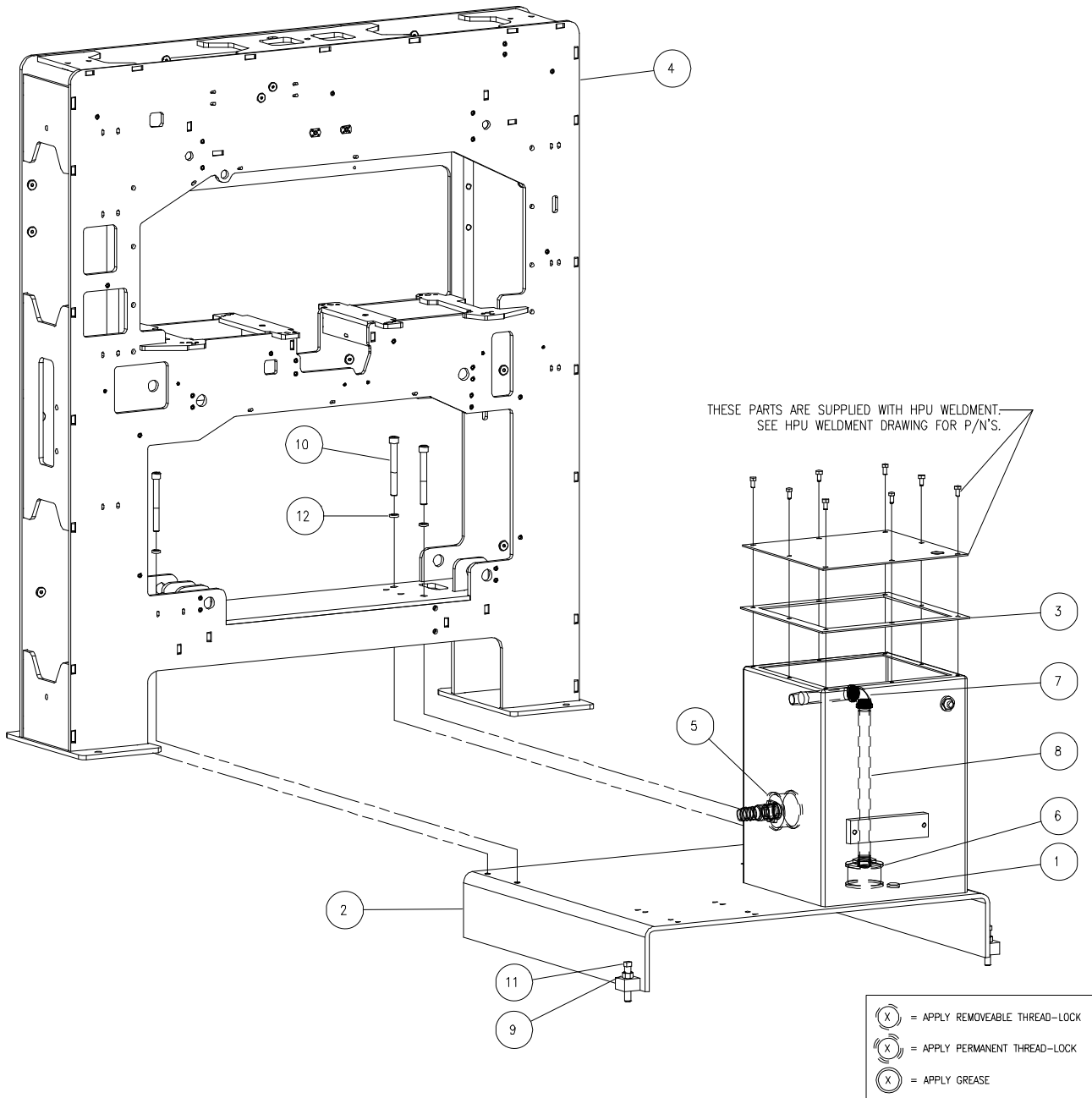


15.0 Schematics & Parts Lists

15.1 Main Assembly – Frame/Tank

47900 Sheet 1

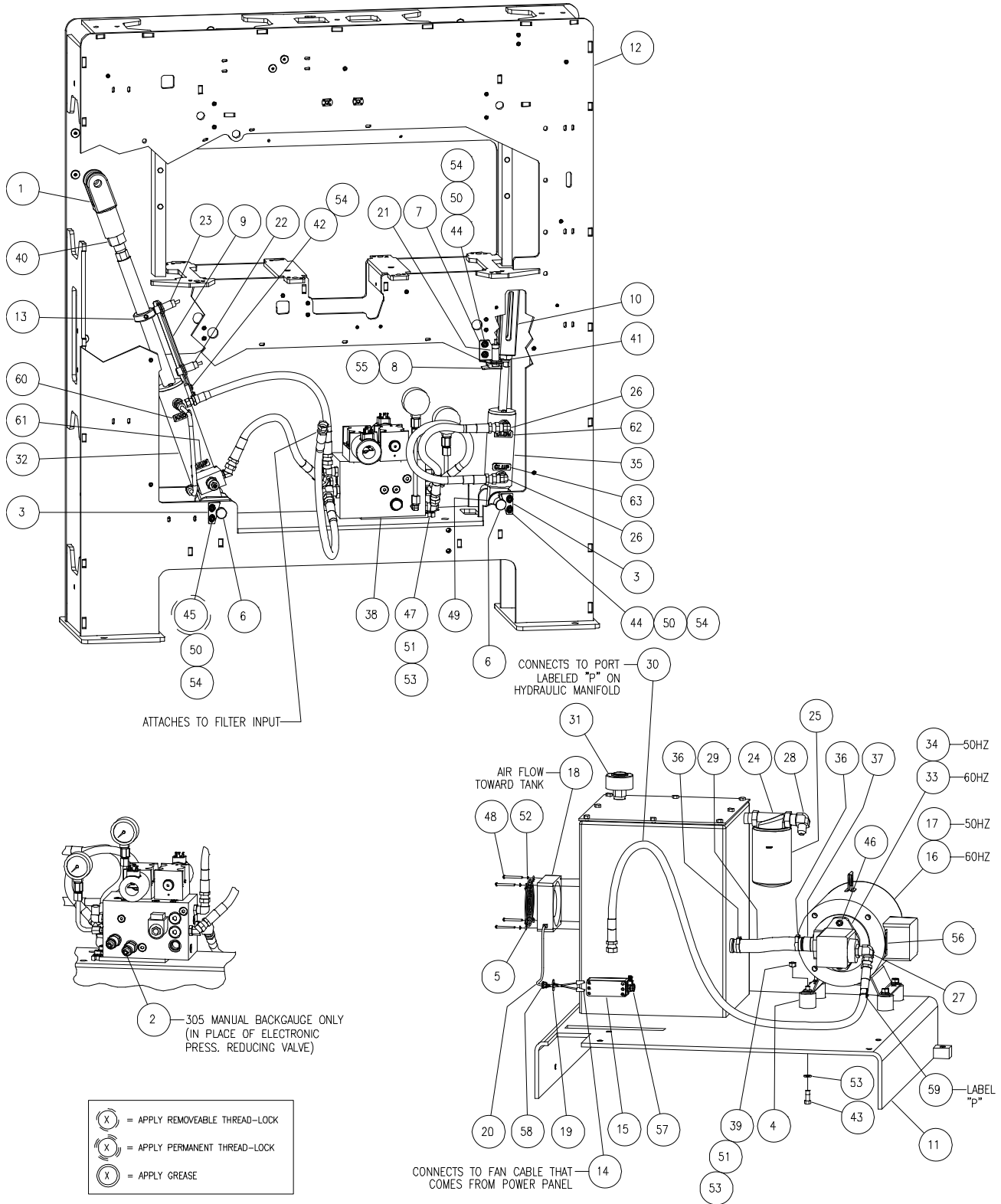


47900 Sheet 1 – Parts List

NO.	PART NO.	DESCRIPTION	QTY
1	47513	MAGNET - HYDRAULIC RESERVOIR	1
2	47542	HPU WELDMENT	1
3	47543	GASKET - HYDRAULIC RESERVOIR	1
4	47901	WELDMENT - 305 FRAME	1
5	H-238-4	STRAINER	1
6	H-338	DIFFUSER	1
7	H-503	ELBOW - PIPE, 90° 3/4 NPT	1
8	H-6405-12112	NIPPLE - 3/4 X 14"	1
9	H-6417-8	NUT - 1/2-13 HEX	2
10	H-6918-836	SCREW - 1/2-13 X 4-1/2 SOCKET HEAD CAP	4
11	H-6931-824	SCREW - 1/2-13 X 3 SQUARE HEAD SET	2
12	H-7329-8	WASHER - 1/2 HIGH COLLAR LOCK	4

15.2 Main Assembly – Hydraulics

47900 Sheet 2

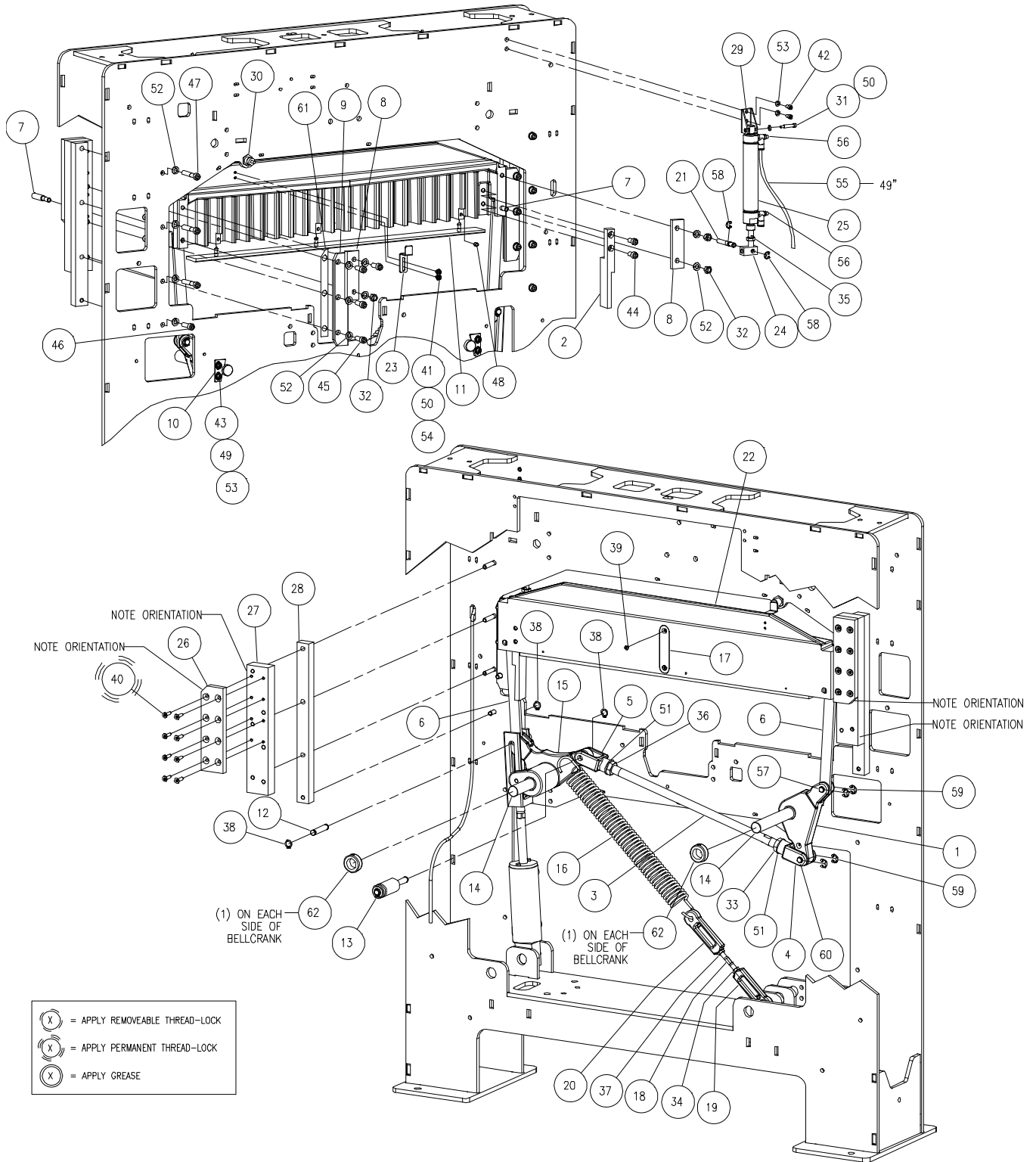


47900 Sheet 2 – Parts List

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	4411	CLEVIS - CONN. ROD L.H.	1
2	5136	PRESSURE REDUCING VALVE	1
3	8835-1	PIN KEEPER	2
4	40016-5	MOUNT - VIBRATION	4
5	47092	GUARD - FAN	1
6	47110-1	PIN - BELL CRANK	2
7	47171-1	BRACKET - CLAMP PROX	1
8	47172-1	ACTUATOR - CLAMP PROX	1
9	47519	BRACKET - KNIFE PROX	1
10	47529	CLEVIS - CLAMP	1
11	47542	HPU WELDMENT	1
12	47901	WELDMENT - 305 FRAME	1
13	A-10644-8	COLLAR	1
14	E-1237-6	WIRE NUT - BLUE	2
15	E-1369-5	COVER - JUNCTION BOX	1
16	E-1600-181	MOTOR - 60 HZ	1
17	E-1600-183	MOTOR - 50 HZ	1
18	E-2483	FAN	1
19	E-2837	ADAPTER - KNOCK-OUT	1
20	EE-2466-2	CABLE ASM - FAN	1
21	EE-2820	PROX. ASM. - HYD UP LIMIT "H"	1
22	EE-2820-2	PROX. ASM. - KNIFE DOWN LIMIT "K"	1
23	EE-2820-5	PROX. ASM. - KNIFE UP LIMIT "U"	1
24	H-226-1	FILTER HEAD	1
25	H-227-1	FILTER	1
26	H-230-6	ELBOW- ORING TO TUBE	2
27	H-230-8	ELBOW- ORING TO TUBE	1
28	H-237-17	ELBOW- PIPE (EXT) TO TUBE	1
29	H-242-55	HOSE - 1" X 6-1/2 LOW PRESSURE	1
30	H-242-65	HYDRAULIC HOSE	1
31	H-287-2	BREATHER CAP	1
32	H-342-2	HYD. CYLINDER - KNIFE	1
33	H-387	PUMP-HYDRAULIC (5 GPM)	1
34	H-387-1	PUMP-HYDRAULIC (6 GPM)	1
35	H-431-2	HYD. CYLINDER - CLAMP	1
36	H-489	HOSE CLAMP	2
37	H-491	HOSE BARB - FILTER/TANK	1
38	H-504-1	KIT - HYDRAULIC MANIFOLD	1
39	H-6417-6	NUT - 3/8-16 HEX	4
40	H-6427-16	NUT - 1"-12 HEX	1
41	H-6428-12	NUT - 3/4-16 HEX JAM	1
42	H-6910-403	SCREW - 1/4-20 X 3/8 BUTTON HEAD CAP	2
43	H-6913-608	SCREW - 3/8-16 X 1 HEX HEAD CAP	4
44	H-6918-404	SCREW - 1/4-20 X 1/2 SOCKET HEAD CAP	4
45	H-6918-405	SCREW - 1/4-20 X 5/8 SOCKET HEAD CAP	2
46	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	2
47	H-6918-610	SCREW - 3/8-16 X 1-1/4 SOCKET HEAD CAP	2
48	H-6923-63228	SCREW - #6-32 X 1-3/4 ROUND HD MACH	4
49	H-7321-16	WASHER - 1" SAE PLAIN	3
50	H-7321-4	WASHER - 1/4 SAE PLAIN	6
51	H-7321-6	WASHER - 3/8 SAE PLAIN	6
52	H-7324-#6	WASHER - #6 INT TOOTH	4
53	H-7327-12	WASHER - 3/8 MEDIUM LOCK	10
54	H-7327-8	WASHER - 1/4 MEDIUM LOCK	8
55	H-21S-125-0500	ROLL PIN - 1/8 X 1/2	1
56	S-1106	DECAL- RED ARROW	1
57	S-1350-16	STRAIN RELIEF BUSHING	1
58	S-1350-18	STRAIN RELIEF BUSHING	1
59	S-1694-5	TYRAP - IDENTIFICATION	1
60	S-1781-61	LABEL - KNND	1
61	S-1781-62	LABEL - KNUP	1
62	S-1781-63	LABEL - KNUP	1
63	S-1781-64	LABEL - KNUP	1

