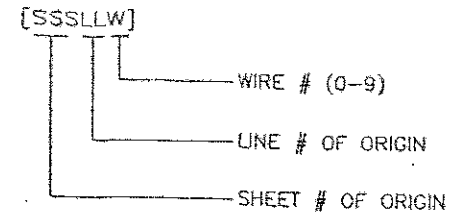


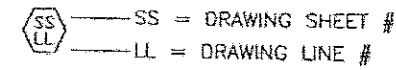
CONTROLS DRAWINGS - 05077

SHEET	DESCRIPTION OF SHEET
ELECTRICAL	
1	ELECTRICAL TABLE OF CONTENTS
2	MACHINE LAYOUT
3	480VAC POWER DISTRIBUTION
4	120VAC POWER DISTRIBUTION
5	24VDC POWER DISTRIBUTION
6	SPARE SHEET
7	KEYENCE LIGHT CURTAIN WIRING
8	SPARE SHEET
9	SPARE SHEET
10	ControlNet POINT TO WIRING
11	ControlNet FLEX IO LAYOUT AND POWER CONNECTION
12	FLEX IO MODULE #0 - INPUTS AND MODULE #1 - INPUTS
13	FLEX IO MODULE #2 - INPUTS AND MODULE #3 - INPUTS
14	FLEX IO MODULE #4 - OUTPUTS AND MODULE #5 - OUTPUTS
15	FLEX IO MODULE #6 - OUTPUTS AND MODULE #7 - ANALOG INPUTS
16	SPARE SHEET
17	SPARE SHEET
18	SPARE SHEET
19	SPARE SHEET
20	ALCATEL CONTROLLER CONNECTIONS AND IO WIRING
21	ALCATEL CONTROLLER ENCLOSURE
22	SPARE SHEET
23	SPARE SHEET
24	SPARE SHEET
25	MAIN ENCLOSURE/PANEL LAYOUT
26	OPERATOR INTERFACE BOX
PNEUMATIC	
1	MAIN AIR DROP AND SEAL DOOR MANIFOLD
2	HELIUM LEAK CIRCUIT

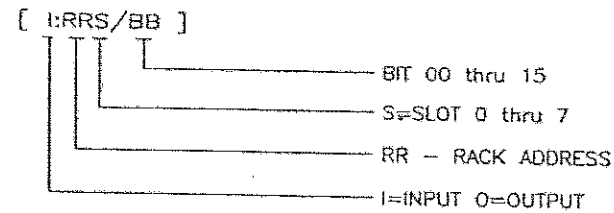
WIRE NUMBER CONVENTION



WIRE CONTINUATION CONVENTION



I/O CONVENTION



WIRE COLOR CODE

BLACK	LINE AND LOAD CIRCUITS AT LINE VOLTAGE
RED	AC CONTROL CIRCUITS
WHITE	NEUTRAL CIRCUIT CONNECTIONS
VIOLET	DC POSITIVE
BROWN	DC NEGATIVE
YELLOW	INTERLOCK CONTROL CIRCUITS WIRED FROM EXTERNAL SOURCE
GREEN/YELLOW	EQUIPMENT GROUND
BLUE	DC CONTROL (IO TO DEVICE/AFTER CONTACT)

MA OR LOW VOLTAGE SIGNAL WIRING (TWISTED PAIRS)

BLACK	SIGNAL POSITIVE
CLEAR	SIGNAL NEGATIVE
BARE	SHIELD DRAIN WIRE

REVISIONS		DRAWING NO.
REV.	DESCRIPTION	APP'D DATE
---	INITIAL RELEASE	SEE 1/1/03

MAIN ENCLOSURE NFPA-79 LABEL

MACHINE NAMEPLATE
CUSTOMER:
MACHINE NUMBER:
PROJECT:
PURCHASE ORDER:
EAGLE PROJECT #:
EAGLE SHIP DATE: March, 2006
VOLTAGE: 480
AIR: 2 SCFM
PHASE: 3 AMPS: 25
 HERTZ: 60
INTERRUPT RATING: 300000 A

CONTROLLED
PRINTED

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DEI #	QTY	DESCRIPTION	PART #	MANUFACTURER	SUPPLIER	RECOMMENDED SPARES
1001	1	ControlNet ADAPTER, FLEX IO	1794-ACN15	ALLEN BRADLEY	KENDALL	1
1002	8	TERMINAL BASE, 3 WIRE	1794-TB3	ALLEN BRADLEY	KENDALL	
1003	4	INPUT MODULE, 16 PT, SINK, FLEX IO	1794-IB16	ALLEN BRADLEY	KENDALL	1
1004	3	OUTPUT MODULE, 16 PT, FLEX IO	1794-OB16	ALLEN BRADLEY	KENDALL	1
1005	1	ANALOG INPUT MODULE, FLEX IO, 8 PT, 12 BIT	1794-IE8	ALLEN BRADLEY	KENDALL	1
1006	1	EXTENDER CABLE FOR TERMINAL BASES, 3M	1794-CE3	ALLEN BRADLEY	KENDALL	
1007	0	SPARE				
1008	0	SPARE				
1009	1	ControlNet ADAPTER, POINT IO	1734-ACNR	ALLEN BRADLEY	KENDALL	1
1010	1	RS232 ASCII INTERFACE MODULE, POINT IO	1734-232ASC	ALLEN BRADLEY	KENDALL	1
1011	1	TERMINAL BASE, W/SPRING TERMINALS, POINT IO	1734-TBS	ALLEN BRADLEY	KENDALL	
1012	0	SPARE				
1013	0	SPARE				
1014	2	ControlNet COAX TAP, Y STYLE, RIGHT ANGLE	1786-TPYR	ALLEN BRADLEY	KENDALL	
1015	2	BNC PLUG, RG-6 CABLE, BOX OF 5	85-545	IDEAL	KENDALL	
1016	30	COAX CABLE, 30 ft.	6300BLK	WEST PENN	KENDALL	
1017	0	SPARE				
1018	0	SPARE				
1019	1	CIRCUIT BREAKER, 40 AMP, 1 POLE	1492-CB1H400	ALLEN BRADLEY	KENDALL	1
1020	5	CIRCUIT BREAKER, 15 AMP, 1 POLE	1492-CB1H150	ALLEN BRADLEY	KENDALL	1
1021	1	CIRCUIT BREAKER, 10 AMP, 1 POLE	1492-CB1H100	ALLEN BRADLEY	KENDALL	1
1022	4	CIRCUIT BREAKER, 5 AMP, 1 POLE	1492-CB1H050	ALLEN BRADLEY	KENDALL	1
1023	5	CIRCUIT BREAKER, 2 AMP, 1 POLE	1492-CB1H020	ALLEN BRADLEY	KENDALL	1
1024	2	CIRCUIT BREAKER, 1 AMP, 1 POLE	1492-CB1H010	ALLEN BRADLEY	KENDALL	1
1025	0	SPARE				
1026	0	SPARE				
1027	0	SPARE				
1028	0	SPARE				
1029	0	SPARE				
1030	1	ILLUMINATED PUSHBUTTON, GREEN LIGHT	800T-QA24G	ALLEN BRADLEY	KENDALL	1
1031	1	PUSH TO TEST PILOT LIGHT, WHITE LIGHT	800TC-PT16C	ALLEN BRADLEY	KENDALL	1
1032	0	SPARE				
1033	0	SPARE				
1034	1	2-POSITION PUSH/PULL PUSHBUTTON, RED	800TC-FX6A5	ALLEN BRADLEY	KENDALL	1
1035	0	SPARE				
1036	0	SPARE				
1037	1	SAFETY RELAY, 3 N.O., 1 N.C., 24V AC/DC	440R-N23132	ALLEN BRADLEY	KENDALL	1
1038	4	CONTROL RELAY, 3 N.O., 1 N.C. CONTACTS, 24VDC COIL	700-CF310ZDJ	ALLEN BRADLEY	KENDALL	1
1039	2	AUXILLARY CONTACT BLOCK, 4 N.O. CONTACTS	100-FA40	ALLEN BRADLEY	KENDALL	1
1040	1	CONTACTOR, 24VDC COIL, 23A	100-C23DJ10	ALLEN BRADLEY	KENDALL	1
1041	1	CONTACTOR, 24VDC COIL, 9A	100-C09DJ10	ALLEN BRADLEY	KENDALL	1
1042	1	SOLID STATE OVERLOAD RELAY, 3.7 - 12A RANGE	193-EA1FB	ALLEN BRADLEY	KENDALL	1
1043	2	ISOLATION RELAY, SOLID STATE, 24VDC COIL	700-HLS1Z24	ALLEN BRADLEY	KENDALL	1
1044	1	ISOLATION RELAY, DPDT, 24VDC COIL	700-HK32Z24	ALLEN BRADLEY	KENDALL	1
1045	1	SCREW TERMINAL SOCKET	700-HN122	ALLEN BRADLEY	KENDALL	
1046	0	SPARE				
1047	0	SPARE				
1048	1	DIN RAIL/PANEL MOUNTING ADAPTER	193-EPM1	ALLEN BRADLEY	KENDALL	
1049	4	DIN RAIL, 1 METER	199-DR1	ALLEN BRADLEY	KENDALL	

