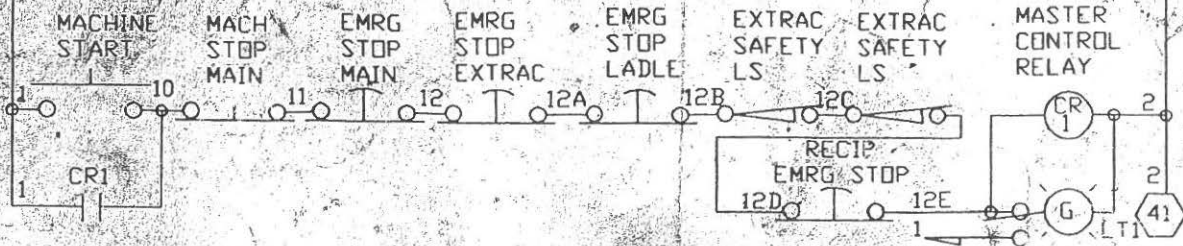
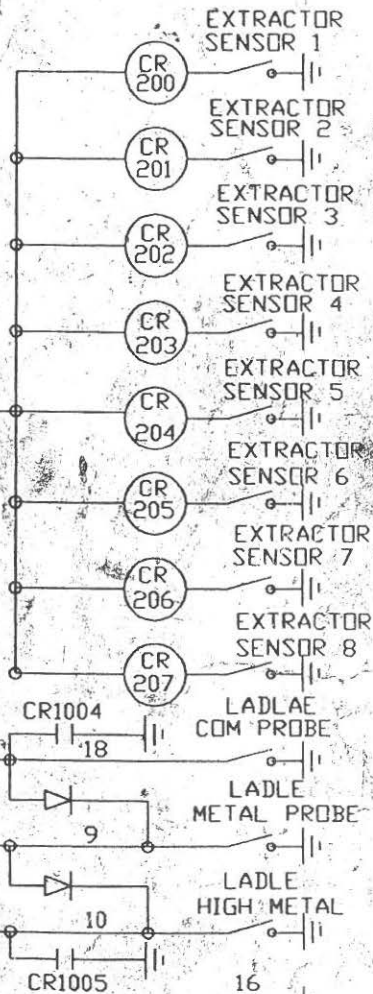
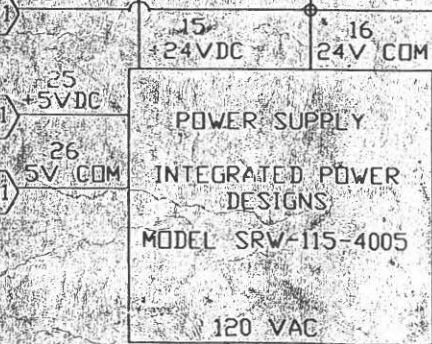


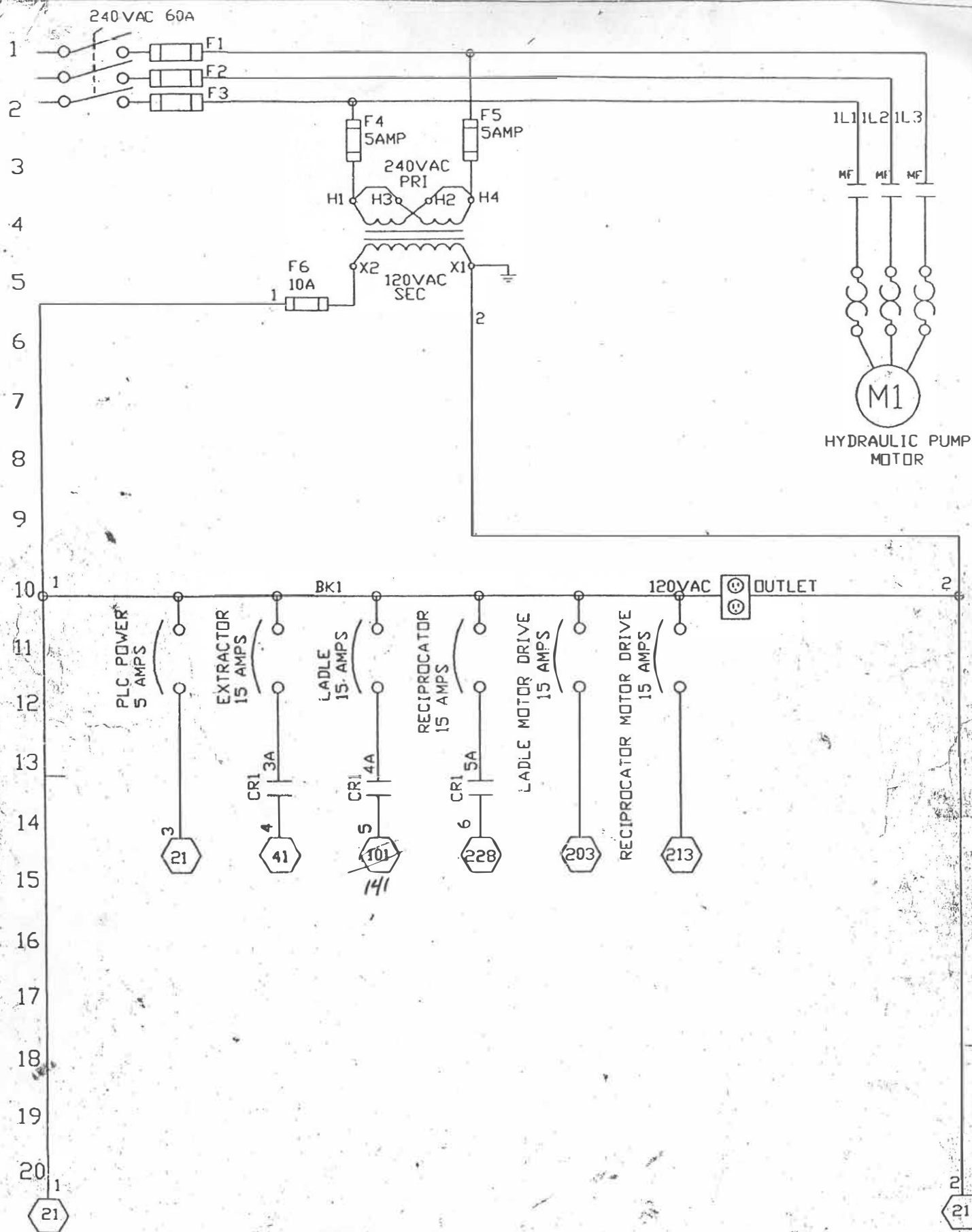
ALLEN BRADLEY PLC

	1	2	3	4	5	6	7	8	9	10	11	12		
⊖	POWER SUPPLY CAT. NO. 1746-P2	PROCESSOR CAT. NO. 1747-LS31-QS302	EXTRACTOR INPUT CARD CAT. NO. 1746-IA16	EXTRACTOR INPUT CARD CAT. NO. 1746-IA16	EXTRACTOR OUTPUT CARD CAT. NO. 1746-DA16	EXTRACTOR OUTPUT CARD CAT. NO. 1746-DA16	EXTRACTOR HIGH SPEED CTR MOD. CAT. NO. 1746-HSCE	LADLE INPUT CARD CAT. NO. 1746-LA16	LADLE HIGH SPEED CTR MOD. CAT. NO. 1746-HSCE	LADLE HIGH SPEED CTR MOD. CAT. NO. 1746-HSCE	RECIPROCATOR / LADLE OUTPUT CARD CAT. NO. 1746-0V32	RECIPROCATOR / LADLE OUTPUT CARD CAT. NO. 1746-DA16	RECIPROCATOR INPUT CARD CAT. NO. 1746-IA16	RECIPROCATOR HIGH SPEED CTR MOD. CAT. NO. 1746-HSCE
⊖	120VAC													
⊖	NEUTRAL													