15.3 Main Assembly – Clamp

47900 Sheet 3

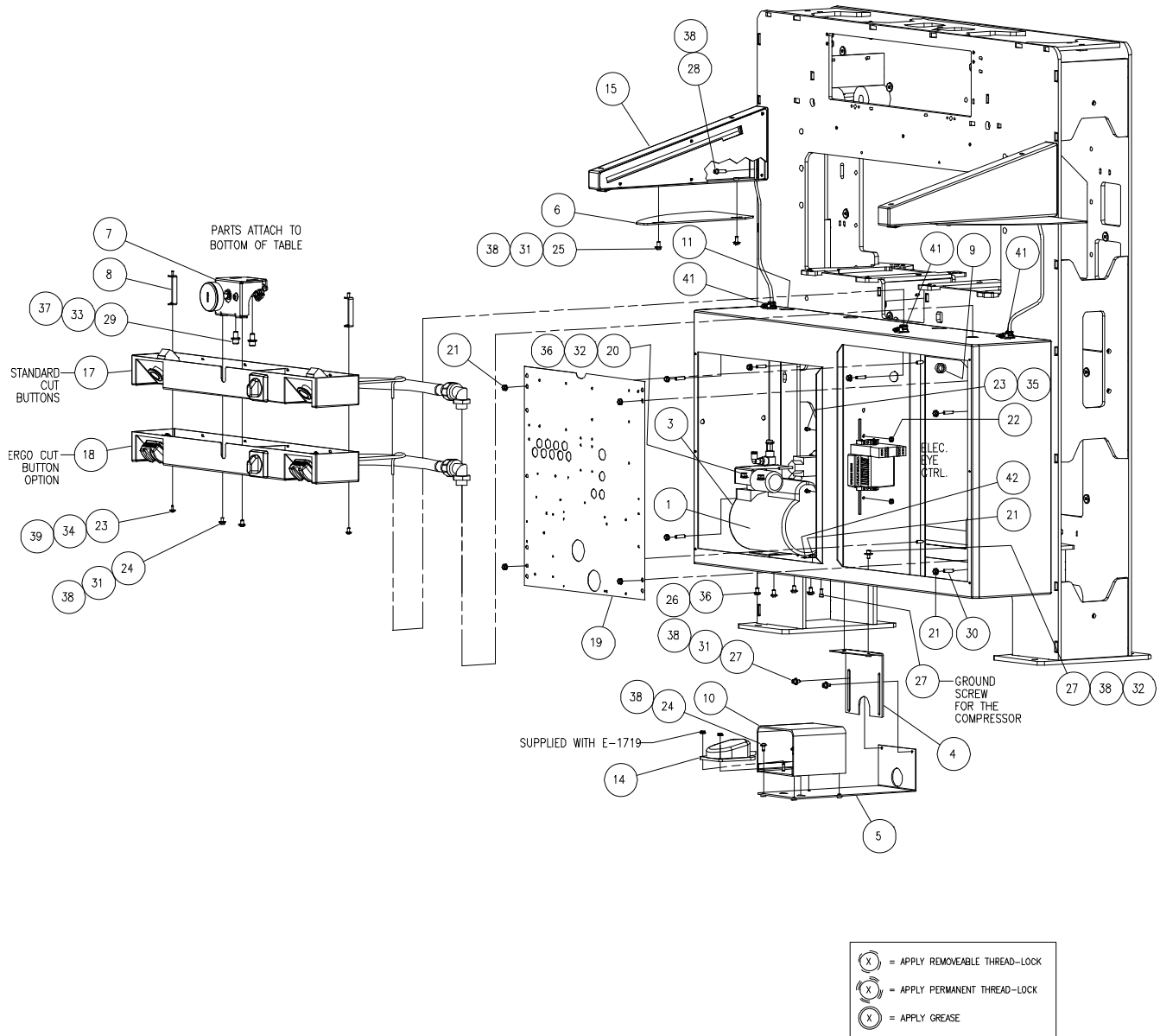


47900 Sheet 3 – Parts List

NO.	PART NO.	DESCRIPTION	QTY
1	4406-D-1	BELLCRANK ASM - R.H. CLAMP	1
2	4441-1	DEFLECTOR - PAPER, BLOCK	1
3	4461	ROD - CLAMP CONNECTOR	1
4	4465	CLEVIS - CONN. ROD R.H.	1
5	4466	CLEVIS - CONN. ROD L.H.	1
6	4504-2	BAR - CLAMP PULL DOWN	2
7	4506	STUD - CLAMP PULL DOWN	2
8	4508	BAR - CLAMP GUIDE	2
9	4509-1	BAR - CLAMP GUIDE	2
10	8835-1	PIN KEEPER	2
11	47006-2	FALSE CLAMP PLATE ASSEMBLY	1
12	47063	PIN- CLAMP CYLINDER CLEVIS	1
13	47090	PIN ASSEMBLY - SPRING	1
14	47110-1	PIN - BELL CRANK	2
15	47123-2	BELLCRANK ASM - L.H. CLAMP	1
16	47136-2	SPRING	1
17	47252	CLAMP WEAR STRIP	1
18	47253	TIE ROD - CLAMP RETURN	1
19	47254	CLEVIS - R.H.	1
20	47255	CLEVIS - L.H.	1
21	47266	STUD - HYDRAULIC DAMPER	1
22	47522	CLAMP - 305	1
23	47528-1	LIMIT SWITCH ACTUATOR - CLAMP UP	1
24	47556-2	ROD END	1
25	47643-1	AIR CYLINDER - CLAMP	1
26	47940	REAR GIB	2
27	47941	REAR GIB SUPPORT	2
28	47942	REAR SUPPORT	2
29	47953	CLEVIS BRACKET	1
30	EE-2820-4	PROX. ASM. - CLAMP UP "C"	1
31	H-5254-408	SCREW - 1/4 X 1 SHSS	1
32	H-6417-6	NUT - 3/8-16 HEX	3
33	H-6424-12	NUT - 3/4-10 HEX JAM	1
34	H-6424-6	NUT - 3/8-16 HEX JAM	1
35	H-6428-7	NUT - 7/16-20 HEX JAM	1
36	H-6433-12	NUT - 3/4-10 L.H. HEX JAM	1
37	H-6433-6	NUT - 3/8-16 L.H. HEX JAM	1
38	H-6451-0500	RING - EXTERNAL GRIPPING	3
39	H-6897-102403	SCREW - #10-24 X 3/8" FLAT HEAD CAP	2
40	H-6909-408	SCREW - 1/4-20 X 1" FLAT HEAD CAP	16
41	H-6918-102404	SCREW - #10-24 X 1/2 SOCKET HEAD CAP	2
42	H-6918-404	SCREW - 1/4-20 X 1/2 SOCKET HEAD CAP	4
43	H-6918-405	SCREW - 1/4-20 X 5/8 SOCKET HEAD CAP	2
44	H-6918-606	SCREW - 3/8-16 X 3/4 SOCKET HEAD CAP	2
45	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	7
46	H-6918-610	SCREW - 3/8-16 X 1-1/4 SOCKET HEAD CAP	2
47	H-6918-618	SCREW - 3/8-16 X 2-1/4 SOCKET HEAD CAP	6
48	H-6951-406	SCREW - 1/4-20 X 3/8 NYLOK FLT PT SOC SET	3
49	H-7321-4	WASHER - 1/4 SAE PLAIN	4
50	H-7321-#10	WASHER - #10 SAE PLAIN	3
51	H-7324-24	WASHER - 3/4 INT TOOTH	2
52	H-7327-12	WASHER - 3/8 MEDIUM LOCK	18
53	H-7327-8	WASHER - 1/4 MEDIUM LOCK	6
54	H-7327-#10	WASHER - #10 MEDIUM LOCK	2
55	P-303_X_49INCHES	1/4" O.D. POLYETHYLENE TUBING	1
56	P-304	FLOW CONTROL ELBOW-1/4 TUBE X 1/8 NPT	2
57	S-482-1	STRAIGHT ROD END PIN	1
58	S-1193-37	E-RING - 3/8"	2
59	S-1193-50	E-RING - 1/2"	4
60	S-1195	STRAIGHT ROD END PIN	1
61	S-1861	SHIM - CLAMP GUIDE	2
62	SS-798	COLLAR	4

15.4 Main Assembly – Electrical Components, Lower Front

47900 Sheet 5

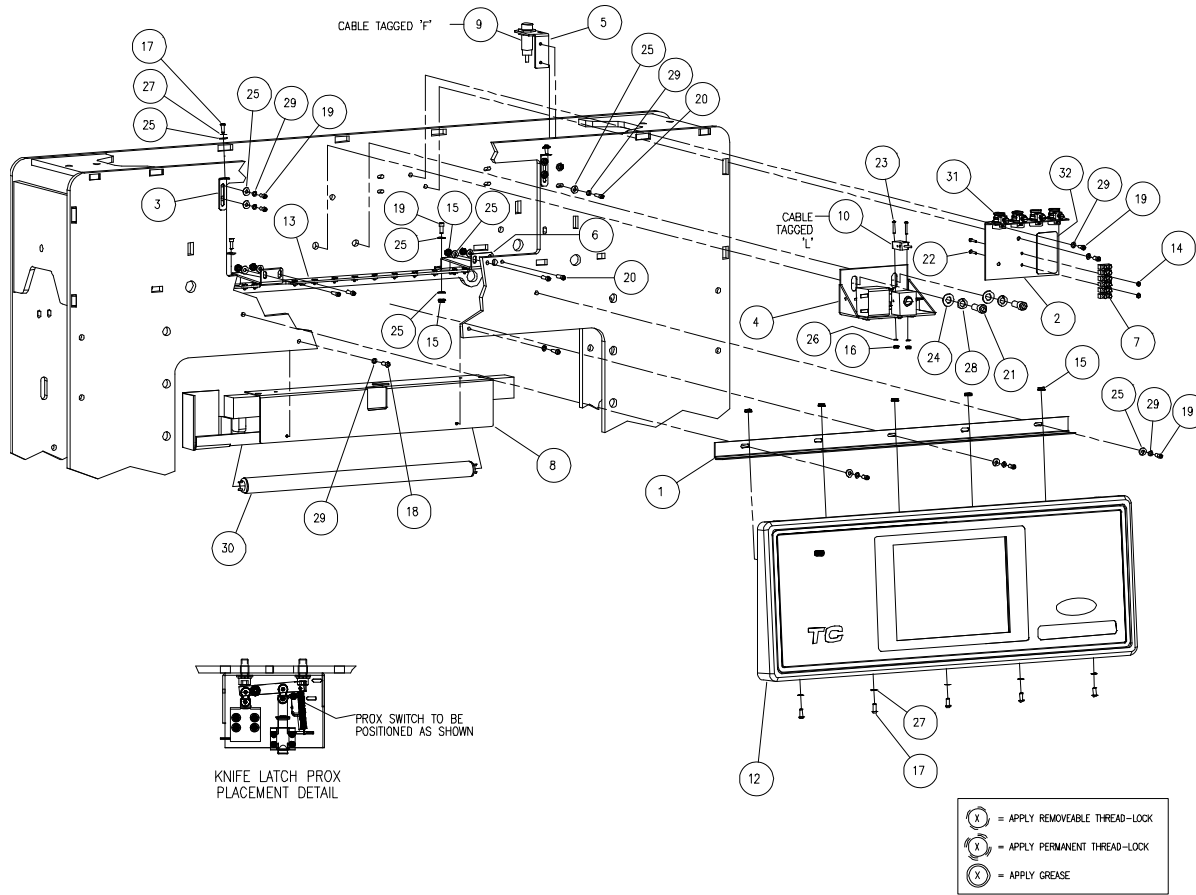


47900 Sheet 5 – Parts List

NO.	PART NO.	DESCRIPTION	QTY
1	40016-8	MOUNT - VIBRATION	4
2	47033-3	FRONT ENCLOSURE	1
3	47645-1	CLAMP COMPRESSOR ASSEMBLY	1
4	47646	FOOT SWITCH BRACKET	1
5	47647	FOOT SWITCH BRACKET	1
6	47943	SHIELD - TABLE	2
7	49249	BACKGAUGE CONTROL ASSEMBLY	1
8	49255-1	STAND OFF- SHEETMETAL	2
9	E-1172-10	SNAP-IN BUSHING	1
10	E-1719	FOOTSWITCH GUARD	1
11	E-2196-17	HOLE PLUG	4
12			
13			
14	EE-3207	FOOT SWITCH ASSEMBLY	1
15	EE-3339	ELECTRIC EYE ASM W/ CONTROLS	1
16			
17	EE-3382	CUT BUTTON SWITCH ASM - 305TC	1
18	EE-3382-1	CUT BUTTON SWITCH ASM - ERGO 305TC	1
19	EE-3461-1	ELECTRICAL PANEL ASM - 305TC	1
20	H-6417-5	NUT - 5/16-18 HEX	4
21	H-6423-4	NUT - 1/4-20 HEX KEP	11
22	H-6423-#10	NUT - #10-24 HEX KEP	4
23	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	7
24	H-6910-404	SCREW - 1/4-20 X 1/2 BUTTON HEAD CAP	6
25	H-6910-405	SCREW - 1/4-20 X 5/8 BUTTON HEAD CAP	4
26	H-6910-604	SCREW - 3/8-16 X 1/2 BUTTON HEAD CAP	2
27	H-6918-404	SCREW - 1/4-20 X 1/2 SOCKET HEAD CAP	5
28	H-6918-406	SCREW - 1/4-20 X 3/4 SOCKET HEAD CAP	4
29	H-6918-504	SCREW - 5/16-18 X 1/2 SOCKET HEAD CAP	4
30	H-6940-416	SCREW - 1/4-20 X 1 FLAT SOC SET	6
31	H-7321-4	WASHER - 1/4 SAE PLAIN	8
32	H-7321-5	WASHER - 5/16 SAE PLAIN	4
33	H-7321-6	WASHER - 3/8 SAE PLAIN	2
34	H-7321-#10	WASHER - #10 SAE PLAIN	7
35	H-7324-#10	WASHER - #10 INT TOOTH	2
36	H-7327-10	WASHER - 5/16 MEDIUM LOCK	8
37	H-7327-12	WASHER - 3/8 MEDIUM LOCK	2
38	H-7327-8	WASHER - 1/4 MEDIUM LOCK	18
39	H-7327-#10	WASHER - #10 MEDIUM LOCK	7
40			
41	S-1350-16	STRAIN RELIEF BUSHING	3
42	S-1781-42	LABEL - GROUND	1

15.5 Main Assembly – Electrical Components Upper

47900 sheet 6 (fluorescent table light)

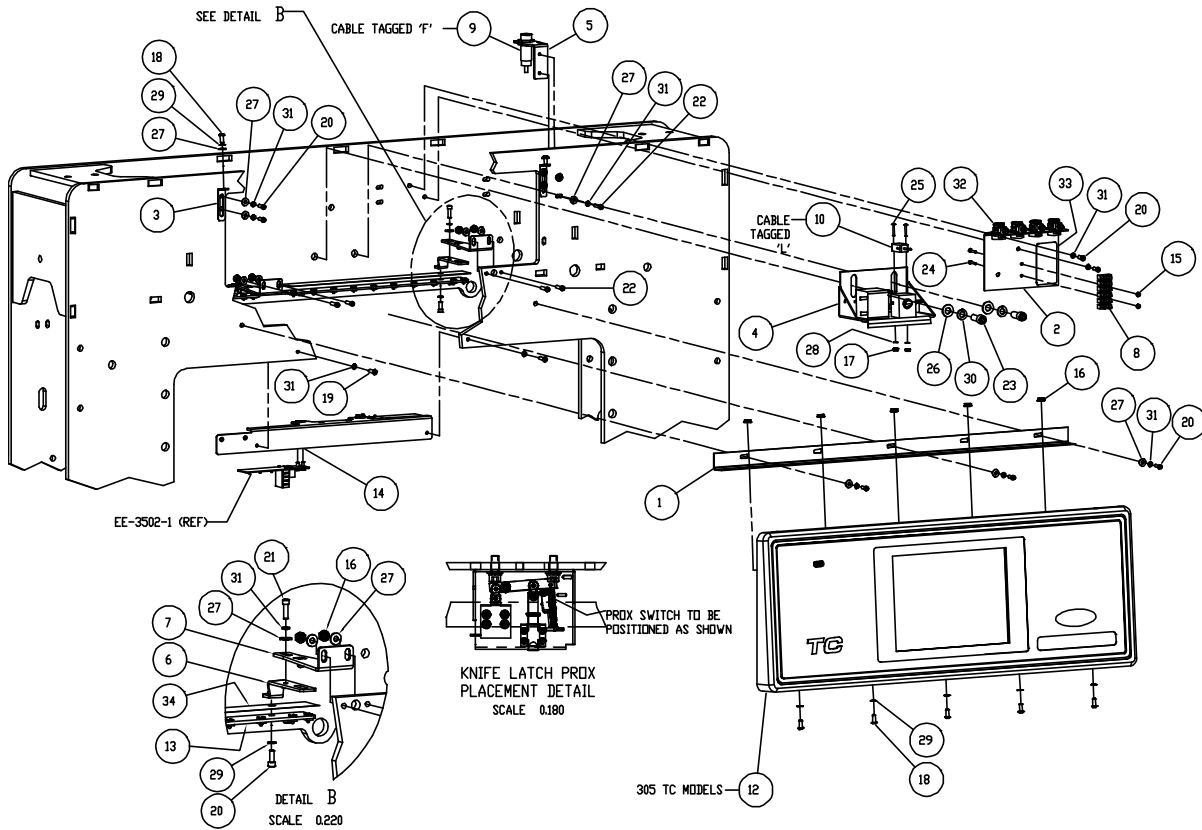


47900 Sheet 6 – Parts List (Fluorescent table Light)

NO.	PART NO.	DESCRIPTION	QTY
1	16047	HINGE- MPS CONSOLE	1
2	47195	BRACKET - ARCH JUNCTION	1
3	47502	BRACKET - CONSOLE	2
4	47568-1	ASSEMBLY - KNIFE LATCH	1
5	47958	PROX SENSOR BRACKET	1
6	47959	LINE LIGHT BRACKET	2
7	E-2626-6	TERMINAL STRIP (6P)	1
8	EE-2149-9	TABLE LIGHT ASSEMBLY	1
9	EE-2820-11	PROX. ASM. - FALSE CLAMP PLATE "F"	REF
10	EE-2842-1	PROX. ASM.- KNIFE LATCH "L"	REF
11			
12	EE-3456	CONTROL CONSOLE ASSEMBLY - 305 TC	1
13	EE-3489	LED LINE LIGHT BOARD (S/N: 305-J-151076 & UP) FOR INCANDESCENT TYPE, SEE SECTION 15.29 ON PG. 113	1
14	H-6417-#4	NUT - #4-40 HEX	2
15	H-6423-#10	NUT - #10-24 HEX KEP	11
16	H-6423-#4	NUT - #4-40 HEX KEP	2
17	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	7
18	H-6910-102406	SCREW - #10-24 X 3/4 BUTTON HEAD CAP	2
19	H-6918-102404	SCREW - #10-24 X 1/2 SOCKET HEAD CAP	11
20	H-6918-102406	SCREW - #10-24 X 3/4 SOCKET HEAD CAP	6
21	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	2
22	H-6922-44012	SCREW - #4-40 X 3/4 FLAT HEAD CAP	2
23	H-6923-44012	SCREW - #4-40 X 3/4 ROUND HD MACH	2
24	H-7321-6	WASHER - 3/8 SAE PLAIN	2
25	H-7321-#10	WASHER - #10 SAE PLAIN	19
26	H-7321-#4	WASHER - #4 SAE PLAIN	2
27	H-7324-#10	WASHER - #10 INT TOOTH	7
28	H-7327-12	WASHER - 3/8 MEDIUM LOCK	2
29	H-7327-#10	WASHER - #10 MEDIUM LOCK	13
30	S-845	LAMP T8 15W 18"	1
31	S-1350-16	STRAIN RELIEF BUSHING	4
32	S-1781-12	LABEL - SHOCK HAZARD	1

