


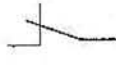












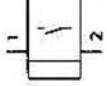
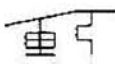
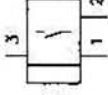

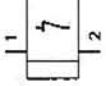
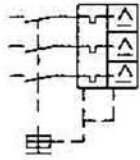
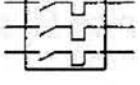







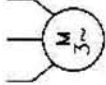

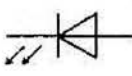


	NORMALLY OPEN 開(a)接點		MECHANICAL INTERLOCK 互鎖器		GROUND 接地		TRANSFORMER 三相變壓器
	NORMALLY CLOSED 開(b)接點		BUZZER 蜂鳴器		PROTECTIVE GROUND 保護性接地		TRANSFORMER 單相變壓器
	KEY SWITCH 鑰匙開關		CONNECTOR 連接器		RESISTOR 電阻器		MAGNETIC CONTACTOR 電磁接觸器—線圈
	PRESSURE SWITCH 壓力開關		INDICATING LAMP 指示燈, 工作燈		FUSE 保險絲		RELAY 繼電器—線圈
	LEVEL SWITCH 液面開關		PROXIMITY LIMIT NORMALLY OPEN 二線式近接開關—開(a)接點		CIRCUIT BREAKER 迴路保護器		PROXIMITY LIMIT NORMALLY OPEN 三線式近接開關—開(a)接點
	SELECTOR SWITCH 選擇開關		PROXIMITY LIMIT NORMALLY CLOSE 二線式近接開關—開(b)接點		NO FUSE BREAKER 主開關		MANUAL MOTOR STARTER 手動馬達啟動器
	MOMENTARY BUTTON 普通型按鈕開關		PROXIMITY SENSOR 三線式近接開關		CAPACITOR 電容器		SOLENOID VALVE 電磁閥
	MAINTAINED BUTTON 保持型按鈕開關		FOOT SWITCH 腳踏開關		DIODE 二極體		3-PHAS. MOTOR 三相馬達
	TEMPERATURE OVERHEAT SWITCH 溫度檢知開關		LIGHT EMITTING DIODE (LED) 發光二極體(LED)		MOTOR FAN 馬達風扇		1-PHAS. MOTOR 單相馬達

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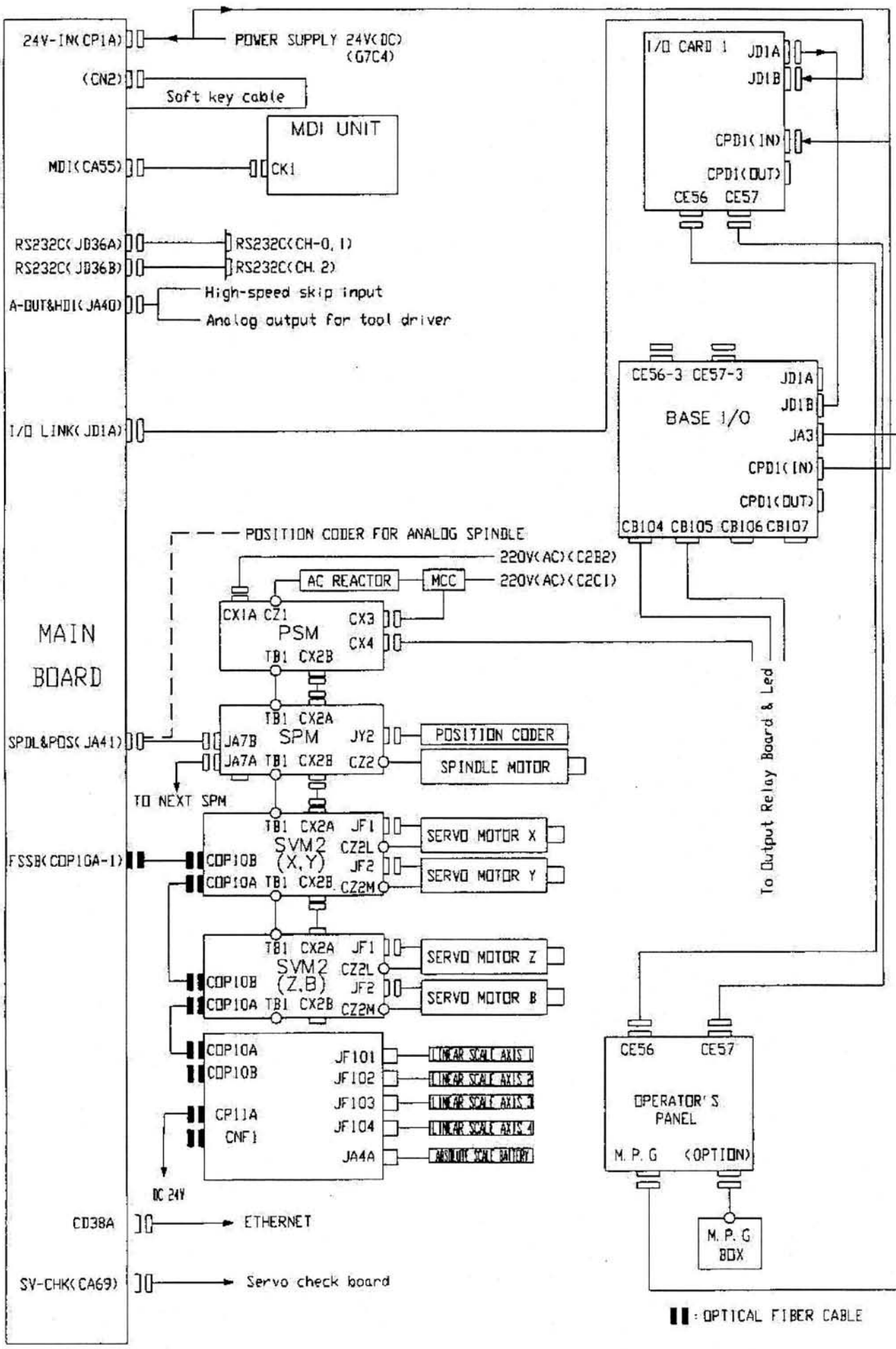
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1	Symbol	
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3	Content	
4	Content	
5	Content	
6	I/O & Device	
7	Servo device connect	
8	I/O Board Layout	
9	Linear Scale Configuration	
10		
11	Main Power	
12		
13	NC Power	
14	Power Supply Module	
15	Spindle Drive & Motor	
16		
17	Feed Drive & Motor	
18	Feed Drive & Motor	
19	Feed Drive & Motor	
20		
21	Peripheral Motors	
22	Peripheral Motors	
23	Peripheral Motors	
24	Peripheral Units	
25	Control I/O Power	
26	Solenoids & Work Light	
27	Magnetic Contactors	
28	Peripheral Units & Solenoids, Magnetic Contactors	
29	Peripheral Units & Solenoids, Magnetic Contactors	
30	Solenoids, Magnetic Contactors	
31	Peripheral Units & Solenoids, Magnetic Contactors	
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35		
36	Emergency Stop	
37	Emergency Stop	
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41	Relays & Signal Outputs	
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43	Relays & Signal Outputs	
44	Relays & Signal Outputs	
45	Relays & Signal Outputs	
46	Relays & Signal Outputs	
47	Relays & Signal Outputs	
48	LEDS & Signal Outputs	
49	LEDS & Signal Outputs	
50	LEDS & Signal Outputs	
51	LEDS & Signal Outputs	
52	LEDS & Signal Outputs	
53		
54		
55		
56	Sensors & Signal Inputs	
57	Sensors & Signal Inputs	
58	Sensors & Signal Inputs	
59	Sensors & Signal Inputs	
60	Sensors & Signal Inputs	
61	Sensors & Signal Inputs	
62	Sensors & Signal Inputs	
63	Sensors & Signal Inputs	
64	Sensors & Signal Inputs	
65	Panel Buttons & Signal Inputs	
66	Panel Buttons & Signal Inputs	

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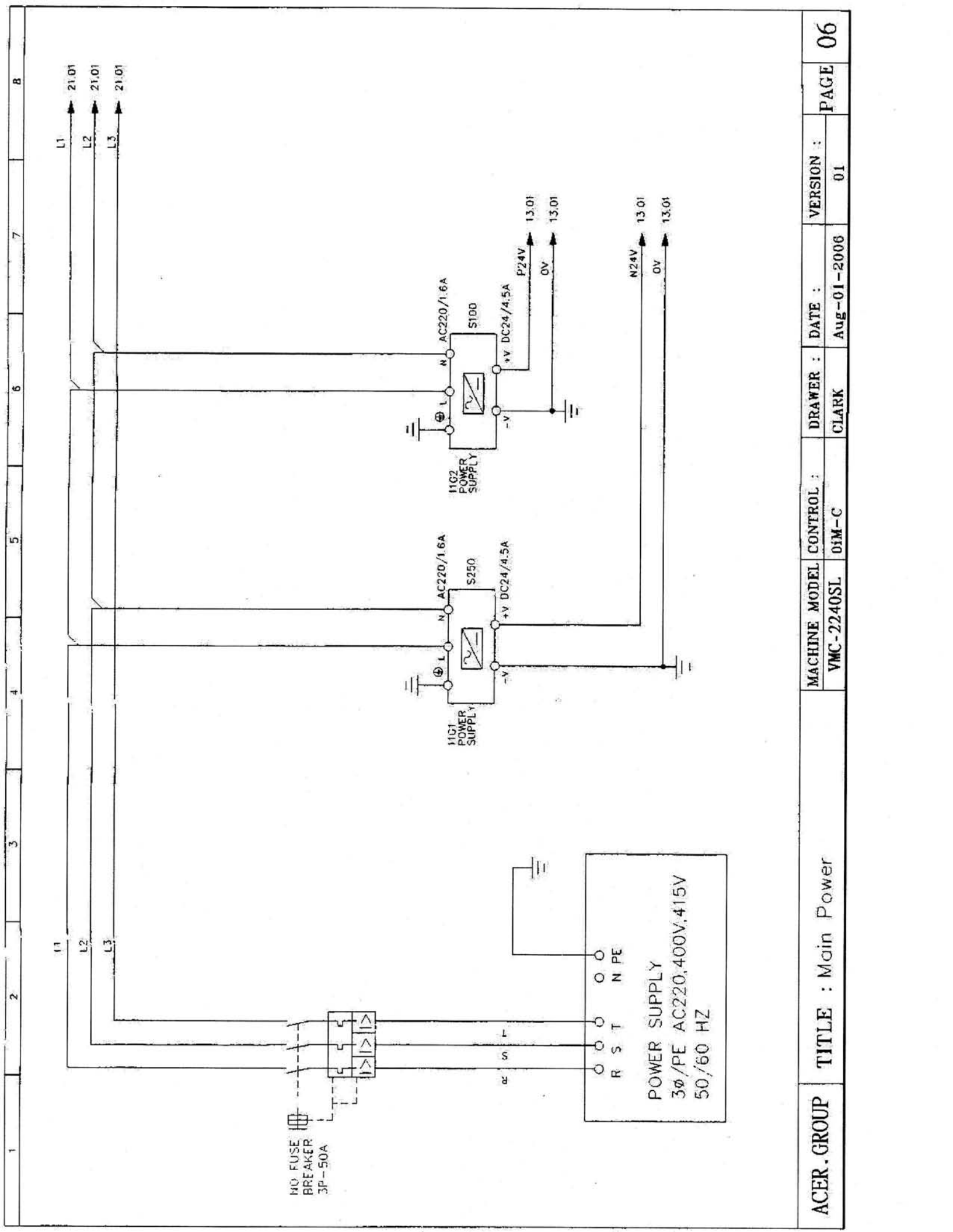
Page	Page description	Page supplementary field
67	Panel Buttons & Signal Inputs	
68	Handwheel Unit & Signal Inputs	
69	Panel Switches & Signal Inputs	
70	Panel Switches & Signal Inputs	
71		
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76	I/O CARD Signal +24V & 0V	
77	Handwheel Safety Permission	
78	Handwheel	
79	Grounding Diagram	
80	RS-232 Diagram	
81	Specification Of Parts	
82	Specification Of Parts	
83		
84		
85		
86	I/O Definition (Input)	
87	I/O Definition (Input)	
88	I/O Definition (Input)	
89	I/O Definition (Input)	
90	I/O Definition (Input)	
91	I/O Definition (Input)	
92	I/O Definition (Output)	
93	I/O Definition (Output)	
94	I/O Definition (Output)	
95		
96	I/O Terminal Block Definition List	
97	I/O Terminal Block Definition List	

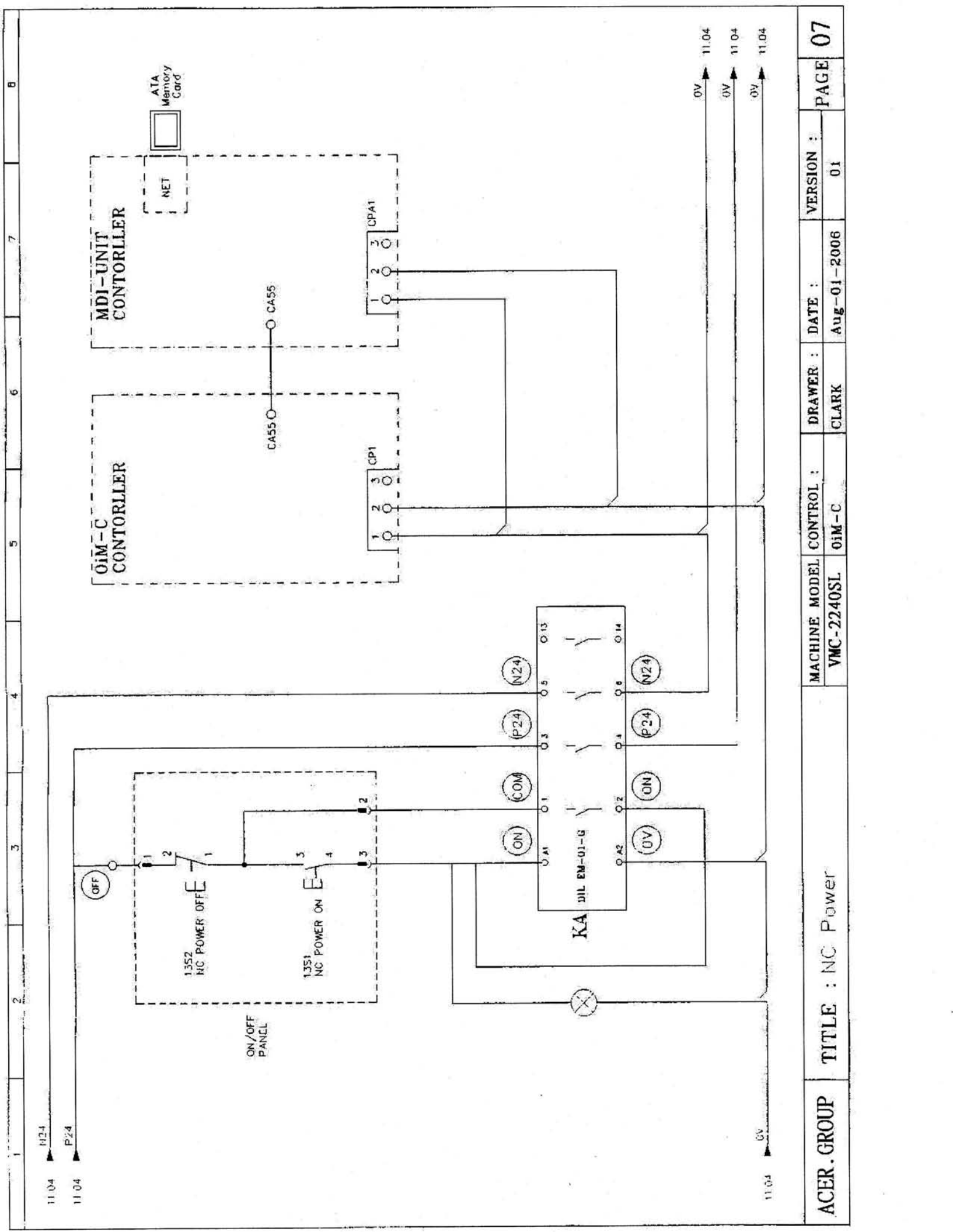


== OPTICAL FIBER CABLE

ACER.GROUP TITLE : Symbol

MACHINE MODEL CONTROL :	01M-C
DRAWER :	CLARK
DATE :	Aug-01-2006
VERSION :	01
PAGE :	05

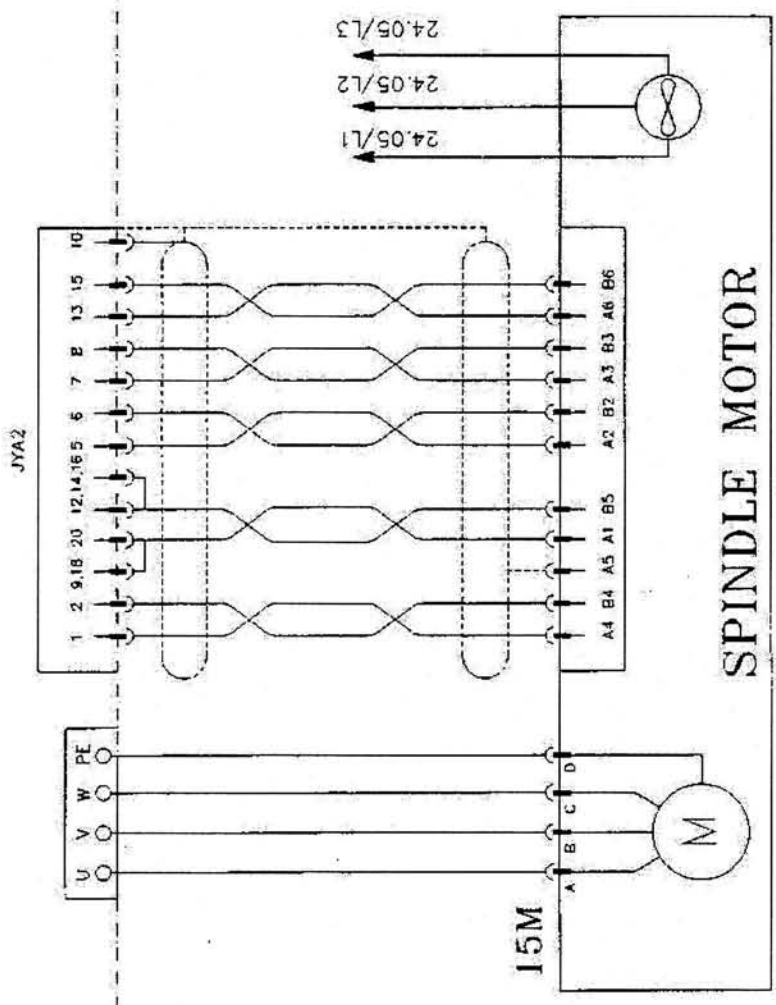




ACER GROUP	TITLE : NC Power		MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	PAGE	07
			VMC-2240SL	OIM-C	CLARK	Aug-01-2006	01		