NEWARK ELEC
MOUNTING
BOARD CAT.
NO. 94F809
WITH I/O
MODULES CAT.
NO. 90F1423



CALEN MFG. CORP. DIE CAST AUXILIARY EQUIPMENT CONTROLS
DR. BY: M. RAMIREZ 1-3-07



CALEN MFG. CORP. DIE CAST AUXILIARY EQUIPMENT CONTROLS
DR. BY: M. RAMIREZ 1-3-07

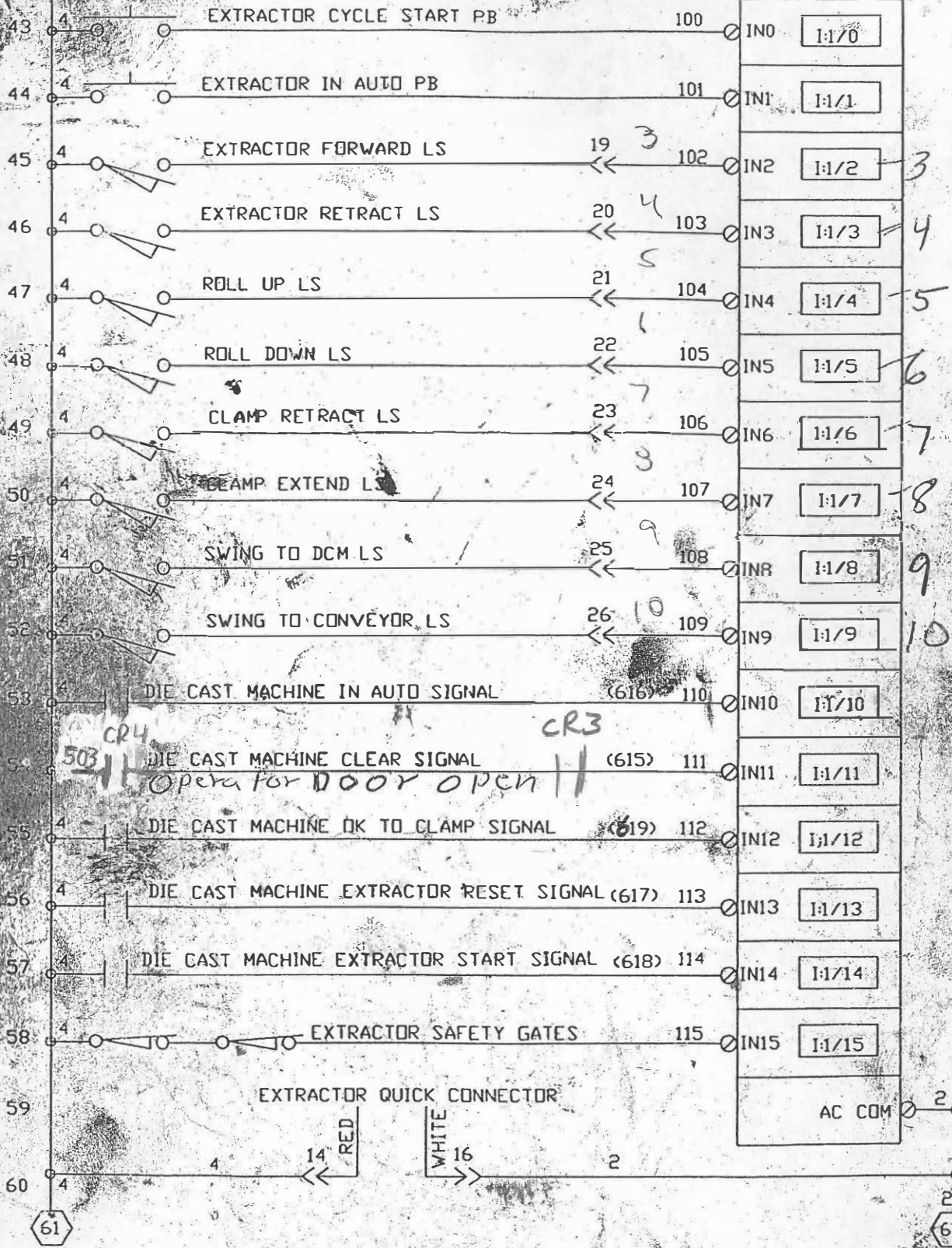
CARD NO. 1

CAT. NO. 1746-1A16

41 15

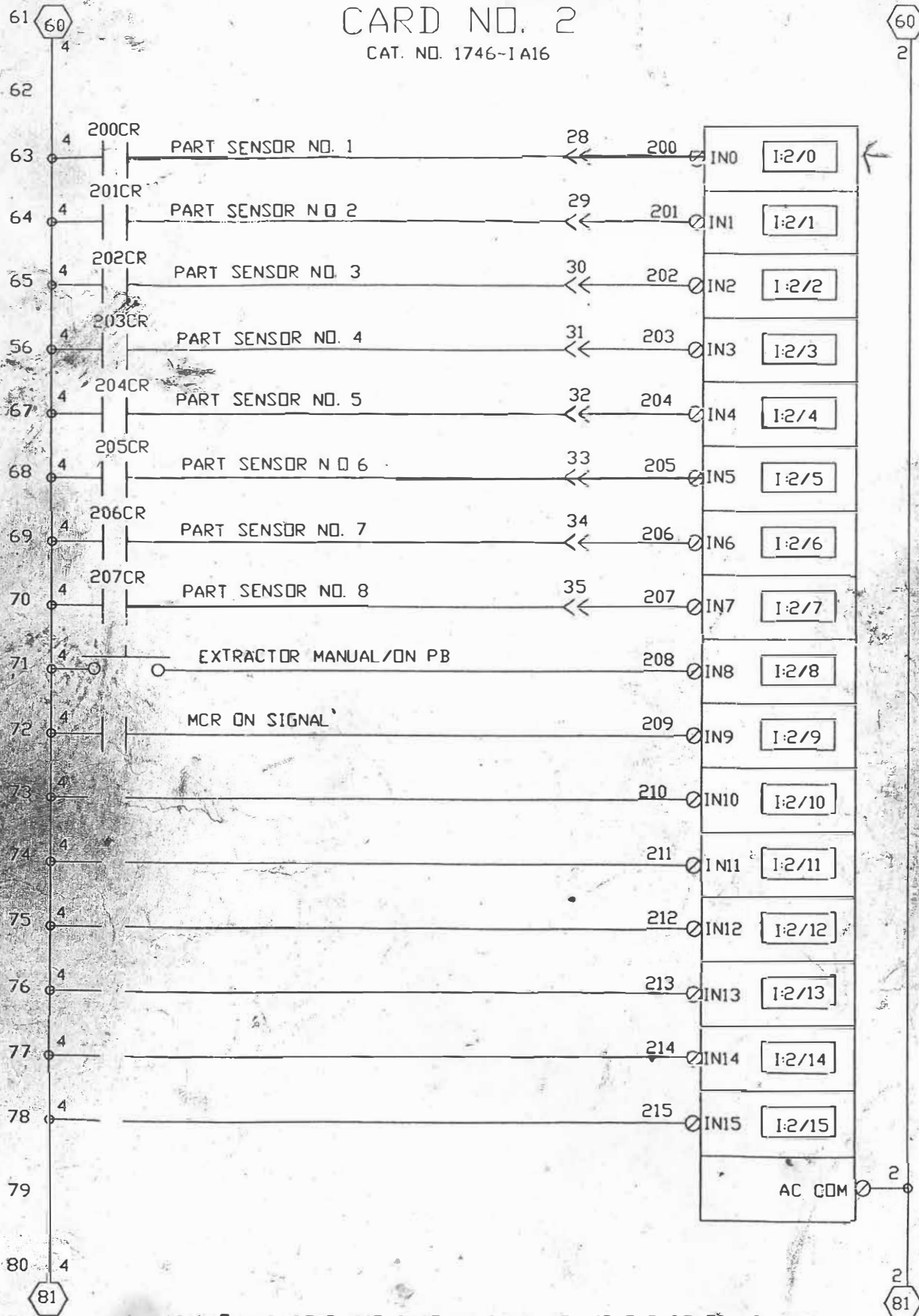
40

2



CARD NO. 2

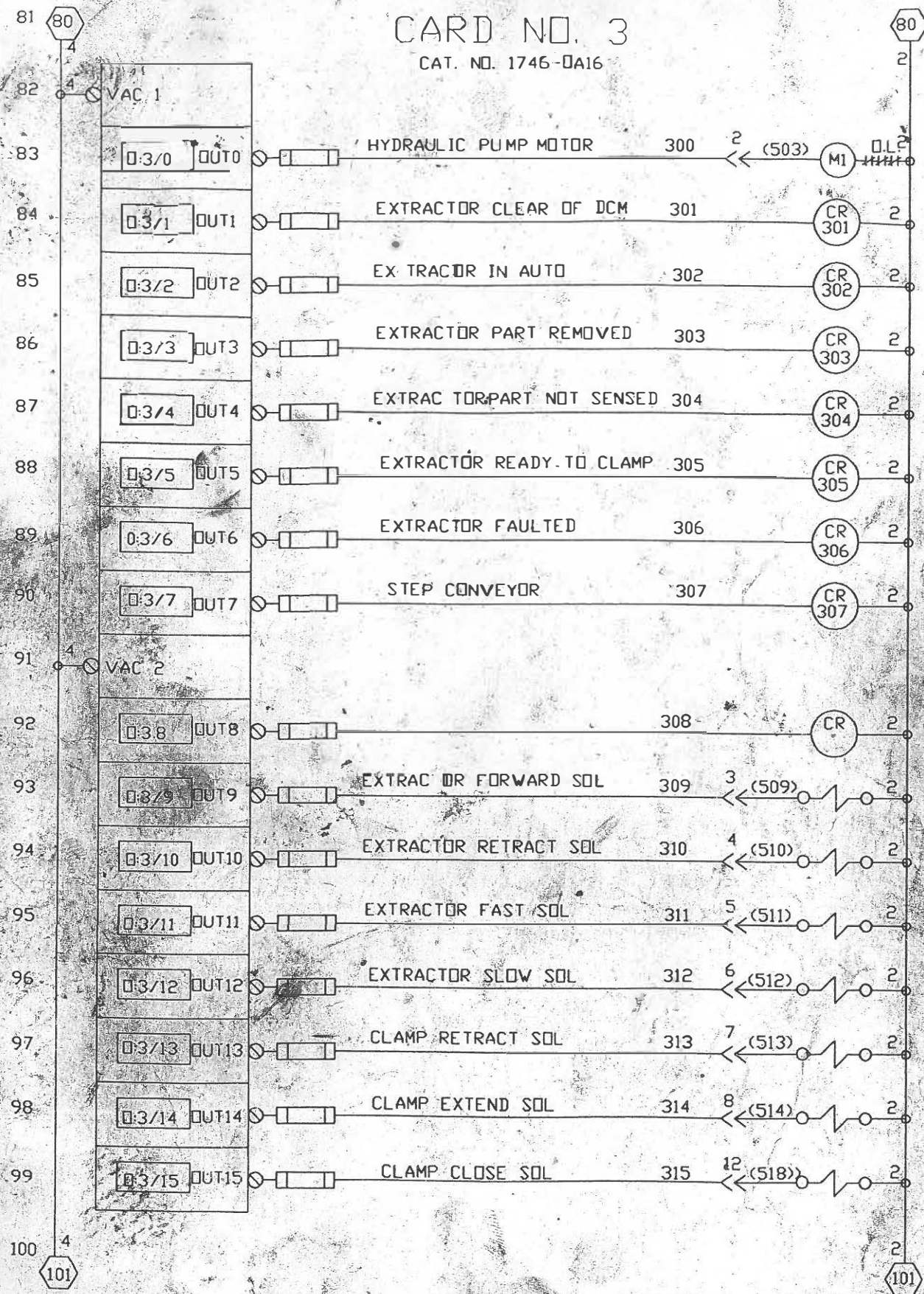
CAT. NO. 1746-1A16



CAL ENMFG CORP. DIE-CAST AUXILIARY EQUIPMENT CONTROLS
DR. BY: M. RAMIREZ 1-3-07

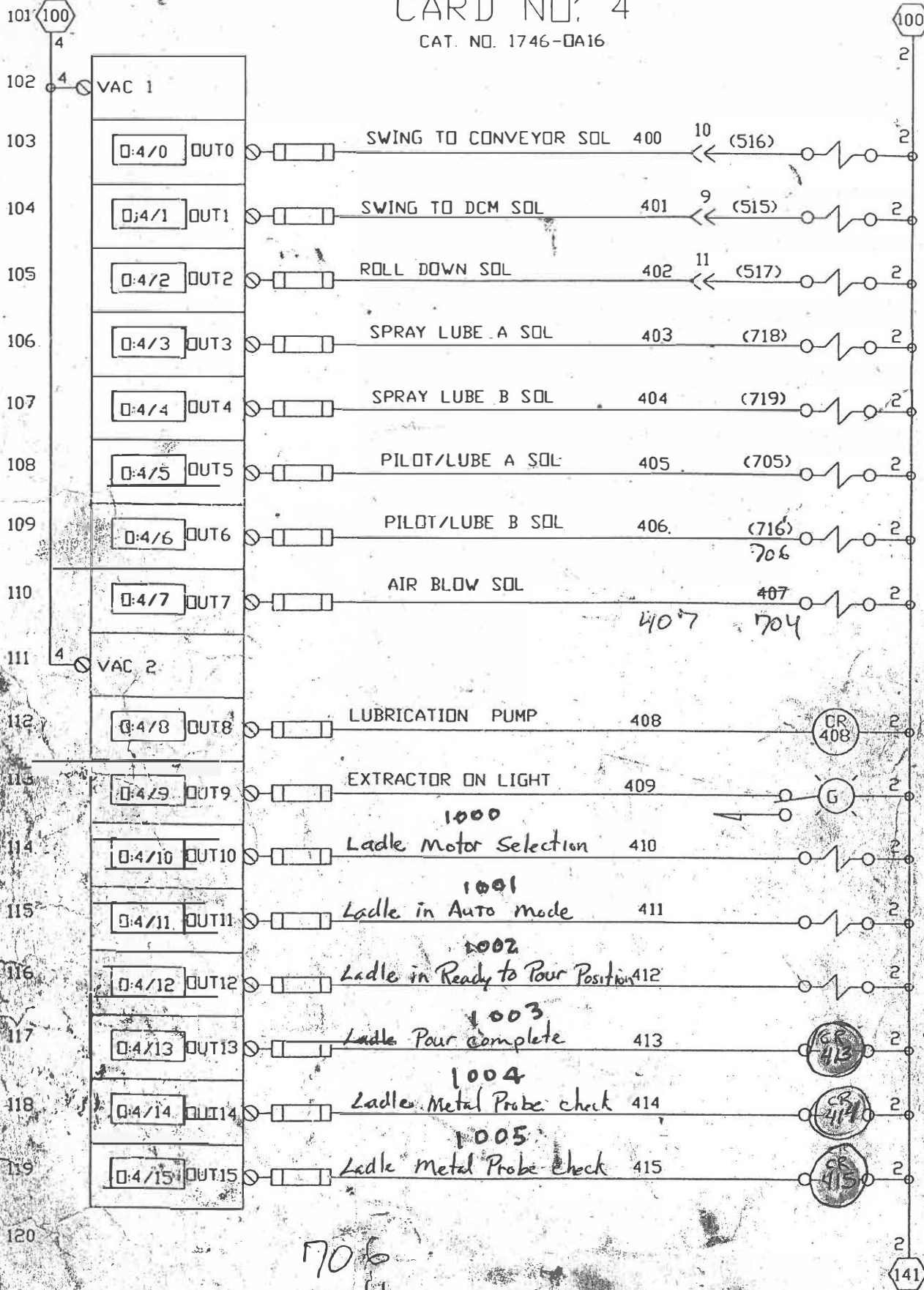
CARD NO. 3

CAT. NO. 1746-0A16