15.6 Main Assembly – Electrical Components, Upper

47900 Sheet 6 (LED Table Light)

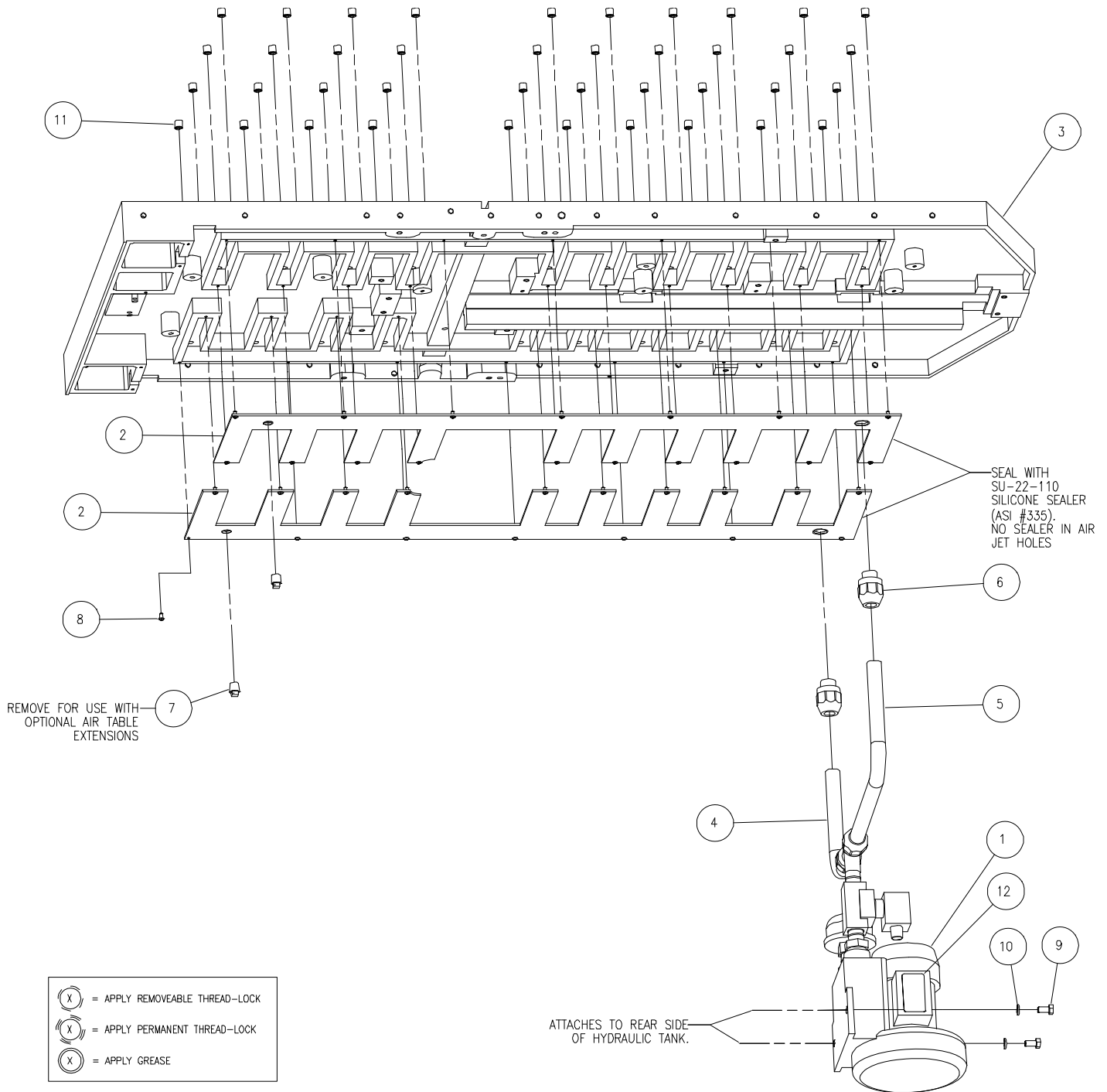


47900 Sheet 6 – Parts List (LED Table Light)

NO.	PART NO.	DESCRIPTION	QTY
1	16047	HINGE- MPS CONSOLE	1
2	47195	BRACKET - ARCH JUNCTION	1
3	47502	BRACKET - CONSOLE	2
4	47568-1	ASSEMBLY - KNIFE LATCH	1
5	47958	PROX SENSOR BRACKET	1
6	47961	LINE LIGHT BRACKET - LOWER	2
7	47962	LINE LIGHT BRACKET - UPPER	2
8	E-2626-6	TERMINAL STRIP (6P)	1
9	EE-2820-11	PROX. ASM. - FALSE CLAMP PLATE "F"	REF
10	EE-2842-1	PROX. ASM.- KNIFE LATCH "L"	REF
11	EE-2850-2	CONTROL CONSOLE ASSEMBLY – MANUAL B.G.	1
12			
13	EE-3489	LED LINE LIGHT BOARD (S/N: 305-J-151076 & UP) FOR INCANDESCENT TYPE, SEE SECTION 15.29 ON PG. 113	
14	EE-3571	TABLE LIGHT – LED ASSEMBLY	2
15	H-6417-#4	NUT - #4-40 HEX	2
16	H-6423-#10	NUT - #10-24 HEX KEP	9
17	H-6423-#4	NUT - #4-40 HEX KEP	2
18	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	7
19	H-6910-102406	SCREW - #10-24 X 3/4 BUTTON HEAD CAP	2
20	H-6918-102404	SCREW - #10-24 X 1/2 SOCKET HEAD CAP	11
21	H-6918-102405	SCREW - #10-24 X 5/8 SOCKET HEAD CAP	2
22	H-6918-102406	SCREW - #10-24 X 3/4 SOCKET HEAD CAP	6
23	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	2
24	H-6922-44012	SCREW - #4-40 X 3/4 FLAT HEAD CAP	2
25	H-6923-44012	SCREW - #4-40 X 3/4 ROUND HD MACH	2
26	H-7321-6	WASHER - 3/8 SAE PLAIN	2
27	H-7321-#10	WASHER - #10 SAE PLAIN	17
28	H-7321-#4	WASHER - #4 SAE PLAIN	2
29	H-7324-#10	WASHER - #10 INT TOOTH	9
30	H-7327-12	WASHER - 3/8 MEDIUM LOCK	2
31	H-7327-#10	WASHER - #10 MEDIUM LOCK	15
32	S-1350-16	STRAIN RELIEF BUSHING	4
33	S-1781-12	LABEL - SHOCK HAZARD	1
34	S-1781-227	LABEL – SHORT CIRCUIT	1

15.7 Main Assembly – Air Table

47900 Sheet 7

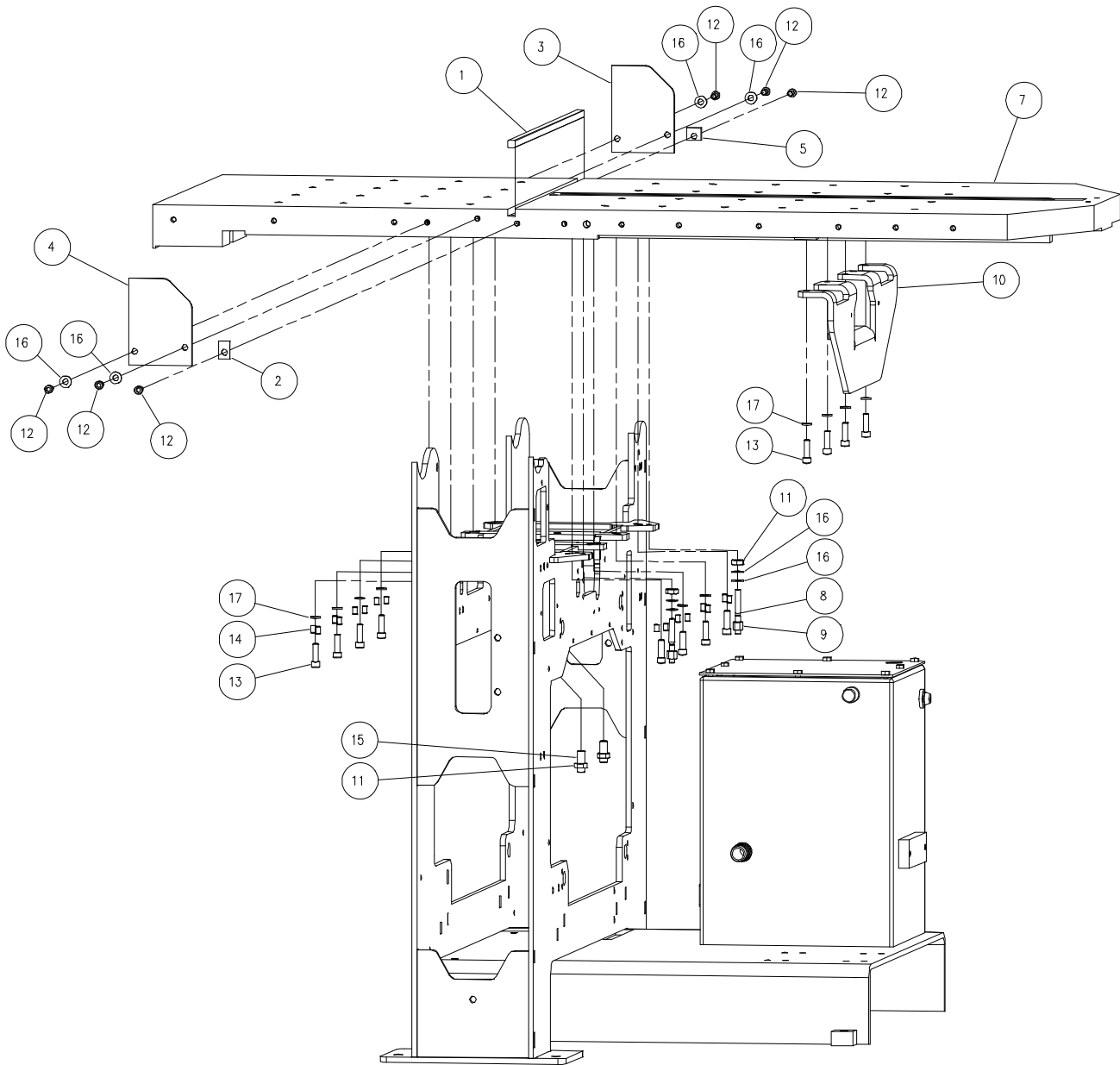





47900 Sheet 7 – Parts List

NO.	PART NO.	DESCRIPTION	QTY
1	47578	BLOWER ASSEMBLY	1
2	47652	AIR CHANNEL COVER	2
3	47654-1	305 TABLE, AIR	1
4	E-2189-2_X_14INCHES	TUBING - CORRUGATED, FLEXIBLE - 14"	1
5	E-2189-2_X_23INCHES	TUBING - CORRUGATED, FLEXIBLE - 23"	1
6	E-2191-2	3/4 CONDUIT FITTING	2
7	H-6650-6	3/8 NPT PLUG - PLASTIC	2
8	H-6910-102403	SCREW - #10-24 X 3/8 BUTTON HEAD CAP	34
9	H-6913-606	SCREW - 3/8-16 X 3/4 HEX HEAD CAP	2
10	H-7327-12	WASHER - 3/8 MEDIUM LOCK	2
11	P-207-2	AIR JET	40
12	S-1781-12	LABEL - SHOCK HAZARD	1

15.8 Main Assembly – Table Mounting

47900 Sheet 8



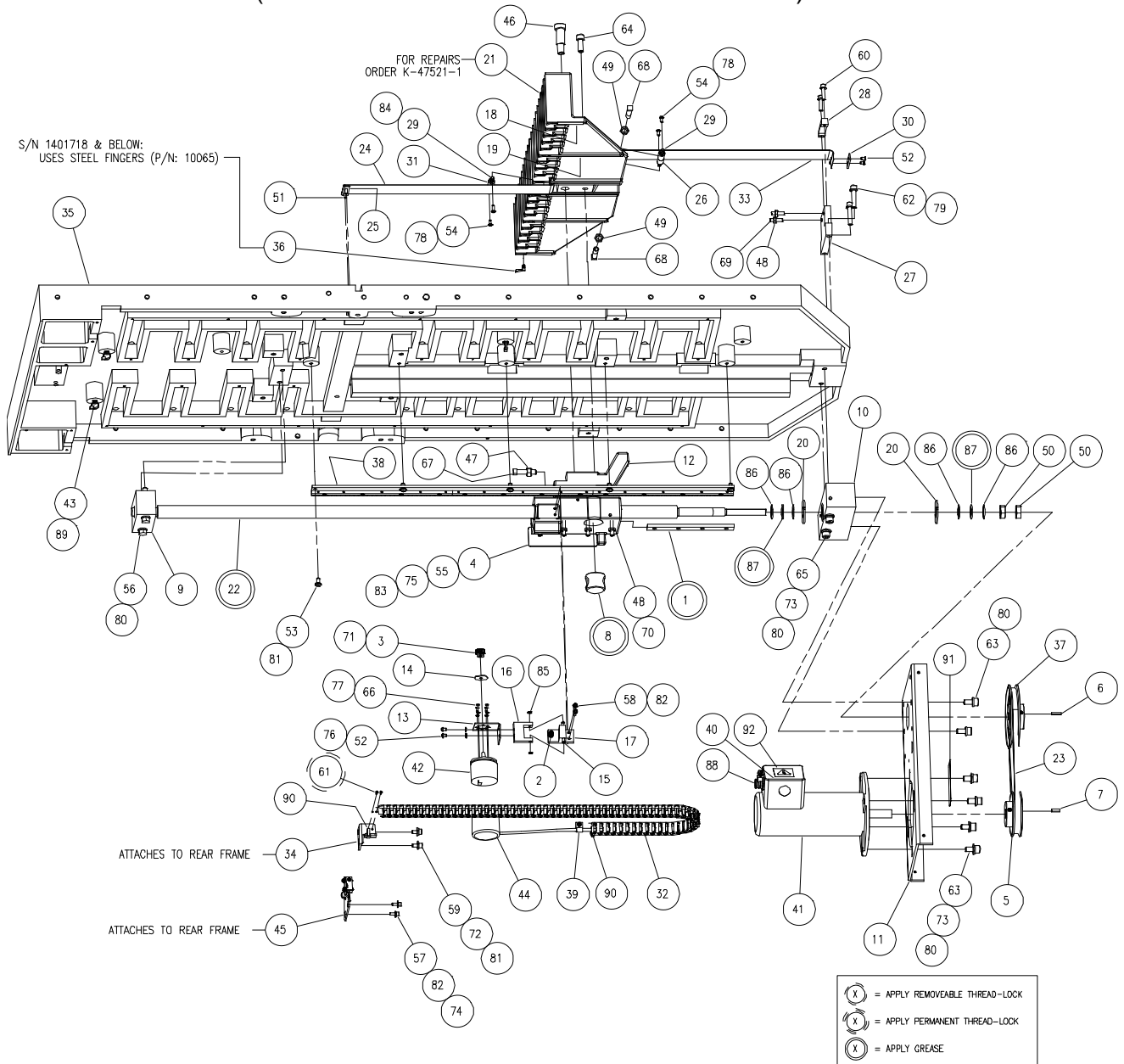
-  = APPLY REMOVEABLE THREAD-LOCK
-  = APPLY PERMANENT THREAD-LOCK
-  = APPLY GREASE

47900 Sheet 8 – Parts List

NO.	PART NO.	DESCRIPTION	QTY
1	4171	CUT STICK - 305	1
2	4542	STOP - STICK, RH	1
3	47115-1	TABLE GUIDE - LH FRONT	1
4	47116-1	TABLE GUIDE - RH FRONT	1
5	47630	CUT STICK STOP	1
6			
7	47654-1	305 TABLE, AIR	1
8	47662	#7 TAPER PIN WITH STUD	2
9	47666	NUT - 3/8-24 HIGH HEX	2
10	47952	TABLE BRACE	1
11	H-6424-8	NUT - 1/2-13 HEX JAM	4
12	H-6918-606	SCREW - 3/8-16 X 3/4 SOCKET HEAD CAP	6
13	H-6918-610	SCREW - 3/8-16 X 1-1/4 SOCKET HEAD CAP	12
14	H-6951-508	SCREW - 5/16 X 1/2 NYLOK FLT PT SOC SET	16
15	H-6951-824	SCREW - 1/2-13 X 1-1/2 NYLOK FLT PT SOC SET	2
16	H-7321-6	WASHER - 3/8 SAE PLAIN	8
17	H-7327-12	WASHER - 3/8 MEDIUM LOCK	14