15U

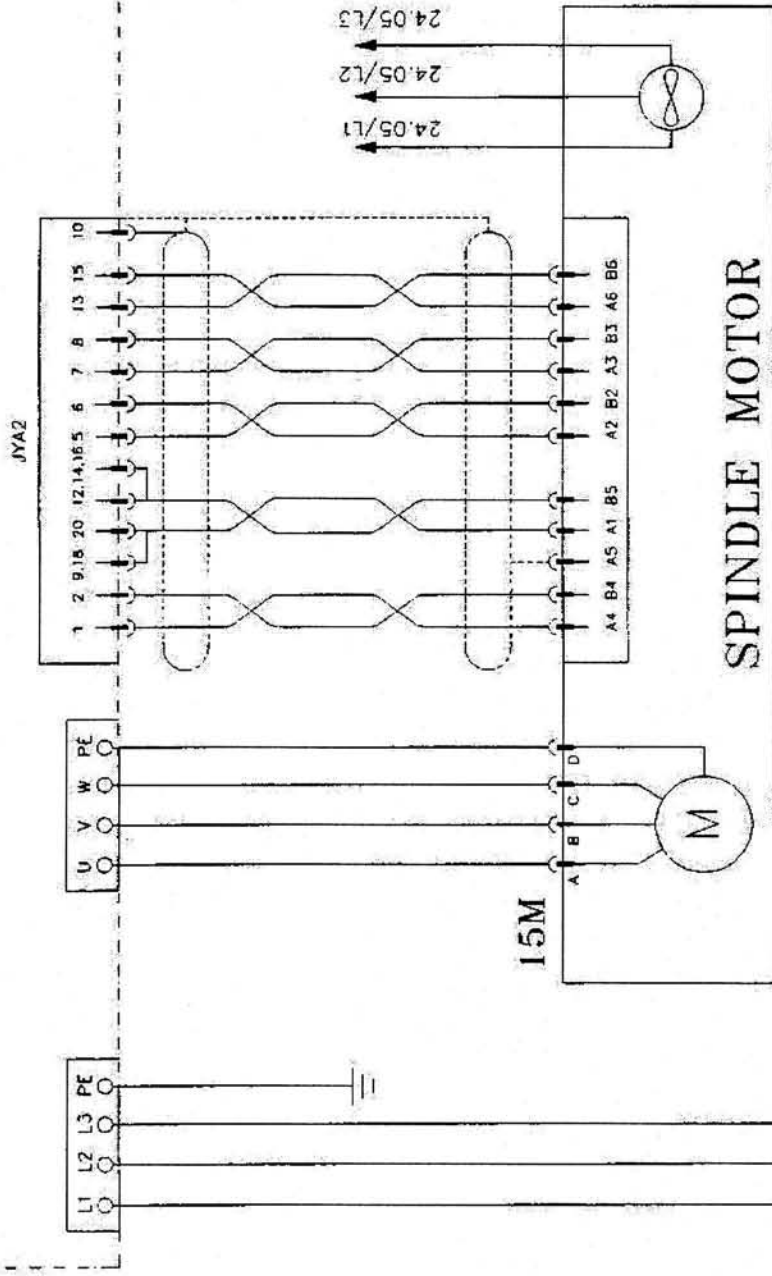
SVSP AMPLIFIER MODULE



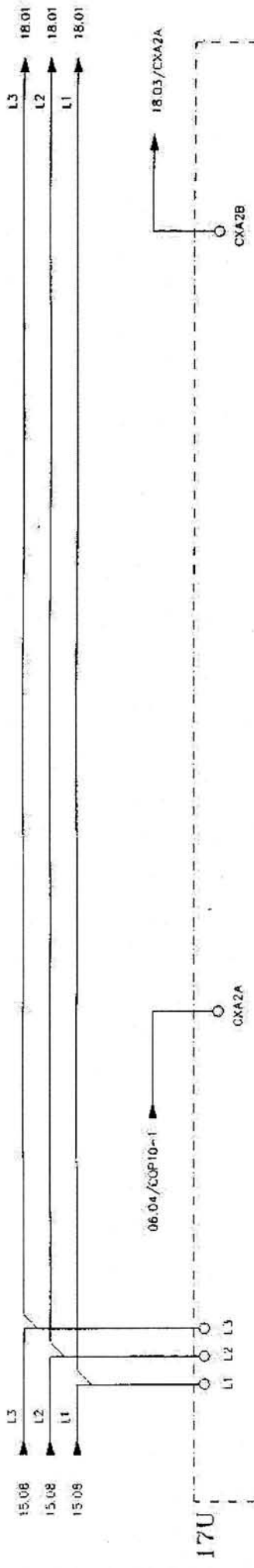
ACER.GROUP	TITLE : Spindle Drive & Motor	MACHINE MODEL VMC-2240SL	CONTROL : 01M-C	DRAWER : CLARK	DATE : Aug-01-2006	VERSION : 01	PAGE 08
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15U

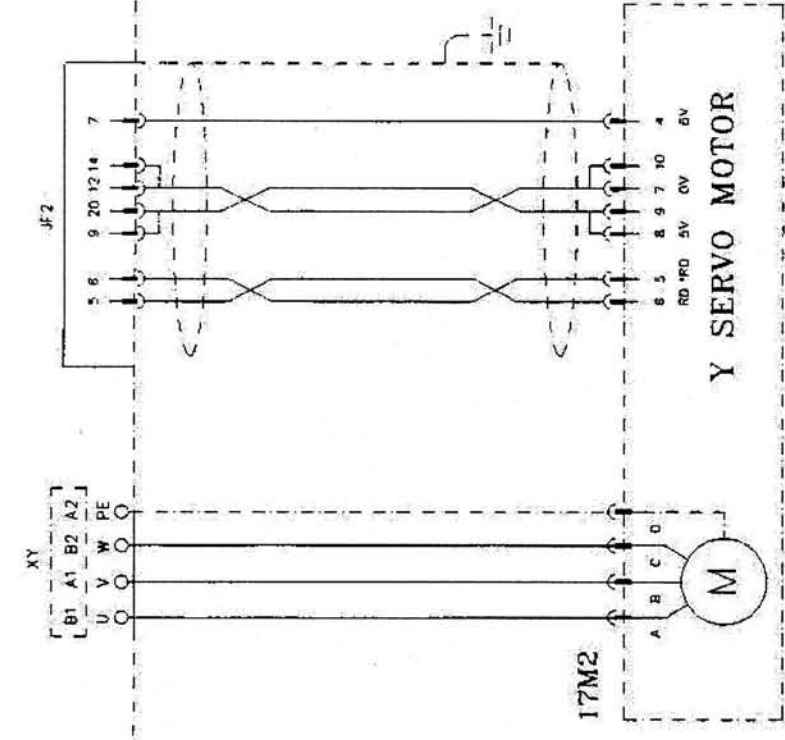
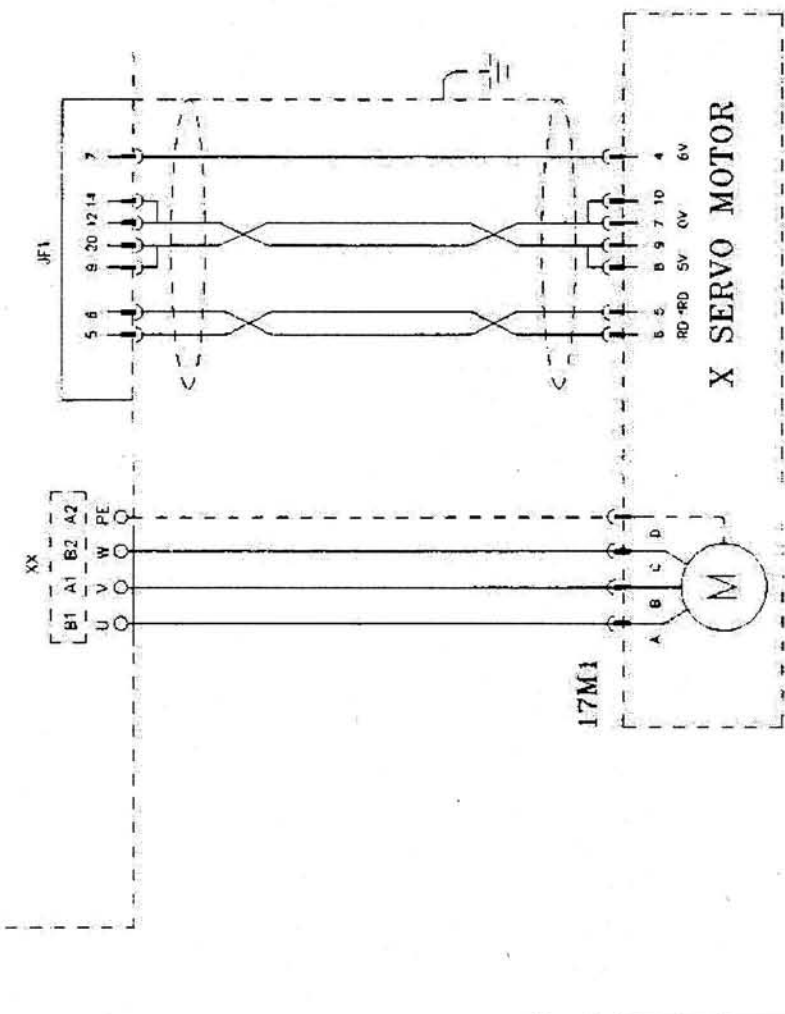
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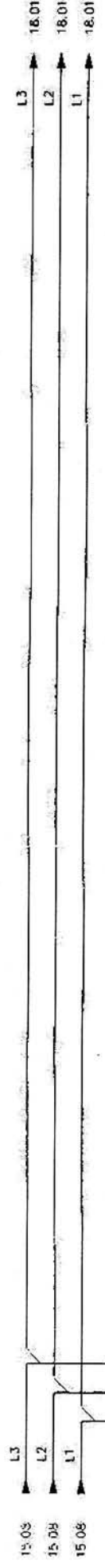
ACER.GROUP	TITLE : Spindle Drive & Motor	MACHINE MODEL VMC-2240SL	CONTROL : 03M-C	DRAWER : CLARK	DATE : Aug-01-2006	VERSION : 01	PAGE 09
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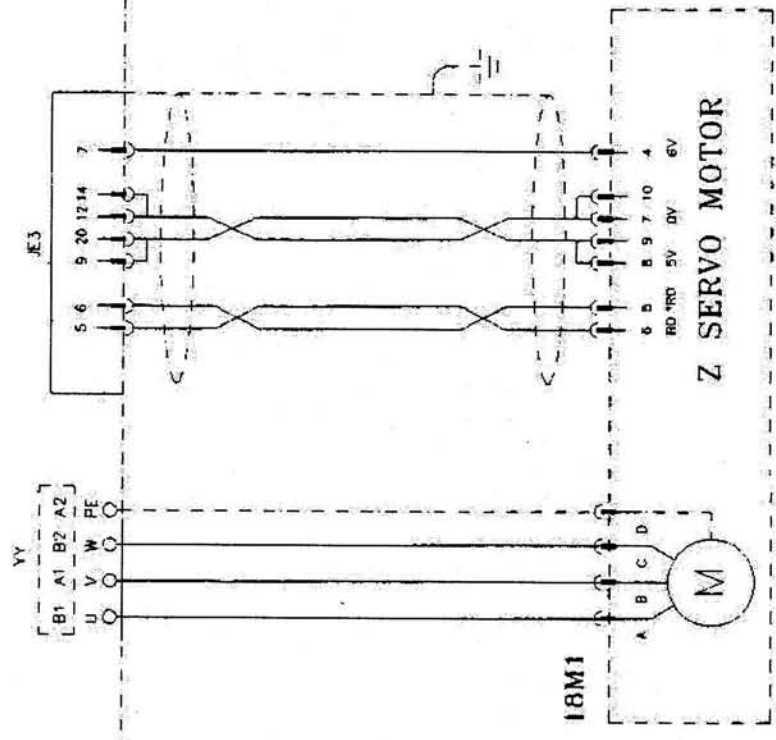
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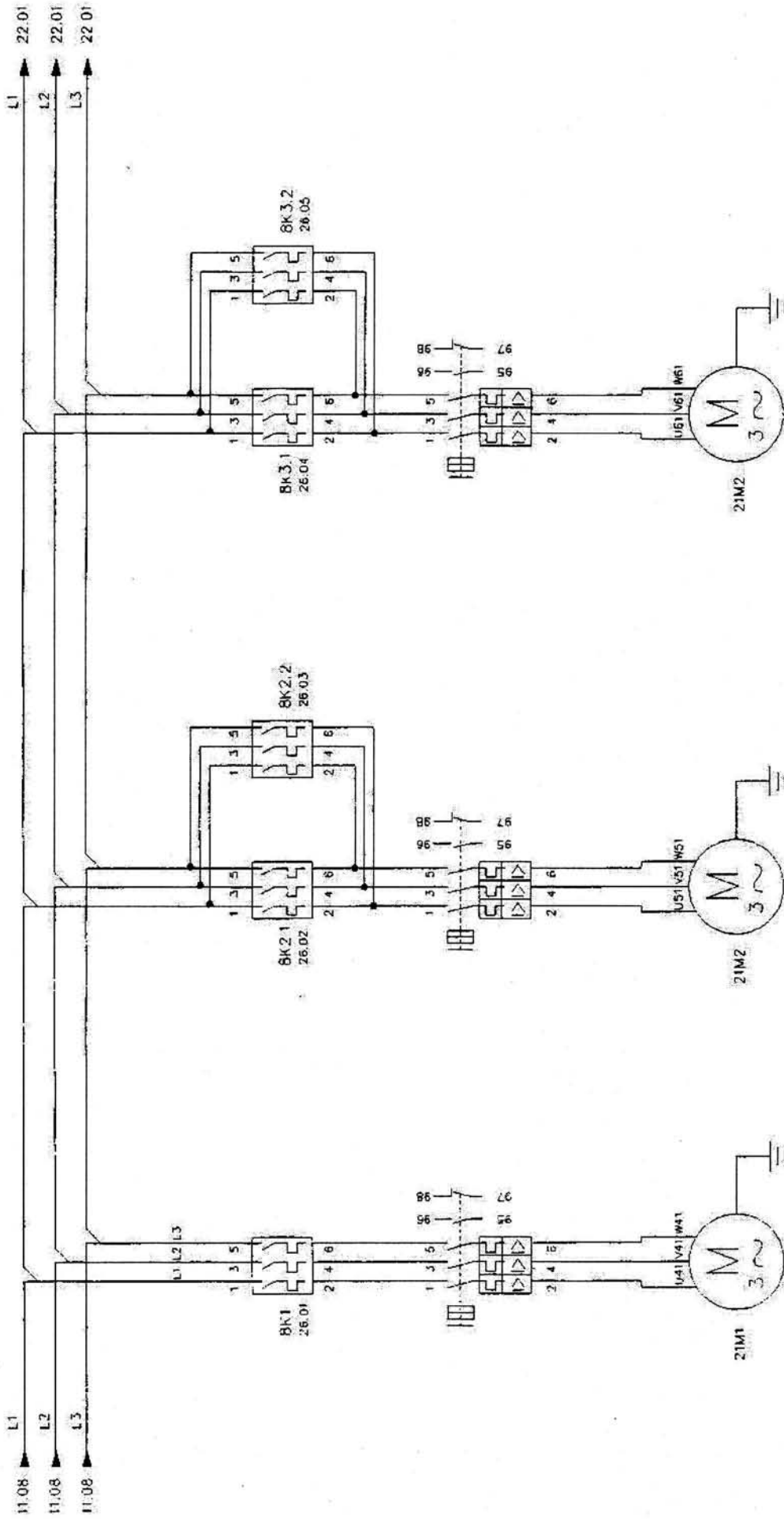
ACER.GROUP	TITLE : Feed Drive & Motor	MACHINE MODEL VMC-2240SL	CONTROL : 01M-C	DRAWER : CLARK	DATE : Aug-01-2006	VERSION : 01	PAGE 10
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SVSP AMPLIFIER MODULE



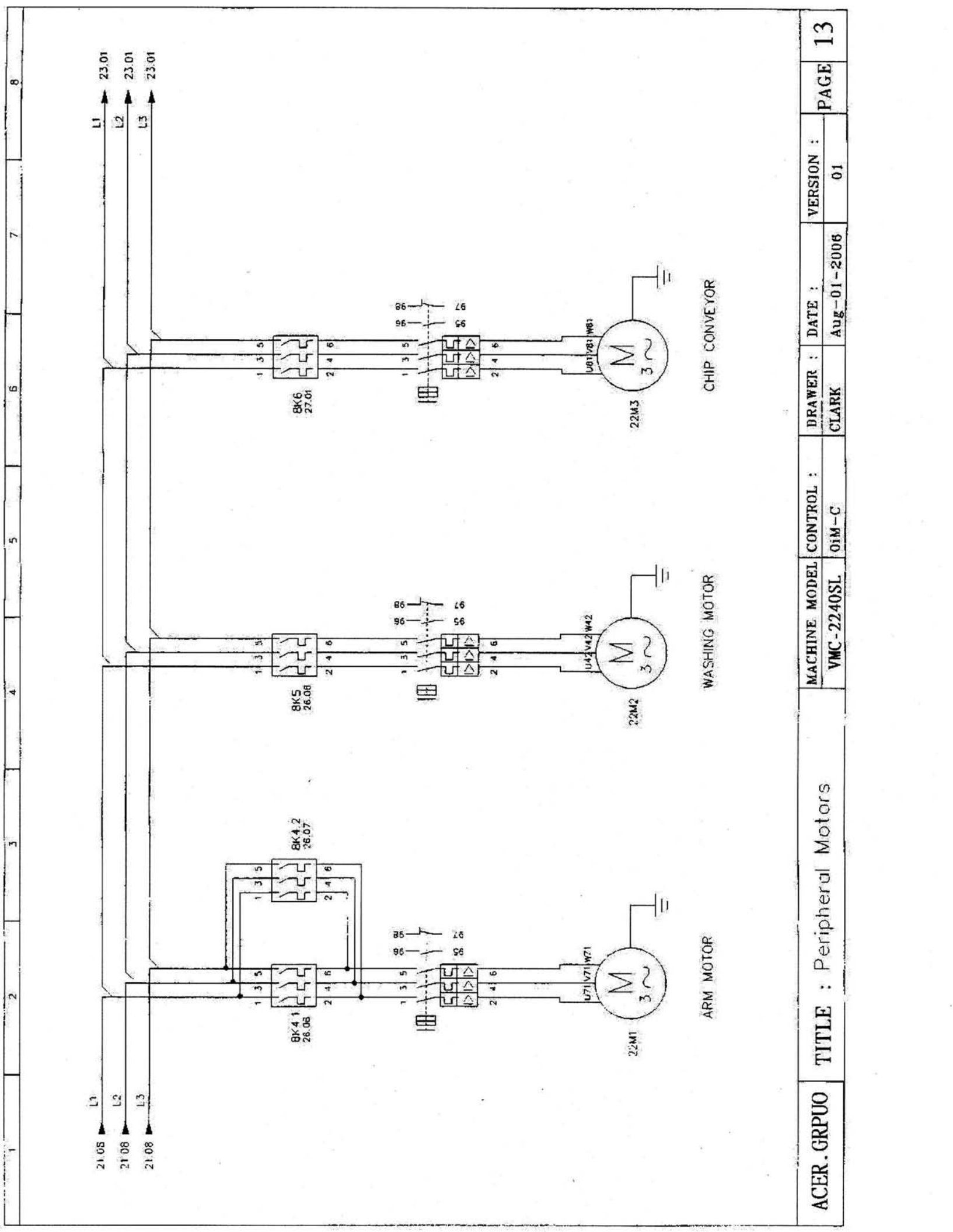
ACER.GROUP	TITLE : Feed Drive & Motor	MACHINE MODEL CONTROL : VMC-2240SL	0iM-C	DRAWER : CLARK	Aug-01-2006	VERSION : 01	PAGE 11
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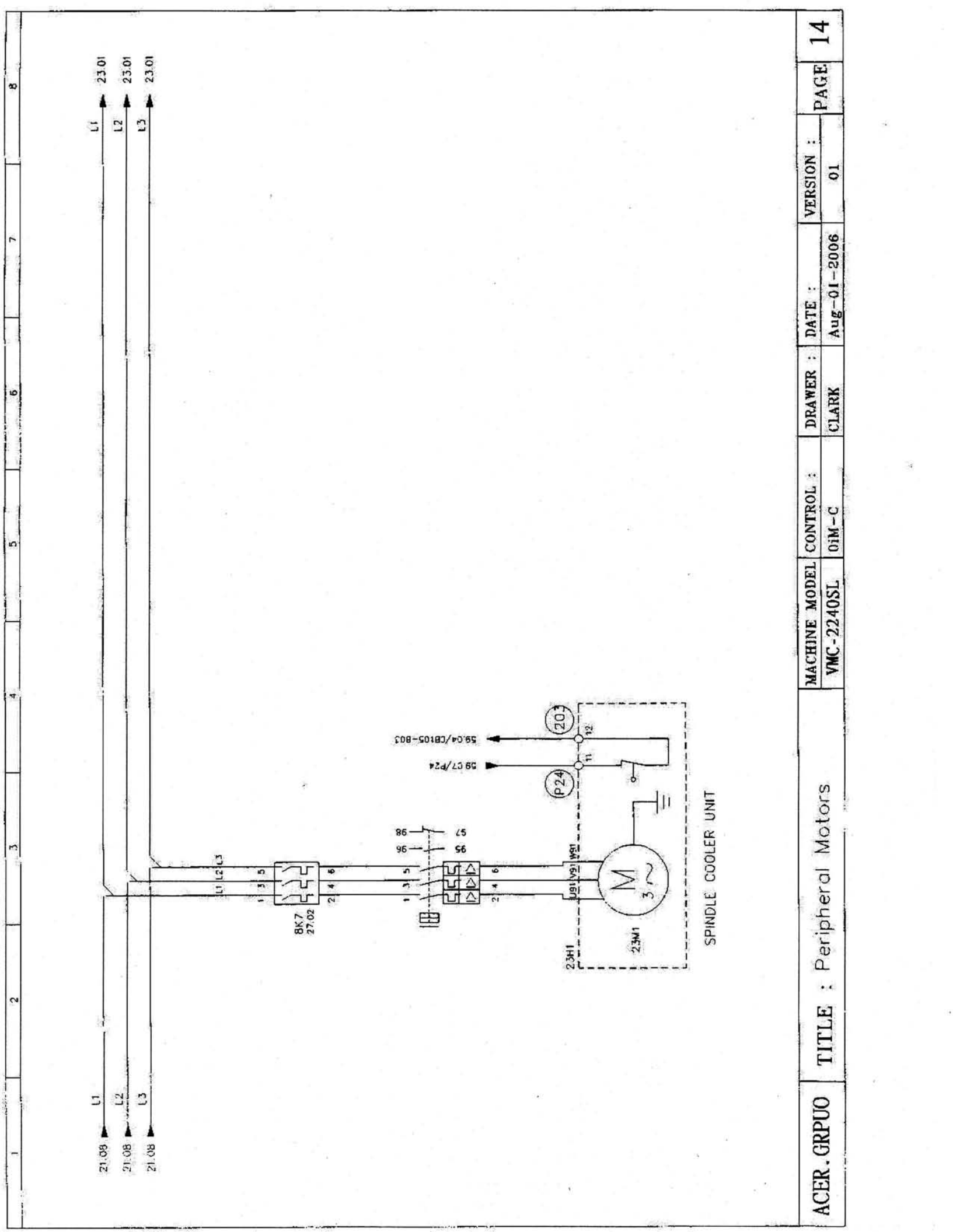