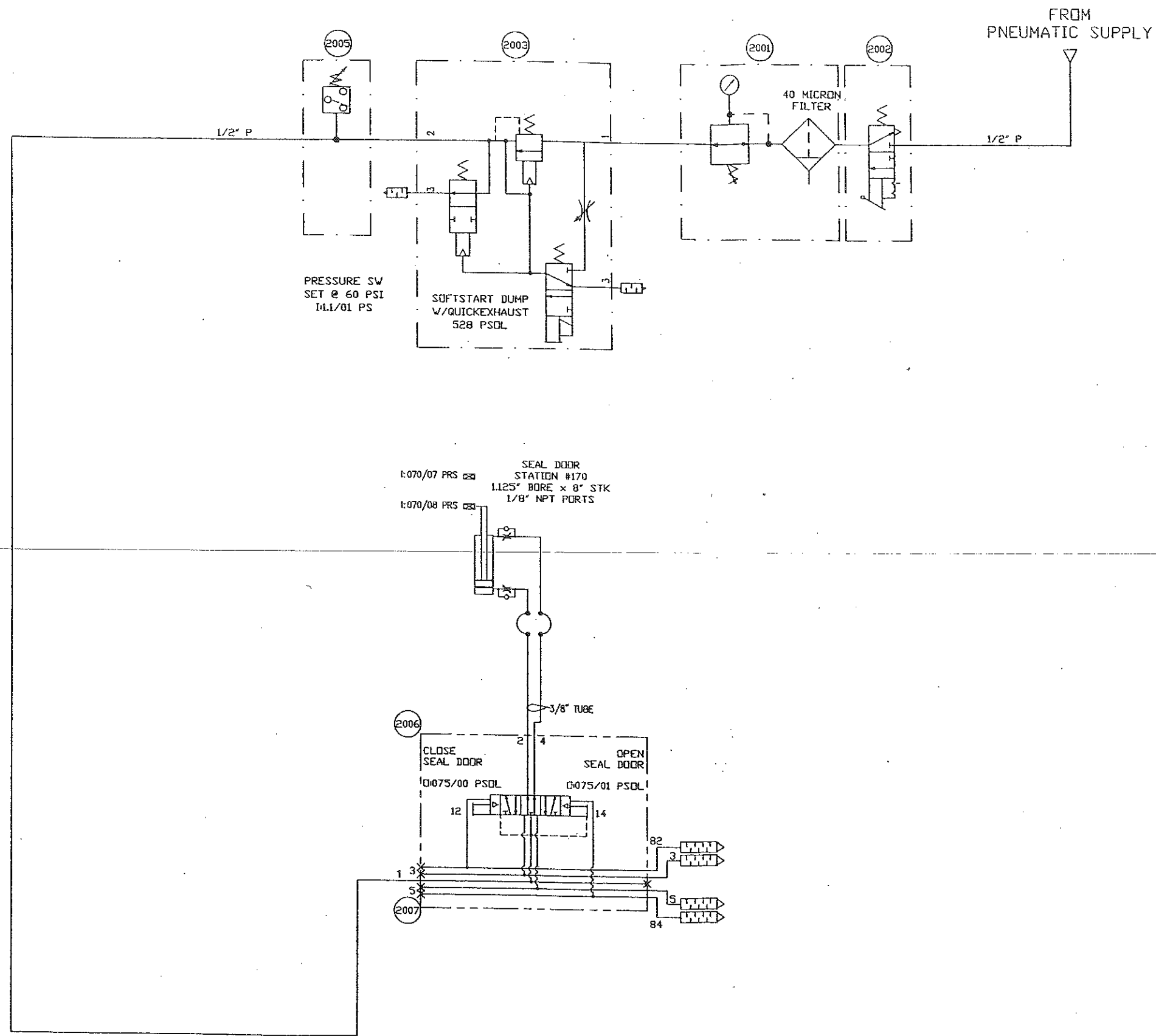
DET #	QTY	DESCRIPTION	PART #	MANUFACTURER	SUPPLIER	RECOMMENDED SPARES
1050	100	TERMINAL BLOCKS, 600V, 30A, DIN RAIL MOUNT				
1051	4	END BARRIER	1492-W4	ALLEN BRADLEY	KENDALL	
1052	4	END ANCHOR	1492-EB3	ALLEN BRADLEY	KENDALL	
1053	2	STANDOFFS	1492-EAH35	ALLEN BRADLEY	KENDALL	
1054	0	SPARE	1492-N25	ALLEN BRADLEY	KENDALL	
1055	0	SPARE				
1056	1	LOAD SWITCH, 25A, FRONT MOUNTED, W/ OPERATING SHAFT				
1057	1	LOAD SWITCH ACTUATOR, RED/YELLOW, TYPE N	194L-E25-1753	ALLEN BRADLEY	KENDALL	
1058	0	SPARE	194L-HE6N-175	ALLEN BRADLEY	KENDALL	
1059	0	SPARE				
1060	1	TOWER LIGHT, RED, 24VDC, LED				
1061	1	TOWER LIGHT, GREEN, 24VDC, LED	855E-24TL4	ALLEN BRADLEY	KENDALL	
1062	1	TOWER LIGHT, BLUE, 24VDC, LED	855T-24TL3	ALLEN BRADLEY	KENDALL	
1063	1	SOUND MODULE, TWO CIRCUIT-TWO TONE	855T-24TL6	ALLEN BRADLEY	KENDALL	
1064	1	10cm POLE MOUNT BASE WITH CAP	855E-B24TA3	ALLEN BRADLEY	KENDALL	
1065	0	SPARE	855E-BPM10C	ALLEN BRADLEY	KENDALL	
1066	0	SPARE				
1067	0	SPARE				
1068	8	FUSE BLOCKS, TOUCH SAFE, 600V, 30A, LPJ FUSES				
1069	3	FUSE, 6A, 600V	JT60030	BUSSMAN	KENDALL	
1070	2	FUSE, 15A, 600V	LPJ-6SP	BUSSMAN	KENDALL	3
1071	3	FUSE, 20A, 600V	LPJ-15SP	BUSSMAN	KENDALL	2
1072	0	SPARE	LPJ-20SP	BUSSMAN	KENDALL	3
1073	0	SPARE				
1074	0	SPARE				
1075	0	WIRING DUCT, 3x4, WHITE				
1076	0	WIRING DUCT, COVER, 3"	G-3X4WH6	PANDUIT	KENDALL	
1077	0	WIRING DUCT, 2x4, WHITE	C3WH6	PANDUIT	KENDALL	
1078	7	WIRING DUCT, 1x4, WHITE	G-2X4WH6	PANDUIT	KENDALL	
1079	0	WIRING DUCT, COVER, 2"	G-1X4WH6	PANDUIT	KENDALL	
1080	7	WIRING DUCT, COVER, 1"	C2WH6	PANDUIT	KENDALL	
1081	1	ENCLOSURE, SCREW COVER, NEMA 4	C1WH6	PANDUIT	KENDALL	
1082	2	ENCLOSURE COVER HINGE KIT	KL1511.210	RITTAL	GREAT LAKES	
1083	4	ENCLOSURE QUICK RELEASE FASTENER	KL1592.000	RITTAL	GREAT LAKES	
1084	1	PUSHBUTTON ENCLOSURE, 2 HOLE, FOR 30.5mm BUTTONS	KL1593.000	RITTAL	GREAT LAKES	
1085	0	SPARE	E2PBX	HOFFMAN	KENDALL	
1086	0	SPARE				
1087	1	DUPLEX RECEPTACLE, 15A, GRAY				
1088	2	SINGLE RECEPTACLE, 15A, GRAY	5262GY	COOPER	KENDALL	
1089	3	MOUNTING BOX FOR ABOVE RECEPTACLE, 3 HOLES FOR WIRING, ALUMINUM	5261GY	COOPER	KENDALL	
1090	2	SINGLE RECEPTACLE COVER, WEATHER PROOF, GRAY	1113	COOPER	KENDALL	
1091	1	LUG, FOR GROUND CONNECTION	1990	COOPER	KENDALL	
1092	1	GROUND BAR	CB70-14-C	PANDUIT	KENDALL	
1093	0	SPARE	GB-14	ITE	KENDALL	
1094	1	DC POWER SUPPLY, 24V, 10A, 120VAC IN				
1095	1	TRANSFORMER, 5KVA, 480VAC PRIMARY, 120VAC SECONDARY	SDN 10-24-100P	SOLA	KENDALL	1
1096	0	SPARE	HS5F5AS	SOLAVHEVI-DUTY	KENDALL	
1097	7	DISTRIBUTION BLOCK, 1 POLE, FINGERSAFE, 160A				
1098	1	DK 3 PART DISTRIBUTION ENCLOSURE	0356 200.21	ABB	GREAT LAKES	
1099	0	FRONT PANEL	7712024	RITTAL	GREAT LAKES	
1100	0	SPARE	1937200	RITTAL	GREAT LAKES	