15.9 Main Assembly – TC Backgauge w/Rack-and-Pinion Encoder system

47900 Sheet 9 & 10 (for Serial Numbers 305-J-171196 and below)



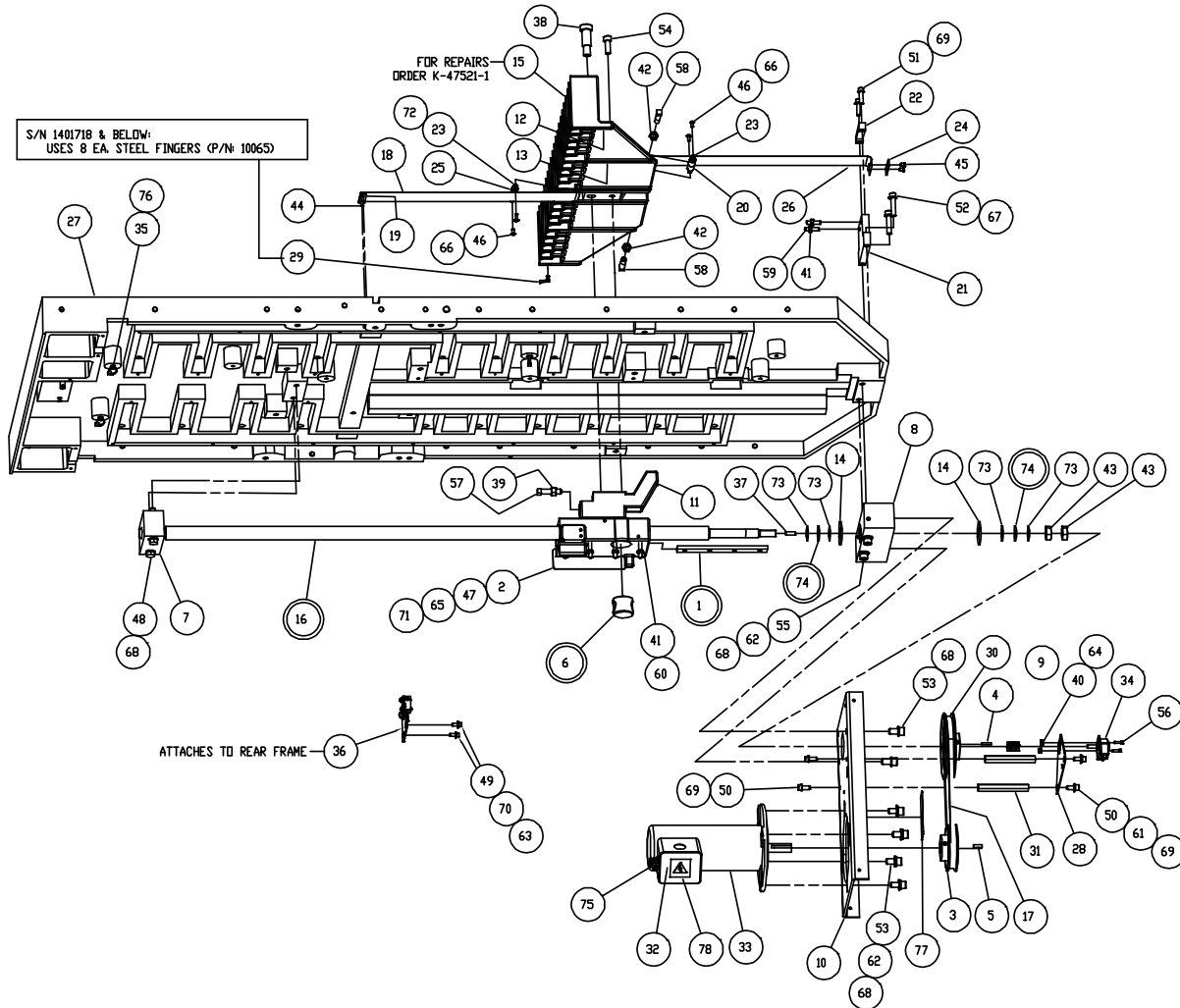
NO.	PART NO.	DESCRIPTION	QTY
1	4510	GIB - BACKGAUGE NUT	2
2	7922	SPRING - COMPRESSION	1
3	8230	ENCODER PINION	1
4	8641-2	ACTUATOR - PRESET	1
5	13927-1	PULLEY - DRIVE, BACKGAUGE	1
6	20206-6123	MACHINE KEY - .125 X .125 X .750	1
7	30305-6123	MACHINE KEY - .188 X .188 X .625	1
8	47028	LEADSCREW NUT- 305 TC	1
9	47037-1	PILLOW BLOCK ASSEMBY- FRONT	1
10	47039-1	PILLOW BLOCK ASSEMBY- REAR	1
11	47054	MOTOR BRACKET	1
12	47135-1	NUT- BACKGAUGE	1

47900 Sheet 9 & 10– Parts List Continued

NO.	PART NO.	DESCRIPTION	QTY
13	47175	BRACKET- ENCODER	1
14	47177	SHIELD - ENCODER	1
15	47191	PIN- ENCODER	1
16	47192	BRACKET- ENCODER	1
17	47193	BRACKET- ENCODER MOUNT	1
18	47269 X 2INCHES	UHMW TAPE - 3/8" W X 2" LONG	2
19	47269 X 5PTSINCHES	UHMW TAPE - 3/8" W X 5.5" LONG	6
20	47503	WASHER- PILLOW BLOCK	2
21	47521-1	305 BACKGAUGE - NEW STYLE FINGERS	1
22	47531	LEADSCREW- 305 TC	1
23	47536	V-BELT	1
24	47586	BELT- SLOT CLOSURE	1
25	47587	BELT CLAMP	1
26	47588	CROWNED PULLEY	1
27	47589	END SUPPORT	1
28	47593	HOLD DOWN BLOCK	1
29	47597	PIN- PULLEY	2
30	47598	BELT RETAINER	1
31	47601	STRAIGHT PULLEY	1
32	47602	CABLE CARRIER	1
33	47604	TENSION BRACKET	1
34	47605	CABLE CHAIN MOUNTING BRACKET	1
35	47654-1	305 TABLE, AIR	1
36	60204	FLOATING FINGER - NYLON	20
37	A-12616-1	PULLEY - DRIVEN, BACKGAUGE	1
38	AA-8226-1	RACK ASSEMBLY	1
39	E-968-2	CABLE CLAMP	1
40	E-1237-1	WIRE NUT - BLUE	2
41	E-1600-202	BACKGAUGE MOTOR	1
42	E-2468	ENCODER	1
43	E-2883	ANCHOR- TYRAP	3
44	EE-3030-1	CABLE ASM - ENCODER	1
45	EE-3464	BRACKET ASSEMBLY - PRESET	1
46	H-5254-1010	SCREW - 5/8 X 1-1/4 SHSS	1
47	H-6417-6	NUT - 3/8-16 HEX	1
48	H-6424-4	NUT - 1/4-20 HEX JAM	10
49	H-6424-6	NUT - 3/8-16 HEX JAM	2
50	H-6428-10	NUT - 5/8-18 HEX JAM	2
51	H-6909-63204	SCREW - #6-32 X 1/2" FLAT HEAD CAP	2
52	H-6910-102402	SCREW - #10-24 X 1/4 BUTTON HEAD CAP	4
53	H-6910-404	SCREW - 1/4-20 X 1/2 BUTTON HEAD CAP	5
54	H-6910-83203	SCREW - #8-32 X 3/8 BUTTON HEAD CAP	3
55	H-6910-83204	SCREW - #8-32 X 1/2 BUTTON HEAD CAP	3
56	H-6913-620	SCREW - 3/8-16 X 2-1/2 HEX HEAD CAP	2
57	H-6918-102404	SCREW - #10-24 X 1/2 SOCKET HEAD CAP	2
58	H-6918-102406	SCREW - #10-24 X 3/4 SOCKET HEAD CAP	3
59	H-6918-404	SCREW - 1/4-20 X 1/2 SOCKET HEAD CAP	2
60	H-6918-408	SCREW - 1/4-20 X 1 SOCKET HEAD CAP	2
61	H-6918-44003	SCREW - #4-40 X 3/8 SOCKET HEAD CAP	2
62	H-6918-512	SCREW - 5/16-18 X 1-1/2 SOCKET HEAD CAP	2
63	H-6918-606	SCREW - 3/8-16 X 3/4 SOCKET HEAD CAP	6
64	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	1
65	H-6918-620	SCREW - 3/8-16 X 2-1/2 SOCKET HEAD CAP	2
66	H-6921-44004	SCREW - #4-40 X 1/4 FILLISTER HD MACH	4
67	H-6931-612	SCREW - 3/8-16 X 1-1/2 SQUARE HEAD SET	1
68	H-6931-614	SCREW - 3/8-16 X 1-3/4 SQUARE HEAD SET	2
69	H-6940-416	SCREW - 1/4-20 X 1 FLAT SOC SET	2
70	H-6940-420	SCREW - 1/4-20 X 1-1/4 FLAT SOC SET	8
71	H-6964-63202	SCREW - #6-32 X 1/8 BRASS TIP SET	1
72	H-7321-4	WASHER - 1/4 SAE PLAIN	2
73	H-7321-6	WASHER - 3/8 SAE PLAIN	6
74	H-7321-#10	WASHER - #10 SAE PLAIN	2
75	H-7321-#8	WASHER - #8 SAE PLAIN	2
76	H-7324-#10	WASHER - #10 INT TOOTH	2
77	H-7324-#4	WASHER - #4 INT TOOTH	4
78	H-7324-#8	WASHER - #8 INT TOOTH	4
79	H-7327-10	WASHER - 5/16 MEDIUM LOCK	2
80	H-7327-12	WASHER - 3/8 MEDIUM LOCK	10
81	H-7327-8	WASHER - 1/4 MEDIUM LOCK	9
82	H-7327-#10	WASHER - #10 MEDIUM LOCK	5
83	H-7327-#8	WASHER - #8 MEDIUM LOCK	2
84	S-1073-25	RETAINING RING	4
85	S-1193-18	E-RING - 3/16"	2
86	S-1295-8	THRUST WASHER	4
87	S-1300-4	THRUST BEARING	2
88	S-1350-16	STRAIN RELIEF BUSHING	1
89	S-1694	TYRAP	3
90	S-1694-1	TYRAP	2
91	S-1781-15	LABEL - MOVING PARTS HAZARD	1
92	S-1781-50	LABEL - ELECTRIC SHOCK	1

15.10 Main Assembly – TC Backgauge w/o Rack-and-Pinion Encoder system

47900 sh't 9 rev. J (for Serial Numbers 305-J-171197 and Up)



47900 sh't 9 Rev. "J" - Parts Lists

NO.	PART NO.	DESCRIPTION	QTY
1	4510	GIB - BACKGAUGE NUT	2
2	8641-2	ACTUATOR - PRESET	1
3	13927-1	PULLEY - DRIVE, BACKGAUGE	1
4	20206-6123	MACHINE KEY - .125 X .125 X .750	1
5	30305-6123	MACHINE KEY - .188 X .188 X .625	1
6	47028	LEADSCREW NUT- 305 TC	1
7	47037-1	PILLOW BLOCK ASSEMBY- FRONT	1
8	47039-1	PILLOW BLOCK ASSEMBY- REAR	1
9	47053-4	COUPLING - FLEXIBLE, 1/4" ID	1
10	47054	MOTOR BRACKET	1
11	47135-1	NUT- BACKGAUGE	1
12	47269_X_2INCHES	.030 UHMW TAPE - 3/8" W X 2" LONG	2
13	47269_X_5PT5INCHES	.030 UHMW TAPE - 3/8" W X 5.5" LONG	6
14	47503	WASHER- PILLOW BLOCK	2
15	47521-1	305 BACKGAUGE - NEW STYLE FINGERS	1
16	47531	LEADSCREW- 305 TC	1
17	47536	V-BELT	1
18	47586	BELT- SLOT CLOSURE	1
19	47587	BELT CLAMP	1
20	47588	CROWNED PULLEY	1
21	47589	END SUPPORT	1
22	47593	HOLD DOWN BLOCK	1
23	47597	PIN- PULLEY	2
24	47598	BELT RETAINER	1
25	47601	STRAIGHT PULLEY	1
26	47604	TENSION BRACKET	1
27	47654-1	305 TABLE, AIR	1
28	49263	ENCODER BRACKET	1
29	60204	FLOATING FINGER - NYLON	20
30	A-12616-1	PULLEY - DRIVEN, BACKGAUGE	1
31	E-1152-40	STANDOFF	2
32	E-1237-1	WIRE NUT - BLUE	2
33	E-1600-202	BACKGAUGE MOTOR	1
34	E-2468-3	ENCODER	1
35	E-2883	ANCHOR- TYRAP	3
36	EE-3464	BRACKET ASSEMBLY - PRESET	1
37	H-5246-406	DOWEL PIN - 1/4 X 3/4 HD GD	1
38	H-5254-1010	SCREW - 5/8 X 1-1/4 SHSS	1
39	H-6417-6	NUT - 3/8-16 HEX	1

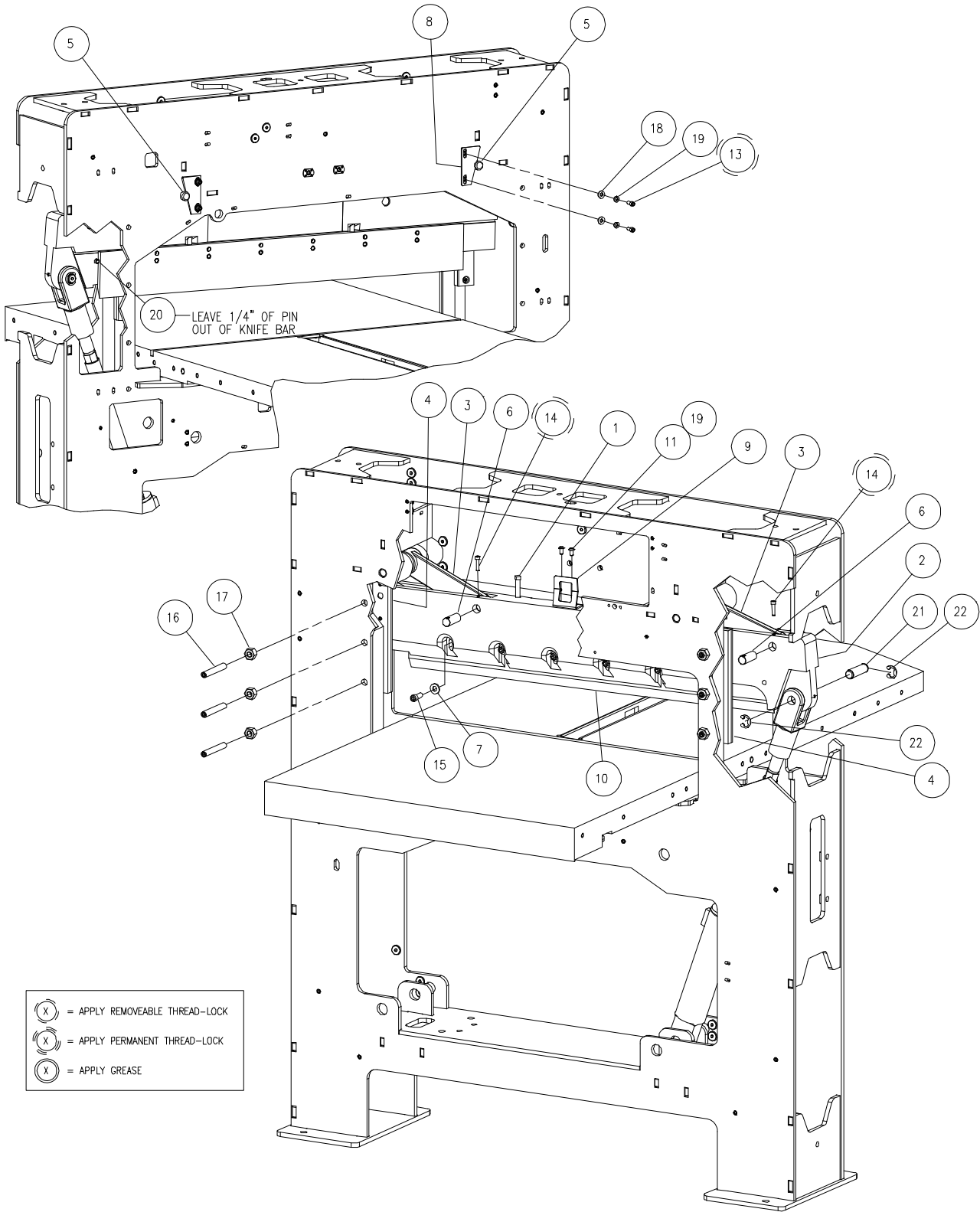
47900 sh't 9 Rev. "J" - Parts Lists (cont.)