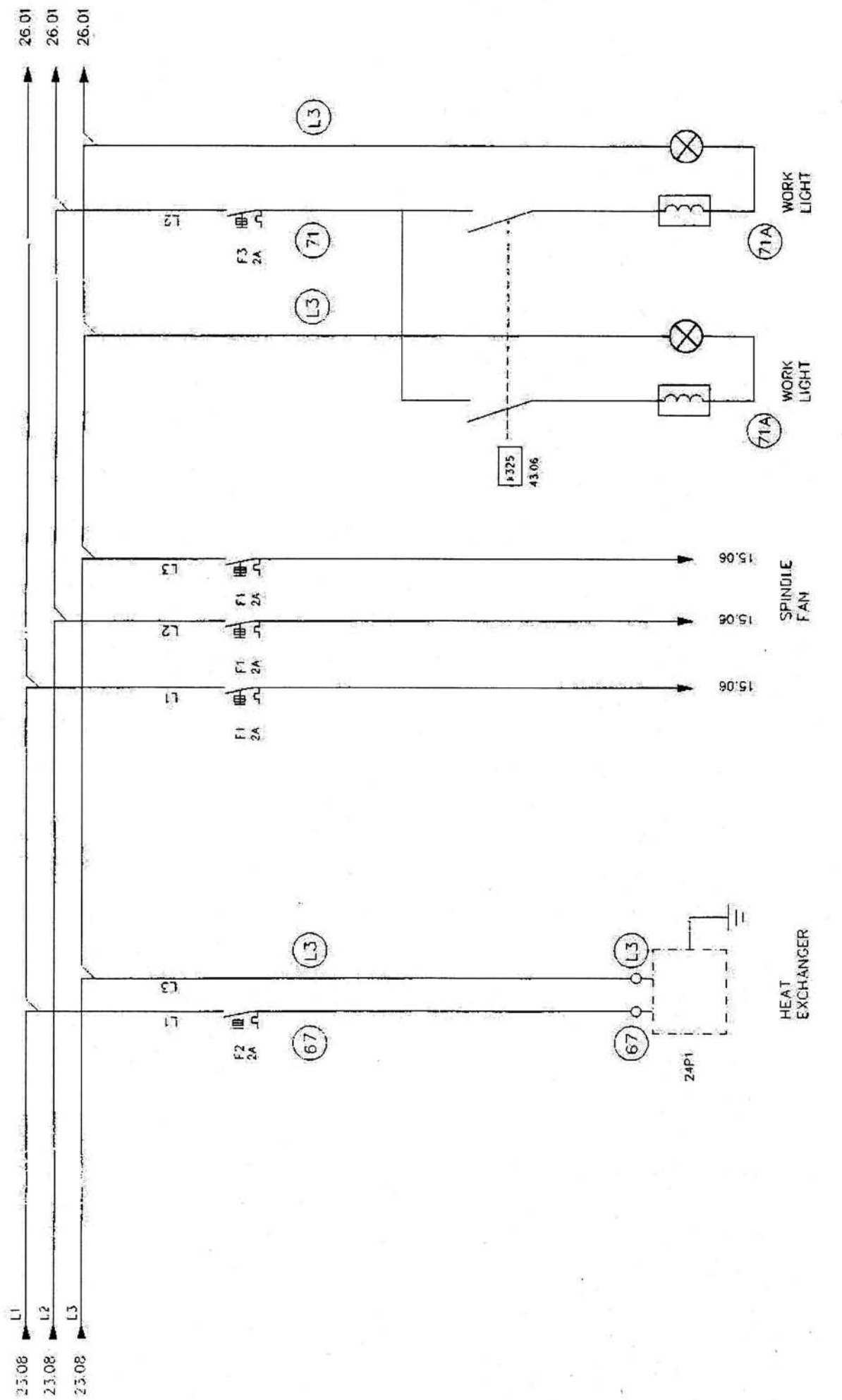
COOLANT MOTOR

CHIP AUGER

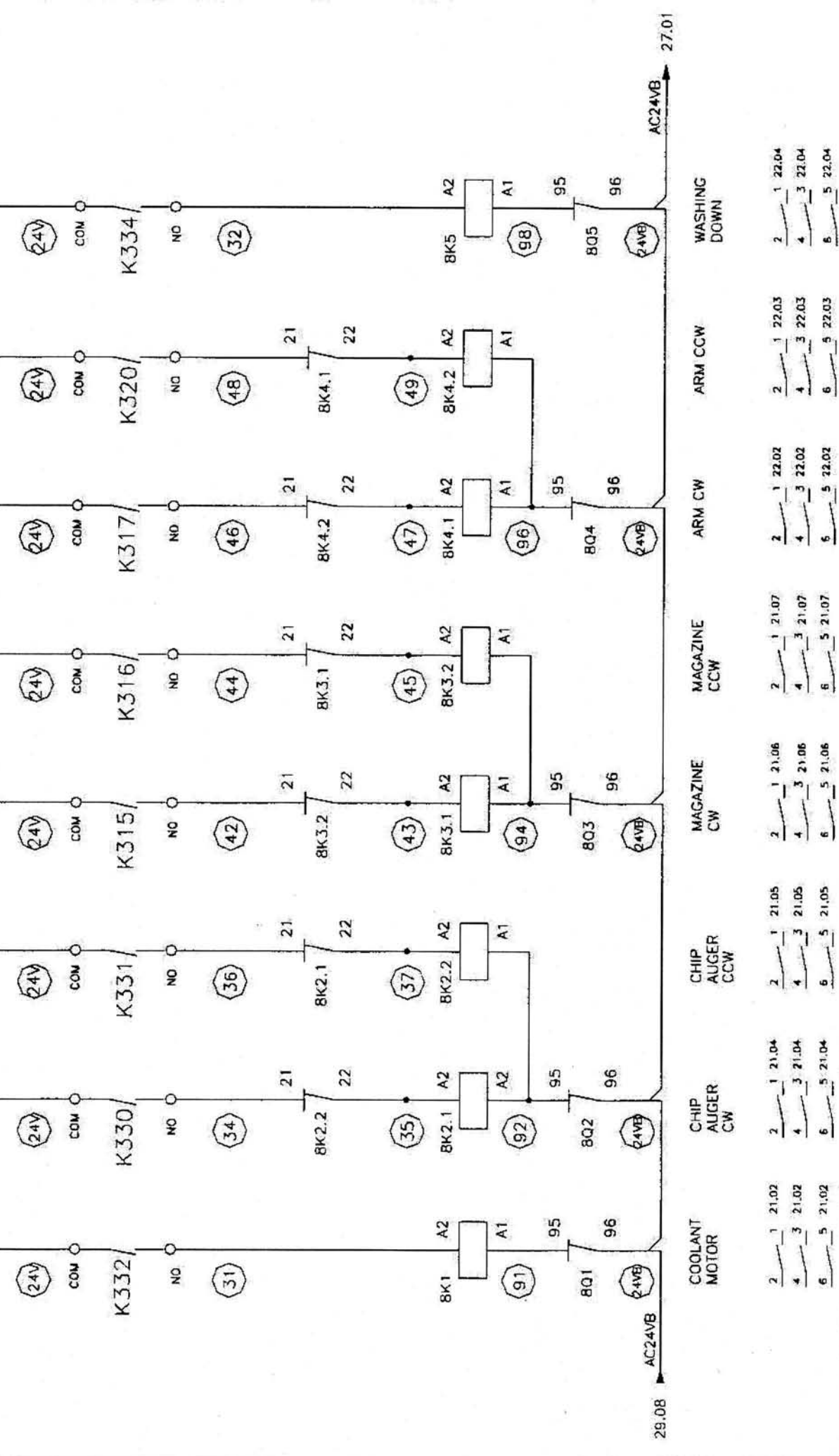
MAGAZINE MOTOR



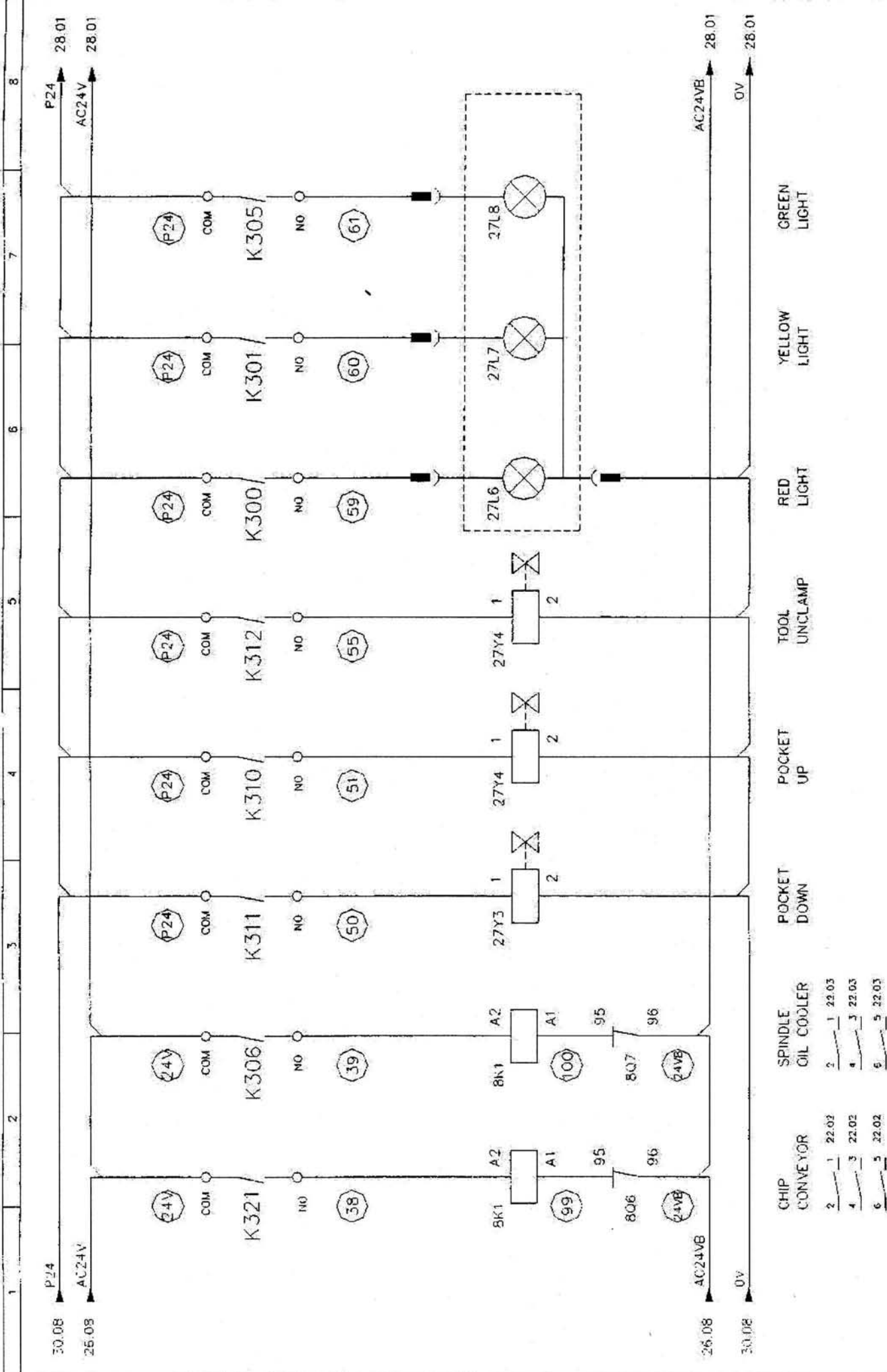




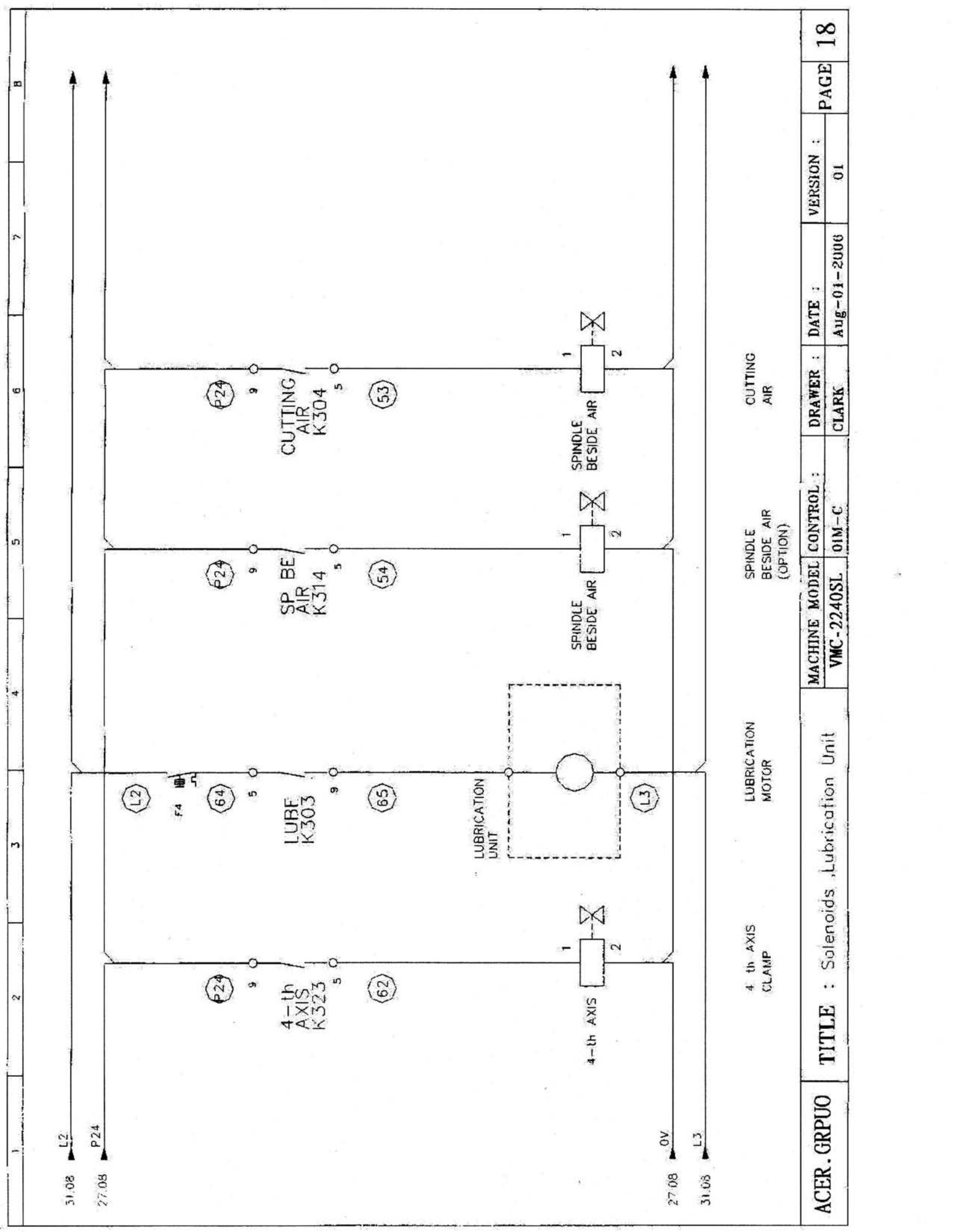
ACER.GRPUO	TITLE : Peripheral Units	MACHINE MODEL CONTROL : VMC-2240SL 01M-C	DRAWER : CLARK	DATE : Aug-01-2006	VERSION : 01	PAGE 15
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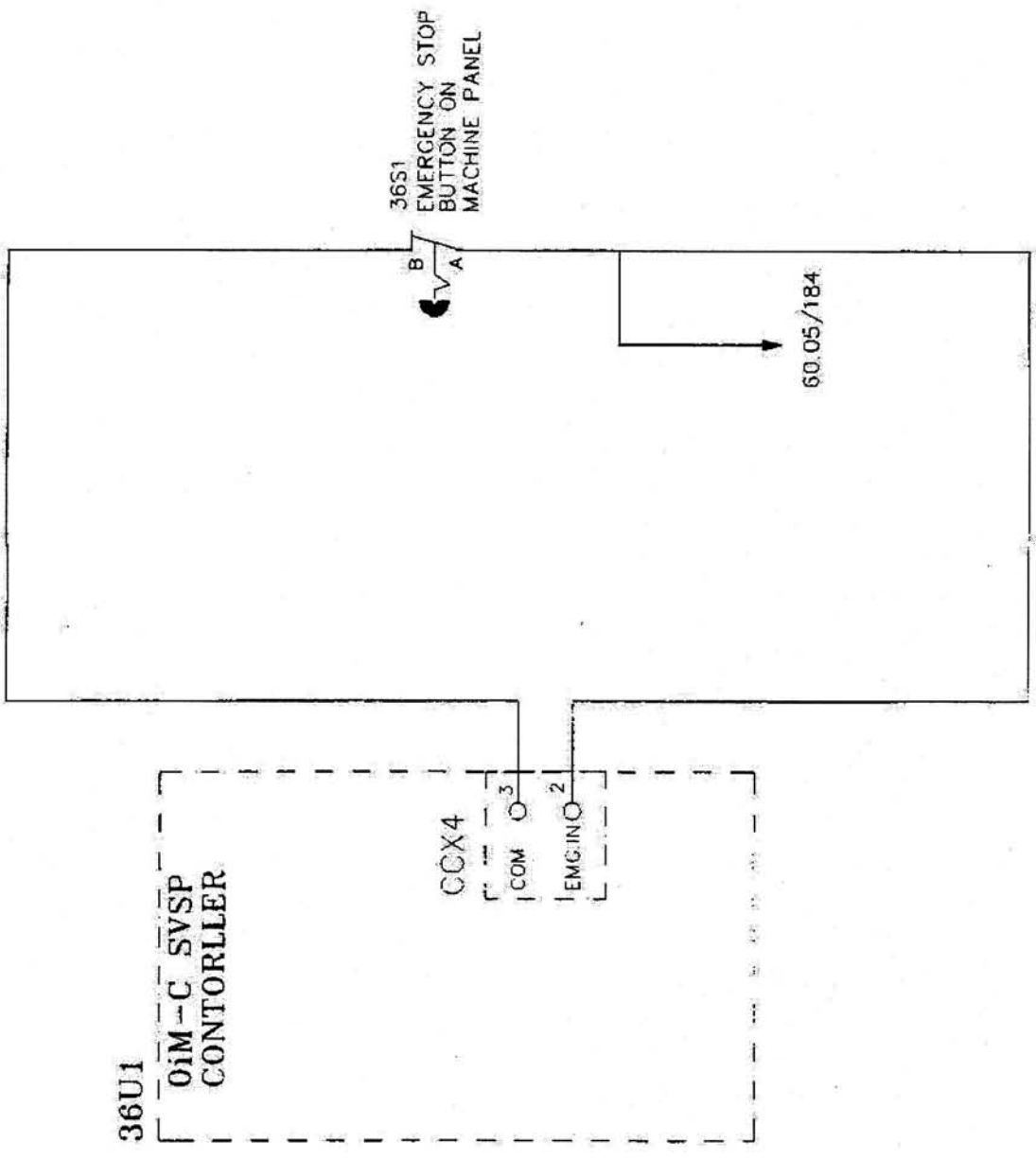
ACER.GRPUO		TITLE : Solenoids ,Magnetic Contactor		MACHINE MODEL CONTROL :		DRAWER : DATE :		VERSION :			
				VMC-2240SL 01M-C		CLARK Aug-01-2006		01			
2	1	21.02	2	1	21.06	2	1	22.03	2	1	22.04
4	3	21.02	4	3	21.06	4	3	22.03	4	3	22.04
6	5	21.02	6	5	21.06	6	5	22.03	6	5	22.04