3/3/2006

DET #	QTY	DESCRIPTION	PART #	MANUFACTURER	SUPPLIER	RECOMMENDED SPARES
1101	0	SPARE				
1102	1	400 SERIES ARM, VERTICAL MOUNT, ROTATE, DOUBLE PIVOT	ERGO-45-007-099	ERGOTRON	ERGOTRON	
1103	0	SPARE				
1104	1	ENCLOSURE, SINGLE DOOR, 60X24X12, ENVIROLINE	SCE-60EL2412LP	SAGINAW CONTROL & ENG.	SAGINAW CONTROL & ENG.	
1105	1	PANEL, 57X21	SCE-60P24	SAGINAW CONTROL & ENG.	SAGINAW CONTROL & ENG.	
REF1	1	SAFETY RELAY UNIT	SL-R11	KEYENCE	KEYENCE	ORDERED BY MECHANICAL
REF2	1	CLASS 2 POWER SUPPLY	SL-U2	KEYENCE	KEYENCE	ORDERED BY MECHANICAL
REF3	1	SAFETY LIGHT CURTAIN, 30.7", 40 BEAM	SL-C40H	KEYENCE	KEYENCE	ORDERED BY MECHANICAL
REF4	1	CABLE, 10M, PNP, MAIN UNIT PLUG - M12	SL-PC10P	KEYENCE	KEYENCE	ORDERED BY MECHANICAL
REF5	2	MOUNTING BRACKET FOR SL-C	OP-42347	KEYENCE	KEYENCE	ORDERED BY MECHANICAL

