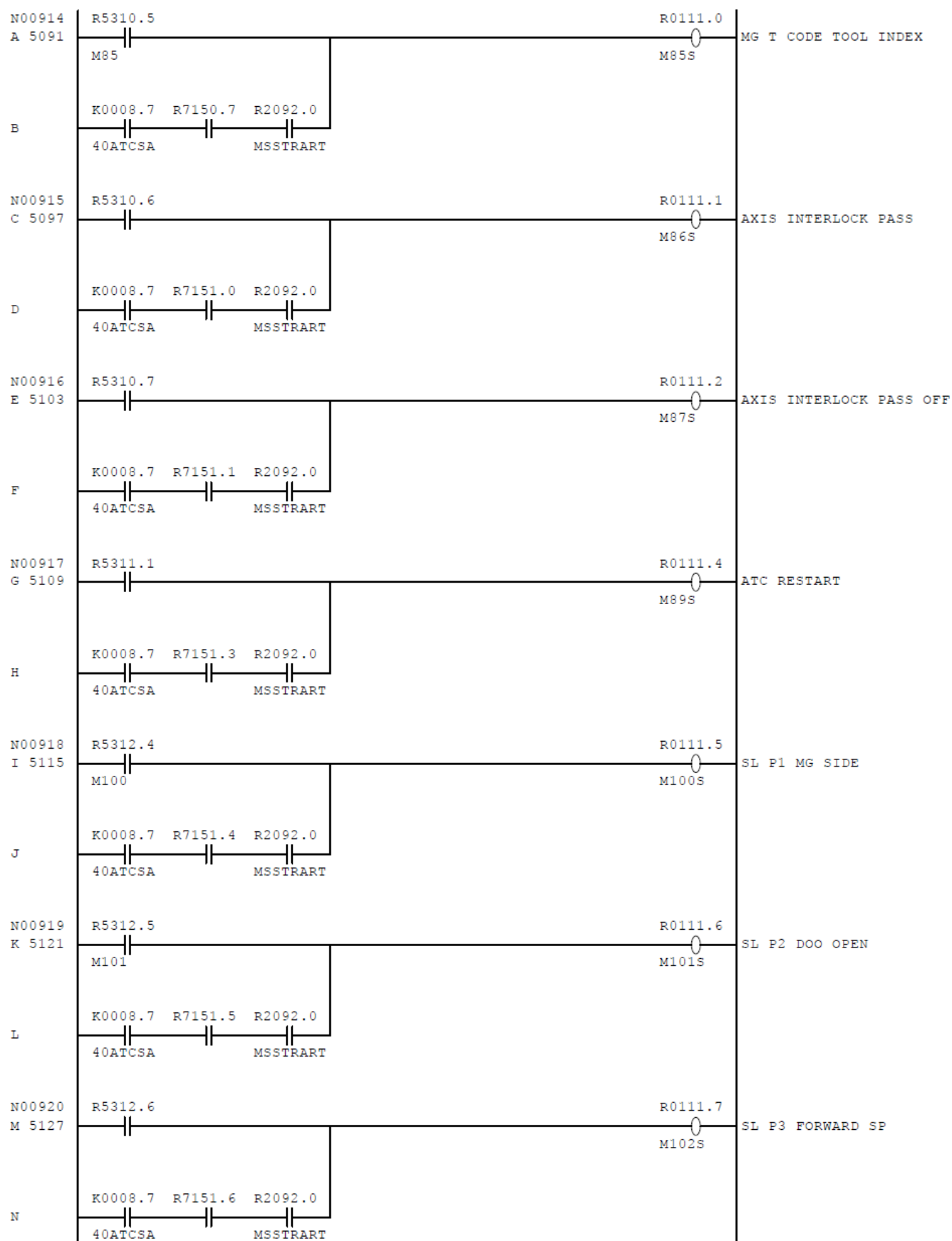


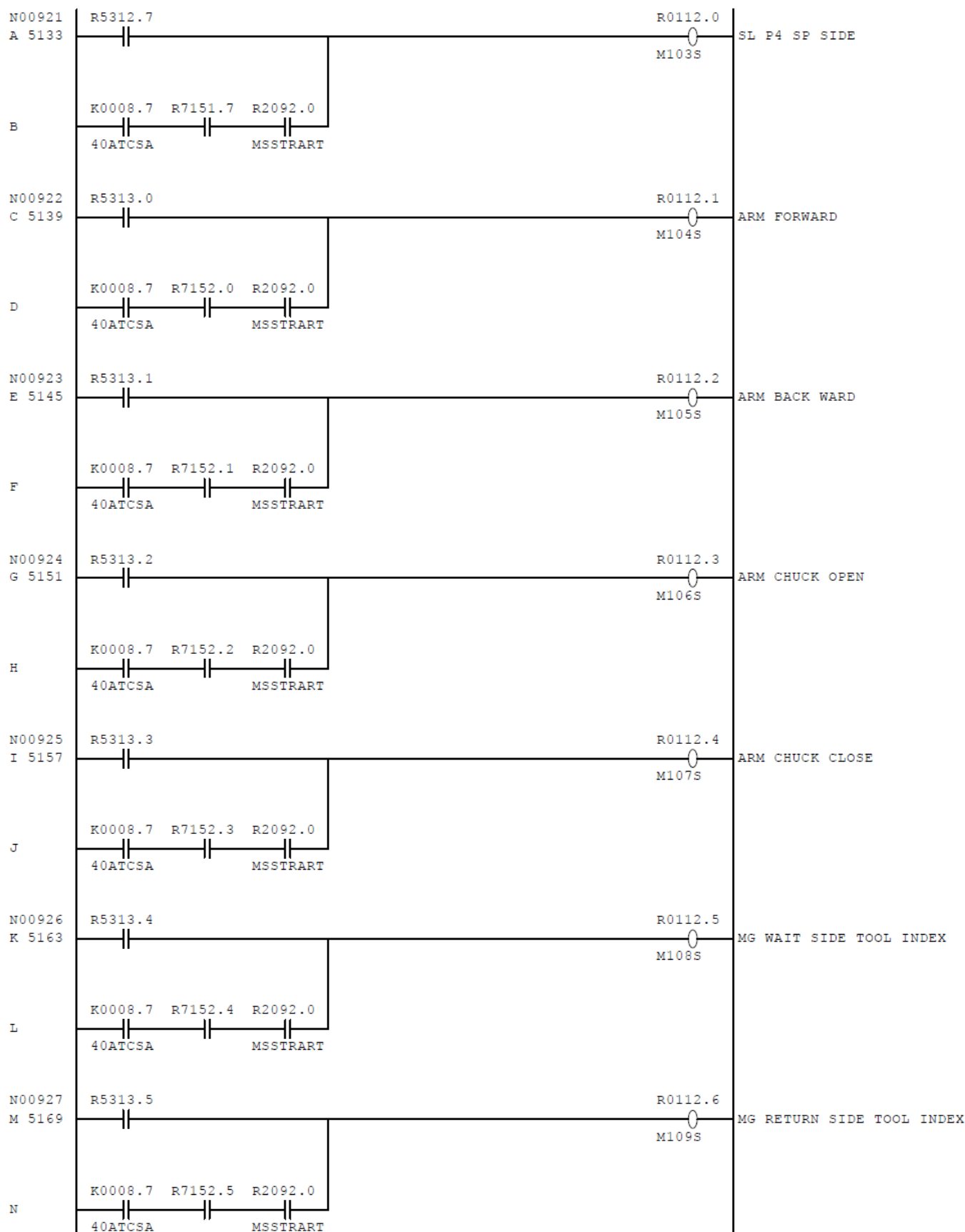


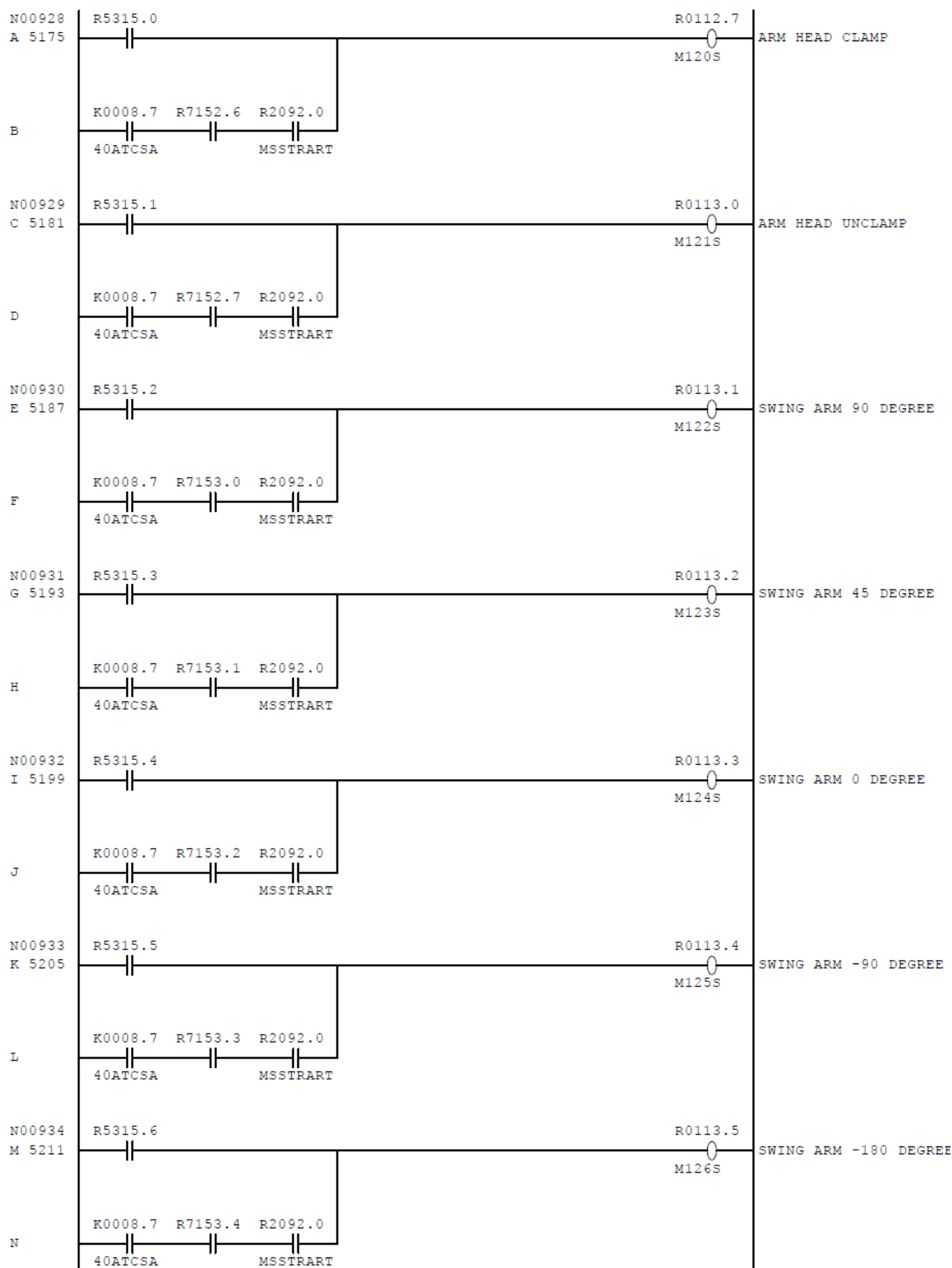


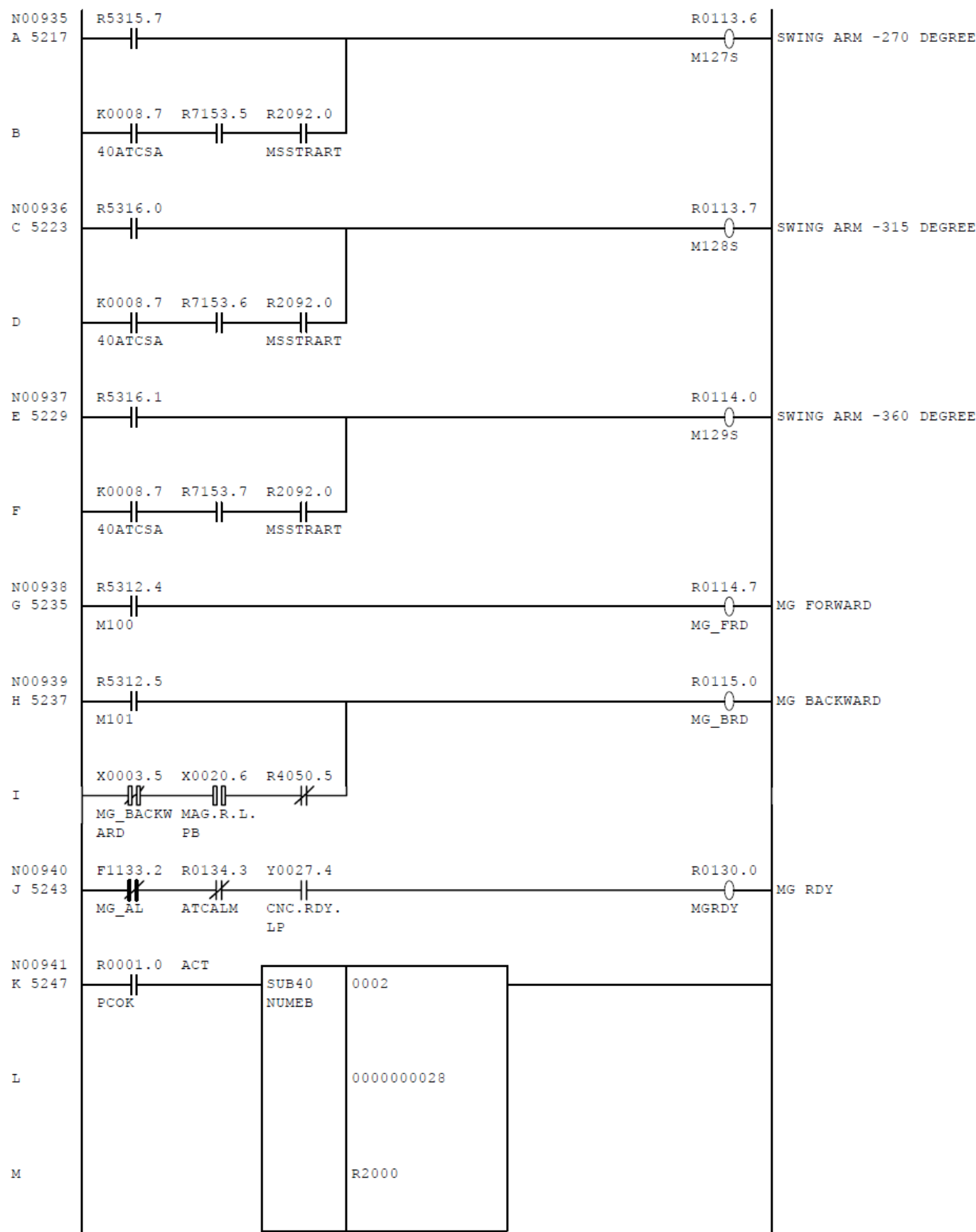


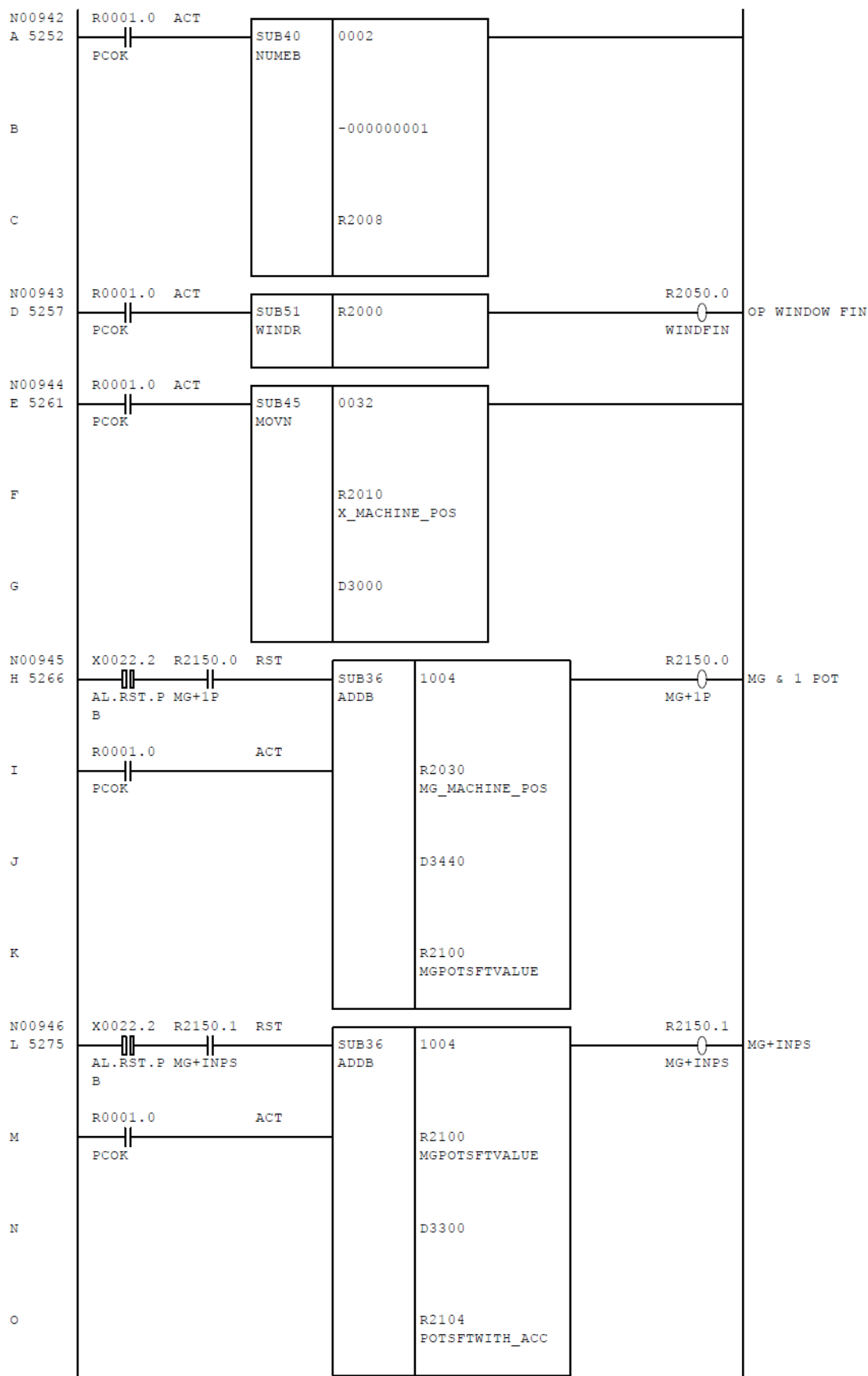


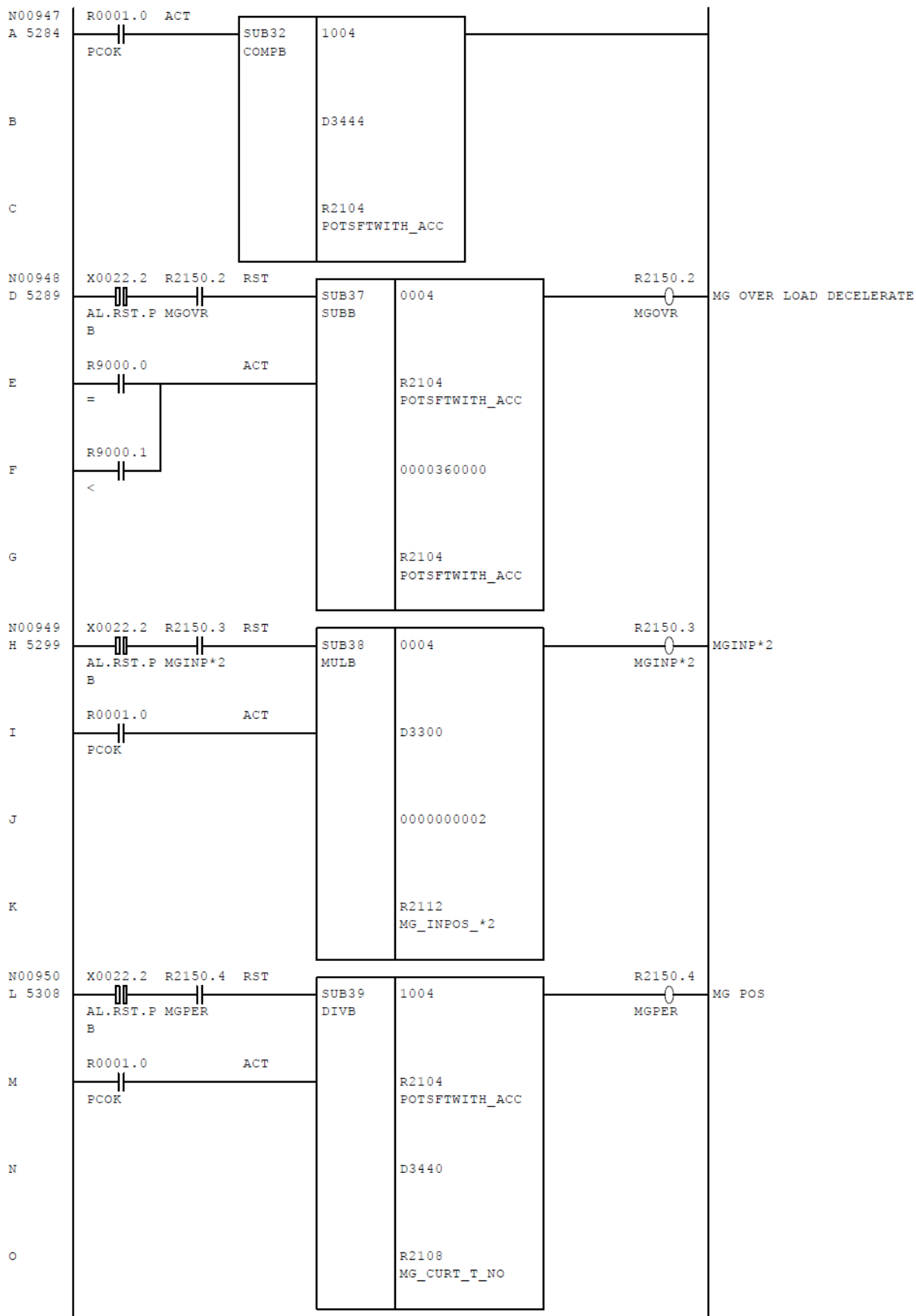


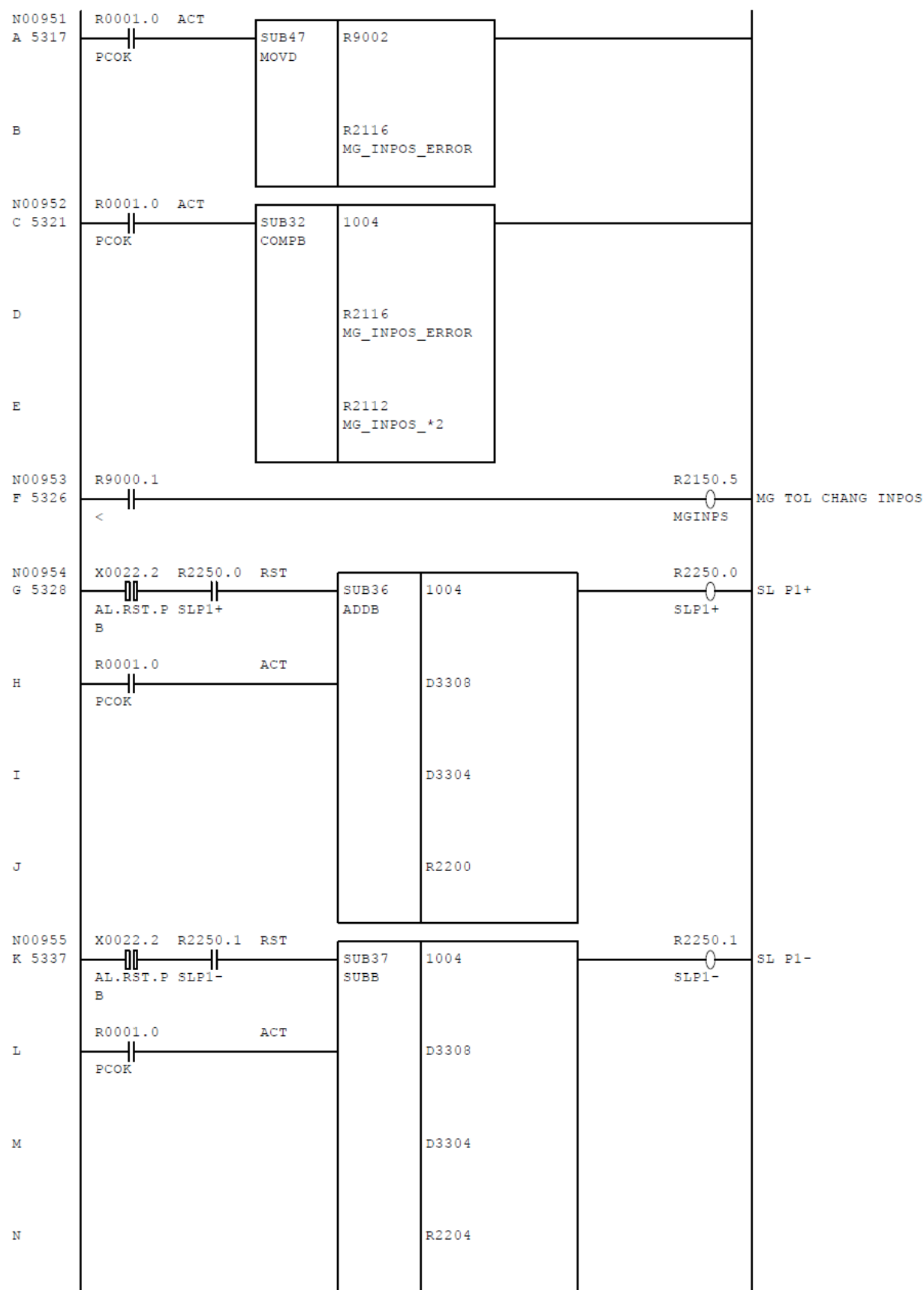


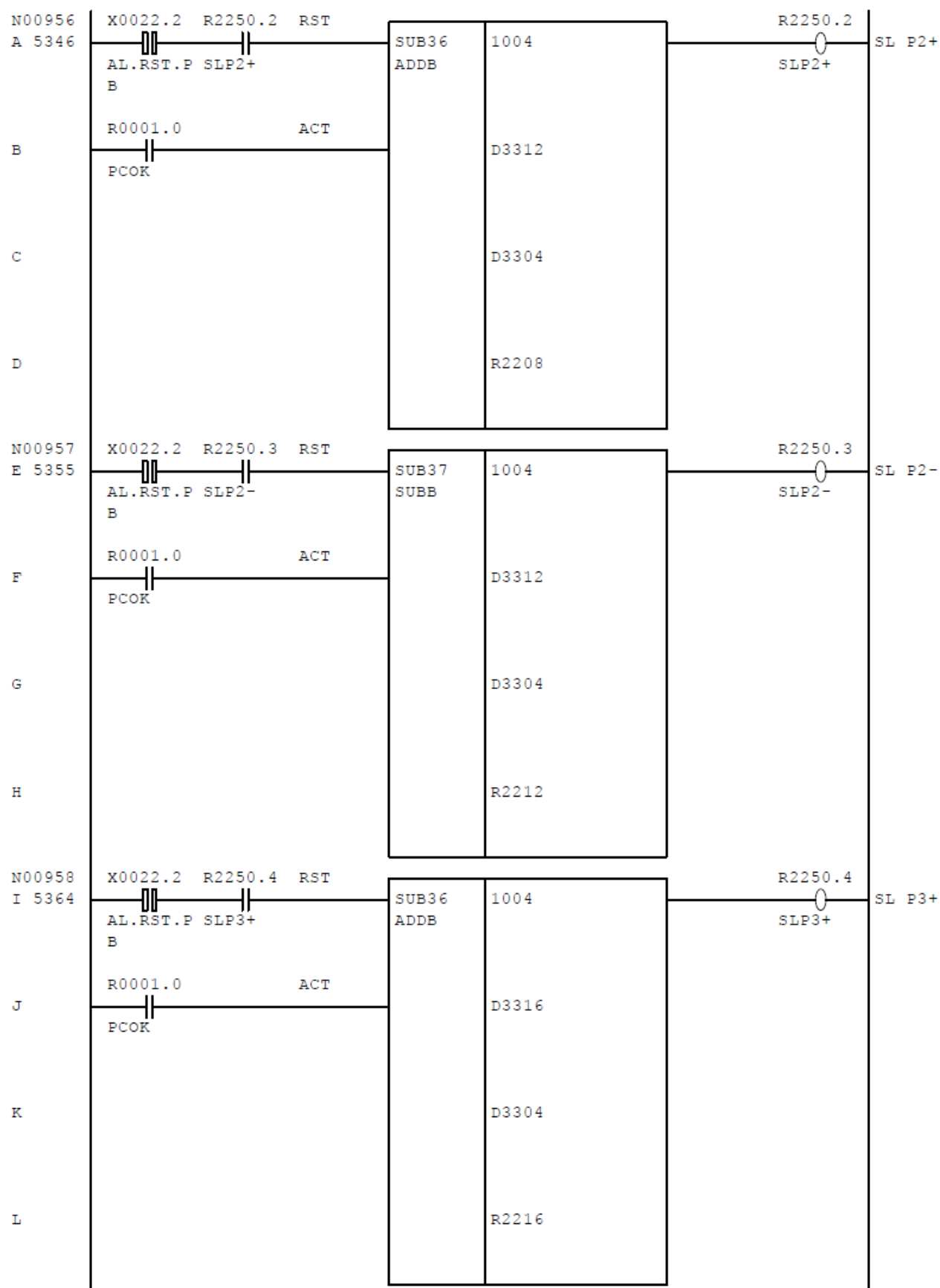


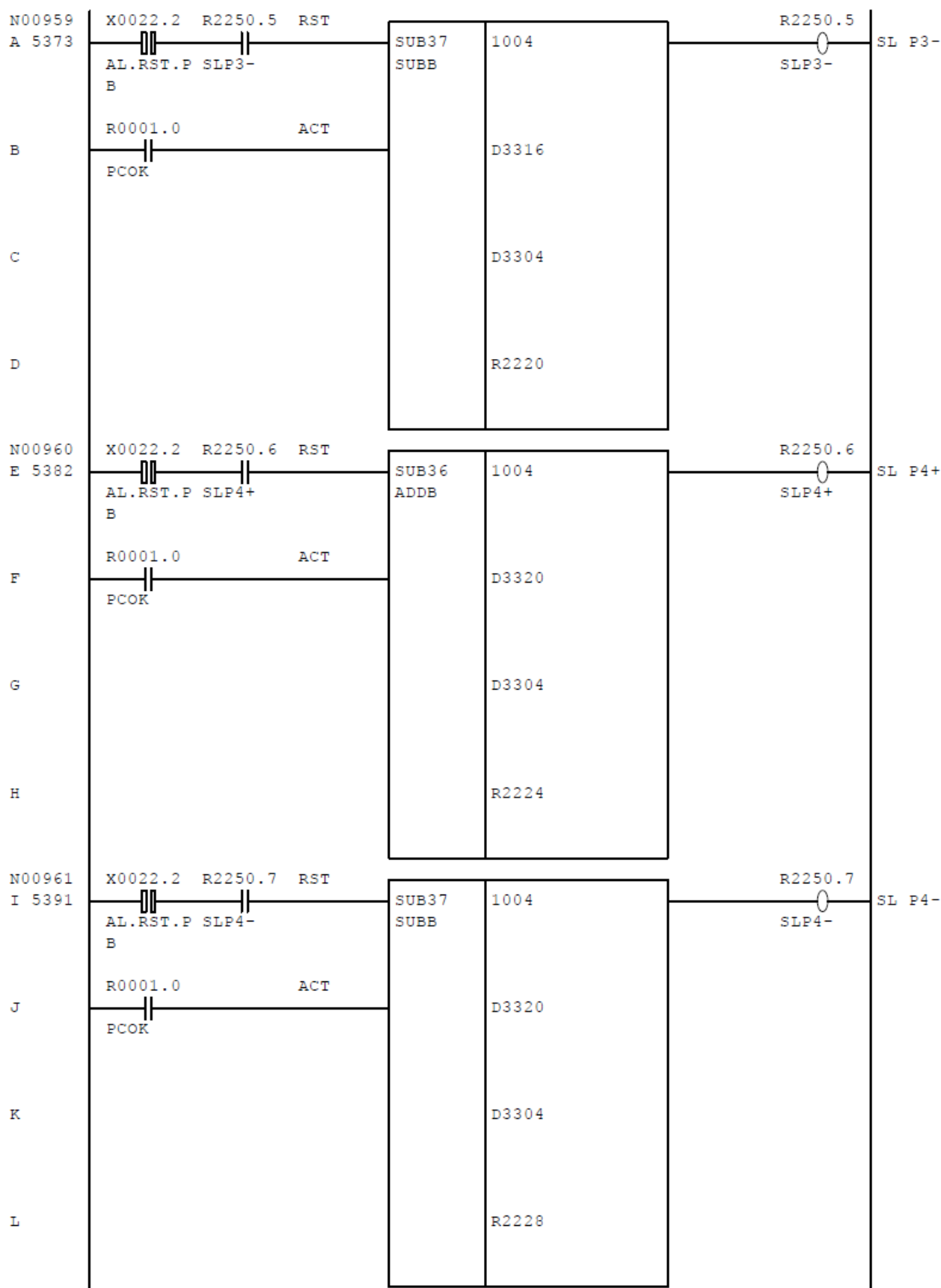


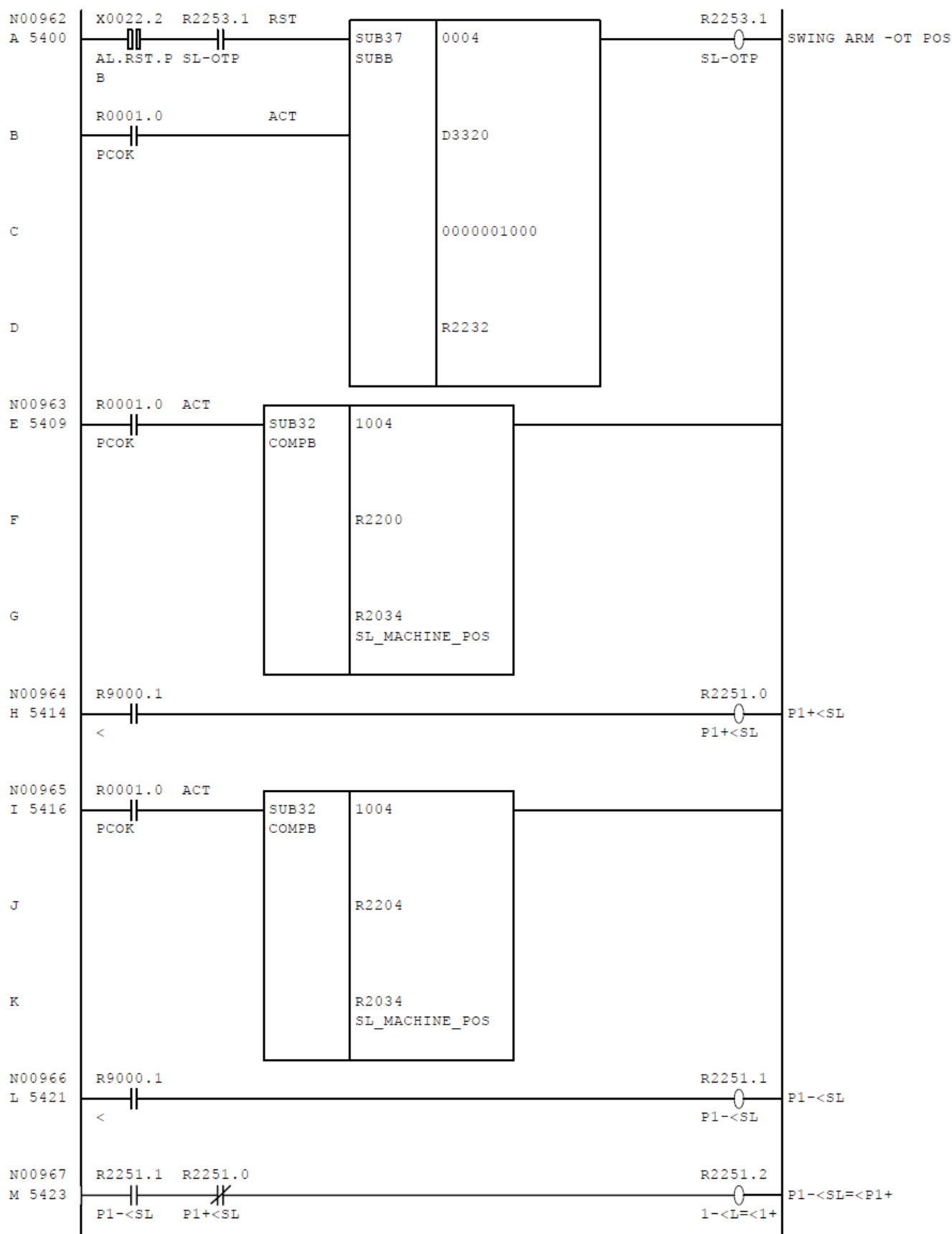


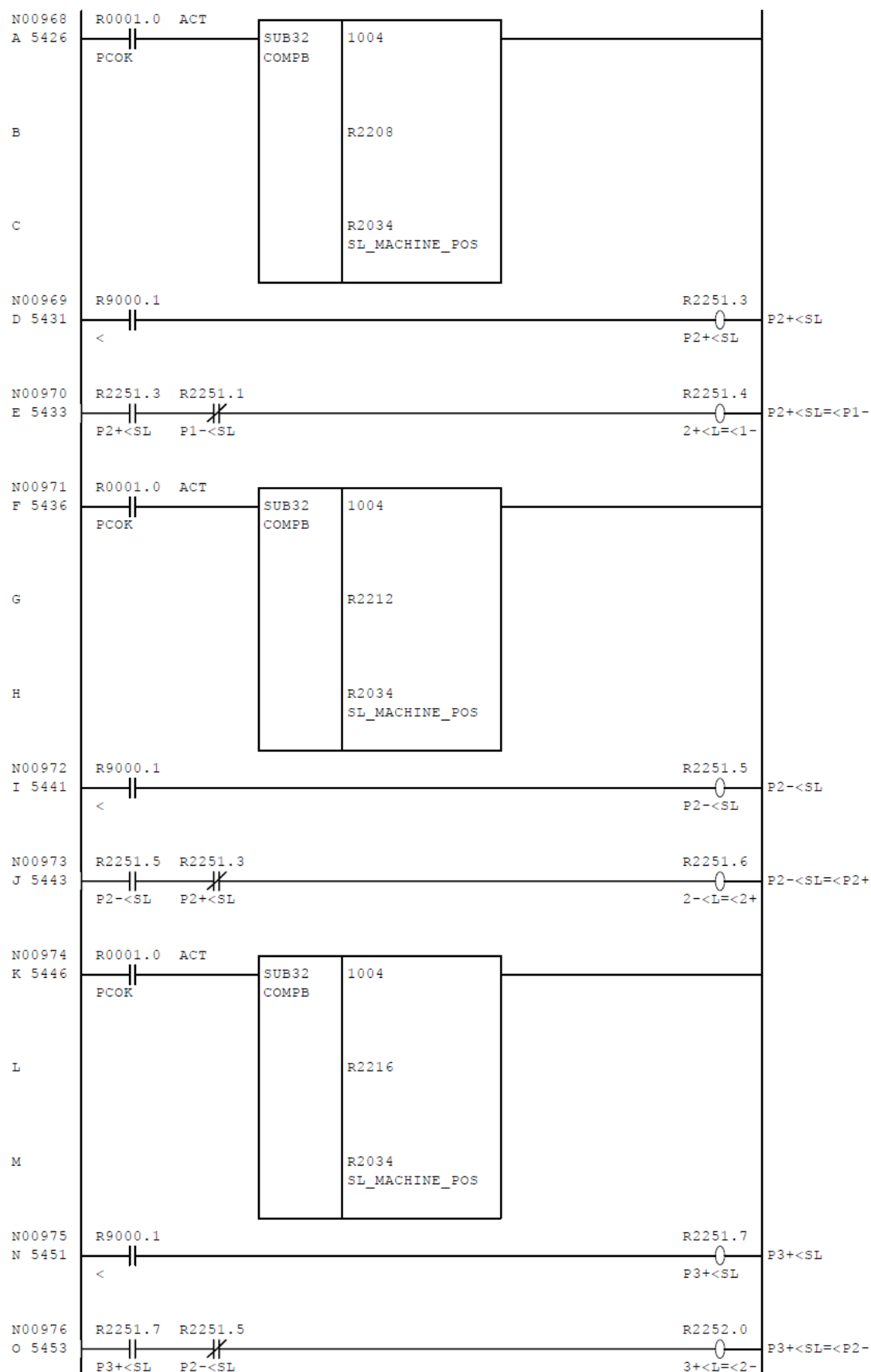


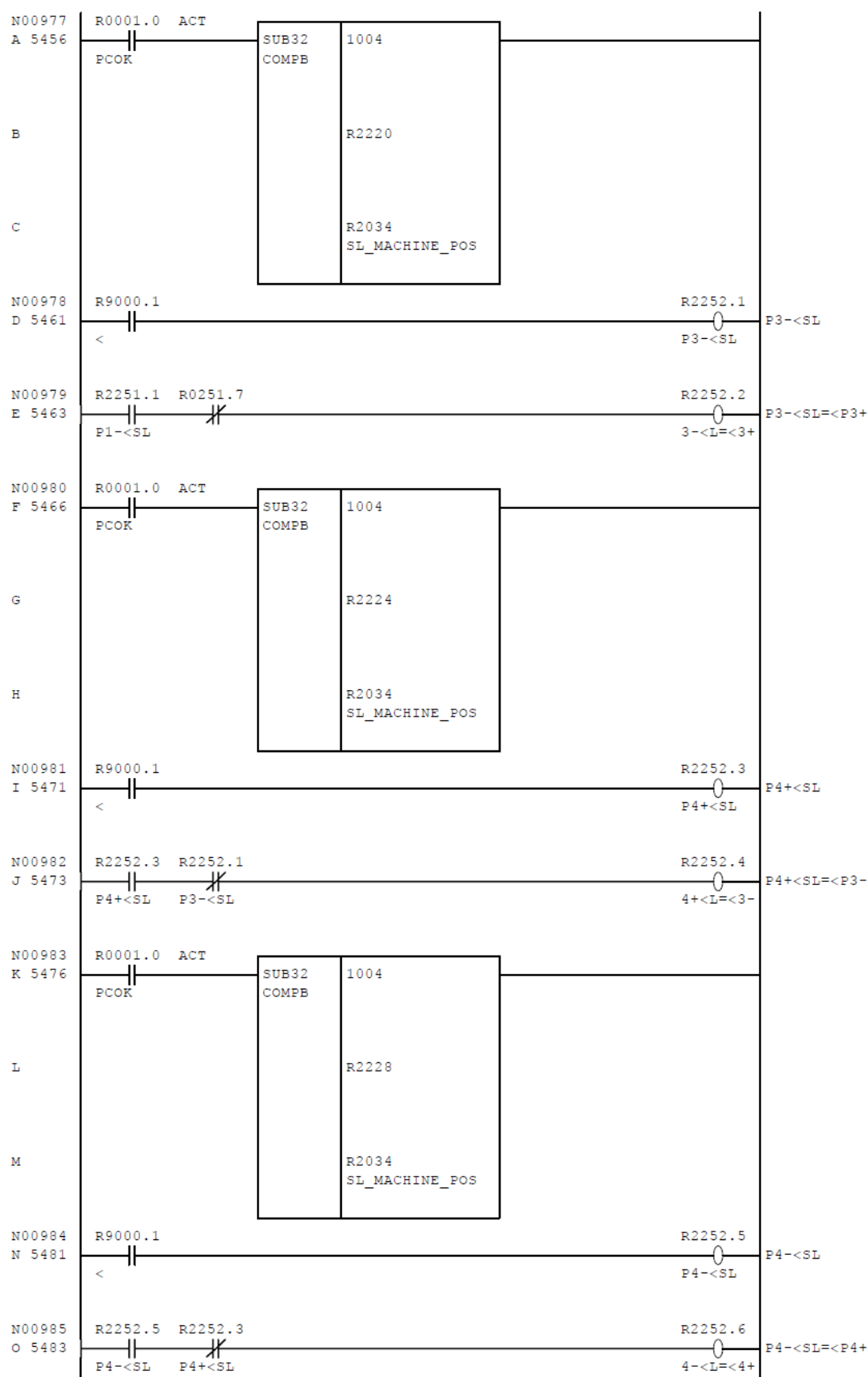


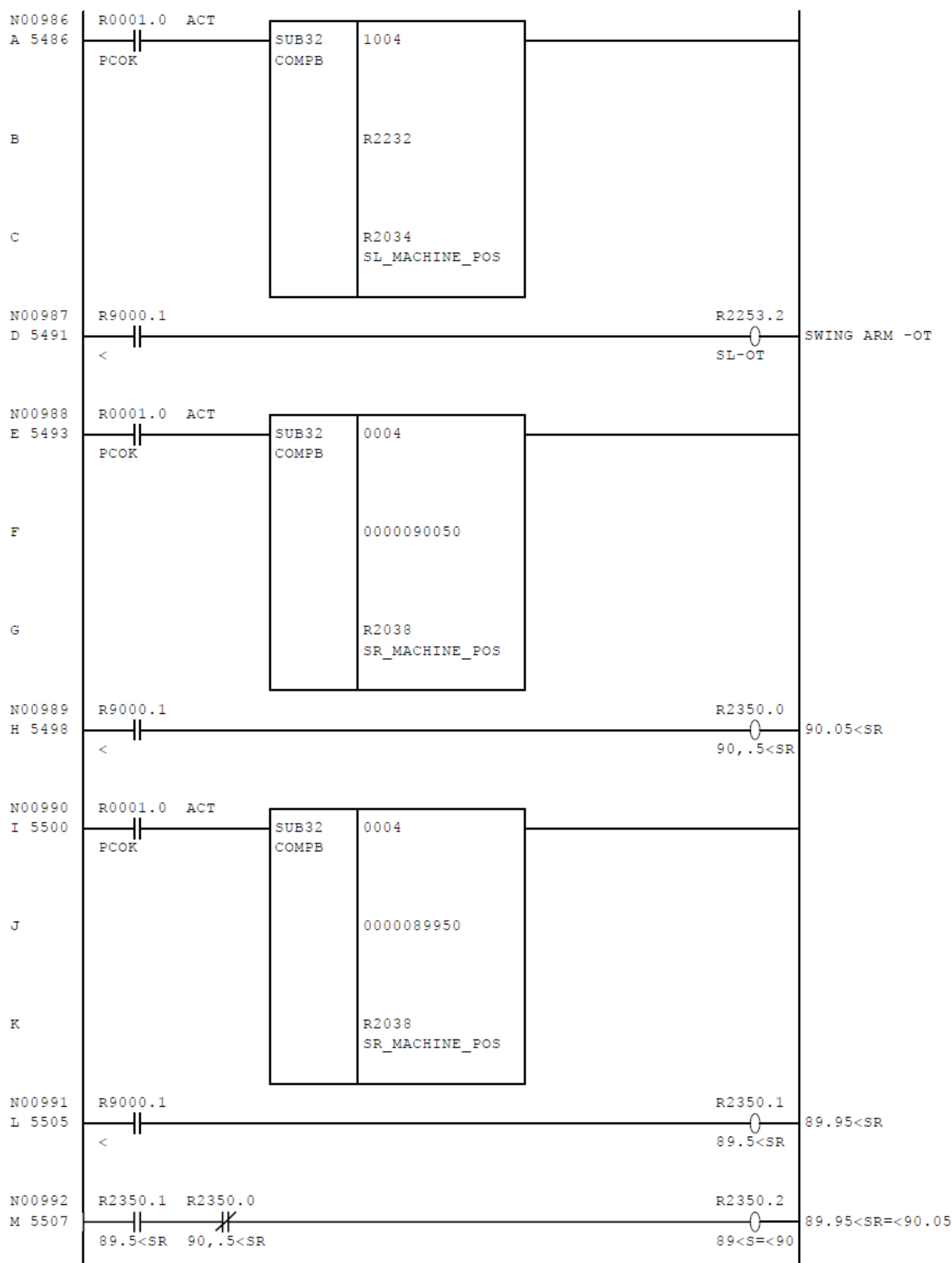


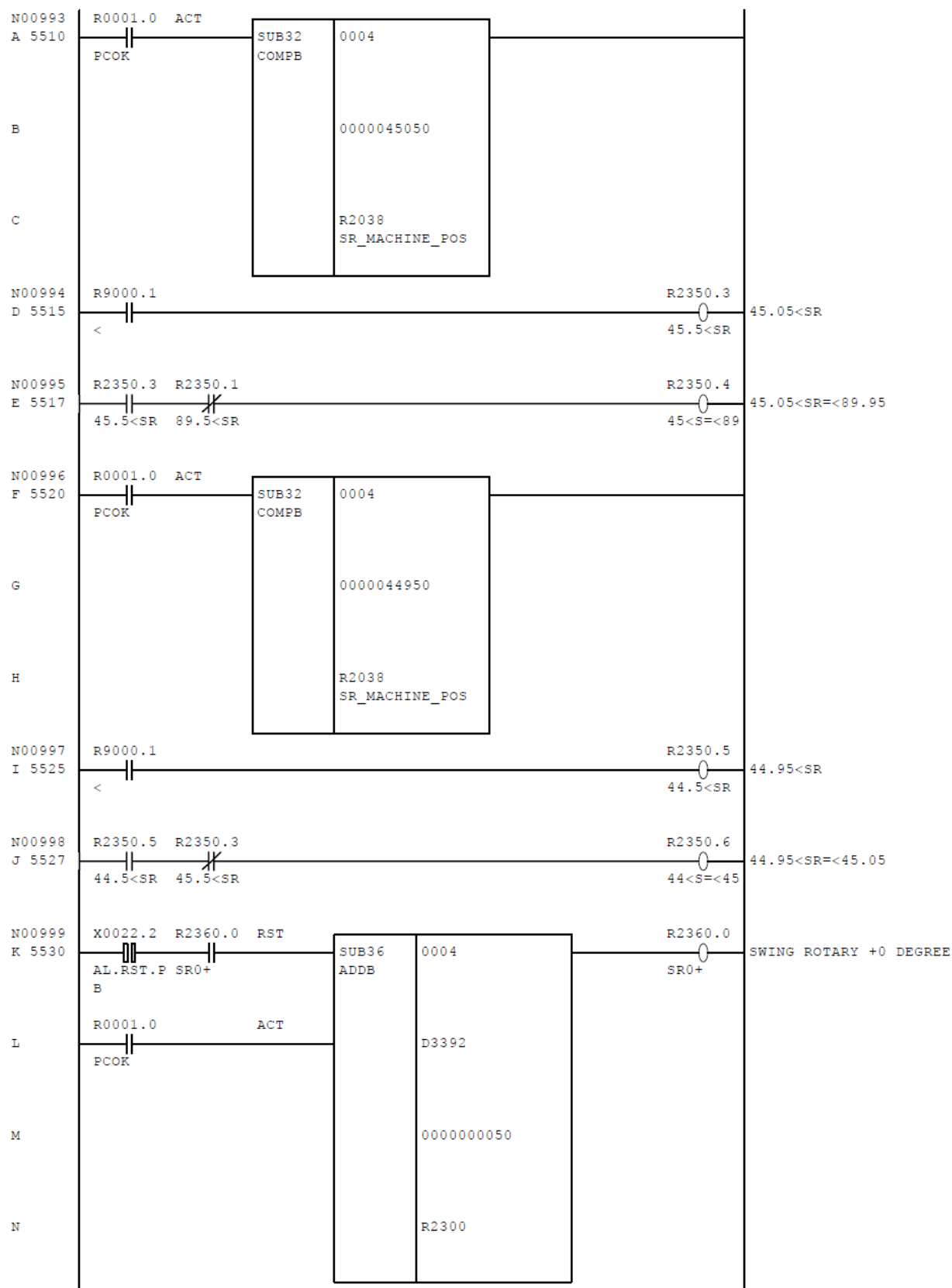


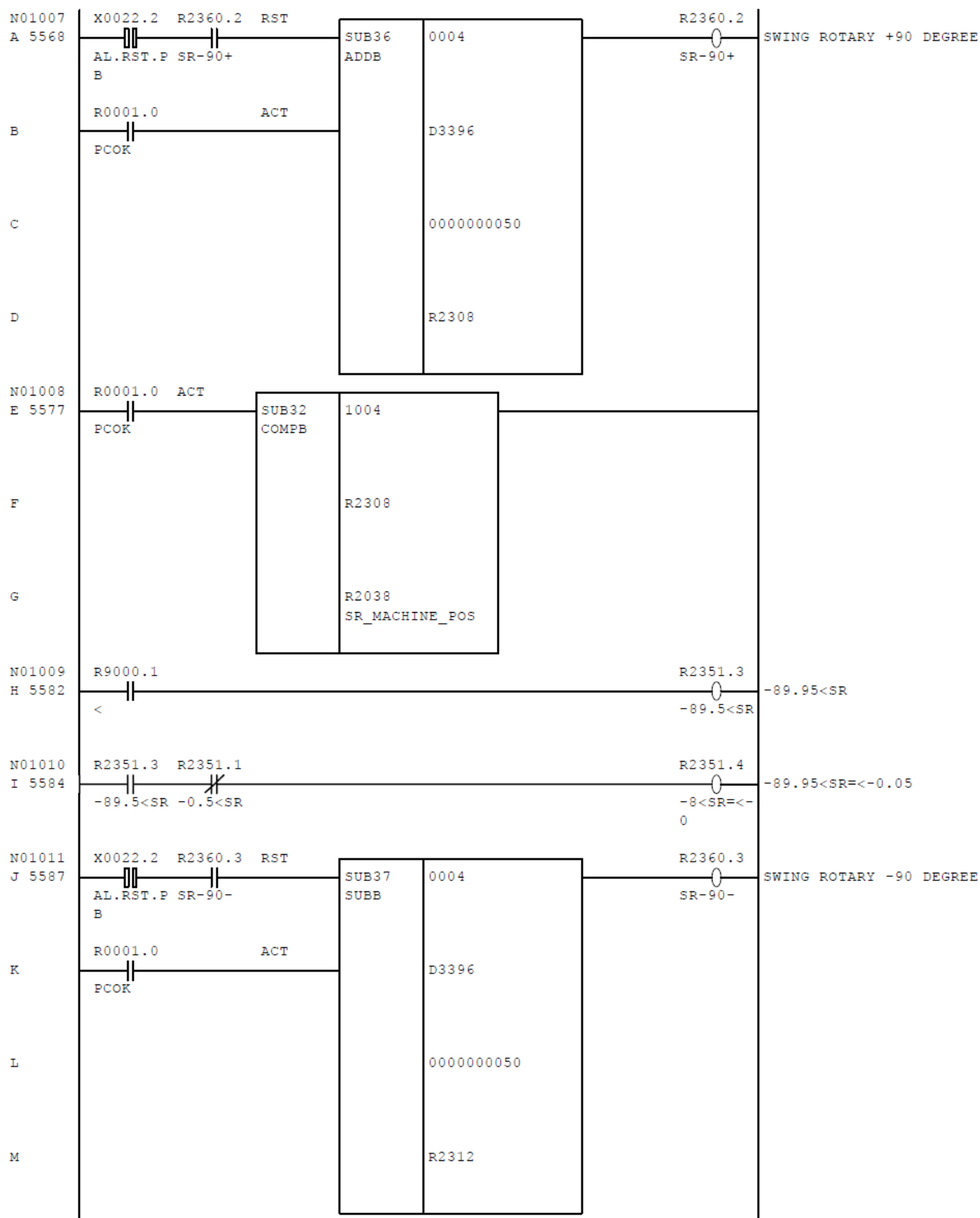


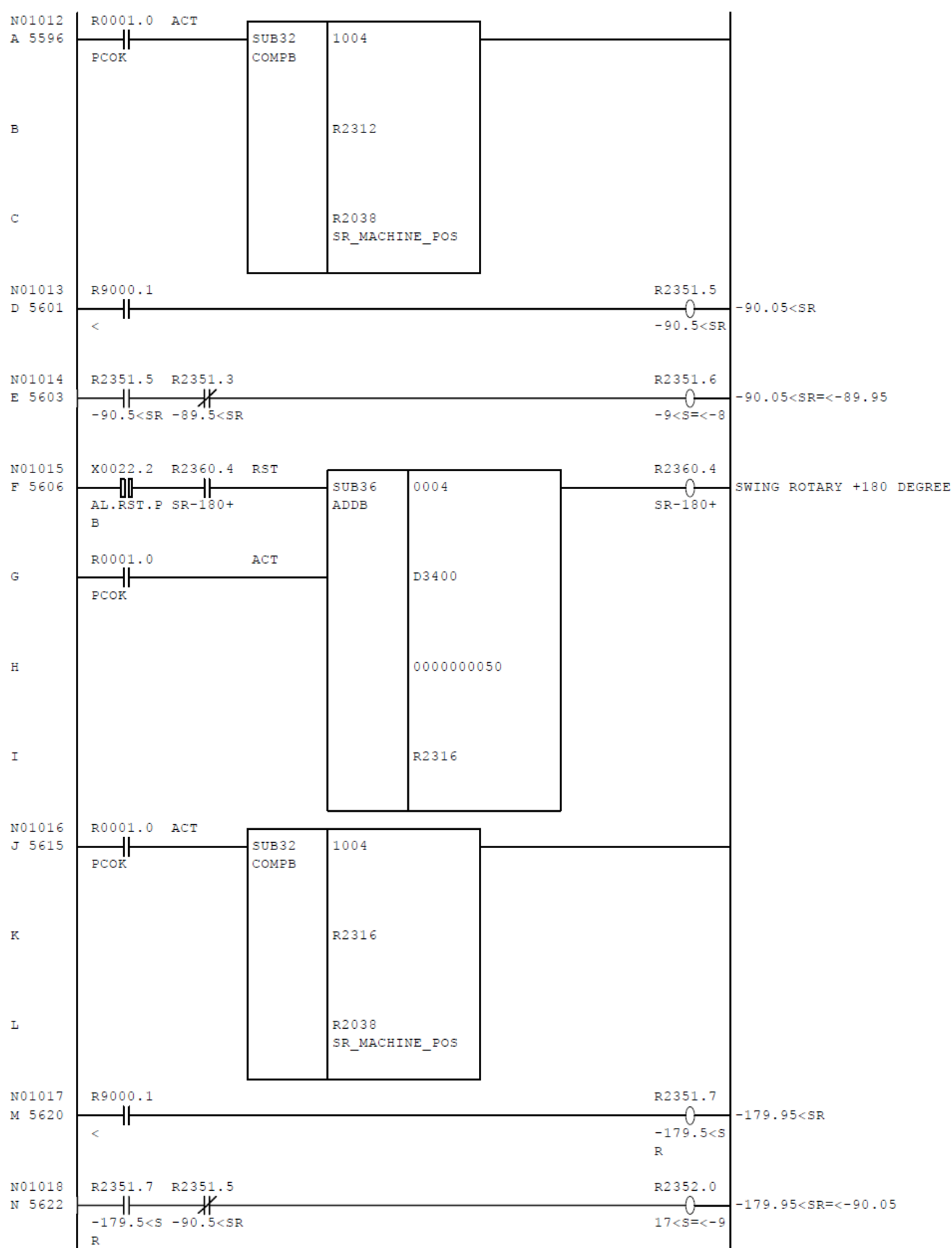


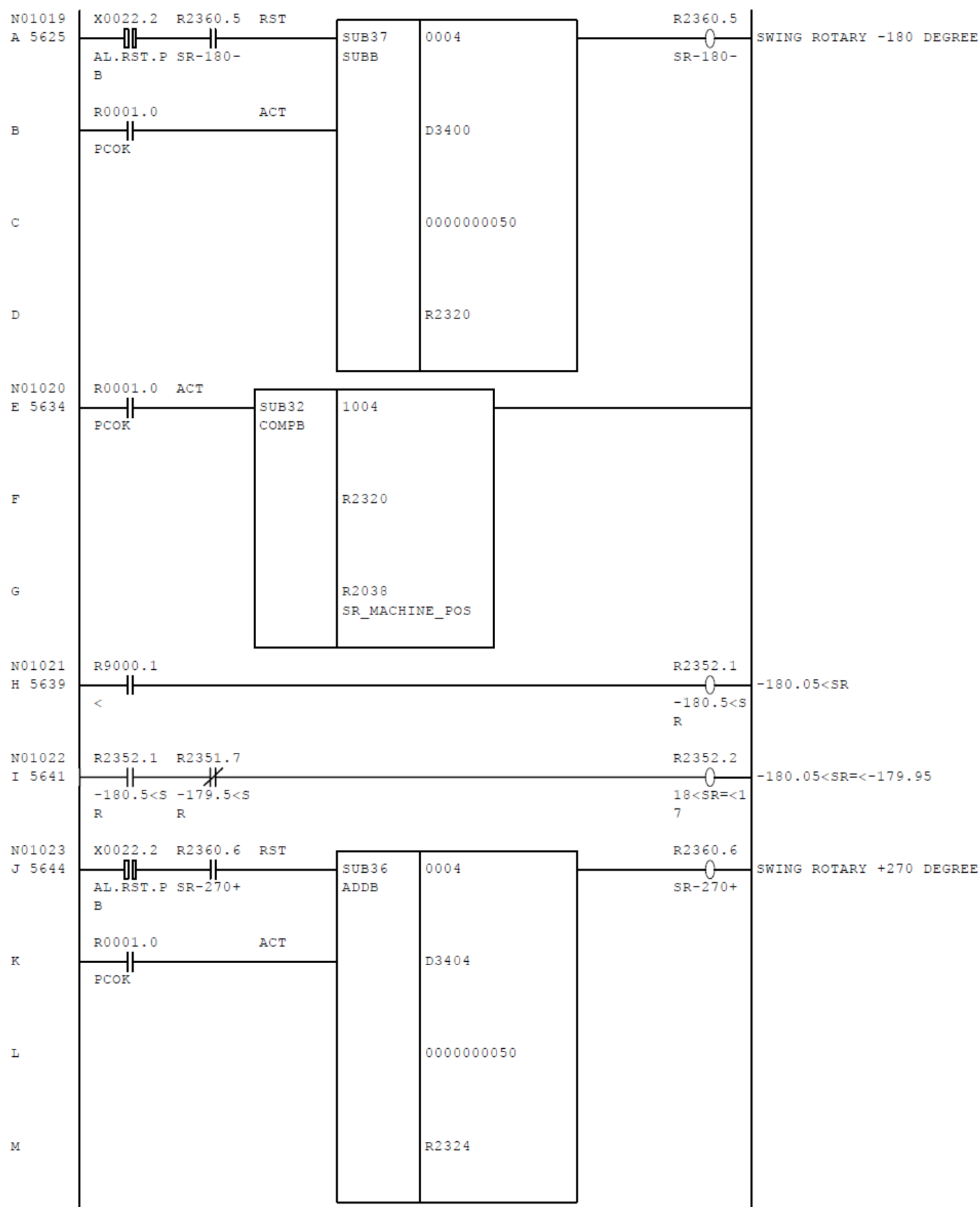


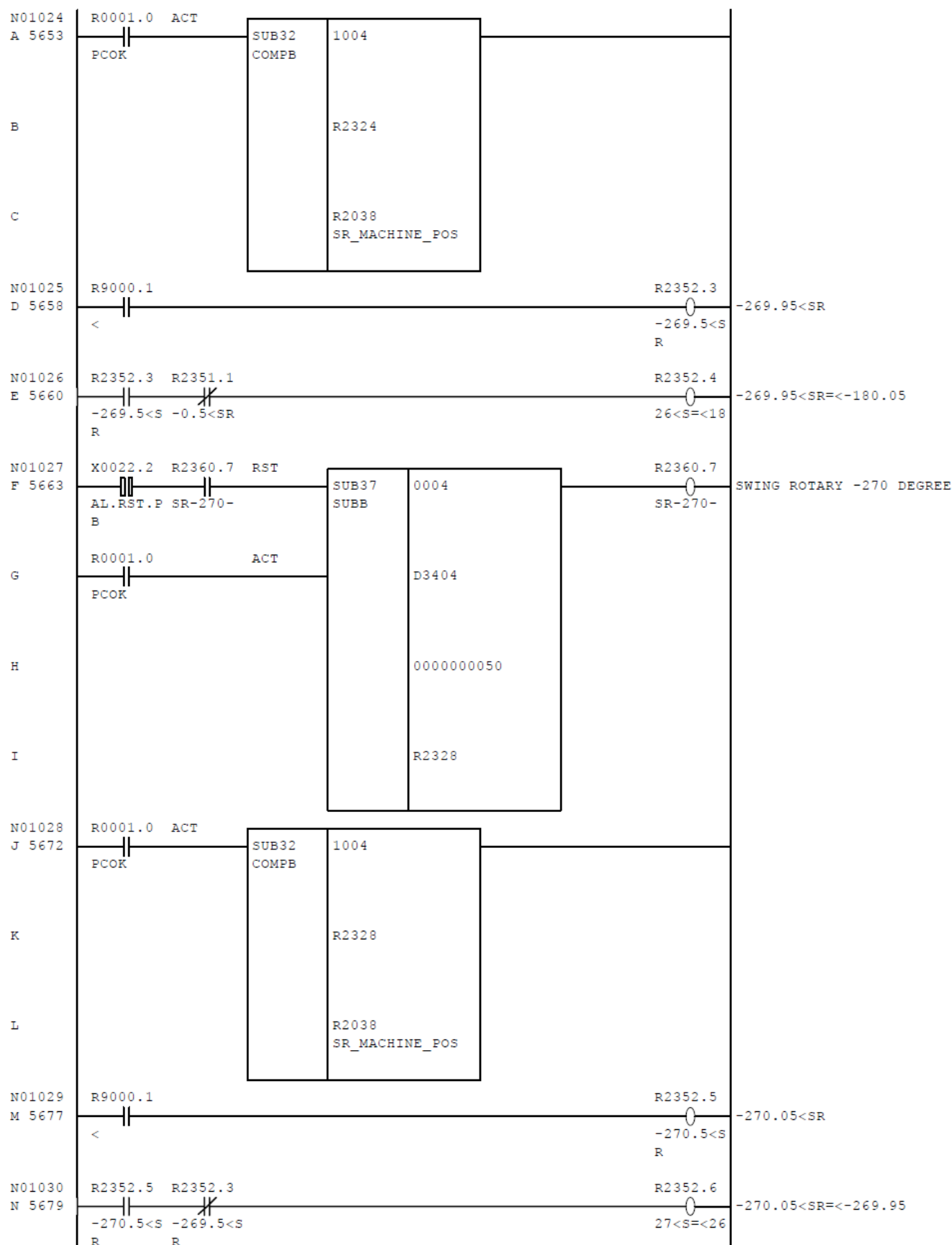


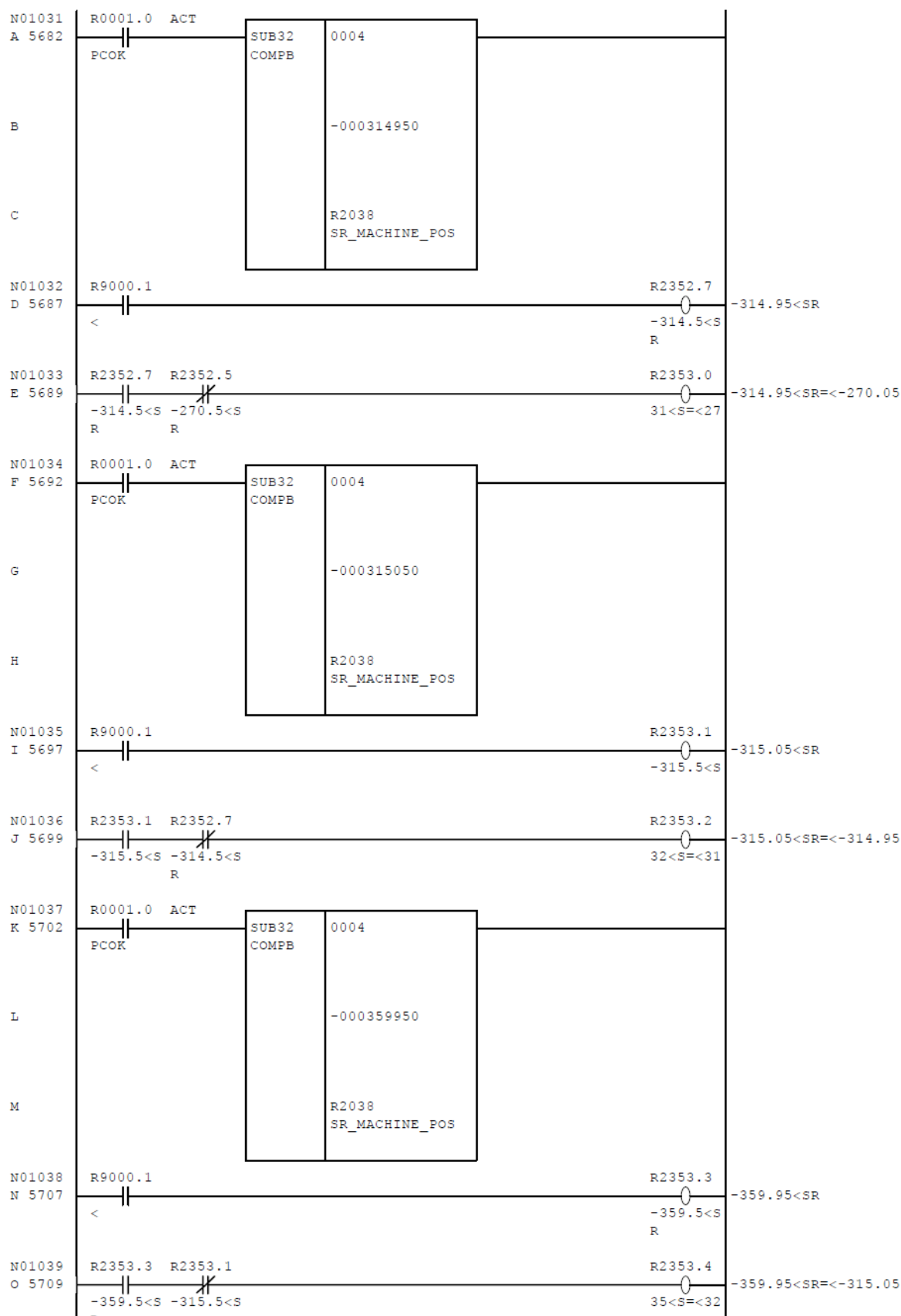


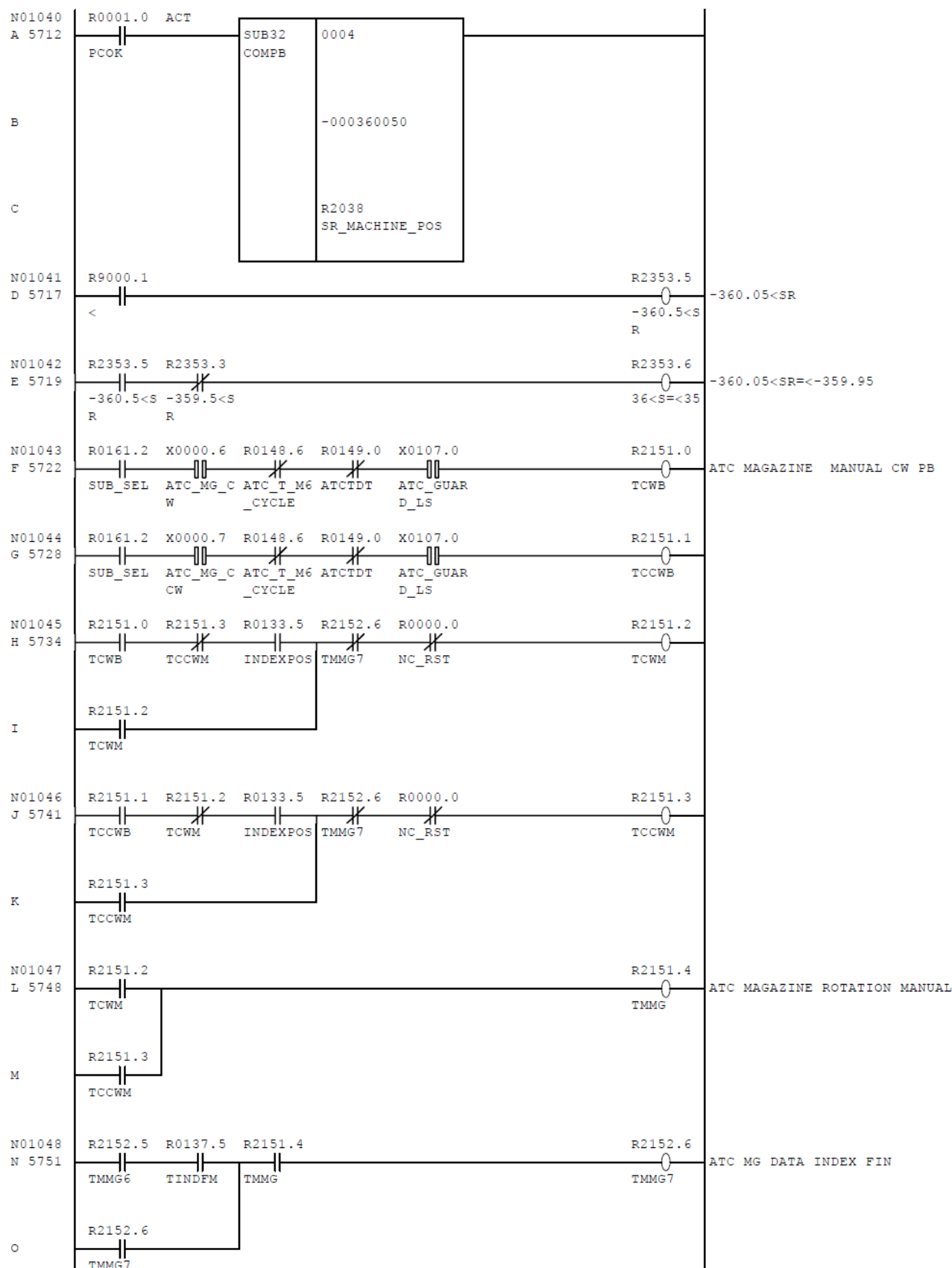


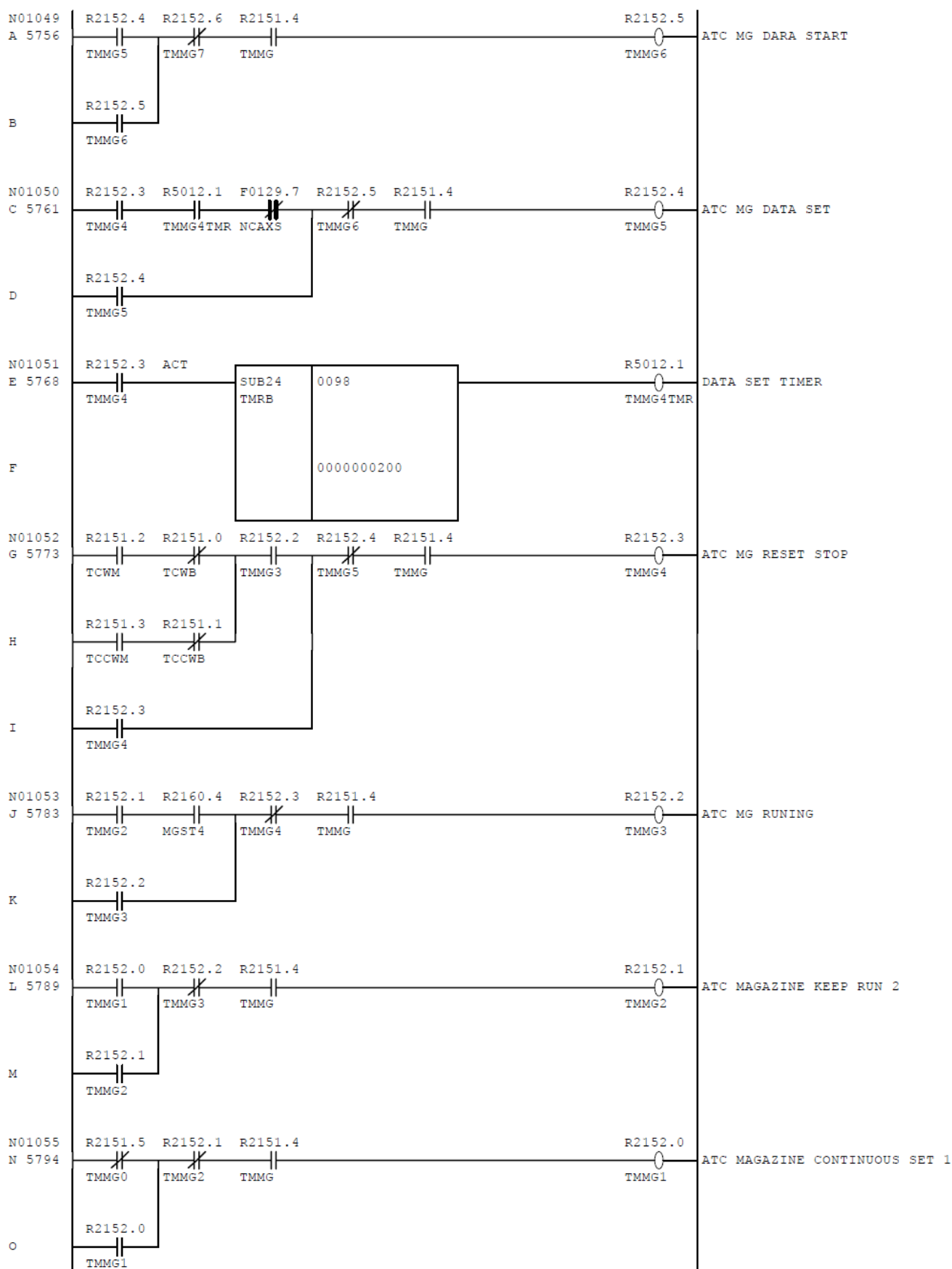


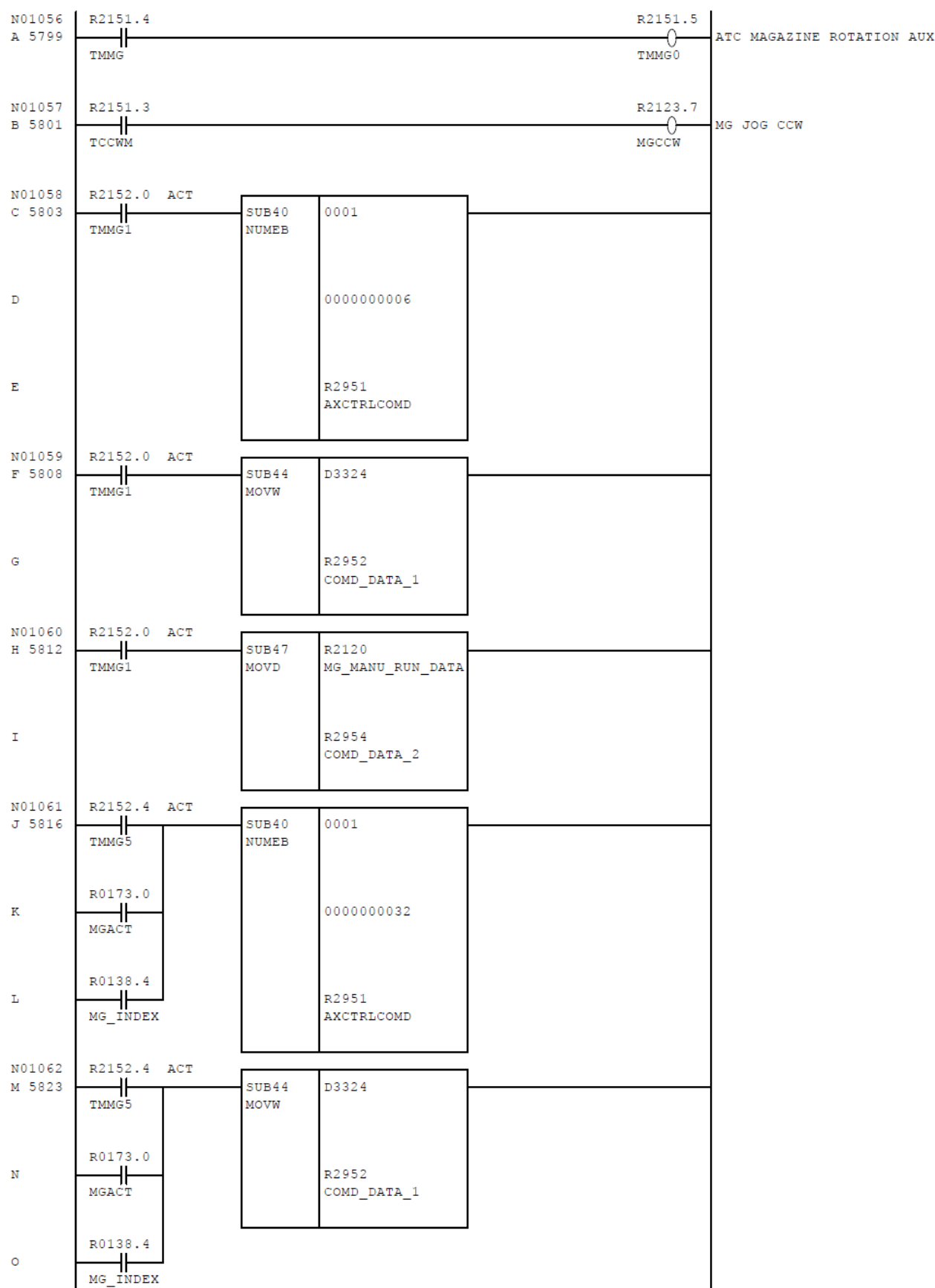


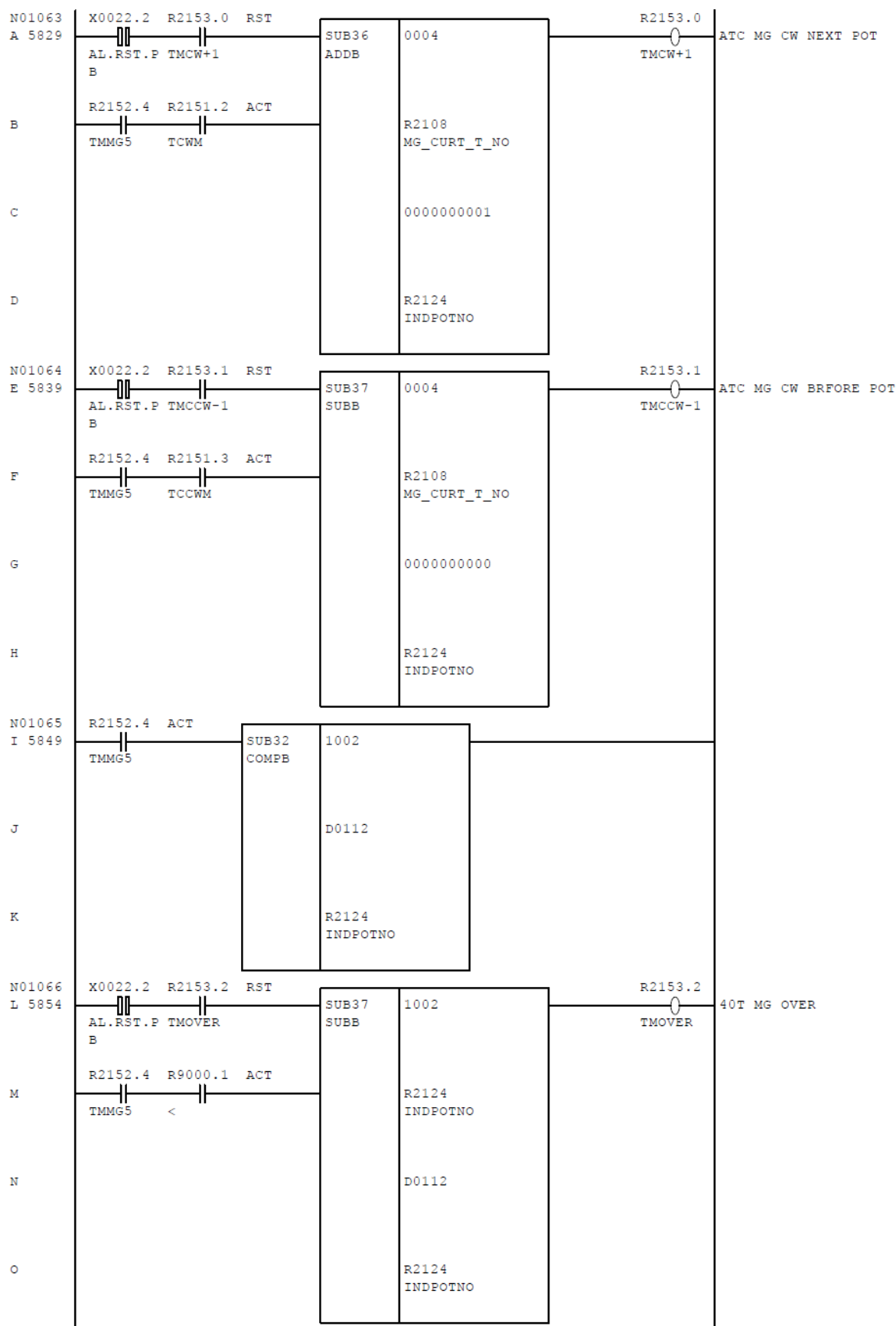


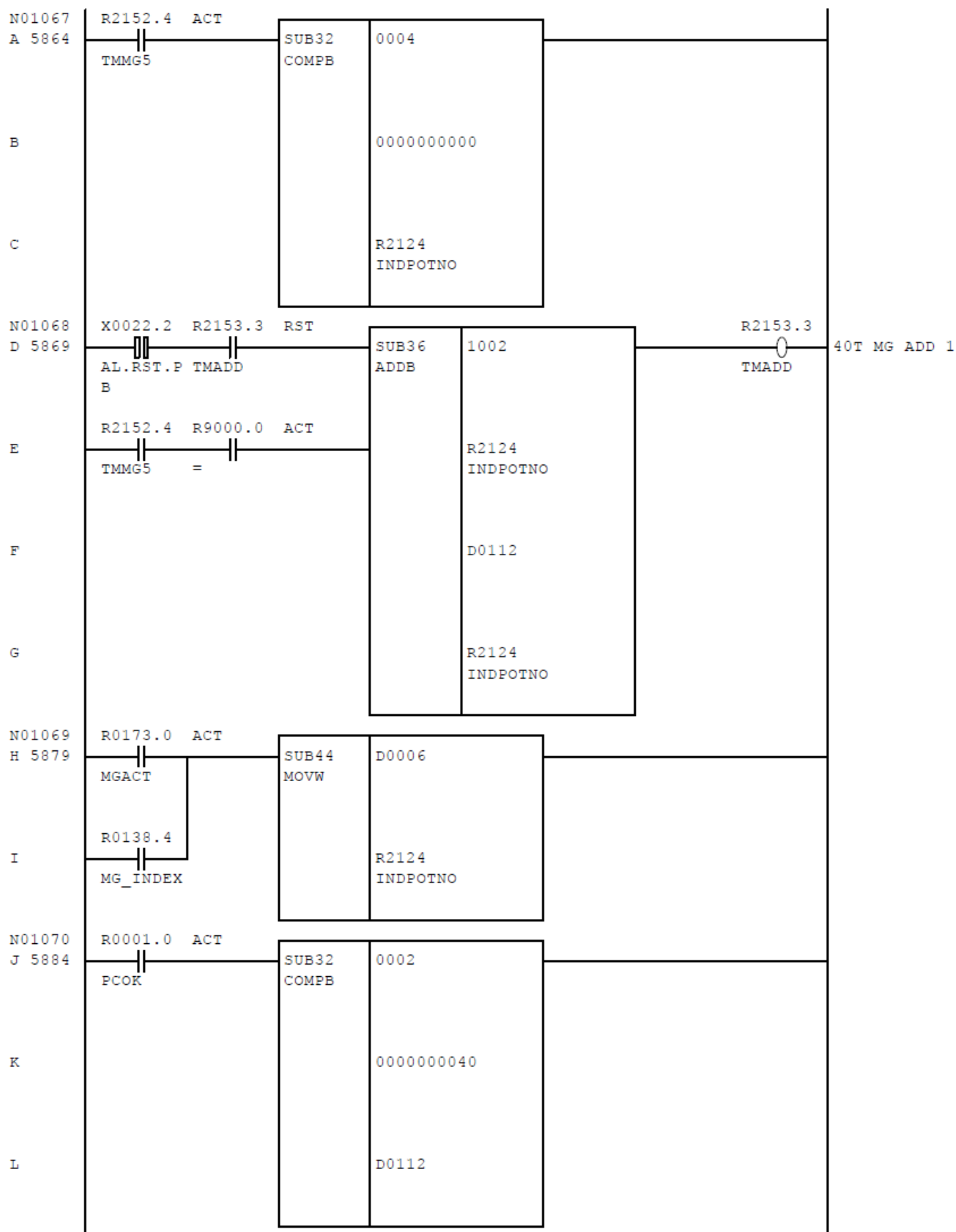


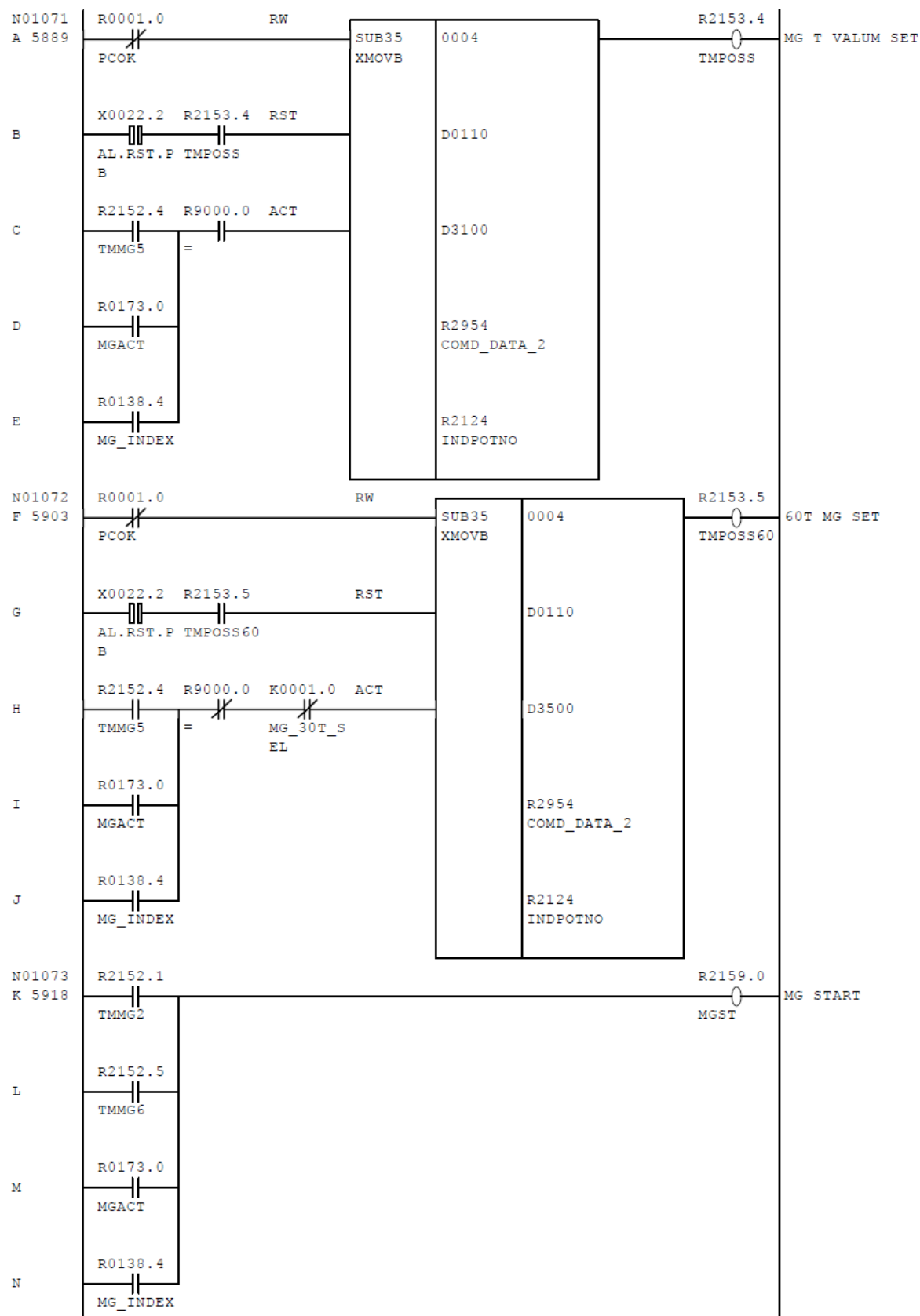


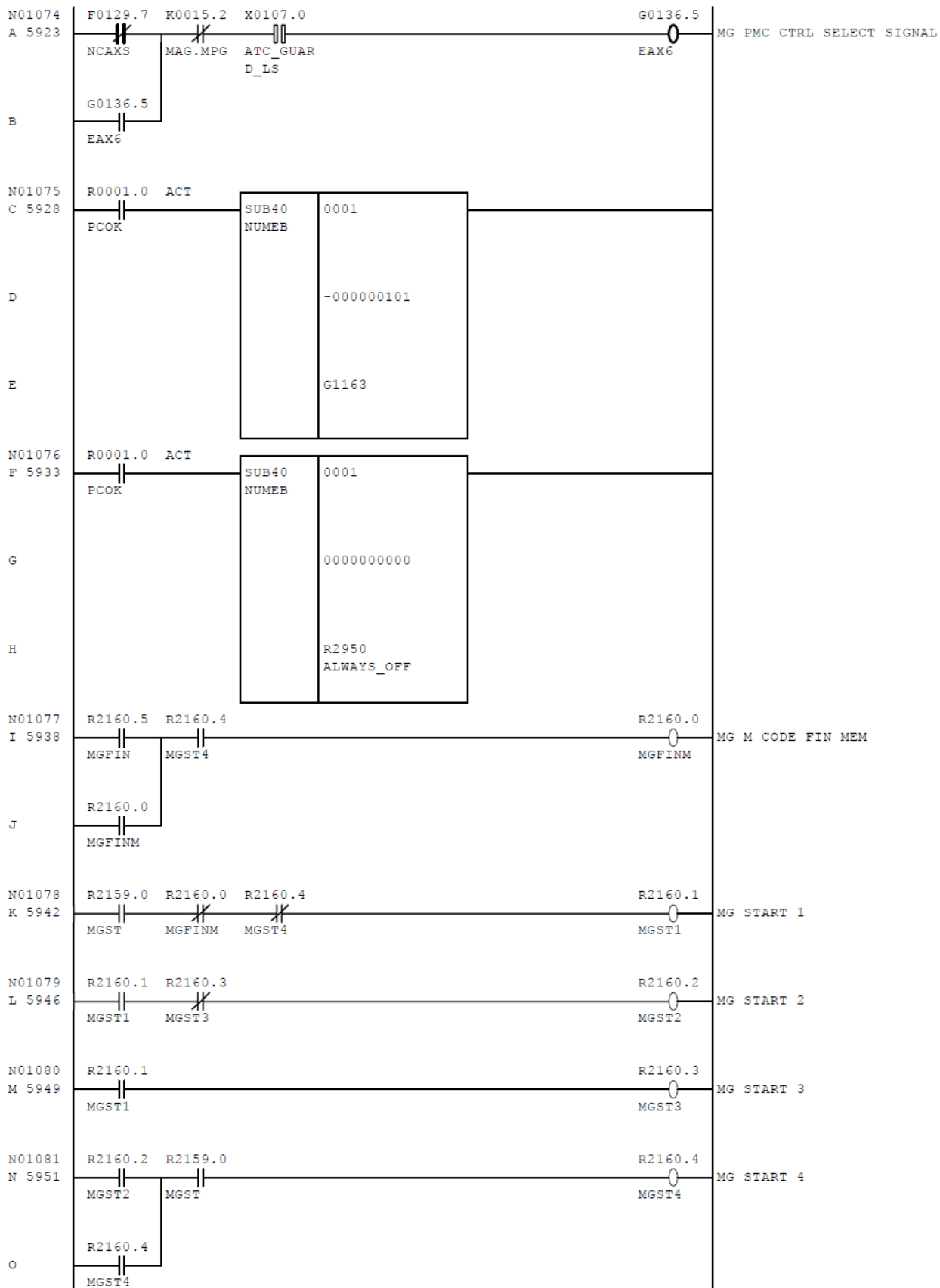


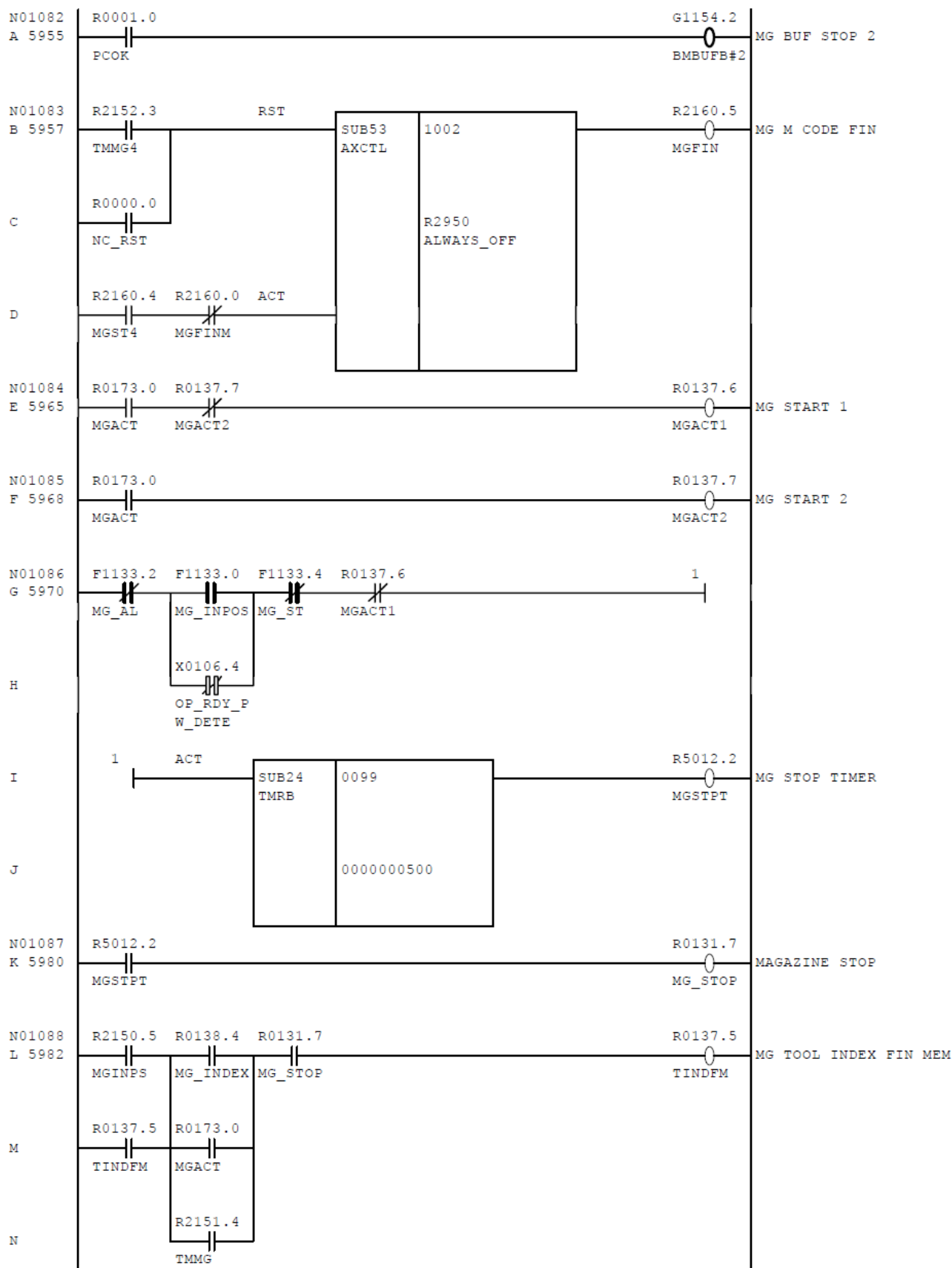


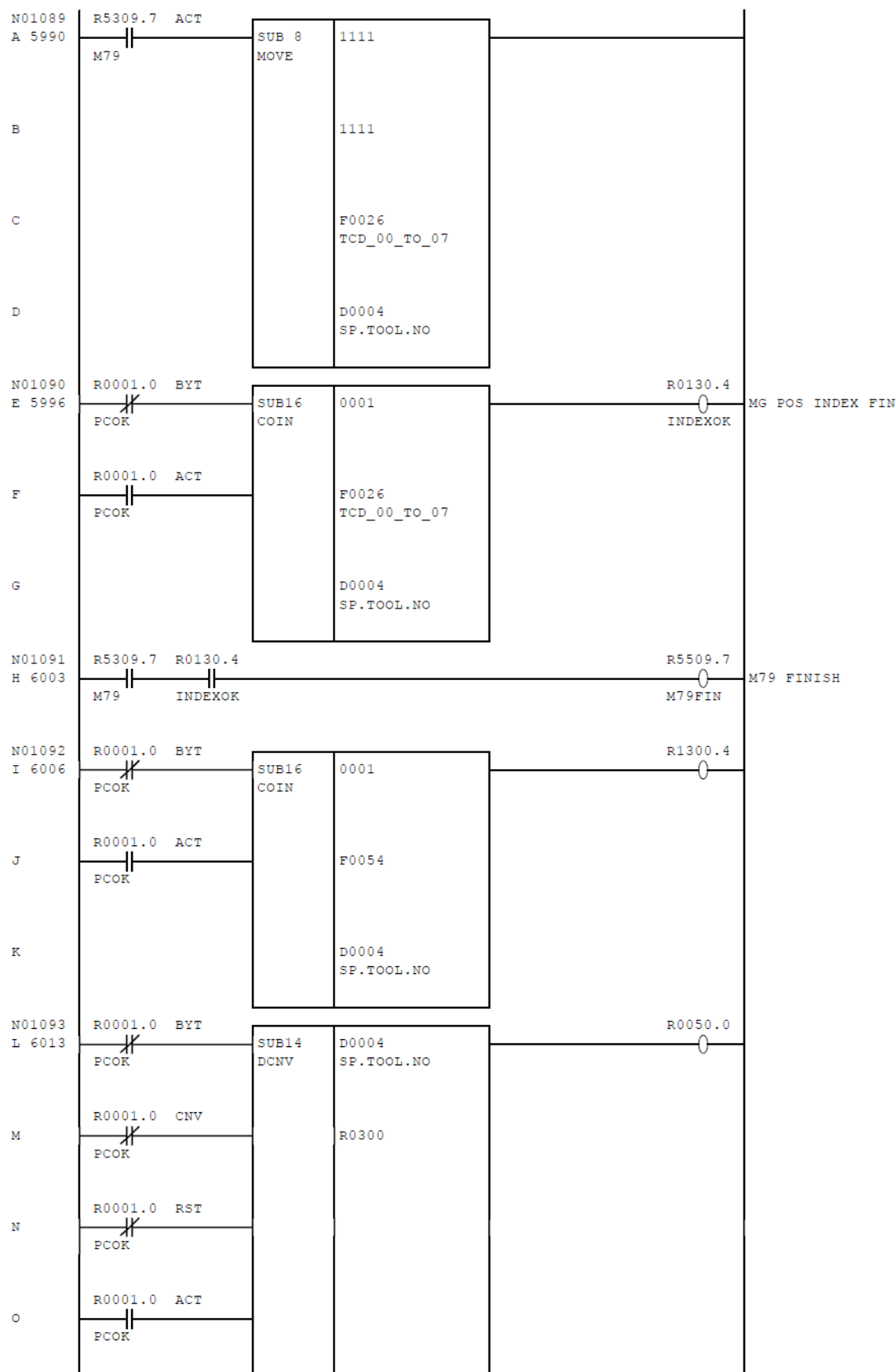


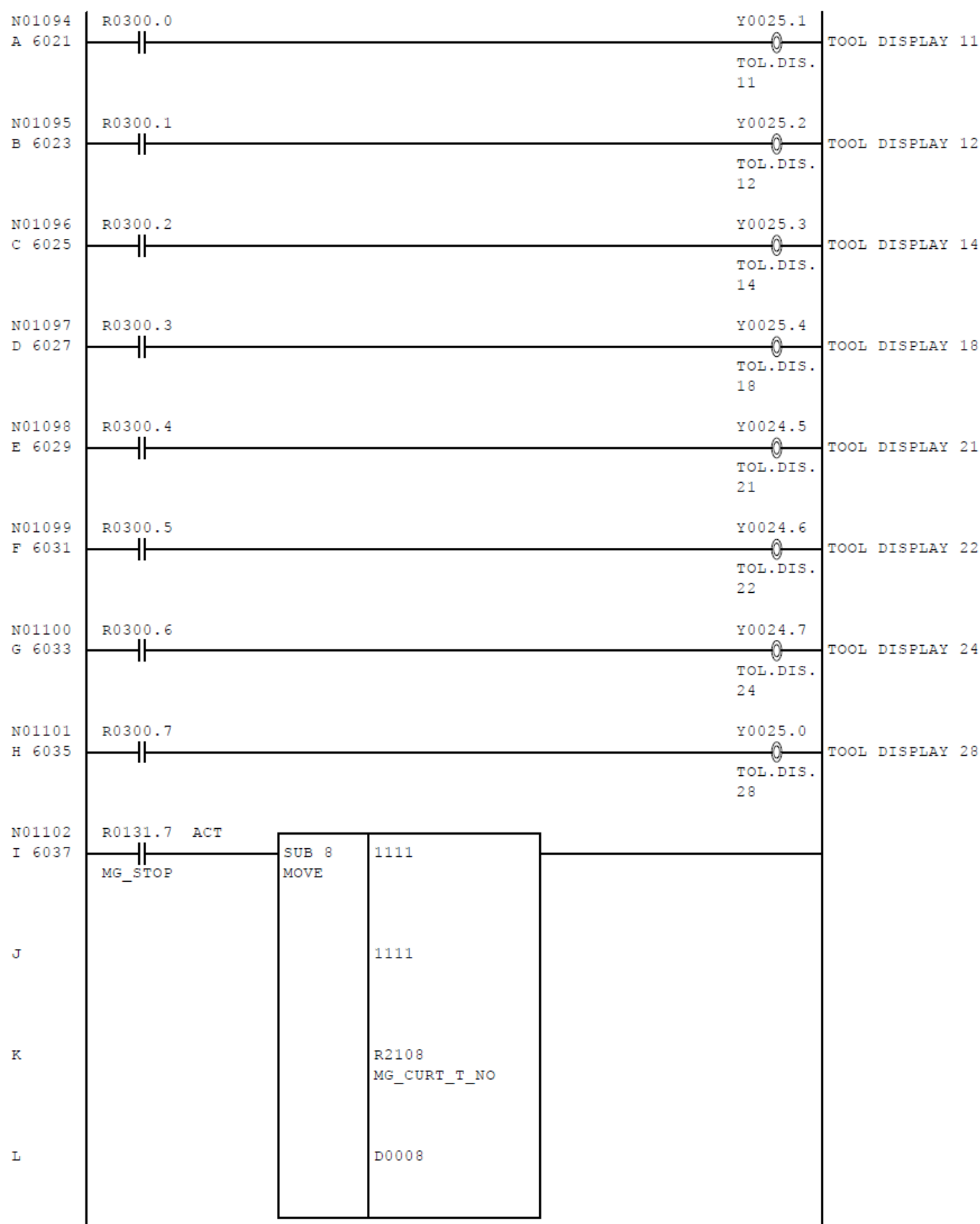


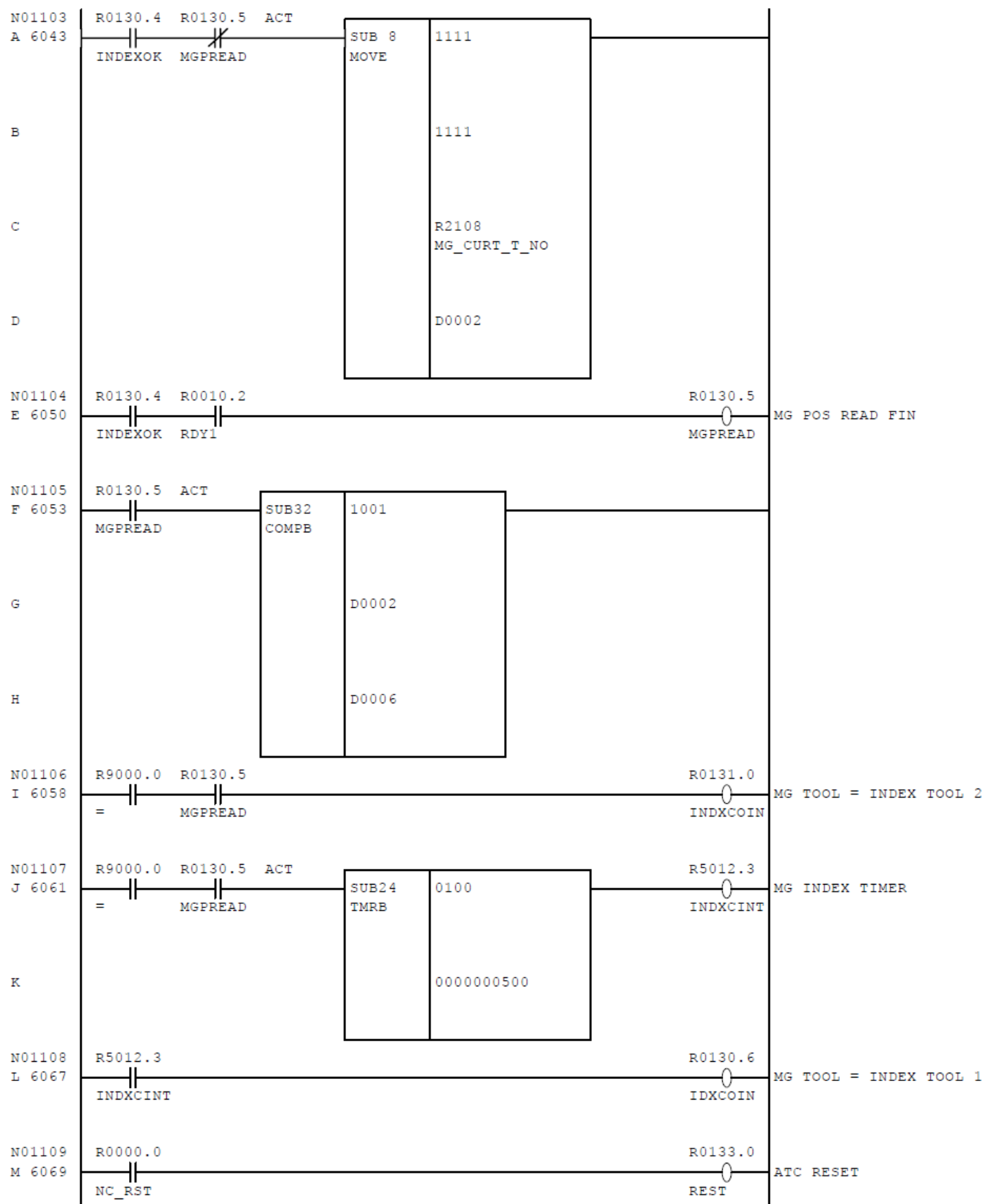


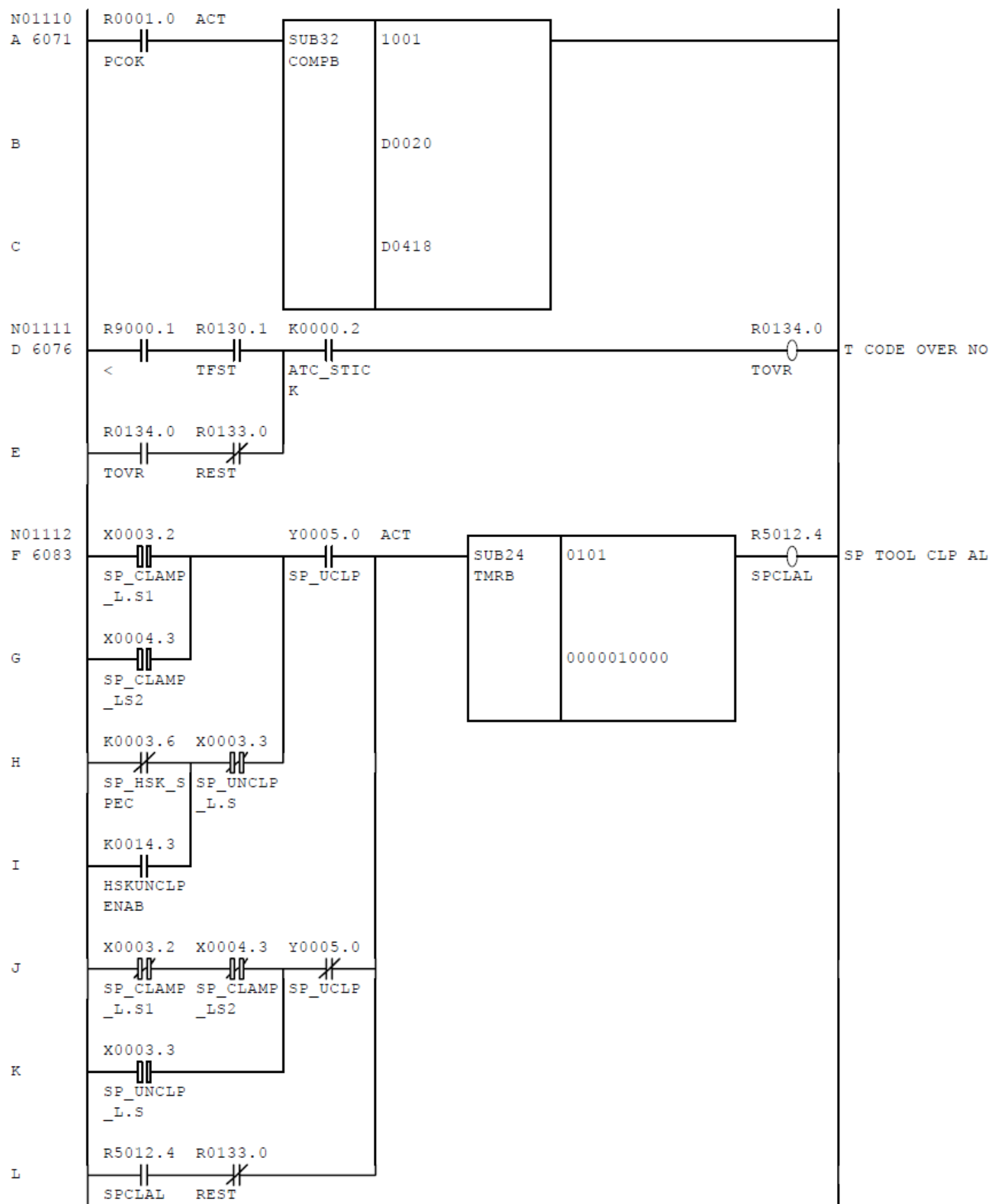


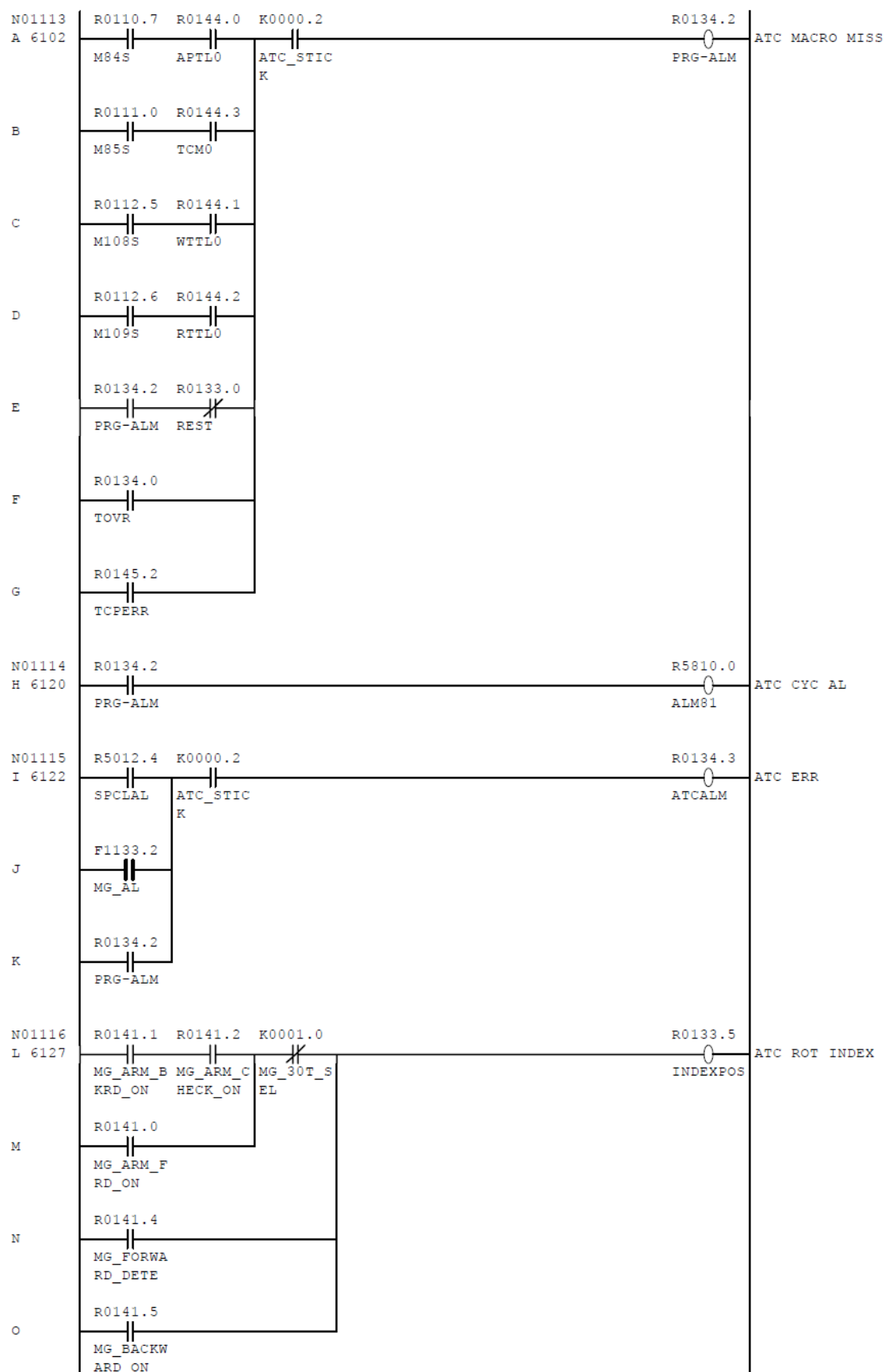




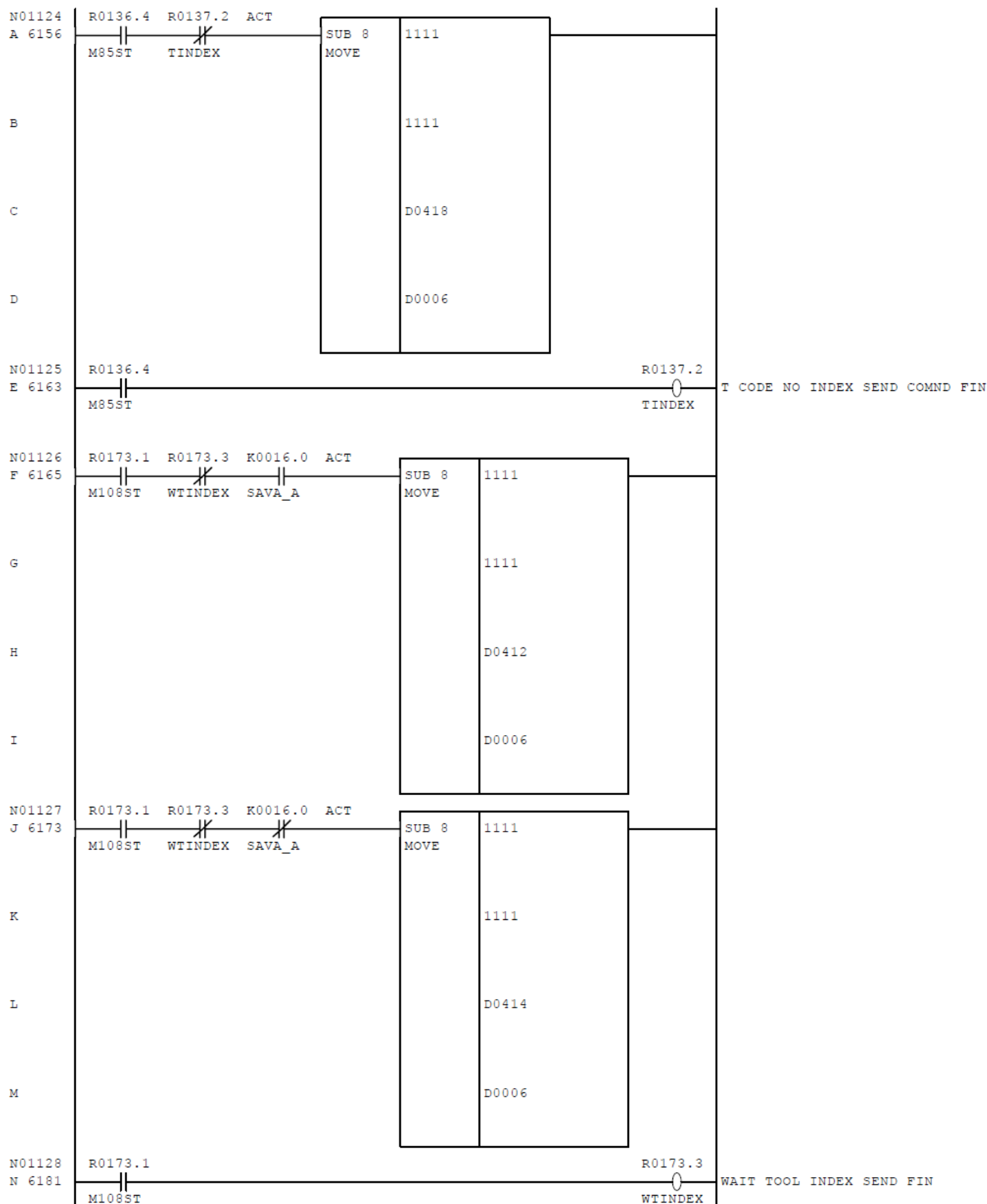


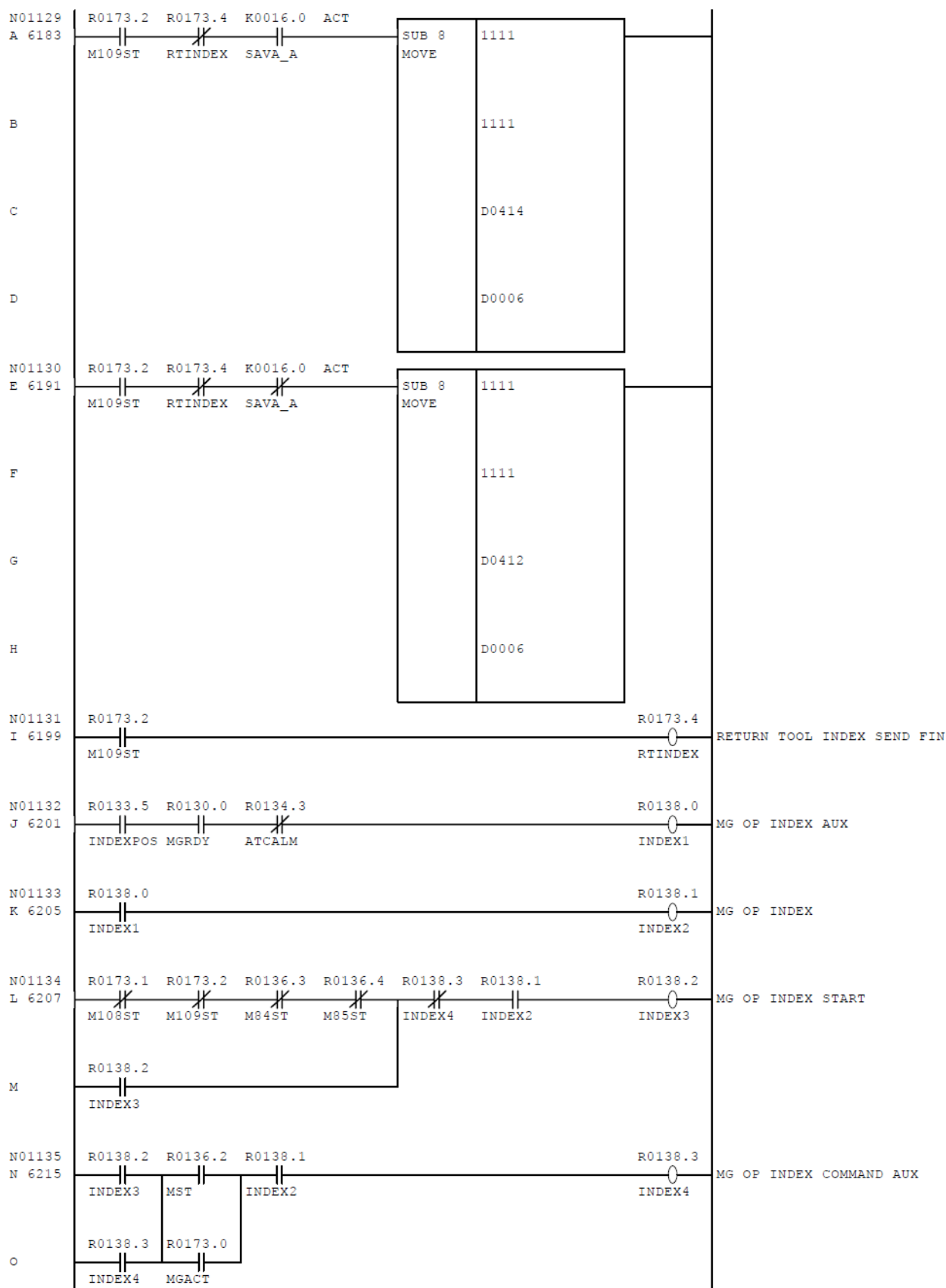


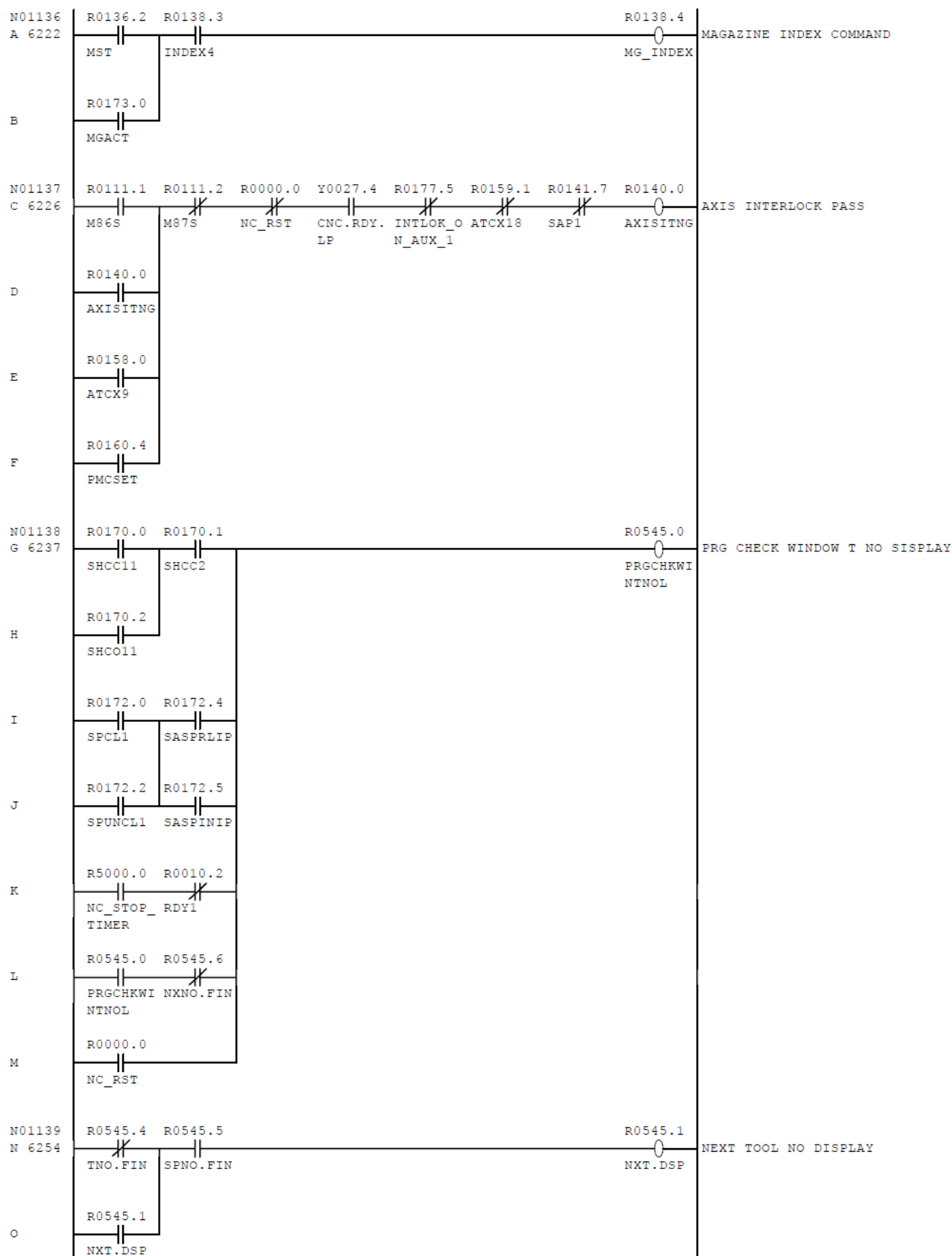


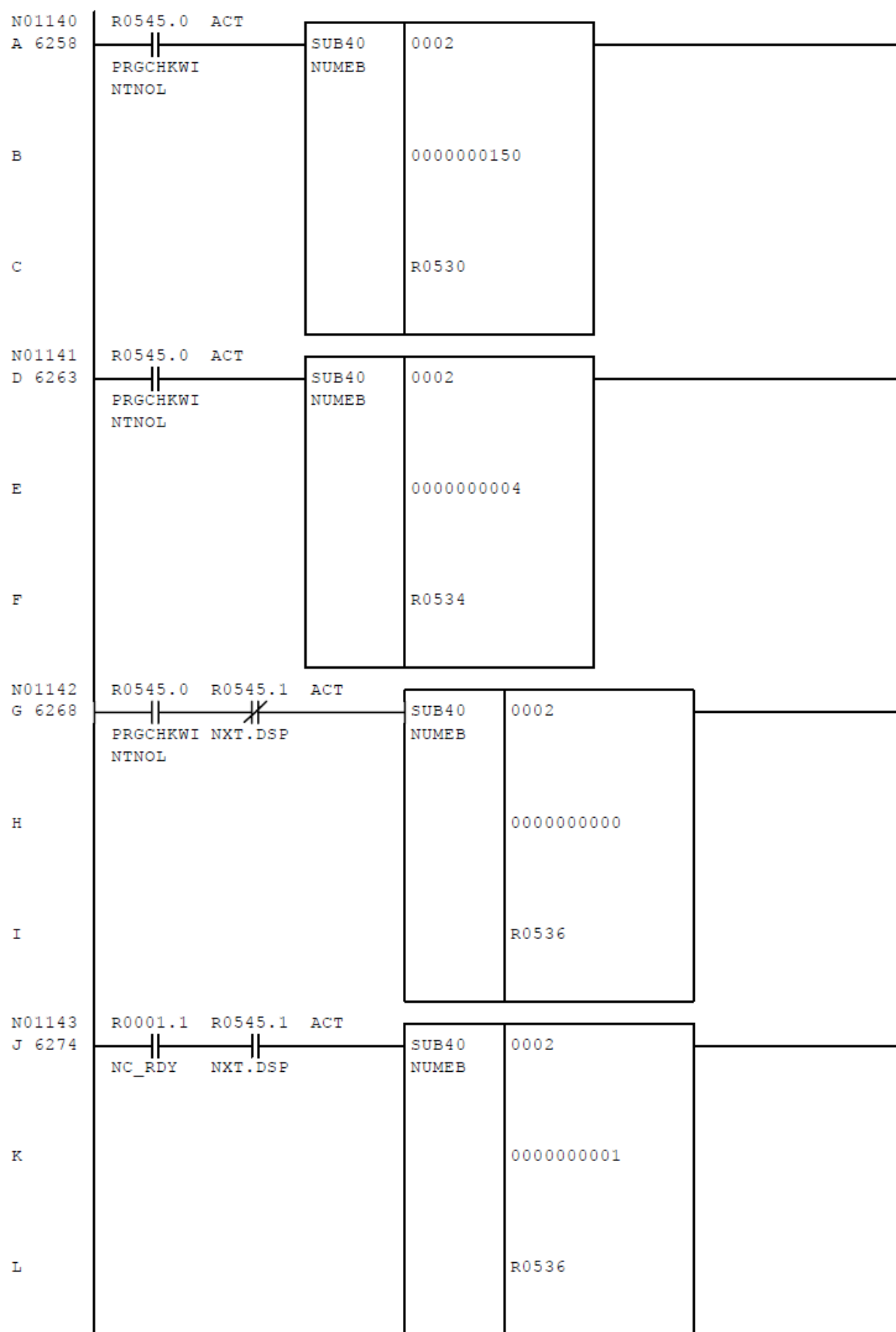




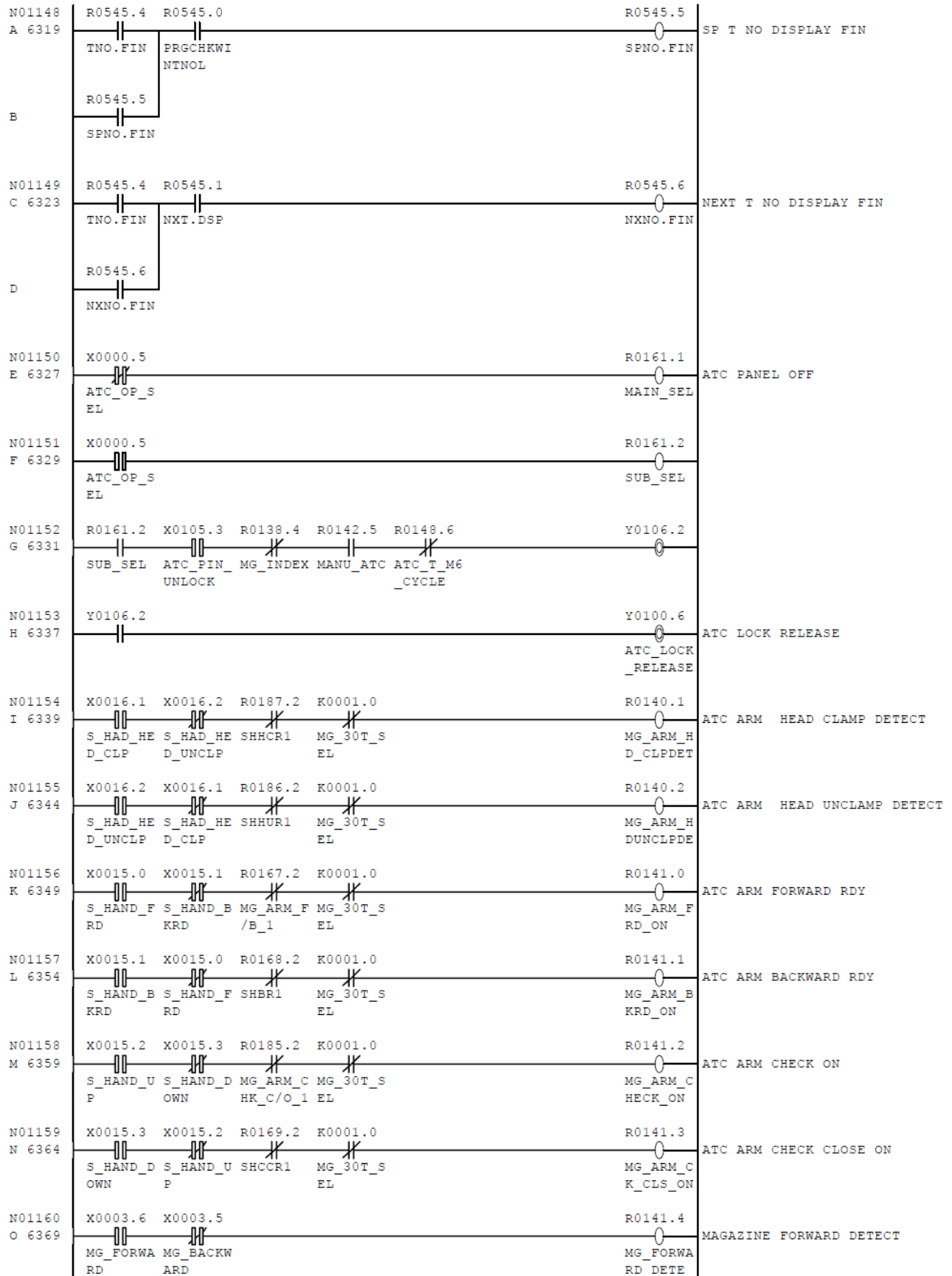


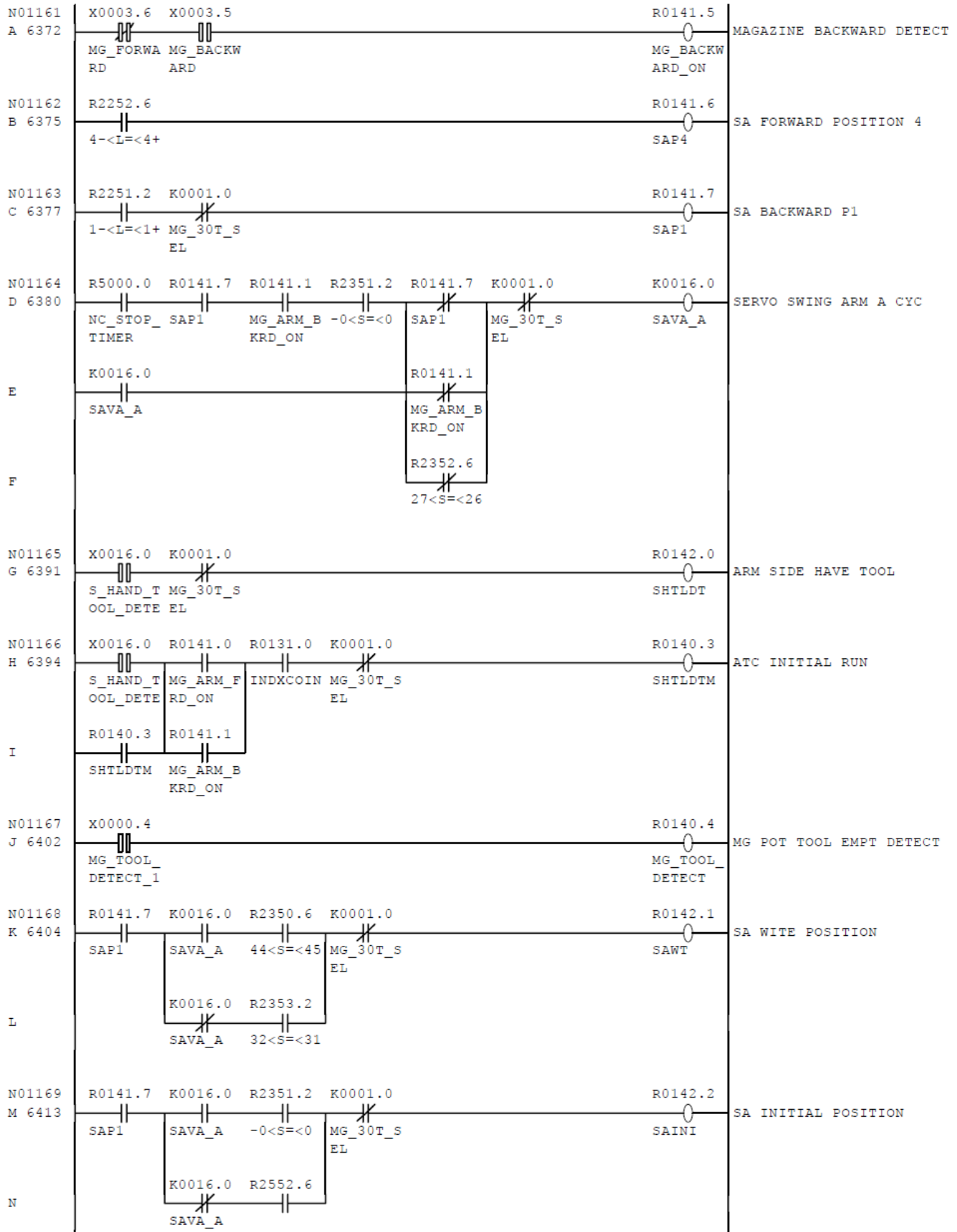


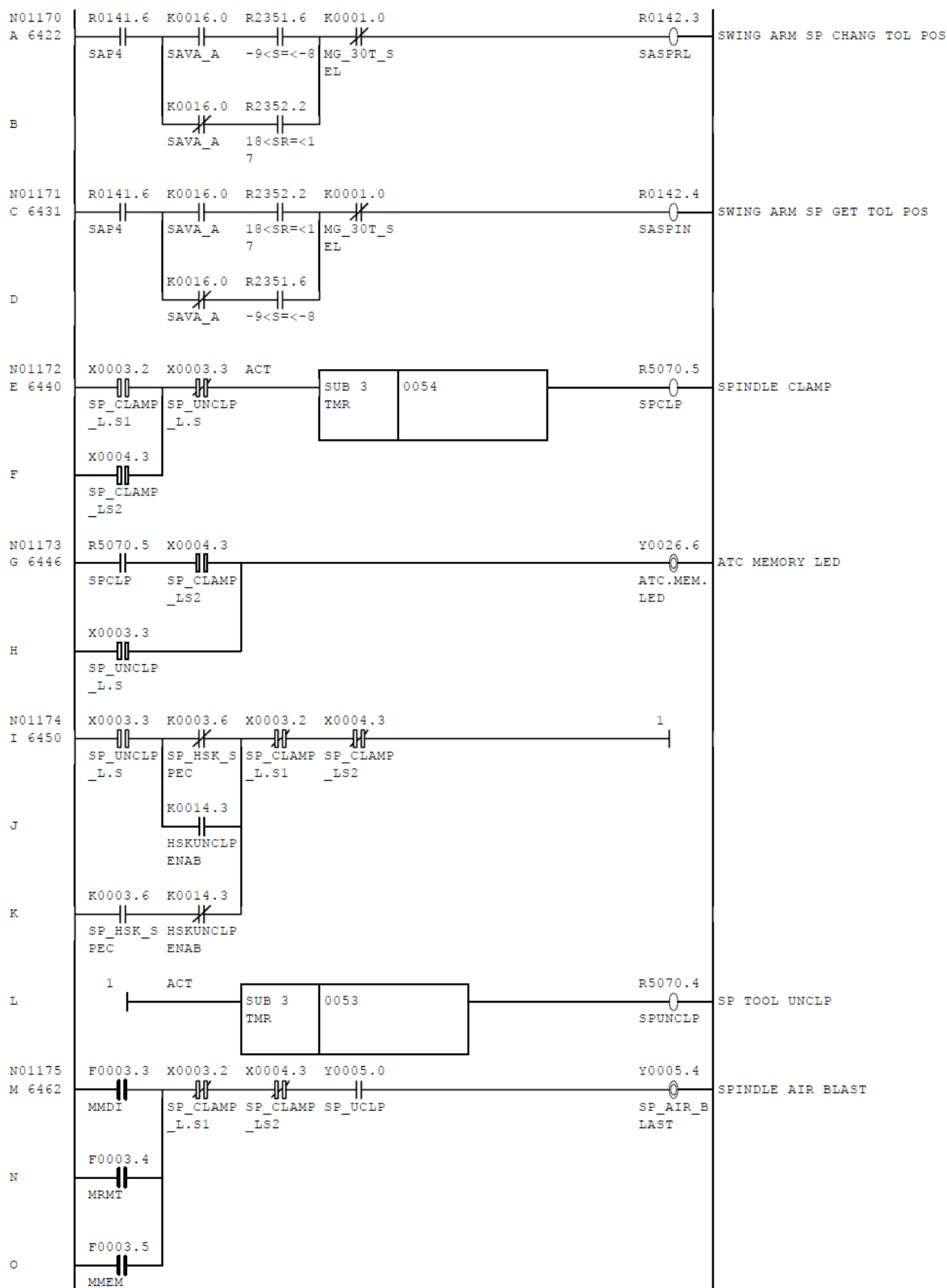


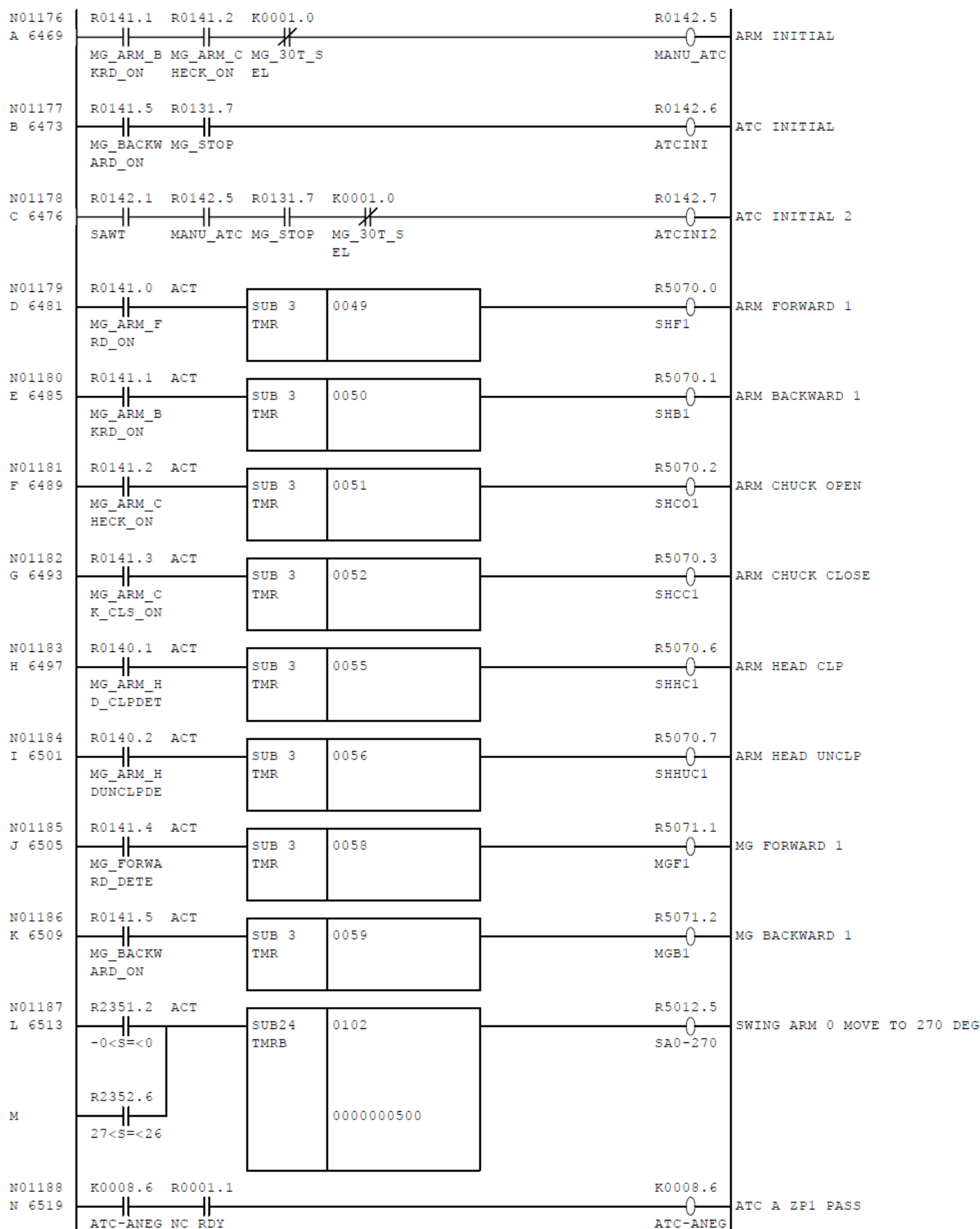


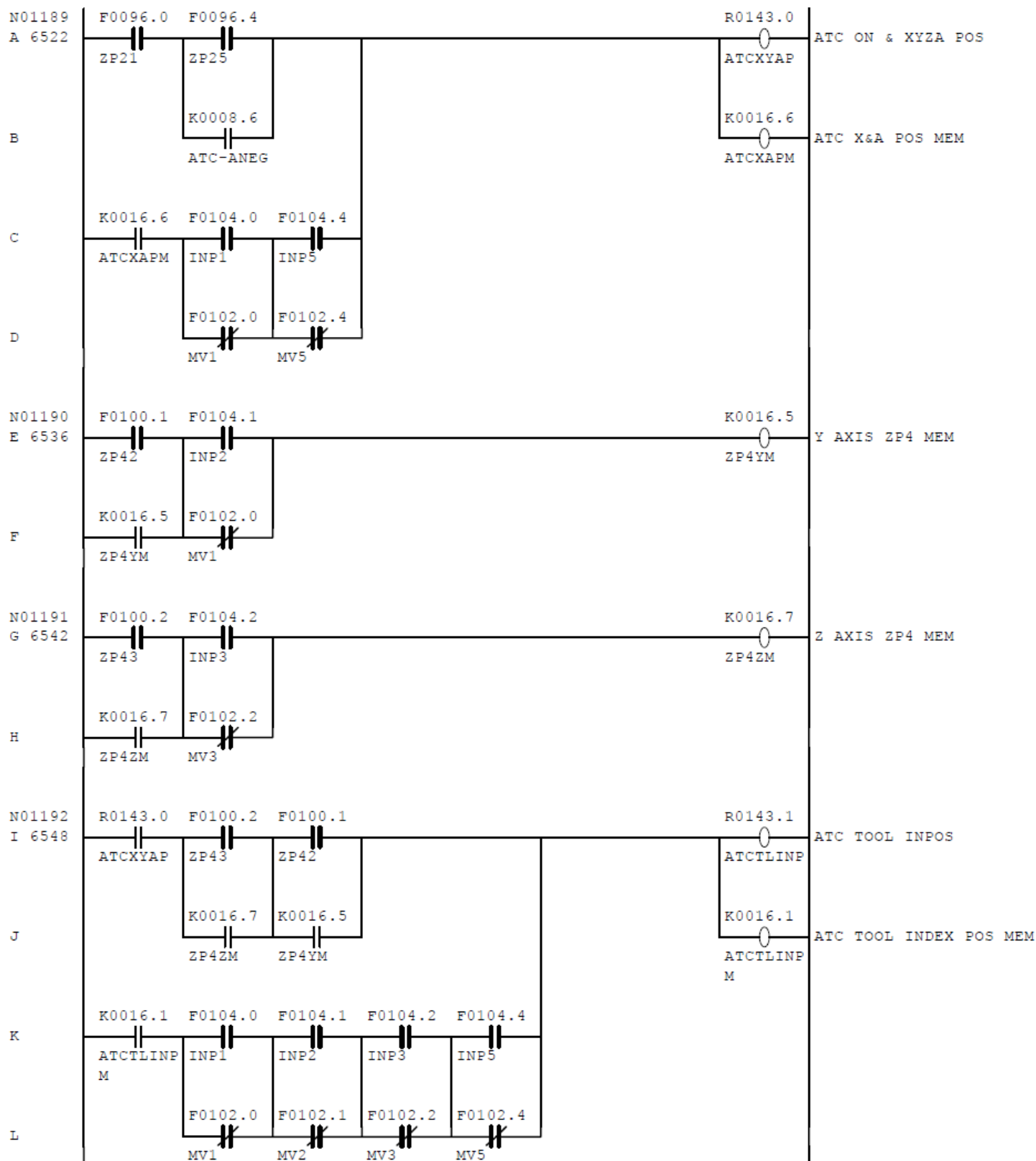


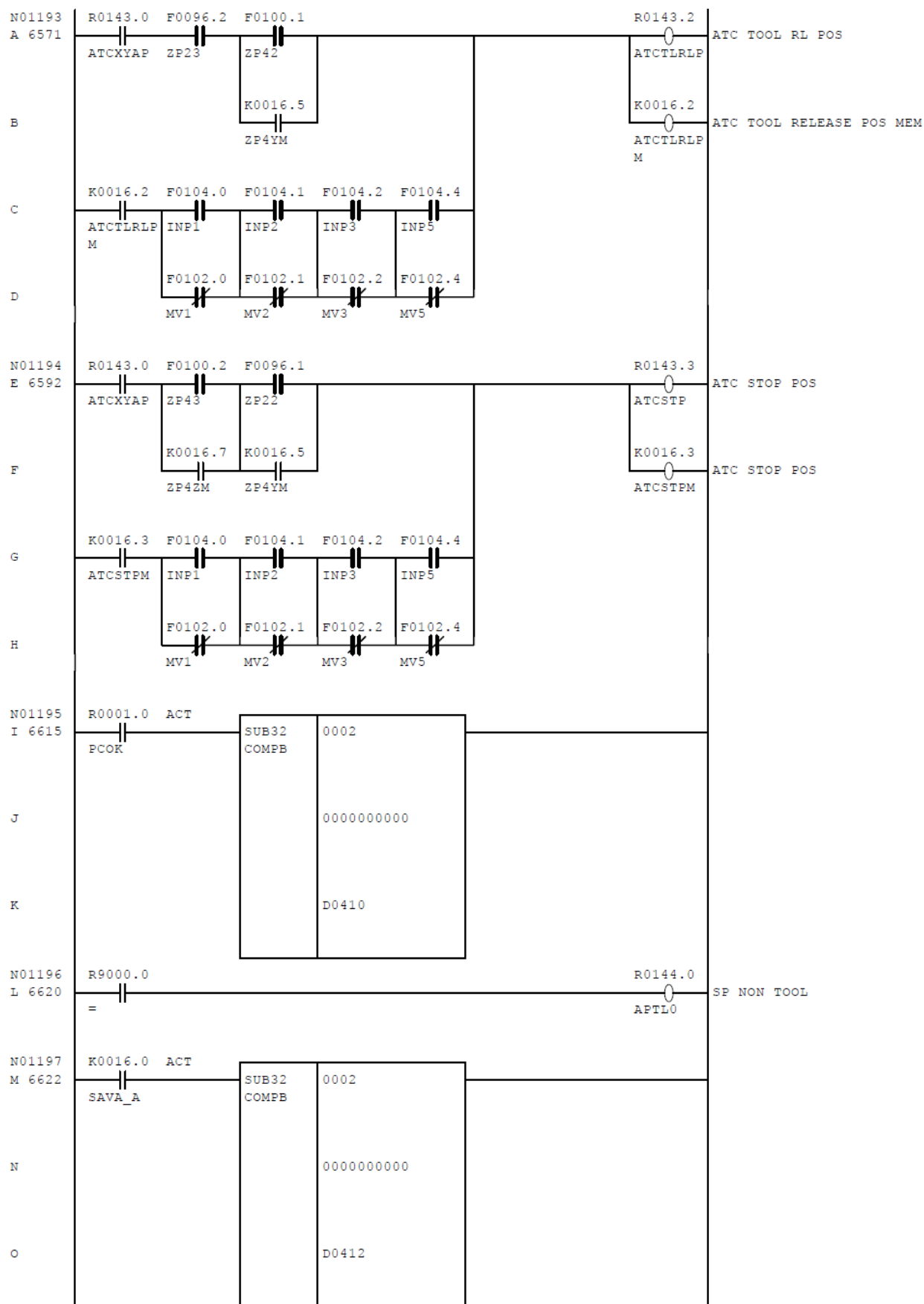


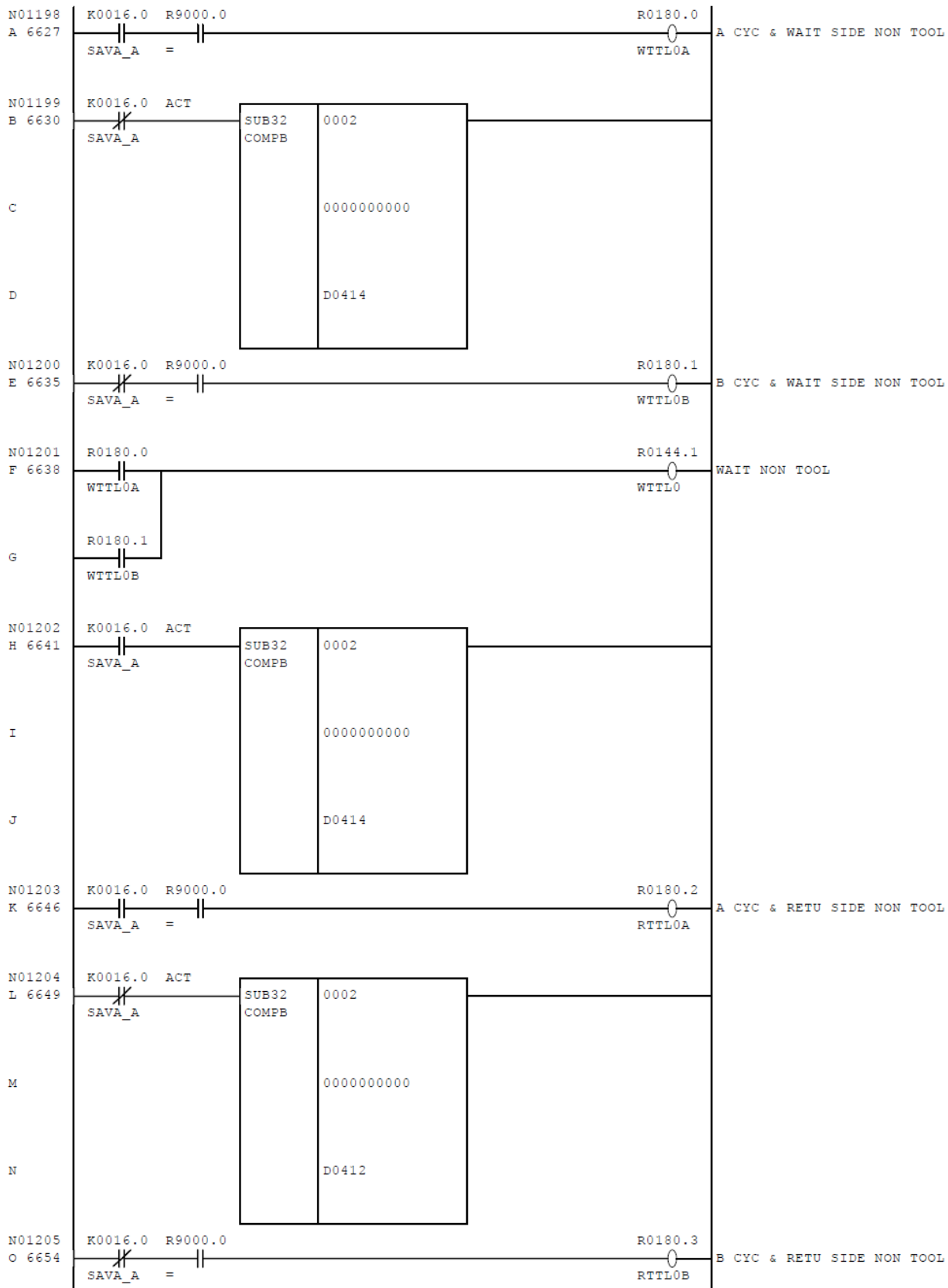


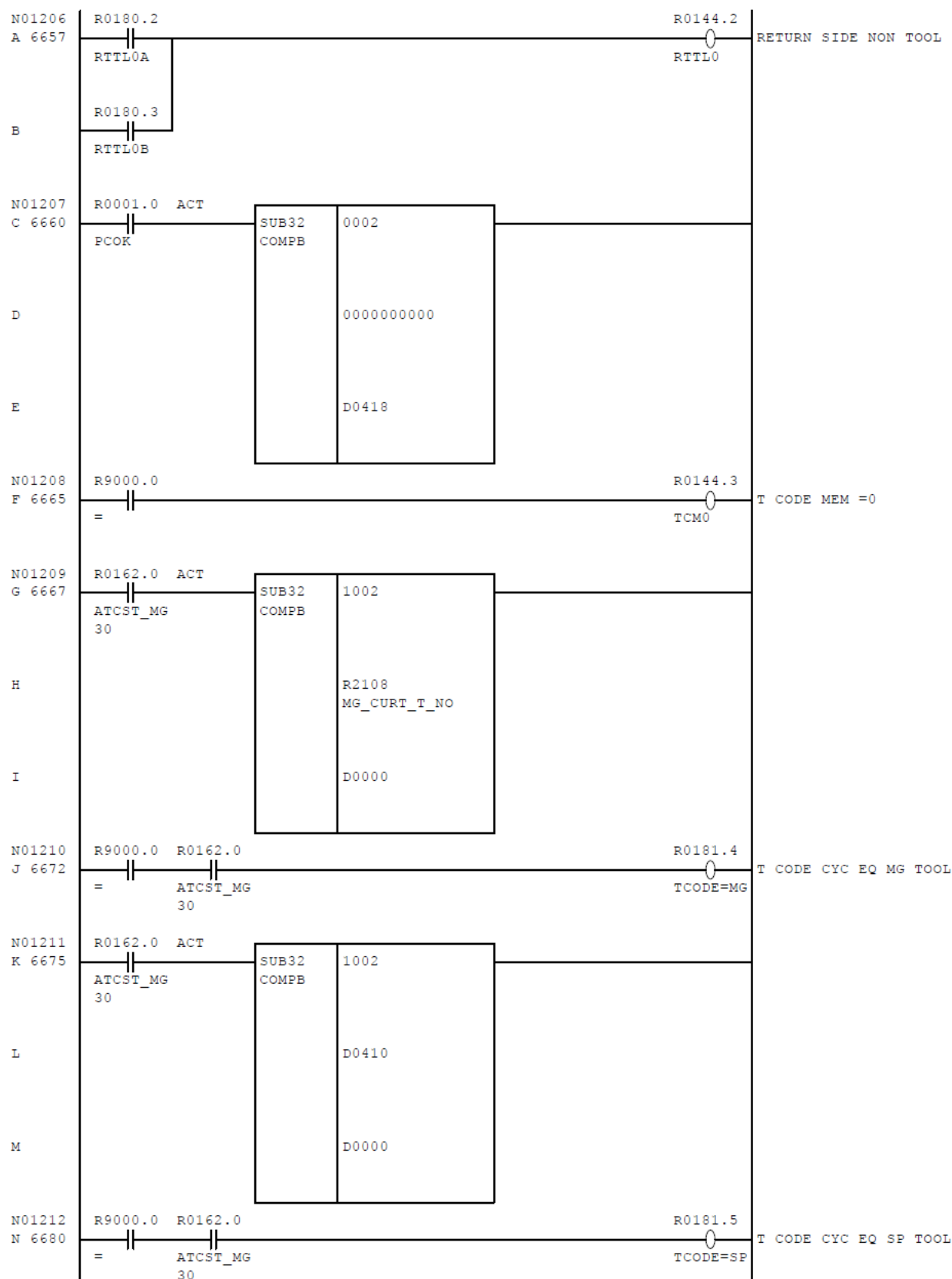


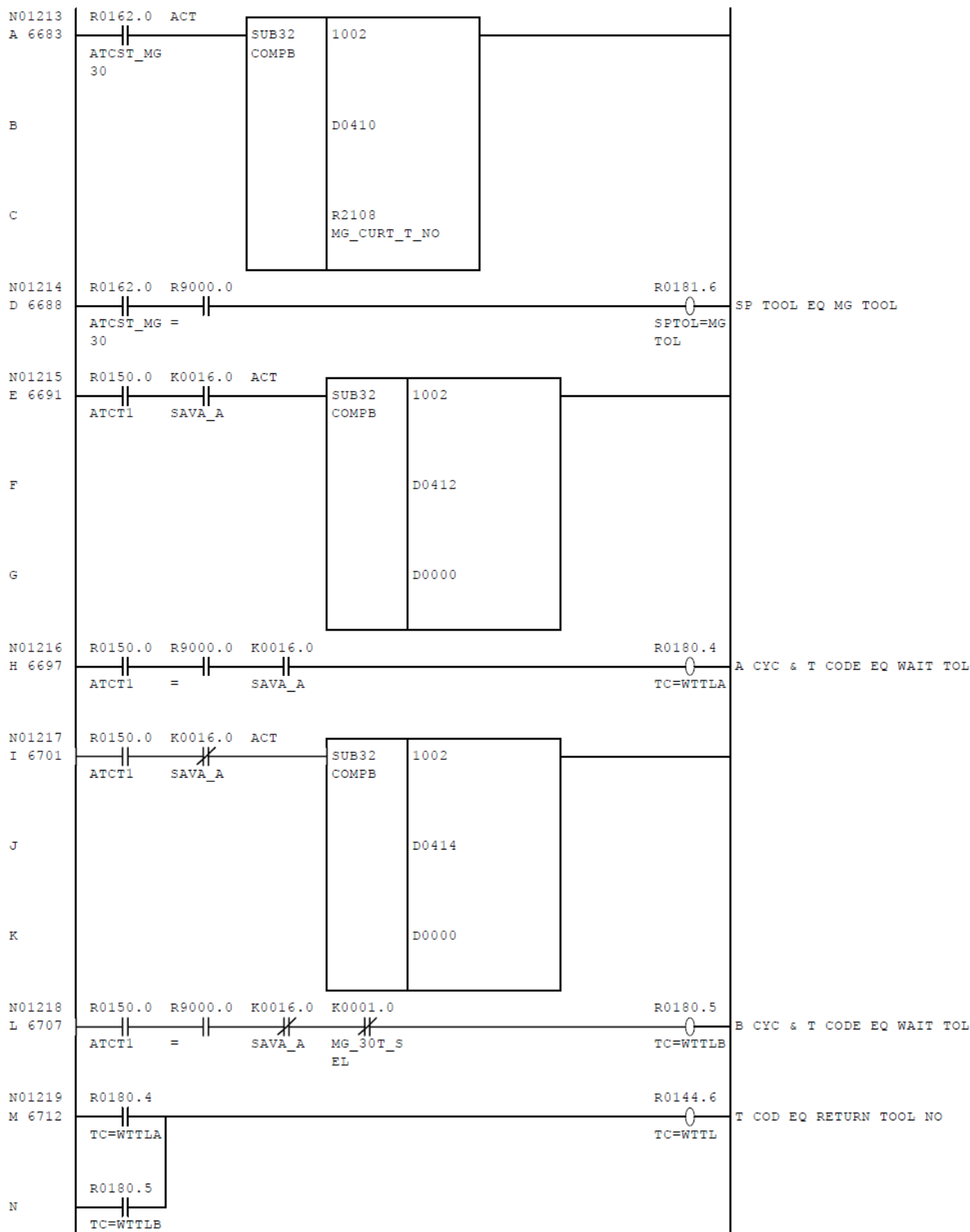


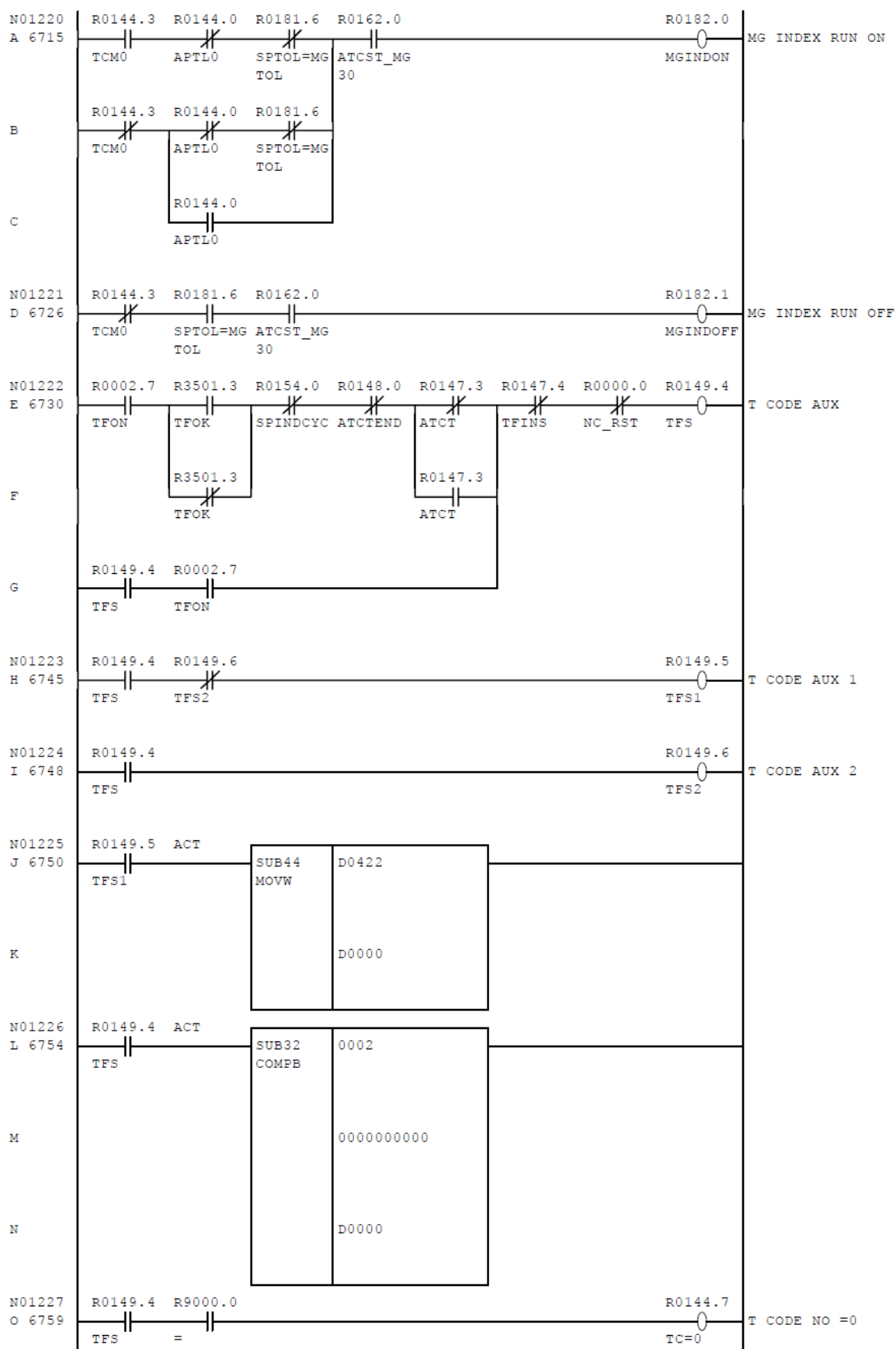


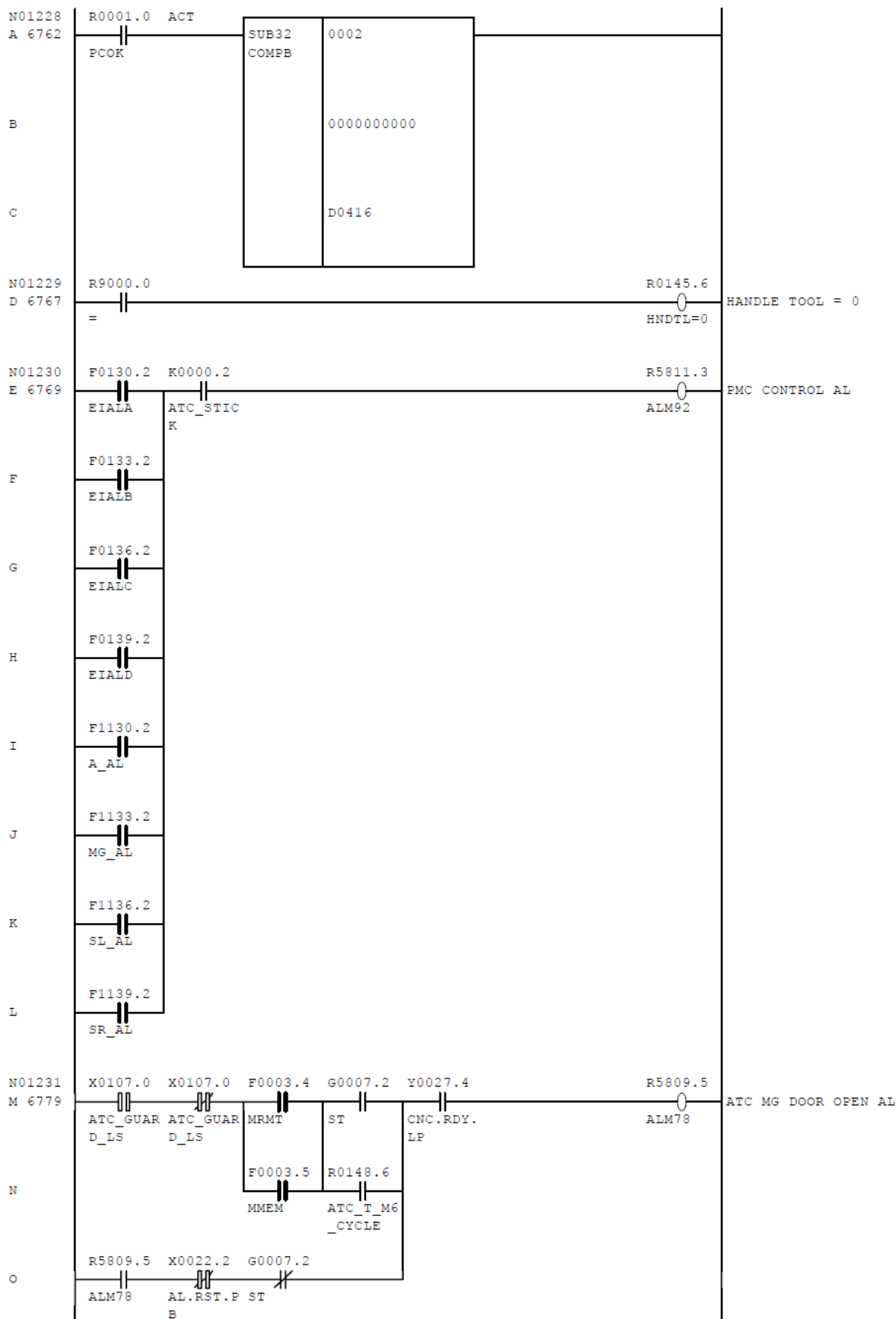


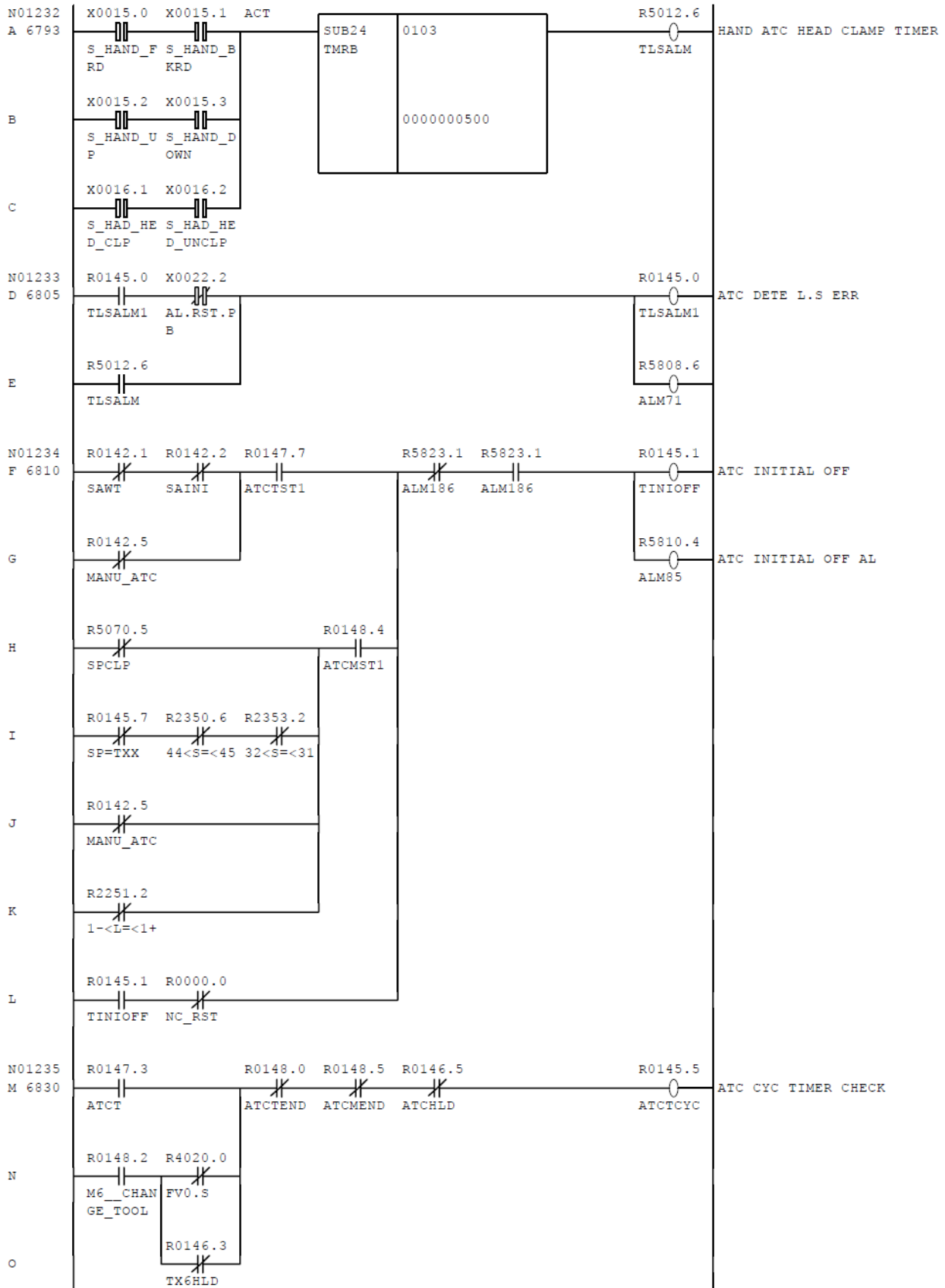


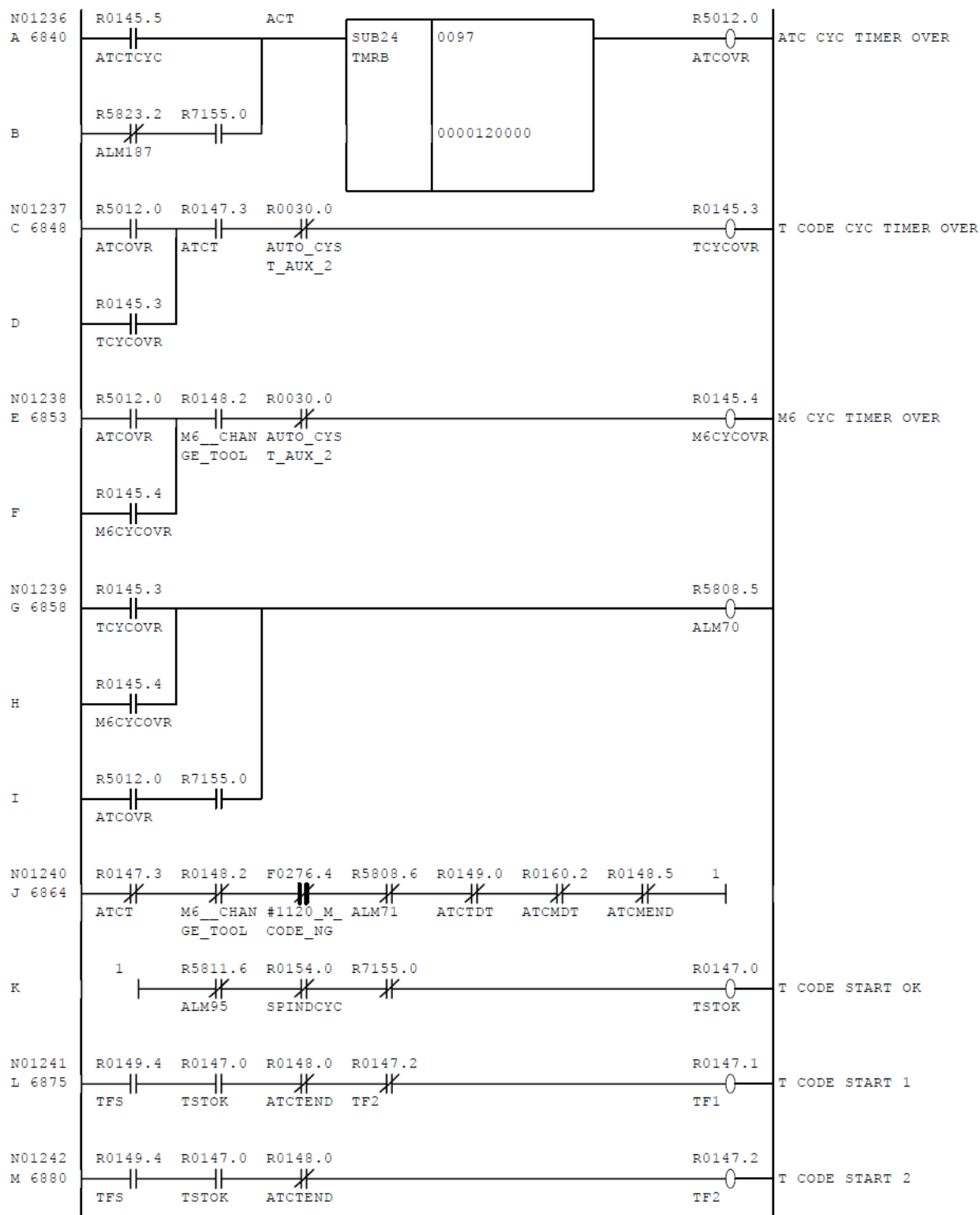


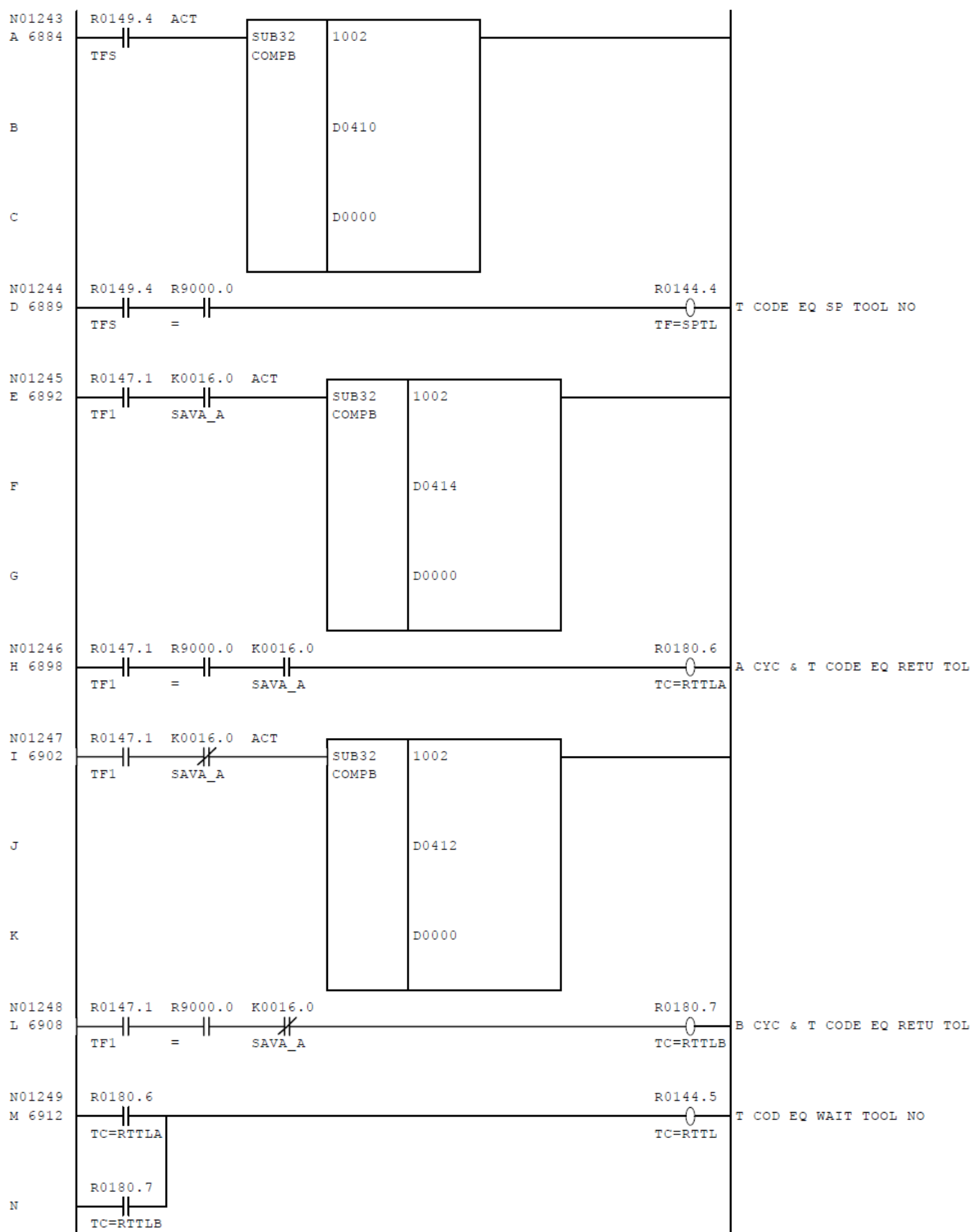


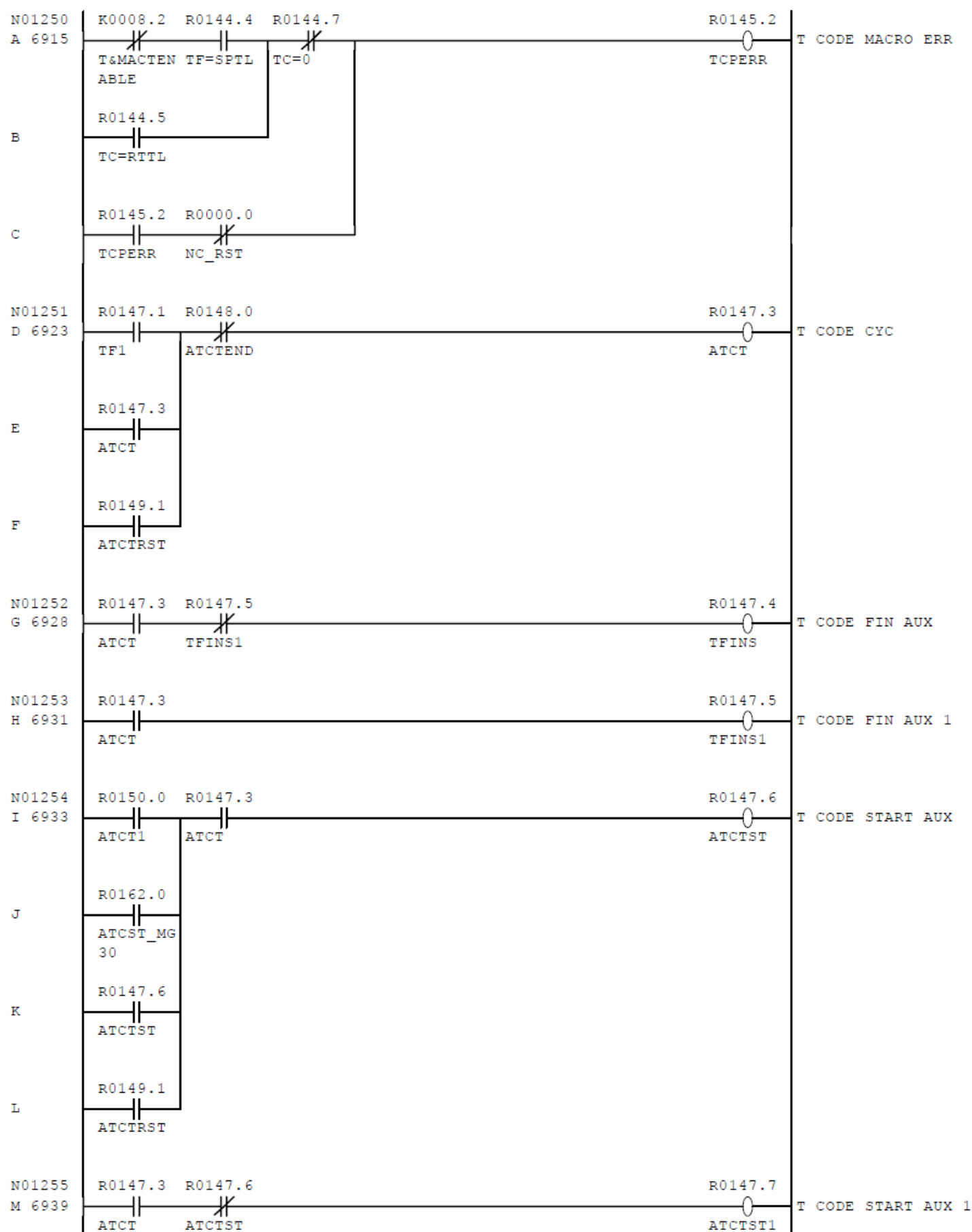


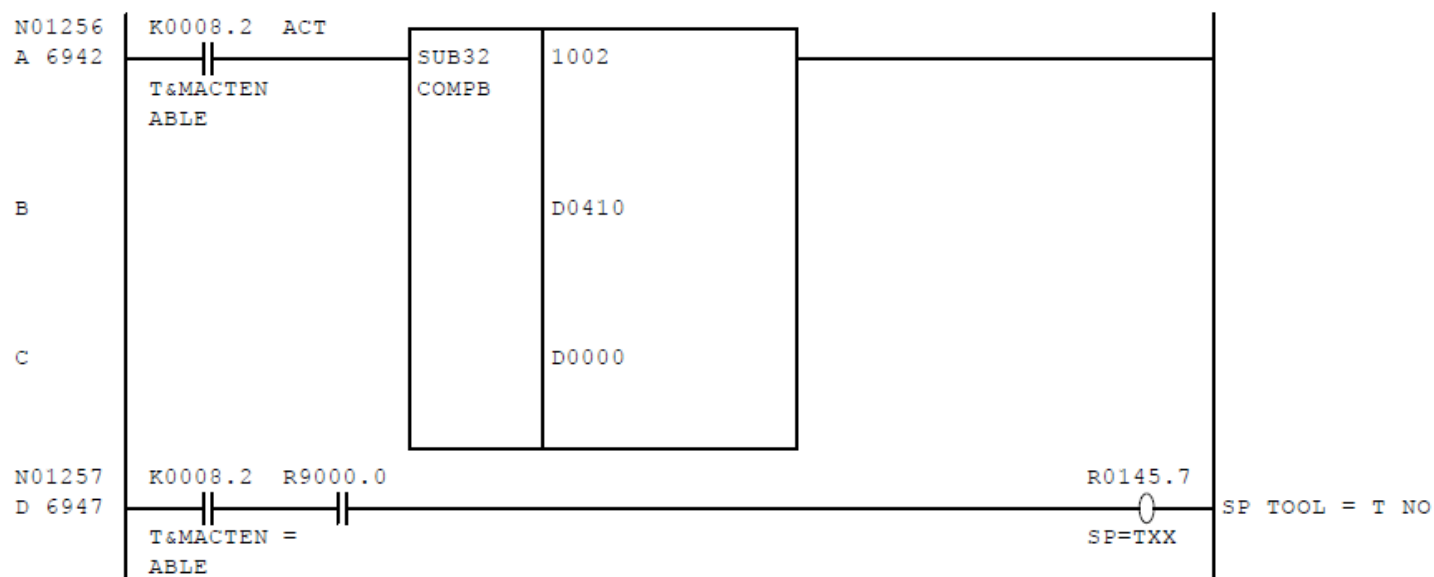


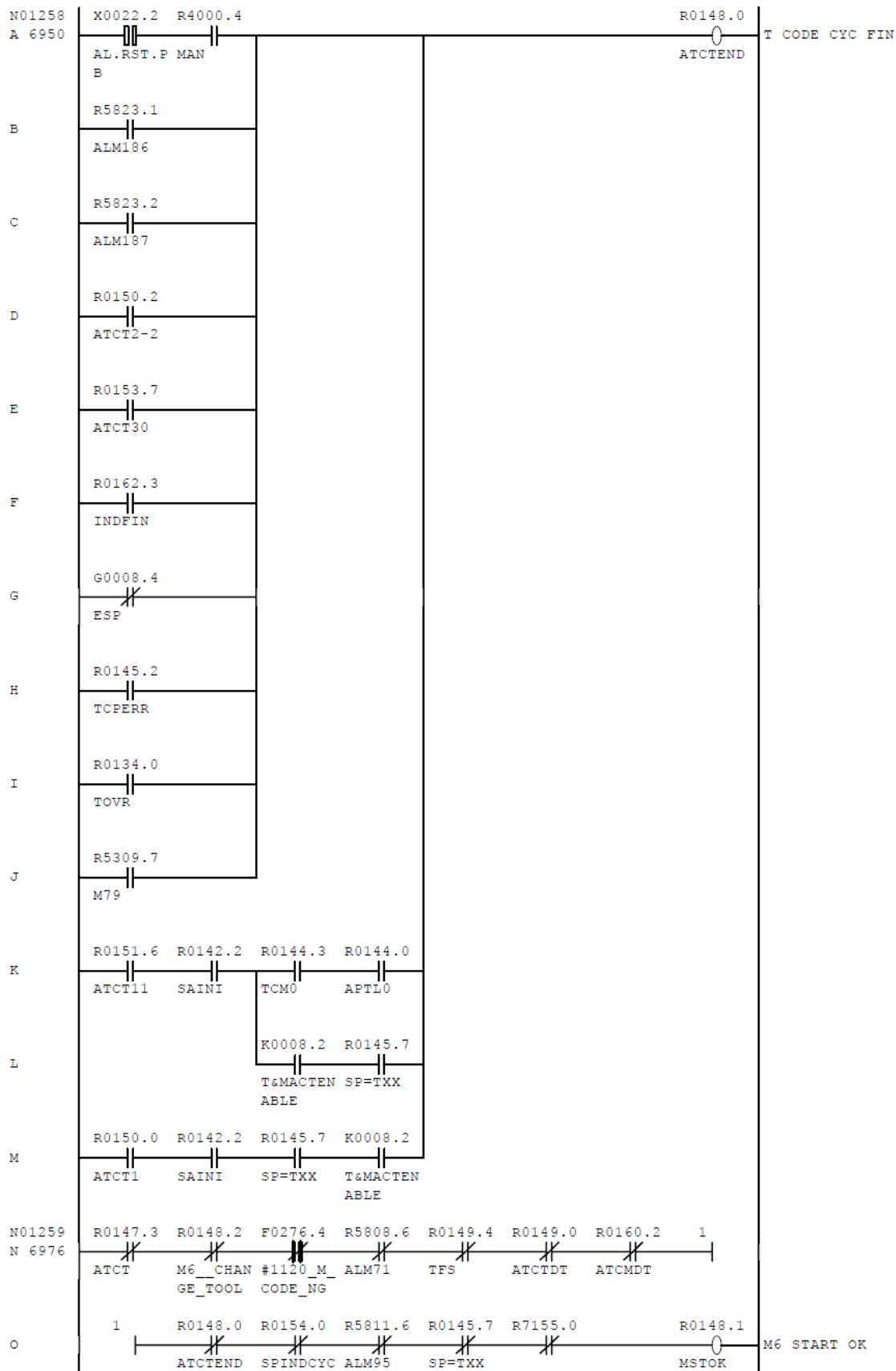


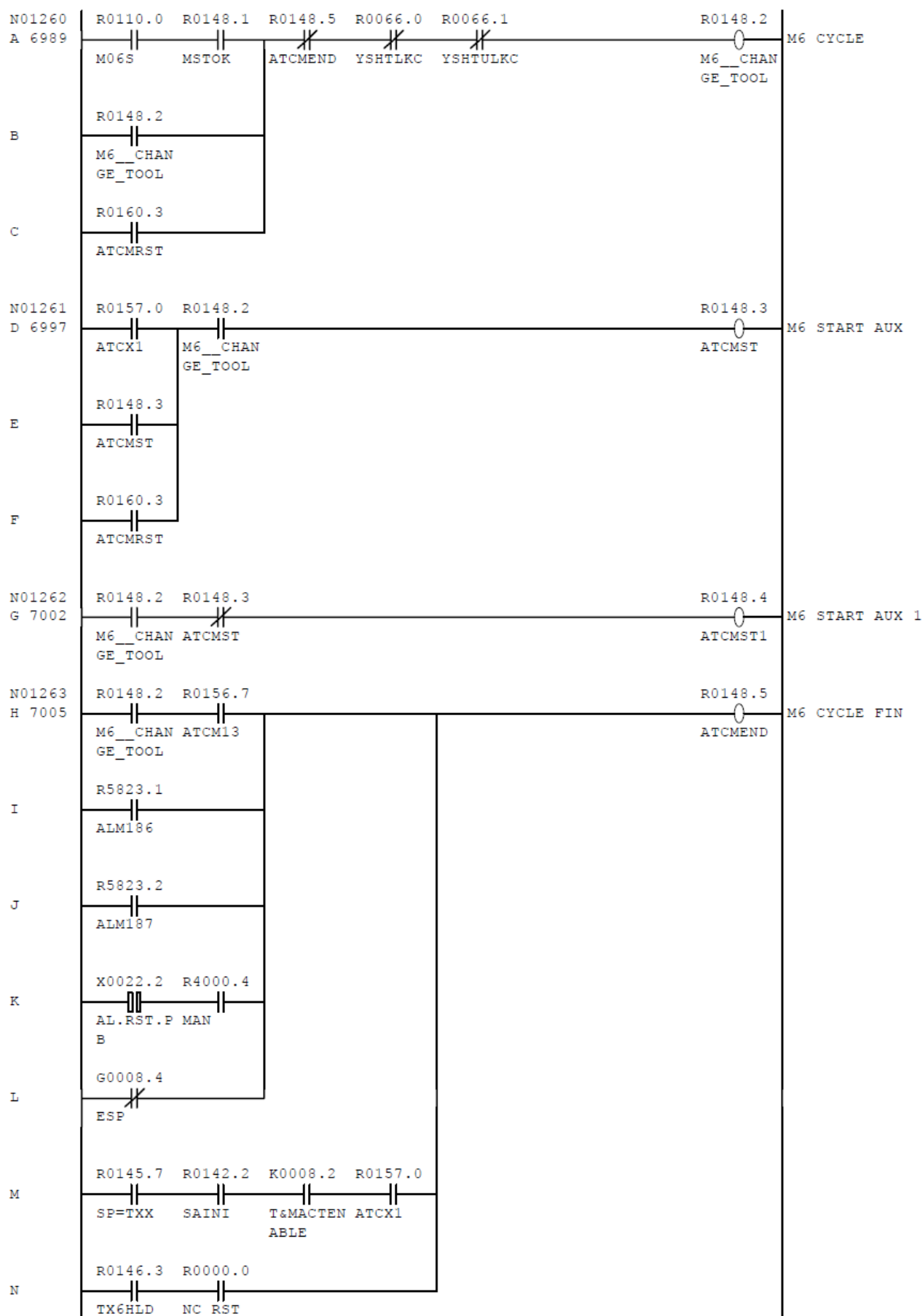


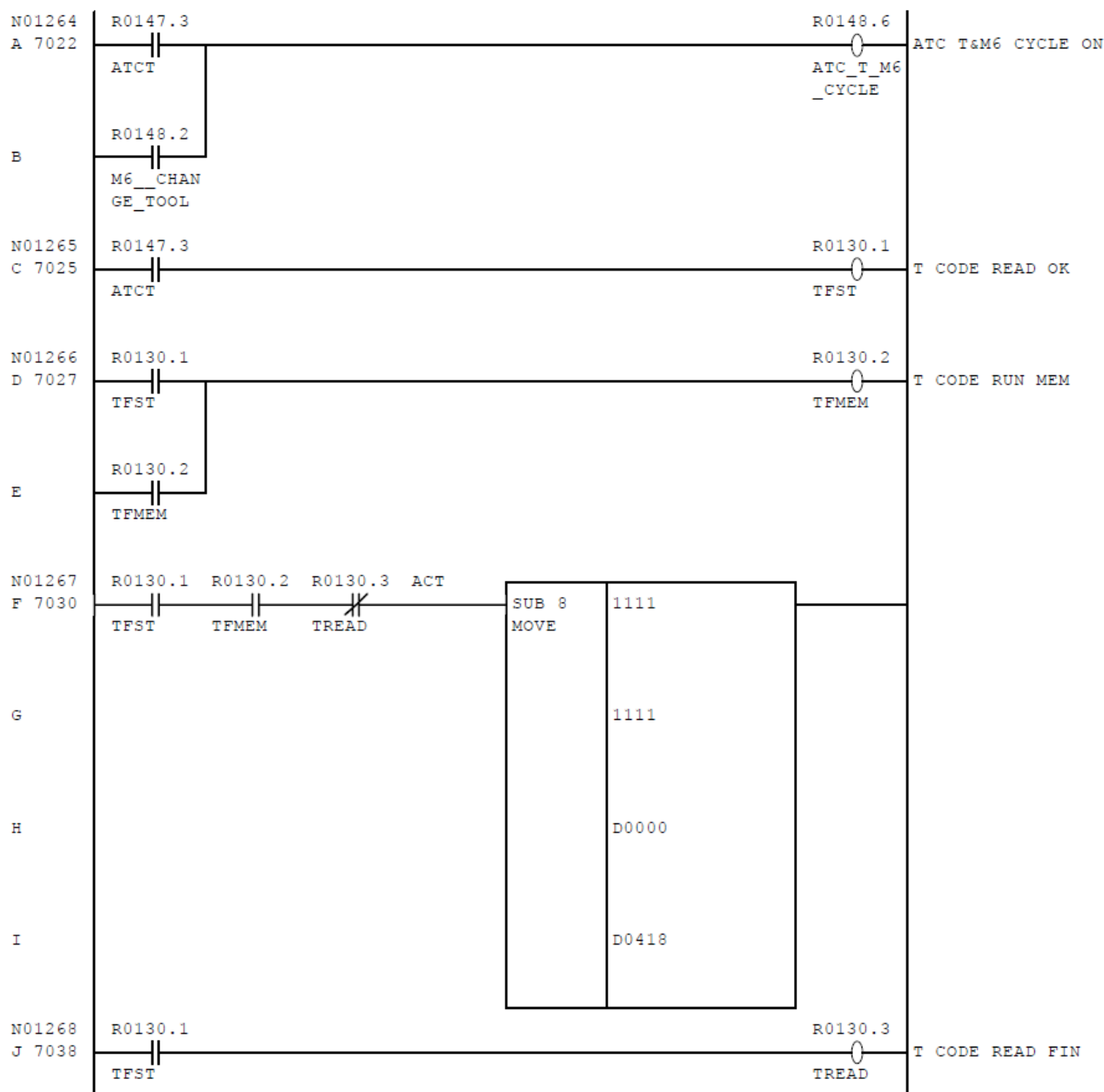


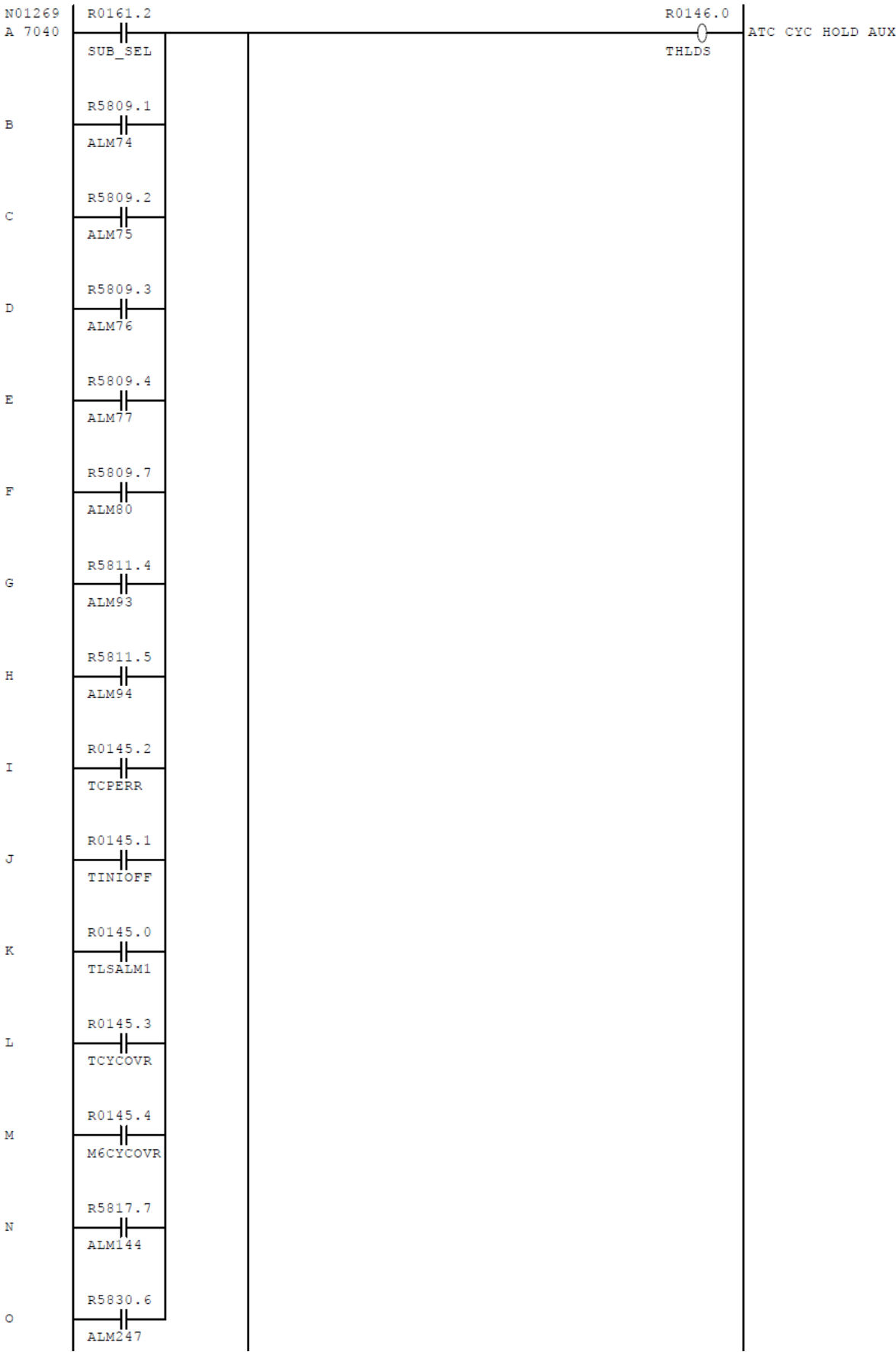


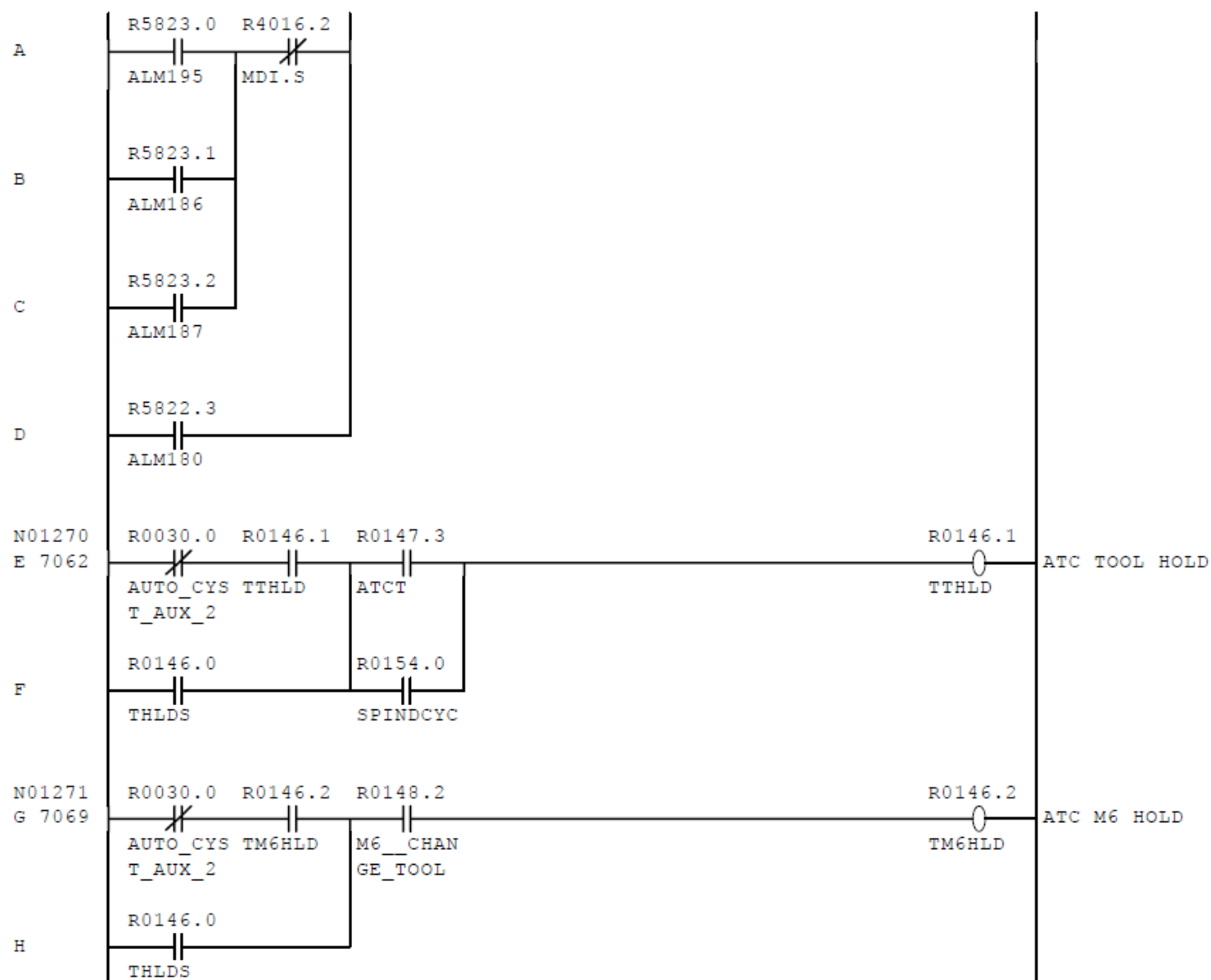


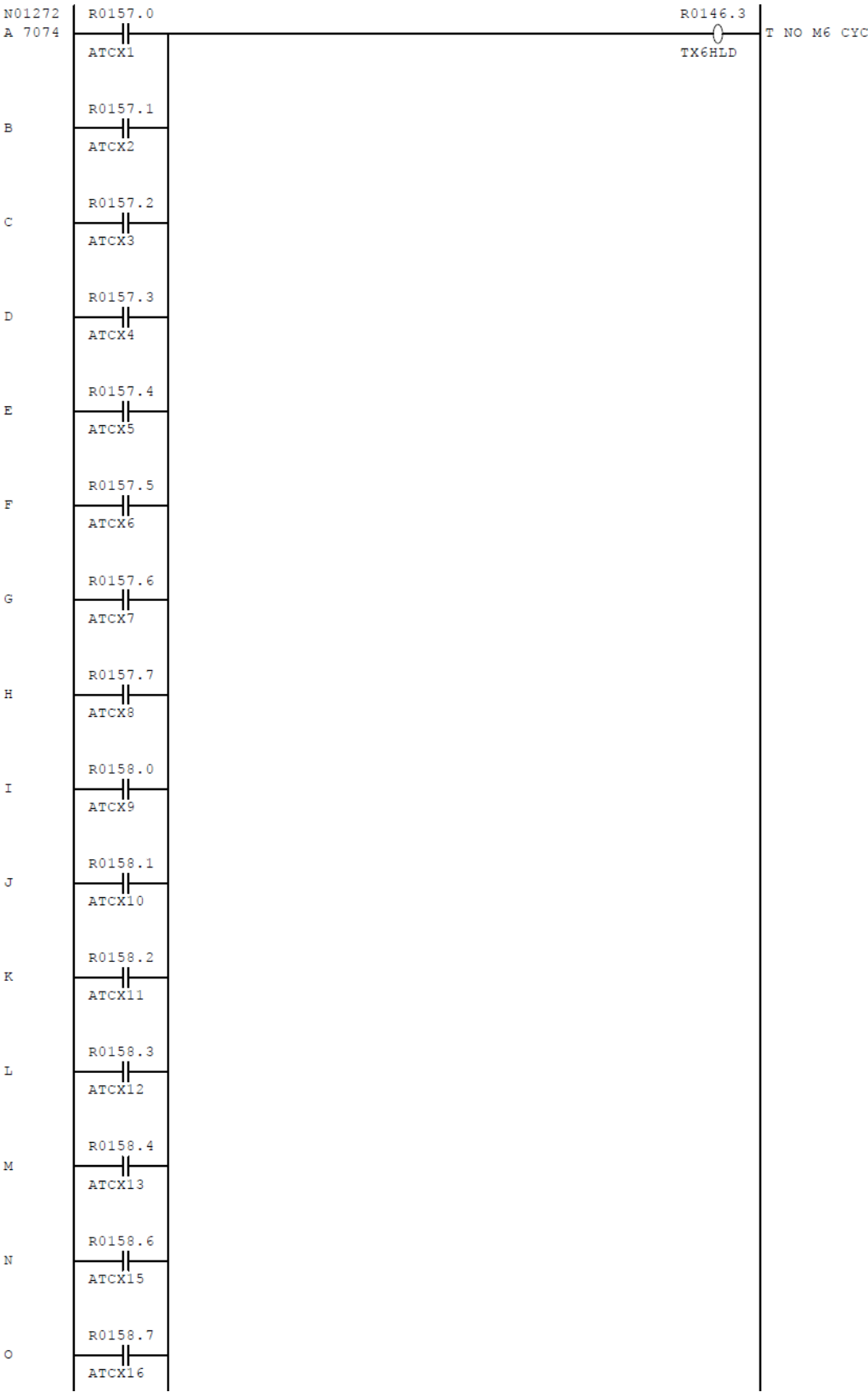


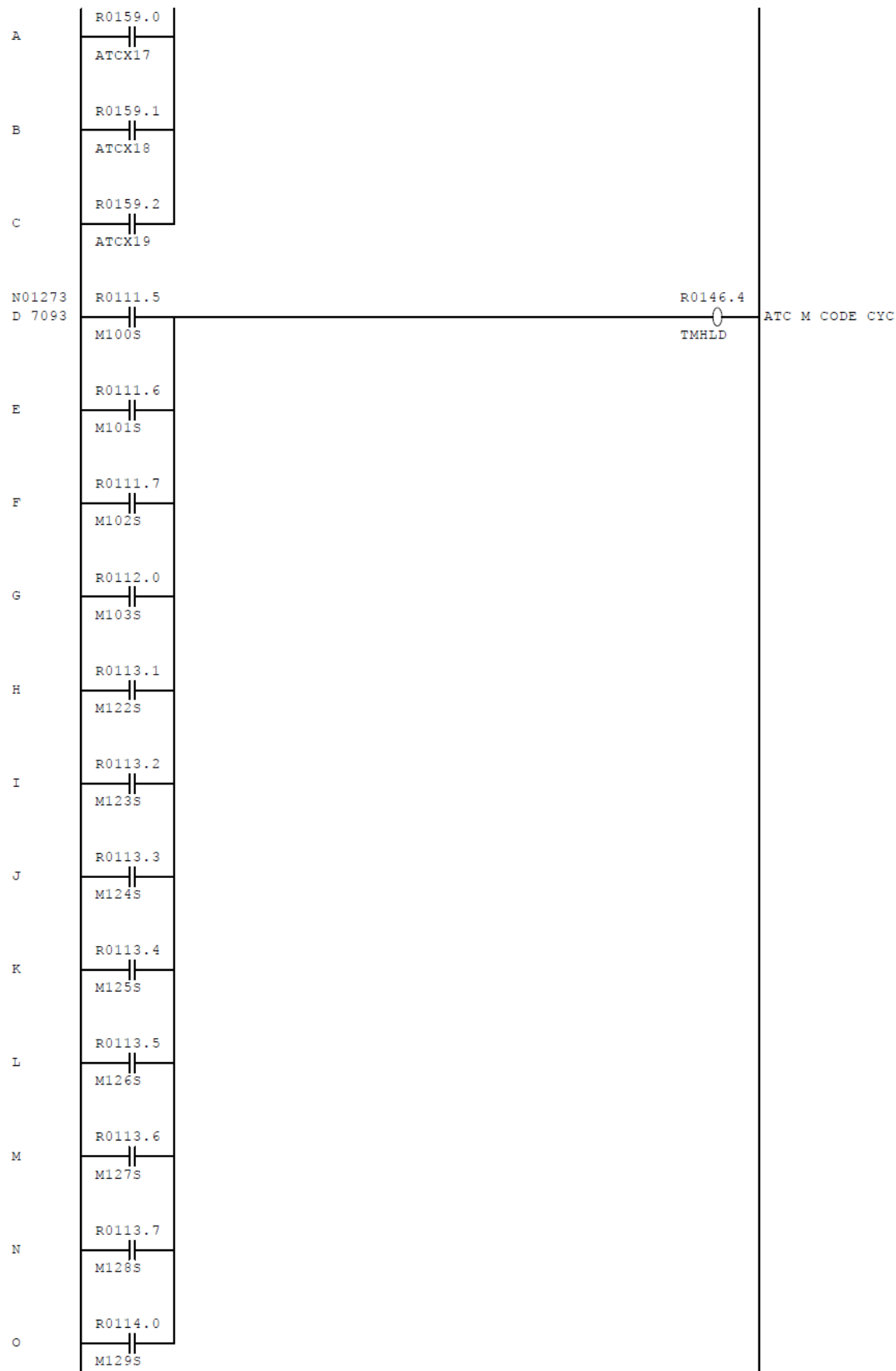


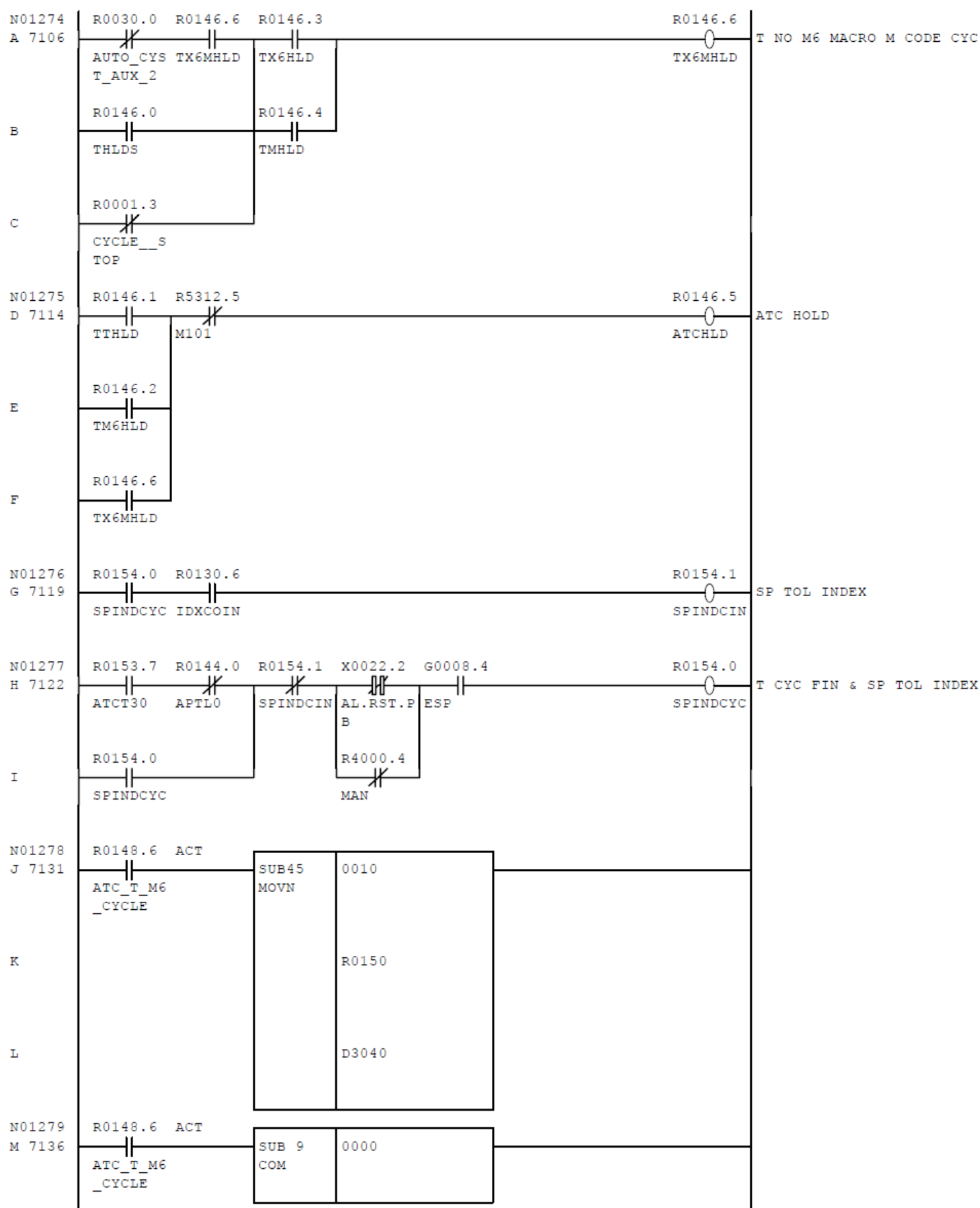


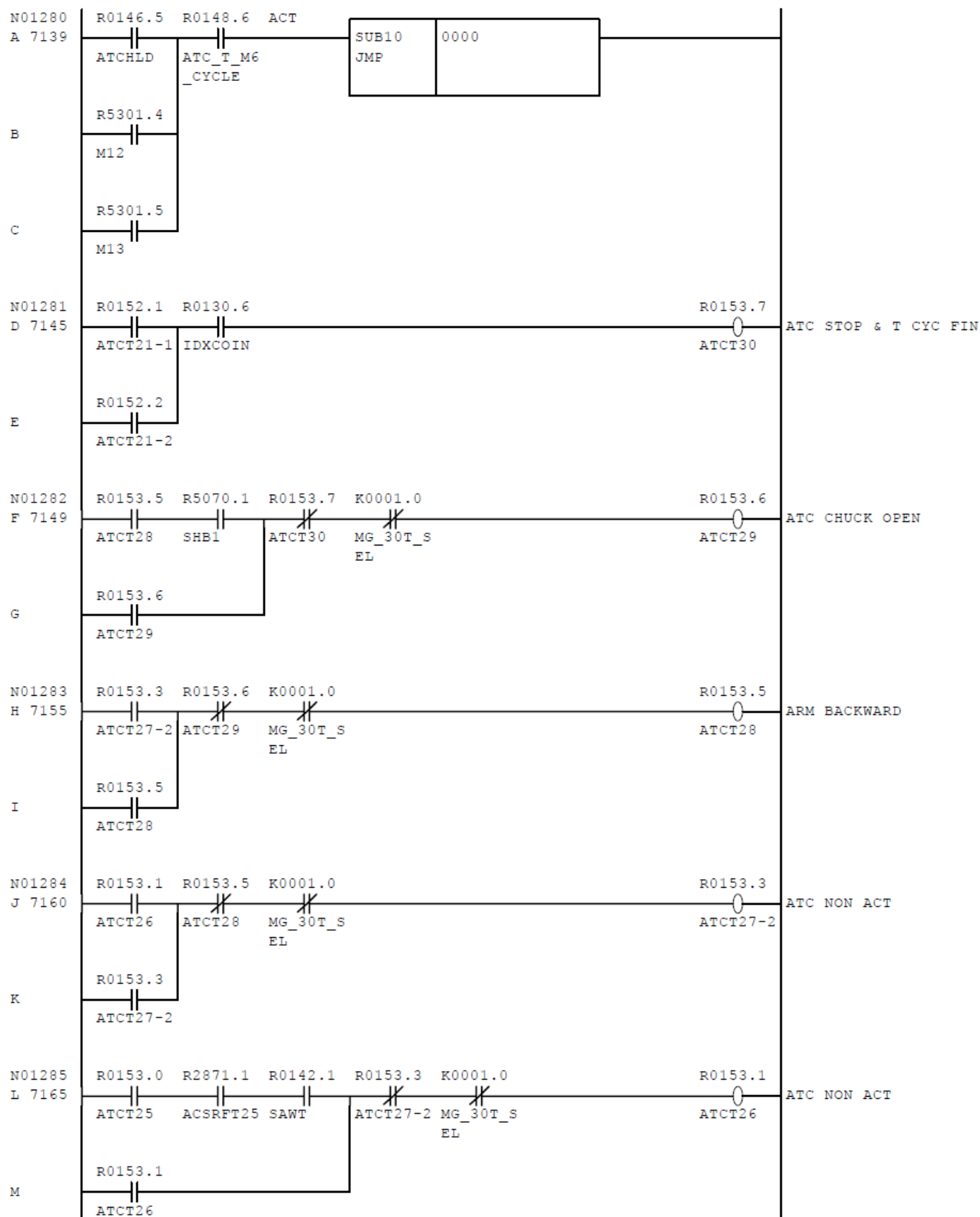