NO.	PART NO.	DESCRIPTION	QTY
40	H-6423-N6	NUT - #6-32 HEX KEP	2
41	H-6424-4	NUT - 1/4-20 HEX JAM	10
42	H-6424-6	NUT - 3/8-16 HEX JAM	2
43	H-6428-10	NUT - 5/8-18 HEX JAM	2
44	H-6909-63204	SCREW - #6-32 X 1/2" FLAT HEAD CAP	2
45	H-6910-102402	SCREW - #10-24 X 1/4 BUTTON HEAD CAP SCREW - #8-32 X 3/8 BUTTON HEAD CAP	2
46	H-6910-83203		3
47	H-6910-83204	SCREW - #8-32 X 1/2 BUTTON HEAD CAP	3
48	H-6913-620	SCREW - 3/8-16 X 2-1/2 HEX HEAD CAP	2
49	H-6918-102404	SCREW - #10-24 X 1/2 SOCKET HEAD CAP	2
50	H-6918-405	SCREW - 1/4-20 X 5/8 SOCKET HEAD CAP	4
51	H-6918-408	SCREW - 1/4-20 X 1 SOCKET HEAD CAP	2
52	H-6918-512	SCREW - 5/16-18 X 1-1/2 SOCKET HEAD CAP	2
53	H-6918-606	SCREW - 3/8-16 X 3/4 SOCKET HEAD CAP	6
54	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	1
55	H-6918-620	SCREW - 3/8-16 X 2-1/2 SOCKET HEAD CAP	2
56	H-6918-63204	SCREW - #6-32 X 1/2 SOCKET HEAD CAP	2
57	H-6931-612	SCREW - 3/8-16 X 1-1/2 SQUARE HEAD SET	1
58	H-6931-614	SCREW - 3/8-16 X 1-3/4 SQUARE HEAD SET	2
59	H-6940-416	SCREW - 1/4-20 X 1 FLAT SOC SET	2
60	H-6940-420	SCREW - 1/4-20 X 1-1/4 FLAT SOC SET	8
61	H-7321-4	WASHER - 1/4 SAE PLAIN	2
62	H-7321-6	WASHER - 3/8 SAE PLAIN	6
63	H-7321-N10	WASHER - #10 SAE PLAIN	2
64	H-7321-N6	WASHER - #6 SAE PLAIN	2
65	H-7321-N8	WASHER - #8 SAE PLAIN	2
66	H-7324-N8	WASHER - #8 INT TOOTH	4
67	H-7327-10	WASHER - 5/16 MEDIUM LOCK	2
68	H-7327-12	WASHER - 3/8 MEDIUM LOCK	10
69	H-7327-8	WASHER - 1/4 MEDIUM LOCK	6
70	H-7327-N10	WASHER - #10 MEDIUM LOCK	2
71	H-7327-N8	WASHER - #8 MEDIUM LOCK	2
72	S-1073-25	RETAINING RING	4
73	S-1295-8	THRUST WASHER	4
74	S-1300-4	THRUST BEARING	2
75	S-1350-16	STRAIN RELIEF BUSHING	1
76	S-1694	TYRAP	3
77	S-1781-15	LABEL - MOVING PARTS HAZARD	1
78	S-1781-50	LABEL - ELECTRIC SHOCK	1

NOTES:

15.11 Main Assembly – Knife

47900 Sheet 11

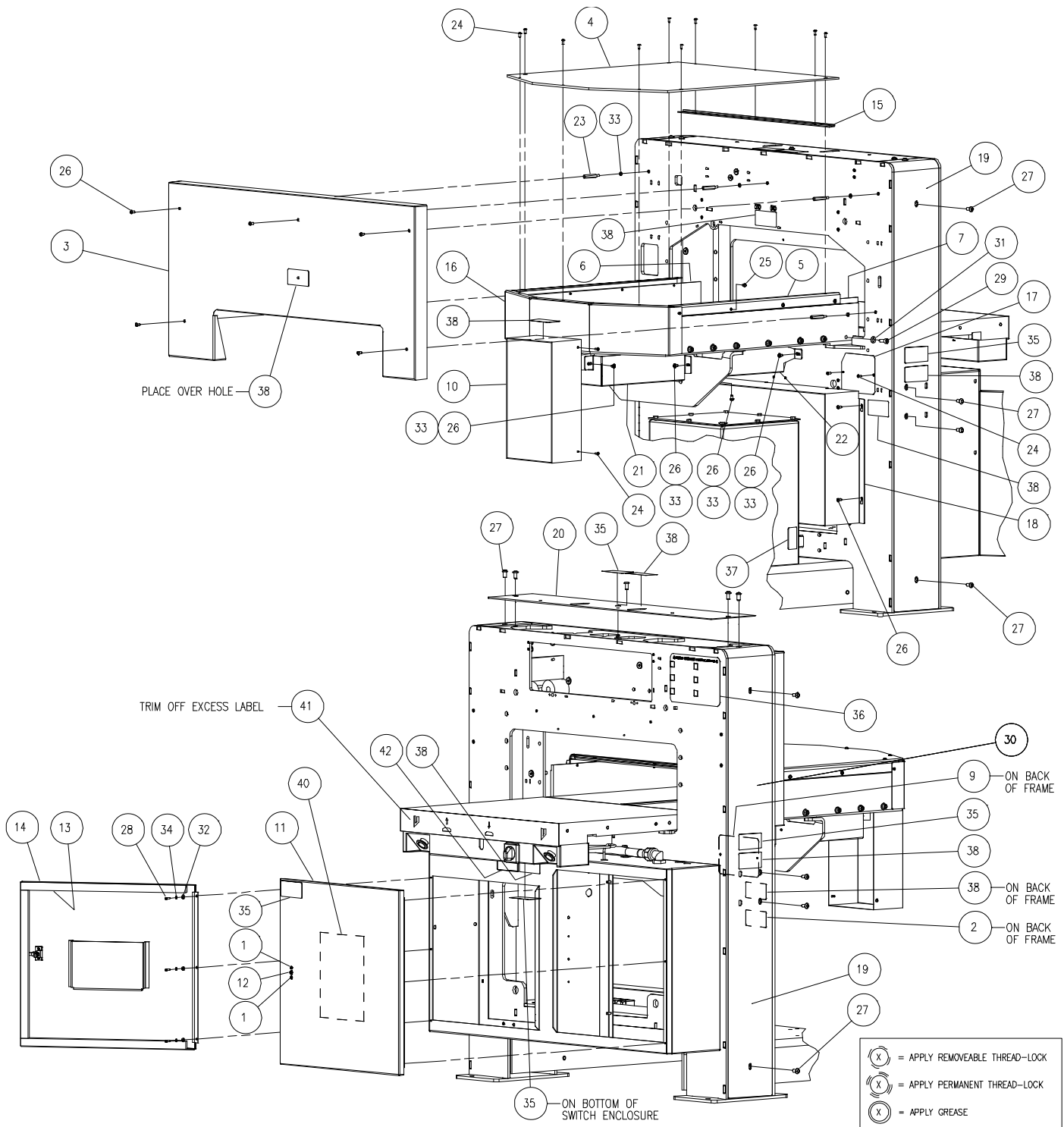


47900 Sheet 11 – Parts List

NO.	PART NO.	DESCRIPTION	QTY
1	4449	KNIFE ADJUSTING SCREW	2
2	4501-2	KNIFE BAR	1
3	4503-3	LINK ASM - KNIFE BAR	2
4	4505	KNIFE BAR GIB	2
5	4507-2	PIN - KNIFE BAR LINK	2
6	4518	PIN - KNIFE LINK	2
7	8815	WASHER - 3/8 HEAVY	6
8	8835-2	PIN KEEPER - UPPER	2
9	47504	BRACKET - KNIFE BAR KEEPER	1
10	47508	KNIFE - 305, HSS	1
11	H-6910-404	SCREW - 1/4-20 X 1/2 BUTTON HEAD CAP	2
12	H-6918-404	SCREW - 1/4-20 X 1/2 SOCKET HEAD CAP	2
13	H-6918-405	SCREW - 1/4-20 X 5/8 SOCKET HEAD CAP	2
14	H-6918-408	SCREW - 1/4-20 X 1 SOCKET HEAD CAP	2
15	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	6
16	H-6953-856	SCREW - 1/2-13 X 3-1/2 OVAL SOC SET	6
17	H-7002-8	NUT - HEAVY HEX, BLACK	6
18	H-7321-4	WASHER - 1/4 SAE PLAIN	4
19	H-7327-8	WASHER - 1/4 MEDIUM LOCK	4
20	H-21S-375-1000	ROLL PIN - 3/8 X 1	1
21	S-1087-1	PIN - STRAIGHT ROD END	1
22	S-1193-75	E-RING - 3/4"	2

15.12 Main Assembly – Covers and Labels

47900 Sheet 12

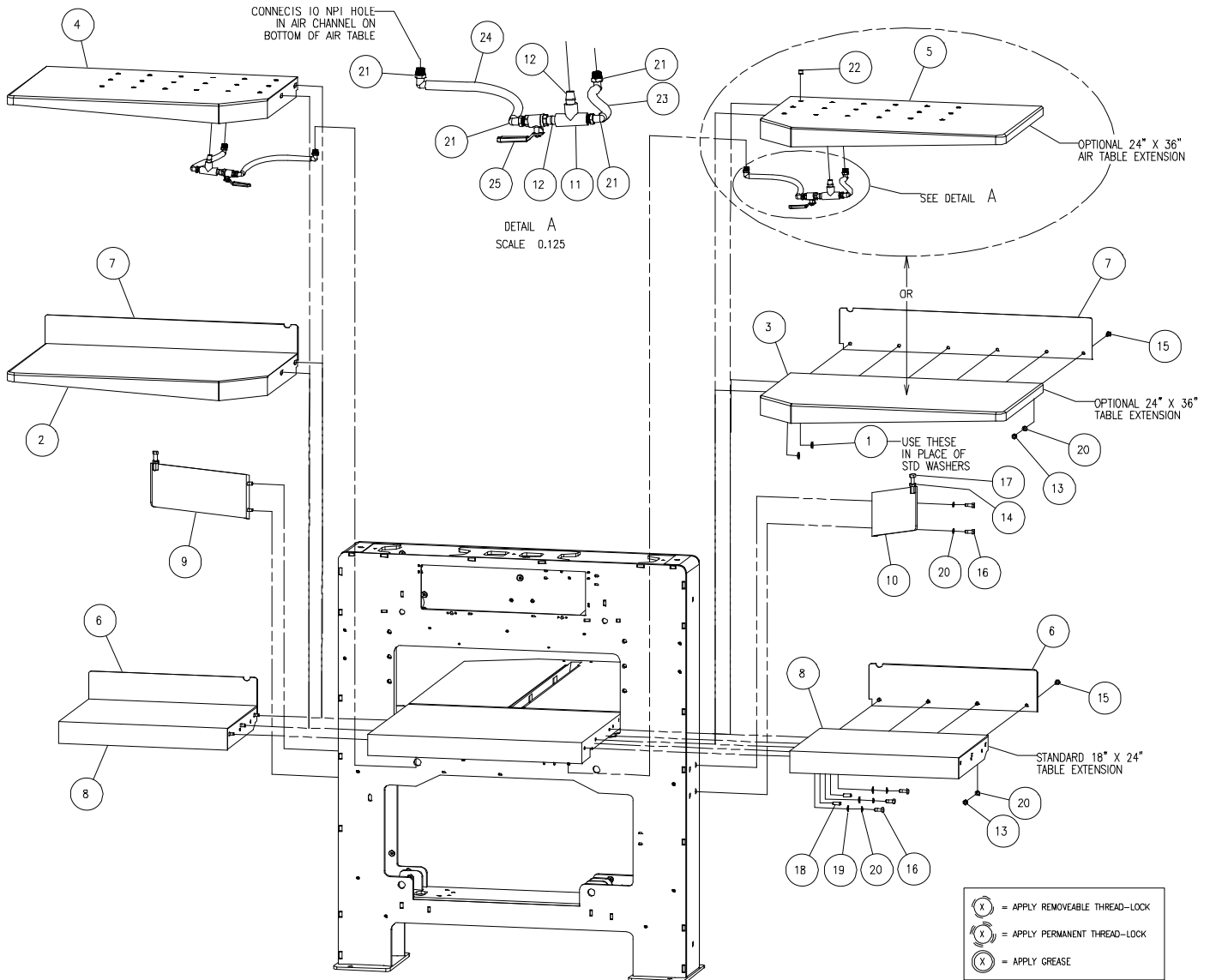


47900 Sheet 12 – Parts List

NO.	PART NO.	DESCRIPTION	QTY
1	11145-1	RIVET - 3/16	4
2	41130	PLATE - SERIAL NUMBER	1
3	47001	COVER - REAR ARCH	1
4	47002-1	SHIELD - BACKGAUGE	1
5	47003	BRACKET - BACKGAUGE SHIELD	2
6	47019-1	GUIDE - RH REAR	1
7	47020-1	GUIDE - LH REAR	1
8	47033-3	FRONT ENCLOSURE	1
9	47050	COVER - R.H. REAR BASE	1
10	47055	COVER - BACKGAUGE DRIVE	1
11	47097	DOOR ASSEMBLY- R.H. FRONT	1
12	47101	DOOR LATCH	2
13	47163	FOAM GASKET - 21-3/4" LONG	6
14	47173-1	DOOR ASM.- L.H. FRONT	1
15	47180	SUPPORT - BACKGAUGE SHIELD	1
16	47265-1	GUARD - BACKGAUGE, REAR	1
17	47552	COVER - L.H. REAR BASE	1
18	47570-1	WELDMENT - LOWER REAR COVER	1
19	47950	SIDE COVER	2
20	47951	TOP COVER	1
21	47955	LEADSCREW COVER - REARWARD	1
22	47956	LEADSCREW COVER - FOREWARD	1
23	E-1152-36	STANDOFF	5
24	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	18
25	H-6910-403	SCREW - 1/4-20 X 3/8 BUTTON HEAD CAP	8
26	H-6910-404	SCREW - 1/4-20 X 1/2 BUTTON HEAD CAP	17
27	H-6910-606	SCREW - 3/8-16 X 3/4 BUTTON HEAD CAP	13
28	H-6918-102404	SCREW - #10-24 X 1/2 SOCKET HEAD CAP	6
29	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	14
30	H-7321-4	WASHER - 1/4 SAE PLAIN	1
31	H-7321-6	WASHER - 3/8 SAE PLAIN	14
32	H-7321-#10	WASHER - #10 SAE PLAIN	6
33	H-7327-8	WASHER - 1/4 MEDIUM LOCK	12
34	H-7327-#10	WASHER - #10 MEDIUM LOCK	6
35	S-1781-11	LABEL- SHOCK HAZARD	5
36	S-1781-116	LABEL - WARNING	1
37	S-1781-12	LABEL - SHOCK HAZARD	1
38	S-1781-16	LABEL- CRUSH HAZARD	9
40	S-1781-230	LABEL – POW. CONN., 305TC (CIRCUIT BRK'S)	1
40	S-1781-211	LABEL - POWER CONNECTION, 305 TC (fuses)	1
41	S-1781-216	LABEL- FRONT OF TABLE	1
42	S-1781-25	LABEL- INSTRUCTION	1