- CHIP CONVEYOR
 - 2 1 22.02
 - 4 3 22.02
 - 6 5 22.02
- SPINDLE OIL COOLER
 - 2 1 22.03
 - 4 3 22.03
 - 6 5 22.03

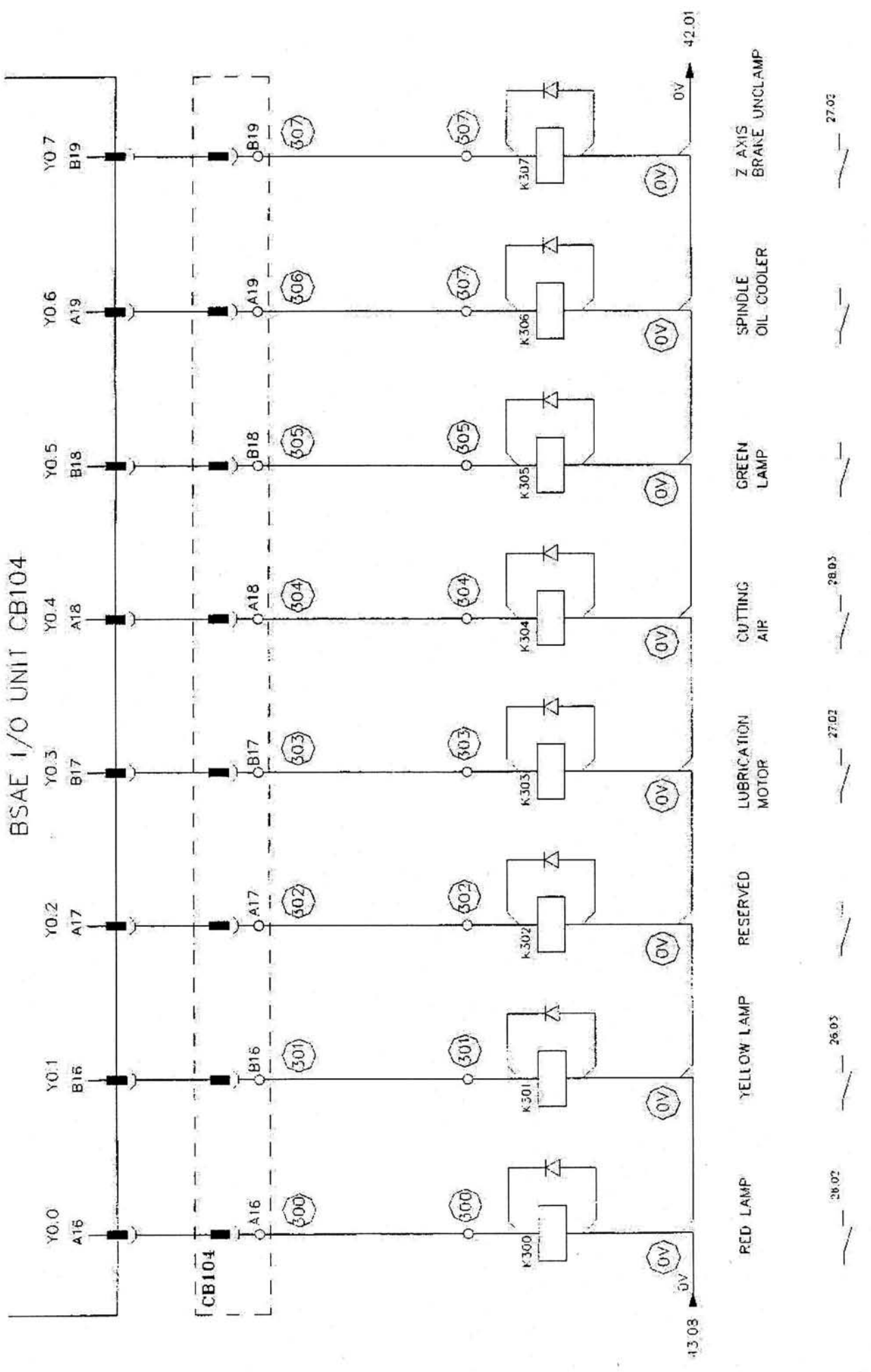


ACER.GRPUO	TITLE : Solenoids ,Lubrication Unit	MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	PAGE 18
		VMC-2240SL	01M-C	CLARK	Aug-01-2006	01	



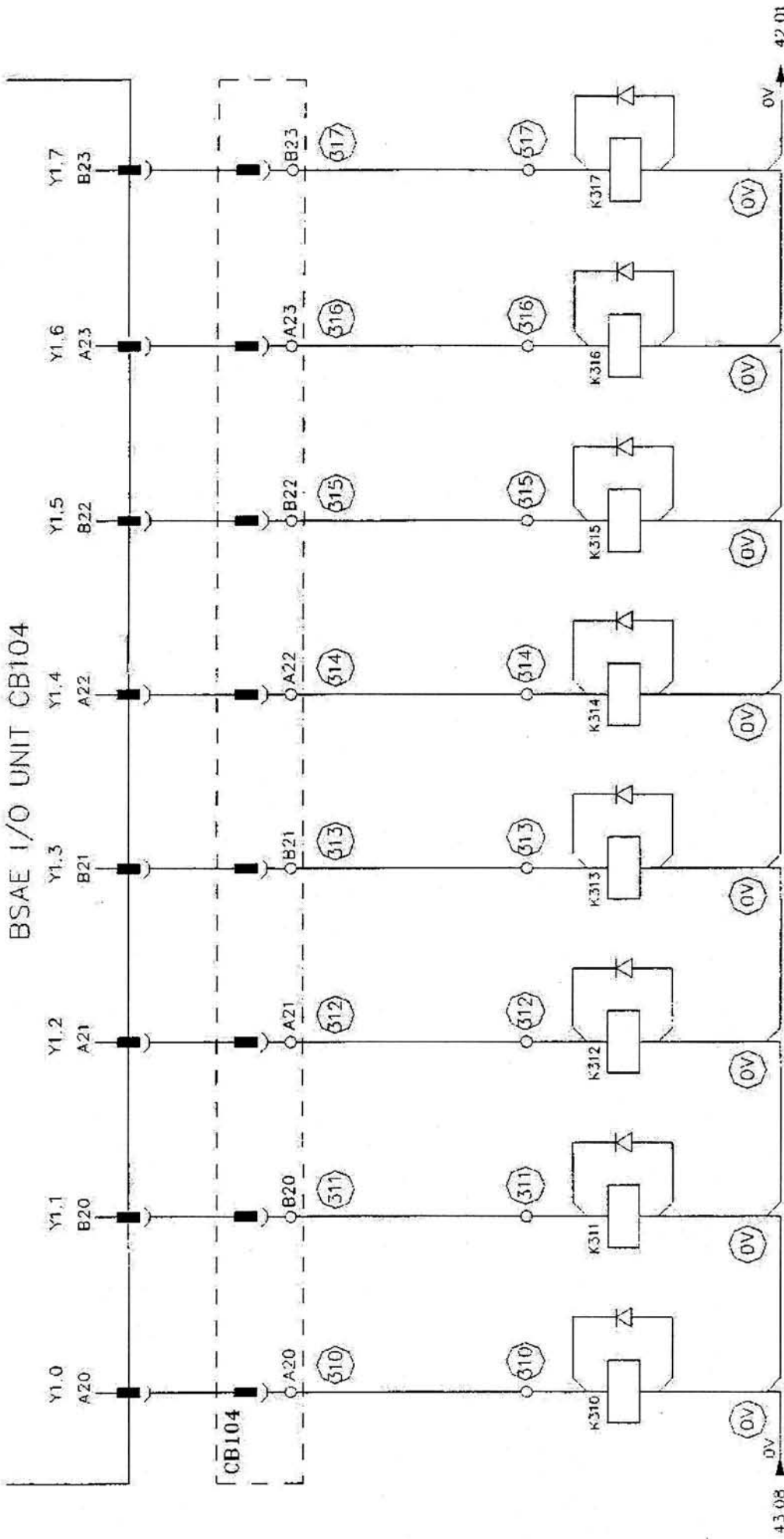
ACER.GRPUO	TITLE : Emergency Stop	MACHINE MODEL VMC-2240SL	CONTROL : OIM-C	DRAWER : CLARK	DATE : Aug-01-2006	VERSION : 01	PAGE 19
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BSAE I/O UNIT CB104



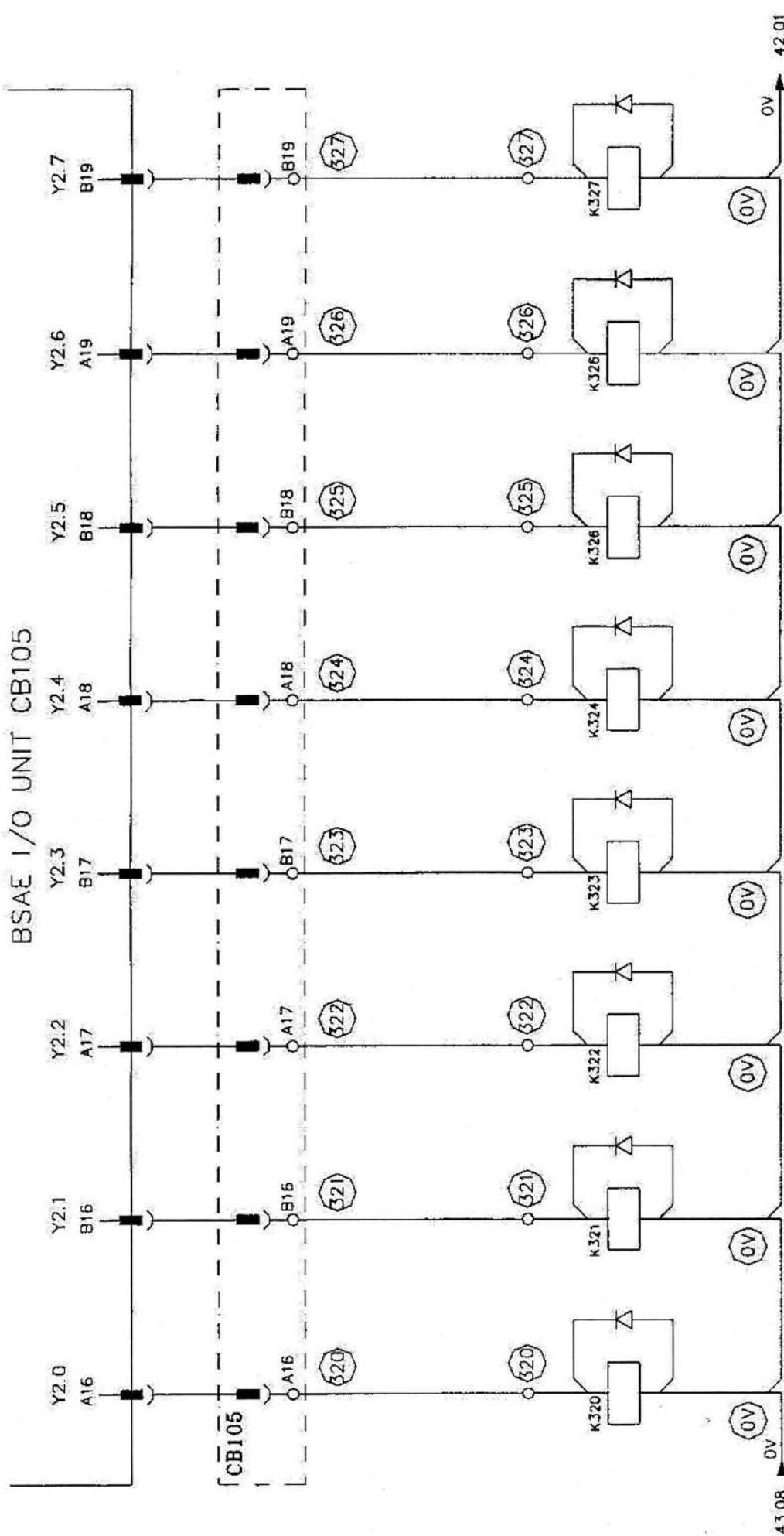
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			VMC-2240SL	01M-C	CLARK	Aug-01-2006	01	
							PAGE	20

BSAE I/O UNIT CB104



43.08	27.03	27.04	27.05	27.05	26.04	26.05	26.06	42.01
POCKET UP	POCKET DOWN	TOOL UNCLAMP	OIL/COOLANT SEPARATION	SPINDLE BESIDE AIR	MAGAZINE MOTOR CW	MAGAZINE MOTOR CCW	ARM MOTOR CW	

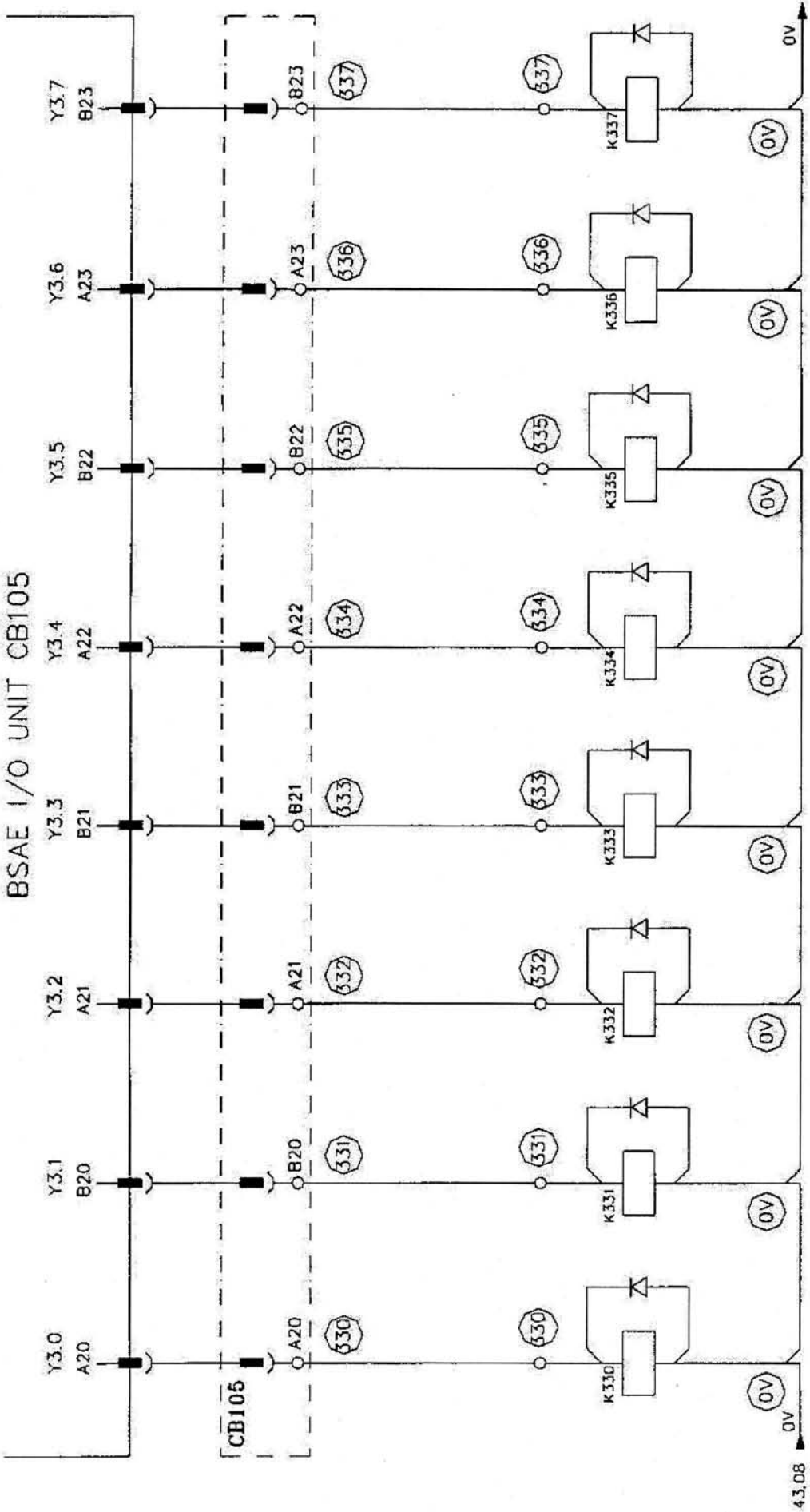
BSAE I/O UNIT CB105



43.08	0V	ARM MOTOR CCW	RESERVED	A.T.L.M	4 AXIS CLAMP	RESERVED	WORK LIGHT	RESERVED	RESERVED	RESERVED	0V	42.01
26.07	28.02	24.06										

ACER.GRP00	TITLE : Relays & Signal Outputs			MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	PAGE 22
				VMC-2240SL	01M-C	CLARK	Aug-01-2006	01	

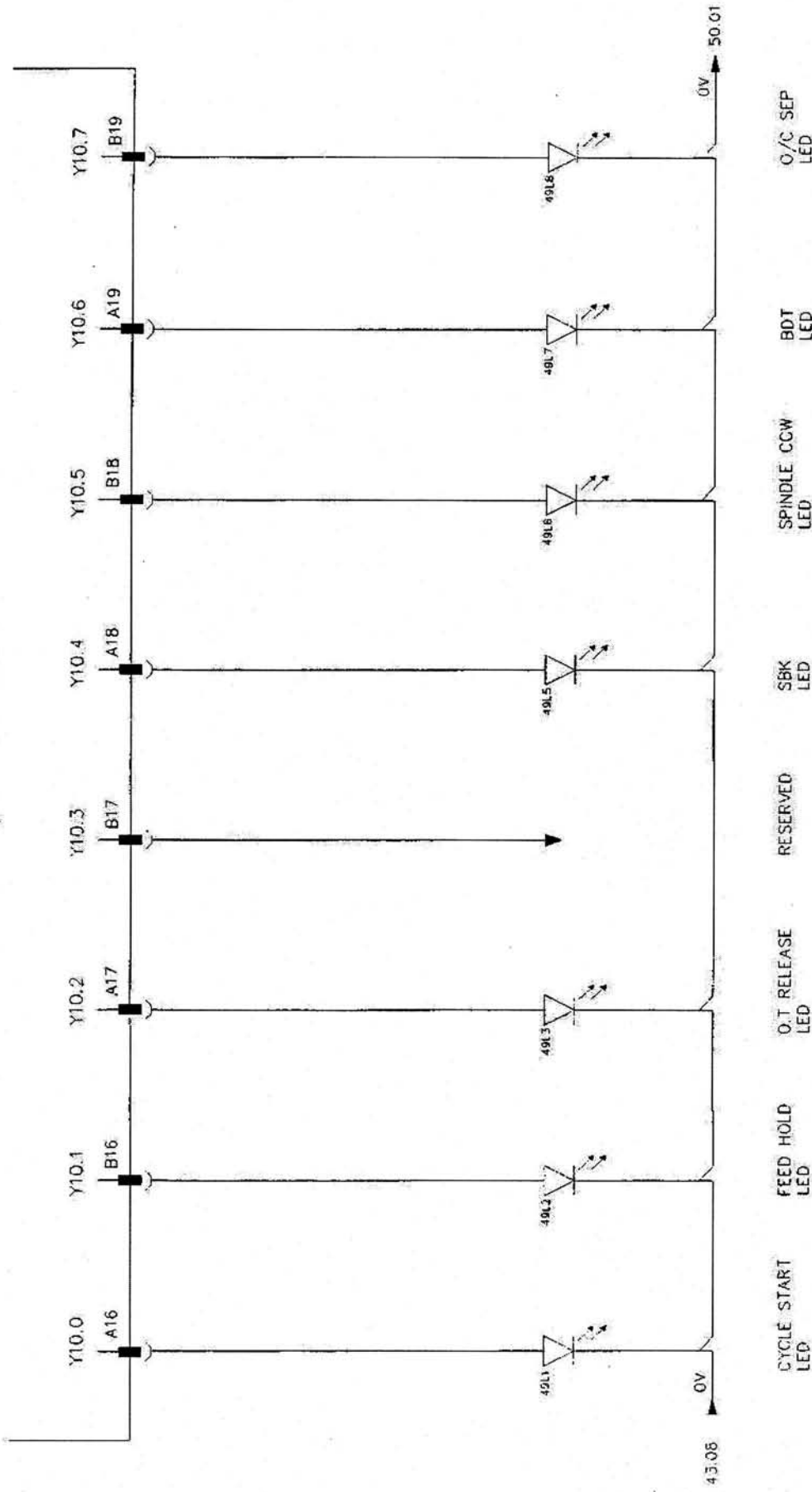
BSAE I/O UNIT CB105



- CHIP AUGER MOTOR CW
- CHIP AUGER MOTOR CCW
- COOLANT MOTOR
- M30 AUTO POWER OFF (OPTION)
- WASHING DOWN
- RESERVED
- RESERVED
- RESERVED