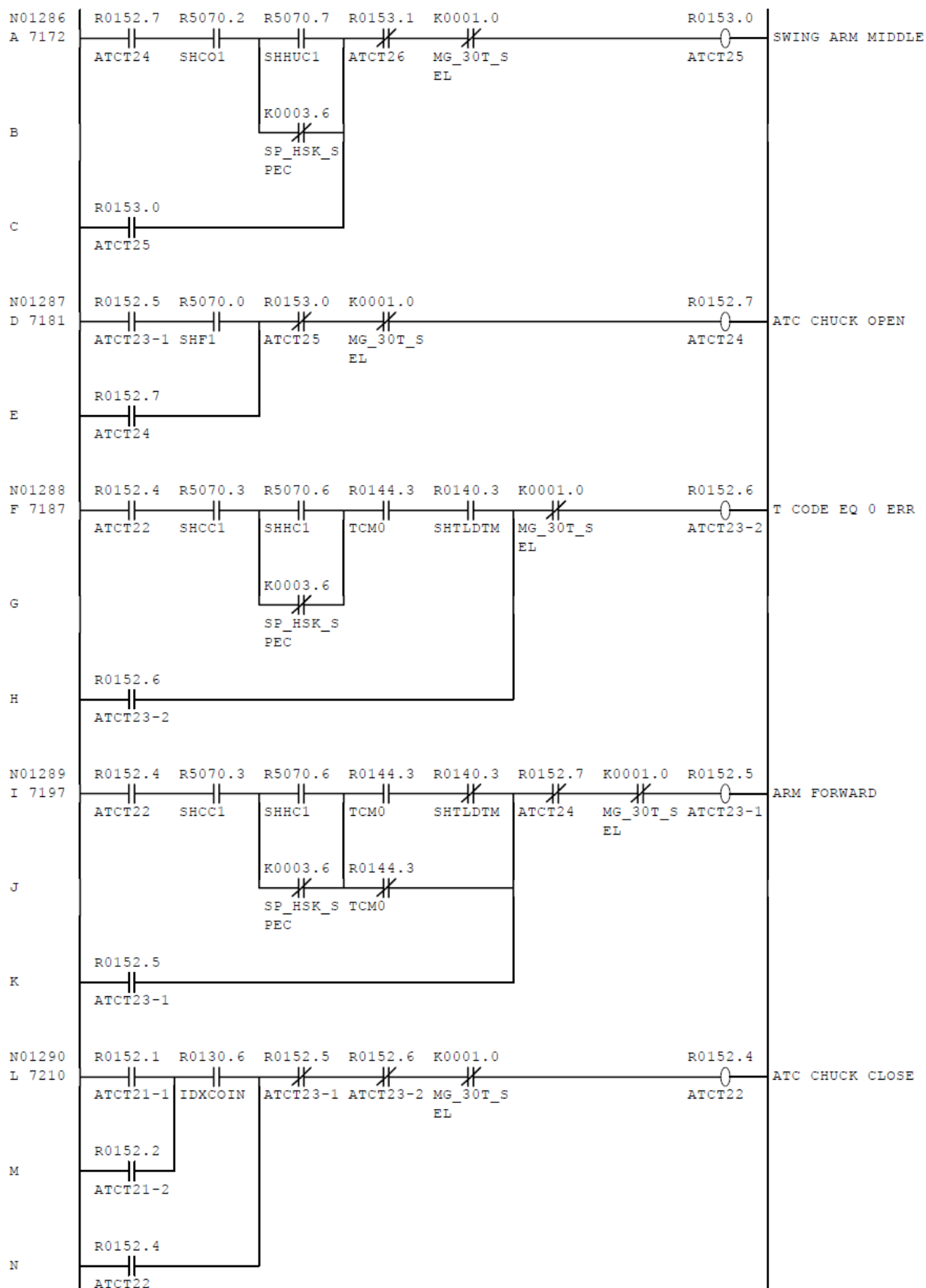


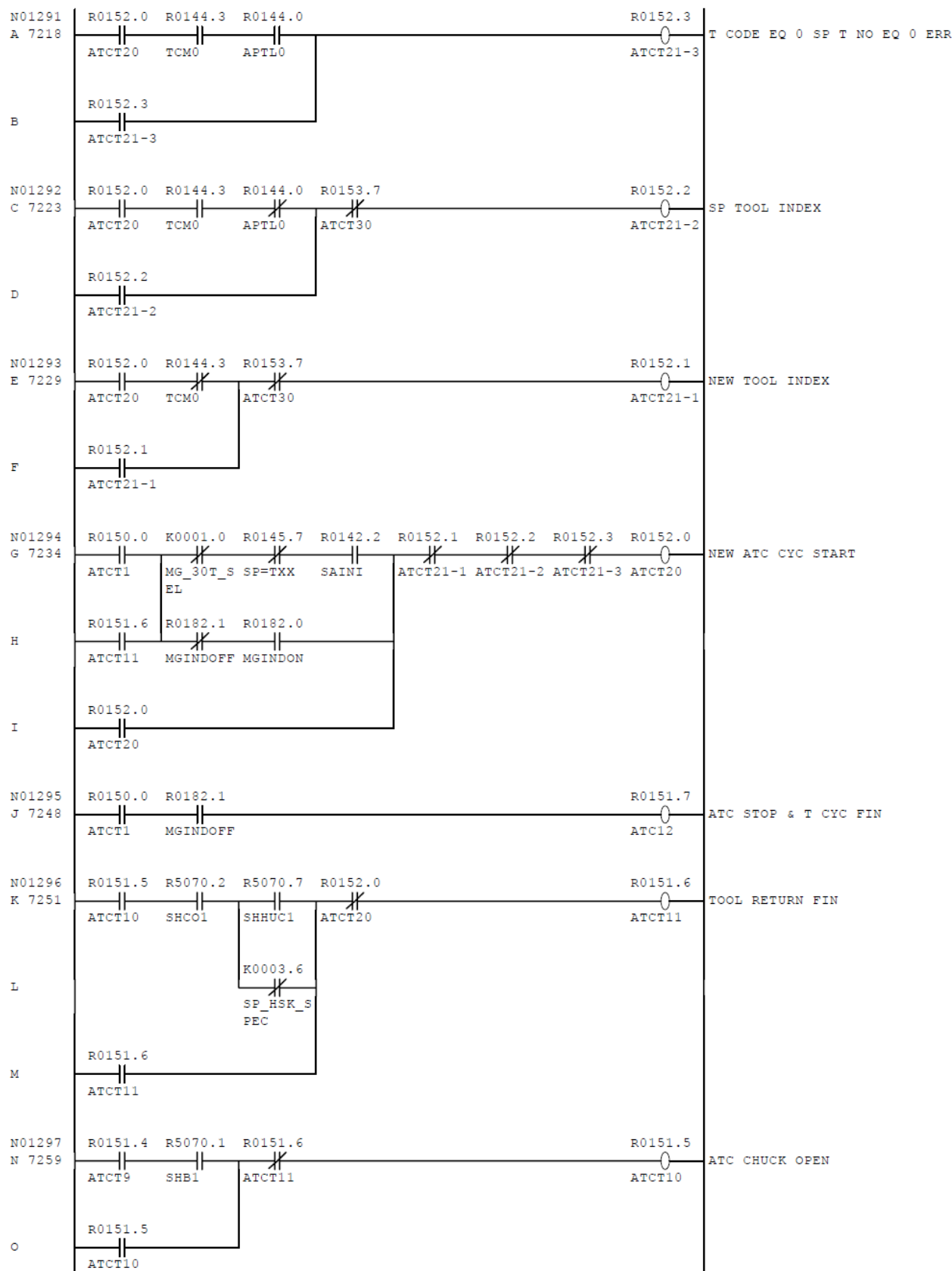


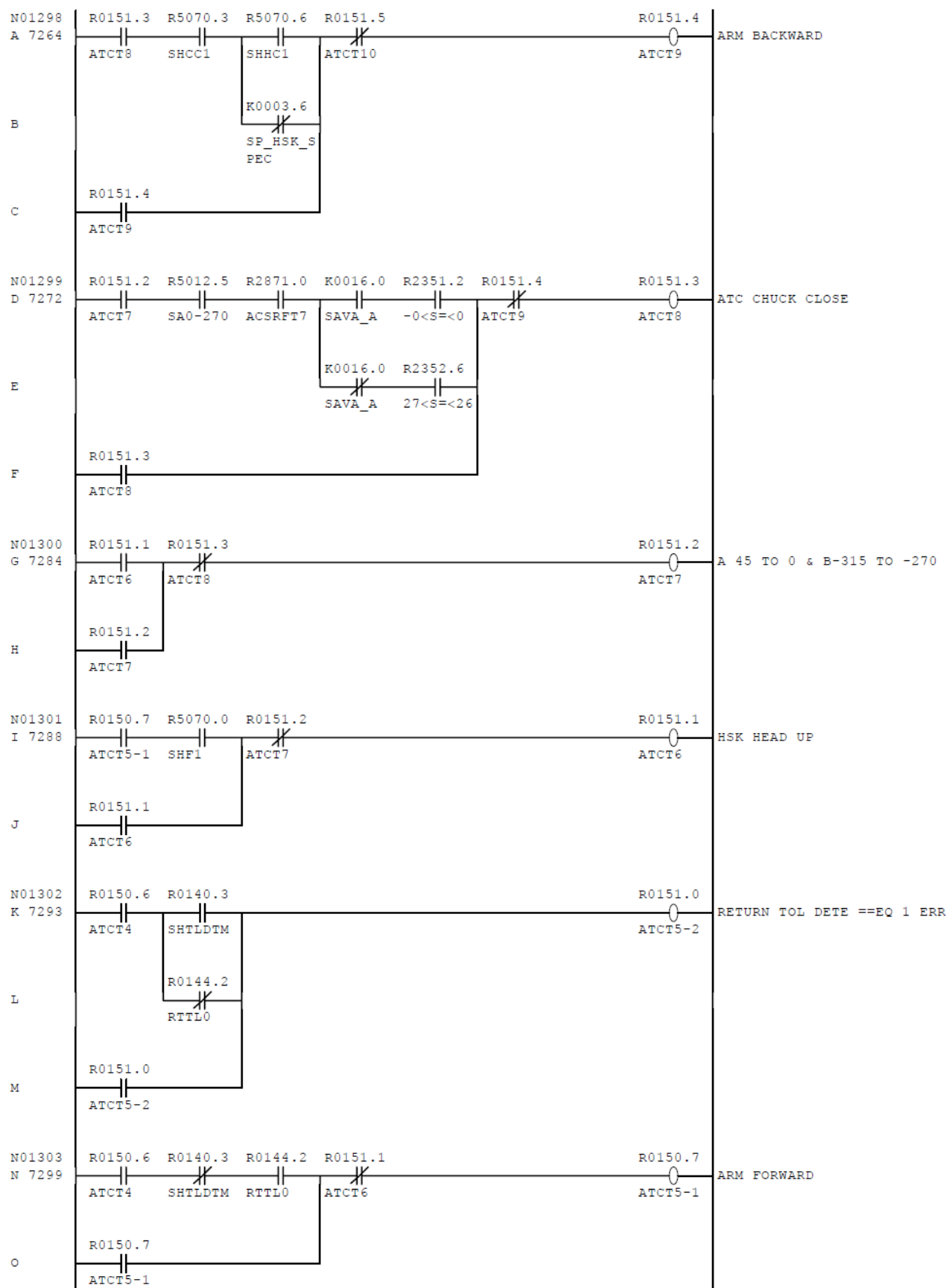


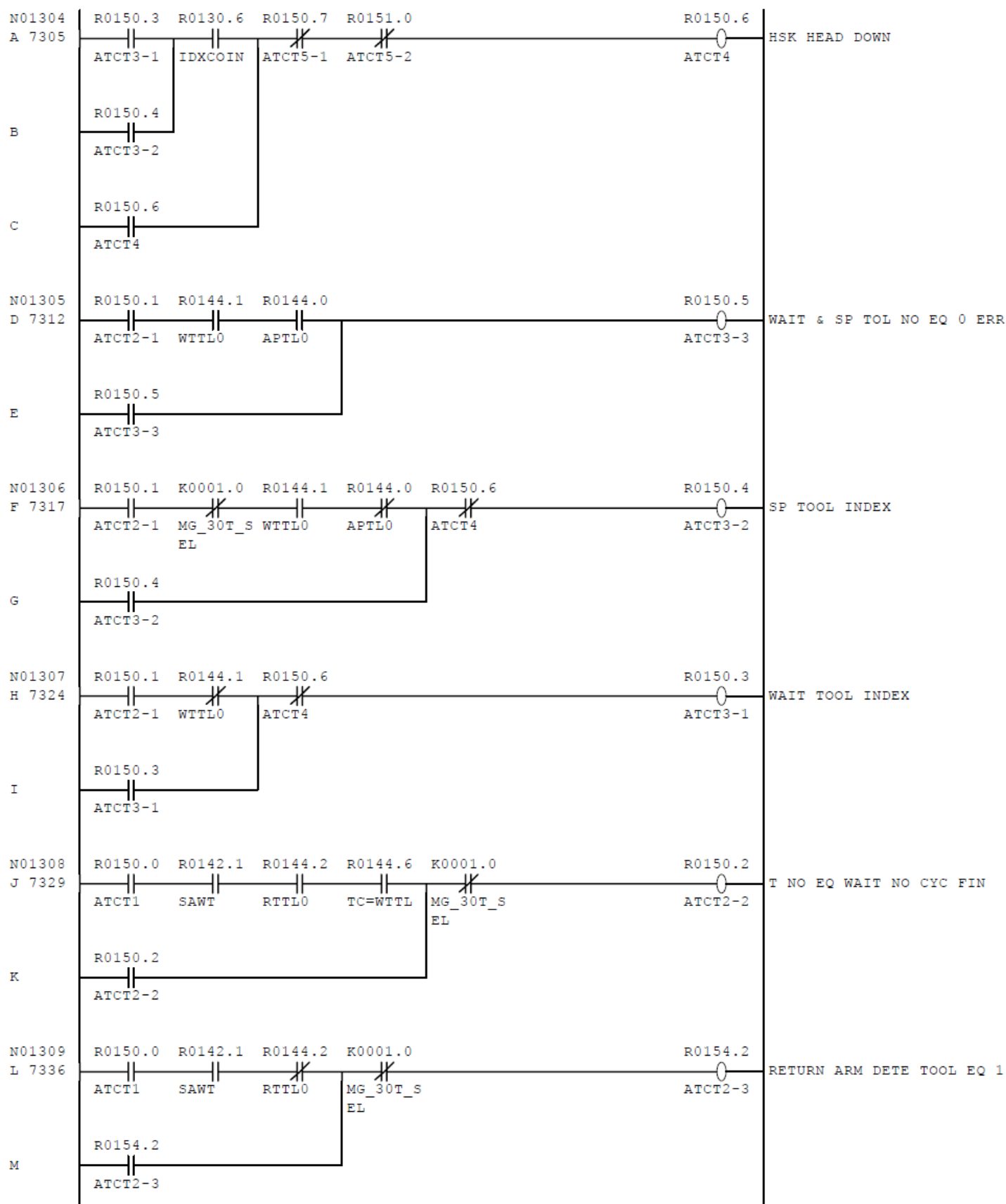


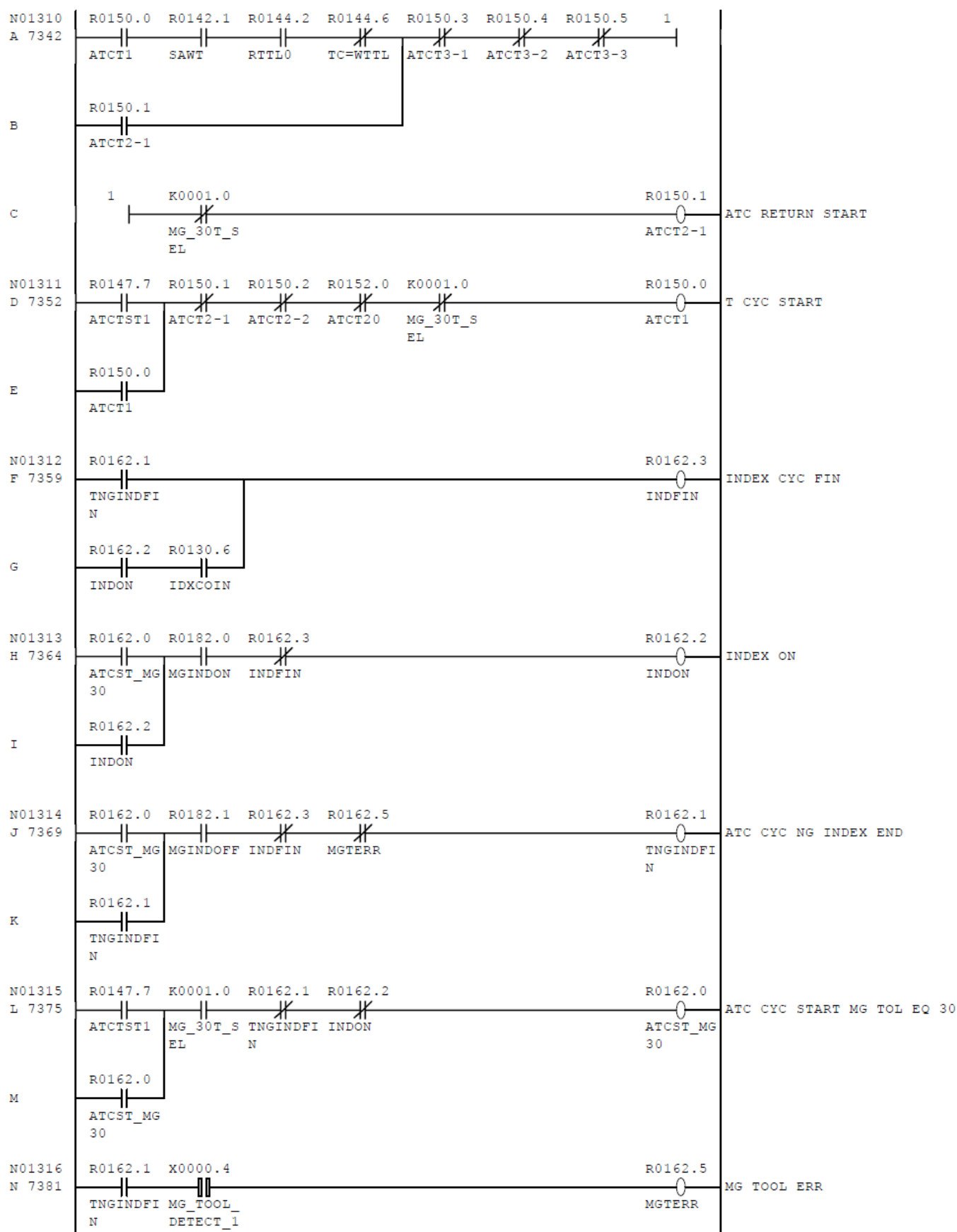


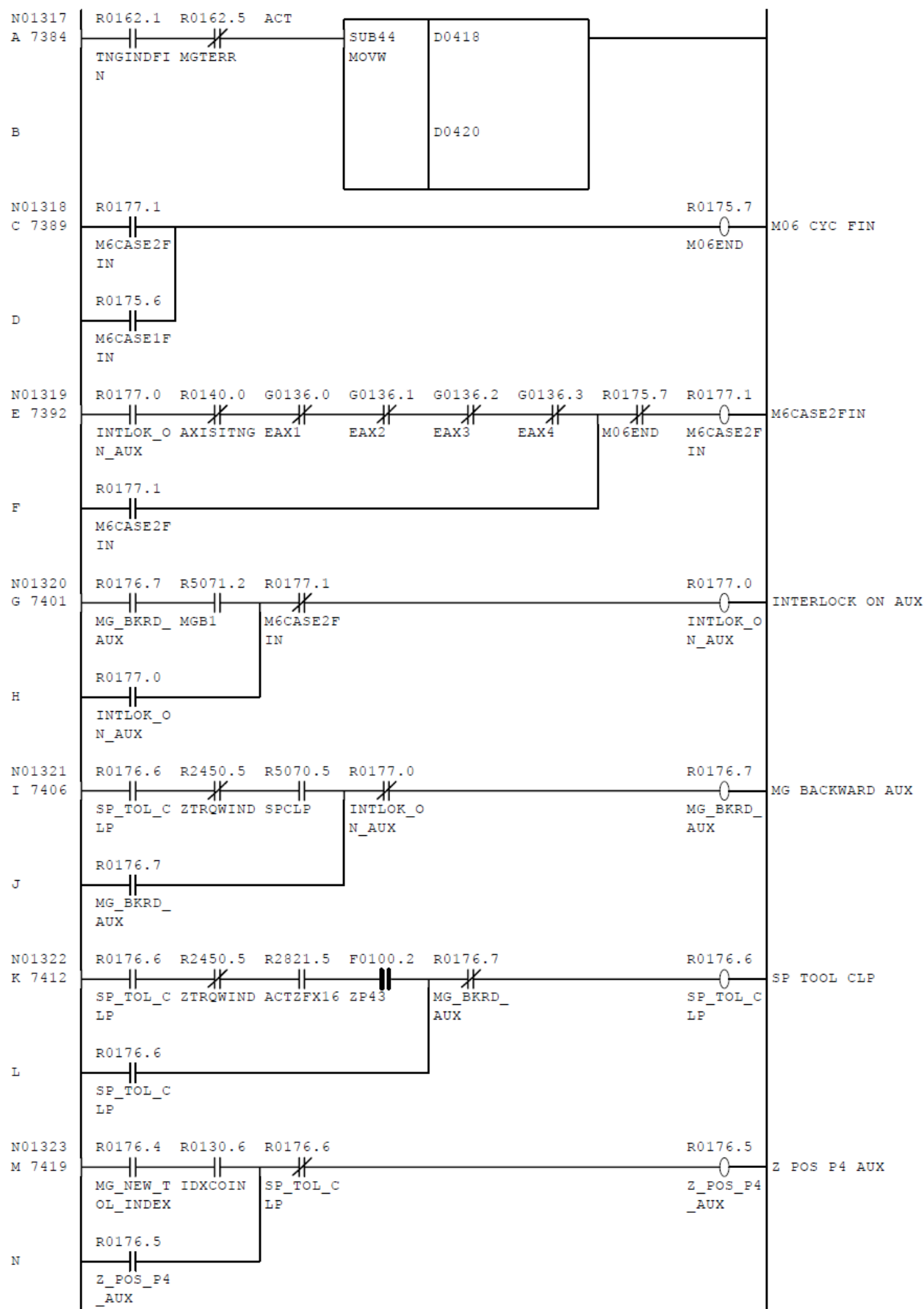


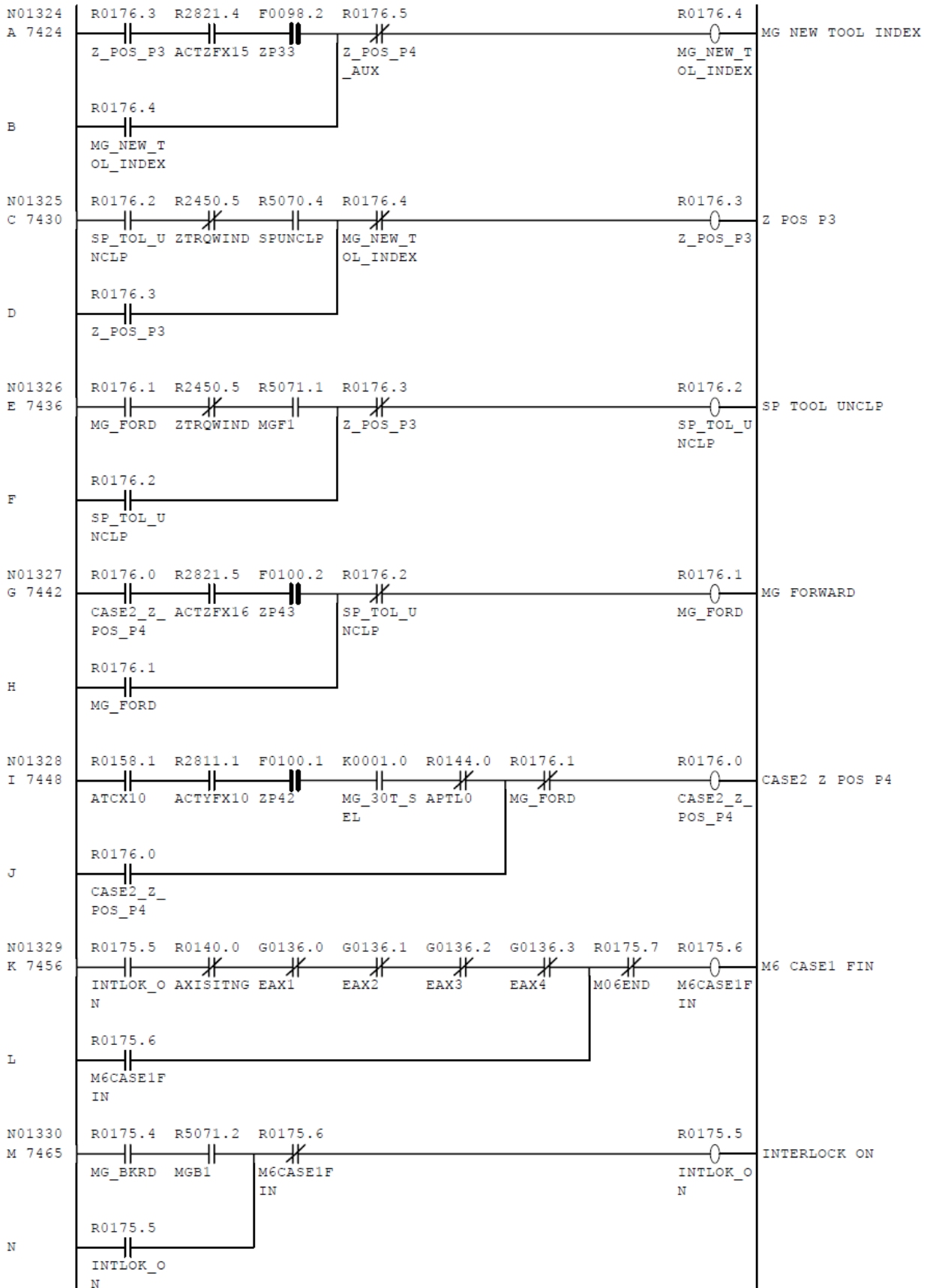


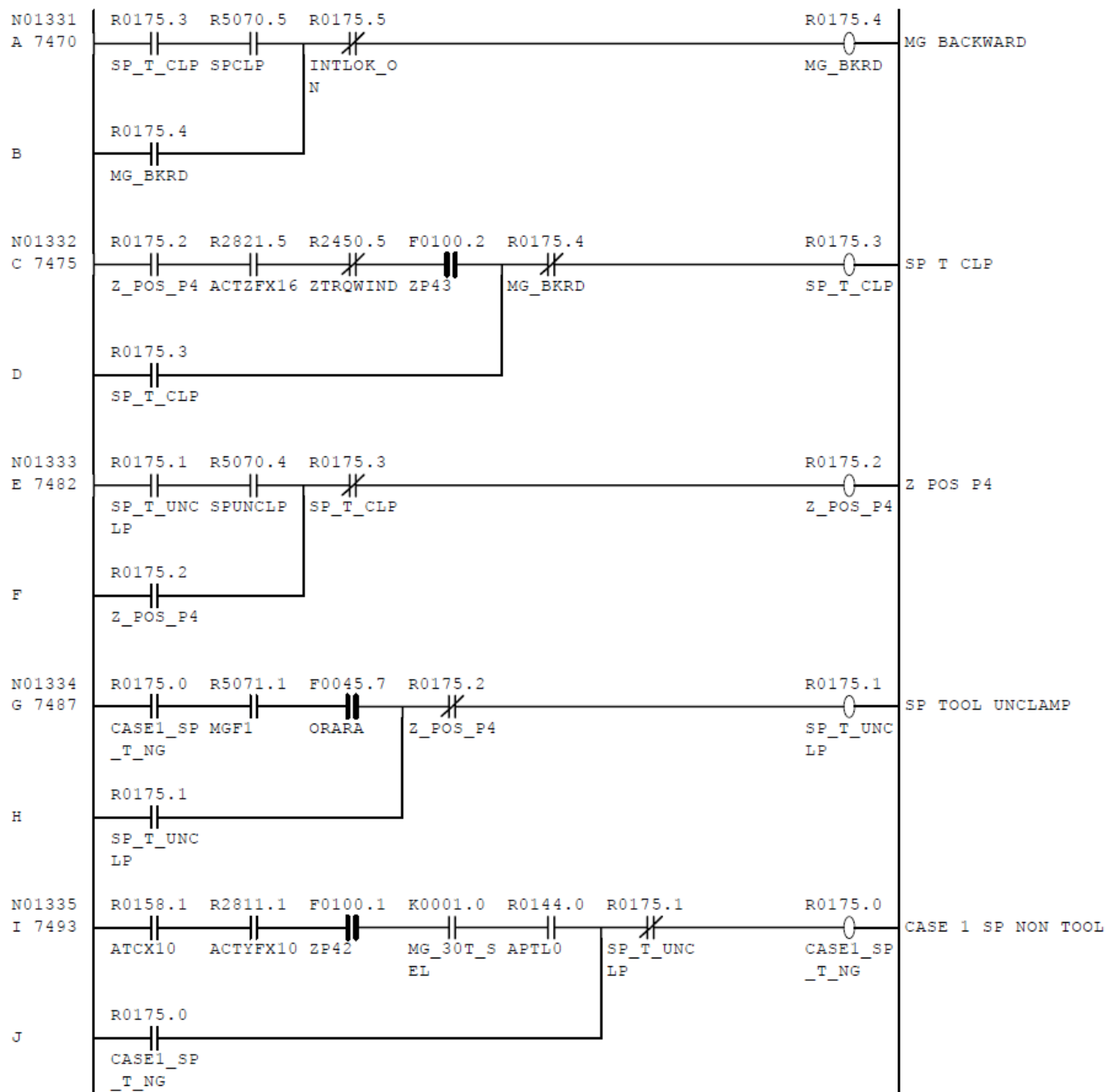


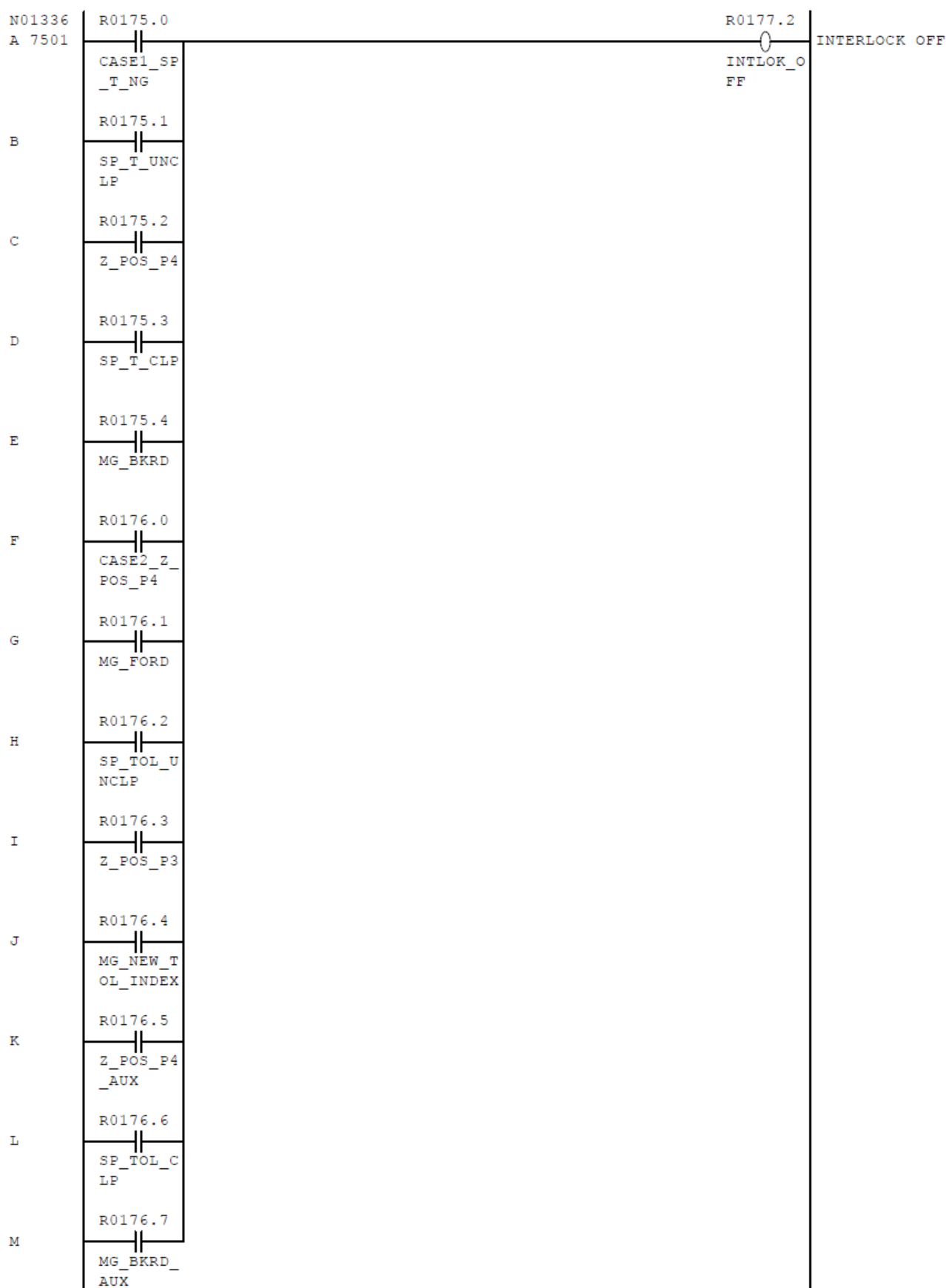


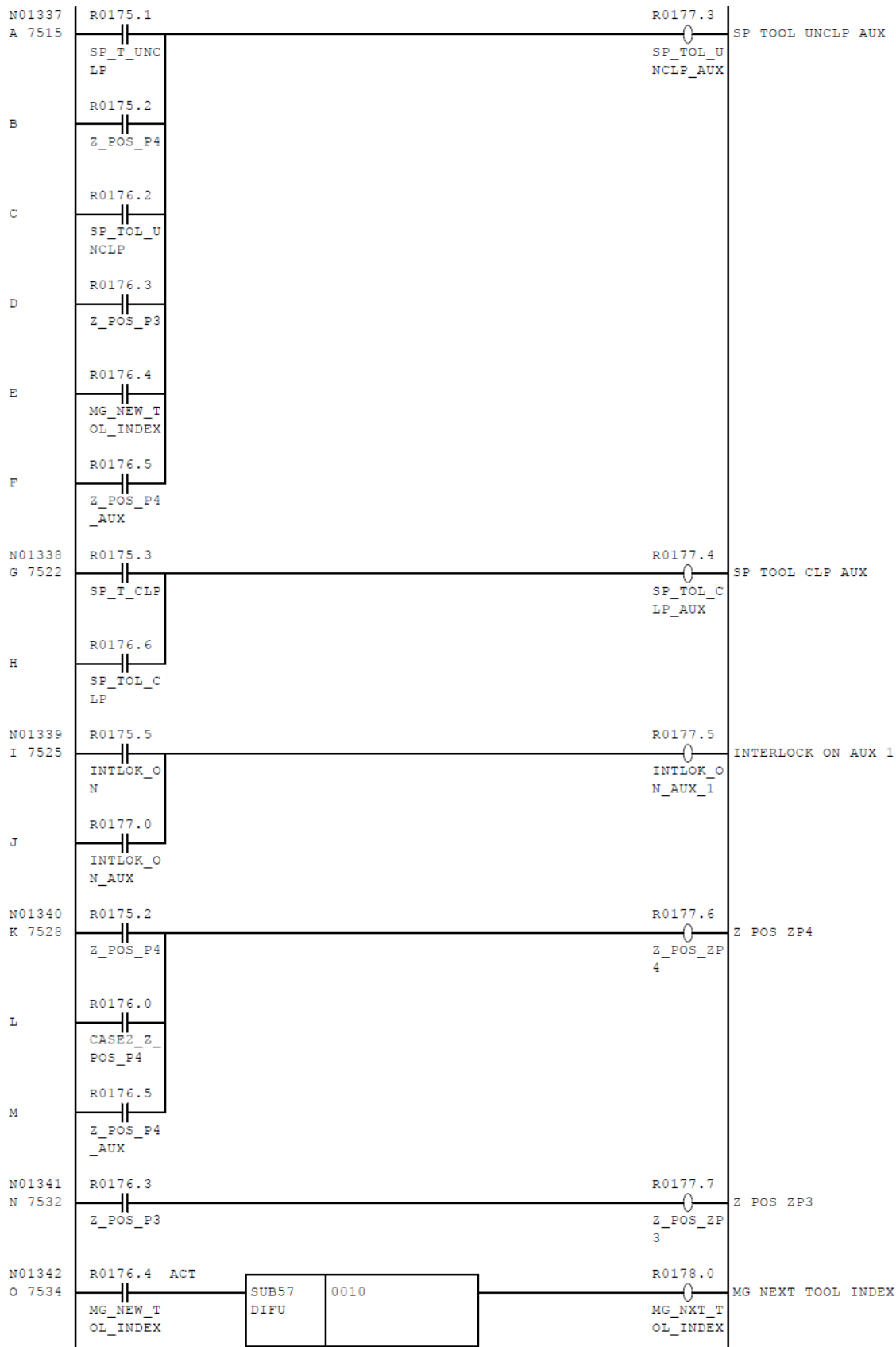


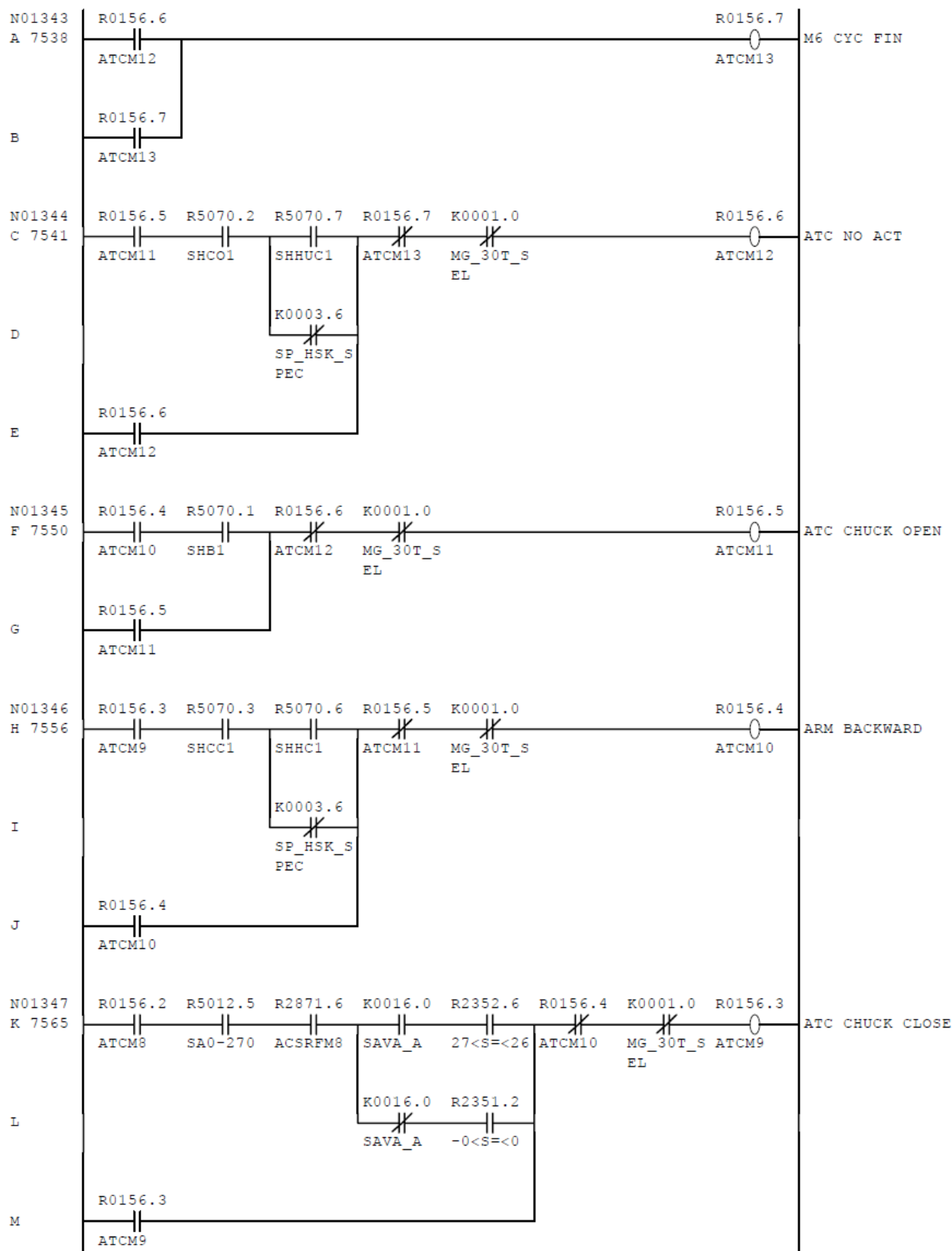


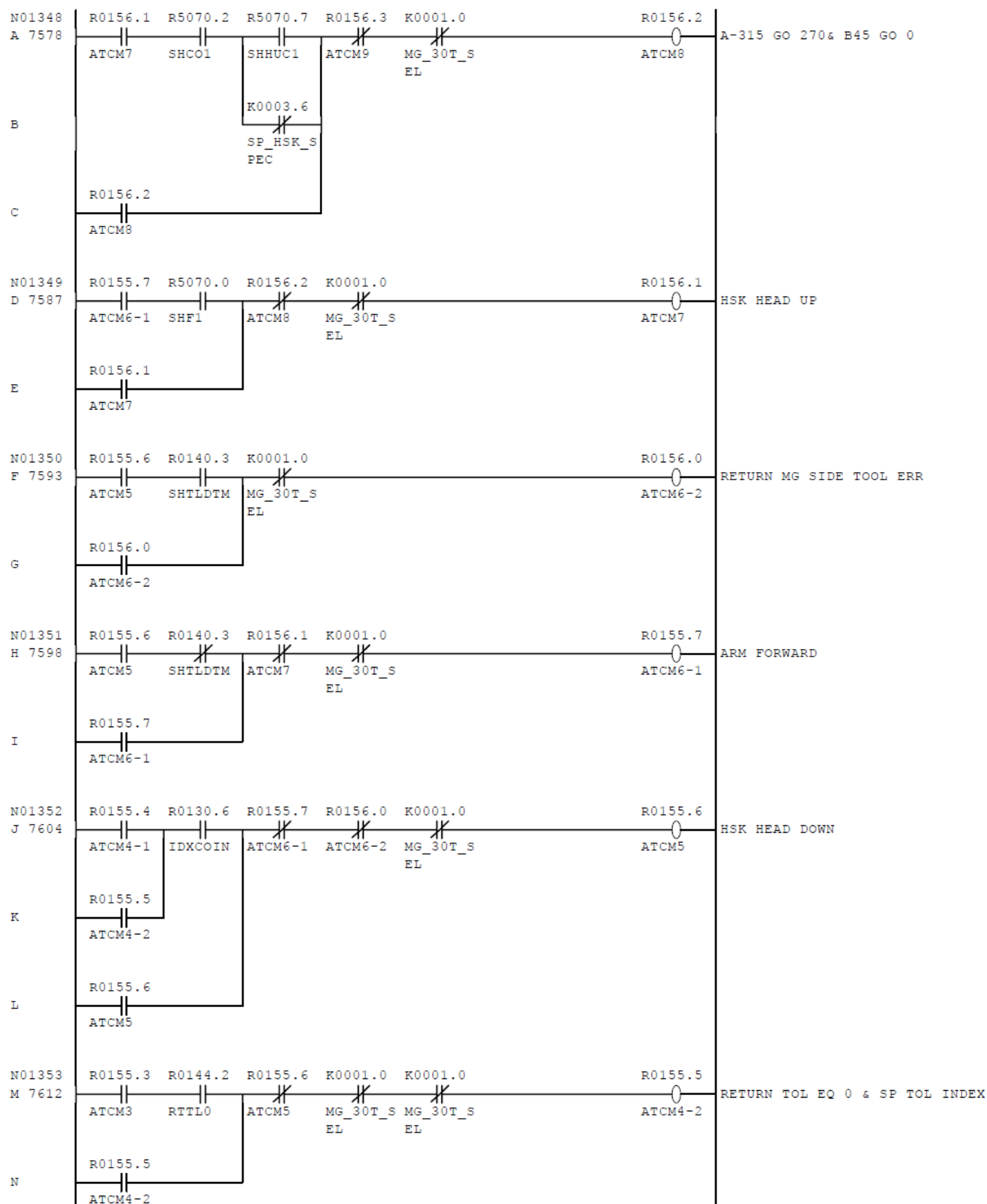


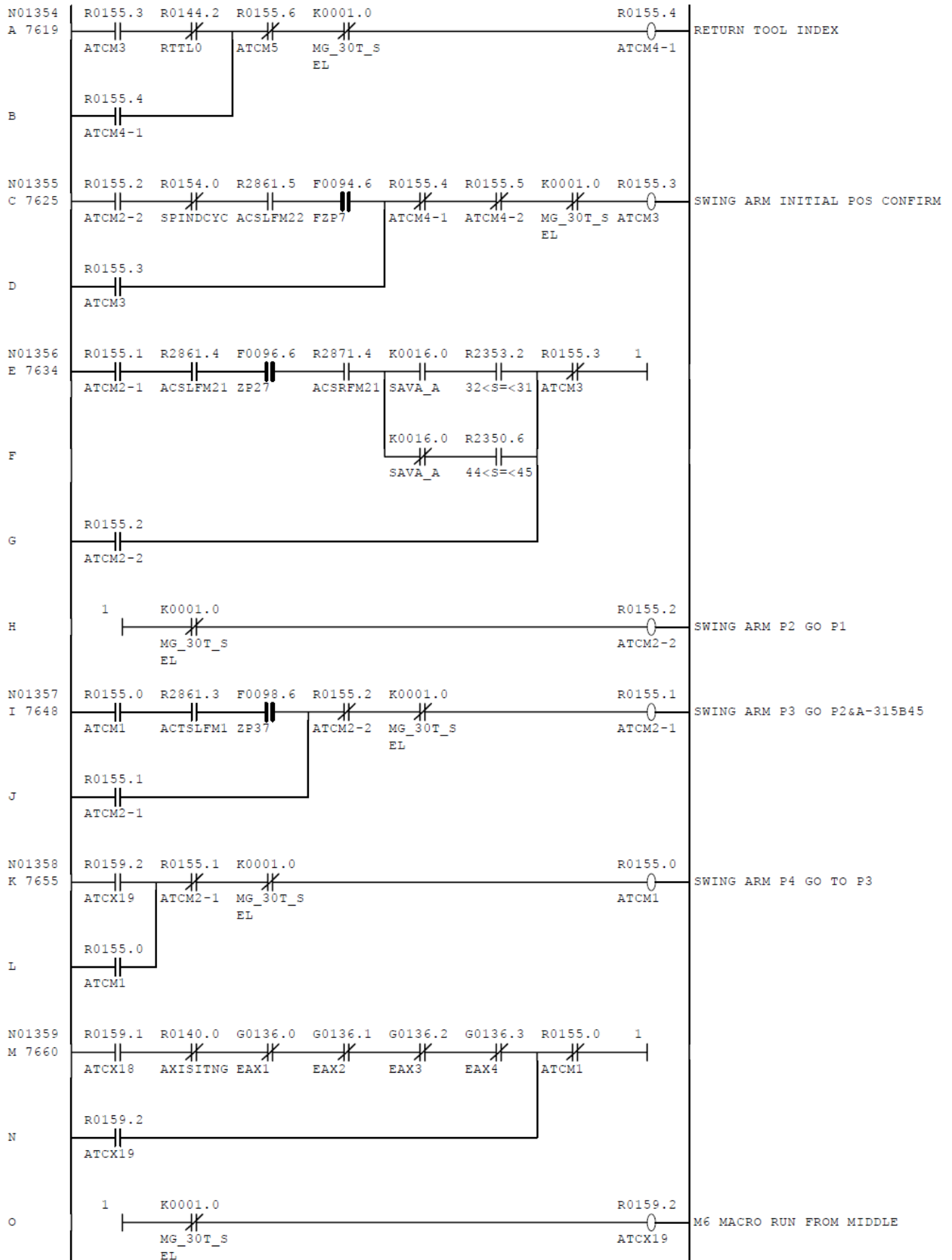


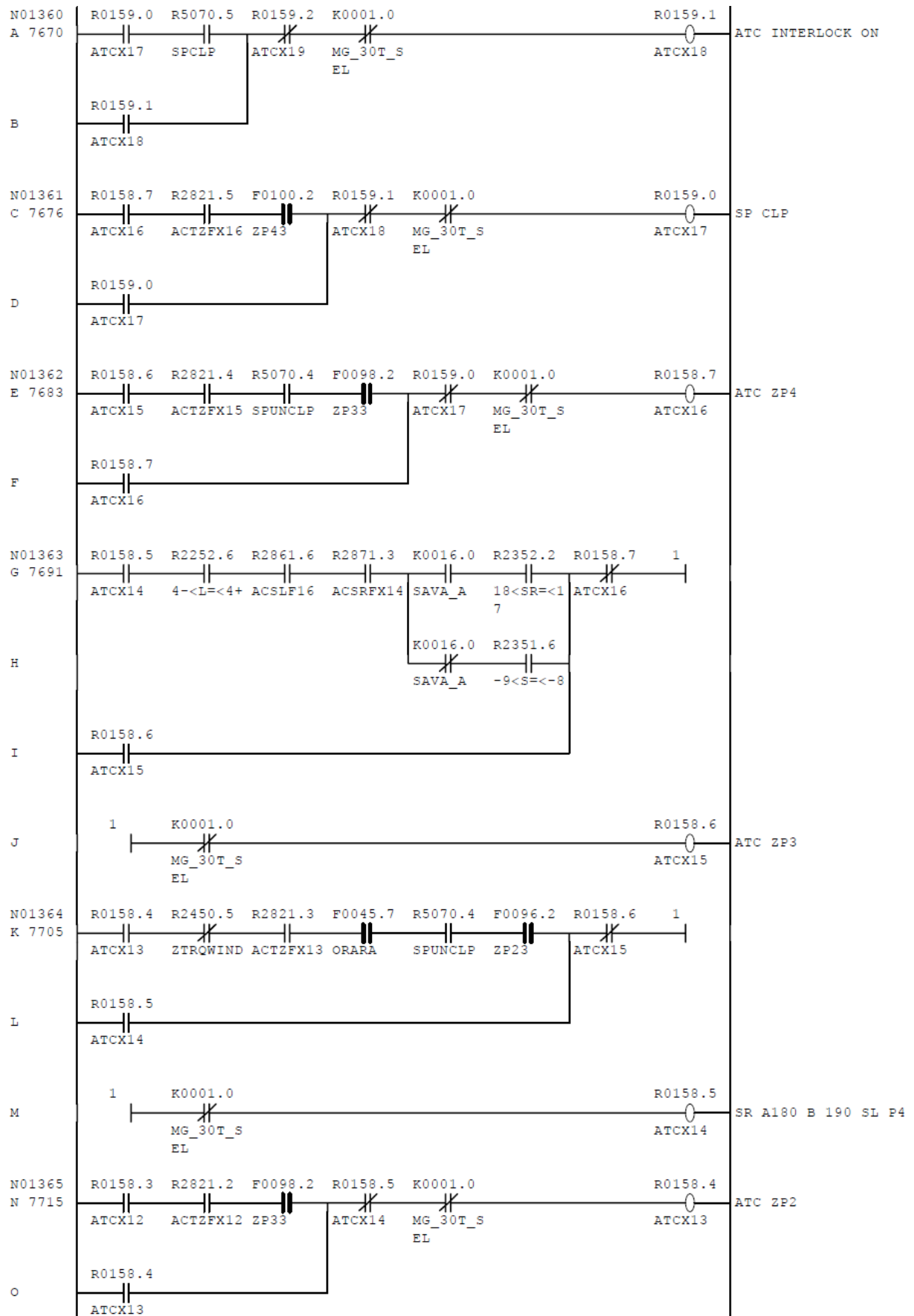


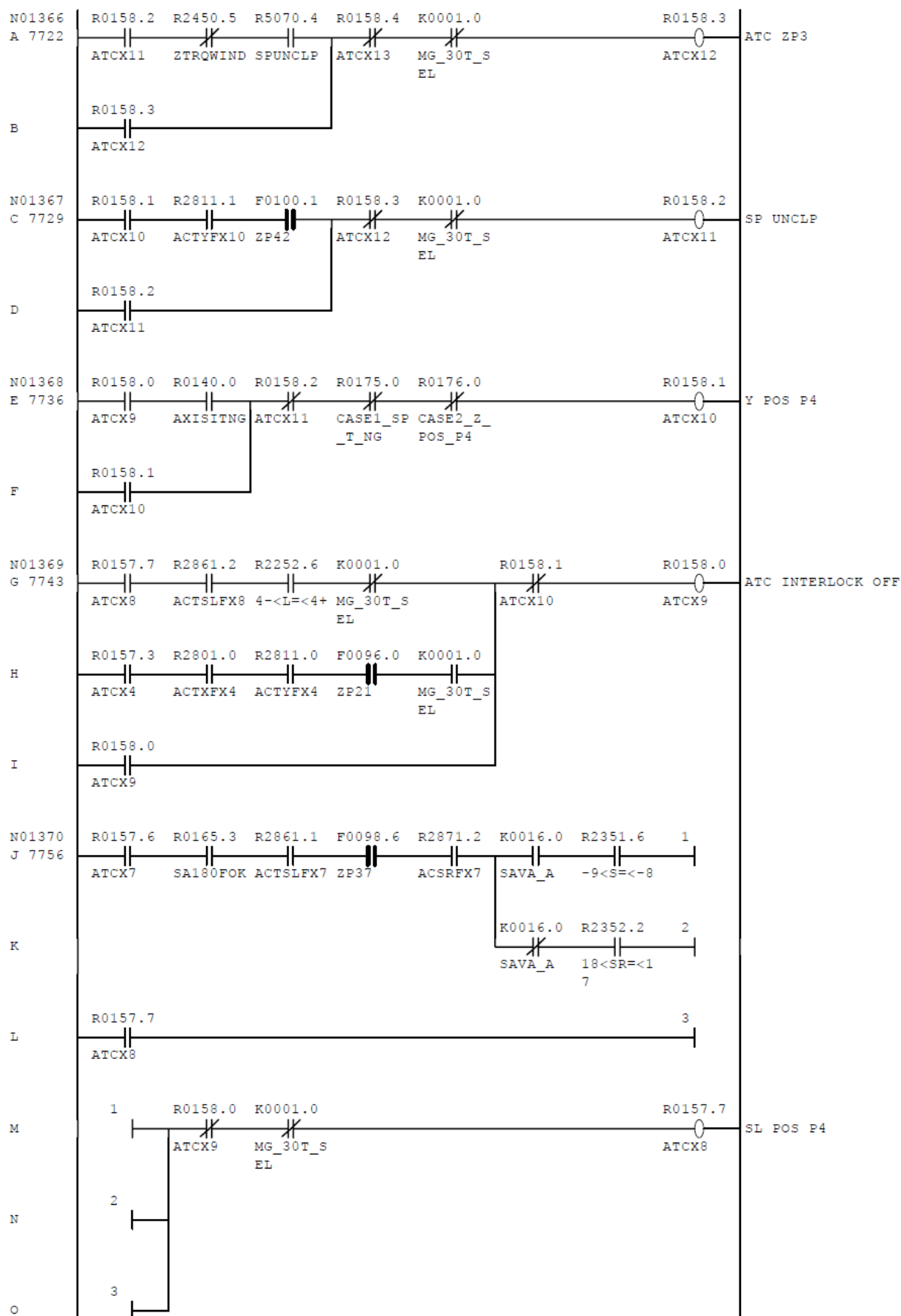


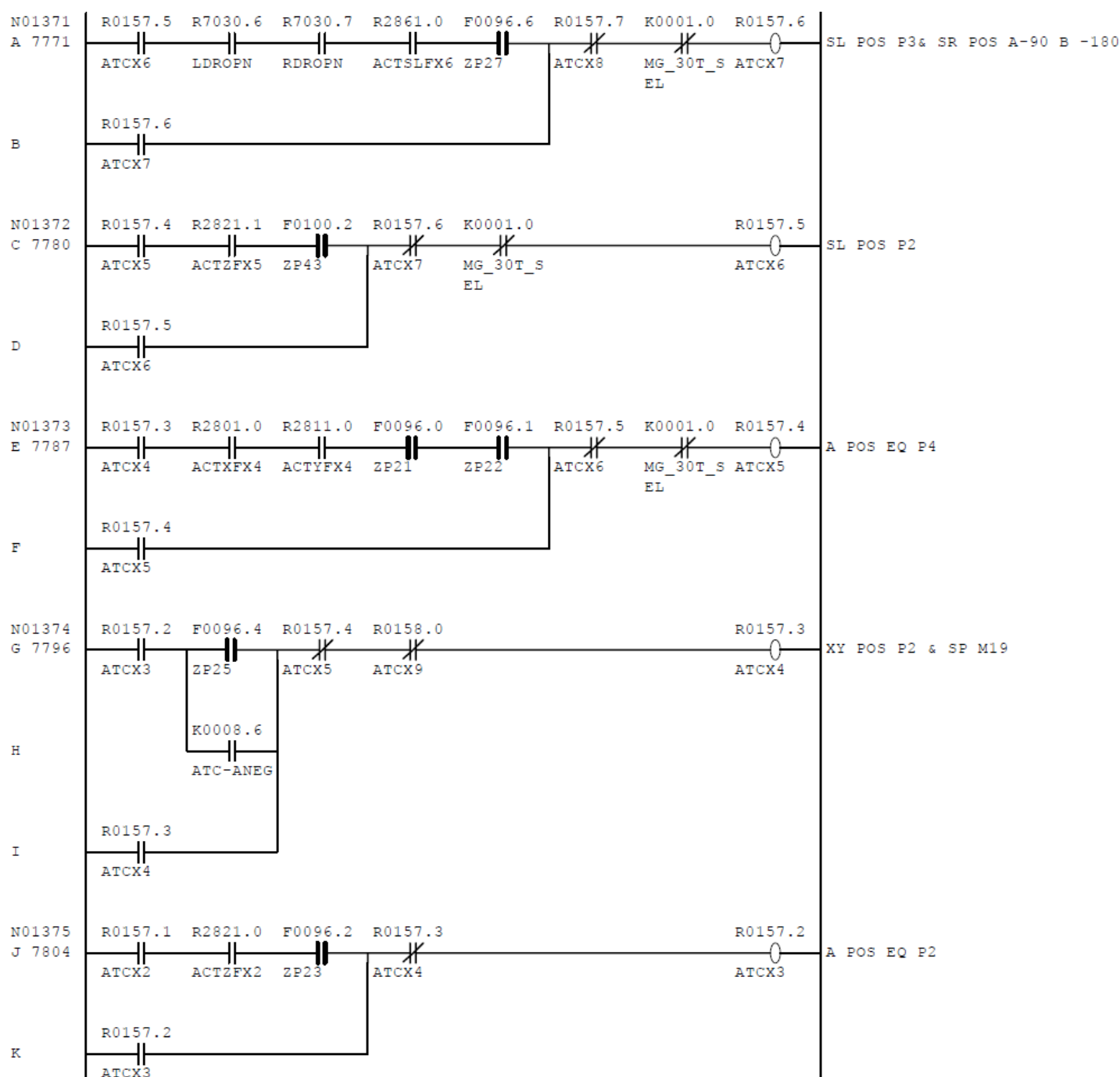


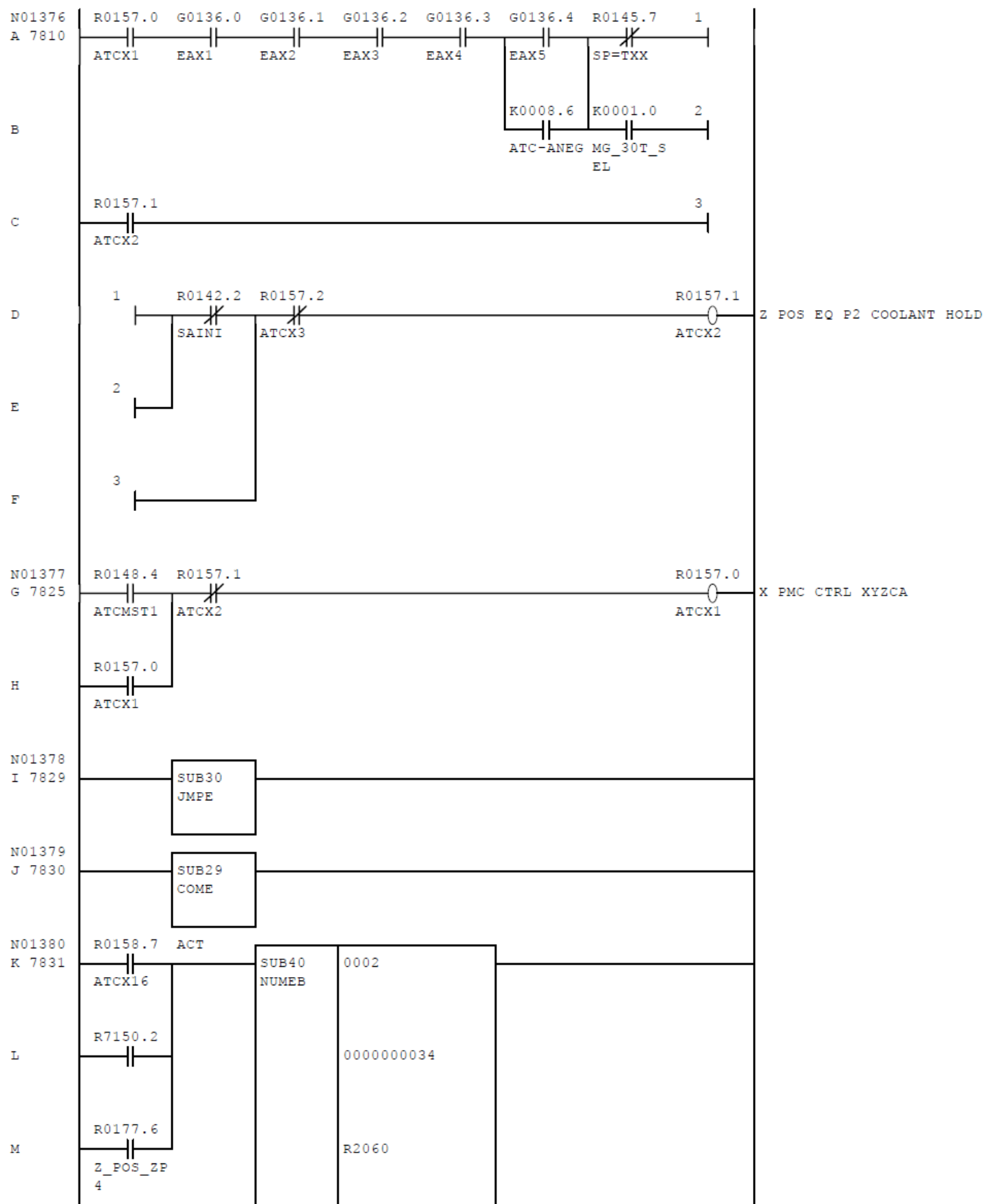


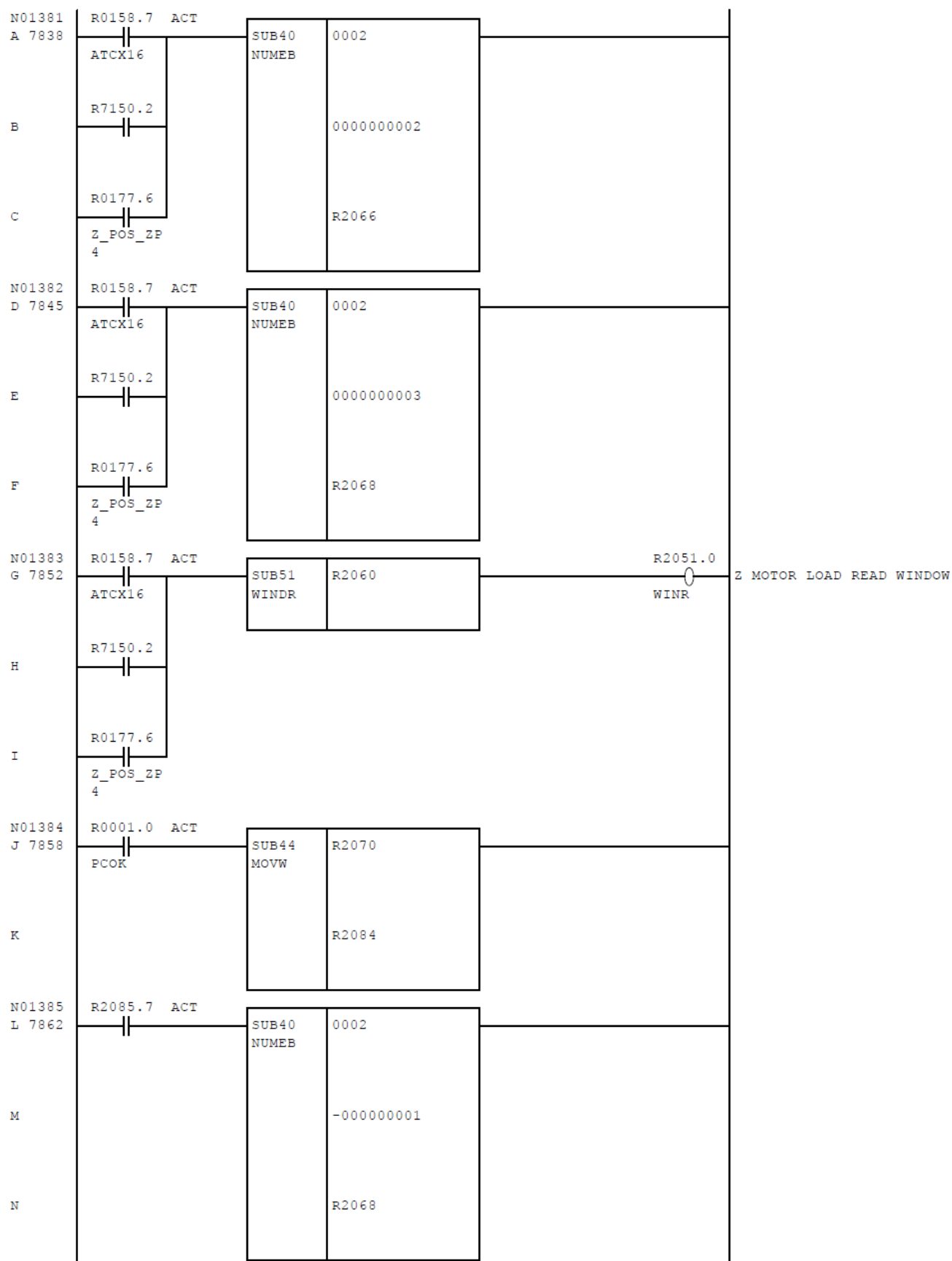


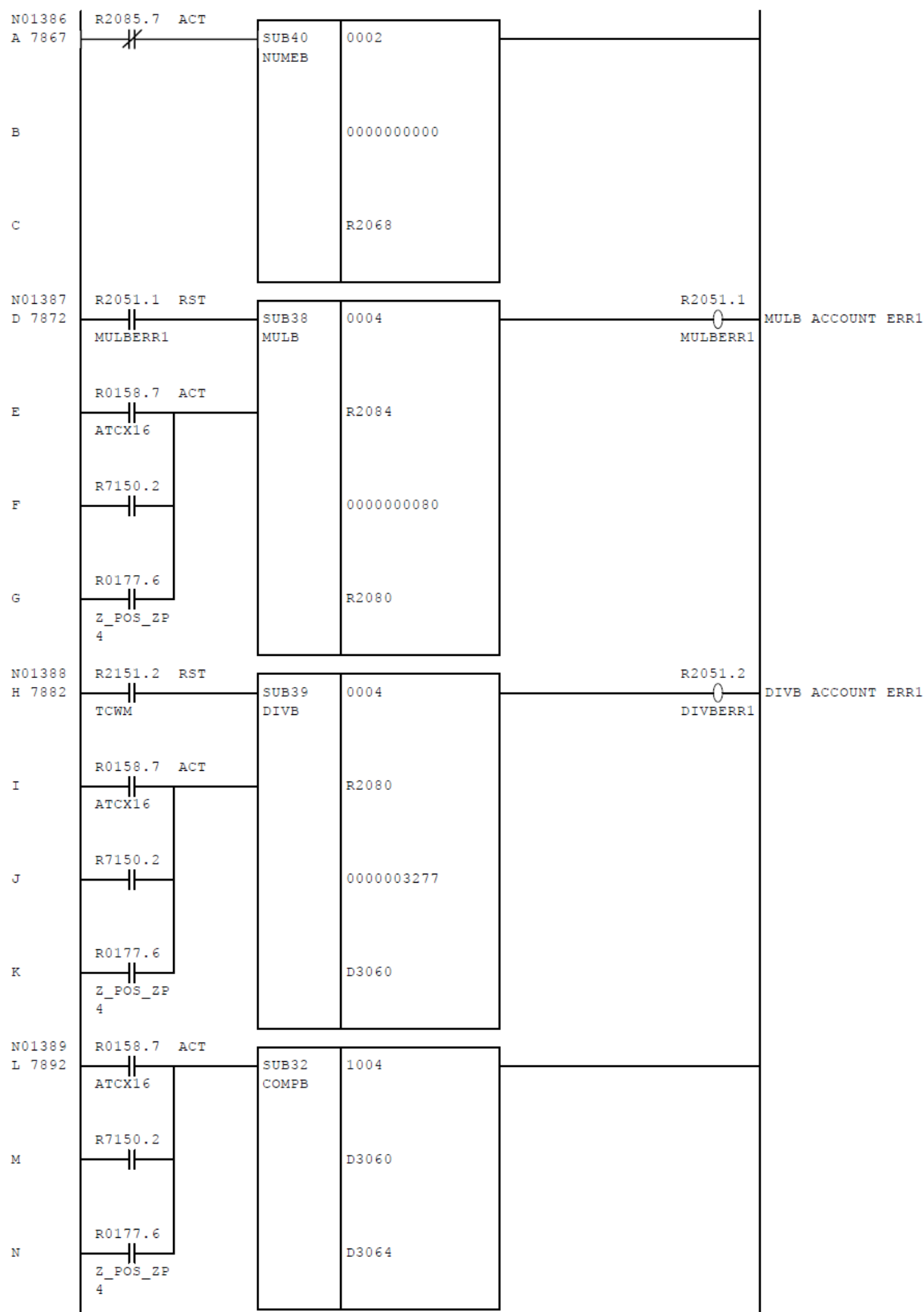


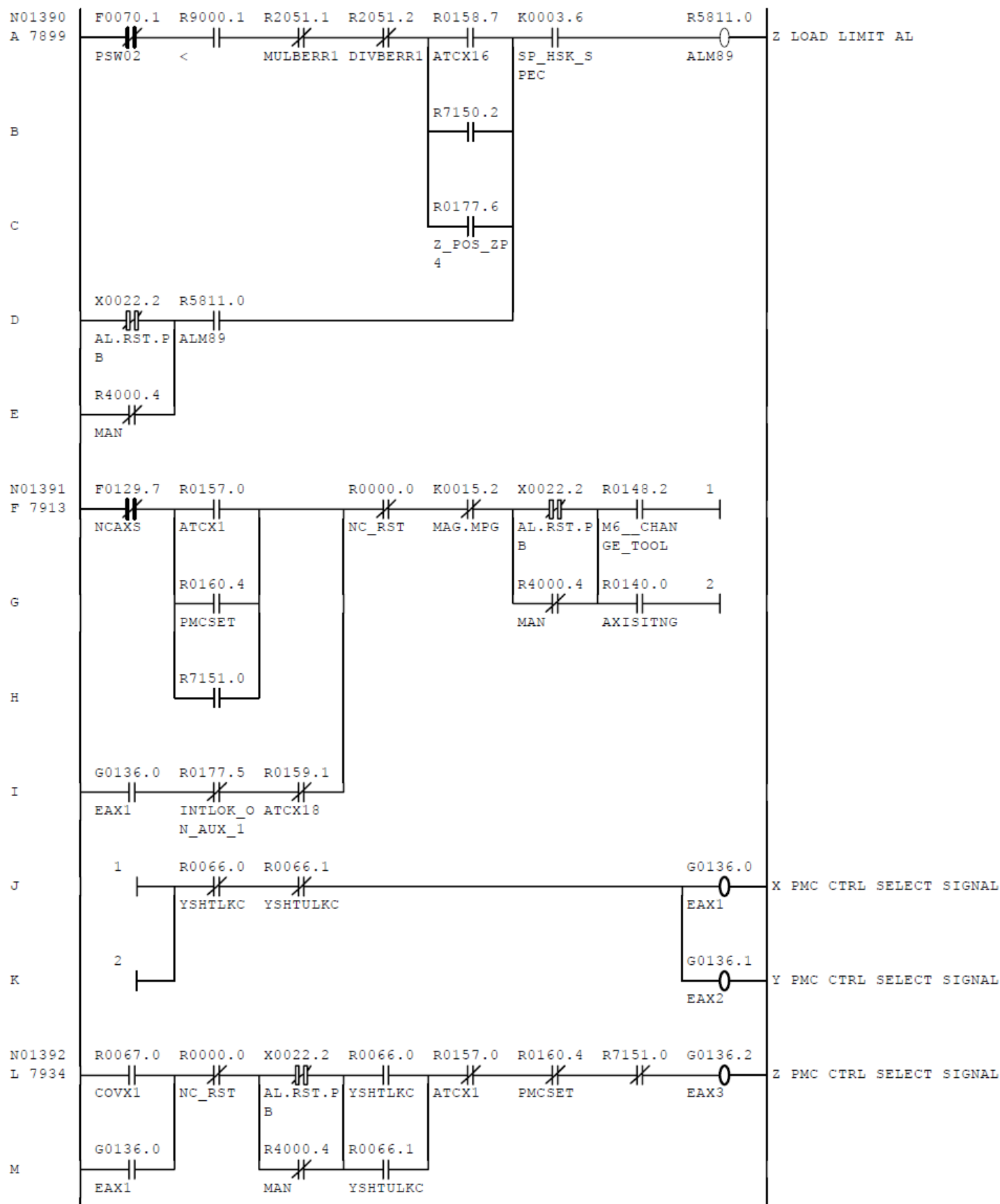


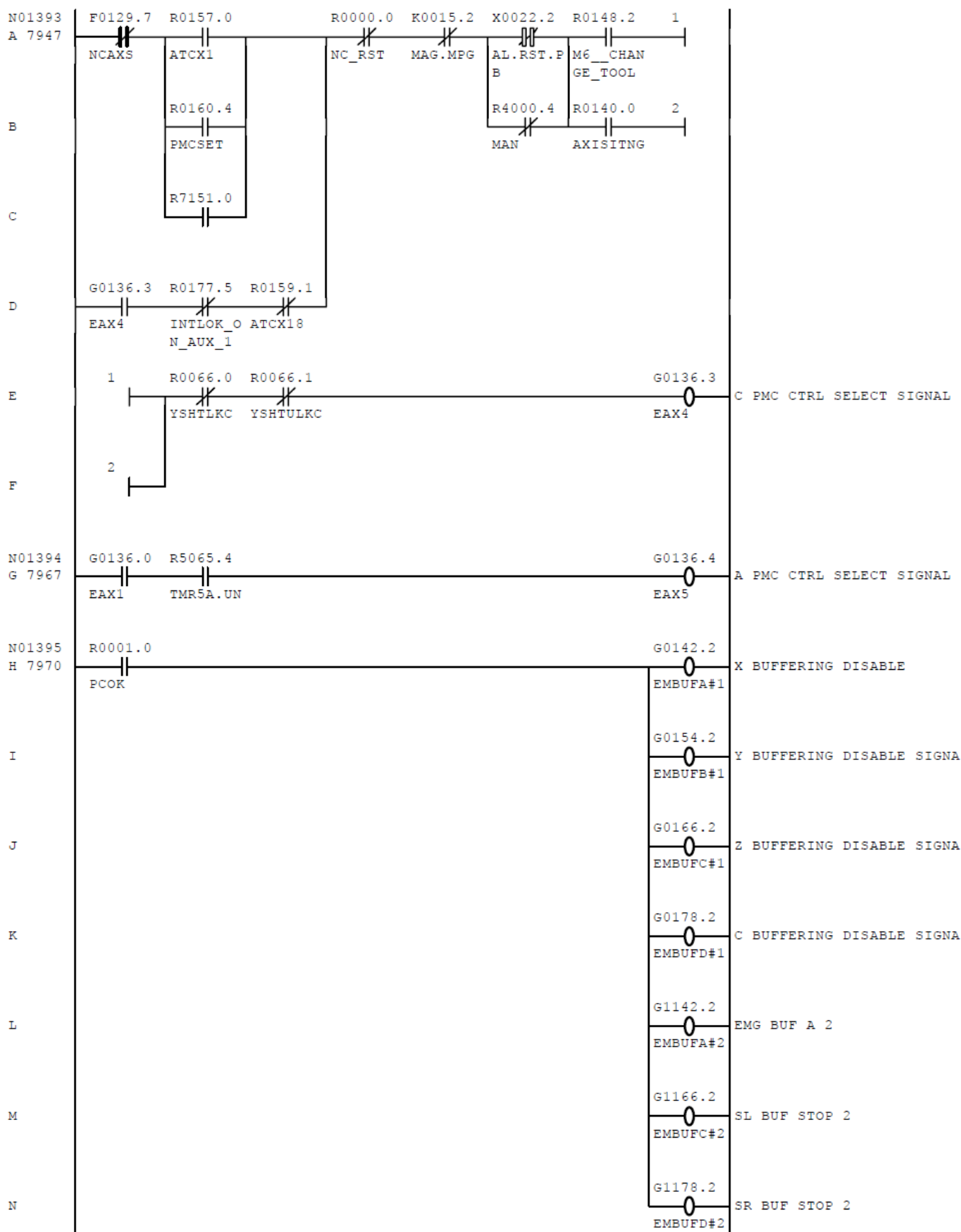


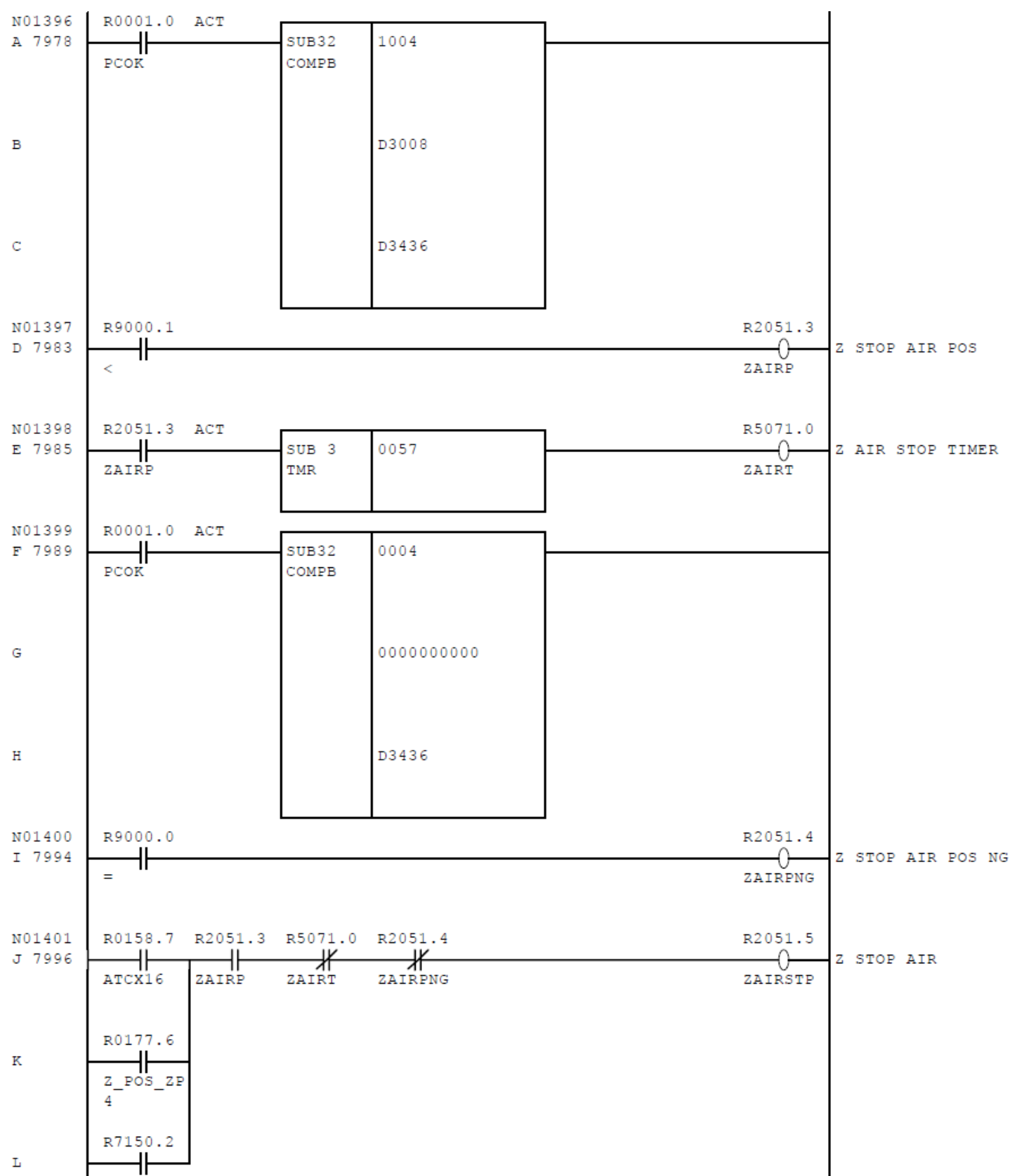


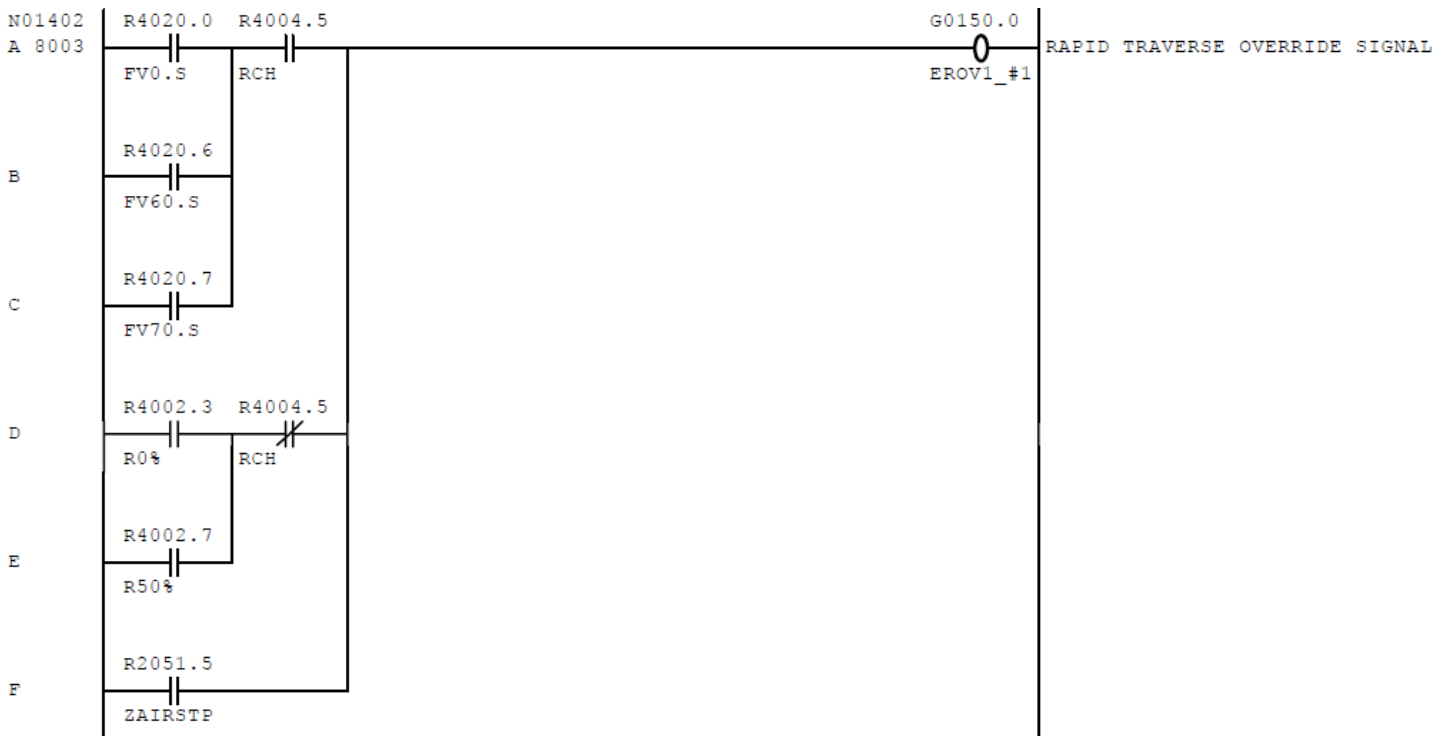


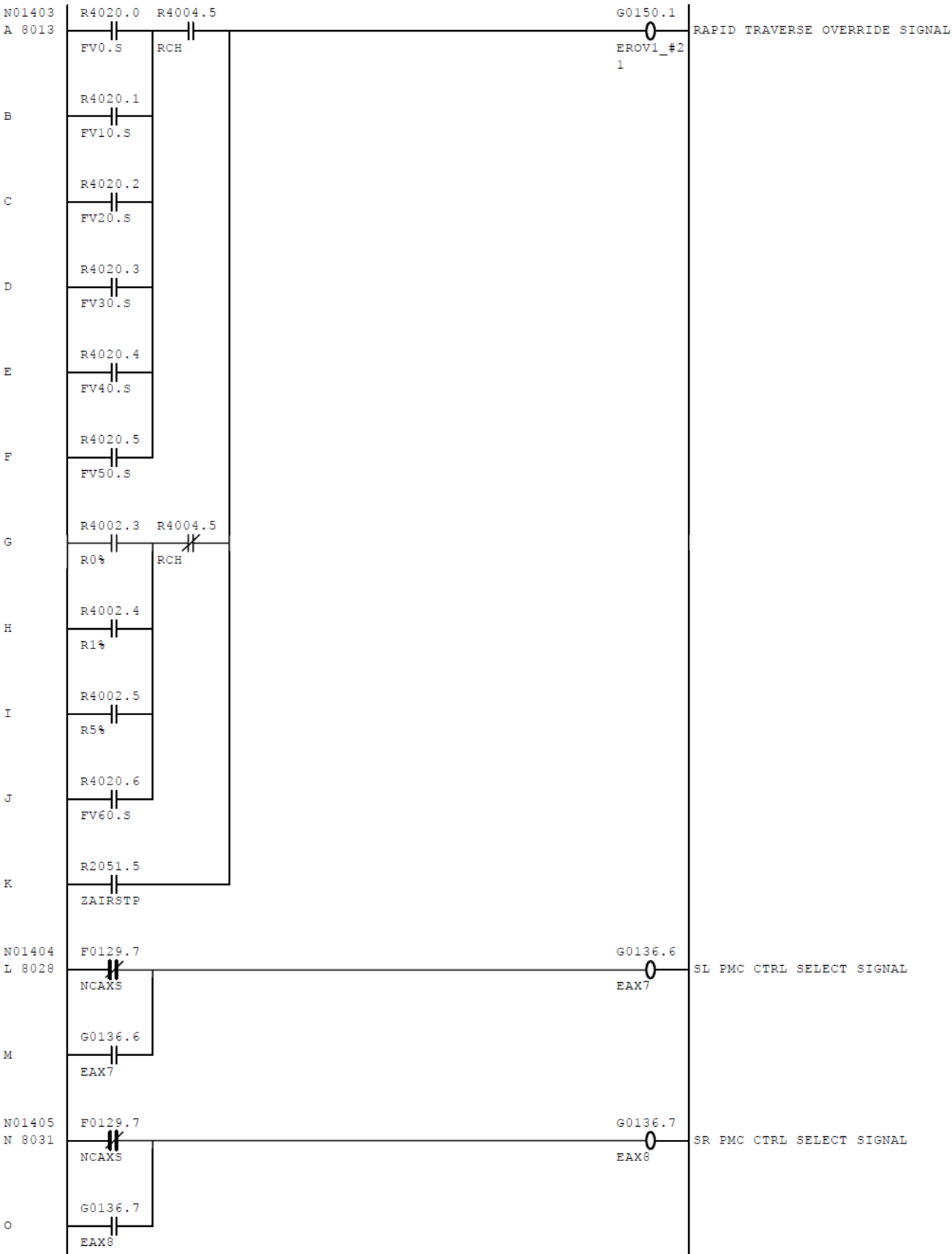


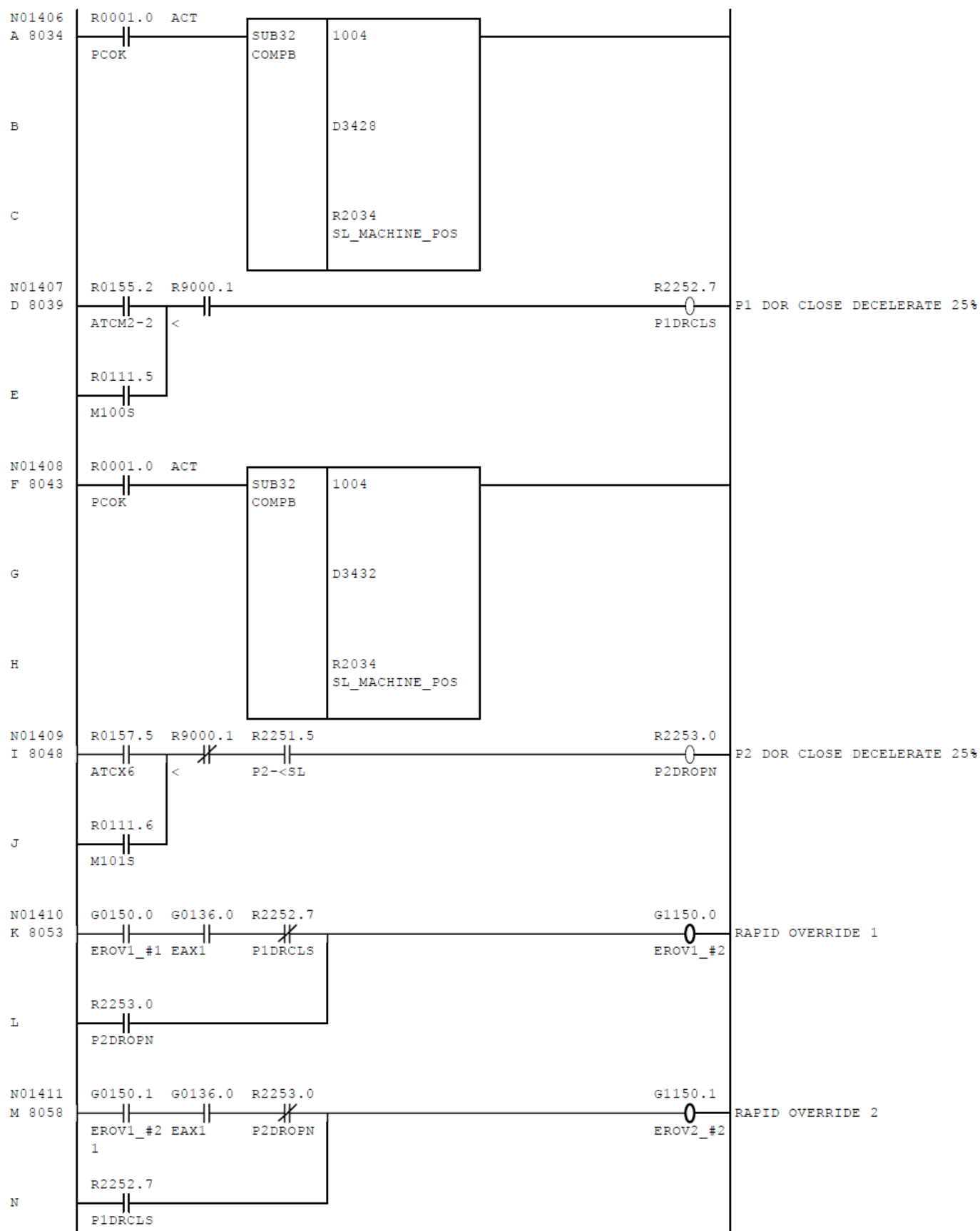


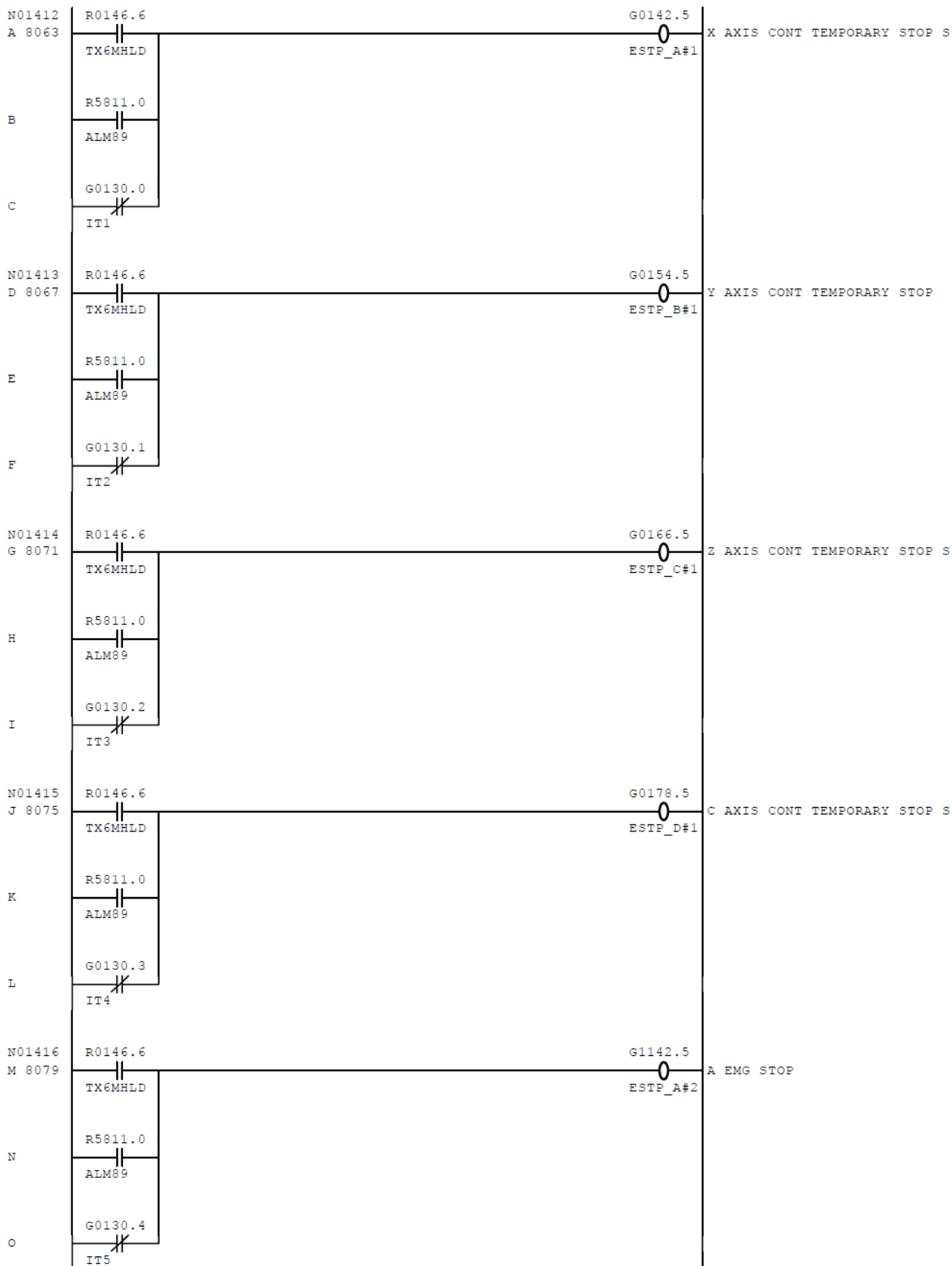


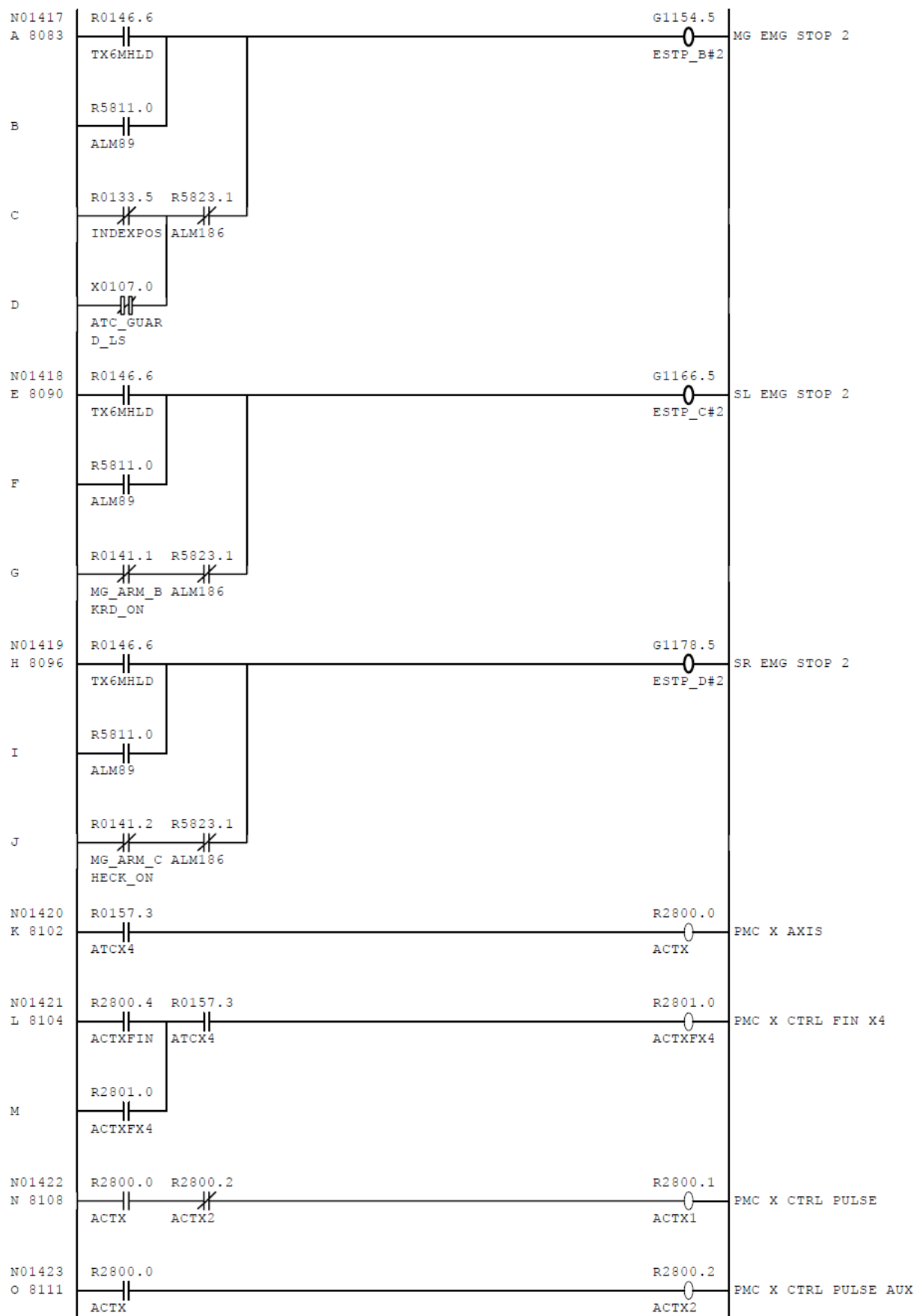


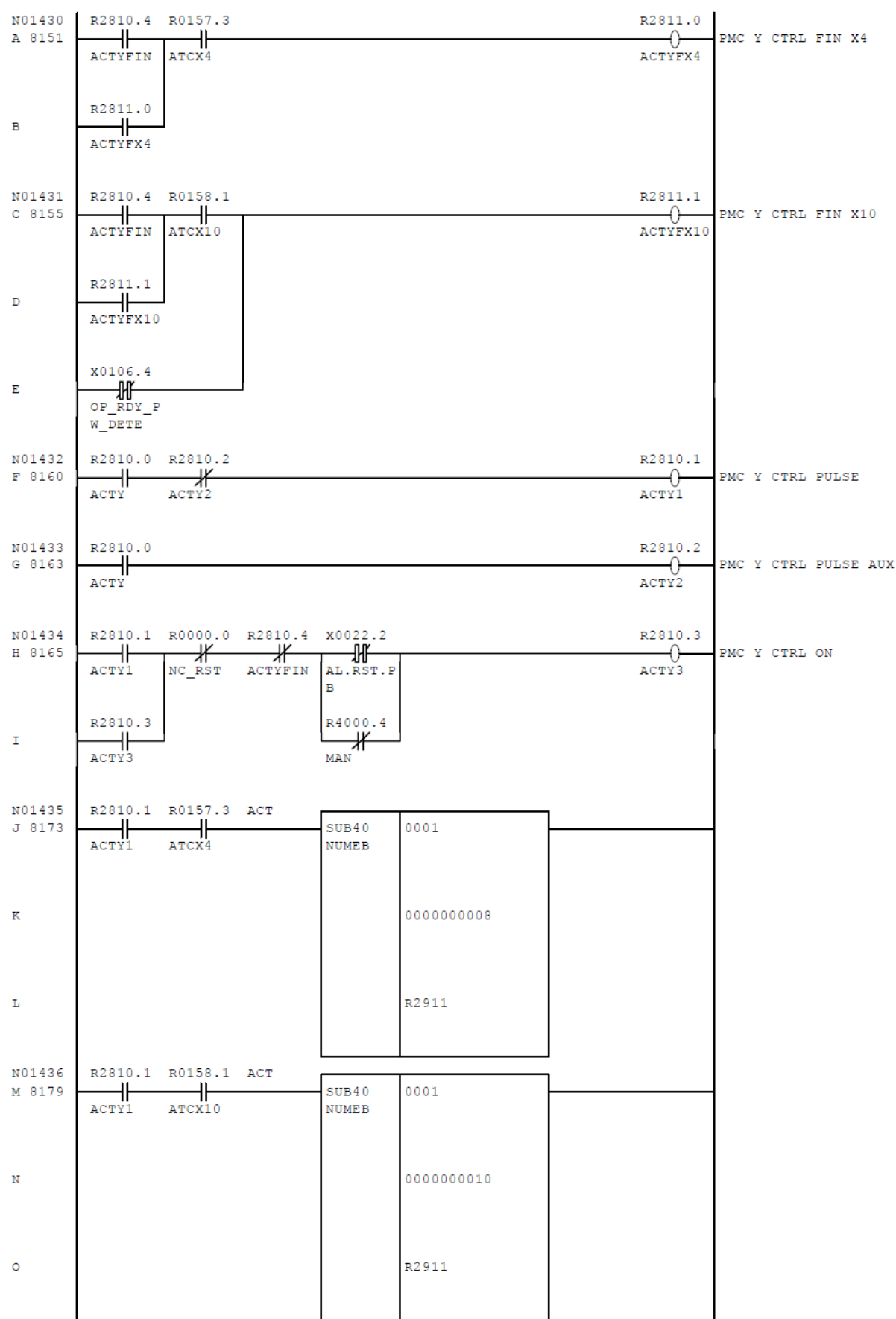


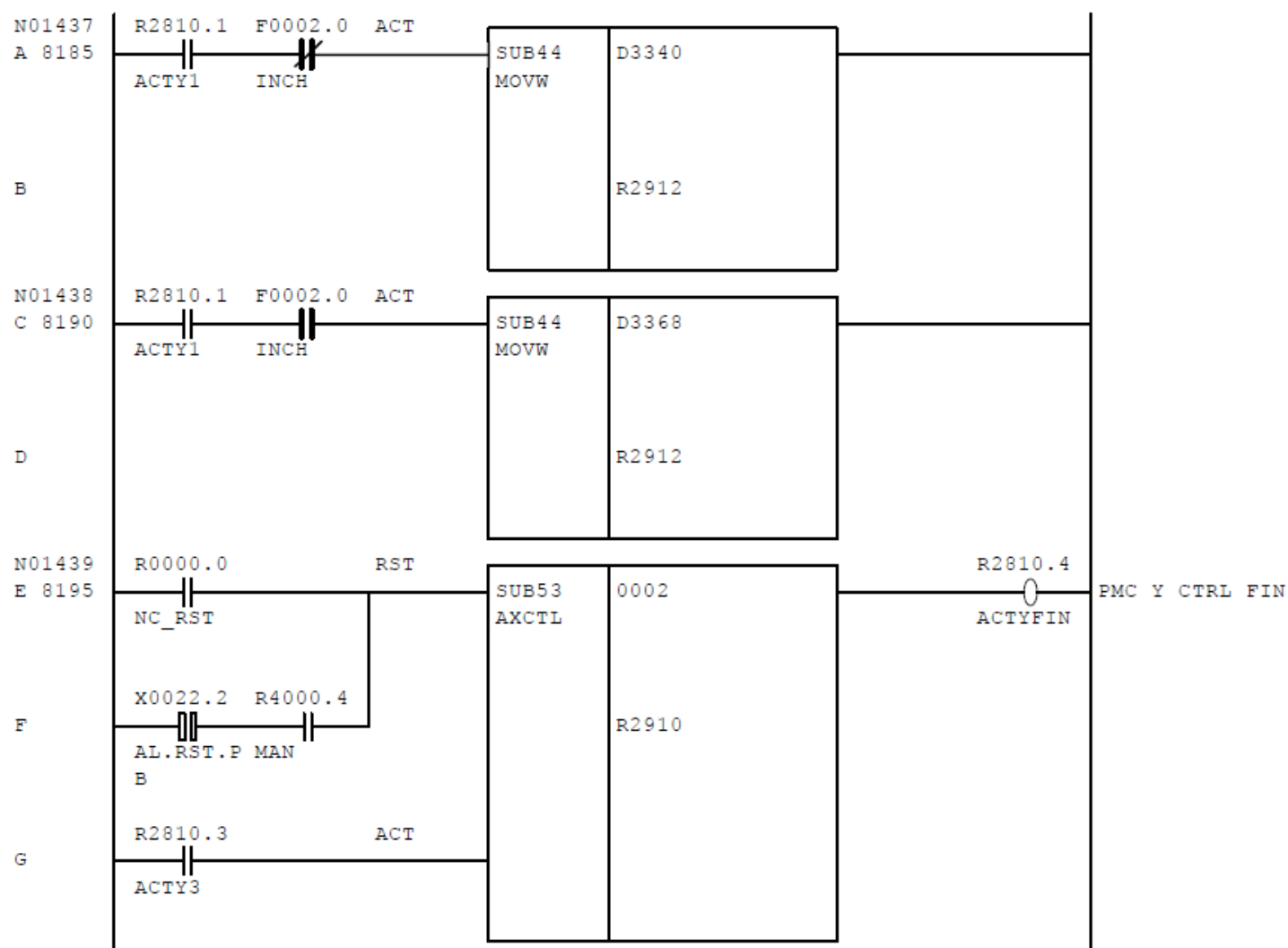


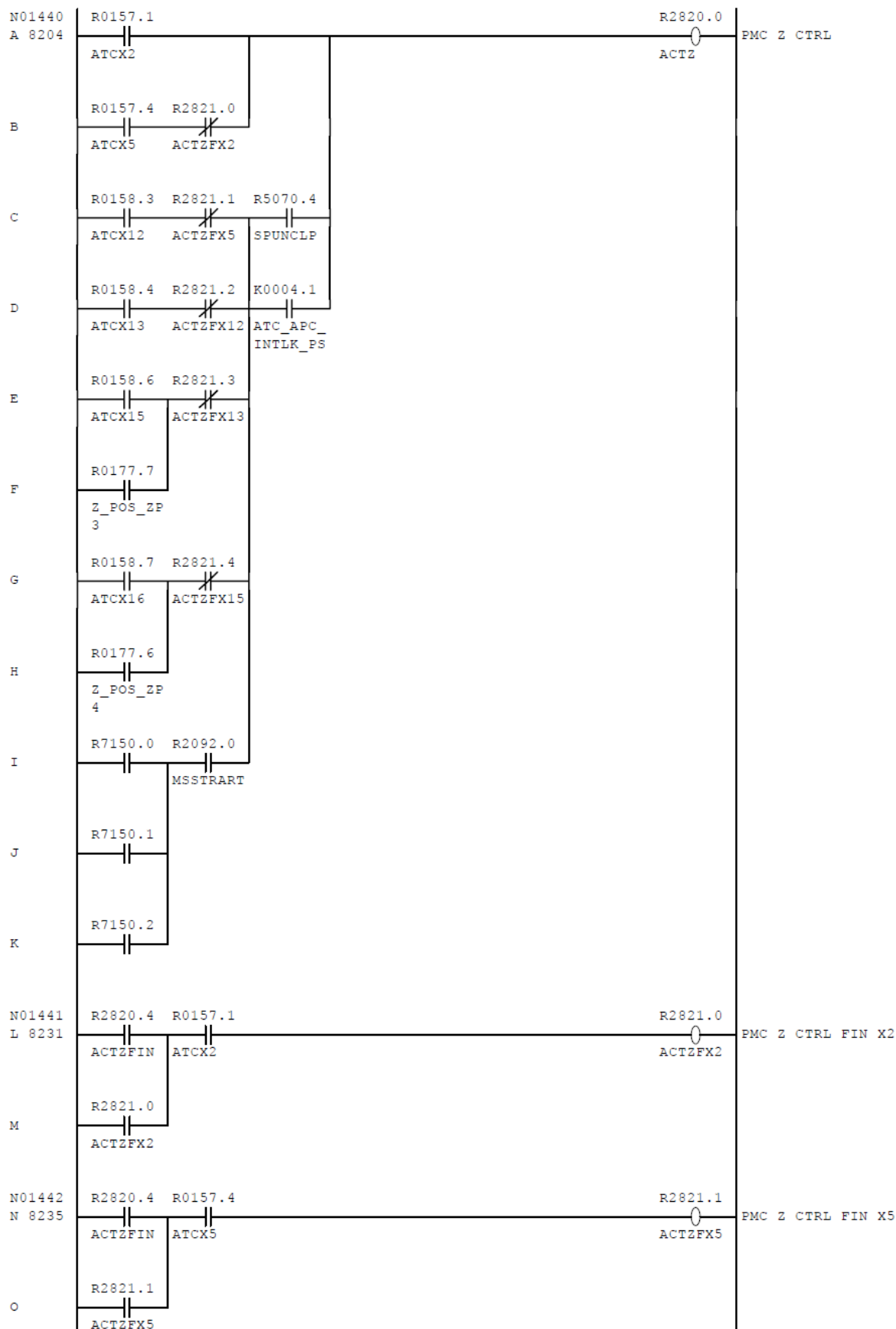


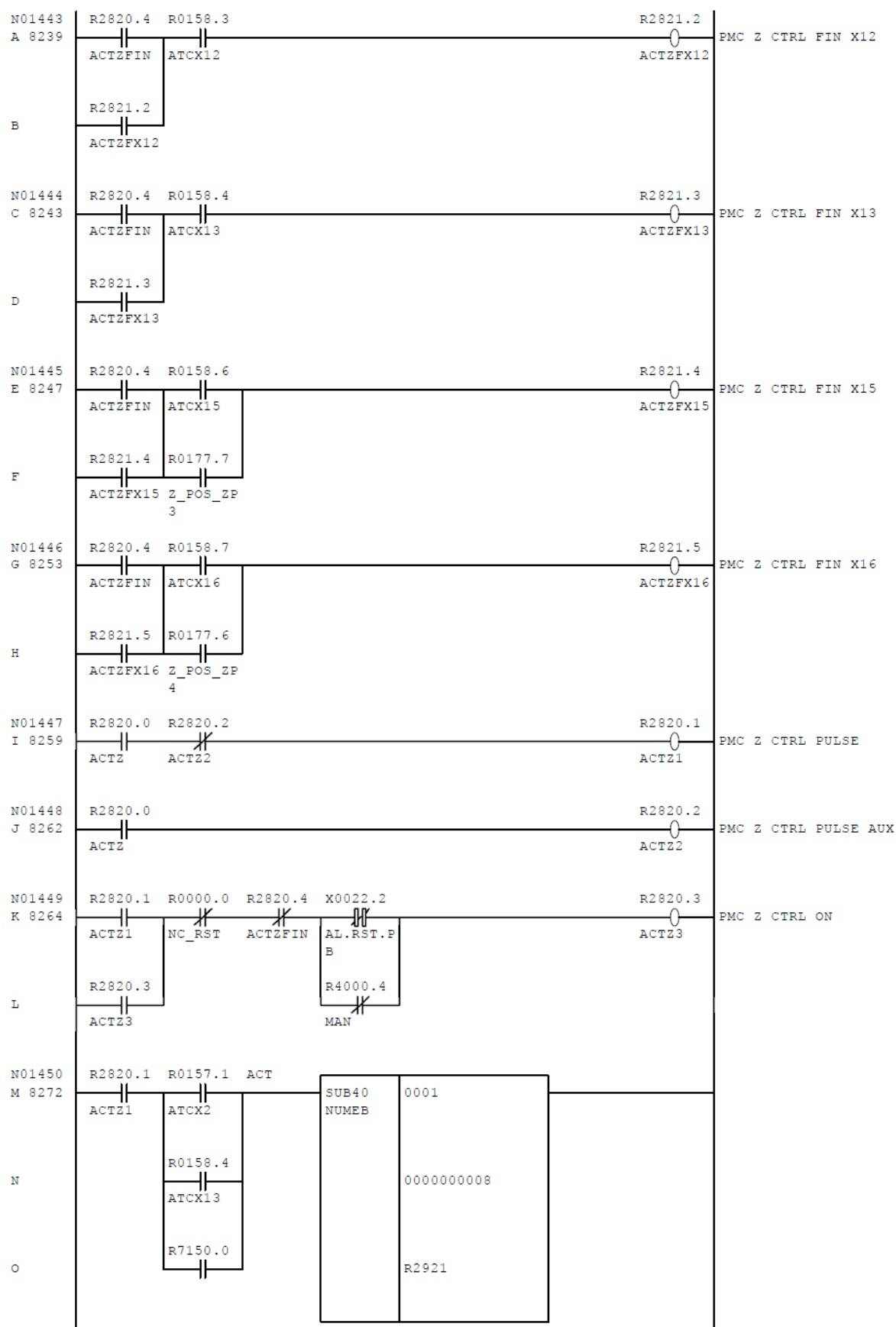


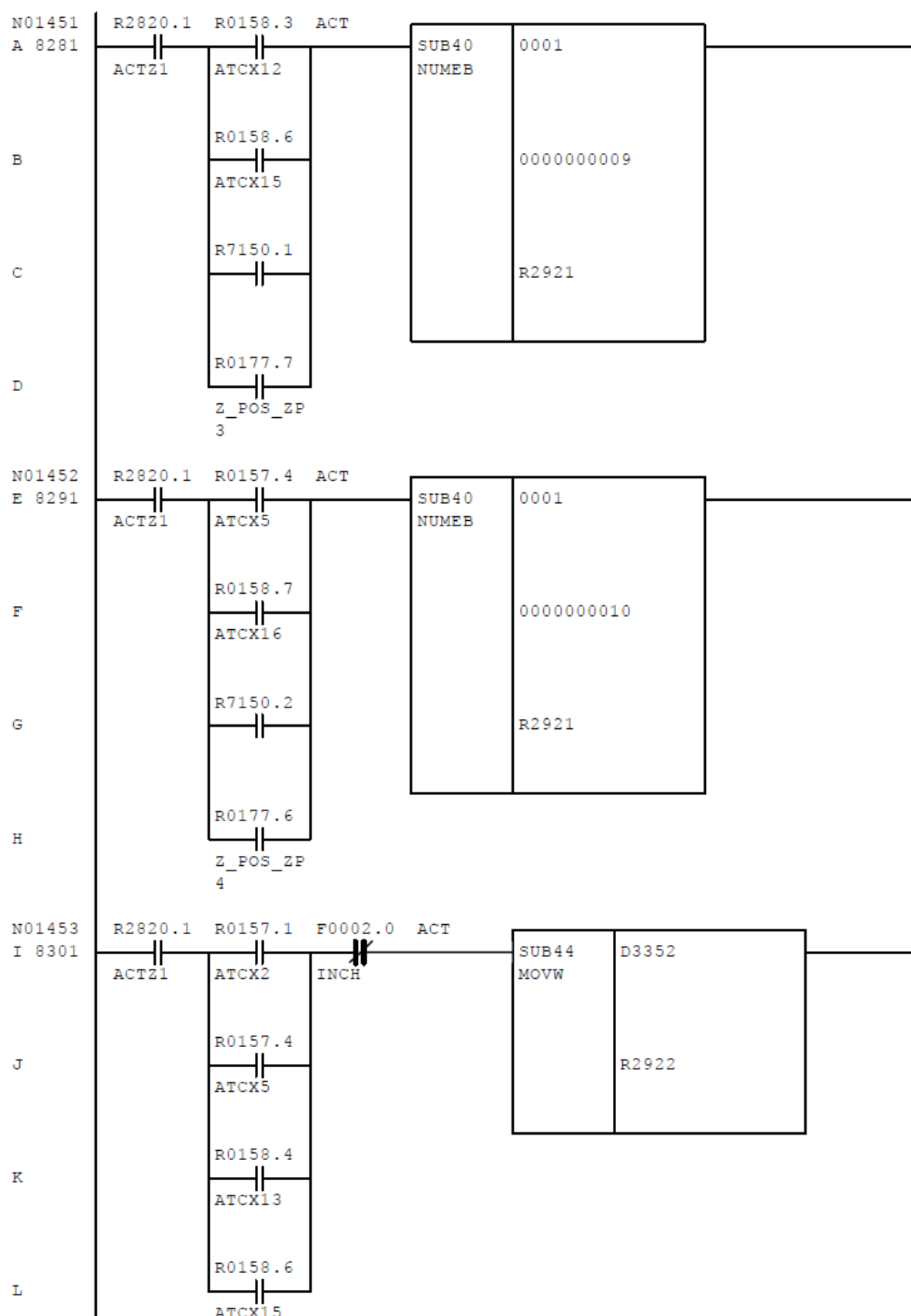


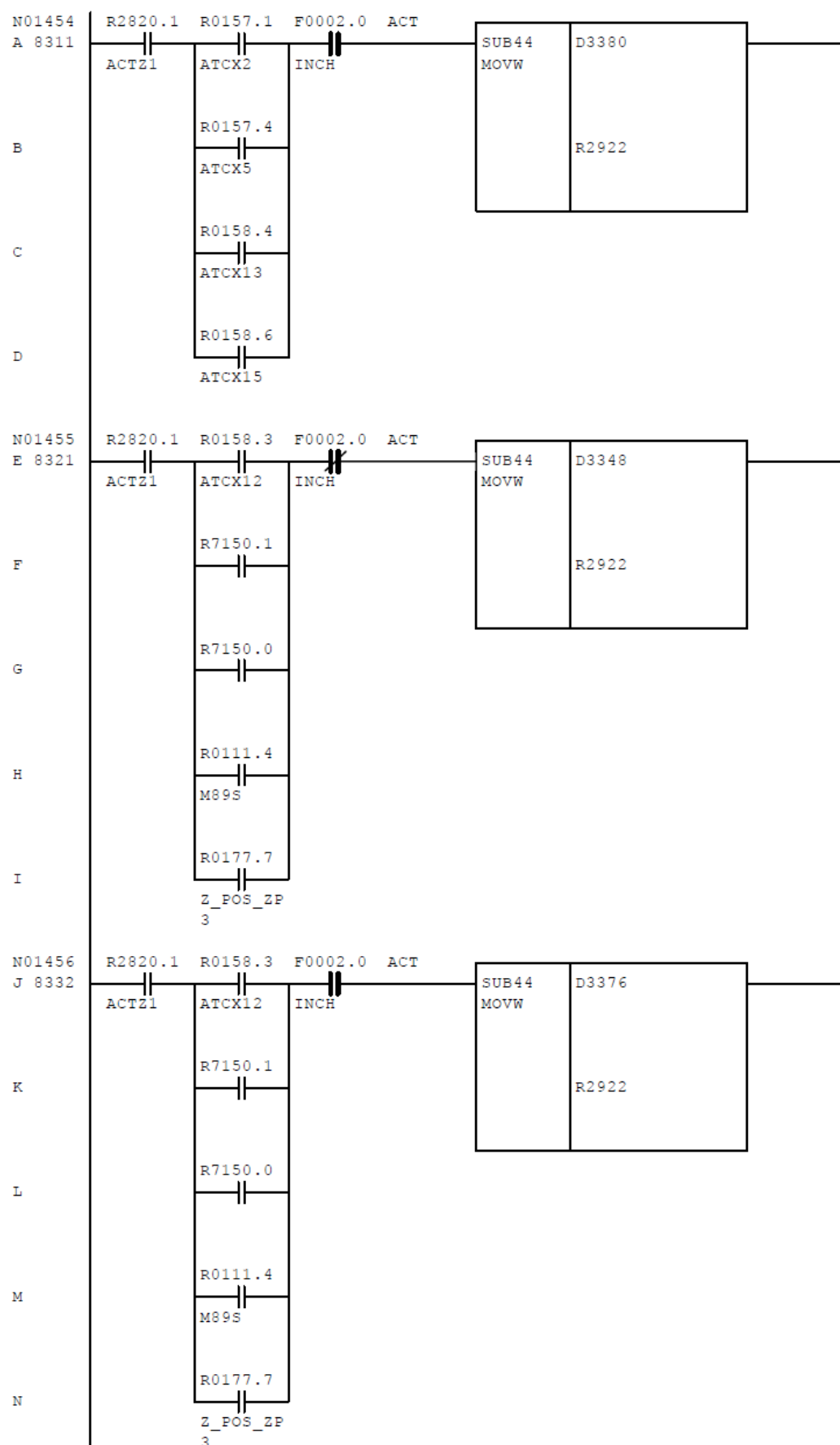


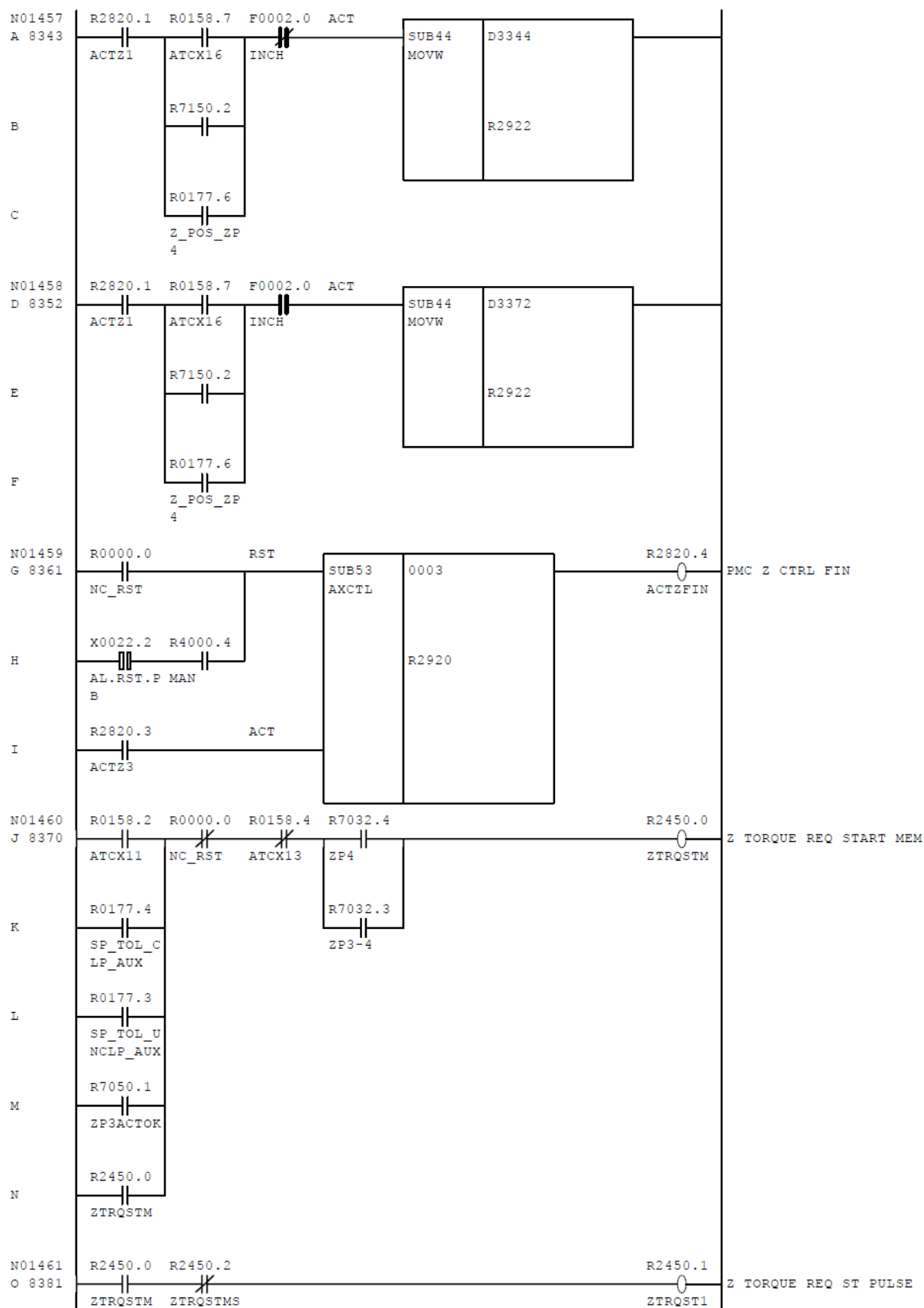


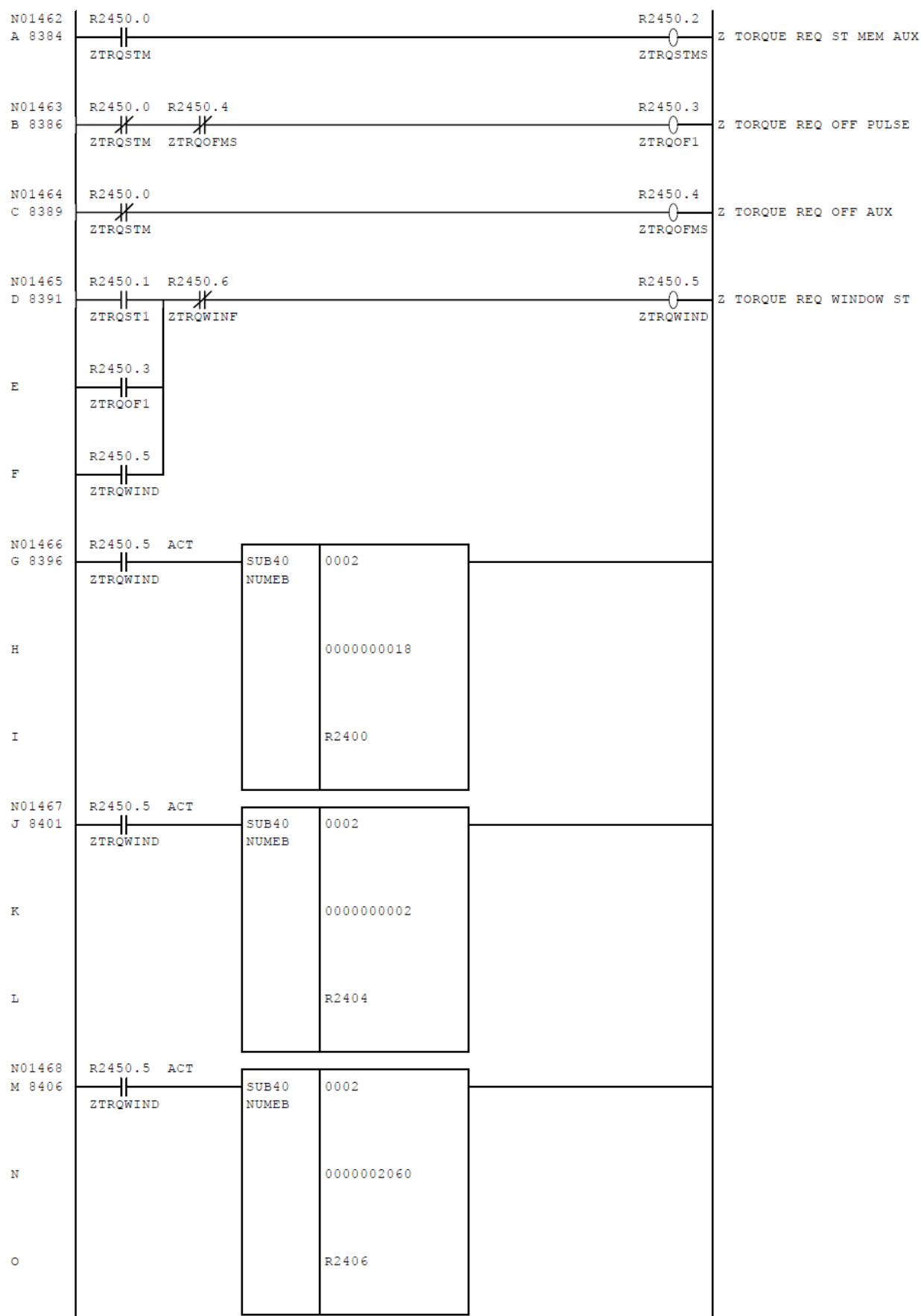


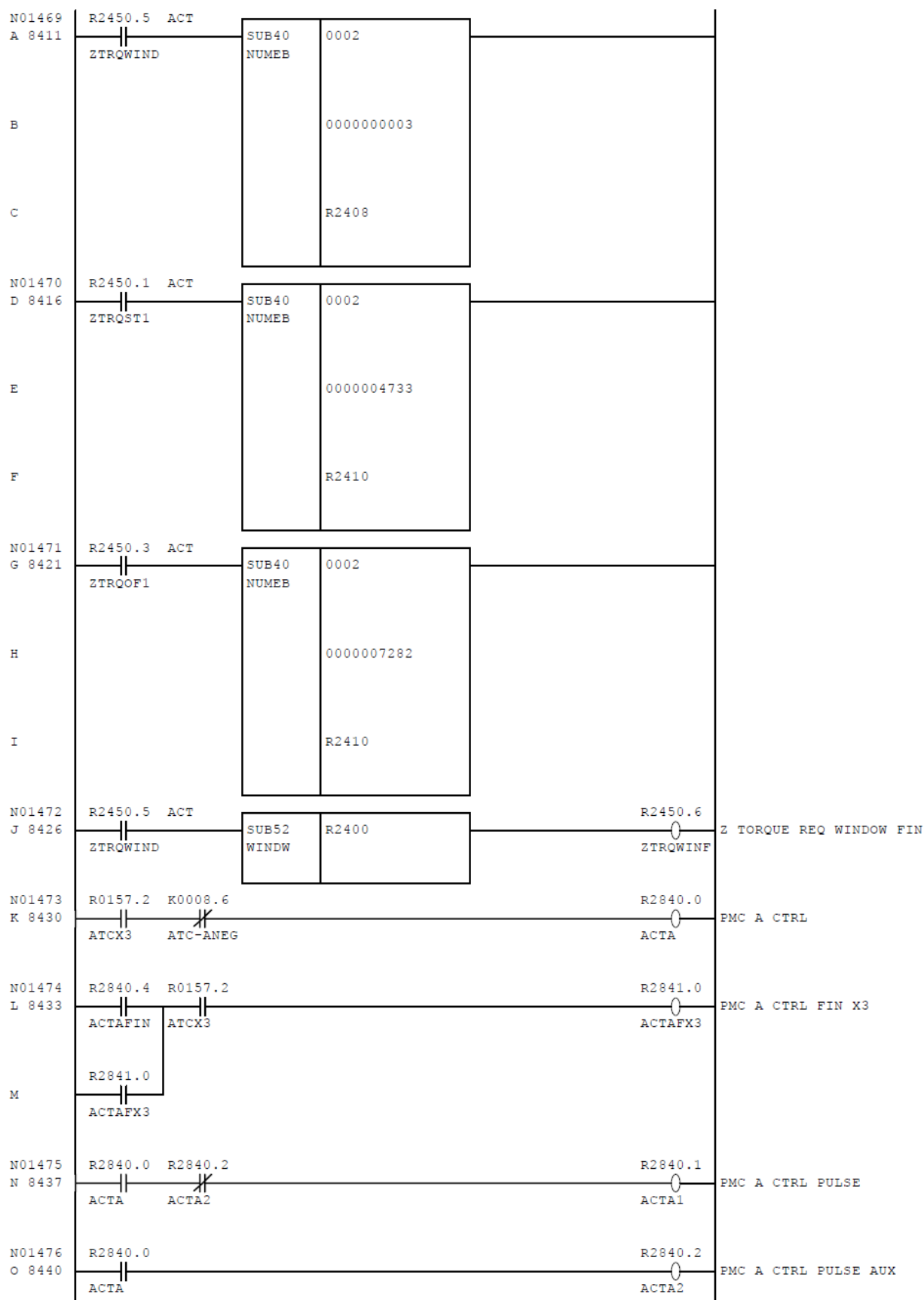


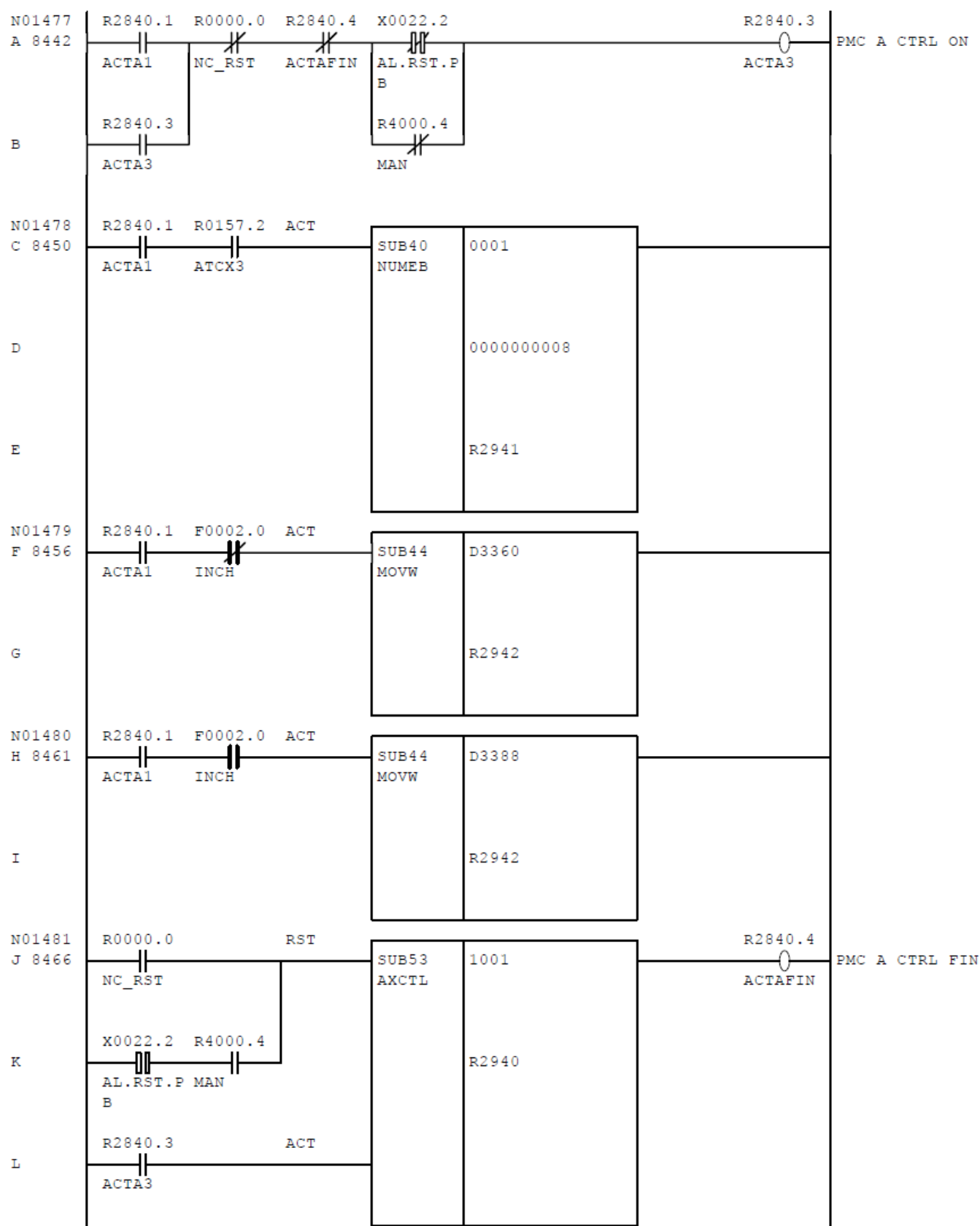


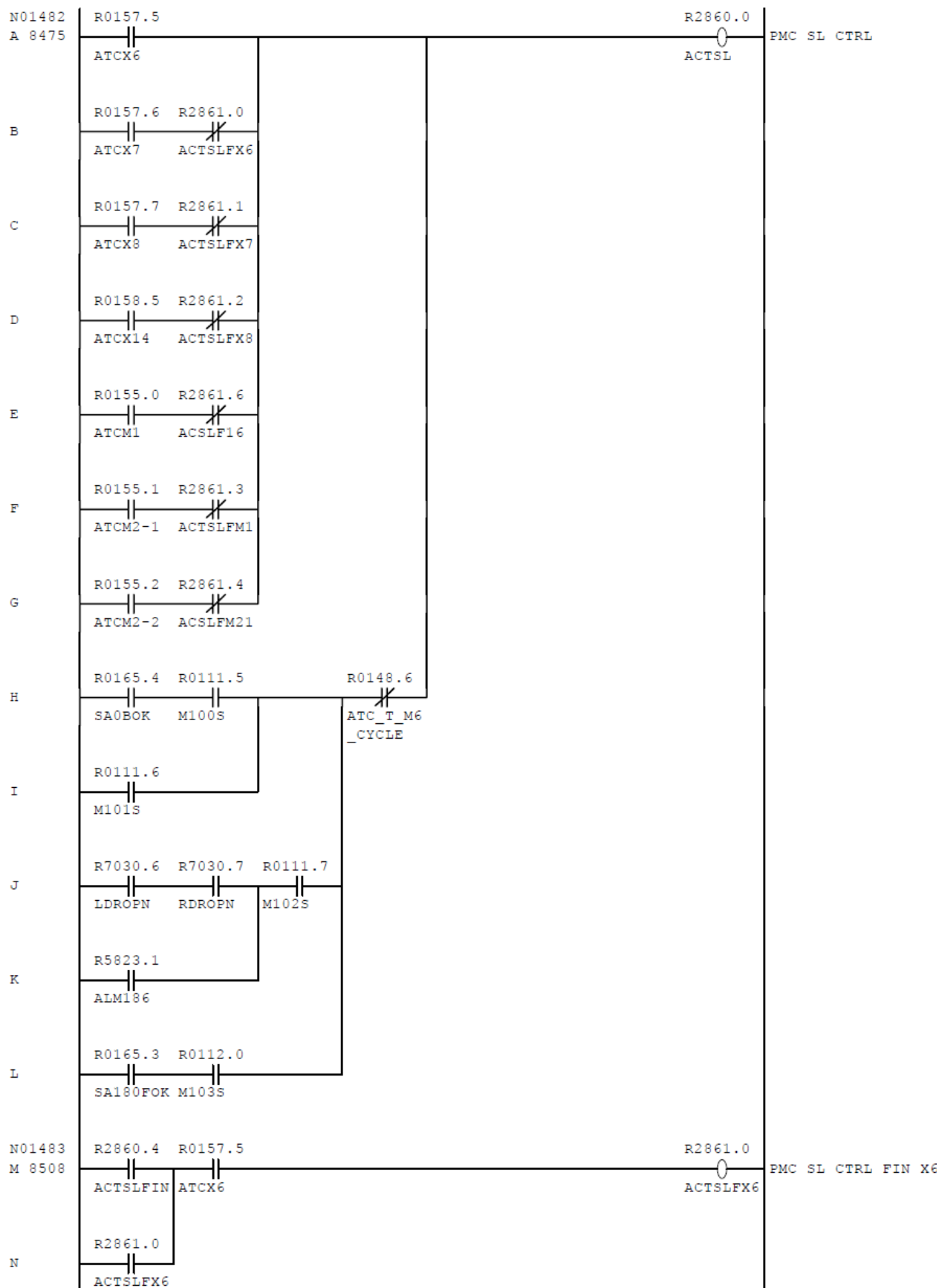


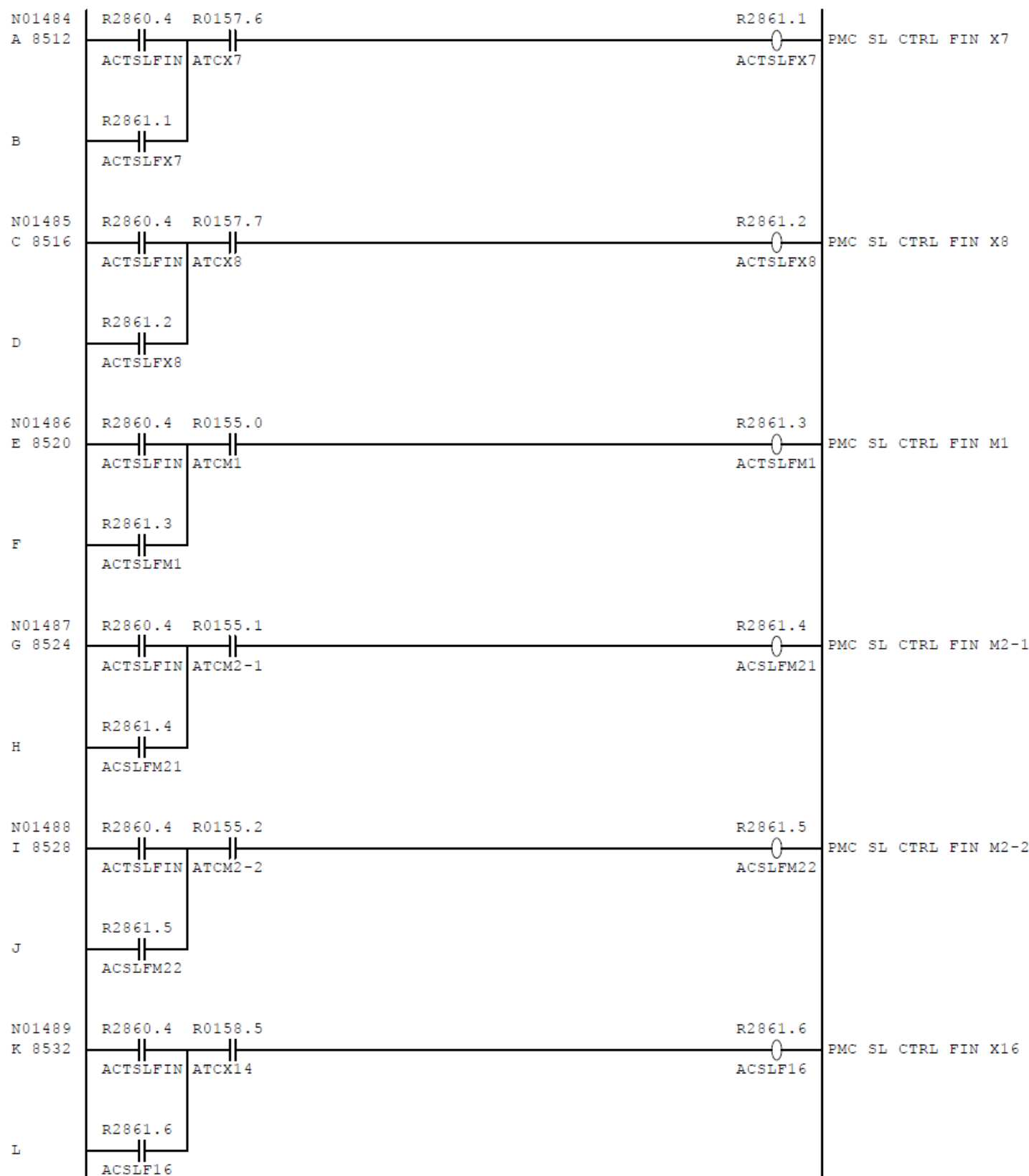


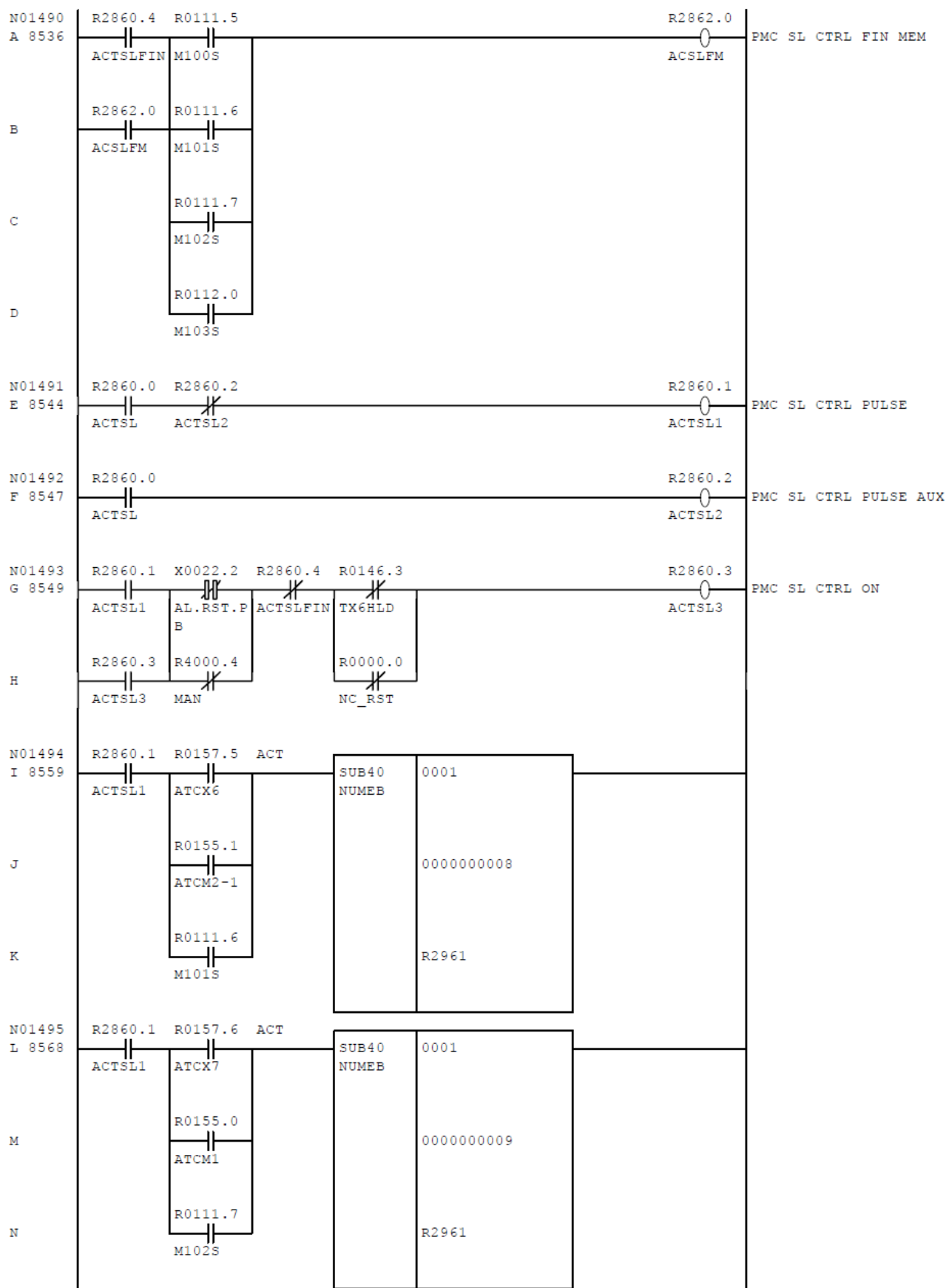


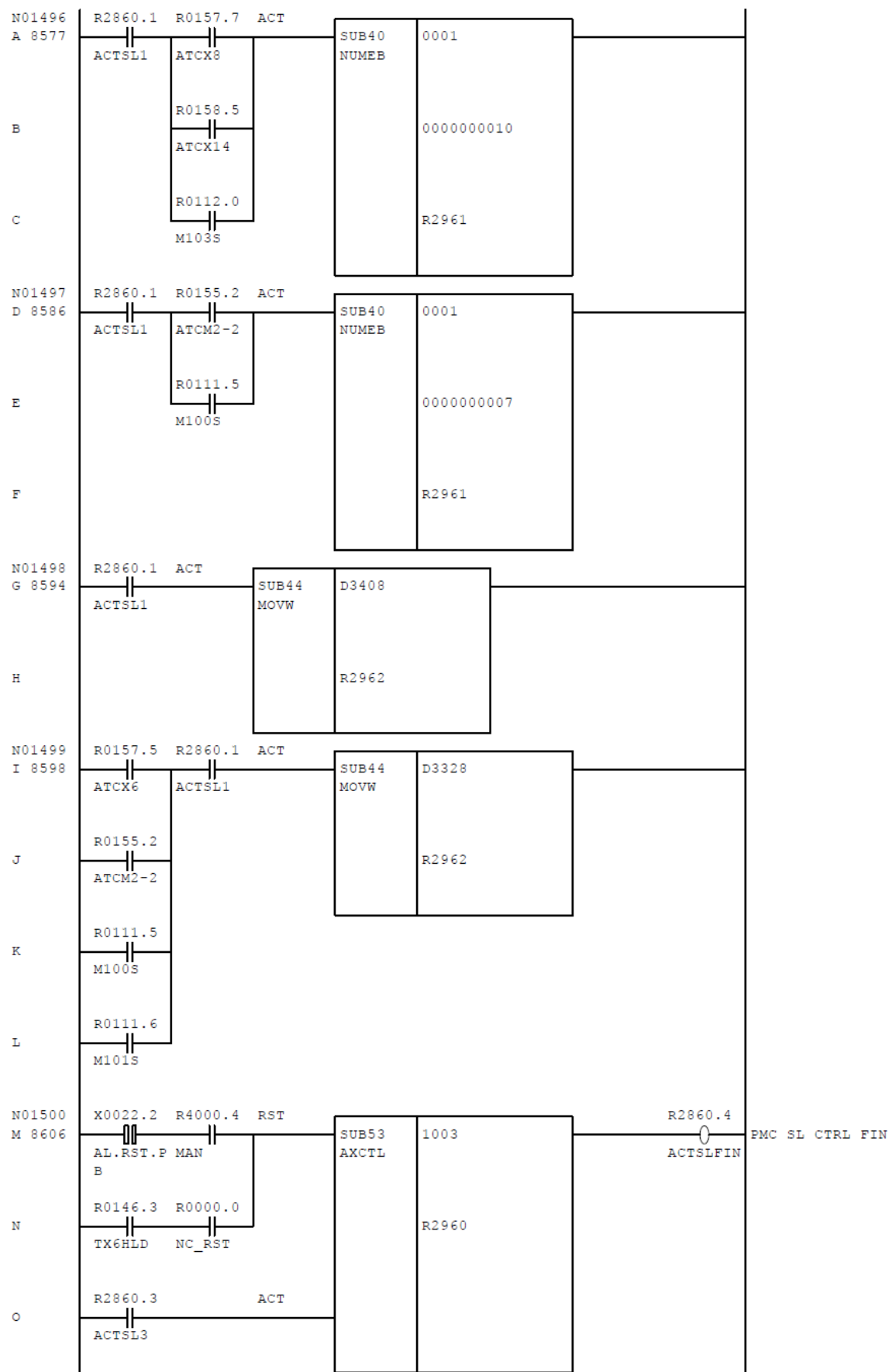


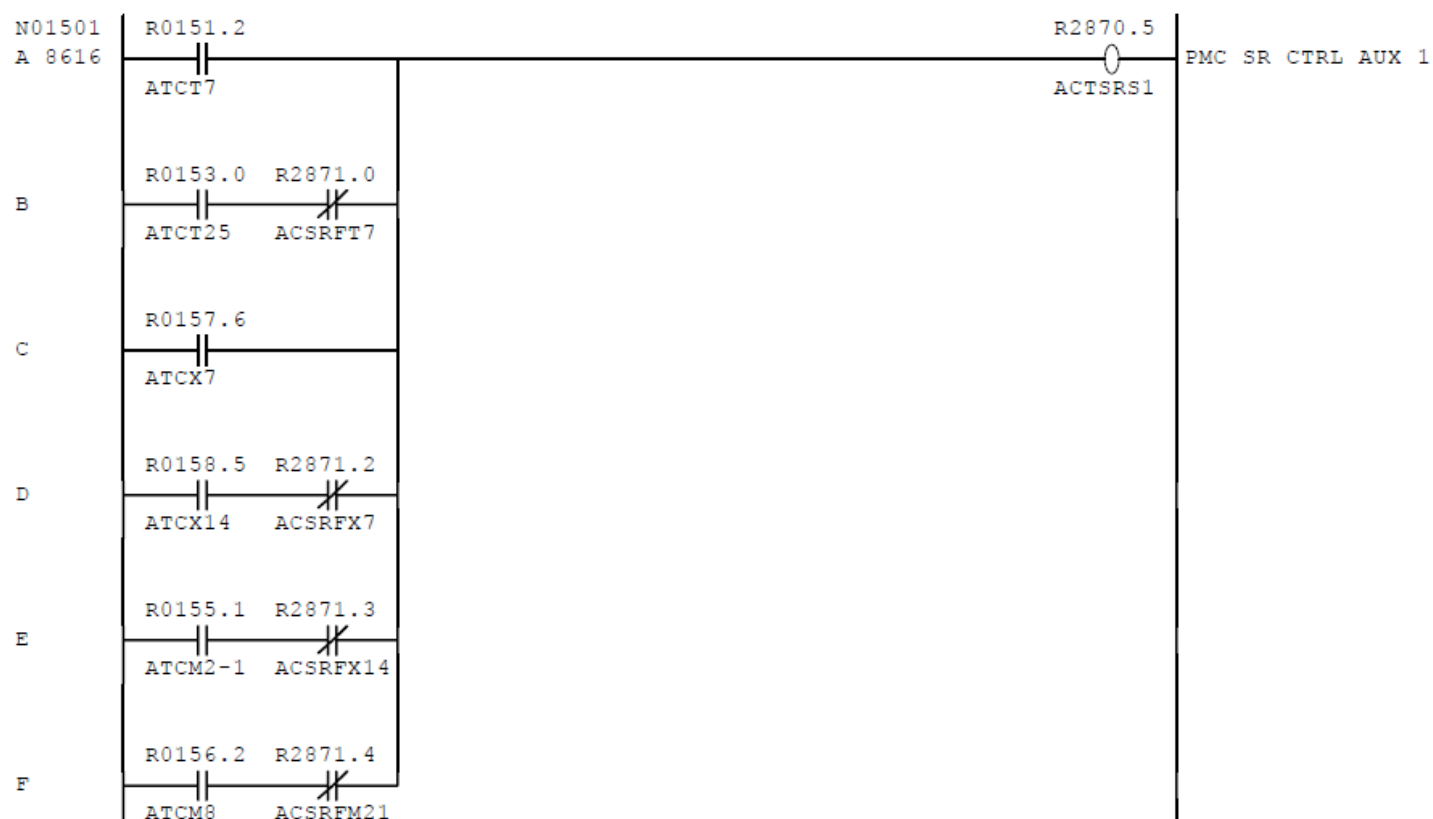


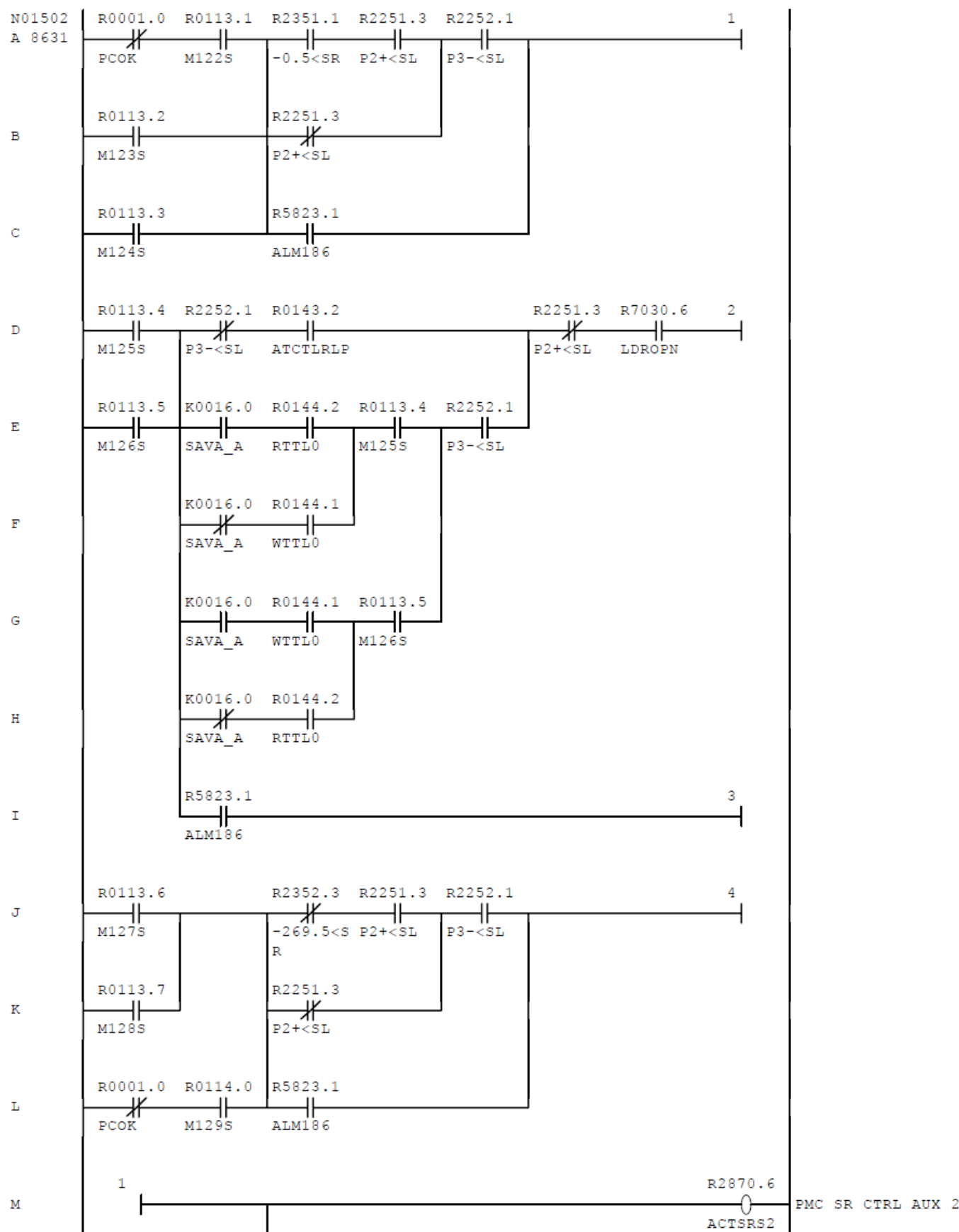


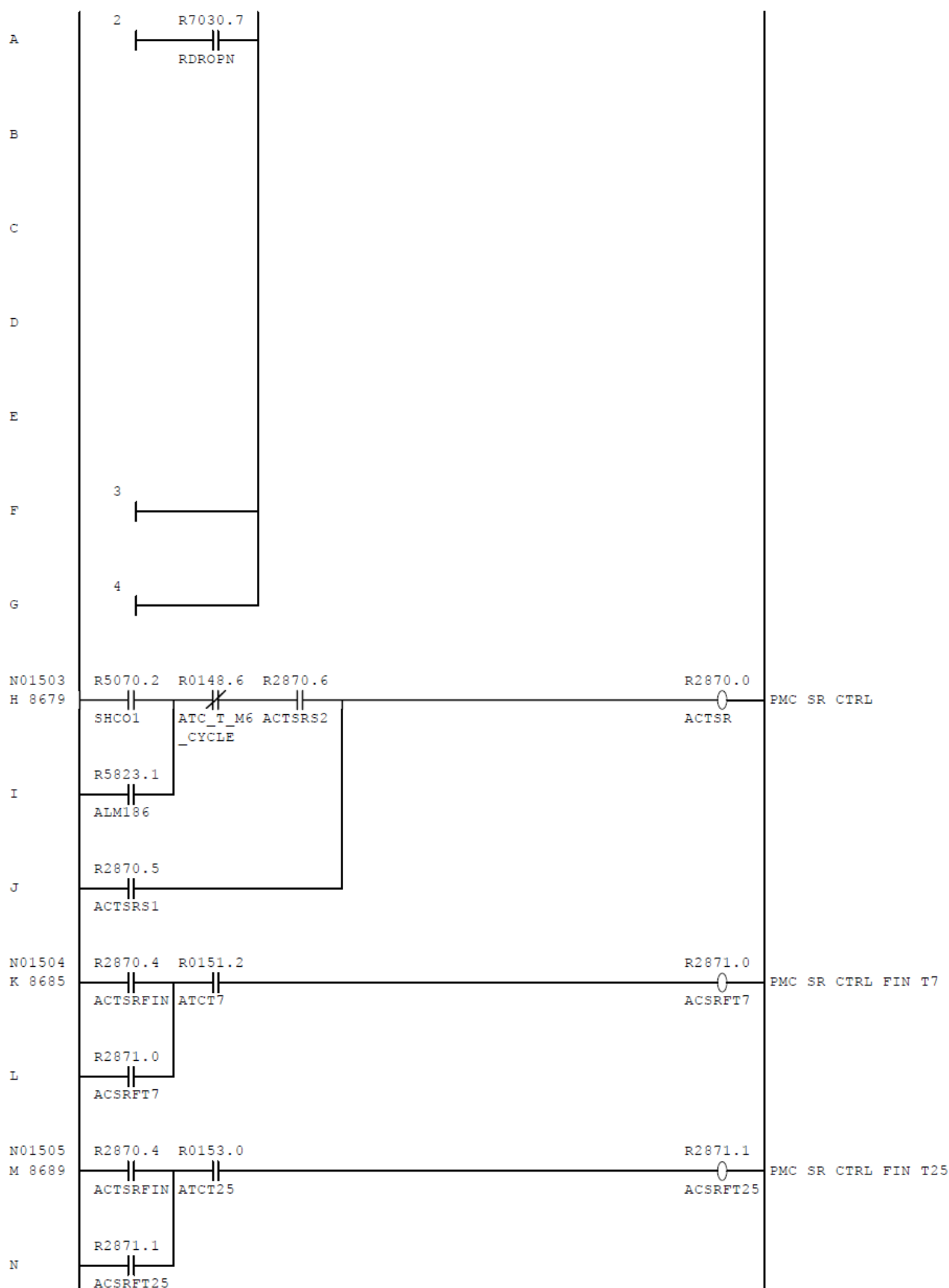


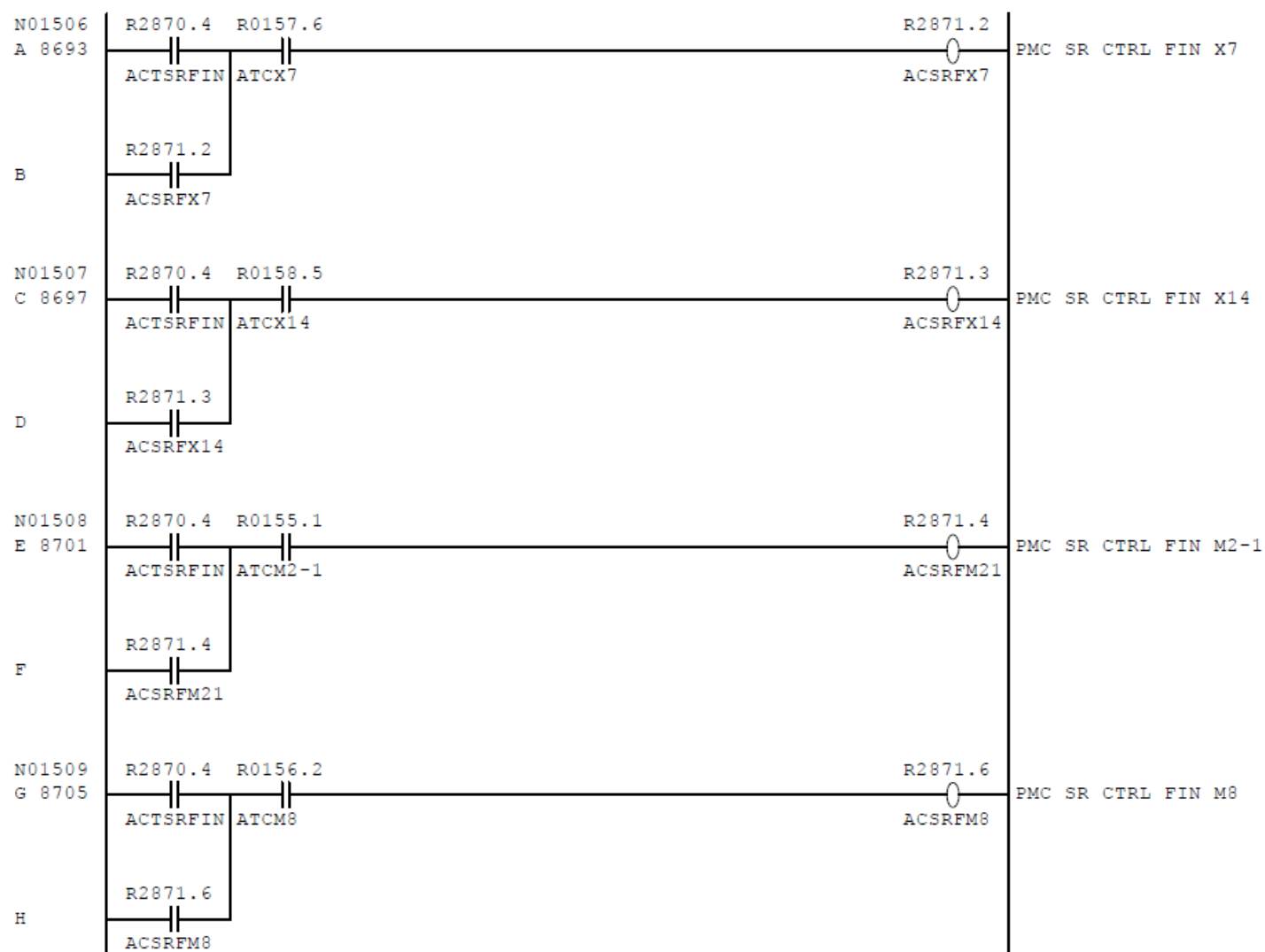


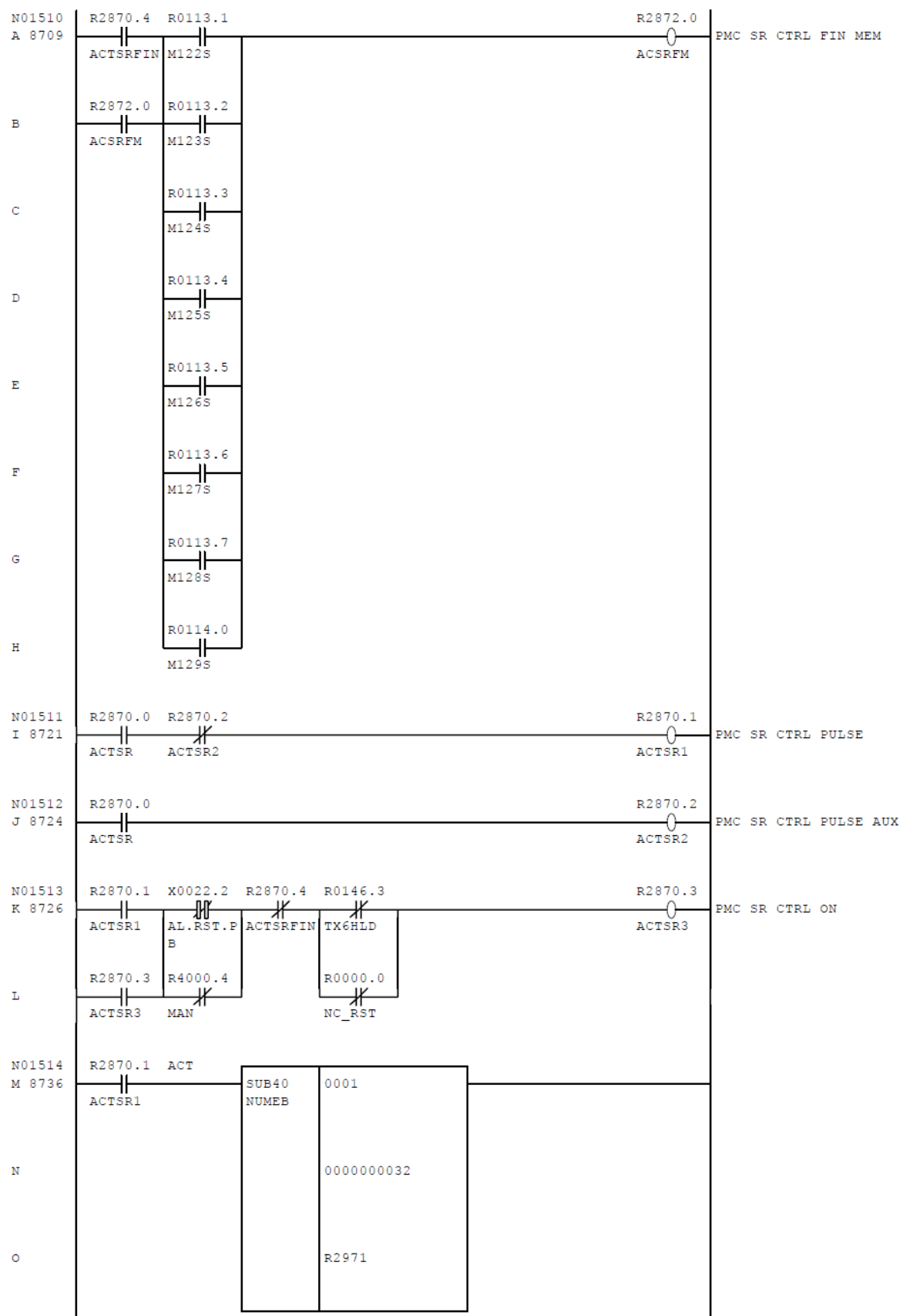


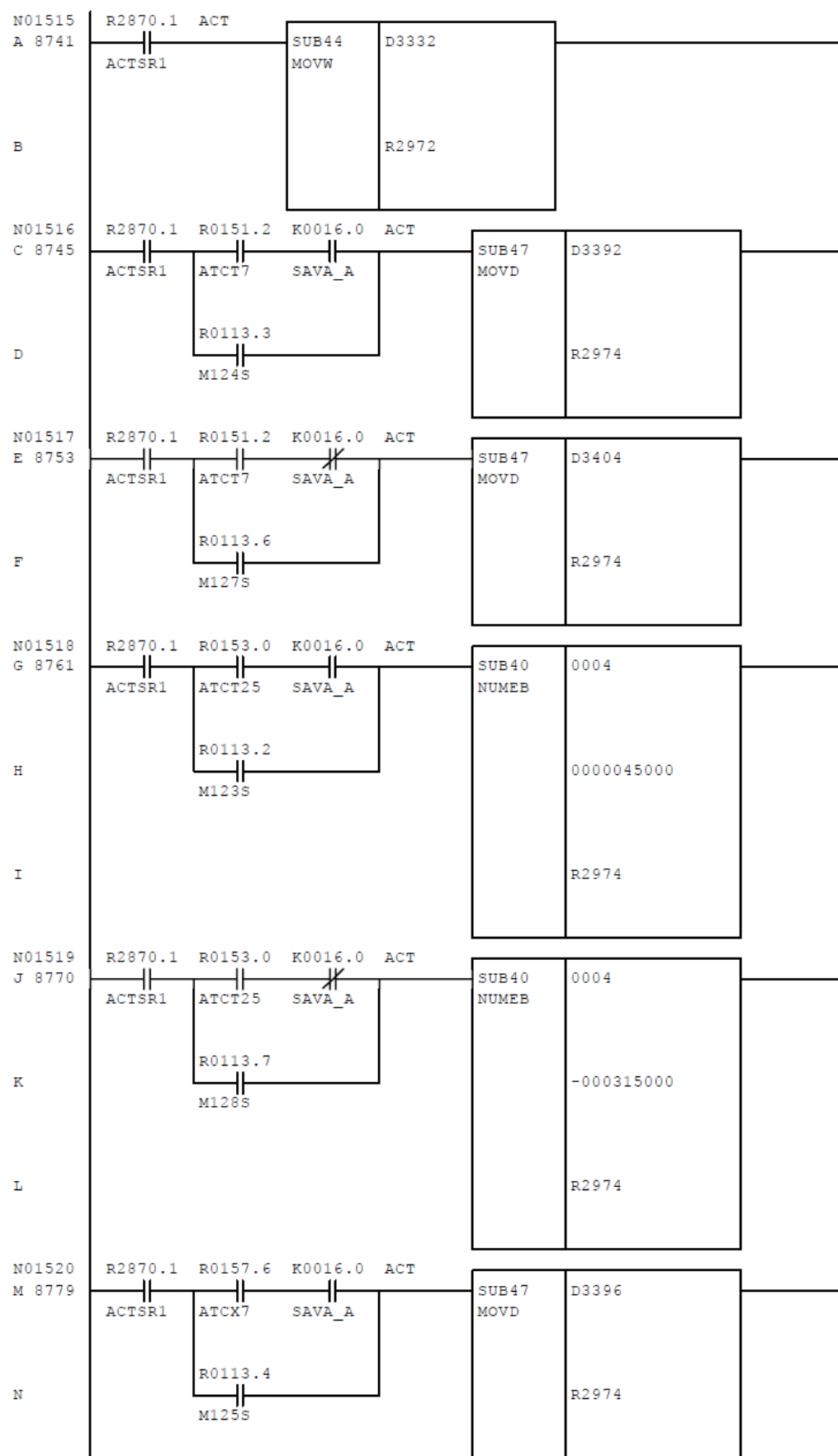


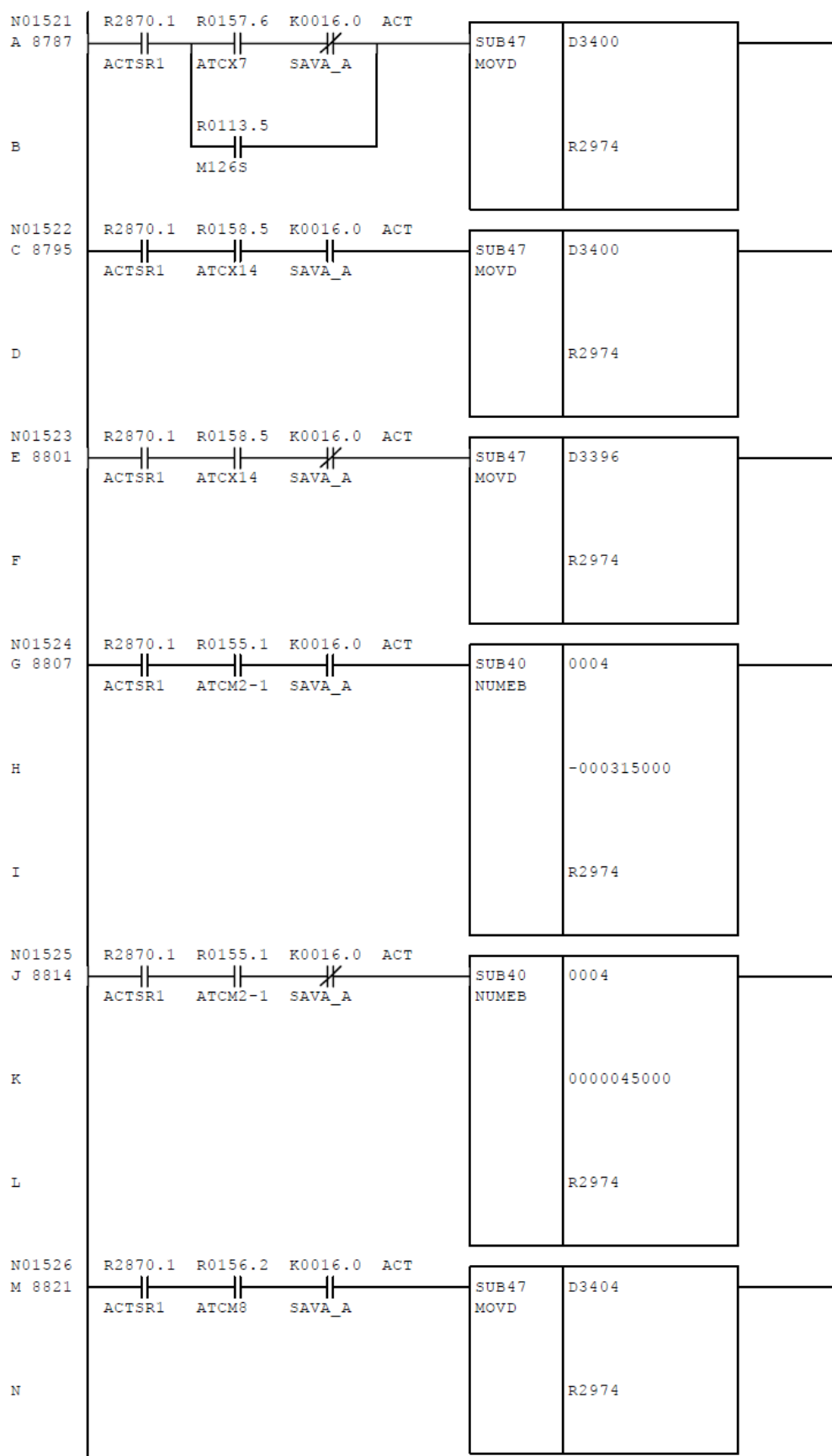


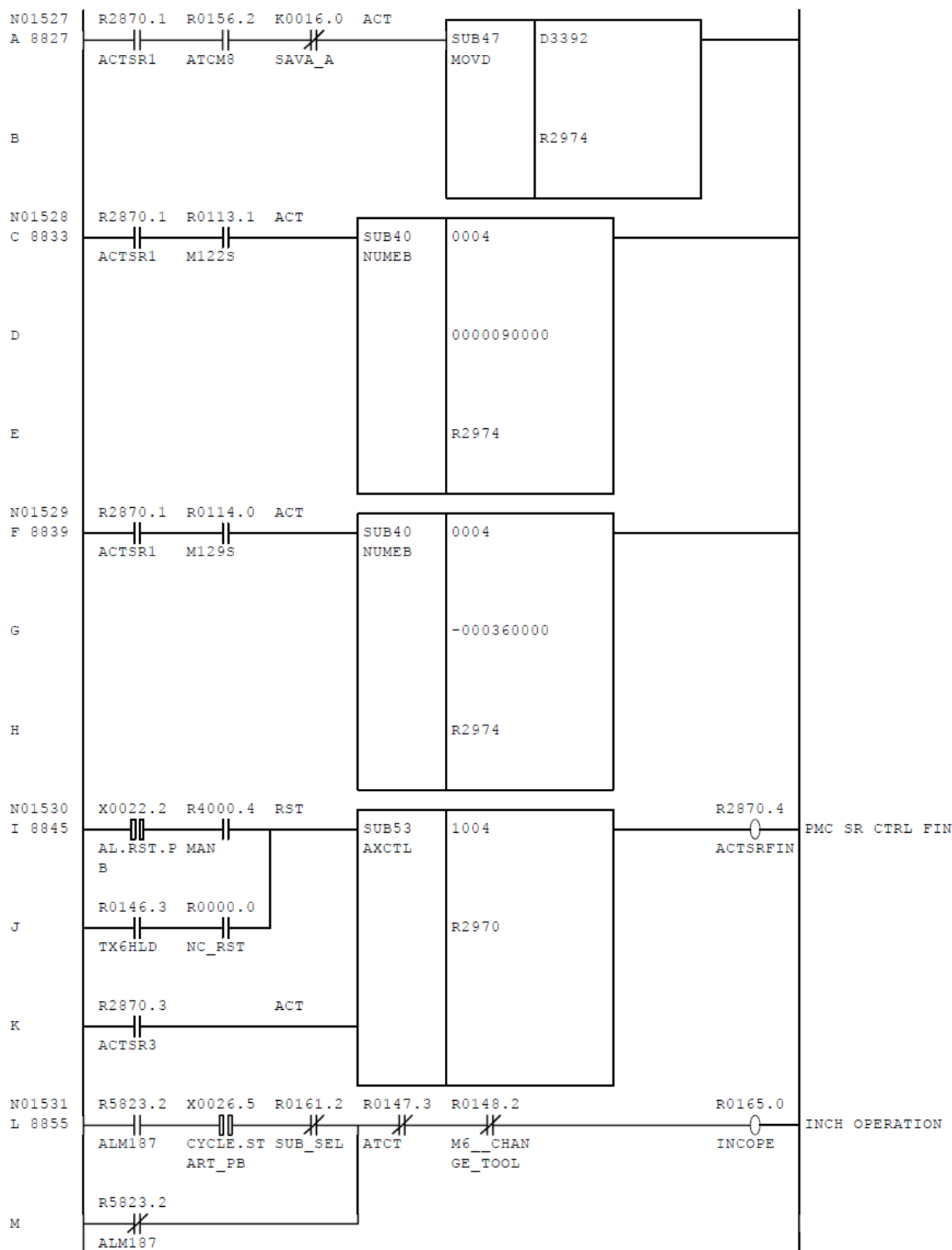


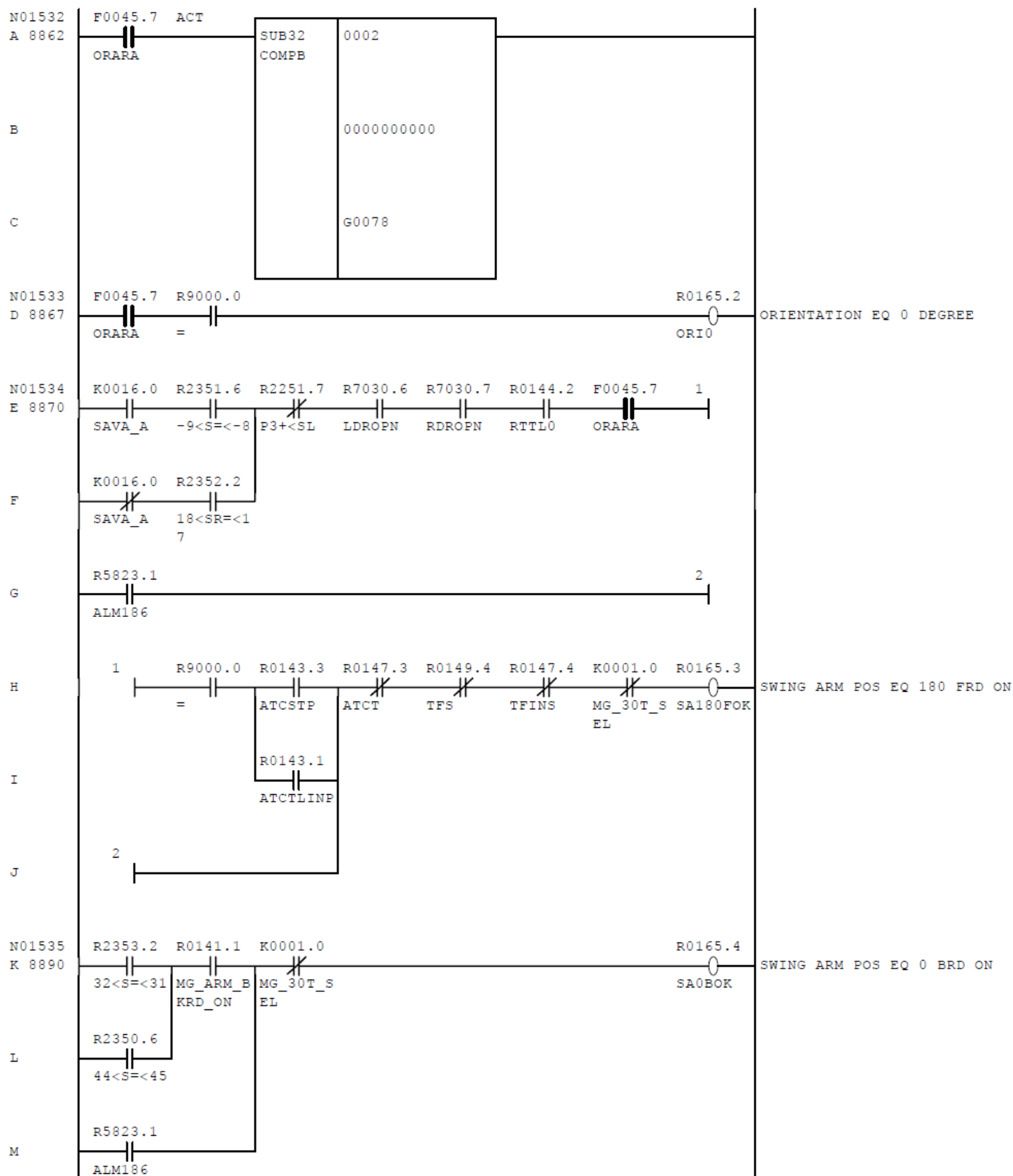


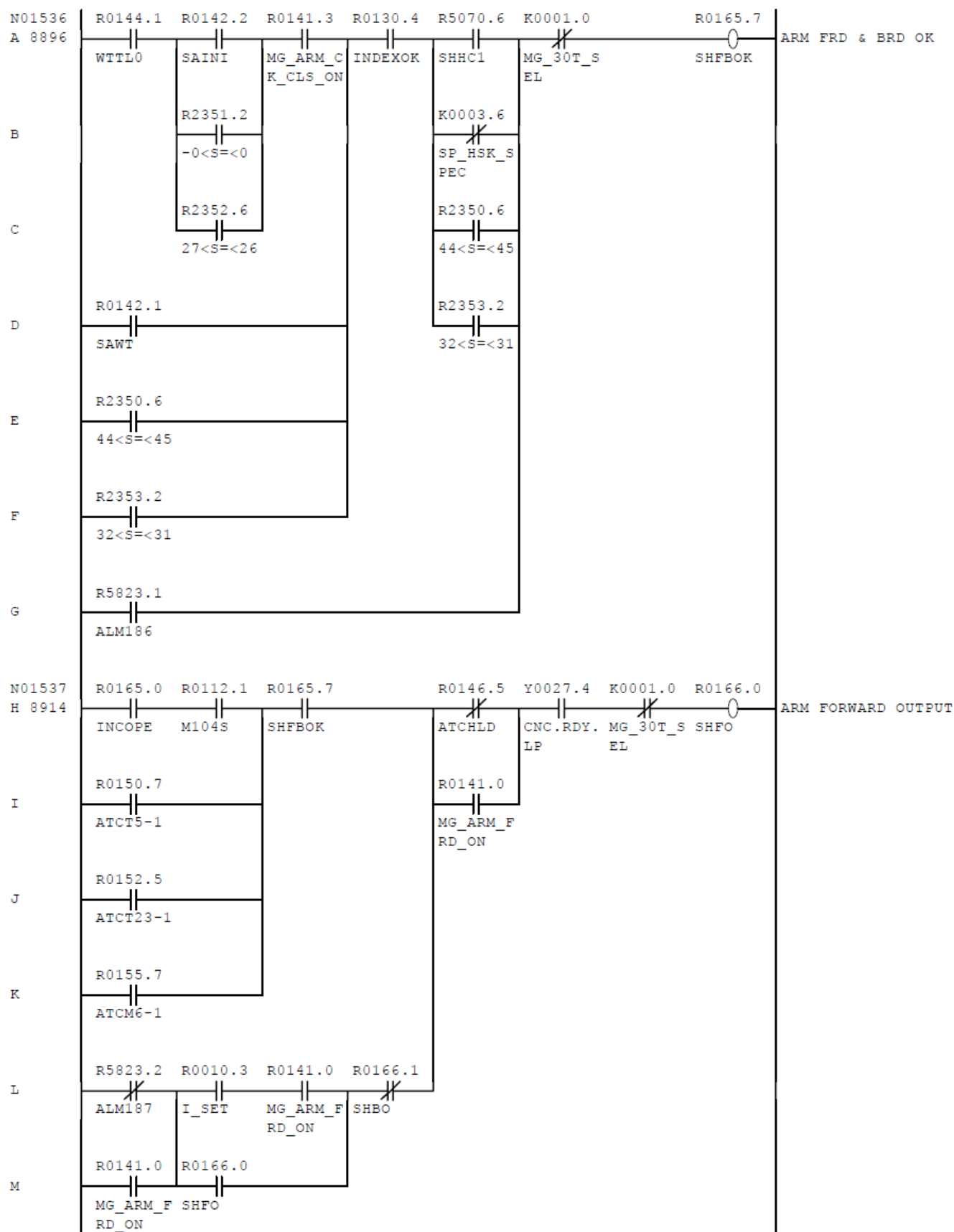


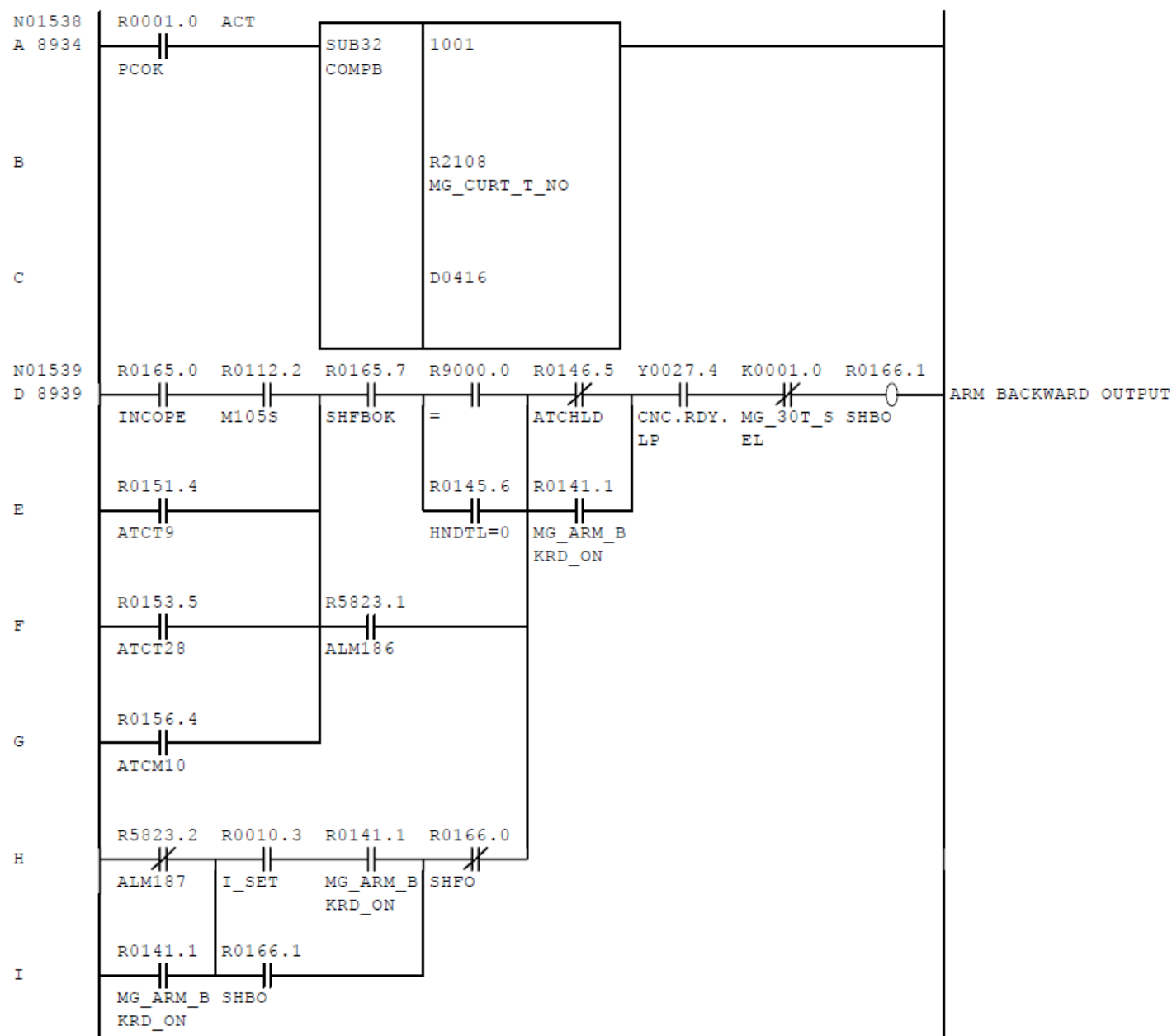


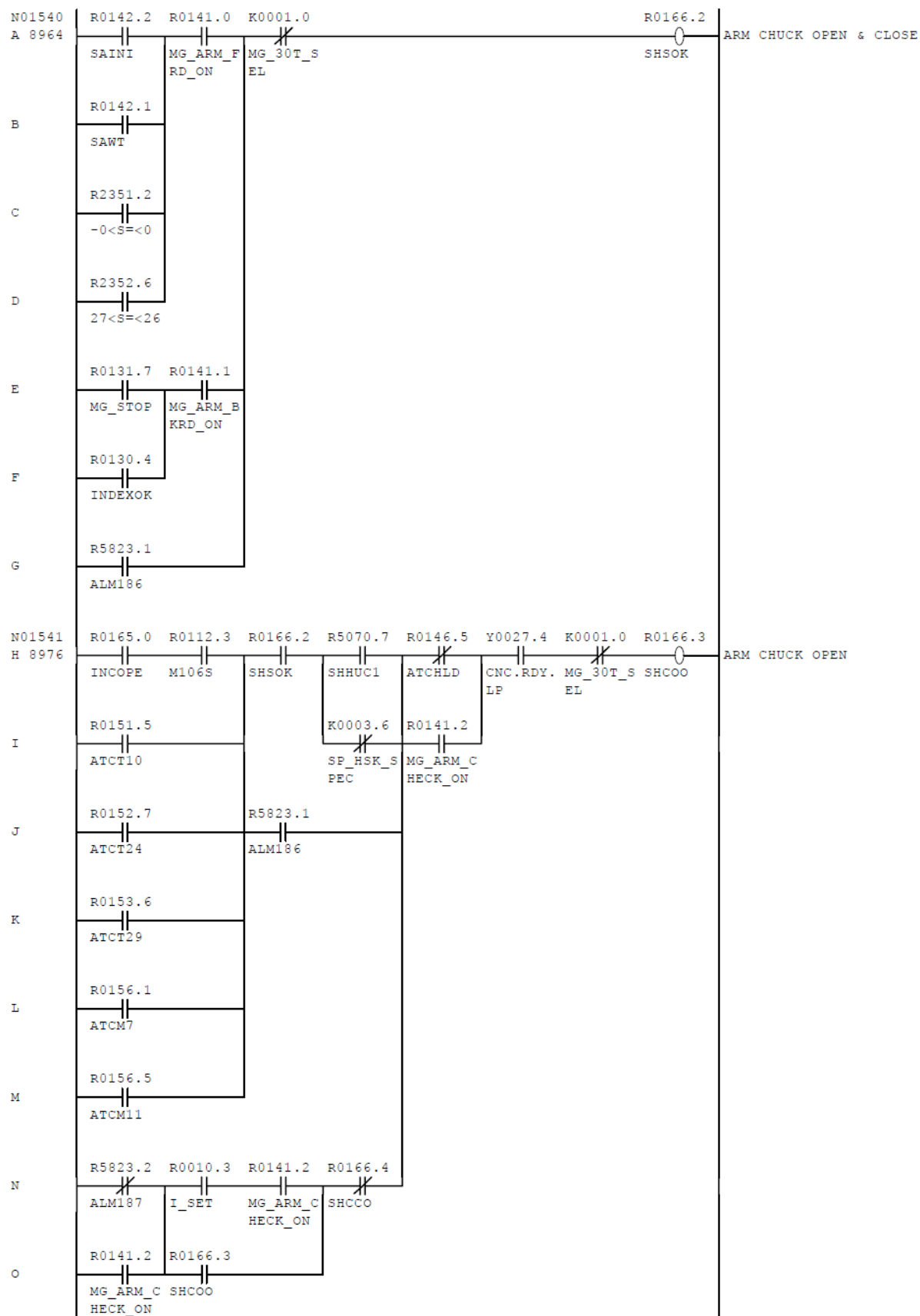


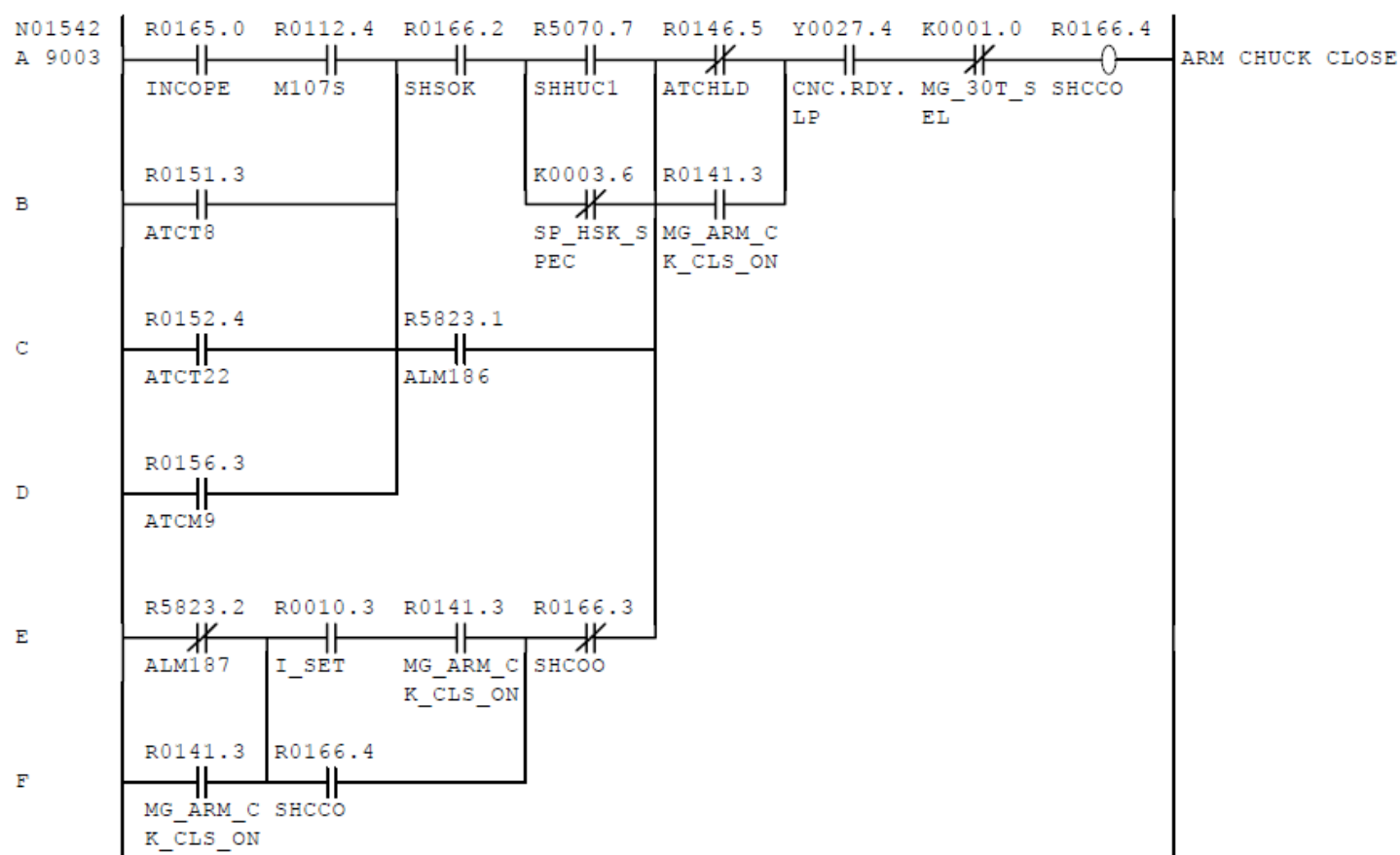


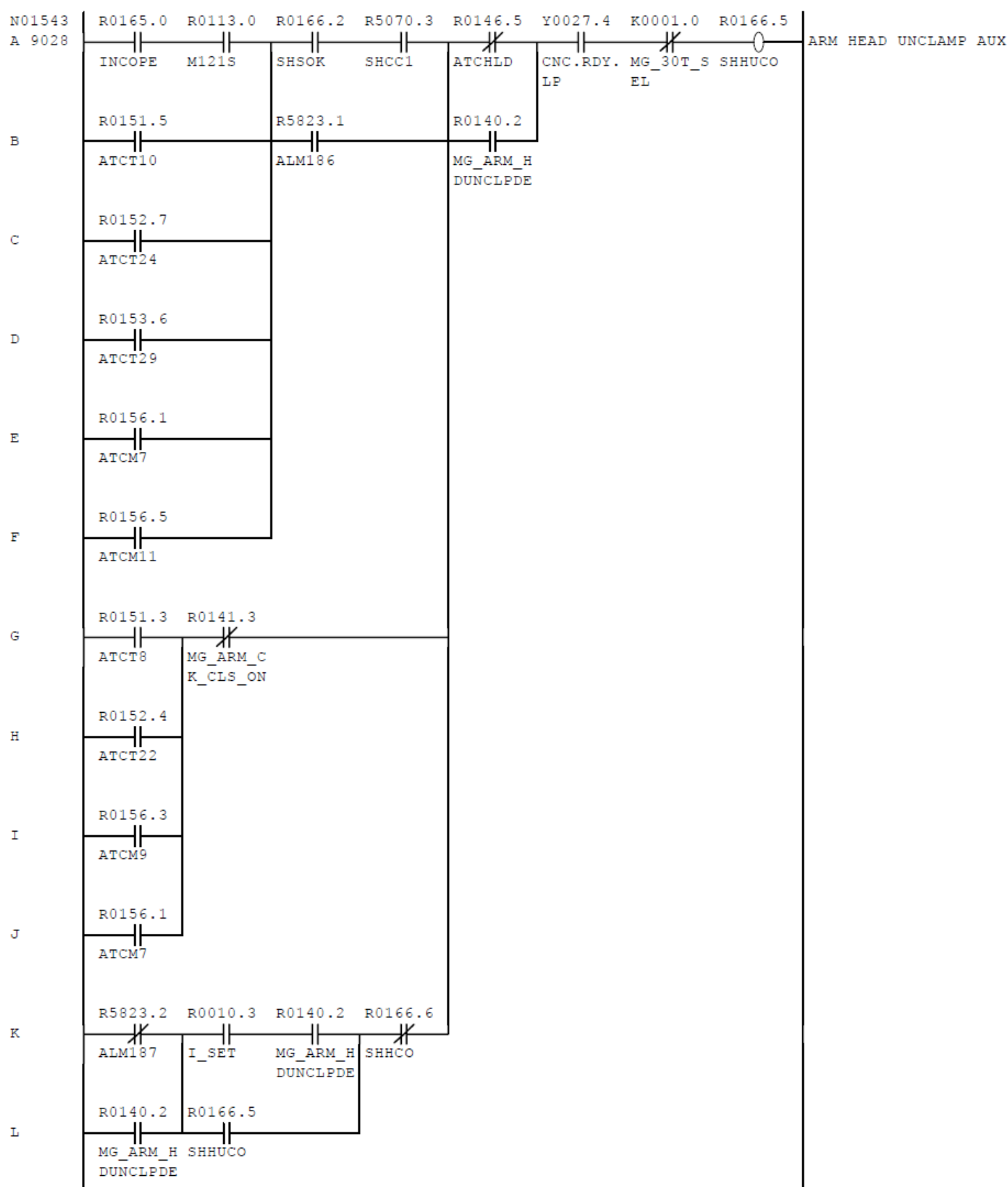


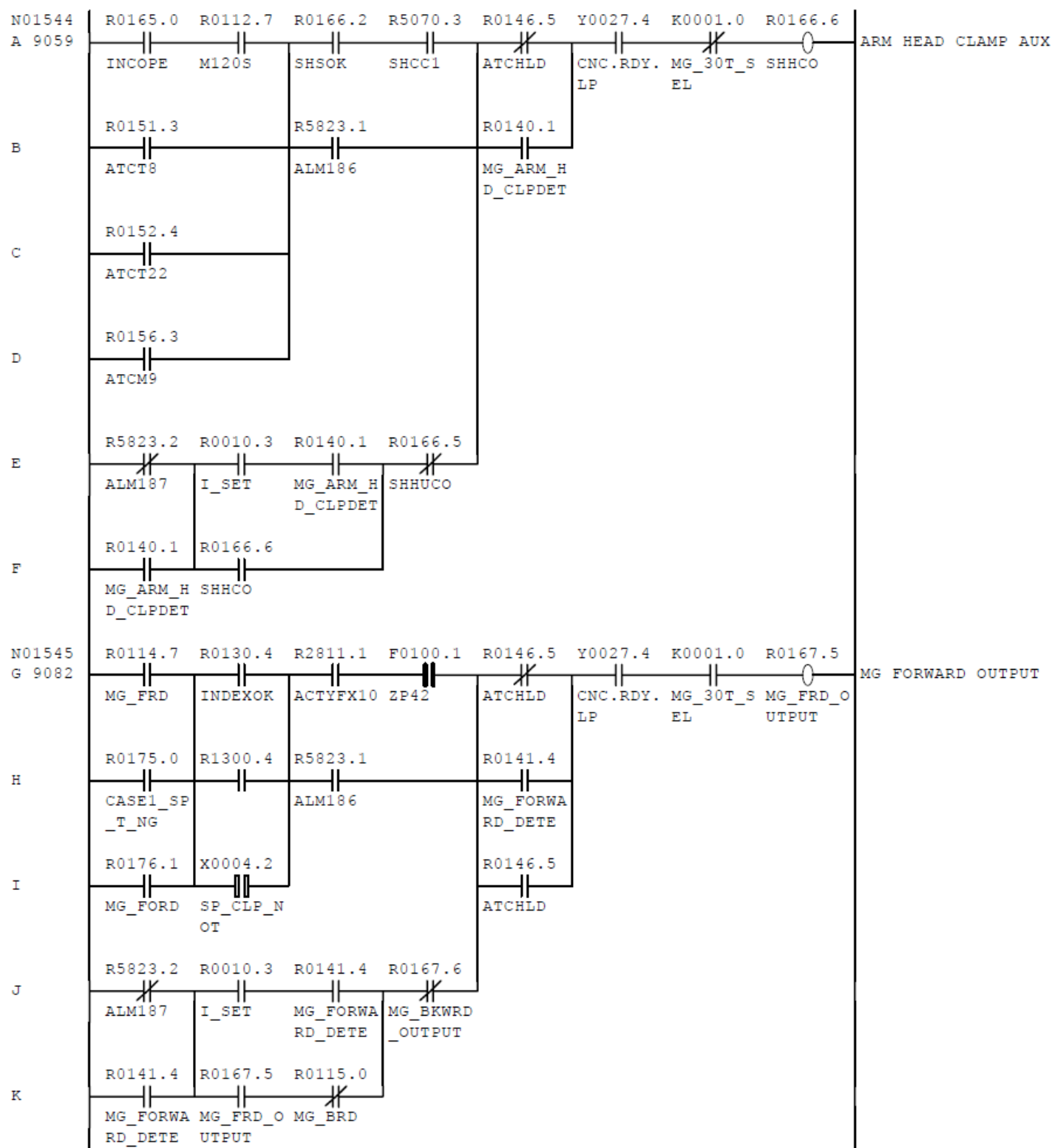


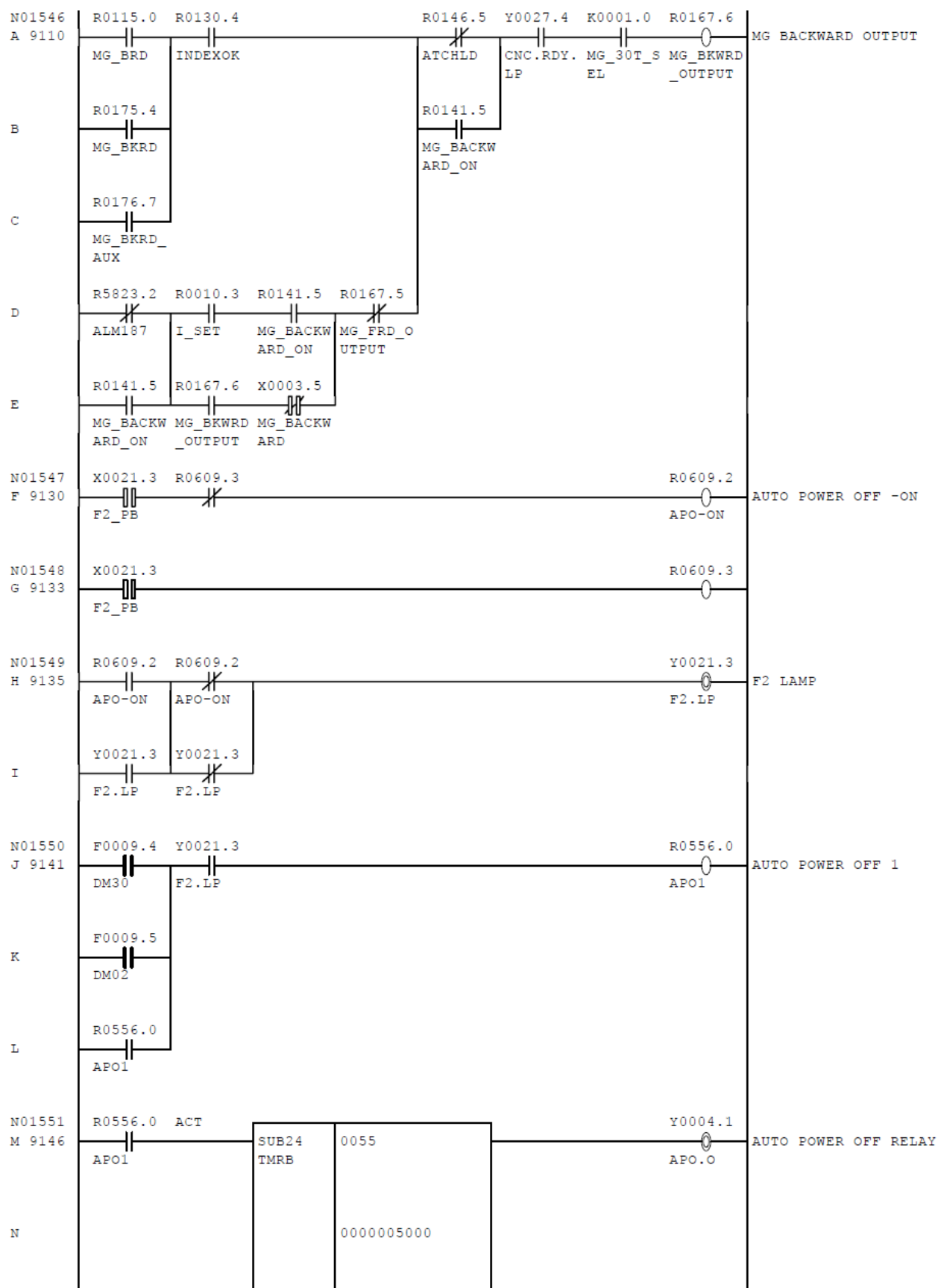


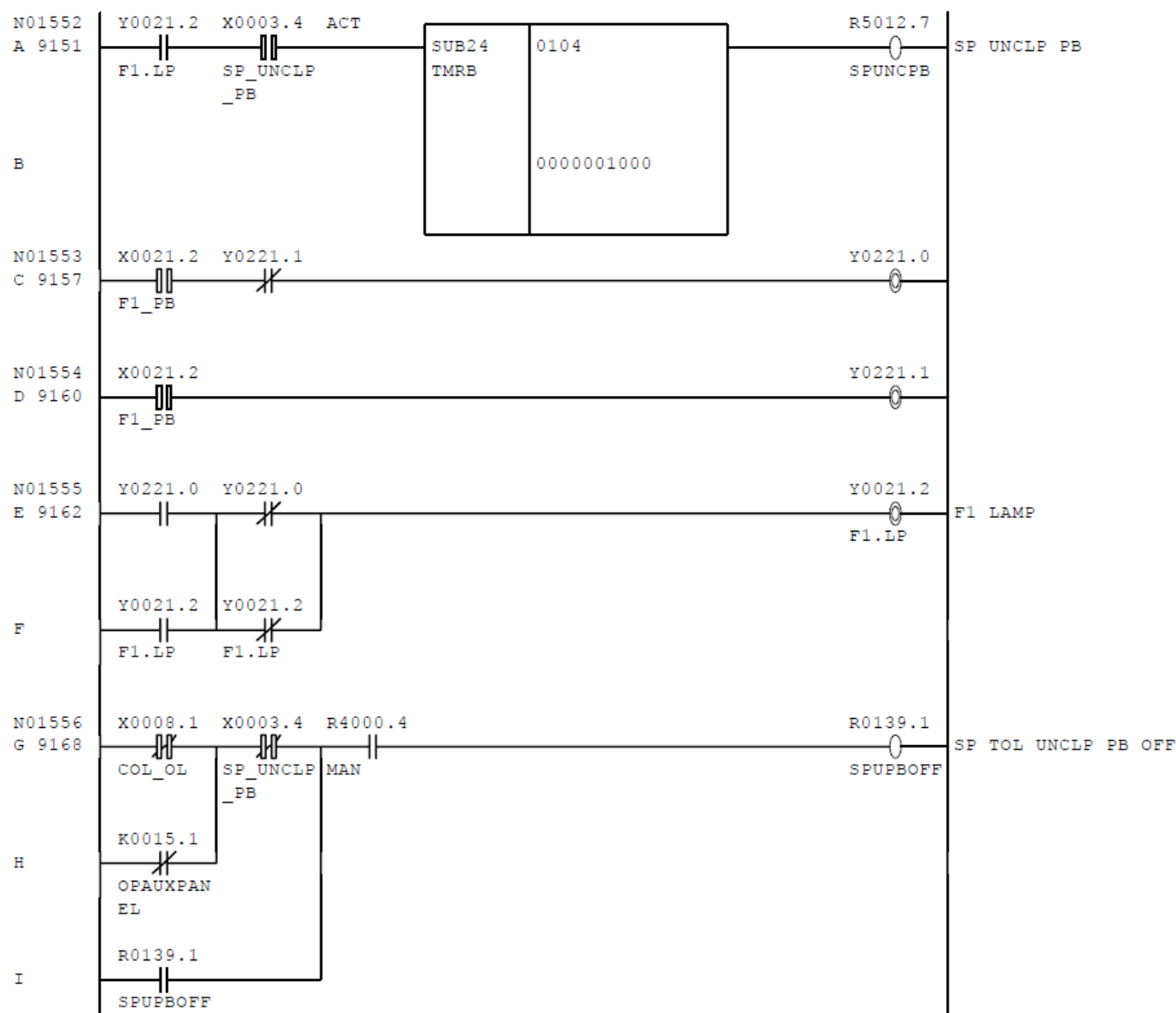


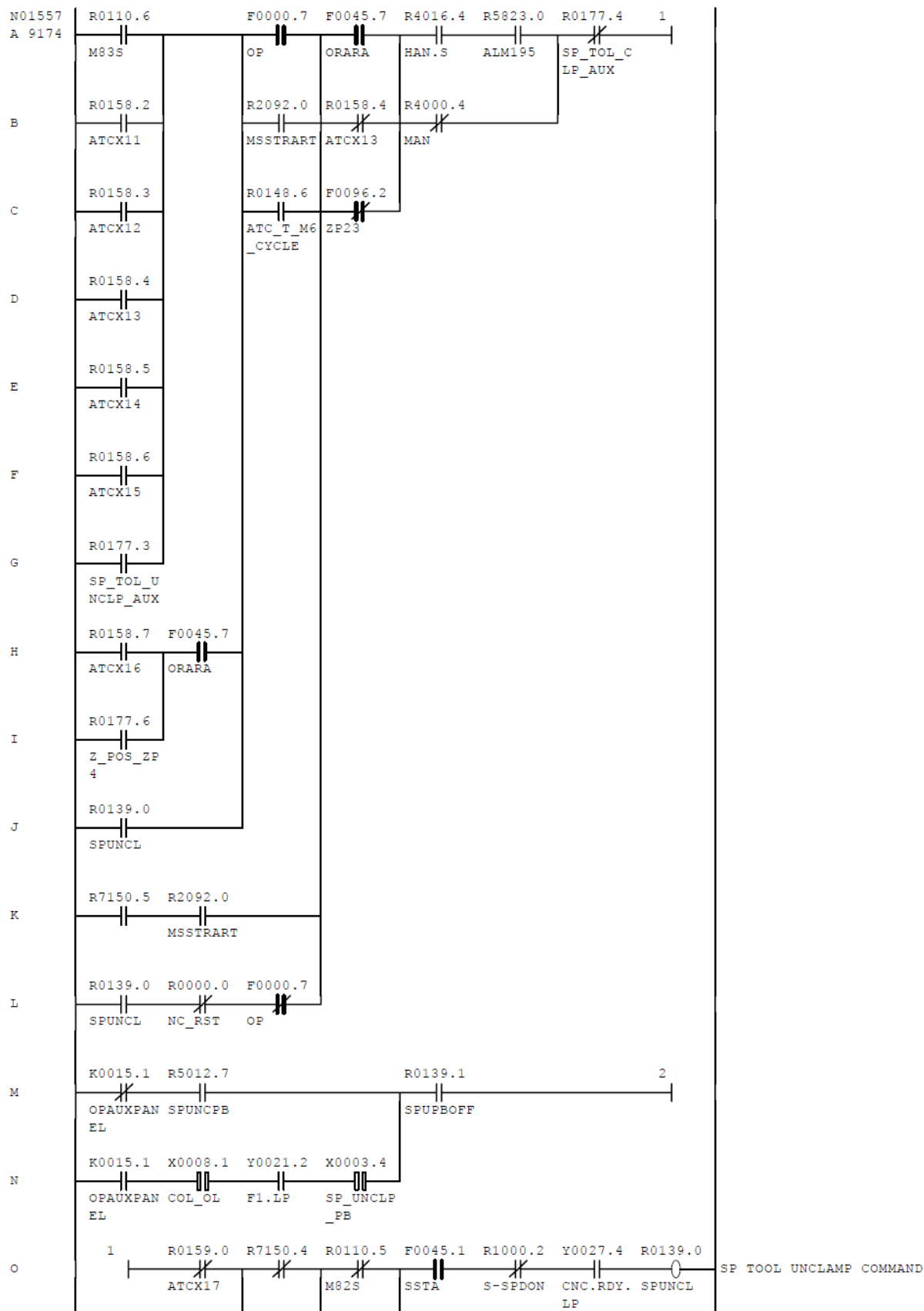


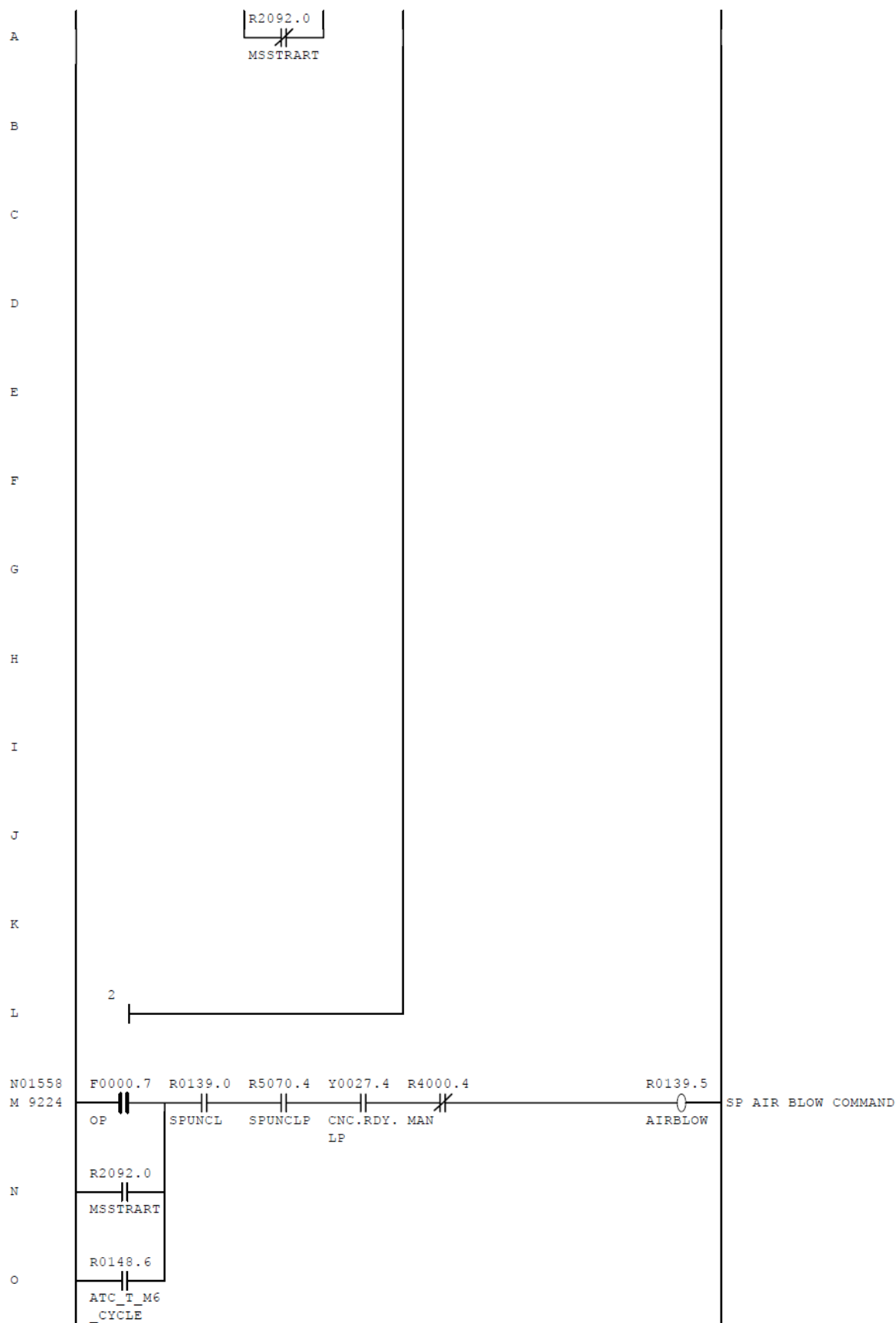


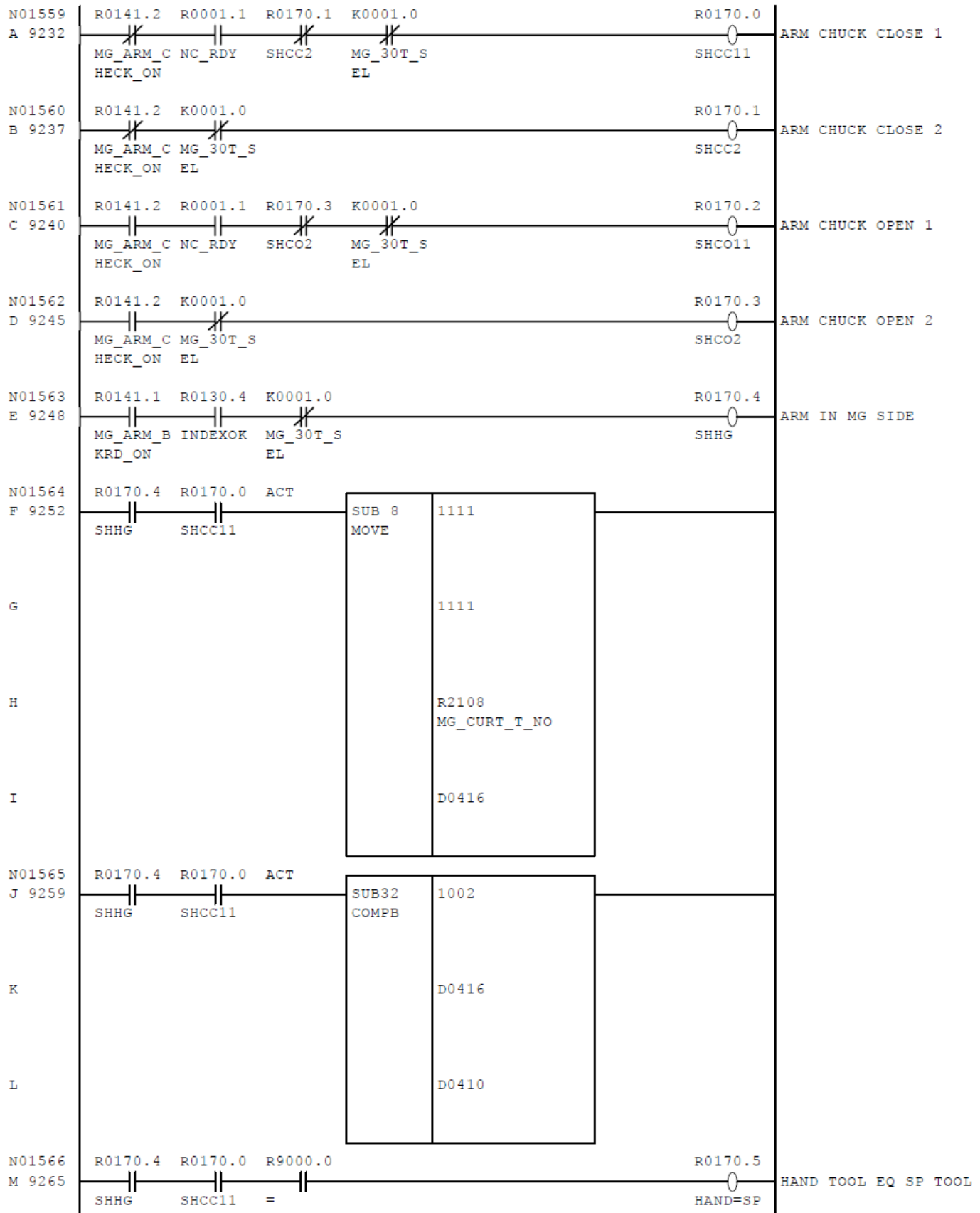