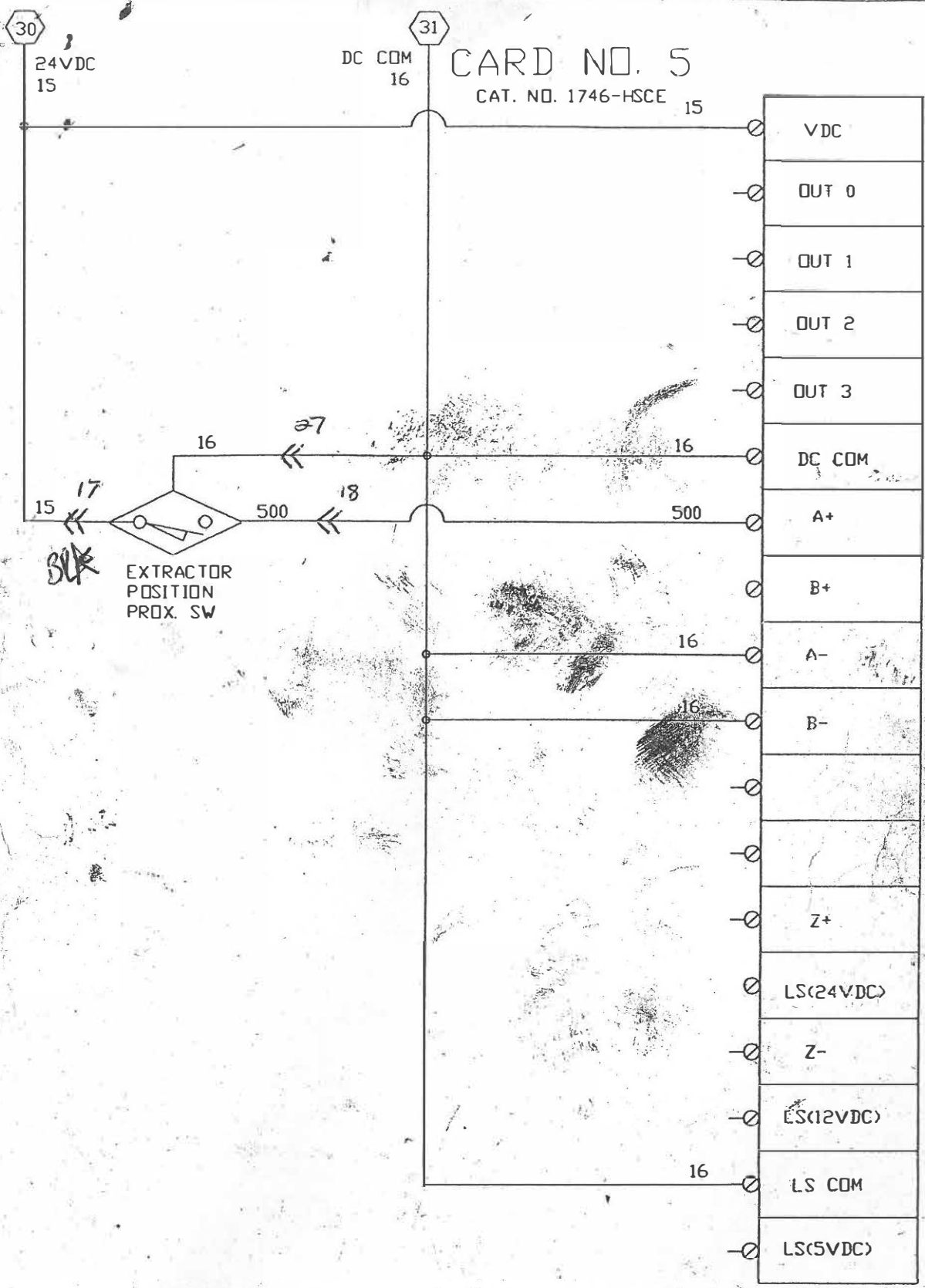


CARD NO: 4

CAT. NO. 1746-0A16



121
122
123
124
125
126
127
128
129
130
131
132
133
134
135
136
137
138
139
140



CALEN MFG. CORP. DIE CAST AUXILIARY EQUIPMENT CONTROLS
DR. BY: M. RAMIREZ 1-3-07

141 15

CARD NO. 6

CAT. NO. 1746-1A16

120

2

142

143

5 LADLE CYCLE START PB

600 IN0 I:6/0

144

5 LADLE IN AUTO PB

601 IN1 I:6/1

145

5 LOW METAL LS

(4) 4 602 IN2 I:6/2

146

5 STROKE LS

(5) 5 603 IN3 I:6/3

147

5 FILL OVERTRAVEL LS

(6) 6 604 IN4 I:6/4

148

5 POUR OVERTRAVEL LS

(7) 7 605 IN5 I:6/5

149

5 DIPPER LEVEL LS

(3) 3 606 IN6 I:6/6

150