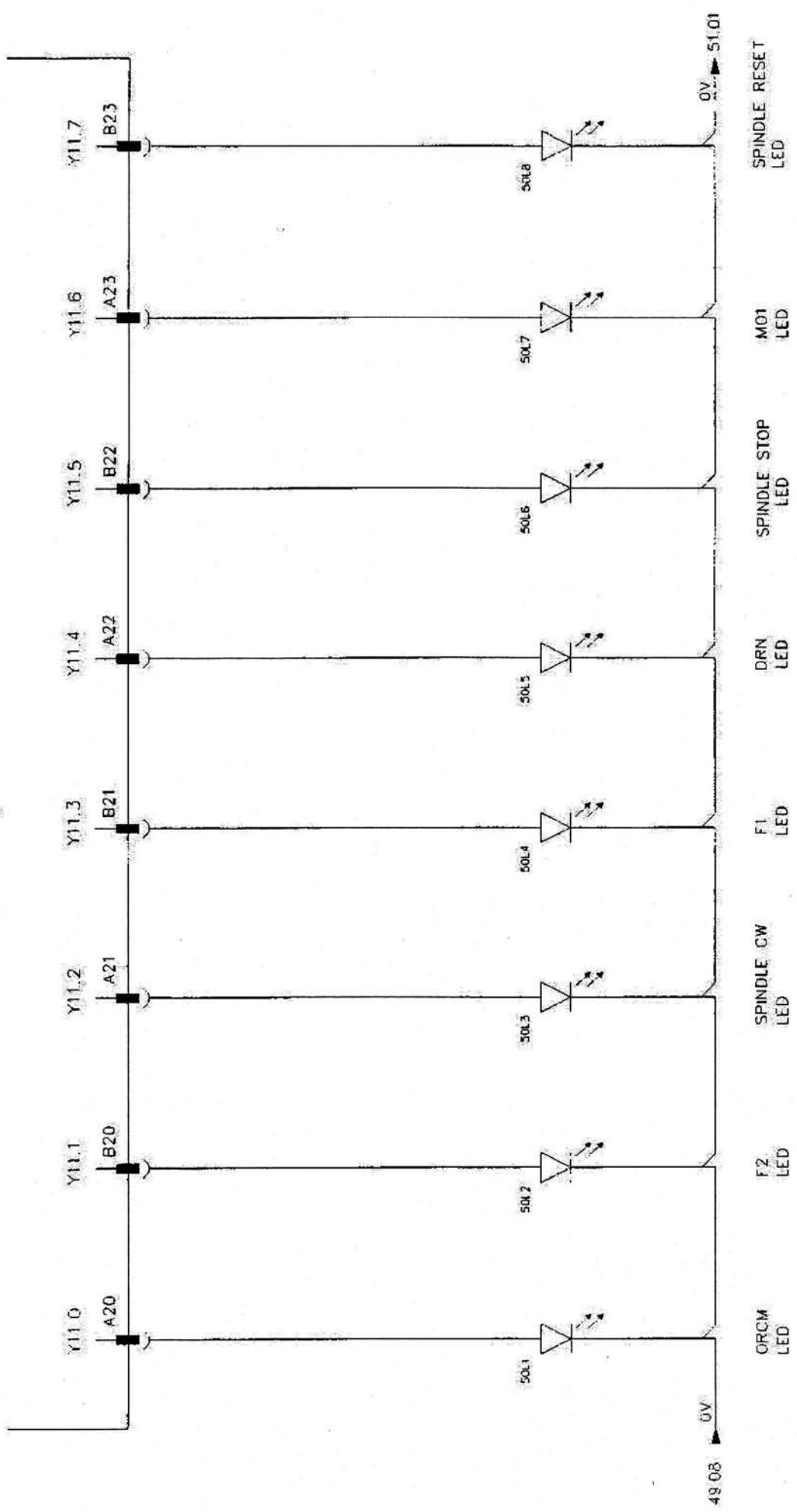
ACER.GRPUO	TITLE : Relays & Signal Outputs			MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	PAGE 23
				VMC-2240SL	01M-C	CLARK	Aug-01-2006	01	

REMOTE I/O UNIT CE56



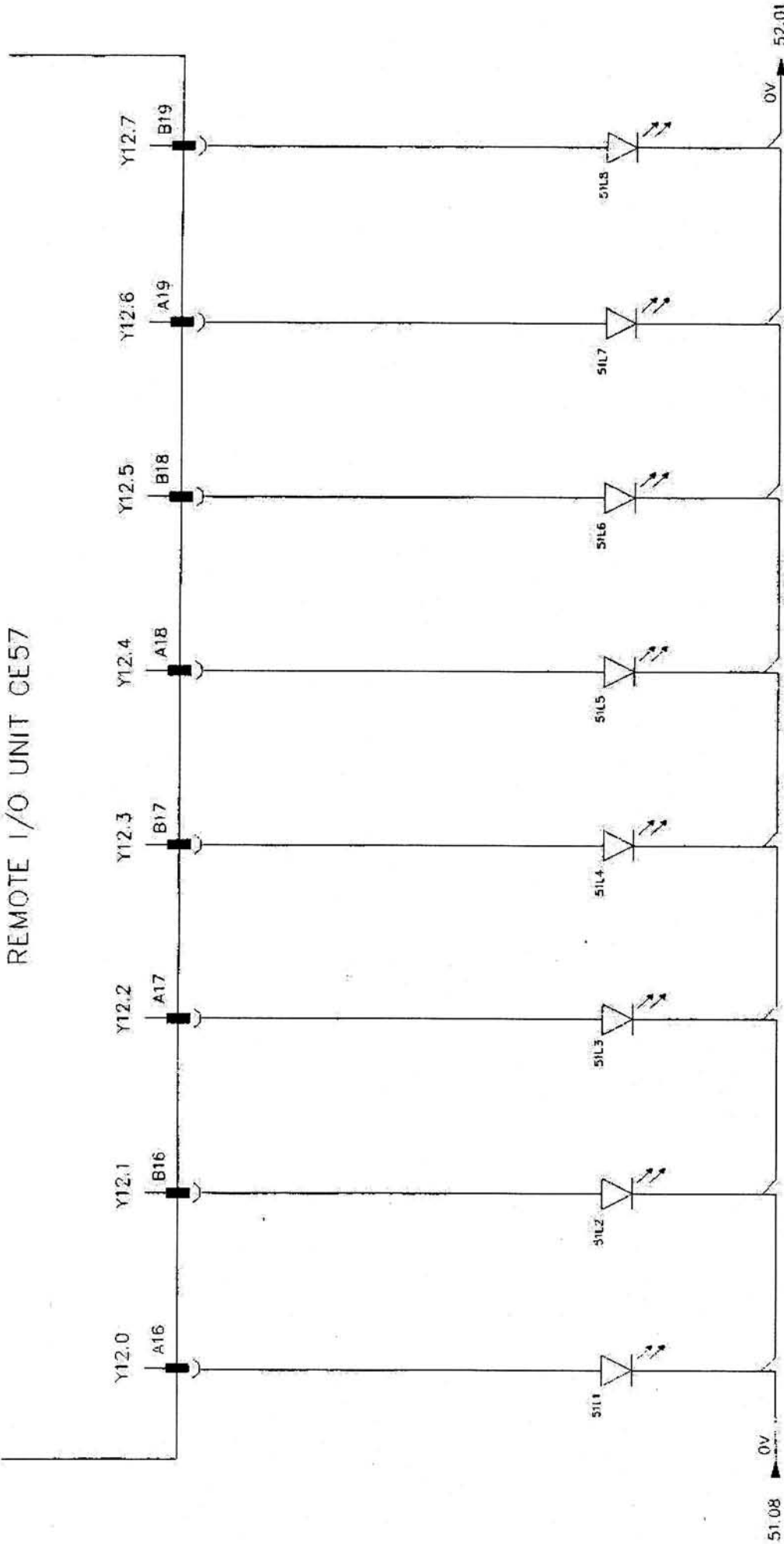
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		VMC-2240SL	0IM-C	CLARK	AUG-01-2006	01	
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REMOTE I/O UNIT CE56



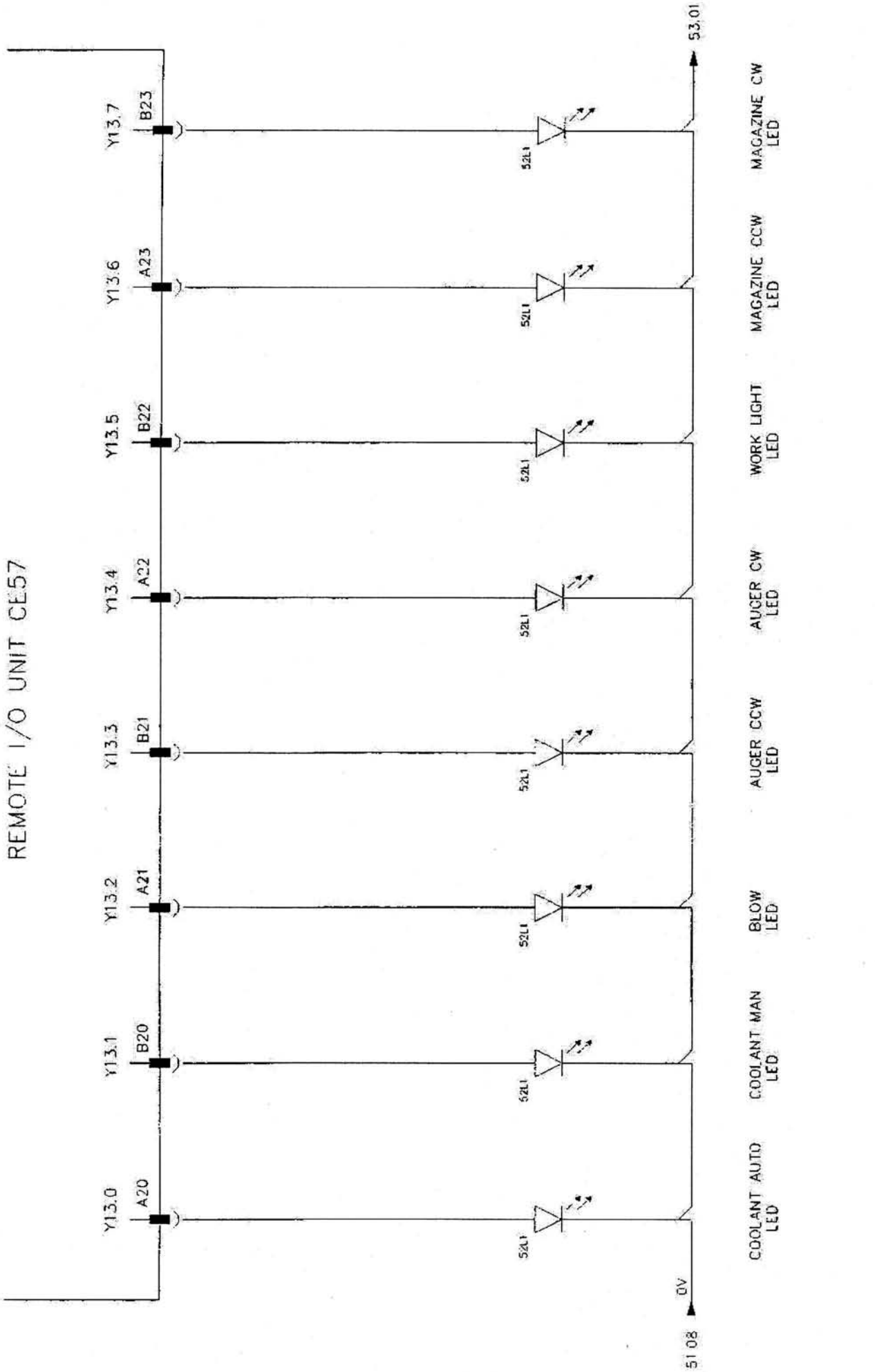
ACER.GRPUO	TITLE : LEDs & Signal Outputs		MACHINE MODEL CONTROL :	DRAWER :	DATE :	VERSION :	PAGE 25
			VMC-2240SL 0IM-C	CLARK	Aug-01-2006	01	

REMOTE I/O UNIT CE57



ACER.GRPUO	TITLE : LEDs & Signal Outputs		MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	
			VMC-2240SL	0iM-C	CLARK	Aug-01-2006	01	
							PAGE	26

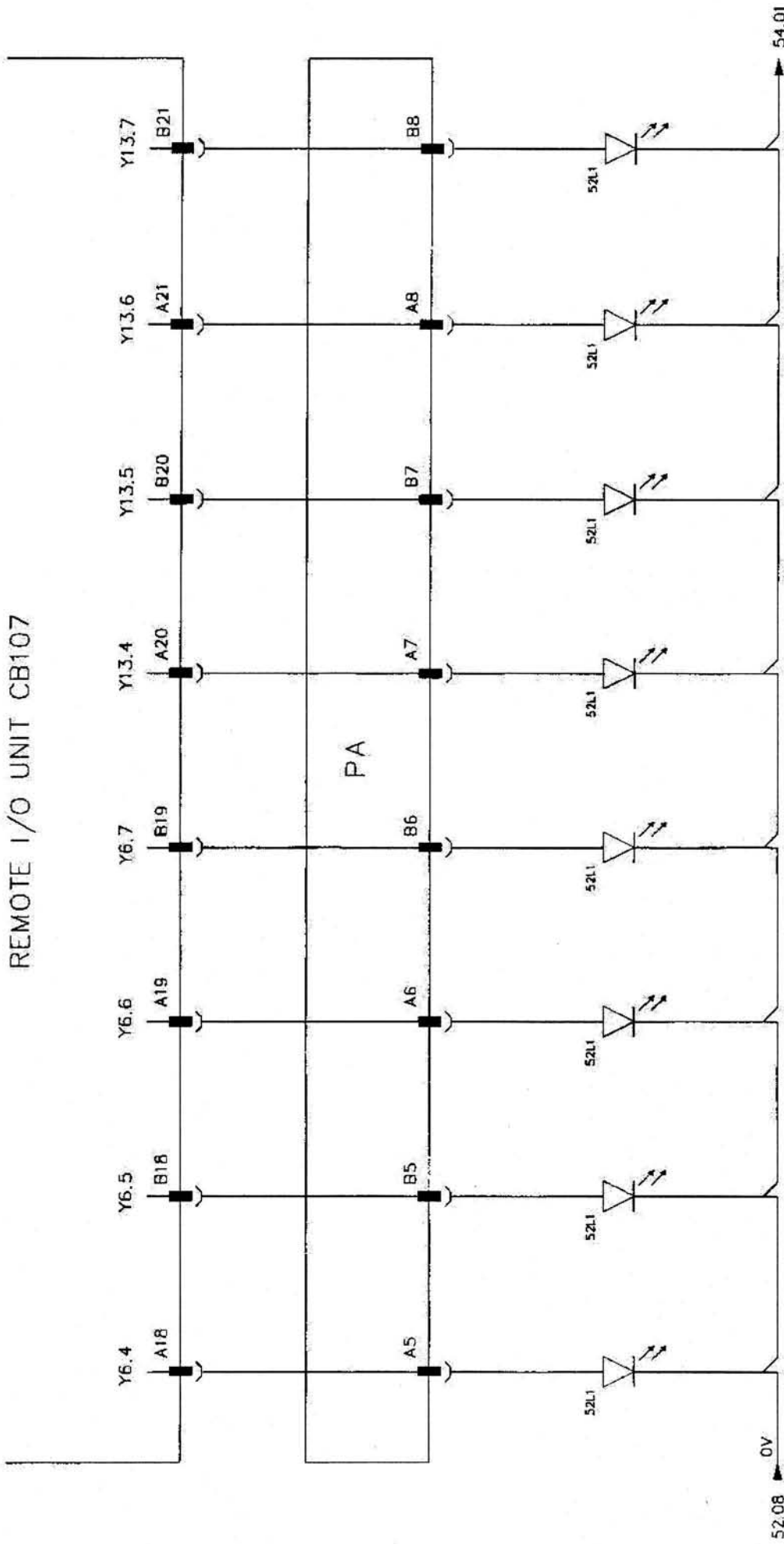
REMOTE I/O UNIT CE57



- COOLANT AUTO LED
- COOLANT MAN LED
- BLOW LED
- AUGER CCW LED
- AUGER CW LED
- WORK LIGHT LED
- MAGAZINE CCW LED
- MAGAZINE CW LED

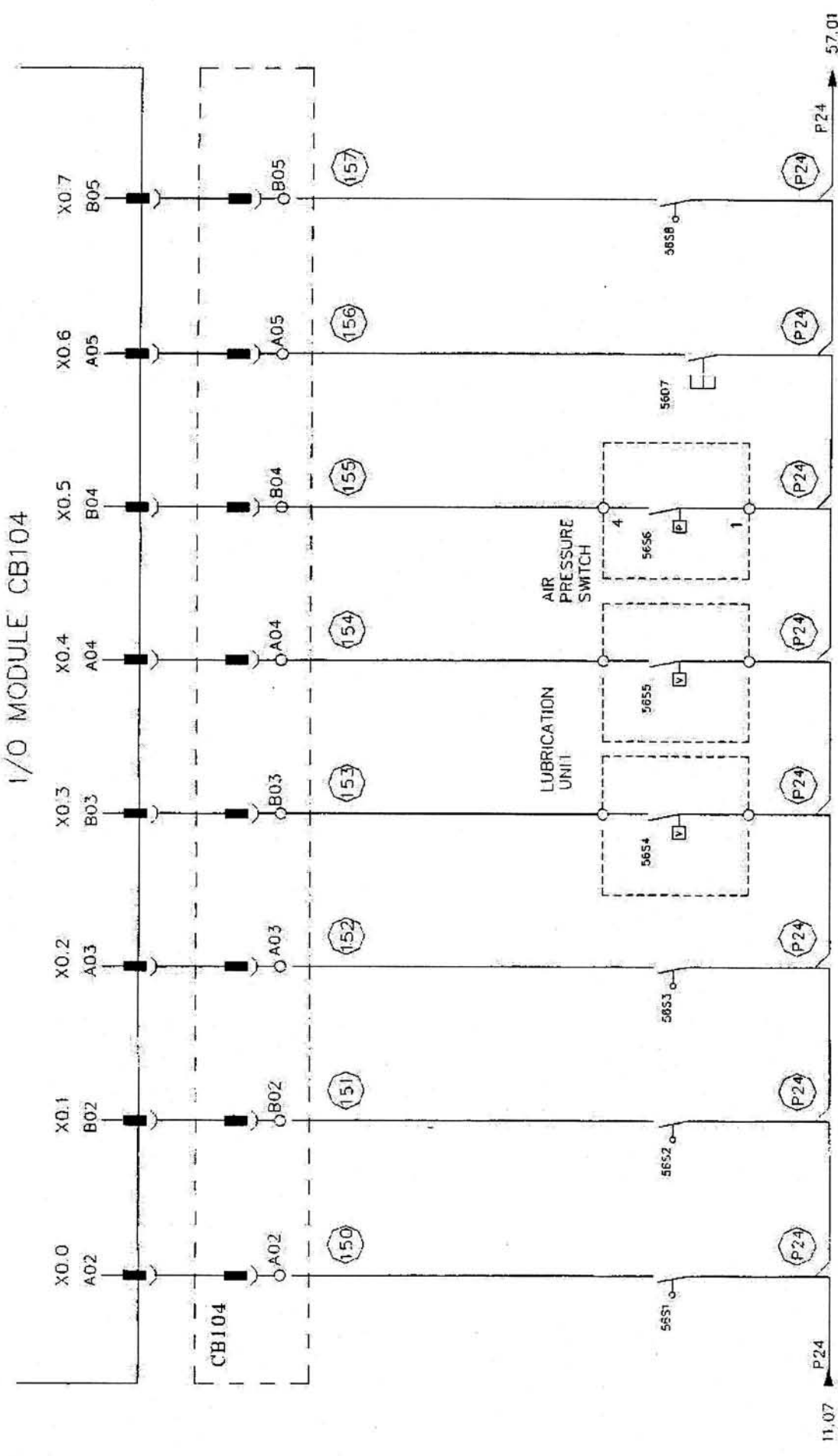
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			VMC-2240SL	01M-C	CLARK	Aug-01-2006	01	
							PAGE	27

REMOTE I/O UNIT CB107



- NC ALARM LED
- LUBE ALARM LED
- AIR ALARM LED
- ALL AXES HOME LED
- RESERVED
- RESERVED
- RESERVED
- RESERVED
- RESERVED
- RESERVED

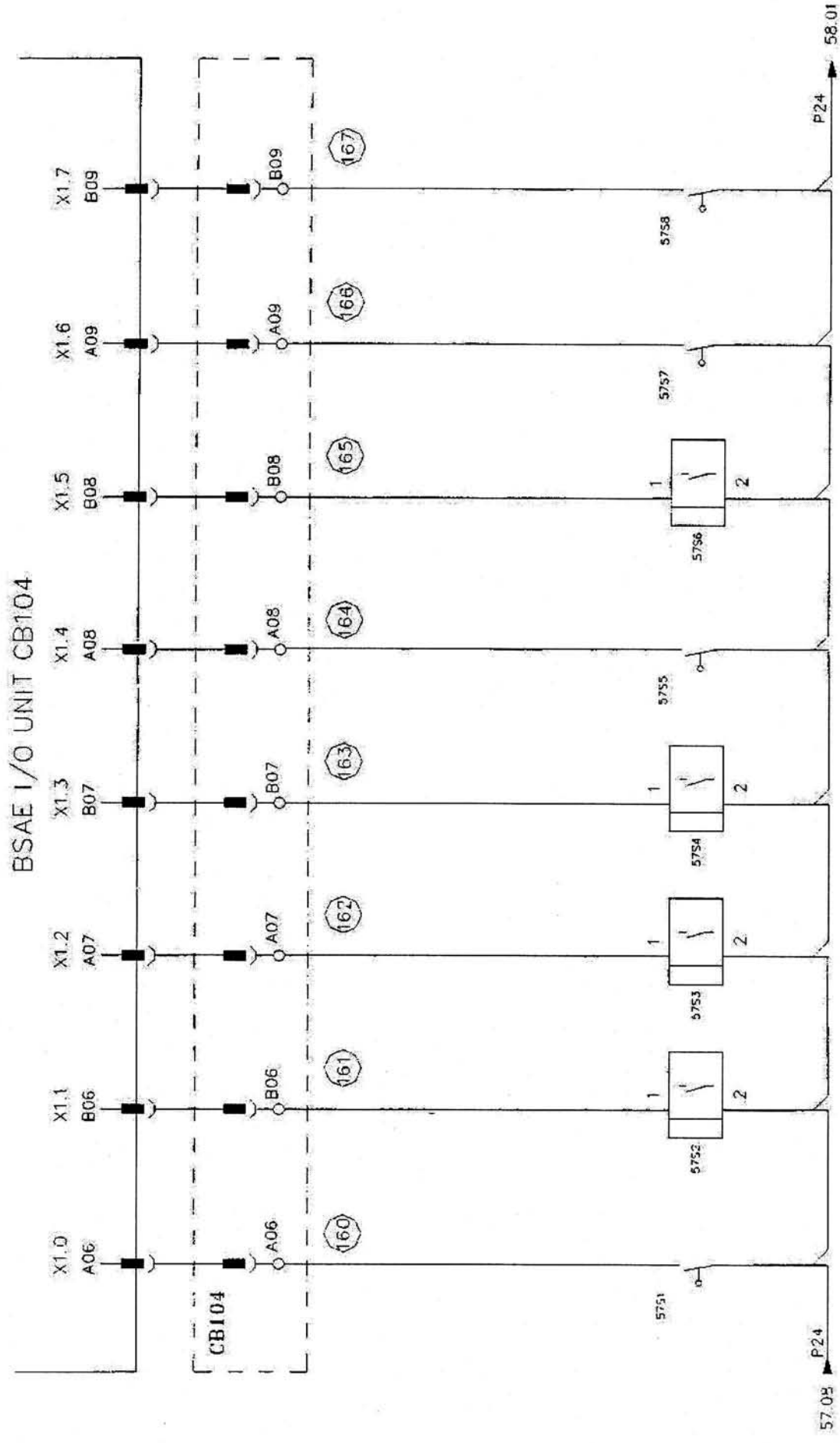
I/O MODULE CB104



CHIP AUGER OVERLOAD
 LUBRICATION LEVEL LOW DETECTION
 LUBRICATION PRESSURE DETECTION (OPT)
 AIR PRESSURE LOW
 MAN TOOL UNCLAMP BUTTON