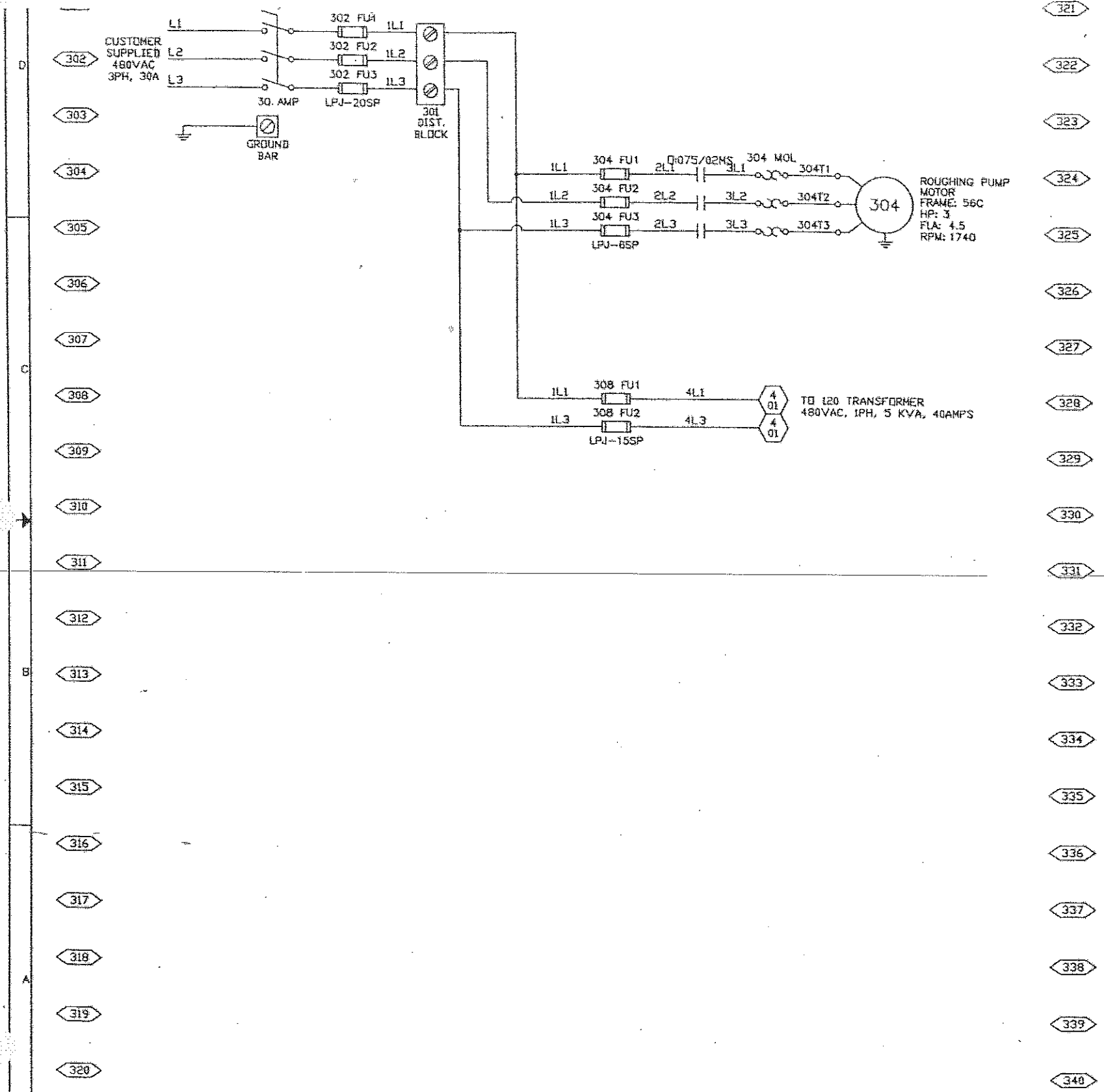
REVISIONS

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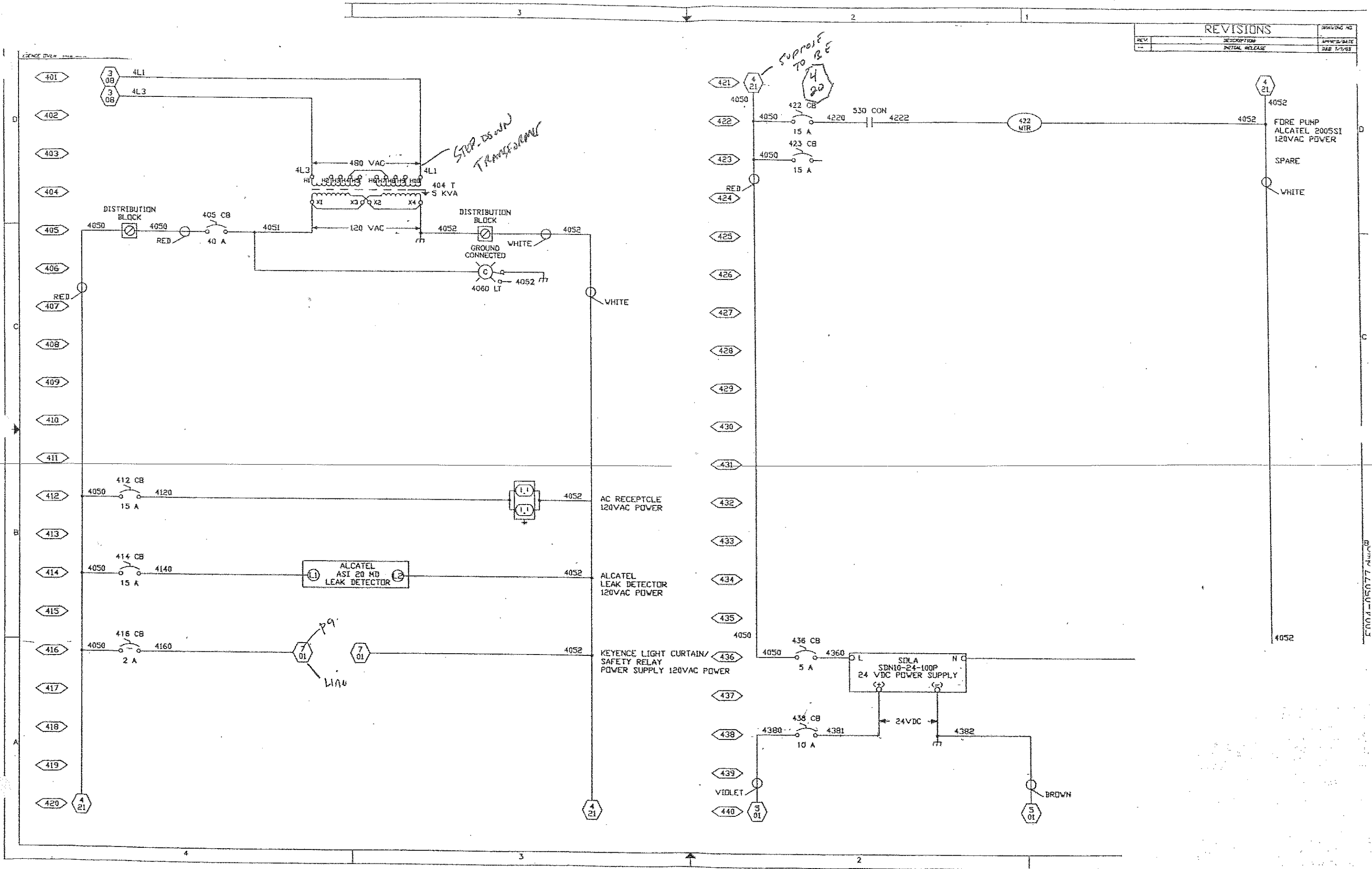


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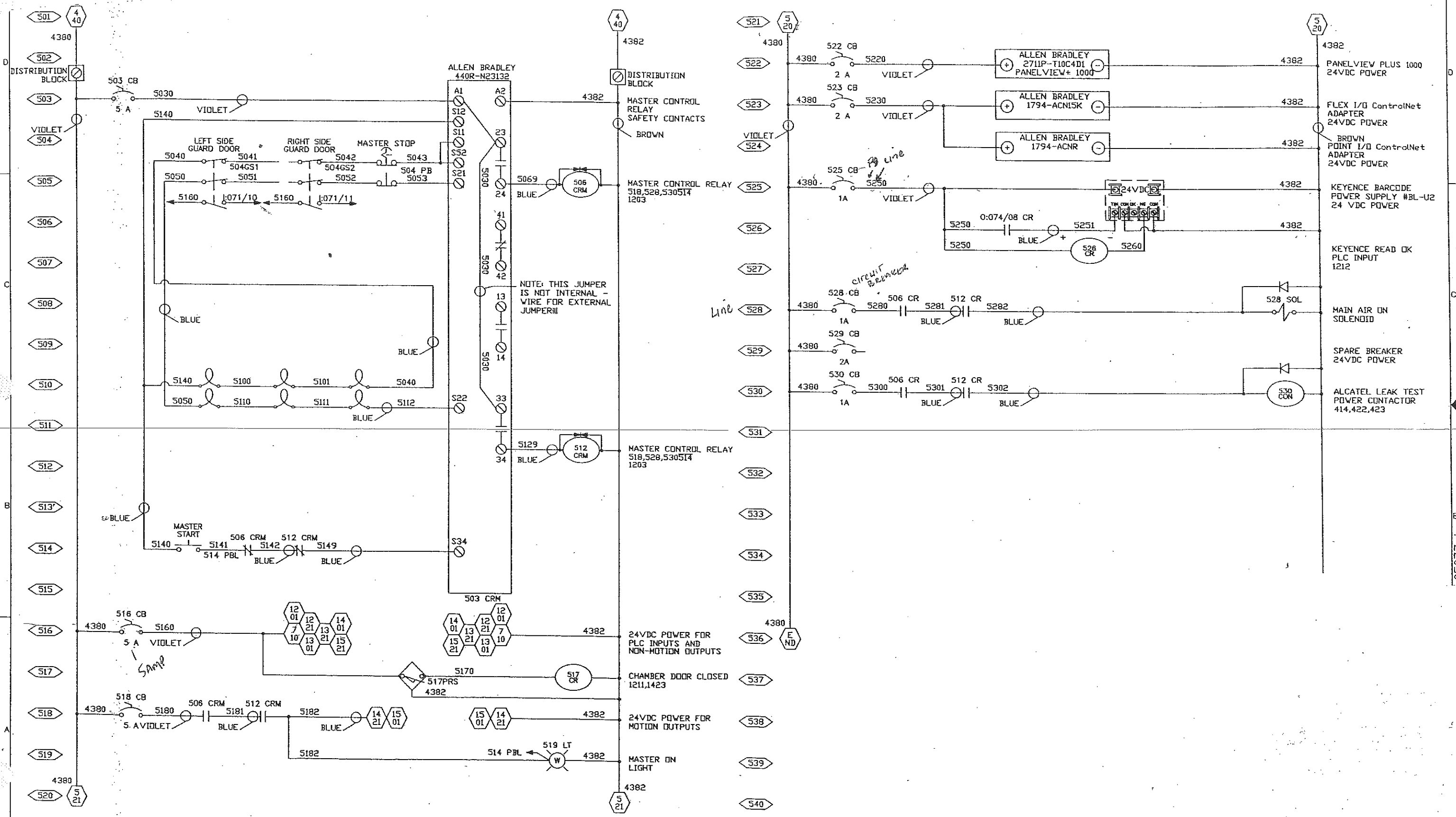