5 LADLE GUARD

607 IN7 I:6/7

151

5 CR 608 COMMON PROBE

(18A) 11 608 IN8 I:6/8

152

5 CR 609 METAL PROBE

(9A) 9 609 IN9 I:6/9

153

5 CR 610 HIGH METAL PROBE

(10A) 10 610 IN10 I:6/10

154

5 DIE CAST MACHINE PLUNGER RETRACTED (806)

611 IN11 I:6/11

155

5 DIE CAST MACHINE LADLE START (805)

612 IN12 I:6/12

156

5 DIE CAST MACHINE OK TO POUR (842)

613 IN13 I:6/13

157

5 HOME LADLE PB

614 IN14 I:6/14

158

5 LADLE MANUAL/ON PB

615 IN15 I:6/15

159

5 LADLE QUICK CONNECTOR

AC COM 2

160

221

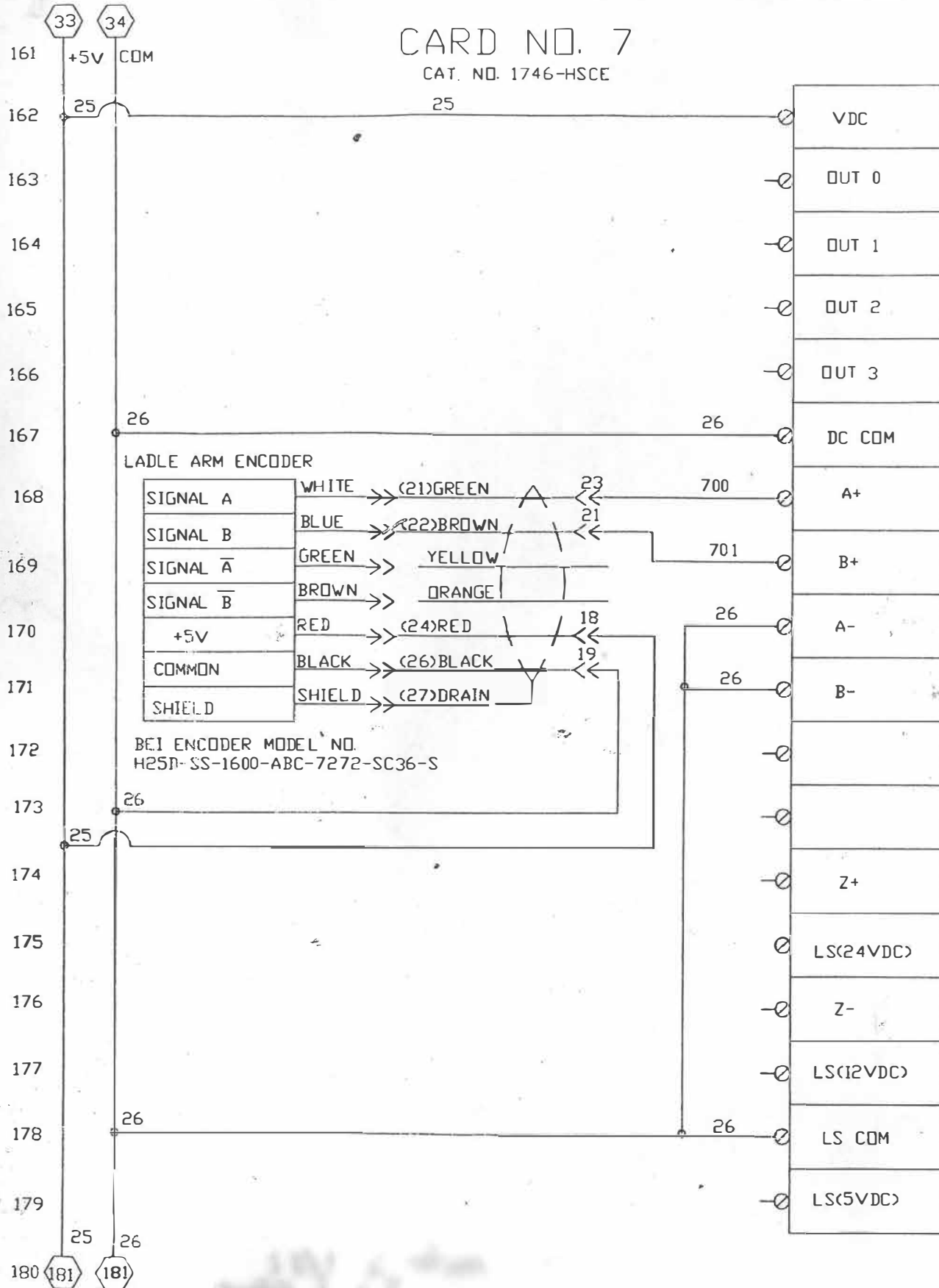
NOTE * Ladle reset with Extractor I:1/11
D.C.M. clear