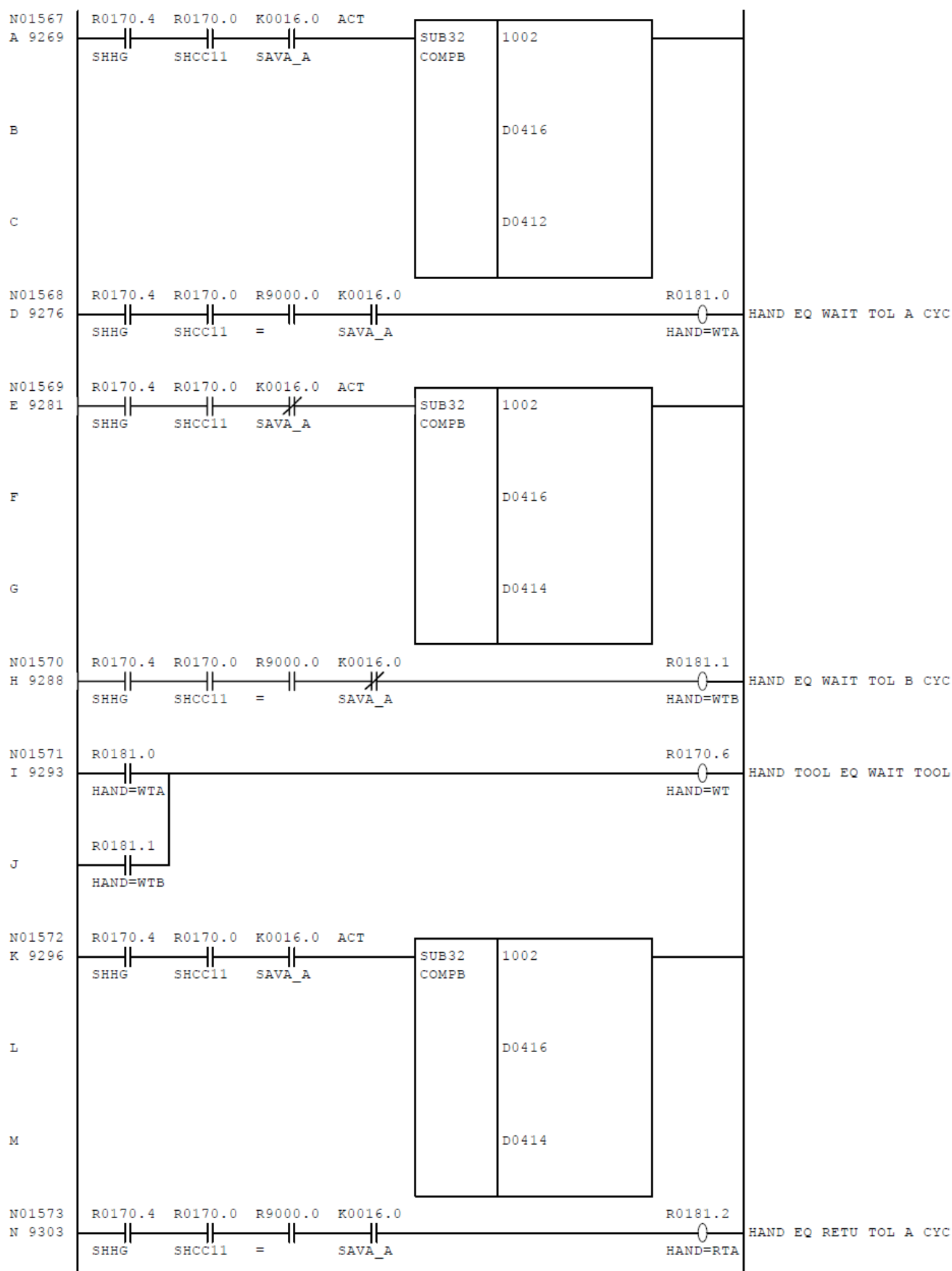




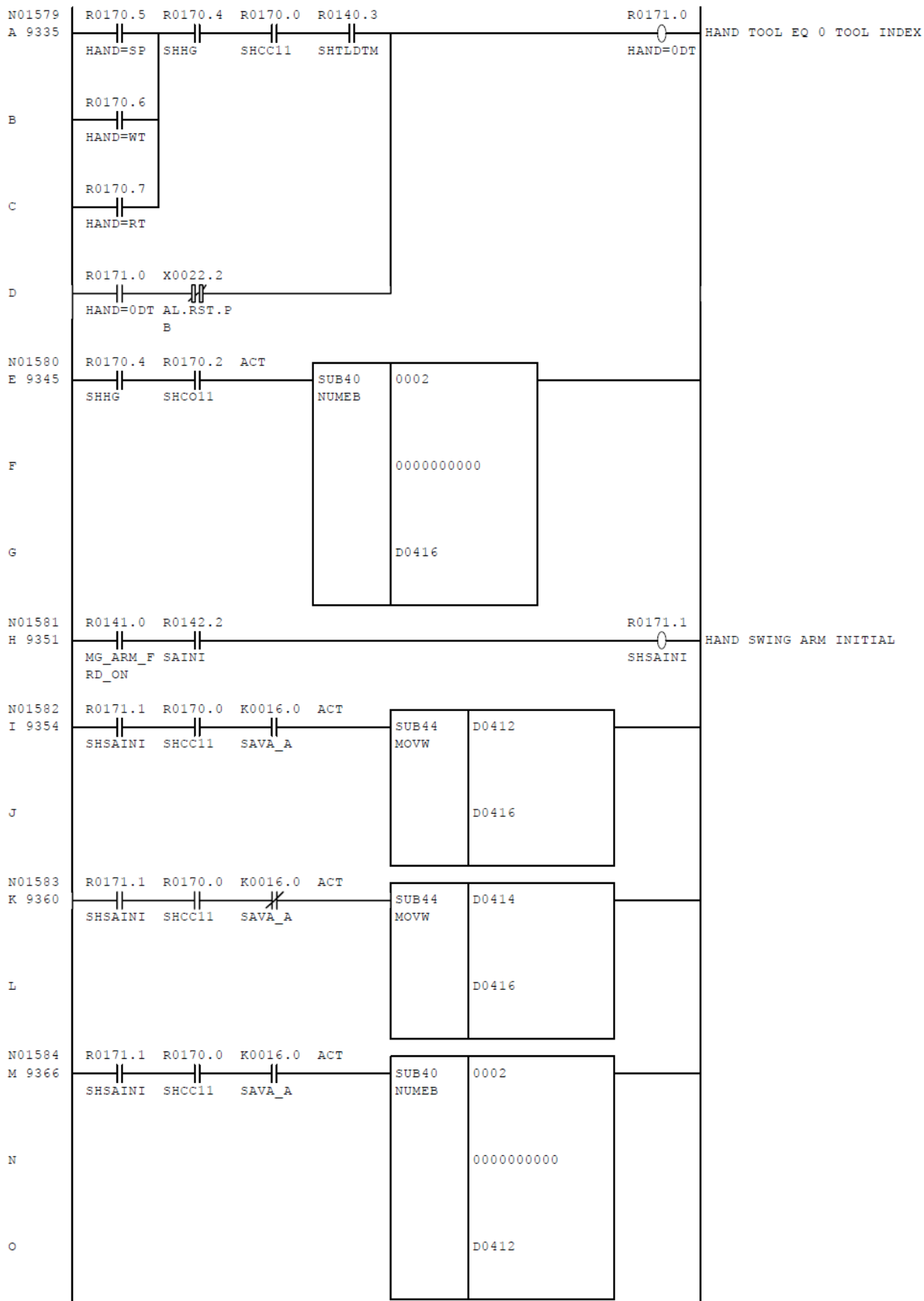


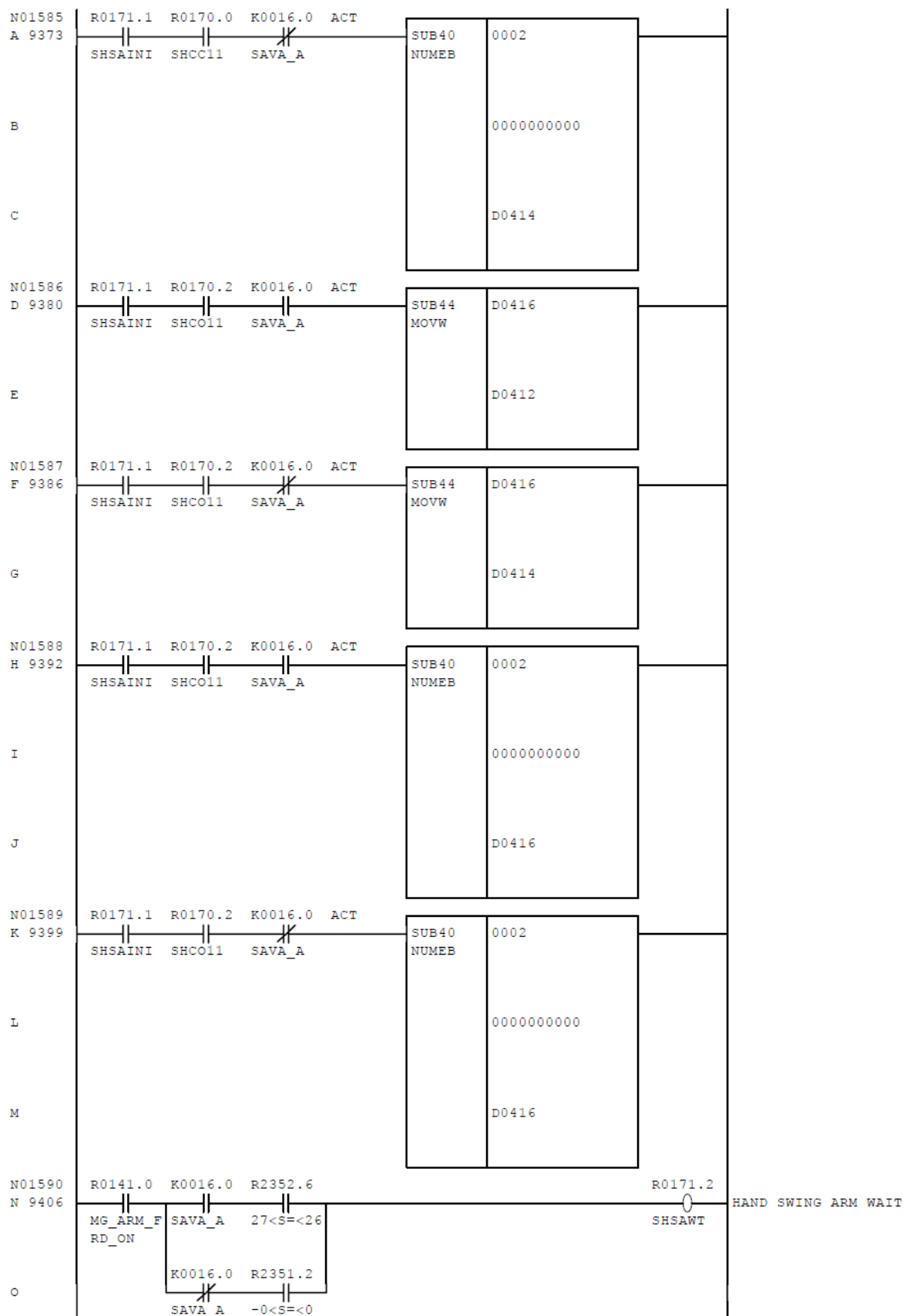


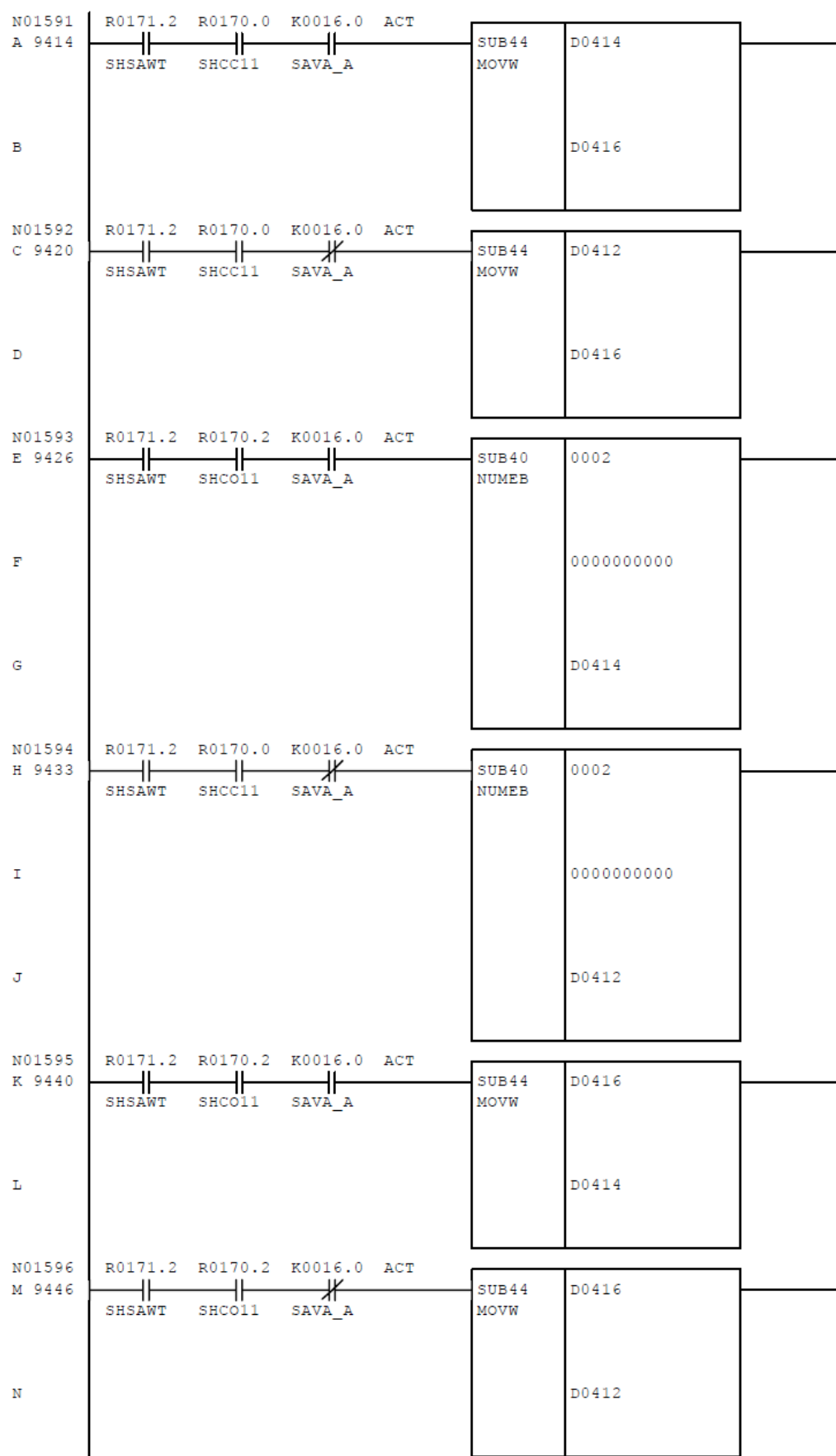


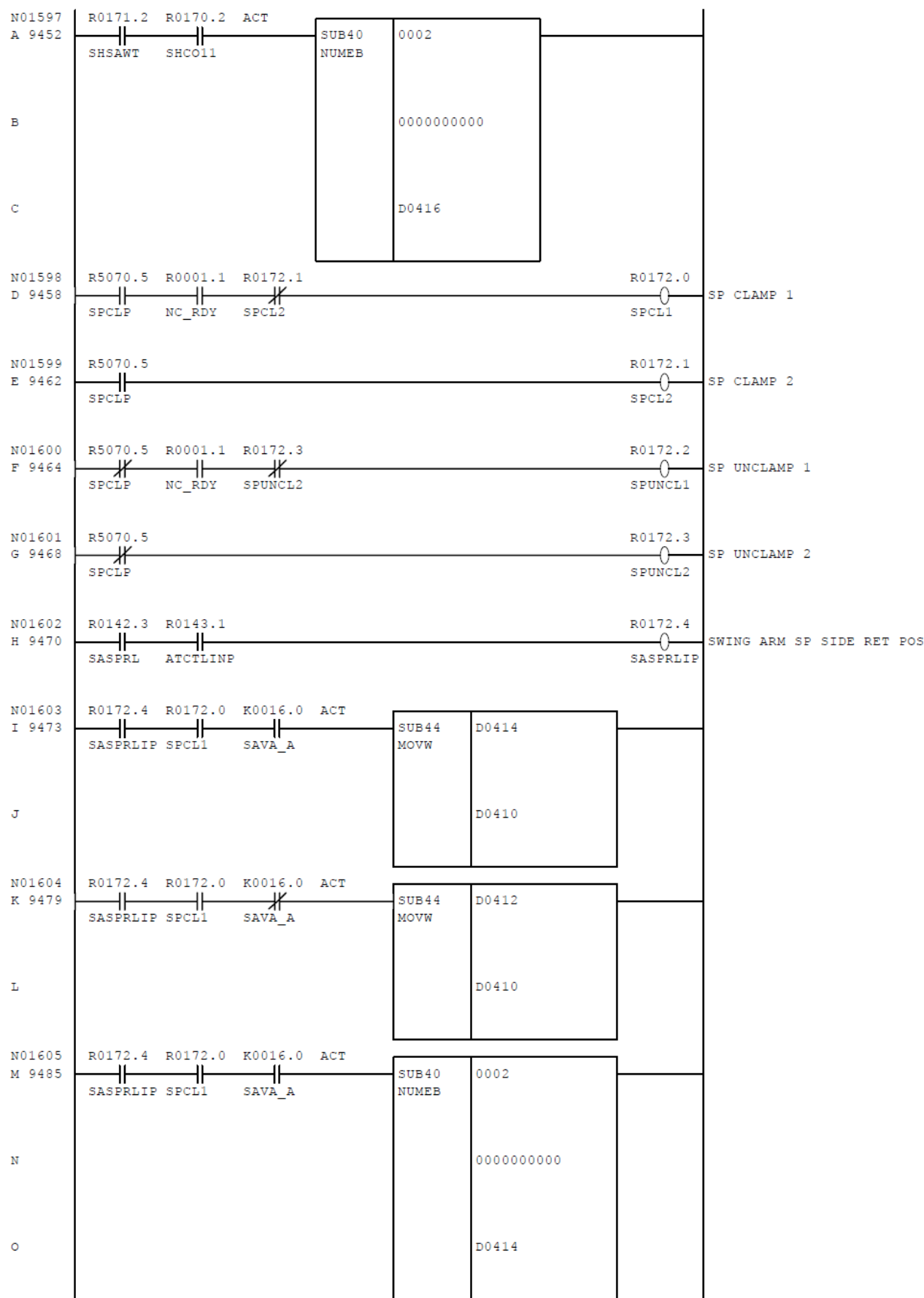


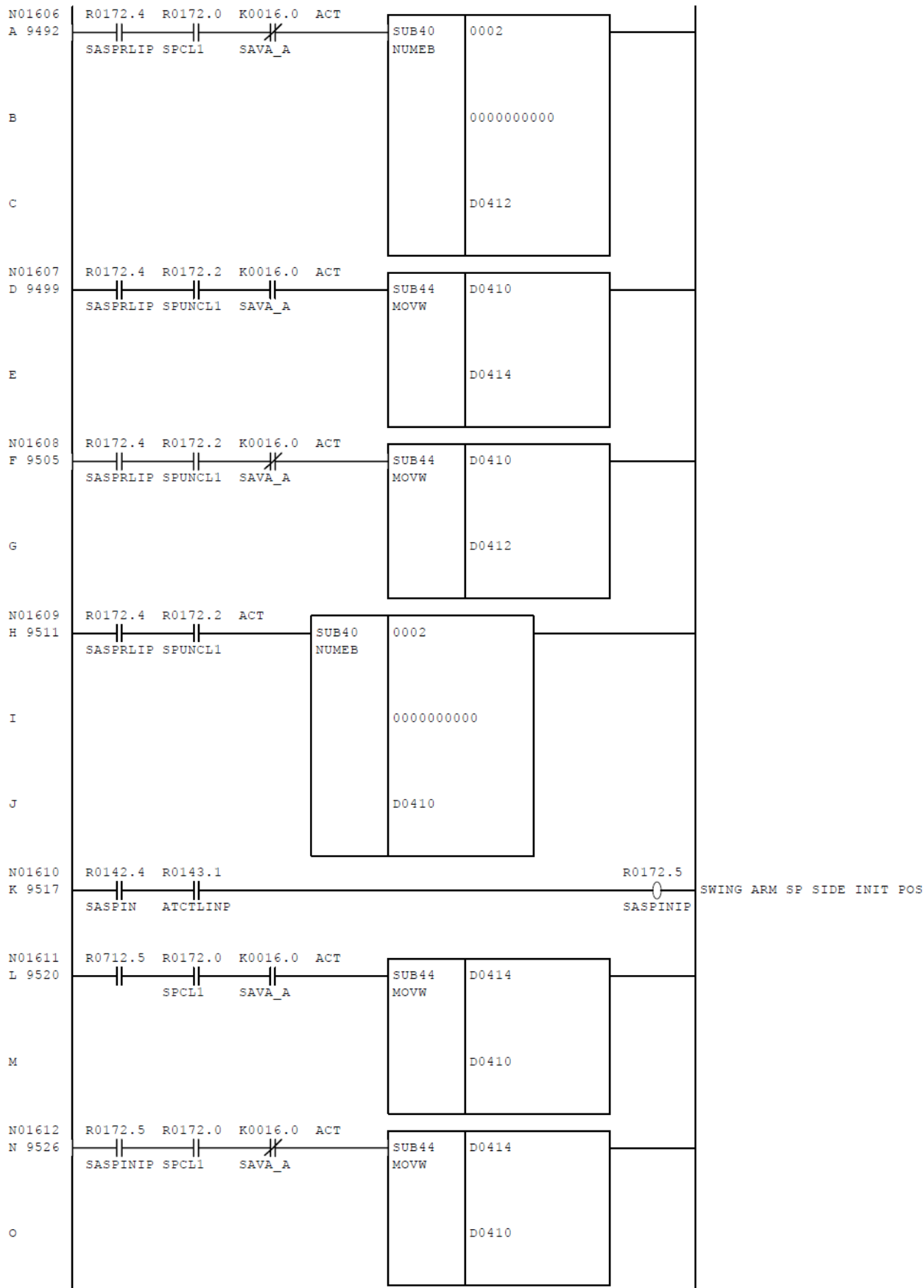


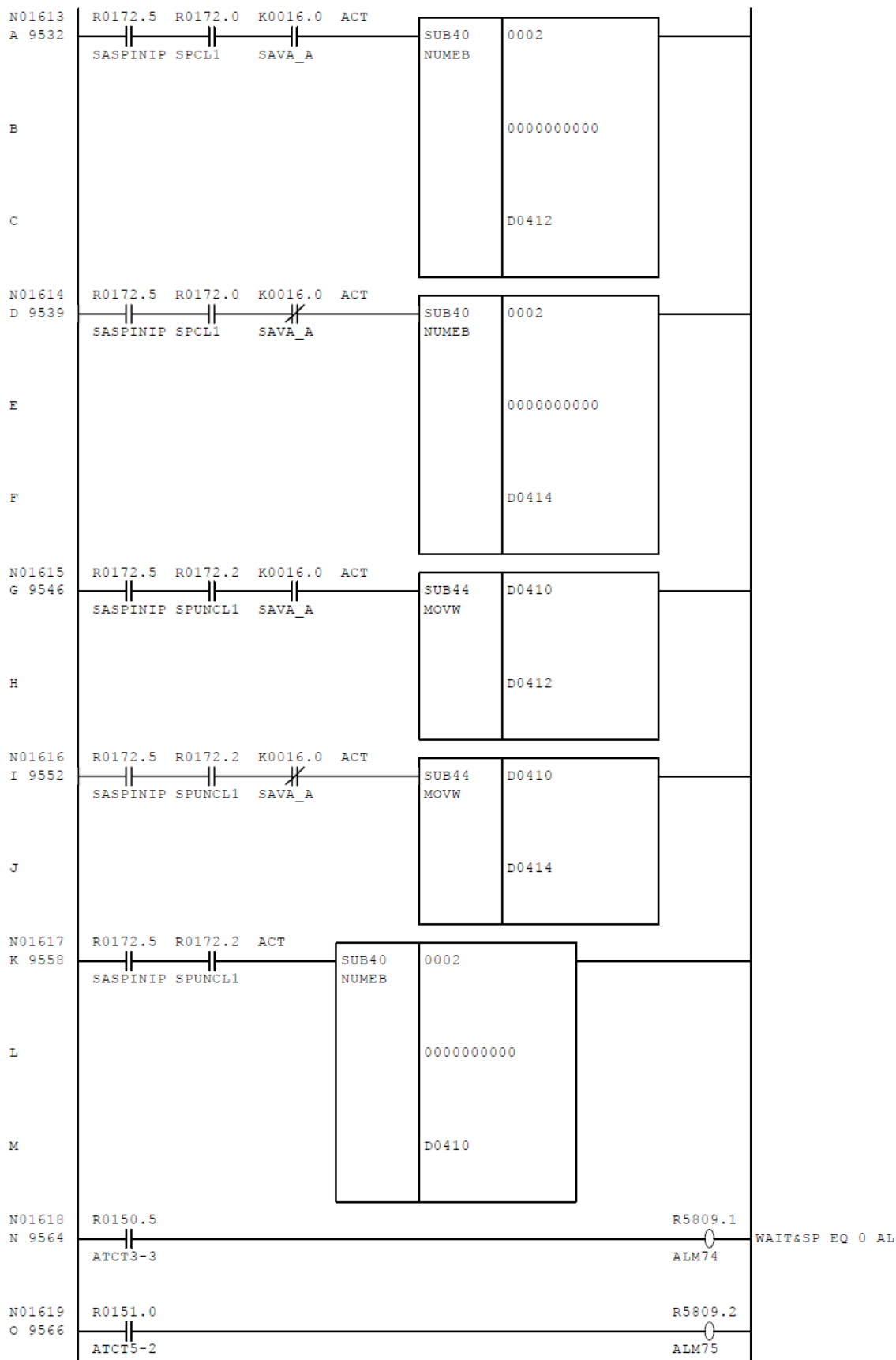


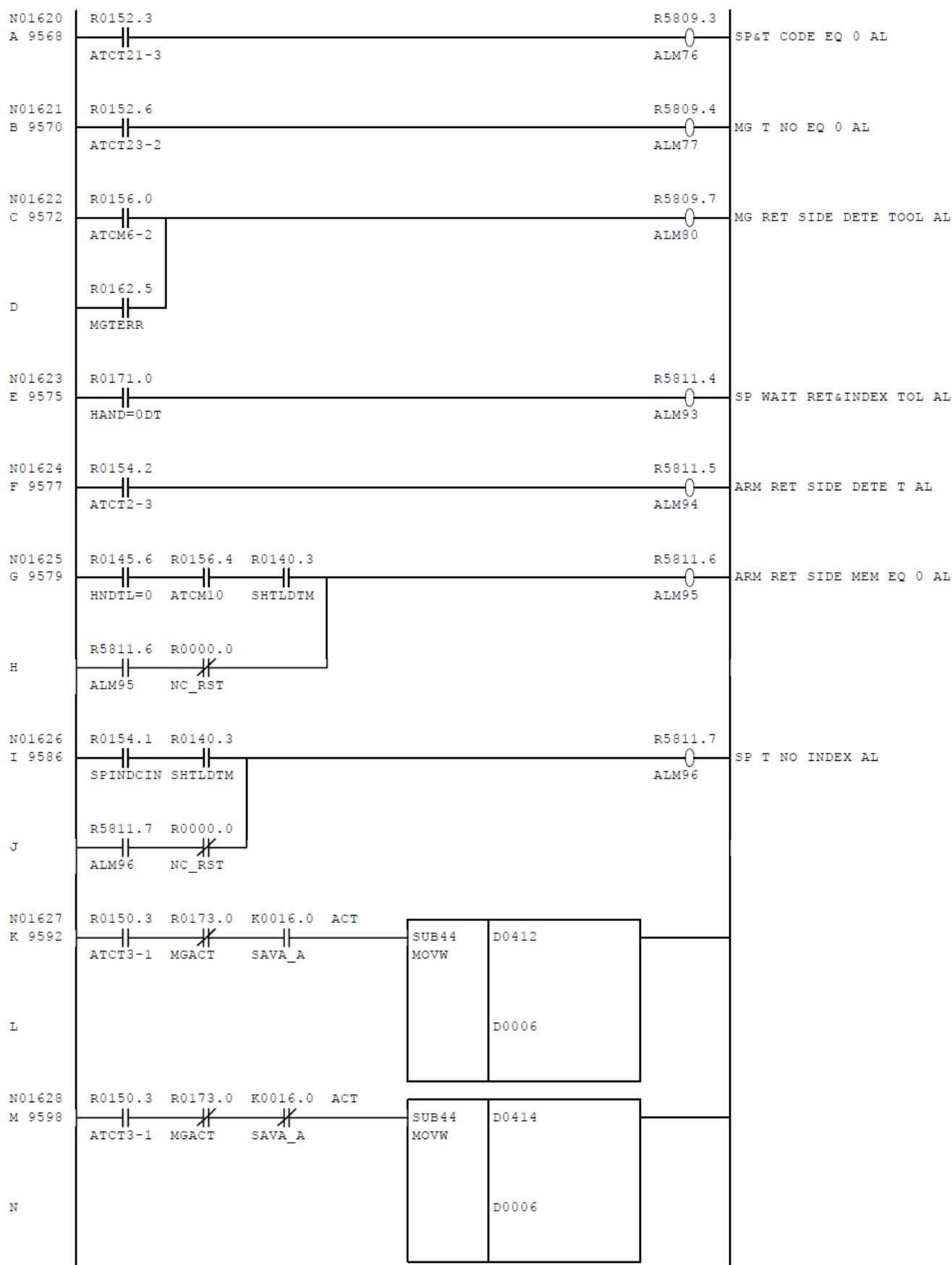


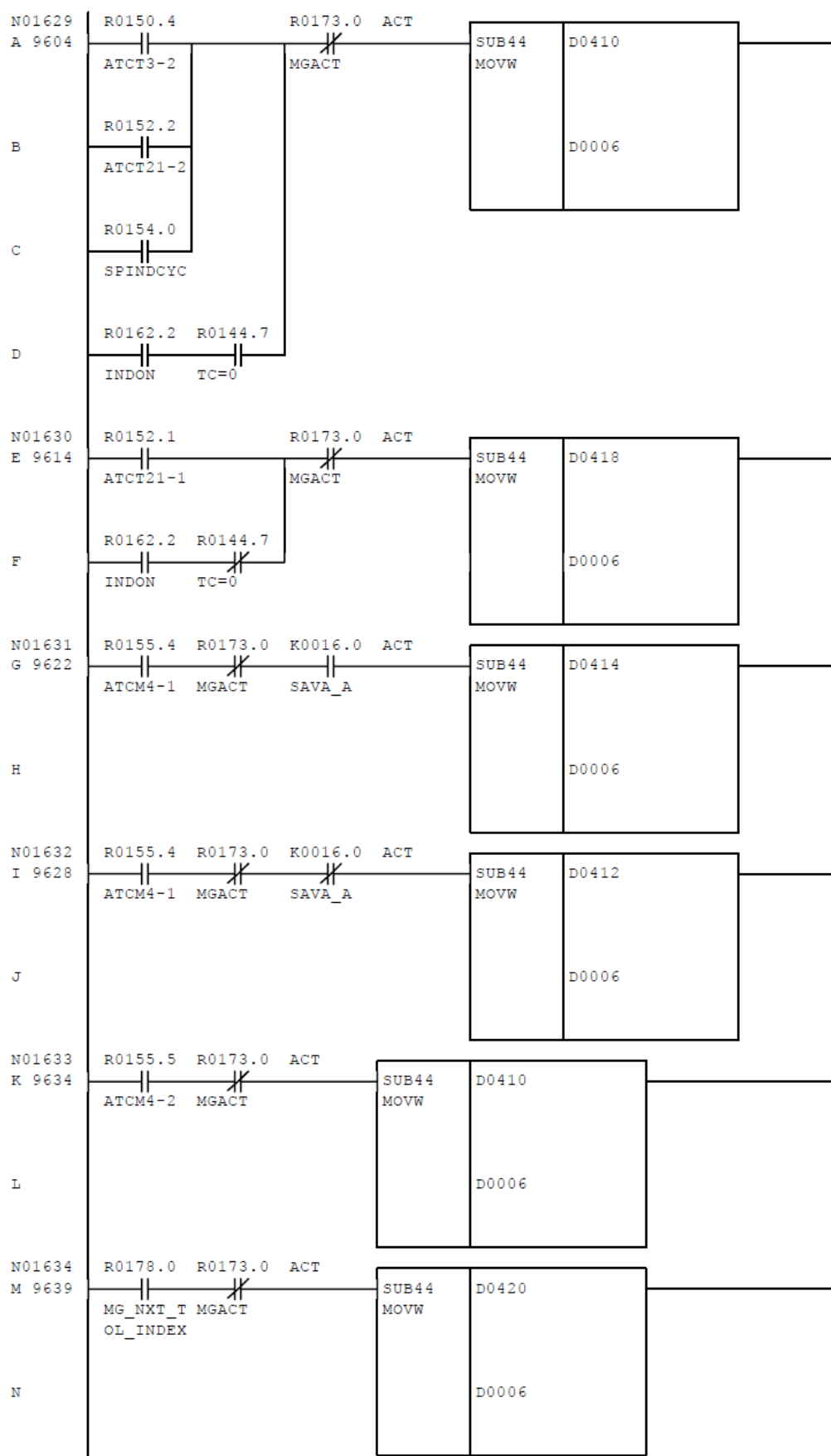


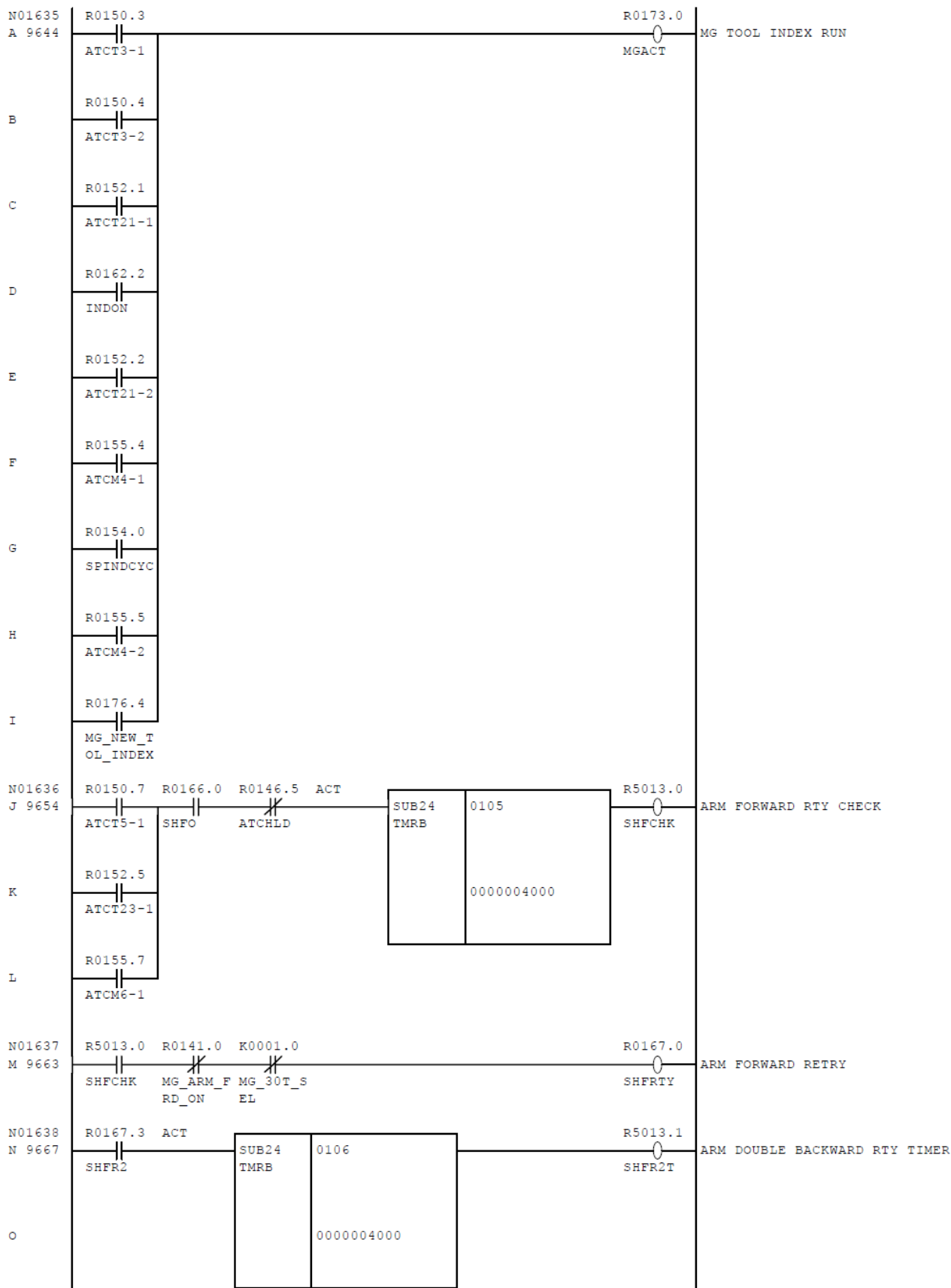


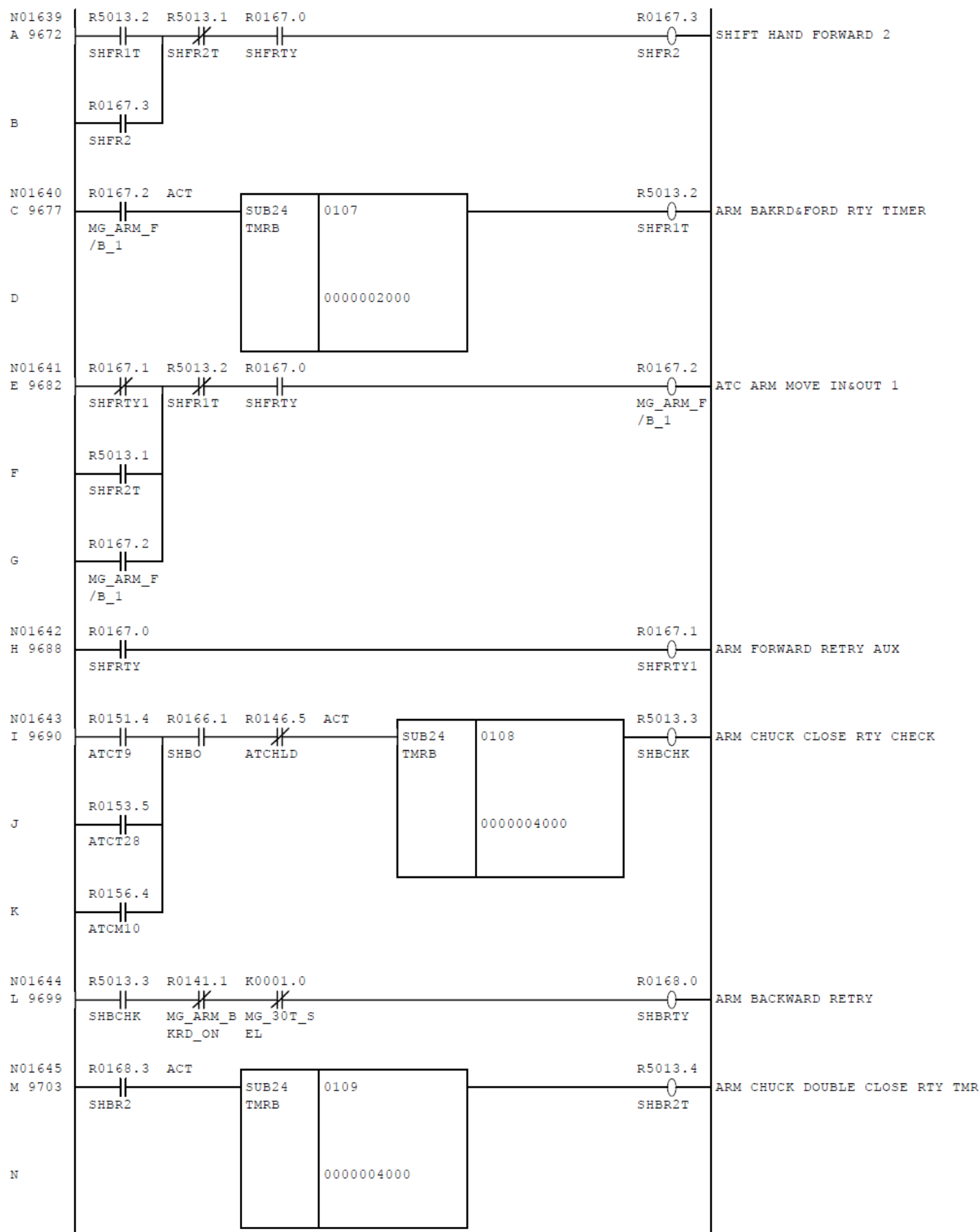


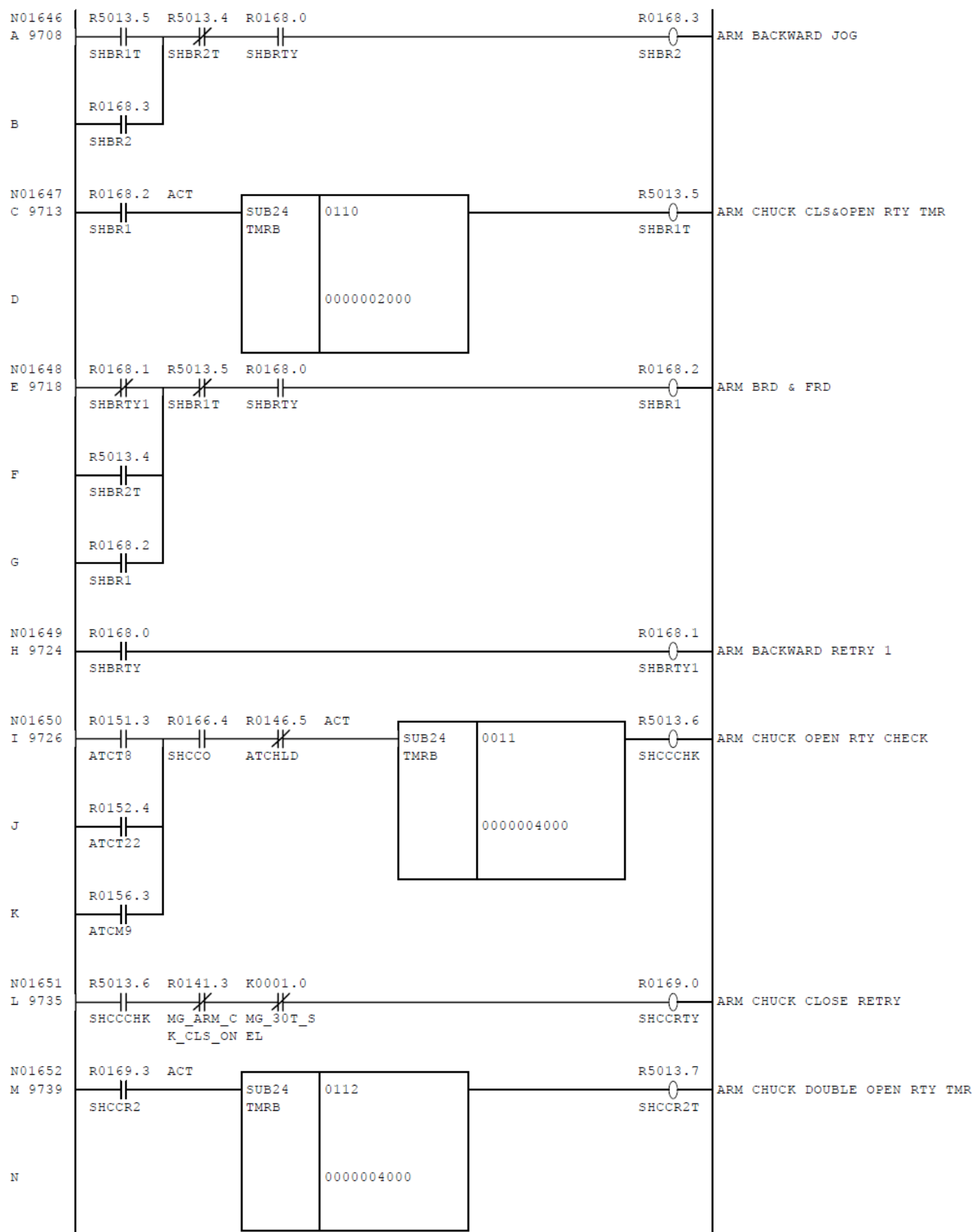


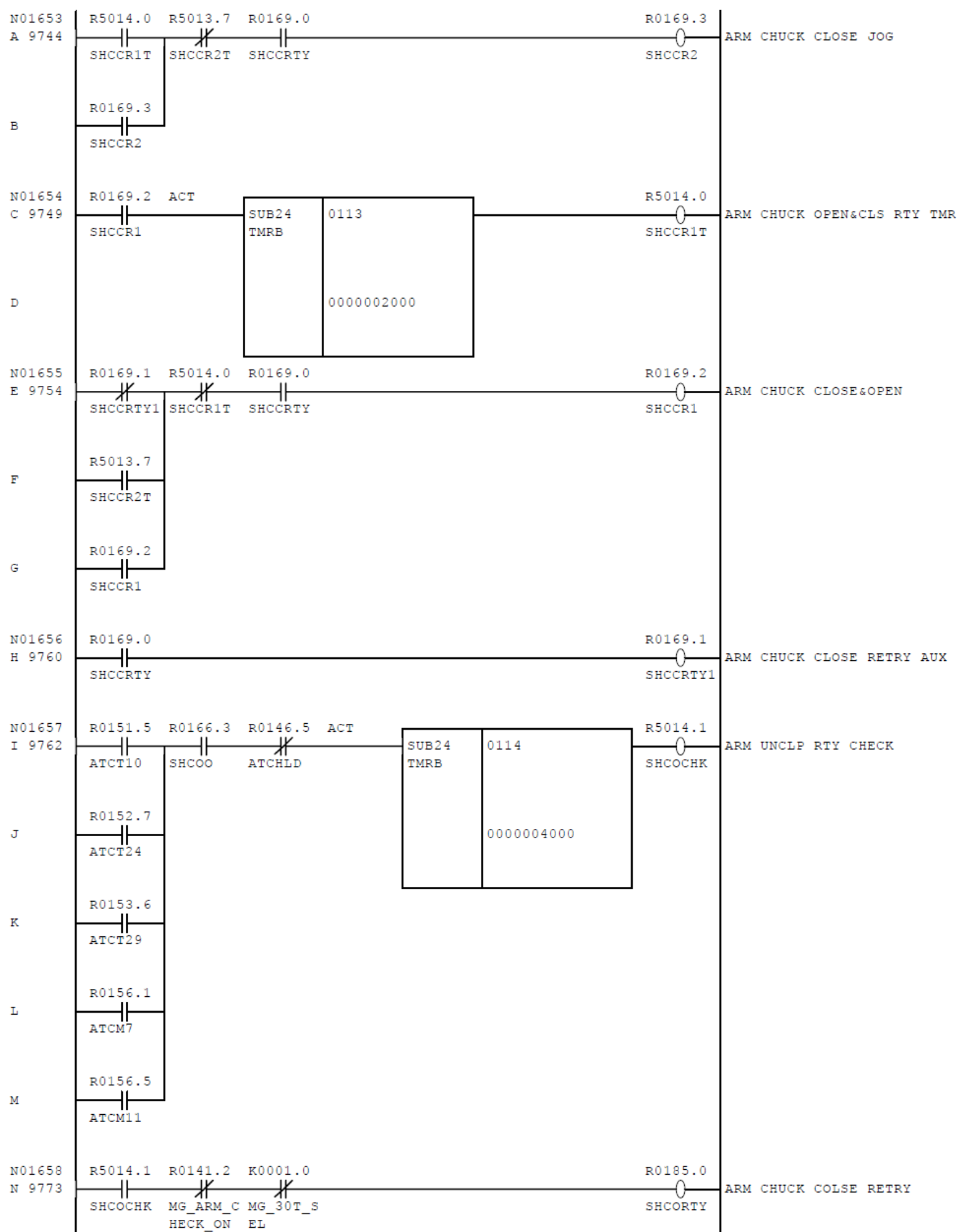


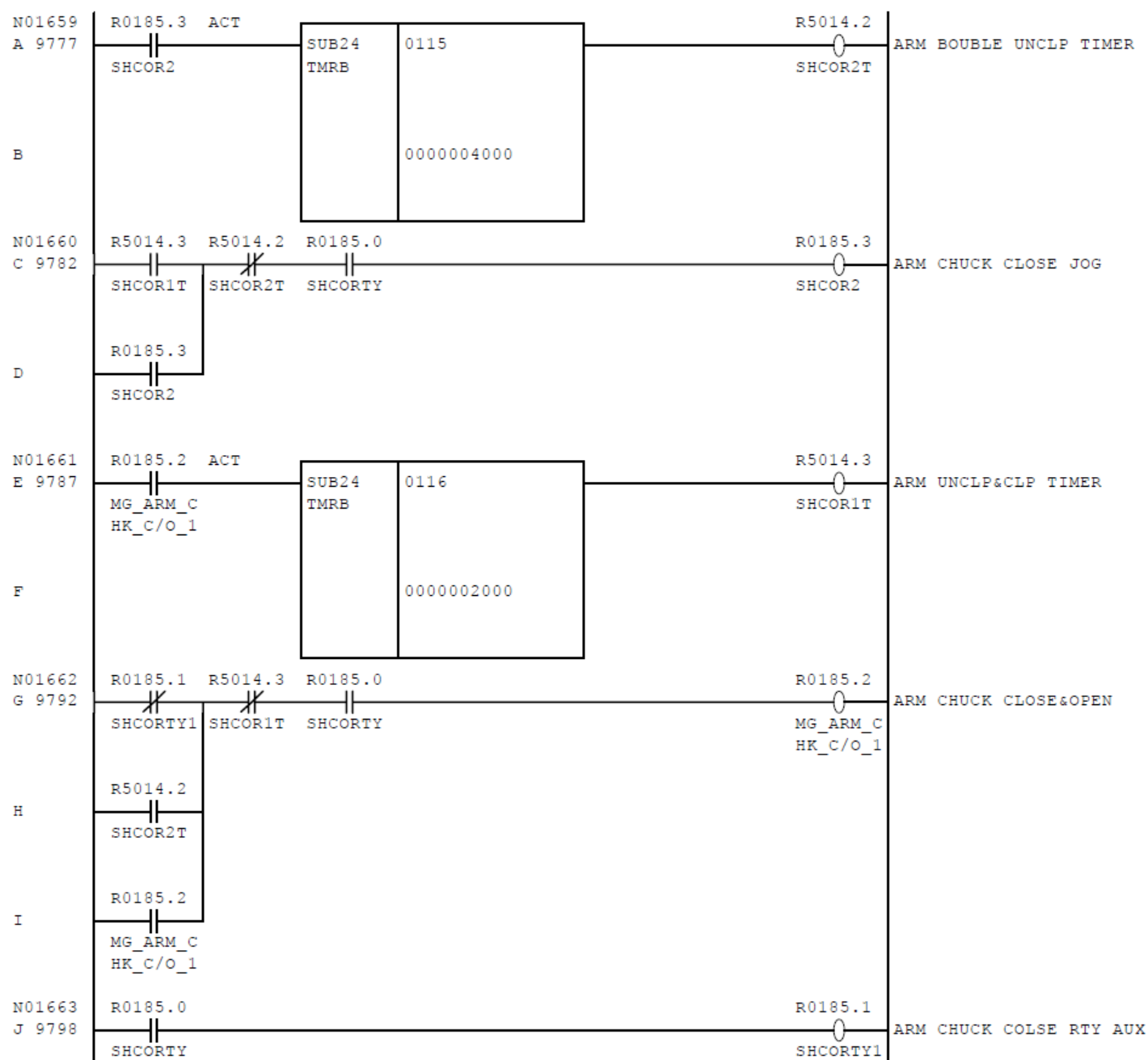


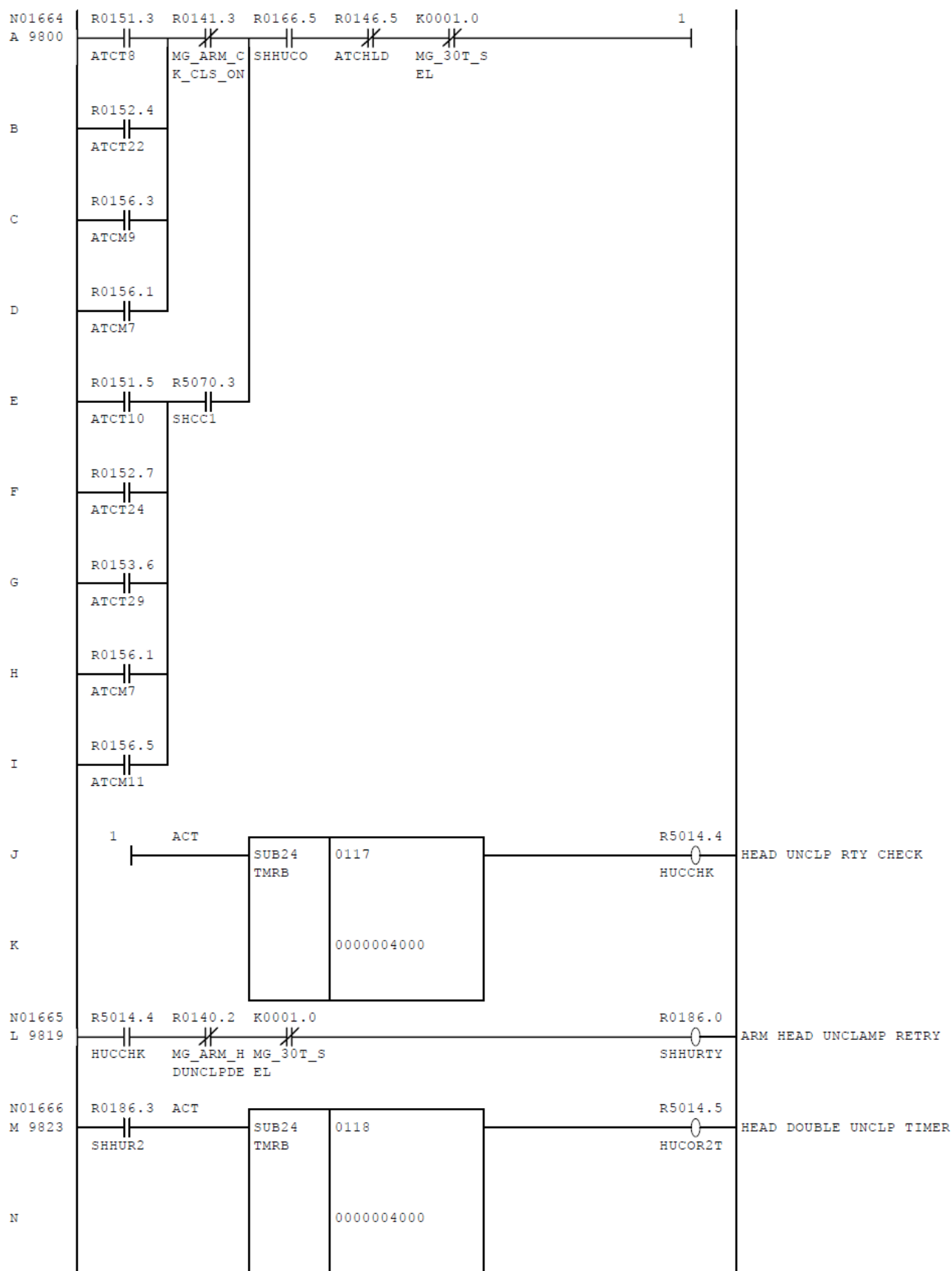


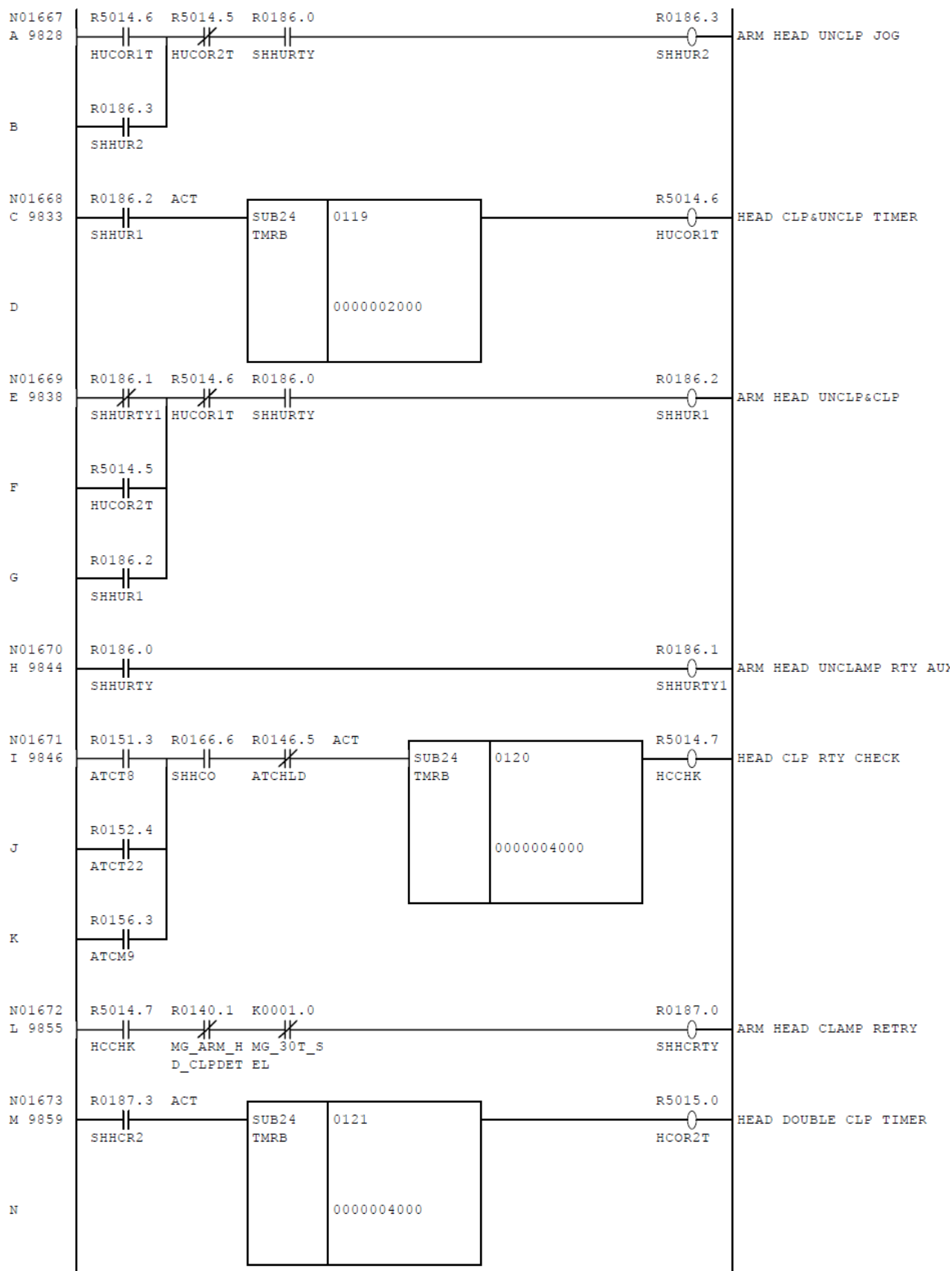


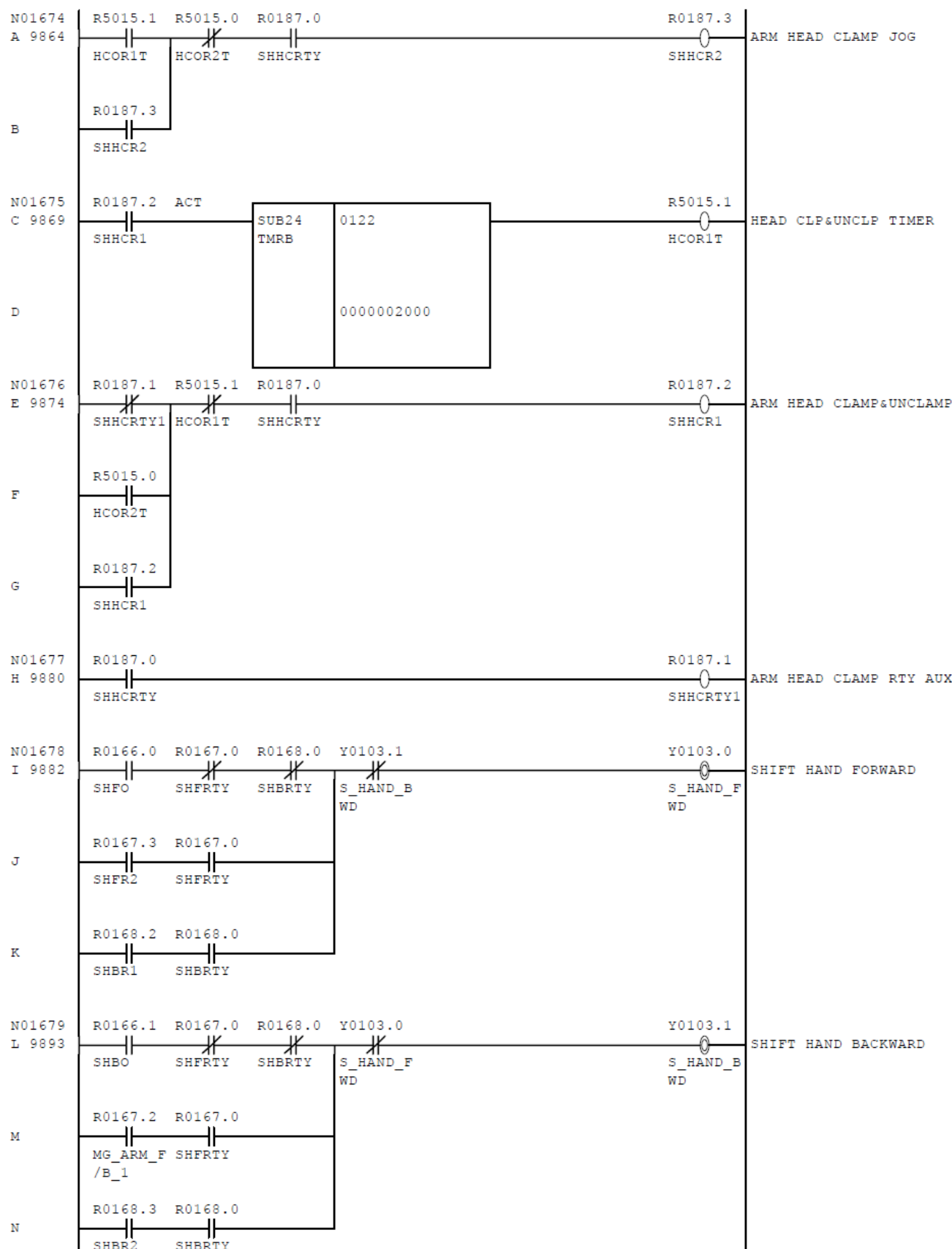


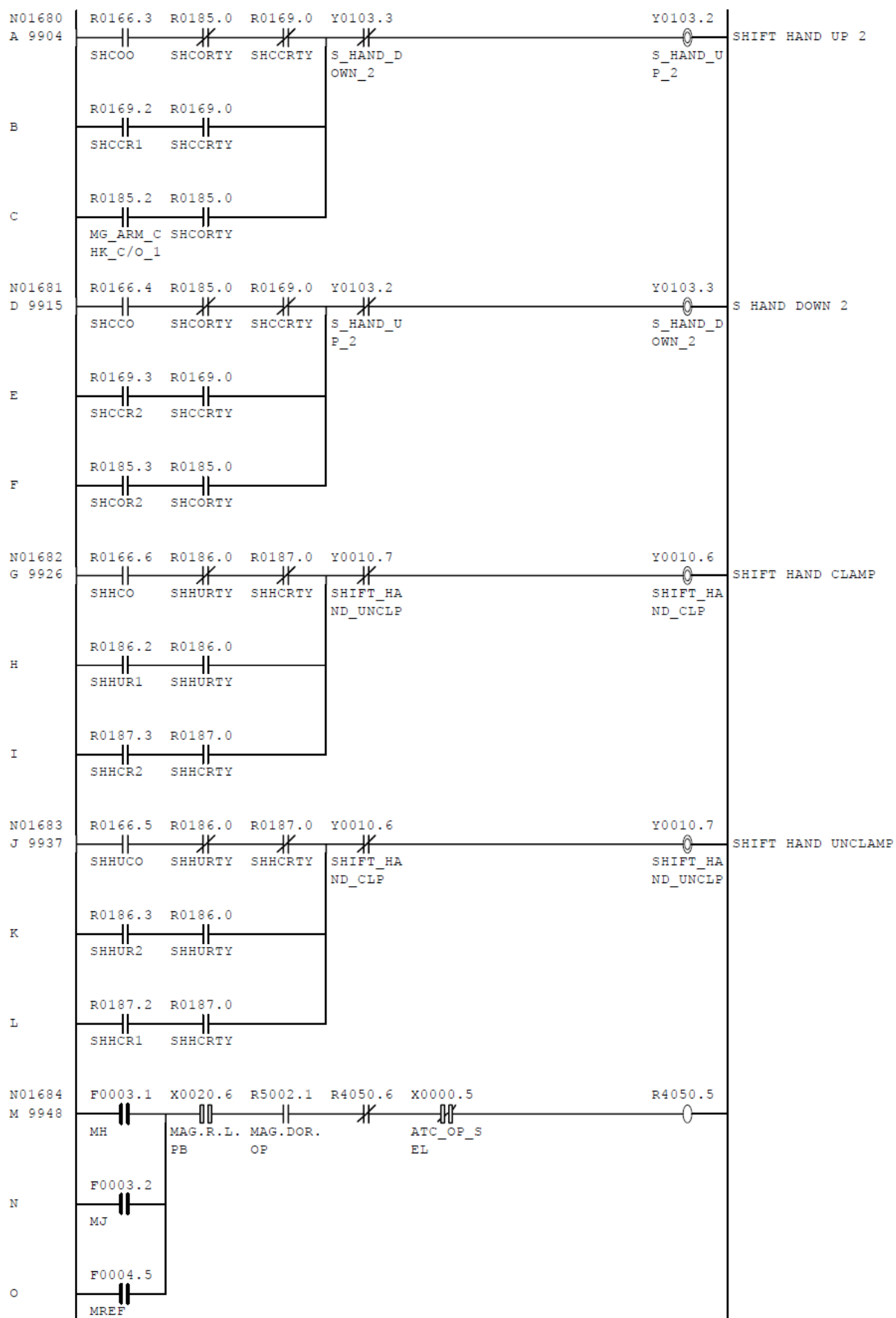


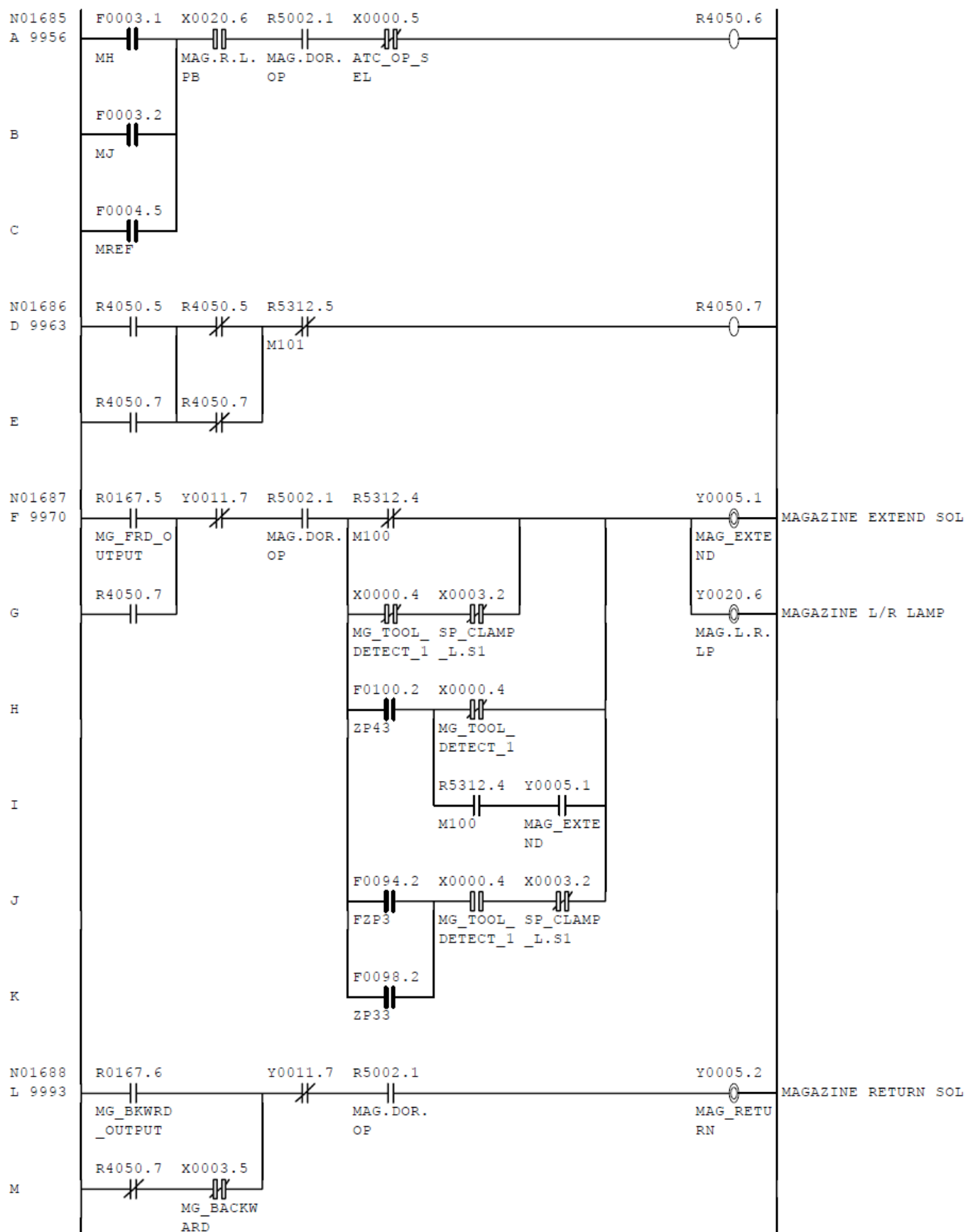


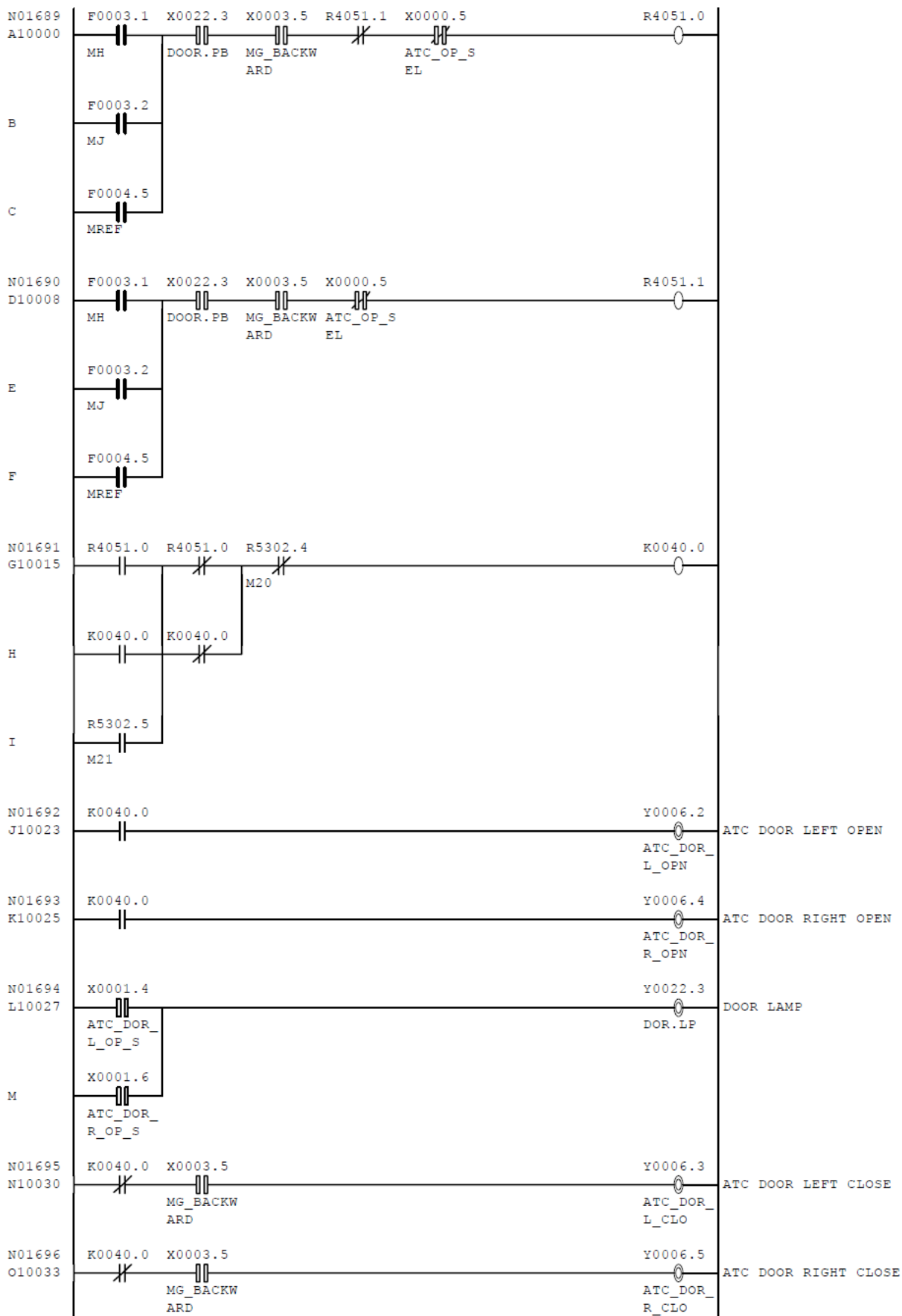


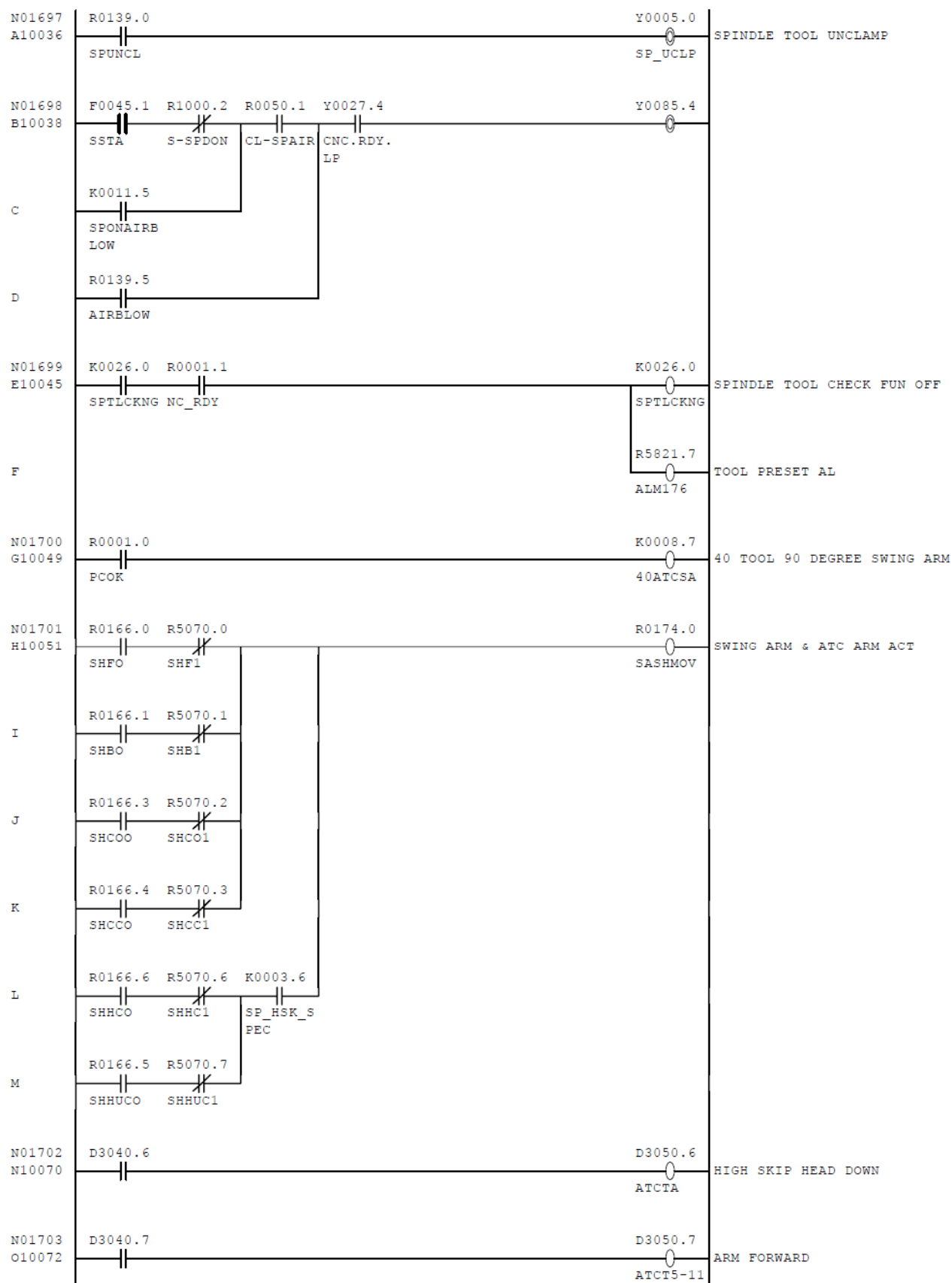


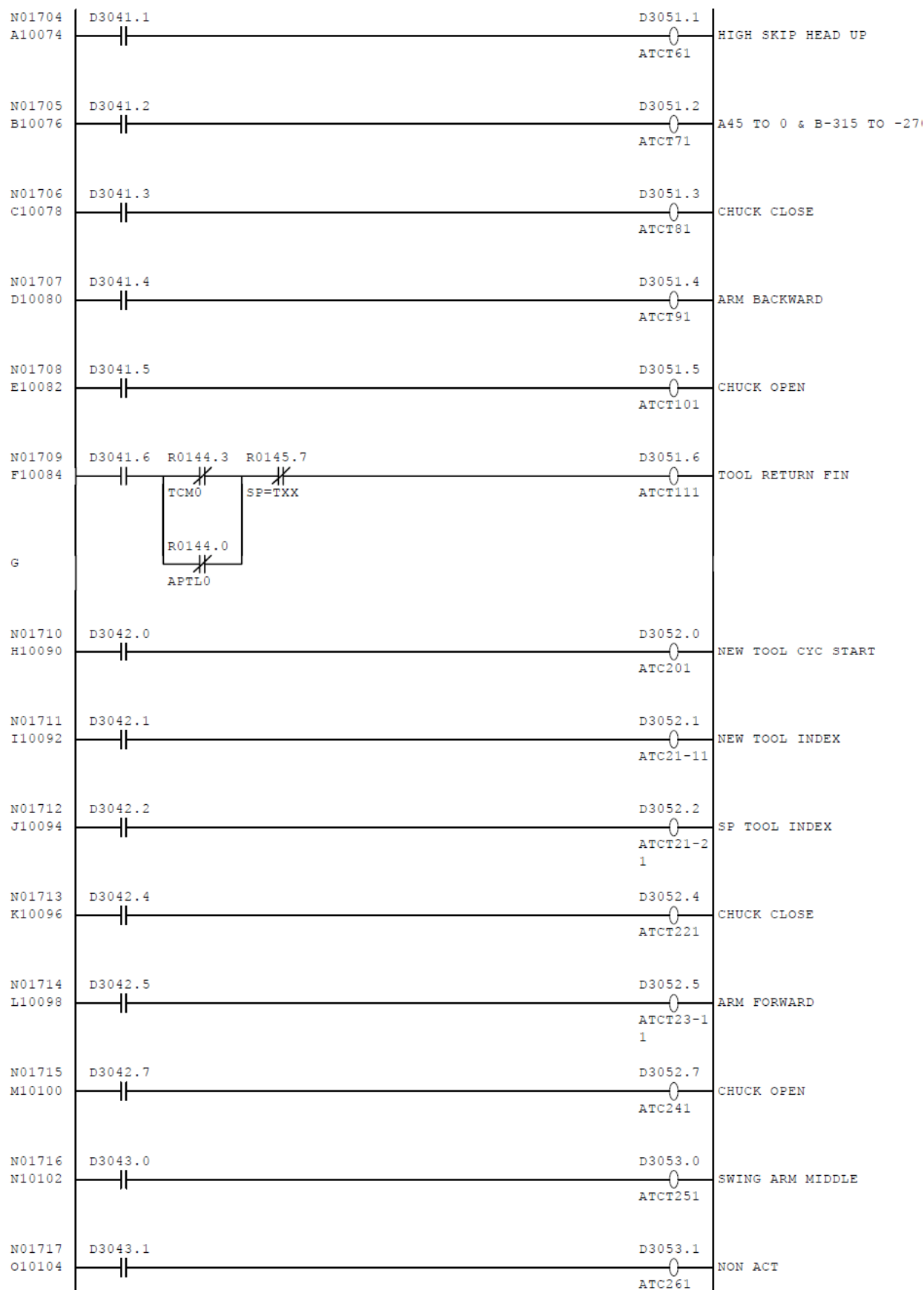


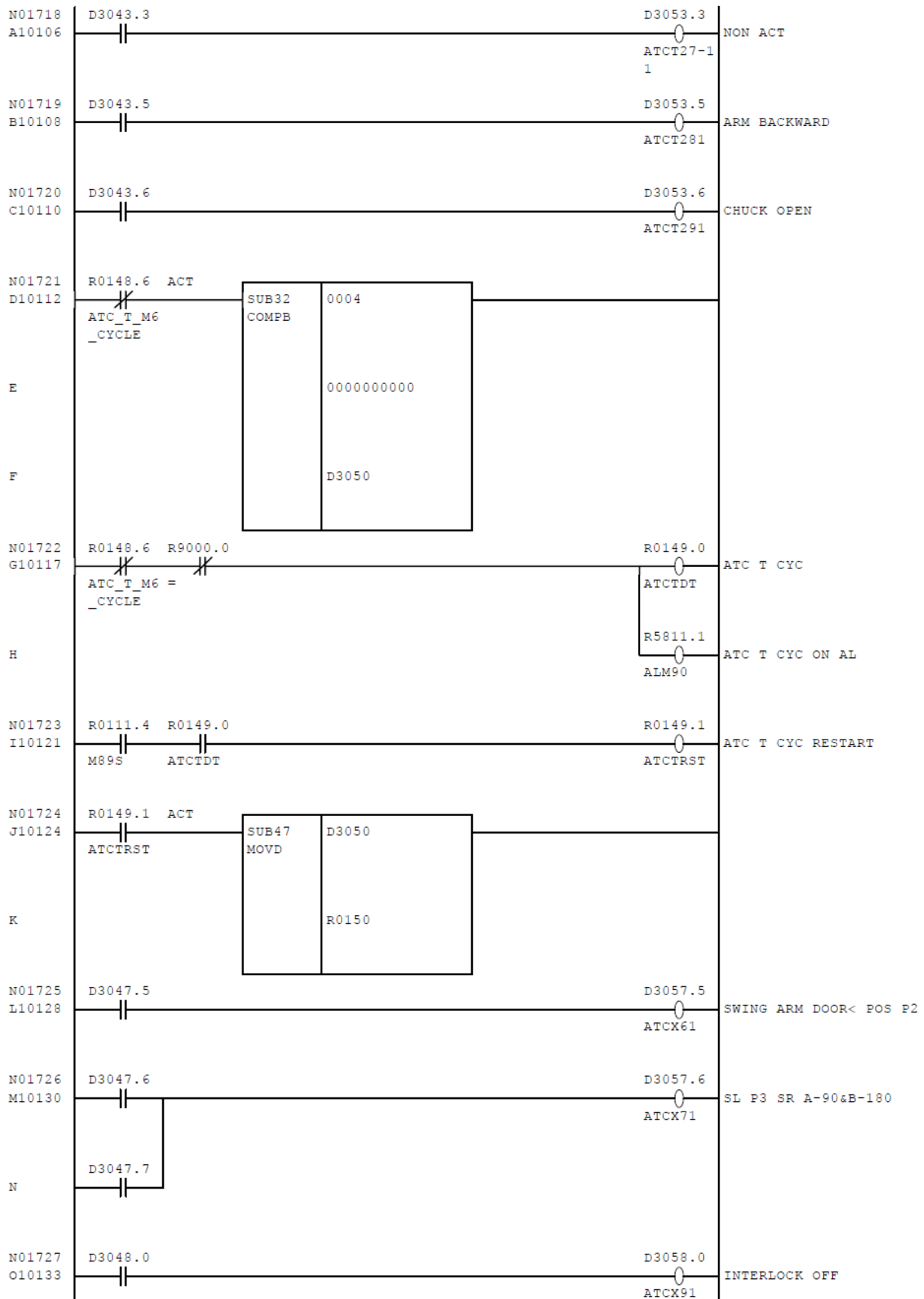


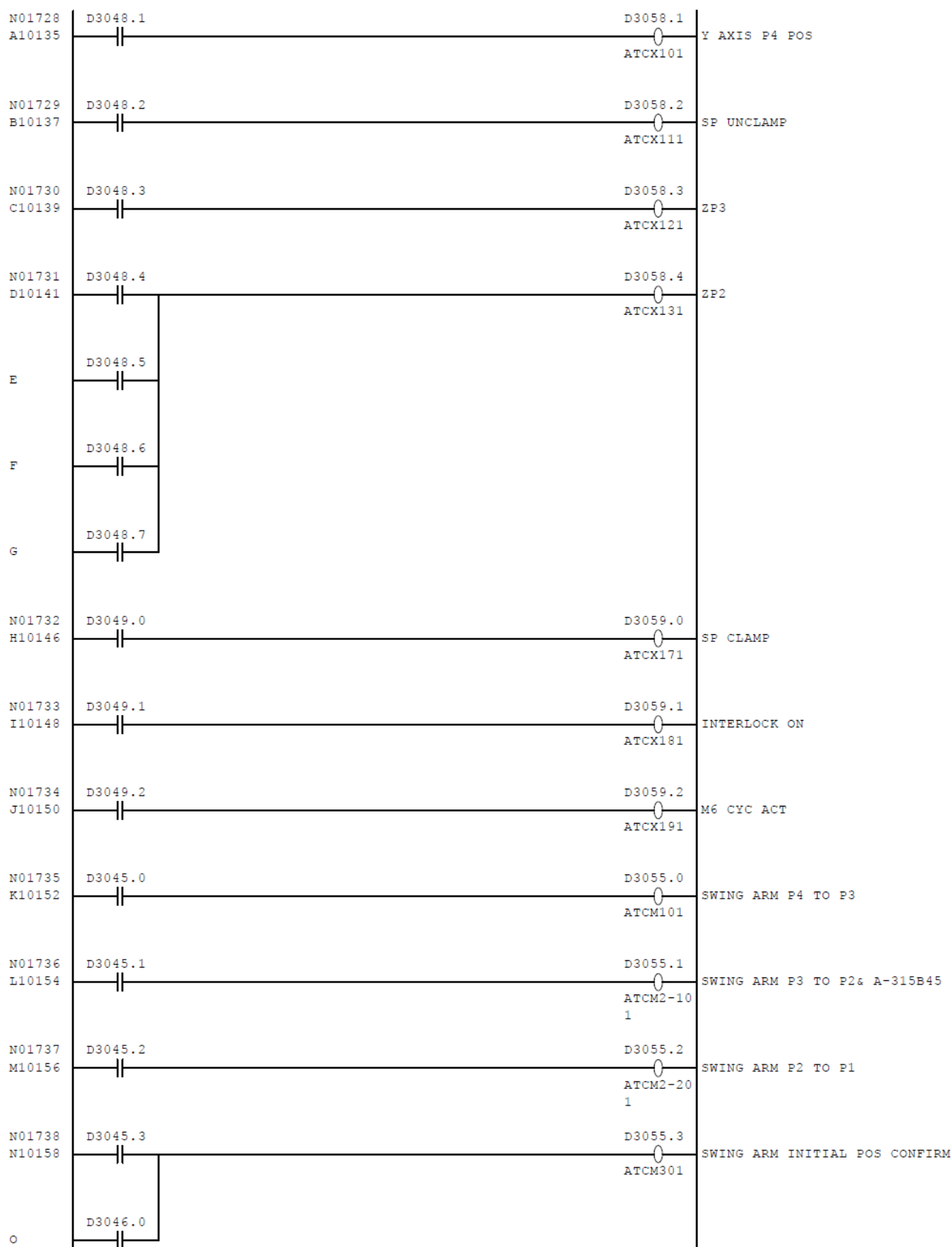


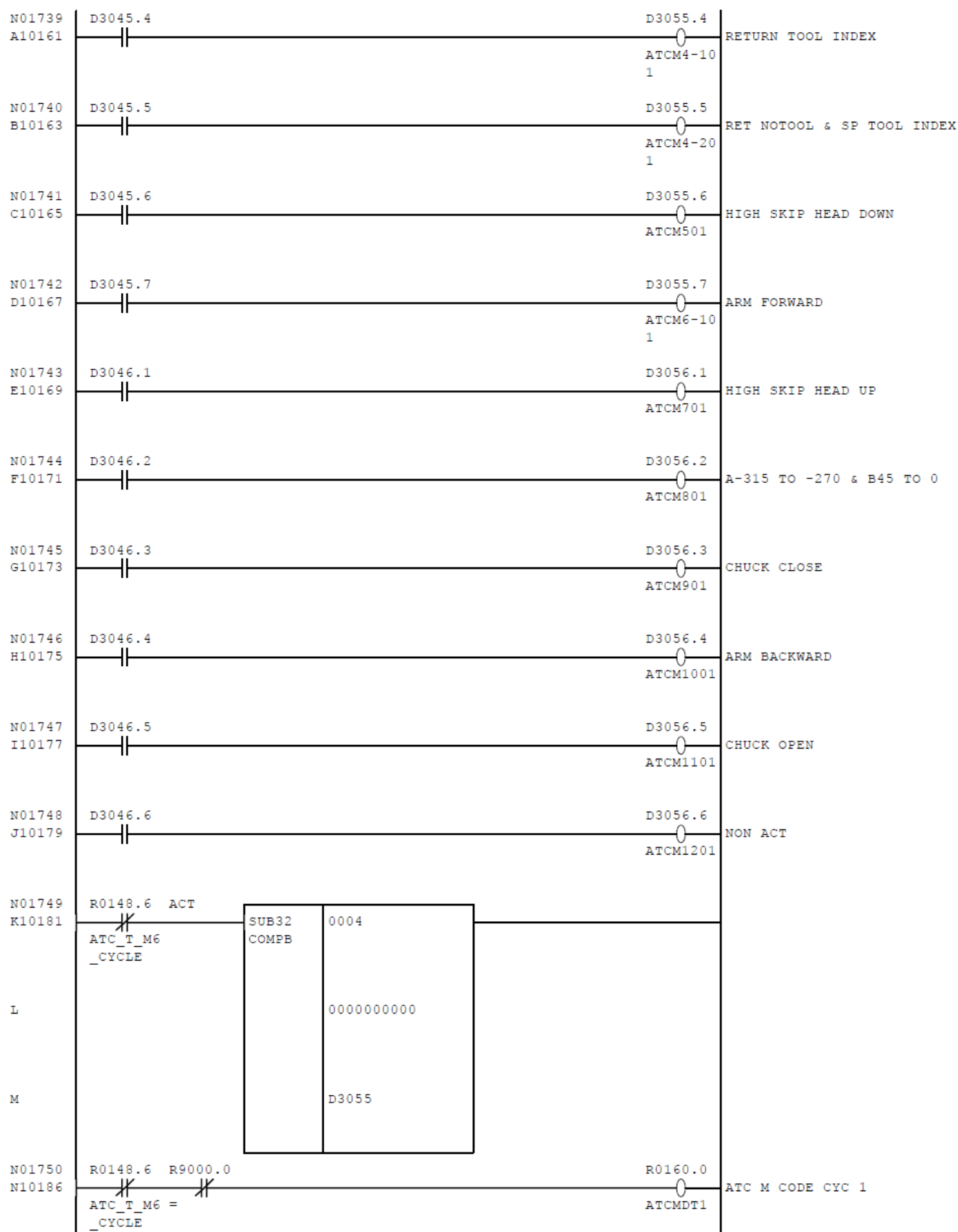


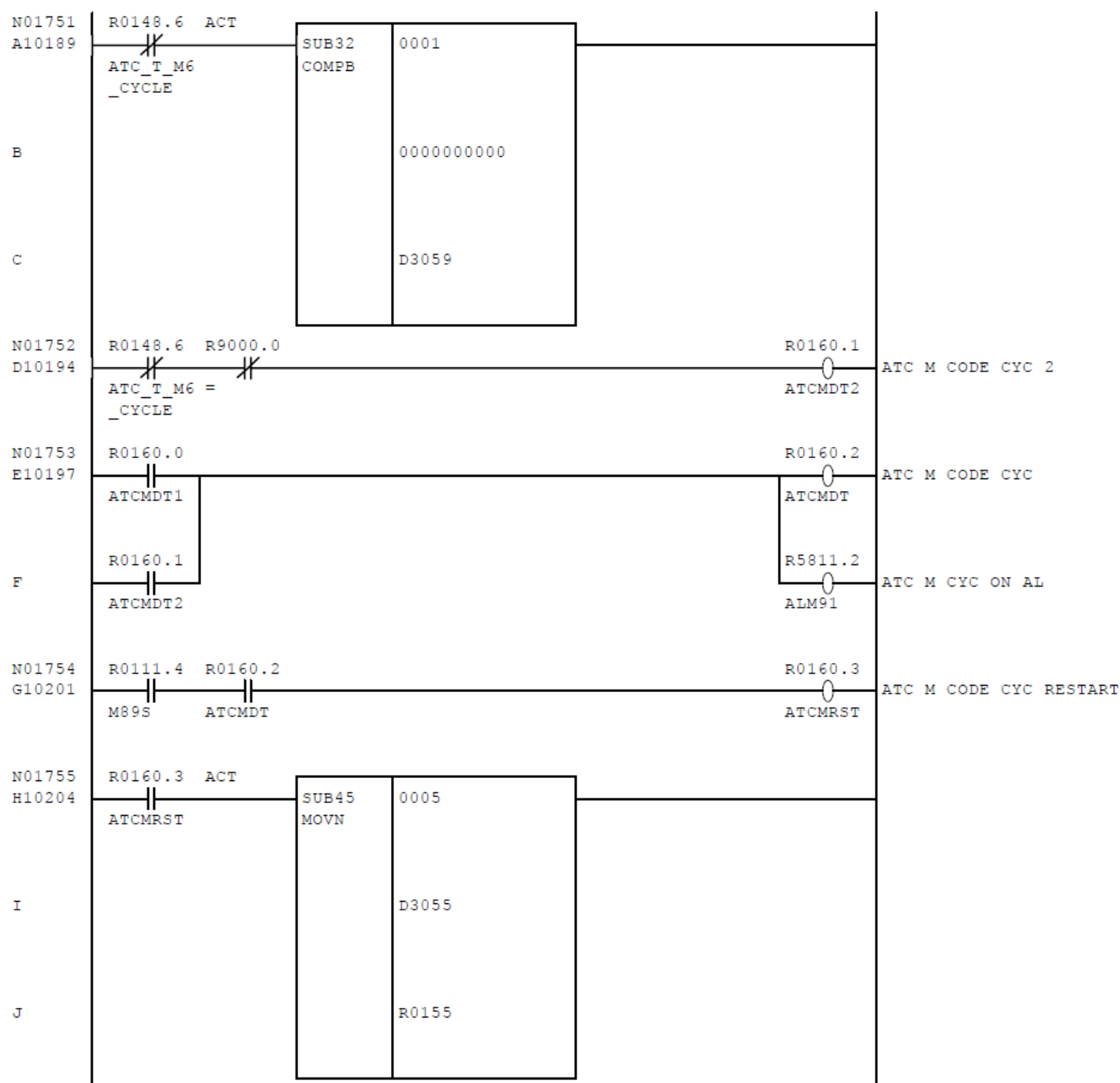


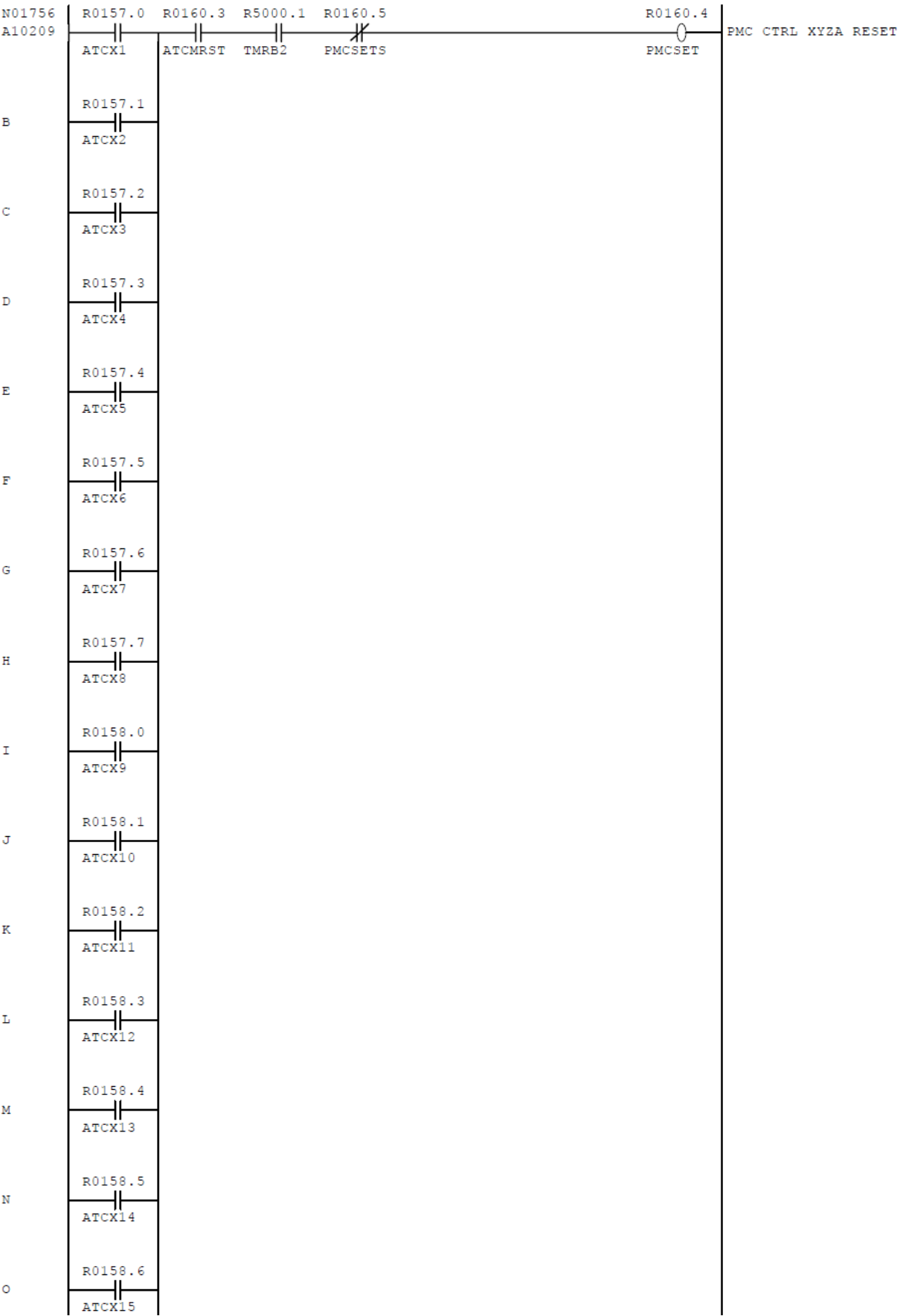


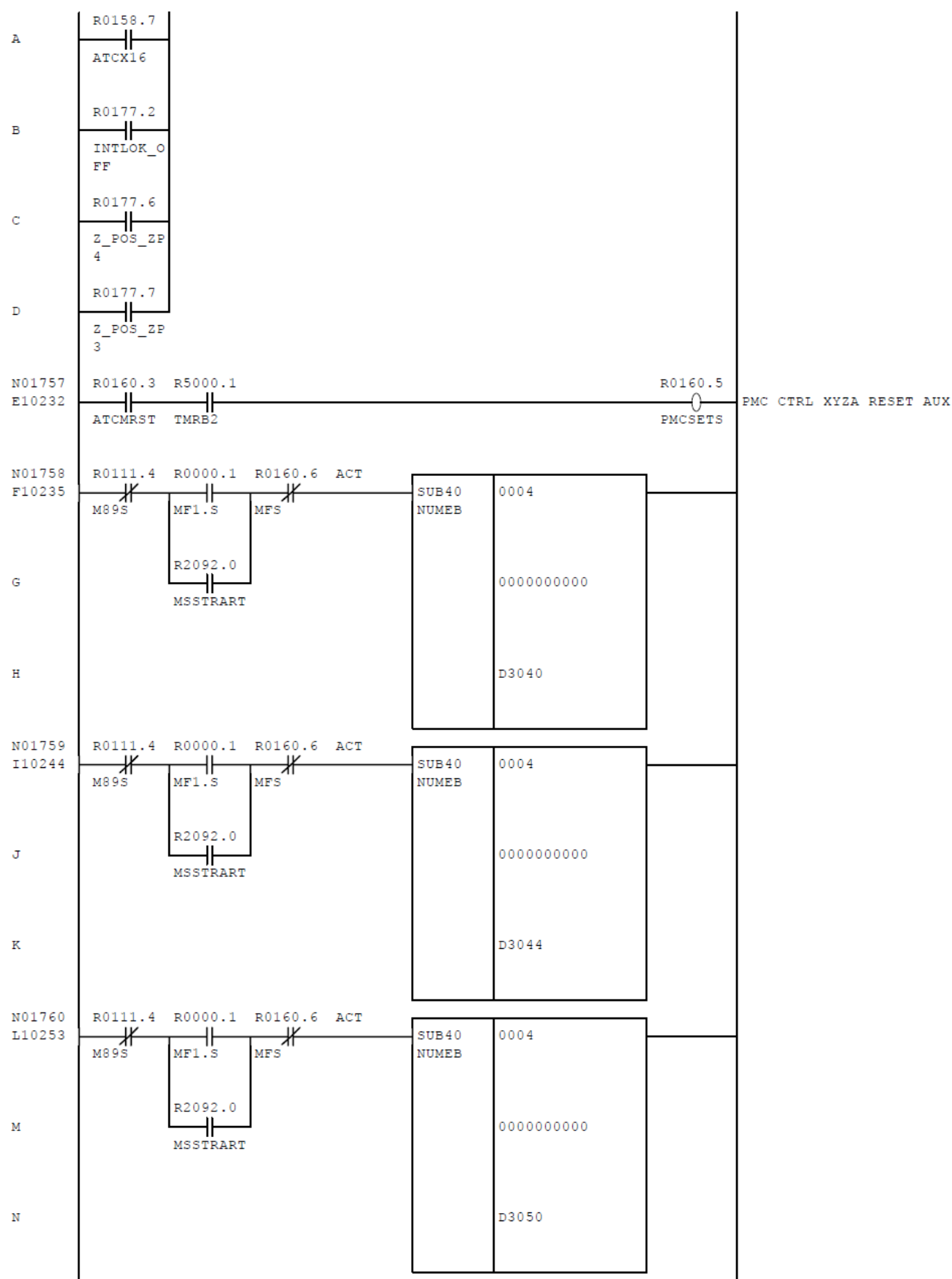


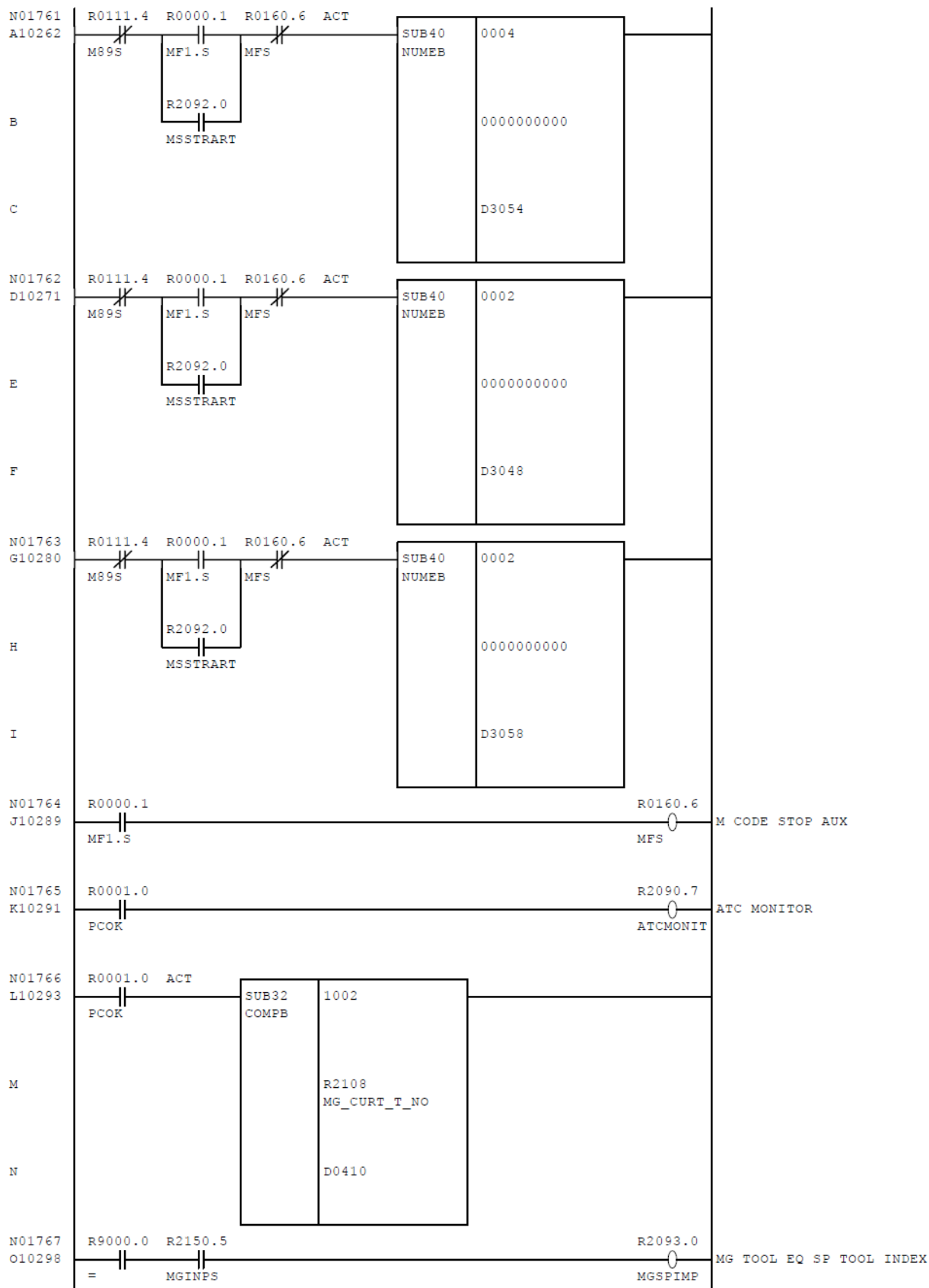


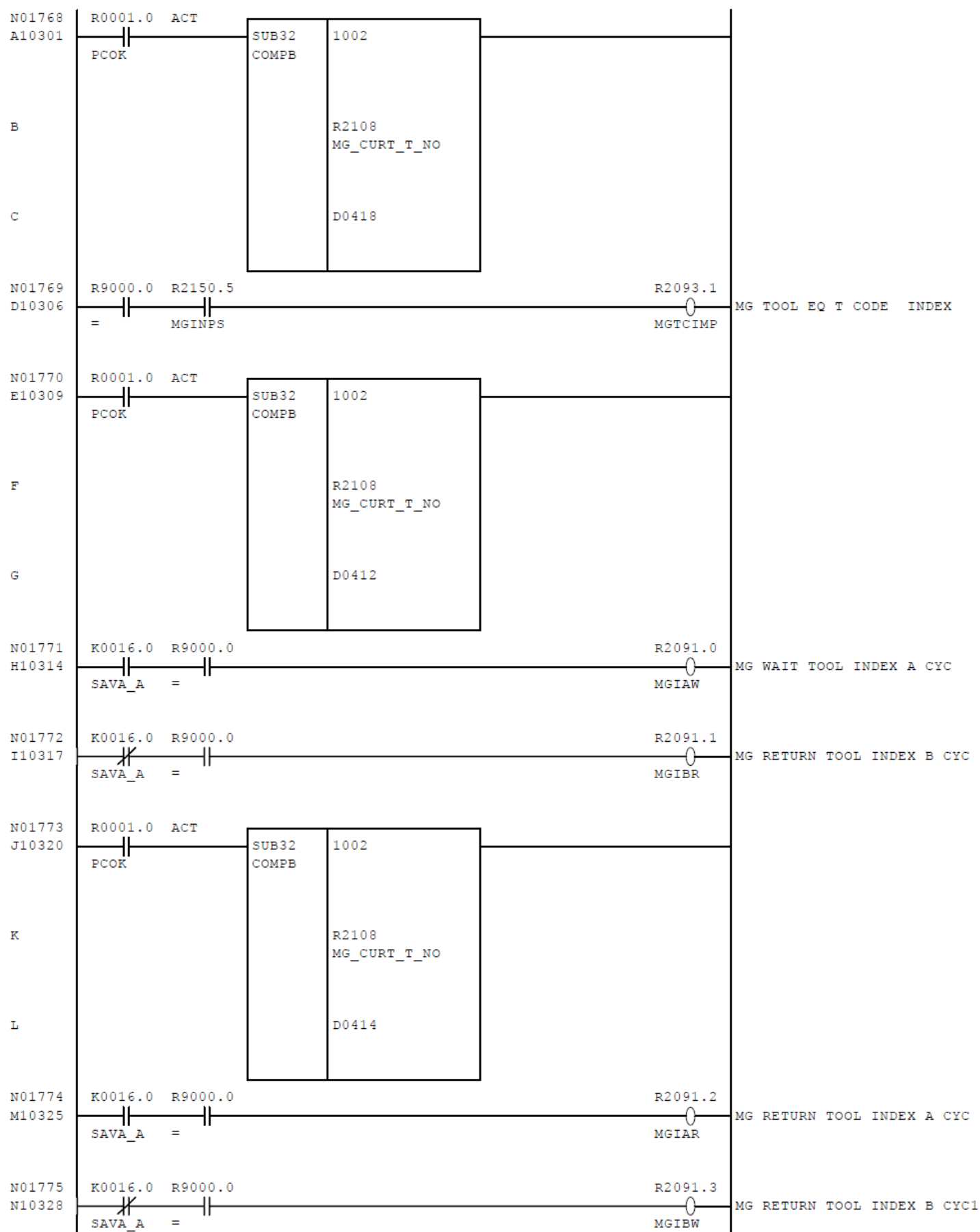


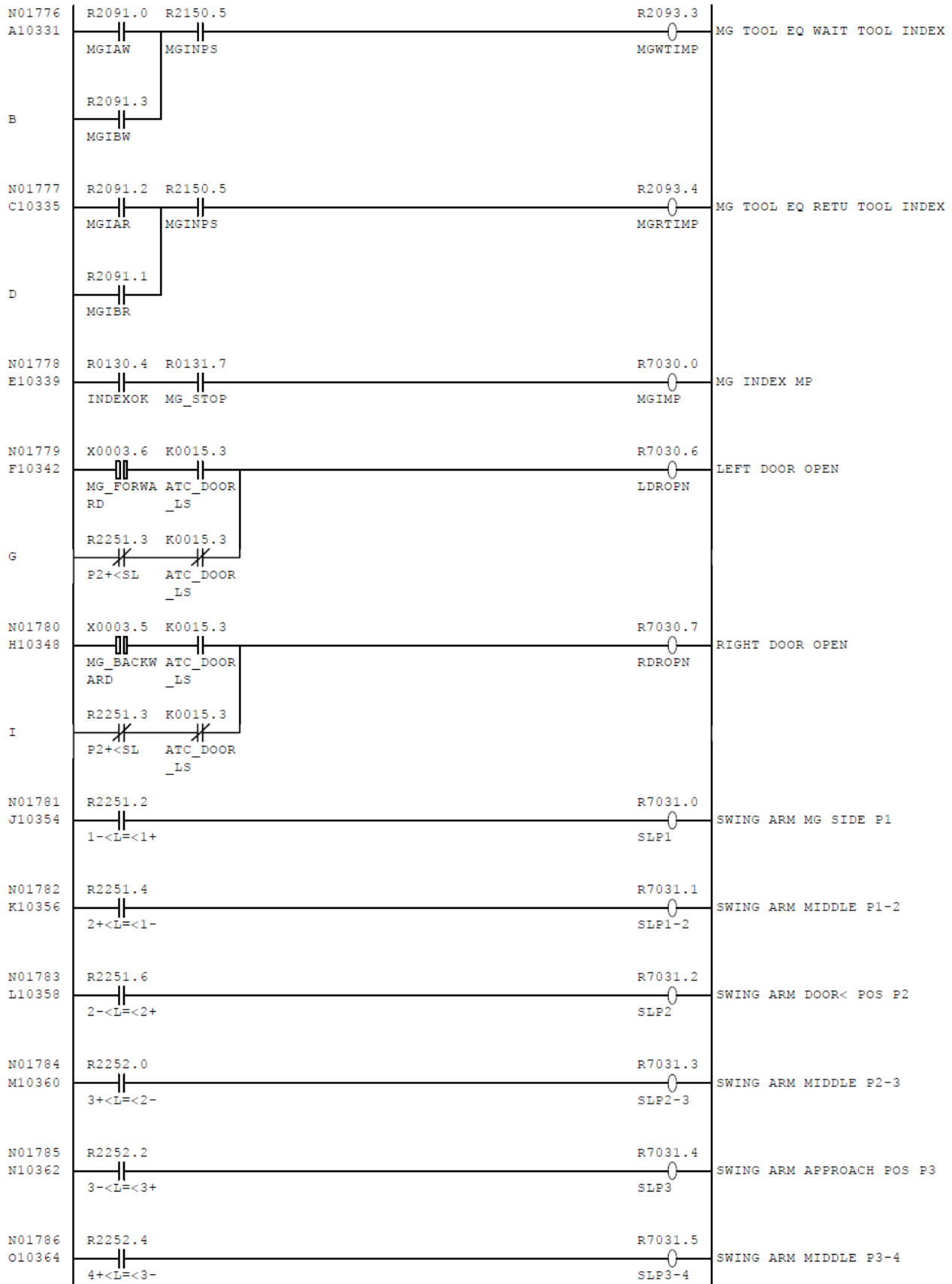


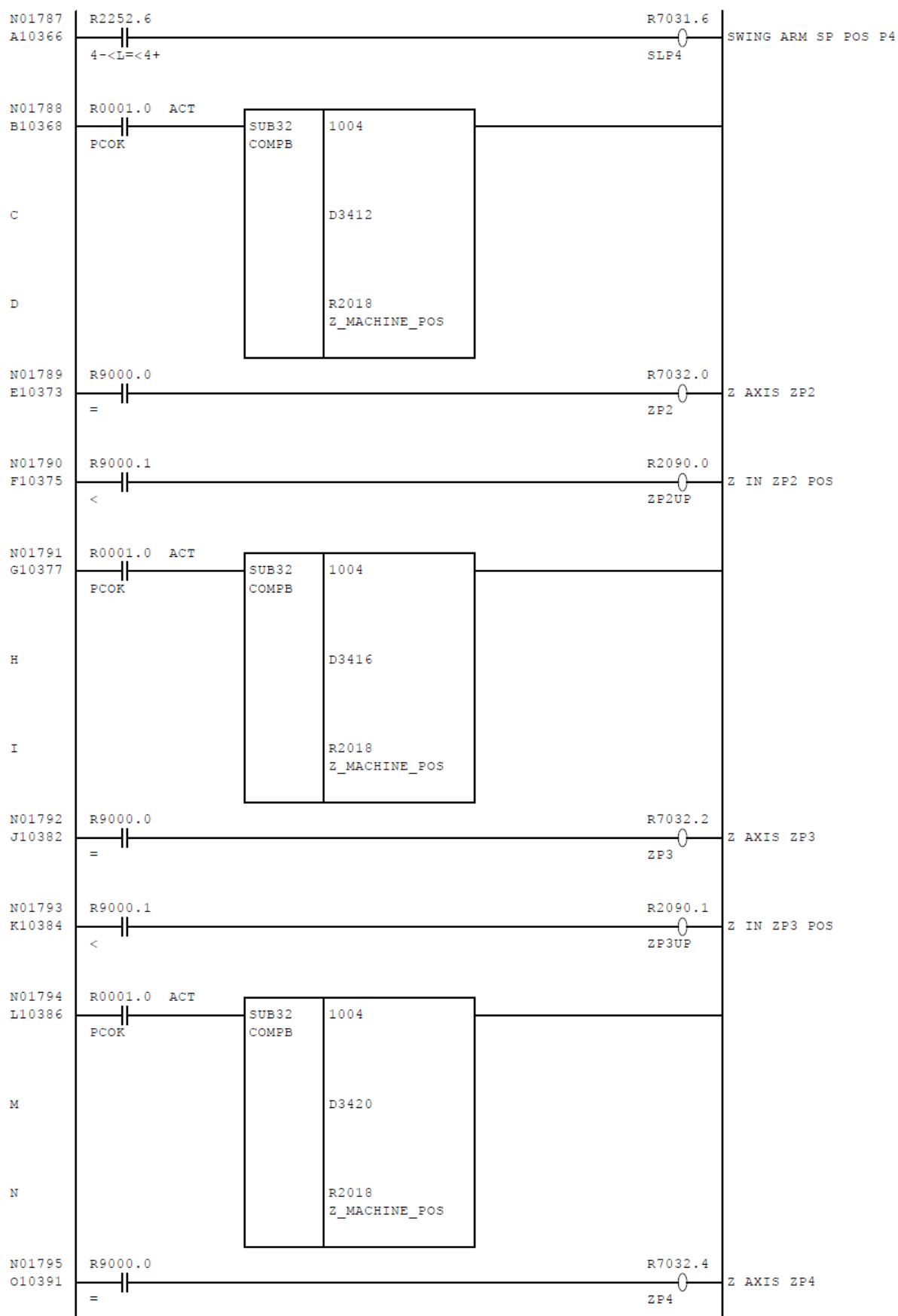


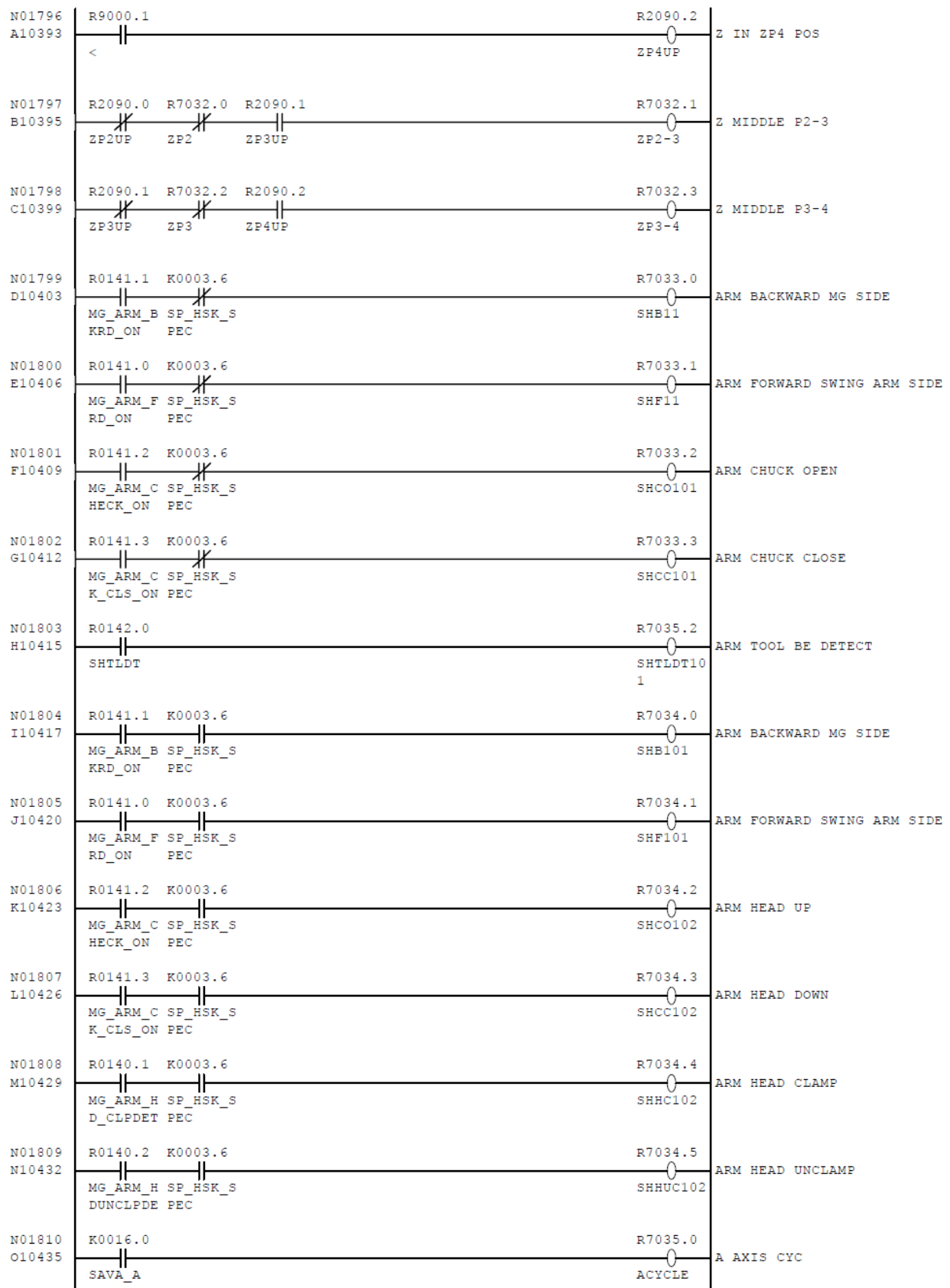


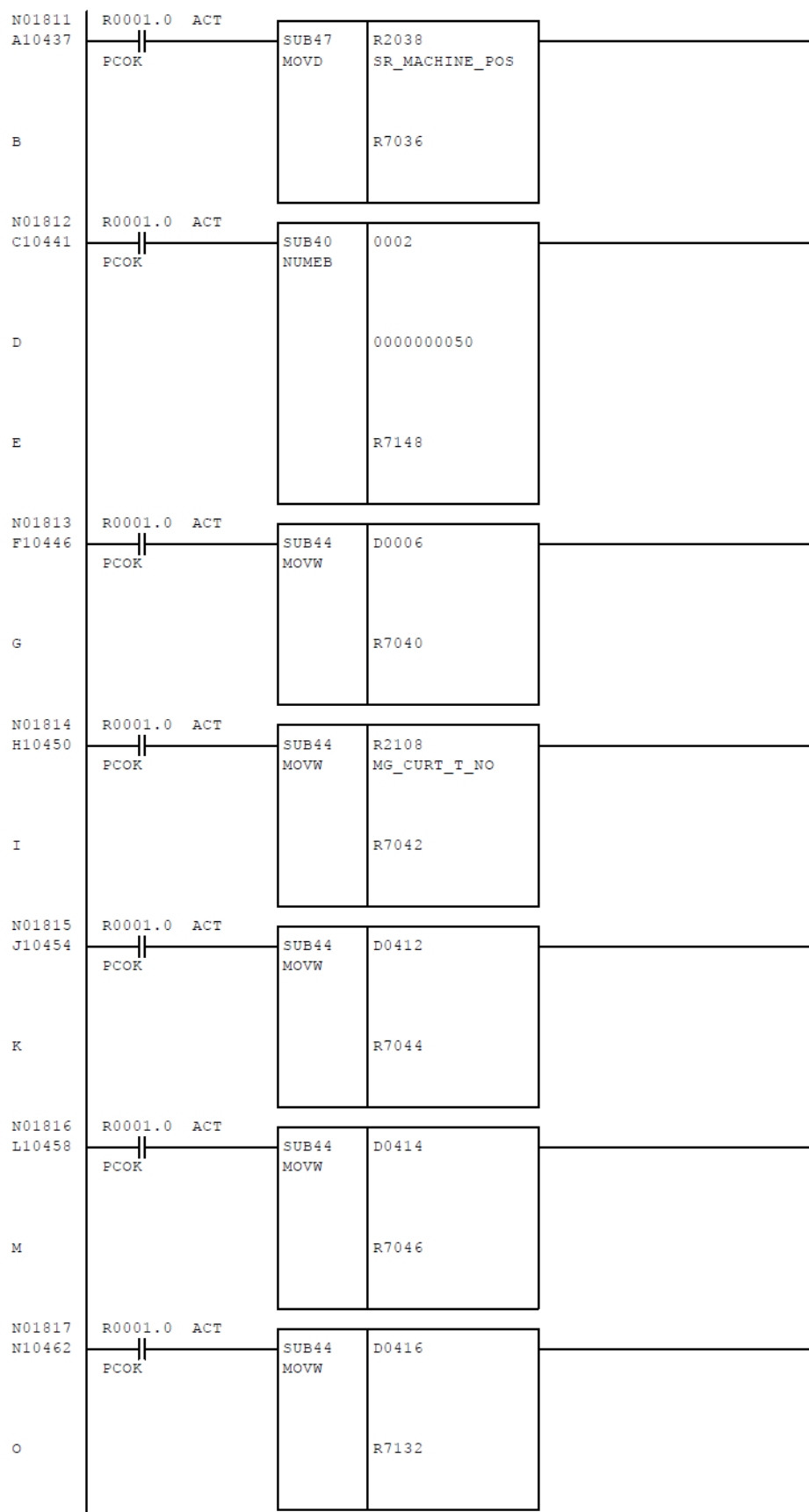




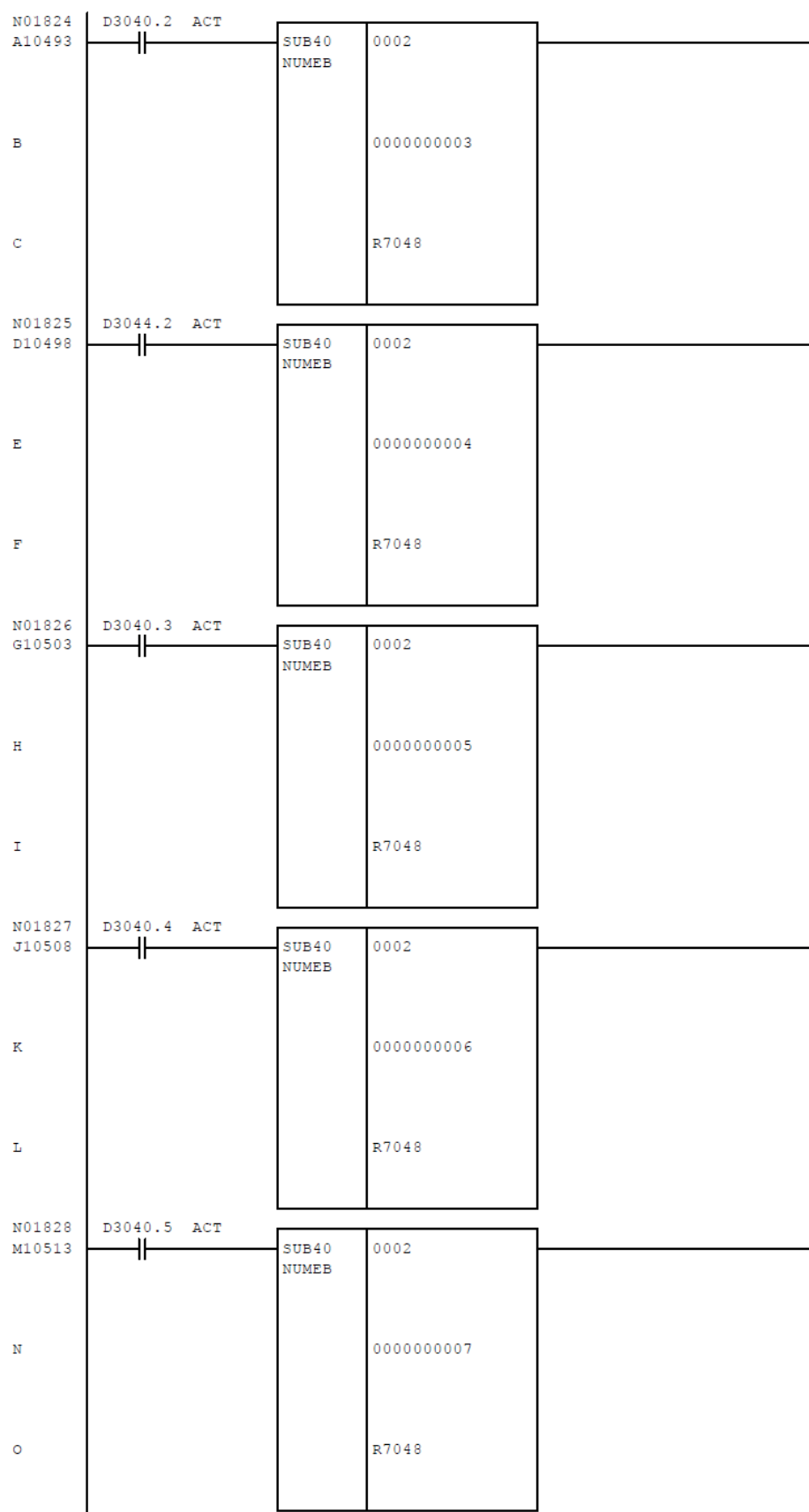




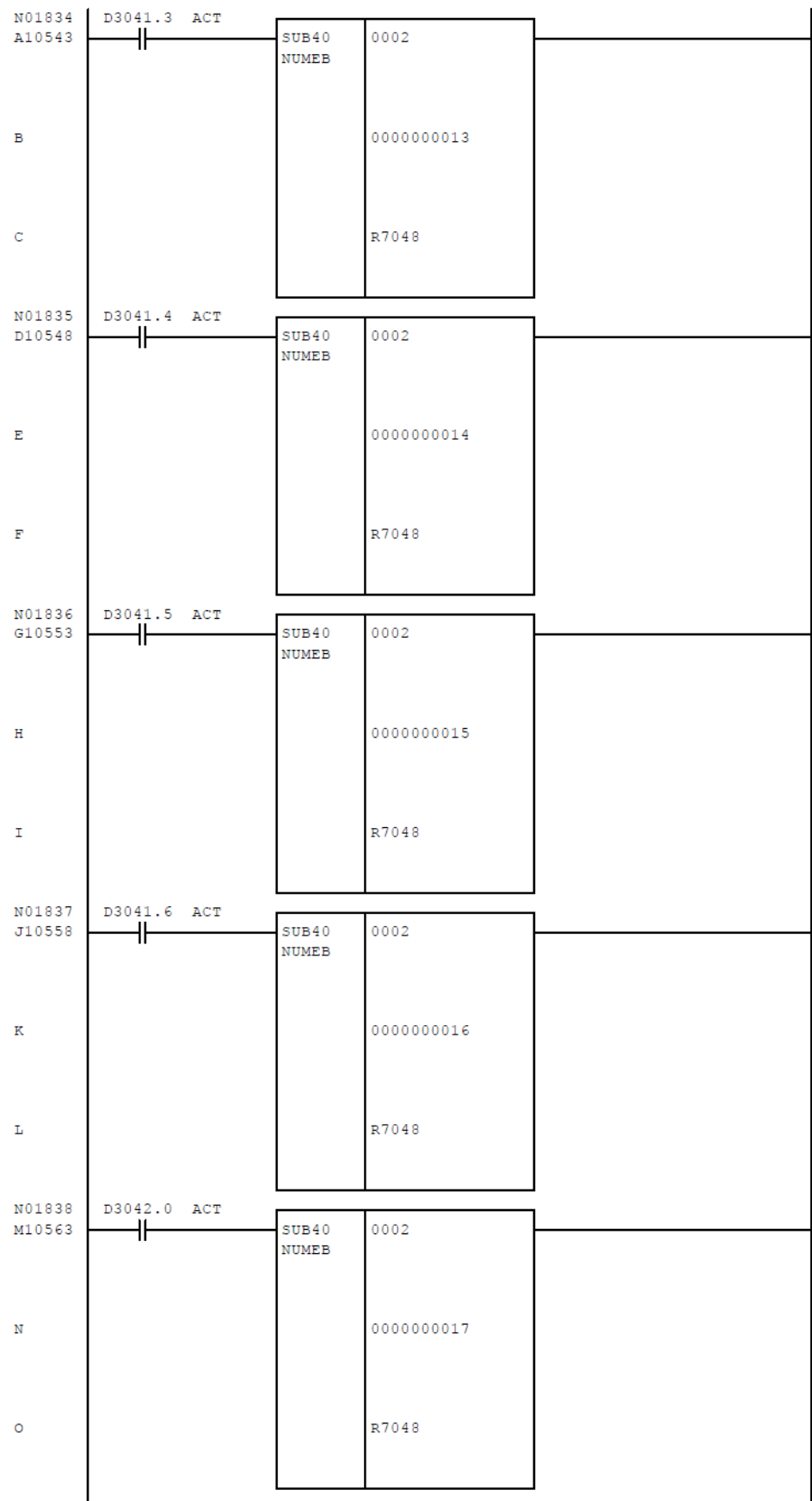


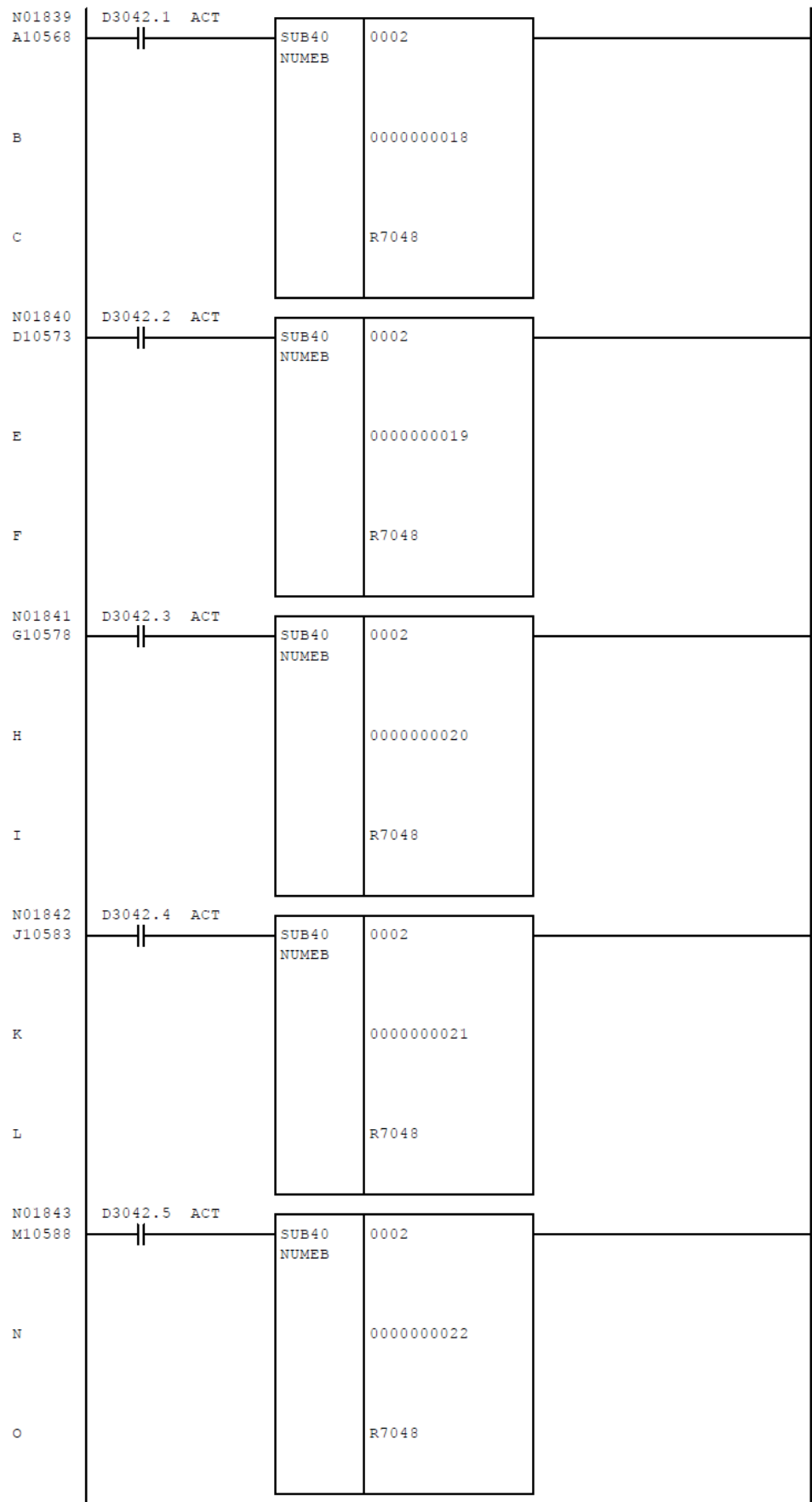


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D			
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F			
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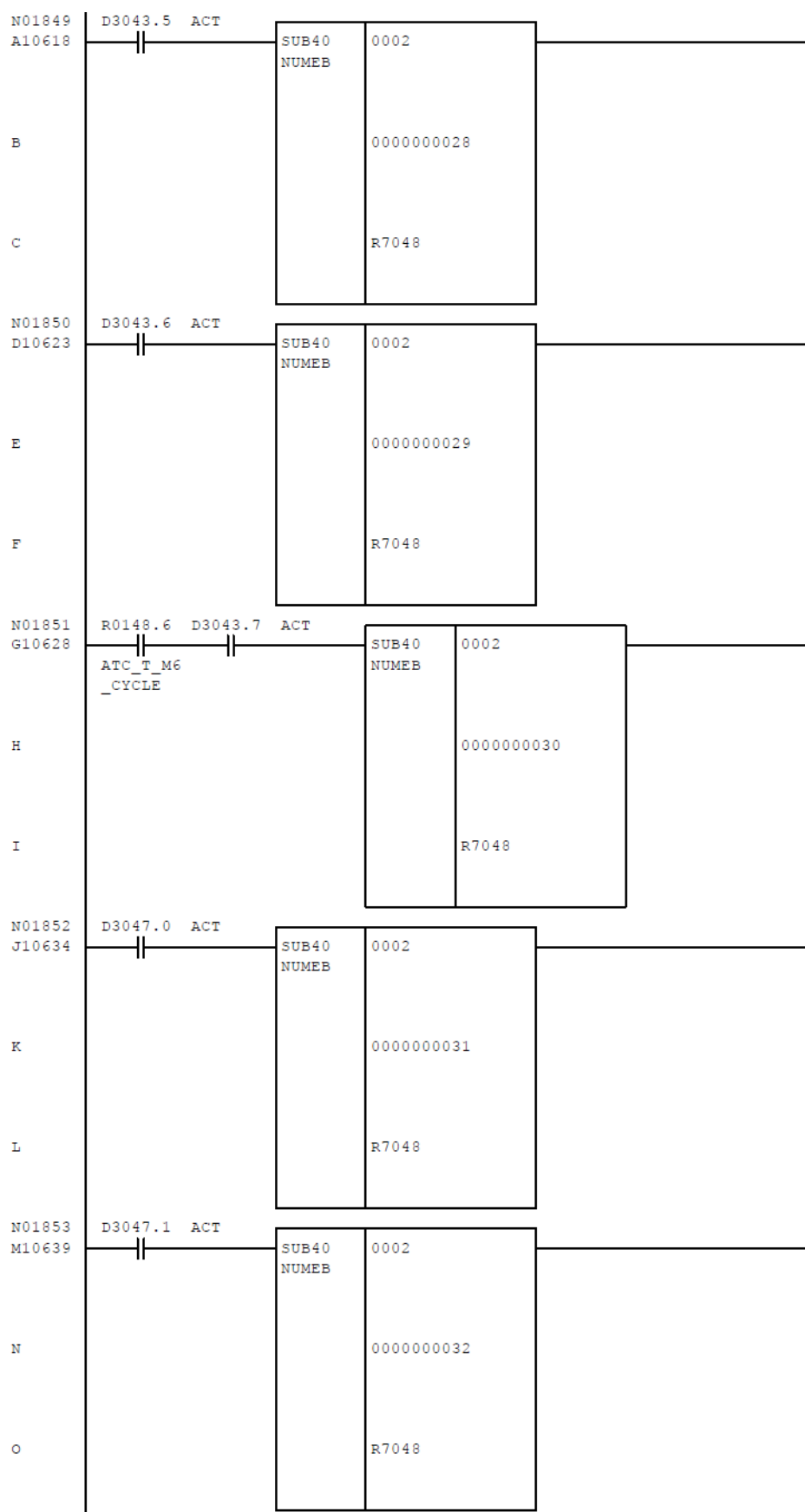


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N01844 A10593	D3042.6 ACT	SUB40 NUMEB	0002	
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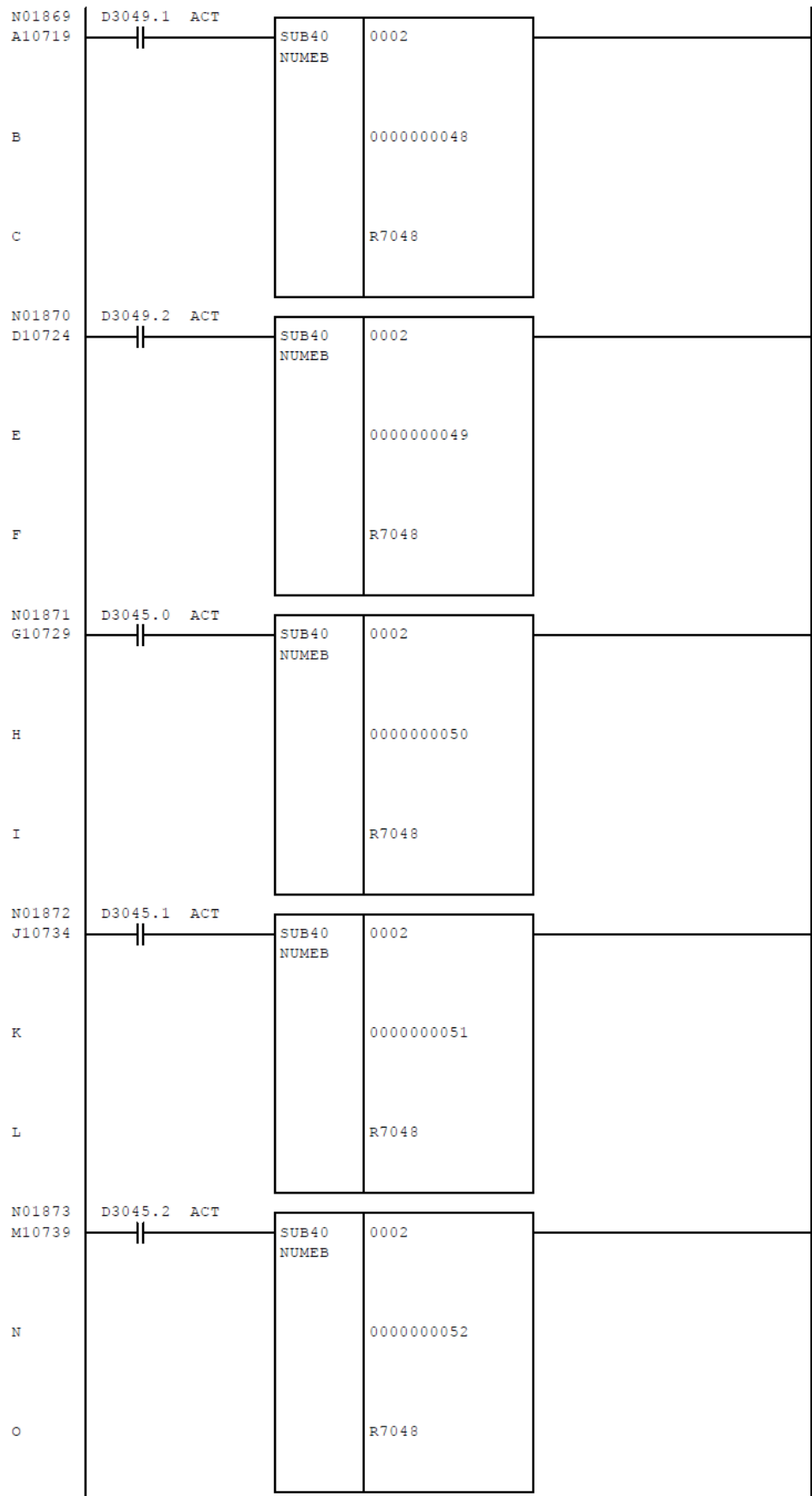


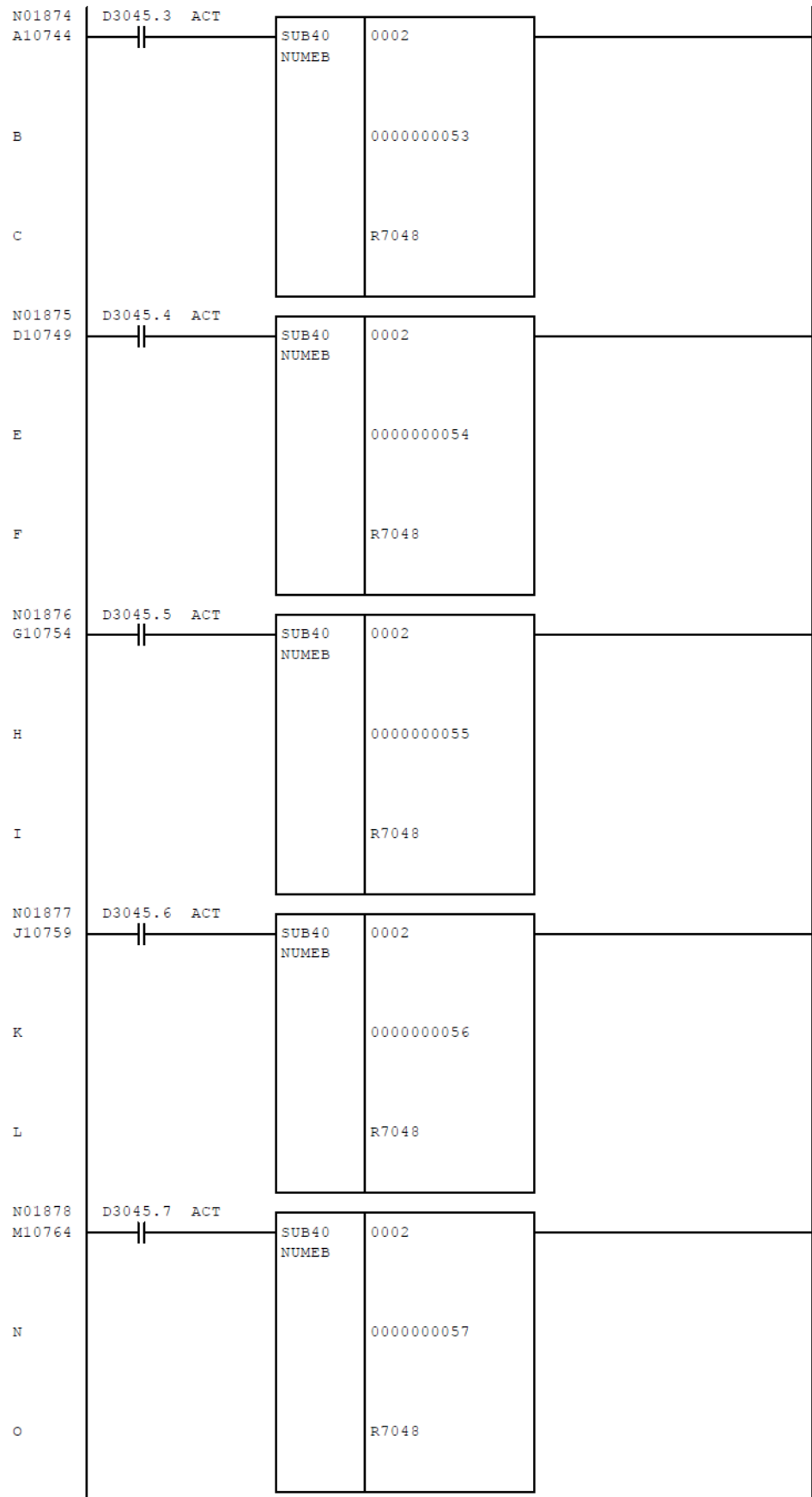
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N01857 J10659	D3047.5 ACT	SUB40 NUMEB	0002
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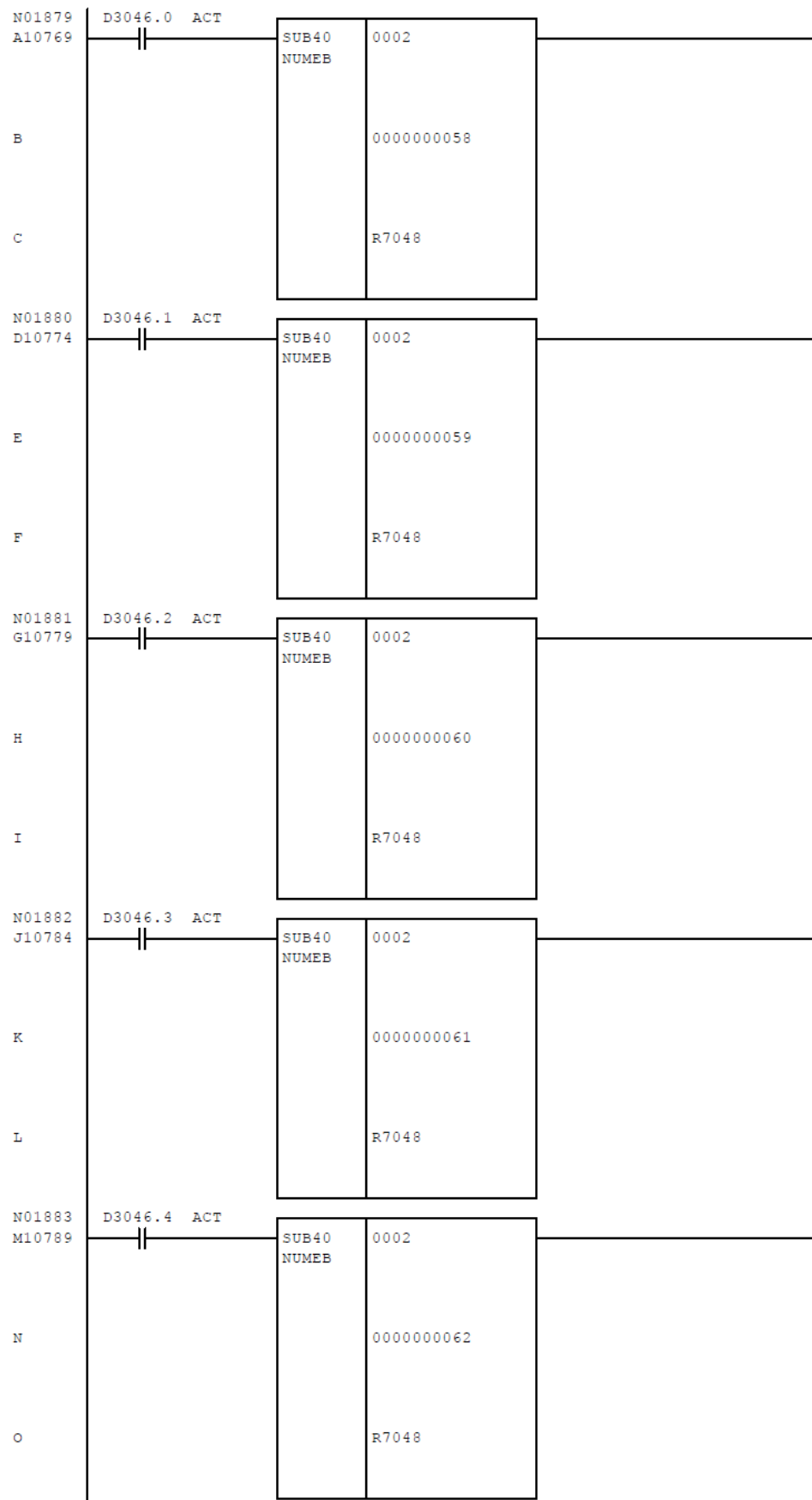
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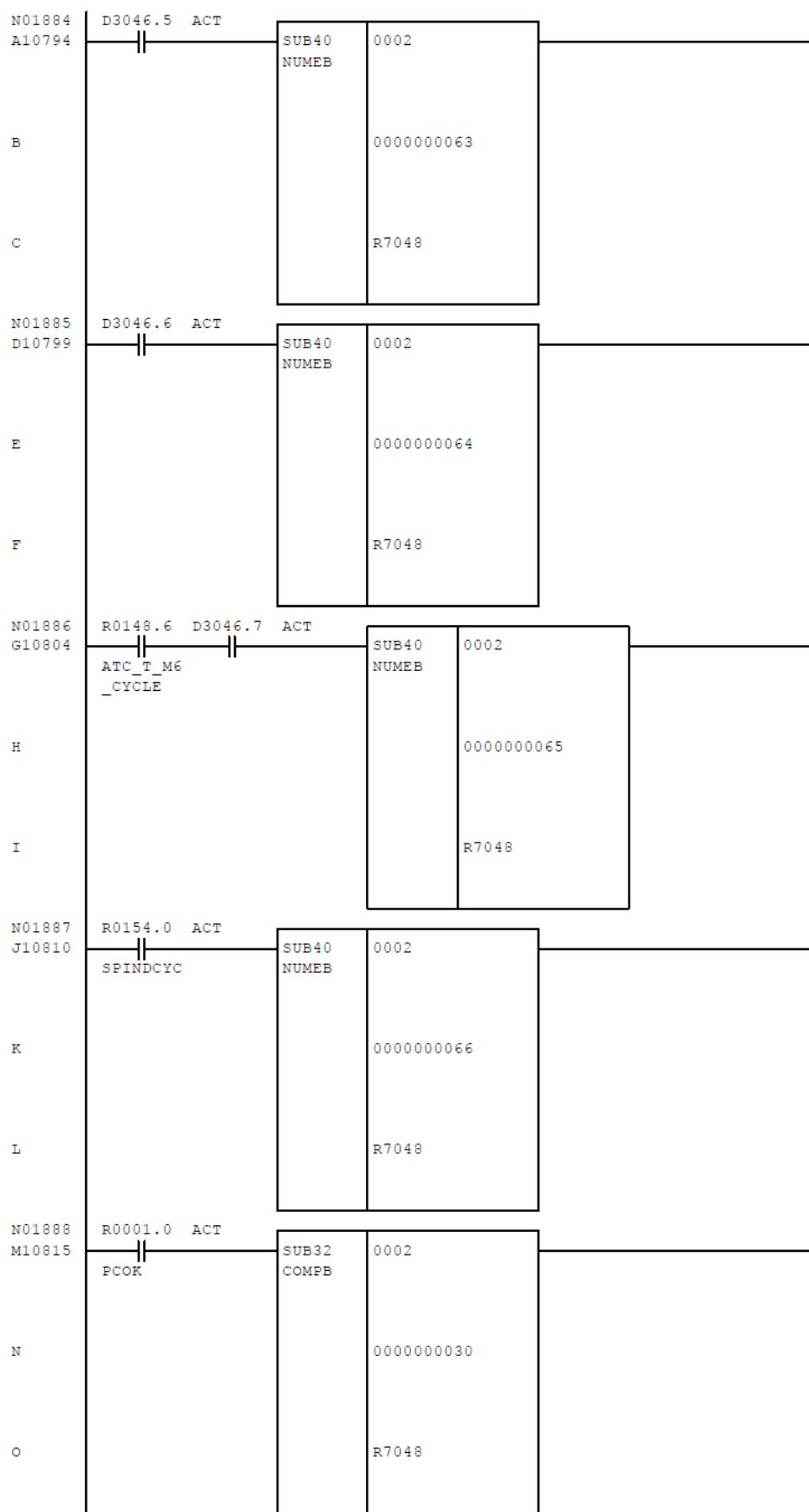
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			R7048
N01867 J10709	D3048.7 ACT		
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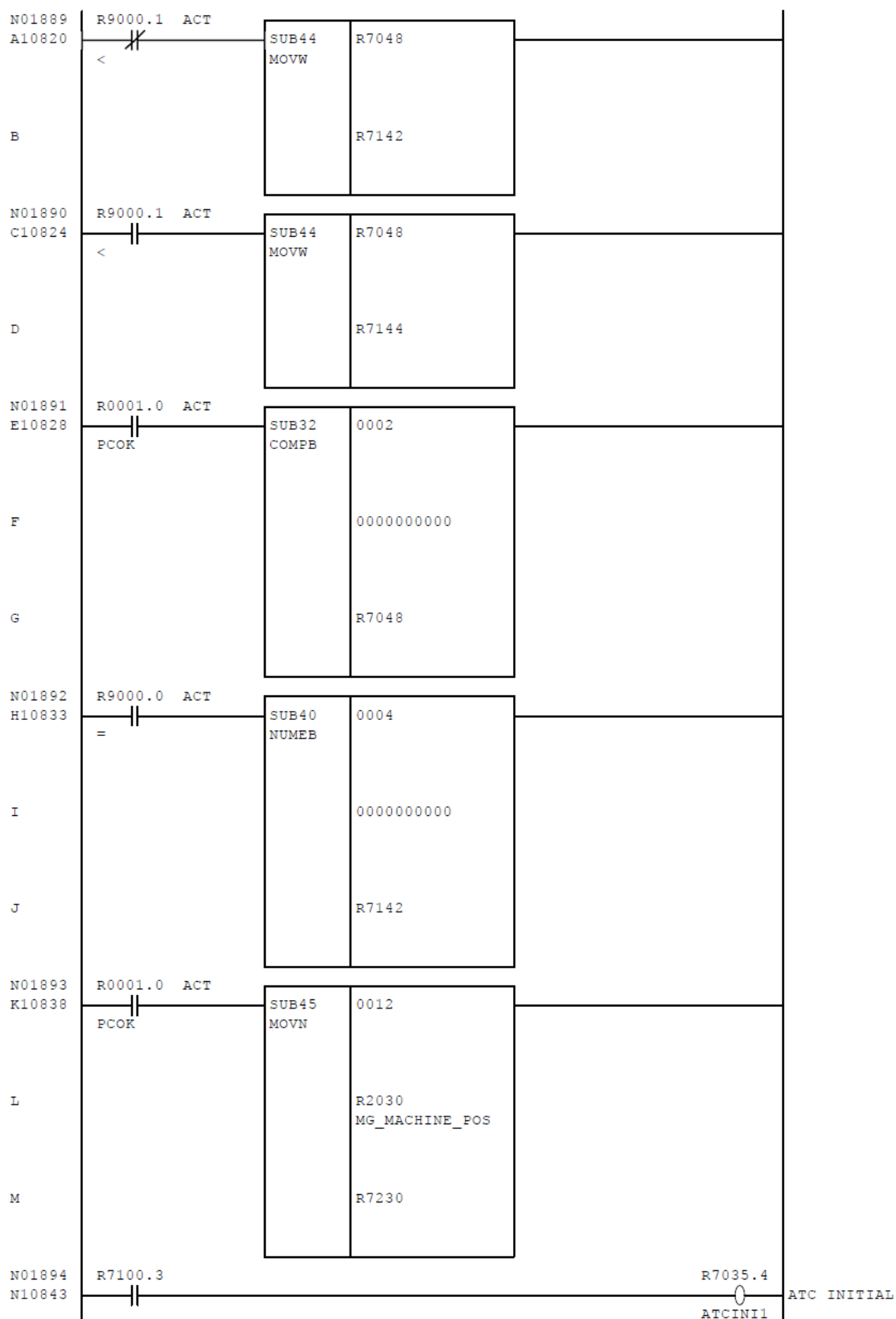
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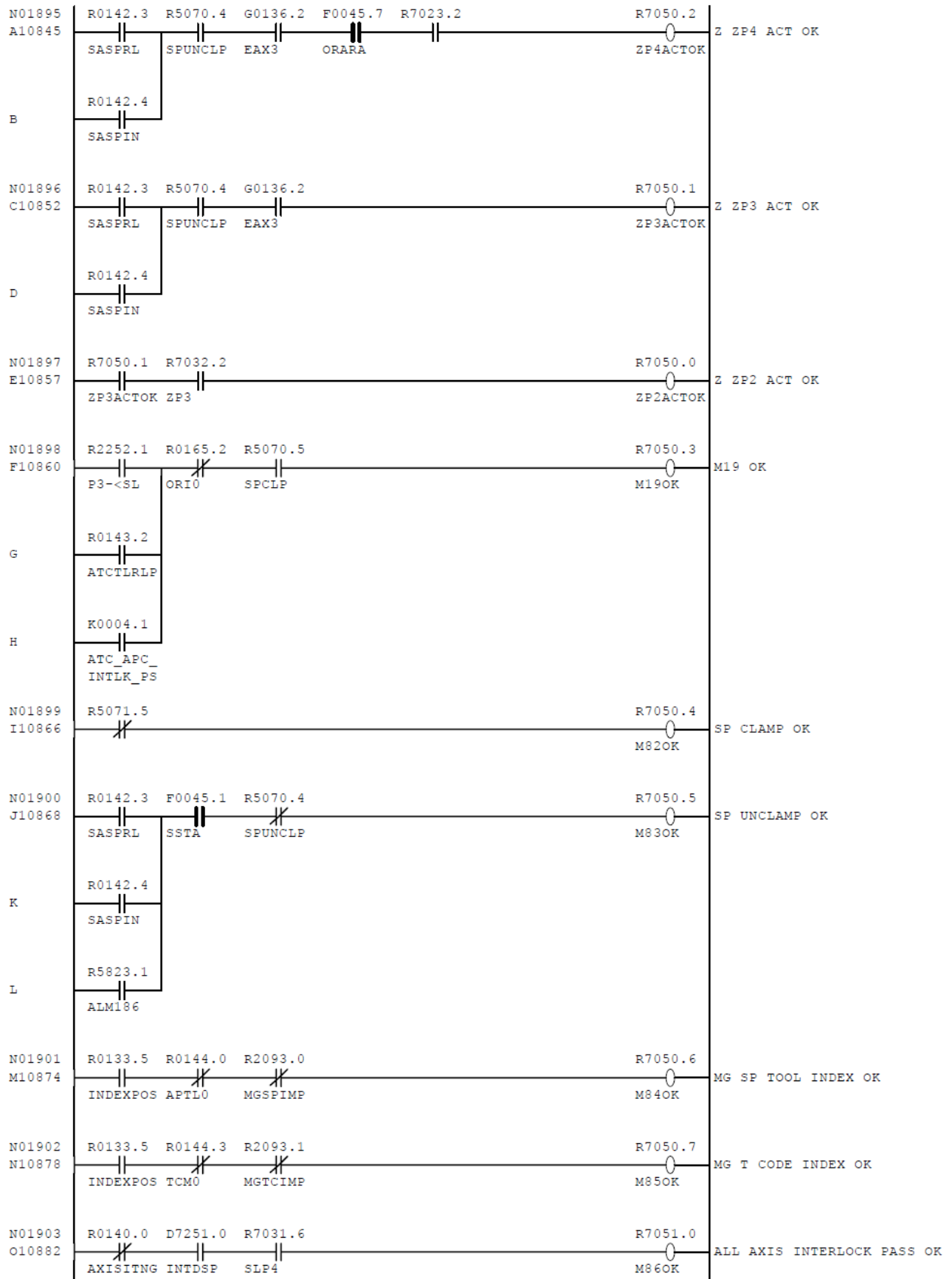