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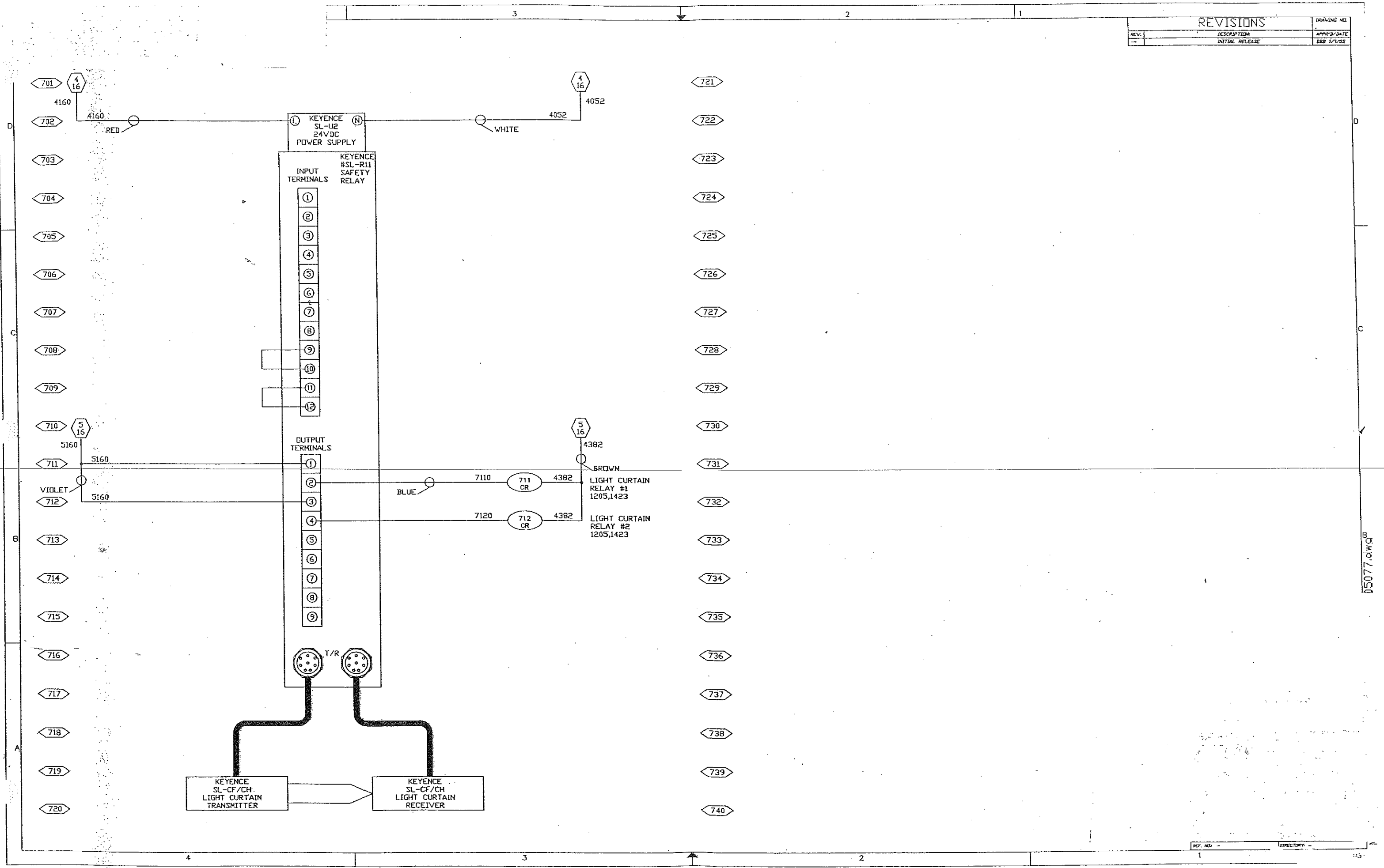
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REVISIONS		
REV. #	DESCRIPTION	APPROV. DATE
-	INITIAL RELEASE	DRG 1/1/83



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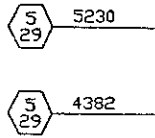
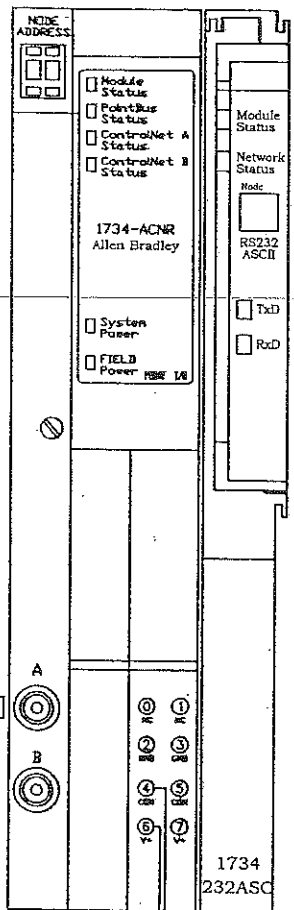
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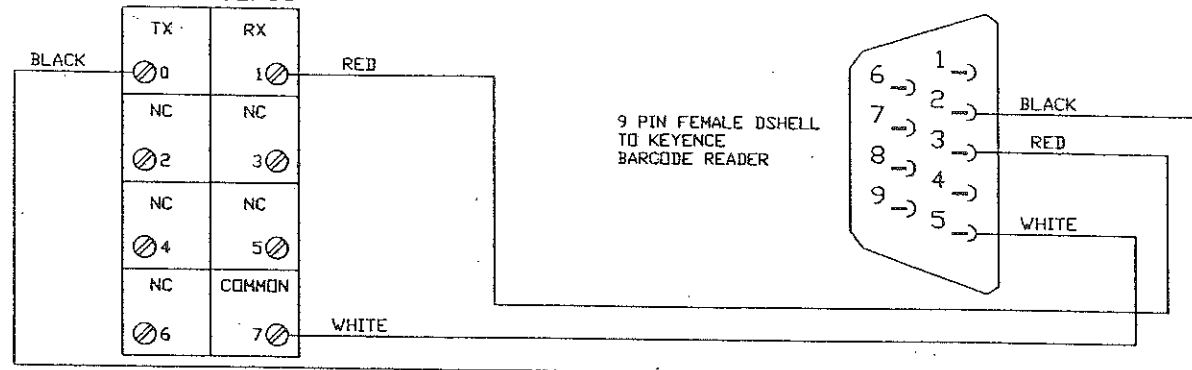
TRUNKLINE