221

CALEN MFG. CORP. DIE CAST AUXILIARY EQUIPMENT CONTROLS
DR. BY: M. RAMIREZ 1-3-07

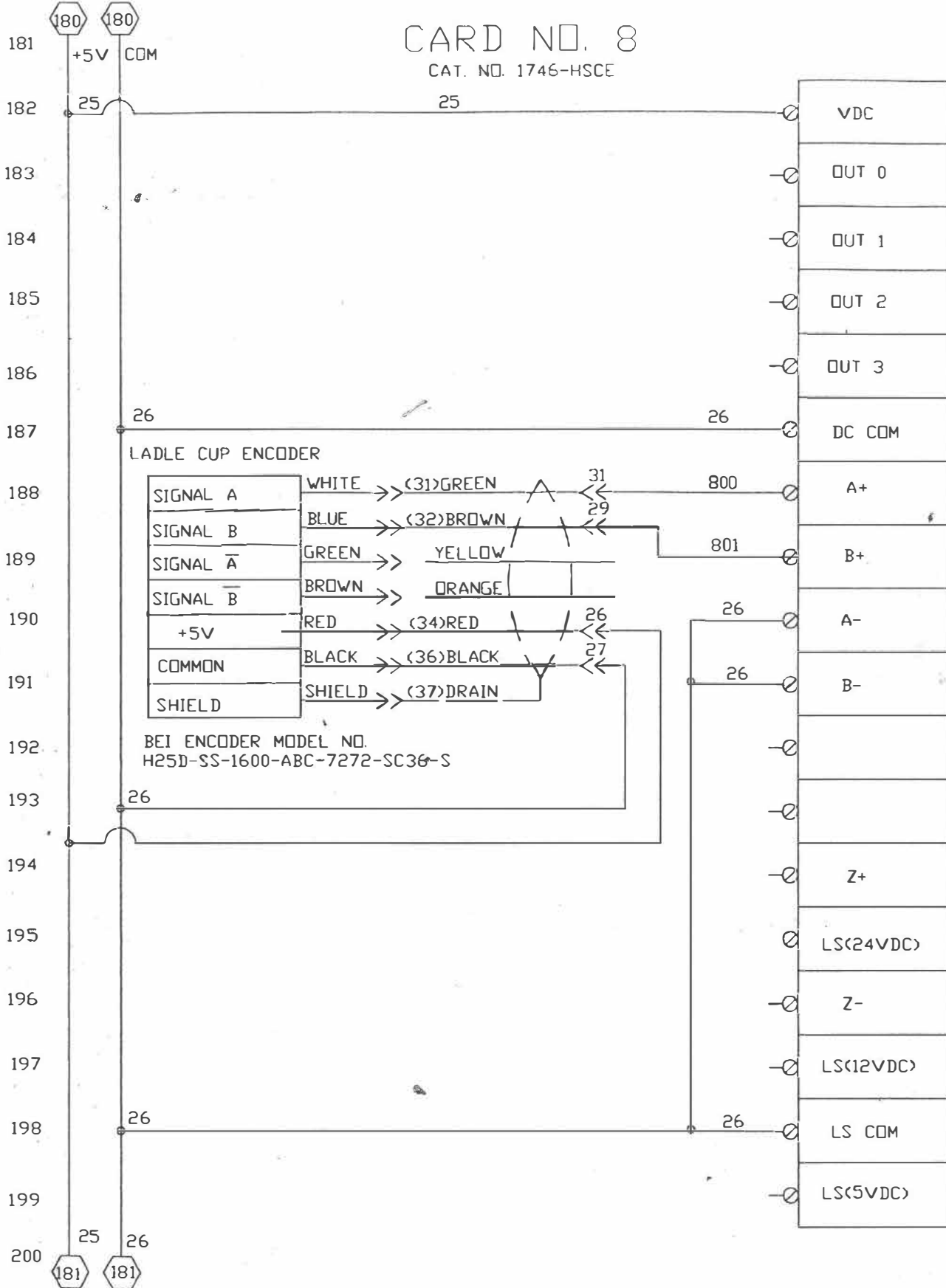
CARD NO. 7

CAT. NO. 1746-HSCE



CARD NO. 8

CAT. NO. 1746-HSCE



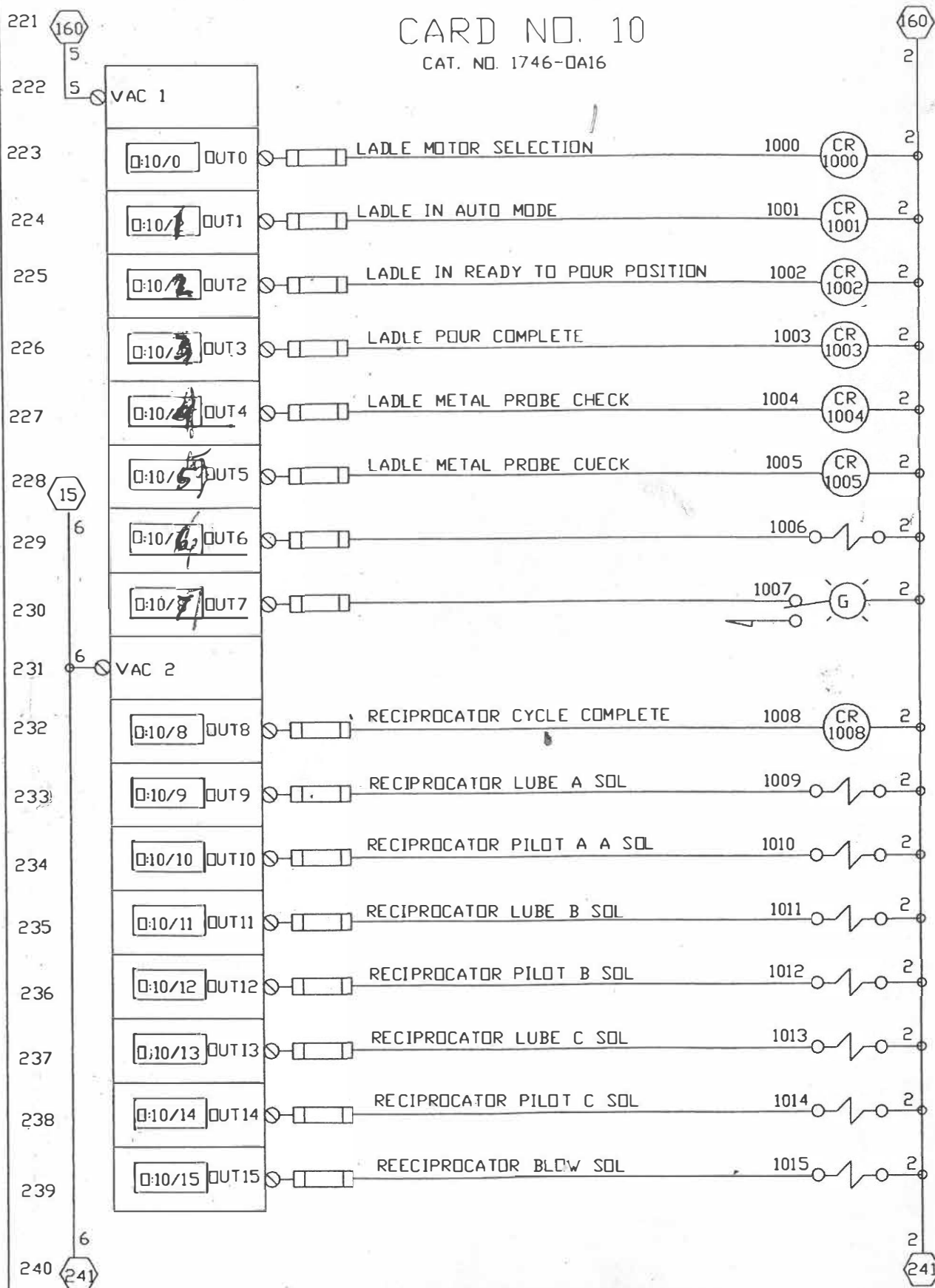
CALLEN MFG. CORP. DIE CAST AUXILIARY EQUIPMENT CONTROLS
DR. BY: M. RAMIREZ 1-3-07