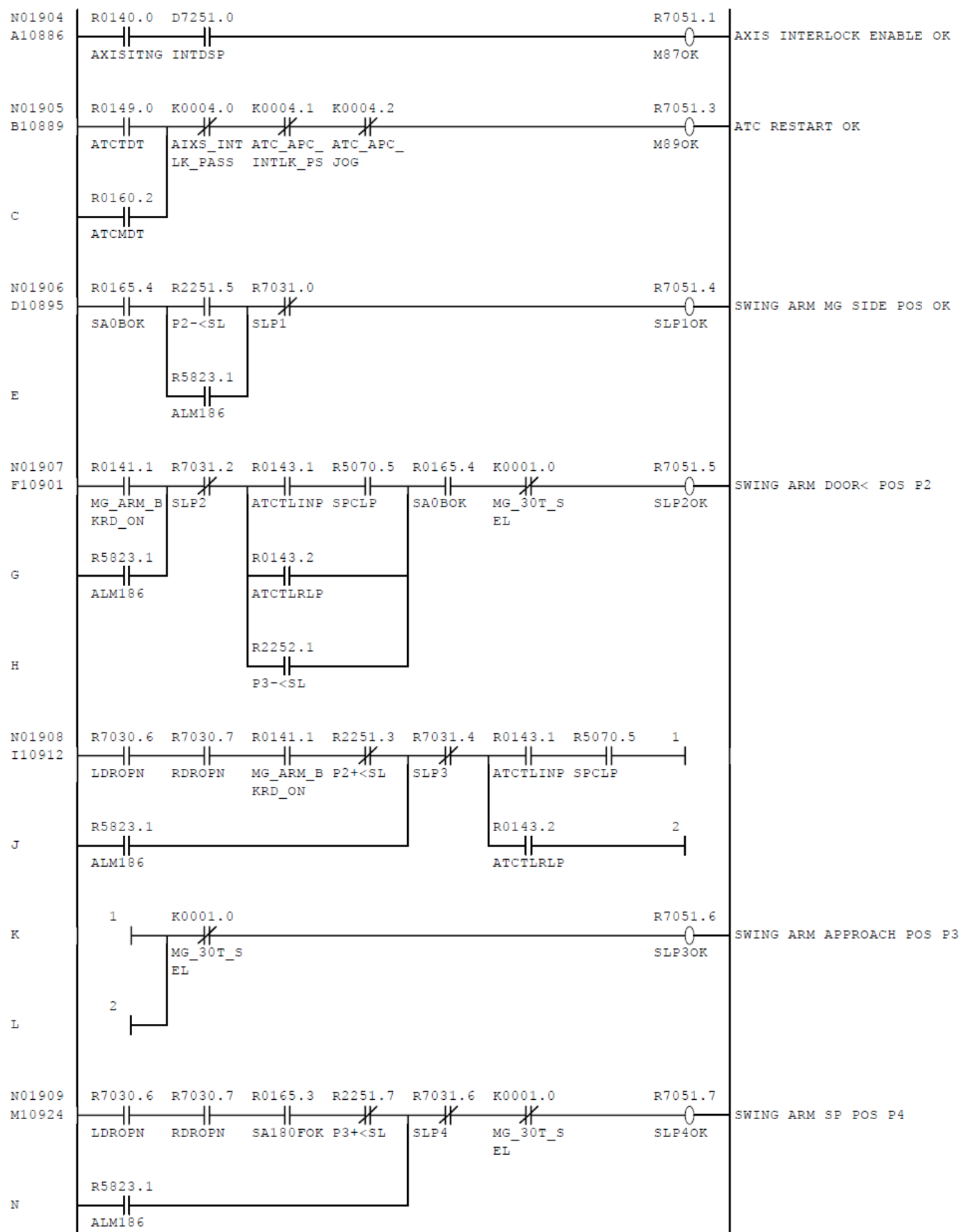


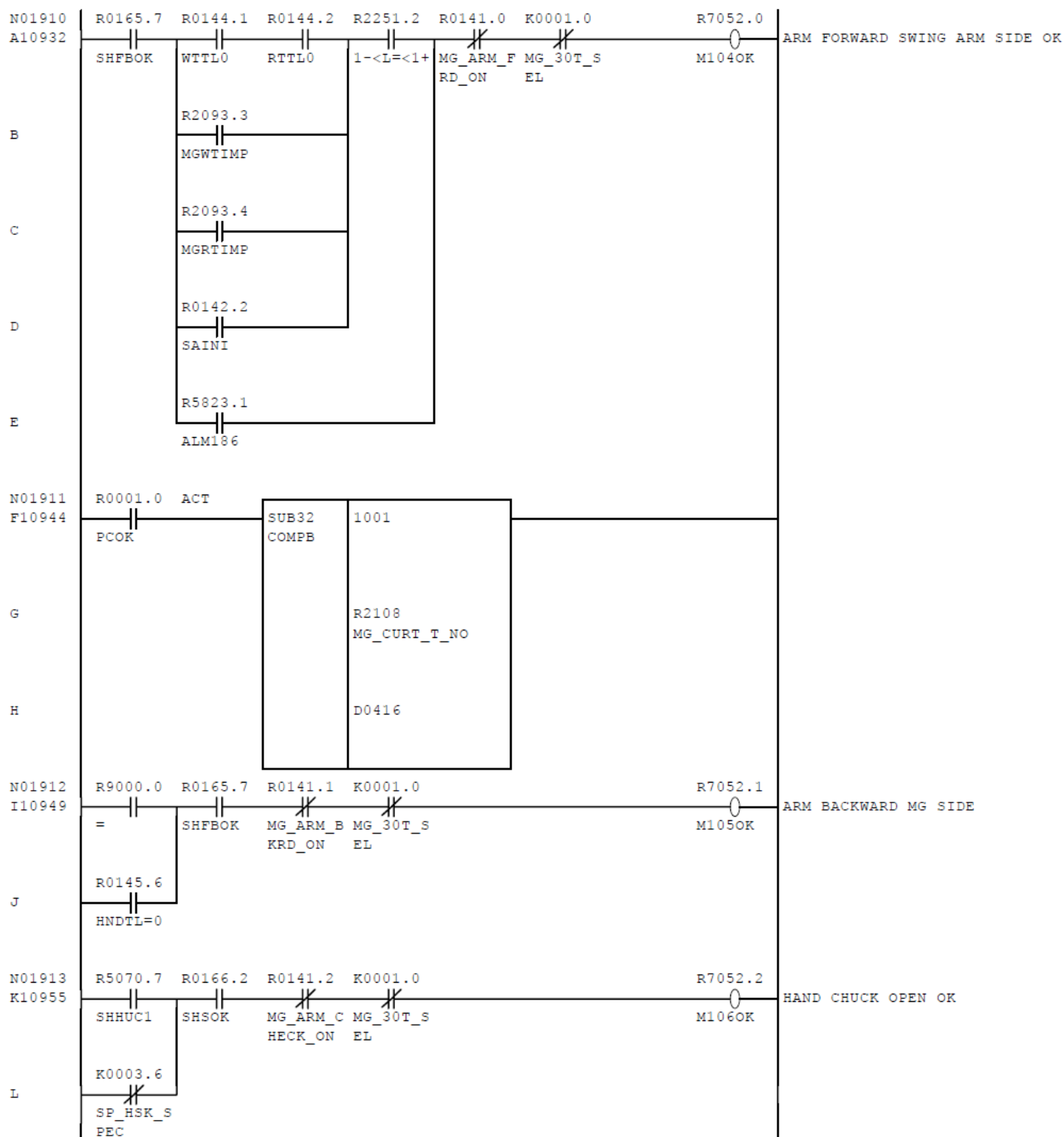


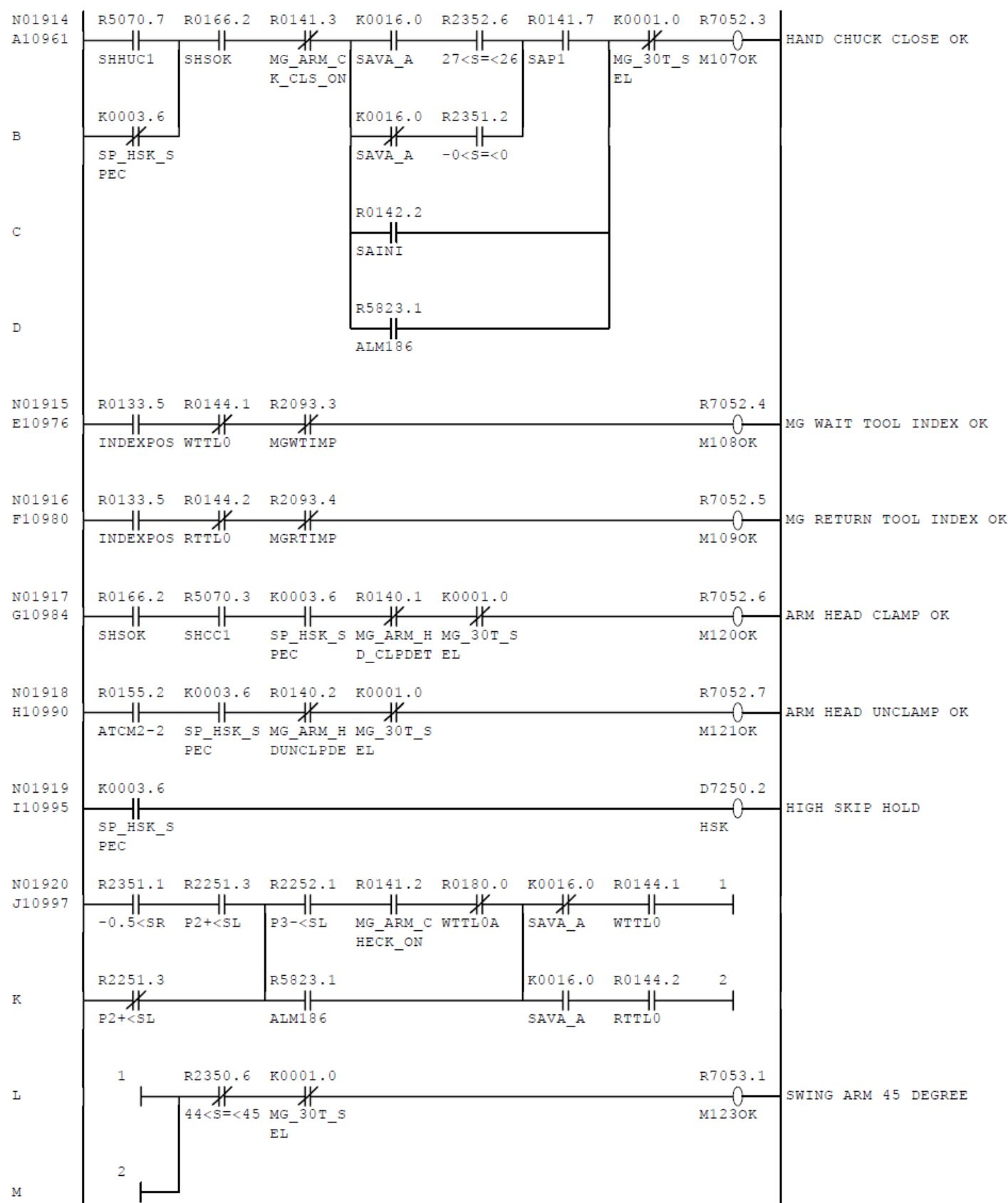


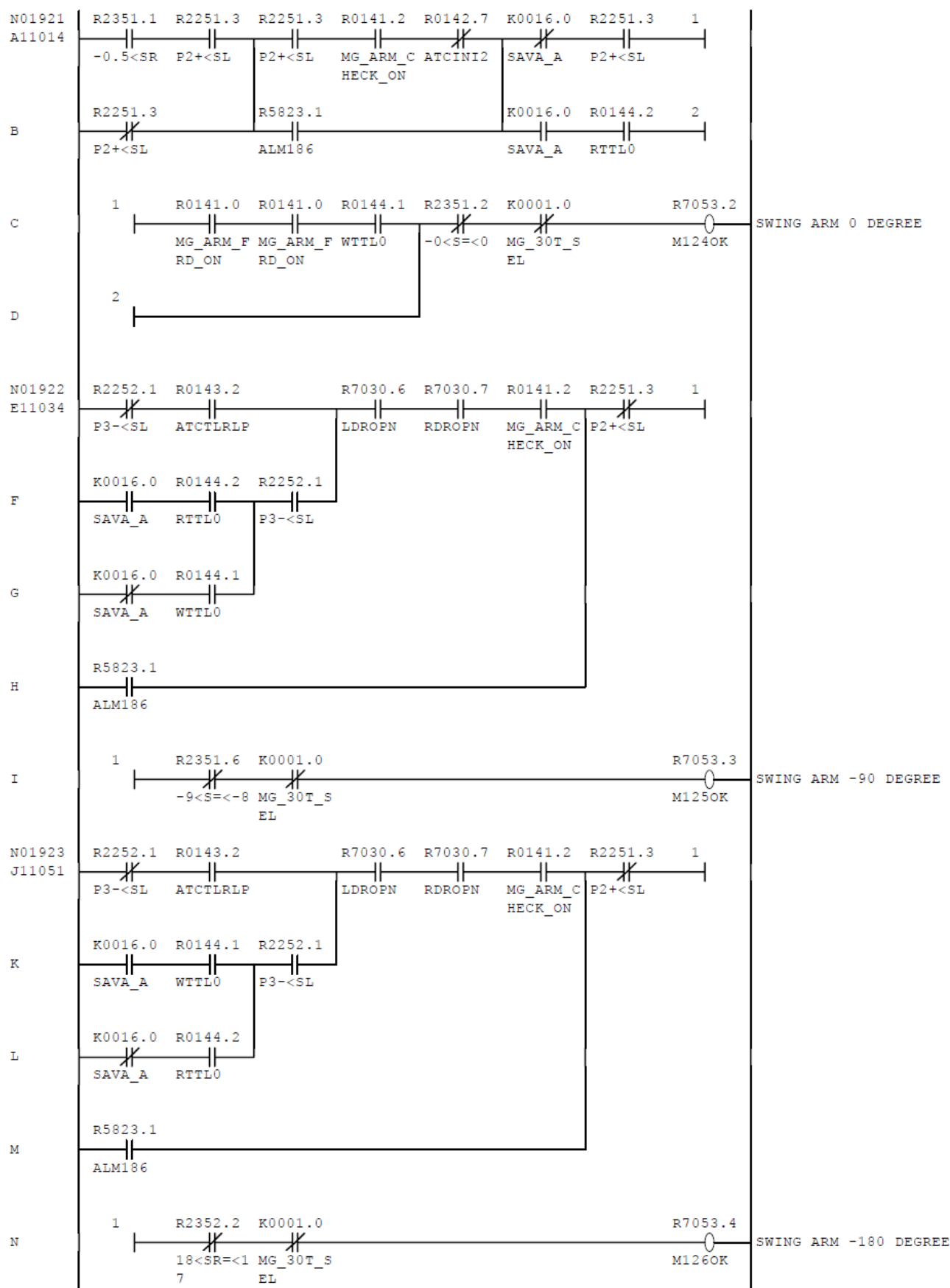


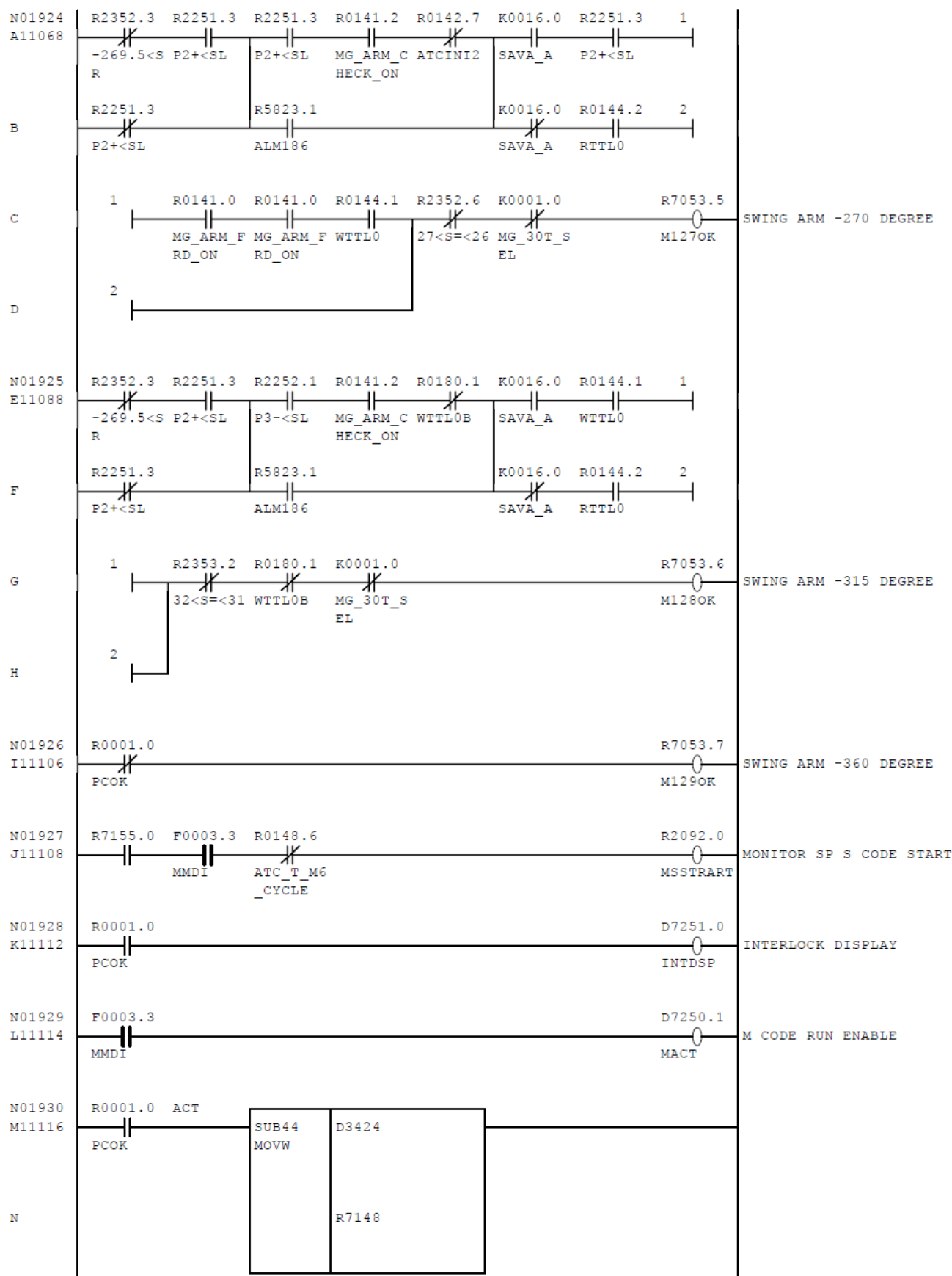


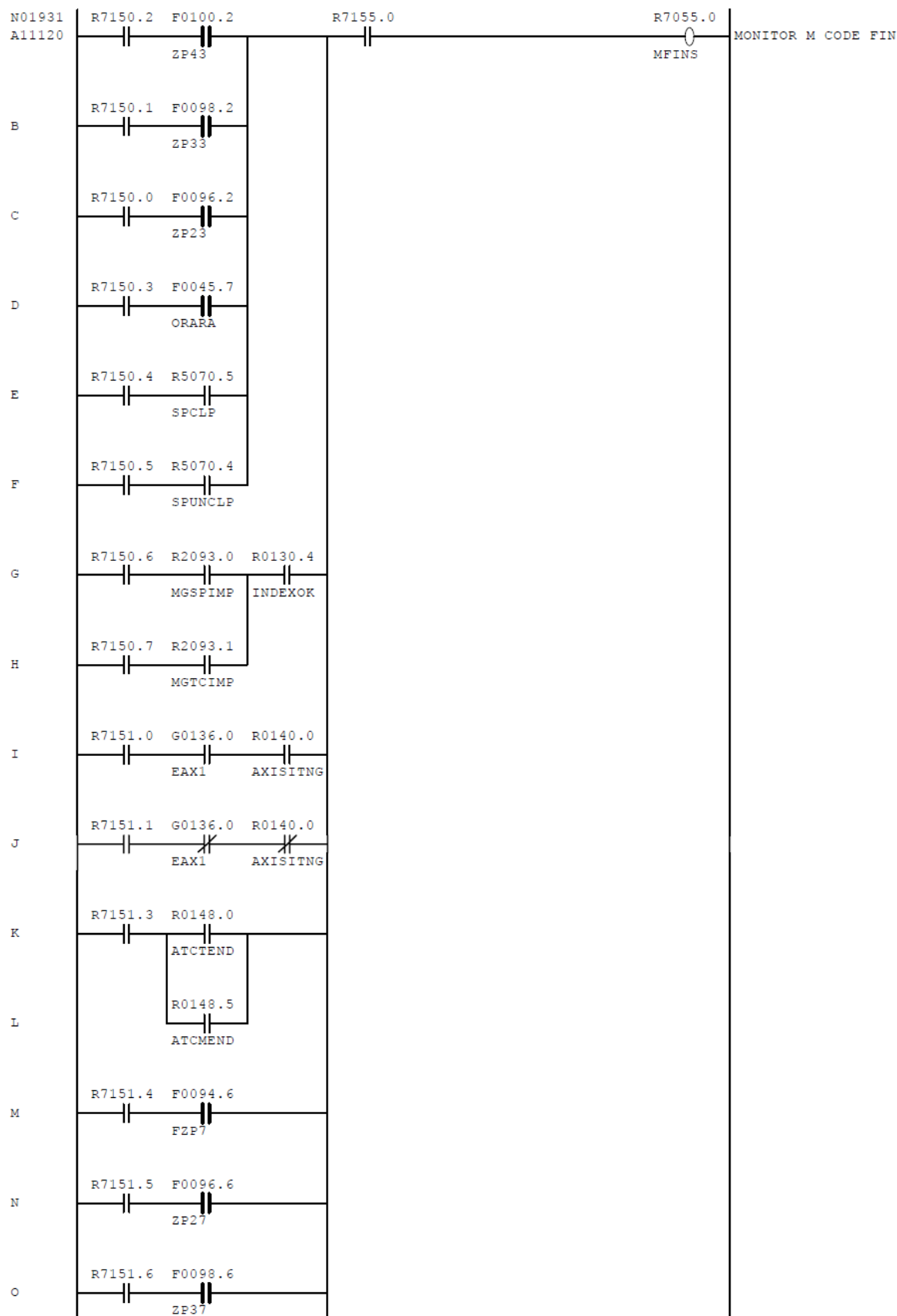


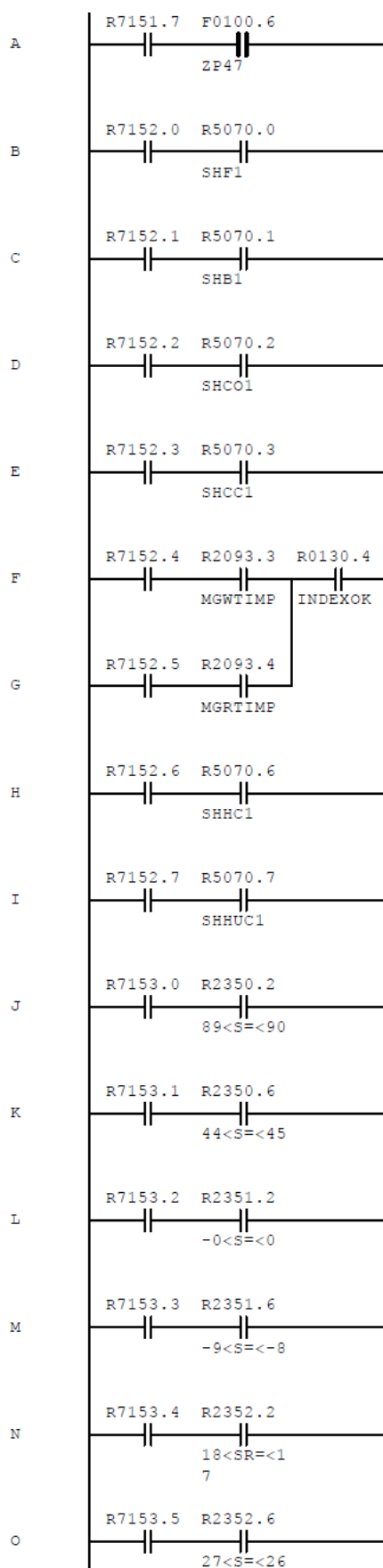


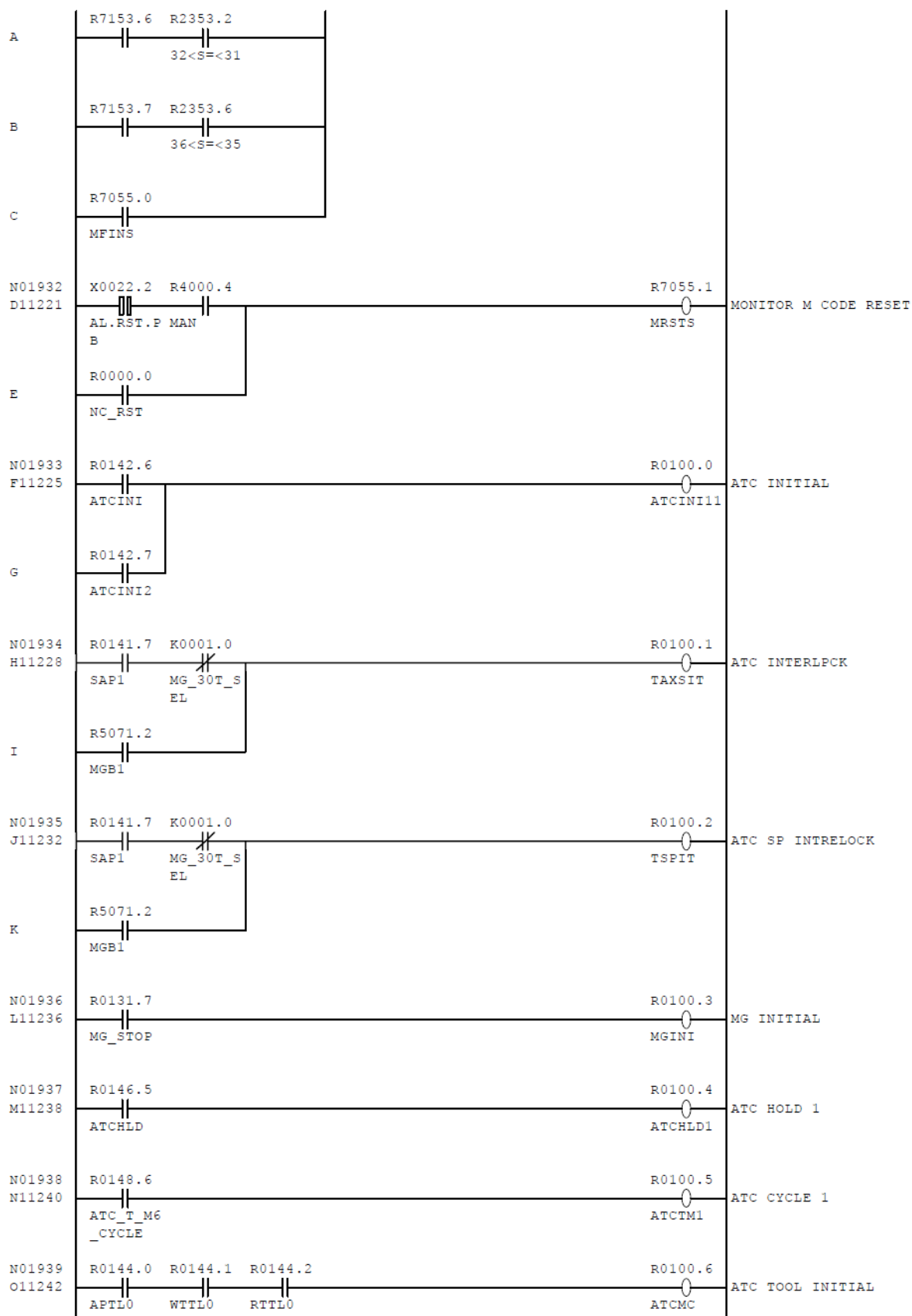


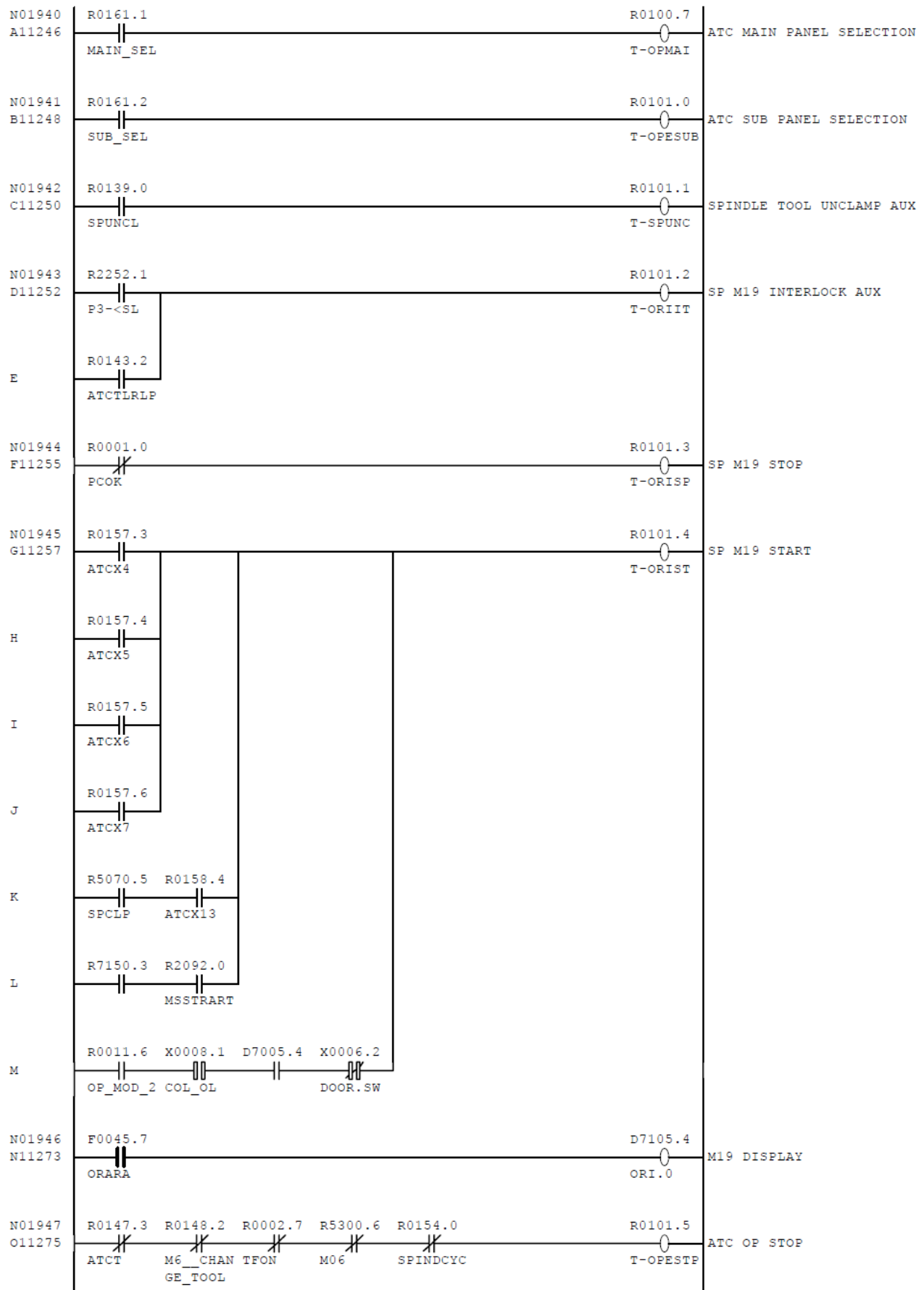


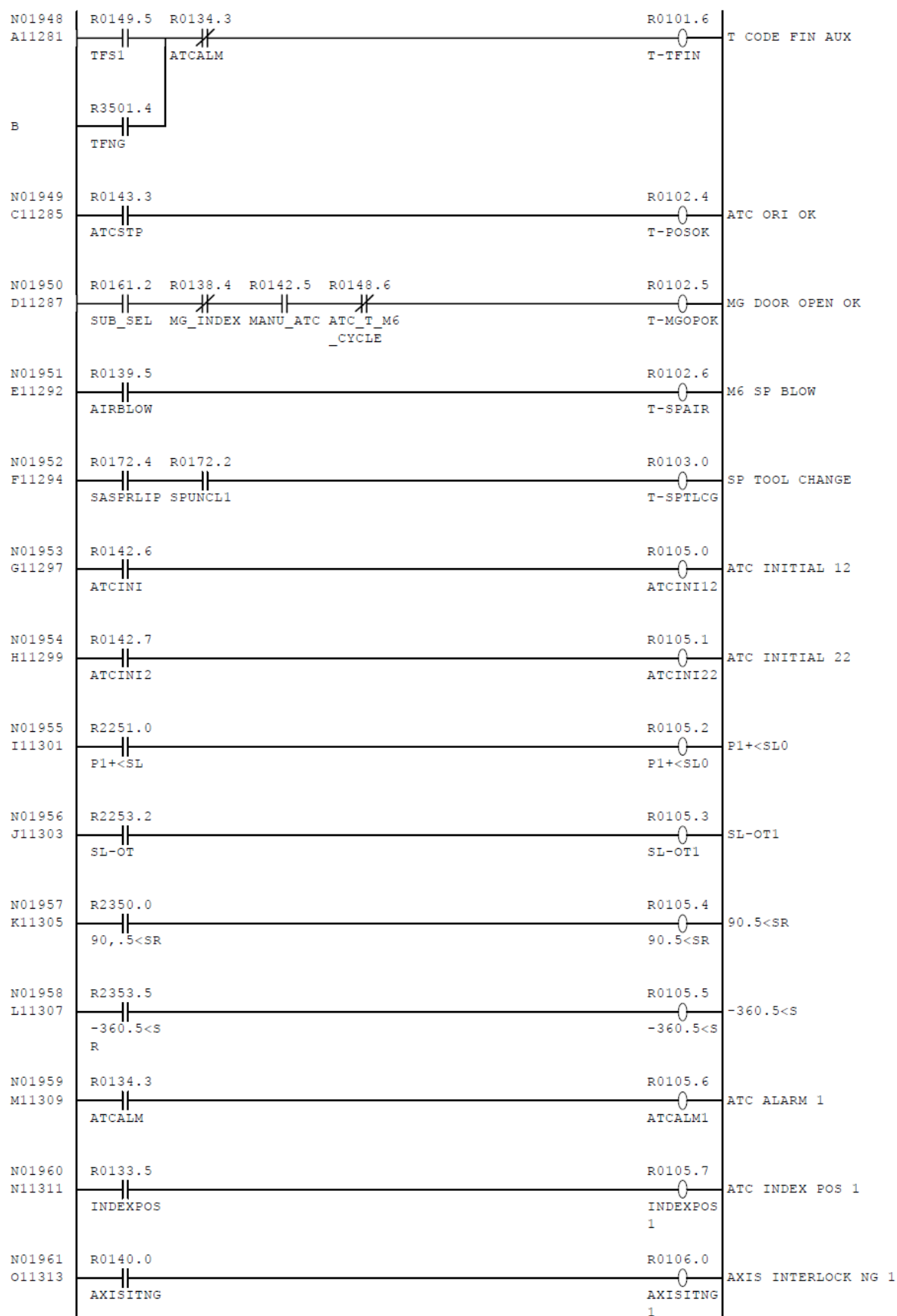


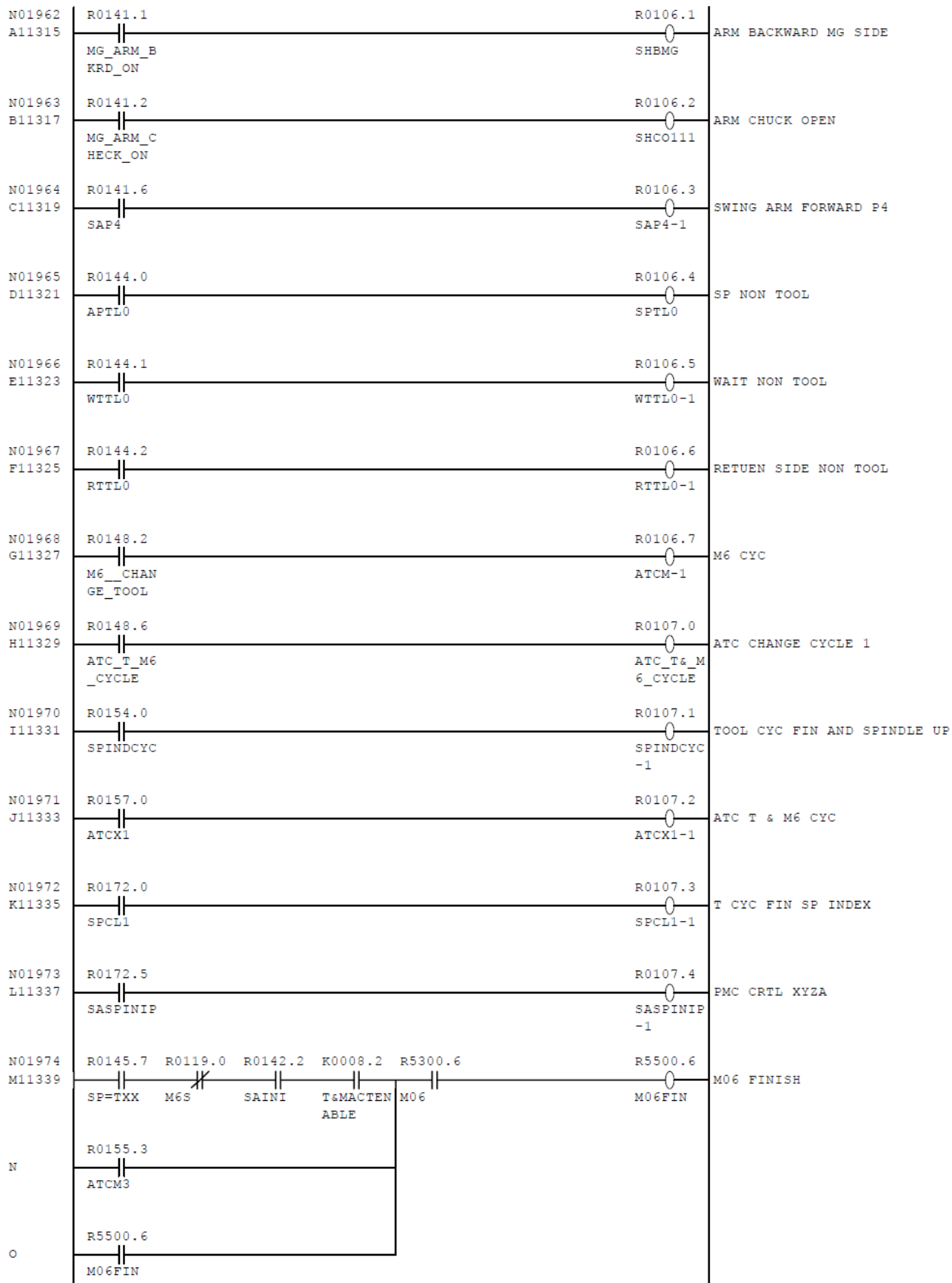


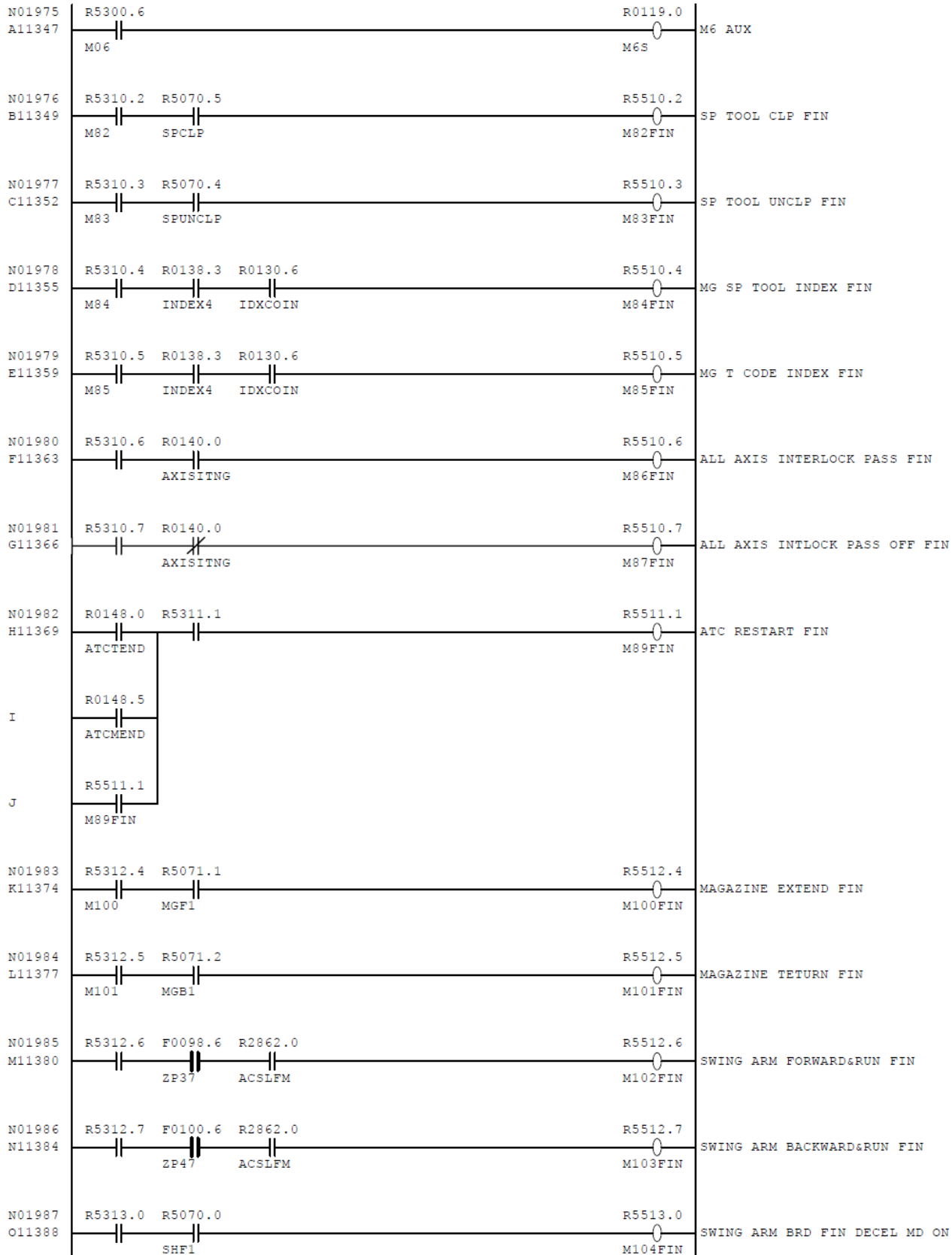




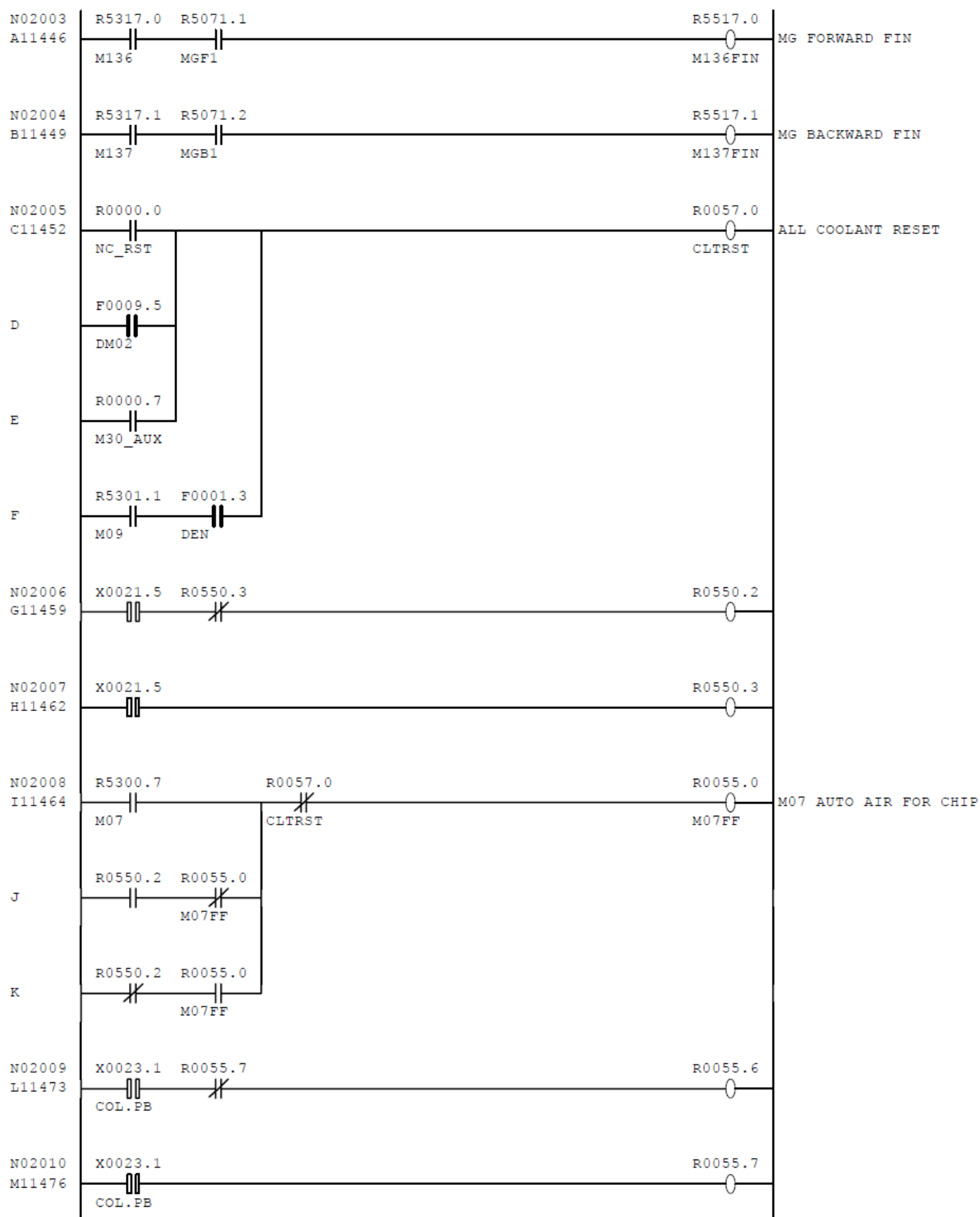


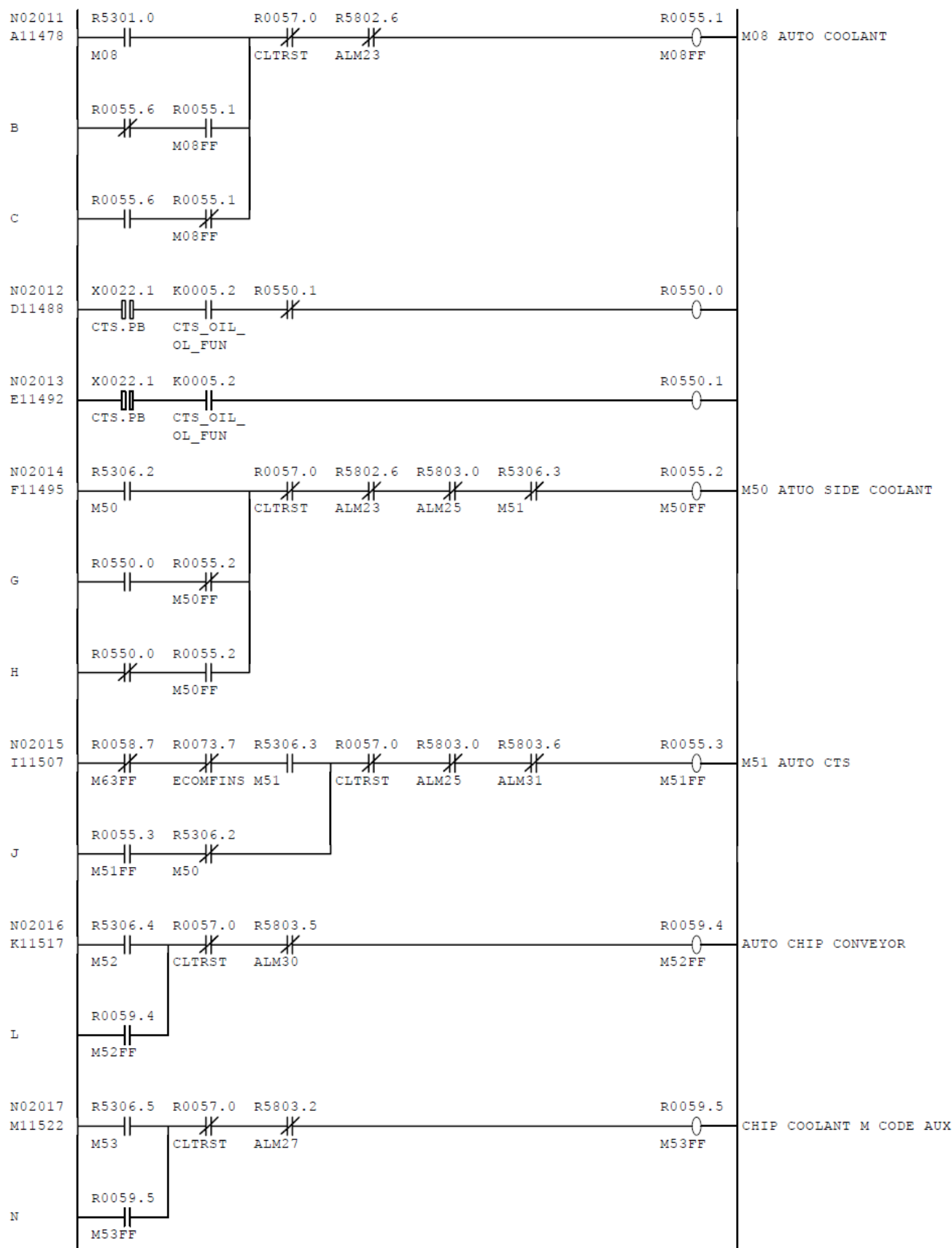


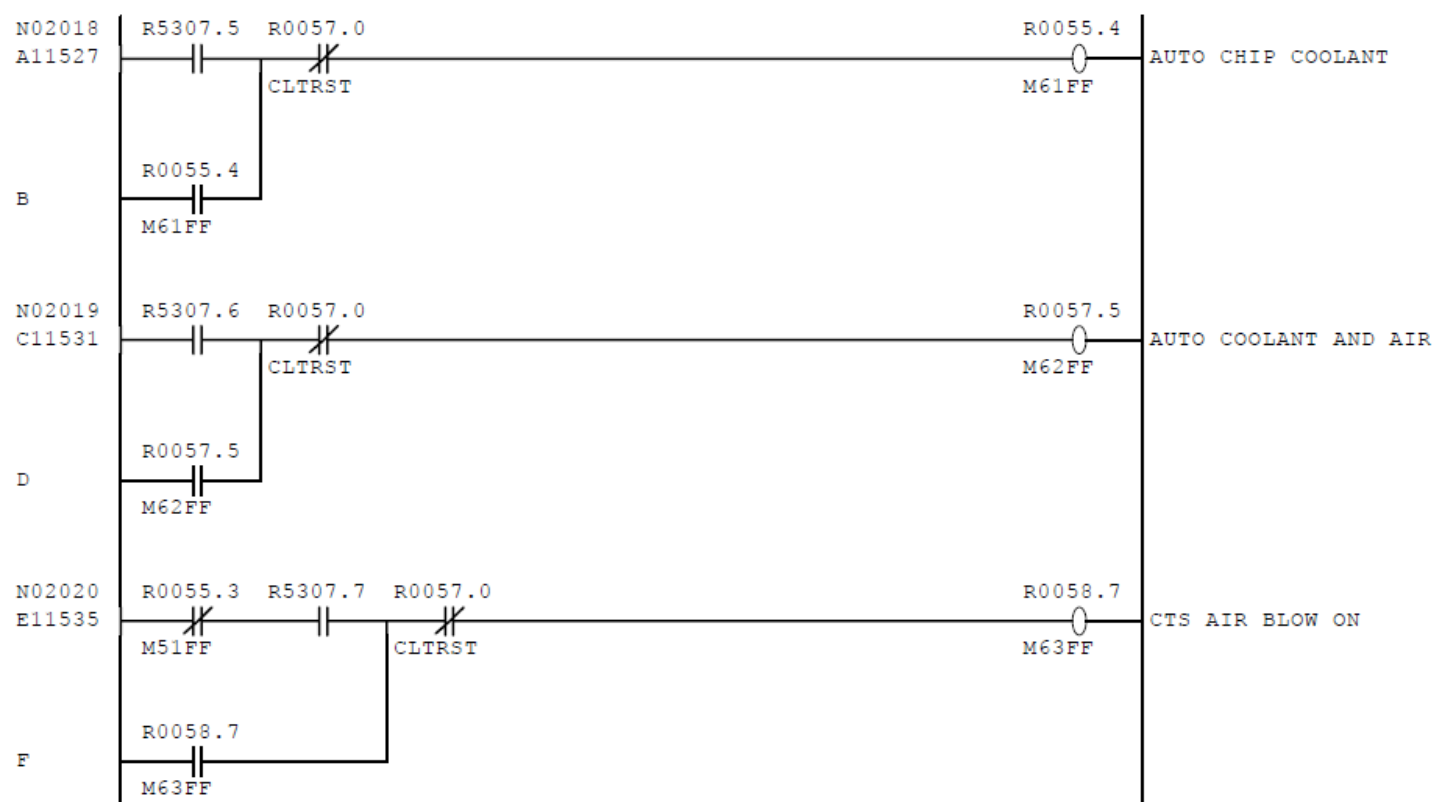


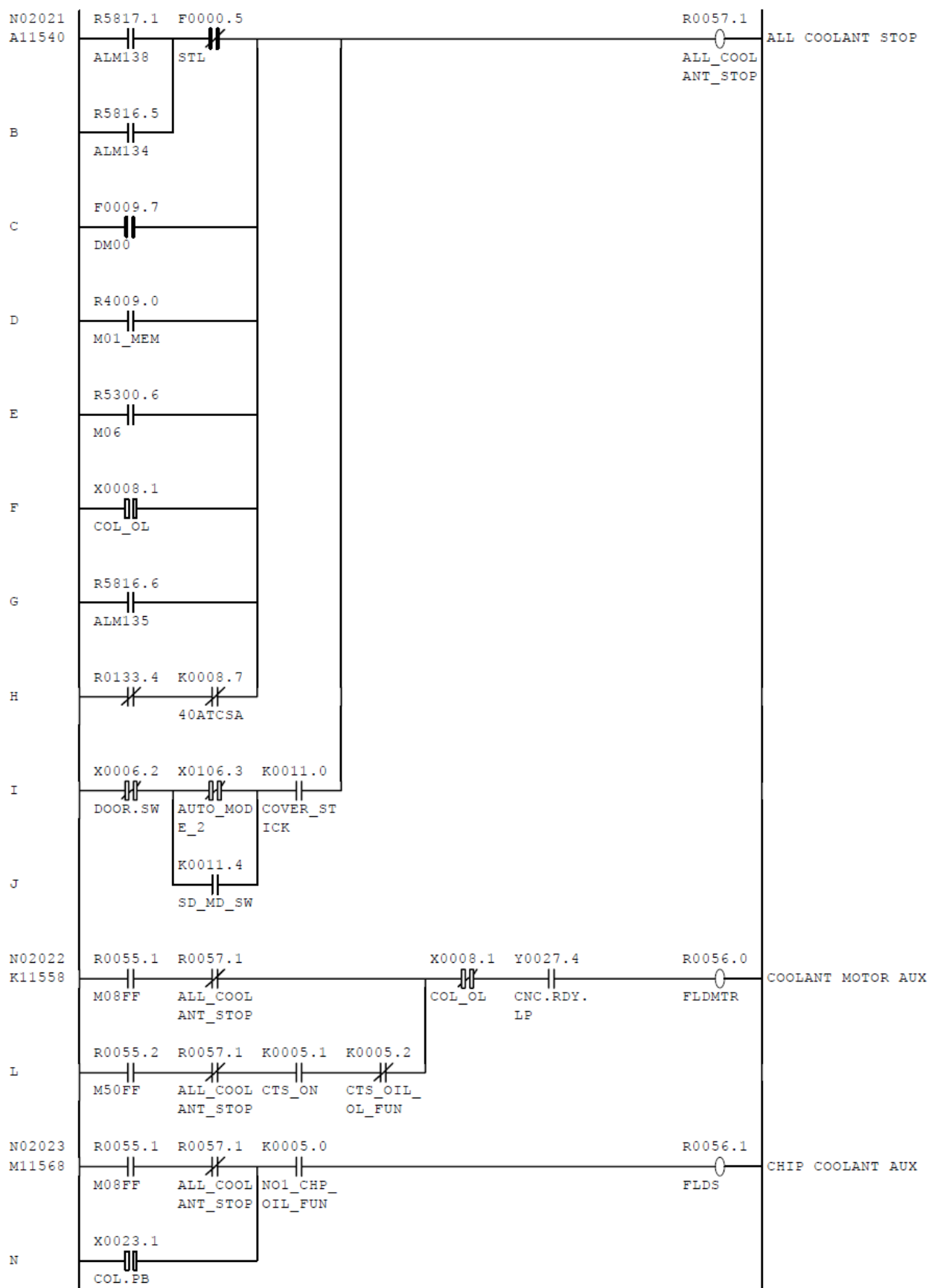


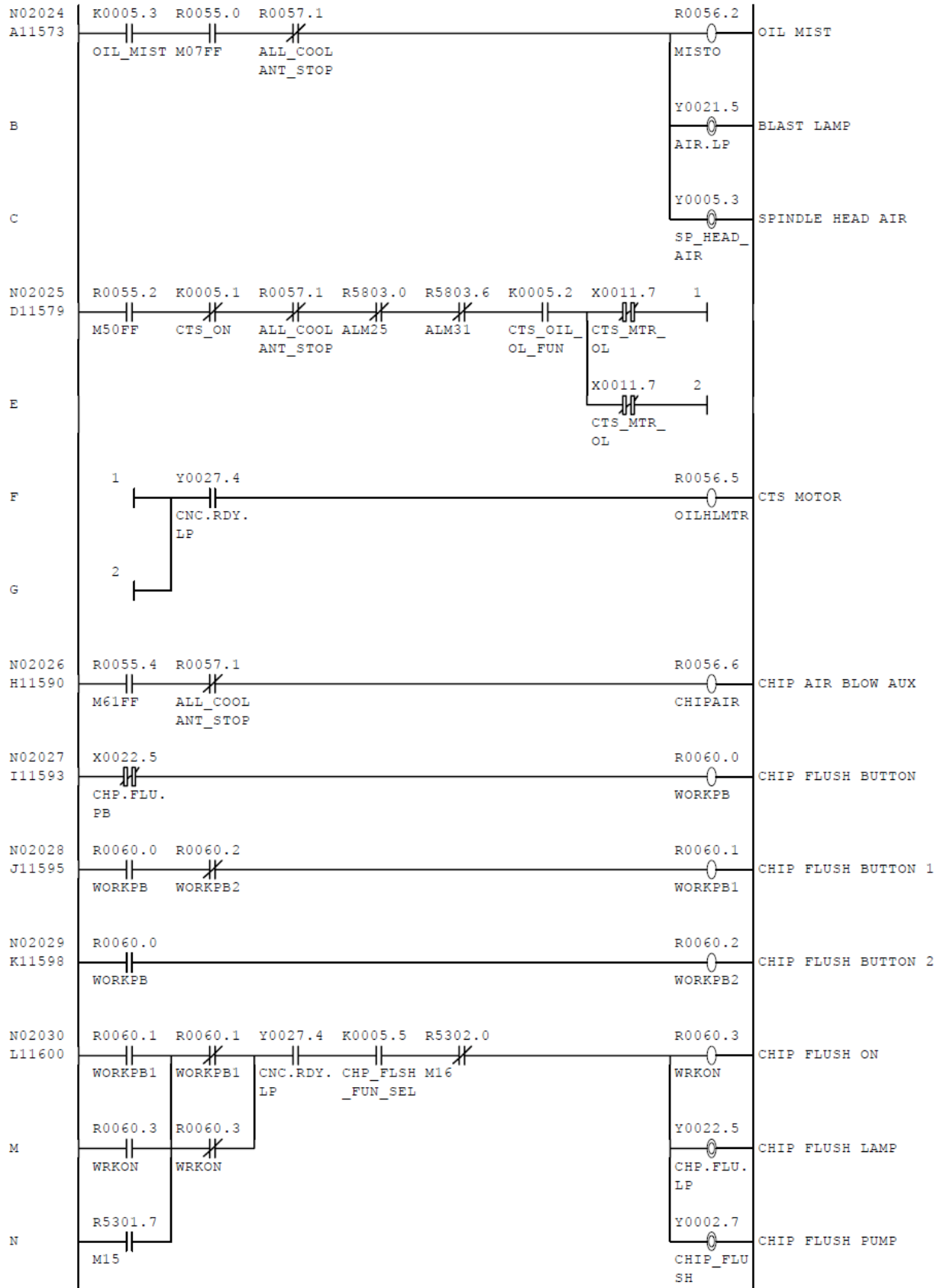
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N01989 B11394	R5313.2 R5070.2 SHCO1	R5513.2 M106FIN	ARM CHUCK OPEN FIN
N01990 C11397	R5313.3 R5070.3 SHCC1	R5513.3 M107FIN	ARM CHUCK CLOSE FIN
N01991 D11400	R5313.4 R0138.3 R0130.6 INDEX4 IDXC0IN	R5513.4 M108FIN	MG WAIT TOOL INDEX FIN
N01992 E11404	R5313.5 R0138.3 R0130.6 INDEX4 IDXC0IN	R5513.5 M109FIN	MG RETURN TOOL INDEX FIN
N01993 F11408	R5315.0 R5070.6 SHHC1	R5515.0 M120FIN	ARM HEAD CLP FIN
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N02000 M11434	R5315.7 R2352.6 R2872.0 27<S=<26 ACSRFM	R5515.7 M127FIN	SWING ARM -270 DEGREE
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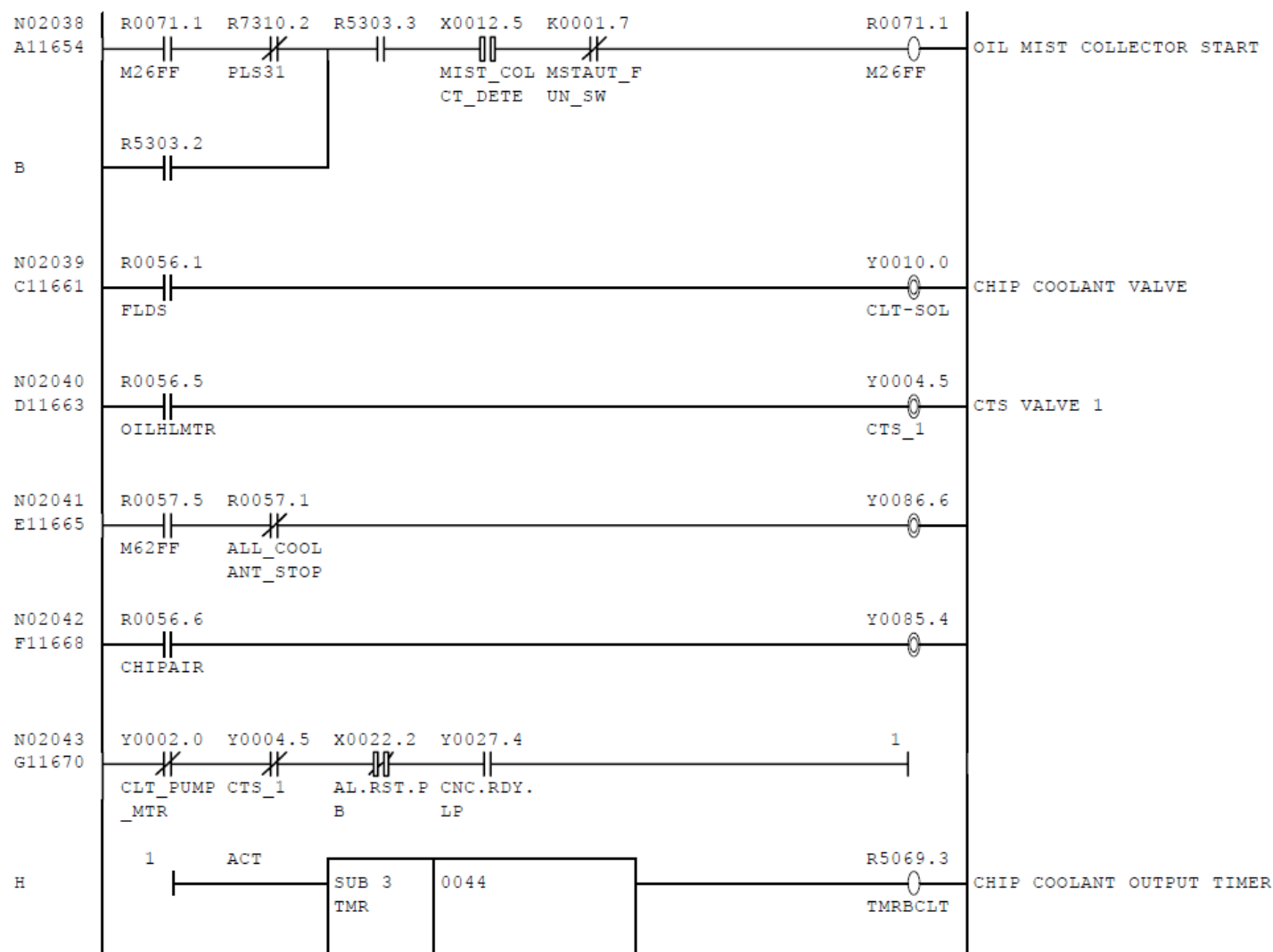