15.13 Main Assembly – Table Extensions

47900 Sheet 13

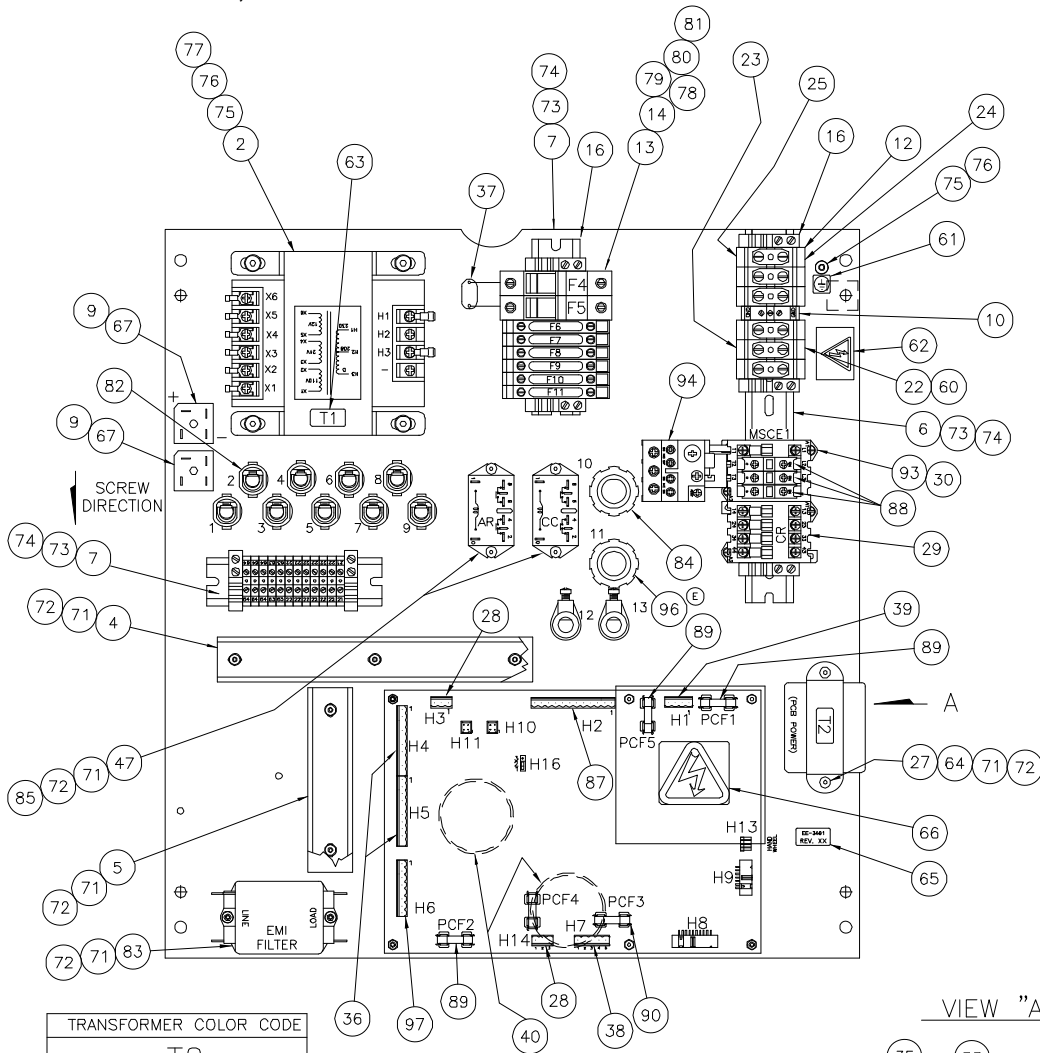


47900 Sheet 13 Parts List

NO.	PART NO.	DESCRIPTION	QTY
1	8815	WASHER - 3/8 HEAVY	4
2	16026	LH TABLE EXTENSION - 24X36	1
3	16027	RH TABLE EXTENSION - 24X36	1
4	16028	LH TABLE EXTENSION - 24X36, AIR	1
5	16029	RH TABLE EXTENSION - 24X36, AIR	1
6	47164-1	PLATE- EXTENSION TABLE	2
7	47164-2	BACK PLATE - LARGE EXT. TABLE	2
8	47166	TABLE EXTENSION - 18 X 24	2
9	A-8495	LH SUPPORT - WELDMENT	1
10	A-8496	RH SUPPORT - WELDMENT	1
11	H-277-1	TEE - 3/8 NPT INTERNAL	2
12	H-6405-1-608	NIPPLE - 3/8" CLOSE	4
13	H-6424-6	NUT - 3/8-16 HEX JAM	12
14	H-6424-8	NUT - 1/2-13 HEX JAM	2
15	H-6913-606	SCREW - 3/8-16 X 3/4 HEX HEAD CAP	12
16	H-6913-608	SCREW - 3/8-16 X 1 HEX HEAD CAP	10
17	H-6913-818	SCREW - 1/2-13 X 2-1/4 HEX HEAD CAP	2
18	H-6939-616	SCREW - 3/8-24 X 1 CUP SOC SET	4
19	H-7321-6	WASHER - 3/8 SAE PLAIN	6
20	H-7327-12	WASHER - 3/8 MEDIUM LOCK	22
21	P-205	90° NYLON ELBOW - 3/8 NPT X 1/2 TUBE	8
22	P-207-1	AIR JET WITH FLANGE	36
23	P-240-3_X_12INCHES	VINYL TUBING - 1/2 ID	2
24	P-240-3_X_22INCHES	VINYL TUBING - 1/2 ID	2
25	S-1921	BALL VALVE - 3/8NPT	2

15.14 Power Panel Assembly (w/Fuses)

EE-3461 Sheet 1, Rev. J



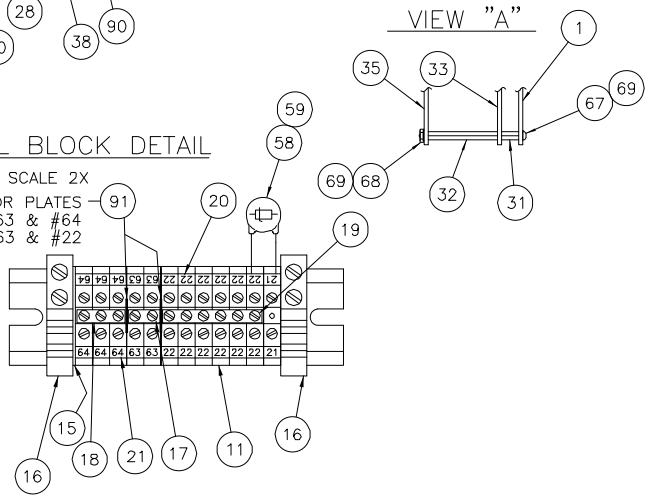
TRANSFORMER COLOR CODE	
T2	
WIRE COLOR	WIRE NO.
BLACK	22
BLACK/WHITE	21
BLACK/RED	-
BLACK/YELLOW	-
BLUE	6
BLUE/YELLOW	5
BLUE	4
RED	3
RED/YELLOW	2
RED	1

NOTE: THE FOLLOWING TERMINALS ARE TO BE JUMPED TOGETHER.

TERMINAL NUMBER	QTY USED	JUMPER PART NO.
64	1	E-2507-3
63	1	E-2507-2
22	1	E-2507-6

TERMINAL BLOCK DETAIL

SCALE 2X
 INSERT SEPARATOR PLATES
 BETWEEN TERM. #63 & #64
 BETWEEN TERM. #63 & #22



EE-3461 Sheet 1, Rev J – Parts List

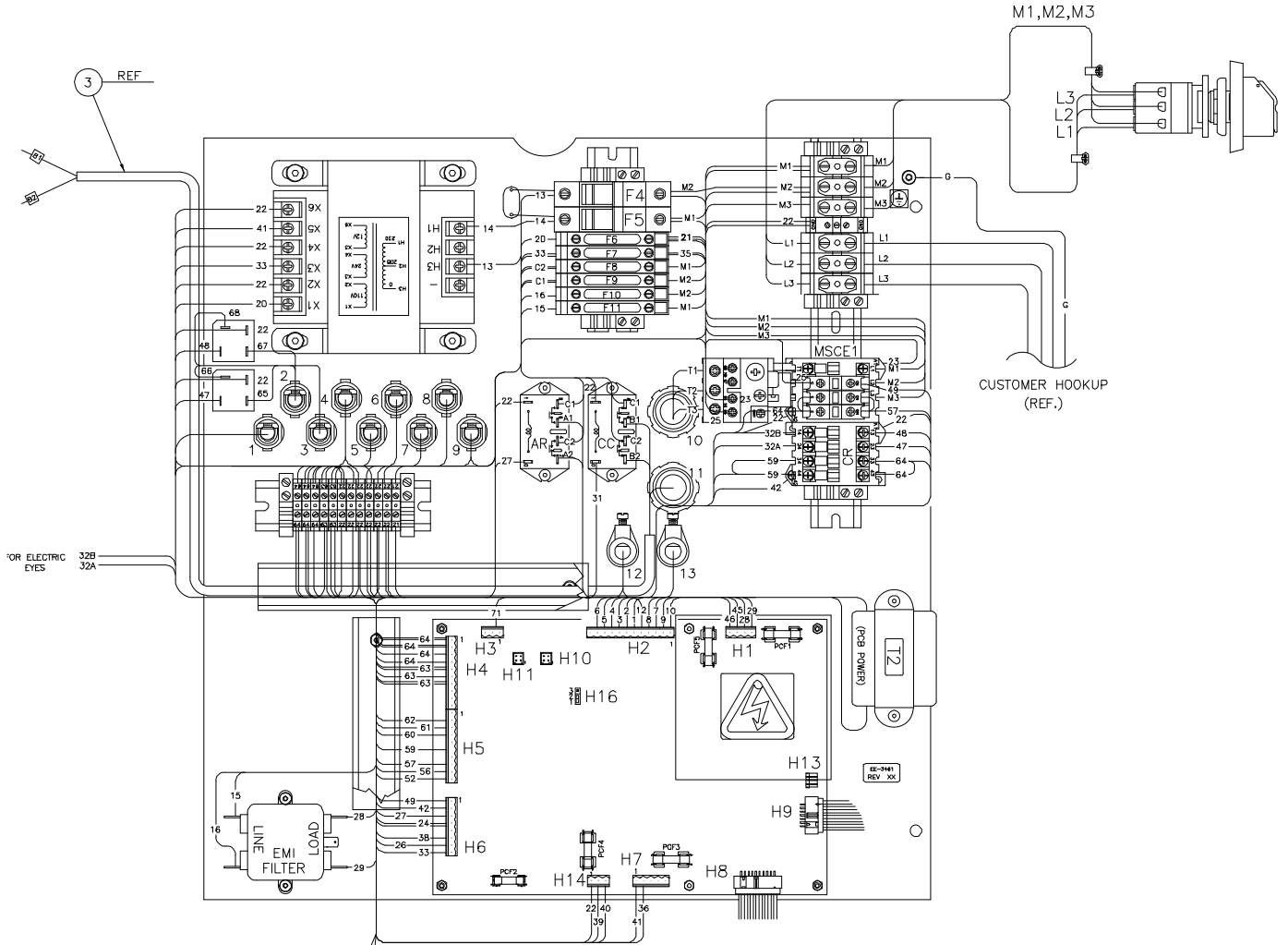
NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	47512	PANEL - POWER	1
2	E-1089-41	TRANSFORMER - 208-230V "T1"	1
3	EE-3210	CABLE ASM. CLAMP COMPRESSOR JUMPER	REF
4	E-1429-17	WIRE DUCT & COVER - 9" LONG	1
5	E-1429-18	WIRE DUCT & COVER - 5-1/4" LONG	1
6	E-1977-21	RAIL - TERMINAL - 10" LONG	1
7	E-1977-23	RAIL - TERMINAL - 5" LONG	2
8	EE-3080	WIRES - CUT LIST	1
9	E-1143	BRIDGE RECTIFIER - PANEL MOUNT	2
10	E-2068-3	TERMINAL BLOCK - GROUNDING	1
11	E-2068-8	TERMINAL BLOCK - #10 AWG.	12
12	E-2068-7	TERMINAL BLOCK - 3 AWG.	6
13	E-1974-10	TERMINAL BLOCK - FUSEHOLDER, MIDGET	2
14	E-1974-9	TERMINAL BLOCK - FUSEHOLDER, GLASS	6
15	E-2069-3	END PLATE	1
16	E-2070-1	END BRACKET	7
17	E-2507-2	FIXED BRIDGE - 2 POLE	1
18	E-2507-3	FIXED BRIDGE - 3 POLE	1
19	E-2507-6	FIXED BRIDGE - 6 POLE	1
20	E-1356-147	MARKING STRIP - TERMINAL BLOCK	1
21	E-1356-148	MARKING STRIP - TERMINAL BLOCK	1
22	E-1356-71	MARKING STRIP - TERMINAL BLOCK	1
23	E-1356-122	MARKING STRIP - TERMINAL BLOCK	1
24	E-1356-118	MARKING STRIP - TERMINAL BLOCK	1
25	E-1356-119	MARKING STRIP - TERMINAL BLOCK	1
26	E-1453-6	TUBING - SHRINK, 1/8" DIA. 1" LONG	1
27	E-2742-5	TRANSFORMER - 120/230V , 16/24V SC. "T2"	1
28	E-2066-3	PLUG CONNECTOR - 3 PIN (H3 & H14)	2
29	E-2403-2	CONTACTOR - RELAY (CR)	1
30	-4		
31	E-1152-56	STAND-OFF - 1/2" LONG	6
32	E-1152-43	STAND-OFF - 2" LONG	2
33	EE-3432-2	P.C.B. ASM. - I/O BOARD	1
34	EE-2820-11	PROX. ASSEMBLY - FALSE CLAMP PLATE "F"	1
35	47157-7	P.C.B. COVER - CLEAR	1
36	E-2066-10	PLUG CONNECTOR - P.C.B. 10 PIN (H4 & 5)	2
37	E-1736-2	QUENCHARC - WIRE LEADS	1
38	E-2066-5	PLUG CONNECTOR - P.C.B. 5 PIN (H7)	1
39	E-2066-4	PLUG CONNECTOR - P.C.B. 4 PIN (H1 & 12)	2
40	E-2196-21	HOLE PLUG - 2" DIA	2
41	EE-2834-1	CABLE ASM. - JUNCTION BOX	1
42	EE-2833-1	CABLE ASM. - BACKGAGE MOTOR	1
43	EE-2820	PROX. ASSEMBLY - HYDRAULIC UP "H"	1
44	EE-2820-12	PROX. ASSEMBLY - CLAMP UP "C"	1
45	EE-2820-2	PROX. ASSEMBLY - KNIFE DOWN "K"	1
46	EE-2820-5	PROX. ASSEMBLY - KNIFE UP "U"	1
47	E-2232-2	RELAY - AIR BLOWER (AR)/ CLAMP COMPRESS.	2
48	EE-2821-8	CABLE ASM. - CUT SOLENOID "A" (MSCE1)	1
49	EE-2842-1	PROX. ASSEMBLY - KNIFE LATCH	1
50	EE-2821-3	CABLE ASM. - ADJUST. PRESS. SOLENOID "P"	1

15.0 Schematics & Parts Lists

EE-3461 Sheet 1, Rev J – Parts List, Continued

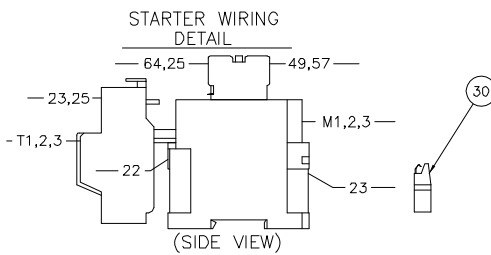
NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
51	EE-2821-6	CABLE ASM. - UNLOAD VALVE SOLENOID "U"	1
52	EE-2821-9	CABLE ASM. - CUT SOLENOID "B" (MSCE2)	1
53	47645-1	CONDUIT ASSEMBLY - BLOWER/AIR SOL.	REF
54	EE-3564-1	CABLE ASSEMBLY - ENCODER	1
55	EE-3464	PROX. ASSEMBLY - PRESET	1
56	EE-2825-1	CABLE ASSEMBLY - HYD. FAN	1
57	EE-2843-1	CABLE ASSEMBLY - KNIFE LATCH	1
58	E-1377	VARISTOR - SUPPRESSOR, MOV	1
59	E-1453-3	SHRINK TUBING - 1" LONG	2
60	E-2752-2	COVER - TERMINAL BLOCK	3
61	S-1781-197	LABEL - GROUND SYMBOL, PRIMARY	1
62	S-1781-50	LABEL - EURO ELECT. SHOCK	1
63	E-1584-51	LABEL - TRANSFORMER, "T1"	1
64	E-1584-52	LABEL - TRANSFORMER, "T2"	1
65	E-1584-()	LABEL - ASM. NO./REV. LEVEL	1
66	S-1781-35	LABEL - CAUTION, ELEC. DANGER	1
67	H-6910-83204	SCREW, #8-32NC X 1/2" BUT HD CAP	2
68	H-6910-63203	SCREW, #6-32NC X 3/8" BUT HD CAP	6
69	H-6423-#6	NUT, #6-32NC HEX	6
70	H-7324-#6	WASHER, #6 INT. TOOTH	14
71	H-6910-83203	SCREW, #8-32NC X 3/8" BUT HD CAP	13
72	H-7324-#8	WASHER, #8 INT. TOOTH	13
73	H-6910-102403	SCREW, #10-24NC X 3/8" BUT HD CAP	8
74	H-7324-#10	WASHER, #10 INT. TOOTH	8
75	H-6910-403	SCREW, 1/4-20NC X 3/8" BUT HD CAP	5
76	H-7324-8	WASHER, 1/4 INT. TOOTH	5
77	H-7319-4	WASHER, 1/4 USS FLAT	4
78	E-2308	FUSE - 3.2A SB MIDGET, "F4", "F5"	2
79	E-889-35	FUSE - 1AMP SLO-BLO GLASS, "F6"	1
80	E-889-37	FUSE - 12AMP SLO-BLO GLASS, "F7" (50HZ)	1
80	E-889-9	FUSE - 8AMP SLO-BLO GLASS, "F7" (60HZ)	1
81	E-889-5	FUSE - 4AMP SB GLASS, "F8", "F9", "10", "11"	4
82	S-1350-16	STRAIN RELIEF - CABLE	11
83	E-2730-3	FILTER - EMI/EFI, PANEL MOUNT	1
84	EE-2836-1	CONDUIT ASM. - HYDRAULIC MOTOR, 3 PHASE	1
85	H-7321-#8	WASHER -#8 FLAT	4
86	S-1694	TY-WRAP - CABLE (NOT SHOWN)	10
87	E-2066-12	PLUG CONNECTOR - P.C.B. 12 PIN (H2)	1
88	E-2376-6	AUXILIARY CONTACT - N.O.	3
89	E-2330-7	FUSE - 5A SB, METRIC (PCF1,PCF2 & PCF5)	REF
90	E-2330-8	FUSE - 6.3A SLO-BLO, METRIC (PCF3)	REF
91	E-2864	SEPARATOR PLATE - TERMINAL BLOCK	2
92			
93	E-2805-6	STARTER - 3 PHASE	1
94	E-2441-18	RELAY - OVERLOAD, 3 PHASE	1
95	E-2330-5	FUSE - 3.15A SB, METRIC (PCF4)	REF
96	EE-3499	CONDUIT ASM. - AIR BLOWER – TABLE	1
97	E-2066-8	PLUG CONNECTOR - P.C.B. 8 PIN (H6)	1
98	EE-3460	CABLE ASM. - 'CAN' (LONG) (NOT SHOWN)	1