CAT. NO. 1746-0V32



CARD NO. 10

CAT. NO. 1746-0A16



CALEN MFG. CORP. DIE CAST AUXILIARY EQUIPMENT CONTROLS
DR. BY: M. RAMIREZ 1-3-07

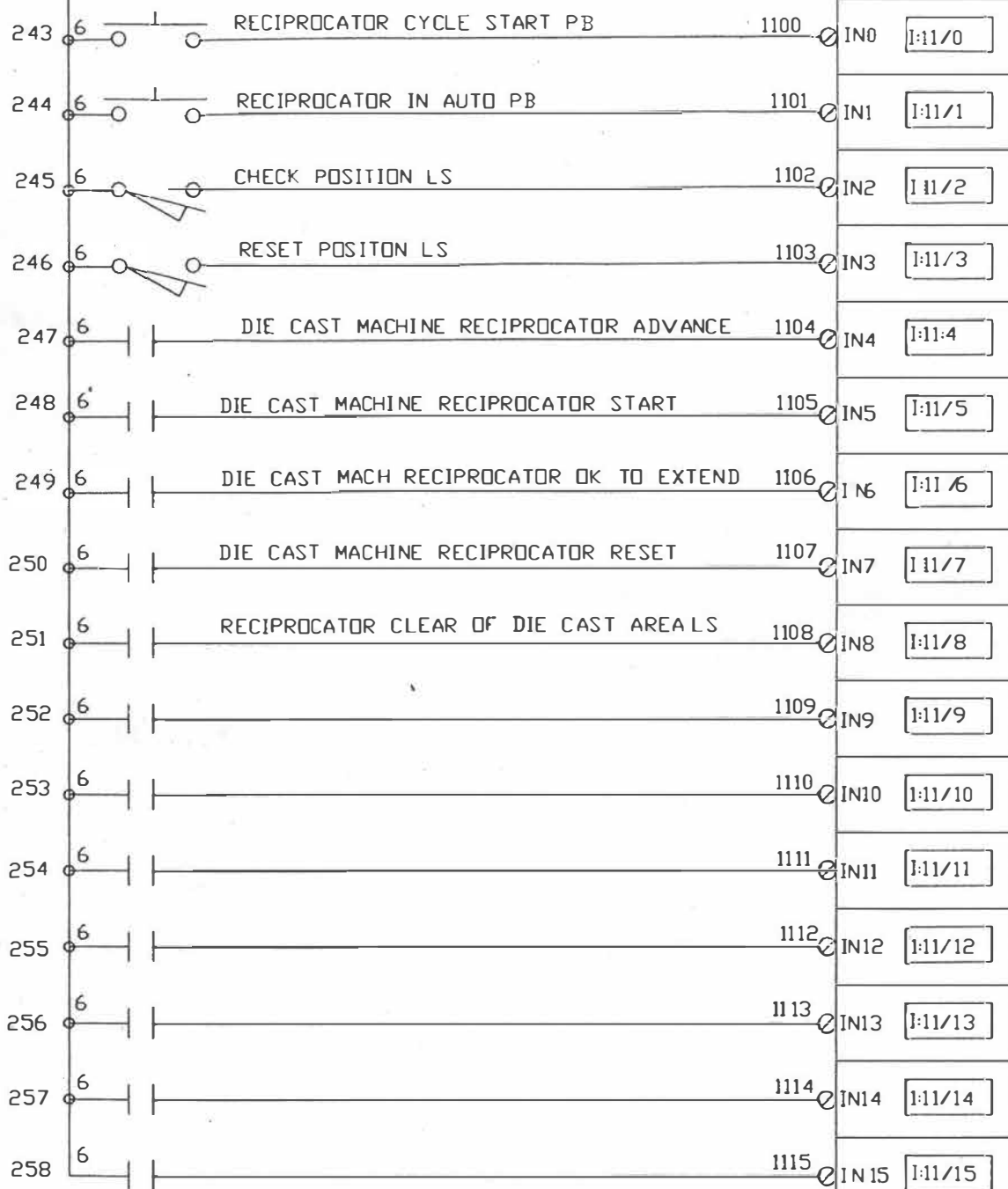
241 240
6

CARD NO. 11

CAT. NO. 1746-0A16

240
2

242



259

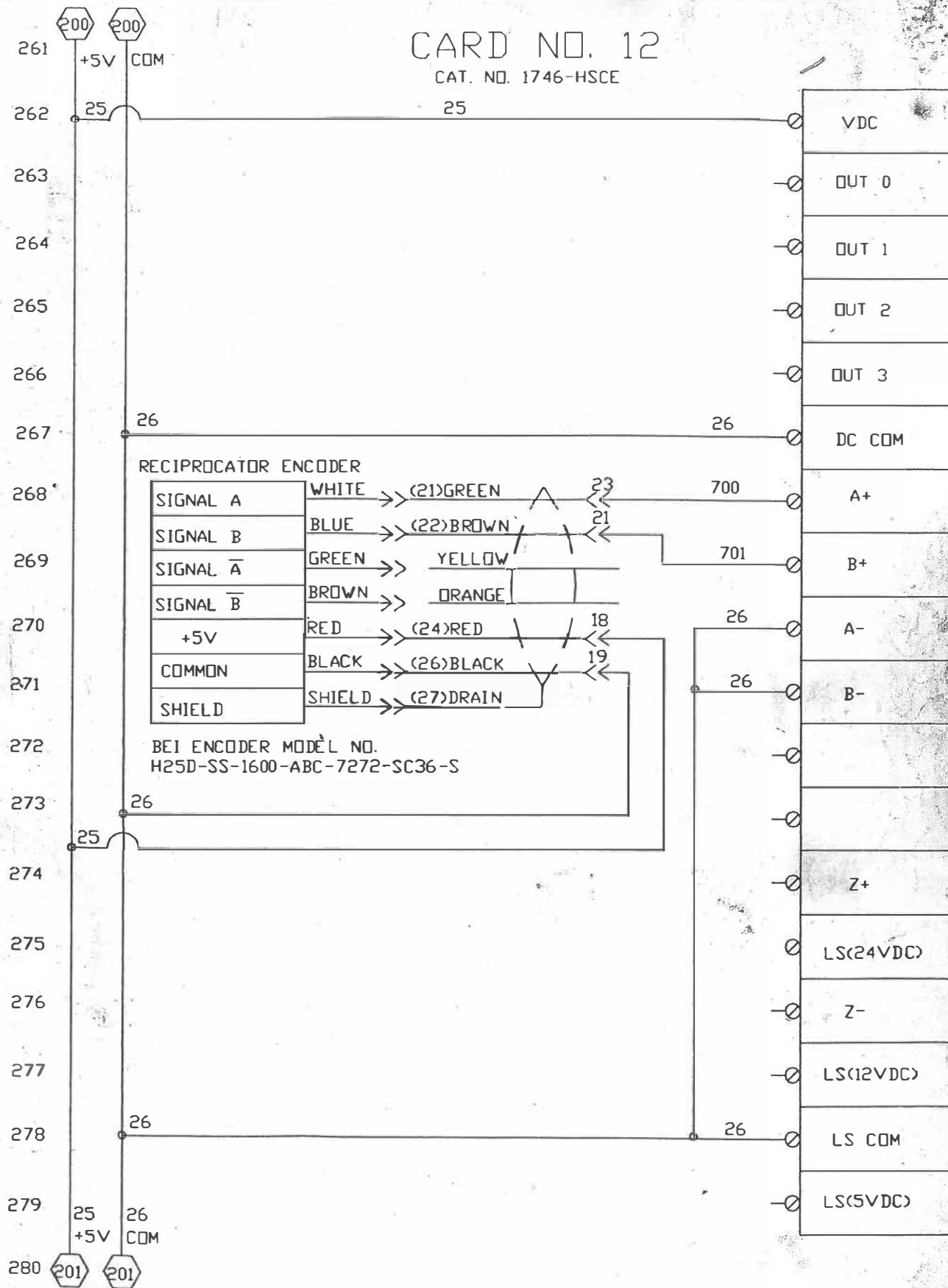
AC COM

2

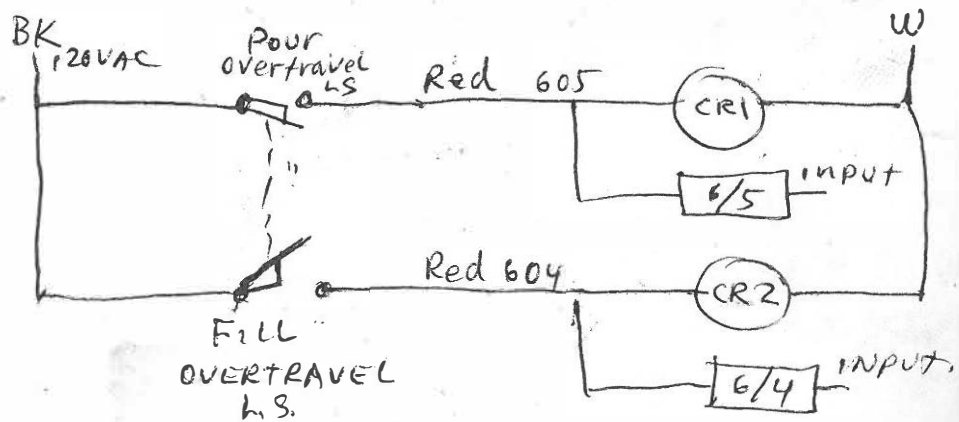
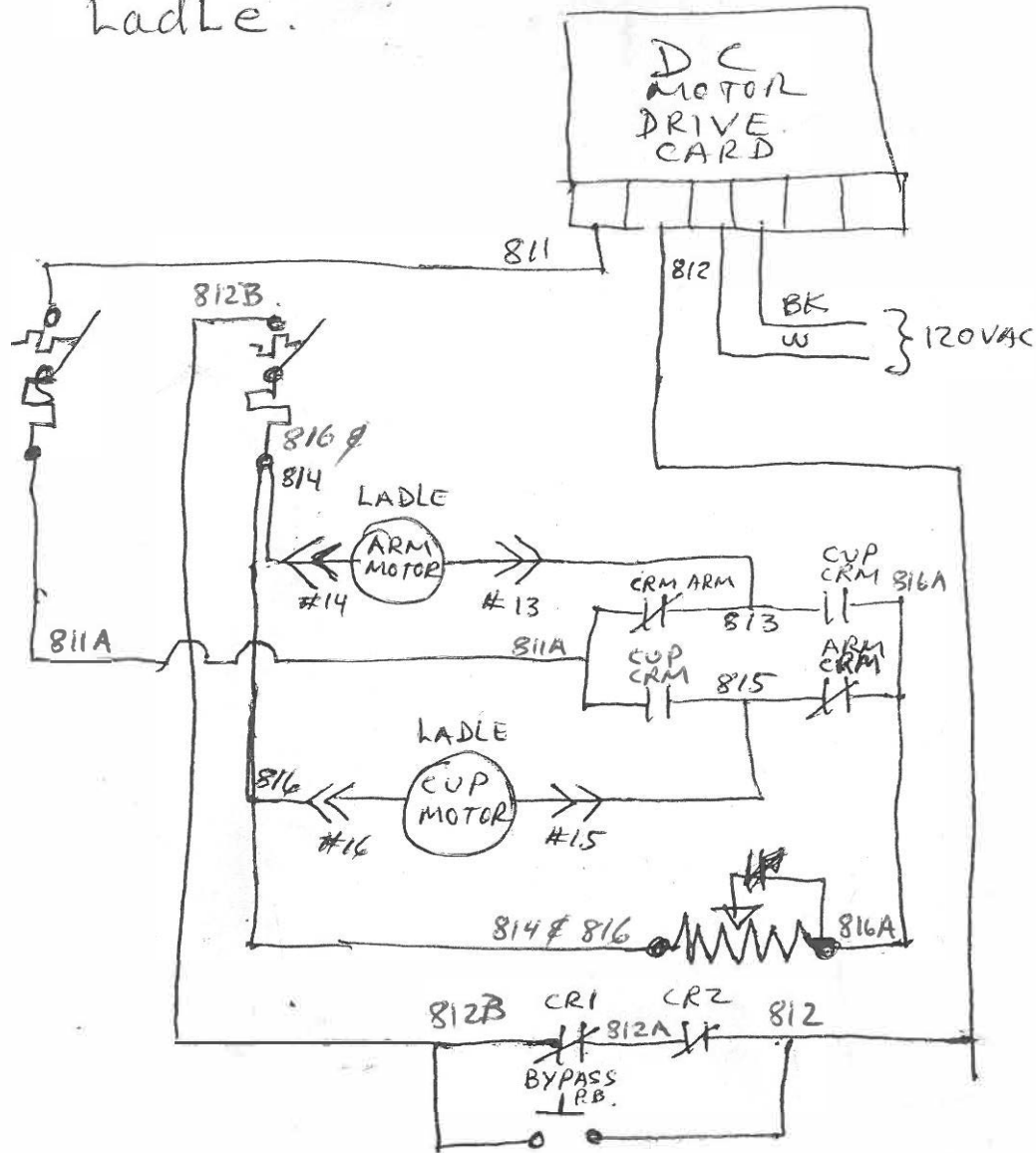
260

CARD NO. 12

CAT. NO. 1746-HSCE



#43 mach.
ladle.