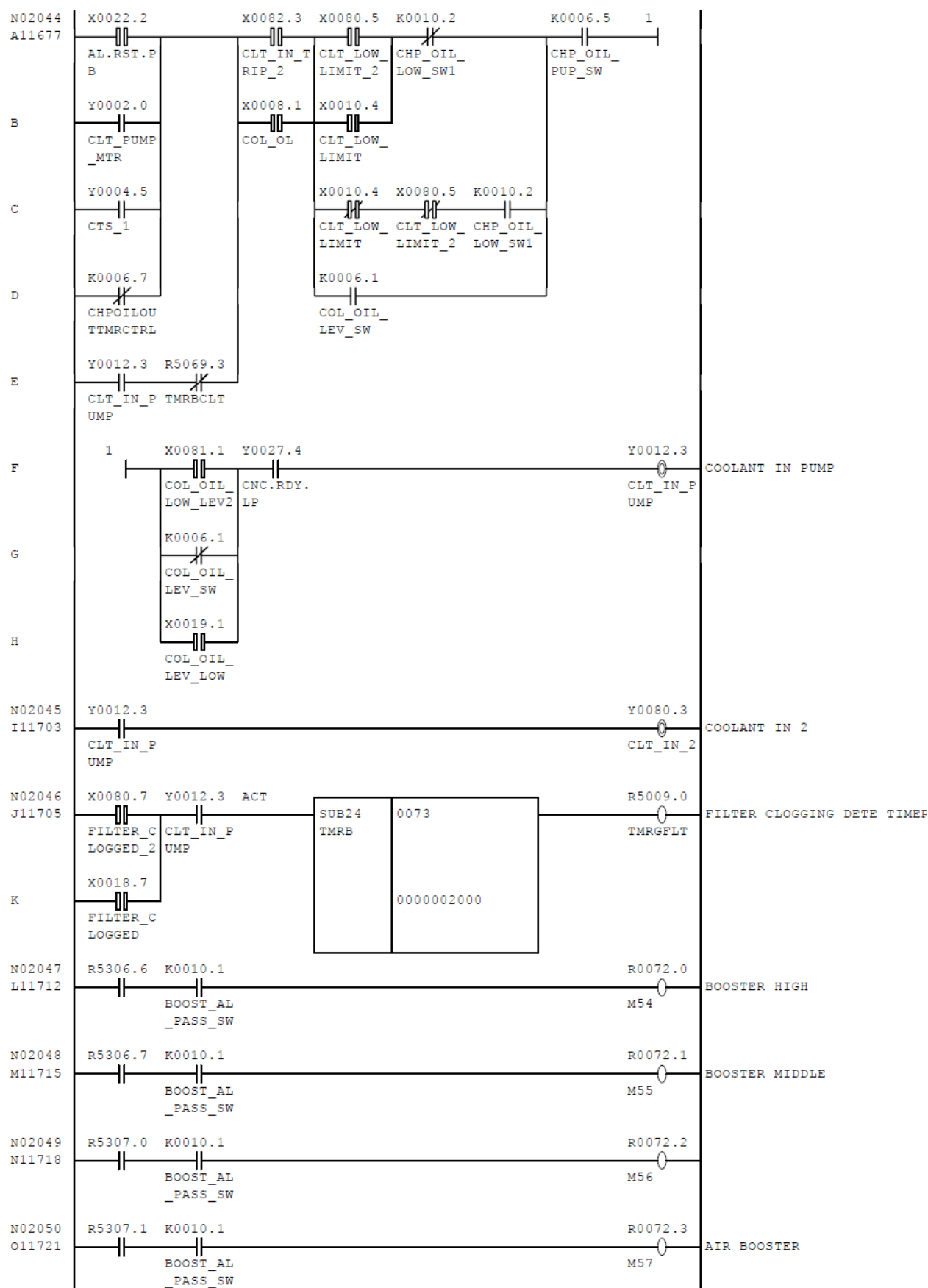


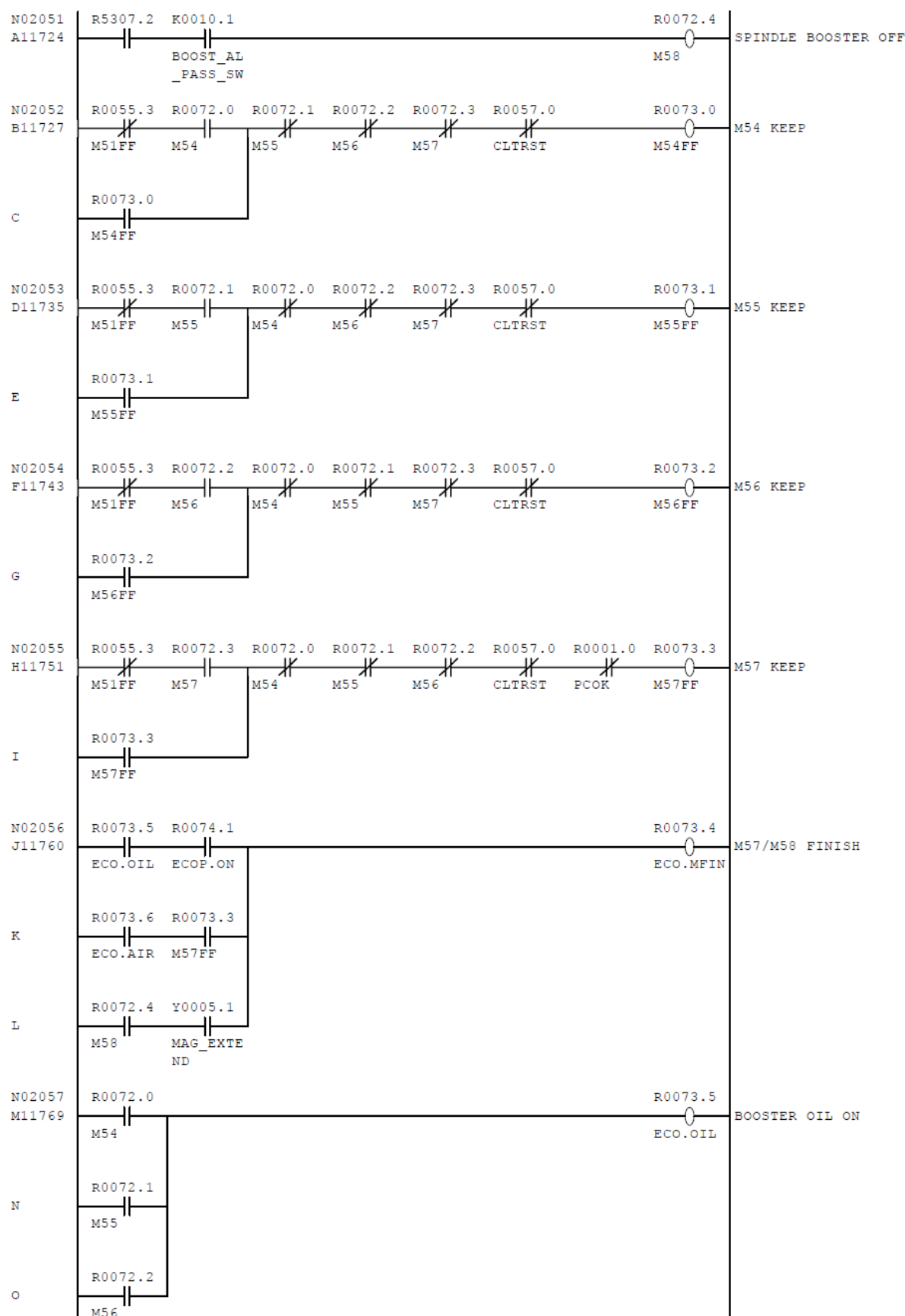


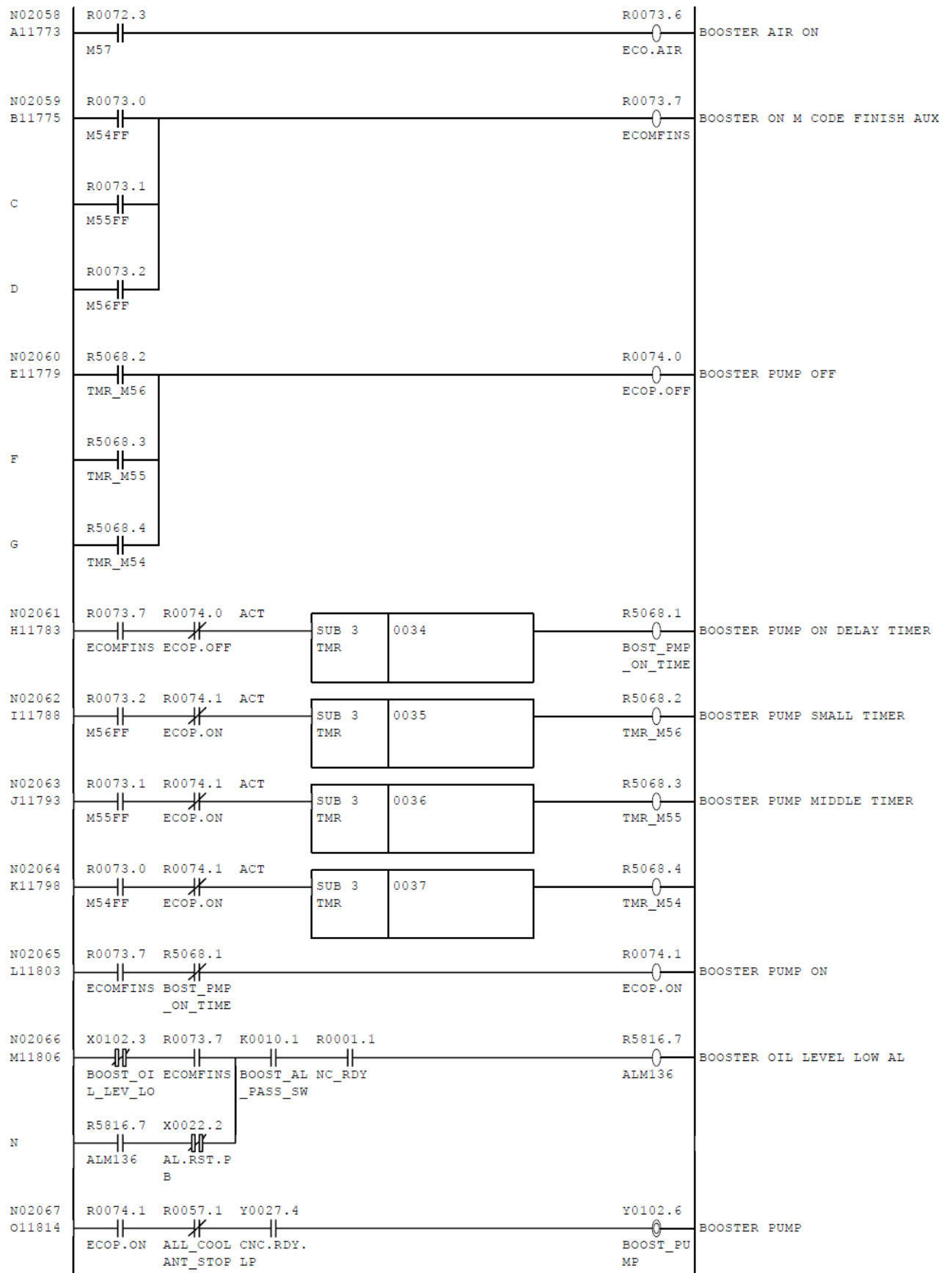


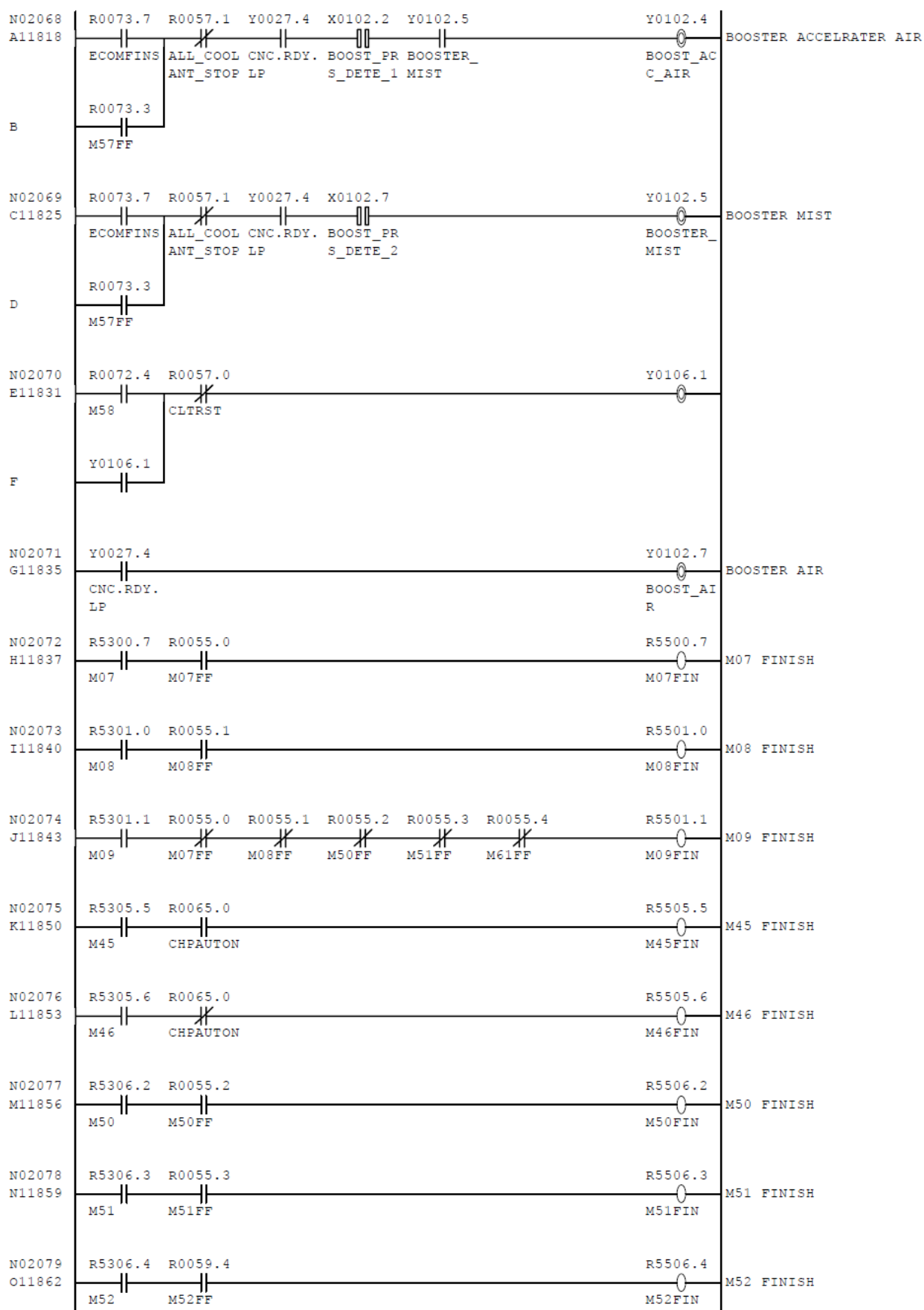


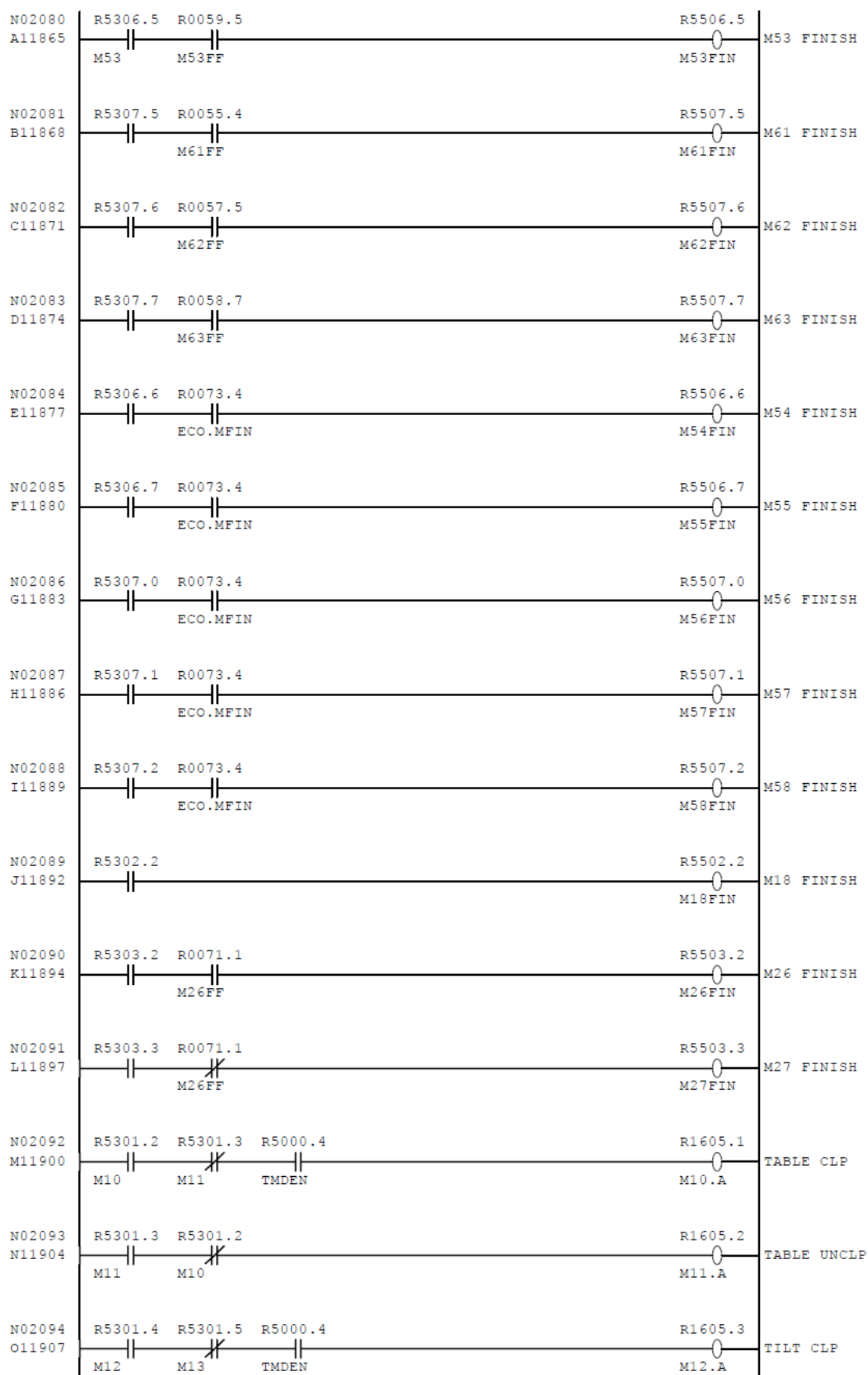


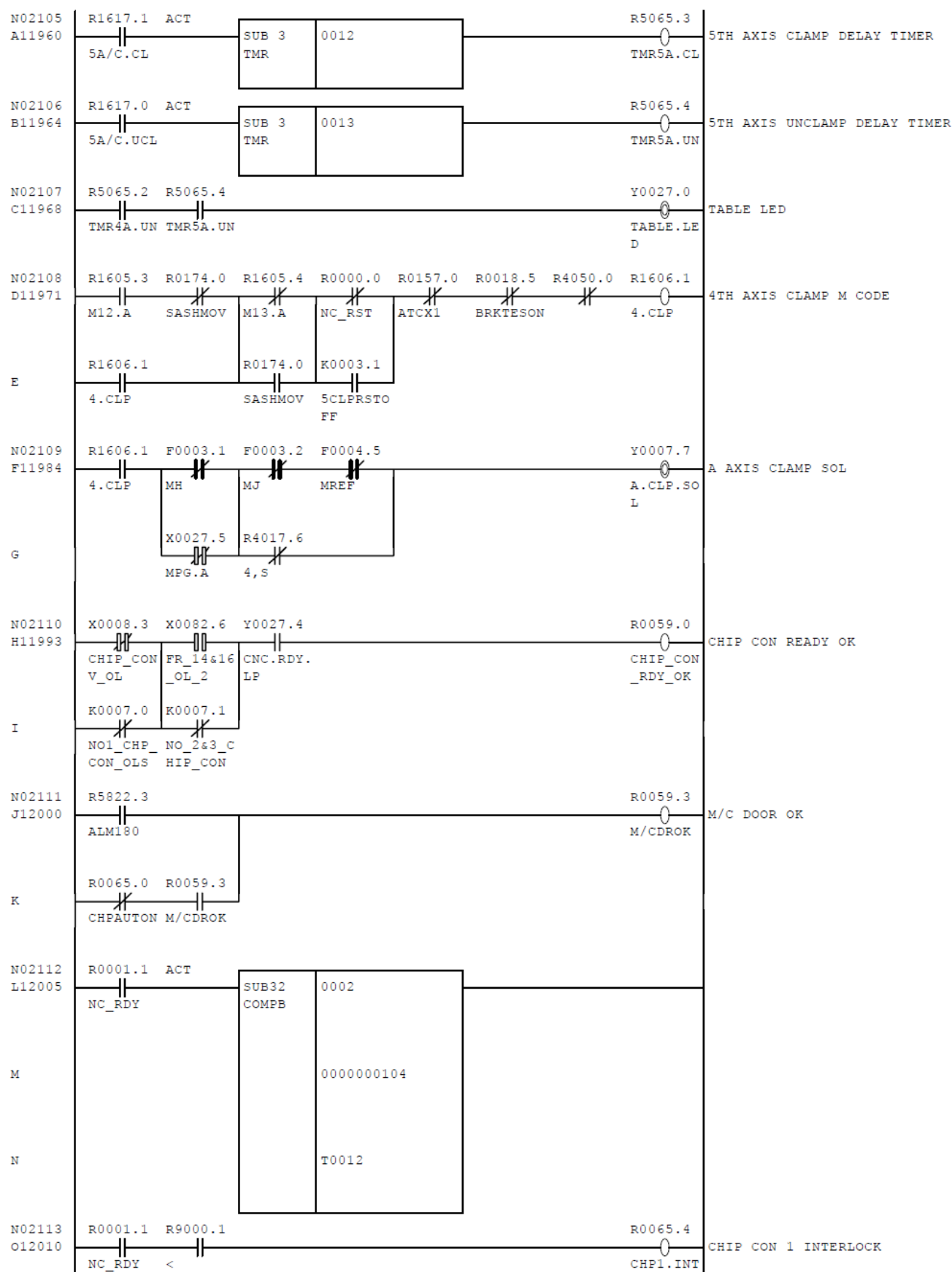


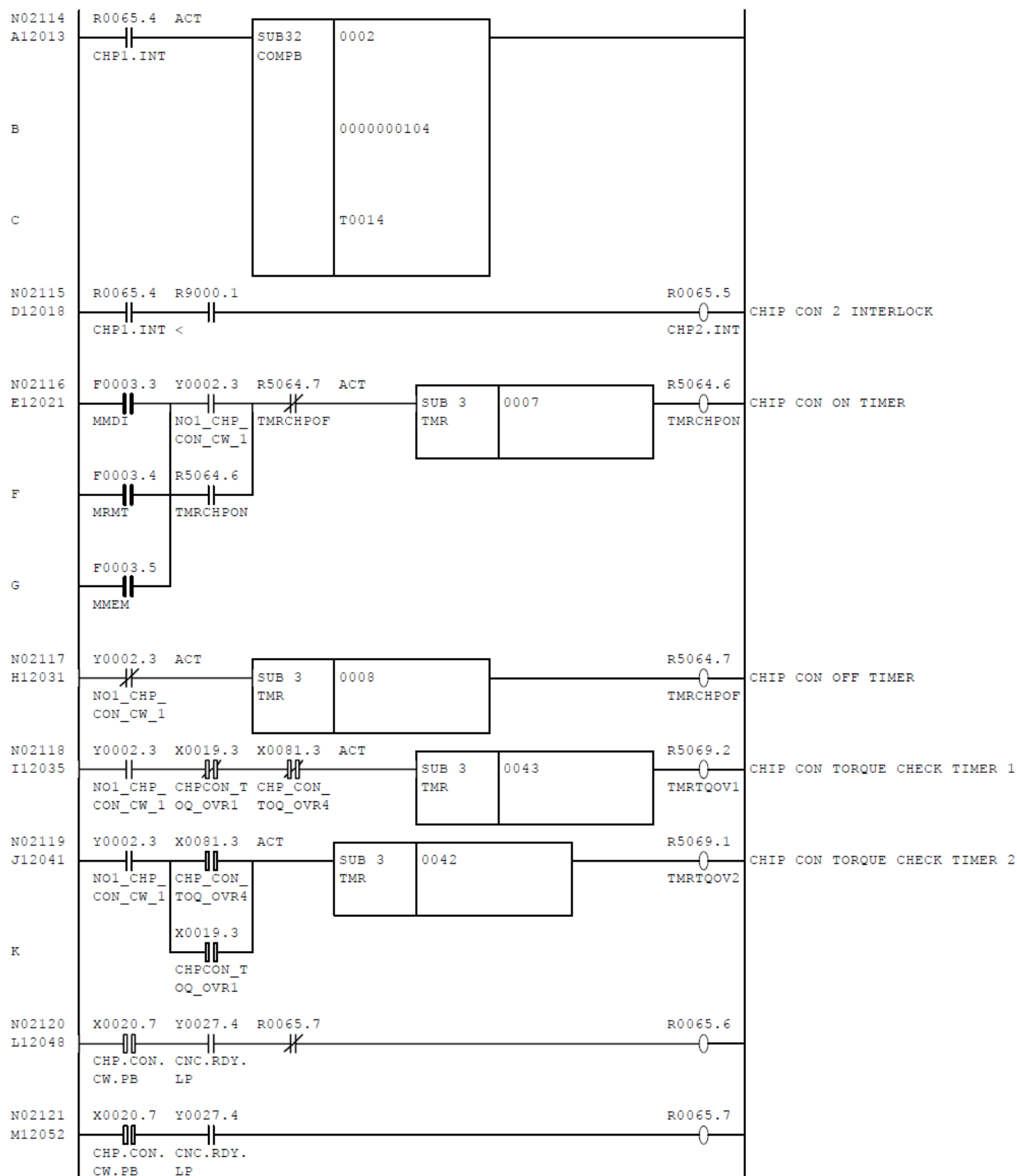


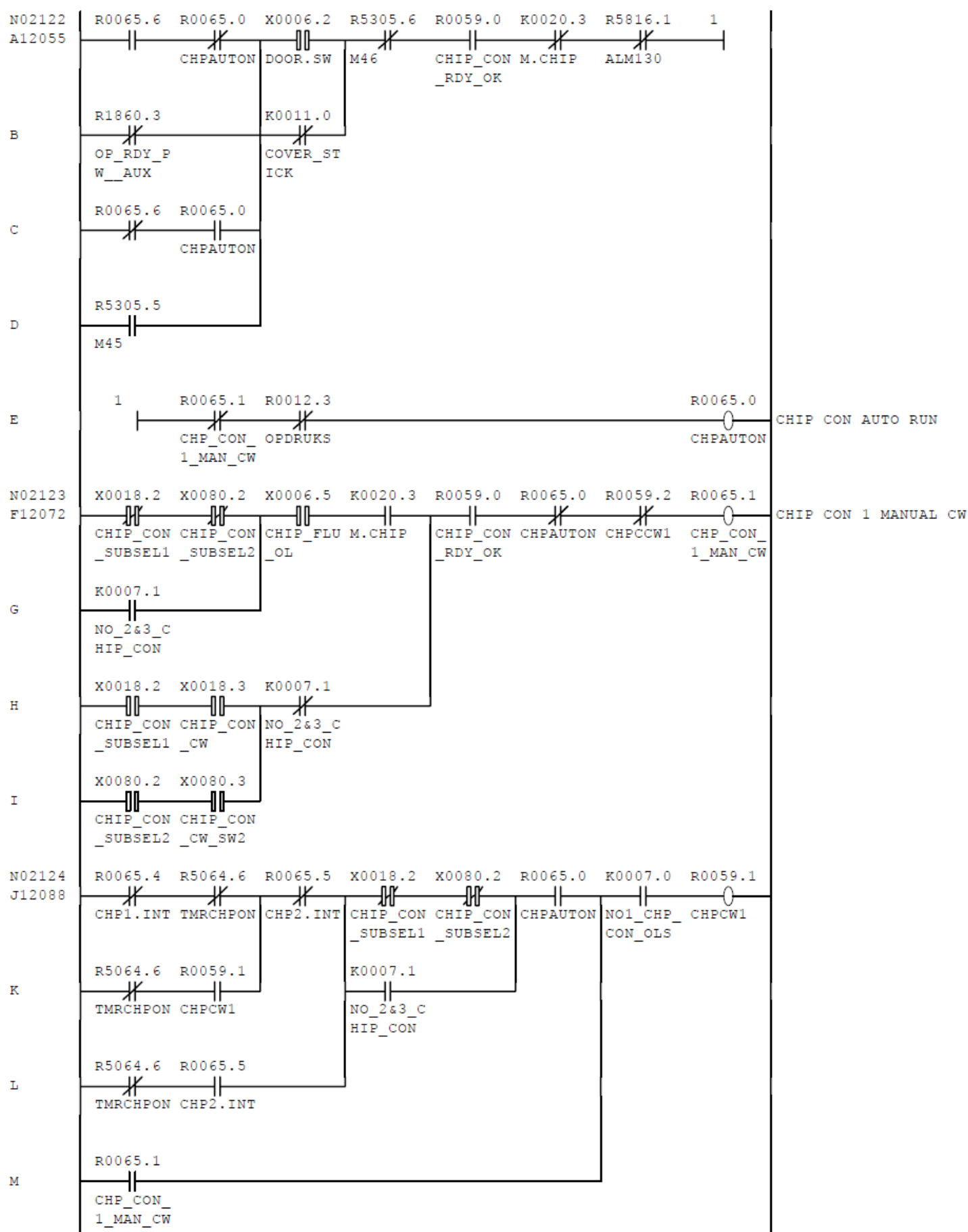


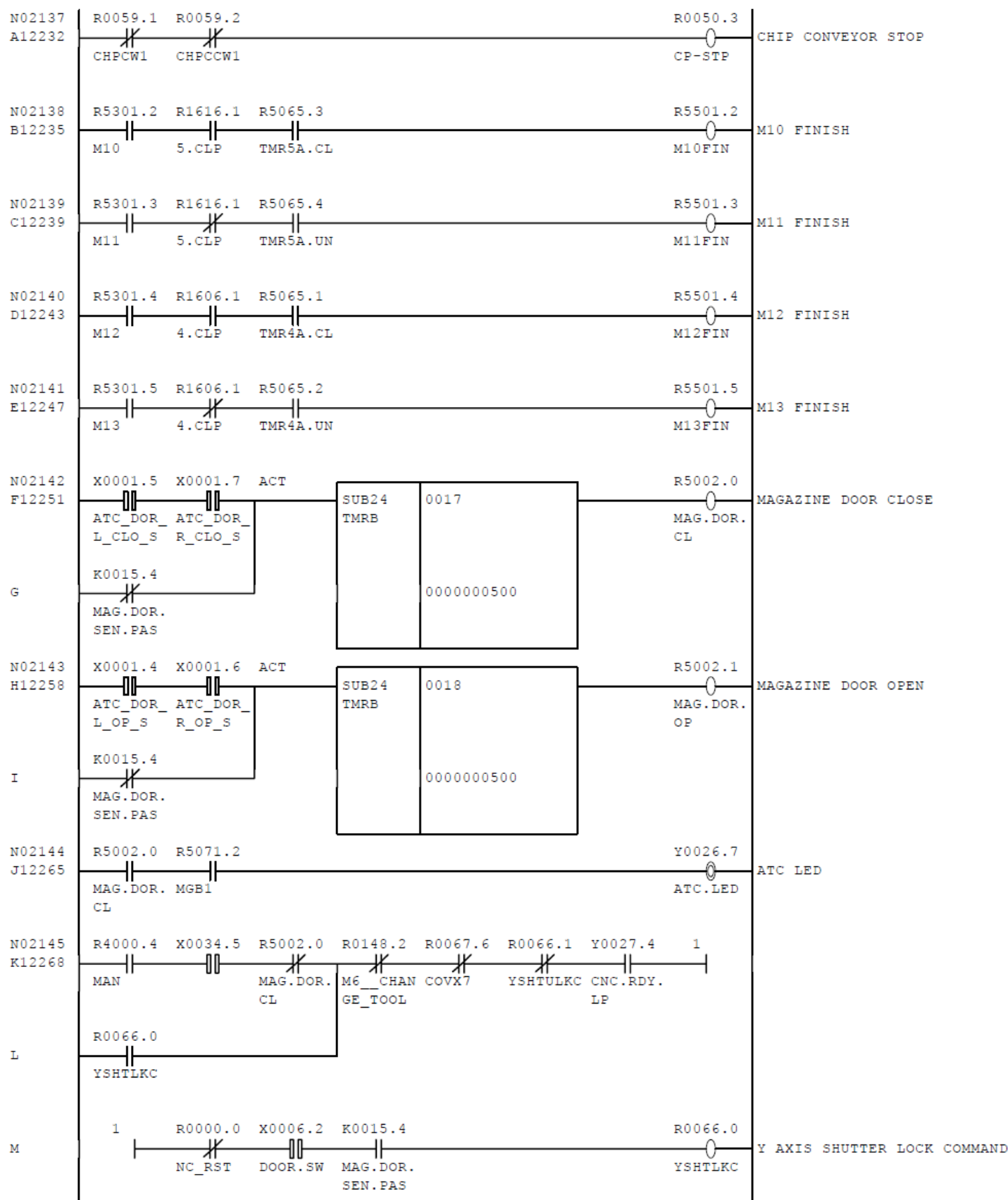


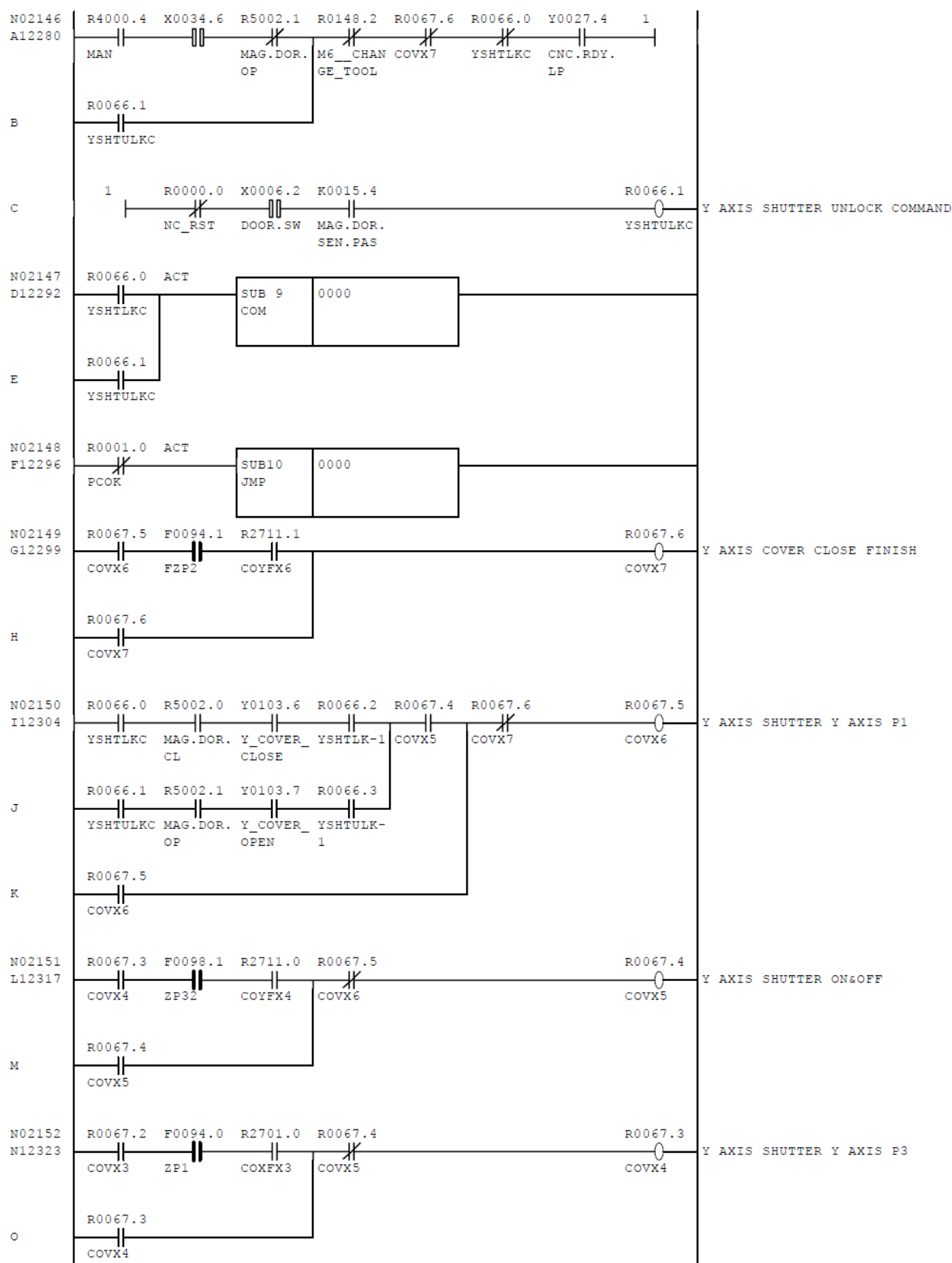


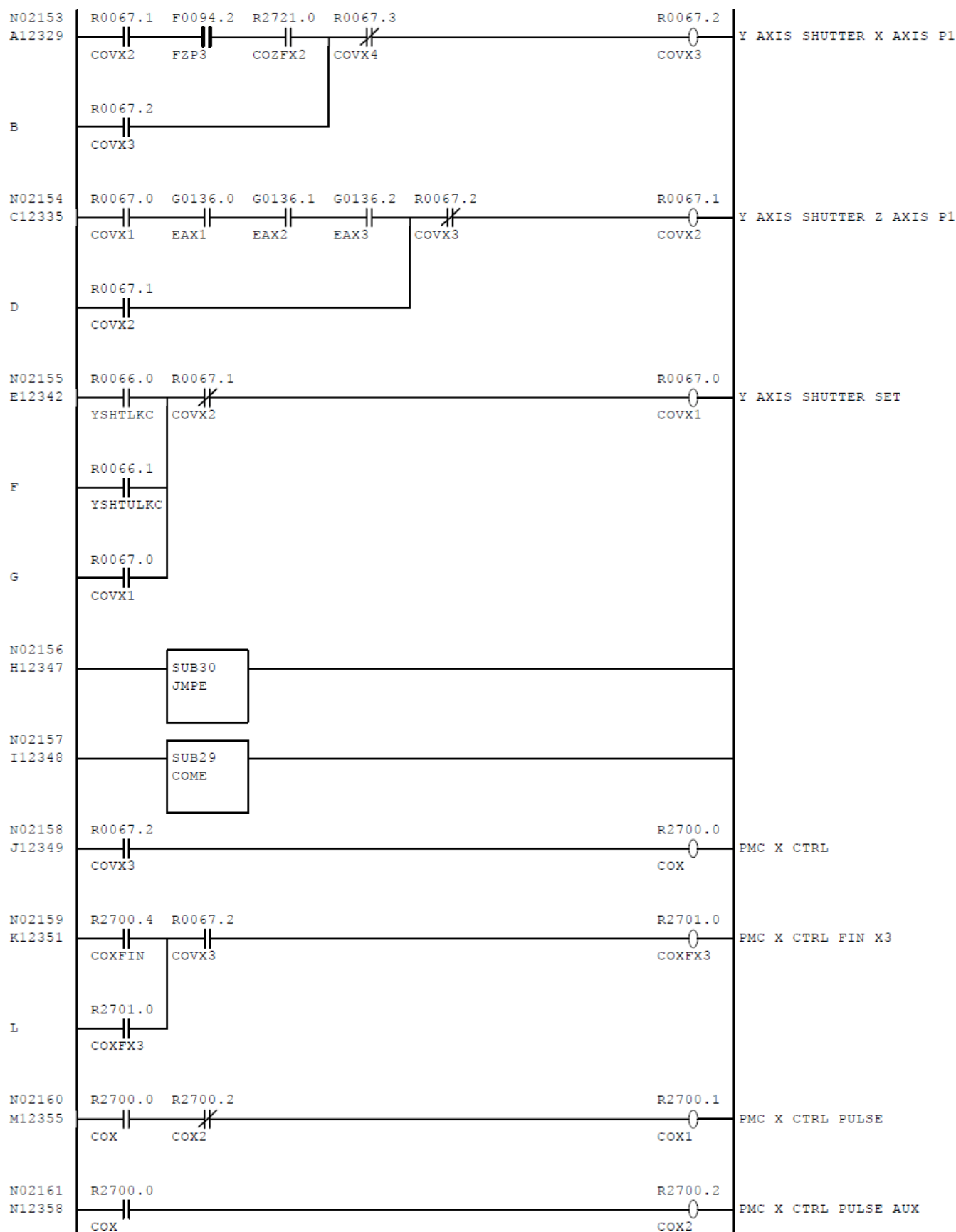


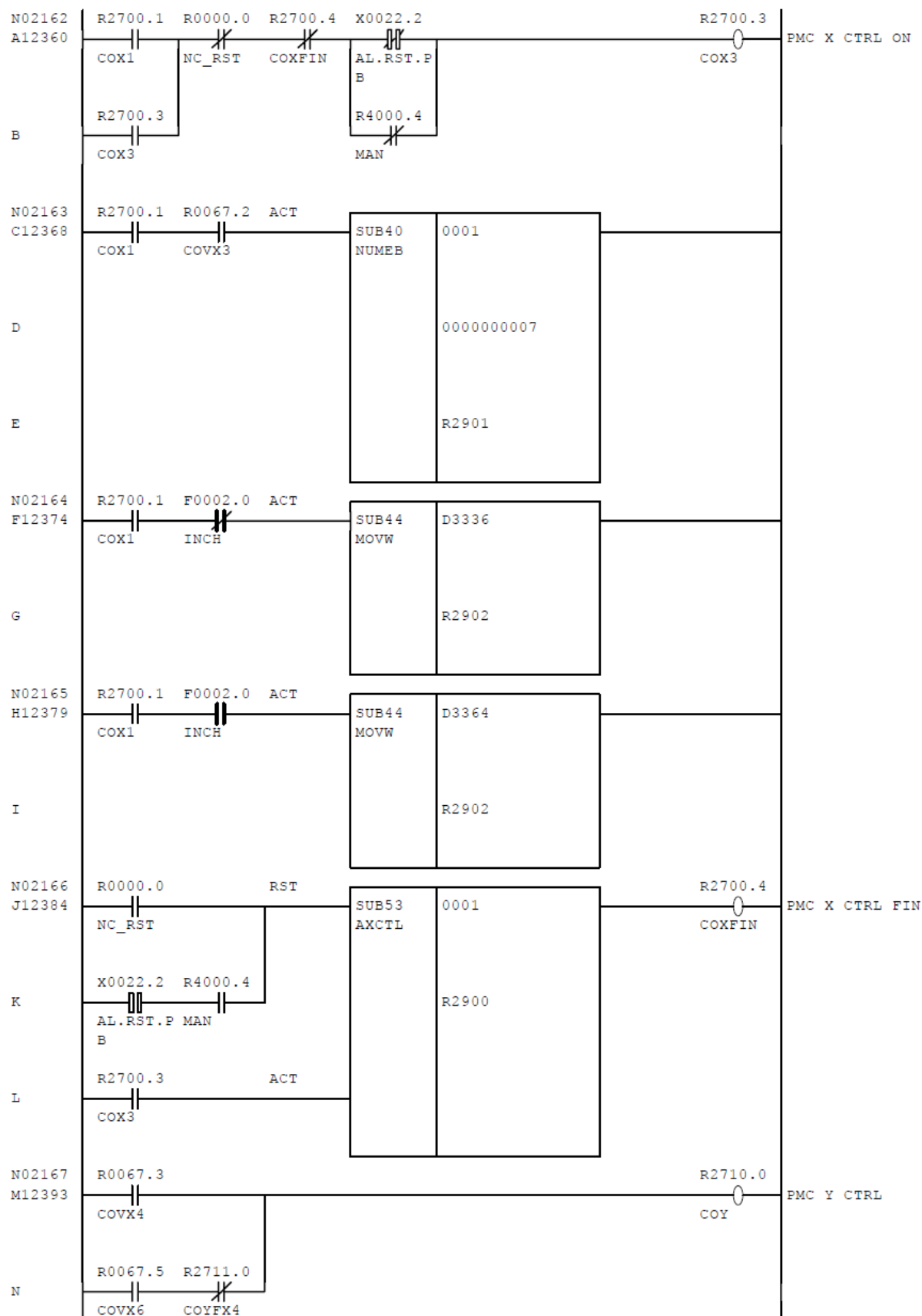


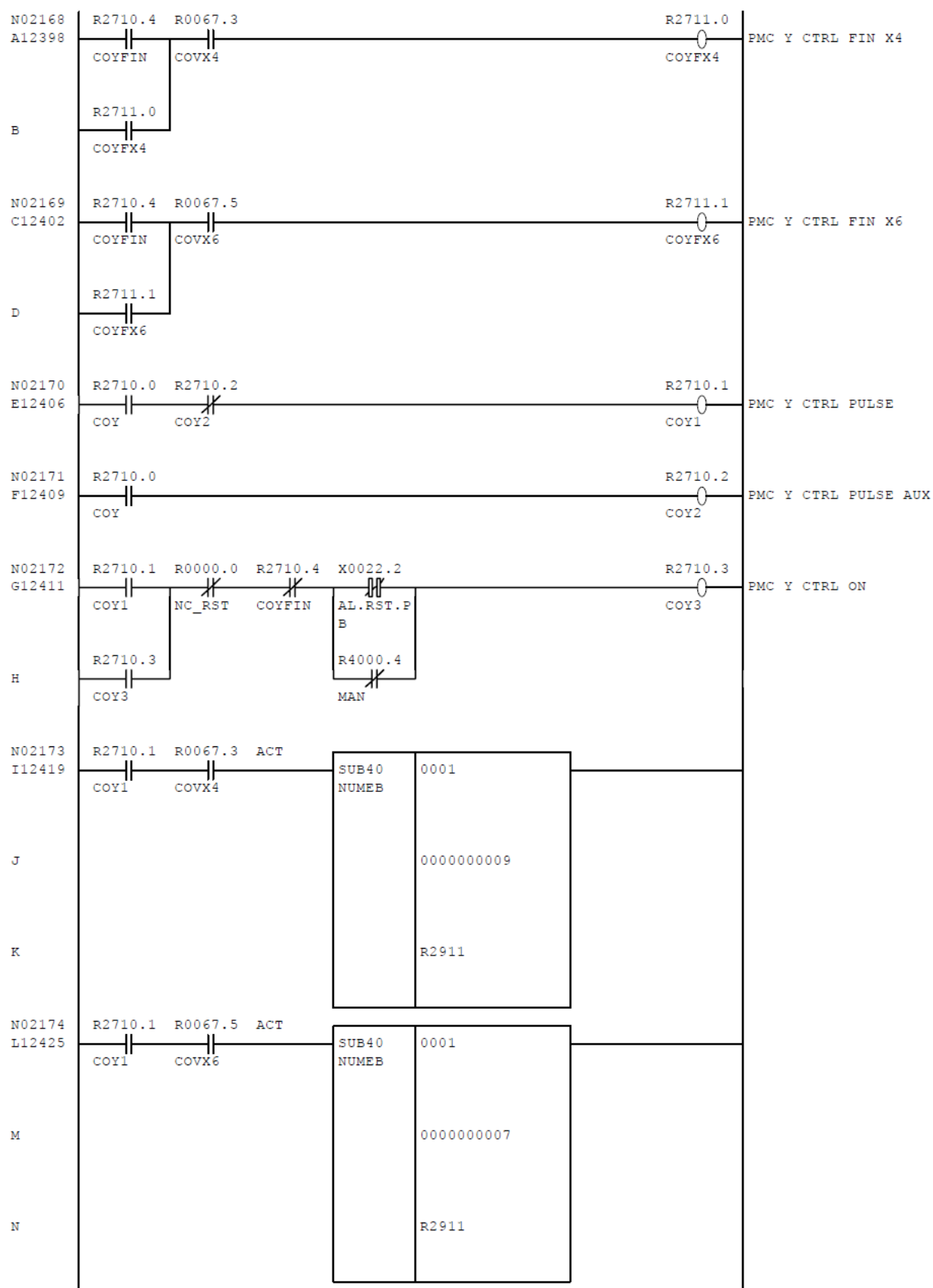


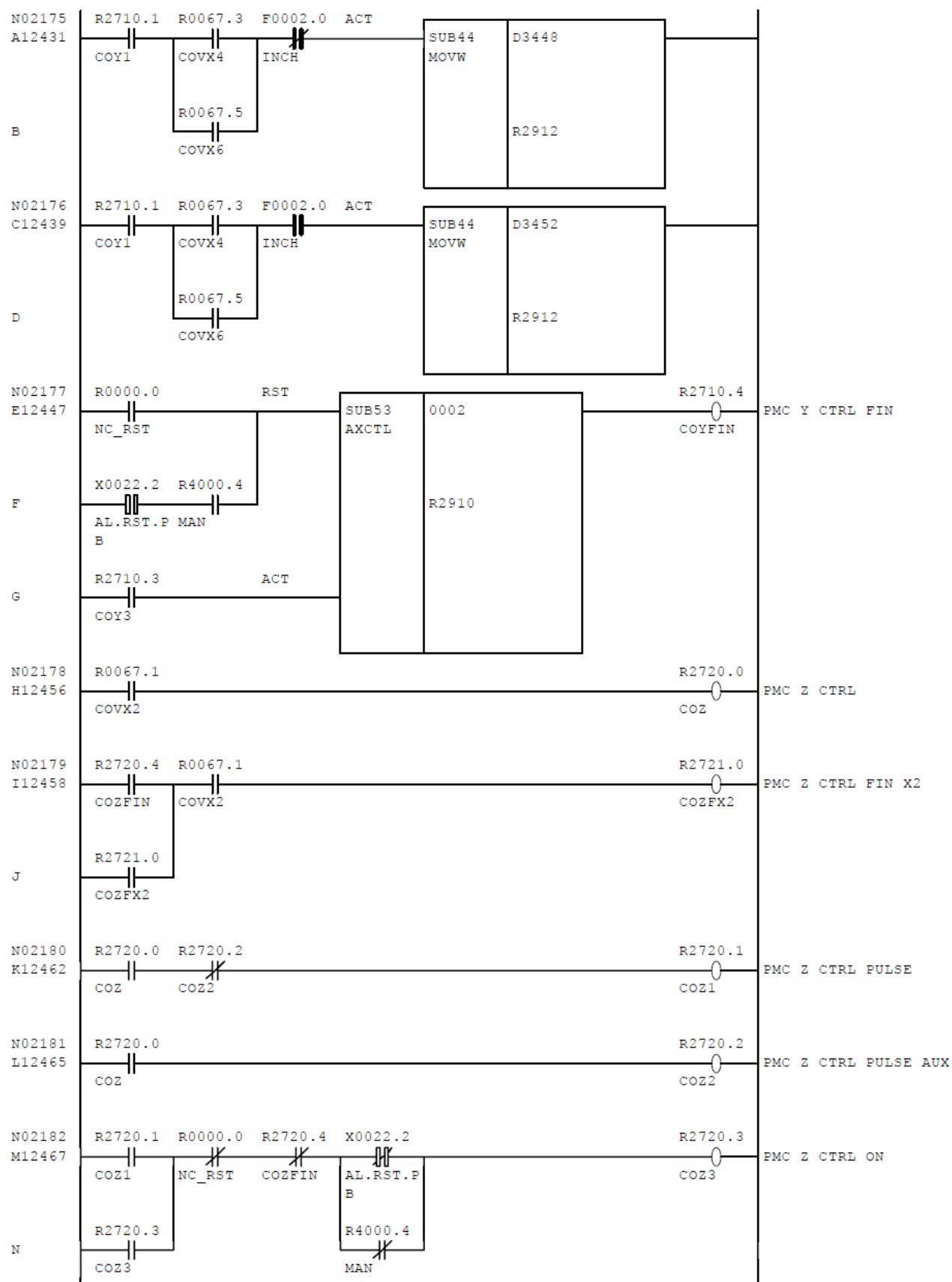


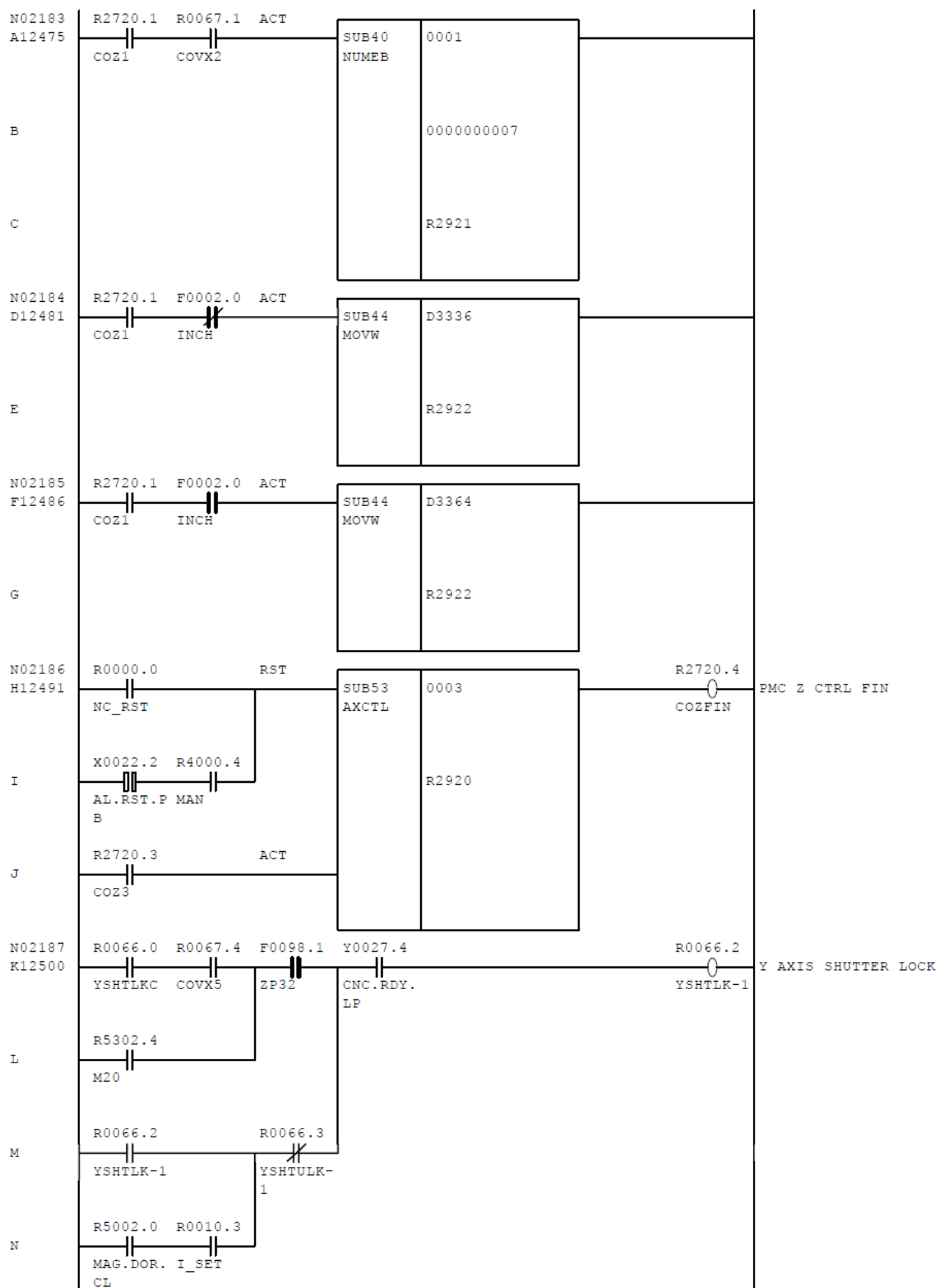


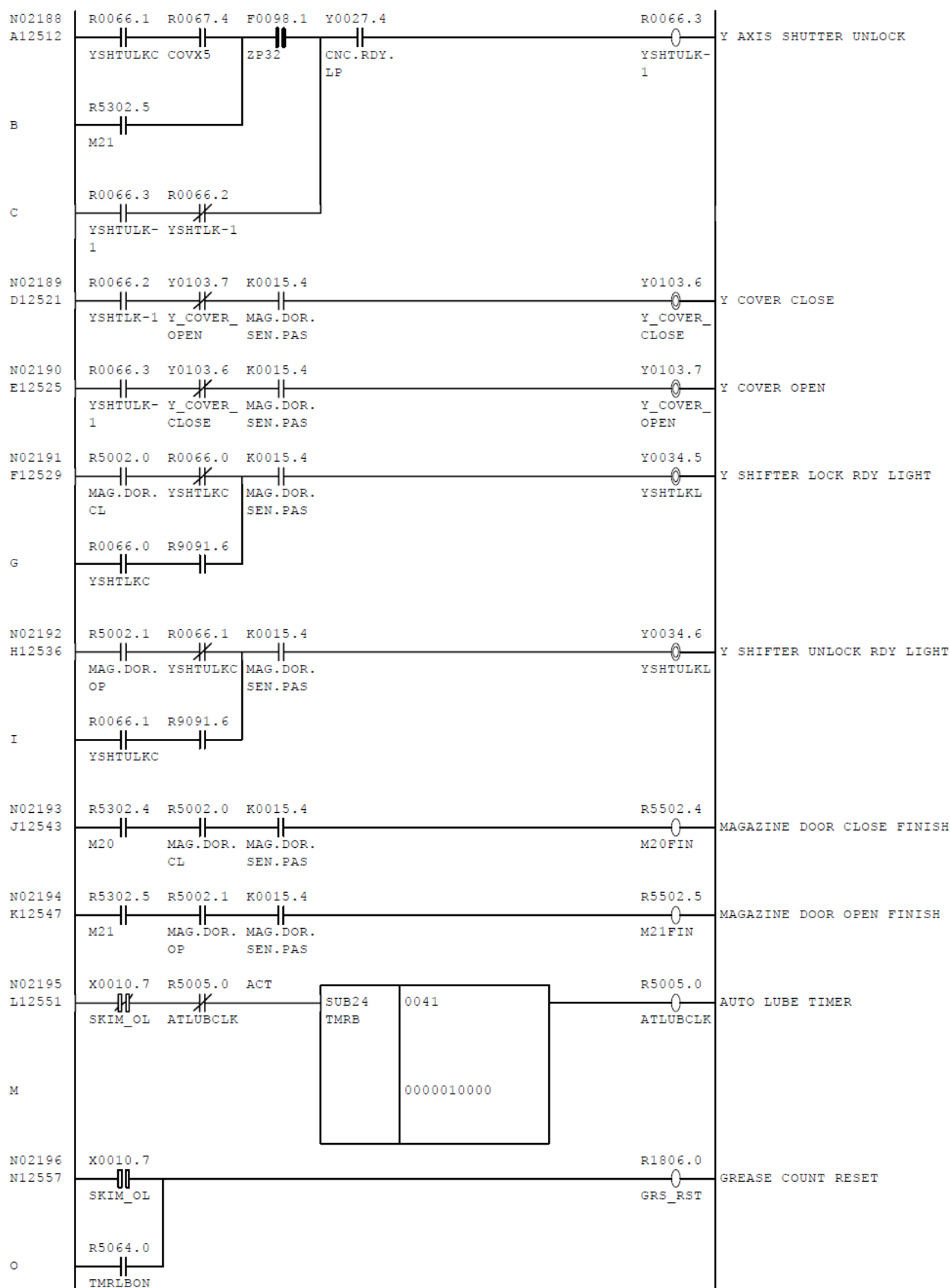


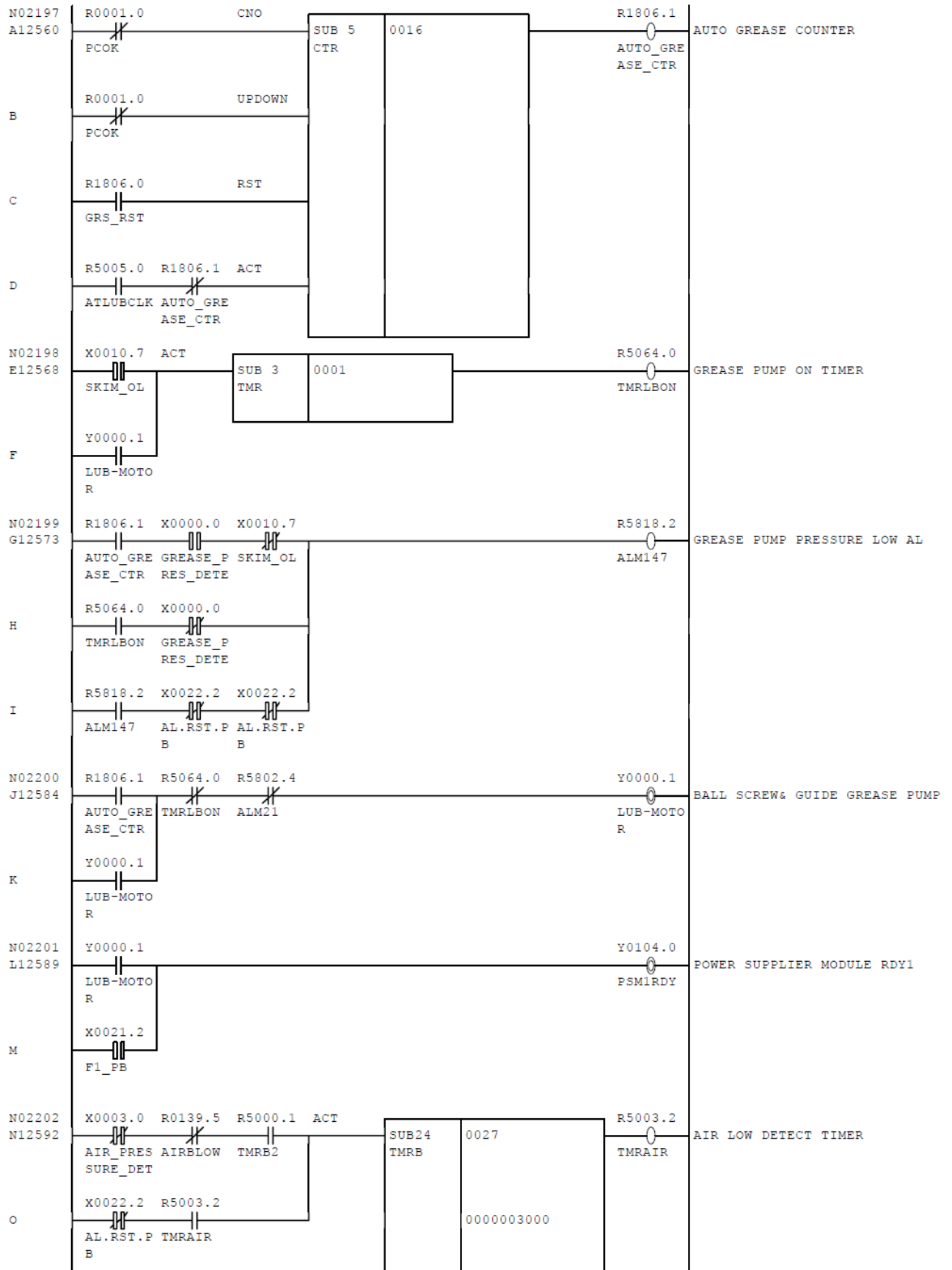


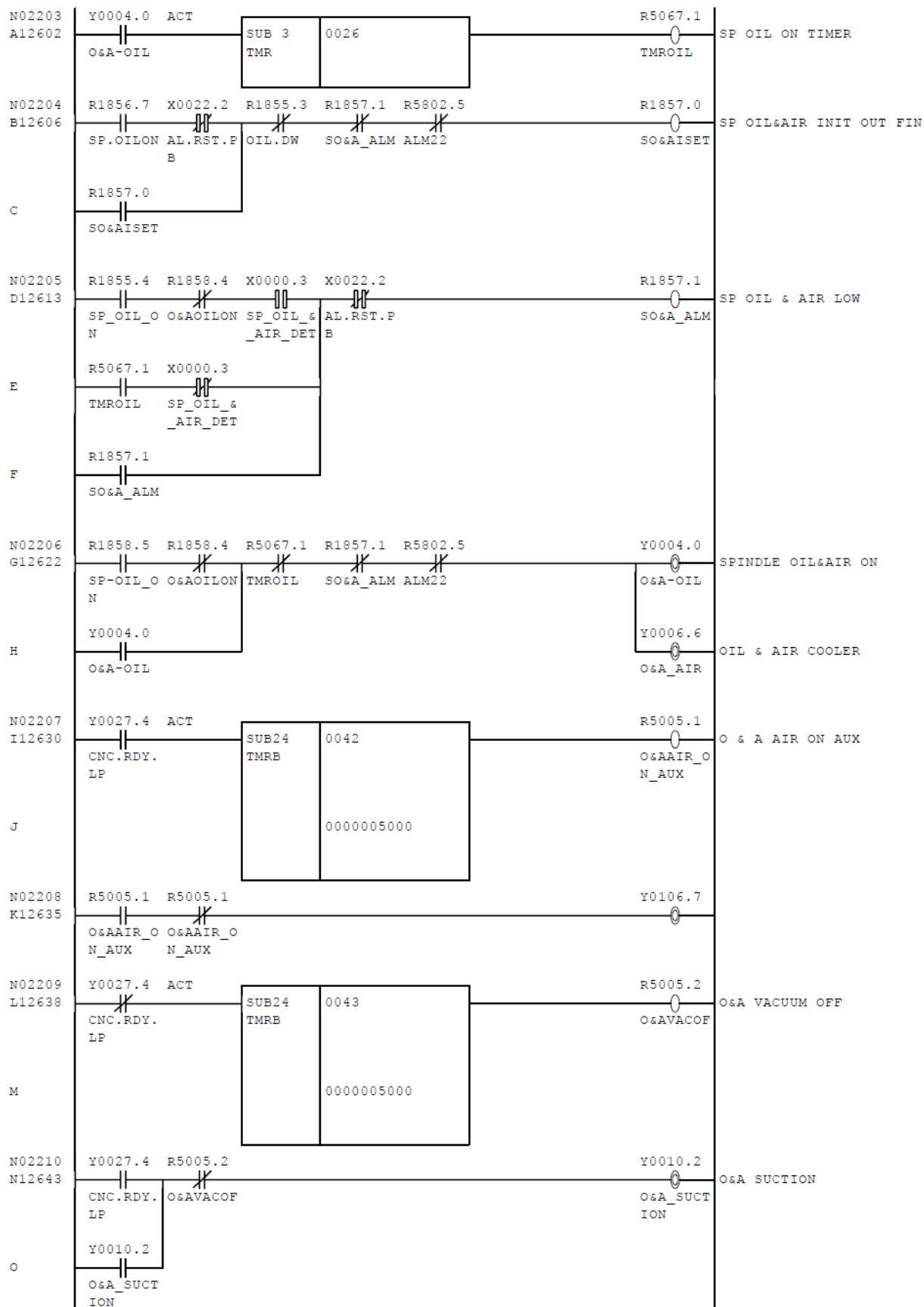


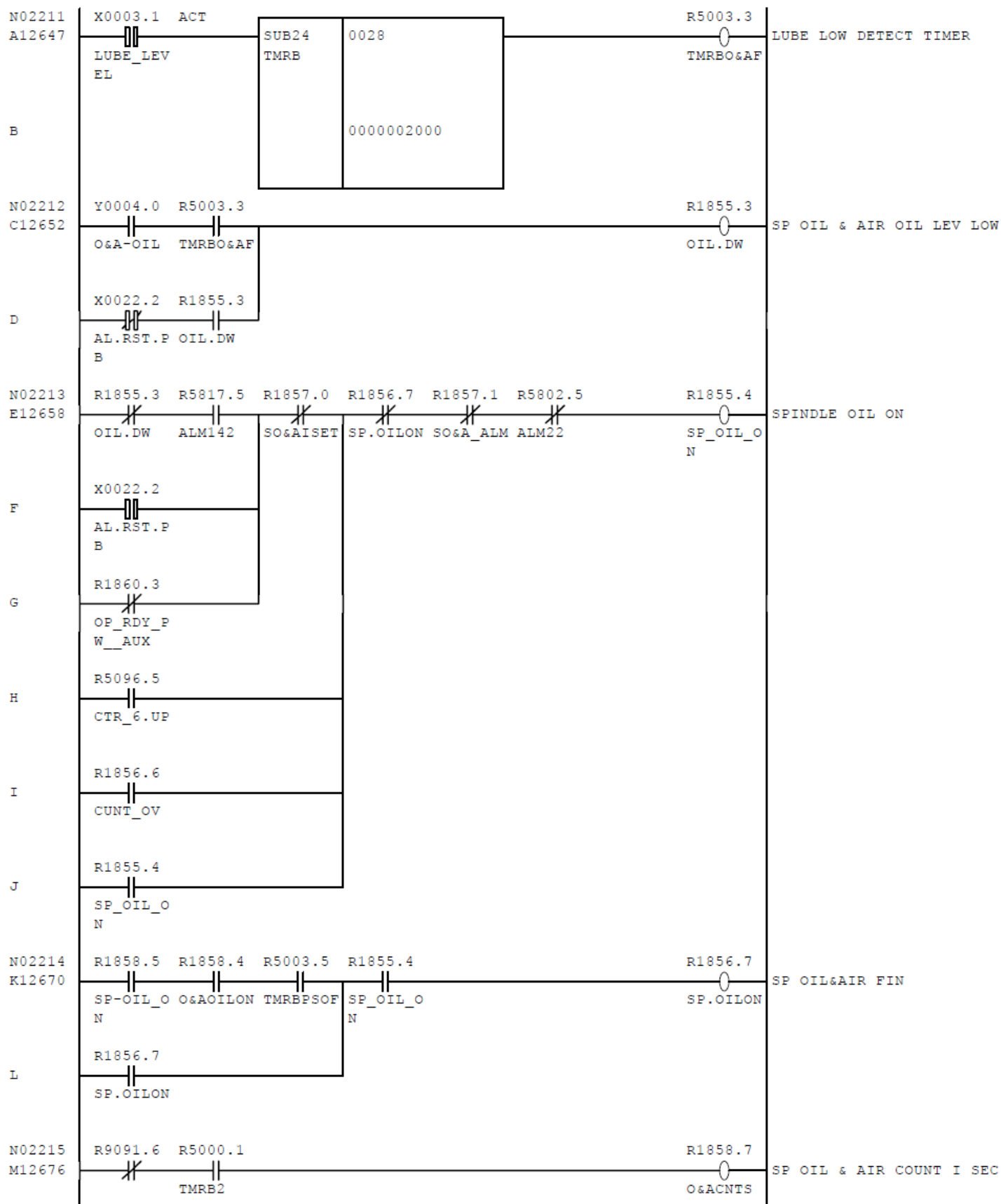


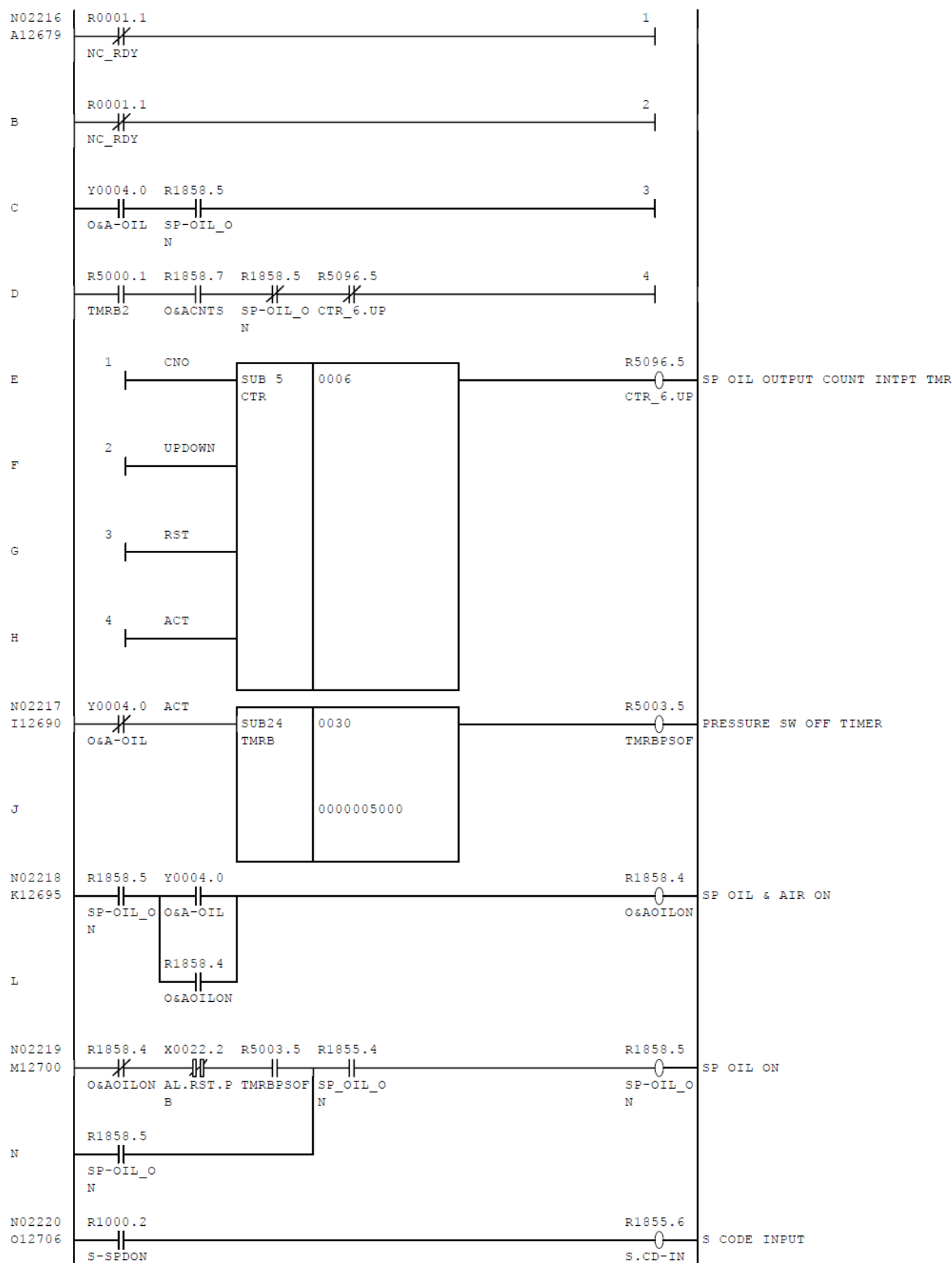


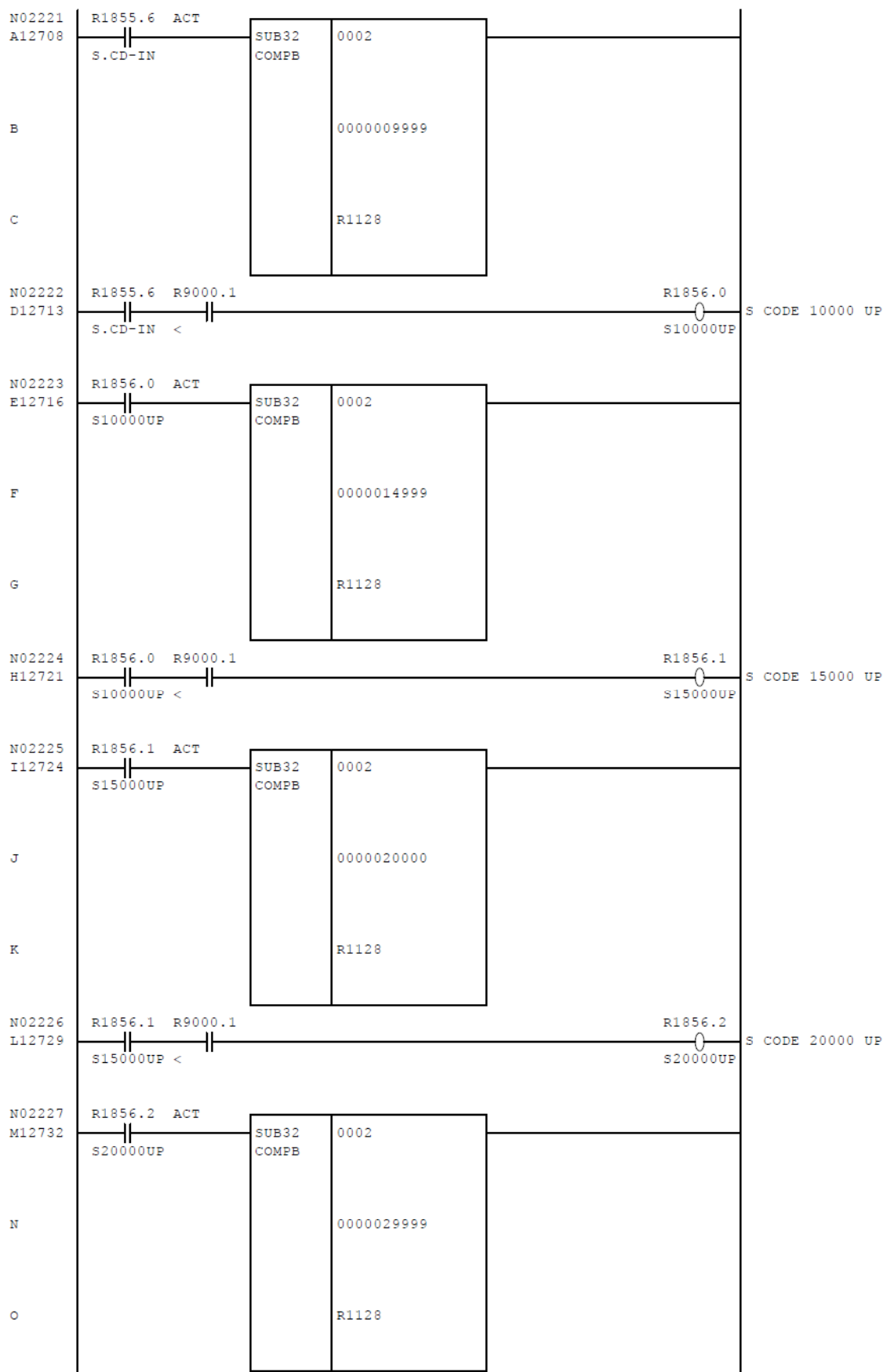


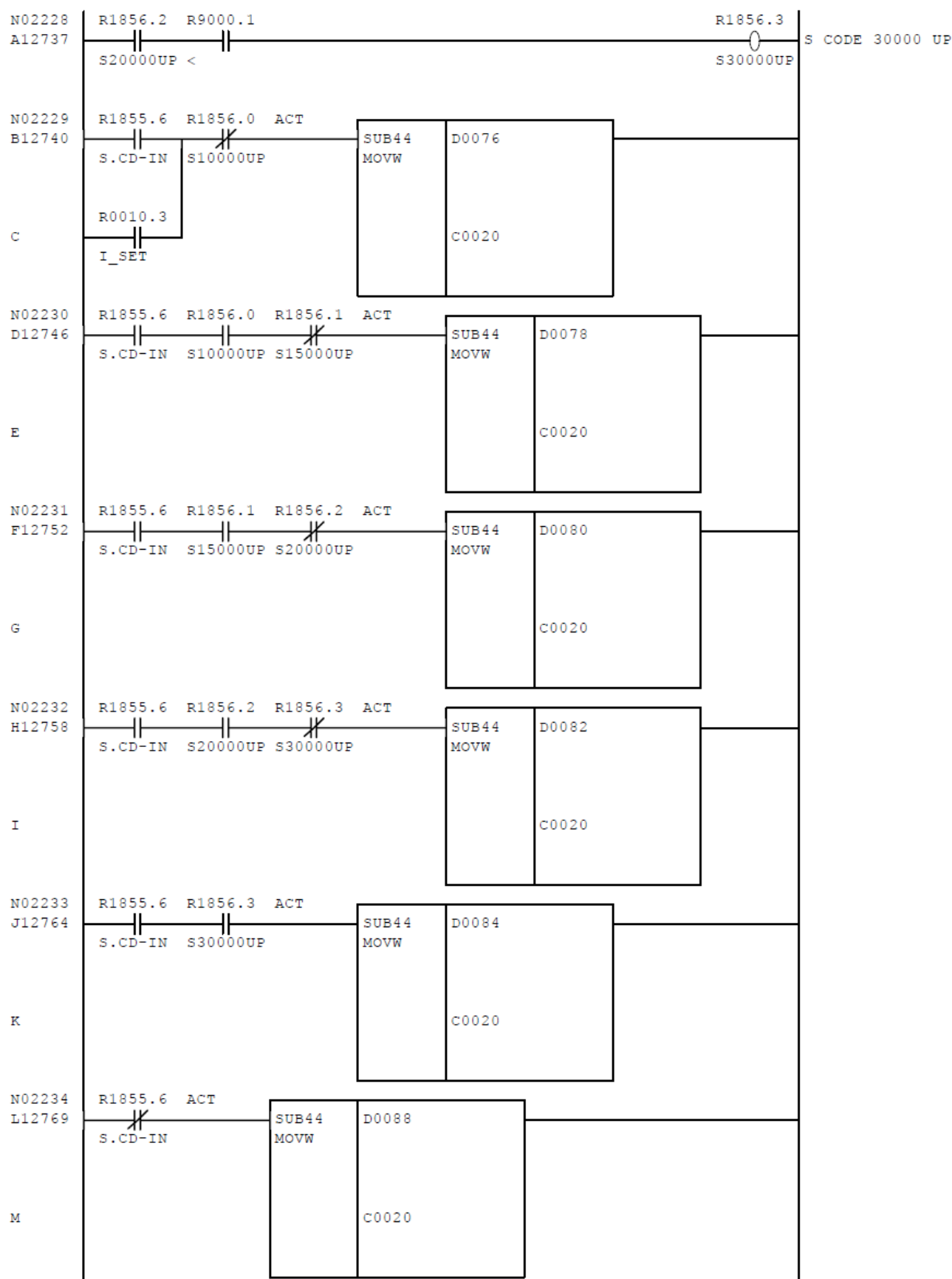


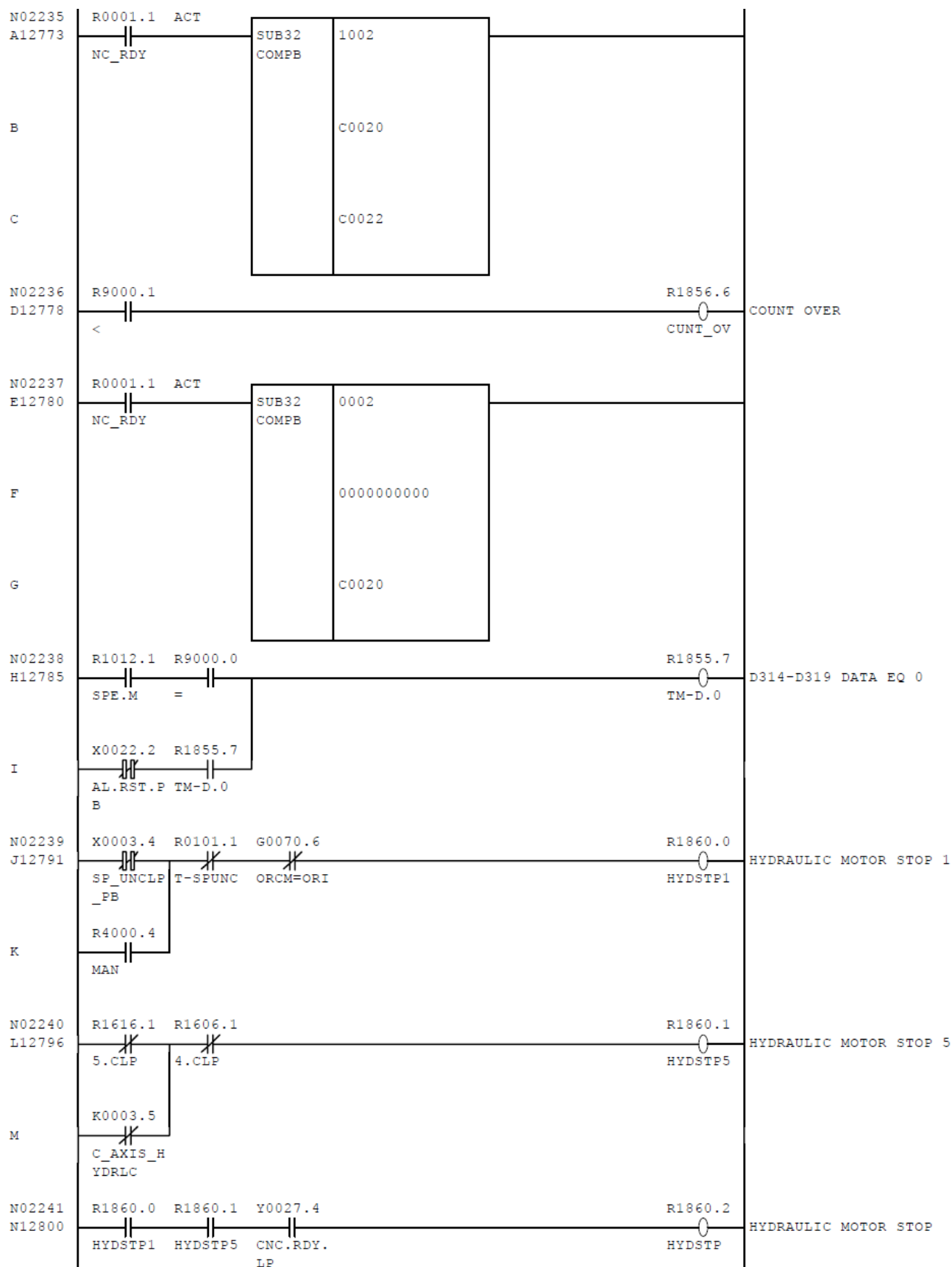


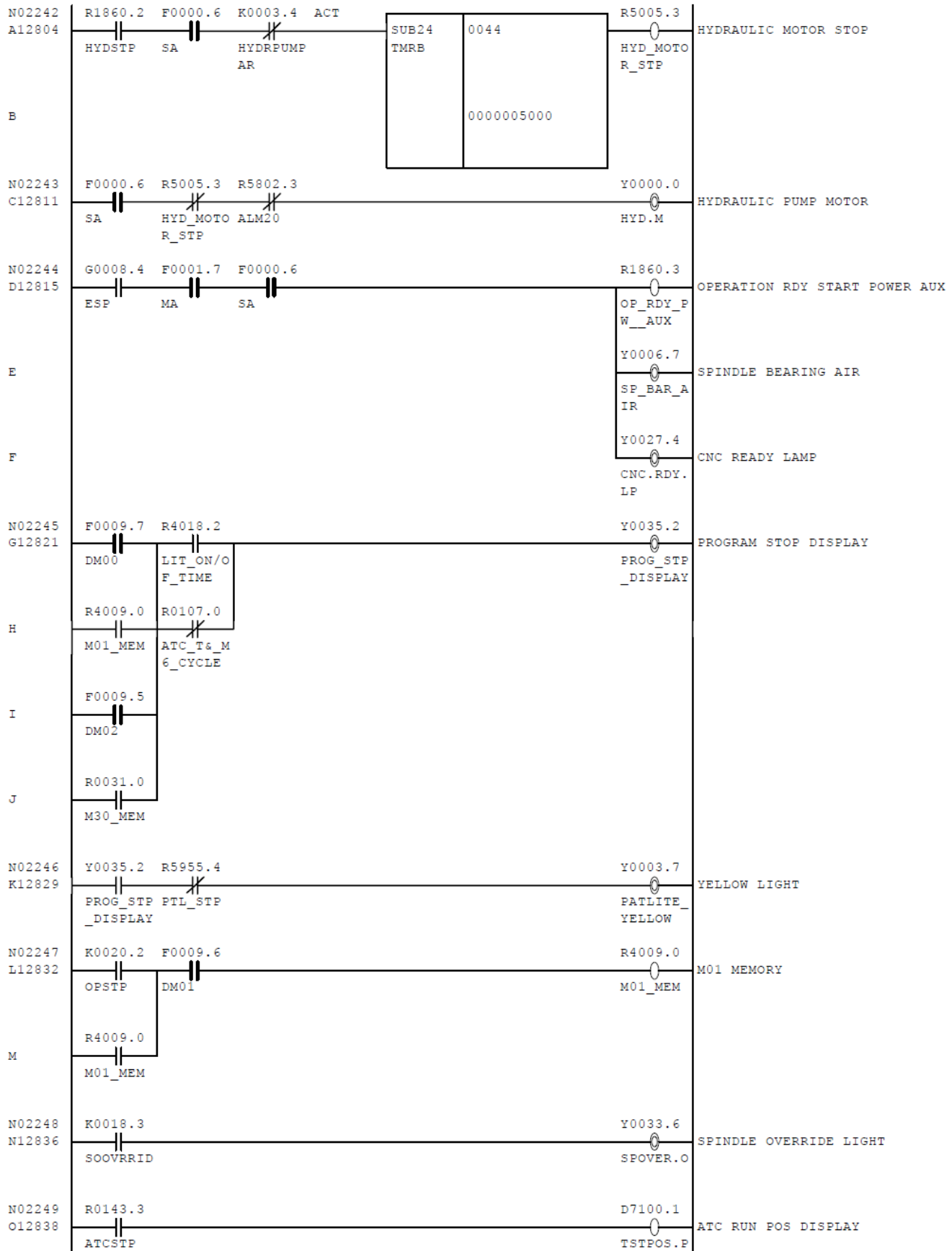


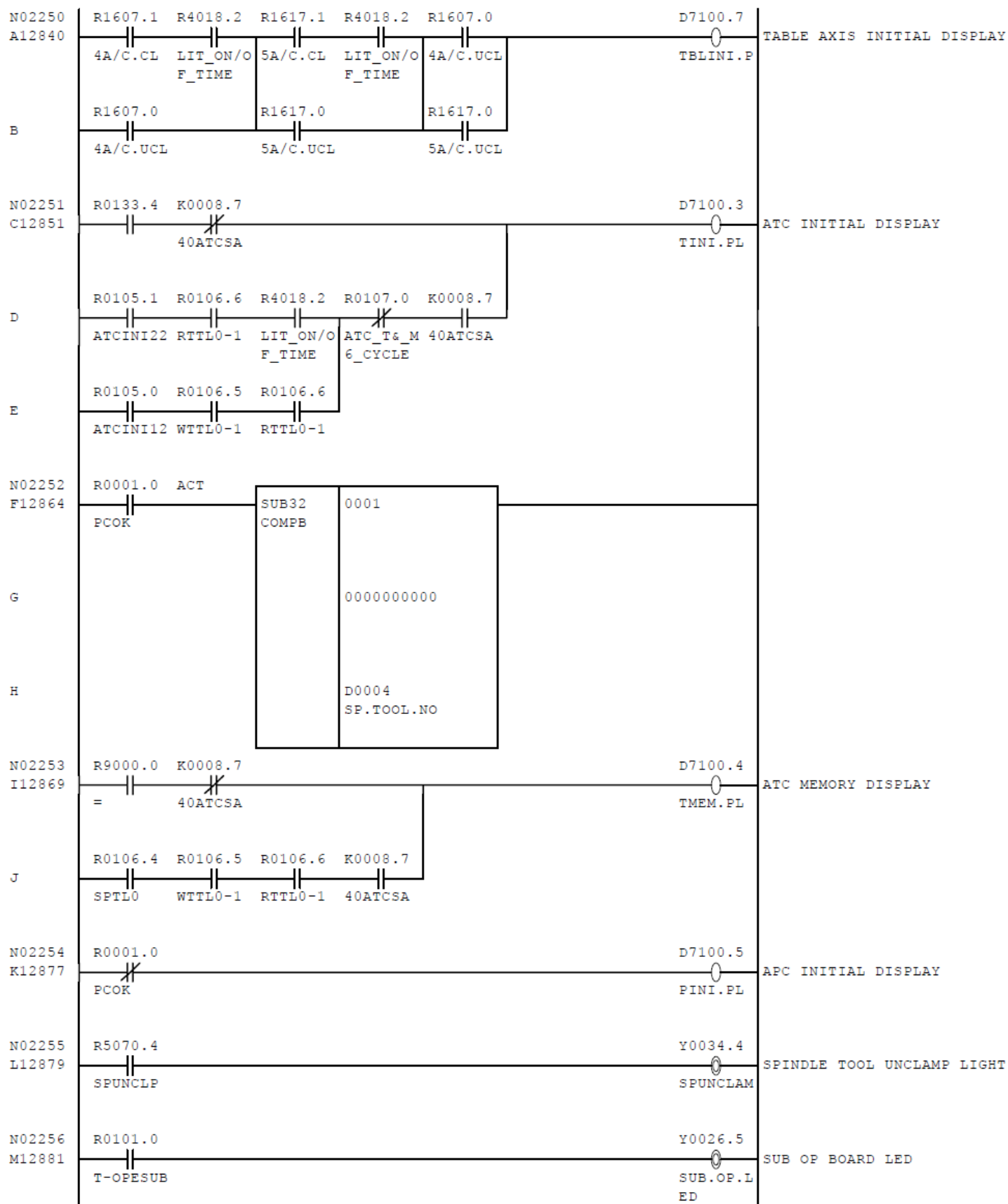


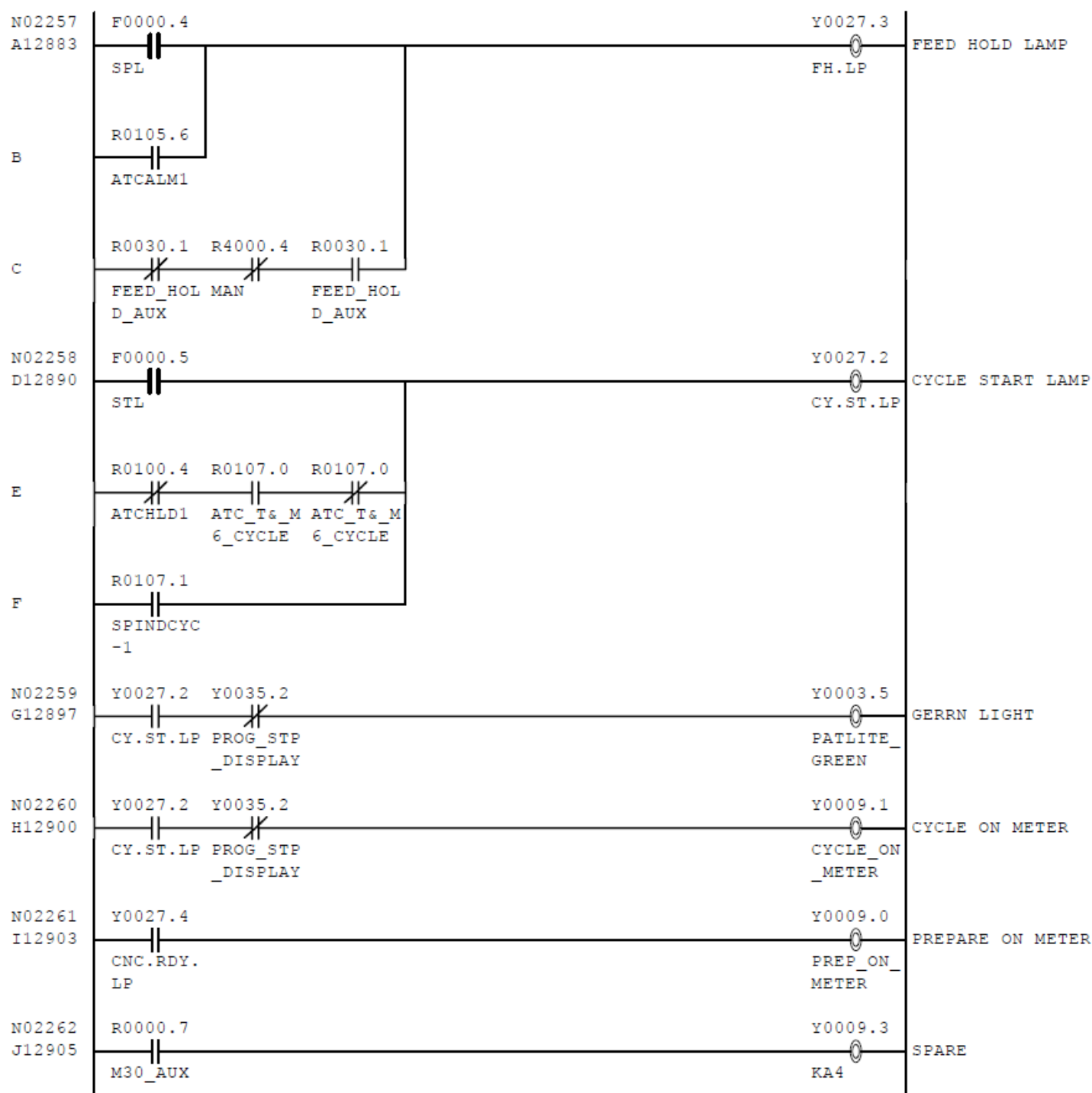


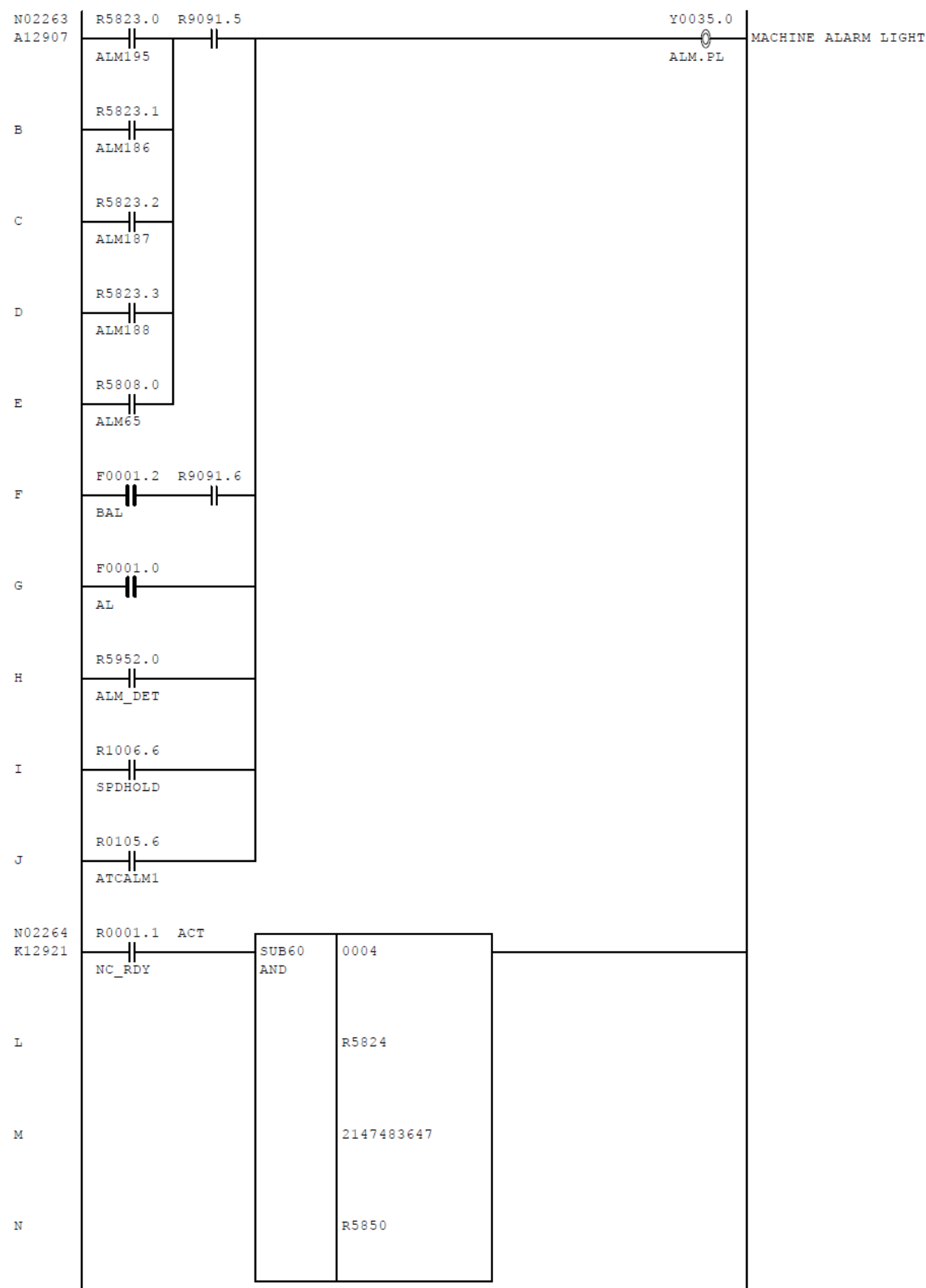


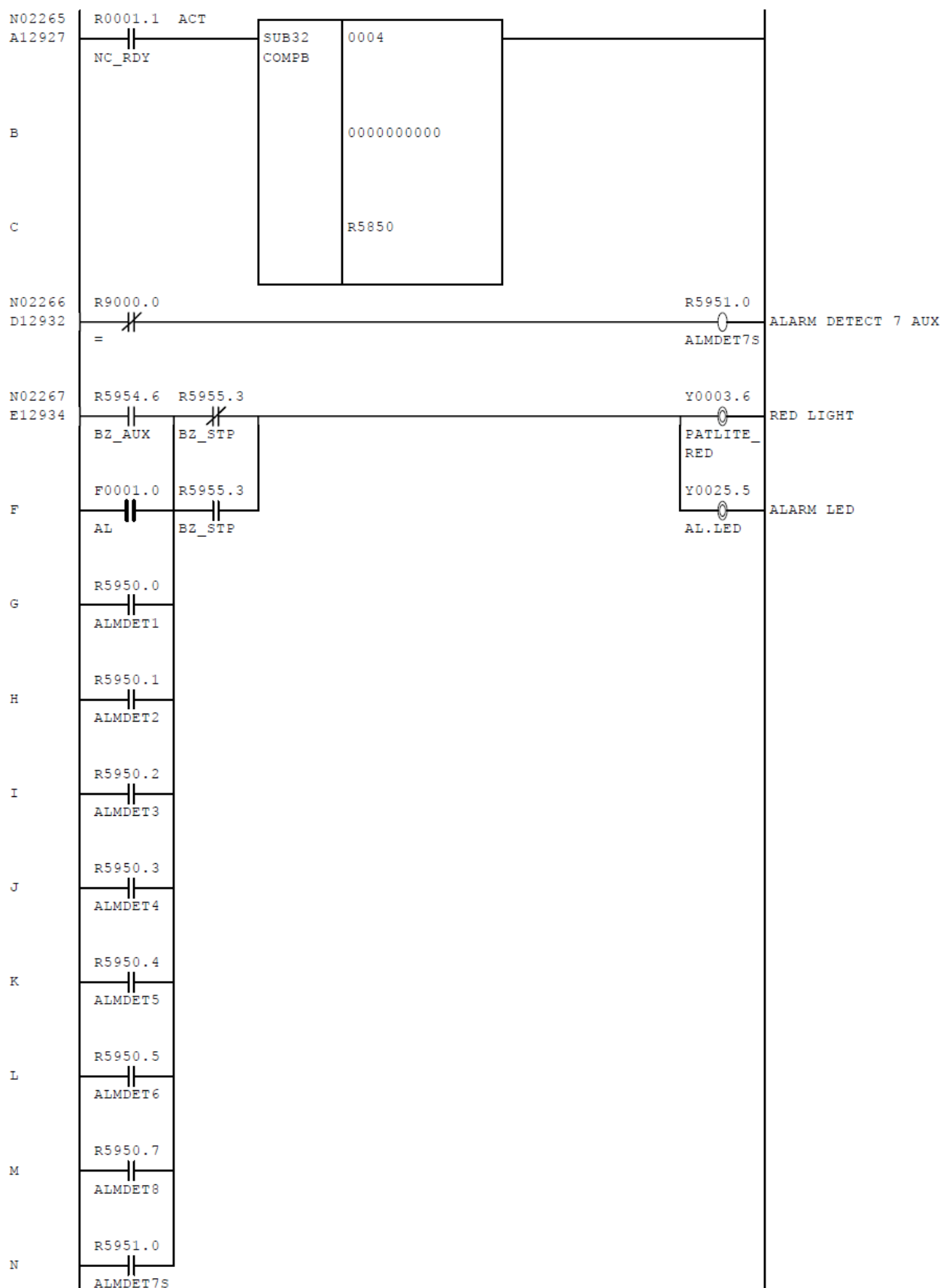


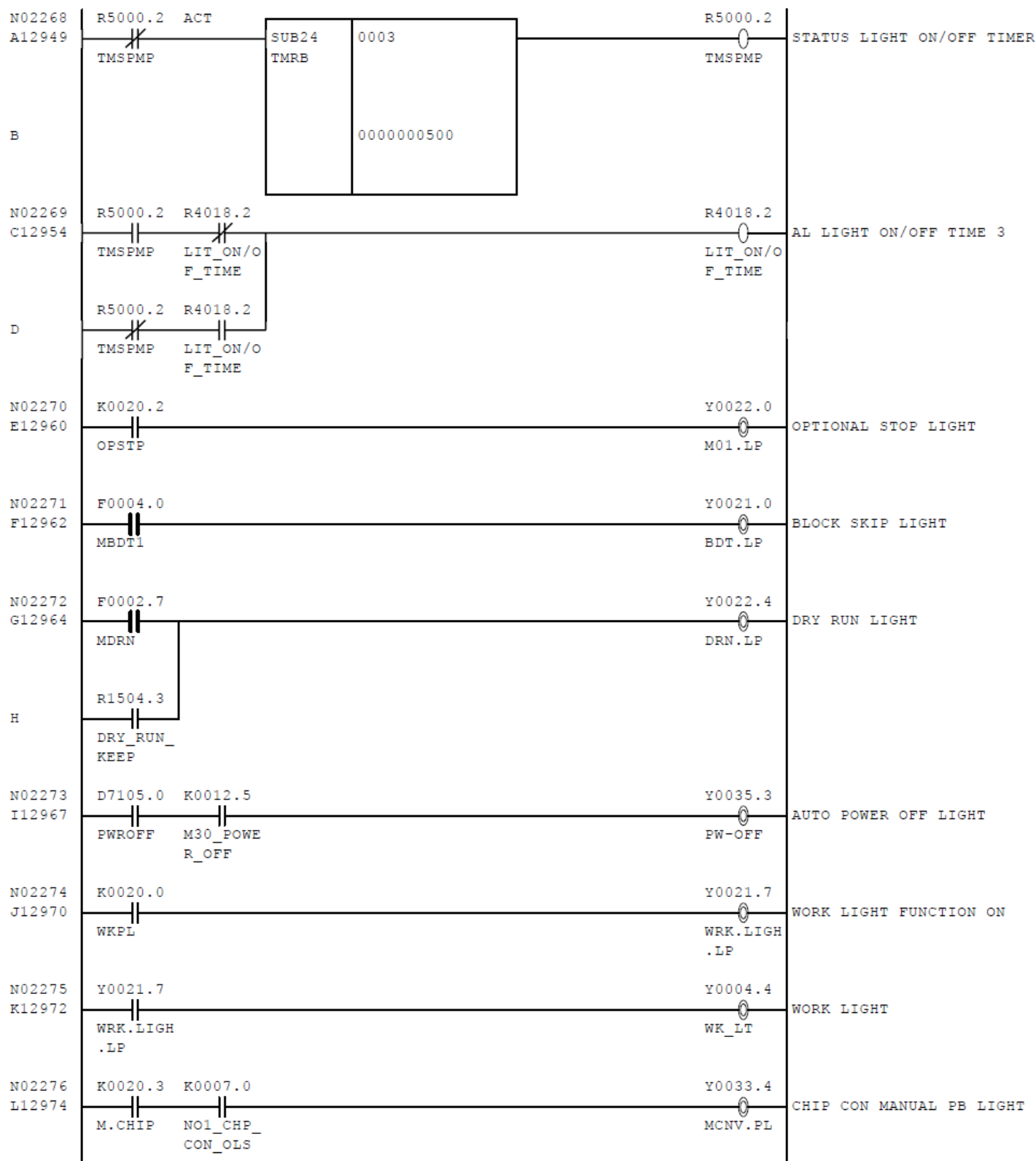


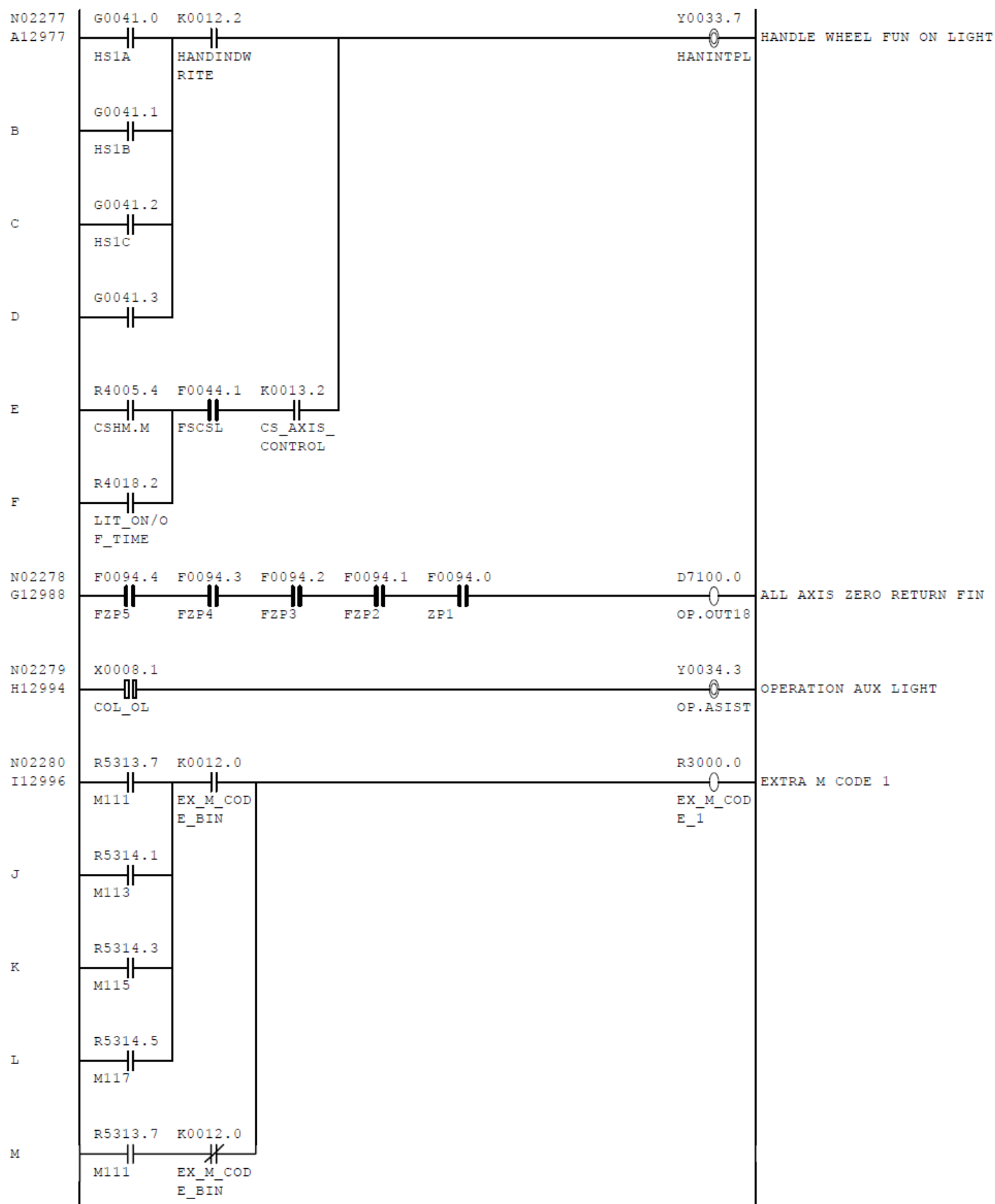


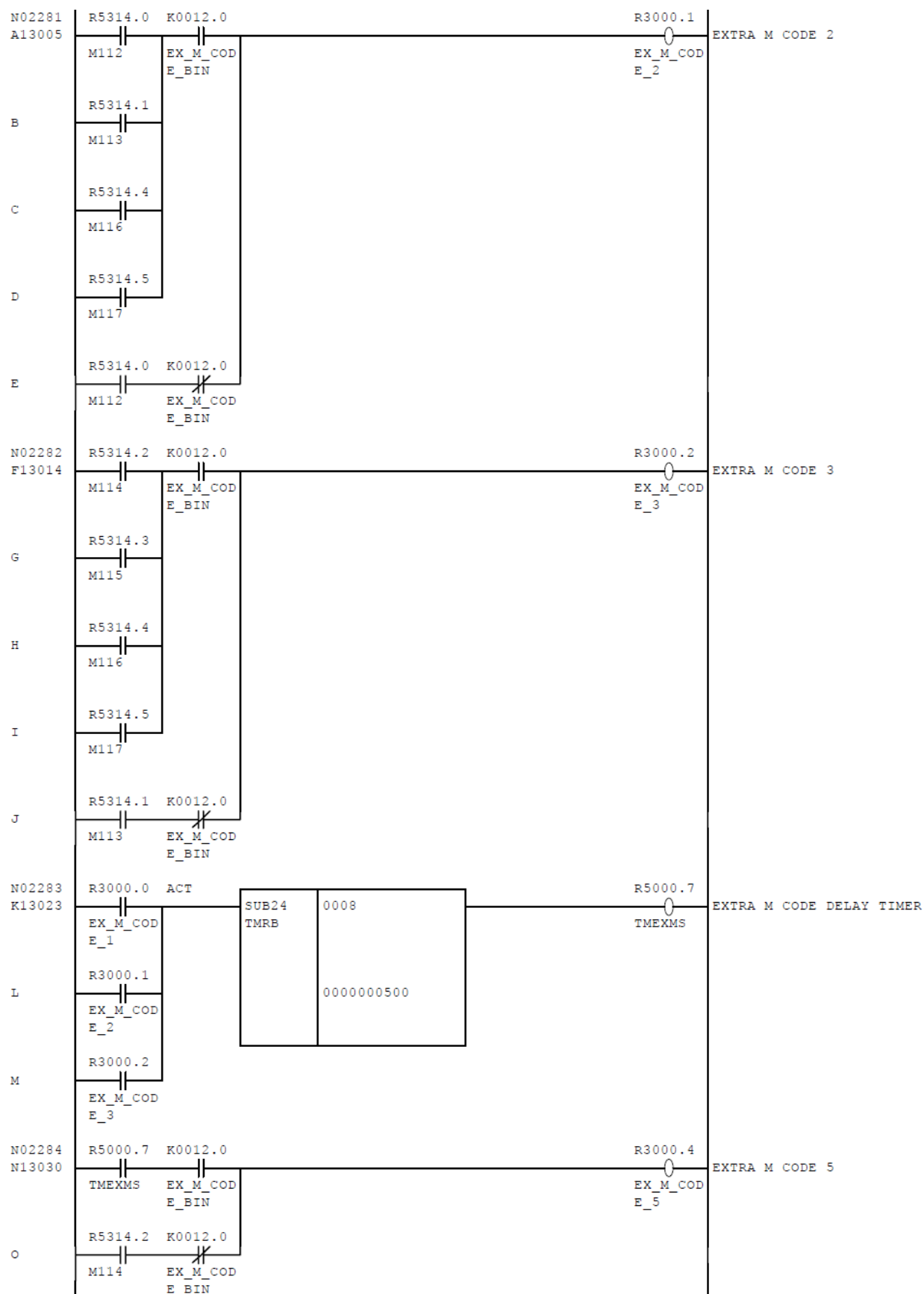


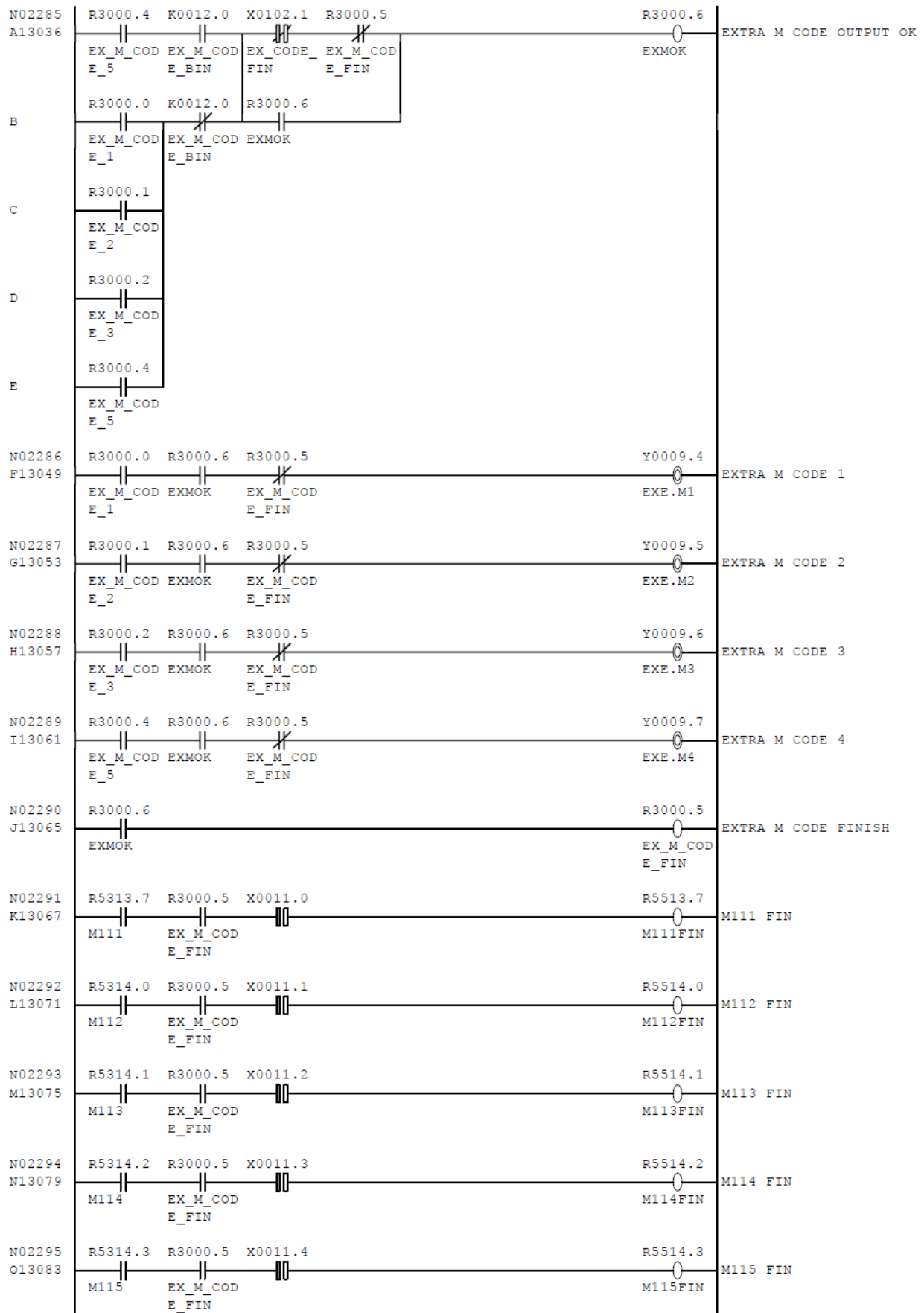


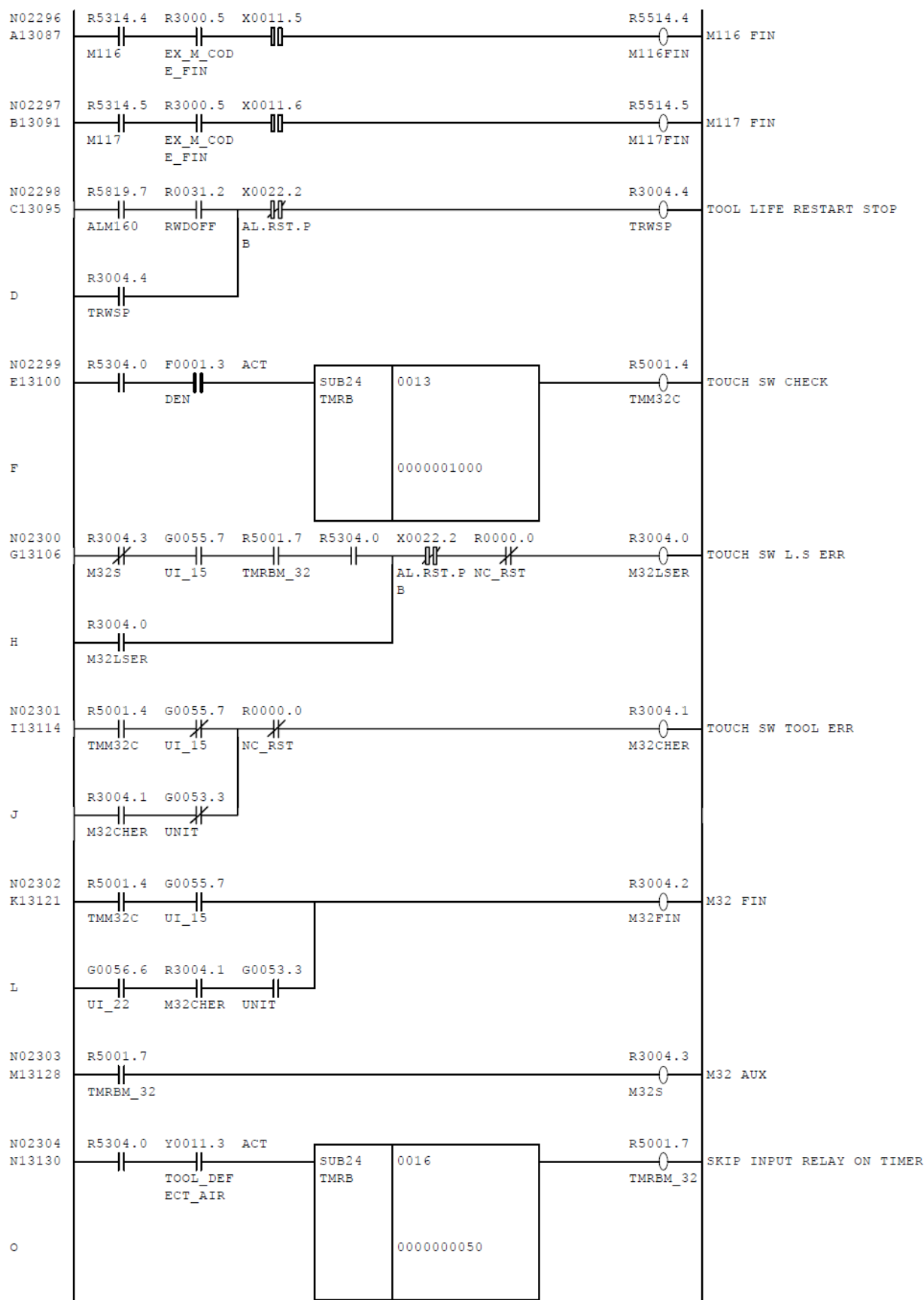


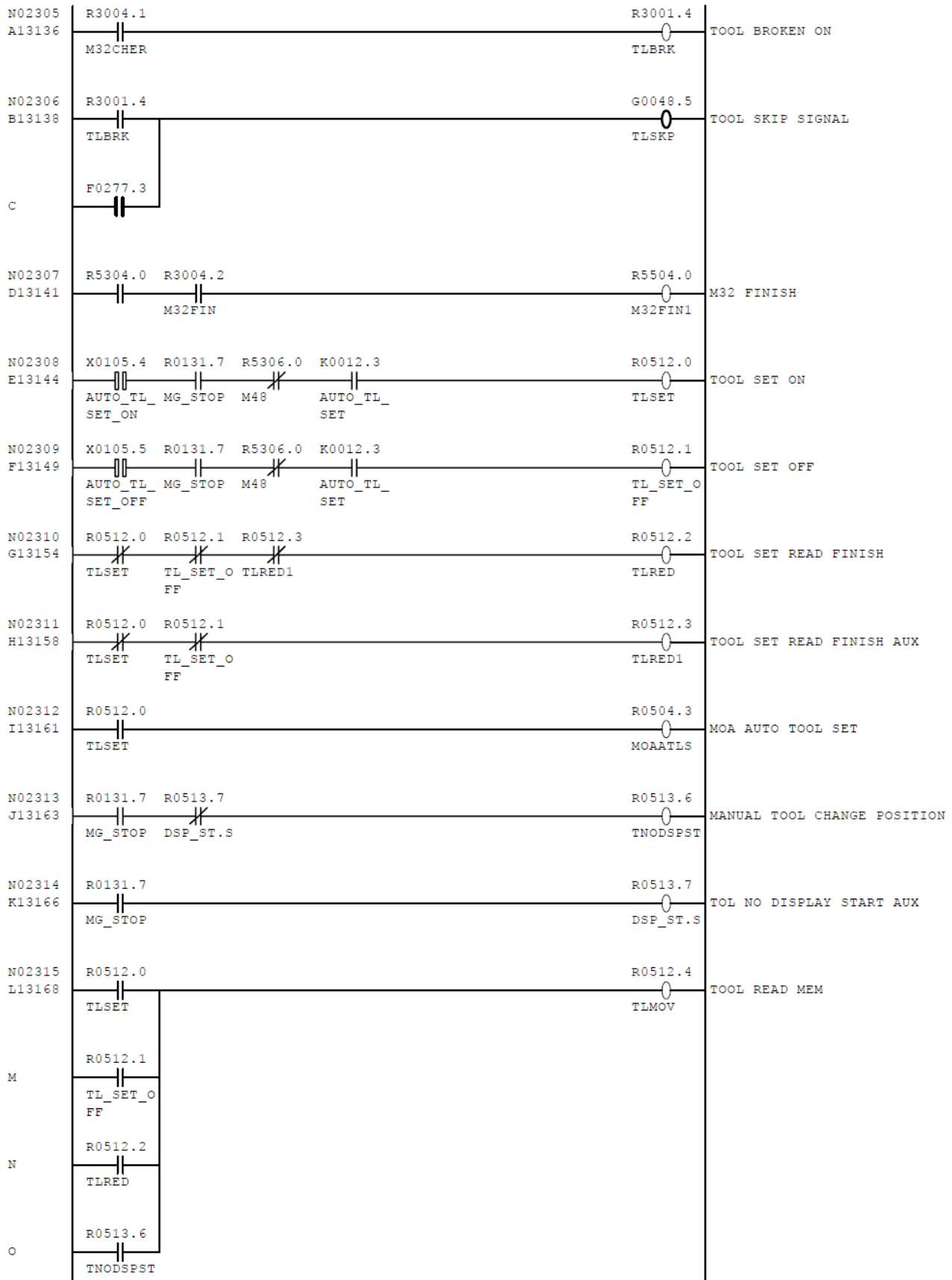


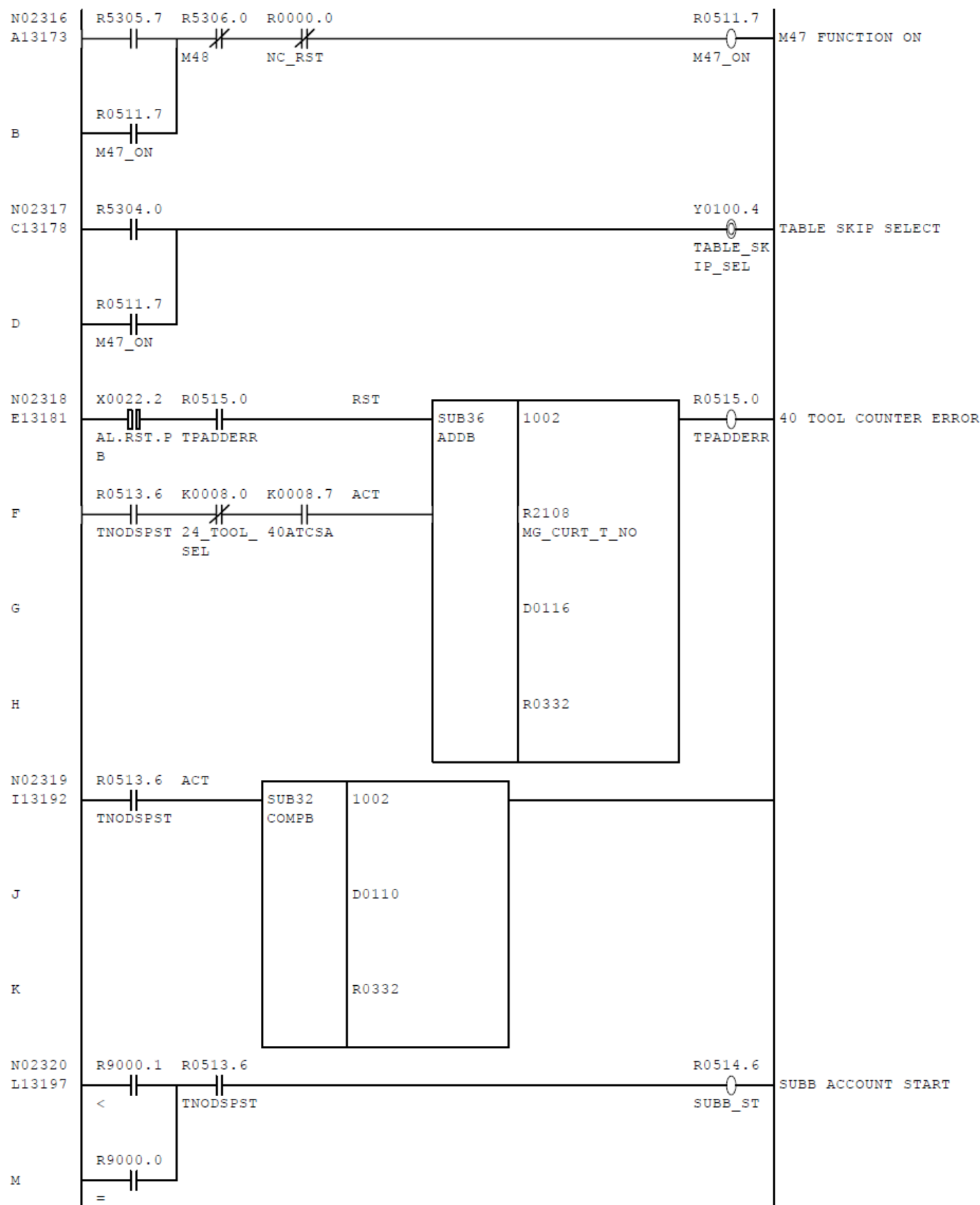


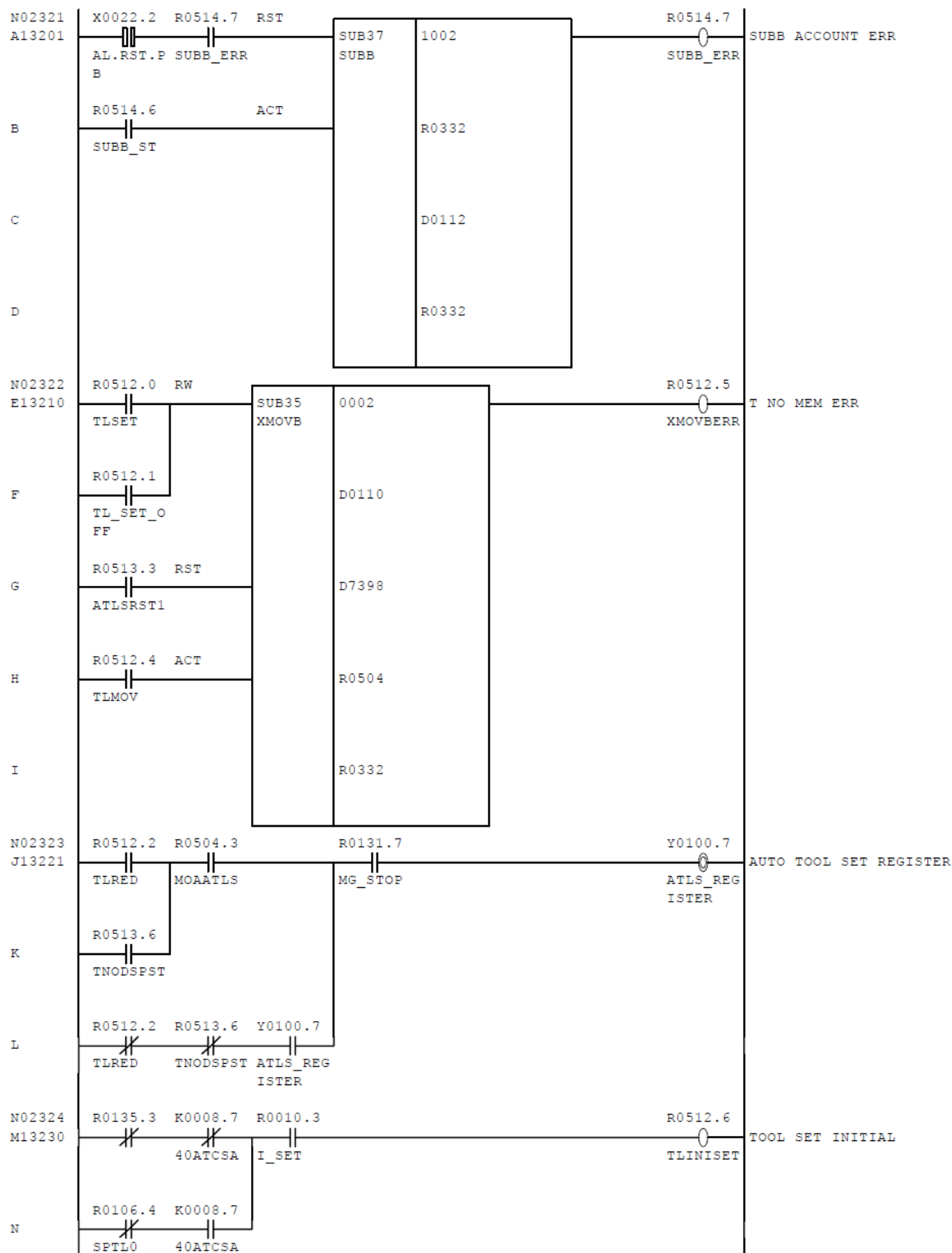


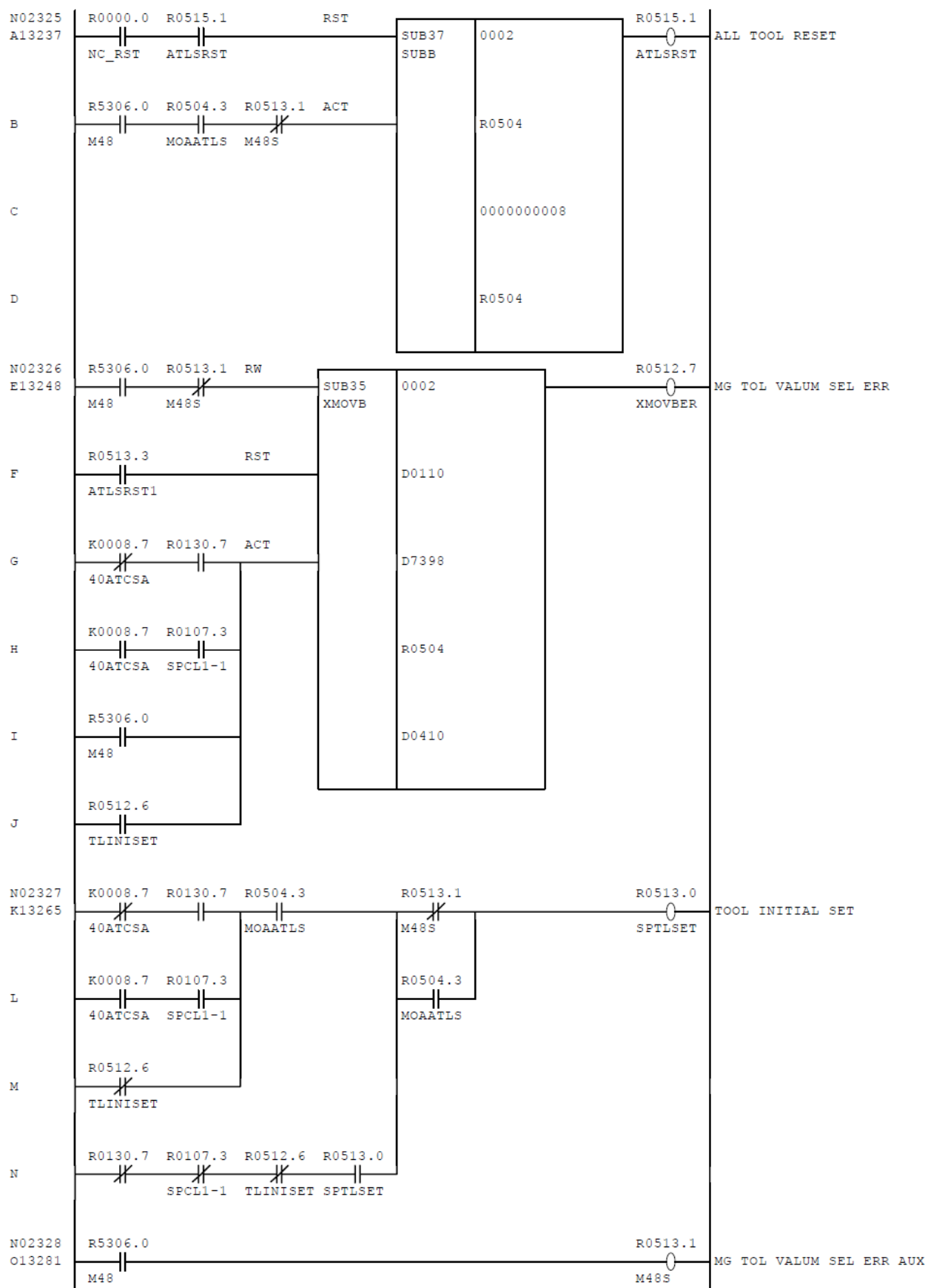


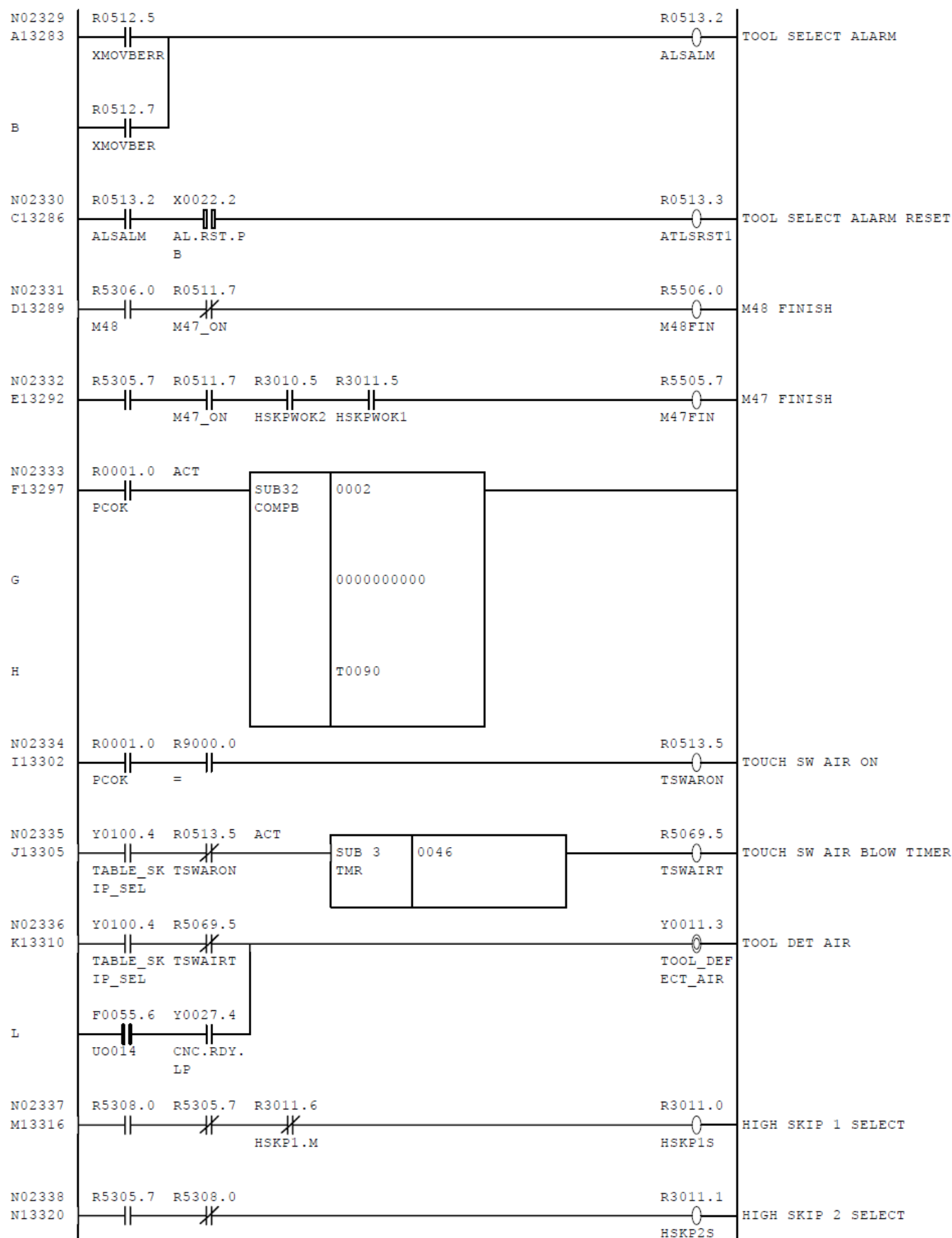


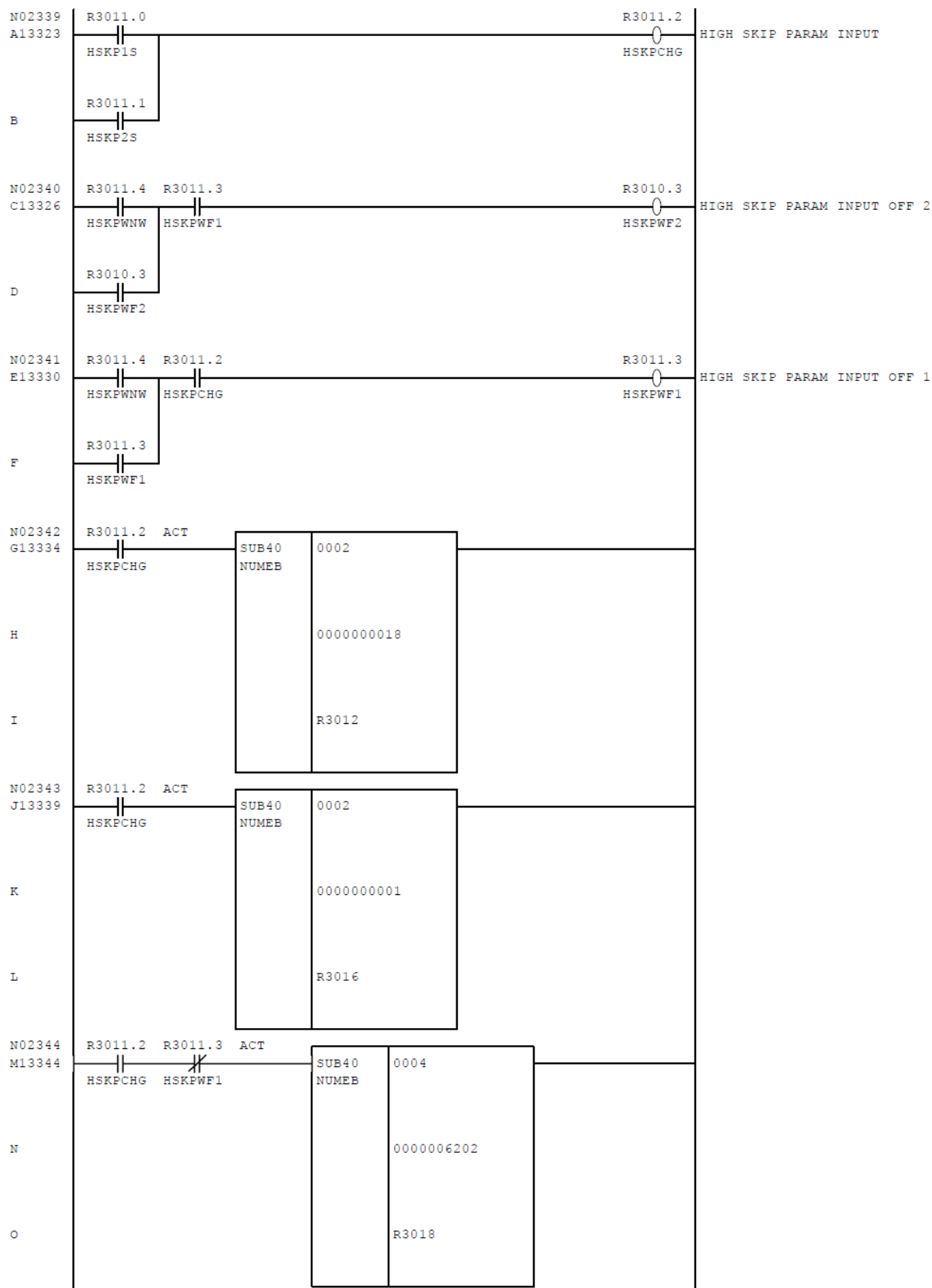




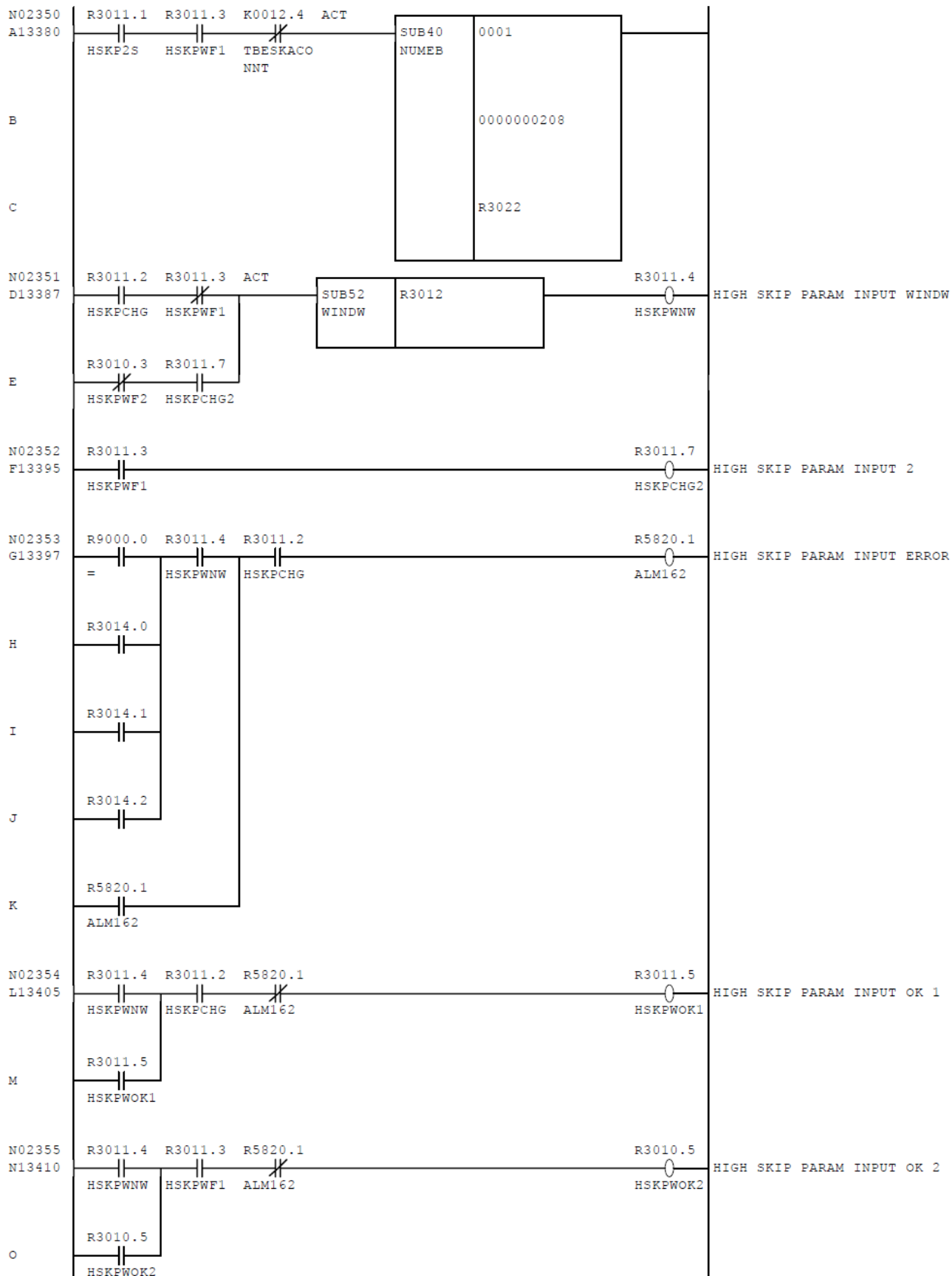


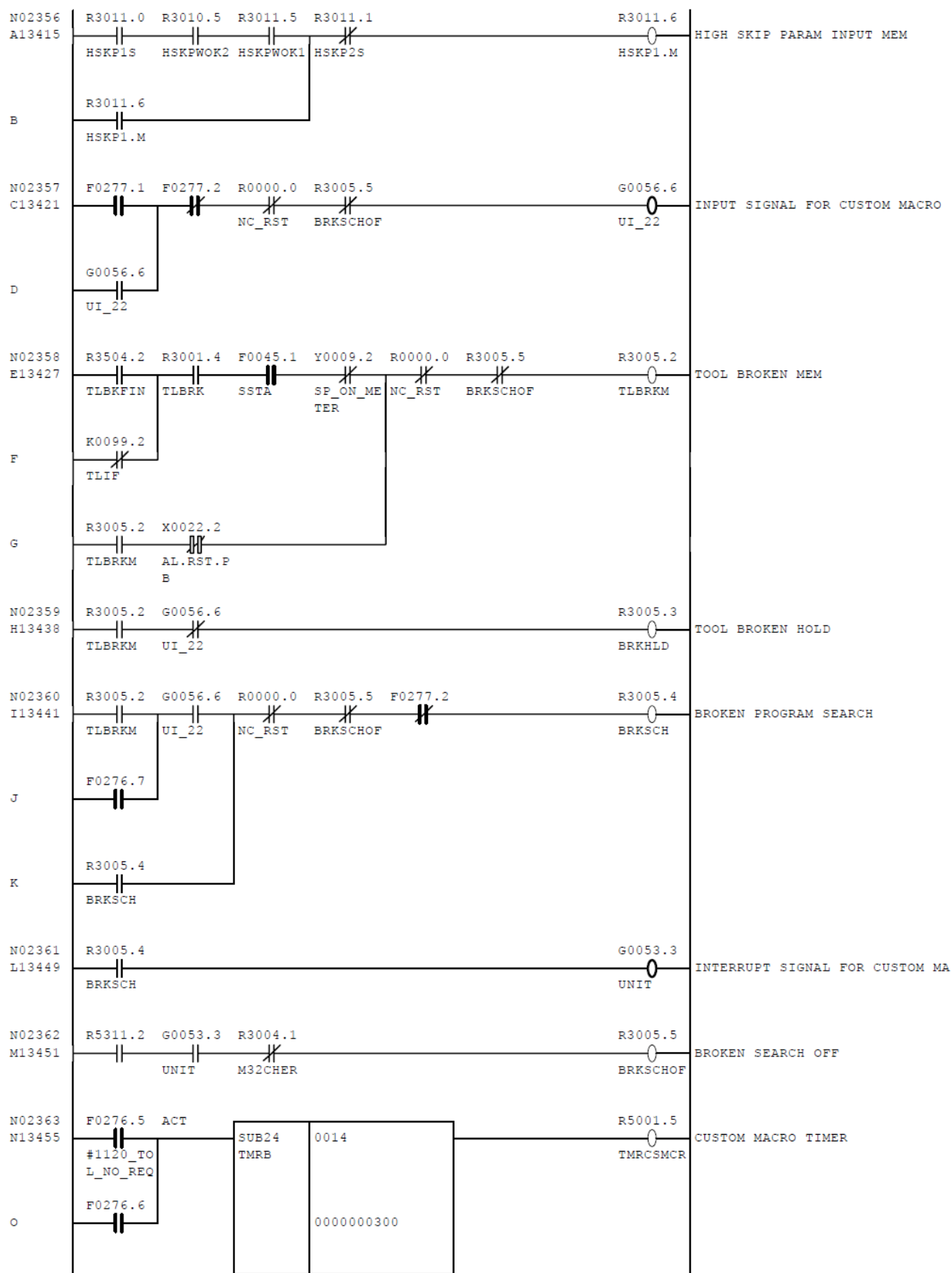




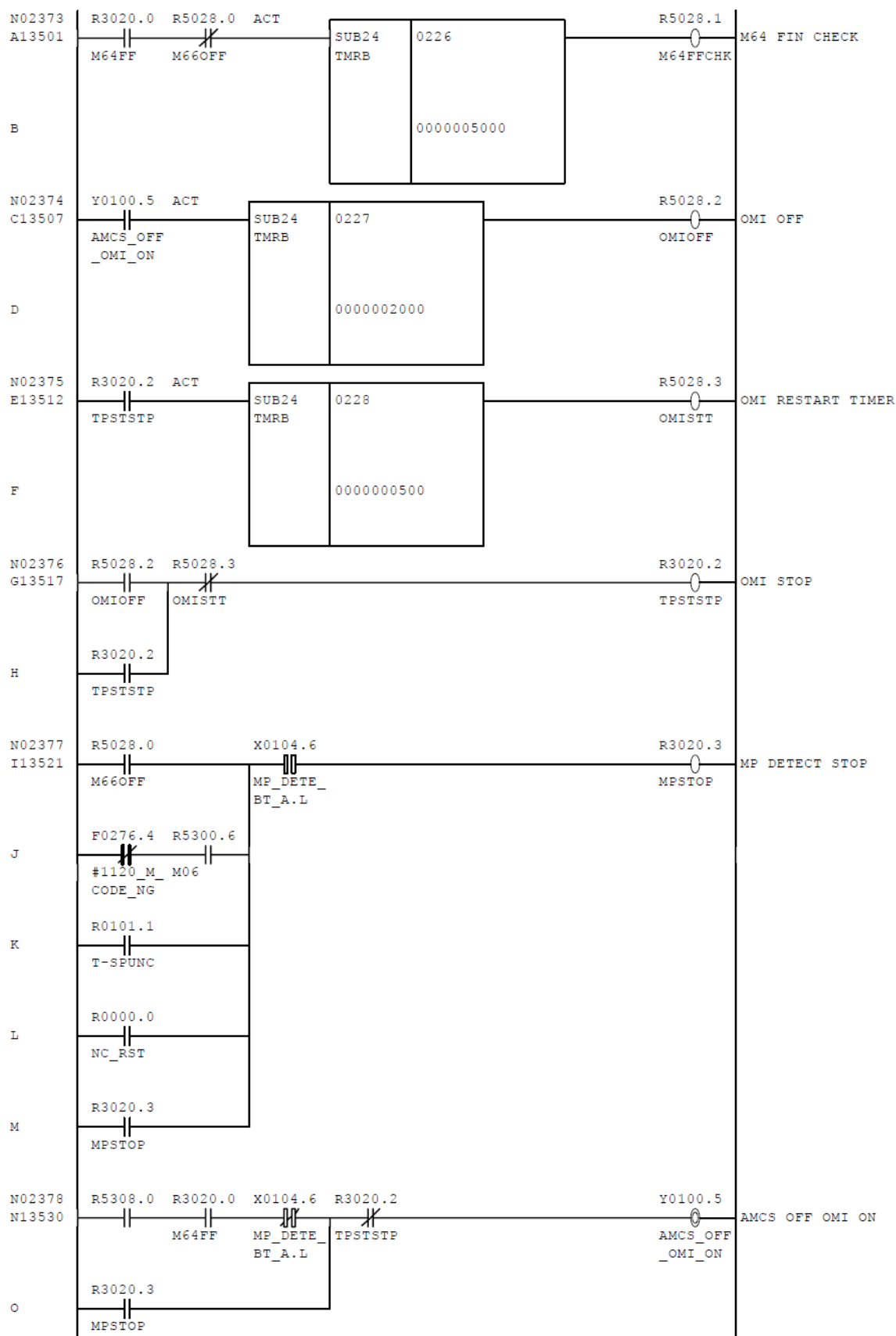


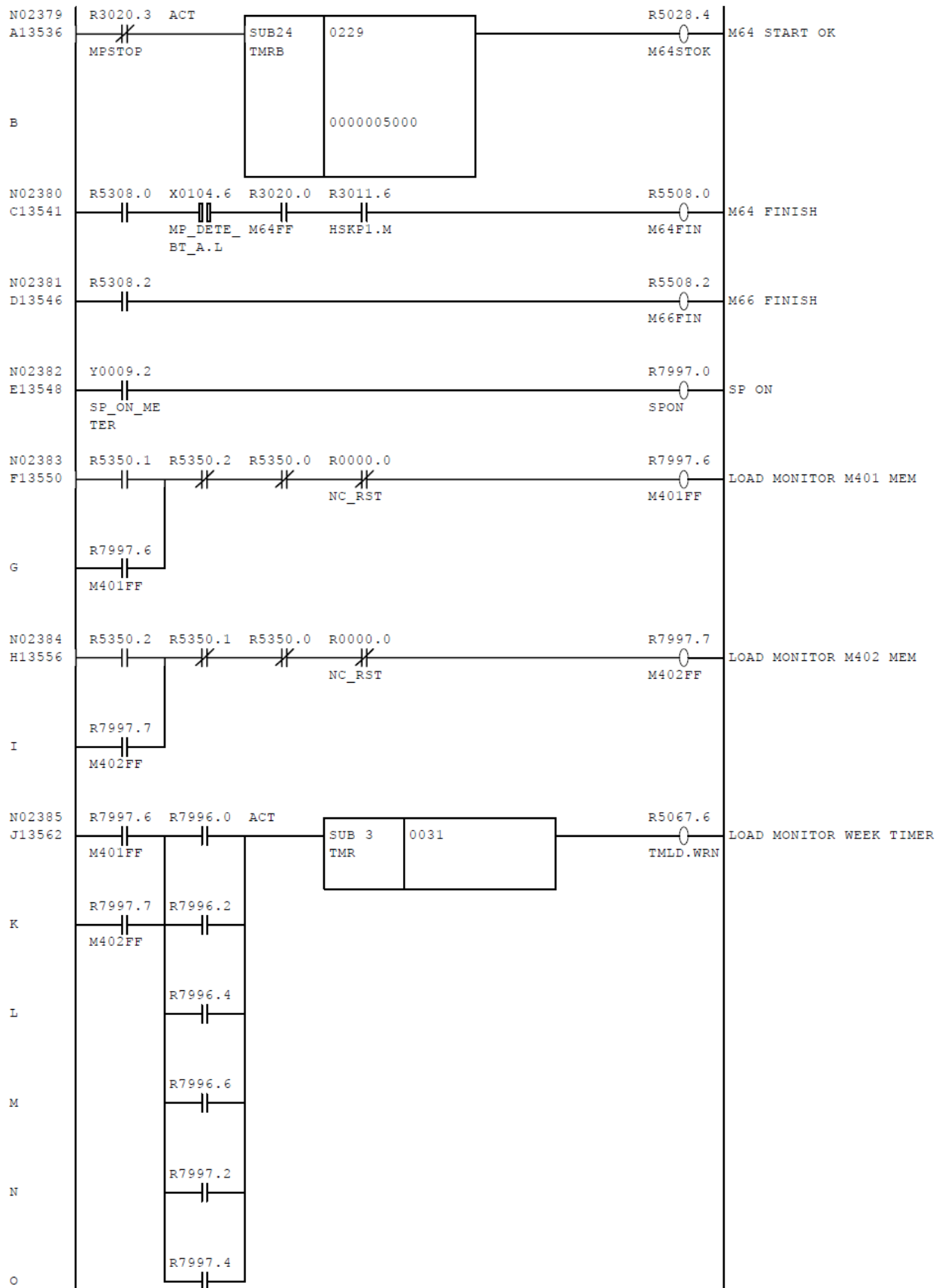


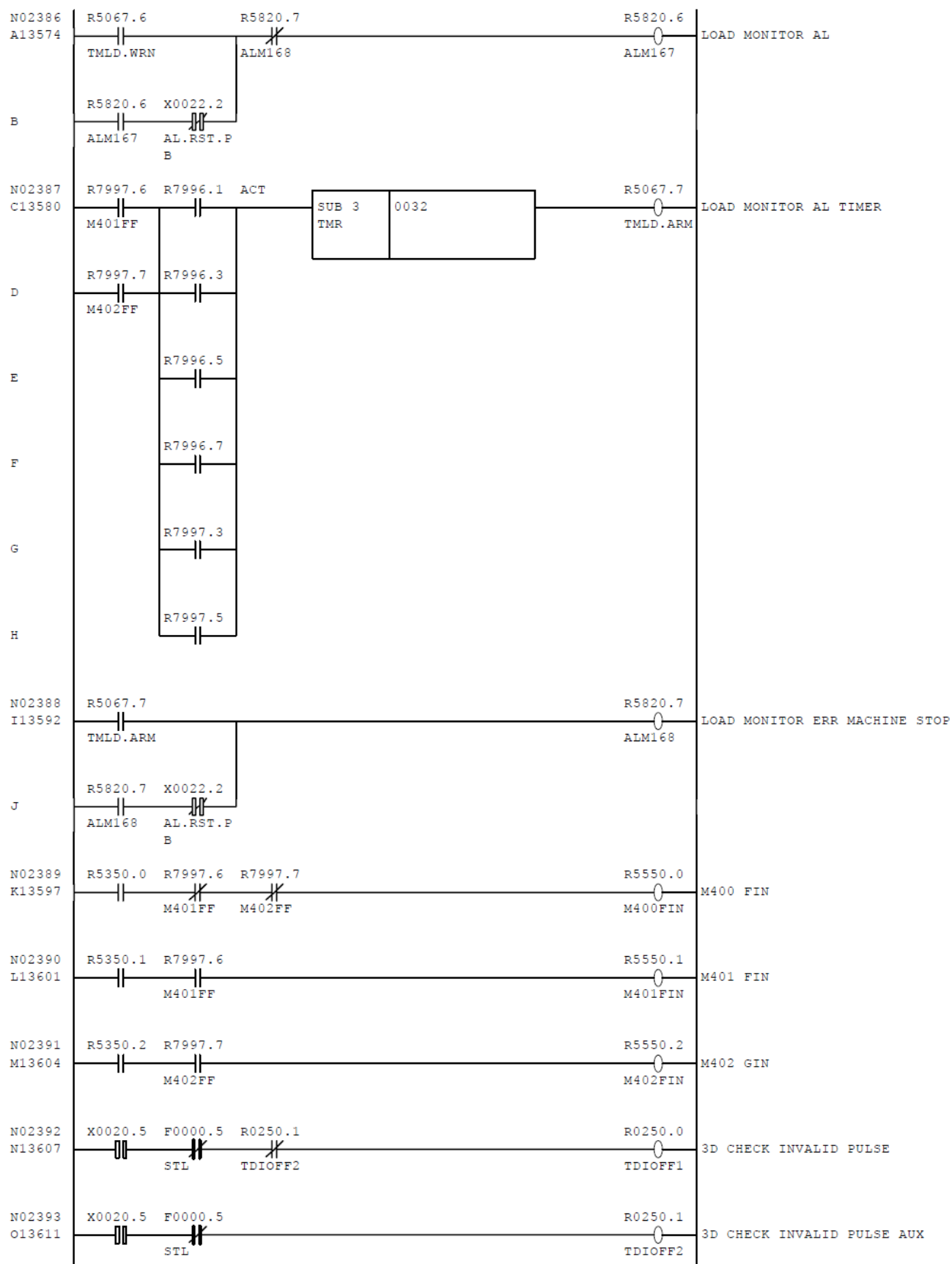


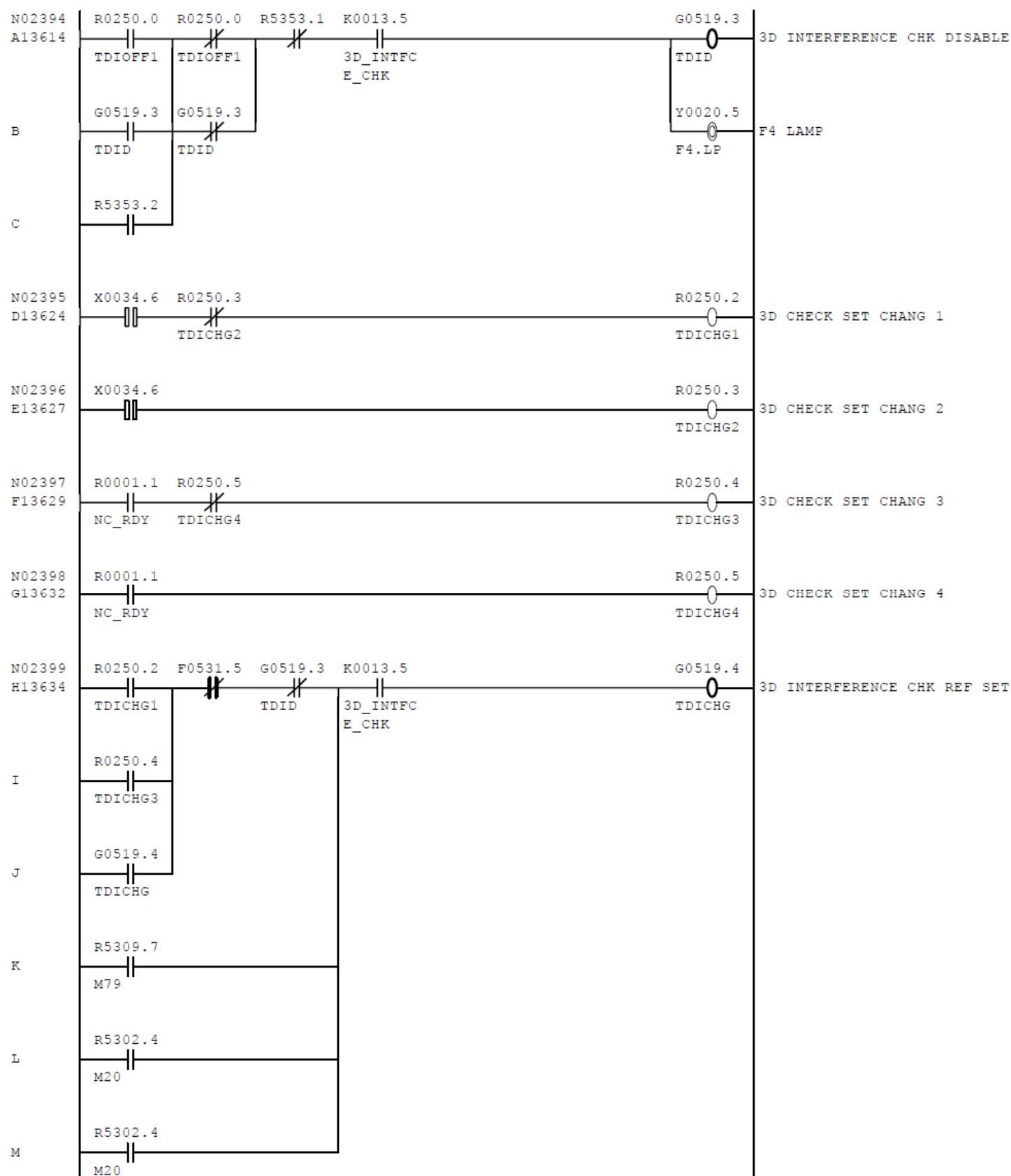


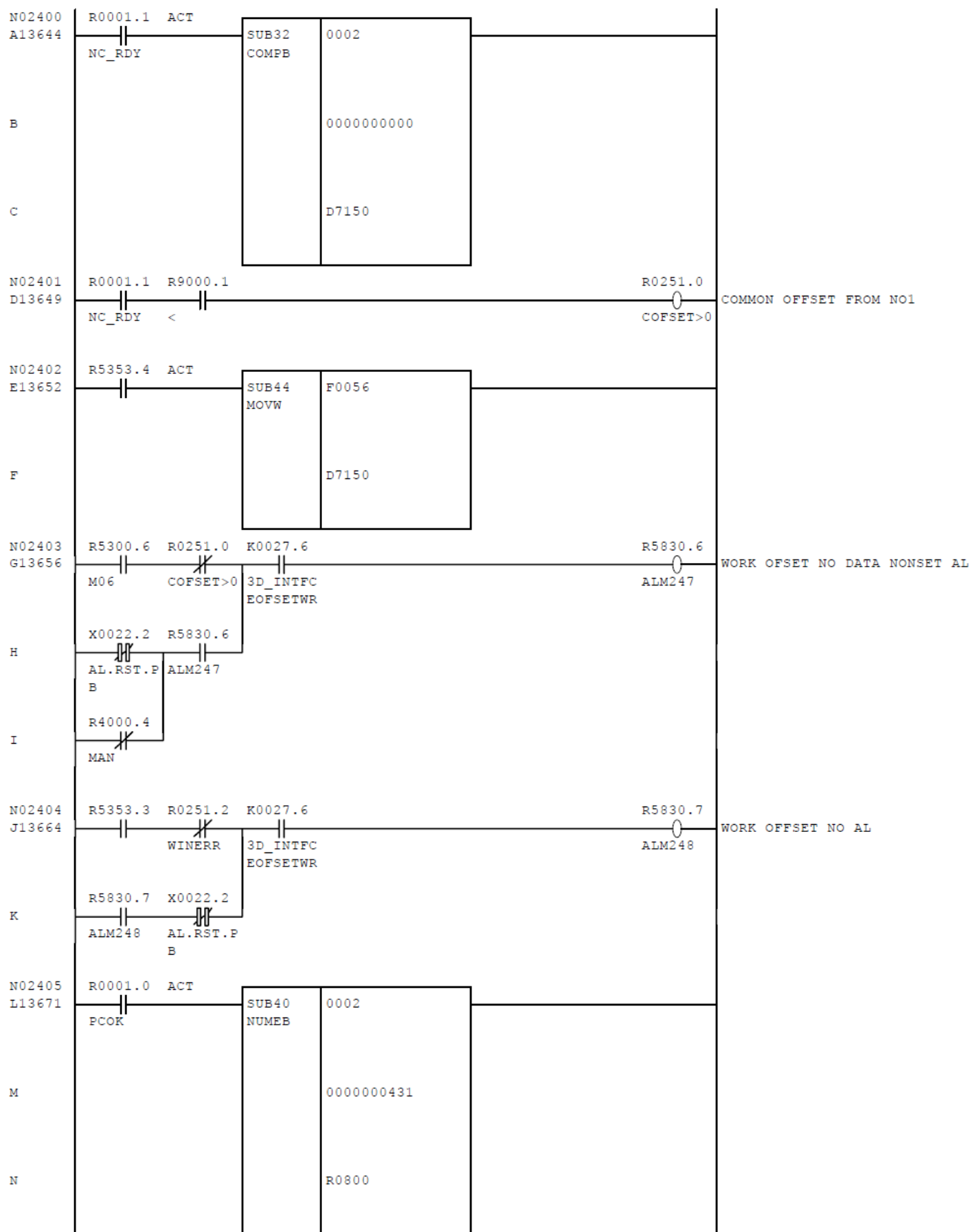


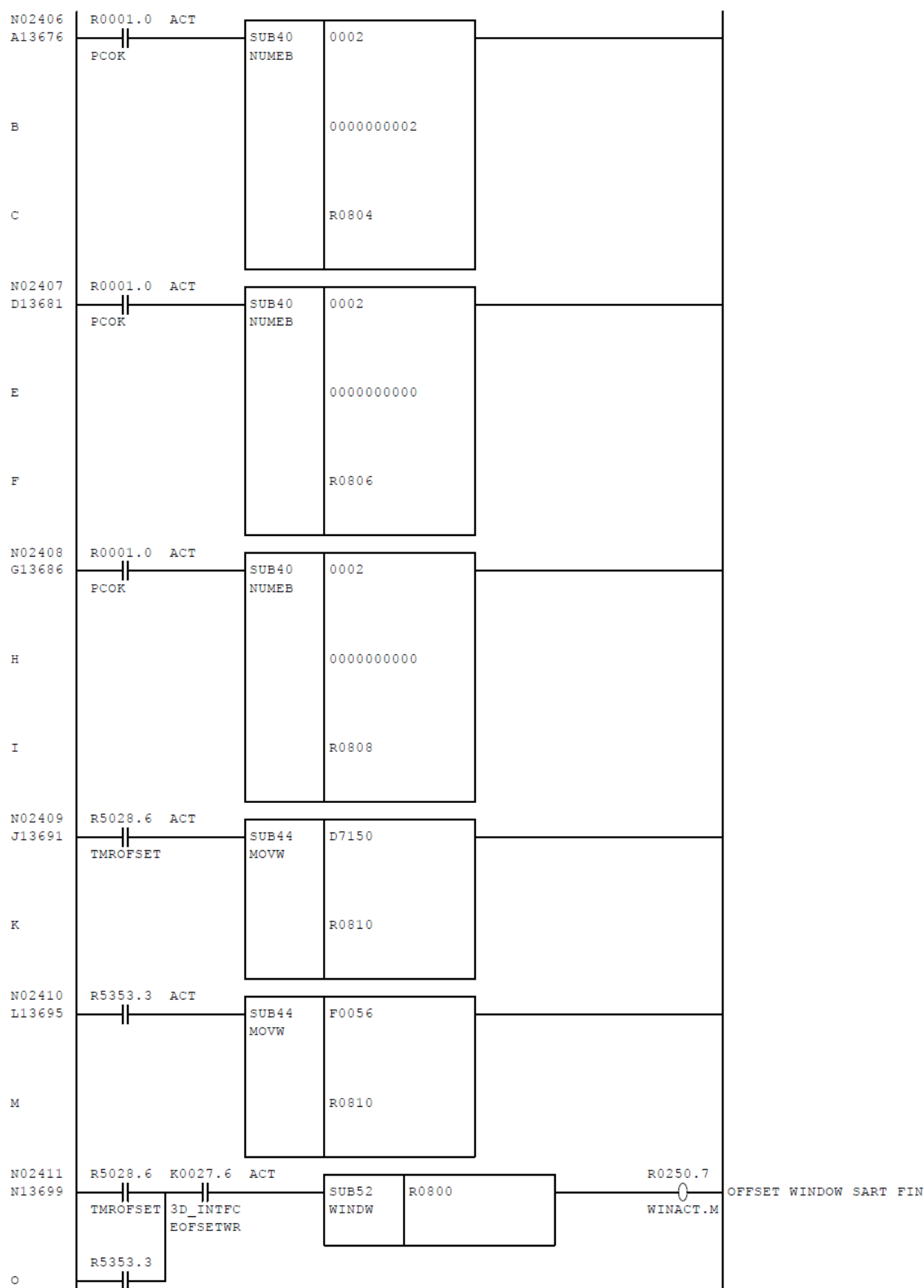


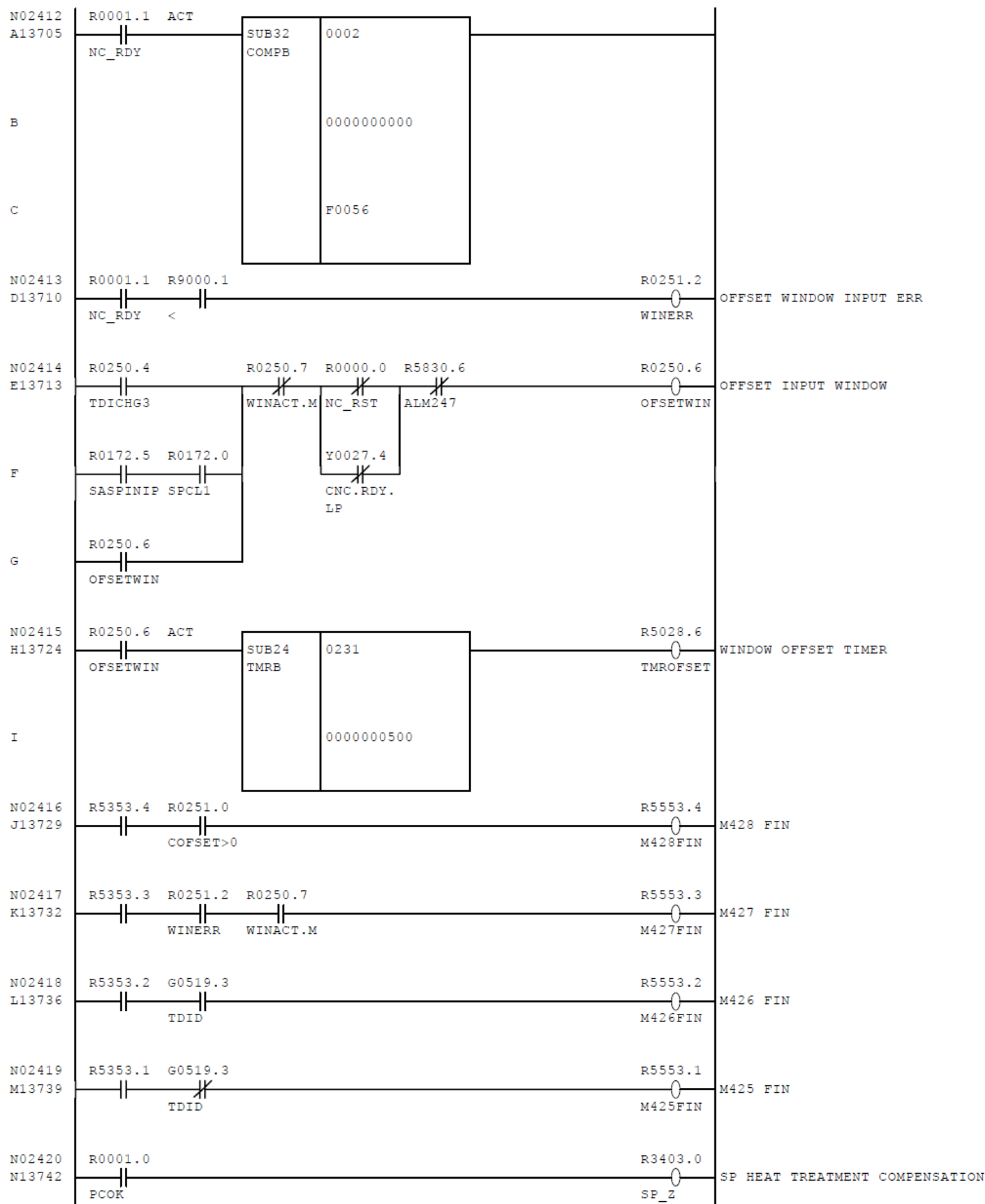


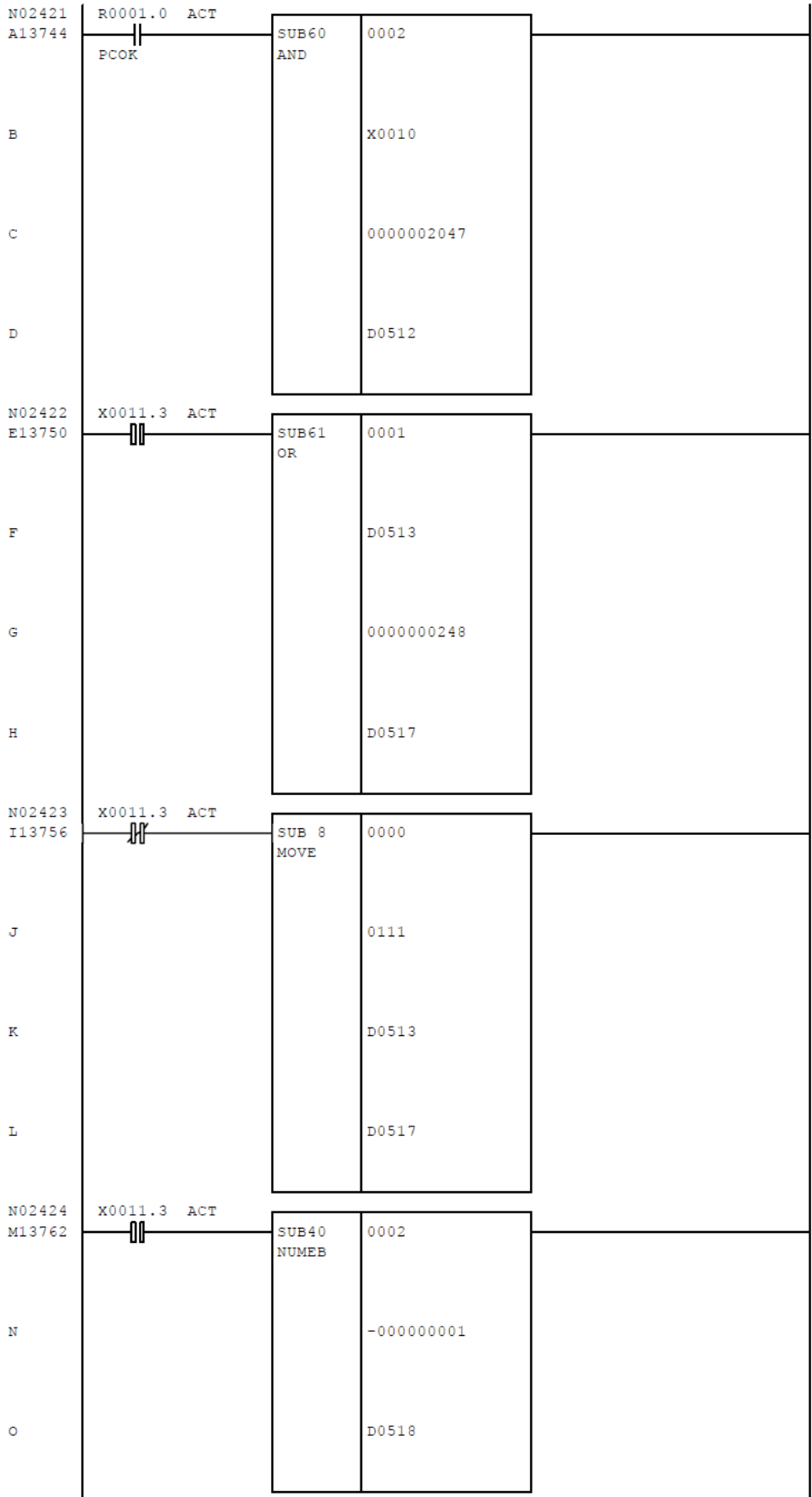


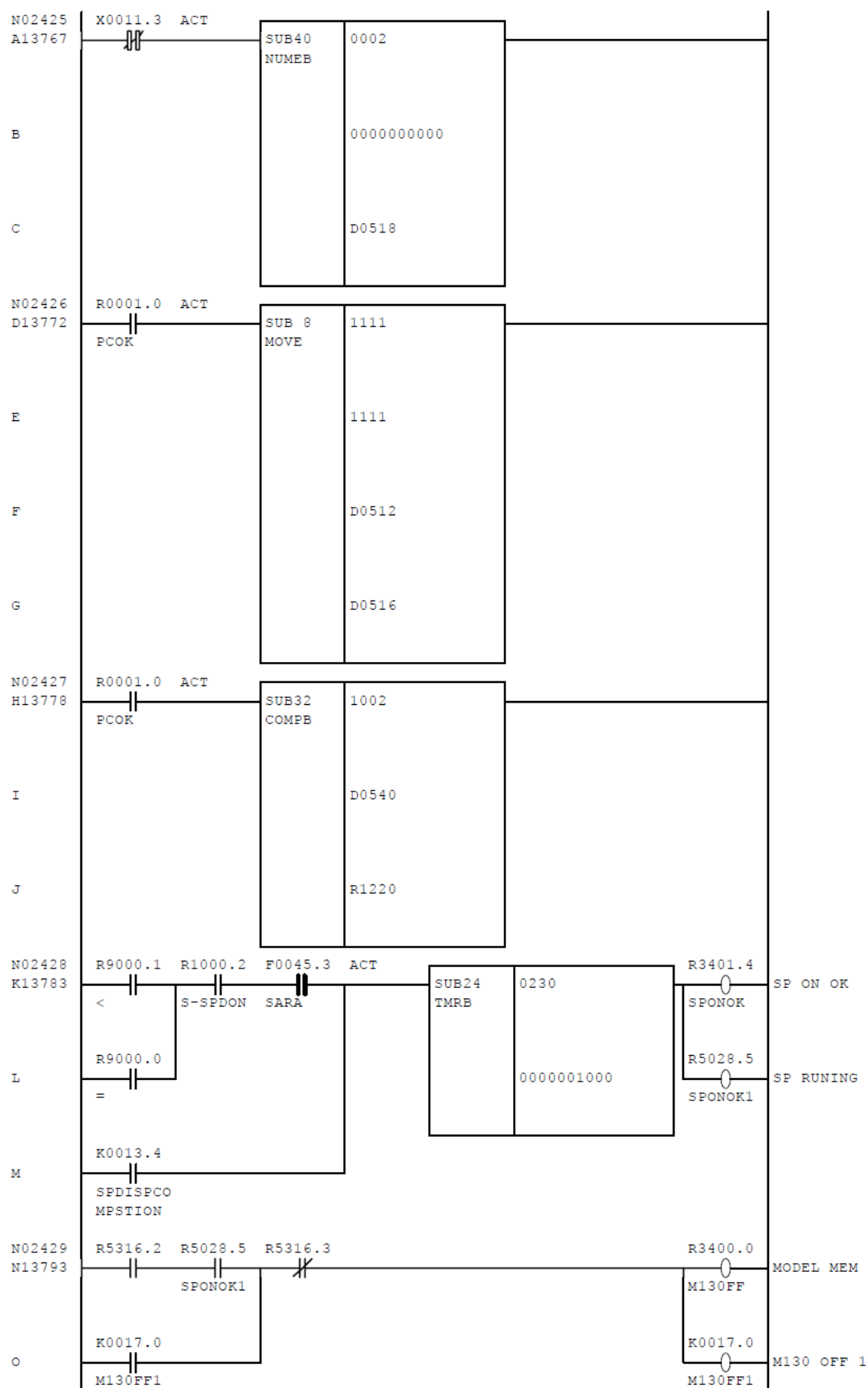




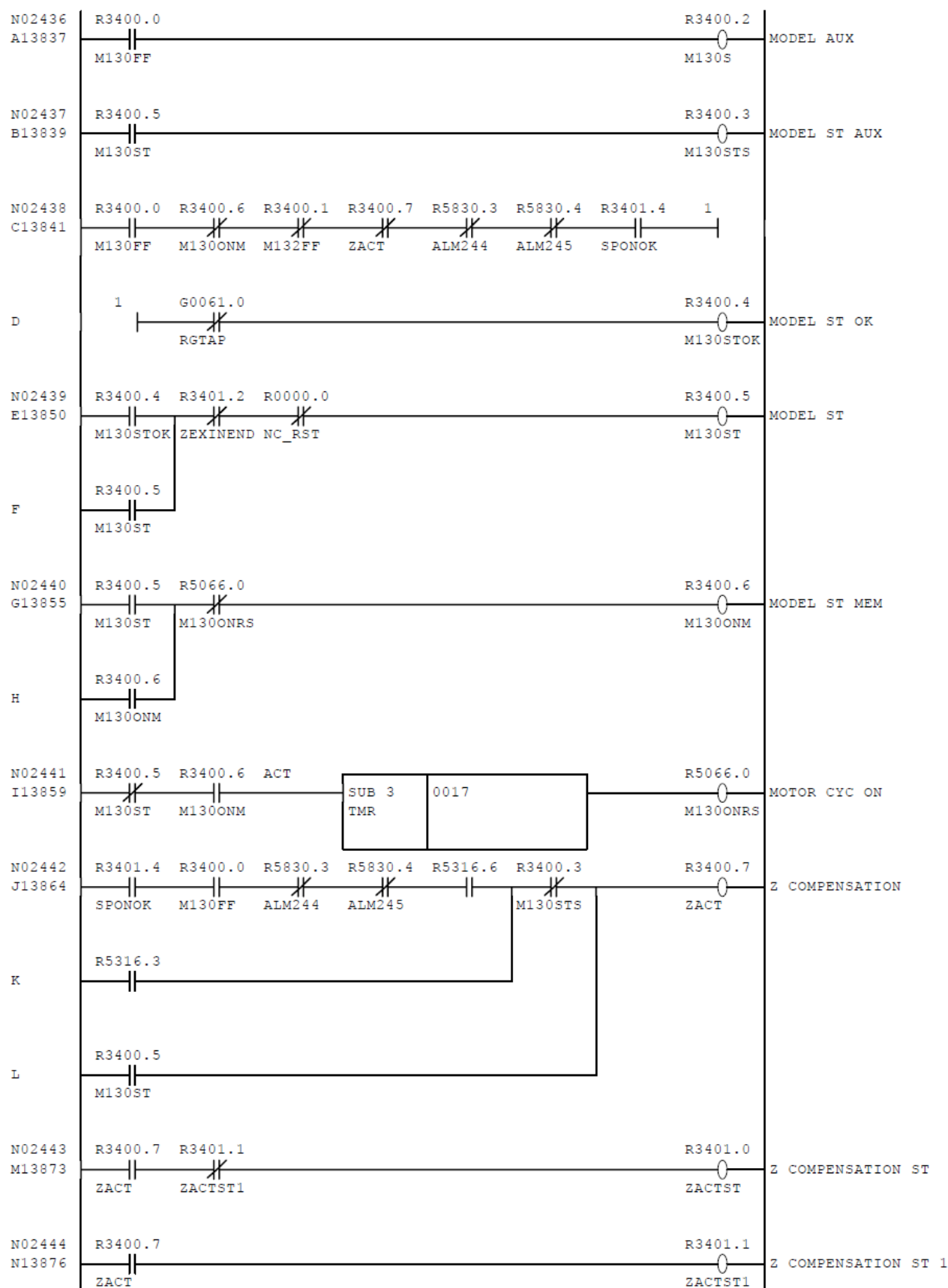


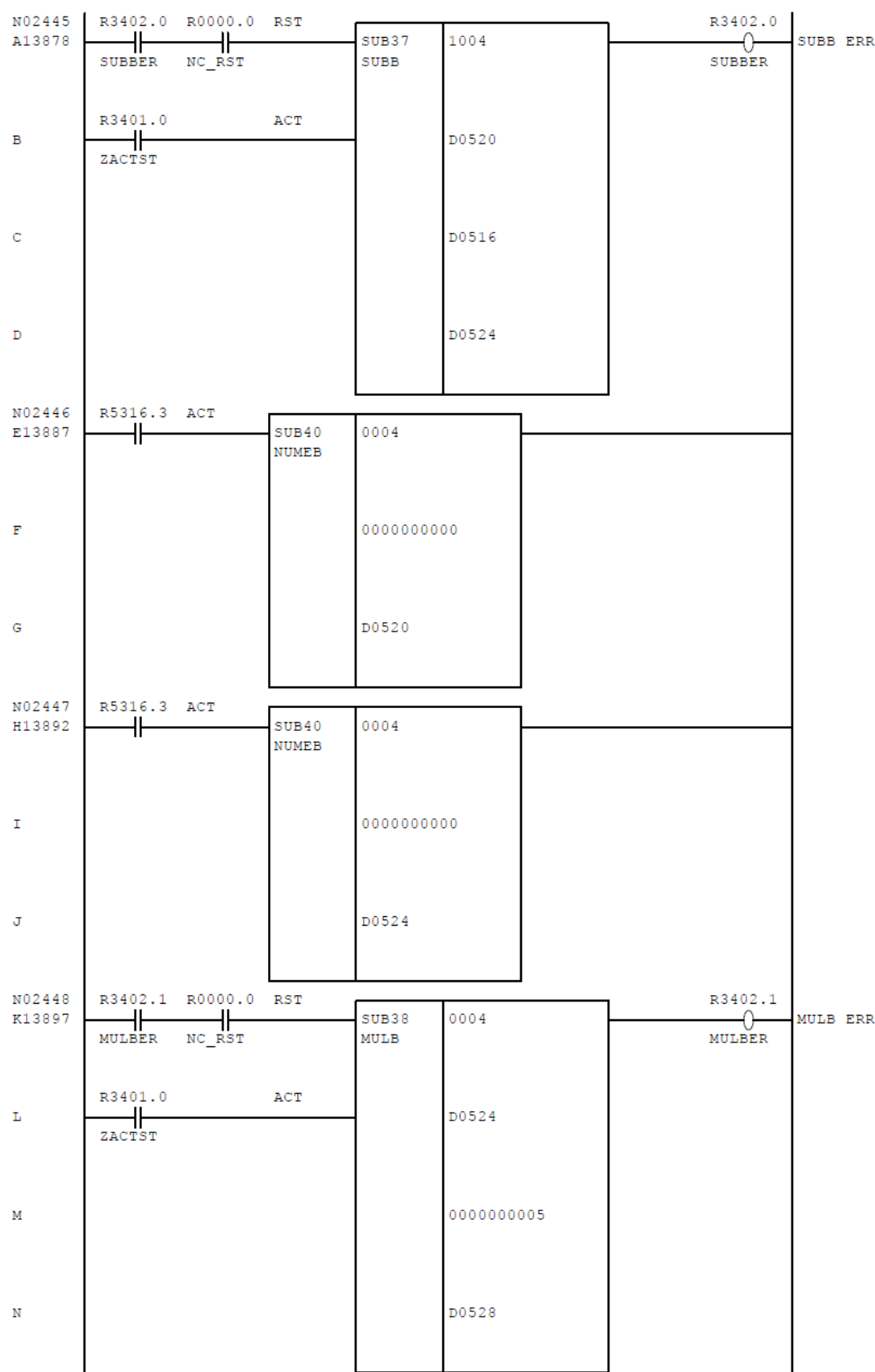


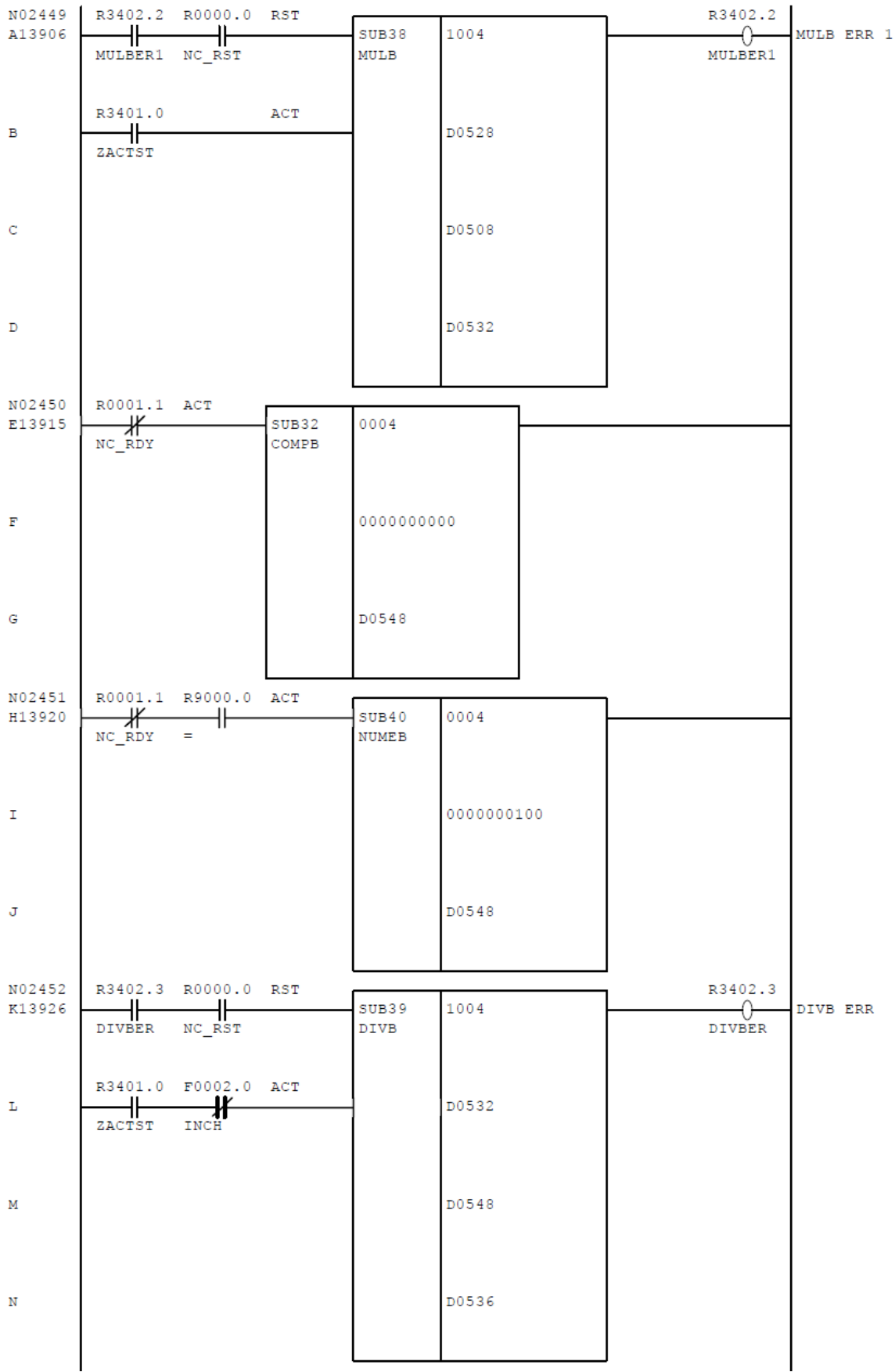


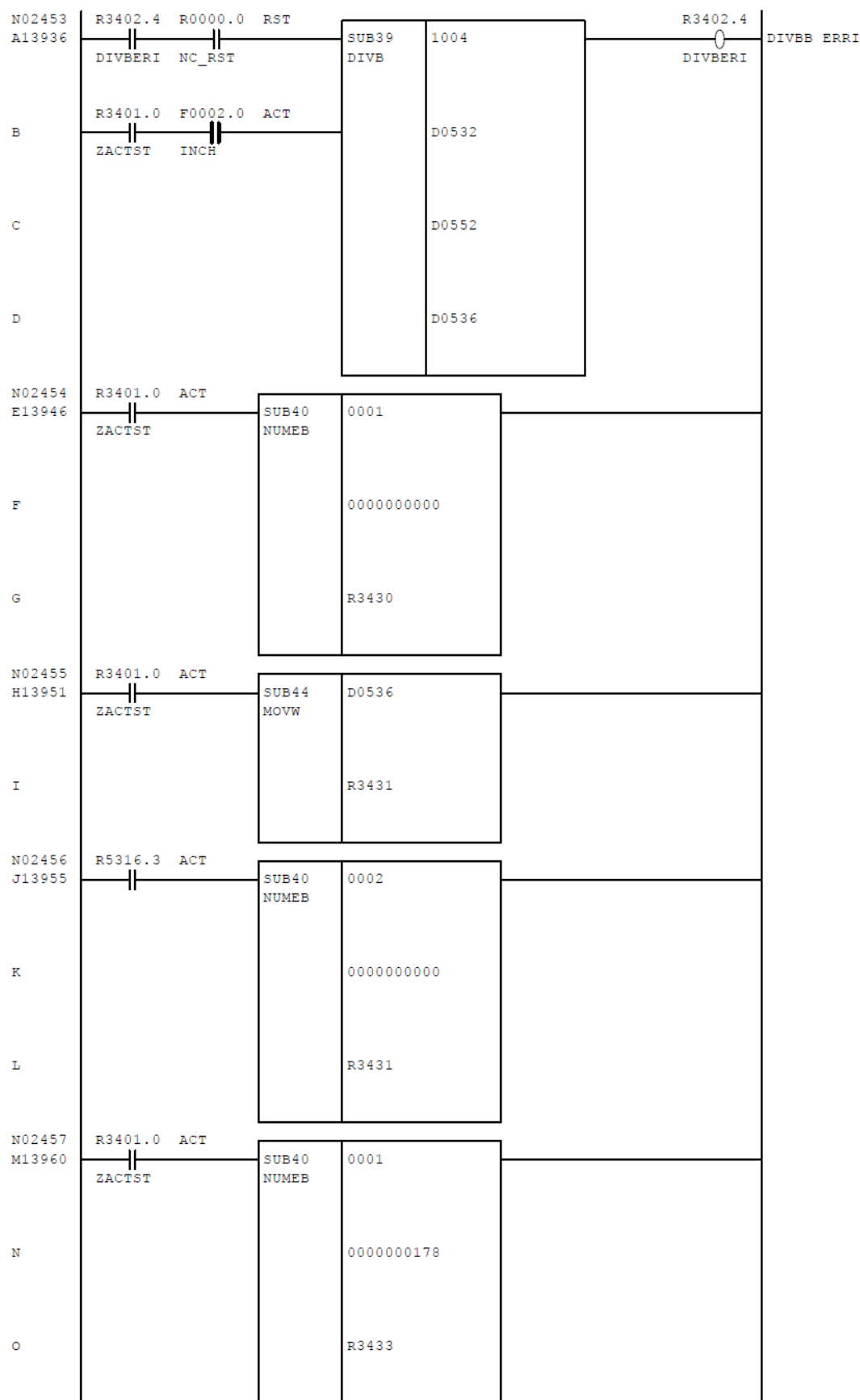


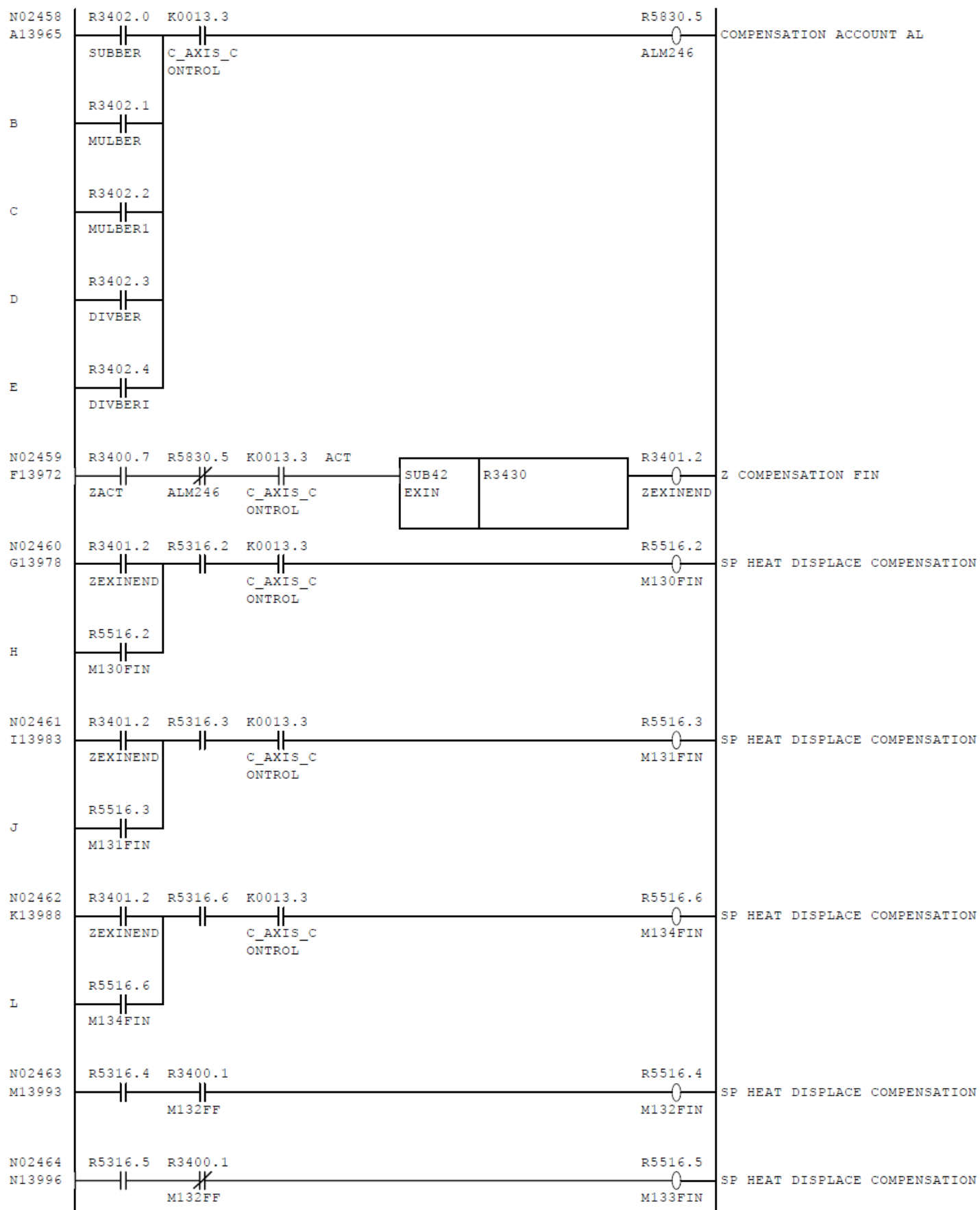


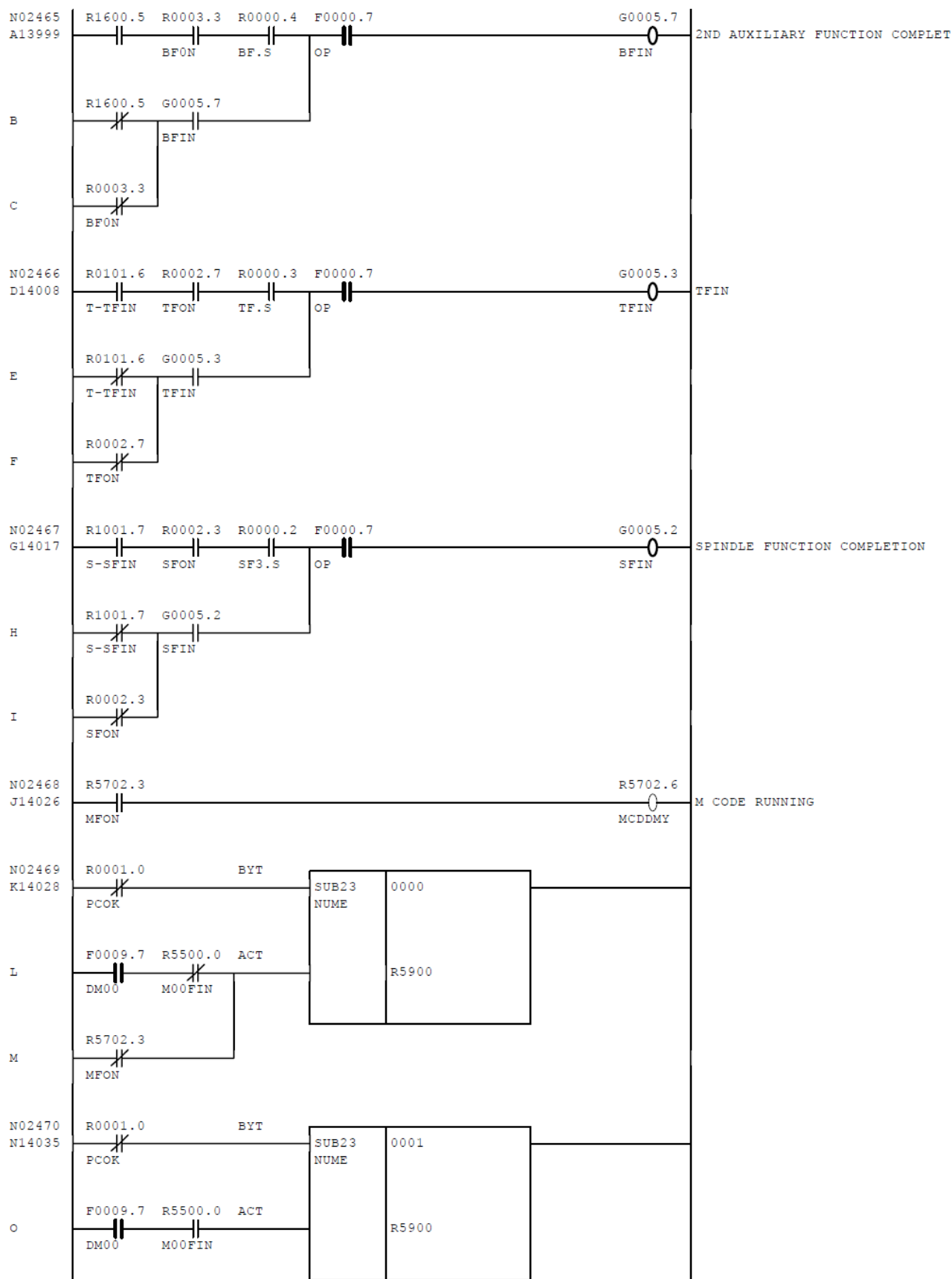


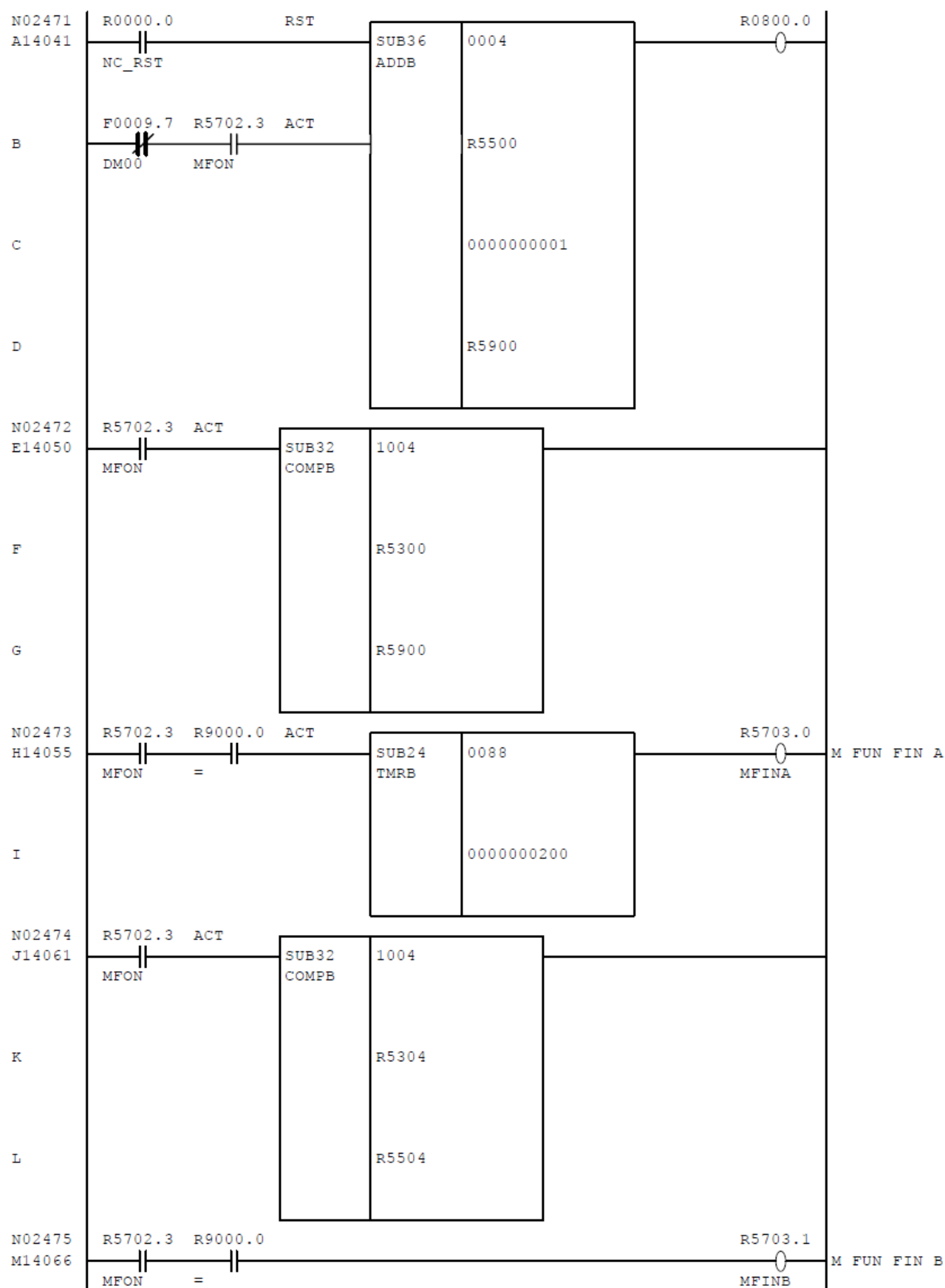


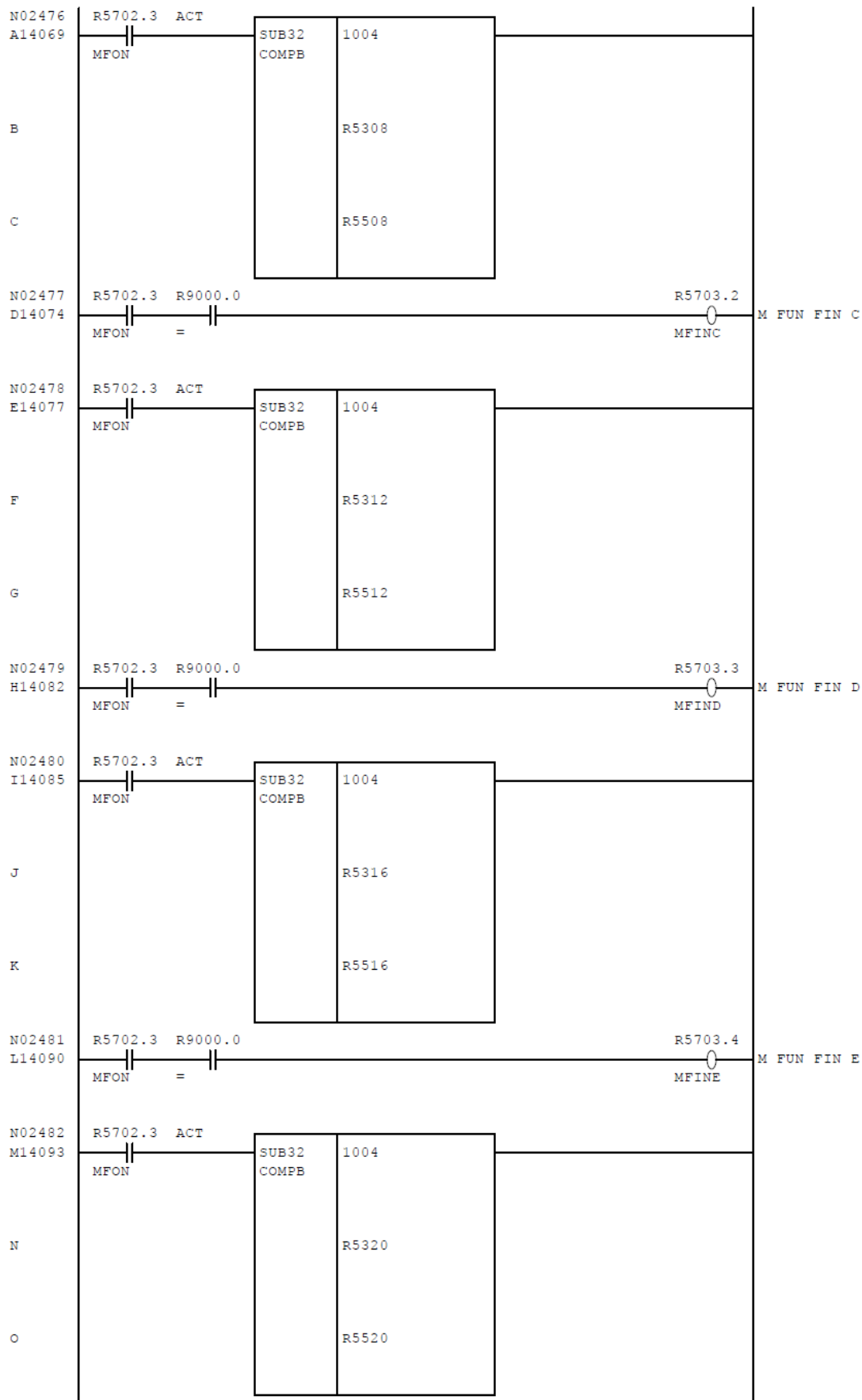


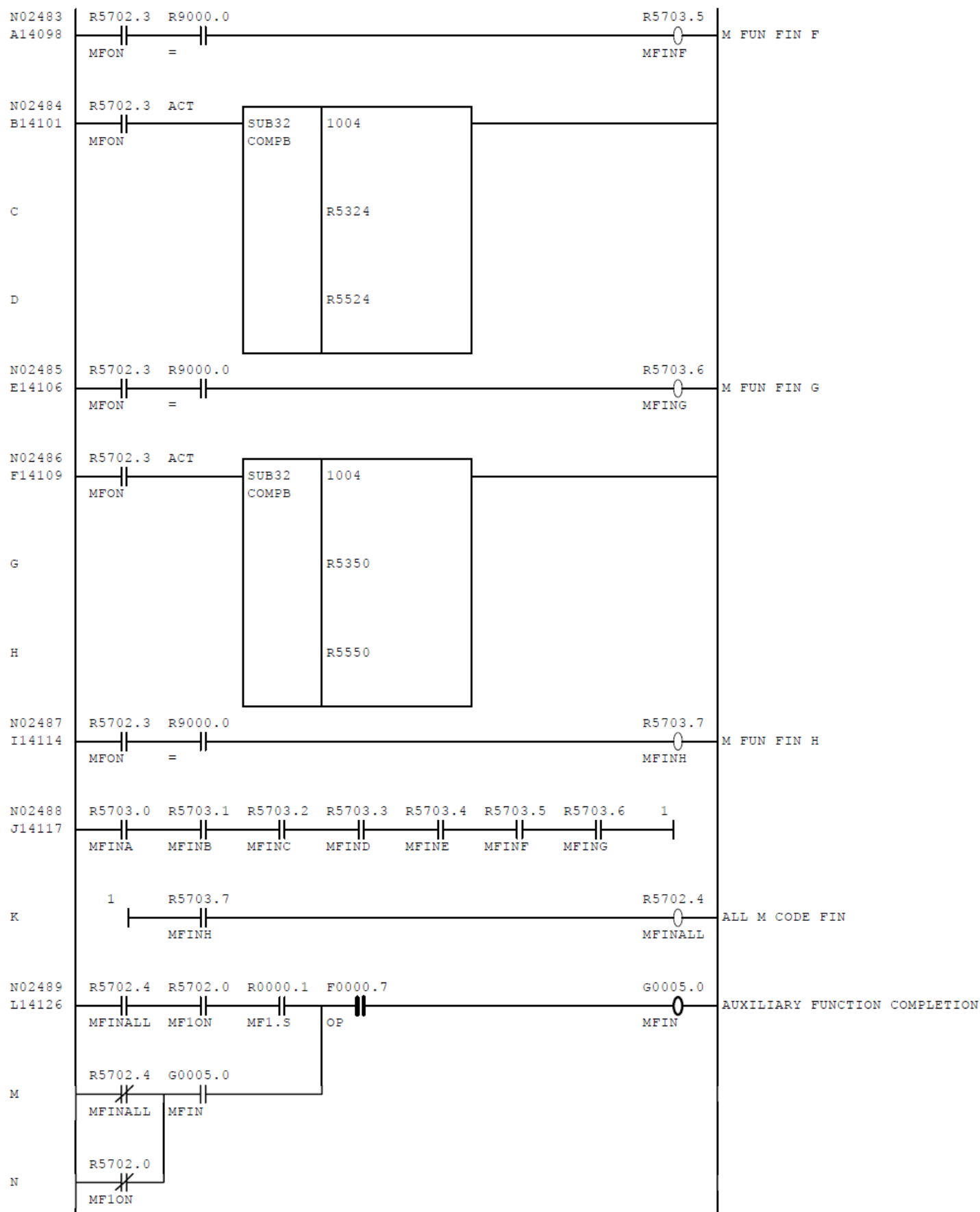


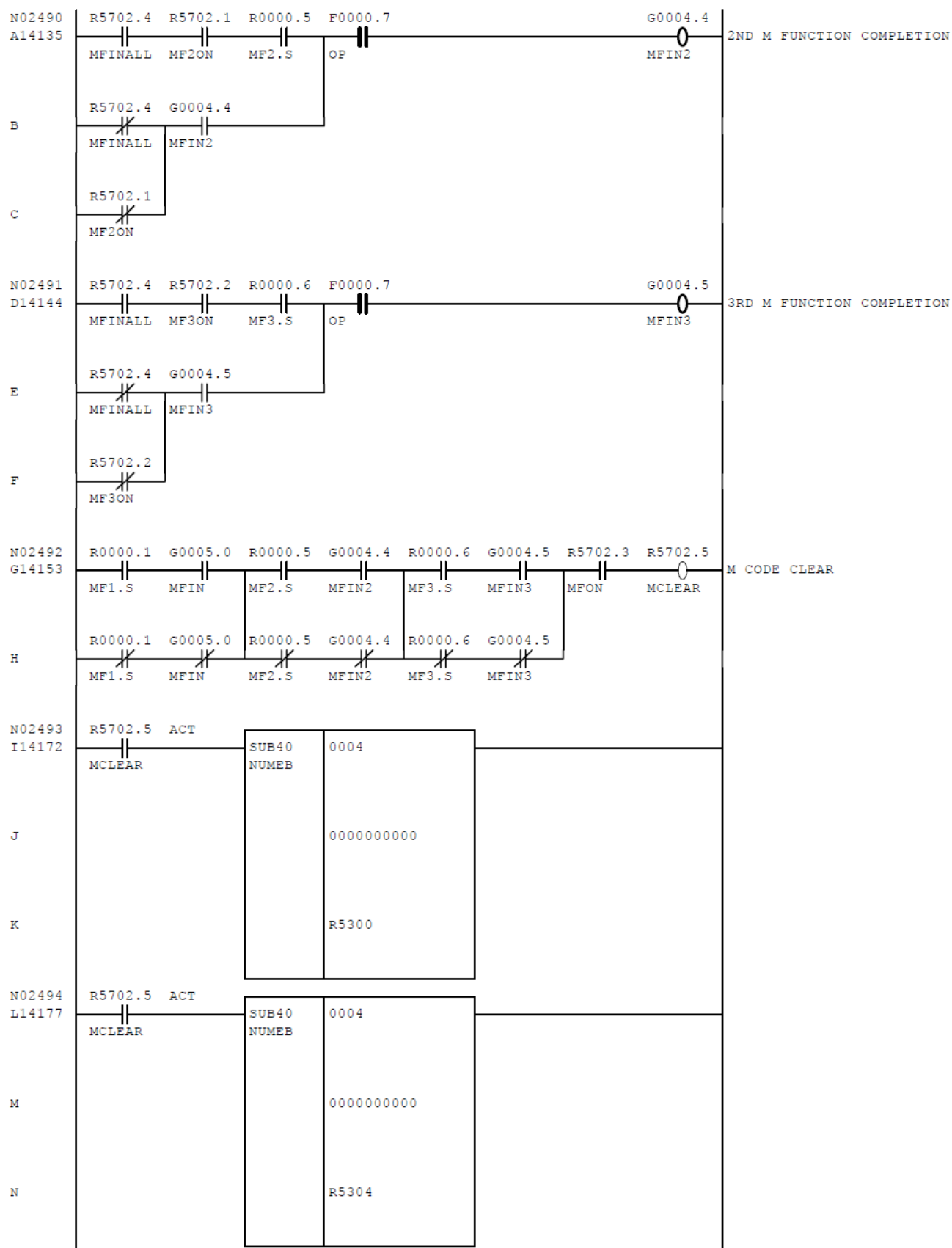




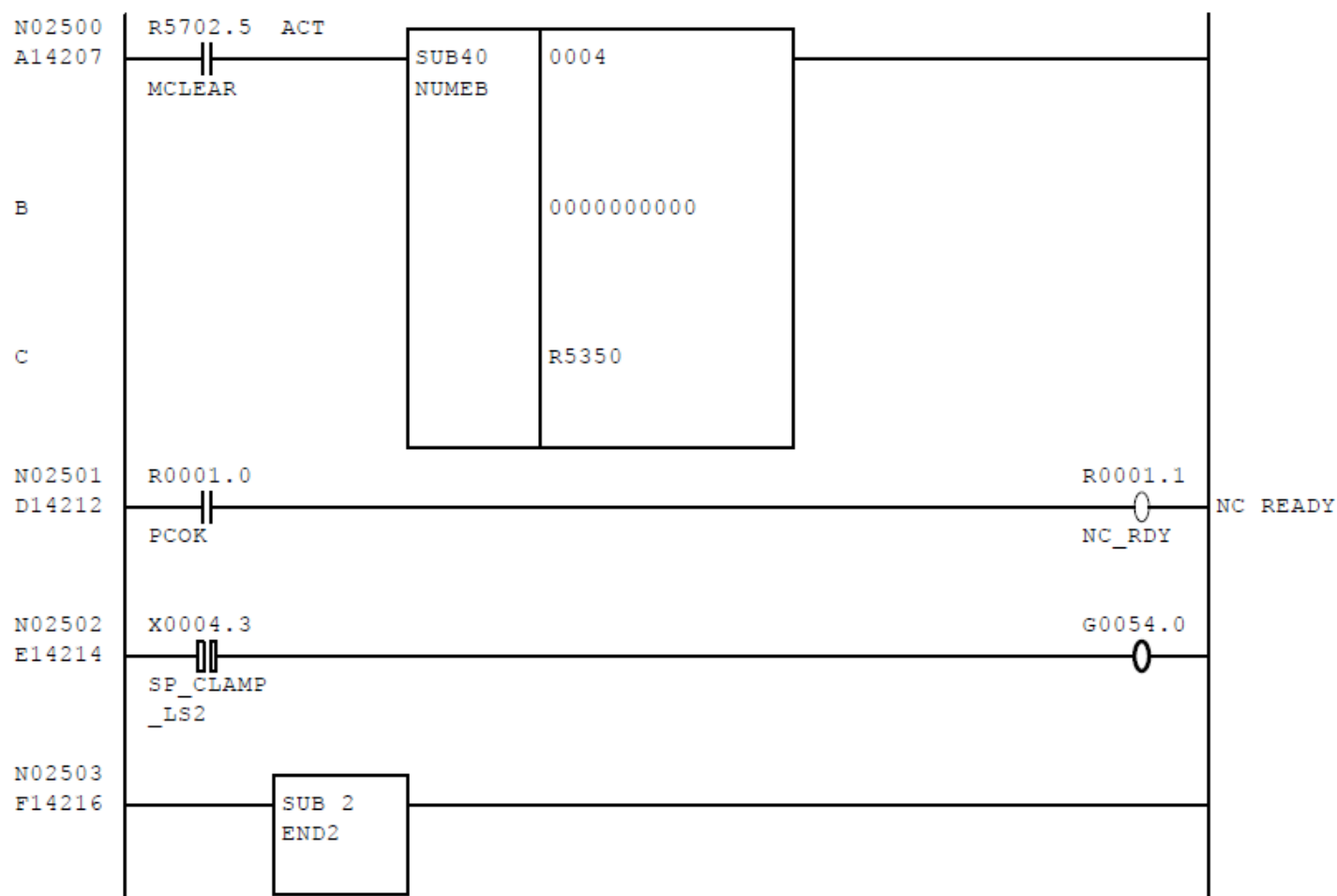








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C			R5308	
N02496 D14187	R5702.5 ACT MCLEAR	SUB40 NUMEB	0004	
E			0000000000	
F			R5312	
N02497 G14192	R5702.5 ACT MCLEAR	SUB40 NUMEB	0004	
H			0000000000	
I			R5316	
N02498 J14197	R5702.5 ACT MCLEAR	SUB40 NUMEB	0004	
K			0000000000	
L			R5320	
N02499 M14202	R5702.5 ACT MCLEAR	SUB40 NUMEB	0004	
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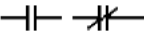
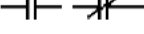
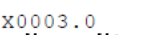


I/O Module

ADDRESS	GROUP	BASE	SLOT	MODULE NAME	COMMENT
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X0001	2	0	01	/16	
X0002	2	0	01	/16	
X0003	2	0	01	/16	
X0004	2	0	01	/16	
X0005	2	0	01	/16	
X0006	2	0	01	/16	
X0007	2	0	01	/16	
X0008	2	0	01	/16	
X0009	2	0	01	/16	
X0010	2	0	01	/16	
X0011	2	0	01	/16	
X0012	2	0	01	/16	
X0013	2	0	01	/16	
X0014	2	0	01	/16	
X0015	2	0	01	/16	
X0016					
X0017					
X0018					
X0019					
X0020	1	0	01	/6	
X0021	1	0	01	/6	
X0022	1	0	01	/6	
X0023	1	0	01	/6	
X0024	1	0	01	/6	
X0025	1	0	01	/6	
X0026	0	0	01	/16	
X0027	0	0	01	/16	
X0028	0	0	01	/16	
X0029	0	0	01	/16	
X0030	0	0	01	/16	
X0031	0	0	01	/16	
X0032	0	0	01	/16	
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X0038	0	0	01	/16	
X0039	0	0	01	/16	
X0040	0	0	01	/16	
X0041	0	0	01	/16	
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ADDRESS	GROUP	BASE	SLOT	MODULE NAME	COMMENT
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Y0001	2	0	01	/8	
Y0002	2	0	01	/8	
Y0003	2	0	01	/8	
Y0004	2	0	01	/8	
Y0005	2	0	01	/8	
Y0006	2	0	01	/8	
Y0007	2	0	01	/8	
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Y0022	1	0	01	/4	
Y0023	1	0	01	/4	
Y0024	0	0	01	/4	
Y0025	0	0	01	/4	
Y0026	0	0	01	/4	
Y0027	0	0	01	/4	

Cross Reference

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0000.0	GREASE_PRES_DETE	GREASE PRESSURE DETECT	
	S012574/N02199 S012577/N02199		
X0000.3	SP_OIL & AIR_DET	SPINDLE OIL&AIR PRESSURE DETE	
	S012615/N02205 S012617/N02205		
X0000.4	MG_TOOL_DETECT_1	MG TOOL DETECT 1	
	S000367/N00076 S006402/N01167 S007382/N01316 S009975/N01687 S009979/N01687 S009987/N01687		
X0000.5	ATC_OP_SEL	ATC SIDE PANEL ON SW	
	S002312/N00401 S002548/N00440 S002556/N00441 S002561/N00441 S002570/N00443 S002575/N00443 S006327/N01150 S006329/N01151 S009954/N01684 S009961/N01685 S010006/N01689 S010013/N01690		
X0000.6	ATC_MG_CW	ATC MAGAZINE CW	
	S005723/N01043		
X0000.7	ATC_MG_CCW	ATC MAGAZINE CCW	
	S005729/N01044		
X0001.1	HYD_MTR_OL	HYDRAULIC MOTOR OL	
	S000270/N00061		
X0001.4	ATC_DOR_L_OP_S	ATC DOOR LEFT OPEN SEN	
	S000378/N00078 S010027/N01694 S012258/N02143		
X0001.5	ATC_DOR_L_CLO_S	ATC DOOR LEFT CLOSE SEN	
	S012251/N02142		
X0001.6	ATC_DOR_R_OP_S	ATC DOOR RIGHT OPEN SEN	
	S000043/N00011 S000379/N00078 S010028/N01694 S012259/N02143		
X0001.7	ATC_DOR_R_CLO_S	ATC DOOR RIGHT CLOSE SEN	
	S012252/N02142		
X0002.0	GREASE_PUMP_O.L	GREASE PUMP OVERLOAD	
	S000299/N00066		
X0003.0	AIR_PRESSURE_DET	AIR PRESSURE LOW DETECT	
	S000513/N00104 S000530/N00107 S012592/N02202		
X0003.1	LUBE_LEVEL	LUBE LEVEL DETECT	
	S000275/N00062 S000276/N00062 S012647/N02211		
X0003.2	SP_CLAMP_L.S1	SPINDLE CLAMP SW WITH TOOL	
	S000398/N00081 S000415/N00086 S000418/N00086 S003877/N00703 S006083/N01112 S006090/N01112 S006440/N01172 S006457/N01174 S006465/N01175 S009976/N01687 S009988/N01687		
X0003.3	SP_UNCLP_L.S	SPINDLE UNCLAMP DETECT SW	
	S000417/N00086 S000420/N00086 S003879/N00703 S006087/N01112 S006092/N01112 S006442/N01172 S006448/N01173 S006450/N01174		
X0003.4	SP_UNCLP_PB	SPINDLE UNCLAMP PB	
	S004148/N00737 S009152/N01552 S009170/N01556 S009216/N01557 S012791/N02239		
X0003.5	MG_BACKWARD	MAGAZINE BACKWARD	
	S000366/N00076 S000386/N00079 S000397/N00081 S002255/N00396 S002269/N00397 S002295/N00399 S002302/N00400 S002313/N00401 S002560/N00441 S002574/N00443 S005238/N00939 S006370/N01160 S006373/N01161 S009119/N01546 S009995/N01688 S010004/N01689 S010012/N01690 S010031/N01695 S010034/N01696 S010348/N01780		
X0003.6	MG_FORWARD	MAGAZINE FORWARD	
	S006369/N01160 S006372/N01161 S010342/N01779		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0004.0	HEAT_EXCHG_OL S000230/N00053	HEAT EXCHANGER OL	
X0004.1	SP_FAN_OL S000235/N00054	SPINDLE FAN OL	
X0004.2	SP_CLP_NOT S009087/N01545	SPINDLE CLAMP WITHOUT TOOL SEN	
X0004.3	SP_CLAMP_LS2 S000416/N00086	SPINDLE CLAMP SW WITHOUT TOOL	S000419/N00086 S003878/N00703 S006084/N01112 S006091/N01112 S006441/N01172 S006447/N01173 S006458/N01174 S006466/N01175 S014214/N02502
X0005.3	C_CLAMP_SEN S011956/N02103	C AXIS CLAMP SENSOR	S011958/N02104
X0005.4	S002549/N00440		
X0005.5	S000444/N00091		
X0005.7	S000445/N00091		
X0006.2	DOOR.SW S000439/N00090	SAFETY DOOR SW	S000884/N00168 S000968/N00179 S001092/N00200 S001108/N00202 S001111/N00203 S001128/N00205 S001167/N00209 S001212/N00215 S001283/N00227 S001284/N00227 S001293/N00229 S001296/N00230 S001299/N00231 S001320/N00233 S001359/N00238 S001570/N00267 S001605/N00274 S002085/N00355 S002234/N00395 S002243/N00395 S003460/N00637 S003530/N00648 S003600/N00659 S003670/N00670 S003796/N00690 S003801/N00691 S003911/N00706 S003993/N00717 S011270/N01945 S011551/N02021 S012062/N02122 S012117/N02126 S012125/N02127 S012277/N02145 S012289/N02146
X0006.4	S000033/N00009 S000083/N00018	S000038/N00010 S000048/N00011 S000075/N00016 S000079/N00017 S000087/N00019 S000091/N00020	
X0006.5	CHIP_FLU_OL S000281/N00063	CHIP FLUSH PUMP OL	S000310/N00068 S011620/N02033 S012075/N02123
X0008.1	COL_OL S000349/N00074	COOLANT MOTOR OL	S000506/N00103 S001176/N00210 S001362/N00238 S001781/N00310 S001790/N00311 S001824/N00316 S001833/N00317 S001847/N00319 S001856/N00320 S001871/N00322 S001880/N00323 S001894/N00325 S001903/N00326 S001917/N00328 S001926/N00329 S001940/N00331 S001949/N00332 S001963/N00334 S001972/N00335 S001986/N00337 S001995/N00338 S002009/N00340 S002018/N00341 S002032/N00343 S002041/N00344 S002102/N00359 S002106/N00360 S009168/N01556 S009214/N01557 S011268/N01945 S011546/N02021 S011565/N02022 S011685/N02044 S012108/N02125 S012994/N02279
X0008.2	SP_COL_DETE_1 S000536/N00108	SPINDLE COOLANT A.L 1	S000550/N00110
X0008.3	CHIP_CONV_OL S000304/N00067	CHIP CONVEYOR MOTOR OL	S000316/N00069 S000317/N00069 S011993/N02110
X0008.4	EMG_STOP S000046/N00011	EMERGENCY STOP SW	S000049/N00011 S000059/N00013 S000894/N00168 S000919/N00171 S000973/N00179 S001018/N00191 S001166/N00209 S001211/N00215 S001606/N00274
X0008.5	A_CLAMP_SEN S001287/N00228	A AXIS CLAMP SENSOR	S011923/N02097 S011929/N02098

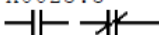
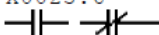
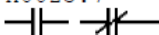
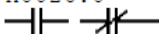
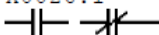
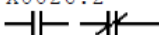
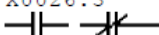
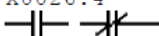
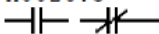
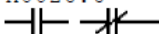
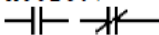
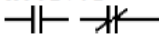
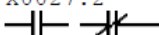
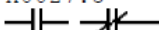
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0008.6		S001019/N00191 S001047/N00194	
X0008.7		S000953/N00177 S000955/N00177	
X0009.4		S002558/N00441 S002572/N00443	
X0009.5		S002559/N00441 S002573/N00443	
X0010.0		SP_HI_SHIFT SPINDLE HIGH SHIFT S004223/N00751	
X0010.1		SP_LOW_SHIFT SPINDLE LOW SHIFT S004216/N00749 S004220/N00750	
X0010.2		S000488/N00098	
X0010.4		CLT_LOW_LIMIT COOLANT TANK LOW LIMIT S000481/N00097 S000482/N00097 S000524/N00106 S011688/N02044 S011690/N02044 S012194/N02132 S012196/N02132 S012210/N02133 S012212/N02133	
X0010.7		SKIM_OL SKIMMER MOTOR OL S000293/N00065 S012225/N02135 S012551/N02195 S012557/N02196 S012568/N02198 S012575/N02199	
X0011.0		S013069/N02291	
X0011.1		S013073/N02292	
X0011.2		S013077/N02293	
X0011.3		S013081/N02294 S013750/N02422 S013756/N02423 S013762/N02424 S013767/N02425	
X0011.4		S013085/N02295	
X0011.5		S013089/N02296	
X0011.6		S013093/N02297	
X0011.7		CTS_MTR_OL CTS MOTOR OL S000287/N00064 S011585/N02025 S011586/N02025	
X0012.5		MIST_COLCT_DETE MIST COLLECTOR DETE L.S S000330/N00071 S011637/N02035 S011647/N02036 S011658/N02038	
X0013.4		DC_QF201 DC QF201 OFF L.S S000240/N00055	
X0013.5		DC_QF202_L.S DC QF202 L.S S000245/N00056	
X0013.6		DC_QF_204_L.S DC QF204 OFF AL S000250/N00057	


ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0014.0 — —	AC_QF12_L.S S000255/N00058	AC QF12 L.S	
X0014.1 — —	AC_QF13_L.S S000260/N00059	AC QF13 OFF L.S	
X0014.2 — —	MOTOR_O.L_7 S000265/N00060	AC QF16 OFF L.S	
X0014.3 — —	WEEK_TIMER_ON S001595/N00272 S001651/N00284	WEEK TIMER ON S001599/N00273 S001608/N00274 S001613/N00275 S001626/N00277	
X0015.0 — —	S_HAND_FRD S006349/N01156	S HAND FORWARD S006355/N01157 S006793/N01232	
X0015.1 — —	S_HAND_BKRD S006350/N01156	S HAND BACKWARD S006354/N01157 S006794/N01232	
X0015.2 — —	S_HAND_UP S006359/N01158	S HAND UP S006365/N01159 S006795/N01232	
X0015.3 — —	S_HAND_DOWN S006360/N01158	S HAND DOWN S006364/N01159 S006796/N01232	
X0016.0 — —	S_HAND_TOOL_DETE S006391/N01165	S HAND TOOL DETECT S006394/N01166	
X0016.1 — —	S_HAD_HED_CLP S006339/N01154	S HAND HEAD CLAMP S006345/N01155 S006798/N01232	
X0016.2 — —	S_HAD_HED_UNCLP S006340/N01154	S HAND HEAD UNCLAMP S006344/N01155 S006799/N01232	
X0018.1 — —	CHIPCOL_FLT_BK_1 S000592/N00118	CHIP COOLANT FILTER BREAK 1	
X0018.2 — —	CHIP_CON_SUBSEL1 S012072/N02123 S012153/N02128	CHIP CON SUB SELECT SW 1 S012077/N02123 S012097/N02124 S012105/N02125 S012149/N02128 S012162/N02129	
X0018.3 — —	CHIP_CON_CW S012078/N02123	CHIP OIL CHIP CON CW S012152/N02128	
X0018.4 — —	CHIP_CON_CCW S012161/N02129	CHIP OIL CHIP CON CCW	
X0018.6 — —	MAIN_TANK_LOW S000600/N00119	MAIN TANK LOW	
X0018.7 — —	FILTER_CLOGGED S011706/N02046	CHIP OIL FILTER CLOGGING	
X0019.1 — —	COL_OIL_LEV_LOW S011699/N02044	COOLANT OIL LOW LEVEL	
X0019.2 — —	COL_ON S000540/N00109	COOLER RUNNING	
X0019.3 — —	CHPCON_TOQ_OVR1 S000468/N00094	CHIP CON TORQUE OVR 1 S012036/N02118 S012043/N02119	
X0019.4 — —	CHP_CON_TOQ_OVR2 S000473/N00095	CHIP CON TORQUE OVR 2	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0019.5	CHP_CON_TOQ_OVR3 S000477/N00096	CHIP CON TORQUE OVR 3	
X0019.6	MGNET_SEPRTOR S000355/N00075	MGNET SEPARATOR	S011628/N02034
X0019.7	CLT_CIRCULATE S012207/N02133	COOLANT CIRCULATE	
X0020.0	MST_LOCK_PB S001759/N00307	MST LOCK PB	S001766/N00308
X0020.2	MAG_CW_PB S002554/N00441	MAGAZINE CW PB	S002569/N00443 S002587/N00446
X0020.3	CHP_CON_MAN_CCW S012110/N02125	CHIP CON MANUAL CCW	
X0020.4	MLK_PB S001739/N00304	MACHINE LOCK PB	S001746/N00305
X0020.5			S013607/N02392 S013611/N02393
X0020.6	MAG.R.L.PB S000323/N00070	MAGAZINE L/R PB	S000376/N00078 S005239/N00939 S009951/N01684 S009959/N01685 S012171/N02130 S012180/N02131
X0020.7	CHP.CON.CW.PB S000342/N00073	CHIP CONVEYOR CW PB	S012048/N02120 S012052/N02121 S012191/N02132
X0021.0	BLOCK_SKIP S002150/N00371	BLOCK SKIP	S002153/N00372
X0021.1	OVC_PB S002647/N00470	OVERRIDE CANCEL PB	S002650/N00471
X0021.2	F1_PB S009157/N01553	F1 PB FOR FOOT SW VALID	S009160/N01554 S012590/N02201
X0021.3	F2_PB S009130/N01547	F2 PB FOR OIL & AIR	S009133/N01548
X0021.4	PRO.RESTART.PB S001802/N00313	PROGRAM RESTART PB	S001809/N00314
X0021.5			S011459/N02006 S011462/N02007
X0021.7	WORK_LIGHT_PB S002114/N00362	WORK LICHT ON PB	S002117/N00363
X0022.0	OPTION_STOP S002161/N00374	OPTIONAL STOP PB	S002164/N00375
X0022.1	CTS_PB S011488/N02012	CTS PB	S011492/N02013

X0022.2	AL.RST.PB	ALARM RESET PB			
	S000228/N00052	S000232/N00053	S000237/N00054	S000242/N00055	S000247/N00056
	S000252/N00057	S000257/N00058	S000262/N00059	S000267/N00060	S000272/N00061
	S000278/N00062	S000283/N00063	S000289/N00064	S000295/N00065	S000301/N00066
	S000306/N00067	S000312/N00068	S000319/N00069	S000326/N00070	S000332/N00071
	S000338/N00072	S000345/N00073	S000351/N00074	S000358/N00075	S000368/N00076
	S000381/N00078	S000387/N00079	S000399/N00081	S000405/N00082	S000427/N00087
	S000456/N00092	S000465/N00094	S000484/N00097	S000490/N00098	S000497/N00099
	S000509/N00103	S000520/N00105	S000526/N00106	S000532/N00107	S000544/N00109
	S000552/N00110	S000559/N00111	S000567/N00112	S000582/N00116	S000588/N00117
	S000595/N00118	S000632/N00127	S000738/N00135	S000744/N00136	S000872/N00165
	S000874/N00166	S000963/N00178	S001280/N00227	S001289/N00228	S001404/N00245
	S001614/N00275	S002346/N00406	S003325/N00598	S003432/N00633	S003464/N00638
	S003487/N00642	S003534/N00649	S003557/N00653	S003604/N00660	S003627/N00664
	S003674/N00671	S003697/N00675	S003810/N00693	S003819/N00694	S003886/N00703
	S004058/N00720	S004763/N00854	S004780/N00857	S004816/N00863	S005047/N00901
	S005266/N00945	S005275/N00946	S005289/N00948	S005299/N00949	S005308/N00950
	S005328/N00954	S005337/N00955	S005346/N00956	S005355/N00957	S005364/N00958
	S005373/N00959	S005382/N00960	S005391/N00961	S005400/N00962	S005530/N00999
	S005549/N01003	S005568/N01007	S005587/N01011	S005606/N01015	S005625/N01019
	S005644/N01023	S005663/N01027	S005829/N01063	S005839/N01064	S005854/N01066
	S005869/N01068	S005890/N01071	S005904/N01072	S006788/N01231	S006806/N01233
	S006950/N01258	S007009/N01263	S007126/N01277	S007907/N01390	S007924/N01391
	S007937/N01392	S007958/N01393	S008117/N01424	S008138/N01428	S008169/N01434
	S008196/N01439	S008268/N01449	S008362/N01459	S008446/N01477	S008467/N01481
	S008551/N01493	S008606/N01500	S008728/N01513	S008845/N01530	S009342/N01579
	S011221/N01932	S011672/N02043	S011677/N02044	S011809/N02066	S012364/N02162
	S012385/N02166	S012415/N02172	S012448/N02177	S012471/N02182	S012492/N02186
	S012580/N02199	S012581/N02199	S012595/N02202	S012607/N02204	S012620/N02205
	S012654/N02212	S012660/N02213	S012701/N02219	S012787/N02238	S013098/N02298
	S013111/N02300	S013181/N02318	S013201/N02321	S013287/N02330	S013433/N02358
	S013576/N02386	S013594/N02388	S013658/N02403	S013667/N02404	S013809/N02431
	S013822/N02433				
X0022.3	DOOR.PB	DOOR PB			
	S000384/N00079	S010003/N01689	S010011/N01690		
X0022.4	DRY_RUN_PB	DRY RUN PB			
	S002139/N00368	S002142/N00369			
X0022.5	CHP.FLU.PB	CHIP FLUSH PB			
	S011593/N02027				
X0022.6	DOR.LCK.PB	DOOR LOCK PB			
	S001059/N00195	S001067/N00197	S001125/N00204		
X0022.7	A.ZRN.PB	AUTO ZRN PB			
	S002407/N00419				
X0023.0	SINGLE_BLOCK	SINGLE BLOCK			
	S002388/N00414	S002392/N00415			
X0023.1	COL.PB	COOLANT PB			
	S011473/N02009	S011476/N02010	S011570/N02023		
X0023.2	DOR.UNL.PB	DOOR UNLOCK PB			
	S001058/N00195	S001064/N00196	S001116/N00204	S001143/N00207	
X0023.3	M19.PB	M19 PB			
	S004383/N00782				
X0023.4	Z.PB	Z AXIS SELECT PB			
	S002440/N00423	S002450/N00424	S002458/N00425	S002475/N00426	S002485/N00427
	S002491/N00428				

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0023.6	-_MAUAL_FEED — — —	- MAUAL FEED	
		S002497/N00430	
X0023.7	SP.CCW.PB — — —	SPINDLE CCW PB	
		S003964/N00711 S004036/N00719 S004363/N00781	
X0024.0	Y.PB — — —	Y AXIS SELECT PB	
		S002439/N00423 S002447/N00424 S002464/N00425 S002474/N00426 S002484/N00427 S002490/N00428	
X0024.1	C.PB — — —	C AXIS SELECT PB	
		S002442/N00423 S002452/N00424 S002462/N00425 S002472/N00426 S002480/N00427	
X0024.2	RAPID.PB — — —	RAPID SELECT PB	
		S001712/N00297	
X0024.3	SP_STOP_PB — — —	SPINDLE STOP PB	
		S003901/N00705 S003915/N00707 S003929/N00708 S003944/N00709 S003951/N00710 S003956/N00711 S004020/N00718 S004044/N00719 S004364/N00781	
X0024.4	X.PB — — —	X AXIS SELECT PB	
		S002436/N00423 S002453/N00424 S002463/N00425 S002473/N00426 S002483/N00427 S002489/N00428	
X0024.5	A.PB — — —	A AXIS SELECT PB	
		S002441/N00423 S002451/N00424 S002461/N00425 S002469/N00426 S002486/N00427	
X0024.6	+_MAUAL_FEED — — —	+ MAUAL FEED	
		S001162/N00209 S002493/N00429	
X0024.7	SP.CW.PB — — —	SPINDLE CW PB	
		S003965/N00711 S004012/N00718 S004362/N00781	
X0025.0	SP_OVERRIDE_A — — —	SPINDLE OVERRIDE A	
		S003013/N00540 S003017/N00541 S003021/N00542 S003025/N00543 S003029/N00544 S003033/N00545 S003037/N00546 S003041/N00547 S003045/N00548 S003050/N00549 S003055/N00550	
X0025.1	SP_OVERRIDE_B — — —	SPINDLE OVERRIDE B	
		S003014/N00540 S003018/N00541 S003022/N00542 S003026/N00543 S003030/N00544 S003034/N00545 S003038/N00546 S003042/N00547 S003046/N00548 S003051/N00549 S003056/N00550	
X0025.2	SP_OVERRIDE_C — — —	SPINDLE OVERRIDE C	
		S003015/N00540 S003019/N00541 S003023/N00542 S003027/N00543 S003031/N00544 S003035/N00545 S003039/N00546 S003043/N00547 S003047/N00548 S003052/N00549 S003057/N00550	
X0025.3	FEED_OVERRIDE_A — — —	FEED OVERRIDE A	
		S002664/N00474 S002670/N00475 S002676/N00476 S002682/N00477 S002688/N00478 S002694/N00479 S002700/N00480 S002706/N00481 S002712/N00482 S002718/N00483 S002724/N00484 S002730/N00485 S002736/N00486 S002742/N00487 S002748/N00488 S002754/N00489 S002760/N00490 S002766/N00491 S002772/N00492 S002778/N00493 S002784/N00494	
X0025.4	FEED_OVERRIDE_B — — —	FEED OVERRIDE B	
		S002665/N00474 S002671/N00475 S002677/N00476 S002683/N00477 S002689/N00478 S002695/N00479 S002701/N00480 S002707/N00481 S002713/N00482 S002719/N00483 S002725/N00484 S002731/N00485 S002737/N00486 S002743/N00487 S002749/N00488 S002755/N00489 S002761/N00490 S002767/N00491 S002773/N00492 S002779/N00493 S002785/N00494	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0025.5	FEED_OVERRIDE_C	FEED OVERRIDE C	
	S002666/N00474	S002672/N00475 S002678/N00476 S002684/N00477 S002690/N00478	
	S002696/N00479	S002702/N00480 S002708/N00481 S002714/N00482 S002720/N00483	
	S002726/N00484	S002732/N00485 S002738/N00486 S002744/N00487 S002750/N00488	
	S002756/N00489	S002762/N00490 S002768/N00491 S002774/N00492 S002780/N00493	
	S002786/N00494		
X0025.6	FEED_OVERRIDE_D	FEED OVERRIDE D	
	S002667/N00474	S002673/N00475 S002679/N00476 S002685/N00477 S002691/N00478	
	S002697/N00479	S002703/N00480 S002709/N00481 S002715/N00482 S002721/N00483	
	S002727/N00484	S002733/N00485 S002739/N00486 S002745/N00487 S002751/N00488	
	S002757/N00489	S002763/N00490 S002769/N00491 S002775/N00492 S002781/N00493	
	S002787/N00494		
X0025.7	FEED_OVERRIDE_E	FEED OVERRIDE E	
	S002668/N00474	S002674/N00475 S002680/N00476 S002686/N00477 S002692/N00478	
	S002698/N00479	S002704/N00480 S002710/N00481 S002716/N00482 S002722/N00483	
	S002728/N00484	S002734/N00485 S002740/N00486 S002746/N00487 S002752/N00488	
	S002758/N00489	S002764/N00490 S002770/N00491 S002776/N00492 S002782/N00493	
	S002788/N00494		
X0026.0	OP_MODE_SEL_A	OPERATION MODE SELECT A	
	S001681/N00291	S001685/N00292 S001689/N00293 S001693/N00294 S001697/N00295	
	S001702/N00296	S001706/N00297 S001708/N00297 S001714/N00298	
X0026.1	OP_MODE_SEL_B	OPERATION MODE SELECT B	
	S001682/N00291	S001686/N00292 S001690/N00293 S001694/N00294 S001698/N00295	
	S001703/N00296	S001707/N00297 S001709/N00297 S001715/N00298	
X0026.2	OP_MODE_SEL_C	OPERATION MODE SELECT C	
	S001683/N00291	S001687/N00292 S001691/N00293 S001695/N00294 S001699/N00295	
	S001704/N00296	S001711/N00297 S001716/N00298	
X0026.3	RAPID_OVEERIDE_A	RAPID OVEERIDE A	
	S002907/N00527		
X0026.4	RAPID_OVEERIDE_B	RAPID OVEERIDE B	
	S002909/N00528		
X0026.5	CYCLE.START_PB	CYCLE START PB	
	S001348/N00236	S001352/N00238 S001396/N00244 S003342/N00602 S003343/N00602	
	S008856/N01531		
X0026.6	HOLD_PB	HOLD PB	
	S000065/N00014		
X0026.7	CNC.RDY.PB	CNC READY PB	
	S000060/N00013		
X0027.1	MEM_KEY_SW	MEMORY KEY ENABLE	
	S001737/N00304	S001744/N00305 S001757/N00307 S001764/N00308 S001778/N00310	
	S001787/N00311	S001800/N00313 S001807/N00314 S001821/N00316 S001830/N00317	
	S001844/N00319	S001853/N00320 S001868/N00322 S001877/N00323 S001891/N00325	
	S001900/N00326	S001914/N00328 S001923/N00329 S001937/N00331 S001946/N00332	
	S001960/N00334	S001969/N00335 S001983/N00337 S001992/N00338 S002006/N00340	
	S002015/N00341	S002029/N00343 S002038/N00344 S002183/N00380 S002606/N00451	
	S002608/N00452	S002610/N00453	
X0027.2	MPG.X	MANUAL AXIS SELECT X AXIS	
	S002911/N00529	S002930/N00533 S002945/N00534 S002958/N00535 S002973/N00537	
X0027.3	MPG.Y	MANUAL AXIS SELECT Y AXIS	
	S002912/N00529	S002943/N00534 S002946/N00534 S002959/N00535 S002974/N00537	

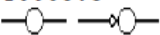
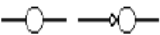
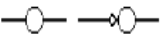
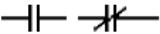
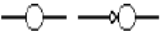
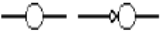
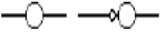
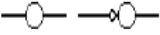
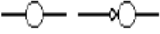
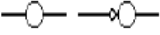
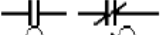
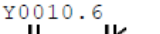
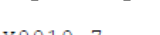
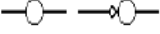
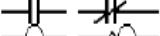
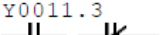
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0027.4	MPG.Z	MANUAL AXIS SELECT Z AXIS	
	S002913/N00529	S002931/N00533 S002944/N00534 S002947/N00534 S002960/N00535	
	S002975/N00537		
X0027.5	MPG.A	MANUAL AXIS SELECT TABLE AXIS	
	S002914/N00529	S002935/N00533 S002948/N00534 S002950/N00534 S002954/N00535	
	S002961/N00535	S002976/N00537 S002978/N00537 S011986/N02109	
X0027.7	HAD_WHEEL_FED*1	HANDLE WHEEL FEED *10	
	S002990/N00538		
X0028.0	HAD_WHEEL_FED*10	HANDLE WHEEL FEED *10	
	S002172/N00377	S002175/N00378 S003006/N00539	
X0028.1	HAD_WHEEL_FED*100	HANDLE WHEEL FEED *100	
	S002991/N00538	S003007/N00539	
X0028.2	MPG.C	MANUAL AXIS SELECT AUX AXIS	
	S002915/N00529	S002932/N00533 S002949/N00534 S002955/N00535 S002962/N00535	
	S002966/N00536	S002977/N00537 S002979/N00537 S011949/N02102	
X0032.3			
	S001379/N00240	S001382/N00241	
X0033.4			
	S002125/N00365	S002128/N00366	
X0033.6			
	S002101/N00359	S002105/N00360	
X0033.7			
	S002089/N00356	S002092/N00357 S002917/N00530 S002920/N00531	
X0034.5			
	S012269/N02145		
X0034.6			
	S012281/N02146	S013624/N02395 S013627/N02396	
X0037.3			
	S003048/N00548	S003053/N00549 S003058/N00550	
X0080.0	CLT_PWR_DEFECT_2	COOLANT POWER DEFECT 2	
	S000507/N00103		
X0080.1	D_FILTER_BRK_2	D FILTER BRRAK 2	
	S000593/N00118		
X0080.2	CHIP_CON_SUBSEL2	CHIP CON SUB SELECT SW 2	
	S012073/N02123	S012079/N02123 S012098/N02124 S012106/N02125 S012148/N02128	
	S012151/N02128	S012160/N02129	
X0080.3	CHIP_CON_CW_SW2	CHIP CON CW SW2	
	S012080/N02123	S012150/N02128	
X0080.4	CHIP_CON_CCW_SW2	CHIP CON CCW SW2	
	S012159/N02129		
X0080.5	CLT_LOW_LIMIT_2	COOLANT LOW LIMIT 2	
	S011687/N02044	S011691/N02044 S012193/N02132 S012197/N02132 S012209/N02133	
	S012213/N02133		
X0080.6		MAIN TANK LOW	
	S000599/N00119		

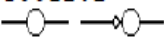
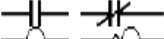
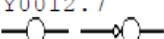
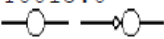
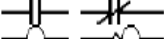
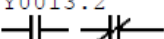
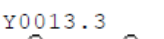
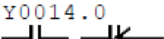
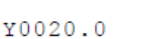
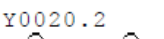
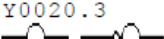
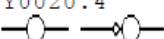
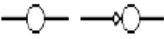
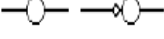

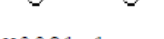
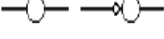
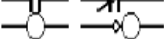
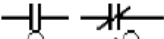
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0080.7 — — — —	FILTER_CLOGGED_2 S011705/N02046	FILTER CLOGGED 2	
X0081.1 — — — —	COL_OIL_LOW_LEV2 S011697/N02044	COOLANT OIL LOW LEV 2	
X0081.2 — — — —	COL_ON_2 S000541/N00109	COOLER RUNNING 2	
X0081.3 — — — —	CHP_CON_TOQ_OVR4 S000469/N00094	CHIP CON TORQUE OVER 4	S012037/N02118 S012042/N02119
X0081.4 — — — —	CHP_CON_TOQ_OVR5 S000474/N00095	CHIP CON TORQUE OVER 5	
X0081.5 — — — —	CHP_CON_TOQ_OVR6 S000478/N00096	CHIP CON TORQUE OVER 6	
X0081.6 — — — —	MAGIC_SEPRATOR S000356/N00075	MAGNETIC SEPARATOR SW	S011629/N02034
X0081.7 — — — —	COLNT_CYC_L.S_2 S012206/N02133	COOLANT CYCLE L.S 2	
X0082.2 — — — —	CHIP_FLOW_TRIP_2 S011621/N02033	CHIP FLOW TRIP 2	
X0082.3 — — — —	CLT_IN_TRIP_2 S011684/N02044	COOLANT IN TRIP 2	
X0082.6 — — — —	FR_14&16_OL_2 S000324/N00070	FR14 &16 OVERLOAD	S011995/N02110 S012170/N02130 S012179/N02131
X0082.7 — — — —	BACK_FLOW_TRIP_2 S000343/N00073	BACK FLOW TRIP 2	S012190/N02132
X0100.6 — — — —	AUTO_FIR_PWDN_SW S000557/N00111	AUTO FIRE POWER DOWN SW	
X0100.7 — — — —	AUTO_FIR_OFF_SW S000564/N00112	AUTO FIRE OFF NOTIFY	
X0101.6 — — — —	TABLE_OT_SW S000403/N00082	TABLE OT LIMIT SW	
X0101.7 — — — —	C_UNCLP_SW S011920/N02097	C AXIS UNCLAMP DETECT SW	S011926/N02098
X0102.1 — — — —	EX_CODE_FIN S013044/N02285	EXTRA CODE FIN	
X0102.2 — — — —	BOOST_PRS_DETE_1 S011822/N02068	BOOSTER PRESSURE DETECT 1	
X0102.3 — — — —	BOOST_OIL_LEV_LO S011806/N02066	BOOSTER OIL LEVEL LOW	
X0102.5 — — — —	MST_COLT_PROT_SW S000336/N00072	MIST COLLECTOR PROTECT DET SW	
X0102.7 — — — —	BOOST_PRS_DETE_2 S011829/N02069	BOOSTER PRESSURE DETECT 2	
X0103.4 — — — —	OPTION1 S004055/N00720	SPARE	S004056/N00720

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0104.0 — —	LASER_DETE_L.S S013475/N02368	LASER DETECT OK L.S	
X0104.1 — —	LASER_STATUS_DET S013477/N02369	LASER STATUS DETE	
X0104.5 — —	MP_DETE_BT_LOW S000586/N00117	MP DETE SW BATTERY LOW	
X0104.6 — —	MP_DETE_BT_A.L S000580/N00116	MP DETE SW BATTERY LOW AL S013528/N02377 S013532/N02378 S013542/N02380	
X0105.3 — —	ATC_PIN_UNLOCK S006332/N01152	ATC PIN UNLOCK DETECT L.S	
X0105.4 — —	AUTO_TL_SET_ON S013144/N02308	AUTO TOOL SET ON PB	
X0105.5 — —	AUTO_TL_SET_OFF S013149/N02309	AUTO TOOL SET OFF PB	
X0106.0 — —	PSM_MCC_OF_CHECK S000932/N00173	POWER MODUAL MCC OFF CHECK	
X0106.2 — —	AUTO__MODE_2 S000882/N00168	AUTO MODE 2 S000969/N00179 S000995/N00185 S000998/N00186	
X0106.3 — —	AUTO_MODE_2 S000457/N00092	AUTO MODE 2 S000723/N00134 S000883/N00168 S000970/N00179 S000996/N00185 S000999/N00186 S001001/N00187 S003912/N00706 S003994/N00717 S011552/N02021	
X0106.4 — —	OP_RDY_PW_DETE S005972/N01086	NC READY POWER ON DETECT S008158/N01431	
X0106.5 — —	ST_RDY_OF_DETE S000878/N00167	CYCLE RDY OFF DETECT	
X0106.7 — —	PW_SUPRT_OF_DE_1 S000879/N00167	POWER SUPPORT OFF DETECT 1 S000966/N00179 S000976/N00180 S000978/N00180	
X0107.0 — —	ATC_GUARD_LS S002225/N00392	ATC MAGAZINE CLOSED GUARD S002226/N00392 S002306/N00401 S005726/N01043 S005732/N01044 S005926/N01074 S006779/N01231 S006780/N01231 S008086/N01417	
X0107.1 — —	PW_SUPRT_OF_DE_2 S000880/N00167	POWER SUPPORT OFF DETECT 2	
X0107.5 — —	ENB_MANU_SW S001005/N00188	ENABLE ON MANUAL SW S001010/N00189 S001013/N00190	
X0222.5 — —	S005023/N00898	S005037/N00900	
X1064.0 — —	S004184/N00745	S004194/N00746 S004207/N00747 S004285/N00764 S004437/N00795	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
Y0000.0		HYD.M HYDRAULIC PUMP MOTOR	S012814/N02243
Y0000.1		LUB-MOTOR BALL SCREW& GUIDE GREASE PUMP	S012569/N02198 S012585/N02200 S012589/N02201 S012588/N02200
Y0000.2		S000951/N00176	
Y0001.0		S000076/N00016	
Y0001.1		S000080/N00017	
Y0001.2		S000084/N00018	
Y0002.0		CLT_PUMP_MTR COOLANT PUMP MTR	S011670/N02043 S011678/N02044 S011613/N02031
Y0002.3		NO1_CHP_CON_CW_1 NO1 CHIP CON CW 1	S012024/N02116 S012031/N02117 S012035/N02118 S012041/N02119 S012129/N02127 S012188/N02132 S012123/N02126
Y0002.4		NO1CHP_CON_CCW NO1 CHIP CON CCW	S012121/N02126 S012131/N02127
Y0002.5		S000904/N00169	
Y0002.7		CHIP_FLUSH CHIP FLUSH PUMP	S004477/N00802 S004480/N00803 S011611/N02030
Y0003.0		OIL_SKIMMER OIL SKIMMER	S012227/N02135
Y0003.3		S002550/N00440 S002557/N00441 S002571/N00443	S002552/N00440
Y0003.4		S000088/N00019	
Y0003.5		PATLITE_GREEN GERRN LIGHT	S000092/N00020 S012899/N02259
Y0003.6		PATLITE_RED RED LIGHT	S012947/N02267
Y0003.7		PATLITE_YELLOW YELLOW LIGHT	S012831/N02246
Y0004.0		O&A-OIL SPINDLE OIL&AIR ON	S012602/N02203 S012624/N02206 S012652/N02212 S012681/N02216 S012690/N02217 S012696/N02218 S012628/N02206

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
Y0004.1	 APO.O	AUTO POWER OFF RELAY	
	S009150/N01551		
Y0004.2	 SP_SHIFT_1	SPINDLE SHIFT 1	
	S000040/N00010 S000888/N00168 S000890/N00168 S001603/N00274 S004189/N00745		
	S004201/N00746		
Y0004.3	 SP_SHIFT_2	SPINDLE SHIFT 2	
	S000967/N00179 S000975/N00180 S000977/N00180 S004199/N00746		
	S004191/N00745		
Y0004.4	 WK_LT	WORK LIGHT	
	S012973/N02275		
Y0004.5	 CTS_1	CTS VALVE 1	
	S011671/N02043 S011679/N02044 S012230/N02136		
	S011616/N02032 S011664/N02040		
Y0005.0	 SP_UCLP	SPINDLE TOOL UNCLAMP	
	S006089/N01112 S006093/N01112 S006467/N01175		
	S010037/N01697		
Y0005.1	 MAG_EXTEND	MAGAZINE EXTEND SOL	
	S009981/N01687 S011766/N02056		
	S009991/N01687		
Y0005.2	 MAG_RETURN	MAGAZINE RETURN SOL	
	S009999/N01688		
Y0005.3	 SP_HEAD_AIR	SPINDLE HEAD AIR	
	S011578/N02024		
Y0005.4	 SP_AIR_BLAST	SPINDLE AIR BLAST	
	S006468/N01175		
Y0006.2	 ATC_DOR_L_OPN	ATC DOOR LEFT OPEN	
	S010024/N01692		
Y0006.3	 ATC_DOR_L_CLO	ATC DOOR LEFT CLOSE	
	S010032/N01695		
Y0006.4	 ATC_DOR_R_OPN	ATC DOOR RIGHT OPEN	
	S012217/N02133 S010026/N01693		
Y0006.5	 ATC_DOR_R_CLO	ATC DOOR RIGHT CLOSE	
	S010035/N01696		
Y0006.6	 O&A_AIR	OIL & AIR COOLER	
	S012629/N02206		
Y0006.7	 SP_BAR_AIR	SPINDLE BEARING AIR	
	S012819/N02244		
Y0007.0	 C.CLIP.SOL	C AXIS CLAMP SOL	
	S011955/N02102		
Y0007.1	 Z_BRAKE	Z BRAKE	
	S000940/N00175 S000938/N00174 S000939/N00174		
Y0007.6	 OPE_DOOR_UNLK	OPERATION DOOR UNLOCK	
	S001121/N00204 S001127/N00205		
	S001126/N00204		

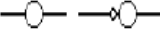
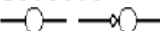
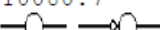
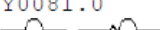
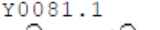
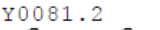
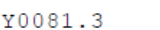
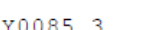

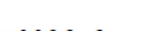

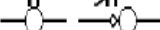
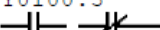
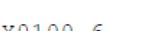
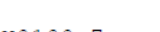
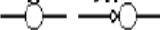
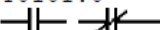
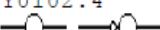
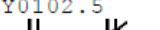

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
Y0007.7	 A.CL.P.SOL S011992/N02109	A AXIS CLAMP SOL	
Y0008.3	 CLTCLR S012222/N02134	CHIP OIL CHILLER ON	
Y0008.4	 MISTCL.M S011641/N02035	OIL MIST COLLECTOR MOTOR	
Y0009.0	 PREP_ON_METER S012904/N02261	PREPARE ON METER	
Y0009.1	 CYCLE_ON_METER S012902/N02260	CYCLE ON METER	
Y0009.2	 SP_ON_METER S000549/N00110 S003526/N00648 S003624/N00663 S003716/N00678 S004100/N00729 S004241/N00757 S004099/N00728	SPINDLE ON METER S003456/N00637 S003554/N00652 S003646/N00667 S003724/N00679 S004102/N00730 S004408/N00785	S003484/N00641 S003576/N00656 S003654/N00668 S003749/N00682 S004104/N00730 S013431/N02358
Y0009.3	 KA4 S012906/N02262	SPARE	S003506/N00645 S003584/N00657 S003596/N00659 S003666/N00670 S003694/N00674 S003881/N00703 S003958/N00711 S004133/N00735 S013548/N02382
Y0009.4	 EXE.M1 S013052/N02286	EXTRA M CODE 1	
Y0009.5	 EXE.M2 S013056/N02287	EXTRA M CODE 2	
Y0009.6	 EXE.M3 S013060/N02288	EXTRA M CODE 3	
Y0009.7	 EXE.M4 S013064/N02289	EXTRA M CODE 4	
Y0010.0	 CLT-SOL S011662/N02039	CHIP COOLANT VALVE	
Y0010.2	 O&A_SUCTION S012644/N02210 S012646/N02210	O&A SUCTION	
Y0010.6	 SHIFT_HAND_CLP S009946/N01683 S009936/N01682	SHIFT HAND CLAMP	
Y0010.7	 SHIFT_HAND_UNCLP S009935/N01682 S009947/N01683	SHIFT HAND UNCLAMP	
Y0011.2	 SP_COOLING_AIR S004146/N00737 S004150/N00737	SPINDLE COOLING AIR	
Y0011.3	 TOOL_DEFECT_AIR S013131/N02304 S013315/N02336	TOOL DET AIR	
Y0011.7	 MG_BACKWARD S009972/N01687 S002088/N00355	MG BACKWARD S009997/N01688	

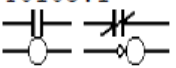
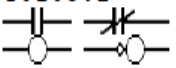
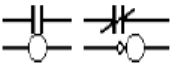
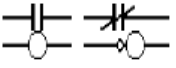
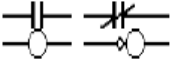
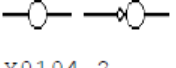
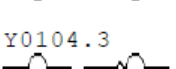
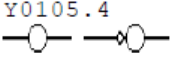
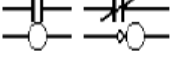
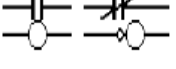
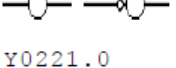
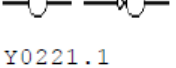
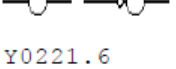
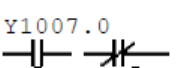
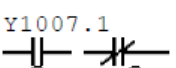


ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
Y0012.2		CHP_FLOW_PUMP S011624/N02033	CHIP FLOW PUMP
Y0012.3		CLT_IN_PUMP S000494/N00099 S011681/N02044 S011703/N02045 S011707/N02046 S011702/N02044	COOLANT IN PUMP
Y0012.7		EXT_NOZZLE S011632/N02034	EXT NOZZLE
Y0013.0		BACK_FLOW_PUMP S012203/N02132	BACK FLOW PUMP
Y0013.1		NO_2&3_CCONV_CW S012178/N02131 S012186/N02132 S012174/N02130	NO 2&3 CHIP CONVEYOR CW 1
Y0013.2		NO_2&3_CHCON_CCW S012169/N02130 S012183/N02131	NO 2&3 CHIP CONVEYOR CCW 2
Y0013.3		COL_RECVC_PUP1 S012218/N02133	COOLANT RECYCLE PUMP 1
Y0014.0		S000922/N00171 S000925/N00171	
Y0020.0		MST.LCK.LP S001776/N00309	MST LOCK LAMP
Y0020.2		MAG.CW.LP S002588/N00446	MAGAZINE CW LAMP
Y0020.3		CHP.CONV.CCW.LP S012132/N02127	CHIP CONVEYOR CCW LAMP
Y0020.4		MLK.LP S001756/N00306	MACHINE LOCK LAMP
Y0020.5		F4.LP S013623/N02394	F4 LAMP
Y0020.6		MAG.L.R.LP S009992/N01687	MAGAZINE L/R LAMP
Y0020.7		CHP.CONV.CW.LP S012124/N02126	CHIP CONVEYOR CW LAMP
Y0021.0		BDT.LP S012963/N02271	BLOCK SKIP LIGHT
Y0021.1		OVC.LP S002653/N00472 S002655/N00472 S002661/N00473 S002659/N00472	OVERRIDE CANCEL LAMP
Y0021.2		F1.LP S009151/N01552 S009163/N01555 S009165/N01555 S009215/N01557 S009167/N01555	F1 LAMP
Y0021.3		F2.LP S009136/N01549 S009138/N01549 S009144/N01550 S009140/N01549	F2 LAMP

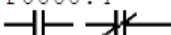
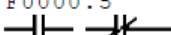
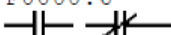
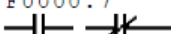
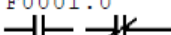
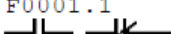
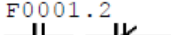
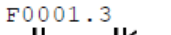
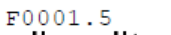
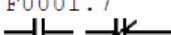
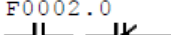
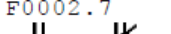
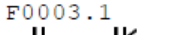
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
Y0021.4	PRO.RESTART.LP 	PROGRAM RESTART LAMP	
Y0021.5	AIR.LP 	BLAST LAMP	
Y0021.7	WRK.LIGH.LP 	WORK LIGHT FUNCTION ON	
Y0022.0	M01.LP 	OPTIONAL STOP LIGHT	
Y0022.1	CTS.LP 	CTS LAMP	
Y0022.2	ALM.RST.LP 	ALARM RESET LAMP	
Y0022.3	DOR.LP 	DOOR LAMP	
Y0022.4	DRN.LP 	DRY RUN LIGHT	
Y0022.5	CHP.FLU.LP 	CHIP FLUSH LAMP	
Y0022.6	DOR.LCK.LP 	OPERATION DOOR LOCK RDY LIGHT	
Y0022.7	A.ZRN.LP 	AUTO ZRN LAMP	
Y0023.0	SBK.LP 	SINGLE BRAKE PB LIGHT	S002398/N00416 S002401/N00417
Y0023.1	COL.LP 	COOLANT LAMP	
Y0023.2	DOR.UNL.LP 	DOOR UNLOCK LAMP	
Y0023.3	M19.LP 	M19 LAMP	
Y0023.4	Z.LP 	Z AXIS LAMP	
Y0023.6	SP.CCW.LP 	SPINDLE CCW LAMP	
Y0023.7	Y.LP 	Y AXIS LAMP	
Y0024.0	C.LP 	C AXIS LAMP	
Y0024.1	SP.STOP.LP 	SPINDLE STOP LAMP	
Y0024.2	X.LP 	X AXIS LAMP	

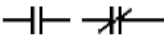
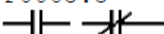
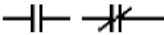
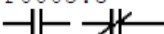
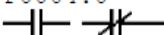
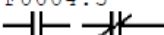
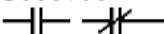
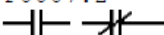
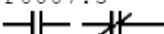
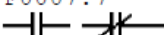
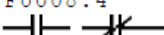
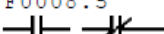
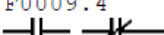
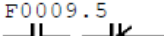
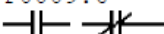
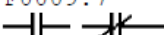
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
Y0024.3	A.LP	A AXIS LAMP	
	S002477/N00426		
Y0024.4	SP.CW.LP	SPINDLE CW LAMP	
	S004088/N00725		
Y0024.5	TOL.DIS.21	TOOL DISPLAY 21	
	S006030/N01098		
Y0024.6	TOL.DIS.22	TOOL DISPLAY 22	
	S006032/N01099		
Y0024.7	TOL.DIS.24	TOOL DISPLAY 24	
	S006034/N01100		
Y0025.0	TOL.DIS.28	TOOL DISPLAY 28	
	S006036/N01101		
Y0025.1	TOL.DIS.11	TOOL DISPLAY 11	
	S006022/N01094		
Y0025.2	TOL.DIS.12	TOOL DISPLAY 12	
	S006024/N01095		
Y0025.3	TOL.DIS.14	TOOL DISPLAY 14	
	S006026/N01096		
Y0025.4	TOL.DIS.18	TOOL DISPLAY 18	
	S006028/N01097		
Y0025.5	AL.LED	ALARM LED	
	S012948/N02267		
Y0026.5	SUB.OP.LED	SUB OP BOARD LED	
	S000373/N00077 S002351/N00407		
	S012882/N02256		
Y0026.6	ATC.MEM.LED	ATC MEMORY LED	
	S006449/N01173		
Y0026.7	ATC.LED	ATC LED	
	S012267/N02144		
Y0027.0	TABLE.LED	TABLE LED	
	S011970/N02107		
Y0027.1	POWER.LED	POWER LED	
	S000150/N00031		
Y0027.2	CY.ST.LP	CYCLE START LAMP	
	S012897/N02259 S012900/N02260		
	S012896/N02258		
Y0027.3	FH.LP	FEED HOLD LAMP	
	S012889/N02257		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
Y0027.4		CNC.RDY.LP CNC READY LAMP	
		S000604/N00120 S000856/N00162 S000859/N00163 S000865/N00164 S000891/N00168	
		S000948/N00176 S000952/N00177 S000954/N00177 S000972/N00179 S000988/N00182	
		S001038/N00194 S001165/N00209 S001210/N00215 S001392/N00242 S001480/N00256	
		S001583/N00269 S001624/N00277 S001657/N00285 S002086/N00355 S002928/N00532	
		S003430/N00632 S003448/N00636 S003502/N00644 S003572/N00655 S003642/N00666	
		S003712/N00677 S003874/N00702 S003954/N00710 S004123/N00733 S004128/N00734	
		S004227/N00753 S004229/N00754 S004264/N00761 S005245/N00940 S006232/N01137	
		S006791/N01231 S008931/N01537 S008961/N01539 S009000/N01541 S009025/N01542	
		S009056/N01543 S009079/N01544 S009107/N01545 S009127/N01546 S009222/N01557	
		S009229/N01558 S010043/N01698 S011566/N02022 S011588/N02025 S011606/N02030	
		S011638/N02035 S011646/N02036 S011673/N02043 S011701/N02044 S011816/N02067	
		S011821/N02068 S011828/N02069 S011835/N02071 S011998/N02110 S012049/N02120	
		S012053/N02121 S012173/N02130 S012182/N02131 S012202/N02132 S012220/N02134	
		S012223/N02135 S012275/N02145 S012287/N02146 S012510/N02187 S012519/N02188	
		S012630/N02207 S012638/N02209 S012643/N02210 S012802/N02241 S012903/N02261	
		S013313/N02336 S013479/N02369 S013720/N02414	
		S012820/N02244	
Y0027.5		MPG.LED MPG ON LED	
		S001701/N00295	
Y0032.3		AUTOCYCL AUTO CYCLE LIGHT	
		S001395/N00243	
Y0032.5		BZ.OUT BUZZER ON	
		S000750/N00137	
Y0032.7		SPARE3 SPARE 3	
		S004248/N00757	
Y0033.4		MCNV.PL CHIP CON MANUAL PB LIGHT	
		S012976/N02276	
Y0033.6		SPOVER.O SPINDLE OVERRIDE LIGHT	
		S012837/N02248	
Y0033.7		HANINTPL HANDLE WHEEL FUN ON LIGHT	
		S002988/N00538 S002993/N00538 S003004/N00539	
		S012987/N02277	
Y0034.3		OP.ASIST OPERATION AUX LIGHT	
		S012995/N02279	
Y0034.4		SPUNCLAM SPINDLE TOOL UNCLAMP LIGHT	
		S012880/N02255	
Y0034.5		YSHTLKL Y SHIFTER LOCK RDY LIGHT	
		S012535/N02191	
Y0034.6		YSHTULKL Y SHIFTER UNLOCK RDY LIGHT	
		S012542/N02192	
Y0035.0		ALM.PL MACHINE ALARM LIGHT	
		S012920/N02263	
Y0035.2		PROG_STP_DISPLAY PROGRAM STOP DISPLAY	
		S000746/N00136 S001160/N00209 S003346/N00603 S012829/N02246 S012898/N02259	
		S012901/N02260	
		S012828/N02245	
Y0035.3		PW-OFF AUTO POWER OFF LIGHT	
		S001433/N00251 S001459/N00254	
		S012969/N02273	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
Y0080.2	 CHP_FLOW_2 S011625/N02033	CHIP CONVEYOR FLOW 2	
Y0080.3	 CLT_IN_2 S011704/N02045	COOLANT IN 2	
Y0080.7	 MGNET_SEPARATOR S011633/N02034	MGNET SEPARATOR	
Y0081.0	 BACK_FLOW_2 S012204/N02132	BACK FLOW 2	
Y0081.1	 NO_2&3_CCON_CW1 S012175/N02130	NO 2&3 CHIP CHIP CON CW 1	
Y0081.2	 NO_2&3_CCON_CCW2 S012184/N02131	NO 2&3 CHIP CONVEYOR CCW 2	
Y0081.3	 COOLER_RECYCLE2 S012219/N02133	COOLER RECYCLE 2	
Y0085.3	 S004132/N00734		
Y0085.4	 S010044/N01698 S011669/N02042		
Y0086.6	 S011667/N02041		
Y0100.4	 TABLE_SKIP_SEL S013305/N02335 S013310/N02336 S013180/N02317	TABLE SKIP SELECT	
Y0100.5	 AMCS_OFF_OMI_ON S013507/N02374 S013535/N02378	AMCS OFF OMI ON	
Y0100.6	 ATC_LOCK_RELEASE S006338/N01153	ATC LOCK RELEASE	
Y0100.7	 ATLS_REGISTER S013226/N02323 S013229/N02323	AUTO TOOL SET REGISTER	
Y0101.0	 SENDING_UNIT_1 S013474/N02368	SENDING UNIT 1	
Y0102.4	 BOOST_ACC_AIR S011824/N02068	BOOSTER ACCEL RATER AIR	
Y0102.5	 BOOSTER_MIST S011823/N02068 S011830/N02069	BOOSTER MIST	
Y0102.6	 BOOST_PUMP S011817/N02067	BOOSTER PUMP	
Y0102.7	 BOOST_AIR S011836/N02071	BOOSTER AIR	
Y0103.0	 S_HAND_FWD S009902/N01679 S009892/N01678	SHIFT HAND FORWARD	

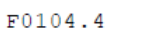
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
Y0103.1	 S_HAND_BWD S009891/N01678 S009903/N01679	SHIFT HAND BACKWARD	
Y0103.2	 S_HAND_UP_2 S009924/N01681 S009914/N01680	SHIFT HAND UP 2	
Y0103.3	 S_HAND_DOWN_2 S009913/N01680 S009925/N01681	S HAND DOWN 2	
Y0103.6	 Y_COVER_CLOSE S012306/N02150 S012524/N02189	Y COVER CLOSE S012526/N02190	
Y0103.7	 Y_COVER_OPEN S012310/N02150 S012528/N02190	Y COVER OPEN S012522/N02189	
Y0104.0	 PSM1RDY S012591/N02201	POWER SUPPLIER MODULE RDY1	
Y0104.2	 PREP_ON S000896/N00168	PREPARE PB ON	
Y0104.3	 PWR_SUPPLY_OK S000974/N00179	POWER SUPPLIER 1 OK	
Y0105.4	 MC_RDY S000903/N00169	MACHINE READY	
Y0106.1	 S011832/N02070 S011834/N02070		
Y0106.2	 S006337/N01153 S006336/N01152		
Y0106.7	 S012637/N02208		
Y0221.0	 S009162/N01555 S009159/N01553	S009164/N01555	
Y0221.1	 S009158/N01553 S009161/N01554		
Y0221.6	 TLLFRSTL S005058/N00903	TOOL LIFE RESET	
Y1007.0	 S001122/N00204 S001110/N00202		
Y1007.1	 S001109/N00202 S001112/N00203		

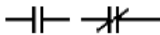
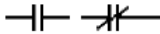
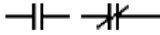
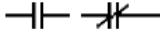
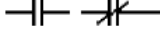
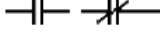
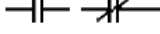
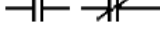










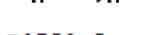

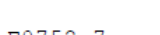

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
F0000.0	RWD	REWINDING SIGNAL	
	S001407/N00246	S001413/N00247	
F0000.4	SPL	FEED HOLD LAMP SIGNAL	
	S012883/N02257		
F0000.5	STL	CYCLE START SIGNAL	
	S000460/N00093	S000622/N00126 S001026/N00193 S001039/N00194 S001117/N00204	
	S001159/N00209	S001273/N00227 S001515/N00260 S003903/N00705 S003924/N00707	
	S011542/N02021	S011645/N02036 S011650/N02037 S012136/N02128 S012890/N02258	
	S013608/N02392	S013612/N02393	
F0000.6	SA	SERVO READY	
	S000857/N00162	S000860/N00163 S000898/N00169 S000937/N00174 S000949/N00176	
	S001186/N00213	S001240/N00221 S004265/N00761 S012805/N02242 S012811/N02243	
	S012817/N02244		
F0000.7	OP	AUTOMATIC OPERATION	
	S000186/N00043	S000206/N00047 S000226/N00051 S001142/N00207 S001168/N00209	
	S001207/N00215	S001514/N00260 S003132/N00562 S003147/N00566 S003154/N00568	
	S003165/N00571	S004762/N00854 S004779/N00857 S009186/N01557 S009195/N01557	
	S009224/N01558	S014006/N02465 S014015/N02466 S014024/N02467 S014133/N02489	
	S014142/N02490	S014151/N02491	
F0001.0	AL	ALARM SIGNAL	
	S000659/N00130	S012916/N02263 S012935/N02267	
F0001.1	RST	RESET SIGNAL	
	S000151/N00032	S002415/N00419 S003887/N00703	
F0001.2	BAL	BATTERY ALARM	
	S012913/N02263		
F0001.3	DEN	DISTRIBUTION END	
	S003849/N00698	S003904/N00705 S011456/N02005 S011914/N02096 S013101/N02299	
F0001.5	TAP	TAPPING SIGNAL	
	S002286/N00398	S002660/N00473 S003106/N00557 S003116/N00559 S003902/N00705	
	S003916/N00707	S003930/N00708 S003996/N00717 S004421/N00790 S004451/N00796	
F0001.7	MA	CNC READY SIGNAL	
	S000897/N00169	S012816/N02244	
F0002.0	INCH	INCH INPUT SIGNAL	
	S008128/N01426	S008133/N01427 S008186/N01437 S008191/N01438 S008307/N01453	
	S008317/N01454	S008328/N01455 S008339/N01456 S008348/N01457 S008357/N01458	
	S008457/N01479	S008462/N01480 S012375/N02164 S012380/N02165 S012435/N02175	
	S012443/N02176	S012482/N02184 S012487/N02185 S013929/N02452 S013939/N02453	
F0002.6	CUT	CUTTING FEED SIGNAL	
	S004885/N00874		
F0002.7	MDRN	DRY RUN CHECK SIGNAL	
	S002838/N00500	S012964/N02272	
F0003.1	MH	MANUAL HANDLE FEED SELECT CHEC	
	S002592/N00447	S002986/N00538 S003002/N00539 S004009/N00718 S004033/N00719	
	S009948/N01684	S009956/N01685 S010000/N01689 S010008/N01690 S011948/N02102	
	S011985/N02109		


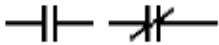
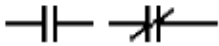
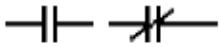
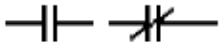
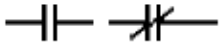
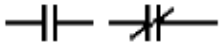
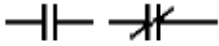
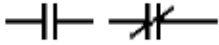

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
F0003.2	MJ	JOG FEED SELECT CHECK	
	S001728/N00301	S002434/N00423 S002445/N00424 S002456/N00425 S002467/N00426	
	S002478/N00427	S002586/N00446 S002593/N00447 S004010/N00718 S004034/N00719	
	S009949/N01684	S009957/N01685 S010001/N01689 S010009/N01690 S011951/N02102	
	S011988/N02109		
F0003.3	MMDI	MANUAL DATA INPUT SELECT CHECK	
	S000372/N00077	S000436/N00090 S000441/N00091 S002589/N00447 S006462/N01175	
	S011109/N01927	S011114/N01929 S012021/N02116	
F0003.4	MRMT	DNC OPERATION SELECT CHECK	
	S000371/N00077	S000437/N00090 S000442/N00091 S000448/N00092 S002590/N00447	
	S006463/N01175	S006781/N01231 S012022/N02116 S012134/N02128	
F0003.5	MMEM	AUTOMATIC OPERATION SELECT CHE	
	S000370/N00077	S000438/N00090 S000443/N00091 S000449/N00092 S001582/N00269	
	S001664/N00287	S002352/N00407 S002591/N00447 S006464/N01175 S006782/N01231	
	S012023/N02116	S012135/N02128	
F0004.0	MBDT1	OPTIONAL BLOCK SKIP CHECK	
	S012962/N02271		
F0004.5	MREF	MANUAL REFERENCE POSITION RETU	
	S001729/N00301	S002328/N00404 S002417/N00419 S002435/N00423 S002446/N00424	
	S002457/N00425	S002468/N00426 S002479/N00427 S002506/N00432 S002513/N00433	
	S002523/N00435	S002533/N00437 S002543/N00439 S004011/N00718 S004035/N00719	
	S009950/N01684	S009958/N01685 S010002/N01689 S010010/N01690 S011952/N02102	
	S011989/N02109		
F0007.0	MF	AUXILIARY FUNCTION STROBE	
	S000153/N00033		
F0007.2	SF	SPINDLE SPEED STROBE	
	S000159/N00036	S004443/N00795	
F0007.3	TF	TOOL FUNCTION STROBE	
	S000161/N00037		
F0007.7	BF	2ND AUXILIARY FUNCTION STROBE	
	S000163/N00038		
F0008.4	MF2	AUXILIARY FUNCTION STROBE SIGN	
	S000155/N00034		
F0008.5	MF3	AUXILIARY FUNCTION STROBE SIGN	
	S000157/N00035		
F0009.4	DM30	DECODE M SIGNAL	
	S000165/N00039	S001118/N00204 S003932/N00708 S004792/N00859 S004807/N00861	
	S009141/N01550		
F0009.5	DM02	DECODE M SIGNAL	
	S000166/N00039	S001027/N00193 S001040/N00194 S001119/N00204 S003337/N00601	
	S003931/N00708	S004791/N00859 S004806/N00861 S009142/N01550 S011453/N02005	
	S012823/N02245		
F0009.6	DM01	DECODE M SIGNAL	
	S001028/N00193	S001041/N00194 S003336/N00601 S003348/N00603 S012834/N02247	
F0009.7	DM00	DECODE M SIGNAL	
	S001029/N00193	S001042/N00194 S003335/N00601 S003340/N00602 S003973/N00712	
	S011543/N02021	S012821/N02245 S014029/N02469 S014036/N02470 S014042/N02471	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
F0044.1	FSCSL	CS CONTOUR CONTROL CHANGE COMP	
	S002326/N00404	S002580/N00444 S002584/N00445 S002927/N00532 S004490/N00806	
	S004494/N00807	S012984/N02277	
F0045.0	ALMA	ALARM (SERIAL SPINDLE)	
	S000045/N00011	S000431/N00088	
F0045.1	SSTA	SPEED ZERO SIGNAL	
	S001034/N00193	S001037/N00194 S001120/N00204 S001148/N00208 S001196/N00214	
	S002333/N00405	S003961/N00711 S003988/N00716 S004066/N00721 S004095/N00727	
	S004105/N00730	S004140/N00736 S004237/N00756 S004242/N00757 S004257/N00759	
	S004450/N00796	S004457/N00798 S004474/N00801 S009220/N01557 S010038/N01698	
	S010871/N01900	S013430/N02358	
F0045.3	SARA	SPEED ARRIVAL SIGNAL	
	S003748/N00682	S003894/N00704 S004087/N00725 S004090/N00726 S004094/N00727	
	S004103/N00730	S004134/N00735 S004256/N00759 S004448/N00796 S004458/N00798	
	S004459/N00798	S013786/N02428	
F0045.7	ORARA	ORIENTATION COMPLETION SIGNAL	
	S001025/N00193	S004315/N00773 S004321/N00774 S004325/N00775 S004333/N00776	
	S004360/N00780	S007489/N01334 S007708/N01364 S008862/N01532 S008867/N01533	
	S008879/N01534	S009183/N01557 S009197/N01557 S010849/N01895 S011129/N01931	
	S011273/N01946		
F0046.2	RCHPA	OUTPUT SWITCH SIGNAL	
	S004179/N00744	S004182/N00745 S004192/N00746 S004202/N00747 S004204/N00747	
	S004214/N00748	S004271/N00762	
F0046.3	RCFNA	OUTPUT SWITCH COMPLETION SIGNA	
	S004114/N00731	S004173/N00743 S004175/N00743	
F0051.0			
	S001104/N00201	S001105/N00201	
F0054.0	UO0	OUTPUT SIGNAL FOR CUSTOM MACRO	
	S000073/N00016		
F0054.1	UO1	OUTPUT SIGNAL FOR CUSTOM MACRO	
	S000077/N00017		
F0054.2	UO2	OUTPUT SIGNAL FOR CUSTOM MACRO	
	S000085/N00019		
F0054.3	UO3	OUTPUT SIGNAL FOR CUSTOM MACRO	
	S000089/N00020		
F0054.4	UO4	OUTPUT SIGNAL FOR CUSTOM MACRO	
	S000081/N00018		
F0055.6	UO014	OUTPUT SIGNAL FOR CUSTOM MACRO	
	S013312/N02336		
F0056.0			
	S000066/N00014	S002390/N00414 S002393/N00415 S002402/N00417	
F0060.1	ESEND	READ COMPLETION SIGNAL FOR EXT	
	S001555/N00266		
F0062.0	AICC_SIGL	AI ADVANCED CONTROL MODE	
	S000055/N00012		
F0064.0	TLCH	TOOL CHANGE	
	S000571/N00113		



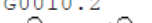
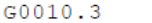
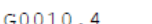






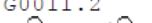
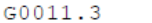
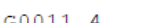
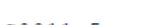



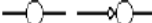
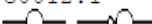
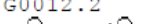
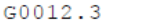
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
F0066.6	PECK2	SMALL"DIAMETER PECK DRILLING I	
	S000054/N00012		
F0070.0	PSW01	POSITION SWITCH	
	S000108/N00023		
F0070.1	PSW02	POSITION SWITCH	
	S007899/N01390		
F0076.3	RTAP	RIGID TAPPING IN PROGRESS	
	S004233/N00755 S004251/N00758		
F0094.0	ZP1	REFERENCE POSITION RETURN END	
	S002409/N00419 S002431/N00422 S002508/N00432 S012324/N02152 S012992/N02278		
F0094.1	FZP2	REFERENCE POSITION RETURN END	
	S002410/N00419 S002432/N00422 S002515/N00433 S012300/N02149 S012991/N02278		
F0094.2	FZP3	REFERENCE POSITION RETURN END	
	S000394/N00081 S002310/N00401 S002411/N00419 S002422/N00420 S002525/N00435 S009985/N01687 S012330/N02153 S012990/N02278		
F0094.3	FZP4	REFERENCE POSITION RETURN END	
	S002412/N00419 S002426/N00421 S002535/N00437 S012989/N02278		
F0094.4	FZP5	REFERENCE POSITION RETURN END	
	S002413/N00419 S002427/N00421 S002545/N00439 S012988/N02278		
F0094.6	FZP7	REFERENCE POSITION RETURN END	
	S007628/N01355 S011158/N01931		
F0096.0	ZP21	2ND REFERENCE POSITION RETURN	
	S006522/N01189 S007750/N01369 S007790/N01373		
F0096.1	ZP22	2ND REFERENCE POSITION RETURN	
	S006596/N01194 S007791/N01373		
F0096.2	ZP23	2ND REFERENCE POSITION RETURN	
	S006572/N01193 S007710/N01364 S007806/N01375 S009199/N01557 S011126/N01931		
F0096.4	ZP25	2ND REFERENCE POSITION RETURN	
	S006523/N01189 S007797/N01374		
F0096.6	ZP27	2ND REFERENCE POSITION RETURN	
	S007636/N01356 S007775/N01371 S011161/N01931		
F0098.1	ZP32	3RD REFERENCE POSITION RETURN	
	S012318/N02151 S012503/N02187 S012515/N02188		
F0098.2	ZP33	3RD REFERENCE POSITION RETURN	
	S000395/N00081 S002311/N00401 S007426/N01324 S007686/N01362 S007717/N01365 S009986/N01687 S011123/N01931		
F0098.6	ZP37	3RD REFERENCE POSITION RETURN	
	S007650/N01357 S007759/N01370 S011164/N01931 S011381/N01985		
F0100.1	ZP42	4TH REFERENCE POSITION RETURN	
	S006536/N01190 S006552/N01192 S006573/N01193 S007450/N01328 S007495/N01335 S007731/N01367 S009090/N01545		
F0100.2	ZP43	4TH REFERENCE POSITION RETURN	
	S000365/N00076 S006542/N01191 S006549/N01192 S006593/N01194 S007415/N01322 S007444/N01327 S007478/N01332 S007678/N01361 S007782/N01372 S009978/N01687 S011121/N01931		

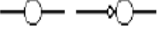

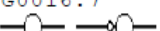
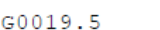
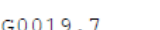
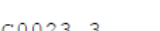

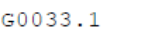
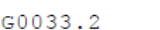
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
F0100.6	ZP47	4TH REFERENCE POSITION RETURN	
	S011167/N01931 S011385/N01986		
F0102.0	MV1	X AXIS MOVING	
	S004871/N00874 S006528/N01189 S006539/N01190 S006557/N01192 S006578/N01193 S006601/N01194		
F0102.1	MV2	Y AXIS MOVING	
	S004873/N00874 S006560/N01192 S006581/N01193 S006604/N01194		
F0102.2	MV3	Z AXIS MOVING	
	S004876/N00874 S006545/N01191 S006563/N01192 S006584/N01193 S006607/N01194		
F0102.3	MV4	4 AXIS MOVING	
	S004879/N00874		
F0102.4	MV5	5 AXIS MOVING	
	S004882/N00874 S006531/N01189 S006566/N01192 S006587/N01193 S006610/N01194		
F0104.0	INP1	X IN POSITION SIGNAL	
	S006527/N01189 S006556/N01192 S006577/N01193 S006600/N01194		
F0104.1	INP2	Y IN POSITION SIGNAL	
	S006538/N01190 S006559/N01192 S006580/N01193 S006603/N01194		
F0104.2	INP3	Z IN POSITION SIGNAL	
	S006544/N01191 S006562/N01192 S006583/N01193 S006606/N01194		
F0104.4	INP5	5 IN POSITION SIGNAL	
	S006530/N01189 S006565/N01192 S006586/N01193 S006609/N01194		
F0122.0	HDO0	HIGH SPEED SKIP STATUS	
	S000094/N00021		
F0122.1	HOD1	HIGH SPEED SKIP STATUS SIGNAL	
	S000096/N00021 S000098/N00021 S000105/N00022		
F0129.7	NCAXS	NC AXIS SELECT	
	S005763/N01050 S005923/N01074 S007913/N01391 S007947/N01393 S008028/N01404 S008031/N01405		
F0130.2	EIALA	X ALARM (PMC AXIS CONTROL)	
	S006769/N01230		
F0133.2	EIALB	Y ALARM (PMC AXIS CONTR)	
	S006770/N01230		
F0136.2	EIALC	Z ALARM (PMC AXIS CONTROL)	
	S006771/N01230		
F0139.2	EIALD	C ALARM (PMC AXIS CONTR)	
	S006772/N01230		
F0191.0	DOOR_OPEN_ON	DOOR OPEN ON	
	S001091/N00200 S001113/N00204 S001114/N00204		
F0191.2	MCC_TEST_REQ	MCC TEST REQUIRE	
	S001049/N00194 S001130/N00206 S001136/N00206 S001140/N00207 S001173/N00210 S001188/N00213 S001208/N00215 S001219/N00216 S001222/N00217		
F0191.3	BRAKE_TEST_REQ	BRAKE TEST REQUIRE	
	S001050/N00194 S001141/N00207 S001214/N00216 S001242/N00221		
F0276.4	#1120_M_CODE_NG	#1120 M CODE NG	
	S003936/N00708 S006866/N01240 S006978/N01259 S013487/N02370 S013522/N02377		

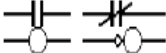
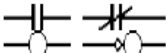
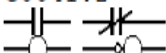
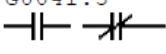
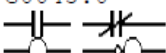
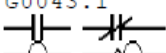
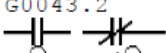
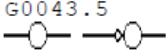
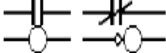
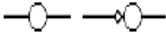
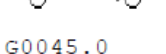
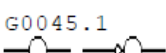
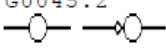
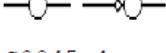
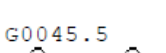
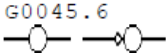
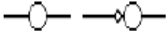


ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
F0276.5		#1120_TOL_NO_REQ #1120 TOOL NO REQUIRE S013455/N02363 S013465/N02366	
F0276.6		S013456/N02363 S013469/N02367	
F0276.7		S013442/N02360	
F0277.1		S013421/N02357	
F0277.2		S013423/N02357 S013447/N02360	
F0277.3		S004932/N00882 S004935/N00883 S013139/N02306	
F0531.5		S013637/N02399	
F0748.1		MCCOFSIG_1 MCC OFF SIGNAL S000917/N00171 S000926/N00172	
F0748.7		MCCOFSIG_2 MCC OFF SIGNAL S000918/N00171 S000927/N00172	
F0750.0		SAFMONITSIG_X SAFETY MONITOR SIGNAL X S001099/N00201	
F0750.1		SAFMONITSIG_Y SAFETY MONITOR SIGNAL Y S001100/N00201	
F0750.2		SAFMONITSIG_Z SAFETY MONITOR SIGNAL Z S001101/N00201	
F0750.3		SAFMONITSIG_B SAFETY MONITOR SIGNAL B S001102/N00201	
F0750.4		SAFMONITSIG_5 SAFETY MONITOR SIGNAL 5 S001103/N00201	
F0752.0		MCCOFSIG_X MCC OFF SIGNAL X S000905/N00170	
F0752.1		MCCOFSIG_Y MCC OFF SIGNAL Y S000906/N00170	
F0752.2		MCCOFSIG_Z MCC OFF SIGNAL Z S000907/N00170	
F0752.3		MCCOFSIG_B MCC OFF SIGNAL B S000908/N00170	
F0752.4		MCCOFSIG_5 MCC OFF SIGNAL 5 S000909/N00170	
F0752.5		MCCOFSIG_6 MCC OFF SIGNAL 6 S000910/N00170	
F0752.6		MCCOFSIG_7 MCC OFF SIGNAL 7 S000911/N00170	
F0752.7		MCCOFSIG_8 MCC OFF SIGNAL 8 S000912/N00170	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
F0753.0	MCCOFSIG_SP	MCC OFF SIGNAL SP	
	S000913/N00170		
F0754.2	BRAKE_SIG_Z	BRAKE Z SIGNAL	
	S000934/N00174		
F0754.4	BRAKE_SIG_5	BRAKE 5 SIGNAL	
	S000935/N00174		
F0755.0	SAFPOSSWSIG_1	SAFE POS SWITCH SIGNAL 1	
	S001169/N00209		
F1130.2	A_AL	A AXIS AL	
	S006773/N01230		
F1133.0	MG_INPOS	MG INPOSITION	
	S005971/N01086		
F1133.2	MG_AL	MG ALARM	
	S005243/N00940 S005970/N01086 S006123/N01115 S006774/N01230		
F1133.4	MG_ST	MG START	
	S005974/N01086		
F1136.2	SL_AL	SL AL	
	S006775/N01230		
F1139.2	SR_AL	SR AL	
	S006776/N01230		

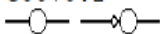
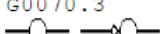
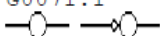
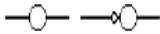
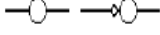
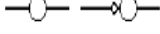
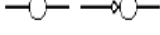
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0004.4	MFIN2	2ND M FUNCTION COMPLETION	
	S003190/N00576 S003192/N00576 S014140/N02490 S014159/N02492 S014161/N02492 S014143/N02490		
G0004.5	MFIN3	3RD M FUNCTION COMPLETION	
	S003200/N00577 S003202/N00577 S014149/N02491 S014165/N02492 S014167/N02492 S014152/N02491		
G0005.0	MFIN	AUXILIARY FUNCTION COMPLETION	
	S003180/N00575 S003182/N00575 S014131/N02489 S014154/N02492 S014156/N02492 S014134/N02489		
G0005.2	SFIN	SPINDLE FUNCTION COMPLETION	
	S000181/N00043 S000183/N00043 S014022/N02467 S014025/N02467		
G0005.3	TFIN	TFIN	
	S000201/N00047 S000203/N00047 S014013/N02466 S014016/N02466		
G0005.6	AFL	MISCELLANEOUS FUNCTION LOCK	
	S002630/N00461		
G0005.7	BFIN	2ND AUXILIARY FUNCTION COMPLET	
	S000221/N00051 S000223/N00051 S014004/N02465 S014007/N02465		
G0006.0	SRN	PROGRAM RESTART	
	S002618/N00456		
G0006.2	ABSM	MANUAL ABSOLUTE	
	S002620/N00457		
G0006.4	OVC	OVERRIDE CANCEL	
	S003351/N00604 S003354/N00605 S002663/N00473		
G0007.2	ST	CYCLE START LAMP SIGNAL	
	S006784/N01231 S006789/N01231 S002355/N00407		
G0007.6	EXLM	STORED STROKE LIMIT SELECT	
	S000109/N00023		
G0008.0	IT	AXIS INTERLOCK	
	S002309/N00401 S004887/N00874 S000058/N00012		
G0008.4	ESP	EMERGENCY STOP	
	S000035/N00009 S000061/N00013 S000900/N00169 S000920/N00171 S002254/N00396 S002268/N00397 S002290/N00398 S002320/N00402 S002416/N00419 S006957/N01258 S007012/N01263 S007129/N01277 S012815/N02244 S000064/N00013		
G0008.5	SP	FEED HOLD	
	S002354/N00407 S000072/N00015		
G0008.6	RRW	RESET & REWIND	
	S002340/N00405		
G0008.7	ERS	EXTERNAL RESET	
	S002348/N00406		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0010.0	JV0	MANUAL FEEDRATE OVERRIDE	
	S002876/N00511		
G0010.1	JV1	MANUAL FEEDRATE OVERRIDE	
	S002878/N00512		
G0010.2	JV2	MANUAL FEEDRATE OVERRIDE	
	S002880/N00513		
G0010.3	JV3	MANUAL FEEDRATE OVERRIDE	
	S002882/N00514		
G0010.4	JV4	MANUAL FEEDRATE OVERRIDE	
	S002884/N00515		
G0010.5	JV5	MANUAL FEEDRATE OVERRIDE	
	S002886/N00516		
G0010.6	JV6	MANUAL FEEDRATE OVERRIDE	
	S002888/N00517		
G0010.7	JV7	MANUAL FEEDRATE OVERRIDE	
	S002890/N00518		
G0011.0	JV8	MANUAL FEEDRATE OVERRIDE	
	S002892/N00519		
G0011.1	JV9	MANUAL FEEDRATE OVERRIDE	
	S002894/N00520		
G0011.2	JV10	MANUAL FEEDRATE OVERRIDE	
	S002896/N00521		
G0011.3	JV11	MANUAL FEEDRATE OVERRIDE	
	S002898/N00522		
G0011.4	JV12	MANUAL FEEDRATE OVERRIDE	
	S002900/N00523		
G0011.5	FV13	MANUAL FEEDRATE OVERRIDE	
	S002902/N00524		
G0011.6	JV14	MANUAL FEEDRATE OVERRIDE	
	S002904/N00525		
G0011.7	JV15	MANUAL FEEDRATE OVERRIDE	
	S002906/N00526		
G0012.0	FV0	FEEDRATE OVERRIDE	
	S002860/N00503		
G0012.1	FV1	FEEDRATE OVERRIDE	
	S002862/N00504		
G0012.2	FV2	FEEDRATE OVERRIDE	
	S002864/N00505		
G0012.3	FV3	FEEDRATE OVERRIDE	
	S002866/N00506		
G0012.4	FV4	FEEDRATE OVERRIDE	
	S002868/N00507		
G0012.5	FV5	FEEDRATE OVERRIDE	
	S002870/N00508		


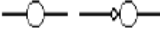
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0012.6	 FV6 S002872/N00509	FEEDRATE OVERRIDE	
G0012.7	 FV7 S002874/N00510	FEEDRATE OVERRIDE	
G0014.0	 S002908/N00527		
G0014.1	 S002910/N00528		
G0016.7	 F1D S002624/N00458	F1 DIGIT FEED SELECT	
G0018.0	 HSA1 S002597/N00448 S002942/N00533	MANU HANDLE FEED AXIS SELECT A	
G0018.1	 HSB1 S002600/N00449 S002953/N00534	MANU HANDLE FEED AXIS SELECT B	
G0018.2	 HSC1 S002603/N00450 S002965/N00535	MANU HANDLE FEED AXIS SELECT C	
G0018.3	 HSD1 S002972/N00536	MANU HANDLE FEED AXIS SELECT D	
G0019.4	 MP1 S003001/N00538	HANDLE FEED 1 SELECT	
G0019.5	 MP2 S003012/N00539	HANDLE FEED 2 SELECT	
G0019.7	 RT S002406/N00418	RAPID TRAVERSE SELECT	
G0023.3	 HANDLF S001298/N00230	HANDLE FEED MAX	
G0027.7	 CON S004069/N00721 S004247/N00757	CS CONTOUR CONTROL CHANGE S004244/N00757 S004489/N00806 S004493/N00807	
G0029.6	 SPSTP S004117/N00731 S004122/N00732	SPINDLE STOP	
G0033.0	 R091 S004296/N00766	SPINDLE MOTOR SPEED COMMAND	
G0033.1	 R101 S004299/N00767	SPINDLE MOTOR SPEED COMMAND	
G0033.2	 R111 S004302/N00768	SPINDLE MOTOR SPEED COMMAND	
G0033.3	 R121 S004305/N00769	SPINDLE MOTOR SPEED COMMAND	
G0033.7	 SIND S004288/N00765 S004287/N00764	SPINDLE MOTOR SPEED COMMAND SE S004294/N00766 S004297/N00767 S004300/N00768 S004303/N00769	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0041.0		HS1A S012977/N02277 S002599/N00448	MANUAL HANDLE INTERRUPTION "A"
G0041.1		HS1B S012978/N02277 S002602/N00449	MANUAL HANDLE INTERRUPTION "B"
G0041.2		HS1C S012979/N02277 S002605/N00450	MANUAL HANDLE INTERRUPTION "C"
G0041.3		S012980/N02277	
G0043.0		MD1 S001252/N00222 S002372/N00409	MODE SELECTION "1"
G0043.1		MD2 S001253/N00222 S002376/N00410	MODE SELECTION "2"
G0043.2		MD4 S001254/N00222 S002383/N00411	MODE SELECTION "3"
G0043.5		DNC1 S002385/N00412	DNC OPERATION SELECT
G0043.7		ZRN S002356/N00408 S002387/N00413	MANUAL REFERENCE POSITION RETU
G0044.0		BDT1 S002613/N00454	OPTIONAL BLOCK SKIP SIGNAL 1
G0044.1		MLK S002626/N00459	ALL AXIS MACHINE LOCK SIGNAL
G0045.0		BDT2 S002632/N00462	OPTIONAL BLOCK SKIP SIGNAL 2
G0045.1		BDT3 S002634/N00463	OPTIONAL BLOCK SKIP SIGNAL 3
G0045.2		BDT4 S002636/N00464	OPTIONAL BLOCK SKIP SIGNAL 4
G0045.3		BDT5 S002638/N00465	OPTIONAL BLOCK SKIP SIGNAL 5
G0045.4		BDT6 S002640/N00466	OPTIONAL BLOCK SKIP SIGNAL 6
G0045.5		BDT7 S002642/N00467	OPTIONAL BLOCK SKIP SIGNAL 7
G0045.6		BDT8 S002644/N00468	OPTIONAL BLOCK SKIP SIGNAL 8
G0045.7		BDT9 S002646/N00469	OPTIONAL BLOCK SKIP SIGNAL 9

G0046.1	SBK	SINGLE BLOCK SIGNAL
	S002403/N00417	
G0046.3	KEY1	MEMORY PROTECT SIGNAL 1
	S002607/N00451	
G0046.4	KEY2	MEMORY PROTECT SIGNAL 2
	S002609/N00452	
G0046.5	KEY3	MEMORY PROTECT SIGNAL 3
	S002611/N00453	
G0046.7	DRN	DRY RUN SIGNA
	S002616/N00455	
G0048.5	TLSPK	TOOL SKIP SIGNAL
	S013140/N02306	
G0053.0	TMRON	GENERAL"PURPOSE INTEGRATING ME
	S004101/N00729	
G0053.3	UNIT	INTERRUPT SIGNAL FOR CUSTOM MA
	S013117/N02301 S013125/N02302 S013452/N02362	
	S013450/N02361	
G0054.0		
	S014215/N02502	
G0055.6	UI14	INPUT SIGNAL FOR CUSTOM MACRO
	S004531/N00815 S004704/N00844 S004708/N00845 S005077/N00909	
	S004707/N00844	
G0055.7	UI_15	INPUT SIGNAL FOR CUSTOM MACRO
	S013107/N02300 S013115/N02301 S013122/N02302	
	S000103/N00021	
G0056.3	UI_19	INPUT SIGNAL FOR CUSTOM MACRO
	S000107/N00022	
G0056.4	UI_20	INPUT SIGNAL FOR CUSTOM MACRO
	S013476/N02368	
G0056.6	UI_22	INPUT SIGNAL FOR CUSTOM MACRO
	S000576/N00114 S004660/N00838 S004703/N00844 S013123/N02302 S013422/N02357	
	S013439/N02359 S013443/N02360	
	S013426/N02357	
G0056.7	UI_23	INPUT SIGNAL FOR CUSTOM MACRO
	S013480/N02369	
G0057.0	UI_24	INPUT SIGNAL FOR CUSTOM MACRO
	S013464/N02365	
G0057.1	UI_25	INPUT SIGNAL FOR CUSTOM MACRO
	S013462/N02364	
G0061.0	RGTAP	RIGID TAPPING SIGNAL
	S002287/N00398 S003872/N00702 S004068/N00721 S004118/N00731 S004238/N00756	
	S004243/N00757 S004442/N00795 S013848/N02438	
	S004240/N00756	
G0066.0	IGNVRY	ALL"AXIS VRDY OFF ALARM IGNORE
	S001262/N00224	
	S001270/N00226	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0070.2		CTH2A S004218/N00749	CLUTCH/GEAR SIGNAL 2
G0070.3		CTH1A S004219/N00749	CLUTCH/GEAR SIGNAL 1
G0070.4		SRVA-CCW S001031/N00193 S004089/N00726 S004083/N00723	CCW COMMAND SIGNAL S001149/N00208 S001197/N00214 S004073/N00721 S004084/N00724 S004092/N00727 S004098/N00728 S004446/N00796
G0070.5		SFRA-CW S001032/N00193 S004075/N00722 S004113/N00731	CW COMMAND SIGNAL S001150/N00208 S001198/N00214 S004064/N00721 S004067/N00721 S004082/N00723 S004086/N00725 S004093/N00727 S004097/N00728 S004249/N00758 S004447/N00796 S004074/N00721
G0070.6		ORCM=ORI S001024/N00193 S004403/N00784 S004358/N00779	ORIENTATIONCOMMAND SIGNAL S001153/N00208 S001201/N00214 S004340/N00777 S004359/N00780 S012794/N02239
G0070.7		M_RDY.A S004187/N00745 S004230/N00754	MACHINE READY SIGNAL S004197/N00746
G0071.1		ESPA S004228/N00753	EMERGENCY STOP SIGNAL
G0071.4		SOCNA S004226/N00752	SOFT START/ STOP CANCEL SIGNAL
G0071.6		RSLA S004270/N00762 S004222/N00750	POWER OUTPUT SWITCH REQUIRE
G0071.7		RCHA S004221/N00750	SP POWER STATUS CHECK SIGNAL
G0072.7		RCHHGA S004224/N00751	SP HIGH GEAR OUTPUT
G0100.0		+J1 S002503/N00431	FEED AXIS X+
G0100.1		+J2 S002517/N00433	FEED AXIS Y+
G0100.2		+J3 S002527/N00435	FEED AXIS Z+
G0100.3		+J4 S002537/N00437	FEED AXIS 4+
G0100.4		+J5 S002547/N00439	FEED AXIS 5+
G0100.5		S002563/N00441	
G0101.0		ED21+ S001324/N00233	2ND EXT DECELERATION +X
G0101.1		ED22+ S001325/N00233	2ND EXT DECELERATION +Y

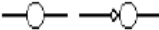


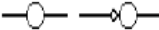


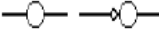


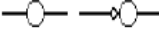
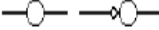
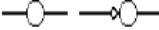
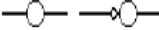
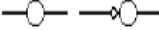
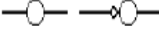
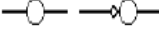
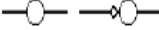
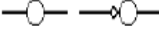
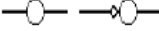

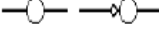

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0101.2	ED23+ S001326/N00233	2ND EXT DECELERATION +Z	
G0101.3	ED24+ S001327/N00233	2ND EXT DECELERATION +B	
G0101.4	ED25+ S001332/N00233	2ND EXT DECELERATION +5	
G0101.5	ED26+ S001335/N00234	2ND EXT DECELERATION +6	
G0101.6	ED27+ S001336/N00234	2ND EXT DECELERATION +7	
G0101.7	ED28+ S001337/N00234	2ND EXT DECELERATION +8	
G0102.0	-J1 S002510/N00432	FEED AXIS X-	
G0102.1	-J2 S002520/N00434	FEED AXIS Y-	
G0102.2	-J3 S002530/N00436	FEED AXIS Z-	
G0102.3	-J4 S002540/N00438	FEED AXIS 4-	
G0102.4	-J5 S002566/N00442	FEED AXIS 5-	
G0102.5	S002577/N00443		
G0103.0	ED21- S001328/N00233	2ND EXT DECELERATION -X	
G0103.1	ED22- S001329/N00233	2ND EXT DECELERATION -Y	
G0103.2	ED23- S001330/N00233	2ND EXT DECELERATION -Z	
G0103.3	ED24- S001331/N00233	2ND EXT DECELERATION -B	
G0103.4	ED25- S001333/N00233	2ND EXT DECELERATION -5	
G0103.5	ED26- S001338/N00234	2ND EXT DECELERATION -6	
G0103.6	ED27- S001339/N00234	2ND EXT DECELERATION -7	
G0103.7	ED28- S001340/N00234	2ND EXT DECELERATION -8	
G0108.2	MLK3 S002628/N00460	Z MACHINE LOCK	
G0114.0	+L1 S000005/N00002	+X OVERTRAVEL	

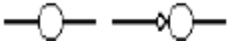
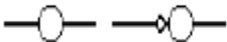
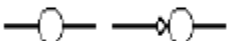
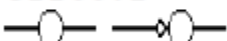
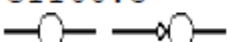
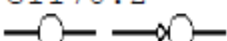
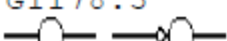
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0114.1	+L2 	+Y OVERTRAVEL	
G0114.2	+L3 	+Z OVERTRAVEL	
G0114.3	+L4 	+4TH OVERTRAVEL	
G0114.4	+L5 	+5 OVERTRAVEL	
G0114.5	+L6 	+6 OVERTRAVEL	
G0114.6	+L7 	+7 OVERTRAVEL	
G0114.7	+L8 	+8 OVERTRAVEL	
G0116.0	-L1 	-X OVERTRAVEL	
G0116.1	-L2 	-Y OVERTRAVEL	
G0116.2	-L3 	-Z OVERTRAVEL	
G0116.3	-L4 	-4TH OVERTRAVEL	
G0116.4	-L5 	-5 OVERTRAVEL	
G0116.5	-L6 	-6 OVERTRAVEL	
G0116.6	-L7 	-7 OVERTRAVEL	
G0116.7	-L8 	-8 OVERTRAVEL	
G0118.0	X+DEC 	+X EXTERNAL DECELERATION	
G0118.1	Y+DEC 	+Y EXTERNAL DECELERATION	
G0118.2	Z+DEC 	+Z EXTERNAL DECELERATION	
G0118.3	4+DEC 	+4 EXTERNAL DECELERATION	
G0118.4	5+DEC 	+5 EXTERNAL DECELERATION	
G0118.5	6+DEC 	+6 EXTERNAL DECELERATION	
G0118.6	7+DEC 	+7 EXTERNAL DECELERATION	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0118.7	8+DEC 	+8 EXTERNAL DECELERATION	
G0120.0	X-DEC 	-X EXTERNAL DECELERATION	
G0120.1	Y-DEC 	-Y EXTERNAL DECELERATION	
G0120.2	Z-DEC 	-Z EXTERNAL DECELERATION	
G0120.3	4-DEC 	-4 EXTERNAL DECELERATION	
G0120.4	5-DEC 	-5 EXTERNAL DECELERATION	
G0120.5	6-DEC 	-6 EXTERNAL DECELERATION	
G0120.6	7-DEC 	-7 EXTERNAL DECELERATION	
G0120.7	8-DEC 	-8 EXTERNAL DECELERATION	
G0126.0	SVF1 	X SERVO OFF	
G0126.1	SVF2 	Y SERVO OFF	
G0126.2	SVF3 	Z SERVO OFF	
		S001202/N00214 S001268/N00226	
		S002216/N00389	
G0126.3	SVF4 	B SERVO OFF	
G0126.4	SVF5 	5 SERVO OFF	
		S001203/N00214	
		S002224/N00391	
G0126.5	SVF6 	6 SERVO OFF	
		S002227/N00392	
G0126.6	SVF7 	7 SERVO OFF	
		S002229/N00393	
G0126.7	SVF8 	8 SERVO OFF	
		S002231/N00394	
G0130.0	IT1 	X INTERLOCK SIGNAL	
		S000051/N00012 S002294/N00399 S002301/N00400 S002327/N00404 S004872/N00874	
		S008065/N01412	
		S002258/N00396	
G0130.1	IT2 	Y INTERLOCK SIGNAL	
		S000052/N00012 S004874/N00874 S008069/N01413	
		S002272/N00397	
G0130.2	IT3 	Z INTERLOCK SIGNAL	
		S000053/N00012 S004877/N00874 S008073/N01414	
		S002291/N00398	

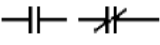
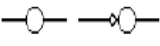
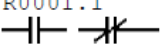
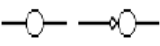
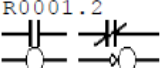
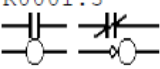
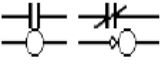
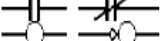
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0130.3	IT4	B INTERLOCK SIGNAL	
		S004880/N00874 S008077/N01415	
		S002298/N00399	
G0130.4	IT5	5 INTERLOCK SIGNAL	
		S004883/N00874 S008081/N01416	
		S002305/N00400	
G0130.5	IT6	6 INTERLOCK SIGNAL	
		S002316/N00401	
G0130.6	IT7	7 INTERLOCK SIGNAL	
		S002321/N00402	
G0130.7	IY8	8 INTERLOCK SIGNAL	
		S002325/N00403	
G0136.0	EAX1	X PMC CTRL SELECT SIGNAL	
		S007394/N01319 S007458/N01329 S007662/N01359 S007811/N01376 S007918/N01391	
		S007935/N01392 S007967/N01394 S008054/N01410 S008059/N01411 S011145/N01931	
		S011149/N01931 S012336/N02154	
		S007932/N01391	
G0136.1	EAX2	Y PMC CTRL SELECT SIGNAL	
		S007395/N01319 S007459/N01329 S007663/N01359 S007812/N01376 S012337/N02154	
		S007933/N01391	
G0136.2	EAX3	Z PMC CTRL SELECT SIGNAL	
		S007396/N01319 S007460/N01329 S007664/N01359 S007813/N01376 S010848/N01895	
		S010855/N01896 S012338/N02154	
		S007946/N01392	
G0136.3	EAX4	C PMC CTRL SELECT SIGNAL	
		S007397/N01319 S007461/N01329 S007665/N01359 S007814/N01376 S007952/N01393	
		S007966/N01393	
G0136.4	EAX5	A PMC CTRL SELECT SIGNAL	
		S007815/N01376	
		S007969/N01394	
G0136.5	EAX6	MG PMC CTRL SELECT SIGNAL	
		S005924/N01074	
		S005927/N01074	
G0136.6	EAX7	SL PMC CTRL SELECT SIGNAL	
		S008029/N01404	
		S008030/N01404	
G0136.7	EAX8	SR PMC CTRL SELECT SIGNAL	
		S008032/N01405	
		S008033/N01405	
G0142.2	EMBUFA#1	X BUFFERING DISABLE	
		S007971/N01395	
G0142.5	ESTP_A#1	X AXIS CONT TEMPORARY STOP S	
		S008066/N01412	
G0150.0	EROV1_#1	RAPID TRAVERSE OVERRIDE SIGNAL	
		S008053/N01410	
		S008012/N01402	
G0150.1	EROV1_#21	RAPID TRAVERSE OVERRIDE SIGNAL	
		S008058/N01411	
		S008027/N01403	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0154.2	EMBUFB#1 	Y BUFFERING DISABLE SIGNA	
	S007972/N01395		
G0154.5	ESTP_B#1 	Y AXIS CONT TEMPORARY STOP	
	S008070/N01413		
G0166.2	EMBUFC#1 	Z BUFFERING DISABLE SIGNA	
	S007973/N01395		
G0166.5	ESTP_C#1 	Z AXIS CONT TEMPORARY STOP S	
	S008074/N01414		
G0178.2	EMBUFD#1 	C BUFFERING DISABLE SIGNA	
	S007974/N01395		
G0178.5	ESTP_D#1 	C AXIS CONT TEMPORARY STOP S	
	S008078/N01415		
G0191.2	OPT 	OP TEST MODE	
	S001209/N00215	S001220/N00216 S001223/N00217 S001229/N00218	
	S001264/N00224		
G0191.3	OPQ 	OP REQUIRE SIGNAL	
	S001066/N00197	S001297/N00230 S001300/N00231 S001321/N00233	
	S001076/N00197		
G0193.2	STBT 	BRAKE TEST START SIGNAL	
	S001164/N00209		
	S001267/N00225		
G0519.3	TDID 	3D INTERFERENCE CHK DISABLE	
	S013615/N02394	S013618/N02394 S013638/N02399 S013737/N02418 S013740/N02419	
	S013622/N02394		
G0519.4	TDICHG 	3D INTERFERENCE CHK REF SET	
	S013636/N02399		
	S013643/N02399		
G0748.6	*SMC 	MCC STATUS	
	S000933/N00173		
G0750.0	*VLDVX 	SAFETY MONITOR REQ SIGNAL X	
	S001093/N00200		
G0750.1	*VLDVY 	SAFETY MONITOR REQ SIGNAL Y	
	S001094/N00200		
G0750.2	*VLDVZ 	SAFETY MONITOR REQ SIGNAL Z	
	S001095/N00200		
G0750.3	*VLDV4 	SAFETY MONITOR REQ SIGNAL B	
	S001096/N00200		
G0750.4	*VLDV5 	SAFETY MONITOR REQ SIGNAL 5	
	S001097/N00200		
G0751.0	*VLDP1 	SAFETY MONITOR REQ SIGNAL SP	
	S001098/N00200		
G0752.0	SVAX 	LIMIT SAFE SPEED X	
	S001078/N00198		
G0752.1	SVAY 	LIMIT SAFE SPEED Y	
	S001079/N00198		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0752.2	SVAZ	LIMIT SAFE SPEED Z	
	S001080/N00198		
G0752.3	SVA4	LIMIT SAFE SPEED B	
	S001081/N00198		
G0752.4	SVA5	LIMIT SAFE SPEED 5	
	S001082/N00198		
G0753.0	SVBX	LIMIT SAFE SPEED X	
	S001085/N00199		
G0753.1	SVBY	LIMIT SAFE SPEED Y	
	S001086/N00199		
G0753.2	SBVBZ	LIMIT SAFE SPEED Z	
	S001087/N00199		
G0753.3	SVB4	LIMIT SAFE SPEED B	
	S001088/N00199		
G0753.4	SVB5	LIMIT SAFE SPEED 5	
	S001089/N00199		
G0754.0	SPA1	LIMIT SAFE SPEED SP	
	S001083/N00198		
G0754.4	SPB1	LIMIT SAFE SPEED SP	
	S001090/N00199		
G1100.0	+J9	FEED AXIS 9+	
	S002581/N00444		
G1101.0	ED29+	2ND EXT DECELERATION 29+	
	S001344/N00235		
G1102.0	-J9	FEED AXIS 9-	
	S002585/N00445		
G1103.0	ED29-	2ND EXT DECELERATION 29-	
	S001345/N00235		
G1114.0	+L9	+9 OVERTRAVEL	
	S000016/N00003		
G1116.0	-L9	-9 OVERTRAVEL	
	S000017/N00003		
G1118.0	9+DEC	+9 EXTERNAL DECELERATION	
	S001342/N00235		
G1120.0	9-DEC	-9 EXTERNAL DECELERATION	
	S001343/N00235		
G1130.0	IT9	9 INTERLOCK SIGNAL	
	S002331/N00404		
G1142.2	EMBUFA#2	EMG BUF A 2	
	S007975/N01395		
G1142.5	ESTP_A#2	A EMG STOP	
	S008082/N01416		
G1150.0	EROV1_#2	RAPID OVERRIDE 1	
	S008057/N01410		

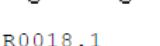
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G1150.1 	EROV2_#2 S008062/N01411	RAPID OVERRIDE 2	
G1154.2 	BMBUFB#2 S005956/N01082	MG BUF STOP 2	
G1154.5 	ESTP_B#2 S008089/N01417	MG EMG STOP 2	
G1166.2 	EMBUFC#2 S007976/N01395	SL BUF STOP 2	
G1166.5 	ESTP_C#2 S008095/N01418	SL EMG STOP 2	
G1178.2 	EMBUFD#2 S007977/N01395	SR BUF STOP 2	
G1178.5 	ESTP_D#2 S008101/N01419	SR EMG STOP 2	

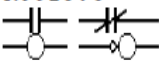
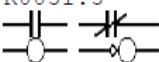
R0000.0	NC_RST	NC RESET AUX			
	S001249/N00221	S001281/N00227	S001365/N00238	S001416/N00247	S001479/N00256
	S001484/N00257	S001494/N00258	S001505/N00259	S001516/N00260	S001521/N00261
	S001545/N00264	S001558/N00266	S001656/N00285	S001674/N00290	S002843/N00501
	S002851/N00502	S003091/N00555	S003761/N00683	S003873/N00702	S003895/N00704
	S003933/N00708	S003970/N00711	S004025/N00718	S004049/N00719	S004119/N00731
	S004234/N00755	S004328/N00775	S004343/N00777	S004374/N00781	S004513/N00811
	S004601/N00829	S004607/N00830	S004614/N00831	S004620/N00832	S004628/N00833
	S004648/N00836	S004706/N00844	S005739/N01045	S005746/N01046	S005958/N01083
	S006069/N01109	S006231/N01137	S006252/N01138	S006280/N01144	S006290/N01145
	S006301/N01146	S006743/N01222	S006824/N01234	S006920/N01250	S007019/N01263
	S007922/N01391	S007936/N01392	S007956/N01393	S008115/N01424	S008137/N01428
	S008167/N01434	S008195/N01439	S008266/N01449	S008361/N01459	S008375/N01460
	S008444/N01477	S008466/N01481	S008556/N01493	S008609/N01500	S008733/N01513
	S008848/N01530	S009194/N01557	S009583/N01625	S009589/N01626	S011223/N01932
	S011452/N02005	S011942/N02101	S011977/N02108	S012276/N02145	S012288/N02146
	S012362/N02162	S012384/N02166	S012413/N02172	S012447/N02177	S012469/N02182
	S012491/N02186	S013112/N02300	S013119/N02301	S013176/N02316	S013237/N02325
	S013424/N02357	S013435/N02358	S013445/N02360	S013485/N02370	S013526/N02377
	S013554/N02383	S013560/N02384	S013719/N02414	S013853/N02439	S013879/N02445
	S013898/N02448	S013907/N02449	S013927/N02452	S013937/N02453	S014041/N02471
	S000152/N00032				
					
R0000.1	MF1.S	MF 1 AUX			
	S003158/N00570	S003167/N00572	S003179/N00575	S003181/N00575	S010236/N01758
	S010245/N01759	S010254/N01760	S010263/N01761	S010272/N01762	S010281/N01763
	S010289/N01764	S014128/N02489	S014153/N02492	S014155/N02492	
	S000154/N00033				
					
R0000.2	SF3.S	SF3 AUX			
	S000168/N00040	S000176/N00042	S000180/N00043	S000182/N00043	S014019/N02467
	S000160/N00036				
					
R0000.3	TF.S	TF AUX			
	S000188/N00044	S000196/N00046	S000200/N00047	S000202/N00047	S014010/N02466
	S000162/N00037				
					
R0000.4	BF.S	BF AUX			
	S000208/N00048	S000216/N00050	S000220/N00051	S000222/N00051	S014001/N02465
	S000164/N00038				
					
R0000.5	MF2.S	MF 2 AUX			
	S003125/N00561	S003134/N00563	S003189/N00576	S003191/N00576	S014137/N02490
	S014158/N02492	S014160/N02492			
	S000156/N00034				
					
R0000.6	MF3.S	MF 3 AUX			
	S003140/N00565	S003149/N00567	S003199/N00577	S003201/N00577	S014146/N02491
	S014164/N02492	S014166/N02492			
	S000158/N00035				
					
R0000.7	M30_AUX	M30 AUX			
	S001400/N00245	S001581/N00269	S001675/N00290	S002332/N00405	S011454/N02005
	S012905/N02262				
	S000167/N00039				
					

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0001.0		NC POWER RDY	
		S000001/N00001 S000002/N00001 S000004/N00002 S000011/N00003 S000018/N00004	
		S000850/N00161 S001021/N00192 S001313/N00232 S001334/N00234 S001341/N00235	
		S002228/N00393 S003356/N00606 S003358/N00607 S003369/N00611 S003383/N00616	
		S003397/N00621 S003411/N00626 S003441/N00634 S003473/N00639 S003496/N00643	
		S003543/N00650 S003566/N00654 S003613/N00661 S003636/N00665 S003683/N00672	
		S003706/N00676 S003812/N00693 S003821/N00694 S004225/N00752 S005247/N00941	
		S005252/N00942 S005257/N00943 S005261/N00944 S005268/N00945 S005277/N00946	
		S005284/N00947 S005301/N00949 S005310/N00950 S005317/N00951 S005321/N00952	
		S005330/N00954 S005339/N00955 S005348/N00956 S005357/N00957 S005366/N00958	
		S005375/N00959 S005384/N00960 S005393/N00961 S005402/N00962 S005409/N00963	
		S005416/N00965 S005426/N00968 S005436/N00971 S005446/N00974 S005456/N00977	
		S005466/N00980 S005476/N00983 S005486/N00986 S005493/N00988 S005500/N00990	
		S005510/N00993 S005520/N00996 S005532/N00999 S005539/N01000 S005551/N01003	
		S005558/N01004 S005570/N01007 S005577/N01008 S005589/N01011 S005596/N01012	
		S005608/N01015 S005615/N01016 S005627/N01019 S005634/N01020 S005646/N01023	
		S005653/N01024 S005665/N01027 S005672/N01028 S005682/N01031 S005692/N01034	
		S005702/N01037 S005712/N01040 S005884/N01070 S005889/N01071 S005903/N01072	
		S005928/N01075 S005933/N01076 S005955/N01082 S005996/N01090 S005997/N01090	
		S006006/N01092 S006007/N01092 S006013/N01093 S006014/N01093 S006015/N01093	
		S006016/N01093 S006071/N01110 S006615/N01195 S006660/N01207 S006762/N01228	
		S007858/N01384 S007970/N01395 S007978/N01396 S007989/N01399 S008034/N01406	
		S008043/N01408 S008631/N01502 S008668/N01502 S008934/N01538 S010049/N01700	
		S010291/N01765 S010293/N01766 S010301/N01768 S010309/N01770 S010320/N01773	
		S010368/N01788 S010377/N01791 S010386/N01794 S010437/N01811 S010441/N01812	
		S010446/N01813 S010450/N01814 S010454/N01815 S010458/N01816 S010462/N01817	
		S010466/N01818 S010470/N01819 S010474/N01820 S010815/N01888 S010828/N01891	
		S010838/N01893 S010944/N01911 S011106/N01926 S011112/N01928 S011116/N01930	
		S011255/N01944 S011758/N02055 S012296/N02148 S012560/N02197 S012561/N02197	
		S012864/N02252 S012877/N02254 S013297/N02333 S013302/N02334 S013671/N02405	
		S013676/N02406 S013681/N02407 S013686/N02408 S013742/N02420 S013744/N02421	
		S013772/N02426 S013778/N02427 S013799/N02430 S013812/N02432 S014028/N02469	
		S014035/N02470 S014212/N02501	
		S000003/N00001	
R0001.1		NC_RDY NC READY	
		S000538/N00108 S000547/N00109 S000555/N00110 S000562/N00111 S000751/N00138	
		S000758/N00140 S000765/N00142 S000772/N00144 S000779/N00146 S000786/N00148	
		S000793/N00150 S000800/N00152 S000820/N00156 S000827/N00157 S000834/N00158	
		S000841/N00159 S002210/N00387 S002212/N00388 S002230/N00394 S002619/N00457	
		S002844/N00501 S002852/N00502 S003092/N00555 S003099/N00556 S004164/N00741	
		S004169/N00742 S004831/N00866 S006274/N01143 S006292/N01145 S006303/N01146	
		S006520/N01188 S009233/N01559 S009241/N01561 S009459/N01598 S009465/N01600	
		S010046/N01699 S011812/N02066 S012005/N02112 S012010/N02113 S012679/N02216	
		S012680/N02216 S012773/N02235 S012780/N02237 S012921/N02264 S012927/N02265	
		S013629/N02397 S013632/N02398 S013644/N02400 S013649/N02401 S013705/N02412	
		S013710/N02413 S013915/N02450 S013920/N02451	
		S014213/N02501	
R0001.2		ITSUB ALL AXIS INTERLOCK	
		S000057/N00012	
		S000050/N00011	
R0001.3		CYCLE__STOP CYCLE STOP	
		S000068/N00015 S000070/N00015 S001346/N00236 S007109/N01274	
		S000067/N00014	
R0001.4		PRPONM1 OPERATION PREPAR MEM 1	
		S000034/N00009 S000037/N00010	
		S000036/N00009	
R0001.5		ST_RDY_OF_CHECK CYCLE ST RDY OFF CHECK	
		S000039/N00010 S000063/N00013 S000895/N00168	
		S000042/N00010	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0002.0	SFON1	SPINDLE FUNCTION ON 1	
	S000170/N00041	S000172/N00041	
	S000169/N00040		
R0002.1	SFON2	SPINDLE FUNCTION ON 2	
	S000178/N00043		
	S000175/N00041		
R0002.2	SFON3	SPINDLE FUNCTION ON 3	
	S000171/N00041	S000173/N00041	
	S000177/N00042		
R0002.3	SFON	SPINDLE FUNCTION ON	
	S000179/N00043	S003893/N00704 S004107/N00730 S004151/N00738 S004156/N00739	
	S004160/N00740	S004370/N00781 S004435/N00795 S014018/N02467 S014021/N02467	
	S000187/N00043		
R0002.4	TFON1	TOOL FUNCTION ON 1	
	S000190/N00045	S000192/N00045	
	S000189/N00044		
R0002.5	TFON2	TOOL FUNCTION ON 2	
	S000198/N00047		
	S000195/N00045		
R0002.6	TFON3	TOOL FUNCTION ON 3	
	S000191/N00045	S000193/N00045	
	S000197/N00046		
R0002.7	TFON	TOOL FUNCTION ON	
	S000199/N00047	S004501/N00809 S004505/N00810 S006730/N01222 S006740/N01222	
	S011277/N01947	S014009/N02466 S014012/N02466	
	S000207/N00047		
R0003.0	BFON1	2ND AUXILIARY FUNCTION ON 1	
	S000210/N00049	S000212/N00049	
	S000209/N00048		
R0003.1	BFON2	2ND AUXILIARY FUNCTION ON 2	
	S000218/N00051		
	S000215/N00049		
R0003.2	BF3	2ND AUXILIARY FUNCTION ON 3	
	S000211/N00049	S000213/N00049	
	S000217/N00050		
R0003.3	BFON	2ND AUXILIARY FUNCTION ON	
	S000219/N00051	S014000/N02465 S014003/N02465	
	S000227/N00051		
R0010.0	CYCLE_ST_PB_ON	CYCLE START PB ON	
	S000871/N00165	S000876/N00166 S000885/N00168	
	S000873/N00165		
R0010.1	CYCLE_ST_PB_OF	CYCLE ST OFF PB	
	S000870/N00165	S000875/N00166	
	S000877/N00166		
R0010.2	RDY1	NC RDY 1	
	S000432/N00088	S001598/N00273 S006051/N01104 S006247/N01138	
	S000849/N00160		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0010.3	I_SET	MACHINE PREPAR RDY	
	S008922/N01537 S008952/N01539 S008991/N01541 S009016/N01542 S009047/N01543		
	S009070/N01544 S009095/N01545 S009116/N01546 S012506/N02187 S012741/N02229		
	S013235/N02324		
	S000858/N00162		
R0010.5	ST_RDY_ON_OK	CYCLE READY ON OK	
	S000887/N00168 S001604/N00274		
	S000881/N00167		
R0010.6	MCC_OF_TIMING	MCC OFF TIMING	
	S000924/N00171		
	S000916/N00170		
R0011.0	PWRDY1	MCC POWER RDY 1	
	S000990/N00183 S000993/N00184 S001512/N00259 S001569/N00267 S002244/N00395		
	S004121/N00732 S004376/N00781		
	S000989/N00182		
R0011.5	OPMOD1	OPERATION MODE 1	
	S001391/N00242 S002232/N00395		
	S000997/N00185		
R0011.6	OP_MOD_2	OPERATION MODE 2	
	S001006/N00188 S001070/N00197 S001077/N00198 S001301/N00231 S002233/N00395		
	S011267/N01945		
	S001000/N00186		
R0011.7	OP_MOD_3	OPERATION MODE 3	
	S001011/N00189 S001051/N00194 S001072/N00197 S001084/N00199 S001275/N00227		
	S001294/N00229 S001322/N00233 S001363/N00238 S002236/N00395 S012118/N02126		
	S012126/N02127		
	S001002/N00187		
R0012.0	MOD_1_OP_DOR_OPE	MODE 1 OPERATOR DOOR OPEN	
	S001069/N00197		
	S001020/N00191		
R0012.1	OPOKMD2	OPERATION DOOR OPEN MODE 2	
	S001071/N00197		
	S001036/N00193		
R0012.2	OP_DOR_OPEN_MD3	OPERATION DOOR OPEN MODE 3	
	S001074/N00197		
	S001055/N00194		
R0012.3	OPDRUKS	OPERATION DOOR UNLOCK	
	S001057/N00195 S001068/N00197 S012070/N02122		
	S001063/N00195		
R0012.4	OPDRUKE	DOOR OPEN & CYCLE STOP	
	S001056/N00195		
	S001065/N00196		
R0012.5	SACHKOK	MACHINE SAFETY CHECK RDY	
	S001115/N00204		
	S001107/N00201		
R0015.0	PRDY1ON	MCC POWERO 1 ON	
	S000992/N00183		
R0015.1	PRDY1ONS	MCC POWERO 1 ON AUX	
	S000991/N00183		
	S000994/N00184		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0016.0	MCCTOK1	MCC TEST RDY 1	
		S001157/N00209 S001183/N00213	
		S001156/N00208	
R0016.1	MCCTOK	MCC TEST RDY	
		S001184/N00213	
		S001172/N00209	
R0016.2	MCCTST	MCC TEST	
		S001178/N00211 S001181/N00212	
		S001177/N00210	
R0016.3	MCCTST1	MCC TEST 1	
		S001185/N00213 S001191/N00213	
		S001180/N00211	
R0016.4	MCCTST2	MCC TEST 2	
		S001179/N00211	
		S001182/N00212	
R0016.5	MCC_TEST_ON	MCC CHECK ON	
		S000936/N00174 S001187/N00213 S001192/N00213 S001259/N00223 S001263/N00224	
		S001269/N00226 S002214/N00389 S002221/N00391	
		S001195/N00213	
R0017.0	MOD2ENB	MODE 2 ENABLE SW ON	
		S001004/N00188 S001015/N00190 S002242/N00395	
		S001007/N00188	
R0017.1	MOD_3_ENB	MODE 3 ENABLE SW ON	
		S001009/N00189 S001016/N00190 S001360/N00238 S002239/N00395	
		S001012/N00189	
R0017.2	ENB_OF_CHK	ENABLE SW OFF CHECK	
		S001003/N00188 S001008/N00189 S001014/N00190	
		S001017/N00190	
R0017.3	SPINDLE_IT_1	SPINDLE INTERLOCK 1	
		S001295/N00229	
R0018.0	BRKTOK1	BRAKE TEST RDY 1	
		S001205/N00215 S001237/N00221	
		S001204/N00214	
R0018.1	BRKTOK	BRAKE TEST RDY	
		S001230/N00218 S001238/N00221	
		S001213/N00215	
R0018.2	BRKTST	BRAKE TEST	
		S001232/N00219 S001235/N00220	
		S001221/N00216	
R0018.3	BRKTST3	BRAKE TEST START	
		S001239/N00221 S001245/N00221	
		S001234/N00219	
R0018.4	BRKTST4	BRAKE TEST START AUX	
		S001233/N00219	
		S001236/N00220	
R0018.5	BRKTESON	BRAKE TESTING	
		S001241/N00221 S001246/N00221 S001251/N00222 S001260/N00223 S001265/N00225	
		S002220/N00391 S002371/N00409 S002375/N00410 S002382/N00411 S011981/N02108	
		S001250/N00221	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0018.6		BRKTST1 BRAKE TEST AUX 1 S001224/N00217 S001228/N00218 S001227/N00217	
R0018.7		BRKTST2 BRAKE TEST AUX 2 S001217/N00216 S001225/N00217 S001231/N00218	
R0030.0		AUTO_CYST_AUX_2 AUTO CYCLE START AUX 2 S001279/N00227 S001350/N00237 S001403/N00245 S001477/N00256 S002349/N00407 S003326/N00598 S006851/N01237 S006856/N01238 S007062/N01270 S007069/N01271 S007106/N01274 S001369/N00238	
R0030.1		FEED_HOLD_AUX FEED HOLD AUX S000069/N00015 S012885/N02257 S012887/N02257 S001378/N00239	
R0030.2		CYSTINT CYCLE START INTERRUPT S001347/N00236 S001367/N00238 S001349/N00236	
R0030.3		MDIOPE MDI OPERATION S001399/N00244	
R0030.4		AUTON1 AUTO ON 1 S001384/N00242 S001387/N00242 S001381/N00240	
R0030.5		AUTON2 AUTO ON 2 S001380/N00240 S001383/N00241	
R0030.6		AUTCYCM AUTO CYCLE MODE 2 S001386/N00242 S001388/N00242 S001394/N00243 S001420/N00248 S001393/N00242	
R0030.7		AUTO_CYST_AUX AUTO CYCLE START AUX 2 S002350/N00407 S001351/N00237	
R0031.0		M30_MEM M30 MEMORY S000945/N00176 S001402/N00245 S001408/N00246 S001417/N00247 S001676/N00290 S012824/N02245 S001406/N00245	
R0031.1		RWDON DATA BACK UP ON S001409/N00246 S001412/N00247 S001458/N00254 S001411/N00246	
R0031.2		RWDOFF DATA BACK UP FINISH S000649/N00130 S001410/N00246 S001414/N00247 S001422/N00248 S001427/N00250 S001448/N00252 S013096/N02298 S001418/N00247	
R0031.3		CYSTNO CYCLE START PROHIBIT S001421/N00248 S001431/N00250 S001442/N00252 S001423/N00248	
R0031.4		RWDSTOK DATA BACK UP STOP OK S001429/N00250 S001426/N00249	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0031.5		RWDST DATA BACK UP STOP	S001277/N00227 S001471/N00256 S001473/N00256 S001562/N00267 S001432/N00250
R0031.6		AUTO_PW_OFF AUTO POWER OFF	S000902/N00169 S000946/N00176 S001450/N00252 S001452/N00253 S001451/N00252
R0031.7		M30SWM M30 SW MEM	S001434/N00251 S001460/N00254 S001463/N00254
R0032.0		MAIN_PRG_NO_SEH MAIN PROGRAM NO. SEARCH	S001470/N00256 S001485/N00257 S001501/N00259 S001535/N00264 S001469/N00255
R0032.1		WSETHLD WORKSETS HOLD	S001476/N00256 S001503/N00259 S001568/N00267 S001679/N00290 S001481/N00256
R0032.2		DCNVWK BCD CONVERTER WORK	S001502/N00259 S001536/N00264 S001491/N00257
R0032.4		DCNVWT BCD CONVERTER WEEK	S001507/N00259 S001538/N00264 S001500/N00258
R0032.5		WNSCH WORK PROGRAM NO SERCH	S000817/N00155 S001353/N00238 S001509/N00259 S001518/N00260 S002342/N00406 S001513/N00259
R0032.6		ERSOK EXTERA NC RESET OK	S001517/N00260 S001523/N00261 S001552/N00265 S002343/N00406 S001519/N00260
R0032.7		PRGSHST EX PROGRAM SERCH START	S001522/N00261 S001526/N00262 S001531/N00263 S001540/N00264 S001548/N00265 S001525/N00261
R0033.0		EXIN-PG EX PROGRAM NO SERCH AUX	S001520/N00261 S001541/N00264 S001556/N00266 S001534/N00263
R0033.1		PRGSHOK EX PROGRAM NO SERCH OK	S001524/N00261 S001551/N00265 S001554/N00266 S001553/N00265
R0033.2		CYST2 CYCLE STOP 2	S001355/N00238 S001415/N00247 S001557/N00266 S001573/N00268 S001578/N00269 S001672/N00290 S001561/N00266
R0033.3		CYST1 CYCLE START 1	S001354/N00238 S001564/N00267 S001572/N00268 S001571/N00267
R0033.4		CYST2M CYCLE START MEM	S001466/N00255 S001559/N00266 S001580/N00269 S001585/N00270 S001591/N00271 S001584/N00269
R0033.5		AUTPWOFs AUTO POWER OFF START	S001449/N00252 S001435/N00251