ControlNet
 TRUNKLINE
 SHEET E011

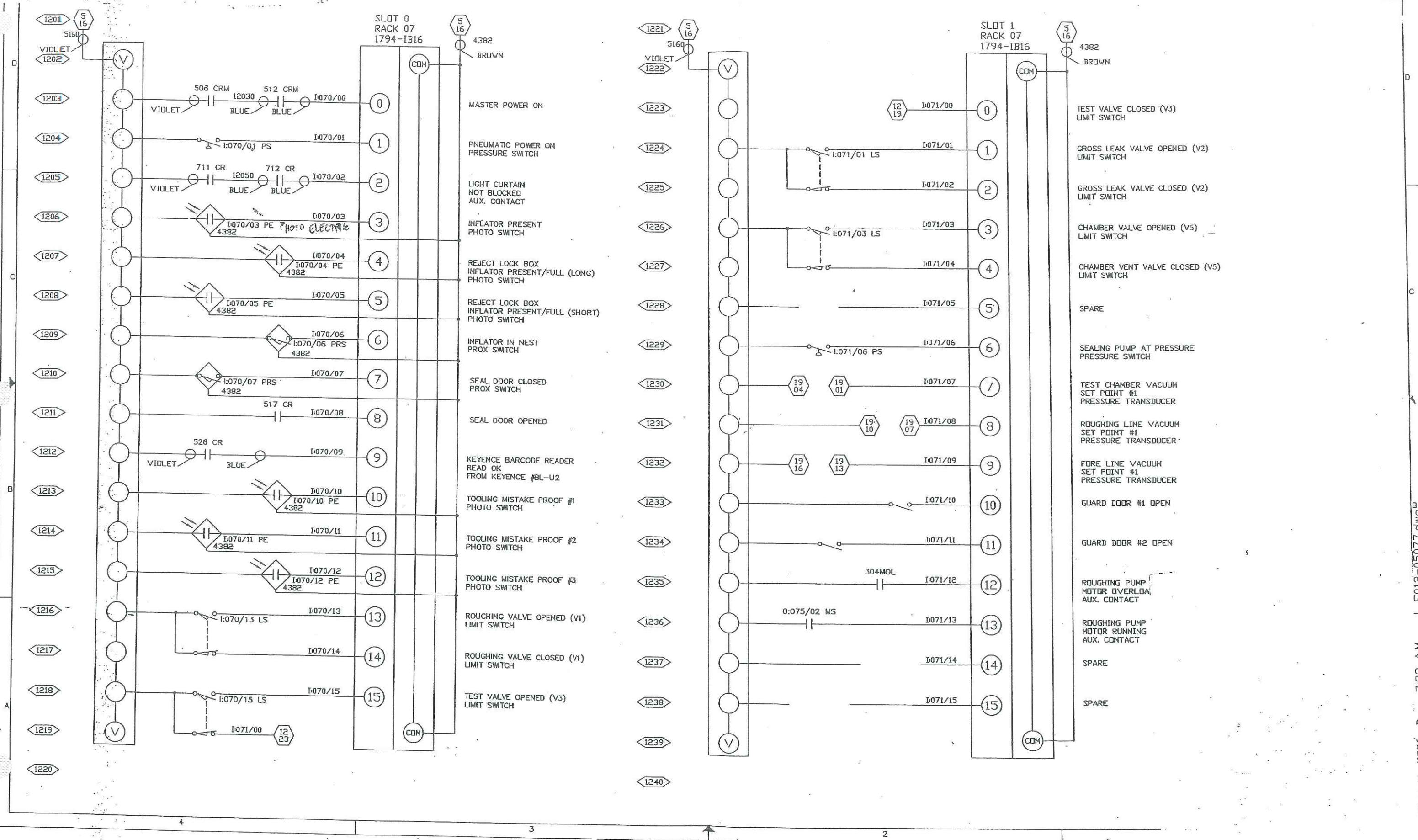
1786-TPXL



POINT IO MODULE #1
 1734-232ASC



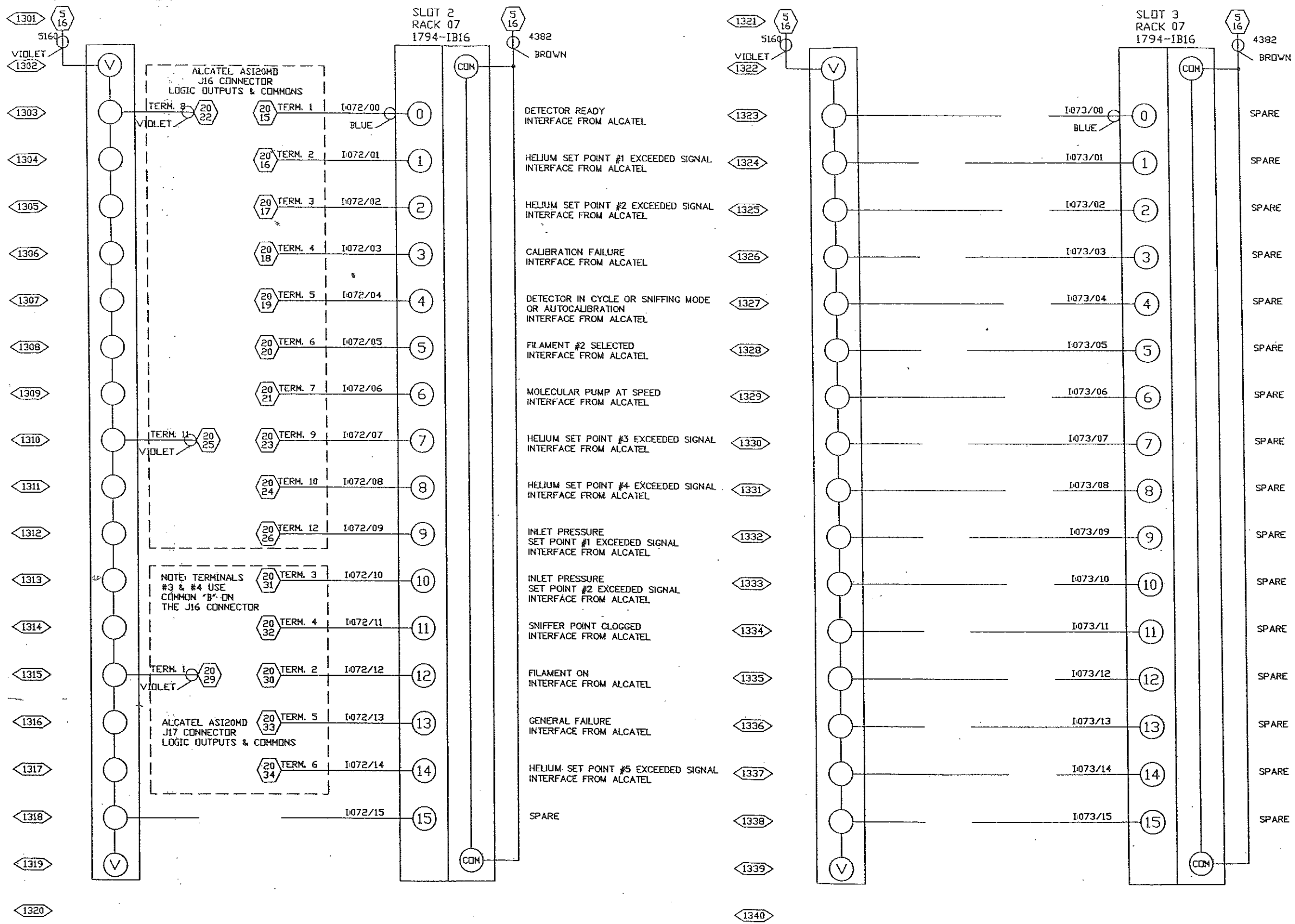
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