Power Panel Assembly (w/Fuses)
EE-3461 Sheet 2, Rev. J



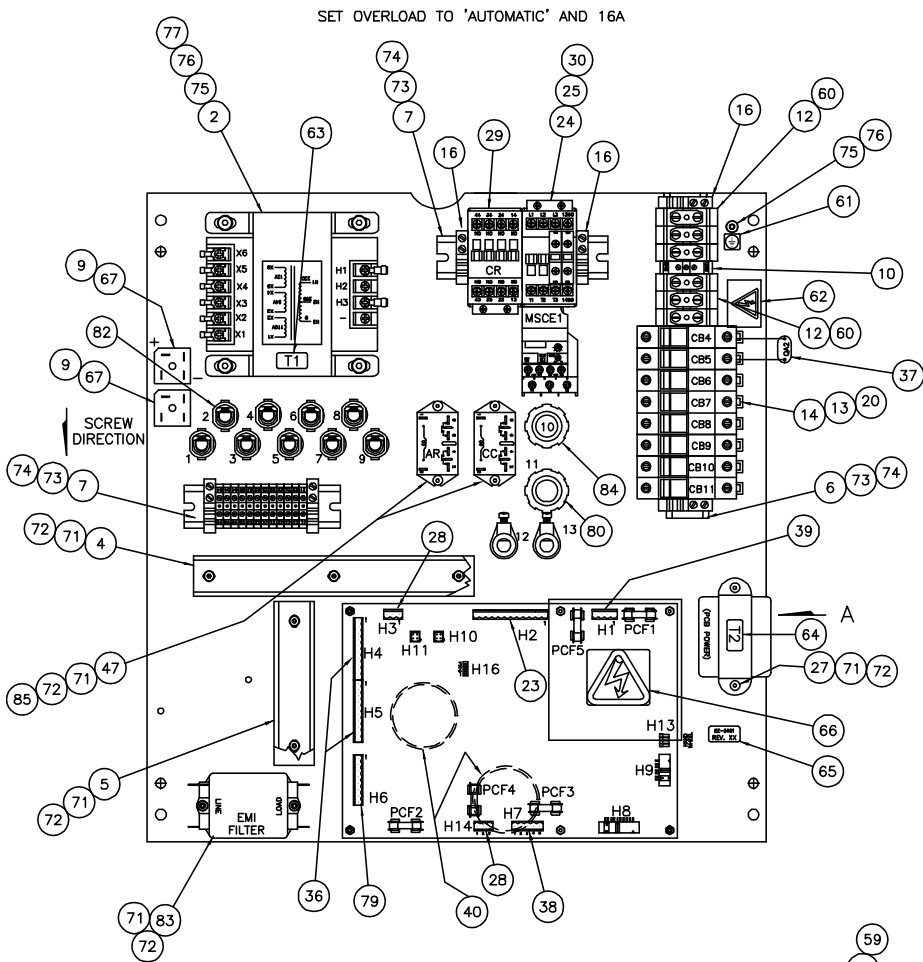
EXTERNAL CABLE DESCRIPTION

LOCATION	ITEM #	DESCRIPTION	WIRE NUMBERS
1	42	BACKGAGE MOTOR	45, 46 & G
	56	HYD. FAN	21 & 22
2	48	CUT SOLENOID (MPCE1)	65 & 66
3	52	CUT SOLENOID (MPCE2)	67 & 68
4	51	UNLOAD VALVE	22 & 38
5	44	CLAMP UP PROX. "C"	62, 63 & 64
	50	CLAMP PRESS. VALVE "P"	39 & 40
6	43	HYDRAULIC UP PROX. "H"	61, 63 & 64
7	49	KNIFE LATCH PROX.	52, 63 & 64
	57	KNIFE LATCH "L"	22 & 26
8	46	KNIFE UP PROX. "U"	60, 63 & 64
	45	KNIFE DOWN PROX. "K"	56, 63 & 64
9	41	JUNCTION BOX POWER	21, 22, 35 & 36
10	84	HYDRAULIC MOTOR	T1, T2, T3 & G
11	96	BLOWER MOTOR	A1, A2 & G
		AIR SOLENOID	22 & 24
12	55	PRESET PROX. (N.C.)	12, 63 & 64
	34	FALSE CLAMP PROX.	63, 64 & 71
13	54	ENCODER	7, 8, 9 & 10

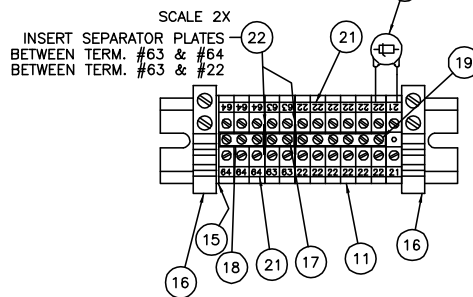


15.15 Power Panel Assembly (w/Circuit Breakers)

EE-3461-1 Sheet 1 REV. "A"



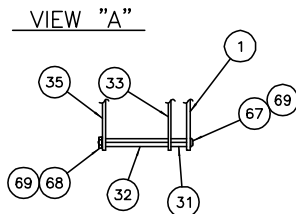
TERMINAL BLOCK DETAIL



TRANSFORMER COLOR CODE	
T2	
WIRE COLOR	WIRE NO.
BLACK	22
BLACK/WHITE	21
BLACK/RED	-
BLACK/YELLOW	-
BLUE	6
BLUE/YELLOW	5
BLUE	4
RED	3
RED/YELLOW	2
RED	1

NOTE: THE FOLLOWING TERMINALS ARE TO BE JUMPED TOGETHER.

TERMINAL NUMBER	QTY USED	JUMPER PART NO.
64	1	E-2507-3
63	1	E-2507-2
22	1	E-2507-6



EE-3461-1 Sheet 1, Rev A – Parts List

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	47512-1	PANEL - POWER	1
2	E-1089-41	TRANSFORMER - 208-230V "T1"	1
3	EE-3210	CABLE ASM. CLAMP COMPRESSOR JUMPER	REF
4	E-1429-17	WIRE DUCT & COVER - 9" LONG	1
5	E-1429-18	WIRE DUCT & COVER - 5-1/4" LONG	1
6	E-1977-16	RAIL - TERMINAL - 10-5/8" LONG	1
7	E-1977-23	RAIL - TERMINAL - 5" LONG	2
8	EE-3080	WIRES - CUT LIST	1
9	E-1143	BRIDGE RECTIFIER - PANEL MOUNT	2
10	E-2068-3	TERMINAL BLOCK - GROUNDING	1
11	E-2068-8	TERMINAL BLOCK - #10 AWG.	12
12	E-2068-7	TERMINAL BLOCK - 3 AWG.	6
13	E-3264-1	CIRCUIT BREAKER - 1A (CB6)	1
14	E-3264-5	CIRCUIT BREAKER - 4A (CB4,5,8,9,10,11)	6
15	E-2069-3	END PLATE	1
16	E-2070-1	END BRACKET	6
17	E-2507-2	FIXED BRIDGE - 2 POLE	1
18	E-2507-3	FIXED BRIDGE - 3 POLE	1
19	E-2507-6	FIXED BRIDGE - 6 POLE	1
20	E-3264-9	CIRCUIT BREAKER - 8A (CB7) (60 HZ ONLY)	1
	E-3264-14	CIRCUIT BREAKER - 12A (CB7) (50HZ ONLY)	
21	E-1356-()	MARKING STRIP - TERMINAL BLOCK	2
22	E-2864	SEPARATOR PLATE - TERMINAL BLOCK	2
23	E-2066-12	PLUG CONNECTOR - P.C.B. 12 PIN (H2)	1
24	E-2376-6	AUXILIARY CONTACT - N.O.	2
25	E-2441-18	RELAY - OVERLOAD, 3 PHASE	1
26	E-1453-6	TUBING - SHRINK, 1/8" DIA. 1" LONG	1
27	E-2742-5	TRANSFORMER - 120/230V , 16/24V SC. "T2"	1
28	E-2066-3	PLUG CONNECTOR - 3 PIN (H3 & H14)	2
29	E-2403-10	CONTACTOR - RELAY (CR)	1
30	E-2805-6	STARTER - 3 PHASE	1
31	E-1152-56	STAND-OFF - 1/2" LONG	6
32	E-1152-43	STAND-OFF - 2" LONG	2
33	EE-3432-2	P.C.B. ASM. - I/O BOARD	1
34	EE-2820-11	PROX. ASSEMBLY - FALSE CLAMP PLATE "F"	1
35	47157-7	P.C.B. COVER - CLEAR	1
36	E-2066-10	PLUG CONNECTOR - P.C.B. 10 PIN (H4 & 5)	2
37	E-1736-2	QUENCHARC - WIRE LEADS	1
38	E-2066-5	PLUG CONNECTOR - P.C.B. 5 PIN (H7)	1

EE-3461-1 Sheet 1, Rev A – Parts List

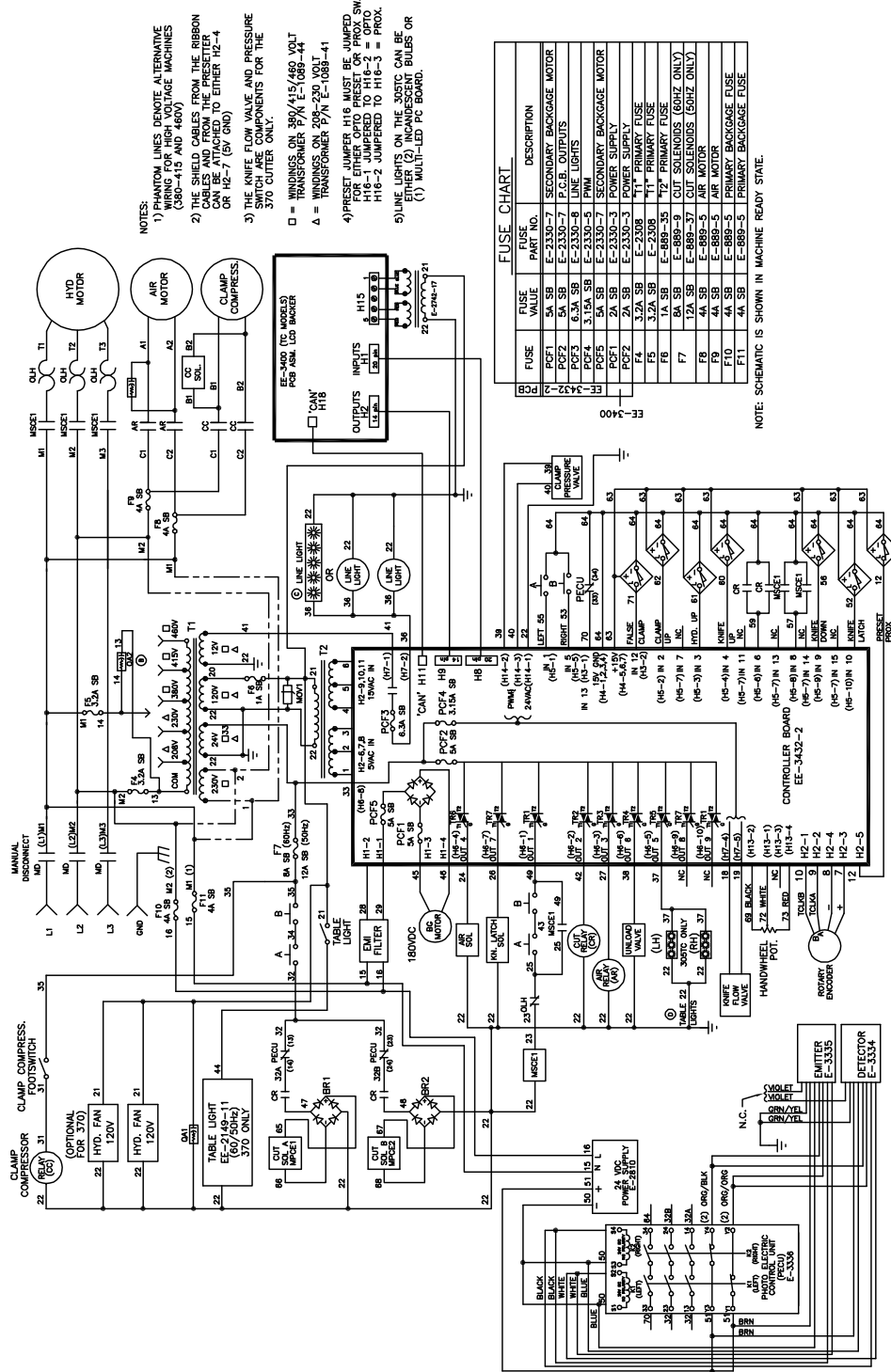
NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
39	E-2066-4	PLUG CONNECTOR - P.C.B. 4 PIN (H1)	1
40	E-2196-21	HOLE PLUG - 2" DIA	2
41	EE-2834-1	CABLE ASM. - JUNCTION BOX	1
42	EE-2833-1	CABLE ASM. - BACKGAGE MOTOR	1
43	EE-2820	PROX. ASSEMBLY - HYDRAULIC UP "H"	1
44	EE-2820-12	PROX. ASSEMBLY - CLAMP UP "C"	1
45	EE-2820-2	PROX. ASSEMBLY - KNIFE DOWN "K"	1
46	EE-2820-5	PROX. ASSEMBLY - KNIFE UP "U"	1
47	E-2232-2	RELAY - AIR BLOWER (AR)/ CLAMP COMPRESS.	2
48	EE-2821-8	CABLE ASM. - CUT SOLENOID "A" (MSCE1)	1
49	EE-2842-1	PROX. ASSEMBLY - KNIFE LATCH	1
50	EE-2821-3	CABLE ASM. - ADJUST. PRESS. SOLENOID "P"	1
51	EE-2821-6	CABLE ASM. - UNLOAD VALVE SOLENOID "U"	1
52	EE-2821-9	CABLE ASM. - CUT SOLENOID "B" (MSCE2)	1
53	47645-1	CONDUIT ASSEMBLY - BLOWER/AIR SOL.	REF
54	EE-3564-1	CABLE ASSEMBLY - ENCODER	1
55	EE-3464	PROX. ASSEMBLY - PRESET	1
56	EE-2825-1	CABLE ASSEMBLY - HYD. FAN	1
57	EE-2843-1	CABLE ASSEMBLY - KNIFE LATCH	1
58	E-1377	VARISTOR - SUPPRESSOR, MOV1	1
59	E-1453-3	SHRINK TUBING - 1" LONG	2
60	E-2752-2	COVER - TERMINAL BLOCK	3
61	S-1781-197	LABEL - GROUND SYMBOL, PRIMARY	1
62	S-1781-50	LABEL - EURO ELECT. SHOCK	1
63	E-1584-51	LABEL - TRANSFORMER, "T1"	1
64	E-1584-52	LABEL - TRANSFORMER, "T2"	1
65	E-1584-()	LABEL - ASM. NO./REV. LEVEL	1
66	S-1781-35	LABEL - CAUTION, ELEC. DANGER	1
67	H-6910-83204	SCREW, #8-32NC X 1/2" BUT HD CAP	2
68	H-6910-63203	SCREW, #6-32NC X 3/8" BUT HD CAP	6
69	H-6423-#6	NUT, #6-32NC HEX	6
70	H-7324-#6	WASHER, #6 INT. TOOTH	14
71	H-6910-83203	SCREW, #8-32NC X 3/8" BUT HD CAP	13
72	H-7324-#8	WASHER, #8 INT. TOOTH	13
73	H-6910-102403	SCREW, #10-24NC X 3/8" BUT HD CAP	8
74	H-7324-#10	WASHER, #10 INT. TOOTH	8
75	H-6910-403	SCREW, 1/4-20NC X 3/8" BUT HD CAP	5

EE-3461-1 Sheet 1, Rev A – Parts List

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
76	H-7324-8	WASHER, 1/4 INT. TOOTH	5
77	H-7319-4	WASHER, 1/4 USS FLAT	4
78	EE-3460	CABLE ASM. - 'CAN' (LONG) (NOT SHOWN)	1
79	E-2066-8	PLUG CONNECTOR - P.C.B. 8 PIN (H6)	1
80	EE-3499	CONDUIT ASM. - AIR BLOWER - TABLE	1
81			
82	S-1350-16	STRAIN RELIEF - CABLE	11
83	E-2730-3	FILTER - EMI/EFI, PANEL MOUNT	1
84	EE-2836-1	CONDUIT ASM. - HYDRAULIC MOTOR, 3 PHASE	1
85	H-7321-#8	WASHER -#8 FLAT	4
86	S-1694	TY-WRAP - CABLE (NOT SHOWN)	10