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0040.0	WTOFM	WEEKLY TIMER OFF MEM	
		S001596/N00272 S001600/N00273	
		S001597/N00272	
R0040.1	WTMRST	WEEKLY TIMER RESET	
		S001607/N00274 S001619/N00276 S001628/N00278	
		S001602/N00273	
R0040.2	WTPRPN	WEEK TIMER PROG OPERATION ON	
		S000886/N00168 S001623/N00277	
		S001622/N00276	
R0040.3	WTPRPM	WEEK TIME PROG OPERATION MEM	
		S001611/N00274 S001621/N00276 S001625/N00277	
		S001627/N00277	
R0040.4	WTMRONM	WEEK TIMER ON MEM	
		S001630/N00278 S001632/N00279	
		S001631/N00278	
R0040.5	WTCYC1	WEEKLY TIMER CYCLE 1	
		S001644/N00283	
		S001639/N00280	
R0040.6	WTCYC2	WEEKLY TIMER CYCLE 2	
		S001638/N00280	
		S001641/N00281	
R0040.7	WTCYCOK1	WEEKLY TIMER CYCLE 1 OK	
		S001646/N00283	
		S001643/N00282	
R0041.0	WTCYC3	WEEKLY TIMER CYCLE 3	
		S001649/N00284 S001653/N00285	
		S001648/N00283	
R0041.1	WTCYC4	WEEK TIMER CYCLE ZERO RETURN	
		S001654/N00285 S001660/N00286	
		S001659/N00285	
R0041.2	WTCYC5	WEEK TIMER CYC ZERO RET FINISH	
		S001655/N00285 S001661/N00286 S001663/N00287	
		S001662/N00286	
R0041.3	WTCYC6	WEEKLY TIMER CYC MEM MODE	
		S001665/N00287 S001667/N00288 S001670/N00289 S001678/N00290	
		S001666/N00287	
R0041.4	WTCYC7	WEEKLY PROGRAM SEARCH	
		S001468/N00255 S001495/N00258 S001506/N00259 S001537/N00264	
		S001669/N00288	
R0041.5	WTCYC7S	WEEKLY TIMER CYCLE COMPLEMENT	
		S001668/N00288	
		S001671/N00289	
R0041.7	WTCYC10	WEEKLY TIMER PROG CYC	
		S001462/N00254 S001474/N00256 S001673/N00290	
		S001680/N00290	
R0050.0			
		S006020/N01093	

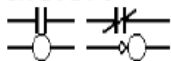
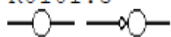
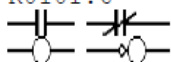
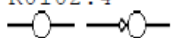
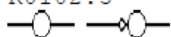
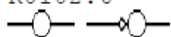
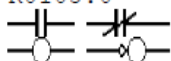
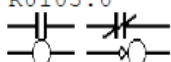
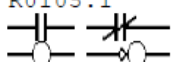
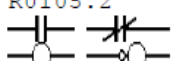
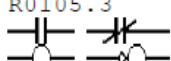
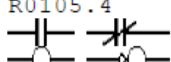
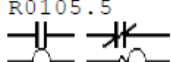
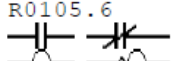
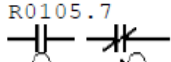
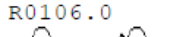
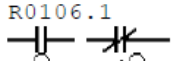
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0050.1	CL-SPAIR 	SPINDLE COOLANT AIR	
	S010041/N01698		
	S012231/N02136		
R0050.3	CP-STP 	CHIP CONVEYOR STOP	
	S001046/N00194		
	S012234/N02137		
R0055.0	M07FF 	M07 AUTO AIR FOR CHIP	
	S011466/N02008	S011469/N02008 S011574/N02024 S011838/N02072 S011844/N02074	
	S011472/N02008		
R0055.1	M08FF 	M08 AUTO COOLANT	
	S011480/N02011	S011483/N02011 S011558/N02022 S011568/N02023 S011841/N02073	
	S011845/N02074		
	S011487/N02011		
R0055.2	M50FF 	M50 AUTO SIDE COOLANT	
	S011497/N02014	S011500/N02014 S011560/N02022 S011579/N02025 S011846/N02074	
	S011857/N02077		
	S011506/N02014		
R0055.3	M51FF 	M51 AUTO CTS	
	S011510/N02015	S011535/N02020 S011727/N02052 S011735/N02053 S011743/N02054	
	S011751/N02055	S011847/N02074 S011860/N02078	
	S011516/N02015		
R0055.4	M61FF 	AUTO CHIP COOLANT	
	S011528/N02018	S011590/N02026 S011848/N02074 S011869/N02081	
	S011530/N02018		
R0055.6			
	S011479/N02011	S011482/N02011	
	S011475/N02009		
R0055.7			
	S011474/N02009		
	S011477/N02010		
R0056.0	FLDMTR 	COOLANT MOTOR AUX	
	S011612/N02031		
	S011567/N02022		
R0056.1	FLDS 	CHIP COOLANT AUX	
	S011661/N02039		
	S011572/N02023		
R0056.2	MISTO 	OIL MIST	
	S011576/N02024		
R0056.5	OILHLMTR 	CTS MOTOR	
	S011615/N02032	S011663/N02040	
	S011589/N02025		
R0056.6	CHIPAIR 	CHIP AIR BLOW AUX	
	S011668/N02042		
	S011592/N02026		
R0057.0	CLTRST 	ALL COOLANT RESET	
	S011471/N02008	S011485/N02011 S011502/N02014 S011513/N02015 S011519/N02016	
	S011524/N02017	S011529/N02018 S011533/N02019 S011538/N02020 S011733/N02052	
	S011741/N02053	S011749/N02054 S011757/N02055 S011833/N02070	
	S011458/N02005		


















ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0057.1		ALL_COOLANT_STOP ALL COOLANT STOP	
		S011559/N02022 S011561/N02022 S011569/N02023 S011575/N02024 S011581/N02025	
		S011591/N02026 S011619/N02033 S011627/N02034 S011666/N02041 S011815/N02067	
		S011820/N02068 S011827/N02069 S012229/N02136	
		S011557/N02021	
R0057.5		M62FF AUTO COOLANT AND AIR	
		S011532/N02019 S011665/N02041 S011872/N02082	
		S011534/N02019	
R0058.7		M63FF CTS AIR BLOW ON	
		S011507/N02015 S011537/N02020 S011875/N02083 S012228/N02136	
		S011539/N02020	
R0059.0		CHIP_CON_RDY_OK CHIP CON READY OK	
		S012066/N02122 S012084/N02123 S012113/N02125 S012155/N02128 S012164/N02129	
		S011999/N02110	
R0059.1		CHPCW1	
		S012091/N02124 S012115/N02125 S012119/N02126 S012128/N02127 S012232/N02137	
		S012104/N02124	
R0059.2		CHPCCW1 CHP CON CCW 1	
		S012086/N02123 S012120/N02126 S012127/N02127 S012233/N02137	
		S012116/N02125	
R0059.3		M/CDROK M/C DOOR OK	
		S012002/N02111	
		S012004/N02111	
R0059.4		M52FF AUTO CHIP CONVEYOR	
		S011518/N02016 S011618/N02033 S011863/N02079	
		S011521/N02016	
R0059.5		M53FF CHIP COOLANT M CODE AUX	
		S011523/N02017 S011626/N02034 S011866/N02080	
		S011526/N02017	
R0060.0		WORKPB CHIP FLUSH BUTTON	
		S011595/N02028 S011598/N02029	
		S011594/N02027	
R0060.1		WORKPB1 CHIP FLUSH BUTTON 1	
		S011600/N02030 S011603/N02030	
		S011597/N02028	
R0060.2		WORKPB2 CHIP FLUSH BUTTON 2	
		S011596/N02028	
		S011599/N02029	
R0060.3		WRKON CHIP FLUSH ON	
		S011601/N02030 S011604/N02030	
		S011609/N02030	
R0065.0		CHPAUTON CHIP CON AUTO RUN	
		S000451/N00092 S000452/N00092 S011851/N02075 S011854/N02076 S012001/N02111	
		S012056/N02122 S012059/N02122 S012085/N02123 S012101/N02124 S012114/N02125	
		S012145/N02128	
		S012071/N02122	
R0065.1		CHP_CON_1_MAN_CW CHIP CON 1 MANUAL CW	
		S012069/N02122 S012102/N02124	
		S012087/N02123	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0065.2		NO_2&3CNVCW NO 2&3 CHIP CONVEYOR CW	
		S012139/N02128 S012167/N02130 S012177/N02131	
		S012158/N02128	
R0065.3		NO_2&3_CNVCW_ON NO 2&3 CHIP CONVEYOR CCW ON	
		S012168/N02130 S012176/N02131	
		S012166/N02129	
R0065.4		CHP1.INT CHIP CON 1 INTERLOCK	
		S012013/N02114 S012018/N02115 S012088/N02124 S012133/N02128	
		S012012/N02113	
R0065.5		CHP2.INT CHIP CON 2 INTERLOCK	
		S012093/N02124 S012095/N02124 S012141/N02128 S012143/N02128	
		S012020/N02115	
R0065.6			
		S012055/N02122 S012058/N02122	
		S012051/N02120	
R0065.7			
		S012050/N02120	
		S012054/N02121	
R0066.0		YSHTLKC Y AXIS SHUTTER LOCK COMMAND	
		S001061/N00195 S001154/N00208 S006994/N01260 S007930/N01391 S007940/N01392	
		S007964/N01393 S012271/N02145 S012286/N02146 S012292/N02147 S012304/N02150	
		S012342/N02155 S012500/N02187 S012530/N02191 S012531/N02191	
		S012279/N02145	
R0066.1		YSHTULKC Y AXIS SHUTTER UNLOCK COMMAND	
		S001062/N00195 S001155/N00208 S006995/N01260 S007931/N01391 S007941/N01392	
		S007965/N01393 S012274/N02145 S012283/N02146 S012293/N02147 S012308/N02150	
		S012343/N02155 S012512/N02188 S012537/N02192 S012538/N02192	
		S012291/N02146	
R0066.2		YSHTLK-1 Y AXIS SHUTTER LOCK	
		S012307/N02150 S012504/N02187 S012517/N02188 S012521/N02189	
		S012511/N02187	
R0066.3		YSHTULK-1 Y AXIS SHUTTER UNLOCK	
		S012311/N02150 S012508/N02187 S012516/N02188 S012525/N02190	
		S012520/N02188	
R0067.0		COVX1 Y AXIS SHUTTER SET	
		S007934/N01392 S012335/N02154 S012344/N02155	
		S012346/N02155	
R0067.1		COVX2 Y AXIS SHUTTER Z AXIS P1	
		S012329/N02153 S012339/N02154 S012345/N02155 S012456/N02178 S012460/N02179	
		S012476/N02183	
		S012341/N02154	
R0067.2		COVX3 Y AXIS SHUTTER X AXIS P1	
		S012323/N02152 S012332/N02153 S012340/N02154 S012349/N02158 S012353/N02159	
		S012369/N02163	
		S012334/N02153	
R0067.3		COVX4 Y AXIS SHUTTER Y AXIS P3	
		S012317/N02151 S012326/N02152 S012333/N02153 S012393/N02167 S012400/N02168	
		S012420/N02173 S012432/N02175 S012440/N02176	
		S012328/N02152	

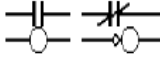
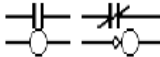
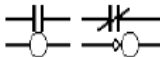
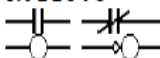
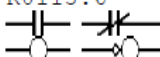
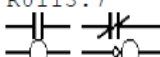
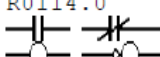
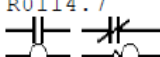
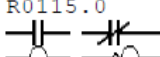
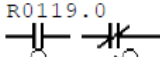
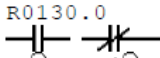
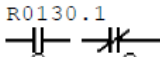
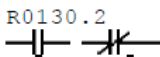
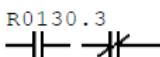
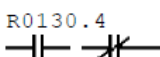
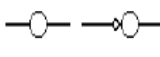
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0067.4	COVX5	Y AXIS SHUTTER ON&OFF	
		S012313/N02150 S012320/N02151 S012327/N02152 S012501/N02187 S012513/N02188 S012322/N02151	
R0067.5	COVX6	Y AXIS SHUTTER Y AXIS P1	
		S012299/N02149 S012314/N02150 S012321/N02151 S012394/N02167 S012404/N02169 S012426/N02174 S012433/N02175 S012441/N02176 S012316/N02150	
R0067.6	COVX7	Y AXIS COVER CLOSE FINISH	
		S012273/N02145 S012285/N02146 S012302/N02149 S012315/N02150 S012303/N02149	
R0071.0	MSTAUT	OIL MIST COLLECTOR AUTO	
		S011635/N02035 S011642/N02036 S011649/N02036	
R0071.1	M26FF	OIL MIST COLLECTOR START	
		S011636/N02035 S011654/N02038 S011895/N02090 S011898/N02091 S011660/N02038	
R0072.0	M54	BOOSTER HIGH	
		S011728/N02052 S011738/N02053 S011746/N02054 S011754/N02055 S011769/N02057 S011714/N02047	
R0072.1	M55	BOOSTER MIDDLE	
		S011730/N02052 S011736/N02053 S011747/N02054 S011755/N02055 S011770/N02057 S011717/N02048	
R0072.2	M56		
		S011731/N02052 S011739/N02053 S011744/N02054 S011756/N02055 S011771/N02057 S011720/N02049	
R0072.3	M57	AIR BOOSTER	
		S011732/N02052 S011740/N02053 S011748/N02054 S011752/N02055 S011773/N02058 S011723/N02050	
R0072.4	M58	SPINDLE BOOSTER OFF	
		S011765/N02056 S011831/N02070 S011726/N02051	
R0073.0	M54FF	M54 KEEP	
		S011729/N02052 S011775/N02059 S011798/N02064 S011734/N02052	
R0073.1	M55FF	M55 KEEP	
		S011737/N02053 S011776/N02059 S011793/N02063 S011742/N02053	
R0073.2	M56FF	M56 KEEP	
		S011745/N02054 S011777/N02059 S011788/N02062 S011750/N02054	
R0073.3	M57FF	M57 KEEP	
		S011753/N02055 S011763/N02056 S011819/N02068 S011826/N02069 S011759/N02055	
R0073.4	ECO.MFIN	M57/M58 FINISH	
		S011878/N02084 S011881/N02085 S011884/N02086 S011887/N02087 S011890/N02088 S011768/N02056	
R0073.5	ECO.OIL	BOOSTER OIL ON	
		S011760/N02056 S011772/N02057	

R0073.6	ECO.AIR	BOOSTER AIR ON
	S011762/N02056 S011774/N02058	
R0073.7	ECOMFINS	BOOSTER ON M CODE FINISH AUX
	S011508/N02015 S011783/N02061 S011803/N02065 S011807/N02066 S011818/N02068 S011825/N02069 S011778/N02059	
R0074.0	ECOP.OFF	BOOSTER PUMP OFF
	S011784/N02061 S011782/N02060	
R0074.1	ECOP.ON	BOOSTER PUMP ON
	S011761/N02056 S011789/N02062 S011794/N02063 S011799/N02064 S011814/N02067 S011805/N02065	
R0100.0	ATCINI11	ATC INITIAL
	S001424/N00249 S001438/N00252 S001642/N00282 S011227/N01933	
R0100.1	TAXSIT	ATC INTERLPCK
	S002247/N00396 S002260/N00397 S002274/N00398 S011231/N01934	
R0100.2	TSPIT	ATC SP INTRELOCK
	S004000/N00717 S011235/N01935	
R0100.3	MGINI	MG INITIAL
	S005025/N00898 S011237/N01936	
R0100.4	ATCHLD1	ATC HOLD 1
	S001373/N00239 S012891/N02258 S011239/N01937	
R0100.5	ATCTM1	ATC CYCLE 1
	S001035/N00193 S001158/N00209 S001206/N00215 S001398/N00244 S001425/N00249 S002334/N00405 S002335/N00405 S011241/N01938	
R0100.6	ATCMC	ATC TOOL INITIAL
	S011245/N01939	
R0100.7	T-OPMAI	ATC MAIN PANEL SELECTION
	S001356/N00238 S001726/N00301 S001733/N00302 S011247/N01940	
R0101.0	T-OPESUB	ATC SUB PANEL SELECTION
	S012881/N02256 S011249/N01941	
R0101.1	T-SPUNC	SPINDLE TOOL UNCLAMP AUX
	S004413/N00787 S004416/N00788 S012793/N02239 S013489/N02370 S013525/N02377 S011251/N01942	
R0101.2	T-ORIIIT	SP M19 INTERLOCK AUX
	S004386/N00782 S011254/N01943	
R0101.3	T-ORISP	SP M19 STOP
	S011256/N01944	

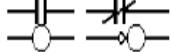
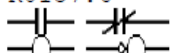
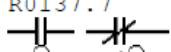
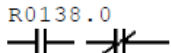
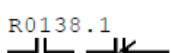
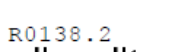
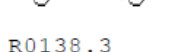
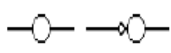
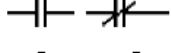
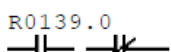
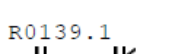
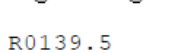
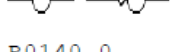

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0101.4		T-ORIST S004382/N00782 S011272/N01945	SP M19 START
R0101.5		T-OPESTOP S011280/N01947	ATC OP STOP
R0101.6		T-TFIN S014008/N02466 S011284/N01948	T CODE FIN AUX S014011/N02466
R0102.4		T-POSOK S011286/N01949	ATC ORI OK
R0102.5		T-MGPOK S011291/N01950	MG DOOR OPEN OK
R0102.6		T-SPAIR S011293/N01951	M6 SP BLOW
R0103.0		T-SPTLCG S004714/N00846 S011296/N01952	SP TOOL CHANGE
R0105.0		ATCINI12 S012856/N02251 S011298/N01953	ATC INITIAL 12
R0105.1		ATCINI22 S012853/N02251 S011300/N01954	ATC INITIAL 22
R0105.2		P1+<SL0 S000021/N00005 S011302/N01955	P1+<SL0
R0105.3		SL-OT1 S000024/N00006 S011304/N01956	SL-OT1
R0105.4		90.5<SR S000027/N00007 S011306/N01957	90.5<SR
R0105.5		-360.5<S S000030/N00008 S011308/N01958	-360.5<S
R0105.6		ATCALM1 S012884/N02257 S011310/N01959	ATC ALARM 1 S012919/N02263
R0105.7		INDEXPOS1 S002307/N00401 S011312/N01960	ATC INDEX POS 1
R0106.0		AXISITNG1 S011314/N01961	AXIS INTERLOCK NG 1
R0106.1		SHBMG S002317/N00402 S011316/N01962	ARM BACKWARD MG SIDE

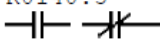

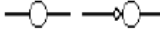
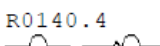

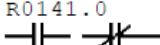


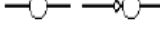
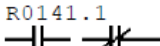


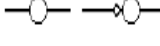
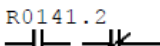
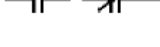

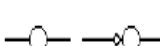
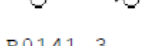
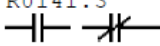

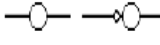
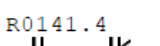
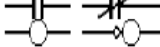
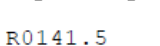
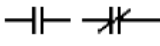
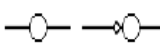
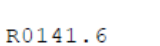
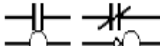
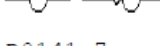
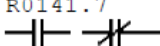
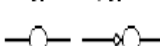
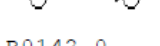
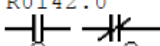
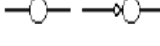
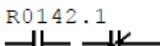
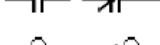
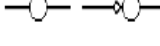





ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0106.2	SHCO111 	ARM CHUCK OPEN	
	S002322/N00403 S011318/N01963		
R0106.3	SAP4-1 	SWING ARM FORWARD P4	
	S011320/N01964		
R0106.4	SPTL0 	SP NON TOOL	
	S012871/N02253 S013232/N02324 S011322/N01965		
R0106.5	WTTL0-1 	WAIT NON TOOL	
	S012857/N02251 S012872/N02253 S011324/N01966		
R0106.6	RTTL0-1 	RETUEN SIDE NON TOOL	
	S012854/N02251 S012858/N02251 S012873/N02253 S011326/N01967		
R0106.7	ATCM-1 	M6 CYC	
	S000703/N00132 S011328/N01968		
R0107.0	ATC_T&_M6_CYCLE 	ATC CHANGE CYCLE 1	
	S012826/N02245 S012860/N02251 S012892/N02258 S012893/N02258 S011330/N01969		
R0107.1	SPINDCYC-1 	TOOL CYC FIN AND SPINDLE UP	
	S012895/N02258 S011332/N01970		
R0107.2	ATCX1-1 	ATC T & M6 CYC	
	S011334/N01971		
R0107.3	SPCL1-1 	T CYC FIN SP INDEX	
	S013254/N02326 S013268/N02327 S013273/N02327 S011336/N01972		
R0107.4	SASPINIP-1 	PMC CRTL XYZA	
	S011338/N01973		
R0110.0	M06S 	ATC TOOL CHANGE	
	S006141/N01119 S006989/N01260 S005080/N00910		
R0110.5	M82S 	SP TOOL CLAMP	
	S009210/N01557 S005082/N00911		
R0110.6	M83S 	SP TOOL UNCLAMP	
	S009174/N01557 S005084/N00912		
R0110.7	M84S 	MG SP TOOL INDEX	
	S006102/N01113 S006139/N01118 S005090/N00913		
R0111.0	M85S 	MG T CODE TOOL INDEX	
	S006104/N01113 S005096/N00914		
R0111.1	M86S 	AXIS INTERLOCK PASS	
	S006226/N01137 S005102/N00915		

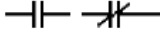




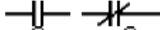
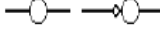

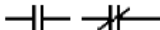
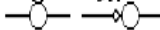

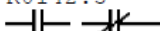


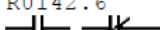


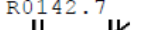


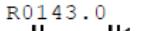
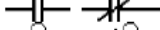

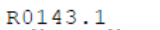
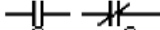
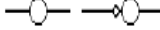
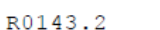
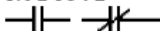

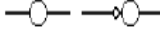
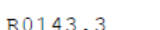
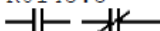
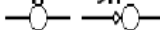
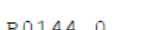
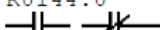



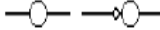
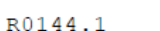
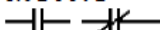



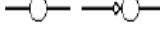
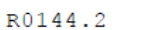
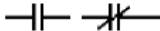





ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0111.2		M87S S006230/N01137 S005108/N00916	AXIS INTERLOCK PASS OFF
R0111.4		M89S S008325/N01455 S010244/N01759 S005114/N00917	ATC RESTART S008336/N01456 S010121/N01723 S010201/N01754 S010235/N01758 S010253/N01760 S010262/N01761 S010271/N01762 S010280/N01763
R0111.5		M100S S007093/N01273 S008600/N01499 S005120/N00918	SL P1 MG SIDE S008040/N01407 S008495/N01482 S008538/N01490 S008588/N01497
R0111.6		M101S S007094/N01273 S008601/N01499 S005126/N00919	SL P2 DOO OPEN S008049/N01409 S008496/N01482 S008539/N01490 S008562/N01494
R0111.7		M102S S007095/N01273 S005132/N00920	SL P3 FORWARD SP S008500/N01482 S008540/N01490 S008571/N01495
R0112.0		M103S S007096/N01273 S005138/N00921	SL P4 SP SIDE S008503/N01482 S008541/N01490 S008580/N01496
R0112.1		M104S S008915/N01537 S005144/N00922	ARM FORWARD
R0112.2		M105S S008940/N01539 S005150/N00923	ARM BACK WARD
R0112.3		M106S S008977/N01541 S005156/N00924	ARM CHUCK OPEN
R0112.4		M107S S009004/N01542 S005162/N00925	ARM CHUCK CLOSE
R0112.5		M108S S006107/N01113 S005168/N00926	MG WAIT SIDE TOOL INDEX S006143/N01120
R0112.6		M109S S006110/N01113 S005174/N00927	MG RETURN SIDE TOOL INDEX S006145/N01121
R0112.7		M120S S009060/N01544 S005180/N00928	ARM HEAD CLAMP
R0113.0		M121S S009029/N01543 S005186/N00929	ARM HEAD UNCLAMP
R0113.1		M122S S007097/N01273 S005192/N00930	SWING ARM 90 DEGREE S008632/N01502 S008711/N01510 S008834/N01528

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0113.2	M123S	SWING ARM 45 DEGREE	
	S007098/N01273 S008633/N01502 S008712/N01510 S008764/N01518 S005198/N00931		
R0113.3	M124S	SWING ARM 0 DEGREE	
	S007099/N01273 S008634/N01502 S008713/N01510 S008748/N01516 S005204/N00932		
R0113.4	M125S	SWING ARM -90 DEGREE	
	S007100/N01273 S008641/N01502 S008650/N01502 S008714/N01510 S008782/N01520 S005210/N00933		
R0113.5	M126S	SWING ARM -180 DEGREE	
	S007101/N01273 S008642/N01502 S008656/N01502 S008715/N01510 S008790/N01521 S005216/N00934		
R0113.6	M127S	SWING ARM -270 DEGREE	
	S007102/N01273 S008666/N01502 S008716/N01510 S008756/N01517 S005222/N00935		
R0113.7	M128S	SWING ARM -315 DEGREE	
	S007103/N01273 S008667/N01502 S008717/N01510 S008773/N01519 S005228/N00936		
R0114.0	M129S	SWING ARM -360 DEGREE	
	S007104/N01273 S008669/N01502 S008718/N01510 S008840/N01529 S005234/N00937		
R0114.7	MG_FRD	MG FORWARD	
	S009082/N01545 S005236/N00938		
R0115.0	MG_BRD	MG BACKWARD	
	S009098/N01545 S009110/N01546 S005242/N00939		
R0119.0	M6S	M6 AUX	
	S011340/N01974 S011348/N01975		
R0130.0	MGRDY	MG RDY	
	S006202/N01132 S005246/N00940		
R0130.1	TFST	T CODE READ OK	
	S006077/N01111 S007027/N01266 S007030/N01267 S007038/N01268 S007026/N01265		
R0130.2	TFMEM	T CODE RUN MEM	
	S005027/N00898 S007028/N01266 S007031/N01267 S007029/N01266		
R0130.3	TREAD	T CODE READ FIN	
	S007032/N01267 S007039/N01268		
R0130.4	INDEXOK	MG POS INDEX FIN	
	S006004/N01091 S006043/N01103 S006050/N01104 S008905/N01536 S008970/N01540 S009085/N01545 S009113/N01546 S009249/N01563 S010339/N01778 S011142/N01931 S011186/N01931 S006002/N01090		
R0130.5	MGPREAD	MG POS READ FIN	
	S006044/N01103 S006053/N01105 S006059/N01106 S006062/N01107 S006052/N01104		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0130.6		IDXC0IN MG TOOL = INDEX TOOL 1	
		S007120/N01276 S007147/N01281 S007212/N01290 S007307/N01304 S007361/N01312	
		S007420/N01323 S007606/N01352 S011357/N01978 S011361/N01979 S011402/N01991	
		S011406/N01992	
		S006068/N01108	
R0130.7		S013252/N02326 S013266/N02327 S013272/N02327	
R0131.0		INDXC0IN MG TOOL = INDEX TOOL 2	
		S006399/N01166	
		S006060/N01106	
R0131.7		MG_STOP MAGAZINE STOP	
		S005988/N01088 S006037/N01102 S006474/N01177 S006478/N01178 S008969/N01540	
		S010340/N01778 S011236/N01936 S013145/N02308 S013150/N02309 S013163/N02313	
		S013166/N02314 S013228/N02323	
		S005981/N01087	
R0133.0		REST ATC RESET	
		S006079/N01111 S006096/N01112 S006114/N01113	
		S006070/N01109	
R0133.4		S003998/N00717 S004385/N00782 S011548/N02021 S012851/N02251	
R0133.5		INDEXPOS ATC ROT INDEX	
		S005736/N01045 S005743/N01046 S006201/N01132 S008085/N01417 S010874/N01901	
		S010878/N01902 S010976/N01915 S010980/N01916 S011311/N01960	
		S006133/N01116	
R0134.0		TOVR T CODE OVER NO	
		S006078/N01111 S006116/N01113 S006959/N01258	
		S006082/N01111	
R0134.2		PRG-ALM ATC MACRO MISS	
		S006113/N01113 S006120/N01114 S006124/N01115	
		S006119/N01113	
R0134.3		ATCALM ATC ERR	
		S005244/N00940 S006203/N01132 S011283/N01948 S011309/N01959	
		S006126/N01115	
R0135.3		S013230/N02324	
R0136.2		MST M CODE INDEX START	
		S006217/N01135 S006222/N01136	
		S006138/N01117	
R0136.3		M84ST M84 SP TOOL NO INDEX START	
		S006134/N01117 S006147/N01122 S006154/N01123 S006209/N01134	
		S006140/N01118	
R0136.4		M85ST M85 SP T CODE NO INDEX START	
		S006135/N01117 S006156/N01124 S006163/N01125 S006210/N01134	
		S006142/N01119	
R0137.0		SPINDEX SP TOL NO INDEX SEND COMD FIN	
		S006148/N01122	
		S006155/N01123	
R0137.2		TINDEX T CODE NO INDEX SEND COMND FIN	
		S006157/N01124	
		S006164/N01125	

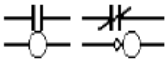
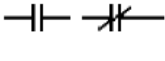
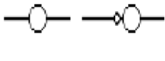
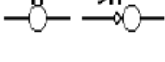
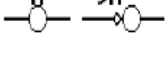
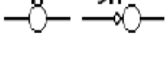
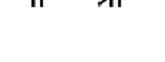
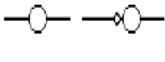
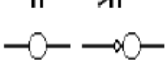
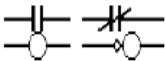
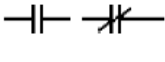
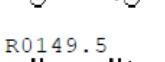
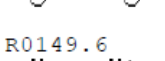
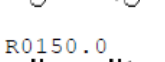
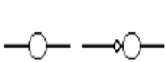
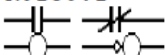


ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0137.5		MG TOOL INDEX FIN MEM	
		S005752/N01048 S005983/N01088	
		S005989/N01088	
R0137.6		MG START 1	
		S005975/N01086	
		S005967/N01084	
R0137.7		MG START 2	
		S005966/N01084	
		S005969/N01085	
R0138.0		MG OP INDEX AUX	
		S006205/N01133	
		S006204/N01132	
R0138.1		MG OP INDEX	
		S006213/N01134 S006220/N01135	
		S006206/N01133	
R0138.2		MG OP INDEX START	
		S006211/N01134 S006215/N01135	
		S006214/N01134	
R0138.3		MG OP INDEX COMMAND AUX	
		S006212/N01134 S006216/N01135 S006224/N01136 S011356/N01978 S011360/N01979	
		S011401/N01991 S011405/N01992	
		S006221/N01135	
R0138.4		MAGAZINE INDEX COMMAND	
		S005818/N01061 S005825/N01062 S005880/N01069 S005894/N01071 S005908/N01072	
		S005921/N01073 S005984/N01088 S006333/N01152 S011288/N01950	
		S006225/N01136	
R0139.0		SP TOOL UNCLAMP COMMAND	
		S009185/N01557 S009193/N01557 S009227/N01558 S010036/N01697 S011250/N01942	
		S009223/N01557	
R0139.1		SP TOL UNCLP PB OFF	
		S009171/N01556 S009218/N01557	
		S009173/N01556	
R0139.5		SP AIR BLOW COMMAND	
		S010042/N01698 S011292/N01951 S012593/N02202	
		S009231/N01558	
R0140.0		AXIS INTERLOCK PASS	
		S002248/N00396 S002261/N00397 S002278/N00398 S006227/N01137 S007393/N01319	
		S007457/N01329 S007661/N01359 S007737/N01368 S007928/N01391 S007962/N01393	
		S010882/N01903 S010886/N01904 S011146/N01931 S011150/N01931 S011313/N01961	
		S011364/N01980 S011367/N01981	
		S006236/N01137	
R0140.1		ATC ARM HEAD CLAMP DETECT	
		S006497/N01183 S009069/N01544 S009071/N01544 S009077/N01544 S009856/N01672	
		S010429/N01808 S010987/N01917	
		S006343/N01154	
R0140.2		ATC ARM HEAD UNCLAMP DETECT	
		S006501/N01184 S009046/N01543 S009048/N01543 S009054/N01543 S009820/N01665	
		S010432/N01809 S010992/N01918	
		S006348/N01155	

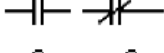
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0140.3		SHTLDTM ATC INITIAL RUN	
		S006395/N01166 S007193/N01288 S007203/N01289 S007294/N01302 S007300/N01303	
		S007594/N01350 S007599/N01351 S009328/N01577 S009340/N01579 S009581/N01625	
		S009587/N01626 S006401/N01166	
R0140.4		MG_TOOL_DETECT MG POT TOOL EMPT DETECT	
		S006403/N01167	
R0141.0		MG_ARM_FRD_ON ATC ARM FORWARD RDY	
		S006129/N01116 S006396/N01166 S006481/N01179 S008921/N01537 S008923/N01537	
		S008929/N01537 S008968/N01540 S009351/N01581 S009406/N01590 S009664/N01637	
		S010406/N01800 S010420/N01805 S010941/N01910 S011024/N01921 S011025/N01921	
		S011078/N01924 S011079/N01924	
		S006353/N01156	
R0141.1		MG_ARM_BKRD_ON ATC ARM BACKWARD RDY	
		S006127/N01116 S006382/N01164 S006386/N01164 S006397/N01166 S006469/N01176	
		S006485/N01180 S008092/N01418 S008892/N01535 S008951/N01539 S008953/N01539	
		S008959/N01539 S008971/N01540 S009248/N01563 S009700/N01644 S010403/N01799	
		S010417/N01804 S010901/N01907 S010914/N01908 S010952/N01912 S011315/N01962	
		S006358/N01157	
R0141.2		MG_ARM_CHECK_ON ATC ARM CHECK ON	
		S006128/N01116 S006470/N01176 S006489/N01181 S008098/N01419 S008990/N01541	
		S008992/N01541 S008998/N01541 S009232/N01559 S009237/N01560 S009240/N01561	
		S009245/N01562 S009774/N01658 S010409/N01801 S010423/N01806 S010958/N01913	
		S011001/N01920 S011018/N01921 S011045/N01922 S011062/N01923 S011072/N01924	
		S011092/N01925 S011317/N01963	
		S006363/N01158	
R0141.3		MG_ARM_CHK_CLS_ON ATC ARM CHECK CLOSE ON	
		S006493/N01182 S008901/N01536 S009015/N01542 S009017/N01542 S009023/N01542	
		S009043/N01543 S009736/N01651 S009804/N01664 S010412/N01802 S010426/N01807	
		S010964/N01914 S006368/N01159	
R0141.4		MG_FORWARD_DETE MAGAZINE FORWARD DETECT	
		S006131/N01116 S006505/N01185 S009094/N01545 S009096/N01545 S009104/N01545	
		S006371/N01160	
R0141.5		MG_BACKWARD_ON MAGAZINE BACKWARD DETECT	
		S006132/N01116 S006473/N01177 S006509/N01186 S009115/N01546 S009117/N01546	
		S009125/N01546 S006374/N01161	
R0141.6		SAP4 SA FORWARD POSITION 4	
		S004731/N00849 S006422/N01170 S006431/N01171 S011319/N01964	
		S006376/N01162	
R0141.7		SAP1 SA BACKWARD P1	
		S006235/N01137 S006381/N01164 S006385/N01164 S006404/N01168 S006413/N01169	
		S010970/N01914 S011228/N01934 S011232/N01935	
		S006379/N01163	
R0142.0		SHTLDT ARM SIDE HAVE TOOL	
		S010415/N01803 S006393/N01165	
R0142.1		SAWT SA WITE POSITION	
		S006476/N01178 S006810/N01234 S007167/N01285 S007330/N01308 S007337/N01309	
		S007343/N01310 S008902/N01536 S008965/N01540	
		S006412/N01168	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0142.2		SAINI SA INITIAL POSITION	
		S006811/N01234 S006962/N01258 S006971/N01258 S007014/N01263 S007238/N01294	
		S007821/N01376 S008897/N01536 S008964/N01540 S009352/N01581 S010937/N01910	
		S010971/N01914 S011341/N01974	
		S006421/N01169	
R0142.3		SASPRL SWING ARM SP CHANG TOL POS	
		S009470/N01602 S010845/N01895 S010852/N01896 S010868/N01900	
		S006430/N01170	
R0142.4		SASPIN SWING ARM SP GET TOL POS	
		S009517/N01610 S010846/N01895 S010853/N01896 S010869/N01900	
		S006439/N01171	
R0142.5		MANU_ATC ARM INITIAL	
		S006334/N01152 S006477/N01178 S006812/N01234 S006819/N01234 S011289/N01950	
		S006472/N01176	
R0142.6		ATCINI ATC INITIAL	
		S011225/N01933 S011297/N01953	
		S006475/N01177	
R0142.7		ATCINI2 ATC INITIAL 2	
		S011019/N01921 S011073/N01924 S011226/N01933 S011299/N01954	
		S006480/N01178	
R0143.0		ATCXYP ATC ON & XYZA POS	
		S006548/N01192 S006571/N01193 S006592/N01194	
		S006534/N01189	
R0143.1		ATCTLINP ATC TOOL INPOS	
		S008882/N01534 S009471/N01602 S009518/N01610 S010904/N01907 S010918/N01908	
		S006569/N01192	
R0143.2		ATCTLRLP ATC TOOL RL POS	
		S008644/N01502 S010861/N01898 S010906/N01907 S010920/N01908 S011035/N01922	
		S011052/N01923 S011253/N01943	
		S006590/N01193	
R0143.3		ATCSTP ATC STOP POS	
		S008881/N01534 S011285/N01949 S012838/N02249	
		S006613/N01194	
R0144.0		APTL0 SP NON TOOL	
		S006103/N01113 S006716/N01220 S006719/N01220 S006721/N01220 S006964/N01258	
		S007123/N01277 S007220/N01291 S007225/N01292 S007314/N01305 S007320/N01306	
		S007452/N01328 S007497/N01335 S010086/N01709 S010875/N01901 S011242/N01939	
		S011321/N01965	
		S006621/N01196	
R0144.1		WTTL0 WAIT NON TOOL	
		S006108/N01113 S007313/N01305 S007319/N01306 S007325/N01307 S008648/N01502	
		S008652/N01502 S008896/N01536 S010933/N01910 S010977/N01915 S011006/N01920	
		S011026/N01921 S011039/N01922 S011054/N01923 S011080/N01924 S011097/N01925	
		S011243/N01939 S011323/N01966	
		S006640/N01201	
R0144.2		RTTL0 RETURN SIDE NON TOOL	
		S006111/N01113 S007295/N01302 S007301/N01303 S007331/N01308 S007338/N01309	
		S007344/N01310 S007613/N01353 S007620/N01354 S008646/N01502 S008654/N01502	
		S008878/N01534 S010934/N01910 S010981/N01916 S011008/N01920 S011028/N01921	
		S011037/N01922 S011056/N01923 S011082/N01924 S011099/N01925 S011244/N01939	
		S011325/N01967	
		S006659/N01206	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0144.3	TCM0	T CODE MEM =0	
	S006105/N01113 S006715/N01220 S006718/N01220 S006726/N01221 S006963/N01258		
	S007192/N01288 S007202/N01289 S007204/N01289 S007219/N01291 S007224/N01292		
	S007230/N01293 S010085/N01709 S010879/N01902		
	S006666/N01208		
R0144.4	TF=SPTL	T CODE EQ SP TOOL NO	
	S006916/N01250		
	S006891/N01244		
R0144.5	TC=RTTL	T COD EQ WAIT TOOL NO	
	S006917/N01250		
	S006914/N01249		
R0144.6	TC=WTTL	T COD EQ RETURN TOOL NO	
	S007332/N01308 S007345/N01310		
	S006714/N01219		
R0144.7	TC=0	T CODE NO =0	
	S006918/N01250 S009608/N01629 S009616/N01630		
	S006761/N01227		
R0145.0	TLSALM1	ATC DETE L.S ERR	
	S006805/N01233 S007050/N01269		
	S006808/N01233		
R0145.1	TINIOFF	ATC INITIAL OFF	
	S006823/N01234 S007049/N01269		
	S006828/N01234		
R0145.2	TCPERR	T CODE MACRO ERR	
	S006117/N01113 S006919/N01250 S006958/N01258 S007048/N01269		
	S006922/N01250		
R0145.3	TCYCOVR	T CODE CYC TIMER OVER	
	S006849/N01237 S006858/N01239 S007051/N01269		
	S006852/N01237		
R0145.4	M6CYCOVR	M6 CYC TIMER OVER	
	S006854/N01238 S006859/N01239 S007052/N01269		
	S006857/N01238		
R0145.5	ATCTCYC	ATC CYC TIMER CHECK	
	S006840/N01236		
	S006839/N01235		
R0145.6	HNDTL=0	HANDLE TOOL = 0	
	S008946/N01539 S009579/N01625 S010950/N01912		
	S006768/N01229		
R0145.7	SP=TXX	SP TOOL = T NO	
	S006815/N01234 S006966/N01258 S006972/N01258 S006986/N01259 S007013/N01263		
	S007237/N01294 S007818/N01376 S010088/N01709 S011339/N01974		
	S006949/N01257		
R0146.0	THLDS	ATC CYC HOLD AUX	
	S007064/N01270 S007071/N01271 S007108/N01274		
	S007061/N01269		
R0146.1	TTHLD	ATC TOOL HOLD	
	S007063/N01270 S007114/N01275		
	S007068/N01270		

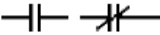
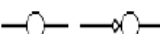
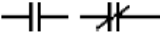
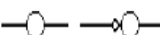
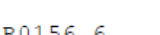
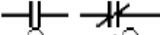

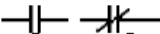

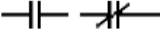

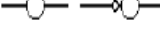
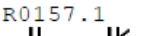
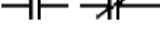
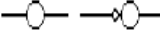
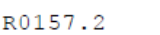
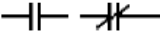
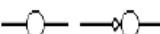
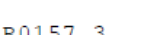
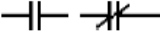

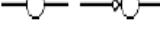
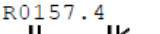
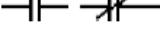


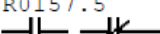
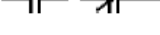


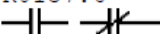

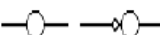
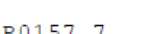
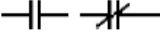



ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0146.2	TM6HLD	ATC M6 HOLD	
	S007070/N01271	S007115/N01275	
	S007073/N01271		
R0146.3	TX6HLD	T NO M6 CYC	
	S006833/N01235	S007018/N01263	S007110/N01274 S008555/N01493 S008608/N01500
	S008732/N01513	S008847/N01530	
	S007092/N01272		
R0146.4	TMHLD	ATC M CODE CYC	
	S007111/N01274		
	S007105/N01273		
R0146.5	ATCHLD	ATC HOLD	
	S006838/N01235	S007139/N01280	S008928/N01537 S008958/N01539 S008997/N01541
	S009022/N01542	S009053/N01543	S009076/N01544 S009103/N01545 S009105/N01545
	S009124/N01546	S009658/N01636	S009694/N01643 S009730/N01650 S009768/N01657
	S009813/N01664	S009850/N01671	S011238/N01937
	S007118/N01275		
R0146.6	TX6MHL	T NO M6 MACRO M CODE CYC	
	S007107/N01274	S007116/N01275	S008063/N01412 S008067/N01413 S008071/N01414
	S008075/N01415	S008079/N01416	S008083/N01417 S008090/N01418 S008096/N01419
	S007113/N01274		
R0147.0	TSTOK	T CODE START OK	
	S006876/N01241	S006881/N01242	
	S006874/N01240		
R0147.1	TF1	T CODE START 1	
	S006892/N01245	S006898/N01246	S006902/N01247 S006908/N01248 S006923/N01251
	S006879/N01241		
R0147.2	TF2	T CODE START 2	
	S006878/N01241		
	S006883/N01242		
R0147.3	ATCT	T CODE CYC	
	S006736/N01222	S006737/N01222	S006830/N01235 S006850/N01237 S006864/N01240
	S006924/N01251	S006928/N01252	S006931/N01253 S006937/N01254 S006939/N01255
	S006976/N01259	S007022/N01264	S007025/N01265 S007065/N01270 S008859/N01531
	S008885/N01534	S011275/N01947	
	S006927/N01251		
R0147.4	TFINS	T CODE FIN AUX	
	S006742/N01222	S008887/N01534	
	S006930/N01252		
R0147.5	TFINS1	T CODE FIN AUX 1	
	S006929/N01252		
	S006932/N01253		
R0147.6	ATCTST	T CODE START AUX	
	S006935/N01254	S006940/N01255	
	S006938/N01254		
R0147.7	ATCTST1	T CODE START AUX 1	
	S006813/N01234	S007352/N01311	S007375/N01315
	S006941/N01255		
R0148.0	ATCTEND	T CODE CYC FIN	
	S006735/N01222	S006836/N01235	S006877/N01241 S006882/N01242 S006926/N01251
	S006983/N01259	S011153/N01931	S011369/N01982
	S006975/N01258		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0148.1		M6 START OK	
		S006990/N01260	
		S006988/N01259	
R0148.2		M6 CYCLE	
		S001045/N00194 S001272/N00227 S006831/N01235 S006855/N01238 S006865/N01240	
		S006977/N01259 S006991/N01260 S007000/N01261 S007002/N01262 S007005/N01263	
		S007023/N01264 S007072/N01271 S007927/N01391 S007961/N01393 S008860/N01531	
		S011276/N01947 S011327/N01968 S012272/N02145 S012284/N02146	
		S006996/N01260	
R0148.3		M6 START AUX	
		S006998/N01261 S007003/N01262	
		S007001/N01261	
R0148.4		M6 START AUX 1	
		S006821/N01234 S007825/N01377	
		S007004/N01262	
R0148.5		M6 CYCLE FIN	
		S006837/N01235 S006870/N01240 S006993/N01260 S011154/N01931 S011370/N01982	
		S007021/N01263	
R0148.6		ATC T&M6 CYCLE ON	
		S005724/N01043 S005730/N01044 S006335/N01152 S006785/N01231 S007131/N01278	
		S007136/N01279 S007142/N01280 S008505/N01482 S008681/N01503 S009188/N01557	
		S009226/N01558 S010112/N01721 S010117/N01722 S010181/N01749 S010186/N01750	
		S010189/N01751 S010194/N01752 S010478/N01821 S010628/N01851 S010804/N01886	
		S011110/N01927 S011240/N01938 S011290/N01950 S011329/N01969	
		S007024/N01264	
R0149.0		ATC T CYC	
		S005725/N01043 S005731/N01044 S006868/N01240 S006981/N01259 S010122/N01723	
		S010889/N01905	
		S010119/N01722	
R0149.1		ATC T CYC RESTART	
		S006925/N01251 S006936/N01254 S010124/N01724	
		S010123/N01723	
R0149.4		T CODE AUX	
		S006739/N01222 S006745/N01223 S006748/N01224 S006754/N01226 S006759/N01227	
		S006875/N01241 S006880/N01242 S006884/N01243 S006889/N01244 S006980/N01259	
		S008886/N01534	
		S006744/N01222	
R0149.5		T CODE AUX 1	
		S006750/N01225 S011281/N01948	
		S006747/N01223	
R0149.6		T CODE AUX 2	
		S006746/N01223	
		S006749/N01224	
R0150.0		T CYC START	
		S006691/N01215 S006697/N01216 S006701/N01217 S006707/N01218 S006933/N01254	
		S006970/N01258 S007234/N01294 S007248/N01295 S007329/N01308 S007336/N01309	
		S007342/N01310 S007353/N01311	
		S007358/N01311	
R0150.1		ATC RETURN START	
		S007312/N01305 S007317/N01306 S007324/N01307 S007346/N01310 S007354/N01311	
		S007351/N01310	

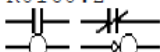
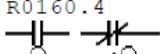
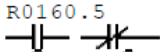
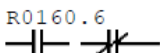
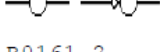
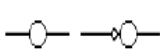
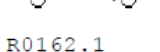
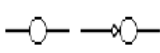
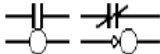
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0150.2		T NO EQ WAIT NO CYC FIN S006954/N01258 S007333/N01308 S007355/N01311 S007335/N01308	
R0150.3		WAIT TOOL INDEX S007305/N01304 S007326/N01307 S007347/N01310 S009592/N01627 S009598/N01628 S009644/N01635 S007328/N01307	
R0150.4		SP TOOL INDEX S007306/N01304 S007321/N01306 S007348/N01310 S009604/N01629 S009645/N01635 S007323/N01306	
R0150.5		WAIT & SP TOL NO EQ 0 ERR S007315/N01305 S007349/N01310 S009564/N01618 S007316/N01305	
R0150.6		HSK HEAD DOWN S007293/N01302 S007299/N01303 S007308/N01304 S007322/N01306 S007327/N01307 S007311/N01304	
R0150.7		ARM FORWARD S007288/N01301 S007302/N01303 S007309/N01304 S008916/N01537 S009654/N01636 S007304/N01303	
R0151.0		RETURN TOL DETE ==EQ 1 ERR S007297/N01302 S007310/N01304 S009566/N01619 S007298/N01302	
R0151.1		HSK HEAD UP S007284/N01300 S007290/N01301 S007303/N01303 S007292/N01301	
R0151.2		A 45 TO 0 & B-315 TO -270 S007272/N01299 S007285/N01300 S007291/N01301 S008616/N01501 S008687/N01504 S008746/N01516 S008754/N01517 S007287/N01300	
R0151.3		ATC CHUCK CLOSE S007264/N01298 S007281/N01299 S007286/N01300 S009005/N01542 S009039/N01543 S009061/N01544 S009726/N01650 S009800/N01664 S009846/N01671 S007283/N01299	
R0151.4		ARM BACKWARD S007259/N01297 S007269/N01298 S007282/N01299 S008941/N01539 S009690/N01643 S007271/N01298	
R0151.5		ATC CHUCK OPEN S007251/N01296 S007261/N01297 S007270/N01298 S008978/N01541 S009030/N01543 S009762/N01657 S009805/N01664 S007263/N01297	
R0151.6		TOOL RETURN FIN S006961/N01258 S007235/N01294 S007256/N01296 S007262/N01297 S007258/N01296	
R0151.7		ATC STOP & T CYC FIN S007250/N01295	
R0152.0		NEW ATC CYC START S007218/N01291 S007223/N01292 S007229/N01293 S007243/N01294 S007257/N01296 S007356/N01311 S007247/N01294	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0152.1	ATCT21-1	NEW TOOL INDEX	
	S007145/N01281	S007210/N01290 S007231/N01293 S007244/N01294 S009614/N01630	
	S009646/N01635		
	S007233/N01293		
R0152.2	ATCT21-2	SP TOOL INDEX	
	S007146/N01281	S007211/N01290 S007226/N01292 S007245/N01294 S009605/N01629	
	S009648/N01635		
	S007228/N01292		
R0152.3	ATCT21-3	T CODE EQ 0 SP T NO EQ 0 ERR	
	S007221/N01291	S007246/N01294 S009568/N01620	
	S007222/N01291		
R0152.4	ATCT22	ATC CHUCK CLOSE	
	S007187/N01288	S007197/N01289 S007213/N01290 S009006/N01542 S009040/N01543	
	S009062/N01544	S009727/N01650 S009801/N01664 S009847/N01671	
	S007217/N01290		
R0152.5	ATCT23-1	ARM FORWARD	
	S007181/N01287	S007206/N01289 S007214/N01290 S008917/N01537 S009655/N01636	
	S007209/N01289		
R0152.6	ATCT23-2	T CODE EQ 0 ERR	
	S007194/N01288	S007215/N01290 S009570/N01621	
	S007196/N01288		
R0152.7	ATCT24	ATC CHUCK OPEN	
	S007172/N01286	S007183/N01287 S007207/N01289 S008979/N01541 S009031/N01543	
	S009763/N01657	S009806/N01664	
	S007186/N01287		
R0153.0	ATCT25	SWING ARM MIDDLE	
	S007165/N01285	S007177/N01286 S007184/N01287 S008617/N01501 S008691/N01505	
	S008762/N01518	S008771/N01519	
	S007180/N01286		
R0153.1	ATCT26	ATC NON ACT	
	S007160/N01284	S007168/N01285 S007178/N01286	
	S007171/N01285		
R0153.3	ATCT27-2	ATC NON ACT	
	S007155/N01283	S007161/N01284 S007169/N01285	
	S007164/N01284		
R0153.5	ATCT28	ARM BACKWARD	
	S007149/N01282	S007156/N01283 S007162/N01284 S008942/N01539 S009691/N01643	
	S007159/N01283		
R0153.6	ATCT29	ATC CHUCK OPEN	
	S007151/N01282	S007157/N01283 S008980/N01541 S009032/N01543 S009764/N01657	
	S009807/N01664		
	S007154/N01282		
R0153.7	ATCT30	ATC STOP & T CYC FIN	
	S006955/N01258	S007122/N01277 S007152/N01282 S007227/N01292 S007232/N01293	
	S007148/N01281		
R0154.0	SPINDCYC	T CYC FIN & SP TOL INDEX	
	S006734/N01222	S006872/N01240 S006984/N01259 S007066/N01270 S007119/N01276	
	S007124/N01277	S007626/N01355 S009606/N01629 S009650/N01635 S010810/N01887	
	S011279/N01947	S011331/N01970	
	S007130/N01277		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0154.1		SP TOL INDEX	
		S007125/N01277 S009586/N01626	
		S007121/N01276	
R0154.2		RETURN ARM DETE TOOL EQ 1	
		S007339/N01309 S009577/N01624	
		S007341/N01309	
R0155.0		SWING ARM P4 GO TO P3	
		S007648/N01357 S007656/N01358 S007667/N01359 S008485/N01482 S008522/N01486	
		S008570/N01495	
		S007659/N01358	
R0155.1		SWING ARM P3 GO P2&A-315B45	
		S007634/N01356 S007651/N01357 S007657/N01358 S008488/N01482 S008526/N01487	
		S008561/N01494 S008624/N01501 S008703/N01508 S008808/N01524 S008815/N01525	
		S007654/N01357	
R0155.2		SWING ARM P2 GO P1	
		S007625/N01355 S007644/N01356 S007652/N01357 S008039/N01407 S008491/N01482	
		S008530/N01488 S008587/N01497 S008599/N01499 S010990/N01918	
		S007647/N01356	
R0155.3		SWING ARM INITIAL POS CONFIRM	
		S007612/N01353 S007619/N01354 S007629/N01355 S007645/N01356 S011343/N01974	
		S007633/N01355	
R0155.4		RETURN TOOL INDEX	
		S007604/N01352 S007621/N01354 S007630/N01355 S009622/N01631 S009628/N01632	
		S009649/N01635	
		S007624/N01354	
R0155.5		RETURN TOL EQ 0 & SP TOL INDEX	
		S007605/N01352 S007614/N01353 S007631/N01355 S009634/N01633 S009651/N01635	
		S007618/N01353	
R0155.6		HSK HEAD DOWN	
		S007593/N01350 S007598/N01351 S007607/N01352 S007615/N01353 S007622/N01354	
		S007611/N01352	
R0155.7		ARM FORWARD	
		S007587/N01349 S007600/N01351 S007608/N01352 S008918/N01537 S009656/N01636	
		S007603/N01351	
R0156.0		RETURN MG SIDE TOOL ERR	
		S007595/N01350 S007609/N01352 S009572/N01622	
		S007597/N01350	
R0156.1		HSK HEAD UP	
		S007578/N01348 S007589/N01349 S007601/N01351 S008981/N01541 S009033/N01543	
		S009042/N01543 S009765/N01657 S009803/N01664 S009808/N01664	
		S007592/N01349	
R0156.2		A-315 GO 270& B45 GO 0	
		S007565/N01347 S007583/N01348 S007590/N01349 S008627/N01501 S008707/N01509	
		S008822/N01526 S008828/N01527	
		S007586/N01348	
R0156.3		ATC CHUCK CLOSE	
		S007556/N01346 S007574/N01347 S007584/N01348 S009007/N01542 S009041/N01543	
		S009063/N01544 S009728/N01650 S009802/N01664 S009848/N01671	
		S007577/N01347	

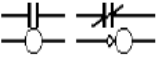
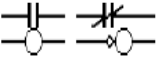
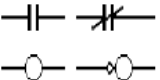
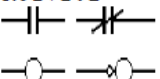
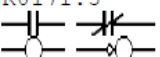
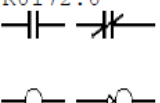
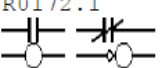
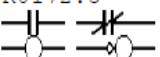
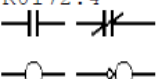
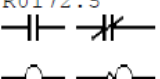
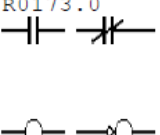
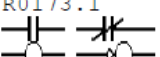
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0156.4	ATCM10	ARM BACKWARD	
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	S009692/N01643	S007564/N01346	
R0156.5	ATCM11	ATC CHUCK OPEN	
	S007541/N01344	S007552/N01345	S007562/N01346 S008982/N01541 S009034/N01543
	S009766/N01657	S009809/N01664	
	S007555/N01345		
R0156.6	ATCM12	ATC NO ACT	
	S007538/N01343	S007546/N01344	S007553/N01345
	S007549/N01344		
R0156.7	ATCM13	M6 CYC FIN	
	S007006/N01263	S007539/N01343	S007547/N01344
	S007540/N01343		
R0157.0	ATCX1	X PMC CTRL XYZCA	
	S006997/N01261	S007016/N01263	S007074/N01272 S007810/N01376 S007826/N01377
	S007914/N01391	S007943/N01392	S007948/N01393 S010209/N01756 S011333/N01971
	S011980/N02108		
	S007828/N01377		
R0157.1	ATCX2	Z POS EQ P2 COOLANT HOLD	
	S007075/N01272	S007804/N01375	S007822/N01376 S007827/N01377 S008204/N01440
	S008233/N01441	S008273/N01450	S008302/N01453 S008312/N01454 S010210/N01756
	S007824/N01376		
R0157.2	ATCX3	A POS EQ P2	
	S007076/N01272	S007796/N01374	S007807/N01375 S007823/N01376 S008430/N01473
	S008435/N01474	S008451/N01478	S010211/N01756
	S007809/N01375		
R0157.3	ATCX4	XY POS P2 & SP M19	
	S007077/N01272	S007747/N01369	S007787/N01373 S007800/N01374 S007808/N01375
	S008102/N01420	S008106/N01421	S008122/N01425 S008146/N01429 S008153/N01430
	S008174/N01435	S010212/N01756	S011257/N01945
	S007803/N01374		
R0157.4	ATCX5	A POS EQ P4	
	S007078/N01272	S007780/N01372	S007792/N01373 S007801/N01374 S008205/N01440
	S008237/N01442	S008292/N01452	S008303/N01453 S008313/N01454 S010213/N01756
	S011258/N01945		
	S007795/N01373		
R0157.5	ATCX6	SL POS P2	
	S007079/N01272	S007771/N01371	S007783/N01372 S007793/N01373 S008048/N01409
	S008475/N01482	S008510/N01483	S008560/N01494 S008598/N01499 S010214/N01756
	S011259/N01945		
	S007786/N01372		
R0157.6	ATCX7	SL POS P3& SR POS A-90 B -180	
	S007080/N01272	S007756/N01370	S007776/N01371 S007784/N01372 S008476/N01482
	S008514/N01484	S008569/N01495	S008620/N01501 S008695/N01506 S008780/N01520
	S008788/N01521	S010215/N01756	S011260/N01945
	S007779/N01371		
R0157.7	ATCX8	SL POS P4	
	S007081/N01272	S007743/N01369	S007767/N01370 S007777/N01371 S008479/N01482
	S008518/N01485	S008578/N01496	S010216/N01756
	S007770/N01370		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0158.0	ATCX9	ATC INTERLOCK OFF	
		S006228/N01137 S007082/N01272 S007736/N01368 S007753/N01369 S007768/N01370	
		S007802/N01374 S010217/N01756	
		S007755/N01369	
R0158.1	ATCX10	Y POS P4	
		S007083/N01272 S007448/N01328 S007493/N01335 S007729/N01367 S007738/N01368	
		S007754/N01369 S008147/N01429 S008157/N01431 S008180/N01436 S010218/N01756	
		S007742/N01368	
R0158.2	ATCX11	SP UNCLP	
		S007084/N01272 S007722/N01366 S007732/N01367 S007739/N01368 S008370/N01460	
		S009175/N01557 S010219/N01756	
		S007735/N01367	
R0158.3	ATCX12	ATC ZP3	
		S007085/N01272 S007715/N01365 S007725/N01366 S007733/N01367 S008208/N01440	
		S008241/N01443 S008282/N01451 S008322/N01455 S008333/N01456 S009176/N01557	
		S010220/N01756	
		S007728/N01366	
R0158.4	ATCX13	ATC ZP2	
		S007086/N01272 S007705/N01364 S007718/N01365 S007726/N01366 S008210/N01440	
		S008245/N01444 S008274/N01450 S008304/N01453 S008314/N01454 S008376/N01460	
		S009177/N01557 S009198/N01557 S010221/N01756 S011262/N01945	
		S007721/N01365	
R0158.5	ATCX14	SR A180 B 190 SL P4	
		S007691/N01363 S007711/N01364 S007719/N01365 S008482/N01482 S008534/N01489	
		S008579/N01496 S008621/N01501 S008699/N01507 S008796/N01522 S008802/N01523	
		S009178/N01557 S010222/N01756	
		S007714/N01364	
R0158.6	ATCX15	ATC ZP3	
		S007087/N01272 S007683/N01362 S007701/N01363 S007712/N01364 S008213/N01440	
		S008249/N01445 S008283/N01451 S008305/N01453 S008315/N01454 S009179/N01557	
		S010223/N01756	
		S007704/N01363	
R0158.7	ATCX16	ATC ZP4	
		S007088/N01272 S007676/N01361 S007687/N01362 S007702/N01363 S007831/N01380	
		S007838/N01381 S007845/N01382 S007852/N01383 S007873/N01387 S007883/N01388	
		S007892/N01389 S007903/N01390 S007996/N01401 S008217/N01440 S008255/N01446	
		S008293/N01452 S008344/N01457 S008353/N01458 S009181/N01557 S010224/N01756	
		S007690/N01362	
R0159.0	ATCX17	SP CLP	
		S007089/N01272 S007670/N01360 S007679/N01361 S007688/N01362 S009206/N01557	
		S007682/N01361	
R0159.1	ATCX18	ATC INTERLOCK ON	
		S006234/N01137 S007090/N01272 S007660/N01359 S007672/N01360 S007680/N01361	
		S007920/N01391 S007954/N01393	
		S007675/N01360	
R0159.2	ATCX19	M6 MACRO RUN FROM MIDDLE	
		S007091/N01272 S007655/N01358 S007666/N01359 S007673/N01360	
		S007669/N01359	
R0160.0	ATCMDT1	ATC M CODE CYC 1	
		S010197/N01753	
		S010188/N01750	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0160.1		ATC M CODE CYC 2	
		S010198/N01753	
		S010196/N01752	
R0160.2		ATC M CODE CYC	
		S006869/N01240	S006982/N01259 S010202/N01754 S010890/N01905
		S010199/N01753	
R0160.3		ATC M CODE CYC RESTART	
		S006992/N01260	S006999/N01261 S010204/N01755 S010228/N01756 S010232/N01757
		S010203/N01754	
R0160.4		PMC CTRL XYZA RESET	
		S006229/N01137	S007915/N01391 S007944/N01392 S007949/N01393
		S010231/N01756	
R0160.5		PMC CTRL XYZA RESET AUX	
		S010230/N01756	
		S010234/N01757	
R0160.6		M CODE STOP AUX	
		S010239/N01758	S010248/N01759 S010257/N01760 S010266/N01761 S010275/N01762
		S010284/N01763	
		S010290/N01764	
R0161.1		ATC PANEL OFF	
		S011246/N01940	
		S006328/N01150	
R0161.2			
		S005722/N01043	S005728/N01044 S006331/N01152 S007040/N01269 S008857/N01531
		S011248/N01941	S011287/N01950
		S006330/N01151	
R0162.0		ATC CYC START MG TOL EQ 30	
		S006667/N01209	S006673/N01210 S006675/N01211 S006681/N01212 S006683/N01213
		S006688/N01214	S006724/N01220 S006728/N01221 S006934/N01254 S007364/N01313
		S007369/N01314	S007376/N01315
		S007380/N01315	
R0162.1		ATC CYC NG INDEX END	
		S007359/N01312	S007370/N01314 S007378/N01315 S007381/N01316 S007384/N01317
		S007374/N01314	
R0162.2		INDEX ON	
		S007360/N01312	S007365/N01313 S007379/N01315 S009607/N01629 S009615/N01630
		S009647/N01635	
		S007368/N01313	
R0162.3		INDEX CYC FIN	
		S006956/N01258	S007367/N01313 S007372/N01314
		S007363/N01312	
R0162.5		MG TOOL ERR	
		S007373/N01314	S007385/N01317 S009573/N01622
		S007383/N01316	
R0165.0		INCH OPERATION	
		S008914/N01537	S008939/N01539 S008976/N01541 S009003/N01542 S009028/N01543
		S009059/N01544	
		S008861/N01531	
R0165.2		ORIENTATION EQ 0 DEGREE	
		S010863/N01898	
		S008869/N01533	

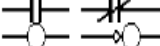
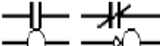
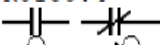
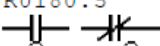
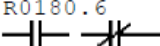
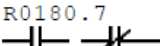
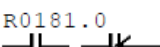
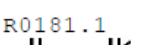
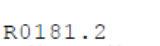
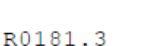
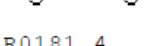
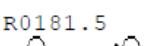
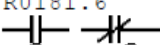
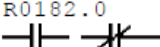
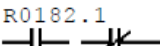
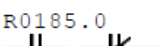
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0165.3	SA180FOK	SWING ARM POS EQ 180 FRD ON	
		S007757/N01370 S008502/N01482 S010926/N01909	
		S008889/N01534	
R0165.4	SA0BOK	SWING ARM POS EQ 0 BRD ON	
		S008494/N01482 S010895/N01906 S010909/N01907	
		S008895/N01535	
R0165.7	SHFBOK	ARM FRD & BRD OK	
		S008919/N01537 S008944/N01539 S010932/N01910 S010951/N01912	
		S008913/N01536	
R0166.0	SHFO	ARM FORWARD OUTPUT	
		S008924/N01537 S008956/N01539 S009657/N01636 S009882/N01678 S010051/N01701	
		S008933/N01537	
R0166.1	SHBO	ARM BACKWARD OUTPUT	
		S008926/N01537 S008954/N01539 S009693/N01643 S009893/N01679 S010053/N01701	
		S008963/N01539	
R0166.2	SHSOK	ARM CHUCK OPEN & CLOSE	
		S008983/N01541 S009008/N01542 S009035/N01543 S009064/N01544 S010957/N01913	
		S010963/N01914 S010984/N01917	
		S008975/N01540	
R0166.3	SHCOO	ARM CHUCK OPEN	
		S008993/N01541 S009020/N01542 S009767/N01657 S009904/N01680 S010056/N01701	
		S009002/N01541	
R0166.4	SHCCO	ARM CHUCK CLOSE	
		S008995/N01541 S009018/N01542 S009729/N01650 S009915/N01681 S010059/N01701	
		S009027/N01542	
R0166.5	SHHUCO	ARM HEAD UNCLAMP AUX	
		S009049/N01543 S009074/N01544 S009812/N01664 S009937/N01683 S010064/N01701	
		S009058/N01543	
R0166.6	SHHCO	ARM HEAD CLAMP AUX	
		S009051/N01543 S009072/N01544 S009849/N01671 S009926/N01682 S010062/N01701	
		S009081/N01544	
R0167.0	SHFRTY	ARM FORWARD RETRY	
		S009675/N01639 S009686/N01641 S009688/N01642 S009883/N01678 S009886/N01678	
		S009894/N01679 S009897/N01679	
		S009666/N01637	
R0167.1	SHFRTY1	ARM FORWARD RETRY AUX	
		S009682/N01641	
		S009689/N01642	
R0167.2	MG_ARM_F/B_1	ATC ARM MOVE IN&OUT 1	
		S006351/N01156 S009677/N01640 S009684/N01641 S009896/N01679	
		S009687/N01641	
R0167.3	SHFR2	SHIFT HAND FORWARD 2	
		S009667/N01638 S009673/N01639 S009885/N01678	
		S009676/N01639	
R0167.5	MG_FRD_OUTPUT	MG FORWARD OUTPUT	
		S009097/N01545 S009122/N01546 S009970/N01687	
		S009109/N01545	
R0167.6	MG_BKWRD_OUTPUT	MG BACKWARD OUTPUT	
		S009101/N01545 S009118/N01546 S009993/N01688	
		S009129/N01546	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0168.0	SHBRTY	ARM BACKWARD RETRY	
		S009711/N01646 S009722/N01648 S009724/N01649 S009884/N01678 S009889/N01678	
		S009895/N01679 S009900/N01679	
		S009702/N01644	
R0168.1	SHBRTY1	ARM BACKWARD RETRY 1	
		S009718/N01648	
		S009725/N01649	
R0168.2	SHBR1	ARM BRD & FRD	
		S006356/N01157 S009713/N01647 S009720/N01648 S009888/N01678	
		S009723/N01648	
R0168.3	SHBR2	ARM BACKWARD JOG	
		S009703/N01645 S009709/N01646 S009899/N01679	
		S009712/N01646	
R0169.0	SHCCRTY	ARM CHUCK CLOSE RETRY	
		S009747/N01653 S009758/N01655 S009760/N01656 S009906/N01680 S009908/N01680	
		S009917/N01681 S009919/N01681	
		S009738/N01651	
R0169.1	SHCCRTY1	ARM CHUCK CLOSE RETRY AUX	
		S009754/N01655	
		S009761/N01656	
R0169.2	SHCCR1	ARM CHUCK CLOSE&OPEN	
		S006366/N01159 S009749/N01654 S009756/N01655 S009907/N01680	
		S009759/N01655	
R0169.3	SHCCR2	ARM CHUCK CLOSE JOG	
		S009739/N01652 S009745/N01653 S009918/N01681	
		S009748/N01653	
R0170.0	SHCC11	ARM CHUCK CLOSE 1	
		S006237/N01138 S009253/N01564 S009260/N01565 S009266/N01566 S009270/N01567	
		S009277/N01568 S009282/N01569 S009289/N01570 S009297/N01572 S009304/N01573	
		S009309/N01574 S009316/N01575 S009327/N01577 S009339/N01579 S009355/N01582	
		S009361/N01583 S009367/N01584 S009374/N01585 S009415/N01591 S009421/N01592	
		S009434/N01594	
		S009236/N01559	
R0170.1	SHCC2	ARM CHUCK CLOSE 2	
		S006239/N01138 S009234/N01559	
		S009239/N01560	
R0170.2	SHCO11	ARM CHUCK OPEN 1	
		S006238/N01138 S009346/N01580 S009381/N01586 S009387/N01587 S009393/N01588	
		S009400/N01589 S009427/N01593 S009441/N01595 S009447/N01596 S009453/N01597	
		S009244/N01561	
R0170.3	SHCO2	ARM CHUCK OPEN 2	
		S009242/N01561	
		S009247/N01562	
R0170.4	SHHG	ARM IN MG SIDE	
		S009252/N01564 S009259/N01565 S009265/N01566 S009269/N01567 S009276/N01568	
		S009281/N01569 S009288/N01570 S009296/N01572 S009303/N01573 S009308/N01574	
		S009315/N01575 S009326/N01577 S009338/N01579 S009345/N01580	
		S009251/N01563	
R0170.5	HAND=SP	HAND TOOL EQ SP TOOL	
		S009323/N01577 S009335/N01579	
		S009268/N01566	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0170.6		HAND=WT HAND TOOL EQ WAIT TOOL	S009324/N01577 S009336/N01579 S009295/N01571
R0170.7		HAND=RT HAND TOOL EQ RETURN TOOL	S009325/N01577 S009337/N01579 S009322/N01576
R0171.0		HAND=0DT HAND TOOL EQ 0 TOOL INDEX	S009341/N01579 S009575/N01623 S009344/N01579
R0171.1		SHSAINI HAND SWING ARM INITIAL	S009354/N01582 S009360/N01583 S009366/N01584 S009373/N01585 S009380/N01586 S009386/N01587 S009392/N01588 S009399/N01589 S009353/N01581
R0171.2		SHSAWT HAND SWING ARM WAIT	S009414/N01591 S009420/N01592 S009426/N01593 S009433/N01594 S009440/N01595 S009446/N01596 S009452/N01597 S009413/N01590
R0171.3		HAND=0 HAND TOOL EQ 0 AUX	S009330/N01578 S009329/N01577
R0172.0		SPCL1 SP CLAMP 1	S004737/N00850 S006240/N01138 S009474/N01603 S009480/N01604 S009486/N01605 S009493/N01606 S009521/N01611 S009527/N01612 S009533/N01613 S009540/N01614 S011335/N01972 S013715/N02414 S009461/N01598
R0172.1		SPCL2 SP CLAMP 2	S009460/N01598 S009463/N01599
R0172.2		SPUNCL1 SP UNCLAMP 1	S006241/N01138 S009500/N01607 S009506/N01608 S009512/N01609 S009547/N01615 S009553/N01616 S009559/N01617 S011295/N01952 S009467/N01600
R0172.3		SPUNCL2 SP UNCLAMP 2	S009466/N01600 S009469/N01601
R0172.4		SASPRILP SWING ARM SP SIDE RET POS	S006242/N01138 S009473/N01603 S009479/N01604 S009485/N01605 S009492/N01606 S009499/N01607 S009505/N01608 S009511/N01609 S011294/N01952 S009472/N01602
R0172.5		SASPINIP SWING ARM SP SIDE INIT POS	S006243/N01138 S009526/N01612 S009532/N01613 S009539/N01614 S009546/N01615 S009552/N01616 S009558/N01617 S011337/N01973 S013714/N02414 S009519/N01610
R0173.0		MGACT MG TOOL INDEX RUN	S005817/N01061 S005824/N01062 S005879/N01069 S005893/N01071 S005907/N01072 S005920/N01073 S005965/N01084 S005968/N01085 S005985/N01088 S006218/N01135 S006223/N01136 S009593/N01627 S009599/N01628 S009610/N01629 S009618/N01630 S009623/N01631 S009629/N01632 S009635/N01633 S009640/N01634 S009653/N01635
R0173.1		M108ST WAIT SIDE TOOL INDEX START	S006136/N01117 S006165/N01126 S006173/N01127 S006181/N01128 S006207/N01134 S006144/N01120

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0173.2		M109ST RETURN SIDE TOOL INDEX START	S006137/N01117 S006183/N01129 S006191/N01130 S006199/N01131 S006208/N01134
R0173.3		WTINDEX WAIT TOOL INDEX SEND FIN	S006166/N01126 S006174/N01127 S006182/N01128
R0173.4		RTINDEX RETURN TOOL INDEX SEND FIN	S006184/N01129 S006192/N01130 S006200/N01131
R0174.0		SASHMOV SWING ARM & ATC ARM ACT	S011972/N02108 S011975/N02108 S010069/N01701
R0175.0		CASE1_SP_T_NG CASE 1 SP NON TOOL	S007487/N01334 S007498/N01335 S007501/N01336 S007740/N01368 S009083/N01545
R0175.1		SP_T_UNCLP SP TOOL UNCLAMP	S007482/N01333 S007490/N01334 S007499/N01335 S007502/N01336 S007515/N01337
R0175.2		Z_POS_P4 Z POS P4	S007475/N01332 S007484/N01333 S007491/N01334 S007503/N01336 S007516/N01337
R0175.3		SP_T_CLP SP T CLP	S007470/N01331 S007479/N01332 S007485/N01333 S007504/N01336 S007522/N01338
R0175.4		MG_BKRD MG BACKWARD	S007465/N01330 S007472/N01331 S007480/N01332 S007505/N01336 S009111/N01546
R0175.5		INTLOK_ON INTERLOCK ON	S007456/N01329 S007467/N01330 S007473/N01331 S007525/N01339
R0175.6		M6CASE1FIN M6 CASE1 FIN	S007390/N01318 S007462/N01329 S007468/N01330
R0175.7		M06END M06 CYC FIN	S007399/N01319 S007463/N01329 S007391/N01318
R0176.0		CASE2_Z_POS_P4 CASE2 Z POS P4	S007442/N01327 S007453/N01328 S007506/N01336 S007529/N01340 S007741/N01368
R0176.1		MG_FORD MG FORWARD	S007436/N01326 S007445/N01327 S007454/N01328 S007507/N01336 S009084/N01545
R0176.2		SP_TOL_UNCLP SP TOOL UNCLP	S007430/N01325 S007439/N01326 S007446/N01327 S007508/N01336 S007517/N01337
R0176.3		Z_POS_P3 Z POS P3	S007424/N01324 S007433/N01325 S007440/N01326 S007509/N01336 S007518/N01337

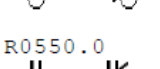
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0176.4		MG_NEW_TOL_INDEX MG NEW TOOL INDEX	
		S007419/N01323 S007427/N01324 S007434/N01325 S007510/N01336 S007519/N01337	
		S007534/N01342 S009652/N01635	
		S007429/N01324	
R0176.5		Z_POS_P4_AUX Z POS P4 AUX	
		S007421/N01323 S007428/N01324 S007511/N01336 S007520/N01337 S007530/N01340	
		S007423/N01323	
R0176.6		SP_TOL_CLP SP TOOL CLP	
		S007406/N01321 S007412/N01322 S007416/N01322 S007422/N01323 S007512/N01336	
		S007523/N01338	
		S007418/N01322	
R0176.7		MG_BKRD_AUX MG BACKWARD AUX	
		S007401/N01320 S007409/N01321 S007417/N01322 S007513/N01336 S009112/N01546	
		S007411/N01321	
R0177.0		INTLOK_ON_AUX INTERLOCK ON AUX	
		S007392/N01319 S007403/N01320 S007410/N01321 S007526/N01339	
		S007405/N01320	
R0177.1		M6CASE2FIN M6CASE2FIN	
		S007389/N01318 S007398/N01319 S007404/N01320	
		S007400/N01319	
R0177.2		INTLOK_OFF INTERLOCK OFF	
		S010225/N01756	
		S007514/N01336	
R0177.3		SP_TOL_UNCLP_AUX SP TOOL UNCLP AUX	
		S008372/N01460 S009180/N01557	
		S007521/N01337	
R0177.4		SP_TOL_CLP_AUX SP TOOL CLP AUX	
		S008371/N01460 S009205/N01557	
		S007524/N01338	
R0177.5		INTLOK_ON_AUX_1 INTERLOCK ON AUX 1	
		S006233/N01137 S007919/N01391 S007953/N01393	
		S007527/N01339	
R0177.6		Z_POS_ZP4 Z POS ZP4	
		S007833/N01380 S007840/N01381 S007847/N01382 S007854/N01383 S007875/N01387	
		S007885/N01388 S007894/N01389 S007905/N01390 S007997/N01401 S008218/N01440	
		S008256/N01446 S008295/N01452 S008346/N01457 S008355/N01458 S009182/N01557	
		S010226/N01756	
		S007531/N01340	
R0177.7		Z_POS_ZP3 Z POS ZP3	
		S008214/N01440 S008250/N01445 S008285/N01451 S008326/N01455 S008337/N01456	
		S010227/N01756	
		S007533/N01341	
R0178.0		MG_NXT_TOL_INDEX MG NEXT TOOL INDEX	
		S009639/N01634	
		S007537/N01342	
R0180.0		WTTLOA A CYC & WAIT SIDE NON TOOL	
		S006638/N01201 S011002/N01920	
		S006629/N01198	
R0180.1		WTTLOB B CYC & WAIT SIDE NON TOOL	
		S006639/N01201 S011093/N01925 S011103/N01925	
		S006637/N01200	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0180.2	RTTL0A 	A CYC & RETU SIDE NON TOOL	
	S006657/N01206		
	S006648/N01203		
R0180.3	RTTL0B 	B CYC & RETU SIDE NON TOOL	
	S006658/N01206		
	S006656/N01205		
R0180.4	TC=WTTLA 	A CYC & T CODE EQ WAIT TOL	
	S006712/N01219		
	S006700/N01216		
R0180.5	TC=WTTLB 	B CYC & T CODE EQ WAIT TOL	
	S006713/N01219		
	S006711/N01218		
R0180.6	TC=RTTLA 	A CYC & T CODE EQ RETU TOL	
	S006912/N01249		
	S006901/N01246		
R0180.7	TC=RTTLB 	B CYC & T CODE EQ RETU TOL	
	S006913/N01249		
	S006911/N01248		
R0181.0	HAND=WTA 	HAND EQ WAIT TOL A CYC	
	S009293/N01571		
	S009280/N01568		
R0181.1	HAND=WTB 	HAND EQ WAIT TOL B CYC	
	S009294/N01571		
	S009292/N01570		
R0181.2	HAND=RTA 	HAND EQ RETU TOL A CYC	
	S009320/N01576		
	S009307/N01573		
R0181.3	HAND=RTB 	HAND EQ RETU TOL B CYC	
	S009321/N01576		
	S009319/N01575		
R0181.4	TCODE=MG 	T CODE CYC EQ MG TOOL	
	S006674/N01210		
R0181.5	TCODE=SP 	T CODE CYC EQ SP TOOL	
	S006682/N01212		
R0181.6	SPTOL=MG TOL 	SP TOOL EQ MG TOOL	
	S006717/N01220	S006720/N01220 S006727/N01221	
	S006690/N01214		
R0182.0	MGINDON 	MG INDEX RUN ON	
	S007240/N01294	S007366/N01313	
	S006725/N01220		
R0182.1	MGINDOFF 	MG INDEX RUN OFF	
	S007239/N01294	S007249/N01295 S007371/N01314	
	S006729/N01221		
R0185.0	SHCORTY 	ARM CHUCK COLSE RETRY	
	S009785/N01660	S009796/N01662 S009798/N01663 S009905/N01680 S009911/N01680	
	S009916/N01681	S009922/N01681	
	S009776/N01658		

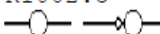
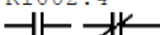
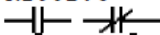
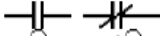
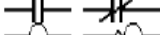

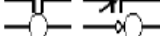
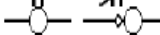
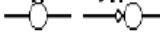
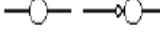
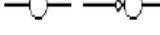



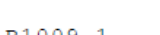

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0185.1	SHCORTY1 	ARM CHUCK COLSE RTY AUX	
	S009792/N01662 S009799/N01663		
R0185.2	MG_ARM_CHK_C/O_1 	ARM CHUCK CLOSE&OPEN	
	S006361/N01158 S009787/N01661 S009794/N01662 S009910/N01680 S009797/N01662		
R0185.3	SHCOR2 	ARM CHUCK CLOSE JOG	
	S009777/N01659 S009783/N01660 S009921/N01681 S009786/N01660		
R0186.0	SHHURTY 	ARM HEAD UNCLAMP RETRY	
	S009831/N01667 S009842/N01669 S009844/N01670 S009927/N01682 S009930/N01682 S009938/N01683 S009941/N01683 S009822/N01665		
R0186.1	SHHURTY1 	ARM HEAD UNCLAMP RTY AUX	
	S009838/N01669 S009845/N01670		
R0186.2	SHHUR1 	ARM HEAD UNCLP&CLP	
	S006346/N01155 S009833/N01668 S009840/N01669 S009929/N01682 S009843/N01669		
R0186.3	SHHUR2 	ARM HEAD UNCLP JOG	
	S009823/N01666 S009829/N01667 S009940/N01683 S009832/N01667		
R0187.0	SHHCRTY 	ARM HEAD CLAMP RETRY	
	S009867/N01674 S009878/N01676 S009880/N01677 S009928/N01682 S009933/N01682 S009939/N01683 S009944/N01683 S009858/N01672		
R0187.1	SHHCRTY1 	ARM HEAD CLAMP RTY AUX	
	S009874/N01676 S009881/N01677		
R0187.2	SHHCR1 	ARM HEAD CLAMP&UNCLAMP	
	S006341/N01154 S009869/N01675 S009876/N01676 S009943/N01683 S009879/N01676		
R0187.3	SHHCR2 	ARM HEAD CLAMP JOG	
	S009859/N01673 S009865/N01674 S009932/N01682 S009868/N01674		
R0250.0	TDIOFF1 	3D CHECK INVALID PULSE	
	S013614/N02394 S013617/N02394 S013610/N02392		
R0250.1	TDIOFF2 	3D CHECK INVALID PULSE AUX	
	S013609/N02392 S013613/N02393		
R0250.2	TDICHG1 	3D CHECK SET CHANG 1	
	S013634/N02399 S013626/N02395		
R0250.3	TDICHG2 	3D CHECK SET CHANG 2	
	S013625/N02395 S013628/N02396		
R0250.4	TDICHG3 	3D CHECK SET CHANG 3	
	S013635/N02399 S013713/N02414 S013631/N02397		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0250.5	TDICHG4	3D CHECK SET CHANG 4	
		S013630/N02397	
		S013633/N02398	
R0250.6	OFSETWIN	OFFSET INPUT WINDOW	
		S013717/N02414	S013724/N02415
		S013723/N02414	
R0250.7	WINACT.M	OFFSET WINDOW SART FIN	
		S013718/N02414	S013734/N02417
		S013704/N02411	
R0251.0	COFSET>0	COMMON OFFSET FROM NO1	
		S013657/N02403	S013730/N02416
		S013651/N02401	
R0251.2	WINERR	OFFSET WINDOW INPUT ERR	
		S013665/N02404	S013733/N02417
		S013712/N02413	
R0251.7			
		S005464/N00979	
R0300.0			
		S006021/N01094	
R0300.1			
		S006023/N01095	
R0300.2			
		S006025/N01096	
R0300.3			
		S006027/N01097	
R0300.4			
		S006029/N01098	
R0300.5			
		S006031/N01099	
R0300.6			
		S006033/N01100	
R0300.7			
		S006035/N01101	
R0504.3	MOAATLS	MOA AUTO TOOL SET	
		S013223/N02323	S013240/N02325 S013271/N02327 S013278/N02327
		S013162/N02312	
R0511.7	M47_ON	M47 FUNCTION ON	
		S000074/N00016	S000078/N00017 S000082/N00018 S000086/N00019 S000090/N00020
		S013174/N02316	S013179/N02317 S013290/N02331 S013293/N02332 S013473/N02368
		S013478/N02369	
		S013177/N02316	
R0512.0	TLSET	TOOL SET ON	
		S013154/N02310	S013158/N02311 S013161/N02312 S013168/N02315 S013210/N02322
		S013148/N02308	
R0512.1	TL_SET_OFF	TOOL SET OFF	
		S013155/N02310	S013159/N02311 S013169/N02315 S013211/N02322
		S013153/N02309	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0512.2	TLRED	TOOL SET READ FINISH	
		S013170/N02315 S013221/N02323 S013224/N02323 S013157/N02310	
R0512.3	TLRED1	TOOL SET READ FINISH AUX	
		S013156/N02310 S013160/N02311	
R0512.4	TLMOV	TOOL READ MEM	
		S013213/N02322 S013172/N02315	
R0512.5	XMOVBERR	T NO MEM ERR	
		S013283/N02329 S013220/N02322	
R0512.6	TLINISSET	TOOL SET INITIAL	
		S013257/N02326 S013270/N02327 S013274/N02327 S013236/N02324	
R0512.7	XMOVBER	MG TOL VALUM SEL ERR	
		S013284/N02329 S013264/N02326	
R0513.0	SPTLSET	TOOL INITIAL SET	
		S013275/N02327 S013463/N02365 S013280/N02327	
R0513.1	M48S	MG TOL VALUM SEL ERR AUX	
		S013241/N02325 S013249/N02326 S013277/N02327 S013282/N02328	
R0513.2	ALSALM	TOOL SELECT ALARM	
		S013286/N02330 S013285/N02329	
R0513.3	ATLSRST1	TOOL SELECT ALARM RESET	
		S013212/N02322 S013250/N02326 S013288/N02330	
R0513.5	TSWARON	TOUCH SW AIR ON	
		S013306/N02335 S013304/N02334	
R0513.6	TNODSPST	MANUAL TOOL CHANGE POSITION	
		S013171/N02315 S013183/N02318 S013192/N02319 S013199/N02320 S013222/N02323 S013225/N02323 S013165/N02313	
R0513.7	DSP_ST.S	TOL NO DISPLAY START AUX	
		S013164/N02313 S013167/N02314	
R0514.6	SUBB_ST	SUBB ACCOUNT START	
		S013203/N02321 S013200/N02320	
R0514.7	SUBB_ERR	SUBB ACCOUNT ERR	
		S013202/N02321 S013209/N02321	
R0515.0	TPADDERR	40 TOOL COUNTER ERROR	
		S013182/N02318 S013191/N02318	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0515.1		ATLSRST S013238/N02325 S013247/N02325	ALL TOOL RESET
R0545.0		PRGCHKWINTNOL S006249/N01138 S006312/N01147 S006253/N01138	PRG CHECK WINDOW T NO SISPLAY S006258/N01140 S006263/N01141 S006268/N01142 S006282/N01144 S006321/N01148
R0545.1		NXT.DSP S006255/N01139 S006304/N01146 S006257/N01139	NEXT TOOL NO DISPLAY S006269/N01142 S006275/N01143 S006283/N01144 S006293/N01145 S006314/N01147 S006325/N01149
R0545.2		MUL.ERR1 S006281/N01144 S006289/N01144	MUL ACCOUNT ERR 1
R0545.3		MUL.ERR2 S006291/N01145 S006300/N01145	MUL ACCOUNT ERR 2
R0545.4		TNO.FIN S006254/N01139 S006318/N01147	T NO DISPLAY FIN S006319/N01148 S006323/N01149
R0545.5		SPNO.FIN S006256/N01139 S006322/N01148	SP T NO DISPLAY FIN S006313/N01147 S006320/N01148
R0545.6		NXNO.FIN S006250/N01138 S006326/N01149	NEXT T NO DISPLAY FIN S006315/N01147 S006324/N01149
R0545.7		MUL.ERR3 S006302/N01146 S006311/N01146	MUL ACCOUNT ERR 3
R0550.0		S011496/N02014 S011491/N02012	S011499/N02014
R0550.1		S011490/N02012 S011494/N02013	
R0550.2		S011465/N02008 S011461/N02006	S011468/N02008
R0550.3		S011460/N02006 S011463/N02007	
R0556.0		AP01 S009143/N01550 S009145/N01550	AUTO POWER OFF 1 S009146/N01551
R0600.0		S001430/N00250	S001436/N00252
R0601.0		S001443/N00252 S001563/N00267	S001461/N00254 S001472/N00256 S001486/N00257 S001504/N00259

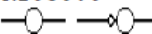
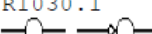
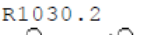
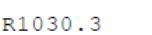
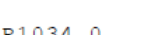

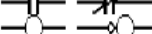
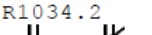

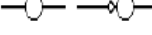
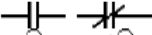
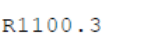
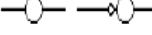
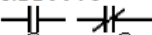
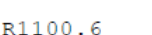
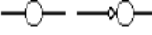
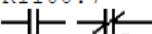
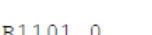
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0609.2		APO-ON S009135/N01549 S009137/N01549 S009132/N01547	AUTO POWER OFF -ON
R0609.3		S009131/N01547 S009134/N01548	
R0659.2		SBK-ON S002389/N00414 S002394/N00415	
R0659.3		SBK+ S002395/N00416 S002397/N00416 S002391/N00414	SBK P.B ON PULSE
R0668.5		*FV100 S002662/N00473	*FV 100% KEEP
R0712.5		S009520/N01611	
R0800.0		S014049/N02471	
R0880.0		OVC.P S002652/N00472 S002654/N00472 S002649/N00470	
R0880.1		OVC.P2 S002648/N00470 S002651/N00471	
R1000.2		S-SPDON S001033/N00193 S001060/N00195 S001151/N00208 S001199/N00214 S004886/N00874 S009221/N01557 S010039/N01698 S012706/N02220 S013785/N02428 S004409/N00785	SPINDLE RUNNING
R1000.3		S-ORIINP S001023/N00193 S001152/N00208 S001200/N00214 S004411/N00786	SP M19
R1000.4		S-SPCL S004414/N00787	SP CLP DETE
R1000.5		S-SPUC S004417/N00788	SP UNCLP DETE
R1001.2		S-ORIEND S004419/N00789	SP M19 FIN
R1001.5		S-NCRST S002341/N00406 S004422/N00790	SP STOP & NC RESET
R1001.6		S-NCHLD S001374/N00239 S004426/N00791	SP STOP & MACHINE HOLD
R1001.7		S-SFIN S014017/N02467 S014020/N02467 S004445/N00795	S CODE FIN
R1002.2		S001274/N00227	

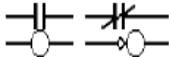
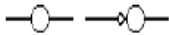
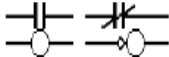
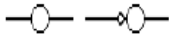
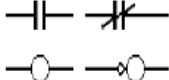
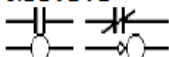
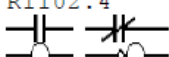
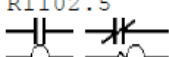
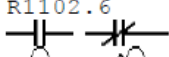
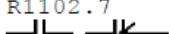
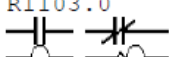
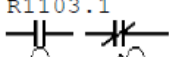
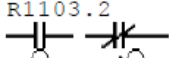
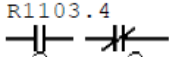
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1002.3	S-WMING 	SP WARM ON	
	S004428/N00792		
R1002.4	S-ONMEM 	SPINDLE ON MEM	
	S001446/N00252		
	S004430/N00793		
R1002.6	S-PWOFOK 	SPINDLE POWER OFF FINISH	
	S001445/N00252		
	S004432/N00794		
R1005.0	M03FF 	M03 MEM	
	S003858/N00700	S004472/N00801	
	S003862/N00700		
R1005.1	M04FF 	M04 MEM	
	S003864/N00701	S004015/N00718 S004039/N00719 S004473/N00801	
	S003868/N00701		
R1005.6	DROPNSTP 	OP DOOR OPEN SP STOP	
	S003959/N00711		
	S003914/N00706		
R1005.7	SPDSP1 	SP STOP 1	
	S003939/N00708	S003960/N00711 S003977/N00713	
	S003928/N00707		
R1006.0	SPDSP 	SP STOP 2	
	S003950/N00710	S003957/N00711 S003978/N00713	
	S003943/N00708		
R1006.1	SPDSP3 	SP STOP 3	
	S003980/N00714	S003986/N00715	
	S003976/N00712		
R1006.3	SPDHOLD2 	SP HOLD 2	
	S000413/N00085	S003888/N00703 S003905/N00705	
	S003890/N00703		
R1006.4	SPDHOLD3 	SP HOLD 3	
	S004008/N00718	S004032/N00719	
	S003979/N00713		
R1006.6	SPDHOLD 	SP HOLD	
	S004420/N00790	S004425/N00791 S012918/N02263	
	S003909/N00705		
R1006.7	SPDCH 	SP RUN CHECK	
	S004006/N00718	S004030/N00719	
	S004004/N00717		
R1007.7	SPINTRP 	SP INTERRUPT	
	S001371/N00239	S003963/N00711 S003975/N00712 S004423/N00791	
	S003972/N00711		
R1009.0	SINDEX 	S CODE INDEX	
	S004436/N00795		
	S004178/N00743		
R1009.1	SP_AUT.M 	SP AUTO MEM	
	S003860/N00700	S003866/N00701 S003952/N00710	
	S003955/N00710		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1009.2	SPDCW1	SP CW AUX	
		S004018/N00718 S004041/N00719 S004053/N00720 S004062/N00721	
		S004028/N00718	
R1009.3	SPDCCW1	SP CCW AUX	
		S004017/N00718 S004042/N00719 S004054/N00720 S004077/N00723 S004079/N00723	
		S004052/N00719	
R1009.4	SPOFF.M	SP OFF MEM	
		S003945/N00709 S003968/N00711 S003984/N00715 S004014/N00718 S004038/N00719	
		S003947/N00709	
R1010.0	SP-ELC.M	SP ELC GEAR CHANGE MEM	
		S004115/N00731 S004177/N00743 S004217/N00749 S004274/N00762 S004276/N00763	
		S004278/N00763 S004307/N00770	
		S004275/N00762	
R1010.1	SP-CHK.E	SPINDLE CHECK FINISH	
		S003883/N00703 S004262/N00760 S004273/N00762 S004281/N00763	
		S004263/N00760	
R1010.2	SP-CK.OK	SPINDLE NORMAL	
		S003884/N00703	
		S004282/N00763	
R1012.0	SPDATA	SPCN DATA WRITE	
		S004161/N00740 S004172/N00743 S004174/N00743 S004185/N00745 S004195/N00746	
		S004208/N00747 S004209/N00747	
		S004163/N00740	
R1012.1	SPE.M	SP SPEED ARRVE MEM	
		S004135/N00735 S004138/N00736 S004429/N00793 S012785/N02238	
		S004137/N00735	
R1012.2	D62=00	SP ELC GEAR SWITCH	
		S004277/N00763 S004279/N00763	
		S004171/N00742	
R1012.3	POLE_CHG	GEAR CHANGE SP SPEED	
		S004159/N00740	
		S004158/N00739	
R1012.5	SP_SPT	SP STOP	
		S004063/N00721 S004078/N00723	
		S003982/N00714	
R1012.6	SP_CAN	SP STOP CANCEL	
		S003981/N00714 S003985/N00715	
		S003987/N00715	
R1012.7	RCHPA.S	SP POWER OUTPUT CHANGE AUX	
		S004183/N00745 S004193/N00746 S004203/N00747 S004205/N00747	
		S004215/N00748	
R1013.1	BLSP.INI	BULIT-IN SP OUTPUT SWITCH	
		S004180/N00744 S004186/N00745 S004196/N00746 S004306/N00770	
		S004181/N00744	
R1013.2	SPSTP.S	SP STOP AUX	
		S004120/N00731	
R1013.3	BLSP.TYP	BULIT-IN SPINDLE TYPE	
		S004439/N00795	
		S004308/N00770	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1014.0	M29-RGT	SP M29 COMMAND	
		S003107/N00557 S003117/N00559 S003941/N00708 S004232/N00755 S004239/N00756	
		S004371/N00781	
		S004236/N00755	
R1014.1	RGT-SPE	RIGID TAP SPEED ARRIVE	
		S004258/N00759	
		S004260/N00759	
R1014.2	SP_CW.S	SP CW	
		S004464/N00799	
		S004076/N00722	
R1014.3	SP_CCW.S	SP CCW	
		S004468/N00800	
		S004085/N00724	
R1014.4	M43FF	CS AXIS CUTTING CONTROL M CODE	
		S003870/N00702 S003942/N00708 S004235/N00755 S004246/N00757 S004394/N00782	
		S003876/N00702	
R1015.0	M19S1	M19 AUX 1	
		S004334/N00776 S004355/N00779 S004377/N00781 S004396/N00783	
		S004311/N00771	
R1015.1	M19S2	M19 AUX 2	
		S004310/N00771	
		S004313/N00772	
R1015.2	ORISKP	M19 BY PASS	
		S004335/N00776 S004356/N00779 S004378/N00781 S004397/N00783	
		S004323/N00774	
R1015.5	ORIRST	M19 RESET	
		S004393/N00782	
		S004380/N00781	
R1015.6	ORIHOLD	M19 HOLD	
		S000411/N00084 S004326/N00775 S004342/N00777 S004349/N00778 S004375/N00781	
		S004345/N00777	
R1016.1	ORI1	M19 START	
		S003938/N00708 S004324/N00775 S004339/N00777 S004348/N00778 S004354/N00779	
		S004392/N00782 S004401/N00784 S004410/N00786	
		S004395/N00782	
R1016.6	ORIEND	M19 FIN	
		S004338/N00777 S004346/N00778 S004418/N00789 S004483/N00804	
		S004337/N00776	
R1017.0	SPPRSOFF	SP TOL PRESET OFF	
		S003882/N00703 S004057/N00720 S004072/N00721 S004081/N00723	
		S004061/N00720	
R1017.1	TAPFINS	G84 FIN	
		S004453/N00797	
		S004452/N00796	
R1017.3	M3/M4FIN	M3&M4 FIN AUX	
		S004465/N00799 S004469/N00800	
		S004462/N00798	
R1018.0	SV50.S	SPINDLE OVERRIDE 50%	
		S003060/N00551 S003074/N00553	
		S003016/N00540	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1018.1	SV60.S	SPINDLE OVERRIDE 60%	
	S003067/N00552 S003075/N00553 S003020/N00541		
R1018.2	SV70.S	SPINDLE OVERRIDE 70%	
	S003061/N00551 S003068/N00552 S003076/N00553 S003024/N00542		
R1018.3	SV80.S	SPINDLE OVERRIDE 80%	
	S003082/N00554 S003028/N00543		
R1018.4	SV90.S	SPINDLE OVERRIDE 90%	
	S003062/N00551 S003083/N00554 S003032/N00544		
R1018.5	SV100.S	SPINDLE OVERRIDE 100%	
	S003069/N00552 S003084/N00554 S003036/N00545		
R1018.6	SV110.S	SPINDLE OVERRIDE 110%	
	S003063/N00551 S003070/N00552 S003085/N00554 S003040/N00546		
R1018.7	SV120.S	SPINDLE OVERRIDE 120%	
	S003077/N00553 S003086/N00554 S003044/N00547		
R1019.0	SV130.S	SPINDLE OVERRIDE 130%	
	S003064/N00551 S003078/N00553 S003087/N00554 S003049/N00548		
R1019.1	SV140.S	SPINDLE OVERRIDE 140%	
	S003071/N00552 S003079/N00553 S003088/N00554 S003054/N00549		
R1019.2	SV150.S	SPINDLE OVERRIDE 150%	
	S003065/N00551 S003072/N00552 S003080/N00553 S003089/N00554 S003059/N00550		
R1020.0	SPSTON	SP RUN ON	
	S003836/N00696 S003842/N00697 S003848/N00698 S003855/N00699 S003831/N00695		
R1021.0	M03-ON	M03 ON	
	S003857/N00700 S003865/N00701 S003891/N00704 S003948/N00710 S004005/N00718 S004031/N00719 S004433/N00795 S004463/N00799 S003837/N00696		
R1021.1	M04-ON	M04 ON	
	S003859/N00700 S003863/N00701 S003892/N00704 S003949/N00710 S004007/N00718 S004029/N00719 S004434/N00795 S004467/N00800 S003843/N00697		
R1021.2	M05-ON	M05 ON	
	S003861/N00700 S003867/N00701 S003934/N00708 S004022/N00718 S004046/N00719 S004471/N00801 S003850/N00698		
R1021.3	M19-ON	M19 ON	
	S004309/N00771 S004312/N00772 S004314/N00773 S004320/N00774 S004381/N00782 S004402/N00784 S004482/N00804 S003856/N00699		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1030.0		SOVR1 S003066/N00551	SP SPEED OVERRIDE 1
R1030.1		SOVR2 S003073/N00552	SP SPEED OVERRIDE 2
R1030.2		SOVR4 S003081/N00553	SP SPEED OVERRIDE 4
R1030.3		SOVR8 S003090/N00554	SP SPEED OVERRIDE 8
R1034.0		MULERR2 S003098/N00555	MUL ACCOUNT ERR2
R1034.1		SOVITR S003110/N00558 S003109/N00557	SP SPEED OVERRIDE CHECK
R1034.2		SPOVROFF S003108/N00557 S003124/N00560	SP SPEED OVERRIDE OFF S003118/N00559
R1100.0		SPWUP S003357/N00606	SP WARM UP
R1100.2		D92<S S003380/N00615 S003364/N00608	D92<S S003457/N00637 S003512/N00646
R1100.3		S=<D92 S003483/N00641 S003368/N00610	S=<D92
R1100.5		D94<S S003394/N00620 S003375/N00612	D94<S S003527/N00648 S003582/N00657
R1100.6		S=<D94 S003381/N00615 S003379/N00614	S=<D94 S003553/N00652
R1100.7		92<S=<94 S003733/N00681 S003382/N00615	92<S=<94
R1101.0		D96<S S003408/N00625 S003389/N00617	D96<S S003597/N00659
R1101.1		S=<D96 S003395/N00620 S003393/N00619	S=<D96 S003623/N00663 S003652/N00668
R1101.2		D94<S=<96 S003735/N00681 S003396/N00620	D94<S=<96
R1101.3		D98<S S003420/N00629 S003403/N00622	D98<S S003667/N00670 S003722/N00679 S003741/N00681
R1101.4		S=<D98 S003409/N00625 S003407/N00624	S=<D98 S003693/N00674

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1101.5	96<S=<98 	D96<S=<D98	
R1101.6	D100<S 	D100<S	
R1101.7	S=<D100 	S=<D100	
R1102.0	98<S=<00 	D98<S=<100	
R1102.1	1SECP 	1 SEC PULSE S003453/N00637 S003480/N00641 S003523/N00648 S003550/N00652 S003593/N00659 S003620/N00663 S003663/N00670 S003690/N00674	
R1102.2	1SECPS 	1 SEC PULSE AUX	
R1102.3	SIND1 	SP INDEX RUN S003747/N00682 S003792/N00689 S003926/N00707 S004013/N00718 S004037/N00719 S004283/N00764 S004427/N00792	
R1102.4	MULBERR 	MULB ACCOUNT ERR S003811/N00693	
R1102.5	DIVBERR 	DIVE AUUOUNT ERR S003820/N00694	
R1102.6	DROPS5UP 	DOOR OPEN SP SPEED 500RPM S004284/N00764	
R1102.7	MDSPON 	SPINDLE ON S003759/N00683 S003946/N00709 S003967/N00711 S003983/N00715	
R1103.0	PRPCNT 	OP RDY COUNT	
R1103.1	ADDBERR 	ADDB ACCOUNT ERR S003764/N00684	
R1103.2	F1PRP 	OP RDY COUNT FIN S003455/N00637 S003757/N00683	
R1103.3	S=D92 	S=6000 S003482/N00641 S003513/N00646	
R1103.4	S=D94 	S=8000 S003552/N00652 S003583/N00657	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1103.5	S=D96	S=10000	
	S003598/N00659	S003622/N00663	S003653/N00668
	S003391/N00618		
R1103.6	S=D98	S=11000	
	S003668/N00670	S003692/N00674	S003723/N00679
	S003405/N00623		
R1105.0	F3CNT	D92<S<=D94 COUNT	
	S003466/N00638		
	S003463/N00637		
R1105.1	ADDBERR1	ADDB ACCOUNT ERR1	
	S003465/N00638	S003765/N00684	
	S003472/N00638		
R1105.2	F3	D92<S<=D94 COUNT FIN	
	S003454/N00637	S003481/N00641	S003505/N00645
	S003734/N00681	S003788/N00688	S003515/N00646
	S003479/N00640	S003525/N00648	
R1105.3	F3STP	D92<S<=D94 STOP COUNT	
	S003489/N00642		
	S003486/N00641		
R1105.4	ADDBERR2	ADDB ACCOUNT ERR2	
	S003488/N00642	S003766/N00684	
	S003495/N00642		
R1105.5	F3RST	D92<S<=D94 STOP COUNT RESET	
	S003504/N00645	S003516/N00646	
	S003503/N00644		
R1105.6	F3STPRST	D92<S<=D94 STOP COUNT RESET	
	S003518/N00647		
	S003517/N00646		
R1106.0	F4CNT	D94<S<=D96 STOP COUNT	
	S003536/N00649		
	S003533/N00648		
R1106.1	ADDBERR3	ADDB ACCOUNT ERR3	
	S003535/N00649	S003767/N00684	
	S003542/N00649		
R1106.2	F4	D94<S<=D96 COUNT FIN	
	S003524/N00648	S003551/N00652	S003575/N00656
	S003736/N00681	S003784/N00687	S003585/N00657
	S003549/N00651	S003595/N00659	
R1106.3	F4STP	D94<S<=D96 STOP COUNT	
	S003559/N00653		
	S003556/N00652		
R1106.4	ADDBERR4	ADDB ACCOUNT ERR4	
	S003558/N00653	S003768/N00684	
	S003565/N00653		
R1106.5	F4RST	D94<S<=D96 COUNT RESET	
	S003574/N00656	S003586/N00657	
	S003573/N00655		
R1106.6	F4STPRST	D94<S<=D96 STOP COUNT RESET	
	S003588/N00658		
	S003587/N00657		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1107.0	F5CNT	D96<S<=D98 COUNT	
	S003606/N00660 S003603/N00659		
R1107.1	ADDBERR5	ADDB ACCOUNT ERR5	
	S003605/N00660 S003769/N00684 S003612/N00660		
R1107.2	F5	D96<S<=D98 COUNT FIN	
	S003594/N00659 S003621/N00663 S003645/N00667 S003655/N00668 S003665/N00670 S003739/N00681 S003780/N00686 S003619/N00662		
R1107.3	F5STP	D96<S<=D98 STOP COUNT	
	S003629/N00664 S003626/N00663		
R1107.4	ADDBERR6	ADDB ACCOUNT ERR6	
	S003628/N00664 S003770/N00684 S003635/N00664		
R1107.5	F5RST	D96<S<=D98 COUNT RESET	
	S003644/N00667 S003656/N00668 S003643/N00666		
R1107.6	F5STPRST	D96<S<=D98 STOP COUNT AUX	
	S003658/N00669 S003657/N00668		
R1108.0	F6CNT	D98<S COUNT	
	S003676/N00671 S003673/N00670		
R1108.1	ADDBERR7	ADDB ACCOUNT ERR7	
	S003675/N00671 S003771/N00684 S003682/N00671		
R1108.2	F6	D98<S COUNT FIN	
	S003664/N00670 S003691/N00674 S003715/N00678 S003725/N00679 S003742/N00681 S003776/N00685 S003689/N00673		
R1108.3	F6STP	D98<S STOP COUNT	
	S003699/N00675 S003696/N00674		
R1108.4	ADDBERR8	ADDB ACCOUNT ERR8	
	S003698/N00675 S003772/N00684 S003705/N00675		
R1108.5	F6RST	D98<S COUNT AUX	
	S003714/N00678 S003726/N00679 S003713/N00677		
R1108.6	F6STPRST	D98<S STOP COUNT RESET	
	S003728/N00680 S003727/N00679		
R1143.0			
	S004295/N00766		
R1143.1			
	S004298/N00767		

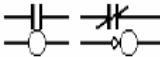
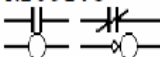
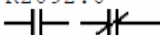
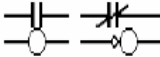
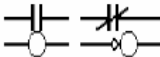
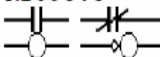
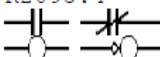
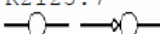
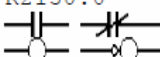
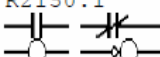
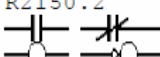
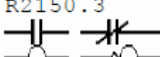
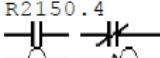
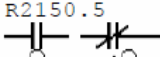
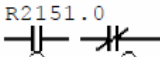
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1143.2		S004301/N00768	
R1143.3		S004304/N00769	
R1300.4		S009086/N01545 S006012/N01092	
R1502.2		PLS01 HANDLE INDEX PULSE 1 S002094/N00358 S002096/N00358 S002091/N00356	
R1502.3		PLS02 HANDLE INDEX PULSE 2 S002090/N00356 S002093/N00357	
R1502.6		PLS03 SPINDLE OVEERIDE PULSE S002108/N00361 S002110/N00361 S002104/N00359	
R1502.7		PLS04 SPINDLE OVERRIDE AUX S002103/N00359 S002107/N00360	
R1503.0		PLS05 WORK LIGHT SW 5 S002119/N00364 S002121/N00364 S002116/N00362	
R1503.1		PLS06 WORK LIGHT SW AUX 6 S002115/N00362 S002118/N00363	
R1503.6		PLS07 CHIP CON MANUAL SW 7 S002130/N00367 S002132/N00367 S002127/N00365	
R1503.7		PLS08 CHIP CON MANUAL SW 8 S002126/N00365 S002129/N00366	
R1504.1		PLS09 DRY RUN SW PULSE 9 AUX S002144/N00370 S002146/N00370 S002141/N00368	
R1504.2		PLS010 DRY RUN SW PULSE 10 AUX S002140/N00368 S002143/N00369	
R1504.3		DRY_RUN_KEEP DRY RUN KEEP S002145/N00370 S002147/N00370 S002614/N00455 S012965/N02272 S002149/N00370	
R1504.4		PLS011 BLOCK SKIP KEEP 11 S002155/N00373 S002157/N00373 S002152/N00371	
R1504.5		PLS012 BLOCK SKIP SW KEEP 12 S002151/N00371 S002154/N00372	
R1504.7		OPTION_STOP_SW OPTIONAL STOP PB S002166/N00376 S002168/N00376 S002163/N00374	

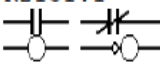
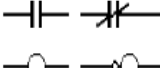
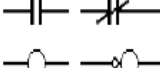
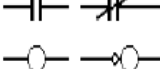
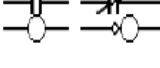
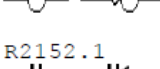
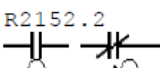
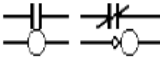
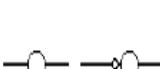
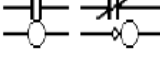
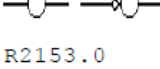
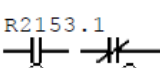
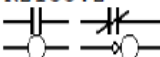

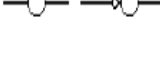
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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R1505.1	PLS015 	PULSE GENERATOR *10 SW S002177/N00379 S002179/N00379 S002174/N00377	
R1505.2	HANDLE_*10_AUX 	PULSE GENERATOR *10 SW AUX S002173/N00377 S002176/N00378	
R1600.5		S013999/N02465 S014002/N02465	
R1605.1	M10.A 	TABLE CLP S011939/N02101 S011903/N02092	
R1605.2	M11.A 	TABLE UNCLP S011941/N02101 S011906/N02093	
R1605.3	M12.A 	TILT CLP S011971/N02108 S011910/N02094	
R1605.4	M13.A 	TILT UNCLP S011974/N02108 S011913/N02095	
R1606.1	4.CLIP 	4TH AXIS CLAMP M CODE S011973/N02108 S011984/N02109 S012244/N02140 S012248/N02141 S012798/N02240 S011983/N02108	
R1607.0	4A/C.UCL 	4TH AXIS UNCLAMP CHECK S011935/N02100 S012842/N02250 S012847/N02250 S011930/N02098	
R1607.1	4A/C.CL 	4TH AXIS CLAMP CHECK S011931/N02099 S012840/N02250 S011924/N02097	
R1616.1	5.CLIP 	5TH AXIS CLAMP M CODE S011940/N02101 S011947/N02102 S012236/N02138 S012240/N02139 S012796/N02240 S011946/N02101	
R1617.0	5A/C.UCL 	5TH AXIS UNCLAMP S011964/N02106 S012845/N02250 S012848/N02250 S011959/N02104	
R1617.1	5A/C.CL 	5TH AXIS CLAMP S011960/N02105 S012843/N02250 S011957/N02103	
R1806.0	GRS_RST 	GREASE COUNT RESET S012562/N02197 S012559/N02196	
R1806.1	AUTO_GREASE_CTR 	AUTO GREASE COUNTER S012564/N02197 S012573/N02199 S012584/N02200 S012567/N02197	

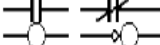
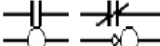
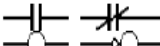
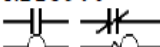
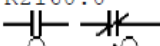
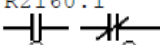
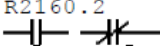
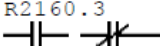
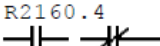
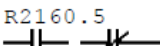
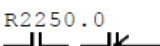
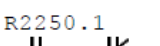
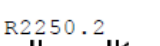
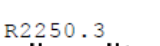
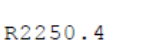
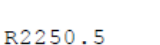
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1855.3		SP OIL & AIR OIL LEV LOW	
		S000500/N00100	S012609/N02204 S012655/N02212 S012658/N02213
		S012657/N02212	
R1855.4		SPINDLE OIL ON	
		S012613/N02205	S012665/N02213 S012674/N02214 S012704/N02219
		S012669/N02213	
R1855.6		S CODE INPUT	
		S012708/N02221	S012713/N02222 S012740/N02229 S012746/N02230 S012752/N02231
		S012758/N02232	S012764/N02233 S012769/N02234
		S012707/N02220	
R1855.7		D314-D319 DATA EQ 0	
		S000434/N00089	S012788/N02238
		S012790/N02238	
R1856.0		S CODE 10000 UP	
		S012716/N02223	S012721/N02224 S012742/N02229 S012747/N02230
		S012715/N02222	
R1856.1		S CODE 15000 UP	
		S012724/N02225	S012729/N02226 S012748/N02230 S012753/N02231
		S012723/N02224	
R1856.2		S CODE 20000 UP	
		S012732/N02227	S012737/N02228 S012754/N02231 S012759/N02232
		S012731/N02226	
R1856.3		S CODE 30000 UP	
		S012760/N02232	S012765/N02233
		S012739/N02228	
R1856.6		COUNT OVER	
		S012664/N02213	
		S012779/N02236	
R1856.7		SP OIL&AIR FIN	
		S012606/N02204	S012666/N02213 S012673/N02214
		S012675/N02214	
R1857.0		SP OIL&AIR INIT OUT FIN	
		S012608/N02204	S012662/N02213
		S012612/N02204	
R1857.1		SP OIL & AIR LOW	
		S000502/N00101	S012610/N02204 S012619/N02205 S012626/N02206 S012667/N02213
		S012621/N02205	
R1858.4		SP OIL & AIR ON	
		S012614/N02205	S012623/N02206 S012671/N02214 S012697/N02218 S012700/N02219
		S012699/N02218	
R1858.5		SP OIL ON	
		S012622/N02206	S012670/N02214 S012682/N02216 S012685/N02216 S012695/N02218
		S012703/N02219	
		S012705/N02219	
R1858.7		SP OIL & AIR COUNT I SEC	
		S012684/N02216	
		S012678/N02215	
R1860.0		HYDRAULIC MOTOR STOP 1	
		S012800/N02241	
		S012795/N02239	

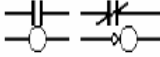
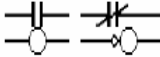
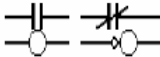
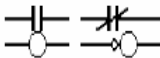
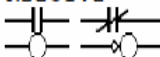
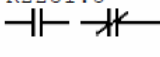
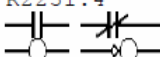
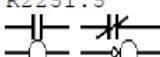
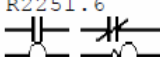
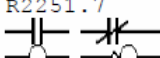
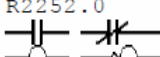
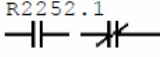
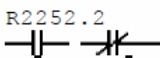
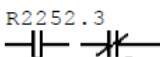
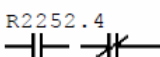
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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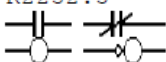
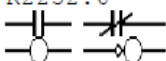
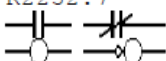
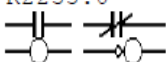
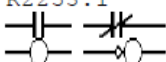
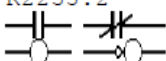
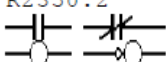
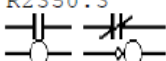
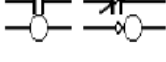
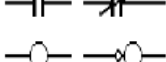
R1860.1		HYDSTP5 S012801/N02241 S012799/N02240	HYDRAULIC MOTOR STOP 5
R1860.2		HYDSTP S012804/N02242 S012803/N02241	HYDRAULIC MOTOR STOP
R1860.3		OP_RDY_PW_AUX S012057/N02122 S012661/N02213 S012818/N02244	OPERATION RDY START POWER AUX
R2050.0		WINDFIN S005260/N00943	OP WINDOW FIN
R2051.0		WINR S007857/N01383	Z MOTOR LOAD READ WINDOW
R2051.1		MULBERR1 S007872/N01387 S007901/N01390 S007881/N01387	MULB ACCOUNT ERR1
R2051.2		DIVBERR1 S007902/N01390 S007891/N01388	DIVB ACCOUNT ERR1
R2051.3		ZAIRP S007985/N01398 S007999/N01401 S007984/N01397	Z STOP AIR POS
R2051.4		ZAIRPNG S008001/N01401 S007995/N01400	Z STOP AIR POS NG
R2051.5		ZAIRSTP S008011/N01402 S008026/N01403 S008002/N01401	Z STOP AIR
R2085.7		S007862/N01385 S007867/N01386	
R2090.0		ZP2UP S010395/N01797 S010376/N01790	Z IN ZP2 POS
R2090.1		ZP3UP S010397/N01797 S010399/N01798 S010385/N01793	Z IN ZP3 POS
R2090.2		ZP4UP S010401/N01798 S010394/N01796	Z IN ZP4 POS
R2090.7		ATCMONIT S010292/N01765	ATC MONITOR
R2091.0		MGIAW S010331/N01776 S010316/N01771	MG WAIT TOOL INDEX A CYC
R2091.1		MGIBR S010336/N01777 S010319/N01772	MG RETURN TOOL INDEX B CYC

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2091.2		MG IAR S010335/N01777 S010327/N01774	MG RETURN TOOL INDEX A CYC
R2091.3		MG IBW S010332/N01776 S010330/N01775	MG RETURN TOOL INDEX B CYC1
R2092.0		MSSTRART S005088/N00913 S005094/N00914 S005100/N00915 S005106/N00916 S005112/N00917 S005118/N00918 S005124/N00919 S005130/N00920 S005136/N00921 S005142/N00922 S005148/N00923 S005154/N00924 S005160/N00925 S005166/N00926 S005172/N00927 S005178/N00928 S005184/N00929 S005190/N00930 S005196/N00931 S005202/N00932 S005208/N00933 S005214/N00934 S005220/N00935 S005226/N00936 S005232/N00937 S008224/N01440 S009187/N01557 S009191/N01557 S009208/N01557 S009225/N01558 S010237/N01758 S010246/N01759 S010255/N01760 S010264/N01761 S010273/N01762 S010282/N01763 S011265/N01945 S011111/N01927	MONITOR SP S CODE START
R2093.0		MGSPIMP S010876/N01901 S011138/N01931 S010300/N01767	MG TOOL EQ SP TOOL INDEX
R2093.1		MGTCIMP S010880/N01902 S011140/N01931 S010308/N01769	MG TOOL EQ T CODE INDEX
R2093.3		MGWTIMP S010935/N01910 S010978/N01915 S011182/N01931 S010334/N01776	MG TOOL EQ WAIT TOOL INDEX
R2093.4		MGRTIMP S010936/N01910 S010982/N01916 S011184/N01931 S010338/N01777	MG TOOL EQ RETU TOOL INDEX
R2123.7		MGCCW S005802/N01057	MG JOG CCW
R2150.0		MG+1P S005267/N00945 S005274/N00945	MG & 1 POT
R2150.1		MG+INPS S005276/N00946 S005283/N00946	MG+INPS
R2150.2		MG OVR S005290/N00948 S005298/N00948	MG OVER LOAD DECELERATE
R2150.3		MGINP*2 S005300/N00949 S005307/N00949	MGINP*2
R2150.4		MGPER S005309/N00950 S005316/N00950	MG POS
R2150.5		MGINPS S005982/N01088 S010299/N01767 S010307/N01769 S010333/N01776 S010337/N01777 S005327/N00953	MG TOL CHANG INPOS
R2151.0		TCWB S005734/N01045 S005774/N01052 S005727/N01043	ATC MAGAZINE MANUAL CW PB

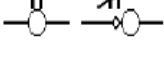
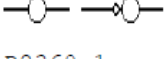
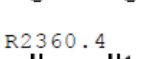
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2151.1		TCCWB S005741/N01046 S005776/N01052 S005733/N01044	
R2151.2		TCWM S005737/N01045 S005742/N01046 S005748/N01047 S005773/N01052 S005832/N01063 S007882/N01388 S005740/N01045	
R2151.3		TCCWM S005735/N01045 S005744/N01046 S005749/N01047 S005775/N01052 S005801/N01057 S005842/N01064 S005747/N01046	
R2151.4		TMMG ATC MAGAZINE ROTATION MANUAL S005754/N01048 S005759/N01049 S005766/N01050 S005781/N01052 S005787/N01053 S005792/N01054 S005797/N01055 S005799/N01056 S005986/N01088 S005750/N01047	
R2151.5		TMMG0 ATC MAGAZINE ROTATION AUX S005794/N01055 S005800/N01056	
R2152.0		TMMG1 ATC MAGAZINE CONTINUOUS SET 1 S005789/N01054 S005795/N01055 S005803/N01058 S005808/N01059 S005812/N01060 S005798/N01055	
R2152.1		TMMG2 ATC MAGAZINE KEEP RUN 2 S005783/N01053 S005790/N01054 S005796/N01055 S005918/N01073 S005793/N01054	
R2152.2		TMMG3 ATC MG RUNING S005778/N01052 S005785/N01053 S005791/N01054 S005788/N01053	
R2152.3		TMMG4 ATC MG RESET STOP S005761/N01050 S005768/N01051 S005779/N01052 S005786/N01053 S005957/N01083 S005782/N01052	
R2152.4		TMMG5 ATC MG DATA SET S005756/N01049 S005764/N01050 S005780/N01052 S005816/N01061 S005823/N01062 S005831/N01063 S005841/N01064 S005849/N01065 S005856/N01066 S005864/N01067 S005871/N01068 S005892/N01071 S005906/N01072 S005767/N01050	
R2152.5		TMMG6 ATC MG DARA START S005751/N01048 S005757/N01049 S005765/N01050 S005919/N01073 S005760/N01049	
R2152.6		TMMG7 ATC MG DATA INDEX FIN S005738/N01045 S005745/N01046 S005753/N01048 S005758/N01049 S005755/N01048	
R2153.0		TMCW+1 ATC MG CW NEXT POT S005830/N01063 S005838/N01063	
R2153.1		TMCCW-1 ATC MG CW BRFORE POT S005840/N01064 S005848/N01064	
R2153.2		TMOVER 40T MG OVER S005855/N01066 S005863/N01066	

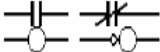
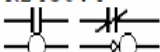
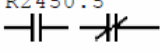
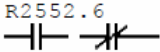
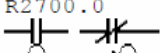
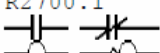
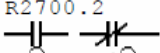
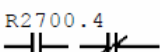
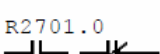
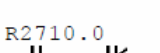
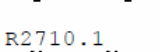
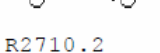
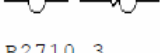
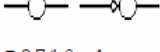
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2153.3	TMADD 	40T MG ADD 1	
	S005870/N01068 S005878/N01068		
R2153.4	TMPOSS 	MG T VALUM SET	
	S005891/N01071 S005902/N01071		
R2153.5	TMPOSS60 	60T MG SET	
	S005905/N01072 S005917/N01072		
R2159.0	MGST 	MG START	
	S005942/N01078 S005922/N01073	S005953/N01081	
R2160.0	MGFINM 	MG M CODE FIN MEM	
	S005939/N01077 S005941/N01077	S005943/N01078 S005960/N01083	
R2160.1	MGST1 	MG START 1	
	S005946/N01079 S005945/N01078	S005949/N01080	
R2160.2	MGST2 	MG START 2	
	S005951/N01081 S005948/N01079		
R2160.3	MGST3 	MG START 3	
	S005947/N01079 S005950/N01080		
R2160.4	MGST4 	MG START 4	
	S005784/N01053 S005954/N01081	S005940/N01077 S005944/N01078 S005952/N01081 S005959/N01083	
R2160.5	MGFIN 	MG M CODE FIN	
	S005938/N01077 S005964/N01083		
R2250.0	SLP1+ 	SL P1+	
	S005329/N00954 S005336/N00954		
R2250.1	SLP1- 	SL P1-	
	S005338/N00955 S005345/N00955		
R2250.2	SLP2+ 	SL P2+	
	S005347/N00956 S005354/N00956		
R2250.3	SLP2- 	SL P2-	
	S005356/N00957 S005363/N00957		
R2250.4	SLP3+ 	SL P3+	
	S005365/N00958 S005372/N00958		
R2250.5	SLP3- 	SL P3-	
	S005374/N00959 S005381/N00959		

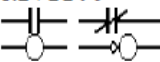
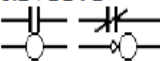
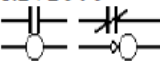
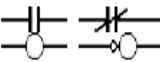
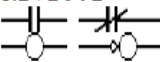
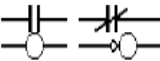
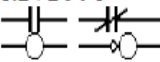
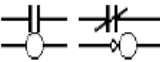
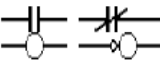
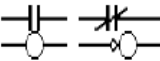
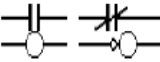
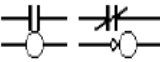
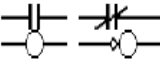
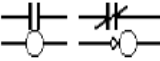
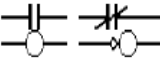
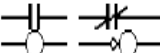
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2250.6	SLP4+	SL P4+	
	S005383/N00960 S005390/N00960		
R2250.7	SLP4-	SL P4-	
	S005392/N00961 S005399/N00961		
R2251.0	P1+<SL	P1+<SL	
	S005424/N00967 S005415/N00964	S011301/N01955	
R2251.1	P1-<SL	P1-<SL	
	S005423/N00967 S005422/N00966	S005434/N00970 S005463/N00979	
R2251.2	1-<L=<1+	P1-<SL=<P1+	
	S006377/N01163 S005425/N00967	S006820/N01234 S010354/N01781 S010938/N01910	
R2251.3	P2+<SL	P2+<SL	
	S005433/N00970 S008672/N01502 S010998/N01920 S011023/N01921 S011071/N01924 S005432/N00969	S005444/N00973 S008673/N01502 S010999/N01920 S011047/N01922 S011077/N01924	S008636/N01502 S010344/N01779 S011015/N01921 S011064/N01923 S011089/N01925 S008637/N01502 S010350/N01780 S011016/N01921 S011069/N01924 S011090/N01925 S008660/N01502 S010915/N01908 S011017/N01921 S011070/N01924
R2251.4	2+<L=<1-	P2+<SL=<P1-	
	S010356/N01782 S005435/N00970		
R2251.5	P2-<SL	P2-<SL	
	S005443/N00973 S005442/N00972	S005454/N00976 S008051/N01409 S010896/N01906	
R2251.6	2-<L=<2+	P2-<SL=<P2+	
	S010358/N01783 S005445/N00973		
R2251.7	P3+<SL	P3+<SL	
	S005453/N00976 S005452/N00975	S008875/N01534 S010927/N01909	
R2252.0	3+<L=<2-	P3+<SL=<P2-	
	S010360/N01784 S005455/N00976		
R2252.1	P3-<SL	P3-<SL	
	S005474/N00982 S010860/N01898 S011051/N01923 S005462/N00978	S008638/N01502 S010907/N01907 S011058/N01923 S011091/N01925	S008643/N01502 S011000/N01920 S011034/N01922 S011041/N01922 S011252/N01943
R2252.2	3-<L=<3+	P3-<SL=<P3+	
	S010362/N01785 S005465/N00979		
R2252.3	P4+<SL	P4+<SL	
	S005473/N00982 S005472/N00981	S005484/N00985	
R2252.4	4+<L=<3-	P4+<SL=<P3-	
	S010364/N01786 S005475/N00982		

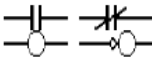
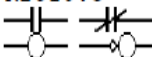
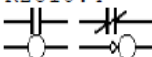
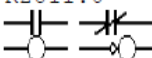
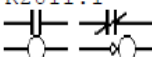
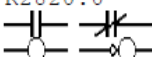
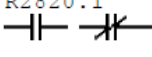
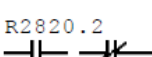
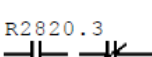
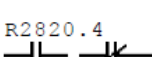
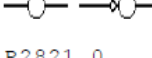
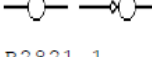
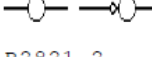
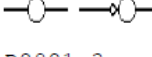
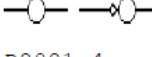
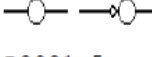
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2252.5		P4-<SL	
		S005483/N00985	
		S005482/N00984	
R2252.6		P4-<SL=<P4+	
		S006375/N01162	S007692/N01363 S007745/N01369 S010366/N01787
		S005485/N00985	
R2252.7		P1 DOR CLOSE DECELERATE 25%	
		S008055/N01410	S008061/N01411
		S008042/N01407	
R2253.0		P2 DOR CLOSE DECELERATE 25%	
		S008056/N01410	S008060/N01411
		S008052/N01409	
R2253.1		SWING ARM -OT POS	
		S005401/N00962	
		S005408/N00962	
R2253.2		SWING ARM -OT	
		S011303/N01956	
		S005492/N00987	
R2350.0		90.05<SR	
		S005508/N00992	S011305/N01957
		S005499/N00989	
R2350.1		89.95<SR	
		S005507/N00992	S005518/N00995
		S005506/N00991	
R2350.2		89.95<SR=<90.05	
		S011195/N01931	S011415/N01995
		S005509/N00992	
R2350.3		45.05<SR	
		S005517/N00995	S005528/N00998
		S005516/N00994	
R2350.4		45.05<SR=<89.95	
		S005519/N00995	
R2350.5		44.95<SR	
		S005527/N00998	S005547/N01002
		S005526/N00997	
R2350.6		44.95<SR=<45.05	
		S006406/N01168	S006816/N01234 S007641/N01356 S008891/N01535 S008903/N01536
		S008908/N01536	S011011/N01920 S011198/N01931 S011419/N01996
		S005529/N00998	
R2350.7		0.05<SR	
		S005546/N01002	S005566/N01006
		S005545/N01001	
R2351.0		0.05<SR=<44.95	
		S005548/N01002	
R2351.1		-0.05<SR	
		S005565/N01006	S005585/N01010 S005661/N01026 S008635/N01502 S010997/N01920
		S011014/N01921	
		S005564/N01005	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2351.2		-0<S=<0 S006383/N01164 S008898/N01536 S011201/N01931 S005567/N01006	-0.05<SR=<0.05 S006415/N01169 S008966/N01540 S011423/N01997 S005567/N01006
R2351.3		-89.5<SR S005584/N01010 S005583/N01009	-89.95<SR S005604/N01014
R2351.4		-8<SR=<-0 S005586/N01010	-89.95<SR=<-0.05
R2351.5		-90.5<SR S005603/N01014 S005602/N01013	-90.05<SR S005623/N01018
R2351.6		-9<S=<-8 S006424/N01170 S011048/N01922 S005605/N01014	-90.05<SR=<-89.95 S006435/N01171 S007698/N01363 S011204/N01931 S011427/N01998
R2351.7		-179.5<SR S005622/N01018 S005621/N01017	-179.95<SR S005642/N01022
R2352.0		17<S=<-9 S005624/N01018	-179.95<SR=<-90.05
R2352.1		-180.5<SR S005641/N01022 S005640/N01021	-180.05<SR
R2352.2		18<SR=<17 S006426/N01170 S011065/N01923 S005643/N01022	-180.05<SR=<-179.95 S006433/N01171 S007696/N01363 S011207/N01931 S011431/N01999
R2352.3		-269.5<SR S005660/N01026 S005659/N01025	-269.95<SR S005680/N01030 S008671/N01502 S011068/N01924 S011088/N01925
R2352.4		26<S=<18 S005662/N01026	-269.95<SR=<-180.05
R2352.5		-270.5<SR S005679/N01030 S005678/N01029	-270.05<SR S005690/N01033
R2352.6		27<S=<26 S006387/N01164 S008967/N01540 S011435/N02000 S005681/N01030	-270.05<SR=<-269.95 S006514/N01187 S007278/N01299 S007569/N01347 S008899/N01536 S009408/N01590 S010966/N01914 S011085/N01924 S011210/N01931
R2352.7		-314.5<SR S005689/N01033 S005688/N01032	-314.95<SR S005700/N01036
R2353.0		31<S=<27 S005691/N01033	-314.95<SR=<-270.05
R2353.1		-315.5<S S005699/N01036 S005698/N01035	-315.05<SR S005710/N01039

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2353.2		32<S=<31 -315.05<SR=<-314.95 S006408/N01168 S006817/N01234 S007639/N01356 S008890/N01535 S008904/N01536 S008909/N01536 S011102/N01925 S011213/N01931 S011439/N02001 S005701/N01036	
R2353.3		-359.5<SR -359.95<SR S005709/N01039 S005720/N01042 S005708/N01038	
R2353.4		35<S=<32 -359.95<SR=<-315.05 S005711/N01039	
R2353.5		-360.5<SR -360.05<SR S005719/N01042 S011307/N01958 S005718/N01041	
R2353.6		36<S=<35 -360.05<SR=<-359.95 S011216/N01931 S011443/N02002 S005721/N01042	
R2360.0		SR0+ SWING ROTARY +0 DEGREE S005531/N00999 S005538/N00999	
R2360.1		SR0- SWING ROTARY -0 DEGREE S005550/N01003 S005557/N01003	
R2360.2		SR-90+ SWING ROTARY +90 DEGREE S005569/N01007 S005576/N01007	
R2360.3		SR-90- SWING ROTARY -90 DEGREE S005588/N01011 S005595/N01011	
R2360.4		SR-180+ SWING ROTARY +180 DEGREE S005607/N01015 S005614/N01015	
R2360.5		SR-180- SWING ROTARY -180 DEGREE S005626/N01019 S005633/N01019	
R2360.6		SR-270+ SWING ROTARY +270 DEGREE S005645/N01023 S005652/N01023	
R2360.7		SR-270- SWING ROTARY -270 DEGREE S005664/N01027 S005671/N01027	
R2450.0		ZTRQSTM Z TORQUE REQ START MEM S008374/N01460 S008381/N01461 S008384/N01462 S008386/N01463 S008389/N01464 S008380/N01460	
R2450.1		ZTRQST1 Z TORQUE REQ ST PULSE S008391/N01465 S008416/N01470 S008383/N01461	
R2450.2		ZTRQSTMS Z TORQUE REQ ST MEM AUX S008382/N01461 S008385/N01462	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2450.3		Z TORQUE REQ OFF PULSE S008392/N01465 S008421/N01471 S008388/N01463	
R2450.4		Z TORQUE REQ OFF AUX S008387/N01463 S008390/N01464	
R2450.5		Z TORQUE REQ WINDOW ST S007407/N01321 S007413/N01322 S007431/N01325 S007437/N01326 S007477/N01332 S007706/N01364 S007723/N01366 S008393/N01465 S008396/N01466 S008401/N01467 S008406/N01468 S008411/N01469 S008426/N01472 S008395/N01465	
R2450.6		Z TORQUE REQ WINDOW FIN S008394/N01465 S008429/N01472	
R2552.6		S006417/N01169	
R2700.0		PMC X CTRL S012355/N02160 S012358/N02161 S012350/N02158	
R2700.1		PMC X CTRL PULSE S012360/N02162 S012368/N02163 S012374/N02164 S012379/N02165 S012357/N02160	
R2700.2		PMC X CTRL PULSE AUX S012356/N02160 S012359/N02161	
R2700.3		PMC X CTRL ON S012361/N02162 S012388/N02166 S012367/N02162	
R2700.4		PMC X CTRL FIN S012351/N02159 S012363/N02162 S012392/N02166	
R2701.0		PMC X CTRL FIN X3 S012325/N02152 S012352/N02159 S012354/N02159	
R2710.0		PMC Y CTRL S012406/N02170 S012409/N02171 S012397/N02167	
R2710.1		PMC Y CTRL PULSE S012411/N02172 S012419/N02173 S012425/N02174 S012431/N02175 S012439/N02176 S012408/N02170	
R2710.2		PMC Y CTRL PULSE AUX S012407/N02170 S012410/N02171	
R2710.3		PMC Y CTRL ON S012412/N02172 S012451/N02177 S012418/N02172	
R2710.4		PMC Y CTRL FIN S012398/N02168 S012402/N02169 S012414/N02172 S012455/N02177	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2711.0	COYFX4	PMC Y CTRL FIN X4	
	S012319/N02151 S012395/N02167 S012399/N02168 S012401/N02168		
R2711.1	COYFX6	PMC Y CTRL FIN X6	
	S012301/N02149 S012403/N02169 S012405/N02169		
R2720.0	COZ	PMC Z CTRL	
	S012462/N02180 S012465/N02181 S012457/N02178		
R2720.1	COZ1	PMC Z CTRL PULSE	
	S012467/N02182 S012475/N02183 S012481/N02184 S012486/N02185 S012464/N02180		
R2720.2	COZ2	PMC Z CTRL PULSE AUX	
	S012463/N02180 S012466/N02181		
R2720.3	COZ3	PMC Z CTRL ON	
	S012468/N02182 S012495/N02186 S012474/N02182		
R2720.4	COZFIN	PMC Z CTRL FIN	
	S012458/N02179 S012470/N02182 S012499/N02186		
R2721.0	COZFX2	PMC Z CTRL FIN X2	
	S012331/N02153 S012459/N02179 S012461/N02179		
R2800.0	ACTX	PMC X AXIS	
	S008108/N01422 S008111/N01423 S008103/N01420		
R2800.1	ACTX1	PMC X CTRL PULSE	
	S008113/N01424 S008121/N01425 S008127/N01426 S008132/N01427 S008110/N01422		
R2800.2	ACTX2	PMC X CTRL PULSE AUX	
	S008109/N01422 S008112/N01423		
R2800.3	ACTX3	PMC X CTRL ON	
	S008114/N01424 S008141/N01428 S008120/N01424		
R2800.4	ACTXFIN	PMC X CTRL FIN	
	S008104/N01421 S008116/N01424 S008145/N01428		
R2801.0	ACTXFX4	PMC X CTRL FIN X4	
	S007748/N01369 S007788/N01373 S008105/N01421 S008107/N01421		
R2810.0	ACTY	PMC Y CTRL	
	S008160/N01432 S008163/N01433 S008150/N01429		
R2810.1	ACTY1	PMC Y CTRL PULSE	
	S008165/N01434 S008173/N01435 S008179/N01436 S008185/N01437 S008190/N01438 S008162/N01432		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2810.2	ACTY2	PMC Y CTRL PULSE AUX	
	S008161/N01432		
	S008164/N01433		
R2810.3	ACTY3	PMC Y CTRL ON	
	S008166/N01434	S008199/N01439	
	S008172/N01434		
R2810.4	ACTYFIN	PMC Y CTRL FIN	
	S008151/N01430	S008155/N01431 S008168/N01434	
	S008203/N01439		
R2811.0	ACTYFX4	PMC Y CTRL FIN X4	
	S007749/N01369	S007789/N01373 S008148/N01429 S008152/N01430	
	S008154/N01430		
R2811.1	ACTYFX10	PMC Y CTRL FIN X10	
	S007449/N01328	S007494/N01335 S007730/N01367 S008156/N01431 S009089/N01545	
	S008159/N01431		
R2820.0	ACTZ	PMC Z CTRL	
	S008259/N01447	S008262/N01448	
	S008230/N01440		
R2820.1	ACTZ1	PMC Z CTRL PULSE	
	S008264/N01449	S008272/N01450 S008281/N01451 S008291/N01452 S008301/N01453	
	S008311/N01454	S008321/N01455 S008332/N01456 S008343/N01457 S008352/N01458	
	S008261/N01447		
R2820.2	ACTZ2	PMC Z CTRL PULSE AUX	
	S008260/N01447		
	S008263/N01448		
R2820.3	ACTZ3	PMC Z CTRL ON	
	S008265/N01449	S008365/N01459	
	S008271/N01449		
R2820.4	ACTZFIN	PMC Z CTRL FIN	
	S008231/N01441	S008235/N01442 S008239/N01443 S008243/N01444 S008247/N01445	
	S008253/N01446	S008267/N01449	
	S008369/N01459		
R2821.0	ACTZFX2	PMC Z CTRL FIN X2	
	S007805/N01375	S008206/N01440 S008232/N01441	
	S008234/N01441		
R2821.1	ACTZFX5	PMC Z CTRL FIN X5	
	S007781/N01372	S008209/N01440 S008236/N01442	
	S008238/N01442		
R2821.2	ACTZFX12	PMC Z CTRL FIN X12	
	S007716/N01365	S008211/N01440 S008240/N01443	
	S008242/N01443		
R2821.3	ACTZFX13	PMC Z CTRL FIN X13	
	S007707/N01364	S008215/N01440 S008244/N01444	
	S008246/N01444		
R2821.4	ACTZFX15	PMC Z CTRL FIN X15	
	S007425/N01324	S007684/N01362 S008219/N01440 S008248/N01445	
	S008252/N01445		
R2821.5	ACTZFX16	PMC Z CTRL FIN X16	
	S007414/N01322	S007443/N01327 S007476/N01332 S007677/N01361 S008254/N01446	
	S008258/N01446		


















































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		S008432/N01473	
R2840.1		ACTA1 PMC A CTRL PULSE	
		S008442/N01477 S008450/N01478 S008456/N01479 S008461/N01480	
		S008439/N01475	
R2840.2		ACTA2 PMC A CTRL PULSE AUX	
		S008438/N01475	
		S008441/N01476	
R2840.3		ACTA3 PMC A CTRL ON	
		S008443/N01477 S008470/N01481	
		S008449/N01477	
R2840.4		ACTAFIN PMC A CTRL FIN	
		S008433/N01474 S008445/N01477	
		S008474/N01481	
R2841.0		ACTAFX3 PMC A CTRL FIN X3	
		S008434/N01474	
		S008436/N01474	
R2860.0		ACTSL PMC SL CTRL	
		S008544/N01491 S008547/N01492	
		S008507/N01482	
R2860.1		ACTSL1 PMC SL CTRL PULSE	
		S008549/N01493 S008559/N01494 S008568/N01495 S008577/N01496 S008586/N01497	
		S008594/N01498 S008602/N01499	
		S008546/N01491	
R2860.2		ACTSL2 PMC SL CTRL PULSE AUX	
		S008545/N01491	
		S008548/N01492	
R2860.3		ACTSL3 PMC SL CTRL ON	
		S008550/N01493 S008611/N01500	
		S008558/N01493	
R2860.4		ACTSLFIN PMC SL CTRL FIN	
		S008508/N01483 S008512/N01484 S008516/N01485 S008520/N01486 S008524/N01487	
		S008528/N01488 S008532/N01489 S008536/N01490 S008554/N01493	
		S008615/N01500	
R2861.0		ACTSLFX6 PMC SL CTRL FIN X6	
		S007774/N01371 S008477/N01482 S008509/N01483	
		S008511/N01483	
R2861.1		ACTSLFX7 PMC SL CTRL FIN X7	
		S007758/N01370 S008480/N01482 S008513/N01484	
		S008515/N01484	
R2861.2		ACTSLFX8 PMC SL CTRL FIN X8	
		S007744/N01369 S008483/N01482 S008517/N01485	
		S008519/N01485	
R2861.3		ACTSLFM1 PMC SL CTRL FIN M1	
		S007649/N01357 S008489/N01482 S008521/N01486	
		S008523/N01486	
R2861.4		ACSLFM21 PMC SL CTRL FIN M2-1	
		S007635/N01356 S008492/N01482 S008525/N01487	
		S008527/N01487	

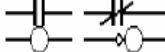
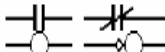
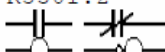
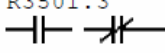
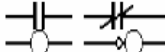
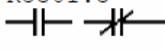
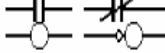
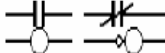
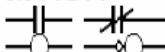
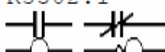
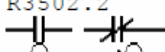
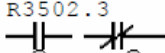
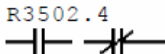
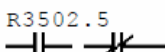
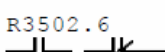
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2861.5	ACSLFM22	PMC SL CTRL FIN M2-2	
		S007627/N01355 S008529/N01488	
		S008531/N01488	
R2861.6	ACSLF16	PMC SL CTRL FIN X16	
		S007693/N01363 S008486/N01482 S008533/N01489	
		S008535/N01489	
R2862.0	ACSLFM	PMC SL CTRL FIN MEM	
		S008537/N01490 S011382/N01985 S011386/N01986	
		S008543/N01490	
R2870.0	ACTSR	PMC SR CTRL	
		S008721/N01511 S008724/N01512	
		S008684/N01503	
R2870.1	ACTSR1	PMC SR CTRL PULSE	
		S008726/N01513 S008736/N01514 S008741/N01515 S008745/N01516 S008753/N01517	
		S008761/N01518 S008770/N01519 S008779/N01520 S008787/N01521 S008795/N01522	
		S008801/N01523 S008807/N01524 S008814/N01525 S008821/N01526 S008827/N01527	
		S008833/N01528 S008839/N01529	
		S008723/N01511	
R2870.2	ACTSR2	PMC SR CTRL PULSE AUX	
		S008722/N01511	
		S008725/N01512	
R2870.3	ACTSR3	PMC SR CTRL ON	
		S008727/N01513 S008850/N01530	
		S008735/N01513	
R2870.4	ACTSRFIN	PMC SR CTRL FIN	
		S008685/N01504 S008689/N01505 S008693/N01506 S008697/N01507 S008701/N01508	
		S008705/N01509 S008709/N01510 S008731/N01513	
		S008854/N01530	
R2870.5	ACTSR51	PMC SR CTRL AUX 1	
		S008683/N01503	
		S008630/N01501	
R2870.6	ACTSR52	PMC SR CTRL AUX 2	
		S008682/N01503	
		S008678/N01502	
R2871.0	ACSRFT7	PMC SR CTRL FIN T7	
		S007274/N01299 S008618/N01501 S008686/N01504	
		S008688/N01504	
R2871.1	ACSRFT25	PMC SR CTRL FIN T25	
		S007166/N01285 S008690/N01505	
		S008692/N01505	
R2871.2	ACSRFX7	PMC SR CTRL FIN X7	
		S007760/N01370 S008622/N01501 S008694/N01506	
		S008696/N01506	
R2871.3	ACSRFX14	PMC SR CTRL FIN X14	
		S007694/N01363 S008625/N01501 S008698/N01507	
		S008700/N01507	
R2871.4	ACSRFM21	PMC SR CTRL FIN M2-1	
		S007637/N01356 S008628/N01501 S008702/N01508	
		S008704/N01508	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2871.6		PMCSR CTRL FIN M8 S007567/N01347 S008706/N01509 S008708/N01509	
R2872.0		PMCSR CTRL FIN MEM S008710/N01510 S011416/N01995 S011420/N01996 S011424/N01997 S011428/N01998 S011432/N01999 S011436/N02000 S011440/N02001 S011444/N02002 S008720/N01510	
R3000.0		EXTRA M CODE 1 S013023/N02283 S013038/N02285 S013049/N02286 S013004/N02280	
R3000.1		EXTRA M CODE 2 S013024/N02283 S013039/N02285 S013053/N02287 S013013/N02281	
R3000.2		EXTRA M CODE 3 S013025/N02283 S013040/N02285 S013057/N02288 S013022/N02282	
R3000.4		EXTRA M CODE 5 S013036/N02285 S013041/N02285 S013061/N02289 S013035/N02284	
R3000.5		EXTRA M CODE FINISH S013045/N02285 S013051/N02286 S013055/N02287 S013059/N02288 S013063/N02289 S013068/N02291 S013072/N02292 S013076/N02293 S013080/N02294 S013084/N02295 S013088/N02296 S013092/N02297 S013066/N02290	
R3000.6		EXTRA M CODE OUTPUT OK S013046/N02285 S013050/N02286 S013054/N02287 S013058/N02288 S013062/N02289 S013065/N02290 S013048/N02285	
R3001.4		TOOL BROKEN ON S002250/N00396 S002264/N00397 S002283/N00398 S013138/N02306 S013429/N02358 S013137/N02305	
R3004.0		TOUCH SW L.S ERR S000578/N00115 S013110/N02300 S013113/N02300	
R3004.1		TOUCH SW TOOL ERR S000575/N00114 S004940/N00884 S013116/N02301 S013124/N02302 S013136/N02305 S013453/N02362 S013120/N02301	
R3004.2		M32 FIN S013142/N02307 S013127/N02302	
R3004.3		M32 AUX S000401/N00082 S013106/N02300 S013129/N02303	
R3004.4		TOOL LIFE RESTART STOP S000573/N00113 S001368/N00238 S001567/N00267 S002345/N00406 S013097/N02298 S013099/N02298	
R3005.2		TOOL BROKEN MEM S013432/N02358 S013438/N02359 S013441/N02360 S013437/N02358	

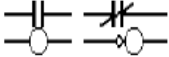
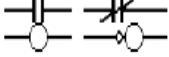
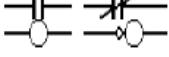
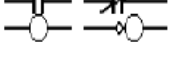
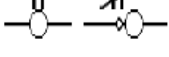
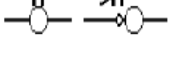

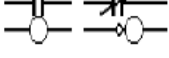
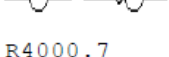
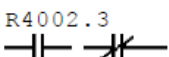
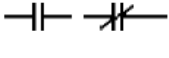
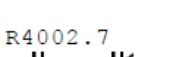
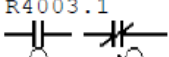


ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R3005.3		BRKHL D TOOL BROKEN HOLD S013440/N02359	
R3005.4		BRKSCH BROKEN PROGRAM SEARCH S001592/N00271 S013444/N02360 S013449/N02361 S013448/N02360	
R3005.5		BRKSCHOF BROKEN SEARCH OFF S013425/N02357 S013436/N02358 S013446/N02360 S013454/N02362	
R3007.7		S004967/N00888	
R3010.3		HSKPWF2 HIGH SKIP PARAM INPUT OFF 2 S013327/N02340 S013389/N02351 S013329/N02340	
R3010.5		HSKPWF2 HIGH SKIP PARAM INPUT OK 2 S013294/N02332 S013411/N02355 S013416/N02356 S013414/N02355	
R3011.0		HSKP1S HIGH SKIP 1 SELECT S013323/N02339 S013350/N02345 S013367/N02348 S013415/N02356 S013319/N02337	
R3011.1		HSKP2S HIGH SKIP 2 SELECT S013324/N02339 S013356/N02346 S013373/N02349 S013380/N02350 S013419/N02356 S013322/N02338	
R3011.2		HSKPCHG HIGH SKIP PARAM INPUT S013332/N02341 S013334/N02342 S013339/N02343 S013344/N02344 S013387/N02351 S013403/N02353 S013407/N02354 S013325/N02339	
R3011.3		HSKPWF1 HIGH SKIP PARAM INPUT OFF 1 S013328/N02340 S013331/N02341 S013345/N02344 S013351/N02345 S013357/N02346 S013362/N02347 S013368/N02348 S013374/N02349 S013381/N02350 S013388/N02351 S013395/N02352 S013412/N02355 S013333/N02341	
R3011.4		HSKPWNW HIGH SKIP PARAM INPUT WINDW S013326/N02340 S013330/N02341 S013401/N02353 S013405/N02354 S013410/N02355 S013394/N02351	
R3011.5		HSKPWF1 HIGH SKIP PARAM INPUT OK 1 S013295/N02332 S013406/N02354 S013417/N02356 S013409/N02354	
R3011.6		HSKP1.M HIGH SKIP PARAM INPUT MEM S000093/N00021 S000095/N00021 S000104/N00022 S013318/N02337 S013418/N02356 S013544/N02380 S013420/N02356	
R3011.7		HSKPCHG2 HIGH SKIP PARAM INPUT 2 S013390/N02351 S013396/N02352	
R3014.0		S013398/N02353	
R3014.1		S013399/N02353	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R3014.2		S013400/N02353	
R3020.0		M64FF M64 MEM S013483/N02370 S013501/N02373 S013531/N02378 S013543/N02380 S013490/N02370	
R3020.1		M66FF M66 MEM S013492/N02371 S013496/N02372 S013495/N02371	
R3020.2		TPSTSTP OMI STOP S013512/N02375 S013518/N02376 S013534/N02378 S013520/N02376	
R3020.3		MPSTOP MP DETECT STOP S013527/N02377 S013533/N02378 S013536/N02379 S013529/N02377	
R3400.0		M130FF MODEL MEM S013806/N02431 S013819/N02433 S013837/N02436 S013841/N02438 S013865/N02442 S013797/N02429	
R3400.1		M132FF MODEL INTERRUPT S013834/N02435 S013843/N02438 S013994/N02463 S013997/N02464 S013836/N02435	
R3400.2		M130S MODEL AUX S013826/N02434 S013838/N02436	
R3400.3		M130STS MODEL ST AUX S013870/N02442 S013840/N02437	
R3400.4		M130STOK MODEL ST OK S013850/N02439 S013849/N02438	
R3400.5		M130ST MODEL ST S013839/N02437 S013851/N02439 S013855/N02440 S013859/N02441 S013871/N02442 S013854/N02439	
R3400.6		M130ONM MODEL ST MEM S013842/N02438 S013856/N02440 S013860/N02441 S013858/N02440	
R3400.7		ZACT Z COMPENSATION S013844/N02438 S013873/N02443 S013876/N02444 S013972/N02459 S013872/N02442	
R3401.0		ZACTST Z COMPENSATION ST S013880/N02445 S013899/N02448 S013908/N02449 S013928/N02452 S013938/N02453 S013946/N02454 S013951/N02455 S013960/N02457 S013875/N02443	
R3401.1		ZACTST1 Z COMPENSATION ST 1 S013874/N02443 S013877/N02444	
R3401.2		ZEXINEND Z COMPENSATION FIN S013852/N02439 S013978/N02460 S013983/N02461 S013988/N02462 S013977/N02459	

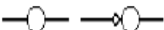
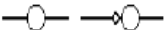
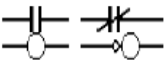
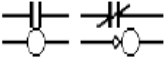
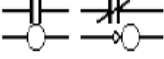
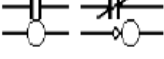
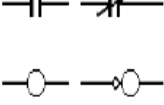
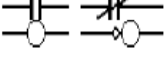
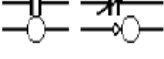
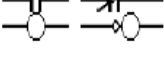
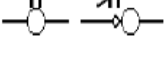
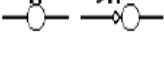
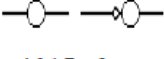
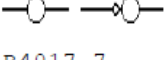
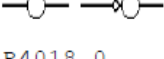

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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		S013791/N02428	
R3402.0		SUBB ERR	
		S013878/N02445 S013965/N02458	
		S013886/N02445	
R3402.1		MULB ERR	
		S013897/N02448 S013966/N02458	
		S013905/N02448	
R3402.2		MULB ERR 1	
		S013906/N02449 S013967/N02458	
		S013914/N02449	
R3402.3		DIVB ERR	
		S013926/N02452 S013968/N02458	
		S013935/N02452	
R3402.4		DIVBB ERR1	
		S013936/N02453 S013969/N02458	
		S013945/N02453	
R3403.0		SP HEAT TREATMENT COMPENSATION	
		S013743/N02420	
R3500.0		T CODE NORMAL	
		S004667/N00839 S004700/N00843	
		S004504/N00809	
R3500.1		T CODE TOOL INFO	
		S004516/N00812 S004521/N00813 S004524/N00814 S004533/N00815 S004631/N00834	
		S004639/N00835 S004699/N00843 S004712/N00845	
		S004508/N00810	
R3500.2		T NO FIN OK	
		S004540/N00816 S004548/N00817 S004550/N00818 S004693/N00843	
		S004543/N00816	
R3500.3		T NO FIN NG	
		S004542/N00816 S004546/N00817 S004551/N00818 S004623/N00833 S004695/N00843	
		S004710/N00845	
		S004549/N00817	
R3500.4		T NO READ FIN	
		S004511/N00811 S004553/N00819 S004558/N00820 S004561/N00821 S004566/N00822	
		S004569/N00823 S004574/N00824 S004577/N00825 S004582/N00826 S004585/N00827	
		S004590/N00828 S004599/N00829 S004604/N00830 S004611/N00831 S004617/N00832	
		S004646/N00836 S004673/N00840 S004681/N00841 S004687/N00842	
		S004552/N00818	
R3500.5		POT NO EQ 0 ERR	
		S004594/N00829 S004596/N00829	
		S004560/N00820	
R3500.6		SP TOOL NO EQ 0 ERR	
		S004605/N00830 S004624/N00833 S004674/N00840 S004682/N00841 S004696/N00843	
		S004709/N00845	
		S004576/N00824	
R3500.7		TOOL NO DETE EQ 0 ERR	
		S004612/N00831 S004625/N00833	
		S004584/N00826	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R3501.0	NG=TLBK	TOO NO BROKEN ERR	
	S004618/N00832 S004626/N00833 S004592/N00828		
R3501.1	TNOALM	TOOL NO AL	
	S004694/N00843 S004658/N00837		
R3501.2	TCODE=0	T CODE EQ 0	
	S004593/N00829 S004595/N00829 S004523/N00813		
R3501.3	TFOK	T CODE READ OK	
	S004534/N00815 S004632/N00834 S004668/N00839 S004698/N00843 S006731/N01222 S006732/N01222 S004701/N00843		
R3501.4	TFNG	T CODE READ NG	
	S004535/N00815 S004711/N00845 S011282/N01948 S004713/N00845		
R3501.5	TLRQON	TOOL REQUIRE ON	
	S004715/N00846 S004723/N00847 S004729/N00848 S004732/N00849 S004739/N00850 S004770/N00855 S004773/N00856 S004720/N00846		
R3501.6	NTRQOK	NEW TOOL REQUIRE OK	
	S004744/N00851 S004752/N00852 S004754/N00853 S004747/N00851		
R3501.7	NTRQNG	NEW TOOL REQUIRE NG	
	S004746/N00851 S004750/N00852 S004761/N00854 S004753/N00852		
R3502.0	TLRQOK	TOOL REQUIRE OK	
	S004755/N00853 S004784/N00858 S004759/N00853		
R3502.1	NTRQCHK	NEW TOOL REQUIRE OFF CHECK	
	S004740/N00850 S004769/N00855 S004772/N00855		
R3502.2	TLRQOK1	TOOL REQUIRE FIN	
	S004717/N00846 S004785/N00858 S004790/N00858		
R3502.3	OLTLREQ1	OLD TOOL REQUIRE FIN	
	S004724/N00847 S004728/N00848 S004733/N00849 S004771/N00855 S004820/N00864 S004730/N00848		
R3502.4	M30TLRQS	M30 TOOL REQUIRE	
	S004793/N00859 S004800/N00860 S004810/N00862 S004797/N00859		
R3502.5	M30RQOK	M30 TOOL REQUIRE OK	
	S001401/N00245 S002337/N00405 S004795/N00859 S004804/N00861 S004822/N00864 S004809/N00861		
R3502.6	TLFOVS1	TOOL LIFE OVERWRITE REQ	
	S004836/N00867 S004840/N00868 S004845/N00869 S004848/N00870 S004853/N00871 S004856/N00872 S004858/N00872 S004869/N00873 S004830/N00865		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R3502.7		TOOL LIFE OVERWRITE REQ AUX	
		S004598/N00829	
		S004568/N00822	
R3503.0		TOOL LIFE OVERWRITE DATA SET	
		S004857/N00872	S004867/N00873
		S004864/N00872	
R3503.1		TOOL LIFE CNT OK	
		S004889/N00875	
		S004888/N00874	
R3503.2		S004897/N00876	
		S004895/N00875	
R3503.3		TOOL LIFE CNT	
		S004903/N00876	
R3503.4		TOOL NO AL MACHINE HOLD	
		S004666/N00838	
R3503.5		TOOL LIFE OVERWRITE DATA EQ 0	
		S004865/N00873	S005065/N00905
		S004847/N00869	
R3503.6		TOL LIFE OVERWRITE DATA>1023	
		S004866/N00873	
		S004855/N00871	
R3503.7		TOOL LIFE OFF TIMER SET	
		S004907/N00878	S004914/N00879 S004923/N00880 S004930/N00881
		S004906/N00877	
R3504.0		TOOL LIFE NO FIN	
		S004915/N00879	S004921/N00880 S004929/N00881 S005060/N00904
		S004924/N00880	
R3504.1		TOOL BORKEN INFO SET	
		S004937/N00884	S004948/N00885 S004957/N00886 S004964/N00887
		S004944/N00884	
R3504.2		TOOL BROKEN INFO FIN	
		S004938/N00884	S004949/N00885 S004955/N00886 S004963/N00887 S005071/N00907
		S013427/N02358	
		S004958/N00886	
R3504.3		TOOL SKIP LOAD MONITOR	
		S004973/N00889	S004982/N00890 S004989/N00891
		S004969/N00888	
R3504.4		TOL LOAD MONITOT SKIP OK FIN	
		S004974/N00889	S004980/N00890 S004988/N00891
		S004983/N00890	
R3504.5		AMCS SKIP	
		S004994/N00893	S005002/N00894 S005011/N00895 S005018/N00896
		S004993/N00892	
R3504.6		AMCS SKIP OK	
		S005003/N00894	S005009/N00895 S005017/N00896 S005074/N00908
		S005012/N00895	

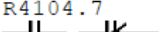
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R3504.7	U027ON 	TOOL BROKEN COMMEND	
	S004941/N00884 S004934/N00882		
R3505.0	U027ON1 	TOOL BROKEN COMMEND 1	
	S004933/N00882 S004936/N00883		
R3505.1	TLLFRST 	TOOL LIFE RESET	
	S005020/N00897 S005031/N00898	S005026/N00898 S005032/N00899 S005041/N00900	
R3505.2	TLLFROF 	TOOL LIFE RESET OFF CHECK	
	S005024/N00898 S005042/N00900	S005033/N00899 S005040/N00900	
R3505.3	TLLFRSF 	TOOL LIFE RESET FIN	
	S005028/N00898 S005055/N00902	S005052/N00902	
R3506.0	TFACTOK 	T CODE RUN OK	
	S004503/N00809 S004500/N00808	S004507/N00810	
R4000.4	MAN 	EACH SELECT	
	S001370/N00239 S002615/N00455 S004045/N00719 S007908/N01390 S008139/N01428 S008447/N01477 S008846/N01530 S012268/N02145 S012449/N02177 S013659/N02403 S001725/N00300	S001372/N00239 S001376/N00239 S004019/N00718 S006951/N01258 S007925/N01391 S007938/N01392 S007959/N01393 S008170/N01434 S008197/N01439 S008269/N01449 S008468/N01481 S008552/N01493 S008607/N01500 S008729/N01513 S008846/N01530 S009172/N01556 S009203/N01557 S009230/N01558 S012280/N02146 S012365/N02162 S012386/N02166 S012472/N02182 S012493/N02186 S012792/N02239 S012886/N02257	S002553/N00441 S002568/N00443 S004021/N00718 S004043/N00719 S007010/N01263 S007127/N01277 S008118/N01424 S008363/N01459 S008729/N01513 S008846/N01530 S009230/N01558 S011222/N01932 S012416/N02172 S012886/N02257
R4000.5	MAN1 	M/C SELECT	
	S002494/N00429 S001731/N00301	S002498/N00430 S004365/N00781 S004372/N00781	
R4000.6	MAN2 	ATC SELECT 1	
	S001734/N00302		
R4000.7	MAN3 	ATC SELECT 2	
	S001736/N00303		
R4002.3	R0% 	RAPID OVEERIDE 0%	
	S008007/N01402	S008020/N01403	
R4002.4	R1% 	RAPID OVEERIDE 1%	
	S008021/N01403		
R4002.5	R5% 	RAPID OVEERIDE 5%	
	S008022/N01403		
R4002.7	R50% 	RAPID OVEERIDE 50%	
	S008008/N01402		
R4003.1	AXISITLK 	AXIS INTERLOCK	
	S002253/N00396 S002245/N00395	S002267/N00397 S002289/N00398	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R4004.0		TEACHIN S002364/N00409 S002368/N00409 S002374/N00410 S002359/N00408	TEACHIN MODE
R4004.1		JOG_MOD S001721/N00300 S002363/N00409 S002378/N00411 S001719/N00299	JOG MODE
R4004.3		HANINRPT S002598/N00448 S002601/N00449 S002604/N00450 S002596/N00447	HANDLE INEX REQ TOOL
R4004.5		RCH S008006/N01402 S008009/N01402 S008019/N01403 S008024/N01403	RAPID EXCHANGE
R4005.0		HPSV-SA S002998/N00538 S002999/N00538 S003009/N00539 S003010/N00539 S002985/N00537	HANDLE PROSESS SERVO SWING AR
R4005.1		HMOFF.S S002938/N00533 S002968/N00536 S002981/N00537 S002916/N00529	HANDLE MONITOR OFF SELECT
R4005.2		CSHM1 S002922/N00532 S002924/N00532 S002919/N00530	CS AXIS MANUAL MODE 1
R4005.3		CSHM2 S002918/N00530 S002921/N00531	CS AXIS MANUAL MODE 2
R4005.4		CSHM.M S002923/N00532 S002925/N00532 S002939/N00533 S002969/N00536 S002982/N00537 S002992/N00538 S012982/N02277 S002929/N00532	CS AXIS MANUAL MODE KEEP
R4006.1		JOG+ S002501/N00431 S002511/N00433 S002521/N00435 S002531/N00437 S002541/N00438 S002555/N00441 S002578/N00444 S002496/N00429	+JOG
R4006.2		JOG- S001163/N00209 S002504/N00432 S002518/N00434 S002528/N00436 S002538/N00438 S002564/N00442 S002567/N00443 S002582/N00445 S002500/N00430	- JOG
R4007.0		MULERR S002850/N00501	MUL ERR
R4007.2		MULERR1 S002858/N00502	MUL ERR1
R4009.0		M01_MEM S003974/N00712 S011544/N02021 S012822/N02245 S012833/N02247 S012835/N02247	M01 MEMORY
R4010.0		OVR1 S002800/N00495	OVERRIDE 1
R4010.1		OVR2 S002811/N00496	OVERRIDE 2
R4010.2		OVR4 S002821/N00497	OVERRIDE 4

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R4010.3		OVR8 S002830/N00498	OVERRIDE 8
R4010.4		OVR16 S002836/N00499	OVERRIDE 16
R4016.0		MEM.S S001465/N00255 S001684/N00291	MEMORY MODE S001511/N00259 S001565/N00267 S001658/N00285 S002360/N00409
R4016.1		EDT.S S002362/N00409 S001688/N00292	EDIT MODE S002373/N00410
R4016.2		MDI.S S001397/N00244 S001692/N00293	MDI MODE S007058/N01269
R4016.3		TAP.S S002361/N00409 S001696/N00294	DNC MODE S002384/N00412
R4016.4		HAN.S S001720/N00300 S002240/N00395 S002381/N00411 S001700/N00295	HANDLE MODE S001724/N00300 S001732/N00302 S001735/N00303 S002237/N00395 S002262/N00397 S002279/N00398 S002369/N00409 S002377/N00411 S002495/N00429 S002499/N00430 S009201/N01557
R4016.5		JOG-L.S S001718/N00299 S001705/N00296	JOG MODE AUX S002837/N00500
R4017.0		RT.S S001722/N00300 S001713/N00297	RAPID MODE S002366/N00409 S002379/N00411 S002404/N00418
R4017.1		ZRN.S S001723/N00300 S001717/N00298	ZERO REFERENCE MODE S002367/N00409 S002380/N00411 S002386/N00413
R4017.3		X,S S002437/N00423 S002443/N00423	AXIS SELECT X S002502/N00431 S002505/N00432
R4017.4		Y,S S002448/N00424 S002454/N00424	AXIS SELECT Y S002512/N00433 S002519/N00434
R4017.5		Z,S S002459/N00425 S002465/N00425	AXIS SELECT Z S002522/N00435 S002529/N00436
R4017.6		4,S S002470/N00426 S002476/N00426	AXIS SELECT 4TH S002532/N00437 S002539/N00438 S011990/N02109
R4017.7		5,S S002481/N00427 S002487/N00427	AXIS SELECT 5TH S002542/N00439 S002565/N00442 S011953/N02102
R4018.0		AUX,S S002579/N00444 S002492/N00428	AUX AXIS SELECT S002583/N00445

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R4018.2		LIT_ON/OFF_TIME AL LIGHT ON/OFF TIME 3	
		S001137/N00206 S012825/N02245 S012841/N02250 S012844/N02250 S012855/N02251	
		S012955/N02269 S012957/N02269 S012983/N02277	
		S012959/N02269	
R4020.0		FV0.S FEED OVERRIDE 0%	
		S002252/N00396 S002266/N00397 S002285/N00398 S002405/N00418 S004774/N00856	
		S006832/N01235 S008003/N01402 S008013/N01403	
		S002669/N00474	
R4020.1		FV10.S FEED OVERRIDE 10%	
		S002790/N00495 S008014/N01403	
		S002675/N00475	
R4020.2		FV20.S FEED OVERRIDE 20%	
		S002801/N00496 S008015/N01403	
		S002681/N00476	
R4020.3		FV30.S FEED OVERRIDE 30%	
		S002791/N00495 S002802/N00496 S008016/N01403	
		S002687/N00477	
R4020.4		FV40.S FEED OVERRIDE 40%	
		S002812/N00497 S008017/N01403	
		S002693/N00478	
R4020.5		FV50.S FEED OVERRIDE 50%	
		S002792/N00495 S002813/N00497 S008018/N01403	
		S002699/N00479	
R4020.6		FV60.S FEED OVERRIDE 60%	
		S002803/N00496 S002814/N00497 S008004/N01402 S008023/N01403	
		S002705/N00480	
R4020.7		FV70.S FEED OVERRIDE 70%	
		S002793/N00495 S002804/N00496 S002815/N00497 S008005/N01402	
		S002711/N00481	
R4021.0		FV80.S FEED OVERRIDE 80%	
		S002822/N00498	
		S002717/N00482	
R4021.1		FV90.S FEED OVERRIDE 90%	
		S002794/N00495 S002823/N00498	
		S002723/N00483	
R4021.2		FV100.S FEED OVERRIDE 100%	
		S002805/N00496 S002824/N00498	
		S002729/N00484	
R4021.3		FV110.S FEED OVERRIDE 110%	
		S002795/N00495 S002806/N00496 S002825/N00498	
		S002735/N00485	
R4021.4		FV120.S FEED OVERRIDE 120%	
		S002816/N00497 S002826/N00498	
		S002741/N00486	
R4021.5		FV130 FEED OVERRIDE 130%	
		S002796/N00495 S002817/N00497 S002827/N00498	
		S002747/N00487	
R4021.6		FV140.S FEED OVERRIDE 140%	
		S002807/N00496 S002818/N00497 S002828/N00498	
		S002753/N00488	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R4021.7		FV150.S S002797/N00495 S002808/N00496 S002819/N00497 S002829/N00498 S002759/N00489	FEED OVERRIDE 150%
R4022.0		FV160.S S002831/N00499 S002765/N00490	FEED OVERRIDE 160%
R4022.1		FV170.S S002798/N00495 S002832/N00499 S002771/N00491	FEED OVERRIDE 170%
R4022.2		FV180.S S002809/N00496 S002833/N00499 S002777/N00492	FEED OVERRIDE 180%
R4022.3		FV190.S S002799/N00495 S002810/N00496 S002834/N00499 S002783/N00493	FEED OVERRIDE 190%
R4022.4		FV200.S S002820/N00497 S002835/N00499 S002789/N00494	FEED OVERRIDE 200%
R4050.0		S002408/N00419 S002421/N00420 S002424/N00421 S002429/N00422 S002524/N00435 S004027/N00718 S004051/N00719 S011945/N02101 S011982/N02108 S002419/N00419	
R4050.1		S002425/N00421 S002534/N00437 S002544/N00439 S002423/N00420	
R4050.2		S002430/N00422 S002507/N00432 S002514/N00433 S002428/N00421	
R4050.3		S002418/N00419 S002433/N00422	
R4050.5		S005240/N00939 S009963/N01686 S009965/N01686 S009955/N01684	
R4050.6		S009953/N01684 S009962/N01685	
R4050.7		S009964/N01686 S009966/N01686 S009971/N01687 S009994/N01688 S009969/N01686	
R4051.0		S010015/N01691 S010018/N01691 S010007/N01689	
R4051.1		S010005/N01689 S010014/N01690	
R4102.0		S002859/N00503	

































ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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R4102.2		S002863/N00505	
R4102.3		S002865/N00506	
R4102.4		S002867/N00507	
R4102.5		S002869/N00508	
R4102.6		S002871/N00509	
R4102.7		S002873/N00510	
R4104.0		S002875/N00511	
R4104.1		S002877/N00512	
R4104.2		S002879/N00513	
R4104.3		S002881/N00514	
R4104.4		S002883/N00515	
R4104.5		S002885/N00516	
R4104.6		S002887/N00517	
R4104.7		S002889/N00518	
R4105.0		S002891/N00519	
R4105.1		S002893/N00520	
R4105.2		S002895/N00521	
R4105.3		S002897/N00522	
R4105.4		S002899/N00523	
R4105.5		S002901/N00524	
R4105.6		S002903/N00525	

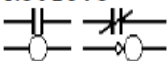
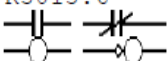
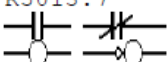
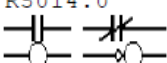
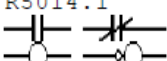
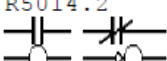
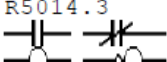
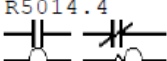
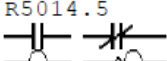
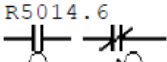
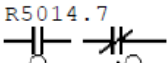
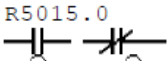
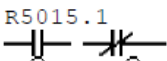
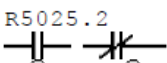
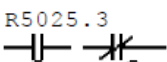
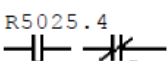
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R4105.7		S002905/N00526	
R5000.0		NC_STOP_TIMER NC STOP DELAY TIMER	
		S000848/N00160 S001594/N00272 S003913/N00706 S006246/N01138 S006380/N01164	
		S000854/N00161	
R5000.1		TMRB2 NC & SERVO RDY DET TIMER	
		S000514/N00104 S000542/N00109 S000855/N00162 S001629/N00278 S004261/N00760	
		S010229/N01756 S010233/N01757 S012594/N02202 S012677/N02215 S012683/N02216	
		S000864/N00163	
R5000.2		TMSPPM STATUS LIGHT ON/OFF TIMER	
		S012949/N02268 S012954/N02269 S012956/N02269	
		S012953/N02268	
R5000.3		EMG_DELAY_TIMER EMG DELAY TIMER	
		S001286/N00228	
		S000869/N00164	
R5000.4		TMDEN DEN TIMER	
		S011902/N02092 S011909/N02094	
		S011918/N02096	
R5000.5		TMCYST CYCLE START DELAY TIMER	
		S001560/N00266 S001566/N00267 S001579/N00269	
		S001577/N00268	
R5000.6		CYST2T CYCLE START 2 MEM DELAY TIMER	
		S001510/N00259	
		S001589/N00270	
R5000.7		TMEXMS EXTRA M CODE DELAY TIMER	
		S013030/N02284	
		S013029/N02283	
R5001.0		WKLYDRY WEEK PROG RESTART DELAY TIME	
		S001637/N00280 S001640/N00281	
		S001636/N00279	
R5001.3		AUTO_PW_OF_TIMG AUTO POWER OFF TIMING	
		S000950/N00176	
		S001457/N00253	
R5001.4		TMM32C TOUCH SW CHECK	
		S013114/N02301 S013121/N02302	
		S013105/N02299	
R5001.5		TMRCSMCR CUSTOM MACRO TIMER	
		S013461/N02364	
		S013460/N02363	
R5001.7		TMRBM_32 SKIP INPUT RELAY ON TIMER	
		S013108/N02300 S013128/N02303	
		S013135/N02304	
R5002.0		MAG.DOR.CL MAGAZINE DOOR CLOSE	
		S001302/N00231 S001323/N00233 S012265/N02144 S012270/N02145 S012305/N02150	
		S012505/N02187 S012529/N02191 S012544/N02193	
		S012257/N02142	
R5002.1		MAG.DOR.OP MAGAZINE DOOR OPEN	
		S002087/N00355 S009952/N01684 S009960/N01685 S009973/N01687 S009998/N01688	
		S012282/N02146 S012309/N02150 S012536/N02192 S012548/N02194	
		S012264/N02143	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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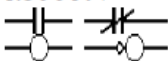
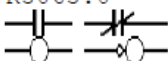
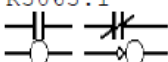
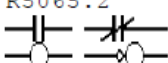
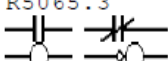
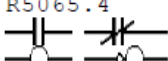
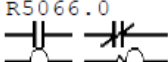
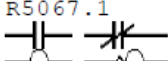
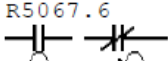
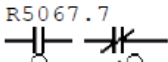
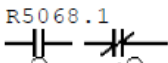
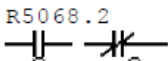
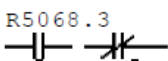
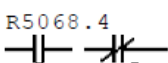
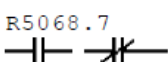
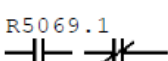
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		S012601/N02202	
R5003.3		TMR BO&AF	LUBE LOW DETECT TIMER
		S012653/N02212	
		S012651/N02211	
R5003.5		TMR BPSOF	PRESSURE SW OFF TIMER
		S012672/N02214	S012702/N02219
		S012694/N02217	
R5004.7		ATC AIR DET TIME	ATC AIR PRESSURE DETECT TIMER
		S000521/N00105	
		S000518/N00104	
R5005.0		ATLUBCLK	AUTO LUBE TIMER
		S012552/N02195	S012563/N02197
		S012556/N02195	
R5005.1		O&AAIR_ON_AUX	O & A AIR ON AUX
		S012635/N02208	S012636/N02208
		S012634/N02207	
R5005.2		O&AVACOF	O&A VACUUM OFF
		S012645/N02210	
		S012642/N02209	
R5005.3		HYD MOTOR STP	HYDRAULIC MOTOR STOP
		S012812/N02243	
		S012810/N02242	
R5006.0		TMR BSPE	SP SAR TIMER
		S004441/N00795	
		S004111/N00730	
R5006.1		TMR SPD	SP START CHECK TIMER
		S000409/N00083	S003906/N00705
		S003900/N00704	
R5006.2		TMR SPSTP	SP STOP TIMER
		S004112/N00731	
		S003992/N00716	
R5006.3		TMRB_RGT	RIGID TAP TIMER
		S004250/N00758	S004259/N00759 S004486/N00805
		S004255/N00758	
R5006.4		SPMSCHG	SP GEAR CHANGE TIMER
		S004190/N00745	S004200/N00746
		S004213/N00747	
R5007.0		TMR ORI	M19 CHECK TIMER
		S004327/N00775	S004341/N00777
		S004332/N00775	
R5007.1		TMR ORIF	M19 FIN TIMER
		S004347/N00778	S004366/N00781
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R5007.2		SPLSCHK	SP CLAMP DETECT TIMER
		S000426/N00087	
		S000425/N00086	

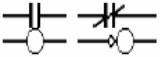
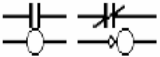
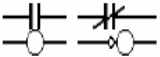
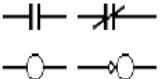
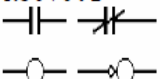
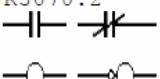
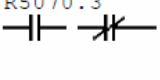
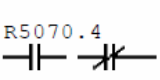
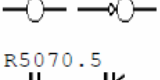
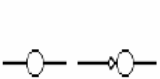
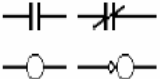
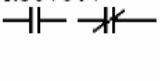
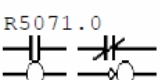
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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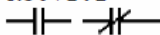
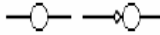
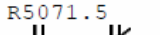
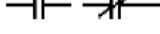
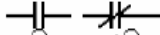
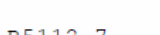
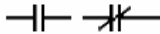

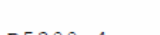
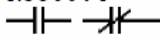
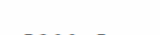
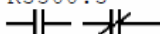

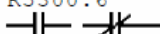

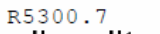
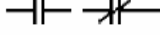
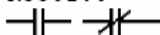
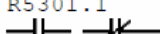
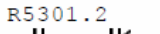
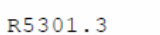
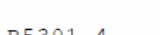


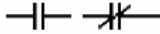
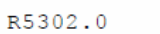

R5007.3	SCOODOK	S CODE OK	
		S004440/N00795 S004460/N00798 S003753/N00682	
R5007.5	SPTYPCHK	SP TYPE CHECK TIMER	
		S004272/N00762 S004269/N00761	
R5009.0	TMRGFLT	FILTER CLOGGING DETE TIMER	
		S000495/N00099 S011711/N02046	
R5012.0	ATCOVER	ATC CYC TIMER OVER	
		S006848/N01237 S006853/N01238 S006860/N01239 S006847/N01236	
R5012.1	TMMG4TMR	DATA SET TIMER	
		S005762/N01050 S005772/N01051	
R5012.2	MGSTPT	MG STOP TIMER	
		S005980/N01087 S005979/N01086	
R5012.3	INDXCINT	MG INDEX TIMER	
		S006067/N01108 S006066/N01107	
R5012.4	SPCLAL	SP TOOL CLP AL	
		S006095/N01112 S006122/N01115 S006101/N01112	
R5012.5	SA0-270	SWING ARM 0 MOVE TO 270 DEG	
		S007273/N01299 S007566/N01347 S006518/N01187	
R5012.6	TLALM	HAND ATC HEAD CLAMP TIMER	
		S006807/N01233 S006804/N01232	
R5012.7	SPUNCPB	SP UNCLP PB	
		S009212/N01557 S009156/N01552	
R5013.0	SHFCHK	ARM FORWARD RTY CHECK	
		S009663/N01637 S009662/N01636	
R5013.1	SHFR2T	ARM DOUBLE BACKWARD RTY TIMER	
		S009674/N01639 S009683/N01641 S009671/N01638	
R5013.2	SHFR1T	ARM BAKRD&FORD RTY TIMER	
		S009672/N01639 S009685/N01641 S009681/N01640	
R5013.3	SHBCHK	ARM CHUCK CLOSE RTY CHECK	
		S009699/N01644 S009698/N01643	
R5013.4	SHBR2T	ARM CHUCK DOUBLE CLOSE RTY TMR	
		S009710/N01646 S009719/N01648 S009707/N01645	

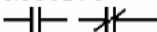
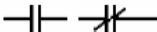
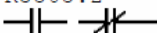
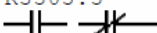
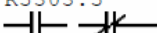
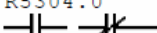
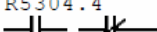
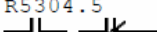
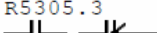
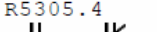
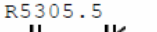
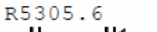
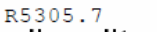
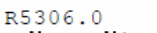

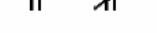



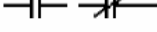
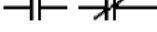
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5013.5	SHBR1T	ARM CHUCK CLS&OPEN RTY TMR	
	S009708/N01646	S009721/N01648	
	S009717/N01647		
R5013.6	SHCCCHK	ARM CHUCK OPEN RTY CHECK	
	S009735/N01651		
	S009734/N01650		
R5013.7	SHCCR2T	ARM CHUCK DOUBLE OPEN RTY TMR	
	S009746/N01653	S009755/N01655	
	S009743/N01652		
R5014.0	SHCCR1T	ARM CHUCK OPEN&CLS RTY TMR	
	S009744/N01653	S009757/N01655	
	S009753/N01654		
R5014.1	SHCOCHK	ARM UNCLP RTY CHECK	
	S009773/N01658		
	S009772/N01657		
R5014.2	SHCOR2T	ARM BOUBLE UNCLP TIMER	
	S009784/N01660	S009793/N01662	
	S009781/N01659		
R5014.3	SHCOR1T	ARM UNCLP&CLP TIMER	
	S009782/N01660	S009795/N01662	
	S009791/N01661		
R5014.4	HUCCHK	HEAD UNCLP RTY CHECK	
	S009819/N01665		
	S009818/N01664		
R5014.5	HUCOR2T	HEAD DOUBLE UNCLP TIMER	
	S009830/N01667	S009839/N01669	
	S009827/N01666		
R5014.6	HUCOR1T	HEAD CLP&UNCLP TIMER	
	S009828/N01667	S009841/N01669	
	S009837/N01668		
R5014.7	HCCHK	HEAD CLP RTY CHECK	
	S009855/N01672		
	S009854/N01671		
R5015.0	HCOR2T	HEAD DOUBLE CLP TIMER	
	S009866/N01674	S009875/N01676	
	S009863/N01673		
R5015.1	HCOR1T	HEAD CLP&UNCLP TIMER	
	S009864/N01674	S009877/N01676	
	S009873/N01675		
R5025.2	TNORQTP	TOOL NO READ AUTO OP TIMER	
	S004638/N00835		
	S004636/N00834		
R5025.3	TM,TLRQ	TOL NO REQU AUTO OP TIMER	
	S004782/N00857		
	S004778/N00856		
R5025.4	TM.M30RQ	M30 TOL NO REQU AUTO OP TMR	
	S004817/N00863		
	S004814/N00862		

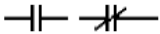
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5028.0		M66 OFF S013484/N02370 S013494/N02371 S013502/N02373 S013521/N02377 S013500/N02372	M66 OFF TIMER
R5028.1		M64 FFCHK S000581/N00116 S000587/N00117 S013506/N02373	M64 FIN CHECK
R5028.2		OMIOFF S013517/N02376 S013511/N02374	OMI OFF
R5028.3		OMISTT S013519/N02376 S013516/N02375	OMI RESTART TIMER
R5028.4		M64STOK S013481/N02370 S013540/N02379	M64 START OK
R5028.5		SPONOK1 S013794/N02429 S013792/N02428	SP RUNING
R5028.6		TMROFSET S013691/N02409 S013699/N02411 S013728/N02415	WINDOW OFFSET TIMER
R5030.0		T.YBRKOF S002215/N00389 S002222/N00391 S000944/N00175	Y BRAKE OFF DETECT TIMER
R5030.1		T.PWOK1C S000984/N00181 S000986/N00181 S000983/N00180	PSM 1 SIGNAL ERR
R5031.0		PILZERR S000961/N00178 S000960/N00177	PILZ SIGNAL ERROR TIMER
R5031.1		PSM_OFF_DELAY S000921/N00171 S000931/N00172	PSM OFF DELAY TIMER
R5031.4		JOGTIM S001266/N00225 S001258/N00222	JOG MODE TIMER
R5064.0		TMRLBON S012558/N02196 S012576/N02199 S012586/N02200 S012572/N02198	GREASE PUMP ON TIMER
R5064.2		SBSTTUP S000627/N00127 S003925/N00707 S000626/N00126	SINGLE BRKE STOP AL
R5064.3		TMRSPSTP1 S004136/N00735 S004139/N00736 S004145/N00737 S004431/N00794 S004143/N00736	SPINDLE CHILLER STOP TIMER
R5064.6		TMRCHPON S012025/N02116 S012089/N02124 S012090/N02124 S012094/N02124 S012138/N02128 S012142/N02128 S012030/N02116	CHIP CON ON TIMER

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5064.7		TMRCHPOF S012027/N02116 S012034/N02117	CHIP CON OFF TIMER
R5065.0		TMRTAP S004461/N00798 S004456/N00797	TAPPING TIMER
R5065.1		TMR4A.CL S002217/N00390 S011934/N02099	4TH AXIS CLAMP DELAY TIMER S012245/N02140
R5065.2		TMR4A.UN S002292/N00399 S011938/N02100	4TH AXIS UNCLAMP DELAY TIMER S011968/N02107 S012249/N02141
R5065.3		TMR5A.CL S002219/N00391 S011963/N02105	5TH AXIS CLAMP DELAY TIMER S012237/N02138
R5065.4		TMR5A.UN S002299/N00400 S011967/N02106	5TH AXIS UNCLAMP DELAY TIMER S007968/N01394 S011969/N02107 S012241/N02139
R5066.0		M130ONRS S013857/N02440 S013863/N02441	MOTOR CYC ON
R5067.1		TMROIL S012616/N02205 S012605/N02203	SP OIL ON TIMER S012625/N02206
R5067.6		TMLD.WRN S013574/N02386 S013573/N02385	LOAD MONITOR WEEK TIMER
R5067.7		TMLD.ARM S013592/N02388 S013591/N02387	LOAD MONITOR AL TIMER
R5068.1		BOST_PMP_ON_TIME S011804/N02065 S011787/N02061	BOOSTER PUMP ON DELAY TIMER
R5068.2		TMR_M56 S011779/N02060 S011792/N02062	BOOSTER PUMP SMALL TIMER
R5068.3		TMR_M55 S011780/N02060 S011797/N02063	BOOSTER PUMP MIDDLE TIMER
R5068.4		TMR_M54 S011781/N02060 S011802/N02064	
R5068.7		MSTOFDLY S011644/N02036 S011653/N02037	OIL MIST COLLECTOR OFF DELAY
R5069.1		TMRTQOV2 S000463/N00094 S012047/N02119	CHIP CON TORQUE CHECK TIMER 2

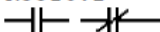
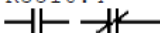
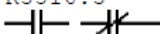
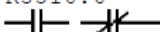
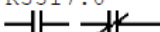
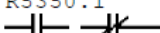
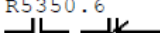
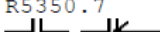
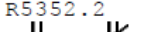
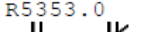
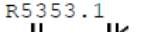
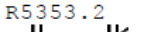
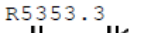
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5069.2		TMRTQOV1 S000462/N00094 S012040/N02118	CHIP CON TORQUE CHECK TIMER 1
R5069.3		TMRBCLT S011682/N02044 S011676/N02043	CHIP COOLANT OUTPUT TIMER
R5069.5		TSWAIRT S013311/N02336 S013309/N02335	TOUCH SW AIR BLOW TIMER
R5070.0		SHF1 S007182/N01287 S011389/N01987 S006484/N01179	ARM FORWARD 1 S007289/N01301 S007588/N01349 S010052/N01701 S011170/N01931
R5070.1		SHB1 S007150/N01282 S011392/N01988 S006488/N01180	ARM BACKWARD 1 S007260/N01297 S007551/N01345 S010054/N01701 S011173/N01931
R5070.2		SHCO1 S007173/N01286 S010057/N01701 S006492/N01181	ARM CHUCK OPEN S007252/N01296 S007542/N01344 S007579/N01348 S008679/N01503 S011176/N01931 S011395/N01989
R5070.3		SHCC1 S007188/N01288 S009065/N01544 S011398/N01990 S006496/N01182	ARM CHUCK CLOSE S007198/N01289 S007265/N01298 S007557/N01346 S009036/N01543 S009810/N01664 S010060/N01701 S010985/N01917 S011179/N01931
R5070.4		SPUNCLP S002276/N00398 S007709/N01364 S010854/N01896 S006461/N01174	SP TOOL UNCLP S004415/N00788 S007432/N01325 S007483/N01333 S007685/N01362 S007724/N01366 S008226/N01440 S009228/N01558 S010847/N01895 S010872/N01900 S011135/N01931 S011353/N01977 S012879/N02255
R5070.5		SPCLP S002330/N00404 S007408/N01321 S009464/N01600 S011132/N01931 S006445/N01172	SPINDLE CLAMP S004149/N00737 S004412/N00787 S006446/N01173 S006814/N01234 S007471/N01331 S007671/N01360 S009458/N01598 S009462/N01599 S009468/N01601 S010864/N01898 S010905/N01907 S010919/N01908 S011261/N01945 S011350/N01976
R5070.6		SHHC1 S007189/N01288 S010063/N01701 S006500/N01183	ARM HEAD CLP S007199/N01289 S007266/N01298 S007558/N01346 S008906/N01536 S011189/N01931 S011409/N01993
R5070.7		SHHUC1 S007174/N01286 S009009/N01542 S011412/N01994 S006504/N01184	ARM HEAD UNCLP S007253/N01296 S007543/N01344 S007580/N01348 S008984/N01541 S010065/N01701 S010955/N01913 S010961/N01914 S011192/N01931
R5071.0		ZAIRT S008000/N01401 S007988/N01398	Z AIR STOP TIMER
R5071.1		MGF1 S007438/N01326 S006508/N01185	MG FORWARD 1 S007488/N01334 S011375/N01983 S011447/N02003