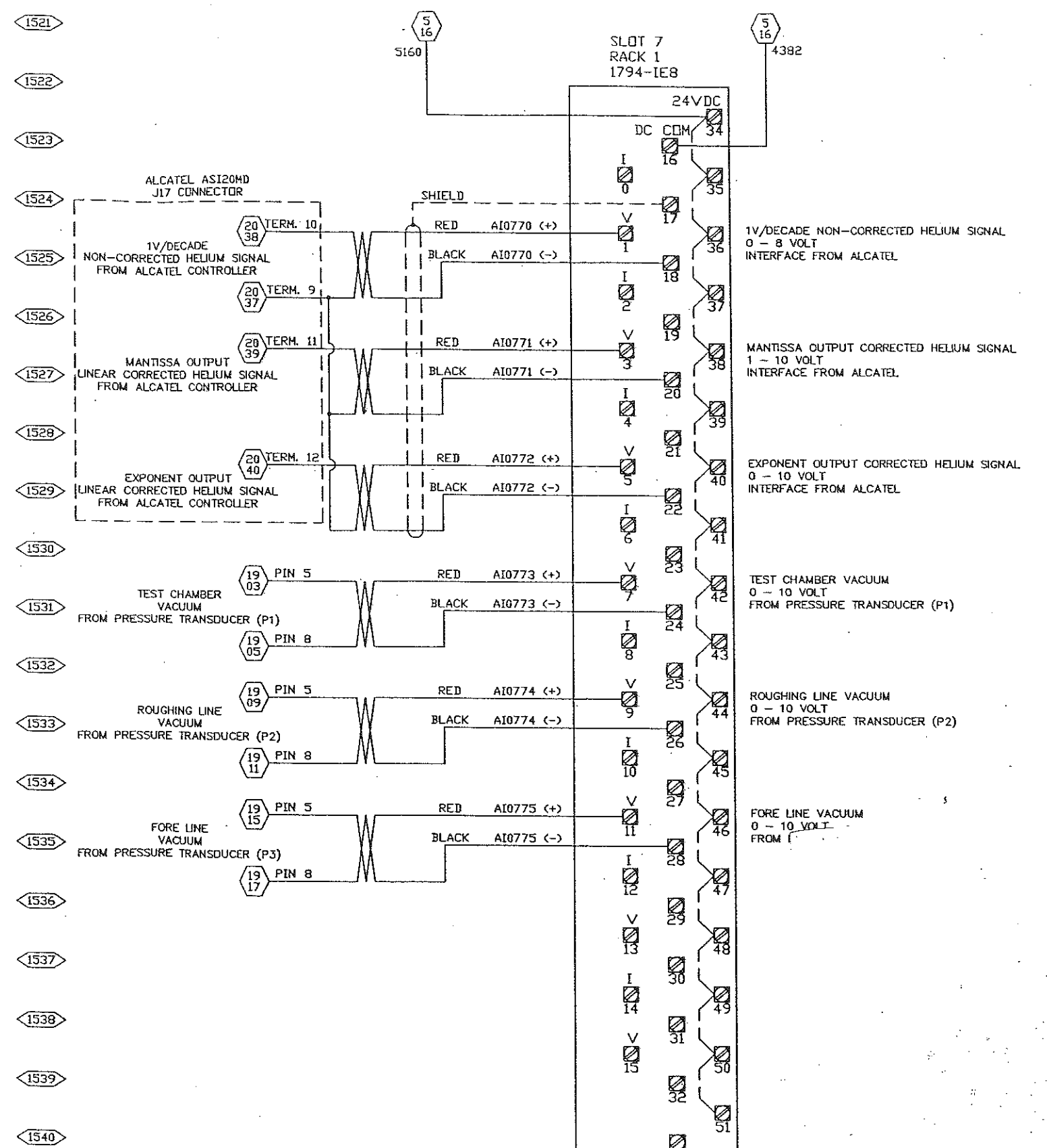
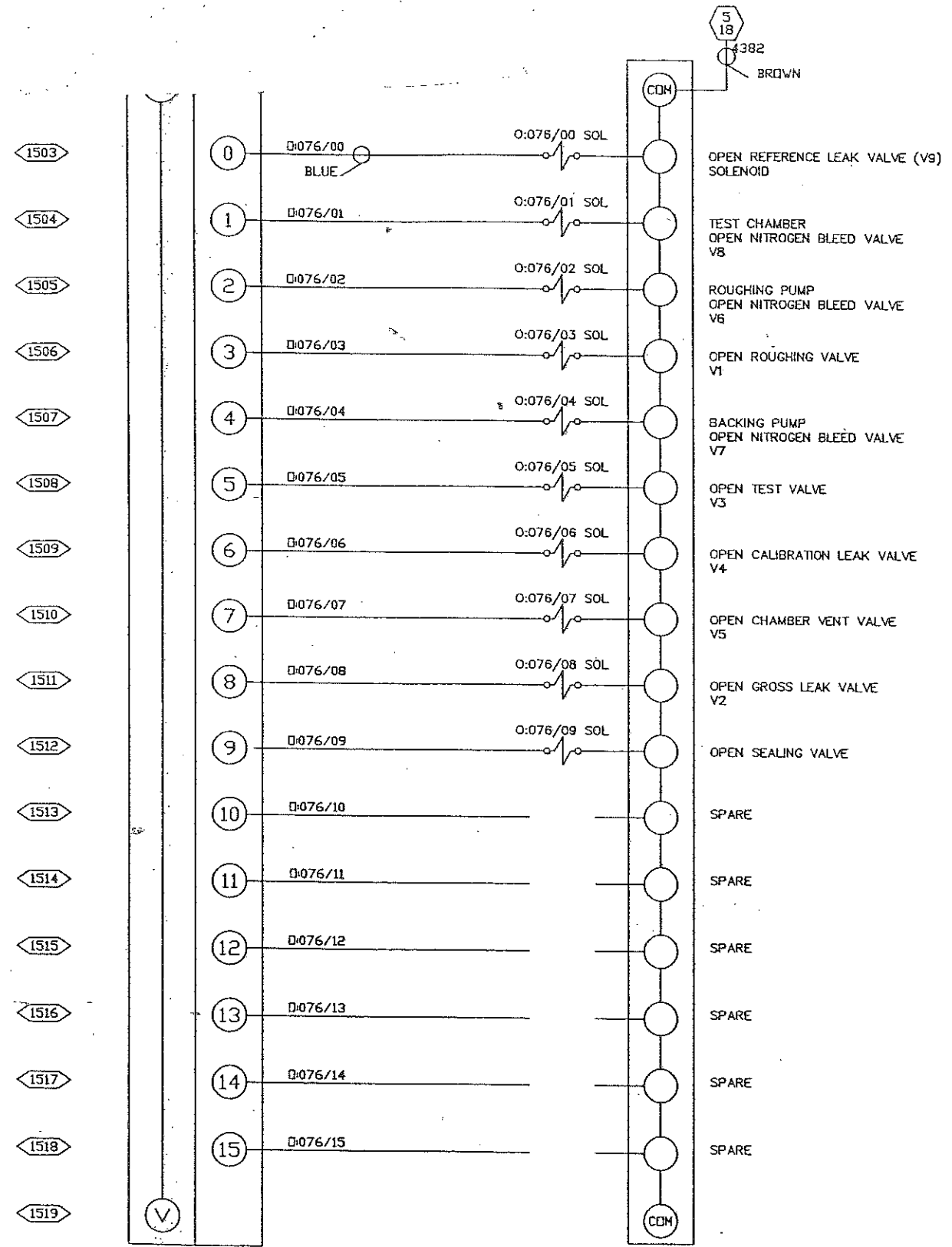
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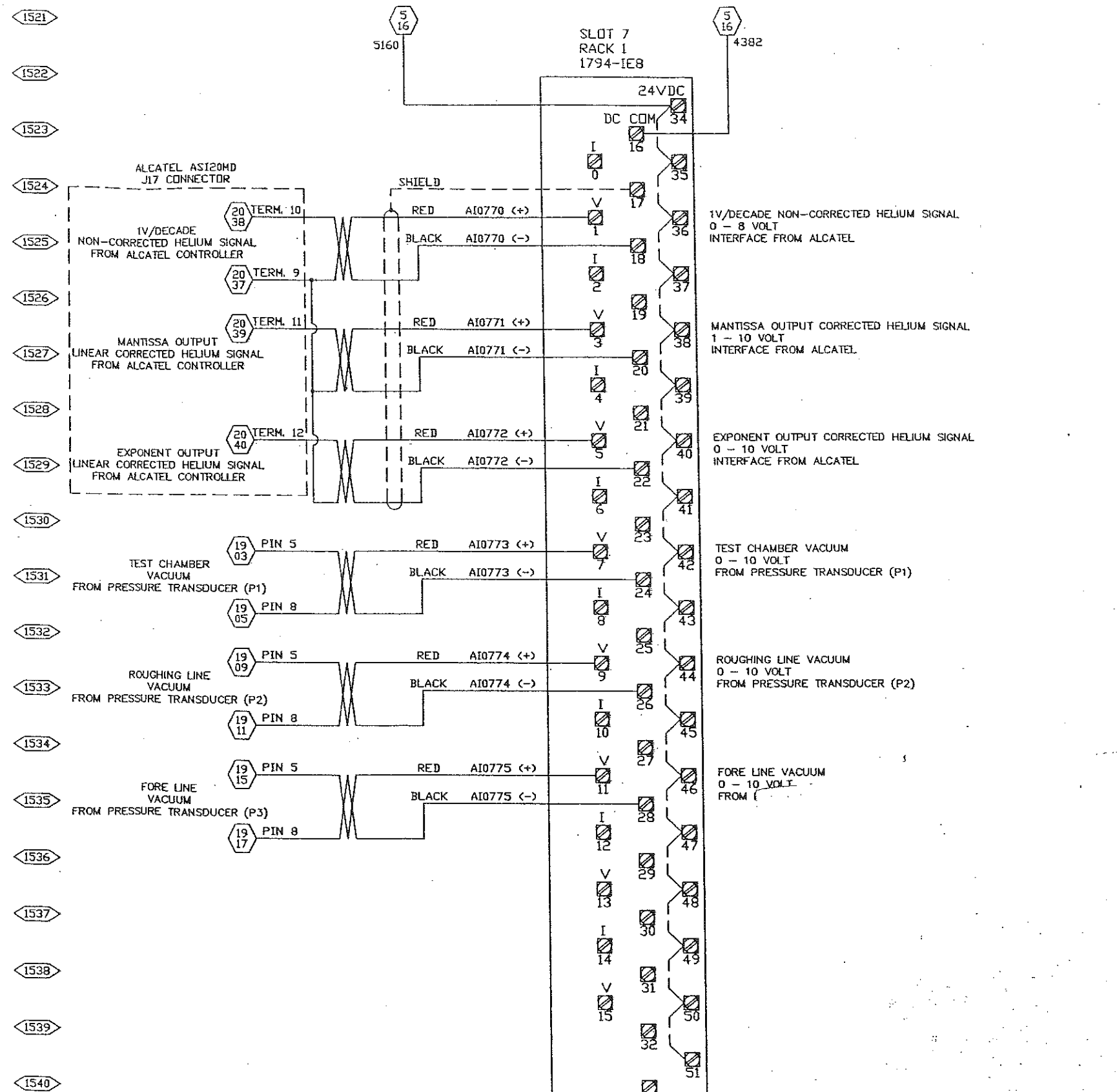
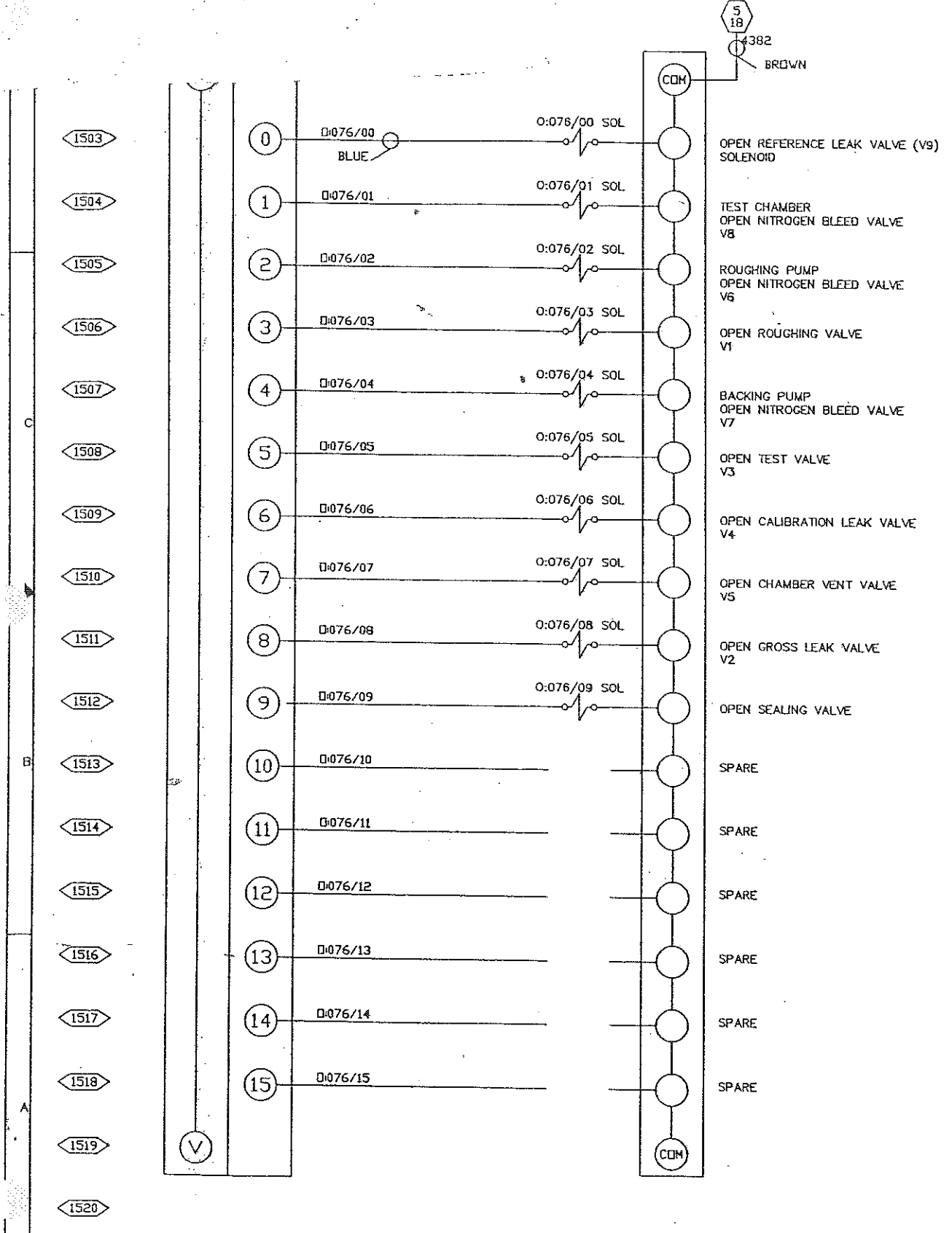