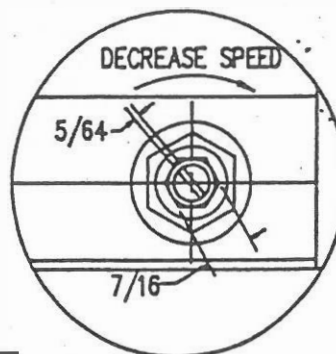
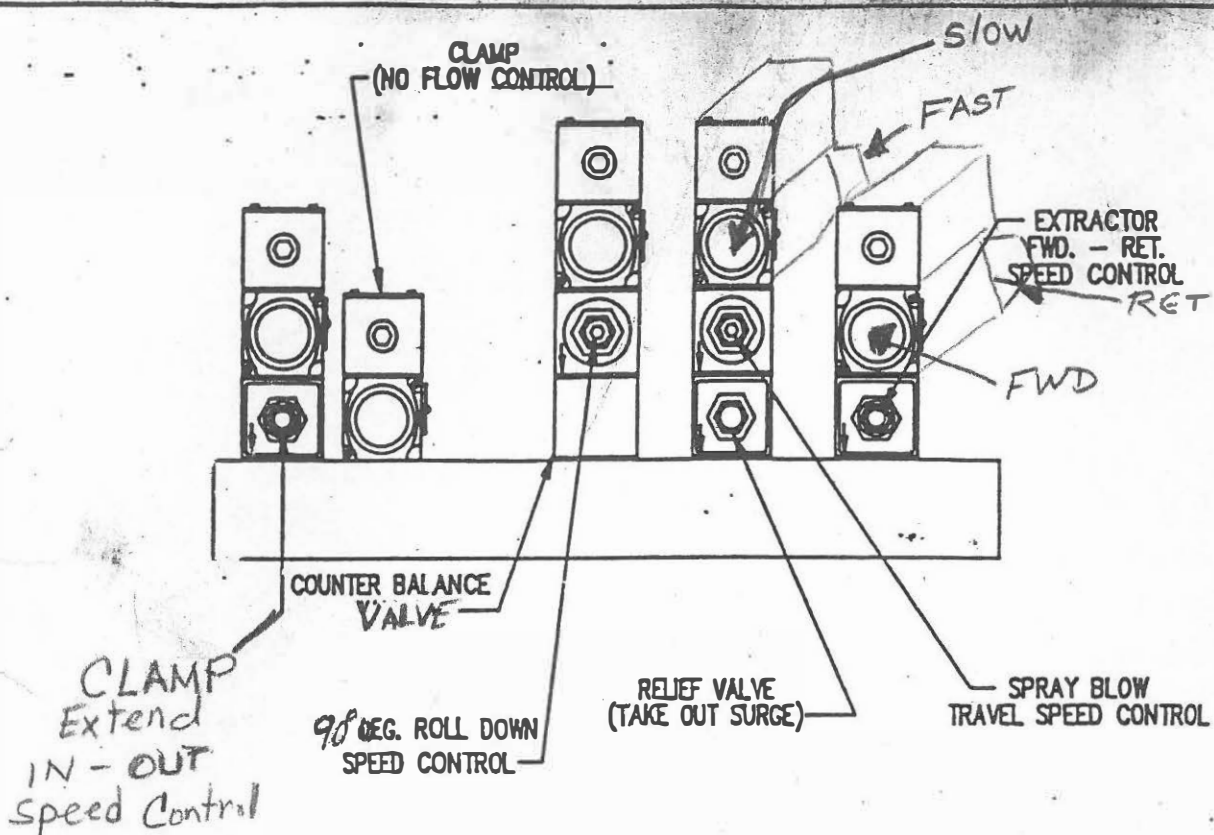


Extractor connector

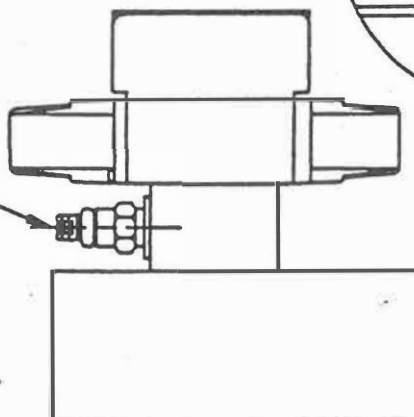
Pin #	Terminal ~~Reconnect~~ wire color & #	Terminal wire color & #	Pin #
17	1) Black 1	501 Red 13	14
18	2) white 2	502 Blue 15	1
19	3) Red 3	503 Black 16	2
20	4) Green 4	502 white 17	16
21	5) orange 5	509 Black 12	3
22	6) Blue 6	510 orange 10	4
23	7) white 7	511 Green 14	5
24	8) Red 8	512 Blue 19	6
25	9) white 38	513 orange 18	7
26	10) Blue 40	514 Green 9	8
27	11) Blue 11	515 Black 33	9
28	20) Red 20	516 Red 41	10
29	21) orange 21	517 Red 29	11
30	22) Black 22	518 Blue 32	12
31	23) white 23	12B orange 39	13
32	24) Red 24	12D orange 31	15
33	25) Green 25	SP Red 34	36
34	26) orange 26	SP BLU 15	37
35	27) Blue 27	SP BLK 37	38

NOTE: All extractor limit switch from 24VDC to 120VAC

4
29
34
3
8
27



ON UNITS WITH SWING
SWING CW. - CCW.
SPEED CONTROL



SHOWN OPP. SIDE



* RIMROCK CORPORATION
1700 RIMROCK ROAD
P.O. BOX 19867
COLUMBUS, OHIO 43219

PHONE: 614-471-5928 TELEX: 245-401 FAX: 614-471-0083
* A Registered Trademark of Rimrock Corp., Columbus, Ohio U.S.A.

DR	MJR	DATE	11.25.91	CK	DATE
DRAWING NO.					REV
196 A0012					
DRAWING OF					SPEED CONTROL ADJUSTMENT

WITCHES

PIPE CHART

THICKNESS
5
5
1
7
4

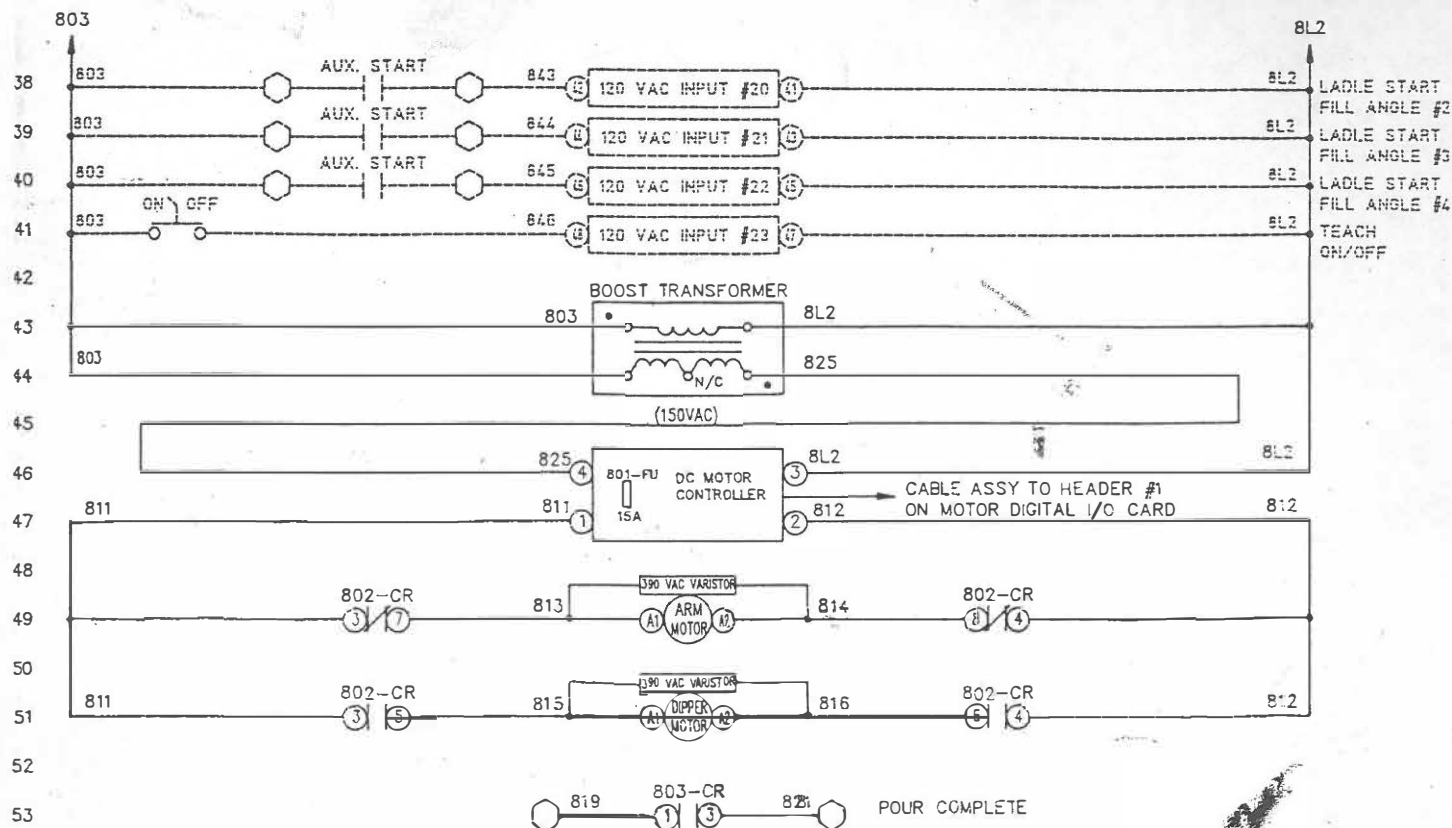
32	HYD. HOSE		1		
31	HYD. HOSE		1		
30	COUNTER BALANCE VALVE "SUN" CBCALBV-EVA		1	08923-26	
298	HYD. CYLINDER "PHD" HVR - 1 1/8 X 8"		1	10523-02	
294	HYD. CYLINDER "PHD" HVR - 1 1/8 X 5"		1	10523-01	
28	HYD. HOSE		1		
27	HYD. HOSE		1		
26	HYD. CYLINDER "TJ" SM-2 3/4 X 1		1	04848	
25	HYD. HOSE		1		
24	HYD. HOSE		1		
23	HYD. CYLINDER "HYDROLINE" RSC-2-4		1	15236-03	
22	MANIFOLD		1	05895	
21	HYD. MOTOR "CHARLYNN" 101-1002-009		2	02958-40	
20	DIRECTIONAL VALVE "VICKERS" FJ-DG-4 V-3-2A-W-B-10		2	03038-02	
19	RELIEF VALVE, "SUN" RPEC-FAV-FBA		1	008923-19	
18	DECELERATION VALVE "PH" DNS-600-S-10V		1	03036	
17	GEAR REDUCER-"PERF." HH2105-6		1	10888-04	
16	JUNCTION BLOCK		1	05896	
15	DIRECTIONAL VALVE "VICKERS" FJ-DG4V-3-2C-W-B-10		4	03038-01	
14	FLOW CONTROL VALVE "SUN" NFCB-LGV-CGP		5	008923-18	
13	HYD. HOSE		2		
12	PRESSURE GAUGE		1	04891	
11	SWIVEL HOSE ADAPTER "PARKER" S2203-B-10		4	05852-11	
10	FILTER/BREATHER-FILTER "VICKERS" SD-113-C		1	04594-2	
9	HYD. HOSE		1		
8	HYD. HOSE		1		
7	SWIVEL HOSE ADAPTER "PARKER" S2103-B-10		2	02276-9	
6	FILTER "SCHRADER" DF30-10C10V-P-D		1	04332-04	
5	FILTER CARTRIDGE		1	04332-E04	
4	OIL LEVEL GAUGE		1	04594-7	
3	VARIABLE DISPLACEMENT PISTON PUMP "VICKERS" PVB-15		1	04594-B	
2	STRAINER "VICKERS" P20-1 1/4-60		1	04594-12A	
1	RESERVOIR 30 GAL.		1	05877	
ITEM	DESCRIPTION	MFG	MODEL NO.	REQ'D	PART NUMBER