ACER.GRPUO	TITLE : Sensors & Signal Inputs		MACHINE MODEL VMC-2240SL	CONTROL : 01M-C	DRAWER : CLARK	DATE :	VERSION : 01
	Aug-01-2006					PAGE 29	

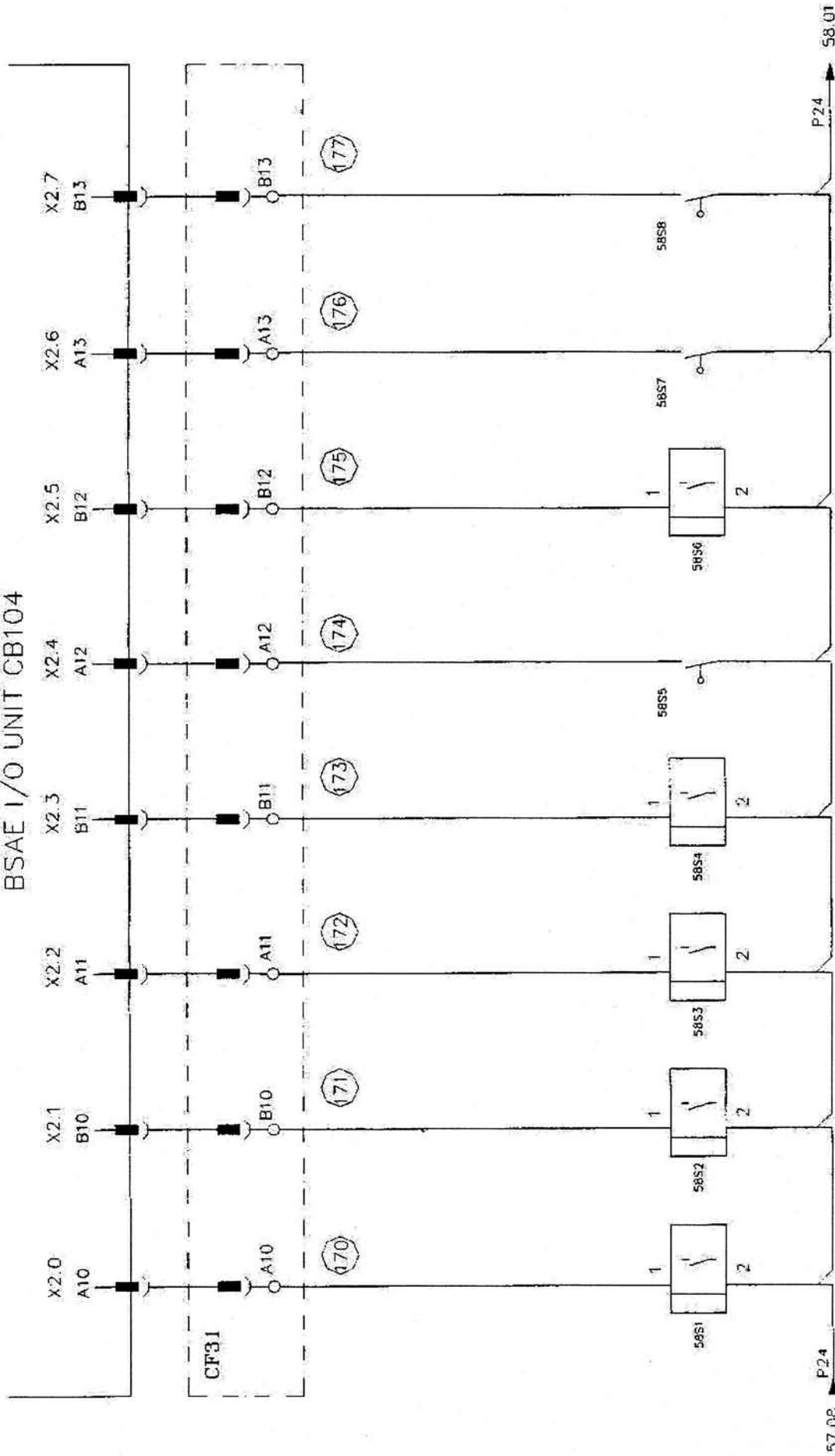
BSAE I/O UNIT CB104



TOOL UNCLAMP POT UP POT DOWN MAGAZINE COUNTER MAGAZINE HOME POSITION TOOL CLAMPED

ACER.GRPVUO	TITLE : Sensors & Signal Inputs		MACHINE MODEL CONTROL :	DRAWER :	DATE :	VERSION :	PAGE 30
			VMC-2240SL	CLARK	Aug-01-2006	01	

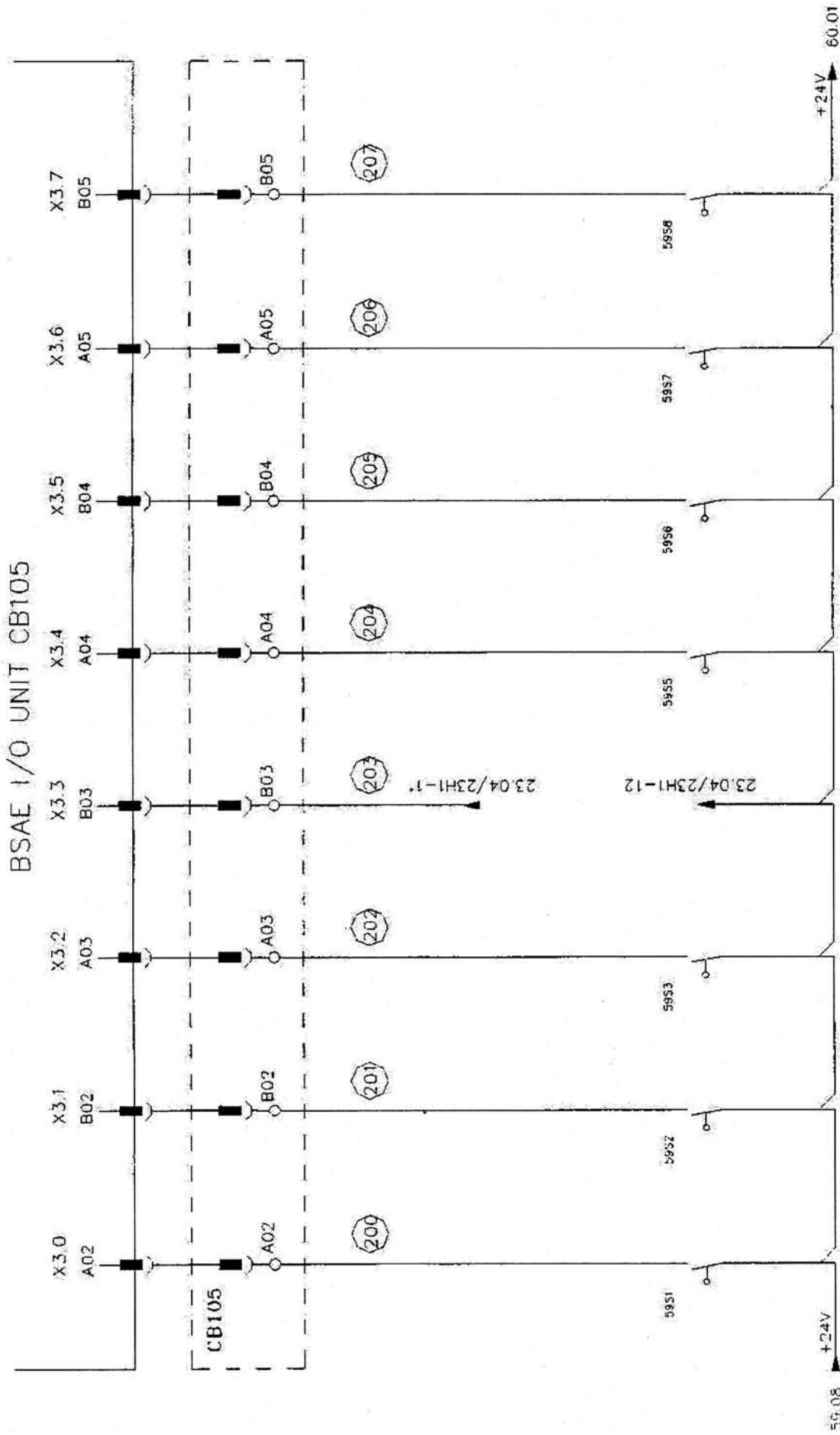
BSAE I/O UNIT CB104



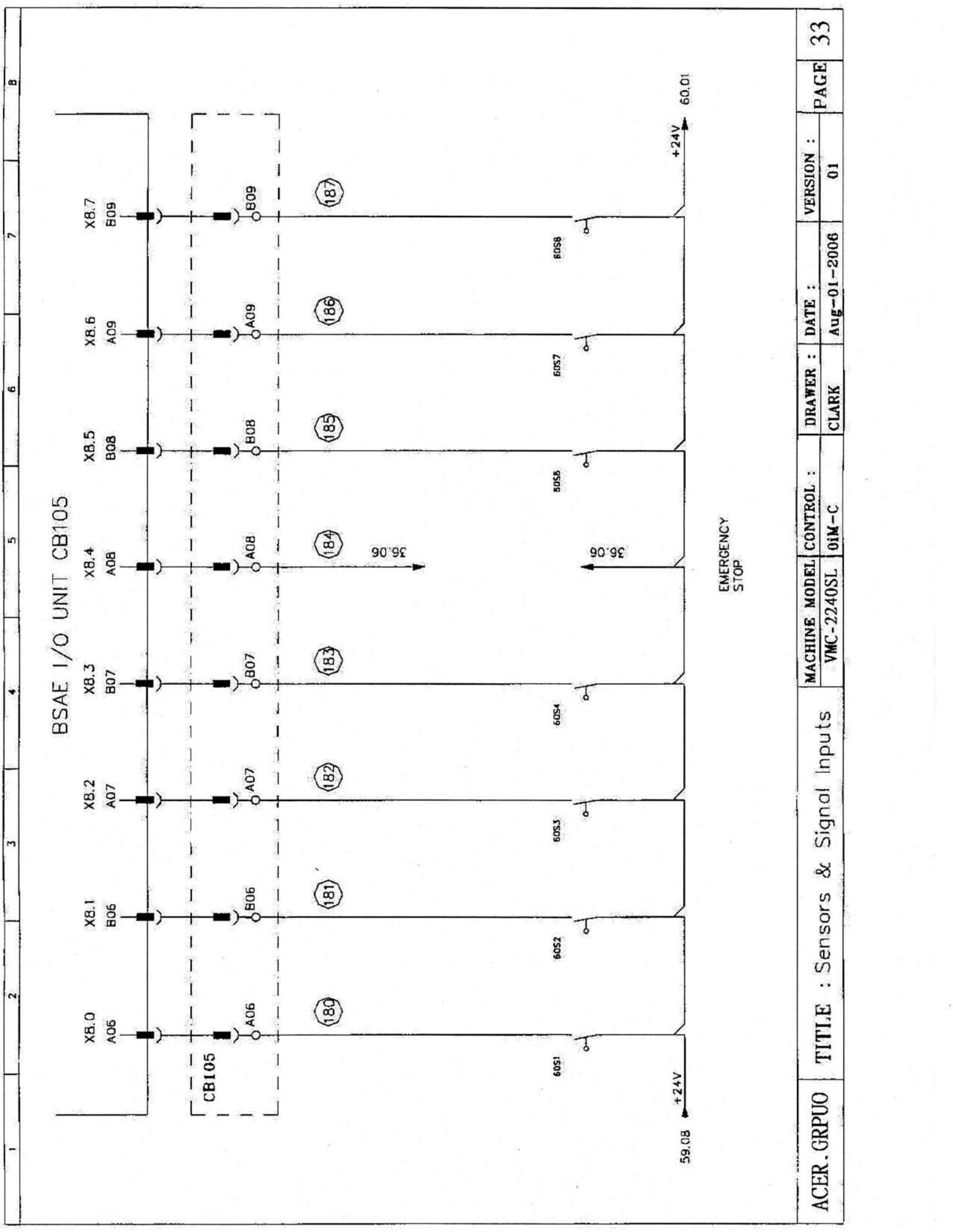
ARM IN TOOL CL/CLMAP POSITION
 ARM IN ORIGIN POSITION
 ARM IN BRAKE POSITION
 4 TH CLAMP DETECTION
 4 TH UNCLAMP DETECTION
 ARM MOTOR OVERLOAD

ACER.GRPUO	TITLE ; Sensors & Signal Inputs			MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	PAGE 31
				VMC-2240SL	01M-C	CLARK	Aug-01-2006	01	

BSAE I/O UNIT CB105



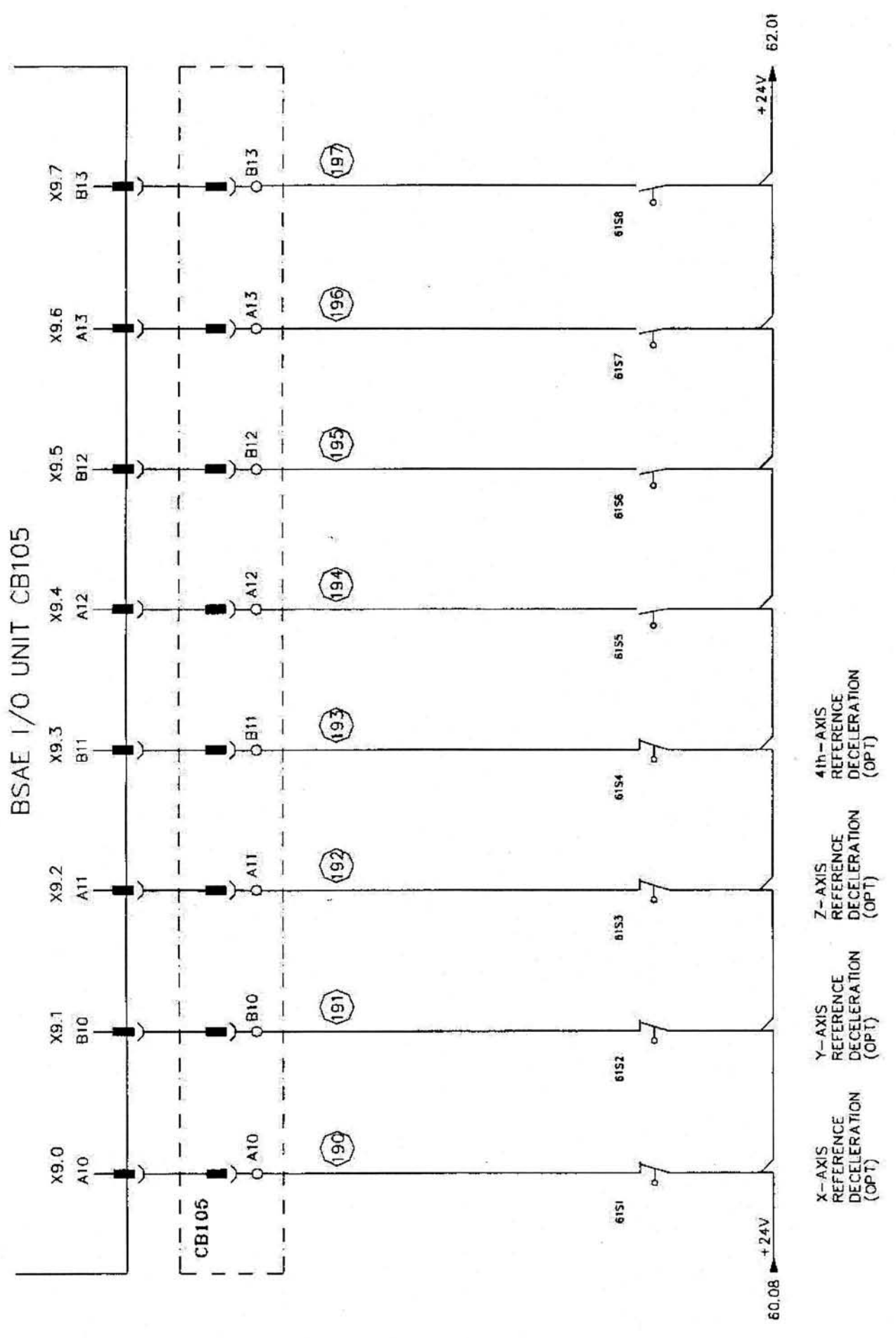
ACER.GRP00	TITLE : Sensors & Signal Inputs		MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	PAGE	32
			VMC-2240SL	03M-C	CLARK	Aug-01-2006	01		



BSAE I/O UNIT CB105

ACER.GRPUO	TITLE : Sensors & Signal Inputs		MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	
			VMC-2240SL	01M-C	CLARK	Aug-01-2006	01	
							PAGE	33

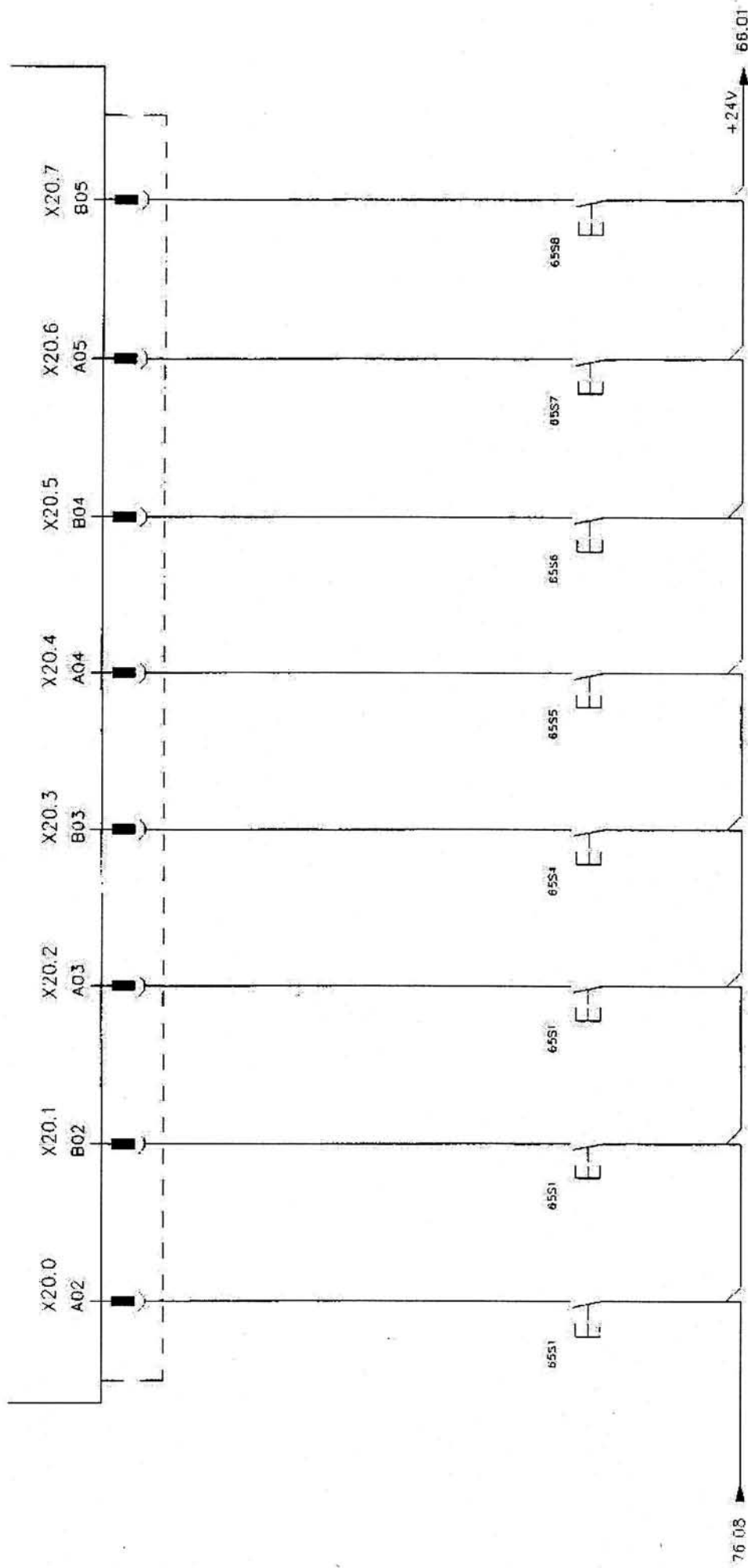
BSAE I/O UNIT CB105



X-AXIS REFERENCE DECELERATION (OPT)
 Y-AXIS REFERENCE DECELERATION (OPT)
 Z-AXIS REFERENCE DECELERATION (OPT)
 4th-AXIS REFERENCE DECELERATION (OPT)