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5071.2	MGB1	MG BACKWARD 1	
	S007402/N01320	S007466/N01330 S011230/N01934 S011234/N01935 S011378/N01984	
	S011450/N02004 S012266/N02144		
	S006512/N01186		
R5071.5			
	S010866/N01899		
R5096.5	CTR_6.UP	SP OIL OUTPUT COUNT INTPT TMR	
	S012663/N02213 S012686/N02216		
	S012689/N02216		
R5112.7			
	S000402/N00082		
R5300.3	M03	SPINDLE CW ROTARY	
	S003754/N00683 S003832/N00696 S003838/N00697 S003844/N00698 S003851/N00699		
	S004367/N00781		
R5300.4	M04	SPINDLE CCW ROTARY	
	S003755/N00683 S003833/N00696 S003839/N00697 S003845/N00698 S003852/N00699		
	S004368/N00781		
R5300.5	M05	SPINDLE STOP	
	S003834/N00696 S003840/N00697 S003846/N00698 S003853/N00699 S003971/N00711		
	S004369/N00781		
R5300.6	M06	AUTO TOOL CHANGE	
	S001044/N00194 S001271/N00227 S003828/N00695 S003935/N00708 S004245/N00757		
	S004789/N00858 S005079/N00910 S011278/N01947 S011345/N01974 S011347/N01975		
	S011545/N02021 S013486/N02370 S013523/N02377 S013656/N02403		
R5300.7	M07	CUTTING AIR BLAST	
	S011464/N02008 S011837/N02072		
R5301.0	M08	COOLANT ON	
	S011478/N02011 S011840/N02073		
R5301.1	M09	COOLANT OFF	
	S011455/N02005 S011843/N02074		
R5301.2	M10	C AXIS TABLE CLAMP	
	S011900/N02092 S011905/N02093 S012235/N02138		
R5301.3	M11	C AXIS TABLE UNCLAMP	
	S011901/N02092 S011904/N02093 S012239/N02139		
R5301.4	M12	A AXIS TABLE CLAMP	
	S007140/N01280 S011907/N02094 S011912/N02095 S012243/N02140		
R5301.5	M13	A AXIS TABLE UNCLAMP	
	S007141/N01280 S011908/N02094 S011911/N02095 S012247/N02141		
R5301.7	M15	CHIP FLUSH PUMP ON	
	S004476/N00802 S011602/N02030		
R5302.0	M16	CHIP FLUSH PUMP OFF	
	S004479/N00803 S011608/N02030		
R5302.2			
	S011892/N02089		
R5302.3	M19	SPINDLE ORIENTATION	
	S003835/N00696 S003841/N00697 S003847/N00698 S003854/N00699		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5302.4	M20	ATC DOOR CLOSE	
	S000112/N00025 S000117/N00026 S000123/N00027 S000129/N00028 S000135/N00029 S000142/N00030 S000383/N00079 S010021/N01691 S012502/N02187 S012543/N02193 S013640/N02399 S013641/N02399		
R5302.5	M21	ATC DOOR OPEN	
	S000362/N00076 S000391/N00081 S010017/N01691 S012514/N02188 S012547/N02194		
R5303.2			
	S011656/N02038 S011894/N02090		
R5303.3			
	S011657/N02038 S011897/N02091		
R5303.5	M29	RAGIP TAPPING	
	S004231/N00755 S004485/N00805		
R5304.0			
	S013100/N02299 S013109/N02300 S013130/N02304 S013141/N02307 S013178/N02317		
R5304.4	M36	OVC OFF	
	S002658/N00472 S003350/N00604		
R5304.5	M37	OVC ON	
	S002657/N00472 S003353/N00605		
R5305.3			
	S003829/N00695 S003869/N00702 S004488/N00806		
R5305.4			
	S003830/N00695 S003871/N00702 S004492/N00807		
R5305.5	M45	CHIP CONVEYOR ON	
	S011850/N02075 S012061/N02122		
R5305.6	M46	CHIP CONVEYOR OFF	
	S011853/N02076 S012065/N02122		
R5305.7			
	S013173/N02316 S013292/N02332 S013317/N02337 S013320/N02338		
R5306.0	M48		
	S013146/N02308 S013151/N02309 S013175/N02316 S013239/N02325 S013248/N02326 S013256/N02326 S013281/N02328 S013289/N02331		
R5306.2	M50	CTS MOTOR ON	
	S011495/N02014 S011511/N02015 S011856/N02077		
R5306.3	M51	CTS MOTOR OFF	
	S011505/N02014 S011509/N02015 S011859/N02078		
R5306.4	M52	CHIP CONVEYOR ON	
	S011517/N02016 S011862/N02079		
R5306.5	M53	CHIP CONVEYOR OFF	
	S011522/N02017 S011865/N02080		
R5306.6			
	S011712/N02047 S011877/N02084		
R5306.7			
	S011715/N02048 S011880/N02085		
R5307.0			
	S011718/N02049 S011883/N02086		

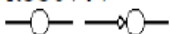
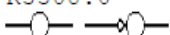
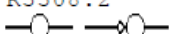
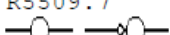
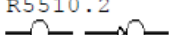
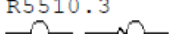
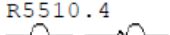
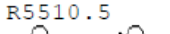
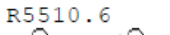
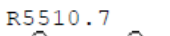
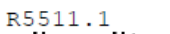





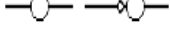
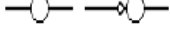
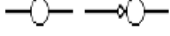
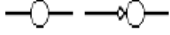
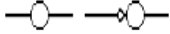
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R5307.2		S011724/N02051 S011889/N02088	
R5307.5		S011527/N02018 S011868/N02081	
R5307.6		S011531/N02019 S011871/N02082	
R5307.7		S011536/N02020 S011874/N02083	
R5308.0		S013316/N02337 S013321/N02338 S013482/N02370 S013493/N02371 S013530/N02378 S013541/N02380	
R5308.2		S013491/N02371 S013546/N02381	
R5309.7		M79 DEFINE SPINDLE TOOL NO. S000111/N00025 S000116/N00026 S000122/N00027 S000128/N00028 S000134/N00029 S000141/N00030 S005990/N01089 S006003/N01091 S006960/N01258 S013639/N02399	
R5310.2		M82 SPINDLE TOOL CLAMP S005081/N00911 S011349/N01976	
R5310.3		M83 SPINDLE TOOL UNCLAMP S005083/N00912 S011352/N01977	
R5310.4		M84 MAGAZINE SELECT SP TOOL S005085/N00913 S011355/N01978	
R5310.5		M85 MAGAZINE SELECT T CODE S005091/N00914 S011359/N01979	
R5310.6		S005097/N00915 S011363/N01980	
R5310.7		S005103/N00916 S011366/N01981	
R5311.1		S005109/N00917 S011372/N01982	
R5311.2		S001464/N00255 S001590/N00271 S013451/N02362	
R5312.4		M100 MAGAZINE FORWARD S000363/N00076 S000375/N00078 S000392/N00081 S005115/N00918 S005235/N00938 S009974/N01687 S009980/N01687 S011374/N01983	
R5312.5		M101 MAGAZINE RETURN S005121/N00919 S005237/N00939 S007117/N01275 S009968/N01686 S011377/N01984	
R5312.6		S005127/N00920 S011380/N01985	
R5312.7		S005133/N00921 S011384/N01986	
R5313.0		S005139/N00922 S011388/N01987	

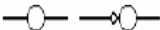

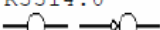
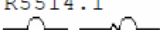
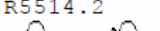
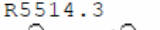
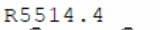
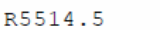
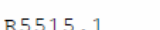
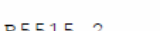







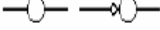
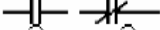
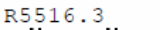
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R5313.3		S005157/N00925 S011397/N01990	
R5313.4		S005163/N00926 S011400/N01991	
R5313.5		S005169/N00927 S011404/N01992	
R5313.7		M111 EXTERNAL M CODE 1 S012996/N02280 S013001/N02280 S013067/N02291	
R5314.0		M112 EXTERNAL M CODE 2 S013005/N02281 S013010/N02281 S013071/N02292	
R5314.1		M113 EXTERNAL M CODE 3 S012997/N02280 S013006/N02281 S013019/N02282 S013075/N02293	
R5314.2		M114 EXTERNAL M CODE 4 S013014/N02282 S013032/N02284 S013079/N02294	
R5314.3		M115 EXTERNAL M CODE 5 S012998/N02280 S013015/N02282 S013083/N02295	
R5314.4		M116 EXTERNAL M CODE 6 S013007/N02281 S013016/N02282 S013087/N02296	
R5314.5		M117 EXTERNAL M CODE 7 S012999/N02280 S013008/N02281 S013017/N02282 S013091/N02297	
R5315.0		S005175/N00928 S011408/N01993	
R5315.1		S005181/N00929 S011411/N01994	
R5315.2		S005187/N00930 S011414/N01995	
R5315.3		S005193/N00931 S011418/N01996	
R5315.4		S005199/N00932 S011422/N01997	
R5315.5		S005205/N00933 S011426/N01998	
R5315.6		S005211/N00934 S011430/N01999	
R5315.7		S005217/N00935 S011434/N02000	
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R5316.1		S005229/N00937 S011442/N02002	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5316.2		S013793/N02429 S013825/N02434 S013980/N02460	
R5316.3		S013796/N02429 S013869/N02442 S013887/N02446 S013892/N02447 S013955/N02456 S013985/N02461	
R5316.4		S013833/N02435 S013993/N02463	
R5316.5		S013835/N02435 S013996/N02464	
R5316.6		S013868/N02442 S013990/N02462	
R5317.0		M136 S011446/N02003	M136
R5317.1		M137 S011449/N02004	M137
R5350.0		S013553/N02383 S013559/N02384 S013597/N02389	
R5350.1		S013550/N02383 S013558/N02384 S013601/N02390	
R5350.2		S013552/N02383 S013556/N02384 S013604/N02391	
R5350.4		S004904/N00877 S005059/N00904	
R5350.5		S004828/N00865 S005063/N00905	
R5350.6		S004509/N00811 S005067/N00906	
R5350.7		S004942/N00884 S005070/N00907	
R5351.0		S004991/N00892 S005073/N00908	
R5351.1		S004705/N00844 S005076/N00909	
R5352.2		S002187/N00381 S002193/N00383	
R5353.0		S002199/N00384 S002205/N00386	
R5353.1		S013620/N02394 S013739/N02419	
R5353.2		S013616/N02394 S013736/N02418	
R5353.3		S013664/N02404 S013695/N02410 S013700/N02411 S013732/N02417	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5353.4		S013652/N02402 S013729/N02416	
R5500.0		M00FIN M00 FINISH S014030/N02469 S014037/N02470 S003344/N00602	
R5500.1		M01FIN M01 FINISH S003349/N00603	
R5500.3		M03FIN M03 FINISH S004466/N00799	
R5500.4		M04FIN M04 FINISH S004470/N00800	
R5500.5		M05FIN M05 FINISH S004475/N00801	
R5500.6		M06FIN M06 FINISH S011344/N01974 S011346/N01974	
R5500.7		M07FIN M07 FINISH S011839/N02072	
R5501.0		M08FIN M08 FINISH S011842/N02073	
R5501.1		M09FIN M09 FINISH S011849/N02074	
R5501.2		M10FIN M10 FINISH S012238/N02138	
R5501.3		M11FIN M11 FINISH S012242/N02139	
R5501.4		M12FIN M12 FINISH S012246/N02140	
R5501.5		M13FIN M13 FINISH S012250/N02141	
R5501.7		M15FIN CHIP FLUSH ON FINISH S004478/N00802	
R5502.0		M16FIN CHIP FLUSH OFF FINISH S004481/N00803	
R5502.2		M18FIN M18 FINISH S011893/N02089	
R5502.3		M19FIN M19 FINISH S004484/N00804	
R5502.4		M20FIN MAGAZINE DOOR CLOSE FINISH S012546/N02193	
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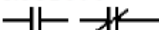
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R5504.4 	M36FIN S003352/N00604	M36 FINISH	
R5504.5 	M37FIN S003355/N00605	M37 FINISH	
R5505.3 	M43FIN S004491/N00806	M43 FINISH	
R5505.4 	M44FIN S004495/N00807	M44 FINISH	
R5505.5 	M45FIN S011852/N02075	M45 FINISH	
R5505.6 	M46FIN S011855/N02076	M46 FINISH	
R5505.7 	M47FIN S013296/N02332	M47 FINISH	
R5506.0 	M48FIN S013291/N02331	M48 FINISH	
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R5506.5 	M53FIN S011867/N02080	M53 FINISH	
R5506.6 	M54FIN S011879/N02084	M54 FINISH	
R5506.7 	M55FIN S011882/N02085	M55 FINISH	
R5507.0 	M56FIN S011885/N02086	M56 FINISH	
R5507.1 	M57FIN S011888/N02087	M57 FINISH	
R5507.2 	M58FIN S011891/N02088	M58 FINISH	
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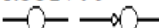
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R5509.7	M79FIN 	M79 FINISH	
R5510.2	M82FIN 	SP TOOL CLP FIN	
R5510.3	M83FIN 	SP TOOL UNCLP FIN	
R5510.4	M84FIN 	MG SP TOOL INDEX FIN	
R5510.5	M85FIN 	MG T CODE INDEX FIN	
R5510.6	M86FIN 	ALL AXIS INTERLOCK PASS FIN	
R5510.7	M87FIN 	ALL AXIS INTLOCK PASS OFF FIN	
R5511.1	M89FIN 	ATC RESTART FIN	
R5511.2	M90FIN 	M90 FINISH	
R5512.4	M100FIN 	MAGAZINE EXTEND FIN	
R5512.5	M101FIN 	MAGAZINE TETURN FIN	
R5512.6	M102FIN 	SWING ARM FORWARD&RUN FIN	
R5512.7	M103FIN 	SWING ARM BACKWARD&RUN FIN	
R5513.0	M104FIN 	SWING ARM BRD FIN DECEL MD ON	
R5513.1	M105FIN 	SWING ARM BRD FIN DECE MD OFF	
R5513.2	M106FIN 	ARM CHUCK OPEN FIN	
R5513.3	M107FIN 	ARM CHUCK CLOSE FIN	
R5513.4	M108FIN 	MG WAIT TOOL INDEX FIN	

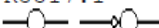
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R5514.1	M113FIN 	M113 FIN	
R5514.2	M114FIN 	M114 FIN	
R5514.3	M115FIN 	M115 FIN	
R5514.4	M116FIN 	M116 FIN	
R5514.5	M117FIN 	M117 FIN	
R5515.0	M120FIN 	ARM HEAD CLP FIN	
R5515.1	M121FIN 	ARM HEAD UNCLP FIN	
R5515.2	M122FIN 	SWING ARM 90 DEGREE	
R5515.3	M123FIN 	SWING ARM 45 DEGREE	
R5515.4	M124FIN 	SWING ARM 0 DEGREE	
R5515.5	M125FIN 	SWING ARM -90 DEGREE	
R5515.6	M126FIN 	SWING ARM -180 DEGREE	
R5515.7	M127FIN 	SWING ARM -270 DEGREE	
R5516.0	M128FIN 	SWING ARM -315 DEGREE	
R5516.1	M129FIN 	SWING ARM -360 DEGREE	
R5516.2	M130FIN  S013979/N02460 S013982/N02460	SP HEAT DISPLACE COMPENSATION	
R5516.3	M131FIN  S013984/N02461 S013987/N02461	SP HEAT DISPLACE COMPENSATION	
R5516.4	M132FIN  S013995/N02463	SP HEAT DISPLACE COMPENSATION	

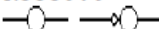
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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R5516.5	M133FIN 	SP HEAT DISPLACE COMPENSATION	
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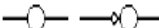
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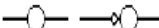
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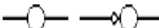
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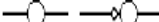
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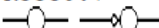
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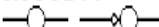
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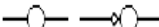
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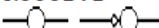
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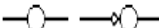
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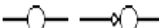
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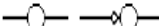
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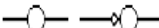
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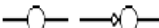
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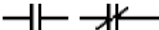
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R5553.1	M425FIN 	M425 FIN	
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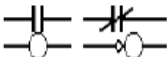
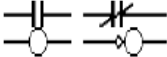
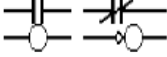
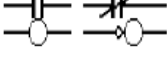
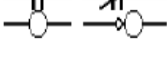
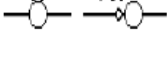
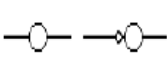
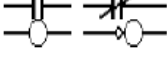

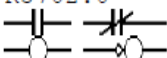
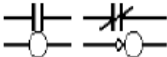
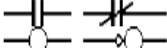
R5553.2	M426FIN 	M426 FIN	
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R5553.3	M427FIN 	M427 FIN	
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R5553.4	M428FIN 	M428 FIN	
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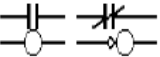
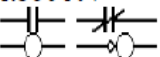
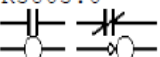
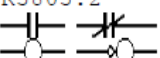
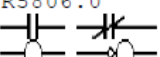
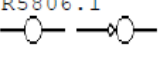
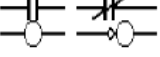
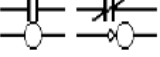
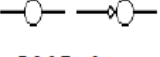
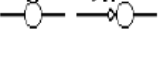
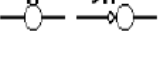
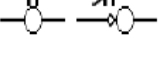
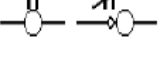
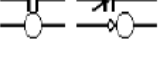
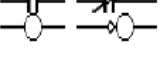
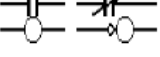
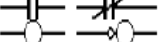
R5700.0	MF2SON1 	2ND M CODE ON 1	
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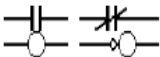
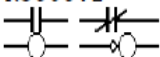
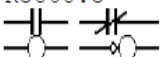
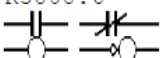
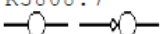
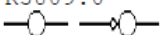
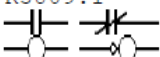
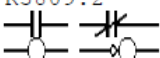
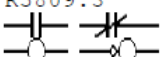
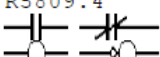
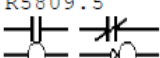
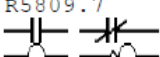
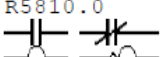
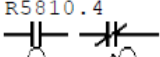
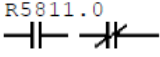
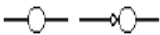


R5700.1	MF2SON 	2ND M CODE ON	
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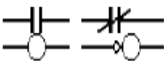
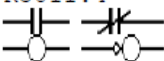
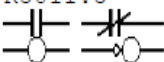
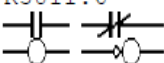
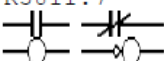
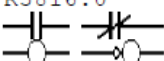
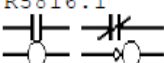
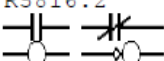
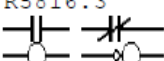
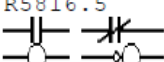
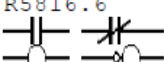
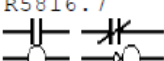
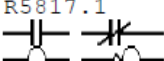
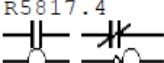
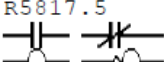
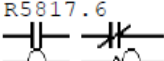
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5700.2	MF2SON2 	2ND M CODE ON 2 S003128/N00562 S003130/N00562 S003135/N00563	
R5700.3	MF2SONM 	2ND M CODE ON MEM S003137/N00564 S003171/N00573 S003139/N00564	
R5700.4	MF3SON1 	3RD M CODE ON 1 S003142/N00566 S003144/N00566 S003141/N00565	
R5700.5	MF3SON 	3RD M CODE ON S003151/N00568 S003175/N00574 S003148/N00566	
R5700.6	MF3SON2 	3RD M CODE ON 2 S003143/N00566 S003145/N00566 S003150/N00567	
R5700.7	MF3SONM 	3RD M CODE ON MEM S003152/N00568 S003155/N00568	
R5701.0	MF1SONM 	1ST M CODE ON 1 S003170/N00573 S003174/N00574 S003157/N00569	
R5701.1	MF1SON1 	1ST M CODE ON S003160/N00571 S003162/N00571 S003159/N00570	
R5701.2	MF1SON 	1ST M CODE ON 2 S003156/N00569 S003169/N00573 S003173/N00574 S003177/N00575 S003211/N00579 S003217/N00580 S003247/N00585 S003166/N00571	
R5701.3	MF1SON2 	1ST M CODE ON MEM S003161/N00571 S003163/N00571 S003168/N00572	
R5701.4	MF2SET 	2ND M CODE SET S003138/N00564 S003187/N00576 S003223/N00581 S003229/N00582 S003252/N00586 S003258/N00587 S003264/N00588 S003270/N00589 S003276/N00590 S003282/N00591 S003172/N00573	
R5701.5	MF3SET 	3RD M CODE SET S003153/N00568 S003197/N00577 S003235/N00583 S003241/N00584 S003288/N00592 S003294/N00593 S003300/N00594 S003306/N00595 S003312/N00596 S003318/N00597 S003176/N00574	
R5702.0	MF1ON 	1ST M CODE RUN S003178/N00575 S003207/N00578 S014127/N02489 S014130/N02489 S003186/N00575	
R5702.1	MF2ON 	2ND M CODE RUN S003188/N00576 S003208/N00578 S014136/N02490 S014139/N02490 S003196/N00576	
R5702.2	MF3ON 	3RD M CODE RUN S003198/N00577 S003209/N00578 S014145/N02491 S014148/N02491 S003206/N00577	

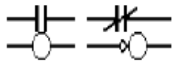
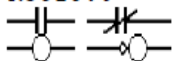
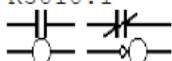
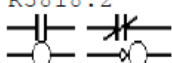
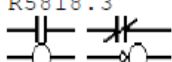
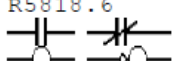
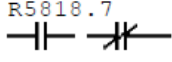
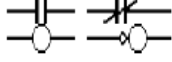
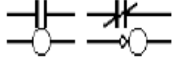
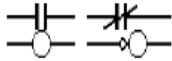
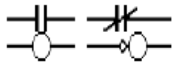
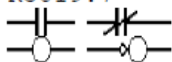
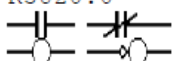
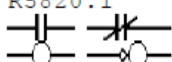
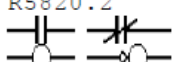
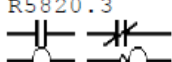
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5702.3		M CODE ON	
		S014026/N02468 S014031/N02469 S014043/N02471 S014050/N02472 S014055/N02473	
		S014061/N02474 S014066/N02475 S014069/N02476 S014074/N02477 S014077/N02478	
		S014082/N02479 S014085/N02480 S014090/N02481 S014093/N02482 S014098/N02483	
		S014101/N02484 S014106/N02485 S014109/N02486 S014114/N02487 S014170/N02492	
		S003210/N00578	
R5702.4		ALL M CODE FIN	
		S014126/N02489 S014129/N02489 S014135/N02490 S014138/N02490 S014144/N02491	
		S014147/N02491	
		S014125/N02488	
R5702.5		M CODE CLEAR	
		S003184/N00575 S003194/N00576 S003204/N00577 S014172/N02493 S014177/N02494	
		S014182/N02495 S014187/N02496 S014192/N02497 S014197/N02498 S014202/N02499	
		S014207/N02500	
		S014171/N02492	
R5702.6		M CODE RUNNING	
		S014027/N02468	
R5703.0		M FUN FIN A	
		S014117/N02488	
		S014060/N02473	
R5703.1		M FUN FIN B	
		S014118/N02488	
		S014068/N02475	
R5703.2		M FUN FIN C	
		S014119/N02488	
		S014076/N02477	
R5703.3		M FUN FIN D	
		S014120/N02488	
		S014084/N02479	
R5703.4		M FUN FIN E	
		S014121/N02488	
		S014092/N02481	
R5703.5		M FUN FIN F	
		S014122/N02488	
		S014100/N02483	
R5703.6		M FUN FIN G	
		S014123/N02488	
		S014108/N02485	
R5703.7		M FUN FIN H	
		S014124/N02488	
		S014116/N02487	
R5800.0		QF1 FUSE OL	
		S000231/N00053 S000636/N00129	
		S000234/N00053	
R5800.1			
		S000241/N00055 S000638/N00129	
		S000244/N00055	
R5800.2			
		S000246/N00056 S000639/N00129	
		S000249/N00056	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5800.3	ALM04	QF204 OVERLOAD AL	
	S000251/N00057	S000640/N00129	
	S000254/N00057		
R5800.4	ALM05		
	S000236/N00054	S000637/N00129	
	S000239/N00054		
R5800.6	ALM07		
	S000256/N00058	S000641/N00129	
	S000259/N00058		
R5800.7	ALM08		
	S000261/N00059	S000650/N00130	
	S000264/N00059		
R5801.5	ALM14		
	S000266/N00060	S000651/N00130	
	S000269/N00060		
R5802.0	ALM17		
	S000508/N00103	S000683/N00131	
	S000512/N00103		
R5802.3	ALM20		
	S000271/N00061	S000642/N00129	S012813/N02243
	S000274/N00061		
R5802.4	ALM21		
	S000300/N00066	S000719/N00133	S012587/N02200
	S000303/N00066		
R5802.5	ALM22		
	S000277/N00062	S000724/N00134	S003917/N00707
	S012668/N02213	S012611/N02204	S012627/N02206
	S000280/N00062		
R5802.6	ALM23	CHIP OIL MOTOR AL	
	S000282/N00063	S000668/N00131	S011486/N02011
	S000286/N00063	S011503/N02014	
R5803.0	ALM25		
	S000288/N00064	S000669/N00131	S011504/N02014
	S011514/N02015	S011582/N02025	
	S000292/N00064		
R5803.2	ALM27		
	S000357/N00075	S000671/N00131	S011525/N02017
	S000361/N00075		
R5803.5	ALM30	CHIP CONVEYOR PUMP O.L	
	S000305/N00067	S000709/N00133	S011520/N02016
	S000309/N00067		
R5803.6	ALM31		
	S000311/N00068	S000670/N00131	S011515/N02015
	S011583/N02025		
	S000315/N00068		
R5803.7	ALM32		
	S000318/N00069	S000710/N00133	
	S000322/N00069		
R5804.1	ALM34		
	S000325/N00070	S000711/N00133	
	S000329/N00070		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5804.6	ALM39 	S000331/N00071 S000712/N00133 S000335/N00071	
R5804.7	ALM40 	S000350/N00074 S000731/N00134 S000354/N00074	
R5805.0	ALM41 	S000344/N00073 S000730/N00134 S000348/N00073	
R5805.2	ALM43 	S000294/N00065 S000652/N00130 S012226/N02135 S000298/N00065	
R5806.0	ALM1060 	S000364/N00076 S000369/N00076	MAGAZINE POT EMPTY ALARM
R5806.1	ALM1061 	S000374/N00077	SUB-OP BOARD VALID
R5806.2	ALM1062 	S000377/N00078 S000382/N00078	ATC DOOR OPEN ALARM
R5806.3	ALM1063 	S000385/N00079 S000388/N00079	MAGAZINE RETURN ALARM
R5806.4	ALM1064 	S000390/N00080	MAGAZINE MAINTENANCE MODE ON
R5807.0	ALM1070 	S000393/N00081 S000400/N00081	SPINDLE EMPTY ALARM
R5807.1	ALM58 	S000682/N00131 S003758/N00683 S003896/N00704 S003907/N00705 S003763/N00683	
R5807.2	ALM59 	S000404/N00082 S000643/N00129 S000408/N00082	
R5807.3	ALM60 	S000672/N00131 S000410/N00083	
R5807.4	ALM61 	S000673/N00131 S000412/N00084	
R5807.6	ALM63 	S000674/N00131 S000414/N00085	
R5807.7	ALM64-1 	S000428/N00087 S000675/N00131 S003908/N00705 S000430/N00087	
R5808.0	ALM65 	S012911/N02263 S000635/N00128	

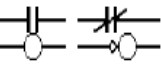
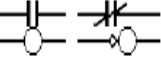
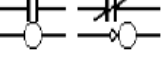
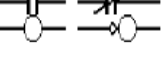
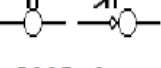
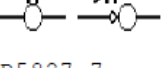
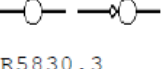
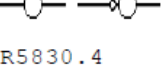
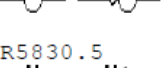

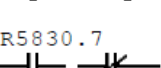
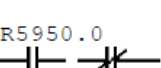
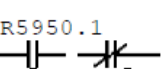
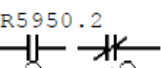
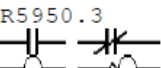

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5808.1	ALM66 	S000644/N00129 S000433/N00088	
R5808.2	ALM67 	S000676/N00131 S003940/N00708 S000435/N00089	
R5808.5	ALM70 	S000663/N00130 S000677/N00131 S006863/N01239	
R5808.6	ALM71 	S000678/N00131 S006867/N01240 S006979/N01259 S006809/N01233	
R5808.7		S000440/N00090	
R5809.0		S000447/N00091	
R5809.1	ALM74 	WAIT&SP EQ 0 AL S007041/N01269 S009565/N01618	
R5809.2	ALM75 	S007042/N01269 S009567/N01619	
R5809.3	ALM76 	SP&T CODE EQ 0 AL S007043/N01269 S009569/N01620	
R5809.4	ALM77 	MG T NO EQ 0 AL S007044/N01269 S009571/N01621	
R5809.5	ALM78 	ATC MG DOOR OPEN AL S000681/N00131 S006787/N01231 S006792/N01231	
R5809.7	ALM80 	MG RET SIDE DETE TOOL AL S007045/N01269 S009574/N01622	
R5810.0	ALM81 	ATC CYC AL S000662/N00130 S000679/N00131 S006121/N01114	
R5810.4	ALM85 	ATC INITIAL OFF AL S000661/N00130 S006829/N01234	
R5811.0	ALM89 	Z LOAD LIMIT AL S000706/N00132 S007909/N01390 S008064/N01412 S008068/N01413 S008072/N01414 S008076/N01415 S008080/N01416 S008084/N01417 S008091/N01418 S008097/N01419  S007912/N01390	
R5811.1	ALM90 	ATC T CYC ON AL S010120/N01722	
R5811.2	ALM91 	ATC M CYC ON AL S010200/N01753	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5811.3	ALM92 	PMC CONTROL AL S000680/N00131 S006778/N01230	
R5811.4	ALM93 	SP WAIT RET&INDEX TOL AL S007046/N01269 S009576/N01623	
R5811.5	ALM94 	ARM RET SIDE DETE T AL S007047/N01269 S009578/N01624	
R5811.6	ALM95 	ARM RET SIDE MEM EQ 0 AL S000736/N00134 S006871/N01240 S006985/N01259 S009582/N01625 S009585/N01625	
R5811.7	ALM96 	SP T NO INDEX AL S000707/N00132 S009588/N01626 S009591/N01626	
R5816.0	ALM129 	CHIP CON IN STOP AL S000455/N00092 S000722/N00134 S000459/N00092	
R5816.1	ALM130 	CHIP CON OVERTORQUE 1 AL S000464/N00094 S000714/N00133 S012068/N02122 S000472/N00094	
R5816.2	ALM131 	CHIP CON OVERTORQUE 2 AL S000715/N00133 S012146/N02128 S000476/N00095	
R5816.3	ALM132 	CHIP CON OVERTORQUE 3 AL S000716/N00133 S012147/N02128 S000480/N00096	
R5816.5	ALM134 	CHIP OIL LOW LEVEL AL S000483/N00097 S000653/N00130 S000696/N00132 S011541/N02021 S000487/N00097	
R5816.6	ALM135 	SUB CHIP OIL TANL LOW AL S000489/N00098 S000689/N00132 S011547/N02021 S000493/N00098	
R5816.7	ALM136 	BOOSTER OIL LEVEL LOW AL S000665/N00130 S011808/N02066 S011813/N02066	
R5817.1	ALM138 	COOLANT FILTER CLOGGING AL S000496/N00099 S000725/N00134 S011540/N02021 S000499/N00099	
R5817.4	ALM141 	ATC AIR LOW AL S000519/N00105 S000685/N00131 S000523/N00105	
R5817.5	ALM142 	SP LUB OIL LEV LOW S000726/N00134 S003918/N00707 S012659/N02213 S000501/N00100	
R5817.6	ALM143 	SP LUB OIL PRESSURE ERROR S000727/N00134 S003919/N00707 S000503/N00101	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5817.7		ALM144 AIR PRESSURE LOW AL S000728/N00134 S007053/N01269 S000505/N00102	
R5818.0		ALM145 CHIP COOL FILT TANK BREAK AL S000594/N00118 S000720/N00133 S000598/N00118	
R5818.1		ALM146 CHIP WATER&OIL LEV LOW AL S000660/N00130 S000602/N00119	
R5818.2		ALM147 GREASE PUMP PRESSURE LOW AL S012579/N02199 S012583/N02199	
R5818.3		ALM148 COOLER TANK LEVEL LOW AL S000525/N00106 S000684/N00131 S000529/N00106	
R5818.6		ALM151 SPINDLE COOLANT ALARM 1 S000729/N00134 S003921/N00707 S000539/N00108	
R5818.7		S003920/N00707	
R5819.1		ALM154 CHIP OIL CHILLER AL S000543/N00109 S000717/N00133 S000548/N00109	
R5819.2		ALM155 SPINDLE COOLANT OFF AL S000535/N00108 S000551/N00110 S003922/N00707 S000556/N00110	
R5819.5		ALM158 AUTO FIRE OFF PS OFF AL S000558/N00111 S000690/N00132 S000563/N00111	
R5819.6		ALM159 PS OFF AL S000603/N00120 S000646/N00129 S000569/N00112	
R5819.7		ALM160 TOOL LIFE AL S000648/N00130 S013095/N02298 S000574/N00113	
R5820.0		ALM161 TOOL BROKEN DETE AL S000691/N00132 S000577/N00114	
R5820.1		ALM162 HIGH SKIP PARAM INPUT ERROR S000699/N00132 S013402/N02353 S013408/N02354 S013413/N02355 S013404/N02353	
R5820.2		ALM163 TOUCH SW AL S000692/N00132 S000579/N00115	
R5820.3		ALM164 MP EQUIPMENT AL S000583/N00116 S000693/N00132 S000585/N00116	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5820.4		ALM165 MP BATTERY LOW AL S000589/N00117 S000718/N00133 S000591/N00117	
R5820.6		ALM167 LOAD MONITOR AL S000664/N00130 S013575/N02386 S013579/N02386	
R5820.7		ALM168 LOAD MONITOR ERR MACHINE STOP S000686/N00131 S003923/N00707 S004966/N00888 S013578/N02386 S013593/N02388 S013596/N02388	
R5821.7		ALM176 TOOL PRESET AL S010048/N01699	
R5822.1		ALM178 PROGRAM SERCH ERROR S001544/N00264 S001550/N00265 S001547/N00264	
R5822.2		ALM179 S001616/N00275 S001618/N00275	
R5822.3		ALM180 OP DOOR OPEN AL S000654/N00130 S000694/N00132 S001278/N00227 S007060/N01269 S012000/N02111 S001285/N00227	
R5822.6		ALM183 PC ACCOUNT ERR S003775/N00684	
R5823.0		ALM195 AXIS INTERLOCK IGNORE AL S002251/N00396 S002265/N00397 S002284/N00398 S002293/N00399 S002300/N00400 S002308/N00401 S002319/N00402 S002324/N00403 S007055/N01269 S009202/N01557 S012907/N02263 S000615/N00124	
R5823.1		ALM186 S006826/N01234 S006827/N01234 S006952/N01258 S007007/N01263 S007056/N01269 S008087/N01417 S008093/N01418 S008099/N01419 S008499/N01482 S008639/N01502 S008663/N01502 S008675/N01502 S008680/N01503 S008884/N01534 S008893/N01535 S008911/N01536 S008948/N01539 S008973/N01540 S008987/N01541 S009012/N01542 S009037/N01543 S009066/N01544 S009091/N01545 S010870/N01900 S010897/N01906 S010902/N01907 S010916/N01908 S010928/N01909 S010939/N01910 S010972/N01914 S011003/N01920 S011020/N01921 S011046/N01922 S011063/N01923 S011074/N01924 S011094/N01925 S012908/N02263 S000613/N00123	
R5823.2		ALM187 ATC JOG AL S006841/N01236 S006953/N01258 S007008/N01263 S007057/N01269 S008855/N01531 S008858/N01531 S008920/N01537 S008950/N01539 S008989/N01541 S009014/N01542 S009045/N01543 S009068/N01544 S009093/N01545 S009114/N01546 S012909/N02263 S000611/N00122	
R5823.3		ALM188 ATC TEST AL S001390/N00242 S012910/N02263 S000609/N00121	
R5823.7		ALM192 SINGLE STOP AL S000631/N00127 S000695/N00132 S000633/N00127	
R5824.3		ALM196 MIST COLLECTOR PROTECTOR AL S000337/N00072 S000713/N00133 S011639/N02035 S000341/N00072	

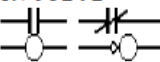
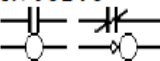
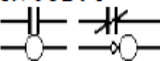
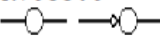
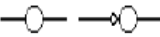
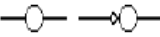
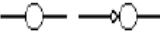
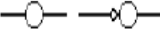

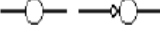
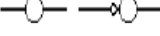
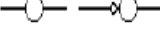
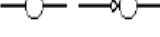
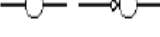



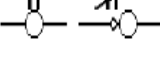


ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5824.5		ALM198 AIR PRESSURE SWITCH OFF AL S000531/N00107 S000645/N00129 S000534/N00107	
R5825.0		ALM201 TOOL POT NO EQ 0 AL S004600/N00829 S004651/N00837 S004661/N00838 S004603/N00829	
R5825.1		ALM202 SP T NO EQ 0 AL S004606/N00830 S004652/N00837 S004662/N00838 S004610/N00830	
R5825.2		ALM203 T NO NONDETECT AL S004613/N00831 S004653/N00837 S004663/N00838 S004616/N00831	
R5825.3		ALM204 TOOL BORKEN NO BE UES AL S004619/N00832 S004654/N00837 S004659/N00838 S004702/N00844 S004622/N00832	
R5825.4		ALM205 TOOL INFO DATA NG AL S004627/N00833 S004656/N00837 S004665/N00838 S004630/N00833	
R5825.5		ALM206 T NO READ CYC AUTO OP AL S000700/N00132 S004512/N00811 S004637/N00835 S004657/N00837 S004640/N00835	
R5825.6		ALM207 TOOL INFO KIND AL S004647/N00836 S004655/N00837 S004664/N00838 S004650/N00836	
R5825.7		ALM208 T NO CYC AL S000701/N00132 S000734/N00134 S004718/N00846 S004756/N00853 S004764/N00854 S004786/N00858 S004766/N00854	
R5826.0		ALM209 AUTO OP TIMER TOOL NO AL S000702/N00132 S000735/N00134 S004719/N00846 S004757/N00853 S004781/N00857 S004787/N00858 S004783/N00857	
R5826.1		ALM210 M30 AUTO OP INFO AL S000705/N00132 S004796/N00859 S004815/N00863 S004818/N00863	
R5826.2		ALM211 TOOL LIFE OVERWRITE INFO AL S004868/N00873 S005064/N00905 S004870/N00873	
R5826.3		ALM212 TOOL LIFE NO SET INFO AL S004916/N00879 S004922/N00880 S004928/N00881 S004931/N00881	
R5826.4		ALM213 TOOL BROKEN INFO AL S004939/N00884 S004950/N00885 S004956/N00886 S004962/N00887 S004965/N00887	
R5826.5		ALM214 TOOL LOAD MONITOR INFO AL S004975/N00889 S004981/N00890 S004987/N00891 S004990/N00891	
R5826.6		ALM215 AMCS TOOL SKIP INFO AL S005004/N00894 S005010/N00895 S005016/N00896 S005019/N00896	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5826.7		ALM216 S005029/N00898 S005046/N00901 S005054/N00902 S005056/N00903 S005049/N00901	TOOL LIFR RESET AL
R5827.0		ALM217 S000732/N00134 S002190/N00382 S002192/N00382	PRINT REQUEST ERROR
R5827.1		ALM218 S000733/N00134 S002202/N00385 S002208/N00386 S002204/N00385	PMC INTERFACE ERR FIN AL
R5827.2		ALM219 S000962/N00178 S000965/N00178	PILZ SIGNAL AL
R5827.3		ALM220 S000985/N00181 S001075/N00197 S000987/N00181	PS 1 SIGNAL AL
R5827.6		ALM223 S001048/N00194 S001288/N00228 S001292/N00228	COOLANT TANK LEV LOW CHECK
R5827.7		ALM224 S001132/N00206 S001135/N00206 S001144/N00207 S001147/N00207	MCC OFF CHECK AL
R5830.3		ALM244 S013808/N02431 S013827/N02434 S013845/N02438 S013866/N02442 S013811/N02431	SP COMPENSATION PLUS DATA AL
R5830.4		ALM245 S013821/N02433 S013828/N02434 S013846/N02438 S013867/N02442 S013824/N02433	SP COMPENSATION MINUS DATA AL
R5830.5		ALM246 S013973/N02459 S013971/N02458	COMPENSATION ACCOUNT AL
R5830.6		ALM247 S007054/N01269 S013660/N02403 S013722/N02414 S013663/N02403	WORK OFFSET NO DATA NONSET AL
R5830.7		ALM248 S000666/N00130 S013666/N02404 S013670/N02404	WORK OFFSET NO AL
R5950.0		ALMDET1 S000807/N00154 S012936/N02267 S000757/N00139	ALARM DETECT 1
R5950.1		ALMDET2 S000808/N00154 S012937/N02267 S000764/N00141	ALARM DETECT 2
R5950.2		ALMDET3 S000809/N00154 S012938/N02267 S000771/N00143	ALARM DETECT 3
R5950.3		ALMDET4 S000810/N00154 S012939/N02267 S000778/N00145	ALARM DETECT 4

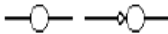
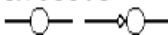
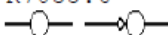
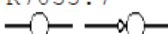
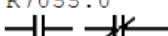
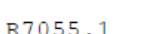
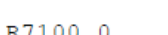
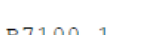
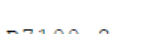
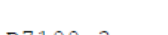
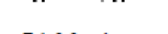


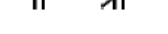
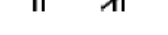


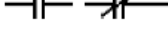
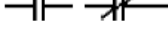
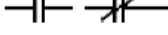
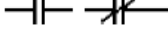
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5950.4	ALMDET5	ALARM DETECT 5	
	S000811/N00154 S012940/N02267		
	S000785/N00147		
R5950.5	ALMDET6	ALARM DETECT 6	
	S000812/N00154 S012941/N02267		
	S000792/N00149		
R5950.6	ALMDET7	ALARM DETECT 6	
	S000813/N00154		
	S000799/N00151		
R5950.7	ALMDET8	ALARM DETECT 8	
	S000814/N00154 S012942/N02267		
	S000806/N00153		
R5951.0	ALMDET7S	ALARM DETECT 7 AUX	
	S012943/N02267		
	S012933/N02266		
R5952.0	ALM_DET	MESSAGE DIIPLAY AL	
	S000741/N00135 S012917/N02263		
	S000815/N00154		
R5954.5	PRP_OFF1	AUTO OP RDY OFF 1	
	S000658/N00130 S000899/N00169		
	S000647/N00129		
R5954.6	BZ_AUX	BUZZER ON AUX	
	S000740/N00135 S000748/N00137 S012934/N02267		
	S000667/N00130		
R5954.7	ALMHLD.S	ALARM HOLD AUX	
	S000688/N00132		
	S000687/N00131		
R5955.0	ALM_HOLD	ALARM HOLD	
	S000655/N00130 S001375/N00239		
	S000708/N00132		
R5955.1	ST_BLK	AUTO START BE LOCK	
	S000656/N00130 S001385/N00242 S001419/N00248		
	S000721/N00133		
R5955.2	SBK_STP	SIGNAL BLOCK STOP	
	S000621/N00126 S000628/N00127 S000657/N00130		
	S000737/N00134		
R5955.3	BZ_STP	BUZZER STOP	
	S000739/N00135 S000749/N00137 S012944/N02267 S012945/N02267		
	S000743/N00135		
R5955.4	PTL_STP	AL LIGHT STOP	
	S000745/N00136 S012830/N02246		
	S000747/N00136		
R5957.0	M0-2FIN	M00&M02 FIN	
	S003334/N00601 S003341/N00602 S003347/N00603		
	S003339/N00601		
R5957.1	M0-2FINS	M00&M02 FIN PROCESS	
	S003328/N00599 S003331/N00600		
	S003327/N00598		

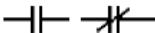
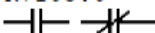
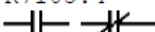
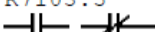
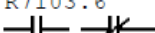
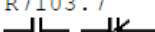
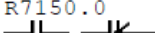
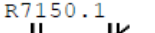
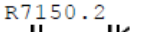
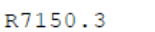
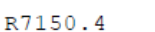
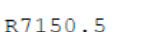
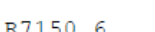
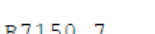
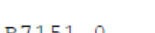
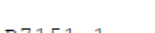
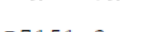




ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5957.2	M0-2FIN1 	M00&M02 FIN 1	
	S003333/N00601 S003330/N00599		
R5957.3	M0-2FIN2 	M00&M02 FIN AUX	
	S003329/N00599 S003332/N00600		
R5960.0	STLS 	START ON AUX	
	S000453/N00092 S000461/N00093		
R5960.4	FIRE.MEM 	FIRE MEMORY	
	S000605/N00120 S000607/N00120	S000947/N00176 S001453/N00253	
R6023.0			
	S004496/N00808		
R6023.2			
	S004497/N00808		
R6023.4			
	S004498/N00808		
R6023.6			
	S004499/N00808		
R6100.0			
	S000115/N00025		
R7000.0	PTNOREQ 	POT NO REQUIRE	
	S004532/N00815 S004537/N00815	S004541/N00816 S004547/N00817	
R7000.2	NTREQ 	NEW TOOL REQUIRE	
	S004738/N00850 S004741/N00850	S004745/N00851 S004751/N00852 S004758/N00853 S004760/N00854	
R7000.4	OLTLREQ 	OLD TOOL REQUIRE	
	S004722/N00847 S004725/N00847	S004726/N00848 S004819/N00864	
R7000.5	M30TLRQ 	M30 TOOL REQUIRE	
	S004799/N00860 S004801/N00860	S004803/N00861 S004821/N00864	
R7000.6	TLBRKRQ 	TOOL BROKEN REQUIRE	
	S004947/N00885 S004951/N00885	S004954/N00886 S004961/N00887	
R7001.0	LDMONRQ 	LOAD MONITOR ERR REQUIRE	
	S004972/N00889 S004976/N00889	S004979/N00890 S004986/N00891	
R7001.2	AMCSSKP1 	AMCS SKIP REQUIRE	
	S005001/N00894 S005005/N00894	S005008/N00895 S005015/N00896	
R7001.4	TLLFRSRQ 	TOOL LIFE RESET REQUIRE	
	S005021/N00897 S005022/N00897	S005045/N00901 S005053/N00902	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R7001.6		TOOL NO LIFE REQUIRE	
		S004913/N00879 S004920/N00880 S004927/N00881 S005061/N00904	
		S004917/N00879	
R7003.0		TOOL ID INDEX MODE	
		S004510/N00811 S004641/N00836 S004643/N00836 S005068/N00906	
		S004515/N00811	
R7003.4		PC CARD WRITE REQUEST	
		S002186/N00381 S002191/N00382 S002194/N00383	
		S002188/N00381	
R7003.6		PC INTERFACE REQUIRE	
		S002198/N00384 S002203/N00385 S002206/N00386	
		S002200/N00384	
R7023.2			
		S010850/N01895	
R7030.0		MG INDEX MP	
		S010341/N01778	
R7030.6		LEFT DOOR OPEN	
		S007772/N01371 S008497/N01482 S008661/N01502 S008876/N01534 S010912/N01908	
		S010924/N01909 S011043/N01922 S011060/N01923	
		S010347/N01779	
R7030.7		RIGHT DOOR OPEN	
		S007773/N01371 S008498/N01482 S008662/N01502 S008877/N01534 S010913/N01908	
		S010925/N01909 S011044/N01922 S011061/N01923	
		S010353/N01780	
R7031.0		SWING ARM MG SIDE P1	
		S010899/N01906	
		S010355/N01781	
R7031.1		SWING ARM MIDDLE P1-2	
		S010357/N01782	
R7031.2		SWING ARM DOOR< POS P2	
		S010903/N01907	
		S010359/N01783	
R7031.3		SWING ARM MIDDLE P2-3	
		S010361/N01784	
R7031.4		SWING ARM APPROACH POS P3	
		S010917/N01908	
		S010363/N01785	
R7031.5		SWING ARM MIDDLE P3-4	
		S010365/N01786	
R7031.6		SWING ARM SP POS P4	
		S010884/N01903 S010929/N01909	
		S010367/N01787	
R7032.0		Z AXIS ZP2	
		S010396/N01797	
		S010374/N01789	
R7032.1		Z MIDDLE P2-3	
		S010398/N01797	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R7032.2		Z AXIS ZP3	
	S010400/N01798	S010858/N01897	
	S010383/N01792		
R7032.3		Z MIDDLE P3-4	
	S008378/N01460		
	S010402/N01798		
R7032.4		Z AXIS ZP4	
	S008377/N01460		
	S010392/N01795		
R7033.0		ARM BACKWARD MG SIDE	
	S010405/N01799		
R7033.1		ARM FORWARD SWING ARM SIDE	
	S010408/N01800		
R7033.2		ARM CHUCK OPEN	
	S010411/N01801		
R7033.3		ARM CHUCK CLOSE	
	S010414/N01802		
R7034.0		ARM BACKWARD MG SIDE	
	S010419/N01804		
R7034.1		ARM FORWARD SWING ARM SIDE	
	S010422/N01805		
R7034.2		ARM HEAD UP	
	S010425/N01806		
R7034.3		ARM HEAD DOWN	
	S010428/N01807		
R7034.4		ARM HEAD CLAMP	
	S010431/N01808		
R7034.5		ARM HEAD UNCLAMP	
	S010434/N01809		
R7035.0		A AXIS CYC	
	S010436/N01810		
R7035.2		ARM TOOL BE DETECT	
	S010416/N01803		
R7035.4		ATC INITIAL	
	S010844/N01894		
R7050.0		Z ZP2 ACT OK	
	S010859/N01897		
R7050.1		Z ZP3 ACT OK	
	S008373/N01460	S010857/N01897	
	S010856/N01896		
R7050.2		Z ZP4 ACT OK	
	S010851/N01895		
R7050.3		M19 OK	
	S010865/N01898		

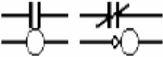
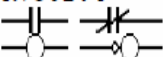
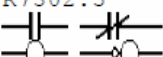
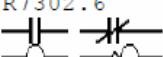
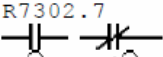
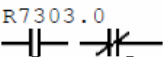
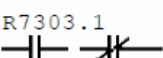
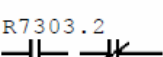
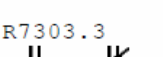
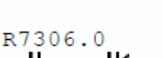
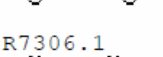
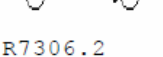
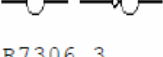
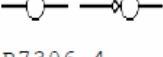
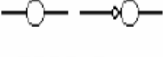
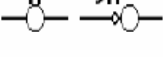
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R7050.4	M82OK S010867/N01899	SP CLAMP OK	
R7050.5	M83OK S010873/N01900	SP UNCLAMP OK	
R7050.6	M84OK S010877/N01901	MG SP TOOL INDEX OK	
R7050.7	M85OK S010881/N01902	MG T CODE INDEX OK	
R7051.0	M86OK S010885/N01903	ALL AXIS INTERLOCK PASS OK	
R7051.1	M87OK S010888/N01904	AXIS INTERLOCK ENABLE OK	
R7051.3	M89OK S010894/N01905	ATC RESTART OK	
R7051.4	SLP1OK S010900/N01906	SWING ARM MG SIDE POS OK	
R7051.5	SLP2OK S010911/N01907	SWING ARM DOOR< POS P2	
R7051.6	SLP3OK S010923/N01908	SWING ARM APPROACH POS P3	
R7051.7	SLP4OK S010931/N01909	SWING ARM SP POS P4	
R7052.0	M104OK S010943/N01910	ARM FORWARD SWING ARM SIDE OK	
R7052.1	M105OK S010954/N01912	ARM BACKWARD MG SIDE	
R7052.2	M106OK S010960/N01913	HAND CHUCK OPEN OK	
R7052.3	M107OK S010975/N01914	HAND CHUCK CLOSE OK	
R7052.4	M108OK S010979/N01915	MG WAIT TOOL INDEX OK	
R7052.5	M109OK S010983/N01916	MG RETURN TOOL INDEX OK	
R7052.6	M120OK S010989/N01917	ARM HEAD CLAMP OK	
R7052.7	M121OK S010994/N01918	ARM HEAD UNCLAMP OK	
R7053.1	M123OK S011013/N01920	SWING ARM 45 DEGREE	
R7053.2	M124OK S011033/N01921	SWING ARM 0 DEGREE	
R7053.3	M125OK S011050/N01922	SWING ARM -90 DEGREE	

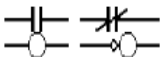
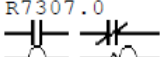
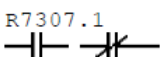
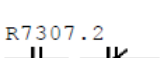
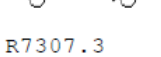
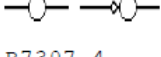
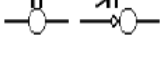
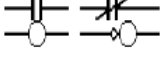
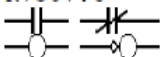
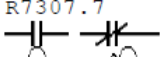
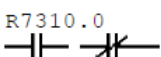
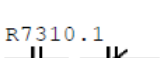
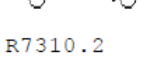
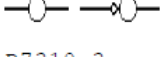
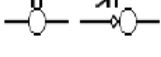
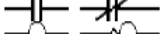
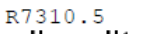
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R7053.4		M126OK S011067/N01923	SWING ARM -180 DEGREE
R7053.5		M127OK S011087/N01924	SWING ARM -270 DEGREE
R7053.6		M128OK S011105/N01925	SWING ARM -315 DEGREE
R7053.7		M129OK S011107/N01926	SWING ARM -360 DEGREE
R7055.0		MFINS S011218/N01931 S011220/N01931	MONITOR M CODE FIN
R7055.1		MRSTS S011224/N01932	MONITOR M CODE RESET
R7100.0		S004529/N00815 S004538/N00816 S004544/N00817	
R7100.1		S004530/N00815 S004539/N00816 S004545/N00817	
R7100.2		S004742/N00851 S004748/N00852 S004767/N00855	
R7100.3		S004743/N00851 S004749/N00852 S004768/N00855 S010843/N01894	
R7100.4		S004721/N00847 S004727/N00848	
R7100.5		S004798/N00860 S004802/N00861	
R7100.6		S004945/N00885 S004952/N00886 S004959/N00887	
R7100.7		S004946/N00885 S004953/N00886 S004960/N00887	
R7101.0		S004970/N00889 S004977/N00890 S004984/N00891	
R7101.1		S004971/N00889 S004978/N00890 S004985/N00891	
R7101.2		S004999/N00894 S005006/N00895 S005013/N00896	
R7101.3		S005000/N00894 S005007/N00895 S005014/N00896	
R7101.4		S005038/N00900 S005043/N00901 S005050/N00902	
R7101.5		S005039/N00900 S005044/N00901 S005051/N00902	
R7101.6		S004911/N00879 S004918/N00880 S004925/N00881	










ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R7101.7		S004912/N00879 S004919/N00880 S004926/N00881	
R7103.0		S004642/N00836 S004644/N00836	
R7103.4		S002185/N00381 S002195/N00383	
R7103.5		S002189/N00382	
R7103.6		S002197/N00384 S002207/N00386	
R7103.7		S002201/N00385	
R7150.0		S008221/N01440 S008275/N01450 S008324/N01455 S008335/N01456 S011125/N01931	
R7150.1		S008222/N01440 S008284/N01451 S008323/N01455 S008334/N01456 S011122/N01931	
R7150.2		S007832/N01380 S007839/N01381 S007846/N01382 S007853/N01383 S007874/N01387 S007884/N01388 S007893/N01389 S007904/N01390 S007998/N01401 S008223/N01440 S008294/N01452 S008345/N01457 S008354/N01458 S011120/N01931	
R7150.3		S011128/N01931 S011264/N01945	
R7150.4		S009207/N01557 S011131/N01931	
R7150.5		S009190/N01557 S011134/N01931	
R7150.6		S005087/N00913 S011137/N01931	
R7150.7		S005093/N00914 S011139/N01931	
R7151.0		S005099/N00915 S007916/N01391 S007945/N01392 S007950/N01393 S011144/N01931	
R7151.1		S005105/N00916 S011148/N01931	
R7151.3		S005111/N00917 S011152/N01931	
R7151.4		S005117/N00918 S011157/N01931	
R7151.5		S005123/N00919 S011160/N01931	
R7151.6		S005129/N00920 S011163/N01931	
R7151.7		S005135/N00921 S011166/N01931	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R7152.0		S005141/N00922 S011169/N01931	
R7152.1		S005147/N00923 S011172/N01931	
R7152.2		S005153/N00924 S011175/N01931	
R7152.3		S005159/N00925 S011178/N01931	
R7152.4		S005165/N00926 S011181/N01931	
R7152.5		S005171/N00927 S011183/N01931	
R7152.6		S005177/N00928 S011188/N01931	
R7152.7		S005183/N00929 S011191/N01931	
R7153.0		S005189/N00930 S011194/N01931	
R7153.1		S005195/N00931 S011197/N01931	
R7153.2		S005201/N00932 S011200/N01931	
R7153.3		S005207/N00933 S011203/N01931	
R7153.4		S005213/N00934 S011206/N01931	
R7153.5		S005219/N00935 S011209/N01931	
R7153.6		S005225/N00936 S011212/N01931	
R7153.7		S005231/N00937 S011215/N01931	
R7155.0		S006842/N01236 S006861/N01239 S006873/N01240 S006987/N01259 S011108/N01927 S011219/N01931	
R7302.0		MCH_LCK_PLS MACHINE LOCK PULSE S001750/N00306 S001752/N00306 S001743/N00304	
R7302.1		MCH_LCK_PLS_AUX MACHINE LOCK PULSE AUX S001742/N00304 S001749/N00305	
R7302.2		PLS3 AUX FUNCTION PULSE S001770/N00309 S001772/N00309 S001763/N00307	







ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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R7302.3	PLS4	AUX FUNCTION PULSE AUX	
	S001762/N00307 S001769/N00308		
R7302.4	PLS5	Z MACHINE LOCK PULSE	
	S001794/N00312 S001785/N00310	S001796/N00312	
R7302.5	PLS6	Z MACHINE LOCK PULSE AUX	
	S001784/N00310 S001793/N00311		
R7302.6	PLS7	PROGRAM RESTART PULSE	
	S001813/N00315 S001806/N00313	S001815/N00315	
R7302.7	PLS8	PROGRAM RESTART PULSE 1	
	S001805/N00313 S001812/N00314		
R7303.0	PLS9	F1 PB SEND PULSE	
	S001837/N00318 S001828/N00316	S001839/N00318	
R7303.1	PLS10	F1 PB SEND PULSE AUX	
	S001827/N00316 S001836/N00317		
R7303.2	PLS11	TEACH PULSE	
	S001860/N00321 S001851/N00319	S001862/N00321	
R7303.3	PLS12	TEACH PULSE AUX	
	S001850/N00319 S001859/N00320		
R7306.0	PLS13	BLOCK SKIP 2 PULSE	
	S001884/N00324 S001875/N00322	S001886/N00324	
R7306.1	PLS14	BLOCK SKIP 2 PULSE	
	S001874/N00322 S001883/N00323		
R7306.2	PLS15	BLOCK SKIP 3 PULSE	
	S001907/N00327 S001898/N00325	S001909/N00327	
R7306.3	PLS16	BLOCK SKIP 3 PULSE	
	S001897/N00325 S001906/N00326		
R7306.4	PLS17	BLOCK SKIP 4 PULSE	
	S001930/N00330 S001921/N00328	S001932/N00330	
R7306.5	PLS18	BLOCK SKIP 4 PULSE	
	S001920/N00328 S001929/N00329		
R7306.6	PLS19	BLOCK SKIP 5 PULSE	
	S001953/N00333 S001944/N00331	S001955/N00333	

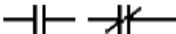
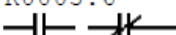
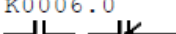
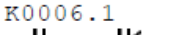
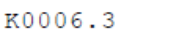
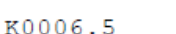
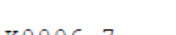

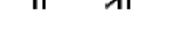
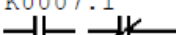


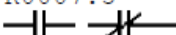
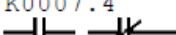
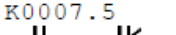
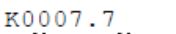
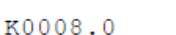
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R7306.7		PLS20 BLOCK SKIP 5 PULSE	S001943/N00331 S001952/N00332
R7307.0		PLS21 BLOCK SKIP 6 PULSE	S001976/N00336 S001978/N00336 S001967/N00334
R7307.1		PLS22 BLOCK SKIP 6 PULSE	S001966/N00334 S001975/N00335
R7307.2		PLS23 BLOCK SKIP 7 PULSE	S001999/N00339 S002001/N00339 S001990/N00337
R7307.3		PLS24 BLOCK SKIP 7 PULSE	S001989/N00337 S001998/N00338
R7307.4		PLS25 BLOCK SKIP 8 PULSE	S002022/N00342 S002024/N00342 S002013/N00340
R7307.5		PLS26 BLOCK SKIP 8 PULSE	S002012/N00340 S002021/N00341
R7307.6		PLS27 BLOCK SKIP 9 PULSE	S002045/N00345 S002047/N00345 S002036/N00343
R7307.7		PLS28 BLOCK SKIP 9 PULSE	S002035/N00343 S002044/N00344
R7310.0		PLS29 AUTO POWER OFF PULSE 1	S002056/N00348 S002058/N00348 S002053/N00346
R7310.1		PLS30 AUTO POWER OFF PULSE 2	S002052/N00346 S002055/N00347
R7310.2		PLS31 OIL MIST COLLECTOR PULSE	S002067/N00351 S002069/N00351 S011643/N02036 S011655/N02038 S002064/N00349
R7310.3		PLS32 OIL MIST COLLECTOR PULSE AUX	S002063/N00349 S002066/N00350
R7310.4		PLS33 MG DOOR WIPER SW PULSE	S002078/N00354 S002080/N00354 S002075/N00352
R7310.5		PLS34 MG DOOR WIPER SW PULSE AUX	S002074/N00352 S002077/N00353
R7996.0			S013564/N02385
R7996.1			S013582/N02387

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R7996.2		S013565/N02385	
R7996.3		S013583/N02387	
R7996.4		S013566/N02385	
R7996.5		S013584/N02387	
R7996.6		S013567/N02385	
R7996.7		S013585/N02387	
R7997.0		SPON S013549/N02382	SP ON
R7997.1		PROTECT S002184/N00380	MEMORY KEY
R7997.2		S013568/N02385	
R7997.3		S013586/N02387	
R7997.4		S013569/N02385	
R7997.5		S013587/N02387	
R7997.6		M401FF S013551/N02383 S013555/N02383	LOAD MONITOR M401 MEM S013562/N02385 S013580/N02387 S013598/N02389 S013602/N02390
R7997.7		M402FF S013557/N02384 S013561/N02384	LOAD MONITOR M402 MEM S013563/N02385 S013581/N02387 S013599/N02389 S013605/N02391
R9000.0		=	=
		S000623/N00126	S000756/N00139
		S000784/N00147	S000791/N00149
		S001549/N00265	S003104/N00557
		S003404/N00623	S003446/N00635
		S003571/N00655	S003618/N00662
		S004129/N00734	S004170/N00742
		S004567/N00822	S004575/N00824
		S005872/N01068	S005895/N01071
		S006620/N01196	S006628/N01198
		S006665/N01208	S006672/N01210
		S006708/N01218	S006760/N01227
		S006909/N01248	S006948/N01257
		S008945/N01539	S009267/N01566
		S009317/N01575	S010118/N01722
		S010306/N01769	S010315/N01771
		S010373/N01789	S010382/N01792
		S012786/N02238	S012869/N02253
		S013397/N02353	S013784/N02428
		S014075/N02477	S014083/N02479
		S014115/N02487	
		S000763/N00141	S000770/N00143
		S000798/N00151	S000805/N00153
		S003365/N00609	S003376/N00613
		S003478/N00640	S003501/N00644
		S003641/N00666	S003688/N00673
		S004322/N00774	S004522/N00813
		S004583/N00826	S004591/N00828
		S005909/N01072	S006058/N01106
		S006636/N01200	S006647/N01203
		S006680/N01212	S006689/N01214
		S006767/N01229	S006890/N01244
		S007994/N01400	S008868/N01533
		S009278/N01568	S009290/N01570
		S010187/N01750	S010195/N01752
		S010318/N01772	S010326/N01774
		S010391/N01795	S010833/N01892
		S012932/N02266	S013198/N02320
		S013921/N02451	S014056/N02473
		S014091/N02481	S014099/N02483
		S000777/N00145	S001542/N00264
		S003390/N00618	S003548/N00651
		S003711/N00677	S004559/N00820
		S005291/N00948	S006061/N01107
		S006655/N01205	S006698/N01216
		S006899/N01246	S008880/N01534
		S009305/N01573	S010298/N01767
		S010329/N01775	S010949/N01912
		S013303/N02334	S014067/N02475
		S014107/N02485	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R9000.1	<	<	
	S003105/N00557	S003363/N00608	S003367/N00610
	S003388/N00617	S003392/N00619	S003402/N00622
	S003418/N00628	S003802/N00691	S004130/N00734
	S004854/N00871	S005292/N00948	S005326/N00953
	S005431/N00969	S005441/N00972	S005451/N00975
	S005481/N00984	S005491/N00987	S005498/N00989
	S005525/N00997	S005544/N01001	S005563/N01005
	S005620/N01017	S005639/N01021	S005658/N01025
	S005697/N01035	S005707/N01038	S005717/N01041
	S007900/N01390	S007983/N01397	S008041/N01407
	S010384/N01793	S010393/N01796	S010820/N01889
	S012019/N02115	S012714/N02222	S012722/N02224
	S012778/N02236	S013197/N02320	S013650/N02401
	S013804/N02431	S013817/N02433	
R9091.1	NOON	ALWAYS ON	
	S000148/N00031	S000616/N00125	S000816/N00155
	S001492/N00258	S001493/N00258	S001482/N00257
			S001483/N00257
R9091.5			
	S012912/N02263		
R9091.6			
	S003423/N00630	S003426/N00631	S005057/N00903
	S012676/N02215	S012914/N02263	S012532/N02191
			S012539/N02192

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
K0000.0		SP_COL_DET_SW_1 SPINDLE COOLANT DETECT SW 1	
		S000537/N00108 S000554/N00110 S003880/N00703	
K0000.2		ATC_STICK ATC STICK	
		S001357/N00238 S001439/N00252 S001727/N00301 S002249/N00396 S002263/N00397	
		S002282/N00398 S004002/N00717 S004389/N00782 S006081/N01111 S006118/N01113	
		S006125/N01115 S006777/N01230	
K0000.3		APC APC FUNCTION SW	
		S001428/N00250 S001437/N00252 S001467/N00255	
K0000.4		CHP_OIL_COLR_SW CHIP OIL CHILLER SW	
		S000546/N00109 S012221/N02134	
K0000.7		CHIP_OIL_UT_SW CHIP OIL UNIT DET SW	
		S000511/N00103	
K0001.0		MG_30T_SEL MG ATC 30T SEL	
		S004536/N00815 S005910/N01072 S006130/N01116 S006342/N01154 S006347/N01155	
		S006352/N01156 S006357/N01157 S006362/N01158 S006367/N01159 S006378/N01163	
		S006389/N01164 S006392/N01165 S006400/N01166 S006411/N01168 S006420/N01169	
		S006429/N01170 S006438/N01171 S006471/N01176 S006479/N01178 S006710/N01218	
		S007153/N01282 S007158/N01283 S007163/N01284 S007170/N01285 S007179/N01286	
		S007185/N01287 S007195/N01288 S007208/N01289 S007216/N01290 S007236/N01294	
		S007318/N01306 S007334/N01308 S007340/N01309 S007350/N01310 S007357/N01311	
		S007377/N01315 S007451/N01328 S007496/N01335 S007548/N01344 S007554/N01345	
		S007563/N01346 S007576/N01347 S007585/N01348 S007591/N01349 S007596/N01350	
		S007602/N01351 S007610/N01352 S007616/N01353 S007617/N01353 S007623/N01354	
		S007632/N01355 S007646/N01356 S007653/N01357 S007658/N01358 S007668/N01359	
		S007674/N01360 S007681/N01361 S007689/N01362 S007703/N01363 S007713/N01364	
		S007720/N01365 S007727/N01366 S007734/N01367 S007746/N01369 S007751/N01369	
		S007769/N01370 S007778/N01371 S007785/N01372 S007794/N01373 S007819/N01376	
		S008888/N01534 S008894/N01535 S008912/N01536 S008932/N01537 S008962/N01539	
		S008974/N01540 S009001/N01541 S009026/N01542 S009057/N01543 S009080/N01544	
		S009108/N01545 S009128/N01546 S009235/N01559 S009238/N01560 S009243/N01561	
		S009246/N01562 S009250/N01563 S009665/N01637 S009701/N01644 S009737/N01651	
		S009775/N01658 S009814/N01664 S009821/N01665 S009857/N01672 S010910/N01907	
		S010922/N01908 S010930/N01909 S010942/N01910 S010953/N01912 S010959/N01913	
		S010974/N01914 S010988/N01917 S010993/N01918 S011012/N01920 S011032/N01921	
		S011049/N01922 S011066/N01923 S011086/N01924 S011104/N01925 S011229/N01934	
		S011233/N01935	
		S000149/N00031	
K0001.1		X0.6_ON AUTO FIRE POWER DOWN SW	
		S000561/N00111 S000565/N00112 S000606/N00120	
K0001.4		WEK_TIM_PRO_SW WEEKLY PROG TIMER FUN SW	
		S001601/N00273 S001645/N00283	
K0001.7		MSTAUT_FUN_SW OIL MIST COLLECTOR AUTO FUN SW	
		S011648/N02036 S011659/N02038	
K0002.0		MST_COLT_DET_SW MIST COLLECTOR DETECT ON SW	
		S000334/N00071 S011640/N02035	
K0002.1		OIL_SKIR_DET_SW OIL SKIMMER OL FUN SW	
		S000297/N00065 S012224/N02135	
K0002.3		X2.5_ON_SW MIST COLECTOR PROTECTOR ON/OFF	
		S000340/N00072	
K0002.4		ATC_AIR_DET_SW ATC AIR CHECK ON/OFF	
		S000522/N00105	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
K0002.7	X1.7_CONTACT_SEL	X1.7 NORMAL OPEN SELECT	
— — —	S011919/N02097	S011921/N02097 S011925/N02098 S011927/N02098	
K0003.0	4CLPRSTOFF	4TH AXIS CLAMP RESET DISABLE	
— — —	S011943/N02101		
K0003.1	5CLPRSTOFF	5TH AXIS CLAMP RESET DISABLE	
— — —	S011978/N02108		
K0003.3	SPCOMMONOP	SP COMMON OP	
— — —	S003745/N00681		
K0003.4	HYDRPUMPAR	HYDRAULIC PUMP ALWAYS ON	
— — —	S012806/N02242		
K0003.5	C_AXIS_HYDRLC	C AXIS HYDRAULIC CLAMP	
— — —	S012797/N02240		
K0003.6	SP_HSK_SPEC	SP HIGH SKIP SPEC	
— — —	S006085/N01112	S006451/N01174 S006454/N01174 S007175/N01286 S007190/N01288	
	S007200/N01289	S007254/N01296 S007267/N01298 S007544/N01344 S007559/N01346	
	S007581/N01348	S007911/N01390 S008907/N01536 S008985/N01541 S009010/N01542	
	S010067/N01701	S010404/N01799 S010407/N01800 S010410/N01801 S010413/N01802	
	S010418/N01804	S010421/N01805 S010424/N01806 S010427/N01807 S010430/N01808	
	S010433/N01809	S010956/N01913 S010962/N01914 S010986/N01917 S010991/N01918	
	S010995/N01919		
K0004.0	AXIS_INTLK_PASS	ALL AXIS INTERLOCK PASS	
— — —	S000614/N00124	S010891/N01905	
K0004.1	ATC_APC_INTLK_PS	ATC&APC INTERLOCK PASS	
— — —	S000022/N00005	S000025/N00006 S000028/N00007 S000031/N00008 S000612/N00123	
	S004390/N00782	S008227/N01440 S010862/N01898 S010892/N01905	
K0004.2	ATC_APC_JOG	ATC&APC JOG	
— — —	S000610/N00122	S010893/N01905	
K0004.3	APC_TEST_MODE	APC TEST MODE	
— — —	S000608/N00121		
K0004.4	SP_TEST_MODE	SP TEST MODE	
— — —	S000634/N00128	S003744/N00681 S003762/N00683	
K0004.5		BRAKE TEST REQUIRE	
— — —	S001215/N00216	S001243/N00221 S001247/N00221	
K0004.6	MCC_TEST_REQ_OFF	MCC TEST REQ OFF	
— — —	S001174/N00210	S001189/N00213 S001193/N00213	
K0004.7			
— — —	S000914/N00170		
K0005.0	N01_CHP_OIL_FUN	N01 CHIP OIL FUN SW	
— — —	S000285/N00063	S011571/N02023	
K0005.1	CTS_ON	CTS ON	
— — —	S011562/N02022	S011580/N02025	
K0005.2	CTS_OIL_OL_FUN	CTS OIL OL DETE FUN SW	
— — —	S000291/N00064	S011489/N02012 S011493/N02013 S011563/N02022 S011584/N02025	
K0005.3	OIL_MIST	OIL MIST	
— — —	S011573/N02024		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
K0005.5	CHP_FLSH_FUN_SEL 	CHIP FLUSH FUN SELECT SW S011607/N02030	
K0005.6	CHP_OIL_LEV_STP 	CHIP OIL LEVEL LOW STOP S000697/N00132	
K0006.0	CHIP_PUM_OL_SW 	CHIP COOLANT PUMP O.L AL SW S000308/N00067 S011623/N02033	
K0006.1	COL_OIL_LEV_SW 	CHP OIL LEV CHECK FUNCTION S000528/N00106 S011694/N02044 S011698/N02044	
K0006.3	CHIP_TANK_LEV_ON 	CHIP WATER&OIL LEV DETE ON S000601/N00119	
K0006.5	CHP_OIL_PUP_SW 	CHIP OIL PUMP OL FUNCTION SW S000314/N00068 S011696/N02044	
K0006.7	CHPOILOUTTMCTRL 	CHIP OIL OUT TIMER CONTROL S011680/N02044	
K0007.0	NO1_CHP_CON_OLS 	NO1 CHP CON OL FUN SW S000321/N00069 S000450/N00092 S002135/N00367 S011994/N02110 S012103/N02124 S012122/N02126 S012130/N02127 S012975/N02276	
K0007.1	NO_2&3_CHIP_CON 	NO 2&3 CHIP CONVEYOR FUN ON S000328/N00070 S011996/N02110 S012074/N02123 S012082/N02123 S012099/N02124 S012107/N02125 S012111/N02125 S012157/N02128 S012165/N02129 S012185/N02132 S012187/N02132	
K0007.2	CHP_CON1_TOQ_SW 	CHIP CON 1 TORQUE SW S000470/N00094 S002136/N00367	
K0007.3	CHP_CON2_TOQ_SW 	CHIP CON 2 TORQUE SW S000475/N00095	
K0007.4	CHP_CON3TOQ_SW 	CHIP CON 3 TORQUE SW S000479/N00096	
K0007.5	CHP_CON_RUN_CHK 	CHIP CON RUN CHECK S000467/N00094	
K0007.7	CHPCONOFAL_PASS 	CHIP CON OFF AL PASS S000454/N00092	
K0008.0	24_TOOL_SEL 	24 TOOL SELECT S013184/N02318	
K0008.2	T&MACTENABLE 	T CODE & M CODE ACT ENABLE S004609/N00830 S004675/N00840 S004683/N00841 S006915/N01250 S006942/N01256 S006947/N01257 S006965/N01258 S006973/N01258 S007015/N01263 S011342/N01974	
K0008.6	ATC-ANEG 	ATC A ZP1 PASS S006519/N01188 S006524/N01189 S007798/N01374 S007816/N01376 S008431/N01473 S006521/N01188	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
K0008.7	40ATCSA	40 TOOL 90 DEGREE SWING ARM	
	S002246/N00396	S002259/N00397 S002273/N00398 S002275/N00398 S002277/N00398	
	S003997/N00717	S003999/N00717 S004384/N00782 S004387/N00782 S005086/N00913	
	S005092/N00914	S005098/N00915 S005104/N00916 S005110/N00917 S005116/N00918	
	S005122/N00919	S005128/N00920 S005134/N00921 S005140/N00922 S005146/N00923	
	S005152/N00924	S005158/N00925 S005164/N00926 S005170/N00927 S005176/N00928	
	S005182/N00929	S005188/N00930 S005194/N00931 S005200/N00932 S005206/N00933	
	S005212/N00934	S005218/N00935 S005224/N00936 S005230/N00937 S011549/N02021	
	S012852/N02251	S012861/N02251 S012870/N02253 S012874/N02253 S013185/N02318	
	S013231/N02324	S013233/N02324 S013251/N02326 S013253/N02326 S013265/N02327	
	S013267/N02327		
	S010050/N01700		
K0009.6	HIGH_SPEED_TAP	HIGH SPEED TAP	
	S004449/N00796		
K0010.1	BOOST_AL_PASS_SW	BOOSTER ALARM BY PASS	
	S011713/N02047	S011716/N02048 S011719/N02049 S011722/N02050 S011725/N02051	
	S011811/N02066		
K0010.2	CHP_OIL_LOW_SW1	CHIP OIL LOW L.S SW 1	
	S000486/N00097	S011689/N02044 S011692/N02044 S012195/N02132 S012198/N02132	
	S012211/N02133	S012214/N02133	
K0010.3	CHP_OIL_LOW_SW2	CHIP OIL LOW L.S SW 2	
	S000492/N00098		
K0010.4	EX_NOZL_AUX_COL	EX AUX COOLANT NOZZLE SW	
	S000360/N00075	S011631/N02034	
K0010.5	CH_COT_PU_COT_SW	CHIP COOLANT PUMP COOLANT SW	
	S000353/N00074	S012205/N02133	
K0010.6	FILT_BRK_DET_ON	DRUM FILTER DETECT ON	
	S000597/N00118		
K0010.7	CHP_CON_CCW_SW	CHIP CON CCW OL ON/OFF	
	S000347/N00073	S012201/N02132	
K0011.0	COVER_STICK	COVER ENTIRE STICK	
	S003910/N00706	S003995/N00717 S011555/N02021 S012063/N02122	
K0011.4	SD_MD_SW	STAND MODE SW	
	S001052/N00194	S001131/N00206 S001134/N00206 S001145/N00207 S001170/N00209	
	S001361/N00238	S003461/N00637 S003531/N00648 S003601/N00659 S003671/N00670	
	S003803/N00691	S011553/N02021	
	S001022/N00192		
K0011.5	SPONAIRBLOW	AIR BLOW IN SP RUN	
	S010040/N01698		
K0012.0	EX_M_CODE_BIN	EXTRA BINARY M CODE	
	S013000/N02280	S013002/N02280 S013009/N02281 S013011/N02281 S013018/N02282	
	S013020/N02282	S013031/N02284 S013033/N02284 S013037/N02285 S013042/N02285	
K0012.1	X1.6_PASS	TOUCH SW OVER TRAVIRE	
	S000044/N00011	S000407/N00082	
K0012.2	HANDINDWRITE	MANUAL INDEX WRITE	
	S002099/N00358	S002595/N00447 S012981/N02277	
K0012.3	AUTO_TL_SET	AUTO TOOL SET	
	S000106/N00022	S013147/N02308 S013152/N02309	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
K0012.4	TBESKACONNT	TABLE SKIP A CONNECT	
	S000097/N00021	S000099/N00021 S013375/N02349 S013382/N02350	
K0012.5	M30_POWER_OFF	M30 POWER OFF FUN SW	
	S012968/N02273		
K0012.7	AL_POWER_OFF	ALARM POWER OFF	
	S001441/N00252		
K0013.0	PLAYBACK_ON	PLAYBACK ON	
	S001865/N00321	S002358/N00408	
K0013.1	F1_PB_SEND	F1 PB SEND	
	S002623/N00458		
K0013.2	CS_AXIS_CONTROL	CS AXIS CONTROL	
	S002987/N00538	S002994/N00538 S003003/N00539 S003875/N00702 S012985/N02277	
K0013.3	C_AXIS_CONTROL	C AXIS CONTROL	
	S013805/N02431	S013818/N02433 S013970/N02458 S013974/N02459 S013981/N02460 S013986/N02461 S013991/N02462	
K0013.4	SPDISPCOMPSTION	SP HEAT DISPLACE COMPENSATION	
	S013787/N02428		
K0013.5	3D_INTFCE_CHK	3D INTERFERENCE CHECK	
	S013621/N02394	S013642/N02399	
K0014.3	HSKUNCLPENAB	HIGH SKIP UNCLP ENABLE	
	S006086/N01112	S006452/N01174 S006455/N01174	
K0015.1	OPAUXPANEL	OPERATION AUX PANEL	
	S009169/N01556	S009211/N01557 S009213/N01557	
K0015.2	MAG.MPG	MAGAZINE SERVO MPG VALID	
	S000389/N00080	S002256/N00396 S002270/N00397 S002296/N00399 S002303/N00400 S002315/N00401 S002318/N00402 S002323/N00403 S002933/N00533 S002936/N00533 S002940/N00533 S002951/N00534 S002956/N00535 S002963/N00535 S002967/N00536 S002970/N00536 S002980/N00537 S002983/N00537 S005925/N01074 S007923/N01391 S007957/N01393	
K0015.3	ATC_DOOR_LS	ATC DOOR L.S	
	S010343/N01779	S010345/N01779 S010349/N01780 S010351/N01780	
K0015.4	MAG.DOR.SEN.PAS	MAGAZINE DOOR SENSOR PASS	
	S012253/N02142	S012260/N02143 S012278/N02145 S012290/N02146 S012523/N02189 S012527/N02190 S012534/N02191 S012541/N02192 S012545/N02193 S012549/N02194	

K0016.0		SAVA_A	SERVO SWING ARM A CYC			
		S006167/N01126	S006175/N01127	S006185/N01129	S006193/N01130	S006294/N01145
		S006305/N01146	S006384/N01164	S006405/N01168	S006407/N01168	S006414/N01169
		S006416/N01169	S006423/N01170	S006425/N01170	S006432/N01171	S006434/N01171
		S006622/N01197	S006627/N01198	S006630/N01199	S006635/N01200	S006641/N01202
		S006646/N01203	S006649/N01204	S006654/N01205	S006692/N01215	S006699/N01216
		S006702/N01217	S006709/N01218	S006893/N01245	S006900/N01246	S006903/N01247
		S006910/N01248	S007275/N01299	S007277/N01299	S007568/N01347	S007570/N01347
		S007638/N01356	S007640/N01356	S007695/N01363	S007697/N01363	S007761/N01370
		S007763/N01370	S008645/N01502	S008647/N01502	S008651/N01502	S008653/N01502
		S008747/N01516	S008755/N01517	S008763/N01518	S008772/N01519	S008781/N01520
		S008789/N01521	S008797/N01522	S008803/N01523	S008809/N01524	S008816/N01525
		S008823/N01526	S008829/N01527	S008870/N01534	S008872/N01534	S009271/N01567
		S009279/N01568	S009283/N01569	S009291/N01570	S009298/N01572	S009306/N01573
		S009310/N01574	S009318/N01575	S009356/N01582	S009362/N01583	S009368/N01584
		S009375/N01585	S009382/N01586	S009388/N01587	S009394/N01588	S009401/N01589
		S009407/N01590	S009409/N01590	S009416/N01591	S009422/N01592	S009428/N01593
		S009435/N01594	S009442/N01595	S009448/N01596	S009475/N01603	S009481/N01604
		S009487/N01605	S009494/N01606	S009501/N01607	S009507/N01608	S009522/N01611
		S009528/N01612	S009534/N01613	S009541/N01614	S009548/N01615	S009554/N01616
		S009594/N01627	S009600/N01628	S009624/N01631	S009630/N01632	S010314/N01771
		S010317/N01772	S010325/N01774	S010328/N01775	S010435/N01810	S010965/N01914
		S010967/N01914	S011005/N01920	S011007/N01920	S011022/N01921	S011027/N01921
		S011036/N01922	S011038/N01922	S011053/N01923	S011055/N01923	S011076/N01924
		S011081/N01924	S011096/N01925	S011098/N01925		
		S006390/N01164				
K0016.1		ATCTLINPM	ATC TOOL INDEX POS MEM			
		S006555/N01192				
		S006570/N01192				
K0016.2		ATCTLR LPM	ATC TOOL RELEASE POS MEM			
		S006576/N01193				
		S006591/N01193				
K0016.3		ATCSTPM	ATC STOP POS			
		S006599/N01194				
		S006614/N01194				
K0016.5		ZP4YM	Y AXIS ZP4 MEM			
		S006537/N01190	S006553/N01192	S006574/N01193	S006597/N01194	
		S006541/N01190				
K0016.6		ATCXAPM	ATC X&A POS MEM			
		S006526/N01189				
		S006535/N01189				
K0016.7		ZP4ZM	Z AXIS ZP4 MEM			
		S006543/N01191	S006550/N01192	S006594/N01194		
		S006547/N01191				
K0017.0		M130FF1	M130 OFF 1			
		S013795/N02429				
		S013798/N02429				
K0018.0		H*10	HANDLE FEEDRATE *10			
		S002178/N00379	S002180/N00379			
		S002182/N00379				
K0018.1		H.INT.M	HANDLE INTERRUPT MANUAL			
		S002095/N00358	S002097/N00358	S002594/N00447	S002622/N00458	
		S002100/N00358				

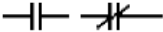
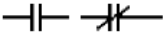
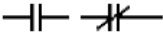
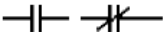
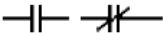
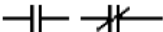
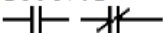
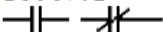
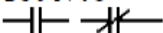
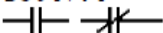
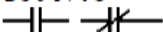
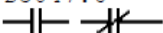
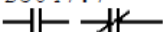
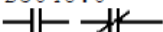
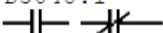
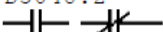
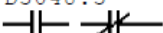
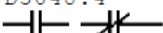
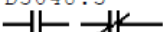
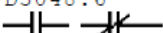
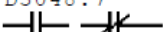
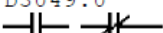
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
K0018.3		SPINDLE OVERRIDE FUN ON	
		S002109/N00361 S002111/N00361 S003123/N00560 S012836/N02248	
		S002113/N00361	
K0020.0		WORK LIGHT FUNCTION SW	
		S002120/N00364 S002122/N00364 S012970/N02274	
		S002124/N00364	
K0020.1		BLOCK SKIP ON MEM	
		S002156/N00373 S002158/N00373 S002612/N00454	
		S002160/N00373	
K0020.2		OPTION STOP FUN SEL SW	
		S002167/N00376 S002169/N00376 S003345/N00603 S012832/N02247 S012960/N02270	
		S002171/N00376	
K0020.3		MANUAL CHIP CON ON MEM	
		S002131/N00367 S002133/N00367 S012067/N02122 S012076/N02123 S012109/N02125	
		S012974/N02276	
		S002138/N00367	
K0025.1		COOLANT OFF CHECK BY PASS	
		S001291/N00228	
K0026.0		SPINDLE TOOL CHECK FUN OFF	
		S004060/N00720 S010045/N01699	
		S010047/N01699	
K0027.6		3D INTERFERENCE OFFSET WRITE	
		S013662/N02403 S013669/N02404 S013701/N02411	
K0028.3		AL159 MEM	
		S000566/N00112	
		S000570/N00112	
K0029.5		PROTECT KEY OFF SW	
		S001738/N00304 S001745/N00305 S001758/N00307 S001765/N00308 S001779/N00310	
		S001788/N00311 S001801/N00313 S001808/N00314 S001822/N00316 S001831/N00317	
		S001845/N00319 S001854/N00320 S001869/N00322 S001878/N00323 S001892/N00325	
		S001901/N00326 S001915/N00328 S001924/N00329 S001938/N00331 S001947/N00332	
		S001961/N00334 S001970/N00335 S001984/N00337 S001993/N00338 S002007/N00340	
		S002016/N00341 S002030/N00343 S002039/N00344	
K0029.6		OPERATION AUX OFF SW	
		S001740/N00304 S001747/N00305 S001760/N00307 S001767/N00308 S001782/N00310	
		S001791/N00311 S001803/N00313 S001810/N00314 S001825/N00316 S001834/N00317	
		S001848/N00319 S001857/N00320 S001872/N00322 S001881/N00323 S001895/N00325	
		S001904/N00326 S001918/N00328 S001927/N00329 S001941/N00331 S001950/N00332	
		S001964/N00334 S001973/N00335 S001987/N00337 S001996/N00338 S002010/N00340	
		S002019/N00341 S002033/N00343 S002042/N00344	
K0040.0			
		S010019/N01691 S010023/N01692 S010025/N01693 S010030/N01695	
		S010033/N01696	
		S010022/N01691	
K0099.2		TOOL INFO	
		S002338/N00405 S004502/N00809 S004506/N00810 S004514/N00811 S004716/N00846	
		S004788/N00858 S004794/N00859 S004805/N00861 S004829/N00865 S004905/N00877	
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ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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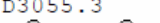
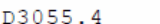
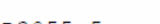




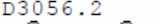
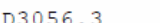





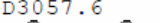
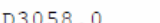




D0490.3		WKLYPRGM WEEKLY PROGRAM MEM	
		S001647/N00283 S001650/N00284	
		S001652/N00284	
D0490.5		WKTMASTER WEEKLY TIMER START ERROR	
		S001609/N00274 S001615/N00275 S001620/N00276	
		S001612/N00274	
D3040.0		S010483/N01822	
D3040.1		S010488/N01823	
D3040.2		S010493/N01824	
D3040.3		S010503/N01826	
D3040.4		S010508/N01827	
D3040.5		S010513/N01828	
D3040.6		S010070/N01702 S010518/N01829	
D3040.7		S010072/N01703 S010523/N01830	
D3041.0		S010528/N01831	
D3041.1		S010074/N01704 S010533/N01832	
D3041.2		S010076/N01705 S010538/N01833	
D3041.3		S010078/N01706 S010543/N01834	
D3041.4		S010080/N01707 S010548/N01835	
D3041.5		S010082/N01708 S010553/N01836	
D3041.6		S010084/N01709 S010558/N01837	
D3042.0		S010090/N01710 S010563/N01838	
D3042.1		S010092/N01711 S010568/N01839	
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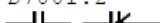
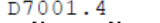
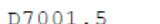



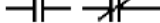

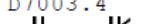
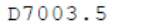
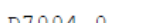





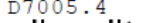
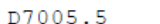



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D3042.6		S010593/N01844	
D3042.7		S010100/N01715 S010598/N01845	
D3043.0		S010102/N01716 S010603/N01846	
D3043.1		S010104/N01717 S010608/N01847	
D3043.3		S010106/N01718 S010613/N01848	
D3043.5		S010108/N01719 S010618/N01849	
D3043.6		S010110/N01720 S010623/N01850	
D3043.7		S010629/N01851	
D3044.2		S010498/N01825	
D3045.0		S010152/N01735 S010729/N01871	
D3045.1		S010154/N01736 S010734/N01872	
D3045.2		S010156/N01737 S010739/N01873	
D3045.3		S010158/N01738 S010744/N01874	
D3045.4		S010161/N01739 S010749/N01875	
D3045.5		S010163/N01740 S010754/N01876	
D3045.6		S010165/N01741 S010759/N01877	
D3045.7		S010167/N01742 S010764/N01878	
D3046.0		S010159/N01738 S010769/N01879	
D3046.1		S010169/N01743 S010774/N01880	
D3046.2		S010171/N01744 S010779/N01881	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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D3046.3		S010173/N01745 S010784/N01882	
D3046.4		S010175/N01746 S010789/N01883	
D3046.5		S010177/N01747 S010794/N01884	
D3046.6		S010179/N01748 S010799/N01885	
D3046.7		S010805/N01886	
D3047.0		S010634/N01852	
D3047.1		S010639/N01853	
D3047.2		S010644/N01854	
D3047.3		S010649/N01855	
D3047.4		S010654/N01856	
D3047.5		S010128/N01725 S010659/N01857	
D3047.6		S010130/N01726 S010664/N01858	
D3047.7		S010131/N01726 S010669/N01859	
D3048.0		S010133/N01727 S010674/N01860	
D3048.1		S010135/N01728 S010679/N01861	
D3048.2		S010137/N01729 S010684/N01862	
D3048.3		S010139/N01730 S010689/N01863	
D3048.4		S010141/N01731 S010694/N01864	
D3048.5		S010142/N01731 S010699/N01865	
D3048.6		S010143/N01731 S010704/N01866	
D3048.7		S010144/N01731 S010709/N01867	
D3049.0		S010146/N01732 S010714/N01868	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D3049.1		S010148/N01733 S010719/N01869	
D3049.2		S010150/N01734 S010724/N01870	
D3050.6		ATCTA S010071/N01702	HIGH SKIP HEAD DOWN
D3050.7		ATCT5-11 S010073/N01703	ARM FORWARD
D3051.1		ATCT61 S010075/N01704	HIGH SKIP HEAD UP
D3051.2		ATCT71 S010077/N01705	A45 TO 0 & B-315 TO -270
D3051.3		ATCT81 S010079/N01706	CHUCK CLOSE
D3051.4		ATCT91 S010081/N01707	ARM BACKWARD
D3051.5		ATCT101 S010083/N01708	CHUCK OPEN
D3051.6		ATCT111 S010089/N01709	TOOL RETURN FIN
D3052.0		ATC201 S010091/N01710	NEW TOOL CYC START
D3052.1		ATC21-11 S010093/N01711	NEW TOOL INDEX
D3052.2		ATCT21-21 S010095/N01712	SP TOOL INDEX
D3052.4		ATCT221 S010097/N01713	CHUCK CLOSE
D3052.5		ATCT23-11 S010099/N01714	ARM FORWARD
D3052.7		ATC241 S010101/N01715	CHUCK OPEN
D3053.0		ATCT251 S010103/N01716	SWING ARM MIDDLE
D3053.1		ATC261 S010105/N01717	NON ACT
D3053.3		ATCT27-11 S010107/N01718	NON ACT
D3053.5		ATCT281 S010109/N01719	ARM BACKWARD
D3053.6		ATCT291 S010111/N01720	CHUCK OPEN
D3055.0		ATCM101 S010153/N01735	SWING ARM P4 TO P3

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D3055.1	ATCM2-101 	SWING ARM P3 TO P2& A-315B45	
D3055.2	ATCM2-201 	SWING ARM P2 TO P1	
D3055.3	ATCM301 	SWING ARM INITIAL POS CONFIRM	
D3055.4	ATCM4-101 	RETURN TOOL INDEX	
D3055.5	ATCM4-201 	RET NOTOOL & SP TOOL INDEX	
D3055.6	ATCM501 	HIGH SKIP HEAD DOWN	
D3055.7	ATCM6-101 	ARM FORWARD	
D3056.1	ATCM701 	HIGH SKIP HEAD UP	
D3056.2	ATCM801 	A-315 TO -270 & B45 TO 0	
D3056.3	ATCM901 	CHUCK CLOSE	
D3056.4	ATCM1001 	ARM BACKWARD	
D3056.5	ATCM1101 	CHUCK OPEN	
D3056.6	ATCM1201 	NON ACT	
D3057.5	ATCX61 	SWING ARM DOOR< POS P2	
D3057.6	ATCX71 	SL P3 SR A-90&B-180	
D3058.0	ATCX91 	INTERLOCK OFF	
D3058.1	ATCX101 	Y AXIS P4 POS	
D3058.2	ATCX111 	SP UNCLAMP	
D3058.3	ATCX121 	ZP3	
D3058.4	ATCX131 	ZP2	
D3059.0	ATCX171 	SP CLAMP	
D3059.1	ATCX181 	INTERLOCK ON	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D3059.2		ATCX191 S010151/N01734	M6 CYC ACT
D7001.2		S001777/N00310	S001786/N00311
D7001.4		S001820/N00316	S001829/N00317
D7001.5		S001843/N00319	S001852/N00320
D7003.0		S001867/N00322	S001876/N00323
D7003.1		S001890/N00325	S001899/N00326
D7003.2		S001913/N00328	S001922/N00329
D7003.3		S001936/N00331	S001945/N00332
D7003.4		S001959/N00334	S001968/N00335
D7003.5		S001982/N00337	S001991/N00338
D7004.0		S002005/N00340	S002014/N00341
D7004.1		S002028/N00343	S002037/N00344
D7005.0		S002051/N00346	S002054/N00347
D7005.1		S002062/N00349	S002065/N00350
D7005.2		S002073/N00352	S002076/N00353
D7005.4		S011269/N01945	
D7005.5		S001175/N00210	S001216/N00216
D7100.0		OP.OUT18 S012993/N02278	ALL AXIS ZERO RETURN FIN
D7100.1		TSTPOS.P S012839/N02249	ATC RUN POS DISPLAY
D7100.3		TINI.PL S012863/N02251	ATC INITIAL DISPLAY
D7100.4		TMEM.PL S012876/N02253	ATC MEMORY DISPLAY
D7100.5		PINI.PL S012878/N02254	APC INITIAL DISPLAY

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D7100.7	TBLINI.P 	TABLE AXIS INITIAL DISPLAY	S012850/N02250
D7101.0	MCLK 	MACHINE LOCK DISPLAY	S001751/N00306 S001753/N00306 S002625/N00459 S001755/N00306
D7101.1	AUXLK 	AUX FUNCTION DISPLAY	S001771/N00309 S001773/N00309 S002629/N00461 S001775/N00309
D7101.2	ZCAN 	Z CANCEL DISPLAY	S001795/N00312 S001797/N00312 S002627/N00460 S001799/N00312
D7101.3	PRGRST 	PROGRAM RESTART DISPLAY	S001814/N00315 S001816/N00315 S002617/N00456 S001818/N00315
D7101.4	F1 	F1 PB SEND DISPLAY	S001838/N00318 S001840/N00318 S002621/N00458 S001842/N00318
D7101.5	TCH-IN 	TEACH MODE DISPLAY	S001861/N00321 S001863/N00321 S002357/N00408 S001866/N00321
D7103.0	BSKP2 	BLOCK SKIP 2	S001885/N00324 S001887/N00324 S002631/N00462 S001889/N00324
D7103.1	BSKP3 	BLOCK SKIP 3	S001908/N00327 S001910/N00327 S002633/N00463 S001912/N00327
D7103.2	BSKP4 	BLOCK SKIP 4	S001931/N00330 S001933/N00330 S002635/N00464 S001935/N00330
D7103.3	BSKP5 	BLOCK SKIP 5	S001954/N00333 S001956/N00333 S002637/N00465 S001958/N00333
D7103.4	BSKP6 	BLOCK SKIP 6	S001977/N00336 S001979/N00336 S002639/N00466 S001981/N00336
D7103.5	BSKP7 	BLOCK SKIP 7	S002000/N00339 S002002/N00339 S002641/N00467 S002004/N00339
D7104.0	BSKP8 	BLOCK SKIP 8	S002023/N00342 S002025/N00342 S002643/N00468 S002027/N00342
D7104.1	BSKP9 	BLOCK SKIP 9	S002046/N00345 S002048/N00345 S002645/N00469 S002050/N00345
D7105.0	PWROFF 	AUTO POWER OFF FUN ON MEM	S002057/N00348 S002059/N00348 S012967/N02273 S002061/N00348

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D7105.1		MSTCL OIL MIST COLLECTOR ON MEM	
		S002068/N00351	S002070/N00351 S011634/N02035
		S002072/N00351	
D7105.2		MRNWIP ATC DOOR WIPER	
		S002079/N00354	S002081/N00354 S002084/N00355
		S002083/N00354	
D7105.4		ORI.0 M19 DISPLAY	
		S011274/N01946	
D7105.5		MCCTES.O MCC CHECK LAMP OFF	
		S001261/N00223	
D7200.0		S000821/N00156	S000828/N00157 S000835/N00158 S000842/N00159
D7200.1		S000822/N00156	S000829/N00157 S000836/N00158 S000843/N00159
D7210.2		S000572/N00113	
D7250.1		MACT M CODE RUN ENABLE	
		S011115/N01929	
D7250.2		HSK HIGH SKIP HOLD	
		S010996/N01919	
D7251.0		INTDSP INTERLOCK DISPLAY	
		S010883/N01903	S010887/N01904
		S011113/N01928	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
X0010	S013747/N02421		
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
F0010	MCD_00_TO_07 S003214/N00579	M CODE 00 TO 07 S003220/N00580	
F0014	S003226/N00581	S003232/N00582	
F0016	S003238/N00583	S003244/N00584	
F0022	S003362/N00607 S003794/N00689	S003373/N00611 S003387/N00616	S003401/N00621 S003415/N00626
F0026	TCD_00_TO_07 S004520/N00812	T CODE 00 TO 07 S004527/N00814	S004671/N00839 S005994/N01089 S006000/N01090
F0054	S006010/N01092		
F0056	S013654/N02402	S013697/N02410 S013709/N02412	
F0280	S004838/N00867	S004844/N00868 S004852/N00870	S004909/N00878 S004997/N00893
F0284	S004318/N00773	S004399/N00783	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
G0030	S003115/N00558 S003122/N00559		
G0032	S004293/N00765		
G0078	S004319/N00773 S004400/N00783 S004407/N00784 S008866/N01532		
G0276	S013468/N02366 S013472/N02367		
G1163	S005932/N01075		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R0034	S001530/N00262 S001533/N00263		
R0035	S001490/N00257 S001499/N00258		
R0150	S007134/N01278 S010127/N01724		
R0155	S010208/N01755		
R0300	S006019/N01093		
R0332	S013190/N02318 S013196/N02319 S013206/N02321 S013208/N02321 S013219/N02322		
R0504	S013218/N02322 S013244/N02325 S013246/N02325 S013262/N02326		
R0530	S006262/N01140 S006317/N01147		
R0534	S006267/N01141		
R0536	S006273/N01142 S006279/N01143		
R0540	S006288/N01144 S006299/N01145 S006310/N01146		
R0604	S001489/N00257		
R0800	S013675/N02405 S013703/N02411		
R0804	S013680/N02406		
R0806	S013685/N02407		
R0808	S013690/N02408		
R0810	S013694/N02409 S013698/N02410		
R1030	S003095/N00555		
R1110	S003437/N00633 S003439/N00633 S003445/N00634 S003452/N00636		
R1112	S003469/N00638 S003471/N00638 S003477/N00639 S003511/N00645		
R1114	S003492/N00642 S003494/N00642 S003500/N00643 S003522/N00647		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R1116	S003539/N00649	S003541/N00649	S003547/N00650 S003581/N00656
R1118	S003562/N00653	S003564/N00653	S003570/N00654 S003592/N00658
R1120	S003609/N00660	S003611/N00660	S003617/N00661 S003651/N00667
R1122	S003632/N00664	S003634/N00664	S003640/N00665 S003662/N00669
R1124	S003679/N00671	S003681/N00671	S003687/N00672 S003721/N00678
R1126	S003702/N00675	S003704/N00675	S003710/N00676 S003732/N00680
R1128	S003779/N00685	S003783/N00686	S003787/N00687 S003791/N00688 S003795/N00689
	S003800/N00690	S003809/N00692	S003815/N00693 S004127/N00733 S004155/N00738
	S012712/N02221	S012720/N02223	S012728/N02225 S012736/N02227
R1138	S003817/N00693	S003824/N00694	
R1142	S003826/N00694	S004292/N00765	
R1220	S013782/N02427		
R1329	S003097/N00555	S003103/N00556	S003114/N00558
R2000	S005251/N00941	S005259/N00943	
R2008	S005256/N00942		
R2010	X_MACHINE_POS	X AXIS MACHINE POS	
	S005264/N00944		
R2018	Z_MACHINE_POS	Z AXIS MACHINE POS	
	S010372/N01788	S010381/N01791	S010390/N01794
R2030	MG_MACHINE_POS	MG AXIS MACHINE POS	
	S005271/N00945	S010841/N01893	
R2034	SL_MACHINE_POS	SL AXIS MACHINE POS	
	S005413/N00963	S005420/N00965	S005430/N00968 S005440/N00971 S005450/N00974
	S005460/N00977	S005470/N00980	S005480/N00983 S005490/N00986 S008038/N01406
	S008047/N01408		
R2038	SR_MACHINE_POS	SR AXIS MACHINE POS	
	S005497/N00988	S005504/N00990	S005514/N00993 S005524/N00996 S005543/N01000
	S005562/N01004	S005581/N01008	S005600/N01012 S005619/N01016 S005638/N01020
	S005657/N01024	S005676/N01028	S005686/N01031 S005696/N01034 S005706/N01037
	S005716/N01040	S010439/N01811	
R2060	S007837/N01380	S007856/N01383	

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2066	S007844/N01381		
R2068	S007851/N01382 S007866/N01385 S007871/N01386		
R2070	S007860/N01384		
R2080	S007880/N01387 S007888/N01388		
R2084	S007861/N01384 S007878/N01387		
R2100	MGPOTSFTVALUE MG POT SHIFT VALUE S005273/N00945 S005280/N00946		
R2104	POTSFTWITH_ACC POT SHIFT WITH ACCOUNT S005282/N00946 S005288/N00947 S005295/N00948 S005297/N00948 S005313/N00950		
R2108	MG_CURT_T_NO MG CURRENT T NO S005315/N00950 S005835/N01063 S005845/N01064 S006041/N01102 S006048/N01103 S006670/N01209 S006687/N01213 S008937/N01538 S009257/N01564 S010296/N01766 S010304/N01768 S010312/N01770 S010323/N01773 S010452/N01814 S010947/N01911 S013188/N02318		
R2112	MG_INPOS_*2 MG INPOSITION *2 VALUE S005306/N00949 S005325/N00952		
R2116	MG_INPOS_ERROR MG INPOSITION ERROR S005320/N00951 S005324/N00952		
R2120	MG_MANU_RUN_DATA MG MANUAL RUN DATA S005814/N01060		
R2124	INDPOTNO TOOL POT INDEX NO S005837/N01063 S005847/N01064 S005853/N01065 S005860/N01066 S005862/N01066 S005868/N01067 S005875/N01068 S005877/N01068 S005883/N01069 S005901/N01071 S005916/N01072		
R2200	S005335/N00954 S005412/N00963		
R2204	S005344/N00955 S005419/N00965		
R2208	S005353/N00956 S005429/N00968		
R2212	S005362/N00957 S005439/N00971		
R2216	S005371/N00958 S005449/N00974		
R2220	S005380/N00959 S005459/N00977		
R2224	S005389/N00960 S005469/N00980		
R2228	S005398/N00961 S005479/N00983		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2232	S005407/N00962	S005489/N00986	
R2300	S005537/N00999	S005542/N01000	
R2304	S005556/N01003	S005561/N01004	
R2308	S005575/N01007	S005580/N01008	
R2312	S005594/N01011	S005599/N01012	
R2316	S005613/N01015	S005618/N01016	
R2320	S005632/N01019	S005637/N01020	
R2324	S005651/N01023	S005656/N01024	
R2328	S005670/N01027	S005675/N01028	
R2400	S008400/N01466	S008428/N01472	
R2404	S008405/N01467		
R2406	S008410/N01468		
R2408	S008415/N01469		
R2410	S008420/N01470	S008425/N01471	
R2900	S008144/N01428	S012391/N02166	
R2901	S008126/N01425	S012373/N02163	
R2902	S008131/N01426	S008136/N01427	S012378/N02164 S012383/N02165
R2910	S008202/N01439	S012454/N02177	
R2911	S008178/N01435	S008184/N01436	S012424/N02173 S012430/N02174
R2912	S008189/N01437	S008194/N01438	S012438/N02175 S012446/N02176
R2920	S008368/N01459	S012498/N02186	
R2921	S008280/N01450	S008290/N01451	S008300/N01452 S012480/N02183

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R2922	S008310/N01453 S008320/N01454 S008331/N01455 S008342/N01456 S008351/N01457 S008360/N01458 S012485/N02184 S012490/N02185		
R2940	S008473/N01481		
R2941	S008455/N01478		
R2942	S008460/N01479 S008465/N01480		
R2950	ALWAYS_OFF ALWAYS OFF S005937/N01076 S005963/N01083		
R2951	AXCTRLCMD AXIS CTRL COMMAND S005807/N01058 S005822/N01061		
R2952	COMD_DATA_1 COMMAND DATA 1 S005811/N01059 S005828/N01062		
R2954	COMD_DATA_2 COMMAND DATA 2 S005815/N01060 S005900/N01071 S005915/N01072		
R2960	S008614/N01500		
R2961	S008567/N01494 S008576/N01495 S008585/N01496 S008593/N01497		
R2962	S008597/N01498 S008605/N01499		
R2970	S008853/N01530		
R2971	S008740/N01514		
R2972	S008744/N01515		
R2974	S008752/N01516 S008760/N01517 S008769/N01518 S008778/N01519 S008786/N01520 S008794/N01521 S008800/N01522 S008806/N01523 S008813/N01524 S008820/N01525 S008826/N01526 S008832/N01527 S008838/N01528 S008844/N01529		
R3012	S013338/N02342 S013393/N02351		
R3016	S013343/N02343		
R3018	S013349/N02344 S013366/N02347		
R3022	S013355/N02345 S013361/N02346 S013372/N02348 S013379/N02349 S013386/N02350		
R3430	S013950/N02454 S013976/N02459		
R3431	S013954/N02455 S013959/N02456		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R3433	S013964/N02457		
R3510	S004894/N00875		
R4010	S002847/N00501 S002855/N00502		
R4100	S002842/N00500 S002856/N00502		
R4102	S002849/N00501		
R4104	S002857/N00502		
R5300	S003251/N00585 S003255/N00586 S003257/N00586 S003291/N00592 S003293/N00592 S014053/N02472 S014176/N02493		
R5304	S003261/N00587 S003263/N00587 S003297/N00593 S003299/N00593 S014064/N02474 S014181/N02494		
R5308	S003267/N00588 S003269/N00588 S003303/N00594 S003305/N00594 S014072/N02476 S014186/N02495		
R5312	S003273/N00589 S003275/N00589 S003309/N00595 S003311/N00595 S014080/N02478 S014191/N02496		
R5316	S003279/N00590 S003281/N00590 S003315/N00596 S003317/N00596 S014088/N02480 S014196/N02497		
R5320	S003285/N00591 S003287/N00591 S003321/N00597 S003323/N00597 S014096/N02482 S014201/N02498		
R5324	S014104/N02484 S014206/N02499		
R5350	S014112/N02486 S014211/N02500		
R5500	S014046/N02471		
R5504	S014065/N02474		
R5508	S014073/N02476		
R5512	S014081/N02478		
R5516	S014089/N02480		
R5520	S014097/N02482		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R5524	S014105/N02484		
R5550	S014113/N02486		
R5800	S000755/N00138 S000825/N00156 S000832/N00157 S000839/N00158 S000846/N00159		
R5804	S000762/N00140		
R5808	S000769/N00142		
R5812	S000776/N00144		
R5816	S000783/N00146		
R5820	S000790/N00148		
R5824	S000797/N00150 S012924/N02264		
R5828	S000804/N00152		
R5850	S012926/N02264 S012931/N02265		
R5900	S014034/N02469 S014040/N02470 S014048/N02471 S014054/N02472		
R6000	S000114/N00025 S000121/N00026		
R6004	S000127/N00027		
R6006	S000133/N00028		
R6010	S000140/N00029		
R6011	S000147/N00030		
R7004	S004528/N00814		
R7009	S004910/N00878		
R7012	S004998/N00893		
R7016	S005036/N00899		
R7022	S004736/N00849		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
R7036	S010440/N01811		
R7040	S010449/N01813		
R7042	S010453/N01814		
R7044	S010457/N01815		
R7046	S010461/N01816		
R7048	S010482/N01821 S010487/N01822 S010492/N01823 S010497/N01824 S010502/N01825 S010507/N01826 S010512/N01827 S010517/N01828 S010522/N01829 S010527/N01830 S010532/N01831 S010537/N01832 S010542/N01833 S010547/N01834 S010552/N01835 S010557/N01836 S010562/N01837 S010567/N01838 S010572/N01839 S010577/N01840 S010582/N01841 S010587/N01842 S010592/N01843 S010597/N01844 S010602/N01845 S010607/N01846 S010612/N01847 S010617/N01848 S010622/N01849 S010627/N01850 S010633/N01851 S010638/N01852 S010643/N01853 S010648/N01854 S010653/N01855 S010658/N01856 S010663/N01857 S010668/N01858 S010673/N01859 S010678/N01860 S010683/N01861 S010688/N01862 S010693/N01863 S010698/N01864 S010703/N01865 S010708/N01866 S010713/N01867 S010718/N01868 S010723/N01869 S010728/N01870 S010733/N01871 S010738/N01872 S010743/N01873 S010748/N01874 S010753/N01875 S010758/N01876 S010763/N01877 S010768/N01878 S010773/N01879 S010778/N01880 S010783/N01881 S010788/N01882 S010793/N01883 S010798/N01884 S010803/N01885 S010809/N01886 S010814/N01887 S010819/N01888 S010822/N01889 S010826/N01890 S010832/N01891		
R7104	S004557/N00819 S004573/N00823 S004581/N00825 S004589/N00827 S004679/N00840		
R7106	S004565/N00821		
R7108	S004691/N00842		
R7110	S004839/N00867 S004861/N00872		
R7132	S010465/N01817		
R7134	S010469/N01818		
R7136	S010473/N01819		
R7138	S010477/N01820		
R7142	S010823/N01889 S010837/N01892		
R7144	S010827/N01890		
R7148	S010445/N01812 S011119/N01930		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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R7230	S010842/N01893		
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R9002	S005319/N00951		
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ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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A0000	S000826/N00156		
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A0042	S000833/N00157		
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A0084	S000840/N00158		
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A0126	S000847/N00159		
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ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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C0020	S012745/N02229 S012751/N02230 S012757/N02231 S012763/N02232 S012768/N02233 S012772/N02234 S012776/N02235 S012784/N02237		
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C0022	S012777/N02235		
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ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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A0000	S000826/N00156		
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A0042	S000833/N00157		
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A0084	S000840/N00158		
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A0126	S000847/N00159		
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ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
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C0020	S012745/N02229 S012751/N02230 S012757/N02231 S012763/N02232 S012768/N02233 S012772/N02234 S012776/N02235 S012784/N02237		
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C0022	S012777/N02235		
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ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D0000	S006671/N01209 S006679/N01211 S006696/N01215 S006706/N01217 S006753/N01225 S006758/N01226 S006888/N01243 S006897/N01245 S006907/N01247 S006946/N01256 S007036/N01267 S010472/N01819		
D0002	S006049/N01103 S006056/N01105		
D0004	SP.TOOL.NO SPINDLE TOOL NUMBER S000139/N00029 S005995/N01089 S006001/N01090 S006011/N01092 S006018/N01093 S012868/N02252		
D0005	S000146/N00030		
D0006	S005882/N01069 S006057/N01105 S006153/N01122 S006162/N01124 S006172/N01126 S006180/N01127 S006190/N01129 S006198/N01130 S009597/N01627 S009603/N01628 S009613/N01629 S009621/N01630 S009627/N01631 S009633/N01632 S009638/N01633 S009643/N01634 S010448/N01813		
D0008	S006042/N01102		
D0020	S006074/N01110		
D0062	S004154/N00738 S004168/N00741		
D0076	S012744/N02229		
D0078	S012750/N02230		
D0080	S012756/N02231		
D0082	S012762/N02232		
D0084	S012767/N02233		
D0086	S004126/N00733		
D0088	S012771/N02234		
D0092	S003361/N00607 S003790/N00688		
D0094	S003372/N00611 S003786/N00687		
D0096	S003386/N00616 S003782/N00686		
D0098	S003400/N00621 S003778/N00685		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D0100	S003414/N00626		
D0106	S003825/N00694		
D0110	S005898/N01071 S005913/N01072 S013195/N02319 S013216/N02322 S013260/N02326		
D0112	S005852/N01065 S005861/N01066 S005876/N01068 S005888/N01070 S013207/N02321		
D0116	S013189/N02318		
D0126	S001498/N00258		
D0410	S004685/N00841 S004735/N00849 S006152/N01122 S006286/N01144 S006619/N01195 S006678/N01211 S006686/N01213 S006887/N01243 S006945/N01256 S009264/N01565 S009478/N01603 S009484/N01604 S009503/N01607 S009509/N01608 S009516/N01609 S009525/N01611 S009531/N01612 S009550/N01615 S009556/N01616 S009563/N01617 S009612/N01629 S009637/N01633 S010297/N01766 S010476/N01820 S013263/N02326 S013467/N02366		
D0412	S006171/N01126 S006197/N01130 S006297/N01145 S006626/N01197 S006653/N01204 S006695/N01215 S006906/N01247 S009275/N01567 S009314/N01574 S009358/N01582 S009372/N01584 S009385/N01586 S009424/N01592 S009439/N01594 S009451/N01596 S009483/N01604 S009498/N01606 S009510/N01608 S009538/N01613 S009551/N01615 S009596/N01627 S009632/N01632 S010313/N01770 S010456/N01815		
D0414	S006179/N01127 S006189/N01129 S006308/N01146 S006634/N01199 S006645/N01202 S006705/N01217 S006896/N01245 S009287/N01569 S009302/N01572 S009364/N01583 S009379/N01585 S009391/N01587 S009418/N01591 S009432/N01593 S009445/N01595 S009477/N01603 S009491/N01605 S009504/N01607 S009524/N01611 S009530/N01612 S009545/N01614 S009557/N01616 S009602/N01628 S009626/N01631 S010324/N01773 S010460/N01816		
D0416	S006766/N01228 S008938/N01538 S009258/N01564 S009263/N01565 S009274/N01567 S009286/N01569 S009301/N01572 S009313/N01574 S009334/N01578 S009350/N01580 S009359/N01582 S009365/N01583 S009384/N01586 S009390/N01587 S009398/N01588 S009405/N01589 S009419/N01591 S009425/N01592 S009444/N01595 S009450/N01596 S009457/N01597 S010464/N01817 S010948/N01911		
D0418	S006075/N01110 S006161/N01124 S006664/N01207 S007037/N01267 S007387/N01317 S009620/N01630 S010305/N01768 S010468/N01818		
D0420	S007388/N01317 S009642/N01634		
D0422	S004672/N00839 S004680/N00840 S004686/N00841 S005035/N00899 S006752/N01225		
D0424	S004692/N00842		
D0454	S004835/N00866 S004863/N00872 S004893/N00875		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D0470	S013471/N02367		
D0500	S013802/N02430		
D0504	S013816/N02432		
D0508	S013912/N02449		
D0512	S013749/N02421 S013776/N02426		
D0513	S013753/N02422 S013760/N02423		
D0516	S013777/N02426 S013803/N02430 S013815/N02432 S013831/N02434 S013884/N02445		
D0517	S013755/N02422 S013761/N02423		
D0518	S013766/N02424 S013771/N02425		
D0520	S013832/N02434 S013883/N02445 S013891/N02446		
D0524	S013885/N02445 S013896/N02447 S013902/N02448		
D0528	S013904/N02448 S013911/N02449		
D0532	S013913/N02449 S013932/N02452 S013942/N02453		
D0536	S013934/N02452 S013944/N02453 S013953/N02455		
D0540	S013781/N02427		
D0548	S013919/N02450 S013925/N02451 S013933/N02452		
D0552	S013943/N02453		
D3000	S005265/N00944		
D3008	S007981/N01396		
D3040	S007135/N01278 S010243/N01758		
D3044	S010252/N01759		
D3048	S010279/N01762		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D3050	S010116/N01721	S010126/N01724 S010261/N01760	
D3054	S010270/N01761		
D3055	S010185/N01749	S010207/N01755	
D3058	S010288/N01763		
D3059	S010193/N01751		
D3060	S007890/N01388	S007897/N01389	
D3064	S007898/N01389		
D3100	S005899/N01071		
D3300	S005281/N00946	S005304/N00949	
D3304	S005334/N00954 S005343/N00955 S005352/N00956 S005361/N00957 S005370/N00958 S005379/N00959 S005388/N00960 S005397/N00961		
D3308	S005333/N00954 S005342/N00955		
D3312	S005351/N00956 S005360/N00957		
D3316	S005369/N00958 S005378/N00959		
D3320	S005387/N00960 S005396/N00961 S005405/N00962		
D3324	S005810/N01059 S005827/N01062		
D3328	S008604/N01499		
D3332	S008743/N01515		
D3336	S008130/N01426 S012377/N02164 S012484/N02184		
D3340	S008188/N01437		
D3344	S008350/N01457		
D3348	S008330/N01455		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D3352	S008309/N01453		
D3360	S008459/N01479		
D3364	S008135/N01427	S012382/N02165 S012489/N02185	
D3368	S008193/N01438		
D3372	S008359/N01458		
D3376	S008341/N01456		
D3380	S008319/N01454		
D3388	S008464/N01480		
D3392	S005535/N00999	S005554/N01003 S008751/N01516 S008831/N01527	
D3396	S005573/N01007	S005592/N01011 S008785/N01520 S008805/N01523	
D3400	S005611/N01015	S005630/N01019 S008793/N01521 S008799/N01522	
D3404	S005649/N01023	S005668/N01027 S008759/N01517 S008825/N01526	
D3408	S008596/N01498		
D3412	S010371/N01788		
D3416	S010380/N01791		
D3420	S010389/N01794		
D3424	S011118/N01930		
D3428	S008037/N01406		
D3432	S008046/N01408		
D3436	S007982/N01396	S007993/N01399	
D3440	S005272/N00945	S005314/N00950	
D3444	S005287/N00947		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
D3448	S012437/N02175		
D3452	S012445/N02176		
D3500	S005914/N01072		
D4000	S003216/N00579 S003250/N00585		
D4099	S003222/N00580		
D4125	S003228/N00581 S003256/N00586		
D4129	S003262/N00587		
D4133	S003268/N00588		
D4137	S003274/N00589		
D4141	S003280/N00590		
D4145	S003286/N00591		
D4224	S003234/N00582		
D4250	S003240/N00583 S003292/N00592		
D4254	S003298/N00593		
D4258	S003304/N00594		
D4262	S003310/N00595		
D4266	S003316/N00596		
D4270	S003322/N00597		
D4349	S003246/N00584		
D7112	S004827/N00864 S004900/N00876 S004902/N00876		
D7150	S013648/N02400 S013655/N02402 S013693/N02409		
D7398	S013217/N02322 S013261/N02326		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
T0004	S000620/N00125		
T0012	S012009/N02112		
T0014	S012017/N02114		
T0090	S013301/N02333		
ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
CTR No.6	S012687/N02216		
CTR No.16	S012565/N02197		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
TMR No.1	S012570/N02198		
TMR No.3	S000624/N00126		
TMR No.4	S004141/N00736		
TMR No.7	S012028/N02116		
TMR No.8	S012032/N02117		
TMR No.9	S004454/N00797		
TMR No.10	S011932/N02099		
TMR No.11	S011936/N02100		
TMR No.12	S011961/N02105		
TMR No.13	S011965/N02106		
TMR No.17	S013861/N02441		
TMR No.26	S012603/N02203		
TMR No.31	S013571/N02385		
TMR No.32	S013589/N02387		
TMR No.34	S011785/N02061		
TMR No.35	S011790/N02062		
TMR No.36	S011795/N02063		
TMR No.37	S011800/N02064		
TMR No.40	S011651/N02037		
TMR No.42	S012045/N02119		
TMR No.43	S012038/N02118		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
TMR No.44	S011674/N02043		
TMR No.46	S013307/N02335		
TMR No.49	S006482/N01179		
TMR No.50	S006486/N01180		
TMR No.51	S006490/N01181		
TMR No.52	S006494/N01182		
TMR No.53	S006459/N01174		
TMR No.54	S006443/N01172		
TMR No.55	S006498/N01183		
TMR No.56	S006502/N01184		
TMR No.57	S007986/N01398		
TMR No.58	S006506/N01185		
TMR No.59	S006510/N01186		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
TMRB No.1	S000851/N00161		
TMRB No.2	S000861/N00163		
TMRB No.3	S012950/N02268		
TMRB No.4	S000866/N00164		
TMRB No.5	S011915/N02096		
TMRB No.6	S001574/N00268		
TMRB No.7	S001586/N00270		
TMRB No.8	S013026/N02283		
TMRB No.9	S001633/N00279		
TMRB No.11	S009731/N01650		
TMRB No.12	S001454/N00253		
TMRB No.13	S013102/N02299		
TMRB No.14	S013457/N02363		
TMRB No.16	S013132/N02304		
TMRB No.17	S012254/N02142		
TMRB No.18	S012261/N02143		
TMRB No.27	S012598/N02202		
TMRB No.28	S012648/N02211		
TMRB No.30	S012691/N02217		
TMRB No.40	S000515/N00104		
TMRB No.41	S012553/N02195		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
TMRB No.42	S012631/N02207		
TMRB No.43	S012639/N02209		
TMRB No.44	S012807/N02242		
TMRB No.49	S004108/N00730		
TMRB No.50	S003897/N00704		
TMRB No.51	S003989/N00716		
TMRB No.52	S004252/N00758		
TMRB No.54	S004210/N00747		
TMRB No.55	S009147/N01551		
TMRB No.57	S004329/N00775		
TMRB No.58	S004350/N00778		
TMRB No.59	S000422/N00086		
TMRB No.60	S003750/N00682		
TMRB No.62	S004266/N00761		
TMRB No.73	S011708/N02046		
TMRB No.88	S014057/N02473		
TMRB No.97	S006844/N01236		
TMRB No.98	S005769/N01051		
TMRB No.99	S005976/N01086		
TMRB No.100	S006063/N01107		
TMRB No.101	S006098/N01112		
TMRB No.102	S006515/N01187		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
TMRB No.103	S006801/N01232		
TMRB No.104	S009153/N01552		
TMRB No.105	S009659/N01636		
TMRB No.106	S009668/N01638		
TMRB No.107	S009678/N01640		
TMRB No.108	S009695/N01643		
TMRB No.109	S009704/N01645		
TMRB No.110	S009714/N01647		
TMRB No.112	S009740/N01652		
TMRB No.113	S009750/N01654		
TMRB No.114	S009769/N01657		
TMRB No.115	S009778/N01659		
TMRB No.116	S009788/N01661		
TMRB No.117	S009815/N01664		
TMRB No.118	S009824/N01666		
TMRB No.119	S009834/N01668		
TMRB No.120	S009851/N01671		
TMRB No.121	S009860/N01673		
TMRB No.122	S009870/N01675		
TMRB No.203	S004633/N00834		
TMRB No.204	S004775/N00856		
TMRB No.205	S004811/N00862		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
TMRB No.225	S013497/N02372		
TMRB No.226	S013503/N02373		
TMRB No.227	S013508/N02374		
TMRB No.228	S013513/N02375		
TMRB No.229	S013537/N02379		
TMRB No.230	S013788/N02428		
TMRB No.231	S013725/N02415		
TMRB No.241	S000941/N00175		
TMRB No.242	S000980/N00180		
TMRB No.249	S000957/N00177		
TMRB No.250	S000928/N00172		
TMRB No.253	S001255/N00222		

ADDRESS	SYMBOL	FIRST COMMENT	STEP NO./NET NO.
DIFU No.10	S007535/N01342		

MESSAGE

ADDRESS	MESSAGE
A000.0	1000 HEAT EXCHANGER OVER LOAD : QF1
A000.1	
A000.2	
A000.3	
A000.4	1004 SPINDLE FAN OVER LOAD : QF7
A002.3	1023 HYDRAULIC MOTOR OVER LOAD : QM14
A002.4	1024 GREASE PUMP MOTOR OVER LOAD : QM15
A002.5	
A002.6	1026 CHIP FLUSH MOTOR OVER LOAD : QM6
A002.7	
A003.0	1030 CTS MOTOR OVER LOAD : QM9
A003.5	1035 CHIP CONVEYOR MOTOR OVER LOAD : QM3
A004.7	1047 COOLANT MOTOR OVER LOAD : QM1
A005.2	1052 OIL SKIMMER OVER LOAD : QM7
A006.0	1060 MAGAZINE POT EMPTY ALARM
A006.1	1061 SUB-OPERATION BOARD VALID
A006.2	1062 ATC DOOR OPEN ALARM
A006.3	1063 MAGAZINE RETURN ALARM
A006.4	1064 MAGAZINE MAINTENANCE MODE ON
A007.0	1070 SPINDLE EMPTY ALARM
A007.4	1074 SPINDLE ORIENT ALARM
A007.6	1076 SPINDLE ROTATE ALARM
A007.7	1077 SPINDLE CLAMP/UNCLAMP ALARM
A008.1	1081 SPINDLE EQUIPMENT ALARM
A008.2	1082 SPINDLE OIL & AIR DATA ALARM
A008.7	1087 OPERATION DOOR OPEN ALARM
A009.0	1090 Y AXIS COVER OPEN ALARM
A016.6	1166 EXTERNAL COOLANT TANK LEVEL LOW
A017.5	1175 SPINDLE LUBE OIL LEVEL LOW
A017.6	1176 SPINDLE LUBE OIL PRESSURE ERROR
A017.7	1177 AIR PRESSURE LOW ALARM
A018.3	1183 COOLANT TANK LEVEL LOW
A018.6	1186 SPINDLE COOLER ALARM
A019.7	1197 TOOL LIFE FULL
A020.0	1200 TOOL BROKEN DETECT ALARM
A020.2	1202 TOUCH SENSOR ALARM
A024.5	1245 AIR PRESSURE SWITCH OFF ALARM

Bit Address Map

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
X0000	ATC_MG_C CW @	ATC_MG_C W @	ATC_OP_S EL @	MG_TOOL_ DETECT_1 @	SP_OIL_& _AIR_DET @			GREASE_P RES_DETE @
X0001	ATC_DOR_ R_CLO_S @	ATC_DOR_ R_OP_S @	ATC_DOR_ L_CLO_S @	ATC_DOR_ L_OP_S @		HYD_TEMP _DETE	HYD_MTR_ OL @	
X0002								GREASE_P UMP_O.L @
X0003		MG_FORWA RD @	MG_BACKW ARD @	SP_UNCLP _PB @	SP_UNCLP _L.S @	SP_CLAMP _L.S1 @	LUBE_LEV EL @	AIR_PRES SURE_DET @
X0004					SP_CLAMP _LS2 @	SP_CLP_N OT @	SP_FAN_O L @	HEAT_EXC HG_OL @
X0005					C_CLAMP_ SEN @			
X0006			CHIP_FLU _OL @			DOOR.SW @		
X0008			A_CLAMP_ SEN @	EMG_STOP @	CHIP_CON V_OL @	SP_COL_D ETE_1 @	COL_OL @	
X0009								
X0010	SKIM_OL @	-	-	CLT_LOW_ LIMIT @	-		SP_LOW_S HIFT @	SP_HI_SH IFT @
X0011	CTS_MTR_ OL @	@	@	@	@	@	@	@
X0012			MIST_COL CT_DETE @	OPTION21 @	OPTION20 @	SP_OIL&A IR_THEAL @		
X0013	OPTION24 @	DC_QF_20 4_L.S @	DC_QF202 _L.S @	DC_QF201 @	OPTION23 @	MOTOR_O. L_1 @	OPTION22 @	SOL_1_FU SE @
X0014	OPTION28 @	OPTION27 @	OPTION26 @	OPTION25 @	WEEK_TIM ER_ON @	MOTOR_O. L_7 @	AC_QF13_ L.S @	AC_QF12_ L.S @
X0015		MG_ZRO_R EF @			S_HAND_D OWN @	S_HAND_U P @	S_HAND_B KRD @	S_HAND_F RD @
X0016						S_HAD_HE D_UNCLP @	S_HAD_HE D_CLP @	S_HAND_T OOL_DETE @
X0018	FILTER_C LOGGED @	MAIN_TAN K_LOW @		CHIP_CON _CCW @	CHIP_CON _CW @	CHIP_CON _SUBSEL1 @	CHIPCOL FLT_BK_1 @	

ADDRESS	BIT NUMBER								BYTE
	7	6	5	4	3	2	1	0	
X0019	CLT_CIRCULATE @	MGNET_SELECTOR @	CHP_CONTOQ_OVR3 @	CHP_CONTOQ_OVR2 @	CHPCONTOQ_OVR1 @	COL_ON @	COL_OILLEV_LOW @	CLE_TAKLW_LEV @	
X0020	CHP.CON.CW.PB @	MAG.R.L.PB @	@	MLK_PB @	CHP_CONMAN_CCW @	MAG_CW_P @		MST.LOCK.PB @	
X0021	WORK_LIGHT_PB @		@	PRO.RESTART_PB @	F2_PB @	F1_PB @	OVC.PB @	BLOCK_SKIP @	
X0022	A.ZRN.PB @	DOR.LCK.PB @	CHP.FLU.PB @	DRY_RUN_PB @	DOOR.PB @	AL.RST.PB @	CTS.PB @	OPTION_STOP @	
X0023	SP.CCW.PB @	-_MAUAL_FEED @	AUX.PB @	Z.PB @	M19.PB @	DOR.UNL.PB @	COL.PB @	SINGLE_BLOCK @	
X0024	SP.CW.PB @	+_MAUAL_FEED @	A.PB @	X.PB @	SP_STOP_PB @	RAPID.PB @	C.PB @	Y.PB @	
X0025	FEED_OVERRIDE_E @	FEED_OVERRIDE_D @	FEED_OVERRIDE_C @	FEED_OVERRIDE_B @	FEED_OVERRIDE_A @	SP_OVERRIDE_C @	SP_OVERRIDE_B @	SP_OVERRIDE_A @	
X0026	CNC.RDY.PB @	HOLD_PB @	CYCLE.START_PB @	RAPID_OVERRIDE_B @	RAPID_OVERRIDE_A @	OP_MODE_SEL_C @	OP_MODE_SEL_B @	OP_MODE_SEL_A @	
X0027	HAD_WHEEL_FED*1 @		MPG.A @	MPG.Z @	MPG.Y @	MPG.X @	MEM_KEY_SW @		
X0028						MPG.C @	HAD_WHEEL_FED*100 @	HAD_WHEEL_FED*10 @	
X0032					@				
X0033	@	@		@					
X0034		@	@						
X0037					@				
X0080	FILTER_CLOGGED_2 @	@	CLT_LOW_LIMIT_2 @	CHIP_CON_CCW_SW2 @	CHIP_CON_CW_SW2 @	CHIP_CON_SUBSEL2 @	D_FILTER_BRK_2 @	CLT_PWR_DEFECT_2 @	
X0081	COLNT_CYC_L.S_2 @	MAGIC_SELECTOR @	CHP_CONTOQ_OVR6 @	CHP_CONTOQ_OVR5 @	CHP_CONTOQ_OVR4 @	COL_ON_2 @	COL_OILLEV_LOW_2 @	CLE_TAKLW_LEV_2 @	
X0082	BACK_FLOW_TRIP_2 @	FR_14&16_OL_2 @	OIL_SKIM_OL_2 @	NO1_CHP_CON_OL_2 @	CLT_INTRIP_2 @	CHIP_FLOW_TRIP_2 @	CTS_TRIP_2 @	CLT_TRIP_2 @	

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
X0100	AUTO_FIR _OFF_SW @	AUTO_FIR _PWDN_SW @	SP_COL_D ET_SW	SP_COL_D ETE_2		OPTION_1		C_AXIS_U NLP_DET
X0101	C_UNCLP_ SW @	TABLE_OT _SW @	Y_COVR_L OK_SW__2	Y_COVR_L OK_SW_1	OPTION8	OPTION7	OPTION6	OPTION5
X0102	BOOST_PR S_DETE_2 @		MST_COLT _PROT_SW @		BOOST_OI L_LEV_LO @	BOOST_PR S_DETE_1 @	EX_CODE_ FIN @	A_AXIS_U NLP_DET
X0103	OPTION4	OPTION3	OPTION2	OPTION1 @				OIL_ & AI R_DETE
X0104	OPTION12	MP_DETE_ BT_A.L @	MP_DETE_ BT_LOW @	OPTION11	OPTION10	OPTION9	LASER_ST ATUS_DET @	LASER_DE TE_L.S @
X0105	OPTION_1 3	MG_TOOL_ INDEX_ST	AUTO_TL_ SET_OFF @	AUTO_TL_ SET_ON @	ATC_PIN_ UNLOCK @			
X0106	PW_SUPRT _OF_DE_1 @	AUTO_MOD E_3	ST_RDY_O F_DETE @	OP_RDY_P W_DETE @	AUTO_MOD E_2 @	AUTO__MO DE_2 @	NC_RDY_P B	PSM_MCC_ OF_CHECK @
X0107	OPTION15	SERVO_EM G_STOP	ENB_MANU _SW @	HYD_PUP_ OFF_DETE	OPTION14	OPTION13	PW_SUPRT _OF_DE_2 @	ATC_GUAR D_LS @
X0222			@					
X1064								@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
Y0000							LUB-MOTOR	HYD.M
Y0001								
Y0002	CHIP_FLUSH			NO1CHP_CON_CCW	NO1_CHP_CON_CW_1			CLT_PUMP_MTR
Y0003	PATLITE_YELLOW	PATLITE_RED	PATLITE_GREEN					OIL_SKIMMER
Y0004			CTS_1	WK_LT	SP_SHIFT_2	SP_SHIFT_1	APO.O	O&A-OIL
Y0005				SP_AIR_B_LAST	SP_HEAD_AIR	MAG_RETURN	MAG_EXTEND	SP_UCLP
Y0006	SP_BAR_AIR	O&A_AIR	ATC_DOR_R_CLO	ATC_DOR_R_OPN	ATC_DOR_L_CLO	ATC_DOR_L_OPN		
Y0007	A.CLIP.SOL	OPE_DOOR_UNLK					Z_BRAKE	C.CLIP.SOL
Y0008		C_CLP		MISTCL.M	CLTCLR			
Y0009	EXE.M4	EXE.M3	EXE.M2	EXE.M1	KA4	SP_ON_METER	CYCLE_ON_METER	PREP_ON_METER
Y0010	SHIFT_HAND_UNCLP	SHIFT_HAND_CLP				O&A_SUCTION		CLT-SOL
Y0011				A_AXIS_C LAMP	TOOL_DEFECT_AIR	SP_COOLING_AIR		SP_AIR_B LOW
Y0012	EXT_NOZZLE				CLT_IN_PUMP	CHP_FLOW_PUMP	CTS_PUMP	
Y0013					COL_RECYC_PUP1	NO_2&3_C HCON_CCW	NO_2&3_C CONV_CW	BACK_FLOW_PUMP
Y0014								
Y0020	CHP.CONV.CW.LP	MAG.L.R.LP	F4.LP	MLK.LP	CHP.CONV.CCW.LP	MAG.CW.LP	TOL.CHG.LP	MST.LCK.LP
Y0021	WRK.LIGHT.LP	F3.LP	AIR.LP	PRO.RESTART.LP	F2.LP	F1.LP	OVC.LP	BDT.LP

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
Y0022	A.ZRN.LP @	DOR.LCK.LP @	CHP.FLU.LP @	DRN.LP @	DOR.LP @	ALM.RST.LP @	CTS.LP @	M01.LP @
Y0023	Y.LP @	SP.CCW.LP @	AUX.LP	Z.LP @	M19.LP @	DOR.UNL.LP @	COL.LP @	SBK.LP @
Y0024	TOL.DIS.24 @	TOL.DIS.22 @	TOL.DIS.21 @	SP.CW.LP @	A.LP @	X.LP @	SP.STOP.LP @	C.LP @
Y0025			AL.LED @	TOL.DIS.18 @	TOL.DIS.14 @	TOL.DIS.12 @	TOL.DIS.11 @	TOL.DIS.28 @
Y0026	ATC.LED @	ATC.MEM.LED @	SUB.OP.LED @	M00.M01.LED	M02.M30.LED	LUBE.AL.LED	MOT.OL.LED	AIR.AL.LED
Y0027			MPG.LED @	CNC.RDY.LP @	FH.LP @	CY.ST.LP @	POWER.LED @	TABLE.LED @
Y0032	SPARE3 @		BZ.OUT @		AUTOCYCL @			
Y0033	HANINTPL @	SPOVER.O @	H-X10.0	MCNV.PL @				
Y0034		YSHTULKL @	YSHTLKL @	SPUNCLAM @	OP.ASIST @			
Y0035					PW-OFF @	PROG_STP_DISPLAY @	SET.PL	ALM.PL @
Y0080	MGNET_SEPARATOR @	OIL_SKIMMER_2	NO1_CHP_CON_CCW2	NO1_CHP_CON_CW_2	CLT_IN_2 @	CHP_FLOW_2 @	CTS_PUMP_2	CHIP_OIL_PUMP_2
Y0081					COOLER_RBCYCLE2 @	NO_2&3_CON_CCW2 @	NO_2&3_CON_CW1 @	BACK_FLOW_2 @
Y0085				@	@			
Y0086		@						
Y0100	ATLS_REGISTER @	ATC_LOCK_RELEASE @	AMCS_OFF_OMI_ON @	TABLE_SKIP_SEL @		NC&MAIN_PW_OF		
Y0101						RECEIVING_UNIT_2	RECEIVING_UNIT_1	SENDING_UNIT_1 @
Y0102	BOOST_AIR @	BOOST_PUMP @	BOOSTER_MIST @	BOOST_AIR @				

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
Y0103	Y_COVER_OPEN @	Y_COVER_CLOSE @	LASER_BR R_AIR	LASER_CO VER_CLS	S_HAND_D OWN_2 @	S_HAND_U P_2 @	S_HAND_B WD @	S_HAND_F WD @
Y0104					PWR_SUPP LY_OK @	PREP_ON @		PSM1RDY @
Y0105				MC_RDY @		A_BRAKE		
Y0106	@					@	@	
Y0221		TLLFRSTL @					@	@
Y1007							@	@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
F0000	OP @	SA @	STL @	SPL @				RWD @
F0001	MA @		TAP @		DEN @	BAL @	RST @	AL @
F0002	MDRN @	CUT @						INCH @
F0003			MMEM @	MRMT @	MMDI @	MJ @	MH @	
F0004			MREF @		MSBK	MABSM		MBDT1 @
F0007	BF @				TF @	SF @		MF @
F0008			MF3 @	MF2 @				
F0009	DM00 @	DM01 @	DM02 @	DM30 @				
F0010 MCD_00_T O_07	FM07 -	FM06 -	FM05 -	FM04 -	FM03 -	-	-	- @
F0011	FM15 -	FM14 -	FM13 -	FM12 -	FM11 -	FM10 -	FM09 -	FM08 - -
F0012	-	-	-	-	-	-	-	- -
F0013	-	-	-	-	-	-	-	- -
F0014	-	-	-	-	-	-	-	- @
F0015	-	-	-	-	-	-	-	- -
F0016	-	-	-	-	-	-	-	- @
F0017	-	-	-	-	-	-	-	- -
F0022	-	-	-	-	-	-	-	- @

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
F0023	-	-	-	-	-	-	-	-	-
F0026 TCD_00_T O_07	-	-	-	-	-	-	-	-	@
F0027	-	-	-	-	-	-	-	-	-
F0028	-	-	-	-	-	-	-	-	-
F0029	-	-	-	-	-	-	-	-	-
F0044							FSCSL @		
F0045	ORARA @				SARA @		SSTA @	ALMA @	
F0046					RCFNA @	RCHPA @			
F0051								@	
F0054	- @	- @	- @	UO4 @	UO3 @	UO2 @	UO1 @	UO0 @	@
F0055	- @	UO014 @	- @	- @	- @	- @	- @	- @	- @
F0056	- @	- @	- @	- @	- @	- @	- @	- @	@
F0057	- @	- @	- @	- @	- @	- @	- @	- @	- @
F0060							ESEND @		
F0062								AICC_SIG L @	
F0064								TLCH @	
F0066		PECK2 @							

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
F0070							PSW02 @	PSW01 @
F0076					RTAP @			
F0094		FZP7 @		FZP5 @	FZP4 @	FZP3 @	FZP2 @	ZP1 @
F0096		ZP27 @		ZP25 @		ZP23 @	ZP22 @	ZP21 @
F0098		ZP37 @				ZP33 @	ZP32 @	
F0100		ZP47 @				ZP43 @	ZP42 @	
F0102				MV5 @	MV4 @	MV3 @	MV2 @	MV1 @
F0104				INP5 @	INP4 @	INP3 @	INP2 @	INP1 @
F0122							HOD1 @	HDO0 @
F0129	NCAXS @							
F0130						EIALA @		
F0133						EIALB @		
F0136						EIALC @		
F0139						EIALD @		
F0191					BRAKE_TE ST_REQ @	MCC_TEST _REQ @		DOOR_OPE N_ON @
F0276	@	@	#1120_TO L_NO_REQ @	#1120_M CODE_NG @				
F0277					@	@	@	

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
F0280	-	-	-	-	-	-	-	-	@
F0281	-	-	-	-	-	-	-	-	-
F0282	-	-	-	-	-	-	-	-	-
F0283	-	-	-	-	-	-	-	-	-
F0284	-	-	-	-	-	-	-	-	@
F0285	-	-	-	-	-	-	-	-	-
F0531			@						
F0748	MCCOFSIG _2 @						MCCOFSIG _1 @		
F0750				SAFMONIT SIG_5 @	SAFMONIT SIG_B @	SAFMONIT SIG_Z @	SAFMONIT SIG_Y @	SAFMONIT SIG_X @	
F0752	MCCOFSIG _8 @	MCCOFSIG _7 @	MCCOFSIG _6 @	MCCOFSIG _5 @	MCCOFSIG _B @	MCCOFSIG _Z @	MCCOFSIG _Y @	MCCOFSIG _X @	
F0753								MCCOFSIG _SP @	
F0754				BRAKE_SI G_5 @		BRAKE_SI G_Z @			
F0755								SAFPOSSW SIG_1 @	
F1130						A_AL @			
F1133				MG_ST @		MG_AL @		MG_INPOS @	
F1136						SL_AL @			
F1139						SR_AL @			

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
G0004			MFIN3 @	MFIN2 @				
G0005	BFIN @	AFL @			TFIN @	SFIN @		MFIN @
G0006				OVC @		ABSM @		SRN @
G0007		EXLM @				ST @		
G0008	ERS @	RRW @	SP @	ESP @				IT @
G0010	JV7 @	JV6 @	JV5 @	JV4 @	JV3 @	JV2 @	JV1 @	JV0 @
G0011	JV15 @	JV14 @	FV13 @	JV12 @	JV11 @	JV10 @	JV9 @	JV8 @
G0012	FV7 @	FV6 @	FV5 @	FV4 @	FV3 @	FV2 @	FV1 @	FV0 @
G0014							@	@
G0016	F1D @							
G0018					HSD1 @	HSC1 @	HSB1 @	HSA1 @
G0019	RT @		MP2 @	MP1 @				
G0023					HANDLF @			
G0027	CON @							
G0029		SPSTP @						
G0030	-	-	-	-	-	-	-	- @
G0032	-	-	-	-	-	-	-	- @

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
G0033	SIND @				R121 @	R111 @	R101 @	R091 @
G0041						HS1C @	HS1B @	HS1A @
G0043	ZRN @		DNC1 @			MD4 @	MD2 @	MD1 @
G0044							MLK @	BDT1 @
G0045	BDT9 @	BDT8 @	BDT7 @	BDT6 @	BDT5 @	BDT4 @	BDT3 @	BDT2 @
G0046	DRN @		KEY3 @	KEY2 @	KEY1 @		SBK @	
G0048			TLSKP @					
G0053					UNIT @			TMRON @
G0054								@
G0055	UI_15 @	UI14 @						
G0056	UI_23 @	UI_22 @		UI_20 @	UI_19 @			
G0057							UI_25 @	UI_24 @
G0061								RGTAP @
G0066								IGNVRY @
G0070	M_RDY.A @	ORCM=ORI @	SFRA-CW @	SRVA-CCW @	CTH1A @	CTH2A @		
G0071	RCHA @	RSLA @		SOCNA @			ESPA @	
G0072	RCHHGA @							

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
G0078	-	-	-	-	-	-	-	-	@
G0079	-	-	-	-	-	-	-	-	-
G0100			@	+J5 @	+J4 @	+J3 @	+J2 @	+J1 @	
G0101	ED28+ @	ED27+ @	ED26+ @	ED25+ @	ED24+ @	ED23+ @	ED22+ @	ED21+ @	
G0102			@	-J5 @	-J4 @	-J3 @	-J2 @	-J1 @	
G0103	ED28- @	ED27- @	ED26- @	ED25- @	ED24- @	ED23- @	ED22- @	ED21- @	
G0108						MLK3 @			
G0114	+L8 @	+L7 @	+L6 @	+L5 @	+L4 @	+L3 @	+L2 @	+L1 @	
G0116	-L8 @	-L7 @	-L6 @	-L5 @	-L4 @	-L3 @	-L2 @	-L1 @	
G0118	8+DEC @	7+DEC @	6+DEC @	5+DEC @	4+DEC @	Z+DEC @	Y+DEC @	X+DEC @	
G0120	8-DEC @	7-DEC @	6-DEC @	5-DEC @	4-DEC @	Z-DEC @	Y-DEC @	X-DEC @	
G0126	SVF8 @	SVF7 @	SVF6 @	SVF5 @	SVF4 @	SVF3 @	SVF2 @	SVF1 @	
G0130	IY8 @	IT7 @	IT6 @	IT5 @	IT4 @	IT3 @	IT2 @	IT1 @	
G0136	EAX8 @	EAX7 @	EAX6 @	EAX5 @	EAX4 @	EAX3 @	EAX2 @	EAX1 @	
G0142			ESTP_A#1 @			EMBUFA#1 @			
G0150							EROV1_#2 1 @	EROV1_#1 @	
G0154			ESTP_B#1 @			EMBUFB#1 @			

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
G0166			ESTP_C#1 @			EMBUFC#1 @		
G0178			ESTP_D#1 @			EMBUFD#1 @		
G0191					OPQ @	OPT @		
G0193						STBT @		
G0276	-	-	-	-	-	-	-	@
G0277	-	-	-	-	-	-	-	-
G0519				TDICHG @	TDID @			
G0748		*SMC @						
G0750				*VLDV5 @	*VLDV4 @	*VLDVZ @	*VLDVY @	*VLDVX @
G0751								*VLDP1 @
G0752				SVA5 @	SVA4 @	SVAZ @	SVAY @	SVAX @
G0753				SVB5 @	SVB4 @	SBVBZ @	SVBY @	SVBX @
G0754				SPB1 @				SPA1 @
G1100								+J9 @
G1101								ED29+ @
G1102								-J9 @
G1103								ED29- @

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
G1114								+L9 @
G1116								-L9 @
G1118								9+DEC @
G1120								9-DEC @
G1130								IT9 @
G1142			ESTP_A#2 @			EMBUFA#2 @		
G1150							EROV2_#2 @	EROV1_#2 @
G1154			ESTP_B#2 @			BMBUFB#2 @		
G1163	-	-	-	-	-	-	-	- @
G1166			ESTP_C#2 @			EMBUFC#2 @		
G1178			ESTP_D#2 @			EMBUFD#2 @		

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R0000	M30_AUX 0	MF3.S 0	MF2.S 0	BF.S 0	TF.S 0	SF3.S 0	MF1.S 0	NC_RST 0
R0001			ST_RDY_O F_CHECK 0	PRPONM1 0	CYCLE__S TOP 0	ITSUB 0	NC_RDY 0	PCOK 0
R0002	TFON 0	TFON3 0	TFON2 0	TFON1 0	SFON 0	SFON3 0	SFON2 0	SFON1 0
R0003					BFON 0	BF3 0	BFON2 0	BFON1 0
R0010		MCC_OF_T IMING 0	ST_RDY_O N_OK 0		I_SET 0	RDY1 0	CYCLE_ST _PB_OF 0	CYCLE_ST _PB_ON 0
R0011	OP_MOD_3 0	OP_MOD_2 0	OPMOD1 0					PWRDY1 0
R0012			SACHKOK 0	OPDRUKF 0	OPDRUKS 0	OP_DOR_O PEN_MD3 0	OPOKMD2 0	MOD_1_OP _DOR_OPE 0
R0015							PRDY1ONS 0	PRDY1ON 0
R0016			MCC_TEST _ON 0	MCCTST2 0	MCCTST1 0	MCCTST 0	MCCTOK 0	MCCTOK1 0
R0017					SPINDLE_ IT_1 0	ENB_OF_C HK 0	MOD_3_EN B 0	MOD2ENB 0
R0018	BRKTST2 0	BRKTST1 0	BRKTESON 0	BRKTST4 0	BRKTST3 0	BRKTST 0	BRKTOK 0	BRKTOK1 0
R0030	AUTO_CYS T_AUX 0	AUTCYCM 0	AUTON2 0	AUTON1 0	MDIOPE 0	CYSTINT 0	FEED_HOL D_AUX 0	AUTO_CYS T_AUX_2 0
R0031	M30SWM 0	AUTO_PW_ OFF 0	RWDST 0	RWDSTOK 0	CYSTNO 0	RWDOFF 0	RWDON 0	M30_MEM 0
R0032	PRGSHST 0	ERSOK 0	WNSCH 0	DCNVWT 0		DCNVWK 0	WSETHLD 0	MAIN_PRG _NO_SEH 0
R0033			AUTPWOF5 0	CYST2M 0	CYST1 0	CYST2 0	PRGSHOK 0	EXIN-PG 0
R0034	-	-	-	-	-	-	-	- 0
R0035	-	-	-	-	-	-	-	- 0

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R0036	-	-	-	-	-	-	-	-
R0037	-	-	-	-	-	-	-	-
R0038	-	-	-	-	-	-	-	-
R0039	-	-	-	-	-	-	-	-
R0040	WTCYCOK1 @	WTCYC2 @	WTCYC1 @	WTMRONM @	WTPRPM @	WTPRPON @	WTMRST @	WTOFM @
R0041	WTCYC10 @		WTCYC7S @	WTCYC7 @	WTCYC6 @	WTCYC5 @	WTCYC4 @	WTCYC3 @
R0050					CP-STP @		CL-SPAIR @	
R0055	@	@		M61FF @	M51FF @	M50FF @	M08FF @	M07FF @
R0056		CHIPAIR @	OILHLMTR @			MISTO @	FLDS @	FLDMTR @
R0057			M62FF @				ALL_COOL ANT_STOP @	CLTRST @
R0058	M63FF @							
R0059			M53FF @	M52FF @	M/CDROK @	CHPCCW1 @	CHPCW1 @	CHIP_CON RDY_OK @
R0060					WRKON @	WORKPB2 @	WORKPB1 @	WORKPB @
R0065	@	@	CHP2.INT @	CHP1.INT @	NO_2&3_C NVCC_ON @	NO_2&3CN VCW @	CHP_CON_ 1_MAN_CW @	CHPAUTON @
R0066					YSHTULK- 1 @	YSHTLK-1 @	YSHTULKC @	YSHTLKC @
R0067		COVX7 @	COVX6 @	COVX5 @	COVX4 @	COVX3 @	COVX2 @	COVX1 @
R0071							M26FF @	MSTAUT @

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R0072				M58 @	M57 @	M56 @	M55 @	M54 @
R0073	ECOMFINS @	ECO.AIR @	ECO.OIL @	ECO.MFIN @	M57FF @	M56FF @	M55FF @	M54FF @
R0074							ECOP.ON @	ECOP.OFF @
R0100	T-OPMAI @	ATCMC @	ATCTM1 @	ATCHLD1 @	MGINI @	TSPIT @	TAXSIT @	ATCINI11 @
R0101		T-TFIN @	T-OPESTP @	T-ORIST @	T-ORISP @	T-ORIIT @	T-SPUNC @	T-OPESUB @
R0102		T-SPAIR @	T-MGOPOK @	T-POSOK @				
R0103								T-SPTLCG @
R0105	INDEXPOS 1 @	ATCALM1 @	-360.5<S @	90.5<SR @	SL-OT1 @	P1+<SL0 @	ATCINI22 @	ATCINI12 @
R0106	ATCM-1 @	RTTL0-1 @	WTTL0-1 @	SPTL0 @	SAP4-1 @	SHCO111 @	SHBMG @	AXISITNG 1 @
R0107				SASPINIP -1 @	SPCL1-1 @	ATCX1-1 @	SPINDCYC -1 @	ATC_T&M 6_CYCLE @
R0110	M84S @	M83S @	M82S @					M06S @
R0111	M102S @	M101S @	M100S @	M89S @		M87S @	M86S @	M85S @
R0112	M120S @	M109S @	M108S @	M107S @	M106S @	M105S @	M104S @	M103S @
R0113	M128S @	M127S @	M126S @	M125S @	M124S @	M123S @	M122S @	M121S @
R0114	MG_FRD @							M129S @
R0115								MG_BRD @
R0119								M6S @

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R0130		IDXCOIN	MGPREAD	INDEXOK	TREAD	TFMEM	TFST	MGRDY
	@	@	@	@	@	@	@	@
R0131	MG_STOP							INDXCOIN
	@							@
R0133			INDEXPOS					REST
			@	@				@
R0134					ATCALM	PRG-ALM		TOVR
					@	@		@
R0135								
					@			
R0136				M85ST	M84ST	MST		
				@	@	@		
R0137	MGACT2	MGACT1	TINDFM			TINDEX		SPINDEX
	@	@	@			@		@
R0138				MG_INDEX	INDEX4	INDEX3	INDEX2	INDEX1
				@	@	@	@	@
R0139			AIRBLOW				SPUPBOFF	SPUNCL
			@				@	@
R0140				MG_TOOL_DETECT	SHTLDTM	MG_ARM_H DUNCLPDE	MG_ARM_H D_CLPDET	AXISITNG
				@	@	@	@	@
R0141	SAP1	SAP4	MG_BACKW ARD_ON	MG_FORWA RD_DETE	MG_ARM_C K_CLS_ON	MG_ARM_C HECK_ON	MG_ARM_B KRD_ON	MG_ARM_F RD_ON
	@	@	@	@	@	@	@	@
R0142	ATCINI2	ATCINI	MANU_ATC	SASPIN	SASPRL	SAINI	SAWT	SHTLDT
	@	@	@	@	@	@	@	@
R0143					ATCSTP	ATCTLRLP	ATCTLINP	ATCXYP
					@	@	@	@
R0144	TC=0	TC=WTTL	TC=RTTL	TF=SPTL	TCM0	RTTL0	WTTL0	APTLO
	@	@	@	@	@	@	@	@
R0145	SP=TX	HNDTL=0	ATCTCYC	M6CYCOVR	TCYCOVR	TCPERR	TINIOFF	TLALM1
	@	@	@	@	@	@	@	@
R0146		TX6MHL	ATCHLD	TMHL	TX6HLD	TM6HLD	TTHLD	THLDS
		@	@	@	@	@	@	@
R0147	ATCTST1	ATCTST	TFINS1	TFINS	ATCT	TF2	TF1	TSTOK
	@	@	@	@	@	@	@	@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R0148		ATC_T_M6 _CYCLE @	ATCMEND @	ATCMST1 @	ATCMST @	M6__CHAN GE_TOOL @	MSTOK @	ATCTEND @
R0149		TFS2 @	TFS1 @	TFS @			ATCTRST @	ATCTDT @
R0150	ATCT5-1 @	ATCT4 @	ATCT3-3 @	ATCT3-2 @	ATCT3-1 @	ATCT2-2 @	ATCT2-1 @	ATCT1 @
R0151	ATC12 @	ATCT11 @	ATCT10 @	ATCT9 @	ATCT8 @	ATCT7 @	ATCT6 @	ATCT5-2 @
R0152	ATCT24 @	ATCT23-2 @	ATCT23-1 @	ATCT22 @	ATCT21-3 @	ATCT21-2 @	ATCT21-1 @	ATCT20 @
R0153	ATCT30 @	ATCT29 @	ATCT28 @	-	ATCT27-2 @	-	ATCT26 @	ATCT25 @
R0154	-	-	-	-	-	ATCT2-3 @	SPINDCIN @	SPINDCYC @
R0155	ATCM6-1 @	ATCM5 @	ATCM4-2 @	ATCM4-1 @	ATCM3 @	ATCM2-2 @	ATCM2-1 @	ATCM1 @
R0156	ATCM13 @	ATCM12 @	ATCM11 @	ATCM10 @	ATCM9 @	ATCM8 @	ATCM7 @	ATCM6-2 @
R0157	ATCX8 @	ATCX7 @	ATCX6 @	ATCX5 @	ATCX4 @	ATCX3 @	ATCX2 @	ATCX1 @
R0158	ATCX16 @	ATCX15 @	ATCX14 @	ATCX13 @	ATCX12 @	ATCX11 @	ATCX10 @	ATCX9 @
R0159	-	-	-	-	-	ATCX19 @	ATCX18 @	ATCX17 @
R0160		MFS @	PMCSETS @	PMCSET @	ATCMRST @	ATCMDT @	ATCMDT2 @	ATCMDT1 @
R0161						SUB_SEL @	MAIN_SEL @	
R0162			MGERR @		INDFIN @	INDON @	TNGINDFI N @	ATCST_MG 30 @
R0165	SHFBOK @			SA0BOK @	SA180FOK @	ORIO @		INCOPE @
R0166		SHHCO @	SHHUCO @	SHCCO @	SHCOO @	SHSOK @	SHBO @	SHFO @

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R0167		MG_BKWRD_OUTPUT @	MG_FRD_OTPUT @		SHFR2 @	MG_ARM_F/B_1 @	SHFRTY1 @	SHFRTY @
R0168					SHBR2 @	SHBR1 @	SHBRTY1 @	SHBRTY @
R0169					SHCCR2 @	SHCCR1 @	SHCCRTY1 @	SHCCRTY @
R0170	HAND=RT @	HAND=WT @	HAND=SP @	SHHG @	SHCO2 @	SHCO11 @	SHCC2 @	SHCC11 @
R0171					HAND=0 @	SHSAWT @	SHSAINI @	HAND=0DT @
R0172			SASPINIP @	SASPRLIP @	SPUNCL2 @	SPUNCL1 @	SPCL2 @	SPCL1 @
R0173				RTINDEX @	WTINDEX @	M109ST @	M108ST @	MGACT @
R0174								SASHMOV @
R0175	M06END @	M6CASE1FIN @	INTLOK_ON @	MG_BKRD @	SP_T_CLP @	Z_POS_P4 @	SP_T_UNCLP @	CASE1_SP_T_NG @
R0176	MG_BKRD_AUX @	SP_TOL_CLP @	Z_POS_P4_AUX @	MG_NEW_TOL_INDEX @	Z_POS_P3 @	SP_TOL_UNCLP @	MG_FORD @	CASE2_Z_POS_P4 @
R0177	Z_POS_ZP3 @	Z_POS_ZP4 @	INTLOK_ON_AUX_1 @	SP_TOL_CLP_AUX @	SP_TOL_UNCLP_AUX @	INTLOK_OFF @	M6CASE2FIN @	INTLOK_ON_AUX @
R0178								MG_NXT_TOL_INDEX @
R0180	TC=RTTLB @	TC=RTTLA @	TC=WTTLB @	TC=WTTLA @	RTTL0B @	RTTL0A @	WTTL0B @	WTTL0A @
R0181		SPTOL=MG_TOL @	TCODE=SP @	TCODE=MG @	HAND=RTB @	HAND=RTA @	HAND=WTB @	HAND=WTA @
R0182							MGINDOFF @	MGINDON @
R0185					SHCOR2 @	MG_ARM_CHK_C/O_1 @	SHCORTY1 @	SHCORTY @
R0186					SHHUR2 @	SHHUR1 @	SHHURTY1 @	SHHURTY @

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R0187					SHHCR2 0	SHHCR1 0	SHHCRTY1 0	SHHCRTY 0
R0250	WINACT.M 0	OFSETWIN 0	TDICHG4 0	TDICHG3 0	TDICHG2 0	TDICHG1 0	TDIOFF2 0	TDIOFF1 0
R0251	0					WINERR 0		COFSET>0 0
R0300	0	0	0	0	0	0	0	0
R0301	-	-	-	-	-	-	-	-
R0332	-	-	-	-	-	-	-	-
R0333	-	-	-	-	-	-	-	-
R0504	-	-	-	-	MOAATLS 0	-	-	-
R0505	-	-	-	-	-	-	-	-
R0511	M47_ON 0							
R0512	XMOVBER 0	TLINISSET 0	XMOVBERR 0	TLMOV 0	TLRED1 0	TLRED 0	TL_SET_O FF 0	TLSET 0
R0513	DSP_ST.S 0	TNODSPST 0	TSWARON 0		ATLSRST1 0	ALSALM 0	M48S 0	SPTLSET 0
R0514	SUBB_ERR 0	SUBB_ST 0						
R0515							ATLSRST 0	TPADDERR 0
R0530	-	-	-	-	-	-	-	-
R0531	-	-	-	-	-	-	-	-
R0532	-	-	-	-	-	-	-	-

ADDRESS	7	6	5	4	3	2	1	0	BYTE
R0533	-	-	-	-	-	-	-	-	-
R0534	-	-	-	-	-	TSRHON	-	-	@
R0535	-	-	-	-	-	-	-	-	-
R0536	-	-	-	-	-	-	-	-	@
R0537	-	-	-	-	-	-	-	-	-
R0538	-	-	-	-	-	-	-	-	-
R0539	-	-	-	-	-	-	-	-	-
R0540	-	-	-	-	-	-	-	-	@
R0541	-	-	-	-	-	-	-	-	-
R0542	-	-	-	-	-	-	-	-	-
R0543	-	-	-	-	-	-	-	-	-
R0545	MUL.ERR3 @	NXNO.FIN @	SPNO.FIN @	TNO.FIN @	MUL.ERR2 @	MUL.ERR1 @	NXT.DSP @	PRGCHKWI NTNOL @	
R0550					@	@	@	@	
R0556								AP01 @	
R0600								@	
R0601								@	
R0604	-	-	-	-	-	-	-	-	@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R0609						APO-ON		
					@	@		
R0659					SBK+	SBK-ON		
					@	@		
R0668			*FV100					
			@					
R0712								
			@					
R0800								
	-	-	-	-	-	-	-	@
R0801								
	-	-	-	-	-	-	-	-
R0802								
	-	-	-	-	-	-	-	-
R0803								
	-	-	-	-	-	-	-	-
R0804								
	-	-	-	-	-	-	-	@
R0805								
	-	-	-	-	-	-	-	-
R0806								
	-	-	-	-	-	-	-	@
R0807								
	-	-	-	-	-	-	-	-
R0808								
	-	-	-	-	-	-	-	@
R0809								
	-	-	-	-	-	-	-	-
R0810								
	-	-	-	-	-	-	-	@
R0811								
	-	-	-	-	-	-	-	-
R0812								
	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R0813	-	-	-	-	-	-	-	-
R0880						OVC.P2 @	OVC.P @	
R1000			S-SPUC @	S-SPCL @	S-ORIINP @	S-SPDON @		
R1001	S-SFIN @	S-NCHLD @	S-NCRST @			S-ORIEND @		
R1002		S-PWOFOK @		S-ONMEM @	S-WMING @			
R1005	SPDSP1 @	DROPNSTP @					M04FF @	M03FF @
R1006	SPDCH @	SPDHOLD @		SPDHOLD3 @	SPDHOLD2 @		SPDSP3 @	SPDSP @
R1007	SPINTRP @							
R1009				SPOFF.M @	SPDCCW1 @	SPDCW1 @	SP_AUT.M @	SINDX @
R1010						SP-CK.OK @	SP-CHK.E @	SP-ELC.M @
R1012	RCHPA.S @	SP_CAN @	SP_SPT @		POLE_CHG @	D62=00 @	SPE.M @	SPDATA @
R1013					BLSP.TYP @	SPSTP.S @	BLSP.INI @	
R1014				M43FF @	SP_CCW.S @	SP_CW.S @	RGT-SPE @	M29-RGT @
R1015		ORIHOLD @	ORIRST @			ORISKP @	M19S2 @	M19S1 @
R1016		ORIEND @					ORI1 @	
R1017					M3/M4FIN @		TAPFINS @	SPPRSOFF @
R1018	SV120.S @	SV110.S @	SV100.S @	SV90.S @	SV80.S @	SV70.S @	SV60.S @	SV50.S @

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R1019						SV150.S @	SV140.S @	SV130.S @
R1020								SPSTON @
R1021					M19-ON @	M05-ON @	M04-ON @	M03-ON @
R1030					SOVR8 @	SOVR4 @	SOVR2 @	SOVR1 @
R1031	-	-	-	-	-	-	-	-
R1034						SPOVROFF @	SOVITR @	MULERR2 @
R1100	92<S=<94 @	S=<D94 @	D94<S @		S=<D92 @	D92<S @		SPWUP @
R1101	S=<D100 @	D100<S @	96<S=<98 @	S=<D98 @	D98<S @	D94<S=<96 @	S=<D96 @	D96<S @
R1102	MDSPON @	DROPS5UP @	DIVBERR @	MULBERR @	SIND1 @	1SECPS @	1SECP @	98<S=<00 @
R1103		S=D98 @	S=D96 @	S=D94 @	S=D92 @	F1PRP @	ADDBERR @	PRPCNT @
R1105		F3STPRST @	F3RST @	ADDBERR2 @	F3STP @	F3 @	ADDBERR1 @	F3CNT @
R1106		F4STPRST @	F4RST @	ADDBERR4 @	F4STP @	F4 @	ADDBERR3 @	F4CNT @
R1107		F5STPRST @	F5RST @	ADDBERR6 @	F5STP @	F5 @	ADDBERR5 @	F5CNT @
R1108		F6STPRST @	F6RST @	ADDBERR8 @	F6STP @	F6 @	ADDBERR7 @	F6CNT @
R1110	-	-	-	-	-	-	-	-
R1111	-	-	-	-	-	-	-	-
R1112	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R1113	-	-	-	-	-	-	-	-
R1114	-	-	-	-	-	-	-	@
R1115	-	-	-	-	-	-	-	-
R1116	-	-	-	-	-	-	-	@
R1117	-	-	-	-	-	-	-	-
R1118	-	-	-	-	-	-	-	@
R1119	-	-	-	-	-	-	-	-
R1120	-	-	-	-	-	-	-	@
R1121	-	-	-	-	-	-	-	-
R1122	-	-	-	-	-	-	-	@
R1123	-	-	-	-	-	-	-	-
R1124	-	-	-	-	-	-	-	@
R1125	-	-	-	-	-	-	-	-
R1126	-	-	-	-	-	-	-	@
R1127	-	-	-	-	-	-	-	-
R1128	-	-	-	-	-	-	-	@
R1129	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R1130	-	-	-	-	-	-	-	-	-
R1131	-	-	-	-	-	-	-	-	-
R1138	-	-	-	-	-	-	-	-	@
R1139	-	-	-	-	-	-	-	-	-
R1140	-	-	-	-	-	-	-	-	-
R1141	-	-	-	-	-	-	-	-	-
R1142	-	-	-	-	-	-	-	-	@
R1143	-	-	-	-	@	@	@	@	-
R1144	-	-	-	-	-	-	-	-	-
R1145	-	-	-	-	-	-	-	-	-
R1220	-	-	-	-	-	-	-	-	@
R1221	-	-	-	-	-	-	-	-	-
R1300				@					
R1329	-	-	-	-	-	-	-	-	@
R1330	-	-	-	-	-	-	-	-	-
R1502	PLS04 @	PLS03 @			PLS02 @	PLS01 @			
R1503	PLS08 @	PLS07 @					PLS06 @	PLS05 @	

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R1504	OPTION_S TOP_SW 0		PLS012 0	PLS011 0	DRY_RUN_ KEEP 0	PLS010 0	PLS09 0	
R1505						HANDLE_* 10_AUX 0	PLS015 0	OPTION_S TOP_AUX 0
R1600			0					
R1605				M13.A 0	M12.A 0	M11.A 0	M10.A 0	
R1606							4.CLIP 0	4.UNC
R1607							4A/C.CL 0	4A/C.UCL 0
R1616							5.CLIP 0	5.UCLS
R1617							5A/C.CL 0	5A/C.UCL 0
R1806							AUTO_GRE ASE_CTR 0	GRS_RST 0
R1855	TM-D.0 0	S.CD-IN 0		SP_OIL_O N 0	OIL.DW 0			
R1856	SP.OILON 0	CUNT_OV 0			S30000UP 0	S20000UP 0	S15000UP 0	S10000UP 0
R1857							SO&A_ALM 0	SO&A_ISET 0
R1858	O&ACNTS 0		SP-OIL_O N 0	O&AOILON 0				
R1860					OP_RDY_P W__AUX 0	HYDSTP 0	HYDSTP5 0	HYDSTP1 0
R2000	-	-	-	-	-	-	-	-
R2001	-	-	-	-	-	-	-	-
R2002	-	-	-	-	-	-	-	-

ADDRESS	7	6	5	4	3	2	1	0	BYTE
R2003	-	-	-	-	-	-	-	-	-
R2004	-	-	-	-	-	-	-	-	-
R2005	-	-	-	-	-	-	-	-	-
R2006	-	-	-	-	-	-	-	-	-
R2007	-	-	-	-	-	-	-	-	-
R2008	-	-	-	-	-	-	-	-	@
R2009	-	-	-	-	-	-	-	-	-
R2010 X_MACHIN E_POS	-	-	-	-	-	-	-	-	@
R2011	-	-	-	-	-	-	-	-	-
R2012	-	-	-	-	-	-	-	-	-
R2013	-	-	-	-	-	-	-	-	-
R2014 Y_MACHIN E_POS	-	-	-	-	-	-	-	-	-
R2015	-	-	-	-	-	-	-	-	-
R2016	-	-	-	-	-	-	-	-	-
R2017	-	-	-	-	-	-	-	-	-
R2018 Z_MACHIN E_POS	-	-	-	-	-	-	-	-	@
R2019	-	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R2020	-	-	-	-	-	-	-	-
R2021	-	-	-	-	-	-	-	-
R2022 C_MACHINE_POS	-	-	-	-	-	-	-	-
R2023	-	-	-	-	-	-	-	-
R2024	-	-	-	-	-	-	-	-
R2025	-	-	-	-	-	-	-	-
R2026 A_MACHINE_POS	-	-	-	-	-	-	-	-
R2027	-	-	-	-	-	-	-	-
R2028	-	-	-	-	-	-	-	-
R2029	-	-	-	-	-	-	-	-
R2030 MG_MACHINE_POS	-	-	-	-	-	-	-	-
R2031	-	-	-	-	-	-	-	-
R2032	-	-	-	-	-	-	-	-
R2033	-	-	-	-	-	-	-	-
R2034 SL_MACHINE_POS	-	-	-	-	-	-	-	-
R2035	-	-	-	-	-	-	-	-
R2036	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R2037	-	-	-	-	-	-	-	-	-
R2038	-	-	-	-	-	-	-	-	@
SR_MACHINE_POS	-	-	-	-	-	-	-	-	@
R2039	-	-	-	-	-	-	-	-	-
R2040	-	-	-	-	-	-	-	-	-
R2041	-	-	-	-	-	-	-	-	-
R2050								WINDFIN	@
R2051			ZAIRSTP	ZAIRPNG	ZAIRP	DIVBERR1	MULBERR1	WINR	@
			@	@	@	@	@	@	@
R2060	-	-	-	-	-	-	-	-	@
R2061	-	-	-	-	-	-	-	-	-
R2062	-	-	-	-	-	-	-	-	-
R2063	-	-	-	-	-	-	-	-	-
R2064	-	-	-	-	-	-	-	-	-
R2065	-	-	-	-	-	-	-	-	-
R2066	-	-	-	-	-	-	-	-	@
R2067	-	-	-	-	-	-	-	-	-
R2068	-	-	-	-	-	-	-	-	@
R2069	-	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R2070	-	-	-	-	-	-	-	-	@
R2071	-	-	-	-	-	-	-	-	-
R2072	-	-	-	-	-	-	-	-	-
R2073	-	-	-	-	-	-	-	-	-
R2080	-	-	-	-	-	-	-	-	@
R2081	-	-	-	-	-	-	-	-	-
R2082	-	-	-	-	-	-	-	-	-
R2083	-	-	-	-	-	-	-	-	-
R2084	-	-	-	-	-	-	-	-	@
R2085	@	-	-	-	-	-	-	-	-
R2086	-	-	-	-	-	-	-	-	-
R2087	-	-	-	-	-	-	-	-	-
R2090	ATCMONIT @					ZP4UP @	ZP3UP @	ZP2UP @	
R2091					MGIBW @	MGIAR @	MGIBR @	MGIARW @	
R2092								MSSTRART @	
R2093				MGRTIMP @	MGWTIMP @		MGTCIMP @	MGSPIMP @	
R2100 MGPOTSFT VALUE	-	-	-	-	-	-	-	-	@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R2101	-	-	-	-	-	-	-	-
R2102	-	-	-	-	-	-	-	-
R2103	-	-	-	-	-	-	-	-
R2104 POTSFTWI TH_ACC	-	-	-	-	-	-	-	@
R2105	-	-	-	-	-	-	-	-
R2106	-	-	-	-	-	-	-	-
R2107	-	-	-	-	-	-	-	-
R2108 MG_CURT_ T_NO	-	-	-	-	-	-	-	@
R2109	-	-	-	-	-	-	-	-
R2110	-	-	-	-	-	-	-	-
R2111	-	-	-	-	-	-	-	-
R2112 MG_INPOS _*2	-	-	-	-	-	-	-	@
R2113	-	-	-	-	-	-	-	-
R2114	-	-	-	-	-	-	-	-
R2115	-	-	-	-	-	-	-	-
R2116 MG_INPOS _ERROR	-	-	-	-	-	-	-	@
R2117	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R2118	-	-	-	-	-	-	-	-
R2119	-	-	-	-	-	-	-	-
R2120 MG_MANU_ RUN_DATA	-	-	-	-	-	-	-	@
R2121	-	-	-	-	-	-	-	-
R2122	-	-	-	-	-	-	-	-
R2123	MGCCW @	-	-	-	-	-	-	-
R2124 INDPOTNO	-	-	-	-	-	-	-	@
R2125	-	-	-	-	-	-	-	-
R2126	-	-	-	-	-	-	-	-
R2127	-	-	-	-	-	-	-	-
R2150			MGINPS @	MGPER @	MGINP*2 @	MGOVR @	MG+INPS @	MG+1P @
R2151			TMMG0 @	TMMG @	TCCWM @	TCWM @	TCCWB @	TCWB @
R2152		TMMG7 @	TMMG6 @	TMMG5 @	TMMG4 @	TMMG3 @	TMMG2 @	TMMG1 @
R2153			TMPOSS60 @	TMPOSS @	TMADD @	TMOVER @	TMCCW-1 @	TMCCW+1 @
R2159								MGST @
R2160			MGFIN @	MGST4 @	MGST3 @	MGST2 @	MGST1 @	MGFINM @
R2200	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R2235	-	-	-	-	-	-	-	-
R2250	SLP4- @	SLP4+ @	SLP3- @	SLP3+ @	SLP2- @	SLP2+ @	SLP1- @	SLP1+ @
R2251	P3+<SL @	2-<L=<2+ @	P2-<SL @	2+<L=<1- @	P2+<SL @	1-<L=<1+ @	P1-<SL @	P1+<SL @
R2252	P1DRCLS @	4-<L=<4+ @	P4-<SL @	4+<L=<3- @	P4+<SL @	3-<L=<3+ @	P3-<SL @	3+<L=<2- @
R2253						SL-OT @	SL-OTP @	P2DROPN @
R2300	-	-	-	-	-	-	-	-
R2301	-	-	-	-	-	-	-	-
R2302	-	-	-	-	-	-	-	-
R2303	-	-	-	-	-	-	-	-
R2304	-	-	-	-	-	-	-	-
R2305	-	-	-	-	-	-	-	-
R2306	-	-	-	-	-	-	-	-
R2307	-	-	-	-	-	-	-	-
R2308	-	-	-	-	-	-	-	-
R2309	-	-	-	-	-	-	-	-
R2310	-	-	-	-	-	-	-	-
R2311	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R2329	-	-	-	-	-	-	-	-	-
R2330	-	-	-	-	-	-	-	-	-
R2331	-	-	-	-	-	-	-	-	-
R2350	0.5<SR @	44<S=<45 @	44.5<SR @	45<S=<89 @	45.5<SR @	89<S=<90 @	89.5<SR @	90,.5<SR @	
R2351	-179.5<S R @	-9<S=<-8 @	-90.5<SR @	-8<SR=<- 0 @	-89.5<SR @	-0<S=<0 @	-0.5<SR @	0<S=<44 @	
R2352	-314.5<S R @	27<S=<26 @	-270.5<S R @	26<S=<18 @	-269.5<S R @	18<SR=<1 7 @	-180.5<S R @	17<S=<-9 @	
R2353		36<S=<35 @	-360.5<S R @	35<S=<32 @	-359.5<S R @	32<S=<31 @	-315.5<S @	31<S=<27 @	
R2360	SR-270- @	SR-270+ @	SR-180- @	SR-180+ @	SR-90- @	SR-90+ @	SR0- @	SR0+ @	
R2400	-	-	-	-	-	-	-	-	@
R2401	-	-	-	-	-	-	-	-	-
R2402	-	-	-	-	-	-	-	-	-
R2403	-	-	-	-	-	-	-	-	-
R2404	-	-	-	-	-	-	-	-	@
R2405	-	-	-	-	-	-	-	-	-
R2406	-	-	-	-	-	-	-	-	@
R2407	-	-	-	-	-	-	-	-	-
R2408	-	-	-	-	-	-	-	-	@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R2409	-	-	-	-	-	-	-	-
R2410	-	-	-	-	-	-	-	-
R2411	-	-	-	-	-	-	-	-
R2412	-	-	-	-	-	-	-	-
R2413	-	-	-	-	-	-	-	-
R2450		ZTRQWINF	ZTRQWIND	ZTRQOFMS	ZTRQOF1	ZTRQSTMS	ZTRQST1	ZTRQSTM
		@	@	@	@	@	@	@
R2552		@						
R2700				COXFIN	COX3	COX2	COX1	COX
				@	@	@	@	@
R2701								COXFX3
								@
R2710				COYFIN	COY3	COY2	COY1	COY
				@	@	@	@	@
R2711							COYFX6	COYFX4
							@	@
R2720				COZFIN	COZ3	COZ2	COZ1	COZ
				@	@	@	@	@
R2721								COZFX2
								@
R2800				ACTXFIN	ACTX3	ACTX2	ACTX1	ACTX
				@	@	@	@	@
R2801								ACTXFX4
								@
R2810				ACTYFIN	ACTY3	ACTY2	ACTY1	ACTY
				@	@	@	@	@
R2811							ACTYFX10	ACTYFX4
							@	@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R2820				ACTZFIN 0	ACTZ3 0	ACTZ2 0	ACTZ1 0	ACTZ 0
R2821			ACTZFX16 0	ACTZFX15 0	ACTZFX13 0	ACTZFX12 0	ACTZFX5 0	ACTZFX2 0
R2840				ACTAFIN 0	ACTA3 0	ACTA2 0	ACTA1 0	ACTA 0
R2841								ACTAFX3 0
R2860				ACTSLFIN 0	ACTSL3 0	ACTSL2 0	ACTSL1 0	ACTSL 0
R2861		ACSLF16 0	ACSLFM22 0	ACSLFM21 0	ACTSLFM1 0	ACTSLFX8 0	ACTSLFX7 0	ACTSLFX6 0
R2862								ACSLFM 0
R2870		ACTSRS2 0	ACTSRS1 0	ACTSRFIN 0	ACTSR3 0	ACTSR2 0	ACTSR1 0	ACTSR 0
R2871		ACSRFM8 0		ACSRFM21 0	ACSREFX14 0	ACSREFX7 0	ACSREFT25 0	ACSREFT7 0
R2872								ACSREFM 0
R2900	-	-	-	-	-	-	-	- 0
R2901	-	-	-	-	-	-	-	- 0
R2902	-	-	-	-	-	-	-	- 0
R2903	-	-	-	-	-	-	-	- -
R2904	-	-	-	-	-	-	-	- -
R2905	-	-	-	-	-	-	-	- -
R2906	-	-	-	-	-	-	-	- -

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R2940	-	-	-	-	-	-	-	-	@
R2941	-	-	-	-	-	-	-	-	@
R2942	-	-	-	-	-	-	-	-	@
R2943	-	-	-	-	-	-	-	-	-
R2944	-	-	-	-	-	-	-	-	-
R2945	-	-	-	-	-	-	-	-	-
R2946	-	-	-	-	-	-	-	-	-
R2947	-	-	-	-	-	-	-	-	-
R2950 ALWAYS_O FF	-	-	-	-	-	-	-	-	@
R2951 AXCTRLCO MD	-	-	-	-	-	-	-	-	@
R2952 COMD_DAT A_1	-	-	-	-	-	-	-	-	@
R2953	-	-	-	-	-	-	-	-	-
R2954 COMD_DAT A_2	-	-	-	-	-	-	-	-	@
R2955	-	-	-	-	-	-	-	-	-
R2956	-	-	-	-	-	-	-	-	-
R2957	-	-	-	-	-	-	-	-	-
R2960	-	-	-	-	-	-	-	-	@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R2961	-	-	-	-	-	-	-	-
R2962	-	-	-	-	-	-	-	-
R2963	-	-	-	-	-	-	-	-
R2964	-	-	-	-	-	-	-	-
R2965	-	-	-	-	-	-	-	-
R2966	-	-	-	-	-	-	-	-
R2967	-	-	-	-	-	-	-	-
R2970	-	-	-	-	-	-	-	-
R2971	-	-	-	-	-	-	-	-
R2972	-	-	-	-	-	-	-	-
R2973	-	-	-	-	-	-	-	-
R2974	-	-	-	-	-	-	-	-
R2975	-	-	-	-	-	-	-	-
R2976	-	-	-	-	-	-	-	-
R2977	-	-	-	-	-	-	-	-
R3000		EXMOK @	EX_M_COD E_FIN @	EX_M_COD E_5 @		EX_M_COD E_3 @	EX_M_COD E_2 @	EX_M_COD E_1 @
R3001				TLBRK @				

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R3004				TRWSP	M32S	M32FIN	M32CHER	M32LSER
				@	@	@	@	@
R3005			BRKSCHOF	BRKSCH	BRKHLD	TLBRKM		
			@	@	@	@		
R3007								
	@							
R3010			HSKPWOK2		HSKPWF2			
			@		@			
R3011	HSKPCHG2	HSKP1.M	HSKPWOK1	HSKPWNW	HSKPWF1	HSKPCHG	HSKP2S	HSKP1S
	@	@	@	@	@	@	@	@
R3012	-	-	-	-	-	-	-	-
								@
R3013	-	-	-	-	-	-	-	-
								-
R3014	-	-	-	-	-	@	@	@
								-
R3015	-	-	-	-	-	-	-	-
								-
R3016	-	-	-	-	-	-	-	-
								@
R3017	-	-	-	-	-	-	-	-
								-
R3018	-	-	-	-	-	-	-	-
								@
R3019	-	-	-	-	-	-	-	-
								-
R3020	-	-	-	-	MPSTOP	TPSTSTP	M66FF	M64FF
					@	@	@	@
R3021	-	-	-	-	-	-	-	-
								-
R3022	-	-	-	-	-	-	-	-
								@
R3023	-	-	-	-	-	-	-	-
								-

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R3024	-	-	-	-	-	-	-	-	-
R3025	-	-	-	-	-	-	-	-	-
R3400	ZACT @	M130ONM @	M130ST @	M130STOK @	M130STS @	M130S @	M132FF @	M130FF @	
R3401				SPONOK @		ZEXINEND @	ZACTST1 @	ZACTST @	
R3402				DIVBERI @	DIVBER @	MULBER1 @	MULBER @	SUBBER @	
R3403								SP_Z @	
R3430	-	-	-	-	-	-	-	-	@
R3431	-	-	-	-	-	-	-	-	@
R3432	-	-	-	-	-	-	-	-	-
R3433	-	-	-	-	-	-	-	-	@
R3434	-	-	-	-	-	-	-	-	-
R3435	-	-	-	-	-	-	-	-	-
R3500	NG=TLNO @	NG=SPTL @	NG=TL0 @	TNO.ANS @	TNO.NG @	TNO.OK @	TC.TLIF @	TC.NORM @	
R3501	NTRQNG @	NTRQOK @	TLRQON @	TFNG @	TFOK @	TCODE=0 @	TNOALM @	NG=TLBK @	
R3502	TLFOVS2 @	TLFOVS1 @	M30RQOK @	M30TLRQS @	OLTLREQ1 @	TLRQOK1 @	NTRQCHK @	TLRQOK @	
R3503	TLFNSET @	TPO>1023 @	TFO=0 @	TNOALMHL @	TLLEFCNT @		TLLEFCTOK @	TLFOVWR @	
R3504	U027ON @	AMCSSKOK @	AMCSSKP @	LDSKPOKF @	LDMTSK @	TLBKFIN @	TLBRKSET @	TLFNFIN @	

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R3505					TLLFRSF	TLLFROF	TLLFRST	U027ON1
					@	@	@	@
R3506								TFACTOK
								@
R3510	-	-	-	-	-	-	-	-
								@
R3511	-	-	-	-	-	-	-	-
								-
R3512	-	-	-	-	-	-	-	-
								-
R3513	-	-	-	-	-	-	-	-
								-
R4000	MAN3	MAN2	MAN1	MAN				
	@	@	@	@				
R4002	R50%	R10%	R5%	R1%	R0%			
	@		@	@	@			
R4003							AXISITLK	
							@	
R4004			RCH	R100%	HANINRPT		JOG_MOD	TEACHIN
			@		@		@	@
R4005				CSHM.M	CSHM2	CSHM1	HMOFF.S	HPSV-SA
				@	@	@	@	@
R4006	JG-OHCHK	JG+OFCHK				JOG-	JOG+	
						@	@	
R4007						MULERR1		MULERR
						@		@
R4009								M01_MEM
								@
R4010	-	-	-	OVR16	OVR8	OVR4	OVR2	OVR1
				@	@	@	@	@
R4011	-	-	-	-	-	-	-	-
								-
R4016			JOG-L.S	HAN.S	TAP.S	MDI.S	EDT.S	MEM.S
			@	@	@	@	@	@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R4017	5,S @	4,S @	2,S @	Y,S @	X,S @	MAN.S @	ZRN.S @	RT.S @
R4018						LIT_ON/O F_TIME @		AUX,S @
R4020	FV70.S @	FV60.S @	FV50.S @	FV40.S @	FV30.S @	FV20.S @	FV10.S @	FV0.S @
R4021	FV150.S @	FV140.S @	FV130 @	FV120.S @	FV110.S @	FV100.S @	FV90.S @	FV80.S @
R4022				FV200.S @	FV190.S @	FV180.S @	FV170.S @	FV160.S @
R4050	@	@	@		@	@	@	@
R4051							@	@
R4100	-	-	-	-	-	-	-	- @
R4101	-	-	-	-	-	-	-	- -
R4102	@	@	@	@	@	@	@	@ @
R4103	-	-	-	-	-	-	-	- -
R4104	@	@	@	@	@	@	@	@ @
R4105	@	@	@	@	@	@	@	@ -
R5000	TMAXMS @	CYST2T @	TMCYST @	TMDEN @	EMG_DELA Y_TIMER @	TMSPPM @	TMRB2 @	NC_STOP_ TIMER @
R5001	TMRBM_32 @		TMRCSMCR @	TMM32C @	AUTO_PW_ OF_TIMG @			WKLYDRY @
R5002							MAG.DOR. OP @	MAG.DOR. CL @
R5003			TMRBPSOF @		TMRBO&AF @	TMRAIR @		

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R5004	ATC_AIR_ DET_TIME @							
R5005					HYD_MOTO R_STP @	O&AVACOF @	O&AAIR_O N_AUX @	ATLUBCLK @
R5006				SPMSCHG @	TMRB_RGT @	TMRSPSTP @	TMRSPD @	TMRBSPE @
R5007	ALM64		SPTYPCHK @		SCOODOK @	SPLSCHK @	TMRORIF @	TMRORI @
R5009								TMRGFLT @
R5012	SPUNCPB @	TLSALM @	SA0-270 @	SPCLAL @	INDXCINT @	MGSTPT @	TMMG4TMR @	ATCOVR @
R5013	SHCCR2T @	SHCCCHK @	SHBR1T @	SHBR2T @	SHBCHK @	SHFR1T @	SHFR2T @	SHFCHK @
R5014	HCCHK @	HUCOR1T @	HUCOR2T @	HUCCHK @	SHCOR1T @	SHCOR2T @	SHCOCHK @	SHCCR1T @
R5015							HCOR1T @	HCOR2T @
R5025				TM.M30RQ @	TM,TLRQ @	TNORQTP @		
R5028		TMROFSET @	SPONOK1 @	M64STOK @	OMISTT @	OMIOFF @	M64FFCHK @	M66OFF @
R5030							T.PWOK1C @	T.YBRKOF @
R5031				JOGTIM @			PSM_OFF_ DELAY @	PILZERR @
R5064	TMRCHPOF @	TMRCHPON @			TMRSPSTP 1 @	SBSTTUP @		TMRLBON @
R5065				TMR5A.UN @	TMR5A.CL @	TMR4A.UN @	TMR4A.CL @	TMRTAP @
R5066								M130ONRS @
R5067	TMLD.ARM @	TMLD.WRN @			TMRWKTIM		TMROI @	

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R5068	MSTOFDLY @			TMR_M54 @	TMR_M55 @	TMR_M56 @	BOST_PMP _ON_TIME @	
R5069			TSWAIRT @		TMRBCLT @	TMRTQOV1 @	TMRTQOV2 @	
R5070	SHHUC1 @	SHHC1 @	SPCLP @	SPUNCLP @	SHCC1 @	SHCO1 @	SHB1 @	SHF1 @
R5071			@			MGB1 @	MGF1 @	ZAIRT @
R5096			CTR_6.UP @					
R5112	@							
R5300	M07 @	M06 @	M05 @	M04 @	M03 @	-	-	- @
R5301	M15 @	-	M13 @	M12 @	M11 @	M10 @	M09 @	M08 @ -
R5302	-	-	M21 @	M20 @	M19 @	@	-	M16 @ -
R5303	-	-	M29 @	-	@	@	-	- -
R5304	-	-	M37 @	M36 @	-	-	-	@ @
R5305	@	M46 @	M45 @	@	@	-	-	- -
R5306	@	@	M53 @	M52 @	M51 @	M50 @	M49 -	M48 @ -
R5307	@	@	@	-	-	@	@	@ -
R5308	-	-	-	-	-	@	-	@ @
R5309	M79 @	-	-	-	-	-	-	- -
R5310	@	@	M85 @	M84 @	M83 @	M82 @	-	- -

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1		0
R5311	-	-	-	-	-	@	@	-	-
R5312	@	@	M101 @	M100 @	-	-	-	-	@
R5313	M111 @	-	@	@	@	@	@	@	-
R5314	-	-	M117 @	M116 @	M115 @	M114 @	M113 @	M112 @	-
R5315	@	@	@	@	@	@	@	@	-
R5316	-	@	@	@	@	@	@	@	@
R5317	-	-	-	-	-	-	M137 @	M136 @	-
R5318	-	-	-	-	-	-	-	-	-
R5319	-	-	-	-	-	-	-	-	-
R5320	-	-	-	-	-	-	-	-	@
R5321	-	-	-	-	-	-	-	-	-
R5322	-	-	-	-	-	-	-	-	-
R5323	-	-	-	-	-	-	-	-	-
R5324	-	-	-	-	-	-	-	-	@
R5325	-	-	-	-	-	-	-	-	-
R5326	-	-	-	-	-	-	-	-	-
R5327	-	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1		0
R5413	-	-	-	-	-	-	-	-	-
R5414	-	-	-	-	-	-	-	-	-
R5415	-	-	-	-	-	-	-	-	-
R5416	-	-	-	-	-	-	-	-	-
R5417	-	-	-	-	-	-	-	-	-
R5418	-	-	-	-	-	-	-	-	-
R5419	-	-	-	-	-	-	-	-	-
R5420	-	-	-	-	-	-	-	-	-
R5421	-	-	-	-	-	-	-	-	-
R5422	-	-	-	-	-	-	-	-	-
R5423	-	-	-	-	-	-	-	-	-
R5424	-	-	-	-	-	-	-	-	-
R5500	M07FIN @	M06FIN @	M05FIN @	M04FIN @	M03FIN @	-	M01FIN @	M00FIN @	@
R5501	M15FIN @	-	M13FIN @	M12FIN @	M11FIN @	M10FIN @	M09FIN @	M08FIN @	-
R5502	-	-	M21FIN @	M20FIN @	M19FIN @	M18FIN @	-	M16FIN @	-
R5503	-	-	M29FIN @	-	M27FIN @	M26FIN @	-	-	-
R5504	-	-	M37FIN @	M36FIN @	-	-	-	M32FIN1 @	@

ADDRESS	BIT NUMBER								BYTE
	7	6	5	4	3	2	1	0	
R5505	M47FIN 0	M46FIN 0	M45FIN 0	M44FIN 0	M43FIN 0	-	-	-	-
R5506	M55FIN 0	M54FIN 0	M53FIN 0	M52FIN 0	M51FIN 0	M50FIN 0	M49FIN -	M48FIN 0	-
R5507	M63FIN 0	M62FIN 0	M61FIN 0	-	-	M58FIN 0	M57FIN 0	M56FIN 0	-
R5508	-	-	-	-	-	M66FIN 0	-	M64FIN 0	0
R5509	M79FIN 0	-	-	-	-	-	-	-	-
R5510	M87FIN 0	M86FIN 0	M85FIN 0	M84FIN 0	M83FIN 0	M82FIN 0	-	-	-
R5511	-	-	-	-	-	M90FIN 0	M89FIN 0	-	-
R5512	M103FIN 0	M102FIN 0	M101FIN 0	M100FIN 0	-	-	-	-	0
R5513	M111FIN 0	-	M109FIN 0	M108FIN 0	M107FIN 0	M106FIN 0	M105FIN 0	M104FIN 0	-
R5514	-	-	M117FIN 0	M116FIN 0	M115FIN 0	M114FIN 0	M113FIN 0	M112FIN 0	-
R5515	M127FIN 0	M126FIN 0	M125FIN 0	M124FIN 0	M123FIN 0	M122FIN 0	M121FIN 0	M120FIN 0	-
R5516	-	M134FIN 0	M133FIN 0	M132FIN 0	M131FIN 0	M130FIN 0	M129FIN 0	M128FIN 0	0
R5517	-	-	-	-	-	-	M137FIN 0	M136FIN 0	-
R5518	-	-	-	-	-	-	-	-	-
R5519	-	-	-	-	-	-	-	-	-
R5520	-	-	-	-	-	-	-	-	0
R5521	-	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R5522	-	-	-	-	-	-	-	-
R5523	-	-	-	-	-	-	-	-
R5524	-	-	-	-	-	-	-	-
R5525	-	-	-	-	-	-	-	-
R5526	-	-	-	-	-	-	-	-
R5527	-	-	-	-	-	-	-	-
R5550	M407FIN @	M406FIN @	M405FIN @	M404FIN @	-	M402FIN @	M401FIN @	M400FIN @
R5551	-	-	-	-	-	-	M409FIN @	M408FIN @
R5552	-	-	-	-	-	M418FIN @	-	-
R5553	-	-	-	M428FIN @	M427FIN @	M426FIN @	M425FIN @	M424FIN @
R5700	MF3SONM @	MF3SON2 @	MF3SON @	MF3SON1 @	MF2SONM @	MF2SON2 @	MF2SON @	MF2SON1 @
R5701			MF3SET @	MF2SET @	MF1SON2 @	MF1SON @	MF1SON1 @	MF1SONM @
R5702		MCDDMY @	MCLEAR @	MFINALL @	MFON @	MF3ON @	MF2ON @	MF1ON @
R5703	MFINH @	MFING @	MFINF @	MFINE @	MFIND @	MFINC @	MFINEB @	MFINA @
R5800	ALM08 @	ALM07 @	-	ALM05 @	ALM04 @	ALM03 @	ALM02 @	ALM01 @
R5801	-	-	ALM14 @	-	-	-	-	-
R5802	-	ALM23 @	ALM22 @	ALM21 @	ALM20 @	-	-	ALM17 @

ADDRESS	BIT NUMBER								BYTE
	7	6	5	4	3	2	1	0	
R5803	ALM32 @	ALM31 @	ALM30 @	-	-	ALM27 @	-	ALM25 @	-
R5804	ALM40 @	ALM39 @	-	-	-	-	ALM34 @	-	@
R5805	-	-	-	-	-	ALM43 @	-	ALM41 @	-
R5806	-	-	-	ALM1064 @	ALM1063 @	ALM1062 @	ALM1061 @	ALM1060 @	-
R5807	ALM64-1 @	ALM63 @	-	ALM61 @	ALM60 @	ALM59 @	ALM58 @	ALM1070 @	-
R5808	-	ALM71 @	ALM70 @	-	-	ALM67 @	ALM66 @	ALM65 @	@
R5809	ALM80 @	-	ALM78 @	ALM77 @	ALM76 @	ALM75 @	ALM74 @	-	-
R5810	-	-	-	ALM85 @	-	-	-	ALM81 @	-
R5811	ALM96 @	ALM95 @	ALM94 @	ALM93 @	ALM92 @	ALM91 @	ALM90 @	ALM89 @	-
R5812	-	-	-	-	-	-	-	-	@
R5813	-	-	-	-	-	-	-	-	-
R5814	-	-	-	-	-	-	-	-	-
R5815	-	-	-	-	-	-	-	-	-
R5816	ALM136 @	ALM135 @	ALM134 @	-	ALM132 @	ALM131 @	ALM130 @	ALM129 @	@
R5817	ALM144 @	ALM143 @	ALM142 @	ALM141 @	-	-	ALM138 @	-	-
R5818	-	ALM151 @	-	-	ALM148 @	ALM147 @	ALM146 @	ALM145 @	-
R5819	ALM160 @	ALM159 @	ALM158 @	-	-	ALM155 @	ALM154 @	-	-

ADDRESS	BIT NUMBER								BYTE
	7	6	5	4	3	2	1	0	
R5820	ALM168 @	ALM167 @	-	ALM165 @	ALM164 @	ALM163 @	ALM162 @	ALM161 @	@
R5821	ALM176 @	-	-	-	-	-	-	-	-
R5822	-	ALM183 @	-	-	ALM180 @	ALM179 @	ALM178 @	-	-
R5823	ALM192 @	-	-	-	ALM188 @	ALM187 @	ALM186 @	ALM195 @	-
R5824	-	-	ALM198 @	-	ALM196 @	-	-	-	@
R5825	ALM208 @	ALM207 @	ALM206 @	ALM205 @	ALM204 @	ALM203 @	ALM202 @	ALM201 @	-
R5826	ALM216 @	ALM215 @	ALM214 @	ALM213 @	ALM212 @	ALM211 @	ALM210 @	ALM209 @	-
R5827	ALM224 @	ALM223 @	-	-	ALM220 @	ALM219 @	ALM218 @	ALM217 @	-
R5828	-	-	-	-	-	-	-	-	@
R5829	-	-	-	-	-	-	-	-	-
R5830	ALM248 @	ALM247 @	ALM246 @	ALM245 @	ALM244 @	-	-	-	-
R5831	-	-	-	-	-	-	-	-	-
R5850	-	-	-	-	-	-	-	-	@
R5851	-	-	-	-	-	-	-	-	-
R5852	-	-	-	-	-	-	-	-	-
R5853	-	-	-	-	-	-	-	-	-
R5900	-	-	-	-	-	-	-	-	@

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R5901	-	-	-	-	-	-	-	-	-
R5902	-	-	-	-	-	-	-	-	-
R5903	-	-	-	-	-	-	-	-	-
R5950	ALMDET8 @	ALMDET7 @	ALMDET6 @	ALMDET5 @	ALMDET4 @	ALMDET3 @	ALMDET2 @	ALMDET1 @	
R5951								ALMDET7S @	
R5952								ALM_DET @	
R5954	ALMHLD.S @	BZ_AUX @	PRP_OFF1 @						
R5955				PTL_STP @	BZ_STP @	SBK_STP @	ST_BLK @	ALM_HOLD @	
R5957					M0-2FIN2 @	M0-2FIN1 @	M0-2FINS @	M0-2FIN @	
R5960			AIR_SWOK	FIRE.MEM @				STLS @	
R6000	-	-	-	-	-	-	-	-	@
R6001	-	-	-	-	-	-	-	-	-
R6002	-	-	-	-	-	-	-	-	-
R6003	-	-	-	-	-	-	-	-	-
R6004	-	-	-	-	-	-	-	-	@
R6005	-	-	-	-	-	-	-	-	-
R6006	-	-	-	-	-	-	-	-	@

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R6007	-	-	-	-	-	-	-	-	-
R6008	-	-	-	-	-	-	-	-	-
R6009	-	-	-	-	-	-	-	-	-
R6010	-	-	-	-	-	-	-	-	@
R6011	-	-	-	-	-	-	-	-	@
R6012	-	-	-	-	-	-	-	-	-
R6013	-	-	-	-	-	-	-	-	-
R6023		@		@		@		@	
R6100								@	
R7000		TLBRKRQ @	M30TLRQ @	OLTLREQ @		NTREQ @		PTNOREQ @	
R7001		TLFNREQ @		TLLFRSRQ @		AMCSSKP1 @		LDMONRQ @	
R7003		PCI/FRQ @		COWTRQ @				TLKINDS @	
R7004	-	-	-	-	-	-	-	-	@
R7005	-	-	-	-	-	-	-	-	-
R7006	-	-	-	-	-	-	-	-	-
R7007	-	-	-	-	-	-	-	-	-
R7009	-	-	-	-	-	-	-	-	@