DER No.
 RIAL No.
 VG. No.
 No.

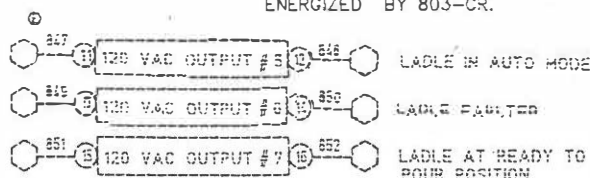
SYSTEM.
 7H EITHER WATER GLYCOL
 RACTOR 600 PSI.

MATERIAL		DATE 2.6.90		SCALE NONE		PRO	
RIMROCK CORPORATION 1700 RIMROCK ROAD P.O. BOX 10097 COLUMBUS, OHIO 43210		DATE		PR 270		SHEET OF	
PHONE: 614-471-0028 TELE: 614-471-0011 FAX: 614-471-0053		DRAWING NO. 195D11350-01		REV A			
*A Registered Trademark of Rimrock Corporation, Columbus, Ohio U.S.A.		DRAWING NAME HYDRAULIC SCHEMATIC -					
TOLERANCES UNLESS OTHERWISE SPECIFIED 2-DIGIT DECIMALS= ±.010 FRACTIONS= ±1/64 3-DIGIT DECIMALS= ±.005 ANGLES= ±1/2 4-DIGIT DECIMALS= ±.0005		MICRO PROCESSOR					
FOR 195 EXTRACTOR							
THIS DRAWING IS THE PROPERTY OF RIMROCK CORP. AND IS FOR THE CONFIDENTIAL USE OF THE BUYER OR SUPPLIER OF THIS EQUIPMENT							

										MAT'L: SEE B.O.M.										OR CK'D DATE 07.06.94 SCALE NONE P/C									
																				OR DATE OR 110 SHEET 1 of 5									
										C MDL										DRAWING NO. 196D11450-15 REV C									
										B AR										196D11450-15									
										A CKE										CHAINED EXTRACTOR MODULE-SCHEMATIC									
										A CKE										STANDARD 195 EXTRACTOR									
																				FOR TRIANGLE SYSTEM									
																				THIS DRAWING IS THE PROPERTY OF RIMROCK CORP. AND IS FOR THE									
																				EXCLUSIVELY FOR THE USE OF THE CUSTOMER. IT IS NOT TO BE									
																				REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN									
																				CONSENT OF RIMROCK CORP. ANY VIOLATION OF THIS NOTICE									
																				IS SUBJECT TO PROSECUTION AND WILL BE PROSECUTED TO THE									
																				FULL EXTENT OF THE LAW.									



NOTE: IN SOME CASES IT MIGHT BE NECESSARY TO PLACE A 130 VAC VARISTER ACROSS THE LOAD BEING ENERGIZED BY 803-CR.



MAIN CONDUIT		
WIRE #	FUNCTION	COLOR
1	+24V	BLUE
3	DIP LEV	BLUE
4	LOW MET	BLUE
5	STROKE	BLUE
6	FILL OT	BLUE
7	POUR OT	BLUE
9	MCT LEV	BLUE
10	HIGH MET	BLUE
GND	GND	GREEN
813	ARM MOT	RED
814	ARM MOT	RED
815	DIP MOT	RED
816	DIP MOT	RED
18	PROG.COM	BLUE

HEADER #1 MOTOR CONTROLLER			
BOARD CONNECT PIN #	WIRE #	FUNCTION	TERM #
49	41	POS.COMM	1
33	42	DIR.BIT	2
35	43	SPD.BIT#6	3
37	44	SPD.BIT#5	4
39	45	SPD.BIT#4	5
41	46	SPD.BIT#3	6
43	47	SPD.BIT#2	7
45	48	SPD.BIT#1	8
47	49	SPD.BIT#0	9
31	50	OK MOVE	10

HEADER #2 ARM ENCODER						
BOARD CONNECT PIN #	JUNC.BOX CONNECT PIN #	WIRE #	FUNCTION	OPAL	A.B.	CONDUIT WIRE COLOR
3	9	21	A	BROWN	WHITE	GREEN
4	8	23	A	BR & WH	GREEN	YELLOW
5	7	22	B	ORANGE	BLUE	BROWN
6	6	25	B	OR & WH	BROWN	ORANGE
9	2	24	+5V	RED	RED	RED
10	3	26	COMM	BLACK	BLACK	BLACK
10	1	27	SHIELD	DRAIN	DRAIN	DRAIN

HEADER #3 DIPPER ENCODER						
BOARD CONNECT PIN #	JUNC.BOX CONNECT PIN #	WIRE #	FUNCTION	OPAL	A.B.	CONDUIT WIRE COLOR
3	9	31	A	BROWN	WHITE	GREEN
4	8	33	A	BR & WH	GREEN	YELLOW
5	7	32	B	ORANGE	BLUE	BROWN
6	6	35	B	OR & WH	BROWN	ORANGE
9	2	34	+5V	RED	RED	RED
10	3	36	COMM	BLACK	BLACK	BLACK
10	1	37	SHIELD	DRAIN	DRAIN	DRAIN

LAST AC. WIRE NO. USED: 852
WIRE NO.S NOT USED: 806, 809, 810, 817, 818, 820, 822, 826-835, 837-841

LAST DC WIRE NO. USED: 50
WIRE NO.S NOT USED: 28, 14, 17, 19, 20, 28, 29, 39-40

FIELD UPDATE DOCUMENTATION PRINT

700	4.17	12	REMOVE GROUND FROM FILTER	1	DES	MAT'L	DATE	2.9.90	SCALE	NONE	REV	1
553	6.6	91	UPDATE AS ENCODER WIRE COLORS	1	MAX		DATE		OR 312	SHEET	1	OF 3
506	3.1	91	UPDATE AS ENCODER WIRE COLORS	1	DES		DATE					
102	8.35	09	HARD WIRE STOP (FIELD UPDATE VERSION)	1	MAX		DATE					
778	06.12	02	ADD WIRE NUMBERS	1	MAX		DATE					
436	10.22	90	ADDED TEACH ON/OFF	1	MAX		DATE					
312	3.9	80	TAKEN FROM 306D00005-03	1	MAX		DATE					
102	8.35	09	HARD WIRE STOP (FIELD UPDATE VERSION)	1	MAX		DATE					
778	06.12	02	ADD WIRE NUMBERS	1	MAX		DATE					
436	10.22	90	ADDED TEACH ON/OFF	1	MAX		DATE					
312	3.9	80	TAKEN FROM 306D00005-03	1	MAX		DATE					



306D09934-06	R
SCHEMATIC - STANDARD 70" MILL	
HALF WAVE DRIVE, 1/2 HP	
VERSION 2.30 OR HIGHER	
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