ACER.GRPUO	TITLE : Sensors & Signal Inputs		MACHINE MODEL VMC-2240SL	CONTROL : 01M-C	DRAWER :	DATE :	VERSION :	
	CLARK	Aug-01-2006			01			
							PAGE	34

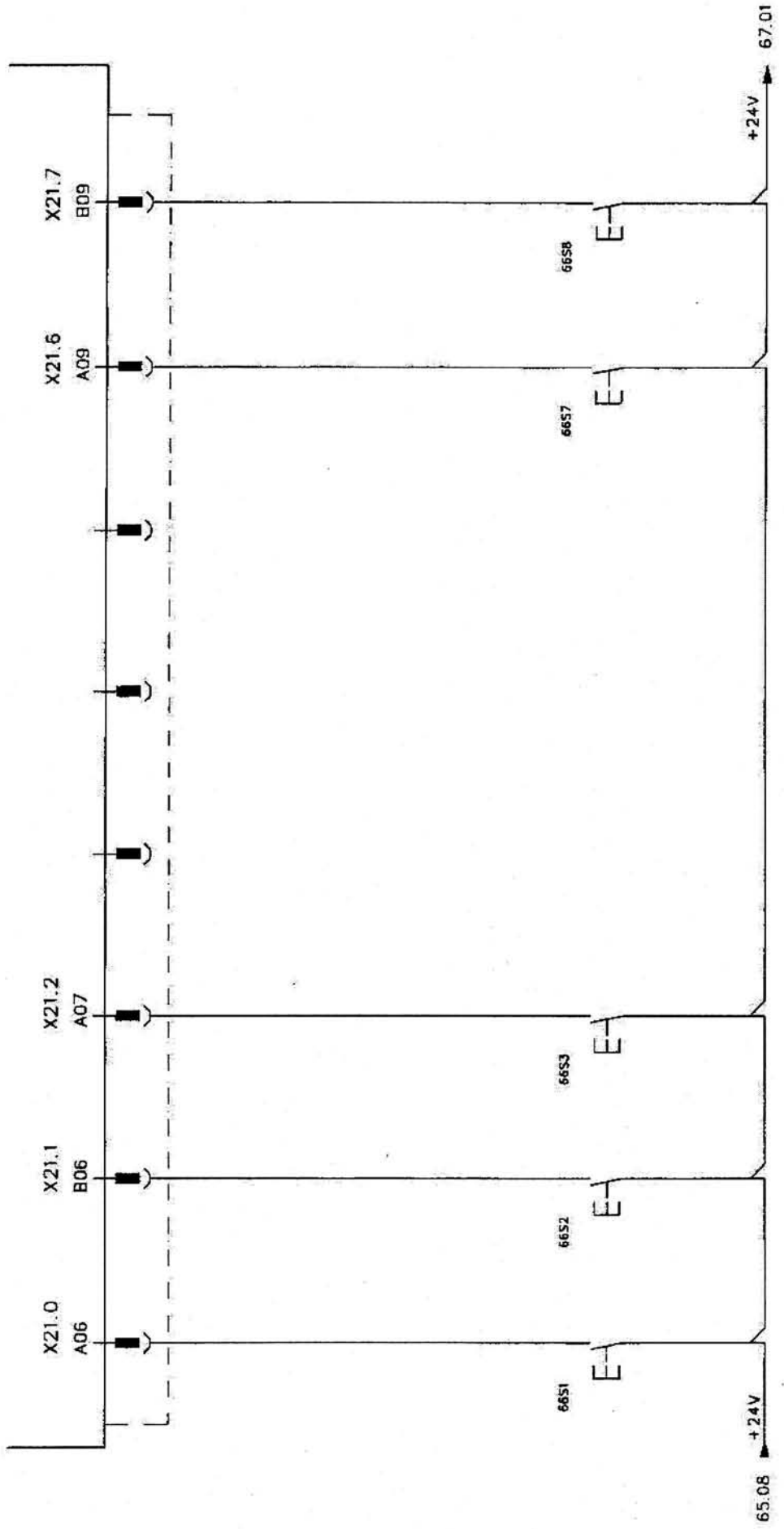
REMOTE I/O UNIT CE56



CYCEL START FEED HOLD O.T. RELEASE JOG -X JOG +X JOG +Y JOG -Y JOG -Z

ACER.GRP00	TITLE : Panel Buttons & Signal Inputs	MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	
		VMC-2240SL	01M-C	CLARK	Aug--01--2006	01	
						PAGE	35

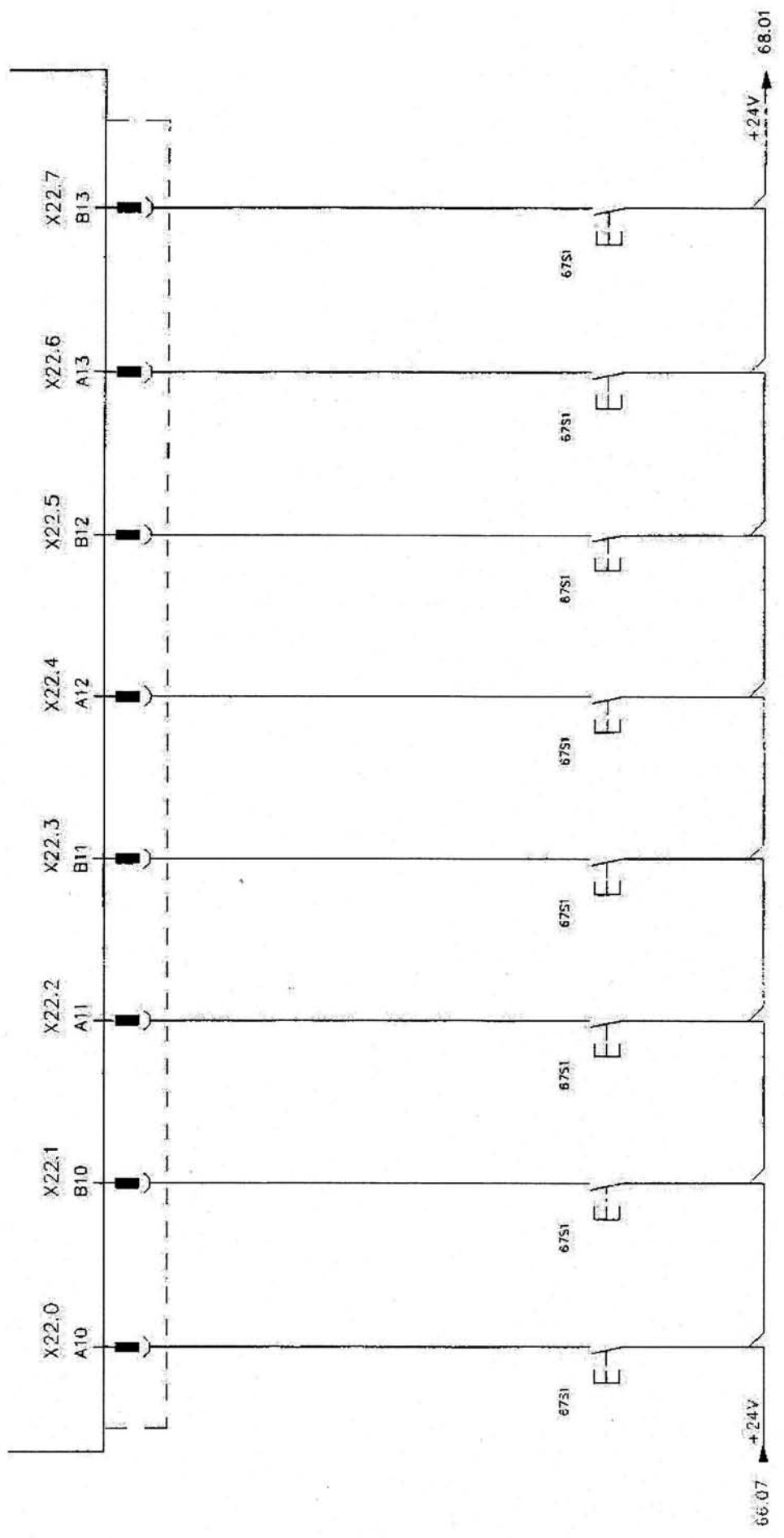
REMOTE I/O UNIT CE56



JOG +Z JOG -4 JOG +4 M01 DRN

ACER.GRP/0	TITLE : Inputs	MACHINE MODEL CONTROL : VMC-2240SL	DRAWER : CLARK	DATE : Aug-01-2006	VERSION :	PAGE
					01	

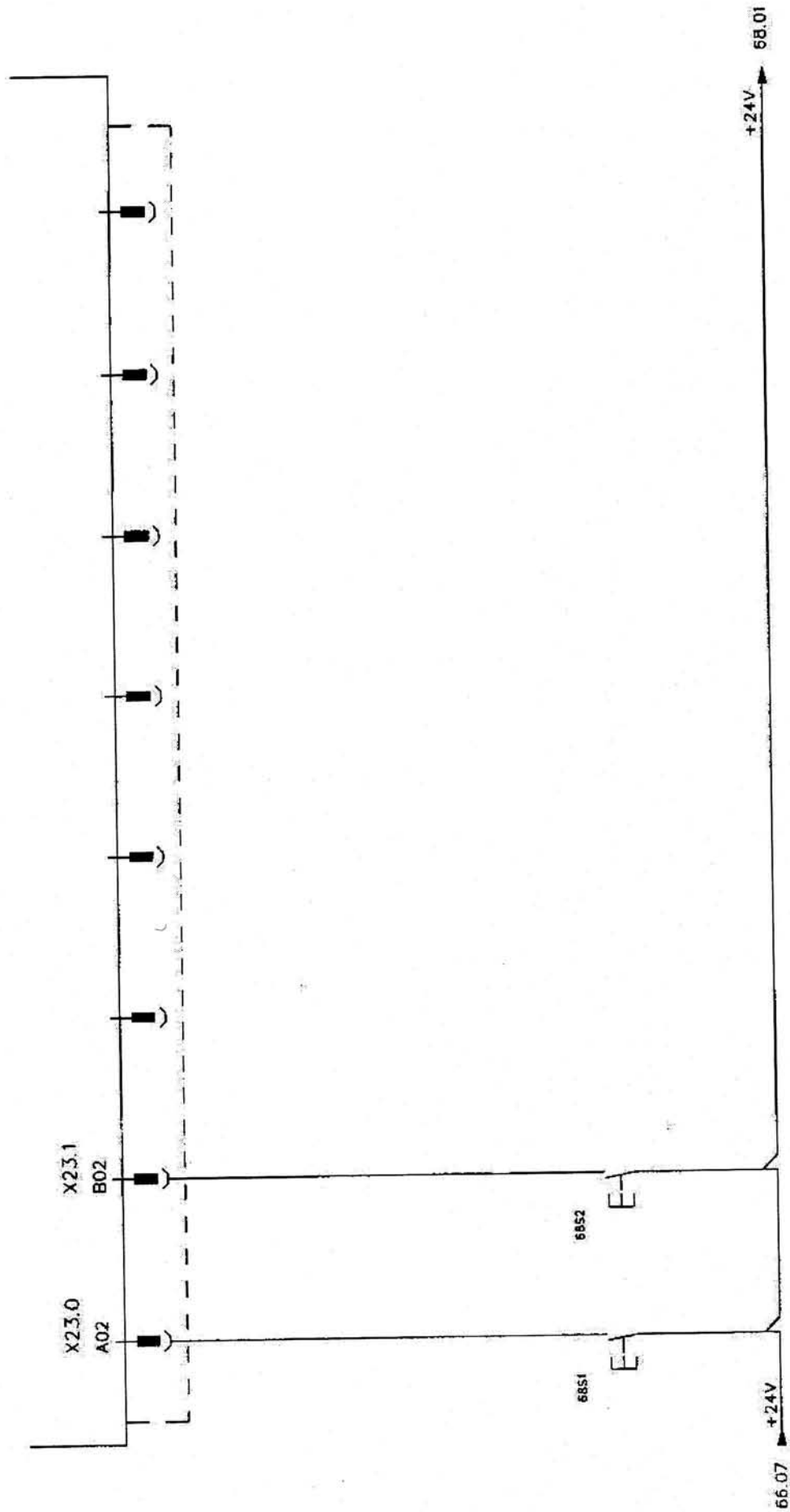
REMOTE I/O UNIT CE56



SPINDLE CW SPINDLE CCW SBK OIL/COOLANT SEPARATION BDT F2 ORCM F1

ACER.GRPUO	TITLE : Panel Buttons & Signal Inputs	MACHINE MODEL : VMC-2240SL	CONTROL : DIM-C	DRAWER : CLARK	DATE : Aug-01-2006	VERSION : 01	PAGE 37
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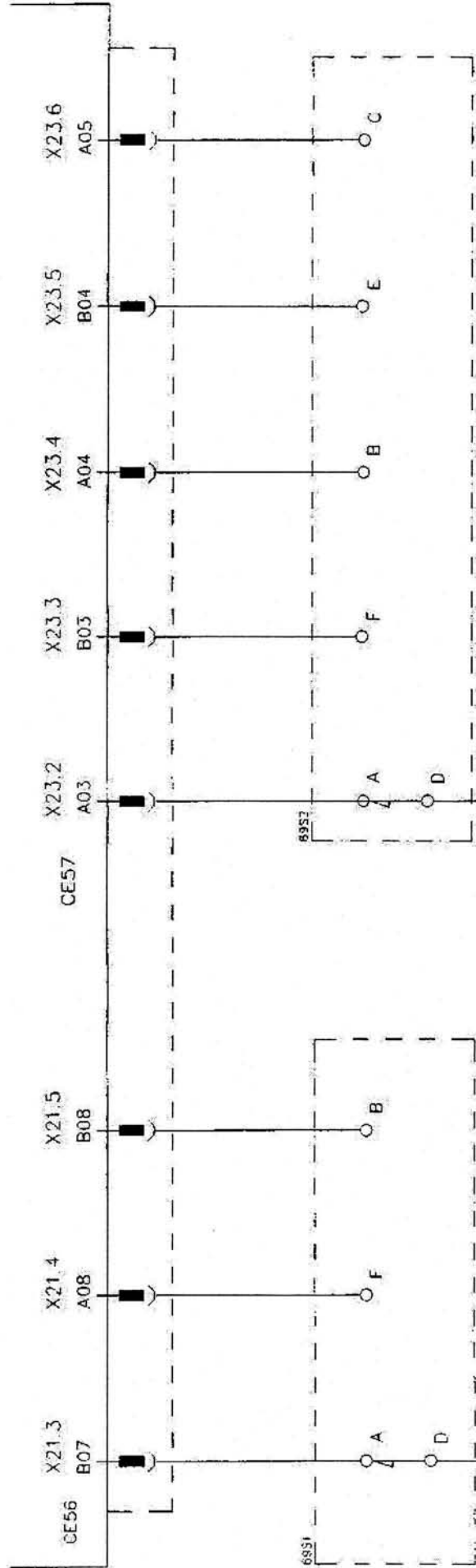
REMOTE I/O UNIT CE56



SPINDLE STOP SPINDLE RELEASE

ACER.GRP/0	TITLE : Panel Buttons & Signal Inputs		MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	PAGE 38
			VMC-2240SL	0IM-C	CLARK	Aug-01-2006	01	

REMOTE I/O UNIT



MODE SELECTION

Address	Signal
X21.3	1 0 1 0 1 0 1 0
X21.4	1 1 0 0 1 1 0 0
X21.5	1 1 1 1 0 0 0 0

MODE EDIT AUTO RMT MPG JOG RAPID ZRN

JOG/G01 OVERRIDE

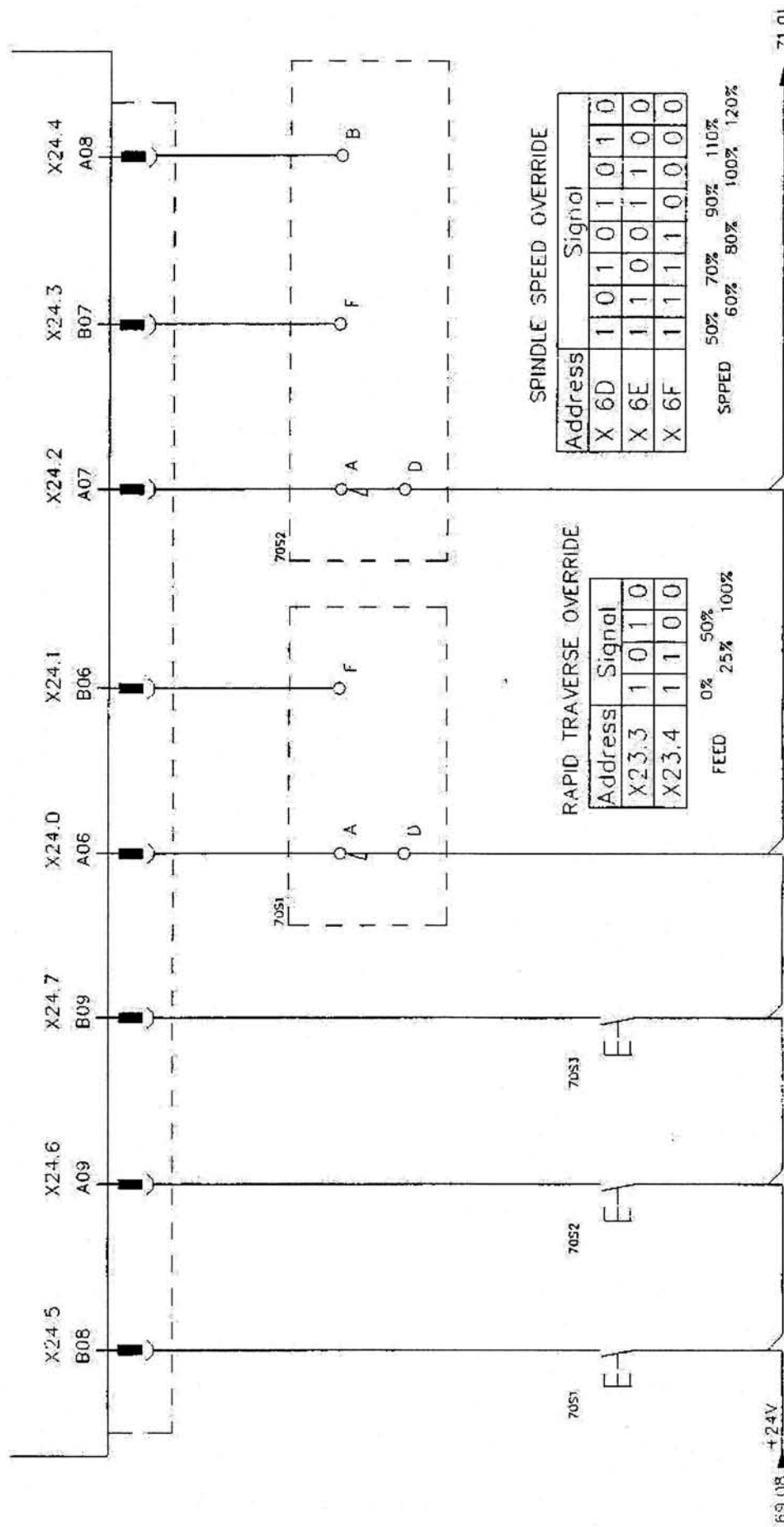
Address	Signal
X23.7	1 0 1 0 1 0 1 0 1 0 1 0 1
X24.0	1 1 0 0 1 1 0 0 1 1 0 0 1
X24.1	1 1 1 1 0 0 0 1 1 1 0 0 0 1 1 1 0
X24.2	1 1 1 1 1 1 1 0 0 0 0 0 0 1 1 1 1
X24.3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 0 0 0 0

FEED 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% 110% 120% 130% 140% 150% 160% 170% 180% 190% 200%

6807 +24V 70.01 +24V

MODE SELECTION 1 SELECTION 2 SELECTION 4
 JOG/G01 OVERRIDE 1 JOG/G01 OVERRIDE 2 JOG/G01 OVERRIDE 4 JOG/G01 OVERRIDE 8 JOG/G01 OVERRIDE 16