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R7010	-	-	-	-	-	-	-	-	-
R7012	-	-	-	-	-	-	-	-	@
R7013	-	-	-	-	-	-	-	-	-
R7014	-	-	-	-	-	-	-	-	-
R7015	-	-	-	-	-	-	-	-	-
R7016	-	-	-	-	-	-	-	-	@
R7017	-	-	-	-	-	-	-	-	-
R7022	-	-	-	-	-	-	-	-	@
R7023	-	-	-	-	-	@	-	-	-
R7030	RDROPN @	LDROPN @						MGIMP @	
R7031		SLP4 @	SLP3-4 @	SLP3 @	SLP2-3 @	SLP2 @	SLP1-2 @	SLP1 @	
R7032				ZP4 @	ZP3-4 @	ZP3 @	ZP2-3 @	ZP2 @	
R7033					SHCC101 @	SHCO101 @	SHF11 @	SHB11 @	
R7034			SHHUC102 @	SHHC102 @	SHCC102 @	SHCO102 @	SHF101 @	SHB101 @	
R7035				ATCINI1 @		SHTLDT10 1 @		ACYCLE @	
R7036	-	-	-	-	-	-	-	-	@
R7037	-	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
R7038	-	-	-	-	-	-	-	-
R7039	-	-	-	-	-	-	-	-
R7040	-	-	-	-	-	-	-	@
R7041	-	-	-	-	-	-	-	-
R7042	-	-	-	-	-	-	-	@
R7043	-	-	-	-	-	-	-	-
R7044	-	-	-	-	-	-	-	@
R7045	-	-	-	-	-	-	-	-
R7046	-	-	-	-	-	-	-	@
R7047	-	-	-	-	-	-	-	-
R7048	-	-	-	-	-	-	-	@
R7049	-	-	-	-	-	-	-	-
R7050	M85OK @	M84OK @	M83OK @	M82OK @	M19OK @	ZP4ACTOK @	ZP3ACTOK @	ZP2ACTOK @
R7051	SLP4OK @	SLP3OK @	SLP2OK @	SLP1OK @	M89OK @		M87OK @	M86OK @
R7052	M121OK @	M120OK @	M109OK @	M108OK @	M107OK @	M106OK @	M105OK @	M104OK @
R7053	M129OK @	M128OK @	M127OK @	M126OK @	M125OK @	M124OK @	M123OK @	
R7055							MRSTS @	MFINS @

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
R7235	-	-	-	-	-	-	-	-	-
R7236	-	-	-	-	-	-	-	-	-
R7237	-	-	-	-	-	-	-	-	-
R7238	-	-	-	-	-	-	-	-	-
R7239	-	-	-	-	-	-	-	-	-
R7240	-	-	-	-	-	-	-	-	-
R7241	-	-	-	-	-	-	-	-	-
R7302	PLS8 0	PLS7 0	PLS6 0	PLS5 0	PLS4 0	PLS3 0	MCH_LCK_ PLS_AUX 0	MCH_LCK_ PLS 0	
R7303					PLS12 0	PLS11 0	PLS10 0	PLS9 0	
R7306	PLS20 0	PLS19 0	PLS18 0	PLS17 0	PLS16 0	PLS15 0	PLS14 0	PLS13 0	
R7307	PLS28 0	PLS27 0	PLS26 0	PLS25 0	PLS24 0	PLS23 0	PLS22 0	PLS21 0	
R7310			PLS34 0	PLS33 0	PLS32 0	PLS31 0	PLS30 0	PLS29 0	
R7996	0	0	0	0	0	0	0	0	
R7997	M402FF 0	M401FF 0	0	0	0	0	PROTECT 0	SPON 0	
R9000							< 0	= 0	
R9002	-	-	-	-	-	-	-	-	0
R9003	-	-	-	-	-	-	-	-	-

ADDRESS	7	6	5	BIT NUMBER				0	BYTE
R9004	-	-	-	-	-	-	-	-	-
R9005	-	-	-	-	-	-	-	-	-
R9091		@	@				NOON @	NOOFF	

ADDRESS	BIT NUMBER								BYTE
	7	6	5	4	3	2	1	0	
K0000	CHIP_OIL UIT_SW @	C_UNCLP_ DISABLE		CHP_OIL_ COLR_SW @	APC @	ATC_STIC K @		SP_COL_D ET_SW_1 @	
K0001	MSTAUT_F UN_SW @			WEK_TIM_ PRO_SW @	SPTLDETE ON		X0.6_ON @	MG_30T_S EL @	
K0002	X1.7_CON TACT_SEL @			ATC_AIR_ DET_SW @	X2.5_ON_ SW @		OIL_SKIR _DET_SW @	MST_COLT _DET_SW @	
K0003		SP_HSK_S PEC @	C_AXIS_H YDRLC @	HYDRPUMP AR @	SPCOMNOP @		5CLPRSTO FF @	4CLPRSTO FF @	
K0004		MCC_TEST _REQ_OFF @		SP_TEST_ MODE @	APC_TEST _MODE @	ATC_APC_ JOG @	ATC_APC_ INTLK_PS @	AXIS_INT LK_PASS @	
K0005	GHP_OILL V_DET_SW	CHP_OIL_ LEV_STP @	CHP_FLSH_ FUN_SEL @	OPTION_6	OIL_MIST @	CTS_OIL_ OL_FUN @	CTS_ON @	NO1_CHP_ OIL_FUN @	
K0006	CHPOILOU TTMRCTRL @		CHP_OIL_ PUP_SW @		CHIP_TAN K_LEV_ON @	CHP_COL_ RDY_SW	COL_OIL_ LEV_SW @	CHIP_PUM _OL_SW @	
K0007	CHPCONOF AL_PASS @		CHP_CON_ RUN_CHK @	CHP_CON3 TOQ_SW @	CHP_CON2 _TOQ_SW @	CHP_CON1 _TOQ_SW @	NO_2&3_C HIP_CON @	NO1_CHP_ CON_OLS @	
K0008	40ATCSA @	ATC-ANEG @				T&MACTEN ABLE @		24_TOOL_ SEL @	
K0009		HIGH_SPE ED_TAP @							
K0010	CHP_CON_ CCW_SW @	FILT_BRK _DET_ON @	CH_COT_P U_COT_SW @	EX_NOZL_ AUX_COL @	CHP_OIL_ LOW_SW2 @	CHP_OIL_ LOW_SW1 @	BOOST_AL _PASS_SW @		
K0011			SPONAIRB LOW @	SD_MD_SW @				COVER_ST ICK @	
K0012	AL_POWER _OFF @		M30_POWE R_OFF @	TBESKACO NNT @	AUTO_TL_ SET @	HANDINDW RITE @	X1.6_PAS S @	EX_M_COD E_BIN @	
K0013			3D_INTFC E_CHK @	SPDISPCO MPSTION @	C_AXIS_C ONTROL @	CS_AXIS_ CONTROL @	F1_PB_SE ND @	PLAYBACK _ON @	
K0014					HSKUNCLP ENAB @				
K0015				MAG.DOR. SEN.PAS @	ATC_DOOR _LS @	MAG.MPG @	OPAUXPAN EL @		
K0016	ZP4ZM @	ATCXAPM @	ZP4YM @	INDEXOKM	ATCSTPM @	ATCTLRLP M @	ATCTLINP M @	SAVA_A @	

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
K0017								M130FF1 @
K0018					SOOVRID @		H.INT.M @	H*10 @
K0020					M.CHIP @	OPSTP @	BLKSKP @	WKPL @
K0025							COL_OF_C HK_PASS @	
K0026								SPTLCKNG @
K0027		3D_INTFC EOFSETWR @						
K0028					AL159.M @			
K0029		OP_AUX_O F_SW @	PRTET_KE Y_OF_SW @					
K0040								@
K0099						TLIF @		

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
D0000	-	INDCOMMO N	-	-	-	-	-	-	@
D0001	-	-	-	-	-	-	-	-	-
D0002	-	-	-	-	-	-	-	-	@
D0004 SP.TOOL. NO	-	-	-	-	-	-	-	-	@
D0005	-	-	-	-	-	-	-	-	@
D0006	-	-	-	-	-	-	-	-	@
D0007	-	-	-	-	-	-	-	-	-
D0008	-	-	-	-	-	-	-	-	@
D0020	-	-	-	-	-	-	-	-	@
D0062	-	-	-	-	-	-	-	-	@
D0063	-	-	-	-	-	-	-	-	-
D0076	-	-	-	-	-	-	-	-	@
D0077	-	-	-	-	-	-	-	-	-
D0078	-	-	-	-	-	-	-	-	@
D0079	-	-	-	-	-	-	-	-	-
D0080	-	-	-	-	-	-	-	-	@
D0081	-	-	-	-	-	-	-	-	-

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
D0471	-	-	-	-	-	-	-	-
D0490			WKTMASTER		WKLYPRGM			
			@		@			
D0500	-	-	-	-	-	-	-	-
								@
D0501	-	-	-	-	-	-	-	-
								-
D0502	-	-	-	-	-	-	-	-
								-
D0503	-	-	-	-	-	-	-	-
								-
D0504	-	-	-	-	-	-	-	-
								@
D0505	-	-	-	-	-	-	-	-
								-
D0506	-	-	-	-	-	-	-	-
								-
D0507	-	-	-	-	-	-	-	-
								-
D0508	-	-	-	-	-	-	-	-
								@
D0509	-	-	-	-	-	-	-	-
								-
D0510	-	-	-	-	-	-	-	-
								-
D0511	-	-	-	-	-	-	-	-
								-
D0512	-	-	-	-	-	-	-	-
								@
D0513	-	-	-	-	-	-	-	-
								@
D0516	-	-	-	-	-	-	-	-
								@

ADDRESS	BIT NUMBER							BYTE	
	7	6	5	4	3	2	1	0	
D3043	@	@	@	-	@	-	@	@	-
D3044	-	-	-	-	-	@	-	-	@
D3045	@	@	@	@	@	@	@	@	-
D3046	@	@	@	@	@	@	@	@	-
D3047	@	@	@	@	@	@	@	@	-
D3048	@	@	@	@	@	@	@	@	@
D3049	-	-	-	-	-	@	@	@	-
D3050	ATCT5-11 @	ATCTA @	-	-	-	-	-	-	@
D3051	-	ATCT111 @	ATCT101 @	ATCT91 @	ATCT81 @	ATCT71 @	ATCT61 @	-	-
D3052	ATC241 @	-	ATCT23-1 1 @	ATCT221 @	-	ATCT21-2 1 @	ATC21-11 @	ATC201 @	-
D3053	-	ATCT291 @	ATCT281 @	-	ATCT27-1 1 @	-	ATC261 @	ATCT251 @	-
D3054	-	-	-	-	-	-	-	-	@
D3055	ATCM6-10 1 @	ATCM501 @	ATCM4-20 1 @	ATCM4-10 1 @	ATCM301 @	ATCM2-20 1 @	ATCM2-10 1 @	ATCM101 @	@
D3056	-	ATCM1201 @	ATCM1101 @	ATCM1001 @	ATCM901 @	ATCM801 @	ATCM701 @	-	-
D3057	-	ATCX71 @	ATCX61 @	-	-	-	-	-	-
D3058	-	-	-	ATCX131 @	ATCX121 @	ATCX111 @	ATCX101 @	ATCX91 @	@
D3059	-	-	-	-	-	ATCX191 @	ATCX181 @	ATCX171 @	@

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
D7003			⓪	⓪	⓪	⓪	⓪	⓪
D7004							⓪	⓪
D7005			⓪	⓪		⓪	⓪	⓪
D7100	TBLINI.P ⓪		PINI.PL ⓪	TMEM.PL ⓪	TINI.PL ⓪		TSTPOS.P ⓪	OP.OUT18 ⓪
D7101			TCH-IN ⓪	F1 ⓪	PRGRST ⓪	ZCAN ⓪	AUXLK ⓪	MCLK ⓪
D7103			BSKP7 ⓪	BSKP6 ⓪	BSKP5 ⓪	BSKP4 ⓪	BSKP3 ⓪	BSKP2 ⓪
D7104							BSKP9 ⓪	BSKP8 ⓪
D7105			MCCTES.O ⓪	ORI.O ⓪		MRNWIP ⓪	MSTCL ⓪	PWROFF ⓪
D7112	-	-	-	-	-	-	-	-
D7113	-	-	-	-	-	-	-	-
D7114	-	-	-	-	-	-	-	-
D7115	-	-	-	-	-	-	-	-
D7150	-	-	-	-	-	-	-	-
D7151	-	-	-	-	-	-	-	-
D7200							⓪	⓪
D7210						⓪		
D7250						HSK ⓪	MACT ⓪	

ADDRESS	BIT NUMBER							BYTE
	7	6	5	4	3	2	1	0
D7251								INTDSP
								@
D7398								
	-	-	-	-	-	-	-	-
D7399								
	-	-	-	-	-	-	-	-
D7400								
	-	-	-	-	-	-	-	-
D7401								
	-	-	-	-	-	-	-	-

Symbol & Comment

NO.	ADDRESS	SYMBOL	FIRST COMMENT
00001	X0000.0	GREASE_PRES_DETE	GREASE PRESSURE DETECT
00002	X0000.3	SP_OIL_&_AIR_DET	SPINDLE OIL&AIR PRESSURE DETE
00003	X0000.4	MG_TOOL_DETECT_1	MG TOOL DETECT 1
00004	X0000.5	ATC_OP_SEL	ATC SIDE PANEL ON SW
00005	X0000.6	ATC_MG_CW	ATC MAGAZINE CW
00006	X0000.7	ATC_MG_CCW	ATC MAGAZINE CCW
00007	X0001.1	HYD_MTR_OL	HYDRAULIC MOTOR OL
00008	X0001.2	HYD_TEMP_DETE	HYDRAULIC THERMAL DETECT
00009	X0001.4	ATC_DOR_L_OP_S	ATC DOOR LEFT OPEN SEN
00010	X0001.5	ATC_DOR_L_CLO_S	ATC DOOR LEFT CLOSE SEN
00011	X0001.6	ATC_DOR_R_OP_S	ATC DOOR RIGHT OPEN SEN
00012	X0001.7	ATC_DOR_R_CLO_S	ATC DOOR RIGHT CLOSE SEN
00013	X0002.0	GREASE_PUMP_O.L	GREASE PUMP OVERLOAD
00014	X0003.0	AIR_PRESSURE_DET	AIR PRESSURE LOW DETECT
00015	X0003.1	LUBE_LEVEL	LUBE LEVEL DETECT
00016	X0003.2	SP_CLAMP_L.S1	SPINDLE CLAMP SW WITH TOOL
00017	X0003.3	SP_UNCLP_L.S	SPINDLE UNCLAMP DETECT SW
00018	X0003.4	SP_UNCLP_PB	SPINDLE UNCLAMP PB
00019	X0003.5	MG_BACKWARD	MAGAZINE BACKWARD
00020	X0003.6	MG_FORWARD	MAGAZINE FORWARD
00021	X0004.0	HEAT_EXCHG_OL	HEAT EXCHANGER OL
00022	X0004.1	SP_FAN_OL	SPINDLE FAN OL
00023	X0004.2	SP_CLP_NOT	SPINDLE CLAMP WITHOUT TOOL SEN
00024	X0004.3	SP_CLAMP_LS2	SPINDLE CLAMP SW WITHOUT TOOL
00025	X0005.3	C_CLAMP_SEN	C AXIS CLAMP SENSOR
00026	X0006.2	DOOR.SW	SAFETY DOOR SW
00027	X0006.5	CHIP_FLU_OL	CHIP FLUSH PUMP OL
00028	X0008.1	COL_OL	COOLANT MOTOR OL
00029	X0008.2	SP_COL_DETE_1	SPINDLE COOLANT A.L 1
00030	X0008.3	CHIP_CONV_OL	CHIP CONVEYOR MOTOR OL
00031	X0008.4	EMG_STOP	EMERGENCY STOP SW
00032	X0008.5	A_CLAMP_SEN	A AXIS CLAMP SENSOR
00033	X0010.0	SP_HI_SHIFT	SPINDLE HIGH SHIFT
00034	X0010.1	SP_LOW_SHIFT	SPINDLE LOW SHIFT
00035	X0010.4	CLT_LOW_LIMIT	COOLANT TANK LOW LIMIT
00036	X0010.7	SKIM_OL	SKIMMER MOTOR OL
00037	X0011.7	CTS_MTR_OL	CTS MOTOR OL
00038	X0012.2	SP_OIL&AIR_THEAL	SPINDLE OIL&AIR THERMAL
00039	X0012.3	OPTION20	SPARE
00040	X0012.4	OPTION21	SPARE

00041	X0012.5	MIST_COLCT_DETE	MIST COLLECTOR DETE L.S
00042	X0013.0	SOL_1_FUSE	SOL 1 FUSE
00043	X0013.1	OPTION22	SPARE
00044	X0013.2	MOTOR_O.L_1	MAIN POWER O.L DETECT
00045	X0013.3	OPTION23	SPARE
00046	X0013.4	DC_QF201	DC QF201 OFF L.S
00047	X0013.5	DC_QF202_L.S	DC QF202 L.S
00048	X0013.6	DC_QF_204_L.S	DC QF204 OFF AL
00049	X0013.7	OPTION24	SPARE
00050	X0014.0	AC_QF12_L.S	AC QF12 L.S
00051	X0014.1	AC_QF13_L.S	AC QF13 OFF L.S
00052	X0014.2	MOTOR_O.L_7	AC QF16 OFF L.S
00053	X0014.3	WEEK_TIMER_ON	WEEK TIMER ON
00054	X0014.4	OPTION25	SPARE
00055	X0014.5	OPTION26	SPARE
00056	X0014.6	OPTION27	SPARE
00057	X0014.7	OPTION28	SPARE
00058	X0015.0	S_HAND_FRD	S HAND FORWARD
00059	X0015.1	S_HAND_BKRD	S HAND BACKWARD
00060	X0015.2	S_HAND_UP	S HAND UP
00061	X0015.3	S_HAND_DOWN	S HAND DOWN
00062	X0015.6	MG_ZRO_REF	MAGAZINE ZERO
00063	X0016.0	S_HAND_TOOL_DETE	S HAND TOOL DETECT
00064	X0016.1	S_HAD_HED_CLP	S HAND HEAD CLAMP
00065	X0016.2	S_HAD_HED_UNCLP	S HAND HEAD UNCLAMP
00066	X0018.1	CHIPCOL_FLT_BK_1	CHIP COOLANT FILTER BREAK 1
00067	X0018.2	CHIP_CON_SUBSEL1	CHIP CON SUB SELECT SW 1
00068	X0018.3	CHIP_CON_CW	CHIP OIL CHIP CON CW
00069	X0018.4	CHIP_CON_CCW	CHIP OIL CHIP CON CCW
00070	X0018.6	MAIN_TANK_LOW	MAIN TANK LOW
00071	X0018.7	FILTER_CLOGGED	CHIP OIL FILTER CLOGGING
00072	X0019.0	CLE_TAK_LW_LEV	CLEAN TANK LOW LEV L.S
00073	X0019.1	COL_OIL_LEV_LOW	COOLANT OIL LOW LEVEL
00074	X0019.2	COL_ON	COOLER RUNNING
00075	X0019.3	CHPCON_TOQ_OVR1	CHIP CON TORQUE OVR 1
00076	X0019.4	CHP_CON_TOQ_OVR2	CHIP CON TORQUE OVR 2
00077	X0019.5	CHP_CON_TOQ_OVR3	CHIP CON TORQUE OVR 3
00078	X0019.6	MGNET_SEPRTOR	MGNET SEPARATOR
00079	X0019.7	CLT_CIRCULATE	COOLANT CIRCULATE
00080	X0020.0	MST.LOCK.PB	MST LOCK PB

00081	X0020.2	MAG_CW_PB	MAGAZINE CW PB
00082	X0020.3	CHP_CON_MAN_CCW	CHIP CON MANUAL CCW
00083	X0020.4	MLK_PB	MACHINE LOCK PB
00084	X0020.6	MAG.R.L.PB	MAGAZINE L/R PB
00085	X0020.7	CHP.CON.CW.PB	CHIP CONVEYOR CW PB
00086	X0021.0	BLOCK_SKIP	BLOCK SKIP
00087	X0021.1	OVC_PB	OVERRIDE CANCEL PB
00088	X0021.2	F1_PB	F1 PB FOR FOOT SW VALID
00089	X0021.3	F2_PB	F2 PB FOR OIL & AIR
00090	X0021.4	PRO.RESTART.PB	PROGRAM RESTART PB
00091	X0021.7	WORK_LIGHT_PB	WORK LIGHT ON PB
00092	X0022.0	OPTION_STOP	OPTIONAL STOP PB
00093	X0022.1	CTS_PB	CTS PB
00094	X0022.2	AL.RST.PB	ALARM RESET PB
00095	X0022.3	DOOR_PB	DOOR PB
00096	X0022.4	DRY_RUN_PB	DRY RUN PB
00097	X0022.5	CHP.FLU_PB	CHIP FLUSH PB
00098	X0022.6	DOR.LCK.PB	DOOR LOCK PB
00099	X0022.7	A.ZRN.PB	AUTO ZRN PB
00100	X0023.0	SINGLE_BLOCK	SINGLE BLOCK
00101	X0023.1	COL_PB	COOLANT PB
00102	X0023.2	DOR.UNL.PB	DOOR UNLOCK PB
00103	X0023.3	M19_PB	M19 PB
00104	X0023.4	Z_PB	Z AXIS SELECT PB
00105	X0023.5	AUX_PB	AXIS AUX SELECT PB
00106	X0023.6	-_MAUAL_FEED	- MAUAL FEED
00107	X0023.7	SP.CCW_PB	SPINDLE CCW PB
00108	X0024.0	Y_PB	Y AXIS SELECT PB
00109	X0024.1	C_PB	C AXIS SELECT PB
00110	X0024.2	RAPID_PB	RAPID SELECT PB
00111	X0024.3	SP_STOP_PB	SPINDLE STOP PB
00112	X0024.4	X_PB	X AXIS SELECT PB
00113	X0024.5	A_PB	A AXIS SELECT PB
00114	X0024.6	+_MAUAL_FEED	+ MAUAL FEED
00115	X0024.7	SP.CW_PB	SPINDLE CW PB
00116	X0025.0	SP_OVERRIDE_A	SPINDLE OVERRIDE A
00117	X0025.1	SP_OVERRIDE_B	SPINDLE OVERRIDE B
00118	X0025.2	SP_OVERRIDE_C	SPINDLE OVERRIDE C
00119	X0025.3	FEED_OVERRIDE_A	FEED OVERRIDE A
00120	X0025.4	FEED_OVERRIDE_B	FEED OVERRIDE B

00121	X0025.5	FEED_OVERRIDE_C	FEED OVERRIDE C
00122	X0025.6	FEED_OVERRIDE_D	FEED OVERRIDE D
00123	X0025.7	FEED_OVERRIDE_E	FEED OVERRIDE E
00124	X0026.0	OP_MODE_SEL_A	OPERATION MODE SELECT A
00125	X0026.1	OP_MODE_SEL_B	OPERATION MODE SELECT B
00126	X0026.2	OP_MODE_SEL_C	OPERATION MODE SELECT C
00127	X0026.3	RAPID_OVEERIDE_A	RAPID OVEERIDE A
00128	X0026.4	RAPID_OVEERIDE_B	RAPID OVEERIDE B
00129	X0026.5	CYCLE.START_PB	CYCLE START PB
00130	X0026.6	HOLD_PB	HOLD PB
00131	X0026.7	CNC.RDY.PB	CNC READY PB
00132	X0027.1	MEM_KEY_SW	MEMORY KEY ENABLE
00133	X0027.2	MPG.X	MANUAL AXIS SELECT X AXIS
00134	X0027.3	MPG.Y	MANUAL AXIS SELECT Y AXIS
00135	X0027.4	MPG.Z	MANUAL AXIS SELECT Z AXIS
00136	X0027.5	MPG.A	MANUAL AXIS SELECT TABLE AXIS
00137	X0027.7	HAD_WHEEL_FED*1	HANDLE WHEEL FEED *10
00138	X0028.0	HAD_WHEEL_FED*10	HANDLE WHEEL FEED *10
00139	X0028.1	HAD_WHEL_FED*100	HANDLE WHEEL FEED *100
00140	X0028.2	MPG.C	MANUAL AXIS SELECT AUX AXIS
00141	X0040.1	CTS_TRIP	CTS TRIP
00142	X0040.2	CHIP_FLOW_TRIP	CHIP FLOW TRIP
00143	X0040.3	CLT_IN_TRIP	COOLANT IN TRIP
00144	X0040.4	NO1_CHP_CON_OL	NO1 CHIP CON OL
00145	X0040.5	OIL_SKIM_OL	OIL SKIMMER OL
00146	X0040.6	FR_14&16_OL	FR 14&16 OL DETECT
00147	X0040.7	BACK_FLOW_TRIP	BACK FLOW TRIP
00148	X0080.0	CLT_PWR_DEFECT_2	COOLANT POWER DEFECT 2
00149	X0080.1	D_FILTER_BRK_2	D FILTER BRRAK 2
00150	X0080.2	CHIP_CON_SUBSEL2	CHIP CON SUB SELECT SW 2
00151	X0080.3	CHIP_CON_CW_SW2	CHIP CON CW SW2
00152	X0080.4	CHIP_CON_CCW_SW2	CHIP CON CCW SW2
00153	X0080.5	CLT_LOW_LIMIT_2	COOLANT LOW LIMIT 2
00154	X0080.6		MAIN TANK LOW
00155	X0080.7	FILTER_CLOGGED_2	FILTER CLOGGED 2
00156	X0081.0	CLE_TAK_LW_LEV_2	CLEAN TANK LOW LEV L.S 2
00157	X0081.1	COL_OIL_LOW_LEV2	COOLANT OIL LOW LEV 2
00158	X0081.2	COL_ON_2	COOLER RUNNING 2
00159	X0081.3	CHP_CON_TOQ_OVR4	CHIP CON TORQUE OVER 4
00160	X0081.4	CHP_CON_TOQ_OVR5	CHIP CON TORQUE OVER 5

00161	X0081.5	CHP_CON_TOQ_OVR6	CHIP CON TORQUE OVER 6
00162	X0081.6	MAGIC_SEPRATOR	MAGNETIC SEPARATOR SW
00163	X0081.7	COLNT_CYC_L.S_2	COOLANT CYCLE L.S 2
00164	X0082.0	CLT_TRIP_2	COOLANT TRIP 2
00165	X0082.1	CTS_TRIP_2	CTS TRIP 2
00166	X0082.2	CHIP_FLOW_TRIP_2	CHIP FLOW TRIP 2
00167	X0082.3	CLT_IN_TRIP_2	COOLANT IN TRIP 2
00168	X0082.4	NO1_CHP_CON_OL_2	NO1 CHIP CON OL 2
00169	X0082.5	OIL_SKIM_OL_2	OIL SKIMMER OL 2
00170	X0082.6	FR14&16_OL_2	FR14 &16 OVERLOAD
00171	X0082.7	BACK_FLOW_TRIP_2	BACK FLOW TRIP 2
00172	X0100.0	C_AXIS_UNLP_DET	C AXIS UNCLAMP DETECT
00173	X0100.2	OPTION1	SPARE
00174	X0100.4	SP_COL_DETE_2	SPINDLE COOLANT A.L 2
00175	X0100.5	SP_COL_DET_SW	SPINDLE COOLANT DETECT SW
00176	X0100.6	AUTO_FIR_PWDN_SW	AUTO FIRE POWER DOWN SW
00177	X0100.7	AUTO_FIR_OFF_SW	AUTO FIRE OFF NOTIFY
00178	X0101.0	OPTION5	SPARE
00179	X0101.1	OPTION6	SPARE
00180	X0101.2	OPTION7	SPARE
00181	X0101.3	OPTION8	SPARE
00182	X0101.4	Y_COVR_LOK_SW_1	Y AXIS COVER LOCK SW 1
00183	X0101.5	Y_COVR_LOK_SW_2	Y AXIS COVER LOCK SW 2
00184	X0101.6	TABLE_OT_SW	TABLE OT LIMIT SW
00185	X0101.7	C_UNCLP_SW	C AXIS UNCLAMP DETECT SW
00186	X0102.0	A_AXIS_UNLP_DET	A AXIS UNCLAMP DETECT
00187	X0102.1	EX_CODE_FIN	EXTRA CODE FIN
00188	X0102.2	BOOST_PRS_DETE_1	BOOSTER PRESSURE DETECT 1
00189	X0102.3	BOOST_OIL_LEV_LO	BOOSTER OIL LEVEL LOW
00190	X0102.5	MST_COLT_PROT_SW	MIST COLLECTOR PROTECT DET SW
00191	X0102.7	BOOST_PRS_DETE_2	BOOSTER PRESSURE DETECT 2
00192	X0103.0	OIL_&_AIR_DETE	OIL & AIR PRESSURE DETECT
00193	X0103.4	OPTION1	SPARE
00194	X0103.5	OPTION2	SPARE
00195	X0103.6	OPTION3	SPARE
00196	X0103.7	OPTION4	SPARE
00197	X0104.0	LASER_DETE_L.S	LASER DETECT OK L.S
00198	X0104.1	LASER_STATUS_DET	LASER STATUS DETE
00199	X0104.2	OPTION9	SPARE
00200	X0104.3	OPTION10	SPARE

00201	X0104.4	OPTION11	SPARE
00202	X0104.5	MP_DETE_BT_LOW	MP DETE SW BATTERY LOW
00203	X0104.6	MP_DETE_BT_A.L	MP DETE SW BATTERY LOW AL
00204	X0104.7	OPTION12	SPARE
00205	X0105.3	ATC_PIN_UNLOCK	ATC PIN UNLOCK DETECT L.S
00206	X0105.4	AUTO_TL_SET_ON	AUTO TOOL SET ON PB
00207	X0105.5	AUTO_TL_SET_OFF	AUTO TOOL SET OFF PB
00208	X0105.6	MG_TOOL_INDEX_ST	MAGAZINE TOOL INDEX ST
00209	X0105.7	OPTION13	SPARE
00210	X0106.0	PSM_MCC_OF_CHECK	POWER MODUAL MCC OFF CHECK
00211	X0106.1	NC_RDY_PB	NC POWER RDY PUSH BUTTON
00212	X0106.2	AUTO_MODE_2	AUTO MODE 2
00213	X0106.3	AUTO_MODE_2	AUTO MODE 2
00214	X0106.4	OP_RDY_PW_DETE	NC READY POWER ON DETECT
00215	X0106.5	ST_RDY_OF_DETE	CYCLE RDY OFF DETECT
00216	X0106.6	AUTO_MODE_3	AUTO MODE 3
00217	X0106.7	PW_SUPRT_OF_DE_1	POWER SUPPORT OFF DETECT 1
00218	X0107.0	ATC_GUARD_LS	ATC MAGAZINE CLOSED GUARD
00219	X0107.1	PW_SUPRT_OF_DE_2	POWER SUPPORT OFF DETECT 2
00220	X0107.2	OPTION13	SPARE
00221	X0107.3	OPTION14	SPARE
00222	X0107.4	HYD_PUP_OFF_DETE	HYDRAULIC PUMP OFF CHECK
00223	X0107.5	ENB_MANU_SW	ENABLE ON MANUAL SW
00224	X0107.6	SERVO_EMG_STOP	SERVO EMERGENCY STOP
00225	X0107.7	OPTION15	SPARE
00226	X0108.0	Z_AXIS_BRK_CHK_OF	Z MOTOR BRAKE CHECK OFF
00227	X0108.1	OPTION16	SPARE
00228	X0108.2	OPTION17	SPARE
00229	X0108.3	OPTION18	SPARE
00230	X0108.5	COOLANT_OF_CHK	COOLANT OFF CHECK
00231	X0108.6	CHIP_CON_OF_CHK	CHIP CONVEYOR OFF CHECK
00232	X0108.7	SAFE_RE_OF_CHECK	SAFETY RELAY OFF CHECK
00233	X0110.5	OPTION19	SPARE
00234	Y0000.0	HYD.M	HYDRAULIC PUMP MOTOR
00235	Y0000.1	LUB-MOTOR	BALL SCREW& GUIDE GREASE PUMP
00236	Y0002.0	CLT_PUMP_MTR	COOLANT PUMP MTR
00237	Y0002.3	NO1_CHP_CON_CW_1	NO1 CHIP CON CW 1
00238	Y0002.4	NO1CHP_CON_CCW	NO1 CHIP CON CCW
00239	Y0002.7	CHIP_FLUSH	CHIP FLUSH PUMP
00240	Y0003.0	OIL_SKIMMER	OIL SKIMMER

00241	Y0003.5	PATLITE_GREEN	GERRN LIGHT
00242	Y0003.6	PATLITE_RED	RED LIGHT
00243	Y0003.7	PATLITE_YELLOW	YELLOW LIGHT
00244	Y0004.0	O&A-OIL	SPINDLE OIL&AIR ON
00245	Y0004.1	APO.O	AUTO POWER OFF RELAY
00246	Y0004.2	SP_SHIFT_1	SPINDLE SHIFT 1
00247	Y0004.3	SP_SHIFT_2	SPINDLE SHIFT 2
00248	Y0004.4	WK_LT	WORK LIGHT
00249	Y0004.5	CTS_1	CTS VALVE 1
00250	Y0005.0	SP_UCLP	SPINDLE TOOL UNCLAMP
00251	Y0005.1	MAG_EXTEND	MAGAZINE EXTEND SOL
00252	Y0005.2	MAG_RETURN	MAGAZINE RETURN SOL
00253	Y0005.3	SP_HEAD_AIR	SPINDLE HEAD AIR
00254	Y0005.4	SP_AIR_BLAST	SPINDLE AIR BLAST
00255	Y0006.1		MG FORWARD
00256	Y0006.2	ATC_DOR_L_OPN	ATC DOOR LEFT OPEN
00257	Y0006.3	ATC_DOR_L_CLO	ATC DOOR LEFT CLOSE
00258	Y0006.4	ATC_DOR_R_OPN	ATC DOOR RIGHT OPEN
00259	Y0006.5	ATC_DOR_R_CLO	ATC DOOR RIGHT CLOSE
00260	Y0006.6	O&A_AIR	OIL & AIR COOLER
00261	Y0006.7	SP_BAR_AIR	SPINDLE BEARING AIR
00262	Y0007.0	C.CLP.SOL	C AXIS CLAMP SOL
00263	Y0007.1	Z_BRAKE	Z BRAKE
00264	Y0007.6	OPE_DOOR_UNLK	OPERATION DOOR UNLOCK
00265	Y0007.7	A.CLP.SOL	A AXIS CLAMP SOL
00266	Y0008.3	CLTCLR	CHIP OIL CHILLER ON
00267	Y0008.4	MISTCL.M	OIL MIST COLLECTOR MOTOR
00268	Y0008.6	C_CLP	C AXIS CLAMP
00269	Y0009.0	PREP_ON_METER	PREPARE ON METER
00270	Y0009.1	CYCLE_ON_METER	CYCLE ON METER
00271	Y0009.2	SP_ON_METER	SPINDLE ON METER
00272	Y0009.3	KA4	SPARE
00273	Y0009.4	EXE.M1	EXTRA M CODE 1
00274	Y0009.5	EXE.M2	EXTRA M CODE 2
00275	Y0009.6	EXE.M3	EXTRA M CODE 3
00276	Y0009.7	EXE.M4	EXTRA M CODE 4
00277	Y0010.0	CLT-SOL	CHIP COOLANT VALVE
00278	Y0010.2	O&A_SUCTION	O&A SUCTION
00279	Y0010.6	SHIFT_HAND_CLP	SHIFT HAND CLAMP
00280	Y0010.7	SHIFT_HAND_UNCLP	SHIFT HAND UNCLAMP

00281	Y0011.0	SP_AIR_BLOW	SPINDLE AIR BLOW
00282	Y0011.2	SP_COOLING_AIR	SPINDLE COOLING AIR
00283	Y0011.3	TOOL_DEFECT_AIR	TOOL DET AIR
00284	Y0011.4	A_AXIS_CLAMP	A AXIS CLAMP
00285	Y0011.7		MG BACKWARD
00286	Y0012.1	CTS_PUMP	CTS PUMP
00287	Y0012.2	CHP_FLOW_PUMP	CHIP FLOW PUMP
00288	Y0012.3	CLT_IN_PUMP	COOLANT IN PUMP
00289	Y0012.7	EXT_NOZZLE	EXT NOZZLE
00290	Y0013.0	BACK_FLOW_PUMP	BACK FLOW PUMP
00291	Y0013.1	NO_2&3_CCONV_CW	NO 2&3 CHIP CONVEYOR CW 1
00292	Y0013.2	NO_2&3_CHCON_CCW	NO 2&3 CHIP CONVEYOR CCW 2
00293	Y0013.3	COL_RECYC_PUP1	COOLANT RECYCLE PUMP 1
00294	Y0020.0	MST.LCK.LP	MST LOCK LAMP
00295	Y0020.1	TOL.CHG.LP	TOOL CHANGE LAMP
00296	Y0020.2	MAG.CW.LP	MAGAZINE CW LAMP
00297	Y0020.3	CHP.CONV.CCW.LP	CHIP CONVEYOR CCW LAMP
00298	Y0020.4	MLK.LP	MACHINE LOCK LAMP
00299	Y0020.5	F4.LP	F4 LAMP
00300	Y0020.6	MAG.L.R.LP	MAGAZINE L/R LAMP
00301	Y0020.7	CHP.CONV.CW.LP	CHIP CONVEYOR CW LAMP
00302	Y0021.0	BDT.LP	BLOCK SKIP LIGHT
00303	Y0021.1	OVC.LP	OVERRIDE CANCEL LAMP
00304	Y0021.2	F1.LP	F1 LAMP
00305	Y0021.3	F2.LP	F2 LAMP
00306	Y0021.4	PRO.RESTART.LP	PROGRAM RESTART LAMP
00307	Y0021.5	AIR.LP	BLAST LAMP
00308	Y0021.6	F3.LP	F3 LAMP
00309	Y0021.7	WRK.LIGH.LP	WORK LIGHT FUNCTION ON
00310	Y0022.0	M01.LP	OPTIONAL STOP LIGHT
00311	Y0022.1	CTS.LP	CTS LAMP
00312	Y0022.2	ALM.RST.LP	ALARM RESET LAMP
00313	Y0022.3	DOR.LP	DOOR LAMP
00314	Y0022.4	DRN.LP	DRY RUN LIGHT
00315	Y0022.5	CHP.FLU.LP	CHIP FLUSH LAMP
00316	Y0022.6	DOR.LCK.LP	OPERATION DOOR LOCK RDY LIGHT
00317	Y0022.7	A.ZRN.LP	AUTO ZRN LAMP
00318	Y0023.0	SBK.LP	SINGLE BRAKE PB LIGHT
00319	Y0023.1	COL.LP	COOLANT LAMP
00320	Y0023.2	DOR.UNL.LP	DOOR UNLOCK LAMP

00321	Y0023.3	M19.LP	M19 LAMP
00322	Y0023.4	Z.LP	Z AXIS LAMP
00323	Y0023.5	AUX.LP	AUX AXIS LAMP
00324	Y0023.6	SP.CCW.LP	SPINDLE CCW LAMP
00325	Y0023.7	Y.LP	Y AXIS LAMP
00326	Y0024.0	C.LP	C AXIS LAMP
00327	Y0024.1	SP.STOP.LP	SPINDLE STOP LAMP
00328	Y0024.2	X.LP	X AXIS LAMP
00329	Y0024.3	A.LP	A AXIS LAMP
00330	Y0024.4	SP.CW.LP	SPINDLE CW LAMP
00331	Y0024.5	TOL.DIS.21	TOOL DISPLAY 21
00332	Y0024.6	TOL.DIS.22	TOOL DISPLAY 22
00333	Y0024.7	TOL.DIS.24	TOOL DISPLAY 24
00334	Y0025.0	TOL.DIS.28	TOOL DISPLAY 28
00335	Y0025.1	TOL.DIS.11	TOOL DISPLAY 11
00336	Y0025.2	TOL.DIS.12	TOOL DISPLAY 12
00337	Y0025.3	TOL.DIS.14	TOOL DISPLAY 14
00338	Y0025.4	TOL.DIS.18	TOOL DISPLAY 18
00339	Y0025.5	AL.LED	ALARM LED
00340	Y0026.0	AIR.AL.LED	AIR LOW FAULT LED
00341	Y0026.1	MOT.OL.LED	MOTOR OVER LOAD LED
00342	Y0026.2	LUBE.AL.LED	LUBE ALARM LED
00343	Y0026.3	M02.M30.LED	M02/M30 LED
00344	Y0026.4	M00.M01.LED	M00/M01 LED
00345	Y0026.5	SUB.OP.LED	SUB OP BOARD LED
00346	Y0026.6	ATC.MEM.LED	ATC MEMORY LED
00347	Y0026.7	ATC.LED	ATC LED
00348	Y0027.0	TABLE.LED	TABLE LED
00349	Y0027.1	POWER.LED	POWER LED
00350	Y0027.2	CY.ST.LP	CYCLE START LAMP
00351	Y0027.3	FH.LP	FEED HOLD LAMP
00352	Y0027.4	CNC.RDY.LP	CNC READY LAMP
00353	Y0027.5	MPG.LED	MPG ON LED
00354	Y0027.6		
00355	Y0027.7		
00356	Y0032.3	AUTOCYCL	AUTO CYCLE LIGHT
00357	Y0032.5	BZ.OUT	BUZZER ON
00358	Y0032.7	SPARE3	SPARE 3
00359	Y0033.4	MCNV.PL	CHIP CON MANUAL PB LIGHT
00360	Y0033.5	H-X10.0	HANDLE FEED *10 LIGHT

00361	Y0033.6	SPOVER.O	SPINDLE OVERRIDE LIGHT
00362	Y0033.7	HANINTPL	HANDLE WHEEL FUN ON LIGHT
00363	Y0034.3	OP.ASIST	OPERATION AUX LIGHT
00364	Y0034.4	SPUNCLAM	SPINDLE TOOL UNCLAMP LIGHT
00365	Y0034.5	YSHTLKL	Y SHIFTER LOCK RDY LIGHT
00366	Y0034.6	YSHTULKL	Y SHIFTER UNLOCK RDY LIGHT
00367	Y0035.0	ALM.PL	MACHINE ALARM LIGHT
00368	Y0035.1	SET.PL	ATC SUB PANEL SELECT LIGHT
00369	Y0035.2	PROG_STP_DISPLAY	PROGRAM STOP DISPLAY
00370	Y0035.3	PW-OFF	AUTO POWER OFF LIGHT
00371	Y0036.0	ATC_SUB_PAL_MD_1	ATC SUB PANEL MD 1
00372	Y0036.1	ATC_SUB_PAL_MD_2	ATC SUB PANEL MD 2
00373	Y0036.2	ATC_SUB_PAL_MD_3	ATC SUB PANEL MD 3
00374	Y0036.3	ATC_SUB_PAL_MD_4	ATC SUB PANEL MD 4
00375	Y0036.4	ATC_SUB_PAL_MD_5	ATC SUB PANEL MD 5
00376	Y0036.5	ATC_SUB_PAL_MD_6	ATC SUB PANEL MD 6
00377	Y0036.6	ATC_SUB_PAL_MD_7	ATC SUB PANEL MD 7
00378	Y0036.7	ATC_SUB_PAL_MD_8	ATC SUB PANEL MD 8
00379	Y0040.0	PSM_RDY	PSM RDY
00380	Y0040.2	OP_RDY_ON	OPERATION RDY ON
00381	Y0040.3	PS_1_OK	POWER SUPPLY 1 OK
00382	Y0040.4	PS_2_OK	POWER SUPPLY 2 OK
00383	Y0040.5	OPTION_15	SPARE
00384	Y0040.6	OPTION_16	SPARE
00385	Y0041.3	Z_BRK_UNLOCK	Z BRAKE UNLOCK
00386	Y0080.0	CHIP_OIL_PUMP_2	CHIP OIL PUMP 2
00387	Y0080.1	CTS_PUMP_2	CTS PUMP 2
00388	Y0080.2	CHP_FLOW_2	CHIP CONVEYOR FLOW 2
00389	Y0080.3	CLT_IN_2	COOLANT IN 2
00390	Y0080.4	NO1_CHP_CON_CW_2	NO1 CHIP CON CW 2
00391	Y0080.5	NO1_CHP_CON_CCW2	NO1 CHIP CON CCW 2
00392	Y0080.6	OIL_SKIMMER_2	OIL SKIMMER 2
00393	Y0080.7	MGNET_SEPARATOR	MGNET SEPARATOR
00394	Y0081.0	BACK_FLOW_2	BACK FLOW 2
00395	Y0081.1	NO_2&3_CCON_CW1	NO 2&3 CHIP CHIP CON CW 1
00396	Y0081.2	NO_2&3_CCON_CCW2	NO 2&3 CHIP CONVEYOR CCW 2
00397	Y0081.3	COOLER_RECYCLE2	COOLER RECYCLE 2
00398	Y0100.2	NC&MAIN_PW_OF	NC & MAIN POWER OFF
00399	Y0100.4	TABLE_SKIP_SEL	TABLE SKIP SELECT
00400	Y0100.5	AMCS_OFF_OMI_ON	AMCS OFF OMI ON

00401	Y0100.6	ATC_LOCK_RELEASE	ATC LOCK RELEASE
00402	Y0100.7	ATLS_REGISTER	AUTO TOOL SET REGISTER
00403	Y0101.0	SENDING_UNIT_1	SENDING UNIT 1
00404	Y0101.1	RECEIVING_UNIT_1	RECEIVING UNIT 1
00405	Y0101.2	RECEIVING_UNIT_2	RECEIVING UNIT 2
00406	Y0102.4	BOOST_ACC_AIR	BOOSTER ACCEL RATER AIR
00407	Y0102.5	BOOSTER_MIST	BOOSTER MIST
00408	Y0102.6	BOOST_PUMP	BOOSTER PUMP
00409	Y0102.7	BOOST_AIR	BOOSTER AIR
00410	Y0103.0	S_HAND_FWD	SHIFT HAND FORWARD
00411	Y0103.1	S_HAND_BWD	SHIFT HAND BACKWARD
00412	Y0103.2	S_HAND_UP_2	SHIFT HAND UP 2
00413	Y0103.3	S_HAND_DOWN_2	S HAND DOWN 2
00414	Y0103.4	LASER_COVER_CLS	LASER COVER CLOSE
00415	Y0103.5	LASER_BRR_AIR	LASER SHUTTER AIR
00416	Y0103.6	Y_COVER_CLOSE	Y COVER CLOSE
00417	Y0103.7	Y_COVER_OPEN	Y COVER OPEN
00418	Y0104.0	PSM1RDY	POWER SUPPLIER MODULE RDY1
00419	Y0104.2	PREP_ON	PREPARE PB ON
00420	Y0104.3	PWR_SUPPLY_OK	POWER SUPPLIER 1 OK
00421	Y0105.2	A_BRAKE	A AXIS MOTOR BRAKE
00422	Y0105.4	MC_RDY	MACHINE READY
00423	Y0107.4	NC_RDY.LP	CNC READY LAMP
00424	Y0221.6	TLLFRSTL	TOOL LIFE RESET
00425	F0000.0	RWD	REWINDING SIGNAL
00426	F0000.1		
00427	F0000.4	SPL	FEED HOLD LAMP SIGNAL
00428	F0000.5	STL	CYCLE START SIGNAL
00429	F0000.6	SA	SERVO READY
00430	F0000.7	OP	AUTOMATIC OPERATION
00431	F0001.0	AL	ALARM SIGNAL
00432	F0001.1	RST	RESET SIGNAL
00433	F0001.2	BAL	BATTERY ALARM
00434	F0001.3	DEN	DISTRIBUTION END
00435	F0001.5	TAP	TAPPING SIGNAL
00436	F0001.7	MA	CNC READY SIGNAL
00437	F0002.0	INCH	INCH INPUT SIGNAL
00438	F0002.6	CUT	CUTTING FEED SIGNAL
00439	F0002.7	MDRN	DRY RUN CHECK SIGNAL
00440	F0003.1	MH	MANUAL HANDLE FEED SELECT CHEC

00441	F0003.2	MJ	JOG FEED SELECT CHECK
00442	F0003.3	MMDI	MANUAL DATA INPUT SELECT CHECK
00443	F0003.4	MRMT	DNC OPERATION SELECT CHECK
00444	F0003.5	MMEM	AUTOMATIC OPERATION SELECT CHECK
00445	F0004.0	MBDT1	OPTIONAL BLOCK SKIP CHECK
00446	F0004.2	MABSM	MANUAL ABSOLUTE CHECK
00447	F0004.3	MSBK	SINGLE BLOCK CHECK
00448	F0004.5	MREF	MANUAL REFERENCE POSITION RETURN
00449	F0007.0	MF	AUXILIARY FUNCTION STROBE
00450	F0007.2	SF	SPINDLE SPEED STROBE
00451	F0007.3	TF	TOOL FUNCTION STROBE
00452	F0007.7	BF	2ND AUXILIARY FUNCTION STROBE
00453	F0008.4	MF2	AUXILIARY FUNCTION STROBE SIGN
00454	F0008.5	MF3	AUXILIARY FUNCTION STROBE SIGN
00455	F0009.4	DM30	DECODE M SIGNAL
00456	F0009.5	DM02	DECODE M SIGNAL
00457	F0009.6	DM01	DECODE M SIGNAL
00458	F0009.7	DM00	DECODE M SIGNAL
00459	F0010.3	FM03	MISCELLANEOUS FUNCTION CODE
00460	F0010.4	FM04	MISCELLANEOUS FUNCTION CODE
00461	F0010.5	FM05	MISCELLANEOUS FUNCTION CODE
00462	F0010.6	FM06	MISCELLANEOUS FUNCTION CODE
00463	F0010.7	FM07	MISCELLANEOUS FUNCTION CODE
00464	F0011.0	FM08	MISCELLANEOUS FUNCTION CODE
00465	F0011.1	FM09	MISCELLANEOUS FUNCTION CODE
00466	F0011.2	FM10	MISCELLANEOUS FUNCTION CODE
00467	F0011.3	FM11	MISCELLANEOUS FUNCTION CODE
00468	F0011.4	FM12	MISCELLANEOUS FUNCTION CODE
00469	F0011.5	FM13	MISCELLANEOUS FUNCTION CODE
00470	F0011.6	FM14	MISCELLANEOUS FUNCTION CODE
00471	F0011.7	FM15	MISCELLANEOUS FUNCTION CODE
00472	F0044.1	FSCSL	CS CONTOUR CONTROL CHANGE COMPLETE
00473	F0045.0	ALMA	ALARM (SERIAL SPINDLE)
00474	F0045.1	SSTA	SPEED ZERO SIGNAL
00475	F0045.3	SARA	SPEED ARRIVAL SIGNAL
00476	F0045.7	ORARA	ORIENTATION COMPLETION SIGNAL
00477	F0046.2	RCHPA	OUTPUT SWITCH SIGNAL
00478	F0046.3	RCFNA	OUTPUT SWITCH COMPLETION SIGNAL
00479	F0054.0	UO0	OUTPUT SIGNAL FOR CUSTOM MACRO
00480	F0054.1	UO1	OUTPUT SIGNAL FOR CUSTOM MACRO

00481	F0054.2	UO2	OUTPUT SIGNAL FOR CUSTOM MACRO
00482	F0054.3	UO3	OUTPUT SIGNAL FOR CUSTOM MACRO
00483	F0054.4	UO4	OUTPUT SIGNAL FOR CUSTOM MACRO
00484	F0055.6	UO014	OUTPUT SIGNAL FOR CUSTOM MACRO
00485	F0060.1	ESEND	READ COMPLETION SIGNAL FOR EXT
00486	F0062.0	AICC_SIGL	AI ADVANCED CONTROL MODE
00487	F0064.0	TLCH	TOOL CHANGE
00488	F0066.6	PECK2	SMALL DIAMETER PECK DRILLING I
00489	F0070.0	PSW01	POSITION SWITCH
00490	F0070.1	PSW02	POSITION SWITCH
00491	F0076.3	RTAP	RIGID TAPPING IN PROGRESS
00492	F0094.0	ZP1	REFERENCE POSITION RETURN END
00493	F0094.1	FZP2	REFERENCE POSITION RETURN END
00494	F0094.2	FZP3	REFERENCE POSITION RETURN END
00495	F0094.3	FZP4	REFERENCE POSITION RETURN END
00496	F0094.4	FZP5	REFERENCE POSITION RETURN END
00497	F0094.6	FZP7	REFERENCE POSITION RETURN END
00498	F0096.0	ZP21	2ND REFERENCE POSITION RETURN
00499	F0096.1	ZP22	2ND REFERENCE POSITION RETURN
00500	F0096.2	ZP23	2ND REFERENCE POSITION RETURN
00501	F0096.4	ZP25	2ND REFERENCE POSITION RETURN
00502	F0096.6	ZP27	2ND REFERENCE POSITION RETURN
00503	F0098.1	ZP32	3RD REFERENCE POSITION RETURN
00504	F0098.2	ZP33	3RD REFERENCE POSITION RETURN
00505	F0098.6	ZP37	3RD REFERENCE POSITION RETURN
00506	F0100.1	ZP42	4TH REFERENCE POSITION RETURN
00507	F0100.2	ZP43	4TH REFERENCE POSITION RETURN
00508	F0100.6	ZP47	4TH REFERENCE POSITION RETURN
00509	F0102.0	MV1	X AXIS MOVING
00510	F0102.1	MV2	Y AXIS MOVING
00511	F0102.2	MV3	Z AXIS MOVING
00512	F0102.3	MV4	4 AXIS MOVING
00513	F0102.4	MV5	5 AXIS MOVING
00514	F0104.0	INP1	X IN POSITION SIGNAL
00515	F0104.1	INP2	Y IN POSITION SIGNAL
00516	F0104.2	INP3	Z IN POSITION SIGNAL
00517	F0104.3	INP4	4 IN POSITION SIGNAL
00518	F0104.4	INP5	5 IN POSITION SIGNAL
00519	F0122.0	HDO0	HIGH SPEED SKIP STATUS
00520	F0122.1	HOD1	HIGH SPEED SKIP STATUS SIGNAL

00521	F0129.7	NCAXS	NC AXIS SELECT
00522	F0130.2	EIALA	X ALARM (PMC AXIS CONTROL)
00523	F0133.2	EIALB	Y ALARM (PMC AXIS CONTR)
00524	F0136.2	EIALC	Z ALARM (PMC AXIS CONTROL)
00525	F0139.2	EIALD	C ALARM (PMC AXIS CONTR)
00526	F0191.0	DOOR_OPEN_ON	DOOR OPEN ON
00527	F0191.2	MCC_TEST_REQ	MCC TEST REQUIRE
00528	F0191.3	BRAKE_TEST_REQ	BRAKE TEST REQUIRE
00529	F0276.4	#1120_M_CODE_NG	#1120 M CODE NG
00530	F0276.5	#1120_TOL_NO_REQ	#1120 TOOL NO REQUIRE
00531	F0276.6		
00532	F0276.7		
00533	F0277.1		
00534	F0277.2		
00535	F0277.3		
00536	F0531.5		
00537	F0748.1	MCCOFSIG_1	MCC OFF SIGNAL
00538	F0748.7	MCCOFSIG_2	MCC OFF SIGNAL
00539	F0750.0	SAFMONITSIG_X	SAFETY MONITOR SIGNAL X
00540	F0750.1	SAFMONITSIG_Y	SAFETY MONITOR SIGNAL Y
00541	F0750.2	SAFMONITSIG_Z	SAFETY MONITOR SIGNAL Z
00542	F0750.3	SAFMONITSIG_B	SAFETY MONITOR SIGNAL B
00543	F0750.4	SAFMONITSIG_5	SAFETY MONITOR SIGNAL 5
00544	F0751.0	SAFMONITSIG_SP	SAFETY MONITOR SIGNAL SP
00545	F0752.0	MCCOFSIG_X	MCC OFF SIGNAL X
00546	F0752.1	MCCOFSIG_Y	MCC OFF SIGNAL Y
00547	F0752.2	MCCOFSIG_Z	MCC OFF SIGNAL Z
00548	F0752.3	MCCOFSIG_B	MCC OFF SIGNAL B
00549	F0752.4	MCCOFSIG_5	MCC OFF SIGNAL 5
00550	F0752.5	MCCOFSIG_6	MCC OFF SIGNAL 6
00551	F0752.6	MCCOFSIG_7	MCC OFF SIGNAL 7
00552	F0752.7	MCCOFSIG_8	MCC OFF SIGNAL 8
00553	F0753.0	MCCOFSIG_SP	MCC OFF SIGNAL SP
00554	F0754.2	BRAKE_SIG_Z	BRAKE Z SIGNAL
00555	F0754.4	BRAKE_SIG_5	BRAKE 5 SIGNAL
00556	F0755.0	SAFPOSSWSIG_1	SAFE POS SWITCH SIGNAL 1
00557	F1130.2	A_AL	A AXIS AL
00558	F1133.0	MG_INPOS	MG INPOSITION
00559	F1133.2	MG_AL	MG ALARM
00560	F1133.4	MG_ST	MG START

00561	F1136.2	SL_AL	SL AL
00562	F1139.2	SR_AL	SR AL
00563	G0004.4	MFIN2	2ND M FUNCTION COMPLETION
00564	G0004.5	MFIN3	3RD M FUNCTION COMPLETION
00565	G0005.0	MFIN	AUXILIARY FUNCTION COMPLETION
00566	G0005.2	SFIN	SPINDLE FUNCTION COMPLETION
00567	G0005.3	TFIN	TFIN
00568	G0005.6	AFL	MISCELLANEOUS FUNCTION LOCK
00569	G0005.7	BFIN	2ND AUXILIARY FUNCTION COMPLET
00570	G0006.0	SRN	PROGRAM RESTART
00571	G0006.2	ABSM	MANUAL ABSOLUTE
00572	G0006.4	OVC	OVERRIDE CANCEL
00573	G0007.2	ST	CYCLE START LAMP SIGNAL
00574	G0007.6	EXLM	STORED STROKE LIMIT SELECT
00575	G0008.0	IT	AXIS INTERLOCK
00576	G0008.4	ESP	EMERGENCY STOP
00577	G0008.5	SP	FEED HOLD
00578	G0008.6	RRW	RESET & REWIND
00579	G0008.7	ERS	EXTERNAL RESET
00580	G0010.0	JV0	MANUAL FEEDRATE OVERRIDE
00581	G0010.1	JV1	MANUAL FEEDRATE OVERRIDE
00582	G0010.2	JV2	MANUAL FEEDRATE OVERRIDE
00583	G0010.3	JV3	MANUAL FEEDRATE OVERRIDE
00584	G0010.4	JV4	MANUAL FEEDRATE OVERRIDE
00585	G0010.5	JV5	MANUAL FEEDRATE OVERRIDE
00586	G0010.6	JV6	MANUAL FEEDRATE OVERRIDE
00587	G0010.7	JV7	MANUAL FEEDRATE OVERRIDE
00588	G0011.0	JV8	MANUAL FEEDRATE OVERRIDE
00589	G0011.1	JV9	MANUAL FEEDRATE OVERRIDE
00590	G0011.2	JV10	MANUAL FEEDRATE OVERRIDE
00591	G0011.3	JV11	MANUAL FEEDRATE OVERRIDE
00592	G0011.4	JV12	MANUAL FEEDRATE OVERRIDE
00593	G0011.5	FV13	MANUAL FEEDRATE OVERRIDE
00594	G0011.6	JV14	MANUAL FEEDRATE OVERRIDE
00595	G0011.7	JV15	MANUAL FEEDRATE OVERRIDE
00596	G0012.0	FV0	FEEDRATE OVERRIDE
00597	G0012.1	FV1	FEEDRATE OVERRIDE
00598	G0012.2	FV2	FEEDRATE OVERRIDE
00599	G0012.3	FV3	FEEDRATE OVERRIDE
00600	G0012.4	FV4	FEEDRATE OVERRIDE

00601	G0012.5	FV5	FEEDRATE OVERRIDE
00602	G0012.6	FV6	FEEDRATE OVERRIDE
00603	G0012.7	FV7	FEEDRATE OVERRIDE
00604	G0015.1	EROV2_#1	RAPID OVERRIDE 2
00605	G0016.7	F1D	F1 DIGIT FEED SELECT
00606	G0018.0	HSA1	MANU HANDLE FEED AXIS SELECT A
00607	G0018.1	HSB1	MANU HANDLE FEED AXIS SELECT B
00608	G0018.2	HSC1	MANU HANDLE FEED AXIS SELECT C
00609	G0018.3	HSD1	MANU HANDLE FEED AXIS SELECT D
00610	G0019.4	MP1	HANDLE FEED 1 SELECT
00611	G0019.5	MP2	HANDLE FEED 2 SELECT
00612	G0019.7	RT	RAPID TRAVERSE SELECT
00613	G0023.3	HANDLF	HANDLE FEED MAX
00614	G0027.7	CON	CS CONTOUR CONTROL CHANGE
00615	G0029.6	SPSTP	SPINDLE STOP
00616	G0033.0	R091	SPINDLE MOTOR SPEED COMMAND
00617	G0033.1	R101	SPINDLE MOTOR SPEED COMMAND
00618	G0033.2	R111	SPINDLE MOTOR SPEED COMMAND
00619	G0033.3	R121	SPINDLE MOTOR SPEED COMMAND
00620	G0033.7	SIND	SPINDLE MOTOR SPEED COMMAND SE
00621	G0041.0	HS1A	MANUAL HANDLE INTERRUPTION "A"
00622	G0041.1	HS1B	MANUAL HANDLE INTERRUPTION "B"
00623	G0041.2	HS1C	MANUAL HANDLE INTERRUPTION "C"
00624	G0043.0	MD1	MODE SELECTION "1"
00625	G0043.1	MD2	MODE SELECTION "2"
00626	G0043.2	MD4	MODE SELECTION "3"
00627	G0043.5	DNC1	DNC OPERATION SELECT
00628	G0043.7	ZRN	MANUAL REFERENCE POSITION RETU
00629	G0044.0	BDT1	OPTIONAL BLOCK SKIP SIGNAL 1
00630	G0044.1	MLK	ALL AXIS MACHINE LOCK SIGNAL
00631	G0045.0	BDT2	OPTIONAL BLOCK SKIP SIGNAL 2
00632	G0045.1	BDT3	OPTIONAL BLOCK SKIP SIGNAL 3
00633	G0045.2	BDT4	OPTIONAL BLOCK SKIP SIGNAL 4
00634	G0045.3	BDT5	OPTIONAL BLOCK SKIP SIGNAL 5
00635	G0045.4	BDT6	OPTIONAL BLOCK SKIP SIGNAL 6
00636	G0045.5	BDT7	OPTIONAL BLOCK SKIP SIGNAL 7
00637	G0045.6	BDT8	OPTIONAL BLOCK SKIP SIGNAL 8
00638	G0045.7	BDT9	OPTIONAL BLOCK SKIP SIGNAL 9
00639	G0046.1	SBK	SINGLE BLOCK SIGNAL
00640	G0046.3	KEY1	MEMORY PROTECT SIGNAL 1

00641	G0046.4	KEY2	MEMORY PROTECT SIGNAL 2
00642	G0046.5	KEY3	MEMORY PROTECT SIGNAL 3
00643	G0046.7	DRN	DRY RUN SIGNA
00644	G0048.5	TLSKP	TOOL SKIP SIGNAL
00645	G0053.0	TMRON	GENERAL"PURPOSE INTEGRATING ME
00646	G0053.3	UNIT	INTERRUPT SIGNAL FOR CUSTOM MA
00647	G0055.6	UI14	INPUT SIGNAL FOR CUSTOM MACRO
00648	G0055.7	UI_15	INPUT SIGNAL FOR CUSTOM MACRO
00649	G0056.3	UI_19	INPUT SIGNAL FOR CUSTOM MACRO
00650	G0056.4	UI_20	INPUT SIGNAL FOR CUSTOM MACRO
00651	G0056.6	UI_22	INPUT SIGNAL FOR CUSTOM MACRO
00652	G0056.7	UI_23	INPUT SIGNAL FOR CUSTOM MACRO
00653	G0057.0	UI_24	INPUT SIGNAL FOR CUSTOM MACRO
00654	G0057.1	UI_25	INPUT SIGNAL FOR CUSTOM MACRO
00655	G0061.0	RGTAP	RIGID TAPPING SIGNAL
00656	G0066.0	IGNVRY	ALL"AXIS VRDY OFF ALARM IGNORE
00657	G0070.2	CTH2A	CLUTCH/GEAR SIGNAL 2
00658	G0070.3	CTH1A	CLUTCH/GEAR SIGNAL 1
00659	G0070.4	SRVA-CCW	CCW COMMAND SIGNAL
00660	G0070.5	SFRA-CW	CW COMMAND SIGNAL
00661	G0070.6	ORCM=ORI	ORIENTATIONCOMMAND SIGNAL
00662	G0070.7	M_RDY.A	MACHINE READY SIGNAL
00663	G0071.1	ESPA	EMERGENCY STOP SIGNAL
00664	G0071.4	SOCNA	SOFT START/ STOP CANCEL SIGNAL
00665	G0071.6	RSLA	POWER OUTPUT SWITCH REQUIRE
00666	G0071.7	RCHA	SP POWER STATUS CHECK SIGNAL
00667	G0072.7	RCHHGA	SP HIGH GEAR OUTPUT
00668	G0100.0	+J1	FEED AXIS X+
00669	G0100.1	+J2	FEED AXIS Y+
00670	G0100.2	+J3	FEED AXIS Z+
00671	G0100.3	+J4	FEED AXIS 4+
00672	G0100.4	+J5	FEED AXIS 5+
00673	G0101.0	ED21+	2ND EXT DECELERATION +X
00674	G0101.1	ED22+	2ND EXT DECELERATION +Y
00675	G0101.2	ED23+	2ND EXT DECELERATION +Z
00676	G0101.3	ED24+	2ND EXT DECELERATION +B
00677	G0101.4	ED25+	2ND EXT DECELERATION +5
00678	G0101.5	ED26+	2ND EXT DECELERATION +6
00679	G0101.6	ED27+	2ND EXT DECELERATION +7
00680	G0101.7	ED28+	2ND EXT DECELERATION +8

00681	G0102.0	-J1	FEED AXIS X-
00682	G0102.1	-J2	FEED AXIS Y-
00683	G0102.2	-J3	FEED AXIS Z-
00684	G0102.3	-J4	FEED AXIS 4-
00685	G0102.4	-J5	FEED AXIS 5-
00686	G0103.0	ED21-	2ND EXT DECELERATION -X
00687	G0103.1	ED22-	2ND EXT DECELERATION -Y
00688	G0103.2	ED23-	2ND EXT DECELERATION -Z
00689	G0103.3	ED24-	2ND EXT DECELERATION -B
00690	G0103.4	ED25-	2ND EXT DECELERATION -5
00691	G0103.5	ED26-	2ND EXT DECELERATION -6
00692	G0103.6	ED27-	2ND EXT DECELERATION -7
00693	G0103.7	ED28-	2ND EXT DECELERATION -8
00694	G0108.2	MLK3	Z MACHINE LOCK
00695	G0114.0	+L1	+X OVERTRAVEL
00696	G0114.1	+L2	+Y OVERTRAVEL
00697	G0114.2	+L3	+Z OVERTRAVEL
00698	G0114.3	+L4	+4TH OVERTRAVEL
00699	G0114.4	+L5	+5 OVERTRAVEL
00700	G0114.5	+L6	+6 OVERTRAVEL
00701	G0114.6	+L7	+7 OVERTRAVEL
00702	G0114.7	+L8	+8 OVERTRAVEL
00703	G0116.0	-L1	-X OVERTRAVEL
00704	G0116.1	-L2	-Y OVERTRAVEL
00705	G0116.2	-L3	-Z OVERTRAVEL
00706	G0116.3	-L4	-4TH OVERTRAVEL
00707	G0116.4	-L5	-5 OVERTRAVEL
00708	G0116.5	-L6	-6 OVERTRAVEL
00709	G0116.6	-L7	-7 OVERTRAVEL
00710	G0116.7	-L8	-8 OVERTRAVEL
00711	G0118.0	X+DEC	+X EXTERNAL DECELERATION
00712	G0118.1	Y+DEC	+Y EXTERNAL DECELERATION
00713	G0118.2	Z+DEC	+Z EXTERNAL DECELERATION
00714	G0118.3	4+DEC	+4 EXTERNAL DECELERATION
00715	G0118.4	5+DEC	+5 EXTERNAL DECELERATION
00716	G0118.5	6+DEC	+6 EXTERNAL DECELERATION
00717	G0118.6	7+DEC	+7 EXTERNAL DECELERATION
00718	G0118.7	8+DEC	+8 EXTERNAL DECELERATION
00719	G0120.0	X-DEC	-X EXTERNAL DECELERATION
00720	G0120.1	Y-DEC	-Y EXTERNAL DECELERATION

00721	G0120.2	Z-DEC	-Z EXTERNAL DECELERATION
00722	G0120.3	4-DEC	-4 EXTERNAL DECELERATION
00723	G0120.4	5-DEC	-5 EXTERNAL DECELERATION
00724	G0120.5	6-DEC	-6 EXTERNAL DECELERATION
00725	G0120.6	7-DEC	-7 EXTERNAL DECELERATION
00726	G0120.7	8-DEC	-8 EXTERNAL DECELERATION
00727	G0126.0	SVF1	X SERVO OFF
00728	G0126.1	SVF2	Y SERVO OFF
00729	G0126.2	SVF3	Z SERVO OFF
00730	G0126.3	SVF4	B SERVO OFF
00731	G0126.4	SVF5	5 SERVO OFF
00732	G0126.5	SVF6	6 SERVO OFF
00733	G0126.6	SVF7	7 SERVO OFF
00734	G0126.7	SVF8	8 SERVO OFF
00735	G0130.0	IT1	X INTERLOCK SIGNAL
00736	G0130.1	IT2	Y INTERLOCK SIGNAL
00737	G0130.2	IT3	Z INTERLOCK SIGNAL
00738	G0130.3	IT4	B INTERLOCK SIGNAL
00739	G0130.4	IT5	5 INTERLOCK SIGNAL
00740	G0130.5	IT6	6 INTERLOCK SIGNAL
00741	G0130.6	IT7	7 INTERLOCK SIGNAL
00742	G0130.7	IY8	8 INTERLOCK SIGNAL
00743	G0136.0	EAX1	X PMC CTRL SELECT SIGNAL
00744	G0136.1	EAX2	Y PMC CTRL SELECT SIGNAL
00745	G0136.2	EAX3	Z PMC CTRL SELECT SIGNAL
00746	G0136.3	EAX4	C PMC CTRL SELECT SIGNAL
00747	G0136.4	EAX5	A PMC CTRL SELECT SIGNAL
00748	G0136.5	EAX6	MG PMC CTRL SELECT SIGNAL
00749	G0136.6	EAX7	SL PMC CTRL SELECT SIGNAL
00750	G0136.7	EAX8	SR PMC CTRL SELECT SIGNAL
00751	G0142.2	EMBUFA#1	X BUFFERING DISABLE
00752	G0142.5	ESTP_A#1	X AXIS CONT TEMPORARY STOP S
00753	G0150.0	EROV1_#1	RAPID TRAVERSE OVERRIDE SIGNAL
00754	G0150.1	EROV1_#21	RAPID TRAVERSE OVERRIDE SIGNAL
00755	G0154.2	EMBUFB#1	Y BUFFERING DISABLE SIGNA
00756	G0154.5	ESTP_B#1	Y AXIS CONT TEMPORARY STOP
00757	G0166.2	EMBUFC#1	Z BUFFERING DISABLE SIGNA
00758	G0166.5	ESTP_C#1	Z AXIS CONT TEMPORARY STOP S
00759	G0178.2	EMBUFD#1	C BUFFERING DISABLE SIGNA
00760	G0178.5	ESTP_D#1	C AXIS CONT TEMPORARY STOP S

00761	G0191.2	OPT	OP TEST MODE
00762	G0191.3	OPQ	OP REQUIRE SIGNAL
00763	G0193.2	STBT	BRAKE TEST START SIGNAL
00764	G0519.3	TDID	3D INTERFERENCE CHK DISABLE
00765	G0519.4	TDICHG	3D INTERFERENCE CHK REF SET
00766	G0748.6	*SMC	MCC STATUS
00767	G0750.0	*VLDVX	SAFETY MONITOR REQ SIGNAL X
00768	G0750.1	*VLDVY	SAFETY MONITOR REQ SIGNAL Y
00769	G0750.2	*VLDVZ	SAFETY MONITOR REQ SIGNAL Z
00770	G0750.3	*VLDV4	SAFETY MONITOR REQ SIGNAL B
00771	G0750.4	*VLDV5	SAFETY MONITOR REQ SIGNAL 5
00772	G0751.0	*VLDP1	SAFETY MONITOR REQ SIGNAL SP
00773	G0752.0	SVAX	LIMIT SAFE SPEED X
00774	G0752.1	SVAY	LIMIT SAFE SPEED Y
00775	G0752.2	SVAZ	LIMIT SAFE SPEED Z
00776	G0752.3	SVA4	LIMIT SAFE SPEED B
00777	G0752.4	SVA5	LIMIT SAFE SPEED 5
00778	G0753.0	SVBX	LIMIT SAFE SPEED X
00779	G0753.1	SVBY	LIMIT SAFE SPEED Y
00780	G0753.2	SBVBZ	LIMIT SAFE SPEED Z
00781	G0753.3	SVB4	LIMIT SAFE SPEED B
00782	G0753.4	SVB5	LIMIT SAFE SPEED 5
00783	G0754.0	SPA1	LIMIT SAFE SPEED SP
00784	G0754.4	SPB1	LIMIT SAFE SPEED SP
00785	G1100.0	+J9	FEED AXIS 9+
00786	G1101.0	ED29+	2ND EXT DECELERATION 29+
00787	G1102.0	-J9	FEED AXIS 9-
00788	G1103.0	ED29-	2ND EXT DECELERATION 29-
00789	G1114.0	+L9	+9 OVERTRAVEL
00790	G1116.0	-L9	-9 OVERTRAVEL
00791	G1118.0	9+DEC	+9 EXTERNAL DECELERATION
00792	G1120.0	9-DEC	-9 EXTERNAL DECELERATION
00793	G1130.0	IT9	9 INTERLOCK SIGNAL
00794	G1142.2	EMBUFA#2	EMG BUF A 2
00795	G1142.5	ESTP_A#2	A EMG STOP
00796	G1150.0	EROV1_#2	RAPID OVERRIDE 1
00797	G1150.1	EROV2_#2	RAPID OVERRIDE 2
00798	G1154.2	BMBUFB#2	MG BUF STOP 2
00799	G1154.5	ESTP_B#2	MG EMG STOP 2
00800	G1166.2	EMBUFC#2	SL BUF STOP 2

00801	G1166.5	ESTP_C#2	SL EMG STOP 2
00802	G1178.2	EMBUFD#2	SR BUF STOP 2
00803	G1178.5	ESTP_D#2	SR EMG STOP 2
00804	R0000.0	NC_RST	NC RESET AUX
00805	R0000.1	MF1.S	MF 1 AUX
00806	R0000.2	SF3.S	SF3 AUX
00807	R0000.3	TF.S	TF AUX
00808	R0000.4	BF.S	BF AUX
00809	R0000.5	MF2.S	MF 2 AUX
00810	R0000.6	MF3.S	MF 3 AUX
00811	R0000.7	M30_AUX	M30 AUX
00812	R0001.0	PCOK	NC POWER RDY
00813	R0001.1	NC_RDY	NC READY
00814	R0001.2	ITSUB	ALL AXIS INTERLOCK
00815	R0001.3	CYCLE__STOP	CYCLE STOP
00816	R0001.4	PRPONM1	OPERATION PREPAR MEM 1
00817	R0001.5	ST_RDY_OF_CHECK	CYCLE ST RDY OFF CHECK
00818	R0002.0	SFON1	SPINDLE FUNCTION ON 1
00819	R0002.1	SFON2	SPINDLE FUNCTION ON 2
00820	R0002.2	SFON3	SPINDLE FUNCTION ON 3
00821	R0002.3	SFON	SPINDLE FUNCTION ON
00822	R0002.4	TFON1	TOOL FUNCTION ON 1
00823	R0002.5	TFON2	TOOL FUNCTION ON 2
00824	R0002.6	TFON3	TOOL FUNCTION ON 3
00825	R0002.7	TFON	TOOL FUNCTION ON
00826	R0003.0	BFON1	2ND AUXILIARY FUNCTION ON 1
00827	R0003.1	BFON2	2ND AUXILIARY FUNCTION ON 2
00828	R0003.2	BF3	2ND AUXILIARY FUNCTION ON 3
00829	R0003.3	BFON	2ND AUXILIARY FUNCTION ON
00830	R0010.0	CYCLE_ST_PB_ON	CYCLE START PB ON
00831	R0010.1	CYCLE_ST_PB_OF	CYCLE ST OFF PB
00832	R0010.2	RDY1	NC RDY 1
00833	R0010.3	I_SET	MACHINE PREPAR RDY
00834	R0010.5	ST_RDY_ON_OK	CYCLE READY ON OK
00835	R0010.6	MCC_OF_TIMING	MCC OFF TIMING
00836	R0011.0	PWRDY1	MCC POWER RDY 1
00837	R0011.5	OPMOD1	OPERATION MODE 1
00838	R0011.6	OP_MOD_2	OPERATION MODE 2
00839	R0011.7	OP_MOD_3	OPERATION MODE 3
00840	R0012.0	MOD_1_OP_DOR_OPE	MODE 1 OPERATOR DOOR OPEN

00841	R0012.1	OPOKMD2	OPERATION DOOR OPEN MODE 2
00842	R0012.2	OP_DOR_OPEN_MD3	OPERATION DOOR OPEN MODE 3
00843	R0012.3	OPDRUKS	OPERATION DOOR UNLOCK
00844	R0012.4	OPDRUKF	DOOR OPEN & CYCLE STOP
00845	R0012.5	SACHKOK	MACHINE SAFETY CHECK RDY
00846	R0015.0	PRDY1ON	MCC POWERO 1 ON
00847	R0015.1	PRDY1ONS	MCC POWERO 1 ON AUX
00848	R0016.0	MCCTOK1	MCC TEST RDY 1
00849	R0016.1	MCCTOK	MCC TEST RDY
00850	R0016.2	MCCTST	MCC TEST
00851	R0016.3	MCCTST1	MCC TEST 1
00852	R0016.4	MCCTST2	MCC TEST 2
00853	R0016.5	MCC_TEST_ON	MCC CHECK ON
00854	R0017.0	MOD2ENB	MODE 2 ENABLE SW ON
00855	R0017.1	MOD_3_ENB	MODE 3 ENABLE SW ON
00856	R0017.2	ENB_OF_CHK	ENABLE SW OFF CHECK
00857	R0017.3	SPINDLE_IT_1	SPINDLE INTERLOCK 1
00858	R0018.0	BRKTOK1	BRAKE TEST RDY 1
00859	R0018.1	BRKTOK	BRAKE TEST RDY
00860	R0018.2	BRKTST	BRAKE TEST
00861	R0018.3	BRKTST3	BRAKE TEST START
00862	R0018.4	BRKTST4	BRAKE TEST START AUX
00863	R0018.5	BRKTESON	BRAKE TESTING
00864	R0018.6	BRKTST1	BRAKE TEST AUX 1
00865	R0018.7	BRKTST2	BRAKE TEST AUX 2
00866	R0030.0	AUTO_CYST_AUX_2	AUTO CYCLE START AUX 2
00867	R0030.1	FEED_HOLD_AUX	FEED HOLD AUX
00868	R0030.2	CYSTINT	CYCLE START INTERRUPT
00869	R0030.3	MDIOPE	MDI OPERATION
00870	R0030.4	AUTON1	AUTO ON 1
00871	R0030.5	AUTON2	AUTO ON 2
00872	R0030.6	AUTCYCM	AUTO CYCLE MODE 2
00873	R0030.7	AUTO_CYST_AUX	AUTO CYCLE START AUX 2
00874	R0031.0	M30_MEM	M30 MEMORY
00875	R0031.1	RWDON	DATA BACK UP ON
00876	R0031.2	RWDOFF	DATA BACK UP FINISH
00877	R0031.3	CYSTNO	CYCLE START PROHIBIT
00878	R0031.4	RWDSTOK	DATA BACK UP STOP OK
00879	R0031.5	RWDST	DATA BACK UP STOP
00880	R0031.6	AUTO_PW_OFF	AUTO POWER OFF

00881	R0031.7	M30SWM	M30 SW MEM
00882	R0032.0	MAIN_PRG_NO_SEH	MAIN PROGRAM NO. SEARCH
00883	R0032.1	WSETHLD	WORKSETS HOLD
00884	R0032.2	DCNVWK	BCD CONVERTER WORK
00885	R0032.4	DCNVWT	BCD CONVERTER WEEK
00886	R0032.5	WNSCH	WORK PROGRAM NO SERCH
00887	R0032.6	ERSOK	EXTERA NC RESET OK
00888	R0032.7	PRGSHST	EX PROGRAM SERCH START
00889	R0033.0	EXIN-PG	EX PROGRAM NO SERCH AUX
00890	R0033.1	PRGSHOK	EX PROGRAM NO SERCH OK
00891	R0033.2	CYST2	CYCLE STOP 2
00892	R0033.3	CYST1	CYCLE START 1
00893	R0033.4	CYST2M	CYCLE START MEM
00894	R0033.5	AUTPWOF5	AUTO POWER OFF START
00895	R0040.0	WTOFM	WEEKLY TIMER OFF MEM
00896	R0040.1	WTMRST	WEEKLY TIMER RESET
00897	R0040.2	WTPRPON	WEEK TIMER PROG OPERATION ON
00898	R0040.3	WTPRPM	WEEK TIME PROG OPERATION MEM
00899	R0040.4	WTMRONM	WEEK TIMER ON MEM
00900	R0040.5	WTCYC1	WEEKLY TIMER CYCLE 1
00901	R0040.6	WTCYC2	WEEKLY TIMER CYCLE 2
00902	R0040.7	WTCYCOK1	WEEKLY TIMER CYCLE 1 OK
00903	R0041.0	WTCYC3	WEEKLY TIMER CYCLE 3
00904	R0041.1	WTCYC4	WEEK TIMER CYCLE ZERO RETURN
00905	R0041.2	WTCYC5	WEEK TIMER CYC ZERO RET FINISH
00906	R0041.3	WTCYC6	WEEKLY TIMER CYC MEM MODE
00907	R0041.4	WTCYC7	WEEKLY PROGRAM SEARCH
00908	R0041.5	WTCYC7S	WEEKLY TIMER CYCLE COMPLEMENT
00909	R0041.7	WTCYC10	WEEKLY TIMER PROG CYC
00910	R0050.1	CL-SPAIR	SPINDLE COOLANT AIR
00911	R0050.3	CP-STP	CHIP CONVEYOR STOP
00912	R0055.0	M07FF	M07 AUTO AIR FOR CHIP
00913	R0055.1	M08FF	M08 AUTO COOLANT
00914	R0055.2	M50FF	M50 ATUO SIDE COOLANT
00915	R0055.3	M51FF	M51 AUTO CTS
00916	R0055.4	M61FF	AUTO CHIP COOLANT
00917	R0056.0	FLDMTR	COOLANT MOTOR AUX
00918	R0056.1	FLDS	CHIP COOLANT AUX
00919	R0056.2	MISTO	OIL MIST
00920	R0056.5	OILHLMTR	CTS MOTOR

00921	R0056.6	CHIPAIR	CHIP AIR BLOW AUX
00922	R0057.0	CLTRST	ALL COOLANT RESET
00923	R0057.1	ALL_COOLANT_STOP	ALL COOLANT STOP
00924	R0057.5	M62FF	AUTO COOLANT AND AIR
00925	R0058.7	M63FF	CTS AIR BLOW ON
00926	R0059.0	CHIP_CON_RDY_OK	CHIP CON READY OK
00927	R0059.1	CHPCW1	
00928	R0059.2	CHPCCW1	CHP CON CCW 1
00929	R0059.3	M/CDROK	M/C DOOR OK
00930	R0059.4	M52FF	AUTO CHIP CONVEYOR
00931	R0059.5	M53FF	CHIP COOLANT M CODE AUX
00932	R0060.0	WORKPB	CHIP FLUSH BUTTON
00933	R0060.1	WORKPB1	CHIP FLUSH BUTTON 1
00934	R0060.2	WORKPB2	CHIP FLUSH BUTTON 2
00935	R0060.3	WRKON	CHIP FLUSH ON
00936	R0065.0	CHPAUTON	CHIP CON AUTO RUN
00937	R0065.1	CHP_CON_1_MAN_CW	CHIP CON 1 MANUAL CW
00938	R0065.2	NO_2&3CNVCW	NO 2&3 CHIP CONVEYOR CW
00939	R0065.3	NO_2&3_CNVC ON	NO 2&3 CHIP CONVEYOR CCW ON
00940	R0065.4	CHP1.INT	CHIP CON 1 INTERLOCK
00941	R0065.5	CHP2.INT	CHIP CON 2 INTERLOCK
00942	R0066.0	YSHTLKC	Y AXIS SHUTTER LOCK COMMAND
00943	R0066.1	YSHTULK	Y AXIS SHUTTER UNLOCK COMMAND
00944	R0066.2	YSHTLK-1	Y AXIS SHUTTER LOCK
00945	R0066.3	YSHTULK-1	Y AXIS SHUTTER UNLOCK
00946	R0067.0	COVX1	Y AXIS SHUTTER SET
00947	R0067.1	COVX2	Y AXIS SHUTTER Z AXIS P1
00948	R0067.2	COVX3	Y AXIS SHUTTER X AXIS P1
00949	R0067.3	COVX4	Y AXIS SHUTTER Y AXIS P3
00950	R0067.4	COVX5	Y AXIS SHUTTER ON&OFF
00951	R0067.5	COVX6	Y AXIS SHUTTER Y AXIS P1
00952	R0067.6	COVX7	Y AXIS COVER CLOSE FINISH
00953	R0071.0	MSTAUT	OIL MIST COLLECTOR AUTO
00954	R0071.1	M26FF	OIL MIST COLLECTOR START
00955	R0072.0	M54	BOOSTER HIGH
00956	R0072.1	M55	BOOSTER MIDDLE
00957	R0072.2	M56	
00958	R0072.3	M57	AIR BOOSTER
00959	R0072.4	M58	SPINDLE BOOSTER OFF
00960	R0073.0	M54FF	M54 KEEP

00961	R0073.1	M55FF	M55 KEEP
00962	R0073.2	M56FF	M56 KEEP
00963	R0073.3	M57FF	M57 KEEP
00964	R0073.4	ECO.MFIN	M57/M58 FINISH
00965	R0073.5	ECO.OIL	BOOSTER OIL ON
00966	R0073.6	ECO.AIR	BOOSTER AIR ON
00967	R0073.7	ECOMFINS	BOOSTER ON M CODE FINISH AUX
00968	R0074.0	ECOP.OFF	BOOSTER PUMP OFF
00969	R0074.1	ECOP.ON	BOOSTER PUMP ON
00970	R0100.0	ATCINI11	ATC INITIAL
00971	R0100.1	TAXSIT	ATC INTERLPCK
00972	R0100.2	TSPIT	ATC SP INTRELOCK
00973	R0100.3	MGINI	MG INITIAL
00974	R0100.4	ATCHLD1	ATC HOLD 1
00975	R0100.5	ATCTM1	ATC CYCLE 1
00976	R0100.6	ATCMC	ATC TOOL INITIAL
00977	R0100.7	T-OPMAI	ATC MAIN PANEL SELECTION
00978	R0101.0	T-OPESUB	ATC SUB PANEL SELECTION
00979	R0101.1	T-SPUNC	SPINDLE TOOL UNCLAMP AUX
00980	R0101.2	T-ORIIT	SP M19 INTERLOCK AUX
00981	R0101.3	T-ORISP	SP M19 STOP
00982	R0101.4	T-ORIST	SP M19 START
00983	R0101.5	T-OPESTP	ATC OP STOP
00984	R0101.6	T-TFIN	T CODE FIN AUX
00985	R0102.4	T-POSOK	ATC ORI OK
00986	R0102.5	T-MGOPOK	MG DOOR OPEN OK
00987	R0102.6	T-SPAIR	M6 SP BLOW
00988	R0103.0	T-SPTLCG	SP TOOL CHANGE
00989	R0105.0	ATCINI12	ATC INITIAL 12
00990	R0105.1	ATCINI22	ATC INITIAL 22
00991	R0105.2	P1+<SL0	P1+<SL0
00992	R0105.3	SL-OT1	SL-OT1
00993	R0105.4	90.5<SR	90.5<SR
00994	R0105.5	-360.5<S	-360.5<S
00995	R0105.6	ATCALM1	ATC ALARM 1
00996	R0105.7	INDEXPOS1	ATC INDEX POS 1
00997	R0106.0	AXISITNG1	AXIS INTERLOCK NG 1
00998	R0106.1	SHBMG	ARM BACKWARD MG SIDE
00999	R0106.2	SHCO111	ARM CHUCK OPEN
01000	R0106.3	SAP4-1	SWING ARM FORWARD P4

01001	R0106.4	SPTL0	SP NON TOOL
01002	R0106.5	WTTL0-1	WAIT NON TOOL
01003	R0106.6	RTTL0-1	RETUEN SIDE NON TOOL
01004	R0106.7	ATCM-1	M6 CYC
01005	R0107.0	ATC_T&_M6_CYCLE	ATC CHANGE CYCLE 1
01006	R0107.1	SPINDCYC-1	TOOL CYC FIN AND SPINDLE UP
01007	R0107.2	ATCX1-1	ATC T & M6 CYC
01008	R0107.3	SPCL1-1	T CYC FIN SP INDEX
01009	R0107.4	SASPINIP-1	PMC CRTL XYZA
01010	R0110.0	M06S	ATC TOOL CHANGE
01011	R0110.5	M82S	SP TOOL CLAMP
01012	R0110.6	M83S	SP TOOL UNCLAMP
01013	R0110.7	M84S	MG SP TOOL INDEX
01014	R0111.0	M85S	MG T CODE TOOL INDEX
01015	R0111.1	M86S	AXIS INTERLOCK PASS
01016	R0111.2	M87S	AXIS INTERLOCK PASS OFF
01017	R0111.4	M89S	ATC RESTART
01018	R0111.5	M100S	SL P1 MG SIDE
01019	R0111.6	M101S	SL P2 DOO OPEN
01020	R0111.7	M102S	SL P3 FORWARD SP
01021	R0112.0	M103S	SL P4 SP SIDE
01022	R0112.1	M104S	ARM FORWARD
01023	R0112.2	M105S	ARM BACK WARD
01024	R0112.3	M106S	ARM CHUCK OPEN
01025	R0112.4	M107S	ARM CHUCK CLOSE
01026	R0112.5	M108S	MG WAIT SIDE TOOL INDEX
01027	R0112.6	M109S	MG RETURN SIDE TOOL INDEX
01028	R0112.7	M120S	ARM HEAD CLAMP
01029	R0113.0	M121S	ARM HEAD UNCLAMP
01030	R0113.1	M122S	SWING ARM 90 DEGREE
01031	R0113.2	M123S	SWING ARM 45 DEGREE
01032	R0113.3	M124S	SWING ARM 0 DEGREE
01033	R0113.4	M125S	SWING ARM -90 DEGREE
01034	R0113.5	M126S	SWING ARM -180 DEGREE
01035	R0113.6	M127S	SWING ARM -270 DEGREE
01036	R0113.7	M128S	SWING ARM -315 DEGREE
01037	R0114.0	M129S	SWING ARM -360 DEGREE
01038	R0114.7	MG_FRD	MG FORWARD
01039	R0115.0	MG_BRD	MG BACKWARD
01040	R0119.0	M6S	M6 AUX

01041	R0130.0	MGRDY	MG RDY
01042	R0130.1	TFST	T CODE READ OK
01043	R0130.2	TFMEM	T CODE RUN MEM
01044	R0130.3	TREAD	T CODE READ FIN
01045	R0130.4	INDEXOK	MG POS INDEX FIN
01046	R0130.5	MGPREAD	MG POS READ FIN
01047	R0130.6	IDXCOIN	MG TOOL = INDEX TOOL 1
01048	R0131.0	INDXCOIN	MG TOOL = INDEX TOOL 2
01049	R0131.7	MG_STOP	MAGAZINE STOP
01050	R0133.0	REST	ATC RESET
01051	R0133.5	INDEXPOS	ATC ROT INDEX
01052	R0134.0	TOVR	T CODE OVER NO
01053	R0134.2	PRG-ALM	ATC MACRO MISS
01054	R0134.3	ATCALM	ATC ERR
01055	R0136.2	MST	M CODE INDEX START
01056	R0136.3	M84ST	M84 SP TOOL NO INDEX START
01057	R0136.4	M85ST	M85 SP T CODE NO INDEX START
01058	R0137.0	SPINDEX	SP TOL NO INDEX SEND COMD FIN
01059	R0137.2	TINDEX	T CODE NO INDEX SEND COMND FIN
01060	R0137.5	TINDFM	MG TOOL INDEX FIN MEM
01061	R0137.6	MGACT1	MG START 1
01062	R0137.7	MGACT2	MG START 2
01063	R0138.0	INDEX1	MG OP INDEX AUX
01064	R0138.1	INDEX2	MG OP INDEX
01065	R0138.2	INDEX3	MG OP INDEX START
01066	R0138.3	INDEX4	MG OP INDEX COMMAND AUX
01067	R0138.4	MG_INDEX	MAGAZINE INDEX COMMAND
01068	R0139.0	SPUNCL	SP TOOL UNCLAMP COMMAND
01069	R0139.1	SPUPBOFF	SP TOL UNCLP PB OFF
01070	R0139.5	AIRBLOW	SP AIR BLOW COMMAND
01071	R0140.0	AXISITNG	AXIS INTERLOCK PASS
01072	R0140.1	MG_ARM_HD_CLPDET	ATC ARM HEAD CLAMP DETECT
01073	R0140.2	MG_ARM_HDUNCLPDE	ATC ARM HEAD UNCLAMP DETECT
01074	R0140.3	SHTLDTM	ATC INITIAL RUN
01075	R0140.4	MG_TOOL_DETECT	MG POT TOOL EMPT DETECT
01076	R0141.0	MG_ARM_FRD_ON	ATC ARM FORWARD RDY
01077	R0141.1	MG_ARM_BKRD_ON	ATC ARM BACKWARD RDY
01078	R0141.2	MG_ARM_CHECK_ON	ATC ARM CHECK ON
01079	R0141.3	MG_ARM_CHK_CLS_ON	ATC ARM CHECK CLOSE ON
01080	R0141.4	MG_FORWARD_DETE	MAGAZINE FORWARD DETECT

01081	R0141.5	MG _{BACKWARD} ON	MAGAZINE BACKWARD DETECT
01082	R0141.6	SAP4	SA FORWARD POSITION 4
01083	R0141.7	SAP1	SA BACKWARD P1
01084	R0142.0	SHTLDT	ARM SIDE HAVE TOOL
01085	R0142.1	SAWT	SA WITE POSITION
01086	R0142.2	SAINI	SA INITIAL POSITION
01087	R0142.3	SASPR1	SWING ARM SP CHANG TOL POS
01088	R0142.4	SASPIN	SWING ARM SP GET TOL POS
01089	R0142.5	MANU_ATC	ARM INITIAL
01090	R0142.6	ATCINI	ATC INITIAL
01091	R0142.7	ATCINI2	ATC INITIAL 2
01092	R0143.0	ATCXYAP	ATC ON & XYZA POS
01093	R0143.1	ATCTLINP	ATC TOOL INPOS
01094	R0143.2	ATCTLRLP	ATC TOOL RL POS
01095	R0143.3	ATCSTP	ATC STOP POS
01096	R0144.0	APTLO	SP NON TOOL
01097	R0144.1	WTTLO	WAIT NON TOOL
01098	R0144.2	RTTLO	RETURN SIDE NON TOOL
01099	R0144.3	TCM0	T CODE MEM =0
01100	R0144.4	TF=SPTL	T CODE EQ SP TOOL NO
01101	R0144.5	TC=RTTL	T COD EQ WAIT TOOL NO
01102	R0144.6	TC=WTTL	T COD EQ RETURN TOOL NO
01103	R0144.7	TC=0	T CODE NO =0
01104	R0145.0	TLSALM1	ATC DETE L.S ERR
01105	R0145.1	TINIOFF	ATC INITIAL OFF
01106	R0145.2	TCPERR	T CODE MACRO ERR
01107	R0145.3	TCYCOVR	T CODE CYC TIMER OVER
01108	R0145.4	M6CYCOVR	M6 CYC TIMER OVER
01109	R0145.5	ATCTCYC	ATC CYC TIMER CHECK
01110	R0145.6	HNDTL=0	HANDLE TOOL = 0
01111	R0145.7	SP=TXX	SP TOOL = T NO
01112	R0146.0	THLDS	ATC CYC HOLD AUX
01113	R0146.1	TTHLD	ATC TOOL HOLD
01114	R0146.2	TM6HLD	ATC M6 HOLD
01115	R0146.3	TX6HLD	T NO M6 CYC
01116	R0146.4	TMHLD	ATC M CODE CYC
01117	R0146.5	ATCHLD	ATC HOLD
01118	R0146.6	TX6MHLD	T NO M6 MACRO M CODE CYC
01119	R0147.0	TSTOK	T CODE START OK
01120	R0147.1	TF1	T CODE START 1

01121	R0147.2	TF2	T CODE START 2
01122	R0147.3	ATCT	T CODE CYC
01123	R0147.4	TFINS	T CODE FIN AUX
01124	R0147.5	TFINS1	T CODE FIN AUX 1
01125	R0147.6	ATCTST	T CODE START AUX
01126	R0147.7	ATCTST1	T CODE START AUX 1
01127	R0148.0	ATCTEND	T CODE CYC FIN
01128	R0148.1	MSTOK	M6 START OK
01129	R0148.2	M6__CHANGE_TOOL	M6 CYCLE
01130	R0148.3	ATCMST	M6 START AUX
01131	R0148.4	ATCMST1	M6 START AUX 1
01132	R0148.5	ATCMEND	M6 CYCLE FIN
01133	R0148.6	ATC_T_M6_CYCLE	ATC T&M6 CYCLE ON
01134	R0149.0	ATCTDT	ATC T CYC
01135	R0149.1	ATCTRST	ATC T CYC RESTART
01136	R0149.4	TFS	T CODE AUX
01137	R0149.5	TFS1	T CODE AUX 1
01138	R0149.6	TFS2	T CODE AUX 2
01139	R0150.0	ATCT1	T CYC START
01140	R0150.1	ATCT2-1	ATC RETURN START
01141	R0150.2	ATCT2-2	T NO EQ WAIT NO CYC FIN
01142	R0150.3	ATCT3-1	WAIT TOOL INDEX
01143	R0150.4	ATCT3-2	SP TOOL INDEX
01144	R0150.5	ATCT3-3	WAIT & SP TOL NO EQ 0 ERR
01145	R0150.6	ATCT4	HSK HEAD DOWN
01146	R0150.7	ATCT5-1	ARM FORWARD
01147	R0151.0	ATCT5-2	RETURN TOL DETE ==EQ 1 ERR
01148	R0151.1	ATCT6	HSK HEAD UP
01149	R0151.2	ATCT7	A 45 TO 0 & B-315 TO -270
01150	R0151.3	ATCT8	ATC CHUCK CLOSE
01151	R0151.4	ATCT9	ARM BACKWARD
01152	R0151.5	ATCT10	ATC CHUCK OPEN
01153	R0151.6	ATCT11	TOOL RETURN FIN
01154	R0151.7	ATC12	ATC STOP & T CYC FIN
01155	R0152.0	ATCT20	NEW ATC CYC START
01156	R0152.1	ATCT21-1	NEW TOOL INDEX
01157	R0152.2	ATCT21-2	SP TOOL INDEX
01158	R0152.3	ATCT21-3	T CODE EQ 0 SP T NO EQ 0 ERR
01159	R0152.4	ATCT22	ATC CHUCK CLOSE
01160	R0152.5	ATCT23-1	ARM FORWARD

01161	R0152.6	ATCT23-2	T CODE EQ 0 ERR
01162	R0152.7	ATCT24	ATC CHUCK OPEN
01163	R0153.0	ATCT25	SWING ARM MIDDLE
01164	R0153.1	ATCT26	ATC NON ACT
01165	R0153.3	ATCT27-2	ATC NON ACT
01166	R0153.5	ATCT28	ARM BACKWARD
01167	R0153.6	ATCT29	ATC CHUCK OPEN
01168	R0153.7	ATCT30	ATC STOP & T CYC FIN
01169	R0154.0	SPINDCYC	T CYC FIN & SP TOL INDEX
01170	R0154.1	SPINDCIN	SP TOL INDEX
01171	R0154.2	ATCT2-3	RETURN ARM DETE TOOL EQ 1
01172	R0155.0	ATCM1	SWING ARM P4 GO TO P3
01173	R0155.1	ATCM2-1	SWING ARM P3 GO P2&A-315B45
01174	R0155.2	ATCM2-2	SWING ARM P2 GO P1
01175	R0155.3	ATCM3	SWING ARM INITIAL POS CONFIRM
01176	R0155.4	ATCM4-1	RETURN TOOL INDEX
01177	R0155.5	ATCM4-2	RETURN TOL EQ 0 & SP TOL INDEX
01178	R0155.6	ATCM5	HSK HEAD DOWN
01179	R0155.7	ATCM6-1	ARM FORWARD
01180	R0156.0	ATCM6-2	RETURN MG SIDE TOOL ERR
01181	R0156.1	ATCM7	HSK HEAD UP
01182	R0156.2	ATCM8	A-315 GO 270& B45 GO 0
01183	R0156.3	ATCM9	ATC CHUCK CLOSE
01184	R0156.4	ATCM10	ARM BACKWARD
01185	R0156.5	ATCM11	ATC CHUCK OPEN
01186	R0156.6	ATCM12	ATC NO ACT
01187	R0156.7	ATCM13	M6 CYC FIN
01188	R0157.0	ATCX1	X PMC CTRL XYZCA
01189	R0157.1	ATCX2	Z POS EQ P2 COOLANT HOLD
01190	R0157.2	ATCX3	A POS EQ P2
01191	R0157.3	ATCX4	XY POS P2 & SP M19
01192	R0157.4	ATCX5	A POS EQ P4
01193	R0157.5	ATCX6	SL POS P2
01194	R0157.6	ATCX7	SL POS P3& SR POS A-90 B -180
01195	R0157.7	ATCX8	SL POS P4
01196	R0158.0	ATCX9	ATC INTERLOCK OFF
01197	R0158.1	ATCX10	Y POS P4
01198	R0158.2	ATCX11	SP UNCLP
01199	R0158.3	ATCX12	ATC ZP3
01200	R0158.4	ATCX13	ATC ZP2

01201	R0158.5	ATCX14	SR A180 B 190 SL P4
01202	R0158.6	ATCX15	ATC ZP3
01203	R0158.7	ATCX16	ATC ZP4
01204	R0159.0	ATCX17	SP CLP
01205	R0159.1	ATCX18	ATC INTERLOCK ON
01206	R0159.2	ATCX19	M6 MACRO RUN FROM MIDDLE
01207	R0160.0	ATCMDT1	ATC M CODE CYC 1
01208	R0160.1	ATCMDT2	ATC M CODE CYC 2
01209	R0160.2	ATCMDT	ATC M CODE CYC
01210	R0160.3	ATCMRST	ATC M CODE CYC RESTART
01211	R0160.4	PMCSET	PMC CTRL XYZA RESET
01212	R0160.5	PMCSETS	PMC CTRL XYZA RESET AUX
01213	R0160.6	MFS	M CODE STOP AUX
01214	R0161.1	MAIN_SEL	ATC PANEL OFF
01215	R0161.2	SUB_SEL	
01216	R0162.0	ATCST_MG30	ATC CYC START MG TOL EQ 30
01217	R0162.1	TNGINDFIN	ATC CYC NG INDEX END
01218	R0162.2	INDON	INDEX ON
01219	R0162.3	INDFIN	INDEX CYC FIN
01220	R0162.5	MGERR	MG TOOL ERR
01221	R0165.0	INCOPE	INCH OPERATION
01222	R0165.2	ORI0	ORIENTATION EQ 0 DEGREE
01223	R0165.3	SA180FOK	SWING ARM POS EQ 180 FRD ON
01224	R0165.4	SA0BOK	SWING ARM POS EQ 0 BRD ON
01225	R0165.7	SHFBOK	ARM FRD & BRD OK
01226	R0166.0	SHFO	ARM FORWARD OUTPUT
01227	R0166.1	SHBO	ARM BACKWARD OUTPUT
01228	R0166.2	SHSOK	ARM CHUCK OPEN & CLOSE
01229	R0166.3	SHCOO	ARM CHUCK OPEN
01230	R0166.4	SHCCO	ARM CHUCK CLOSE
01231	R0166.5	SHHUCO	ARM HEAD UNCLAMP AUX
01232	R0166.6	SHHCO	ARM HEAD CLAMP AUX
01233	R0167.0	SHFRTY	ARM FORWARD RETRY
01234	R0167.1	SHFRTY1	ARM FORWARD RETRY AUX
01235	R0167.2	MG_ARM_F/B_1	ATC ARM MOVE IN&OUT 1
01236	R0167.3	SHFR2	SHIFT HAND FORWARD 2
01237	R0167.5	MG_FRD_OUTPUT	MG FORWARD OUTPUT
01238	R0167.6	MG_BKWRD_OUTPUT	MG BACKWARD OUTPUT
01239	R0168.0	SHBRTY	ARM BACKWARD RETRY
01240	R0168.1	SHBRTY1	ARM BACKWARD RETRY 1

01241	R0168.2	SHBR1	ARM BRD & FRD
01242	R0168.3	SHBR2	ARM BACKWARD JOG
01243	R0169.0	SHCCRTY	ARM CHUCK CLOSE RETRY
01244	R0169.1	SHCCRTY1	ARM CHUCK CLOSE RETRY AUX
01245	R0169.2	SHCCR1	ARM CHUCK CLOSE&OPEN
01246	R0169.3	SHCCR2	ARM CHUCK CLOSE JOG
01247	R0170.0	SHCC11	ARM CHUCK CLOSE 1
01248	R0170.1	SHCC2	ARM CHUCK CLOSE 2
01249	R0170.2	SHCO11	ARM CHUCK OPEN 1
01250	R0170.3	SHCO2	ARM CHUCK OPEN 2
01251	R0170.4	SHHG	ARM IN MG SIDE
01252	R0170.5	HAND=SP	HAND TOOL EQ SP TOOL
01253	R0170.6	HAND=WT	HAND TOOL EQ WAIT TOOL
01254	R0170.7	HAND=RT	HAND TOOL EQ RETURN TOOL
01255	R0171.0	HAND=ODT	HAND TOOL EQ 0 TOOL INDEX
01256	R0171.1	SHSAINI	HAND SWING ARM INITIAL
01257	R0171.2	SHSAWT	HAND SWING ARM WAIT
01258	R0171.3	HAND=0	HAND TOOL EQ 0 AUX
01259	R0172.0	SPCL1	SP CLAMP 1
01260	R0172.1	SPCL2	SP CLAMP 2
01261	R0172.2	SPUNCL1	SP UNCLAMP 1
01262	R0172.3	SPUNCL2	SP UNCLAMP 2
01263	R0172.4	SASPR1IP	SWING ARM SP SIDE RET POS
01264	R0172.5	SASPINIP	SWING ARM SP SIDE INIT POS
01265	R0173.0	MGACT	MG TOOL INDEX RUN
01266	R0173.1	M108ST	WAIT SIDE TOOL INDEX START
01267	R0173.2	M109ST	RETURN SIDE TOOL INDEX START
01268	R0173.3	WTINDEX	WAIT TOOL INDEX SEND FIN
01269	R0173.4	RTINDEX	RETURN TOOL INDEX SEND FIN
01270	R0174.0	SASHMOV	SWING ARM & ATC ARM ACT
01271	R0175.0	CASE1_SP_T_NG	CASE 1 SP NON TOOL
01272	R0175.1	SP_T_UNCLP	SP TOOL UNCLAMP
01273	R0175.2	Z_POS_P4	Z POS P4
01274	R0175.3	SP_T_CLP	SP T CLP
01275	R0175.4	MG_BKRD	MG BACKWARD
01276	R0175.5	INTLOK_ON	INTERLOCK ON
01277	R0175.6	M6CASE1FIN	M6 CASE1 FIN
01278	R0175.7	M06END	M06 CYC FIN
01279	R0176.0	CASE2_Z_POS_P4	CASE2 Z POS P4
01280	R0176.1	MG_FORD	MG FORWARD

01281	R0176.2	SP_TOL_UNCLP	SP TOOL UNCLP
01282	R0176.3	Z_POS_P3	Z POS P3
01283	R0176.4	MG_NEW_TOL_INDEX	MG NEW TOOL INDEX
01284	R0176.5	Z_POS_P4_AUX	Z POS P4 AUX
01285	R0176.6	SP_TOL_CLP	SP TOOL CLP
01286	R0176.7	MG_BKRD_AUX	MG BACKWARD AUX
01287	R0177.0	INTLOK_ON_AUX	INTERLOCK ON AUX
01288	R0177.1	M6CASE2FIN	M6CASE2FIN
01289	R0177.2	INTLOK_OFF	INTERLOCK OFF
01290	R0177.3	SP_TOL_UNCLP_AUX	SP TOOL UNCLP AUX
01291	R0177.4	SP_TOL_CLP_AUX	SP TOOL CLP AUX
01292	R0177.5	INTLOK_ON_AUX_1	INTERLOCK ON AUX 1
01293	R0177.6	Z_POS_ZP4	Z POS ZP4
01294	R0177.7	Z_POS_ZP3	Z POS ZP3
01295	R0178.0	MG_NXT_TOL_INDEX	MG NEXT TOOL INDEX
01296	R0180.0	WTTLOA	A CYC & WAIT SIDE NON TOOL
01297	R0180.1	WTTLOB	B CYC & WAIT SIDE NON TOOL
01298	R0180.2	RTTLOA	A CYC & RETU SIDE NON TOOL
01299	R0180.3	RTTLOB	B CYC & RETU SIDE NON TOOL
01300	R0180.4	TC=WTTLA	A CYC & T CODE EQ WAIT TOL
01301	R0180.5	TC=WTTLB	B CYC & T CODE EQ WAIT TOL
01302	R0180.6	TC=RTTLA	A CYC & T CODE EQ RETU TOL
01303	R0180.7	TC=RTTLB	B CYC & T CODE EQ RETU TOL
01304	R0181.0	HAND=WTA	HAND EQ WAIT TOL A CYC
01305	R0181.1	HAND=WTB	HAND EQ WAIT TOL B CYC
01306	R0181.2	HAND=RTA	HAND EQ RETU TOL A CYC
01307	R0181.3	HAND=RTB	HAND EQ RETU TOL B CYC
01308	R0181.4	TCODE=MG	T CODE CYC EQ MG TOOL
01309	R0181.5	TCODE=SP	T CODE CYC EQ SP TOOL
01310	R0181.6	SPTOL=MG TOL	SP TOOL EQ MG TOOL
01311	R0182.0	MGINDON	MG INDEX RUN ON
01312	R0182.1	MGINDOFF	MG INDEX RUN OFF
01313	R0185.0	SHCORTY	ARM CHUCK COLSE RETRY
01314	R0185.1	SHCORTY1	ARM CHUCK COLSE RTY AUX
01315	R0185.2	MG_ARM_CHK_C/O_1	ARM CHUCK CLOSE&OPEN
01316	R0185.3	SHCOR2	ARM CHUCK CLOSE JOG
01317	R0186.0	SHHURTY	ARM HEAD UNCLAMP RETRY
01318	R0186.1	SHHURTY1	ARM HEAD UNCLAMP RTY AUX
01319	R0186.2	SHHUR1	ARM HEAD UNCLP&CLP
01320	R0186.3	SHHUR2	ARM HEAD UNCLP JOG

01321	R0187.0	SHHCRTY	ARM HEAD CLAMP RETRY
01322	R0187.1	SHHCRTY1	ARM HEAD CLAMP RTY AUX
01323	R0187.2	SHHCR1	ARM HEAD CLAMP&UNCLAMP
01324	R0187.3	SHHCR2	ARM HEAD CLAMP JOG
01325	R0250.0	TDIOFF1	3D CHECK INVALID PULSE
01326	R0250.1	TDIOFF2	3D CHECK INVALID PULSE AUX
01327	R0250.2	TDICHG1	3D CHECK SET CHANG 1
01328	R0250.3	TDICHG2	3D CHECK SET CHANG 2
01329	R0250.4	TDICHG3	3D CHECK SET CHANG 3
01330	R0250.5	TDICHG4	3D CHECK SET CHANG 4
01331	R0250.6	OFSETWIN	OFFSET INPUT WINDOW
01332	R0250.7	WINACT.M	OFFSET WINDOW SART FIN
01333	R0251.0	COFSET>0	COMMON OFFSET FROM NO1
01334	R0251.2	WINERR	OFFSET WINDOW INPUT ERR
01335	R0504.3	MOAATLS	MOA AUTO TOOL SET
01336	R0511.7	M47_ON	M47 FUNCTION ON
01337	R0512.0	TLSET	TOOL SET ON
01338	R0512.1	TL_SET_OFF	TOOL SET OFF
01339	R0512.2	TLRED	TOOL SET READ FINISH
01340	R0512.3	TLRED1	TOOL SET READ FINISH AUX
01341	R0512.4	TLMOV	TOOL READ MEM
01342	R0512.5	XMOVBERR	T NO MEM ERR
01343	R0512.6	TLINISSET	TOOL SET INITIAL
01344	R0512.7	XMOVBER	MG TOL VALUM SEL ERR
01345	R0513.0	SPTLSET	TOOL INITIAL SET
01346	R0513.1	M48S	MG TOL VALUM SEL ERR AUX
01347	R0513.2	ALSALM	TOOL SELECT ALARM
01348	R0513.3	ATLSRST1	TOOL SELECT ALARM RESET
01349	R0513.5	TSWARON	TOUCH SW AIR ON
01350	R0513.6	TNODSPST	MANUAL TOOL CHANGE POSITION
01351	R0513.7	DSP_ST.S	TOL NO DISPLAY START AUX
01352	R0514.6	SUBB_ST	SUBB ACCOUNT START
01353	R0514.7	SUBB_ERR	SUBB ACCOUNT ERR
01354	R0515.0	TPADDERR	40 TOOL COUNTER ERROR
01355	R0515.1	ATLSRST	ALL TOOL RESET
01356	R0534.2	TSRHON	TOOL SEARCH ON
01357	R0545.0	PRGCHKWINTNOL	PRG CHECK WINDOW T NO SISPLAY
01358	R0545.1	NXT.DSP	NEXT TOOL NO DISPLAY
01359	R0545.2	MUL.ERR1	MUL ACCOUNT ERR 1
01360	R0545.3	MUL.ERR2	MUL ACCOUNT ERR 2

01361	R0545.4	TNO.FIN	T NO DISPLAY FIN
01362	R0545.5	SPNO.FIN	SP T NO DISPLAY FIN
01363	R0545.6	NXNO.FIN	NEXT T NO DISPLAY FIN
01364	R0545.7	MUL.ERR3	MUL ACCOUNT ERR 3
01365	R0556.0	APO1	AUTO POWER OFF 1
01366	R0572.0	\$]SBK	SINGLE BLOCK PB. AUX
01367	R0581.0	\$"SBK	
01368	R0609.2	APO-ON	AUTO POWER OFF -ON
01369	R0659.2	SBK-ON	
01370	R0659.3	SBK+	SBK P.B ON PULSE
01371	R0668.5	*FV100	*FV 100% KEEP
01372	R0880.0	OVC.P	
01373	R0880.1	OVC.P2	
01374	R1000.2	S-SPDON	SPINDLE RUNNING
01375	R1000.3	S-ORIINP	SP M19
01376	R1000.4	S-SPCL	SP CLP DETE
01377	R1000.5	S-SPUC	SP UNCLP DETE
01378	R1001.2	S-ORIEND	SP M19 FIN
01379	R1001.5	S-NCRST	SP STOP & NC RESET
01380	R1001.6	S-NCHLD	SP STOP & MACHINE HOLD
01381	R1001.7	S-SFIN	S CODE FIN
01382	R1002.3	S-WMING	SP WARM ON
01383	R1002.4	S-ONMEM	SPINDLE ON MEM
01384	R1002.6	S-PWOFOK	SPINDLE POWER OFF FINISH
01385	R1005.0	M03FF	M03 MEM
01386	R1005.1	M04FF	M04 MEM
01387	R1005.6	DROPNSTP	OP DOOR OPEN SP STOP
01388	R1005.7	SPDSP1	SP STOP 1
01389	R1006.0	SPDSP	SP STOP 2
01390	R1006.1	SPDSP3	SP STOP 3
01391	R1006.3	SPDHOLD2	SP HOLD 2
01392	R1006.4	SPDHOLD3	SP HOLD 3
01393	R1006.6	SPDHOLD	SP HOLD
01394	R1006.7	SPDCH	SP RUN CHECK
01395	R1007.7	SPINTRP	SP INTERRUPT
01396	R1009.0	SINDX	S CODE INDEX
01397	R1009.1	SP_AUT.M	SP AUTO MEM
01398	R1009.2	SPDCW1	SP CW AUX
01399	R1009.3	SPDCCW1	SP CCW AUX
01400	R1009.4	SPOFF.M	SP OFF MEM

01401	R1010.0	SP-ELC.M	SP ELC GEAR CHANGE MEM
01402	R1010.1	SP-CHK.E	SPINDLE CHECK FINISH
01403	R1010.2	SP-CK.OK	SPINDLE NORMAL
01404	R1012.0	SPDATA	SPCN DATA WRITE
01405	R1012.1	SPE.M	SP SPEED ARRVE MEM
01406	R1012.2	D62=00	SP ELC GEAR SWITCH
01407	R1012.3	POLE_CHG	GEAR CHANGE SP SPEED
01408	R1012.5	SP_SPT	SP STOP
01409	R1012.6	SP_CAN	SP STOP CANCEL
01410	R1012.7	RCHPA.S	SP POWER OUTPUT CHANGE AUX
01411	R1013.1	BLSP.INI	BULIT-IN SP OUTPUT SWITCH
01412	R1013.2	SPSTP.S	SP STOP AUX
01413	R1013.3	BLSP.TYP	BULIT-IN SPINDLE TYPE
01414	R1014.0	M29-RGT	SP M29 COMMAND
01415	R1014.1	RGT-SPE	RIGID TAP SPEED ARRIVE
01416	R1014.2	SP_CW.S	SP CW
01417	R1014.3	SP_CCW.S	SP CCW
01418	R1014.4	M43FF	CS AXIS CUTTUNG CONTROL M CODE
01419	R1015.0	M19S1	M19 AUX 1
01420	R1015.1	M19S2	M19 AUX 2
01421	R1015.2	ORISKP	M19 BY PASS
01422	R1015.5	ORIRST	M19 RESET
01423	R1015.6	ORIHOLD	M19 HOLD
01424	R1016.1	ORI1	M19 START
01425	R1016.6	ORIEND	M19 FIN
01426	R1017.0	SPPRSOFF	SP TOL PRESET OFF
01427	R1017.1	TAPFINS	G84 FIN
01428	R1017.3	M3/M4FIN	M3&M4 FIN AUX
01429	R1018.0	SV50.S	SPINDLE OVERRIDE 50%
01430	R1018.1	SV60.S	SPINDLE OVERRIDE 60%
01431	R1018.2	SV70.S	SPINDLE OVERRIDE 70%
01432	R1018.3	SV80.S	SPINDLE OVERRIDE 80%
01433	R1018.4	SV90.S	SPINDLE OVERRIDE 90%
01434	R1018.5	SV100.S	SPINDLE OVERRIDE 100%
01435	R1018.6	SV110.S	SPINDLE OVERRIDE 110%
01436	R1018.7	SV120.S	SPINDLE OVERRIDE 120%
01437	R1019.0	SV130.S	SPINDLE OVERRIDE 130%
01438	R1019.1	SV140.S	SPINDLE OVERRIDE 140%
01439	R1019.2	SV150.S	SPINDLE OVERRIDE 150%
01440	R1020.0	SPSTON	SP RUN ON

01441	R1021.0	M03-ON	M03 ON
01442	R1021.1	M04-ON	M04 ON
01443	R1021.2	M05-ON	M05 ON
01444	R1021.3	M19-ON	M19 ON
01445	R1030.0	SOVR1	SP SPEED OVERRIDE 1
01446	R1030.1	SOVR2	SP SPEED OVERRIDE 2
01447	R1030.2	SOVR4	SP SPEED OVERRIDE 4
01448	R1030.3	SOVR8	SP SPEED OVERRIDE 8
01449	R1034.0	MULERR2	MUL ACCOUNT ERR2
01450	R1034.1	SOVITR	SP SPEED OVERRIDE CHECK
01451	R1034.2	SPOVROFF	SP SPEED OVERRIDE OFF
01452	R1100.0	SPWUP	SP WARM UP
01453	R1100.2	D92<S	D92<S
01454	R1100.3	S=<D92	S=<D92
01455	R1100.5	D94<S	D94<S
01456	R1100.6	S=<D94	S=<D94
01457	R1100.7	92<S=<94	92<S=<94
01458	R1101.0	D96<S	D96<S
01459	R1101.1	S=<D96	S=<D96
01460	R1101.2	D94<S=<96	D94<S=<96
01461	R1101.3	D98<S	D98<S
01462	R1101.4	S=<D98	S=<D98
01463	R1101.5	96<S=<98	D96<S=<D98
01464	R1101.6	D100<S	D100<S
01465	R1101.7	S=<D100	S=<D100
01466	R1102.0	98<S=<100	D98<S=<100
01467	R1102.1	1SECP	1 SEC PULSE
01468	R1102.2	1SECPS	1 SEC PULSE AUX
01469	R1102.3	SIND1	SP INDEX RUN
01470	R1102.4	MULBERR	MULB ACCOUNT ERR
01471	R1102.5	DIVBERR	DIVB AUUOUNT ERR
01472	R1102.6	DROPS5UP	DOOR OPEN SP SPEED 500RPM
01473	R1102.7	MDSPON	SPINDLE ON
01474	R1103.0	PRPCNT	OP RDY COUNT
01475	R1103.1	ADDBERR	ADDB ACCOUNT ERR
01476	R1103.2	F1PRP	OP RDY COUNT FIN
01477	R1103.3	S=D92	S=6000
01478	R1103.4	S=D94	S=8000
01479	R1103.5	S=D96	S=10000
01480	R1103.6	S=D98	S=11000

01481	R1105.0	F3CNT	D92<S<=D94 COUNT
01482	R1105.1	ADDBERR1	ADDB ACCOUNT ERR1
01483	R1105.2	F3	D92<S<=D94 COUNT FIN
01484	R1105.3	F3STP	D92<S<=D94 STOP COUNT
01485	R1105.4	ADDBERR2	ADDB ACCOUNT ERR2
01486	R1105.5	F3RST	D92<S<=D94 STOP COUNT RESET
01487	R1105.6	F3STPRST	D92<S<=D94 STOP COUNT RESET
01488	R1106.0	F4CNT	D94<S<=D96 STOP COUNT
01489	R1106.1	ADDBERR3	ADDB ACCOUNT ERR3
01490	R1106.2	F4	D94<S<=D96 COUNT FIN
01491	R1106.3	F4STP	D94<S<=D96 STOP COUNT
01492	R1106.4	ADDBERR4	ADDB ACCOUNT ERR4
01493	R1106.5	F4RST	D94<S<=D96 COUNT RESET
01494	R1106.6	F4STPRST	D94<S<=D96 STOP COUNT RESET
01495	R1107.0	F5CNT	D96<S<=D98 COUNT
01496	R1107.1	ADDBERR5	ADDB ACCOUNT ERR5
01497	R1107.2	F5	D96<S<=D98 COUNT FIN
01498	R1107.3	F5STP	D96<S<=D98 STOP COUNT
01499	R1107.4	ADDBERR6	ADDB ACCOUNT ERR6
01500	R1107.5	F5RST	D96<S<=D98 COUNT RESET
01501	R1107.6	F5STPRST	D96<S<=D98 STOP COUNT AUX
01502	R1108.0	F6CNT	D98<S COUNT
01503	R1108.1	ADDBERR7	ADDB ACCOUNT ERR7
01504	R1108.2	F6	D98<S COUNT FIN
01505	R1108.3	F6STP	D98<S STOP COUNT
01506	R1108.4	ADDBERR8	ADDB ACCOUNT ERR8
01507	R1108.5	F6RST	D98<S COUNT AUX
01508	R1108.6	F6STPRST	D98<S STOP COUNT RESET
01509	R1200.0	SPDOK1	SP RUN OK 1
01510	R1502.2	PLS01	HANDLE INDEX PULSE 1
01511	R1502.3	PLS02	HANDLE INDEX PULSE 2
01512	R1502.6	PLS03	SPINDLE OVEERIDE PULSE
01513	R1502.7	PLS04	SPINDLE OVERRIDE AUX
01514	R1503.0	PLS05	WORK LIGHT SW 5
01515	R1503.1	PLS06	WORK LIGHT SW AUX 6
01516	R1503.6	PLS07	CHIP CON MANUAL SW 7
01517	R1503.7	PLS08	CHIP CON MANUAL SW 8
01518	R1504.1	PLS09	DRY RUN SW PULSE 9 AUX
01519	R1504.2	PLS010	DRY RUN SW PULSE 10 AUX
01520	R1504.3	DRY_RUN_KEEP	DRY RUN KEEP

01521	R1504.4	PLS011	BLOCK SKIP KEEP 11
01522	R1504.5	PLS012	BLOCK SKIP SW KEEP 12
01523	R1504.7	OPTION_STOP_SW	OPTIONAL STOP PB
01524	R1505.0	OPTION_STOP_AUX	OPTIONAL STOP AUX SW
01525	R1505.1	PLS015	PULSE GENERATOR *10 SW
01526	R1505.2	HANDLE_*10_AUX	PULSE GENERATOR *10 SW AUX
01527	R1605.1	M10.A	TABLE CLP
01528	R1605.2	M11.A	TABLE UNCLP
01529	R1605.3	M12.A	TILT CLP
01530	R1605.4	M13.A	TILT UNCLP
01531	R1606.0	4.UNC	4TH AXIS UNCLAMP CODE
01532	R1606.1	4.CLP	4TH AXIS CLAMP M CODE
01533	R1607.0	4A/C.UCL	4TH AXIS UNCLAMP CHECK
01534	R1607.1	4A/C.CL	4TH AXIS CLAMP CHECK
01535	R1616.0	5.UCLS	5TH AXIS UNCLAMP
01536	R1616.1	5.CLP	5TH AXIS CLAMP M CODE
01537	R1617.0	5A/C.UCL	5TH AXIS UNCLAMP
01538	R1617.1	5A/C.CL	5TH AXIS CLAMP
01539	R1806.0	GRS_RST	GREASE COUNT RESET
01540	R1806.1	AUTO_GREASE_CTR	AUTO GREASE COUNTER
01541	R1855.3	OIL.DW	SP OIL & AIR OIL LEV LOW
01542	R1855.4	SP_OIL_ON	SPINDLE OIL ON
01543	R1855.6	S.CD-IN	S CODE INPUT
01544	R1855.7	TM-D.0	D314-D319 DATA EQ 0
01545	R1856.0	S10000UP	S CODE 10000 UP
01546	R1856.1	S15000UP	S CODE 15000 UP
01547	R1856.2	S20000UP	S CODE 20000 UP
01548	R1856.3	S30000UP	S CODE 30000 UP
01549	R1856.6	CUNT_OV	COUNT OVER
01550	R1856.7	SP.OILON	SP OIL&AIR FIN
01551	R1857.0	SO&Aiset	SP OIL&AIR INIT OUT FIN
01552	R1857.1	SO&A_ALM	SP OIL & AIR LOW
01553	R1858.4	O&AOILON	SP OIL & AIR ON
01554	R1858.5	SP-OIL_ON	SP OIL ON
01555	R1858.7	O&ACNTS	SP OIL & AIR COUNT I SEC
01556	R1860.0	HYDSTP1	HYDRAULIC MOTOR STOP 1
01557	R1860.1	HYDSTP5	HYDRAULIC MOTOR STOP 5
01558	R1860.2	HYDSTP	HYDRAULIC MOTOR STOP
01559	R1860.3	OP_RDY_PW__AUX	OPERATION RDY START POWER AUX
01560	R2050.0	WINDFIN	OP WINDOW FIN

01561	R2051.0	WINR	Z MOTOR LOAD READ WINDOW
01562	R2051.1	MULBERR1	MULB ACCOUNT ERR1
01563	R2051.2	DIVBERR1	DIVB ACCOUNT ERR1
01564	R2051.3	ZAIRP	Z STOP AIR POS
01565	R2051.4	ZAIRPNG	Z STOP AIR POS NG
01566	R2051.5	ZAIRSTP	Z STOP AIR
01567	R2090.0	ZP2UP	Z IN ZP2 POS
01568	R2090.1	ZP3UP	Z IN ZP3 POS
01569	R2090.2	ZP4UP	Z IN ZP4 POS
01570	R2090.7	ATCMONIT	ATC MONITOR
01571	R2091.0	MGIAW	MG WAIT TOOL INDEX A CYC
01572	R2091.1	MGIBR	MG RETURN TOOL INDEX B CYC
01573	R2091.2	MGJAR	MG RETURN TOOL INDEX A CYC
01574	R2091.3	MGIBW	MG RETURN TOOL INDEX B CYC1
01575	R2092.0	MSSTRART	MONITOR SP S CODE START
01576	R2093.0	MGSPIMP	MG TOOL EQ SP TOOL INDEX
01577	R2093.1	MGTCIMP	MG TOOL EQ T CODE INDEX
01578	R2093.3	MGWTIMP	MG TOOL EQ WAIT TOOL INDEX
01579	R2093.4	MGRTIMP	MG TOOL EQ RETU TOOL INDEX
01580	R2123.7	MGCCW	MG JOG CCW
01581	R2150.0	MG+1P	MG & 1 POT
01582	R2150.1	MG+INPS	MG+INPS
01583	R2150.2	MGOVR	MG OVER LOAD DECELERATE
01584	R2150.3	MGINP*2	MGINP*2
01585	R2150.4	MGPOR	MG POS
01586	R2150.5	MGINPS	MG TOL CHANG INPOS
01587	R2151.0	TCWB	ATC MAGAZINE MANUAL CW PB
01588	R2151.1	TCCWB	
01589	R2151.2	TCWM	
01590	R2151.3	TCCWM	
01591	R2151.4	TMMG	ATC MAGAZINE ROTATION MANUAL
01592	R2151.5	TMMG0	ATC MAGAZINE ROTATION AUX
01593	R2152.0	TMMG1	ATC MAGAZINE CONTINUOUS SET 1
01594	R2152.1	TMMG2	ATC MAGAZINE KEEP RUN 2
01595	R2152.2	TMMG3	ATC MG RUNING
01596	R2152.3	TMMG4	ATC MG RESET STOP
01597	R2152.4	TMMG5	ATC MG DATA SET
01598	R2152.5	TMMG6	ATC MG DARA START
01599	R2152.6	TMMG7	ATC MG DATA INDEX FIN
01600	R2153.0	TMCW+1	ATC MG CW NEXT POT

01601	R2153.1	TMCCW-1	ATC MG CW BRFORE POT
01602	R2153.2	TMOVER	40T MG OVER
01603	R2153.3	TMADD	40T MG ADD 1
01604	R2153.4	TMPOSS	MG T VALUM SET
01605	R2153.5	TMPOSS60	60T MG SET
01606	R2159.0	MGST	MG START
01607	R2160.0	MGFINM	MG M CODE FIN MEM
01608	R2160.1	MGST1	MG START 1
01609	R2160.2	MGST2	MG START 2
01610	R2160.3	MGST3	MG START 3
01611	R2160.4	MGST4	MG START 4
01612	R2160.5	MGFIN	MG M CODE FIN
01613	R2250.0	SLP1+	SL P1+
01614	R2250.1	SLP1-	SL P1-
01615	R2250.2	SLP2+	SL P2+
01616	R2250.3	SLP2-	SL P2-
01617	R2250.4	SLP3+	SL P3+
01618	R2250.5	SLP3-	SL P3-
01619	R2250.6	SLP4+	SL P4+
01620	R2250.7	SLP4-	SL P4-
01621	R2251.0	P1+<SL	P1+<SL
01622	R2251.1	P1-<SL	P1-<SL
01623	R2251.2	1-<L=<1+	P1-<SL=<P1+
01624	R2251.3	P2+<SL	P2+<SL
01625	R2251.4	2+<L=<1-	P2+<SL=<P1-
01626	R2251.5	P2-<SL	P2-<SL
01627	R2251.6	2-<L=<2+	P2-<SL=<P2+
01628	R2251.7	P3+<SL	P3+<SL
01629	R2252.0	3+<L=<2-	P3+<SL=<P2-
01630	R2252.1	P3-<SL	P3-<SL
01631	R2252.2	3-<L=<3+	P3-<SL=<P3+
01632	R2252.3	P4+<SL	P4+<SL
01633	R2252.4	4+<L=<3-	P4+<SL=<P3-
01634	R2252.5	P4-<SL	P4-<SL
01635	R2252.6	4-<L=<4+	P4-<SL=<P4+
01636	R2252.7	P1DRCLS	P1 DOR CLOSE DECELERATE 25%
01637	R2253.0	P2DROPN	P2 DOR CLOSE DECELERATE 25%
01638	R2253.1	SL-OTP	SWING ARM -OT POS
01639	R2253.2	SL-OT	SWING ARM -OT
01640	R2350.0	90,.5<SR	90.05<SR

01641	R2350.1	89.5<SR	89.95<SR
01642	R2350.2	89<S=<90	89.95<SR=<90.05
01643	R2350.3	45.5<SR	45.05<SR
01644	R2350.4	45<S=<89	45.05<SR=<89.95
01645	R2350.5	44.5<SR	44.95<SR
01646	R2350.6	44<S=<45	44.95<SR=<45.05
01647	R2350.7	0.5<SR	0.05<SR
01648	R2351.0	0<S=<44	0.05<SR=<44.95
01649	R2351.1	-0.5<SR	-0.05<SR
01650	R2351.2	-0<S=<0	-0.05<SR=<0.05
01651	R2351.3	-89.5<SR	-89.95<SR
01652	R2351.4	-8<SR=<-0	-89.95<SR=<-0.05
01653	R2351.5	-90.5<SR	-90.05<SR
01654	R2351.6	-9<S=<-8	-90.05<SR=<-89.95
01655	R2351.7	-179.5<SR	-179.95<SR
01656	R2352.0	17<S=<-9	-179.95<SR=<-90.05
01657	R2352.1	-180.5<SR	-180.05<SR
01658	R2352.2	18<SR=<17	-180.05<SR=<-179.95
01659	R2352.3	-269.5<SR	-269.95<SR
01660	R2352.4	26<S=<18	-269.95<SR=<-180.05
01661	R2352.5	-270.5<SR	-270.05<SR
01662	R2352.6	27<S=<26	-270.05<SR=<-269.95
01663	R2352.7	-314.5<SR	-314.95<SR
01664	R2353.0	31<S=<27	-314.95<SR=<-270.05
01665	R2353.1	-315.5<S	-315.05<SR
01666	R2353.2	32<S=<31	-315.05<SR=<-314.95
01667	R2353.3	-359.5<SR	-359.95<SR
01668	R2353.4	35<S=<32	-359.95<SR=<-315.05
01669	R2353.5	-360.5<SR	-360.05<SR
01670	R2353.6	36<S=<35	-360.05<SR=<-359.95
01671	R2360.0	SR0+	SWING ROTARY +0 DEGREE
01672	R2360.1	SR0-	SWING ROTARY -0 DEGREE
01673	R2360.2	SR-90+	SWING ROTARY +90 DEGREE
01674	R2360.3	SR-90-	SWING ROTARY -90 DEGREE
01675	R2360.4	SR-180+	SWING ROTARY +180 DEGREE
01676	R2360.5	SR-180-	SWING ROTARY -180 DEGREE
01677	R2360.6	SR-270+	SWING ROTARY +270 DEGREE
01678	R2360.7	SR-270-	SWING ROTARY -270 DEGREE
01679	R2450.0	ZTRQSTM	Z TORQUE REQ START MEM
01680	R2450.1	ZTRQST1	Z TORQUE REQ ST PULSE

01681	R2450.2	ZTRQSTMS	Z TORQUE REQ ST MEM AUX
01682	R2450.3	ZTRQOF1	Z TORQUE REQ OFF PULSE
01683	R2450.4	ZTRQOFMS	Z TORQUE REQ OFF AUX
01684	R2450.5	ZTRQWIND	Z TORQUE REQ WINDOW ST
01685	R2450.6	ZTRQWINF	Z TORQUE REQ WINDOW FIN
01686	R2700.0	COX	PMC X CTRL
01687	R2700.1	COX1	PMC X CTRL PULSE
01688	R2700.2	COX2	PMC X CTRL PULSE AUX
01689	R2700.3	COX3	PMC X CTRL ON
01690	R2700.4	COXFIN	PMC X CTRL FIN
01691	R2701.0	COXFX3	PMC X CTRL FIN X3
01692	R2710.0	COY	PMC Y CTRL
01693	R2710.1	COY1	PMC Y CTRL PULSE
01694	R2710.2	COY2	PMC Y CTRL PULSE AUX
01695	R2710.3	COY3	PMC Y CTRL ON
01696	R2710.4	COYFIN	PMC Y CTRL FIN
01697	R2711.0	COYFX4	PMC Y CTRL FIN X4
01698	R2711.1	COYFX6	PMC Y CTRL FIN X6
01699	R2720.0	COZ	PMC Z CTRL
01700	R2720.1	COZ1	PMC Z CTRL PULSE
01701	R2720.2	COZ2	PMC Z CTRL PULSE AUX
01702	R2720.3	COZ3	PMC Z CTRL ON
01703	R2720.4	COZFIN	PMC Z CTRL FIN
01704	R2721.0	COZFX2	PMC Z CTRL FIN X2
01705	R2800.0	ACTX	PMC X AXIS
01706	R2800.1	ACTX1	PMC X CTRL PULSE
01707	R2800.2	ACTX2	PMC X CTRL PULSE AUX
01708	R2800.3	ACTX3	PMC X CTRL ON
01709	R2800.4	ACTXFIN	PMC X CTRL FIN
01710	R2801.0	ACTXFX4	PMC X CTRL FIN X4
01711	R2810.0	ACTY	PMC Y CTRL
01712	R2810.1	ACTY1	PMC Y CTRL PULSE
01713	R2810.2	ACTY2	PMC Y CTRL PULSE AUX
01714	R2810.3	ACTY3	PMC Y CTRL ON
01715	R2810.4	ACTYFIN	PMC Y CTRL FIN
01716	R2811.0	ACTYFX4	PMC Y CTRL FIN X4
01717	R2811.1	ACTYFX10	PMC Y CTRL FIN X10
01718	R2820.0	ACTZ	PMC Z CTRL
01719	R2820.1	ACTZ1	PMC Z CTRL PULSE
01720	R2820.2	ACTZ2	PMC Z CTRL PULSE AUX

01721	R2820.3	ACTZ3	PMC Z CTRL ON
01722	R2820.4	ACTZFIN	PMC Z CTRL FIN
01723	R2821.0	ACTZFX2	PMC Z CTRL FIN X2
01724	R2821.1	ACTZFX5	PMC Z CTRL FIN X5
01725	R2821.2	ACTZFX12	PMC Z CTRL FIN X12
01726	R2821.3	ACTZFX13	PMC Z CTRL FIN X13
01727	R2821.4	ACTZFX15	PMC Z CTRL FIN X15
01728	R2821.5	ACTZFX16	PMC Z CTRL FIN X16
01729	R2840.0	ACTA	PMC A CTRL
01730	R2840.1	ACTA1	PMC A CTRL PULSE
01731	R2840.2	ACTA2	PMC A CTRL PULSE AUX
01732	R2840.3	ACTA3	PMC A CTRL ON
01733	R2840.4	ACTAFIN	PMC A CTRL FIN
01734	R2841.0	ACTAFX3	PMC A CTRL FIN X3
01735	R2860.0	ACTSL	PMC SL CTRL
01736	R2860.1	ACTSL1	PMC SL CTRL PULSE
01737	R2860.2	ACTSL2	PMC SL CTRL PULSE AUX
01738	R2860.3	ACTSL3	PMC SL CTRL ON
01739	R2860.4	ACTSLFIN	PMC SL CTRL FIN
01740	R2861.0	ACTSLFX6	PMC SL CTRL FIN X6
01741	R2861.1	ACTSLFX7	PMC SL CTRL FIN X7
01742	R2861.2	ACTSLFX8	PMC SL CTRL FIN X8
01743	R2861.3	ACTSLFM1	PMC SL CTRL FIN M1
01744	R2861.4	ACTSLFM21	PMC SL CTRL FIN M2-1
01745	R2861.5	ACTSLFM22	PMC SL CTRL FIN M2-2
01746	R2861.6	ACTSLF16	PMC SL CTRL FIN X16
01747	R2862.0	ACTSLFM	PMC SL CTRL FIN MEM
01748	R2870.0	ACTSR	PMC SR CTRL
01749	R2870.1	ACTSR1	PMC SR CTRL PULSE
01750	R2870.2	ACTSR2	PMC SR CTRL PULSE AUX
01751	R2870.3	ACTSR3	PMC SR CTRL ON
01752	R2870.4	ACTSRFIN	PMC SR CTRL FIN
01753	R2870.5	ACTSRS1	PMC SR CTRL AUX 1
01754	R2870.6	ACTSRS2	PMC SR CTRL AUX 2
01755	R2871.0	ACTSRFT7	PMC SR CTRL FIN T7
01756	R2871.1	ACTSRFT25	PMC SR CTRL FIN T25
01757	R2871.2	ACTSRFX7	PMC SR CTRL FIN X7
01758	R2871.3	ACTSRFX14	PMC SR CTRL FIN X14
01759	R2871.4	ACTSRFM21	PMC SR CTRL FIN M2-1
01760	R2871.6	ACTSRFM8	PMC SR CTRL FIN M8

01761	R2872.0	ACSRFM	PMC SR CTRL FIN MEM
01762	R3000.0	EX_M_CODE_1	EXTRA M CODE 1
01763	R3000.1	EX_M_CODE_2	EXTRA M CODE 2
01764	R3000.2	EX_M_CODE_3	EXTRA M CODE 3
01765	R3000.4	EX_M_CODE_5	EXTRA M CODE 5
01766	R3000.5	EX_M_CODE_FIN	EXTRA M CODE FINISH
01767	R3000.6	EXMOK	EXTRA M CODE OUTPUT OK
01768	R3001.4	TLBRK	TOOL BROKEN ON
01769	R3004.0	M32LSER	TOUCH SW L.S ERR
01770	R3004.1	M32CHER	TOUCH SW TOOL ERR
01771	R3004.2	M32FIN	M32 FIN
01772	R3004.3	M32S	M32 AUX
01773	R3004.4	TRWSP	TOOL LIFE RESTART STOP
01774	R3005.2	TLBRKM	TOOL BROKEN MEM
01775	R3005.3	BRKHL D	TOOL BROKEN HOLD
01776	R3005.4	BRKSCH	BROKEN PROGRAM SEARCH
01777	R3005.5	BRKSCHOF	BROKEN SEARCH OFF
01778	R3010.3	HSKPWF2	HIGH SKIP PARAM INPUT OFF 2
01779	R3010.5	HSKPWOK2	HIGH SKIP PARAM INPUT OK 2
01780	R3011.0	HSKP1S	HIGH SKIP 1 SELECT
01781	R3011.1	HSKP2S	HIGH SKIP 2 SELECT
01782	R3011.2	HSKPCHG	HIGH SKIP PARAM INPUT
01783	R3011.3	HSKPWF1	HIGH SKIP PARAM INPUT OFF 1
01784	R3011.4	HSKPWNW	HIGH SKIP PARAM INPUT WINDW
01785	R3011.5	HSKPWOK1	HIGH SKIP PARAM INPUT OK 1
01786	R3011.6	HSKP1.M	HIGH SKIP PARAM INPUT MEM
01787	R3011.7	HSKPCHG2	HIGH SKIP PARAM INPUT 2
01788	R3020.0	M64FF	M64 MEM
01789	R3020.1	M66FF	M66 MEM
01790	R3020.2	TPSTSTP	OMI STOP
01791	R3020.3	MPSTOP	MP DETECT STOP
01792	R3400.0	M130FF	MODEL MEM
01793	R3400.1	M132FF	MODEL INTERRUPT
01794	R3400.2	M130S	MODEL AUX
01795	R3400.3	M130STS	MODEL ST AUX
01796	R3400.4	M130STOK	MODEL ST OK
01797	R3400.5	M130ST	MODEL ST
01798	R3400.6	M130ONM	MODEL ST MEM
01799	R3400.7	ZACT	Z COMPENSATION
01800	R3401.0	ZACTST	Z COMPENSATION ST

01801	R3401.1	ZACTST1	Z COMPENSATION ST 1
01802	R3401.2	ZEXINEND	Z COMPENSATION FIN
01803	R3401.4	SPONOK	SP ON OK
01804	R3402.0	SUBBER	SUBB ERR
01805	R3402.1	MULBER	MULB ERR
01806	R3402.2	MULBER1	MULB ERR 1
01807	R3402.3	DIVBER	DIVB ERR
01808	R3402.4	DIVBERI	DIVBB ERRI
01809	R3403.0	SP_Z	SP HEAT TREATMENT COMPENSATION
01810	R3500.0	TC.NORM	T CODE NORMAL
01811	R3500.1	TC.TLIF	T CODE TOOL INFO
01812	R3500.2	TNO.OK	T NO FIN OK
01813	R3500.3	TNO.NG	T NO FIN NG
01814	R3500.4	TNO.ANS	T NO READ FIN
01815	R3500.5	NG=TL0	POT NO EQ 0 ERR
01816	R3500.6	NG=SPTL	SP TOOL NO EQ 0 ERR
01817	R3500.7	NG=TLNO	TOOL NO DETE EQ 0 ERR
01818	R3501.0	NG=TLBK	TOO NO BROKEN ERR
01819	R3501.1	TNOALM	TOOL NO AL
01820	R3501.2	TCODE=0	T CODE EQ 0
01821	R3501.3	TFOK	T CODE READ OK
01822	R3501.4	TFNG	T CODE READ NG
01823	R3501.5	TLRQON	TOOL REQUIRE ON
01824	R3501.6	NTRQOK	NEW TOOL REQUIRE OK
01825	R3501.7	NTRQNG	NEW TOOL REQUIRE NG
01826	R3502.0	TLRQOK	TOOL REQUIRE OK
01827	R3502.1	NTRQCHK	NEW TOOL REQUIRE OFF CHECK
01828	R3502.2	TLRQOK1	TOOL REQUIRE FIN
01829	R3502.3	OLTLREQ1	OLD TOOL REQUIRE FIN
01830	R3502.4	M30TLRQS	M30 TOOL REQUIRE
01831	R3502.5	M30RQOK	M30 TOOL REQUIRE OK
01832	R3502.6	TLFOVS1	TOOL LIFE OVERWRITE REQ
01833	R3502.7	TLFOVS2	TOOL LIFE OVERWRITE REQ AUX
01834	R3503.0	TLFOVWR	TOOL LIFE OVERWRITE DATA SET
01835	R3503.1	TLLFCTOK	TOOL LIFE CNT OK
01836	R3503.3	TLLFCNT	TOOL LIFE CNT
01837	R3503.4	TNOALMHL	TOOL NO AL MACHINE HOLD
01838	R3503.5	TFO=0	TOOL LIFE OVERWRITE DATA EQ 0
01839	R3503.6	TPO>1023	TOL LIFE OVERWRITE DATA>1023
01840	R3503.7	TLFNSET	TOOL LIFE OFF TIMER SET

01841	R3504.0	TLFNFIN	TOOL LIFE NO FIN
01842	R3504.1	TLBRKSET	TOOL BORKEN INFO SET
01843	R3504.2	TLBKFIN	TOOL BROKEN INFO FIN
01844	R3504.3	LDMTSK	TOOL SKIP LOAD MONITOR
01845	R3504.4	LDSKPOKF	TOL LOAD MONITOT SKIP OK FIN
01846	R3504.5	AMCSSKP	AMCS SKIP
01847	R3504.6	AMCSSKOK	AMCS SKIP OK
01848	R3504.7	U027ON	TOOL BROKEN COMMEND
01849	R3505.0	U027ON1	TOOL BROKEN COMMEND 1
01850	R3505.1	TLLFRST	TOOL LIFE RESET
01851	R3505.2	TLLFROF	TOOL LIFE RESET OFF CHECK
01852	R3505.3	TLLFRSF	TOOL LIFE RESET FIN
01853	R3506.0	TFACTOK	T CODE RUN OK
01854	R3530.2	TM.TLLIF	TOOL LIFE TIMER
01855	R4000.4	MAN	EACH SELECT
01856	R4000.5	MAN1	M/C SELECT
01857	R4000.6	MAN2	ATC SELECT 1
01858	R4000.7	MAN3	ATC SELECT 2
01859	R4002.3	R0%	RAPID OVEERIDE 0%
01860	R4002.4	R1%	RAPID OVEERIDE 1%
01861	R4002.5	R5%	RAPID OVEERIDE 5%
01862	R4002.6	R10%	RAPID OVEERIDE 10%
01863	R4002.7	R50%	RAPID OVEERIDE 50%
01864	R4003.1	AXISITLK	AXIS INTERLOCK
01865	R4004.0	TEACHIN	TEACHIN MODE
01866	R4004.1	JOG_MOD	JOG MODE
01867	R4004.3	HANINRPT	HANDLE INEX REQ TOOL
01868	R4004.4	R100%	RAPID OVEERIDE 100%
01869	R4004.5	RCH	RAPID EXCHANGE
01870	R4005.0	HPSV-SA	HANDLE PROSESS SERVO SWING AR
01871	R4005.1	HMOFF.S	HANDLE MONITOR OFF SELECT
01872	R4005.2	CSHM1	CS AXIS MANUAL MODE 1
01873	R4005.3	CSHM2	CS AXIS MANUAL MODE 2
01874	R4005.4	CSHM.M	CS AXIS MANUAL MODE KEEP
01875	R4006.1	JOG+	+JOG
01876	R4006.2	JOG-	- JOG
01877	R4006.6	JG+OFCCHK	+JOG OFFCHECK
01878	R4006.7	JG-OHCHK	-JOG OFFCHECK
01879	R4007.0	MULERR	MUL ERR
01880	R4007.2	MULERR1	MUL ERR1

01881	R4009.0	M01_MEM	M01 MEMORY
01882	R4010.0	OV $\overline{R}1$	OVERRIDE 1
01883	R4010.1	OV $\overline{R}2$	OVERRIDE 2
01884	R4010.2	OV $\overline{R}4$	OVERRIDE 4
01885	R4010.3	OV $\overline{R}8$	OVERRIDE 8
01886	R4010.4	OV $\overline{R}16$	OVERRIDE 16
01887	R4016.0	MEM.S	MEMORY MODE
01888	R4016.1	EDT.S	EDIT MODE
01889	R4016.2	MDI.S	MDI MODE
01890	R4016.3	TAP.S	DNC MODE
01891	R4016.4	HAN.S	HANDLE MODE
01892	R4016.5	JOG-L.S	JOG MODE AUX
01893	R4017.0	RT.S	RAPID MODE
01894	R4017.1	ZRN.S	ZERO REFERENCE MODE
01895	R4017.2	MAN.S	MANUAL MODE
01896	R4017.3	X,S	AXIS SELECT X
01897	R4017.4	Y,S	AXIS SELECT Y
01898	R4017.5	Z,S	AXIS SELECT Z
01899	R4017.6	4,S	AXIS SELECT 4TH
01900	R4017.7	5,S	AXIS SELECT 5TH
01901	R4018.0	AUX,S	AUX AXIS SELECT
01902	R4018.2	LIT_ON/O \overline{F} _TIME	AL LIGHT ON/OFF TIME 3
01903	R4020.0	FV0.S	FEED OVERRIDE 0%
01904	R4020.1	FV10.S	FEED OVERRIDE 10%
01905	R4020.2	FV20.S	FEED OVERRIDE 20%
01906	R4020.3	FV30.S	FEED OVERRIDE 30%
01907	R4020.4	FV40.S	FEED OVERRIDE 40%
01908	R4020.5	FV50.S	FEED OVERRIDE 50%
01909	R4020.6	FV60.S	FEED OVERRIDE 60%
01910	R4020.7	FV70.S	FEED OVERRIDE 70%
01911	R4021.0	FV80.S	FEED OVERRIDE 80%
01912	R4021.1	FV90.S	FEED OVERRIDE 90%
01913	R4021.2	FV100.S	FEED OVERRIDE 100%
01914	R4021.3	FV110.S	FEED OVERRIDE 110%
01915	R4021.4	FV120.S	FEED OVERRIDE 120%
01916	R4021.5	FV130	FEED OVERRIDE 130%
01917	R4021.6	FV140.S	FEED OVERRIDE 140%
01918	R4021.7	FV150.S	FEED OVERRIDE 150%
01919	R4022.0	FV160.S	FEED OVERRIDE 160%
01920	R4022.1	FV170.S	FEED OVERRIDE 170%

01921	R4022.2	FV180.S	FEED OVERRIDE 180%
01922	R4022.3	FV190.S	FEED OVERRIDE 190%
01923	R4022.4	FV200.S	FEED OVERRIDE 200%
01924	R5000.0	NC_STOP_TIMER	NC STOP DELAY TIMER
01925	R5000.1	TMRB2	NC & SERVO RDY DET TIMER
01926	R5000.2	TMSMP	STATUS LIGHT ON/OFF TIMER
01927	R5000.3	EMG_DELAY_TIMER	EMG DELAY TIMER
01928	R5000.4	TMDEN	DEN TIMER
01929	R5000.5	TMCYST	CYCLE START DELAY TIMER
01930	R5000.6	CYST2T	CYCLE START 2 MEM DELAY TIMER
01931	R5000.7	TMEXMS	EXTRA M CODE DELAY TIMER
01932	R5001.0	WKLYDRY	WEEK PROG RESTART DELAY TIME
01933	R5001.3	AUTO_PW_OF_TIMG	AUTO POWER OFF TIMING
01934	R5001.4	TMM32C	TOUCH SW CHECK
01935	R5001.5	TMRCSMCR	CUSTOM MACRO TIMER
01936	R5001.7	TMRBM_32	SKIP INPUT RELAY ON TIMER
01937	R5002.0	MAG.DOR.CL	MAGAZINE DOOR CLOSE
01938	R5002.1	MAG.DOR.OP	MAGAZINE DOOR OPEN
01939	R5003.2	TMRAIR	AIR LOW DETECT TIMER
01940	R5003.3	TMRBO&AF	LUBE LOW DETECT TIMER
01941	R5003.5	TMRBPSOF	PRESSURE SW OFF TIMER
01942	R5004.7	ATC_AIR_DET_TIME	ATC AIR PRESSURE DETECT TIMER
01943	R5005.0	ATLUBCLK	AUTO LUBE TIMER
01944	R5005.1	O&AAIR_ON_AUX	O & A AIR ON AUX
01945	R5005.2	O&AVACOF	O&A VACUUM OFF
01946	R5005.3	HYD_MOTOR_STP	HYDRAULIC MOTOR STOP
01947	R5006.0	TMRBSPE	SP SAR TIMER
01948	R5006.1	TMRSPD	SP START CHECK TIMER
01949	R5006.2	TMRSPSTP	SP STOP TIMER
01950	R5006.3	TMRB_RGT	RIGID TAP TIMER
01951	R5006.4	SPMSCHG	SP GEAR CHANGE TIMER
01952	R5007.0	TMRORI	M19 CHECK TIMER
01953	R5007.1	TMRORIF	M19 FIN TIMER
01954	R5007.2	SPLSCHK	SP CLAMP DETECT TIMER
01955	R5007.3	SCOODOK	S CODE OK
01956	R5007.5	SPTYPCHK	SP TYPE CHECK TIMER
01957	R5007.7	ALM64	SP CONFIRM AL
01958	R5009.0	TMRGFLT	FILTER CLOGGING DETE TIMER
01959	R5012.0	ATCOVR	ATC CYC TIMER OVER
01960	R5012.1	TMMG4TMR	DATA SET TIMER

01961	R5012.2	MGSTPT	MG STOP TIMER
01962	R5012.3	INDXCINT	MG INDEX TIMER
01963	R5012.4	SPCLAL	SP TOOL CLP AL
01964	R5012.5	SA0-270	SWING ARM 0 MOVE TO 270 DEG
01965	R5012.6	TLSALM	HAND ATC HEAD CLAMP TIMER
01966	R5012.7	SPUNCPB	SP UNCLP PB
01967	R5013.0	SHFCHK	ARM FORWARD RTY CHECK
01968	R5013.1	SHFR2T	ARM DOUBLE BACKWARD RTY TIMER
01969	R5013.2	SHFR1T	ARM BAKRD&FORD RTY TIMER
01970	R5013.3	SHBCHK	ARM CHUCK CLOSE RTY CHECK
01971	R5013.4	SHBR2T	ARM CHUCK DOUBLE CLOSE RTY TMR
01972	R5013.5	SHBR1T	ARM CHUCK CLS&OPEN RTY TMR
01973	R5013.6	SHCCCHK	ARM CHUCK OPEN RTY CHECK
01974	R5013.7	SHCCR2T	ARM CHUCK DOUBLE OPEN RTY TMR
01975	R5014.0	SHCCR1T	ARM CHUCK OPEN&CLS RTY TMR
01976	R5014.1	SHCOCHK	ARM UNCLP RTY CHECK
01977	R5014.2	SHCOR2T	ARM BOUBLE UNCLP TIMER
01978	R5014.3	SHCOR1T	ARM UNCLP&CLP TIMER
01979	R5014.4	HUCCHK	HEAD UNCLP RTY CHECK
01980	R5014.5	HUCOR2T	HEAD DOUBLE UNCLP TIMER
01981	R5014.6	HUCOR1T	HEAD CLP&UNCLP TIMER
01982	R5014.7	HCCHK	HEAD CLP RTY CHECK
01983	R5015.0	HCOR2T	HEAD DOUBLE CLP TIMER
01984	R5015.1	HCOR1T	HEAD CLP&UNCLP TIMER
01985	R5025.2	TNORQTP	TOOL NO READ AUTO OP TIMER
01986	R5025.3	TM,TLRQ	TOL NO REQU AUTO OP TIMER
01987	R5025.4	TM.M30RQ	M30 TOL NO REQU AUTO OP TMR
01988	R5028.0	M66OFF	M66 OFF TIMER
01989	R5028.1	M64FFCHK	M64 FIN CHECK
01990	R5028.2	OMIOFF	OMI OFF
01991	R5028.3	OMISTT	OMI RESTART TIMER
01992	R5028.4	M64STOK	M64 START OK
01993	R5028.5	SPONOK1	SP RUNING
01994	R5028.6	TMROFSET	WINDOW OFFSET TIMER
01995	R5030.0	T.YBRKOF	Y BRAKE OFF DETECT TIMER
01996	R5030.1	T.PWOK1C	PSM 1 SIGNAL ERR
01997	R5031.0	PILZERR	PILZ SIGNAL ERROR TIMER
01998	R5031.1	PSM_OFF_DELAY	PSM OFF DELAY TIMER
01999	R5031.4	JOGTIM	JOG MODE TIMER
02000	R5045.0	TNO.DSP	PRG CHECK WINDOW T NO DISP

02001	R5064.0	TMRLBON	GREASE PUMP ON TIMER
02002	R5064.2	SBSTTUP	SINGLE BRKE STOP AL
02003	R5064.3	TMRSPSTP1	SPINDLE CHILLER STOP TIMER
02004	R5064.6	TMRCHPON	CHIP CON ON TIMER
02005	R5064.7	TMRCHPOF	CHIP CON OFF TIMER
02006	R5065.0	TMRTAP	TAPPING TIMER
02007	R5065.1	TMR4A.CL	4TH AXIS CLAMP DELAY TIMER
02008	R5065.2	TMR4A.UN	4TH AXIS UNCLAMP DELAY TIMER
02009	R5065.3	TMR5A.CL	5TH AXIS CLAMP DELAY TIMER
02010	R5065.4	TMR5A.UN	5TH AXIS UNCLAMP DELAY TIMER
02011	R5066.0	M130ONRS	MOTOR CYC ON
02012	R5067.1	TMROIL	SP OIL ON TIMER
02013	R5067.3	TMRWKTIM	TABLE CLEAN ON TIMER
02014	R5067.6	TMLD.WRN	LOAD MONITOR WEEK TIMER
02015	R5067.7	TMLD.ARM	LOAD MONITOR AL TIMER
02016	R5068.1	BOST_PMP_ON_TIME	BOOSTER PUMP ON DELAY TIMER
02017	R5068.2	TMR_M56	BOOSTER PUMP SMALL TIMER
02018	R5068.3	TMR_M55	BOOSTER PUMP MIDDLE TIMER
02019	R5068.4	TMR_M54	
02020	R5068.7	MSTOFDLY	OIL MIST COLLECTOR OFF DELAY
02021	R5069.1	TMRTQOV2	CHIP CON TORQUE CHECK TIMER 2
02022	R5069.2	TMRTQOV1	CHIP CON TORQUE CHECK TIMER 1
02023	R5069.3	TMRBCLT	CHIP COOLANT OUTPUT TIMER
02024	R5069.5	TSWAIRT	TOUCH SW AIR BLOW TIMER
02025	R5070.0	SHF1	ARM FORWARD 1
02026	R5070.1	SHB1	ARM BACKWARD 1
02027	R5070.2	SHCO1	ARM CHUCK OPEN
02028	R5070.3	SHCC1	ARM CHUCK CLOSE
02029	R5070.4	SPUNCLP	SP TOOL UNCLP
02030	R5070.5	SPCLP	SPINDLE CLAMP
02031	R5070.6	SHHC1	ARM HEAD CLP
02032	R5070.7	SHHUC1	ARM HEAD UNCLP
02033	R5071.0	ZAIRT	Z AIR STOP TIMER
02034	R5071.1	MGF1	MG FORWARD 1
02035	R5071.2	MGB1	MG BACKWARD 1
02036	R5096.5	CTR_6.UP	SP OIL OUTPUT COUNT INTPT TMR
02037	R5300.3	M03	SPINDLE CW ROTARY
02038	R5300.4	M04	SPINDLE CCW ROTARY
02039	R5300.5	M05	SPINDLE STOP
02040	R5300.6	M06	AUTO TOOL CHANGE

02041	R5300.7	M07	CUTTING AIR BLAST
02042	R5301.0	M08	COOLANT ON
02043	R5301.1	M09	COOLANT OFF
02044	R5301.2	M10	C AXIS TABLE CLAMP
02045	R5301.3	M11	C AXIS TABLE UNCLAMP
02046	R5301.4	M12	A AXIS TABLE CLAMP
02047	R5301.5	M13	A AXIS TABLE UNCLAMP
02048	R5301.7	M15	CHIP FLUSH PUMP ON
02049	R5302.0	M16	CHIP FLUSH PUMP OFF
02050	R5302.3	M19	SPINDLE ORIENTATION
02051	R5302.4	M20	ATC DOOR CLOSE
02052	R5302.5	M21	ATC DOOR OPEN
02053	R5303.5	M29	RAGIP TAPPING
02054	R5304.4	M36	OVC OFF
02055	R5304.5	M37	OVC ON
02056	R5305.5	M45	CHIP CONVEYOR ON
02057	R5305.6	M46	CHIP CONVEYOR OFF
02058	R5306.0	M48	
02059	R5306.1	M49	
02060	R5306.2	M50	CTS MOTOR ON
02061	R5306.3	M51	CTS MOTOR OFF
02062	R5306.4	M52	CHIP CONVEYOR ON
02063	R5306.5	M53	CHIP CONVEYOR OFF
02064	R5309.7	M79	DEFINE SPINDLE TOOL NO.
02065	R5310.2	M82	SPINDLE TOOL CLAMP
02066	R5310.3	M83	SPINDLE TOOL UNCLAMP
02067	R5310.4	M84	MAGAZINE SELECT SP TOOL
02068	R5310.5	M85	MAGAZINE SELECT T CODE
02069	R5312.4	M100	MAGAZINE FORWARD
02070	R5312.5	M101	MAGAZINE RETURN
02071	R5313.7	M111	EXTERNAL M CODE 1
02072	R5314.0	M112	EXTERNAL M CODE 2
02073	R5314.1	M113	EXTERNAL M CODE 3
02074	R5314.2	M114	EXTERNAL M CODE 4
02075	R5314.3	M115	EXTERNAL M CODE 5
02076	R5314.4	M116	EXTERNAL M CODE 6
02077	R5314.5	M117	EXTERNAL M CODE 7
02078	R5317.0	M136	M136
02079	R5317.1	M137	M137
02080	R5500.0	M00FIN	M00 FINISH

02081	R5500.1	M01FIN	M01 FINISH
02082	R5500.3	M03FIN	M03 FINISH
02083	R5500.4	M04FIN	M04 FINISH
02084	R5500.5	M05FIN	M05 FINISH
02085	R5500.6	M06FIN	M06 FINISH
02086	R5500.7	M07FIN	M07 FINISH
02087	R5501.0	M08FIN	M08 FINISH
02088	R5501.1	M09FIN	M09 FINISH
02089	R5501.2	M10FIN	M10 FINISH
02090	R5501.3	M11FIN	M11 FINISH
02091	R5501.4	M12FIN	M12 FINISH
02092	R5501.5	M13FIN	M13 FINISH
02093	R5501.7	M15FIN	CHIP FLUSH ON FINISH
02094	R5502.0	M16FIN	CHIP FLUSH OFF FINISH
02095	R5502.2	M18FIN	M18 FINISH
02096	R5502.3	M19FIN	M19 FINISH
02097	R5502.4	M20FIN	MAGAZINE DOOR CLOSE FINISH
02098	R5502.5	M21FIN	MAGAZINE DOOR OPEN FINISH
02099	R5503.2	M26FIN	M26 FINISH
02100	R5503.3	M27FIN	M27 FINISH
02101	R5503.5	M29FIN	M29 FINISH
02102	R5504.0	M32FIN1	M32 FINISH
02103	R5504.4	M36FIN	M36 FINISH
02104	R5504.5	M37FIN	M37 FINISH
02105	R5505.3	M43FIN	M43 FINISH
02106	R5505.4	M44FIN	M44 FINISH
02107	R5505.5	M45FIN	M45 FINISH
02108	R5505.6	M46FIN	M46 FINISH
02109	R5505.7	M47FIN	M47 FINISH
02110	R5506.0	M48FIN	M48 FINISH
02111	R5506.1	M49FIN	M49 FINISH
02112	R5506.2	M50FIN	M50 FINISH
02113	R5506.3	M51FIN	M51 FINISH
02114	R5506.4	M52FIN	M52 FINISH
02115	R5506.5	M53FIN	M53 FINISH
02116	R5506.6	M54FIN	M54 FINISH
02117	R5506.7	M55FIN	M55 FINISH
02118	R5507.0	M56FIN	M56 FINISH
02119	R5507.1	M57FIN	M57 FINISH
02120	R5507.2	M58FIN	M58 FINISH

02121	R5507.5	M61FIN	M61 FINISH
02122	R5507.6	M62FIN	M62 FINISH
02123	R5507.7	M63FIN	M63 FINISH
02124	R5508.0	M64FIN	M64 FINISH
02125	R5508.2	M66FIN	M66 FINISH
02126	R5509.7	M79FIN	M79 FINISH
02127	R5510.2	M82FIN	SP TOOL CLP FIN
02128	R5510.3	M83FIN	SP TOOL UNCLP FIN
02129	R5510.4	M84FIN	MG SP TOOL INDEX FIN
02130	R5510.5	M85FIN	MG T CODE INDEX FIN
02131	R5510.6	M86FIN	ALL AXIS INTERLOCK PASS FIN
02132	R5510.7	M87FIN	ALL AXIS INTLOCK PASS OFF FIN
02133	R5511.1	M89FIN	ATC RESTART FIN
02134	R5511.2	M90FIN	M90 FINISH
02135	R5512.4	M100FIN	MAGAZINE EXTEND FIN
02136	R5512.5	M101FIN	MAGAZINE TETURN FIN
02137	R5512.6	M102FIN	SWING ARM FORWARD&RUN FIN
02138	R5512.7	M103FIN	SWING ARM BACKWARD&RUN FIN
02139	R5513.0	M104FIN	SWING ARM BRD FIN DECEL MD ON
02140	R5513.1	M105FIN	SWING ARM BRD FIN DECE MD OFF
02141	R5513.2	M106FIN	ARM CHUCK OPEN FIN
02142	R5513.3	M107FIN	ARM CHUCK CLOSE FIN
02143	R5513.4	M108FIN	MG WAIT TOOL INDEX FIN
02144	R5513.5	M109FIN	MG RETURN TOOL INDEX FIN
02145	R5513.7	M111FIN	M111 FIN
02146	R5514.0	M112FIN	M112 FIN
02147	R5514.1	M113FIN	M113 FIN
02148	R5514.2	M114FIN	M114 FIN
02149	R5514.3	M115FIN	M115 FIN
02150	R5514.4	M116FIN	M116 FIN
02151	R5514.5	M117FIN	M117 FIN
02152	R5515.0	M120FIN	ARM HEAD CLP FIN
02153	R5515.1	M121FIN	ARM HEAD UNCLP FIN
02154	R5515.2	M122FIN	SWING ARM 90 DEGREE
02155	R5515.3	M123FIN	SWING ARM 45 DEGREE
02156	R5515.4	M124FIN	SWING ARM 0 DEGREE
02157	R5515.5	M125FIN	SWING ARM -90 DEGREE
02158	R5515.6	M126FIN	SWING ARM -180 DEGREE
02159	R5515.7	M127FIN	SWING ARM -270 DEGREE
02160	R5516.0	M128FIN	SWING ARM -315 DEGREE

02161	R5516.1	M129FIN	SWING ARM -360 DEGREE
02162	R5516.2	M130FIN	SP HEAT DISPLACE COMPENSATION
02163	R5516.3	M131FIN	SP HEAT DISPLACE COMPENSATION
02164	R5516.4	M132FIN	SP HEAT DISPLACE COMPENSATION
02165	R5516.5	M133FIN	SP HEAT DISPLACE COMPENSATION
02166	R5516.6	M134FIN	SP HEAT DISPLACE COMPENSATION
02167	R5517.0	M136FIN	MG FORWARD FIN
02168	R5517.1	M137FIN	MG BACKWARD FIN
02169	R5550.0	M400FIN	M400 FIN
02170	R5550.1	M401FIN	M401 FIN
02171	R5550.2	M402FIN	M402 GIN
02172	R5550.4	M404FIN	M404 FIN
02173	R5550.5	M405FIN	M405 FIN
02174	R5550.6	M406FIN	M406 FIN
02175	R5550.7	M407FIN	M407 FIN
02176	R5551.0	M408FIN	M408 FIN
02177	R5551.1	M409FIN	M409 FIN
02178	R5552.2	M418FIN	M418 FIN
02179	R5553.0	M424FIN	M424 FIN
02180	R5553.1	M425FIN	M425 FIN
02181	R5553.2	M426FIN	M426 FIN
02182	R5553.3	M427FIN	M427 FIN
02183	R5553.4	M428FIN	M428 FIN
02184	R5700.0	MF2SON1	2ND M CODE ON 1
02185	R5700.1	MF2SON	2ND M CODE ON
02186	R5700.2	MF2SON2	2ND M CODE ON 2
02187	R5700.3	MF2SONM	2ND M CODE ON MEM
02188	R5700.4	MF3SON1	3RD M CODE ON 1
02189	R5700.5	MF3SON	3RD M CODE ON
02190	R5700.6	MF3SON2	3RD M CODE ON 2
02191	R5700.7	MF3SONM	3RD M CODE ON MEM
02192	R5701.0	MF1SONM	1ST M CODE ON 1
02193	R5701.1	MF1SON1	1ST M CODE ON
02194	R5701.2	MF1SON	1ST M CODE ON 2
02195	R5701.3	MF1SON2	1ST M CODE ON MEM
02196	R5701.4	MF2SET	2ND M CODE SET
02197	R5701.5	MF3SET	3RD M CODE SET
02198	R5702.0	MF1ON	1ST M CODE RUN
02199	R5702.1	MF2ON	2ND M CODE RUN
02200	R5702.2	MF3ON	3RD M CODE RUN

02201	R5702.3	MFON	M CODE ON
02202	R5702.4	MFINALL	ALL M CODE FIN
02203	R5702.5	MCLEAR	M CODE CLEAR
02204	R5702.6	MCDDMY	M CODE RUNNING
02205	R5703.0	MFINA	M FUN FIN A
02206	R5703.1	MFINB	M FUN FIN B
02207	R5703.2	MFINC	M FUN FIN C
02208	R5703.3	MFIND	M FUN FIN D
02209	R5703.4	MFINE	M FUN FIN E
02210	R5703.5	MFINF	M FUN FIN F
02211	R5703.6	MFING	M FUN FIN G
02212	R5703.7	MFINH	M FUN FIN H
02213	R5800.0	ALM01	QF1 FUSE OL
02214	R5800.1	ALM02	
02215	R5800.2	ALM03	
02216	R5800.3	ALM04	QF204 OVERLOAD AL
02217	R5800.4	ALM05	
02218	R5800.6	ALM07	
02219	R5800.7	ALM08	
02220	R5801.5	ALM14	
02221	R5802.0	ALM17	
02222	R5802.3	ALM20	
02223	R5802.4	ALM21	
02224	R5802.5	ALM22	
02225	R5802.6	ALM23	CHIP OIL MOTOR AL
02226	R5803.0	ALM25	
02227	R5803.2	ALM27	
02228	R5803.5	ALM30	CHIP CONVEYOR PUMP O.L
02229	R5803.6	ALM31	
02230	R5803.7	ALM32	
02231	R5804.1	ALM34	
02232	R5804.6	ALM39	
02233	R5804.7	ALM40	
02234	R5805.0	ALM41	
02235	R5805.2	ALM43	
02236	R5806.0	ALM1060	MAGAZINE POT EMPTY ALARM
02237	R5806.1	ALM1061	SUB-OP BOARD VALID
02238	R5806.2	ALM1062	ATC DOOR OPEN ALARM
02239	R5806.3	ALM1063	MAGAZINE RETURN ALARM
02240	R5806.4	ALM1064	MAGAZINE MAINTENANCE MODE ON

02241	R5807.0	ALM1070	SPINDLE EMPTY ALARM
02242	R5807.1	ALM58	
02243	R5807.2	ALM59	
02244	R5807.3	ALM60	
02245	R5807.4	ALM61	
02246	R5807.6	ALM63	
02247	R5807.7	ALM64-1	
02248	R5808.0	ALM65	
02249	R5808.1	ALM66	
02250	R5808.2	ALM67	
02251	R5808.5	ALM70	
02252	R5808.6	ALM71	
02253	R5809.1	ALM74	WAIT&SP EQ 0 AL
02254	R5809.2	ALM75	
02255	R5809.3	ALM76	SP&T CODE EQ 0 AL
02256	R5809.4	ALM77	MG T NO EQ 0 AL
02257	R5809.5	ALM78	ATC MG DOOR OPEN AL
02258	R5809.7	ALM80	MG RET SIDE DETE TOOL AL
02259	R5810.0	ALM81	ATC CYC AL
02260	R5810.4	ALM85	ATC INITIAL OFF AL
02261	R5811.0	ALM89	Z LOAD LIMIT AL
02262	R5811.1	ALM90	ATC T CYC ON AL
02263	R5811.2	ALM91	ATC M CYC ON AL
02264	R5811.3	ALM92	PMC CONTROL AL
02265	R5811.4	ALM93	SP WAIT RET&INDEX TOL AL
02266	R5811.5	ALM94	ARM RET SIDE DETE T AL
02267	R5811.6	ALM95	ARM RET SIDE MEM EQ 0 AL
02268	R5811.7	ALM96	SP T NO INDEX AL
02269	R5816.0	ALM129	CHIP CON IN STOP AL
02270	R5816.1	ALM130	CHIP CON OVERTORQUE 1 AL
02271	R5816.2	ALM131	CHIP CON OVERTORQUE 2 AL
02272	R5816.3	ALM132	CHIP CON OVERTORQUE 3 AL
02273	R5816.5	ALM134	CHIP OIL LOW LEVEL AL
02274	R5816.6	ALM135	SUB CHIP OIL TANL LOW AL
02275	R5816.7	ALM136	BOOSTER OIL LEVEL LOW AL
02276	R5817.1	ALM138	COOLANT FILTER CLOGGING AL
02277	R5817.4	ALM141	ATC AIR LOW AL
02278	R5817.5	ALM142	SP LUB OIL LEV LOW
02279	R5817.6	ALM143	SP LUB OIL PRESSURE ERROR
02280	R5817.7	ALM144	AIR PRESSURE LOW AL

02281	R5818.0	ALM145	CHIP COOL FILT TANK BREAK AL
02282	R5818.1	ALM146	CHIP WATER&OIL LEV LOW AL
02283	R5818.2	ALM147	GREASE PUMP PRESSURE LOW AL
02284	R5818.3	ALM148	COOLER TANK LEVEL LOW AL
02285	R5818.6	ALM151	SPINDLE COOLANT ALARM 1
02286	R5819.1	ALM154	CHIP OIL CHILLER AL
02287	R5819.2	ALM155	SPINDLE COOLANT OFF AL
02288	R5819.5	ALM158	AUTO FIRE OFF PS OFF AL
02289	R5819.6	ALM159	PS OFF AL
02290	R5819.7	ALM160	TOOL LIFE AL
02291	R5820.0	ALM161	TOOL BROKEN DETE AL
02292	R5820.1	ALM162	HIGH SKIP PARAM INPUT ERROR
02293	R5820.2	ALM163	TOUCH SW AL
02294	R5820.3	ALM164	MP EQUIPMENT AL
02295	R5820.4	ALM165	MP BATTERY LOW AL
02296	R5820.6	ALM167	LOAD MONITOR AL
02297	R5820.7	ALM168	LOAD MONITOR ERR MACHINE STOP
02298	R5821.7	ALM176	TOOL PRESET AL
02299	R5822.1	ALM178	PROGRAM SERCH ERROR
02300	R5822.2	ALM179	
02301	R5822.3	ALM180	OP DOOR OPEN AL
02302	R5822.6	ALM183	PC ACCOUNT ERR
02303	R5823.0	ALM195	AXIS INTERLOCK IGNORE AL
02304	R5823.1	ALM186	
02305	R5823.2	ALM187	ATC JOG AL
02306	R5823.3	ALM188	ATC TEST AL
02307	R5823.7	ALM192	SINGLE STOP AL
02308	R5824.3	ALM196	MIST COLLECTOR PROTECTOR AL
02309	R5824.5	ALM198	AIR PRESSURE SWITCH OFF AL
02310	R5825.0	ALM201	TOOL POT NO EQ 0 AL
02311	R5825.1	ALM202	SP T NO EQ 0 AL
02312	R5825.2	ALM203	T NO NONDETECT AL
02313	R5825.3	ALM204	TOOL BORKEN NO BE UES AL
02314	R5825.4	ALM205	TOOL INFO DATA NG AL
02315	R5825.5	ALM206	T NO READ CYC AUTO OP AL
02316	R5825.6	ALM207	TOOL INFO KIND AL
02317	R5825.7	ALM208	T NO CYC AL
02318	R5826.0	ALM209	AUTO OP TIMER TOOL NO AL
02319	R5826.1	ALM210	M30 AUTO OP INFO AL
02320	R5826.2	ALM211	TOOL LIFE OVERWRITE INFO AL

02321	R5826.3	ALM212	TOOL LIFE NO SET INFO AL
02322	R5826.4	ALM213	TOOL BROKEN INFO AL
02323	R5826.5	ALM214	TOOL LOAD MONITOR INFO AL
02324	R5826.6	ALM215	AMCS TOOL SKIP INFO AL
02325	R5826.7	ALM216	TOOL LIFR RESET AL
02326	R5827.0	ALM217	PRINT REQUEST ERROR
02327	R5827.1	ALM218	PMC INTERFACE ERR FIN AL
02328	R5827.2	ALM219	PILZ SIGNAL AL
02329	R5827.3	ALM220	PS 1 SIGNAL AL
02330	R5827.6	ALM223	COOLANT TANK LEV LOW CHECK
02331	R5827.7	ALM224	MCC OFF CHECK AL
02332	R5830.3	ALM244	SP COMPENSATION PLUS DATA AL
02333	R5830.4	ALM245	SP COMPENSATION MINUS DATA AL
02334	R5830.5	ALM246	COMPENSATION ACCOUNT AL
02335	R5830.6	ALM247	WORK OFSET NO DATA NONSET AL
02336	R5830.7	ALM248	WORK OFFSET NO AL
02337	R5950.0	ALMDET1	ALARM DETECT 1
02338	R5950.1	ALMDET2	ALARM DETECT 2
02339	R5950.2	ALMDET3	ALARM DETECT 3
02340	R5950.3	ALMDET4	ALARM DETECT 4
02341	R5950.4	ALMDET5	ALARM DETECT 5
02342	R5950.5	ALMDET6	ALARM DETECT 6
02343	R5950.6	ALMDET7	ALARM DETECT 6
02344	R5950.7	ALMDET8	ALARM DETECT 8
02345	R5951.0	ALMDET7S	ALARM DETECT 7 AUX
02346	R5952.0	ALM_DET	MESSAGE DIIPLAY AL
02347	R5954.5	PRP_OFF1	AUTO OP RDY OFF 1
02348	R5954.6	BZ_AUX	BUZZER ON AUX
02349	R5954.7	ALMHLD.S	ALARM HOLD AUX
02350	R5955.0	ALM_HOLD	ALARM HOLD
02351	R5955.1	ST_BLK	AUTO START BE LOCK
02352	R5955.2	SBK_STP	SIGNAL BLOCK STOP
02353	R5955.3	BZ_STP	BUZZER STOP
02354	R5955.4	PTL_STP	AL LIGHT STOP
02355	R5957.0	M0-2FIN	M00&M02 FIN
02356	R5957.1	M0-2FINS	M00&M02 FIN PROCESS
02357	R5957.2	M0-2FIN1	M00&M02 FIN 1
02358	R5957.3	M0-2FIN2	M00&M02 FIN AUX
02359	R5960.0	STLS	START ON AUX
02360	R5960.4	FIRE.MEM	FIRE MEMORY

02361	R5960.5	AIR_SWOK	AIR PRESSURE SWITCH DETECT OK
02362	R7000.0	PTNOREQ	POT NO REQUIRE
02363	R7000.2	NTREQ	NEW TOOL REQUIRE
02364	R7000.4	OLTLREQ	OLD TOOL REQUIRE
02365	R7000.5	M30TLRQ	M30 TOOL REQUIRE
02366	R7000.6	TLBRKRQ	TOOL BROKEN REQUIRE
02367	R7001.0	LDMONRQ	LOAD MONITOR ERR REQUIRE
02368	R7001.2	AMCSSKP1	AMCS SKIP REQUIRE
02369	R7001.4	TLLFRSRQ	TOOL LIFE RESET REQUIRE
02370	R7001.6	TLFNREQ	TOOL NO LIFE REQUIRE
02371	R7003.0	TLKINDS	TOOL ID INDEX MODE
02372	R7003.4	COWTRQ	PC CARD WRITE REQUEST
02373	R7003.6	PCI/FRQ	PC INTERFACE REQUIRE
02374	R7030.0	MGIMP	MG INDEX MP
02375	R7030.6	LDROPN	LEFT DOOR OPEN
02376	R7030.7	RDROPN	RIGHT DOOR OPEN
02377	R7031.0	SLP1	SWING ARM MG SIDE P1
02378	R7031.1	SLP1-2	SWING ARM MIDDLE P1-2
02379	R7031.2	SLP2	SWING ARM DOOR< POS P2
02380	R7031.3	SLP2-3	SWING ARM MIDDLE P2-3
02381	R7031.4	SLP3	SWING ARM APPROACH POS P3
02382	R7031.5	SLP3-4	SWING ARM MIDDLE P3-4
02383	R7031.6	SLP4	SWING ARM SP POS P4
02384	R7032.0	ZP2	Z AXIS ZP2
02385	R7032.1	ZP2-3	Z MIDDLE P2-3
02386	R7032.2	ZP3	Z AXIS ZP3
02387	R7032.3	ZP3-4	Z MIDDLE P3-4
02388	R7032.4	ZP4	Z AXIS ZP4
02389	R7033.0	SHB11	ARM BACKWARD MG SIDE
02390	R7033.1	SHF11	ARM FORWARD SWING ARM SIDE
02391	R7033.2	SHCO101	ARM CHUCK OPEN
02392	R7033.3	SHCC101	ARM CHUCK CLOSE
02393	R7034.0	SHB101	ARM BACKWARD MG SIDE
02394	R7034.1	SHF101	ARM FORWARD SWING ARM SIDE
02395	R7034.2	SHCO102	ARM HEAD UP
02396	R7034.3	SHCC102	ARM HEAD DOWN
02397	R7034.4	SHHC102	ARM HEAD CLAMP
02398	R7034.5	SHHUC102	ARM HEAD UNCLAMP
02399	R7035.0	ACYCLE	A AXIS CYC
02400	R7035.2	SHTLDT101	ARM TOOL BE DETECT

02401	R7035.4	ATCINI1	ATC INITIAL
02402	R7050.0	ZP2ACTOK	Z ZP2 ACT OK
02403	R7050.1	ZP3ACTOK	Z ZP3 ACT OK
02404	R7050.2	ZP4ACTOK	Z ZP4 ACT OK
02405	R7050.3	M19OK	M19 OK
02406	R7050.4	M82OK	SP CLAMP OK
02407	R7050.5	M83OK	SP UNCLAMP OK
02408	R7050.6	M84OK	MG SP TOOL INDEX OK
02409	R7050.7	M85OK	MG T CODE INDEX OK
02410	R7051.0	M86OK	ALL AXIS INTERLOCK PASS OK
02411	R7051.1	M87OK	AXIS INTERLOCK ENABLE OK
02412	R7051.3	M89OK	ATC RESTART OK
02413	R7051.4	SLP1OK	SWING ARM MG SIDE POS OK
02414	R7051.5	SLP2OK	SWING ARM DOOR< POS P2
02415	R7051.6	SLP3OK	SWING ARM APPROACH POS P3
02416	R7051.7	SLP4OK	SWING ARM SP POS P4
02417	R7052.0	M104OK	ARM FORWARD SWING ARM SIDE OK
02418	R7052.1	M105OK	ARM BACKWARD MG SIDE
02419	R7052.2	M106OK	HAND CHUCK OPEN OK
02420	R7052.3	M107OK	HAND CHUCK CLOSE OK
02421	R7052.4	M108OK	MG WAIT TOOL INDEX OK
02422	R7052.5	M109OK	MG RETURN TOOL INDEX OK
02423	R7052.6	M120OK	ARM HEAD CLAMP OK
02424	R7052.7	M121OK	ARM HEAD UNCLAMP OK
02425	R7053.1	M123OK	SWING ARM 45 DEGREE
02426	R7053.2	M124OK	SWING ARM 0 DEGREE
02427	R7053.3	M125OK	SWING ARM -90 DEGREE
02428	R7053.4	M126OK	SWING ARM -180 DEGREE
02429	R7053.5	M127OK	SWING ARM -270 DEGREE
02430	R7053.6	M128OK	SWING ARM -315 DEGREE
02431	R7053.7	M129OK	SWING ARM -360 DEGREE
02432	R7055.0	MFINS	MONITOR M CODE FIN
02433	R7055.1	MRSTS	MONITOR M CODE RESET
02434	R7302.0	MCH_LCK_PLS	MACHINE LOCK PULSE
02435	R7302.1	MCH_LCK_PLS_AUX	MACHINE LOCK PULSE AUX
02436	R7302.2	PLS3	AUX FUNCTION PULSE
02437	R7302.3	PLS4	AUX FUNCTION PULSE AUX
02438	R7302.4	PLS5	Z MACHINE LOCK PULSE
02439	R7302.5	PLS6	Z MACHINE LOCK PULSE AUX
02440	R7302.6	PLS7	PROGRAM RESTART PULSE

02441	R7302.7	PLS8	PROGRAM RESTART PULSE 1
02442	R7303.0	PLS9	F1 PB SEND PULSE
02443	R7303.1	PLS10	F1 PB SEND PULSE AUX
02444	R7303.2	PLS11	TEACH PULSE
02445	R7303.3	PLS12	TEACH PULSE AUX
02446	R7306.0	PLS13	BLOCK SKIP 2 PULSE
02447	R7306.1	PLS14	BLOCK SKIP 2 PULSE
02448	R7306.2	PLS15	BLOCK SKIP 3 PULSE
02449	R7306.3	PLS16	BLOCK SKIP 3 PULSE
02450	R7306.4	PLS17	BLOCK SKIP 4 PULSE
02451	R7306.5	PLS18	BLOCK SKIP 4 PULSE
02452	R7306.6	PLS19	BLOCK SKIP 5 PULSE
02453	R7306.7	PLS20	BLOCK SKIP 5 PULSE
02454	R7307.0	PLS21	BLOCK SKIP 6 PULSE
02455	R7307.1	PLS22	BLOCK SKIP 6 PULSE
02456	R7307.2	PLS23	BLOCK SKIP 7 PULSE
02457	R7307.3	PLS24	BLOCK SKIP 7 PULSE
02458	R7307.4	PLS25	BLOCK SKIP 8 PULSE
02459	R7307.5	PLS26	BLOCK SKIP 8 PULSE
02460	R7307.6	PLS27	BLOCK SKIP 9 PULSE
02461	R7307.7	PLS28	BLOCK SKIP 9 PULSE
02462	R7310.0	PLS29	AUTO POWER OFF PULSE 1
02463	R7310.1	PLS30	AUTO POWER OFF PULSE 2
02464	R7310.2	PLS31	OIL MIST COLLECTOR PULSE
02465	R7310.3	PLS32	OIL MIST COLLECTOR PULSE AUX
02466	R7310.4	PLS33	MG DOOR WIPER SW PULSE
02467	R7310.5	PLS34	MG DOOR WIPER SW PULSE AUX
02468	R7997.0	SPON	SP ON
02469	R7997.1	PROTECT	MEMORY KEY
02470	R7997.6	M401FF	LOAD MONITOR M401 MEM
02471	R7997.7	M402FF	LOAD MONITOR M402 MEM
02472	R9000.0	=	=
02473	R9000.1	<	<
02474	R9091.0	NOOFF	ALWAYS OFF
02475	R9091.1	NOON	ALWAYS ON
02476	K0000.0	SP_COL_DET_SW_1	SPINDLE COOLANT DETECT SW 1
02477	K0000.2	ATC_STICK	ATC STICK
02478	K0000.3	APC	APC FUNCTION SW
02479	K0000.4	CHP_OIL_COLR_SW	CHIP OIL CHILLER SW
02480	K0000.6	C_UNCLP_DISABLE	C AXIS UNCLAMP DISABLE

02481	K0000.7	CHIP_OIL_UT_SW	CHIP OIL UNIT DET SW
02482	K0001.0	MG_30T_SEL	MG ATC 30T SEL
02483	K0001.1	X0.6_ON	AUTO FIRE POWER DOWN SW
02484	K0001.3	SPTLDETEON	SP TOOL BE DETECT
02485	K0001.4	WEK_TIM_PRO_SW	WEEKLY PROG TIMER FUN SW
02486	K0001.7	MSTAUT_FUN_SW	OIL MIST COLLECTOR AUTO FUN SW
02487	K0002.0	MST_COLT_DET_SW	MIST COLLECTOR DETECT ON SW
02488	K0002.1	OIL_SKIR_DET_SW	OIL SKIMMER OL FUN SW
02489	K0002.3	X2.5_ON_SW	MIST COLECTOR PROTECTOR ON/OFF
02490	K0002.4	ATC_AIR_DET_SW	ATC AIR CHECK ON/OFF
02491	K0002.7	X1.7_CONTACT_SEL	X1.7 NORMAL OPEN SELECT
02492	K0003.0	4CLPRSTOFF	4TH AXIS CLAMP RESET DISABLE
02493	K0003.1	5CLPRSTOFF	5TH AXIS CLAMP RESET DISABLE
02494	K0003.3	SPCOMNOP	SP COMMON OP
02495	K0003.4	HYDRPUMPAR	HYDRAULIC PUMP ALWAYS ON
02496	K0003.5	C_AXIS_HYDRLC	C AXIS HYDRAULIC CLAMP
02497	K0003.6	SP_HSK_SPEC	SP HIGH SKIP SPEC
02498	K0004.0	AIXS_INTLK_PASS	ALL AXIS INTERLOCK PASS
02499	K0004.1	ATC_APC_INTLK_PS	ATC&APC INTERLOCK PASS
02500	K0004.2	ATC_APC_JOG	ATC&APC JOG
02501	K0004.3	APC_TEST_MODE	APC TEST MODE
02502	K0004.4	SP_TEST_MODE	SP TEST MODE
02503	K0004.5		BRAKE TEST REQUIRE
02504	K0004.6	MCC_TEST_REQ_OFF	MCC TEST REQ OFF
02505	K0005.0	NO1_CHP_OIL_FUN	NO1 CHIP OIL FUN SW
02506	K0005.1	CTS_ON	CTS ON
02507	K0005.2	CTS_OIL_OL_FUN	CTS OIL OL DETE FUN SW
02508	K0005.3	OIL_MIST	OIL MIST
02509	K0005.4	OPTION_6	SPARE
02510	K0005.5	CHP_FLSH_FUN_SEL	CHIP FLUSH FUN SELECT SW
02511	K0005.6	CHP_OIL_LEV_STP	CHIP OIL LEVEL LOW STOP
02512	K0005.7	GHP_OILLV_DET_SW	CHIP OIL LEVEL DETE SW
02513	K0006.0	CHIP_PUM_OL_SW	CHIP COOLANT PUMP O.L AL SW
02514	K0006.1	COL_OIL_LEV_SW	CHP OIL LEV CHECK FUNCTION
02515	K0006.2	CHP_COL_RDY_SW	CHIP COOLANT RDY CHECK SW
02516	K0006.3	CHIP_TANK_LEV_ON	CHIP WATER&OIL LEV DETE ON
02517	K0006.5	CHP_OIL_PUP_SW	CHIP OIL PUMP OL FUNCTION SW
02518	K0006.7	CHPOILOUTTMRCtrl	CHIP OIL OUT TIMER CONTROL
02519	K0007.0	NO1_CHP_CON_OLS	NO1 CHP CON OL FUN SW
02520	K0007.1	NO_2&3_CHIP_CON	NO 2&3 CHIP CONVEYOR FUN ON

02521	K0007.2	CHP_CON1_TOQ_SW	CHIP CON 1 TORQUE SW
02522	K0007.3	CHP_CON2_TOQ_SW	CHIP CON 2 TORQUE SW
02523	K0007.4	CHP_CON3TOQ_SW	CHIP CON 3 TORQUE SW
02524	K0007.5	CHP_CON_RUN_CHK	CHIP CON RUN CHECK
02525	K0007.7	CHPCONOFAL_PASS	CHIP CON OFF AL PASS
02526	K0008.0	24_TOOL_SEL	24 TOOL SELECT
02527	K0008.2	T&MACTENABLE	T CODE & M CODE ACT ENABLE
02528	K0008.6	ATC-ANEG	ATC A ZP1 PASS
02529	K0008.7	40ATCSA	40 TOOL 90 DEGREE SWING ARM
02530	K0009.6	HIGH_SPEED_TAP	HIGH SPEED TAP
02531	K0010.1	BOOST_AL_PASS_SW	BOOSTER ALARM BY PASS
02532	K0010.2	CHP_OIL_LOW_SW1	CHIP OIL LOW L.S SW 1
02533	K0010.3	CHP_OIL_LOW_SW2	CHIP OIL LOW L.S SW 2
02534	K0010.4	EX_NOZL_AUX_COL	EX AUX COOLANT NOZZLE SW
02535	K0010.5	CH_COT_PU_COT_SW	CHIP COOLANT PUMP COOLANT SW
02536	K0010.6	FILT_BRK_DET_ON	DRUM FILTER DETECT ON
02537	K0010.7	CHP_CON_CCW_SW	CHIP CON CCW OL ON/OFF
02538	K0011.0	COVER_STICK	COVER ENTIRE STICK
02539	K0011.4	SD_MD_SW	STAND MODE SW
02540	K0011.5	SPONAIRBLOW	AIR BLOW IN SP RUN
02541	K0012.0	EX_M_CODE_BIN	EXTRA BINARY M CODE
02542	K0012.1	X1.6_PASS	TOUCH SW OVER TRAVIRE
02543	K0012.2	HANDINDWRITE	MANUAL INDEX WRITE
02544	K0012.3	AUTO_TL_SET	AUTO TOOL SET
02545	K0012.4	TBESKACONNT	TABLE SKIP A CONNECT
02546	K0012.5	M30_POWER_OFF	M30 POWER OFF FUN SW
02547	K0012.7	AL_POWER_OFF	ALARM POWER OFF
02548	K0013.0	PLAYBACK_ON	PLAYBACK ON
02549	K0013.1	F1_PB_SEND	F1 PB SEND
02550	K0013.2	CS_AXIS_CONTROL	CS AXIS CONTROL
02551	K0013.3	C_AXIS_CONTROL	C AXIS CONTROL
02552	K0013.4	SPDISPCOMPSTION	SP HEAT DISPLACE COMPENSATION
02553	K0013.5	3D_INTFCE_CHK	3D INTERFERENCE CHECK
02554	K0014.3	HSKUNCLPENAB	HIGH SKIP UNCLP ENABLE
02555	K0015.1	OPAUXPANEL	OPERATION AUX PANEL
02556	K0015.2	MAG.MPG	MAGAZINE SERVO MPG VALID
02557	K0015.3	ATC_DOOR_LS	ATC DOOR L.S
02558	K0015.4	MAG.DOR.SEN.PAS	MAGAZINE DOOR SENSOR PASS
02559	K0016.0	SAVA_A	SERVO SWING ARM A CYC
02560	K0016.1	ATCTLINPM	ATC TOOL INDEX POS MEM

02561	K0016.2	ATCTLR LPM	ATC TOOL RELEASE POS MEM
02562	K0016.3	ATCSTPM	ATC STOP POS
02563	K0016.4	INDEXOKM	MG INDEX POS OK MEM
02564	K0016.5	ZP4YM	Y AXIS ZP4 MEM
02565	K0016.6	ATCXAPM	ATC X&A POS MEM
02566	K0016.7	ZP4ZM	Z AXIS ZP4 MEM
02567	K0017.0	M130FF1	M130 OFF 1
02568	K0018.0	H*10	HANDLE FEEDRATE *10
02569	K0018.1	H.INT.M	HANDLE INTERRUPT MANUAL
02570	K0018.3	SOOVRRID	SPINDLE OVERRIDE FUN ON
02571	K0020.0	WKPL	WORK LIGHT FUNCTION SW
02572	K0020.1	BLKSKP	BLOCK SKIP ON MEM
02573	K0020.2	OPSTP	OPTION STOP FUN SEL SW
02574	K0020.3	M.CHIP	MANUAL CHIP CON ON MEM
02575	K0025.1	COL_OF_CHK_PASS	COOLANT OFF CHECK BY PASS
02576	K0026.0	SPTLCKNG	SPINDLE TOOL CHECK FUN OFF
02577	K0027.6	3D_INTFCEOFSETWR	3D INTERFERENCE OFFSET WRITE
02578	K0028.3	AL159.M	AL159 MEM
02579	K0029.5	PRTET_KEY_OF_SW	PROTECT KEY OFF SW
02580	K0029.6	OP_AUX_OF_SW	OPERATION AUX OFF SW
02581	K0099.2	TLIF	TOOL INFO
02582	D0000.6	INDCOMMON	INDEX COMMAND
02583	D0490.3	WKLYPRGM	WEEKLY PROGRAM MEM
02584	D0490.5	WKTMASTER	WEEKLY TIMER START ERROR
02585	D3050.6	ATCTA	HIGH SKIP HEAD DOWN
02586	D3050.7	ATCT5-11	ARM FORWARD
02587	D3051.1	ATCT61	HIGH SKIP HEAD UP
02588	D3051.2	ATCT71	A45 TO 0 & B-315 TO -270
02589	D3051.3	ATCT81	CHUCK CLOSE
02590	D3051.4	ATCT91	ARM BACKWARD
02591	D3051.5	ATCT101	CHUCK OPEN
02592	D3051.6	ATCT111	TOOL RETURN FIN
02593	D3052.0	ATC201	NEW TOOL CYC START
02594	D3052.1	ATC21-11	NEW TOOL INDEX
02595	D3052.2	ATCT21-21	SP TOOL INDEX
02596	D3052.4	ATCT221	CHUCK CLOSE
02597	D3052.5	ATCT23-11	ARM FORWARD
02598	D3052.7	ATC241	CHUCK OPEN
02599	D3053.0	ATCT251	SWING ARM MIDDLE
02600	D3053.1	ATC261	NON ACT

02601	D3053.3	ATCT27-11	NON ACT
02602	D3053.5	ATCT281	ARM BACKWARD
02603	D3053.6	ATCT291	CHUCK OPEN
02604	D3055.0	ATCM101	SWING ARM P4 TO P3
02605	D3055.1	ATCM2-101	SWING ARM P3 TO P2& A-315B45
02606	D3055.2	ATCM2-201	SWING ARM P2 TO P1
02607	D3055.3	ATCM301	SWING ARM INITIAL POS CONFIRM
02608	D3055.4	ATCM4-101	RETURN TOOL INDEX
02609	D3055.5	ATCM4-201	RET NOTOOL & SP TOOL INDEX
02610	D3055.6	ATCM501	HIGH SKIP HEAD DOWN
02611	D3055.7	ATCM6-101	ARM FORWARD
02612	D3056.1	ATCM701	HIGH SKIP HEAD UP
02613	D3056.2	ATCM801	A-315 TO -270 & B45 TO 0
02614	D3056.3	ATCM901	CHUCK CLOSE
02615	D3056.4	ATCM1001	ARM BACKWARD
02616	D3056.5	ATCM1101	CHUCK OPEN
02617	D3056.6	ATCM1201	NON ACT
02618	D3057.5	ATCX61	SWING ARM DOOR< POS P2
02619	D3057.6	ATCX71	SL P3 SR A-90&B-180
02620	D3058.0	ATCX91	INTERLOCK OFF
02621	D3058.1	ATCX101	Y AXIS P4 POS
02622	D3058.2	ATCX111	SP UNCLAMP
02623	D3058.3	ATCX121	ZP3
02624	D3058.4	ATCX131	ZP2
02625	D3059.0	ATCX171	SP CLAMP
02626	D3059.1	ATCX181	INTERLOCK ON
02627	D3059.2	ATCX191	M6 CYC ACT
02628	D7100.0	OP.OUT18	ALL AXIS ZERO RETURN FIN
02629	D7100.1	TSTPOS.P	ATC RUN POS DISPLAY
02630	D7100.3	TINI.PL	ATC INITIAL DISPLAY
02631	D7100.4	TMEM.PL	ATC MEMORY DISPLAY
02632	D7100.5	PINI.PL	APC INITIAL DISPLAY
02633	D7100.7	TBLINI.P	TABLE AXIS INITIAL DISPLAY
02634	D7101.0	MCLK	MACHINE LOCK DISPLAY
02635	D7101.1	AUXLK	AUX FUNCTION DISPLAY
02636	D7101.2	ZCAN	Z CANCEL DISPLAY
02637	D7101.3	PRGRST	PROGRAM RESTART DISPLAY
02638	D7101.4	F1	F1 PB SEND DISPALY
02639	D7101.5	TCH-IN	TEACH MODE DISPLAY
02640	D7103.0	BSKP2	BLOCK SKIP 2

02641	D7103.1	BSKP3	BLOCK SKIP 3
02642	D7103.2	BSKP4	BLOCK SKIP 4
02643	D7103.3	BSKP5	BLOCK SKIP 5
02644	D7103.4	BSKP6	BLOCK SKIP 6
02645	D7103.5	BSKP7	BLOCK SKIP 7
02646	D7104.0	BSKP8	BLOCK SKIP 8
02647	D7104.1	BSKP9	BLOCK SKIP 9
02648	D7105.0	PWROFF	AUTO POWER OFF FUN ON MEM
02649	D7105.1	MSTCL	OIL MIST COLLECTOR ON MEM
02650	D7105.2	MRNWIP	ATC DOOR WIPER
02651	D7105.4	ORI.0	M19 DISPLAY
02652	D7105.5	MCCTES.O	MCC CHECK LAMP OFF
02653	D7250.1	MACT	M CODE RUN ENABLE
02654	D7250.2	HSK	HIGH SKIP HOLD
02655	D7251.0	INTDSP	INTERLOCK DISPLAY
02656	T0035.2	PGSTP.PL	PRG STOP DISPLAY LAMP
02657	F0010	MCD_00_TO_07	M CODE 00 TO 07
02658	F0026	TCD_00_TO_07	T CODE 00 TO 07
02659	R2010	X_MACHINE_POS	X AXIS MACHINE POS
02660	R2014	Y_MACHINE_POS	Y AXIS MACHINE POS
02661	R2018	Z_MACHINE_POS	Z AXIS MACHINE POS
02662	R2022	C_MACHINE_POS	C AXIS MACHINE POS
02663	R2026	A_MACHINE_POS	A AXIS MACHINE POS
02664	R2030	MG_MACHINE_POS	MG AXIS MACHINE POS
02665	R2034	SL_MACHINE_POS	SL AXIS MACHINE POS
02666	R2038	SR_MACHINE_POS	SR AXIS MACHINE POS
02667	R2100	MGPOTSFTVALUE	MG POT SHIFT VALUE
02668	R2104	POTSFTWITH_ACC	POT SHIFT WITH ACCOUNT
02669	R2108	MG_CURT_T_NO	MG CURRENT T NO
02670	R2112	MG_INPOS_*2	MG INPOSITION *2 VALUE
02671	R2116	MG_INPOS_ERROR	MG INPOSITION ERROR
02672	R2120	MG_MANU_RUN_DATA	MG MANUAL RUN DATA
02673	R2124	INDPOTNO	TOOL POT INDEX NO
02674	R2950	ALWAYS_OFF	ALWAYS OFF
02675	R2951	AXCTRLCMD	AXIS CTRL COMMAND
02676	R2952	COMD_DATA_1	COMMAND DATA 1
02677	R2954	COMD_DATA_2	COMMAND DATA 2
02678	R9002		
02679	D0000		
02680	D0004	SP.TOOL.NO	SPINDLE TOOL NUMBER