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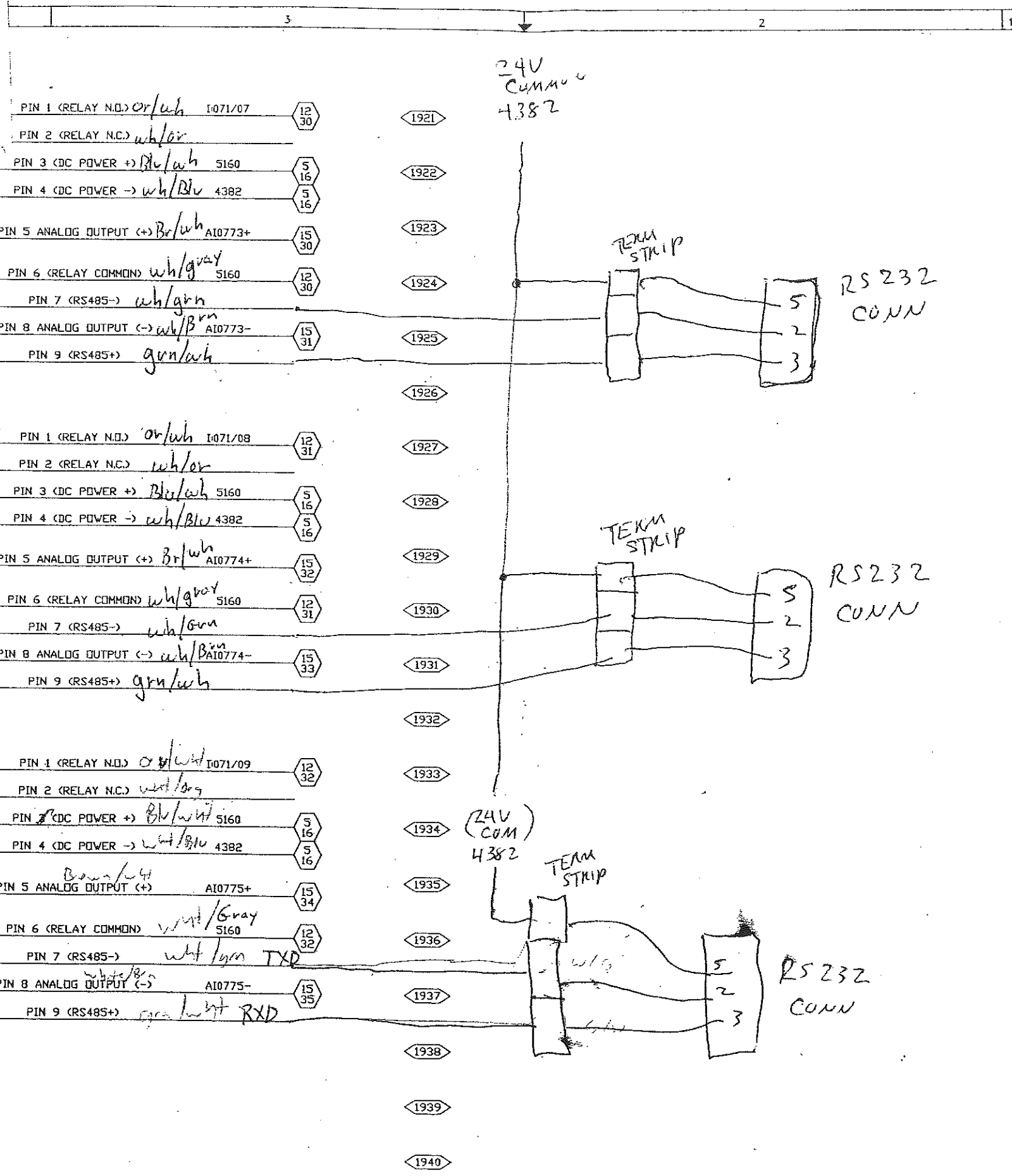
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REVISIONS		
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