REMOTE I/O UNIT CE57



RAPID TRAVERSE OVERRIDE

Address	Signal
X23.3	1 0 1 1 0
X23.4	1 1 0 0

FEED 0% 50% 100%

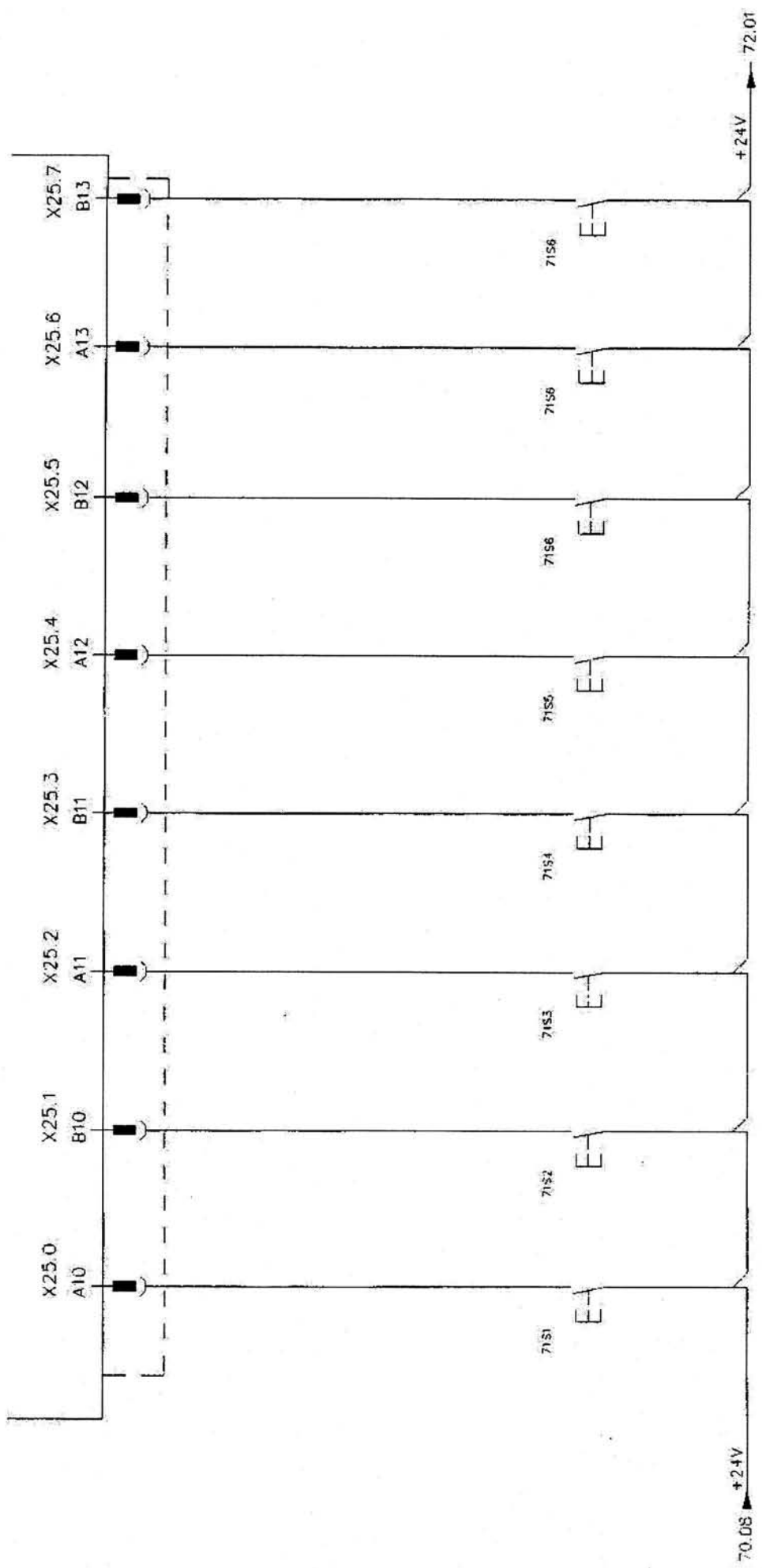
SPINDLE SPEED OVERRIDE

Address	Signal
X 6D	1 0 1 0 1 0 1 0
X 6E	1 1 0 0 1 1 0 0
X 6F	1 1 1 1 0 0 0 0

SPPED 50% 70% 80% 90% 100% 110% 120%

KEY MAGAZINE CW MAGAZINE CCW RAPID TRAVERSE SPINDLE SPEED SPINDLE SPEED SPINDLE SPEED
 OVERVERRIDE 1 OVERVERRIDE 2 OVERVERRIDE 1 OVERVERRIDE 2 OVERVERRIDE 4

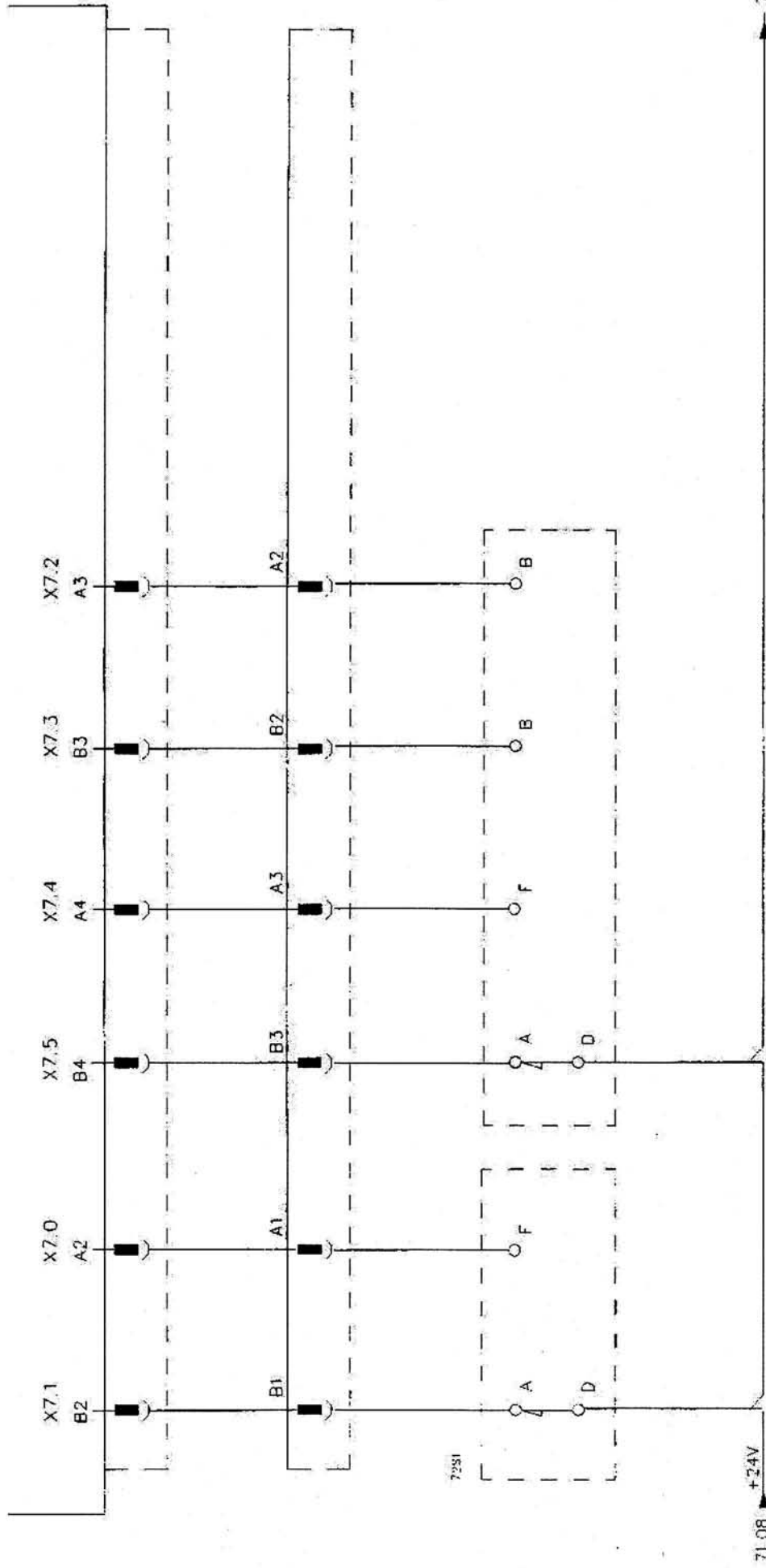
REMOTE I/O UNIT CE57



- WORK LIGHT
- AUGER CW
- AUGER CCW
- BLOW
- COOLANT MAN
- COOLANT AUTO
- WASHDOWN
- M30 AUTO POWER OFF

ACER.GRPUO	TITLE : Panel Buttons & Signal Inputs	MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	
		VMC-2240SL	DiM-C	CLARK	Aug-01-2006	01	
						PAGE	41

REMOTE I/O UNIT CB107



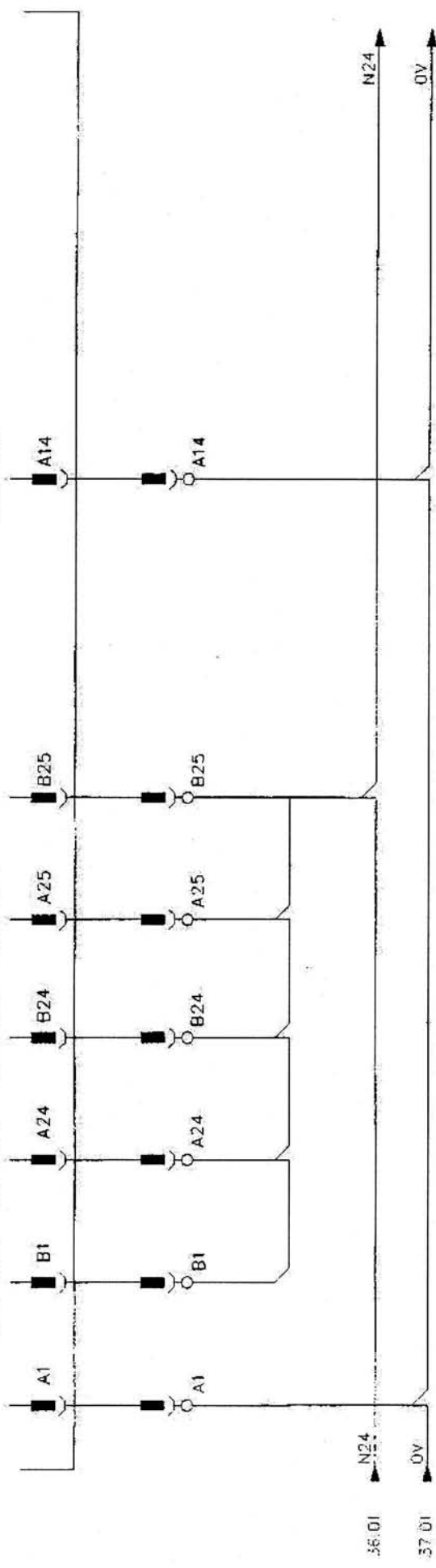
HANDL *100 HANDL *10 HANDL X HANDL Y HANDL Z HANDL Z

ACER.GRPVUO	TITLE : Panel Buttons & Signal Inputs	MACHINE MODEL	CONTROL :	DRAWER :	DATE :	VERSION :	
		VMC-2240SL	03M-C	CLARK	Aug-01-2006	0J	
						PAGE	42

BASE I/O UNIT

CB104 CB105 CB106 CB107

CB106

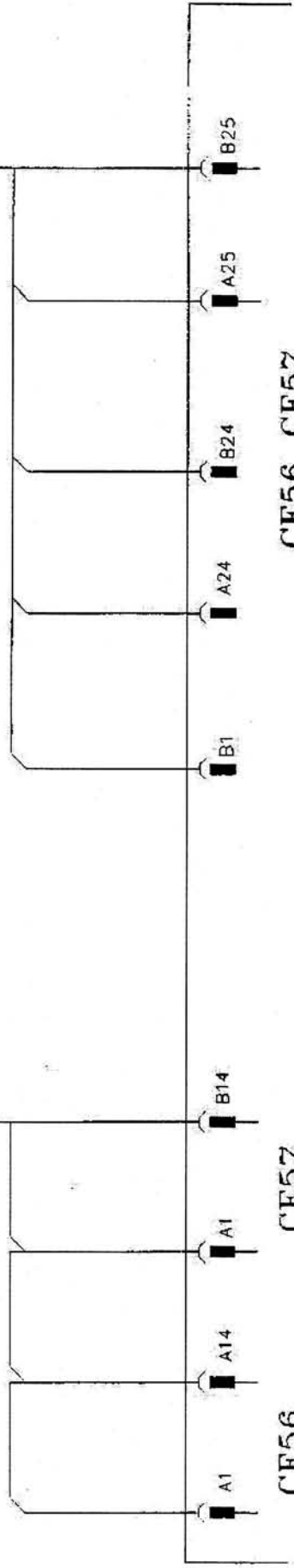


36.01 N24
37.01 0V
49.01 0V
65.01 N24

CE57

CE56 CE57

REMOTE I/O UNIT



ACER.GRPUO TITLE : I/O CARD Signal +24V & 0V

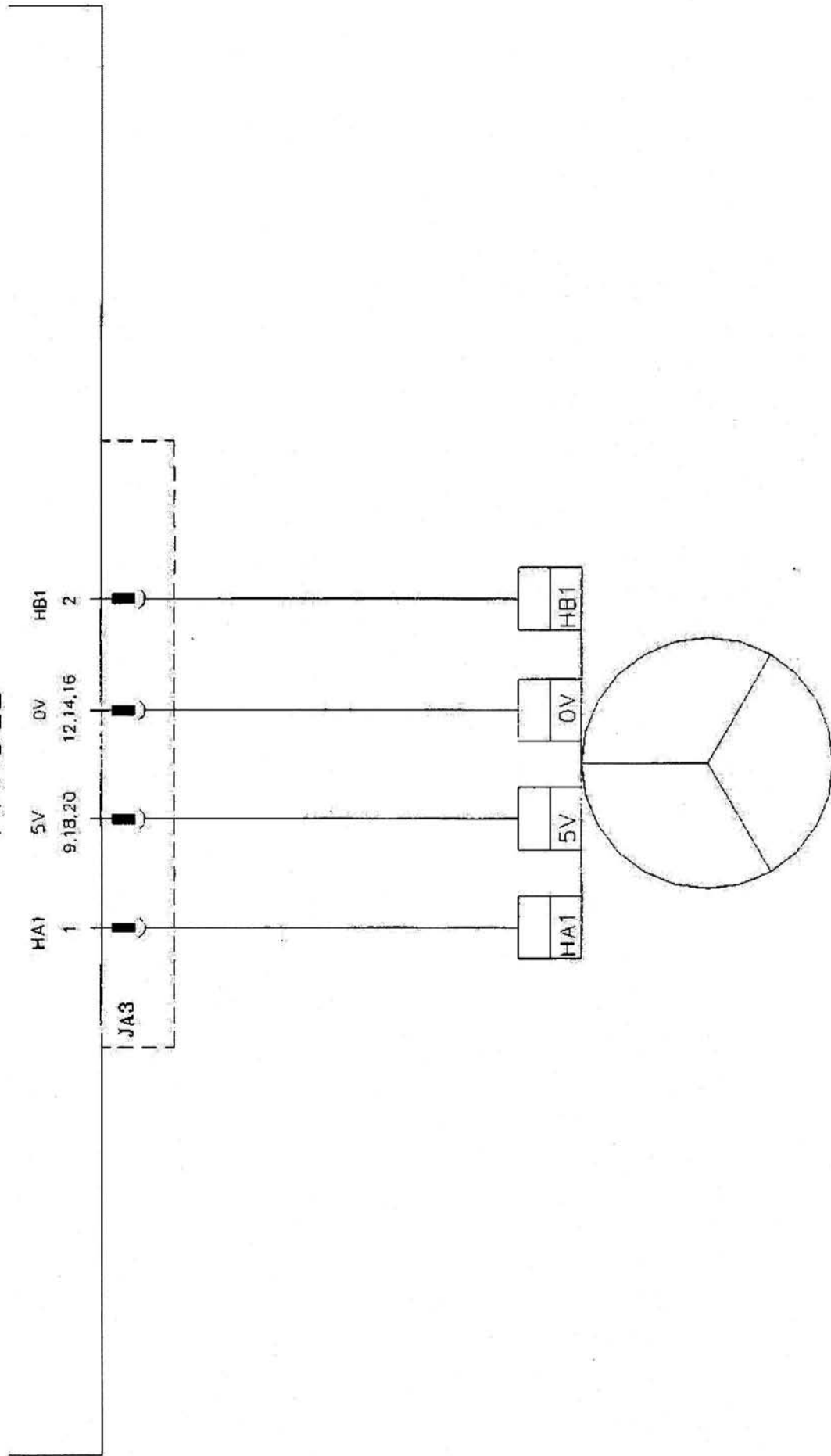
MACHINE MODEL CONTROL : VMC-2240SL 01M-C

DRAWER : CLARK DATE : Aug-01-2006

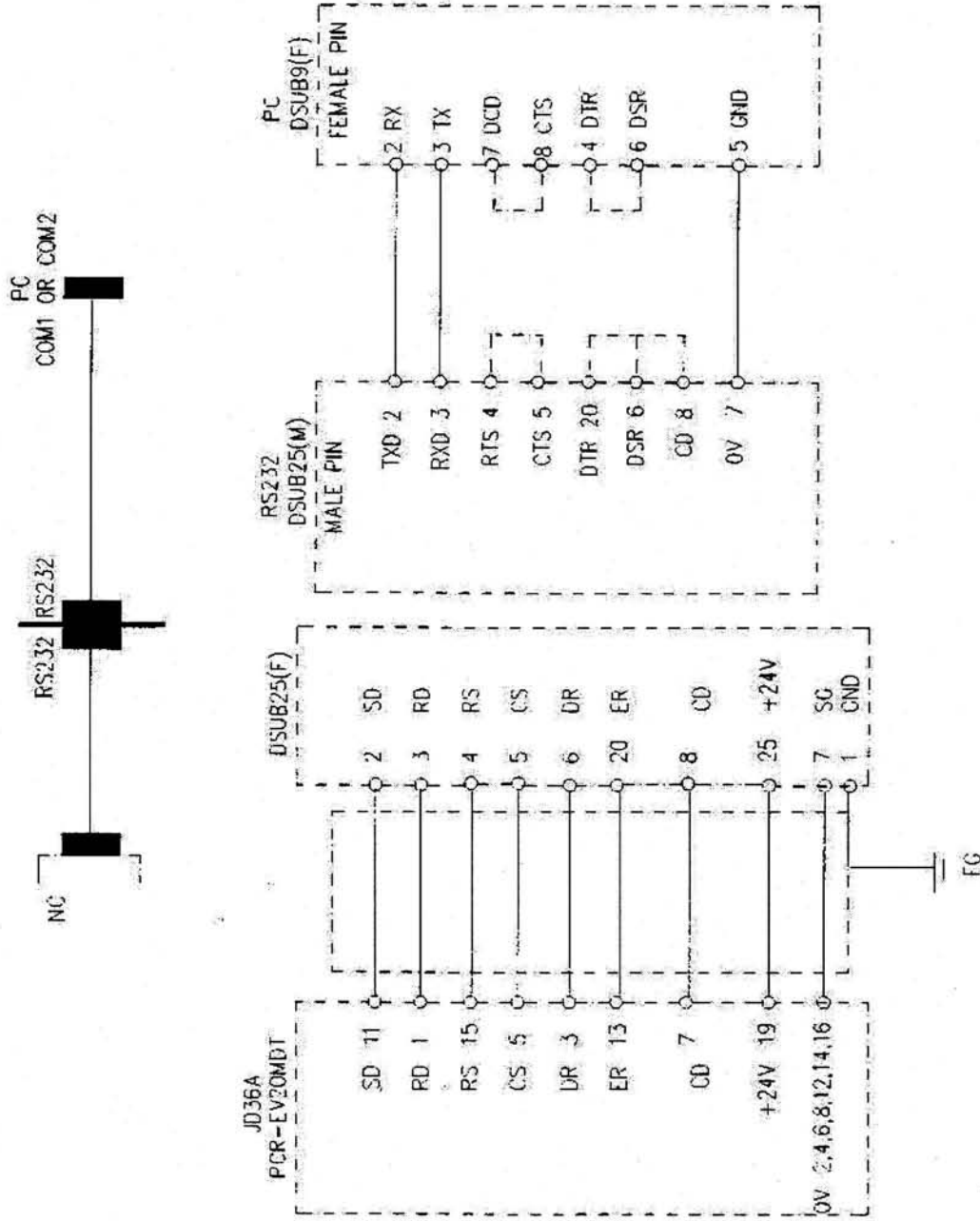
VERSION : 01

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HANDLE



RS-232 CONNECTION WIRING DIAGRAM



ACER.GRP/0	TITLE : RS-232 Diagram	MACHINE MODEL VMC-2240SL	CONTROL : 01M-C	DRAWER : CLARK	DATE : Aug-01-2006	VERSION : 01	PAGE 45
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