15.16 Basic Machine Schematic – (w/Standard Cut Switches & Fuses)

E-3462, Rev. D



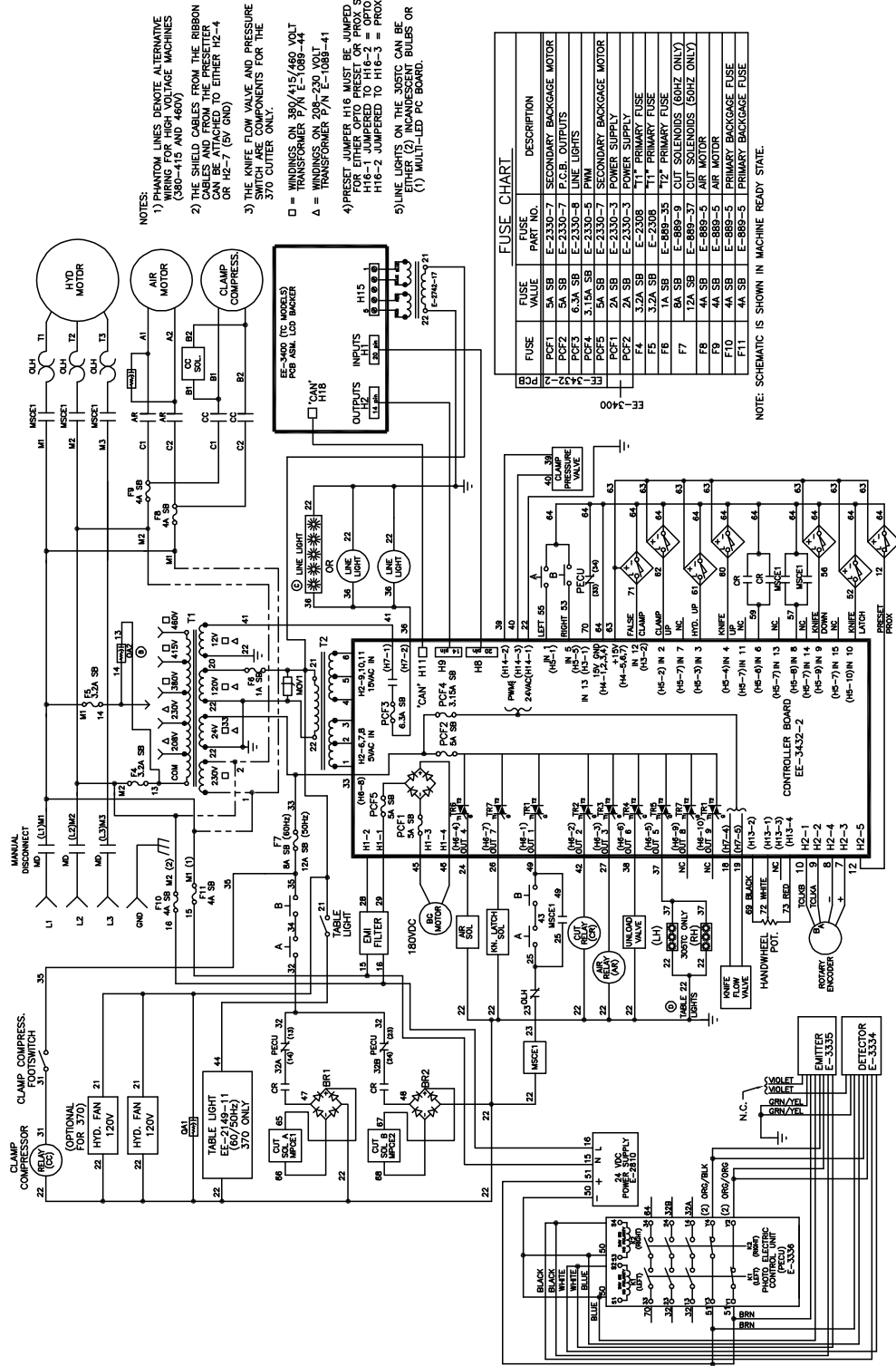
- NOTES:
- 1) PHANTOM LINES DENOTE ALTERNATIVE WIRING FOR HIGH VOLTAGE MACHINES (380-415 AND 460V)
 - 2) THE SHIELD CABLES FROM THE RIBBON CABLE CONNECTOR TO EITHER H2-4 OR H2-7 (5V GND)
 - 3) THE KNEE FLOW VALVE AND PRESSURE SWITCH ARE COMPONENTS FOR THE 370 CUTTER ONLY.
 - 4) PRESSE JUMPER H16 MUST BE JUMPED SW. H16-1 JUMPED TO H16-2 = OPTO H16-2 JUMPED TO H16-3 = PROX. H16-3 JUMPED TO H16-4 = PROX. EITHER (2) INCANDESCENT BULBS OR (1) MULTI-LED PC BOARD.
- = WINDINGS ON 380/415/460 VOLT TRANSFORMER P/N E-1089-44
 Δ = TRANSFORMER P/N E-1081-41

FUSE	VALUE	PART NO.	DESCRIPTION
F1	5A SB	E-2330-7	SECONDARY BACKGAGE MOTOR
F2	5A SB	E-2330-7	SECONDARY BACKGAGE MOTOR
F3	6.3A SB	E-2330-8	P.C.B. OUTPUTS
F4	3.15A SB	E-2330-5	PWM
F5	5A SB	E-2330-7	SECONDARY BACKGAGE MOTOR
F6	2A SB	E-2330-3	POWER SUPPLY
F7	3.2A SB	E-2308	T1 PRIMARY FUSE
F8	1A SB	E-889-35	T2 PRIMARY FUSE
F9	1A SB	E-889-9	CUT SOLENOIDS (50HZ ONLY)
F10	4A SB	E-889-2	AIR MOTOR
F11	4A SB	E-889-5	PRIMARY BACKGAGE FUSE

NOTE: SCHEMATIC IS SHOWN IN MACHINE READY STATE.

15.17 Basic Machine Schematic – (w/Ergo Touch Switches & Fuses)

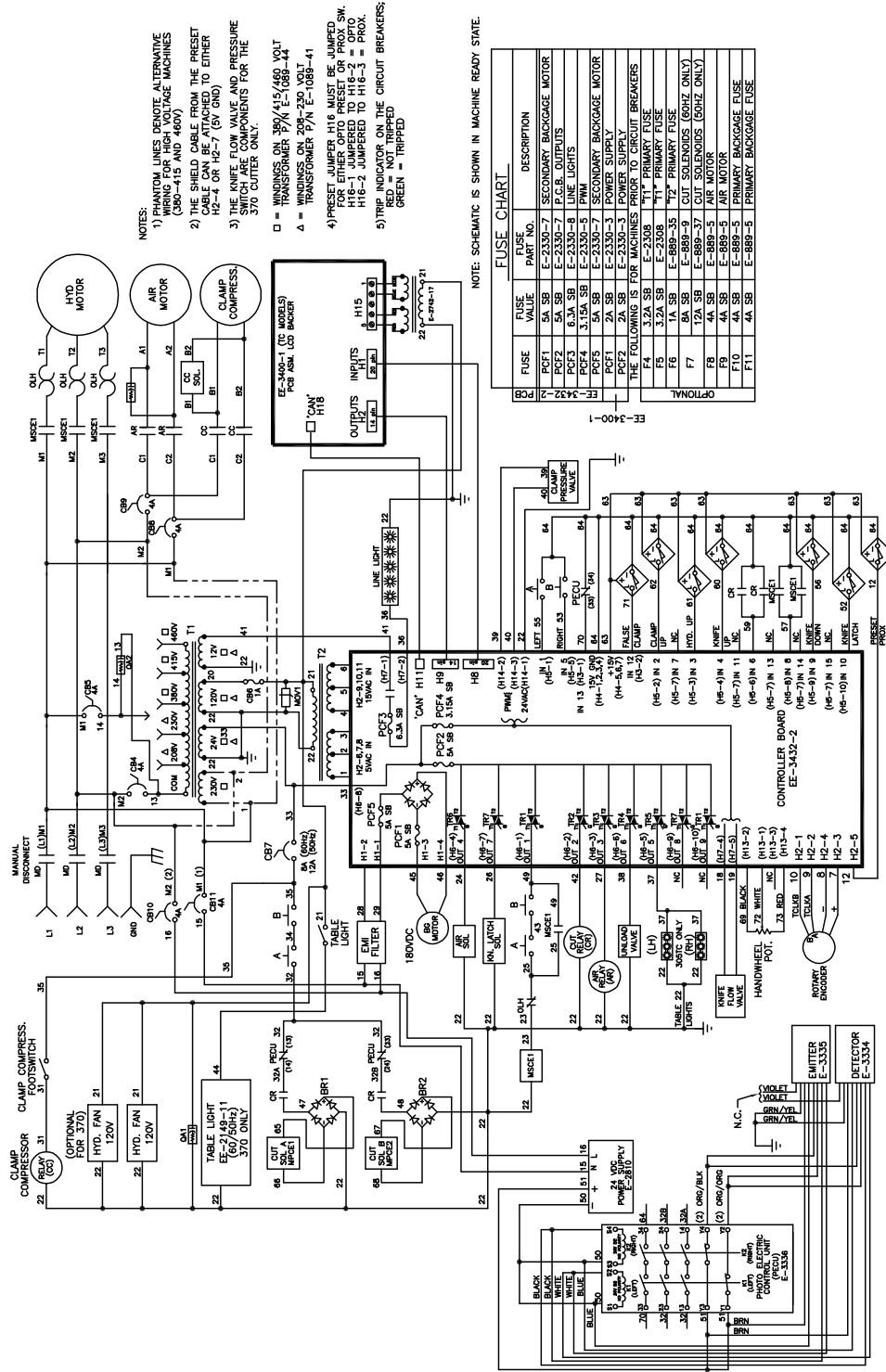
E-3462 rev. D



- NOTES:**
- 1) WIRE TERMINALS DENOTE ALTERNATE WIRING FOR HIGH VOLTAGE MACHINES (380-415 AND 480V)
 - 2) THE SHIELD CABLES FROM THE RIBBON CABLES AND FROM THE PRESETTER OR H2-7 (8V GND) OR H2-7 (8V GND)
 - 3) THE KNIFE FLOW VALVE AND PRESSURE VALVE COMPONENTS FOR THE 370 CUTTER ONLY.
 - 4) WINDINGS ON 380/415/480 VOLT MACHINES ON 208-230 VOLT MACHINES
 - 5) TRANSFORMER P/N E-1088-41
 - 6) PRESET NUMBER H16 MUST BE JUMPED FOR EITHER OPTO PRESET OR PROX SW. H16-1 JUMPED TO H16-2 = OPTO. H16-2 JUMPED TO H16-3 = PROX.
 - 7) LINE LIGHTS ON THE 305TC CAN BE EITHER (2) INCANDESCENT BULBS OR (1) MULTI-LED PC BOARD.

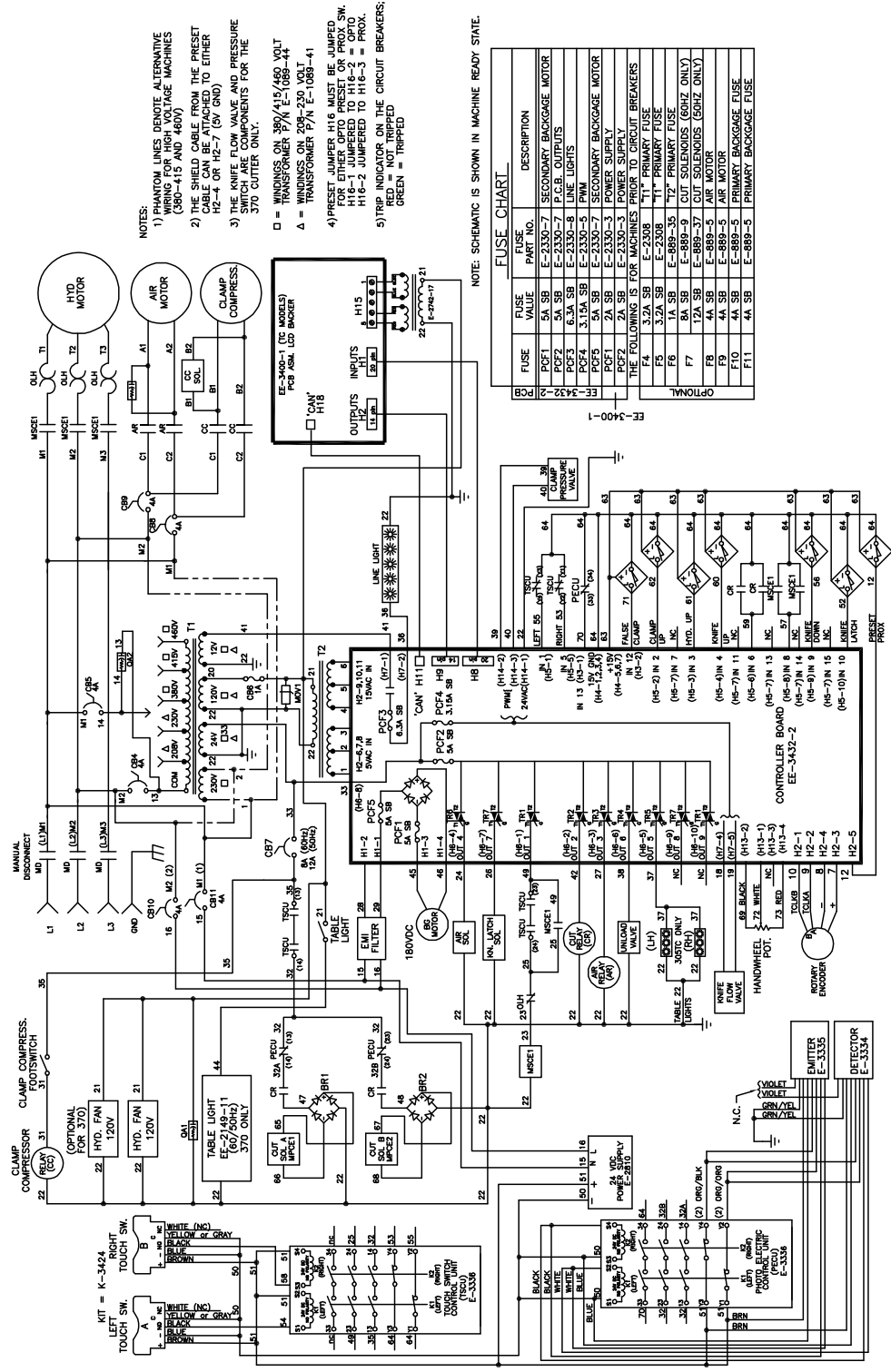
15.18 Basic Machine Schematic – w/Standard Cut Switches & Circuit Breakers

E-3462-1 rev. "A"



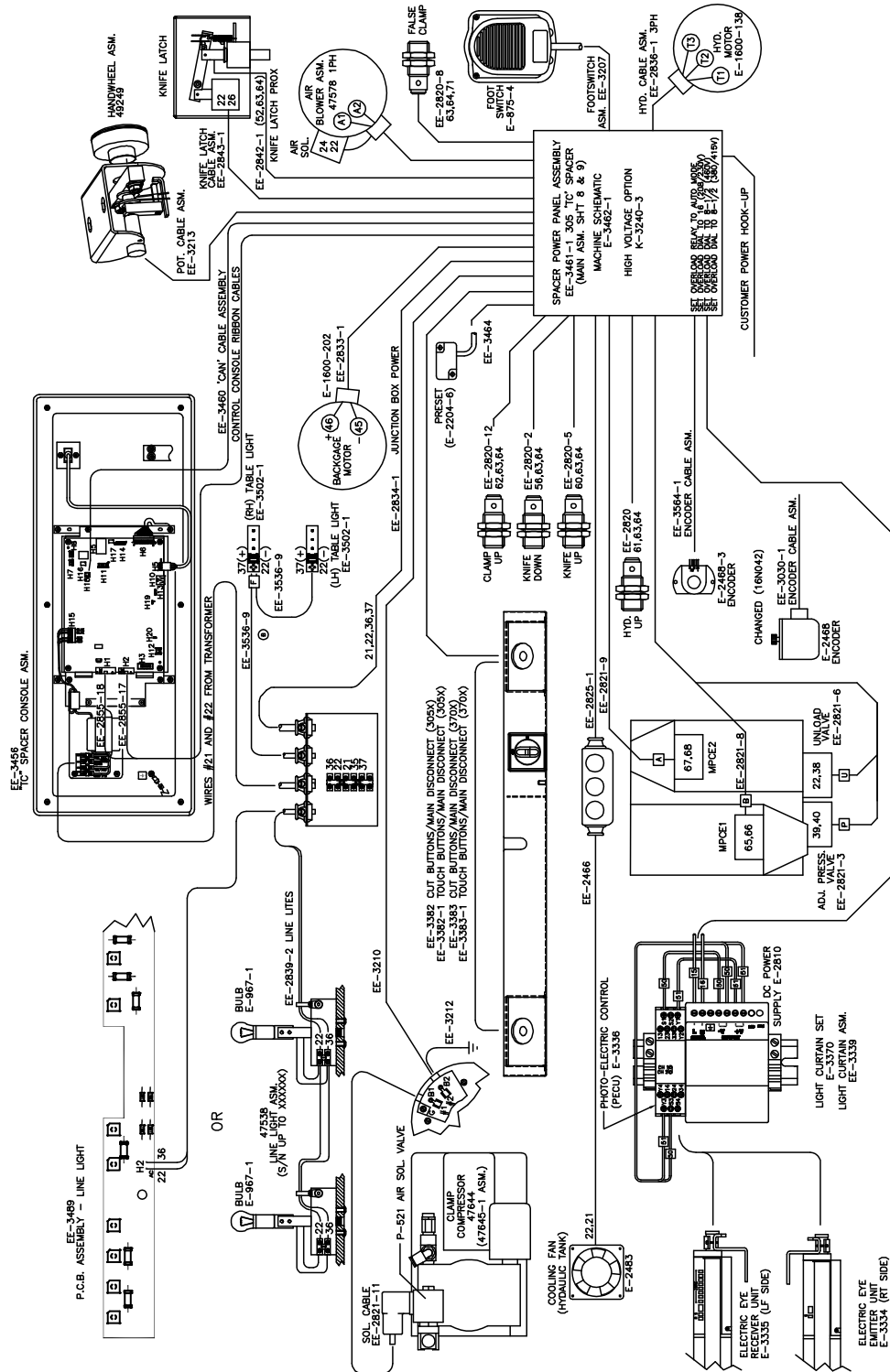
15.19 Basic Machine Schematic – w/Ergo Touch Switches & Circuit Breakers

E-3462-1 rev. "A"



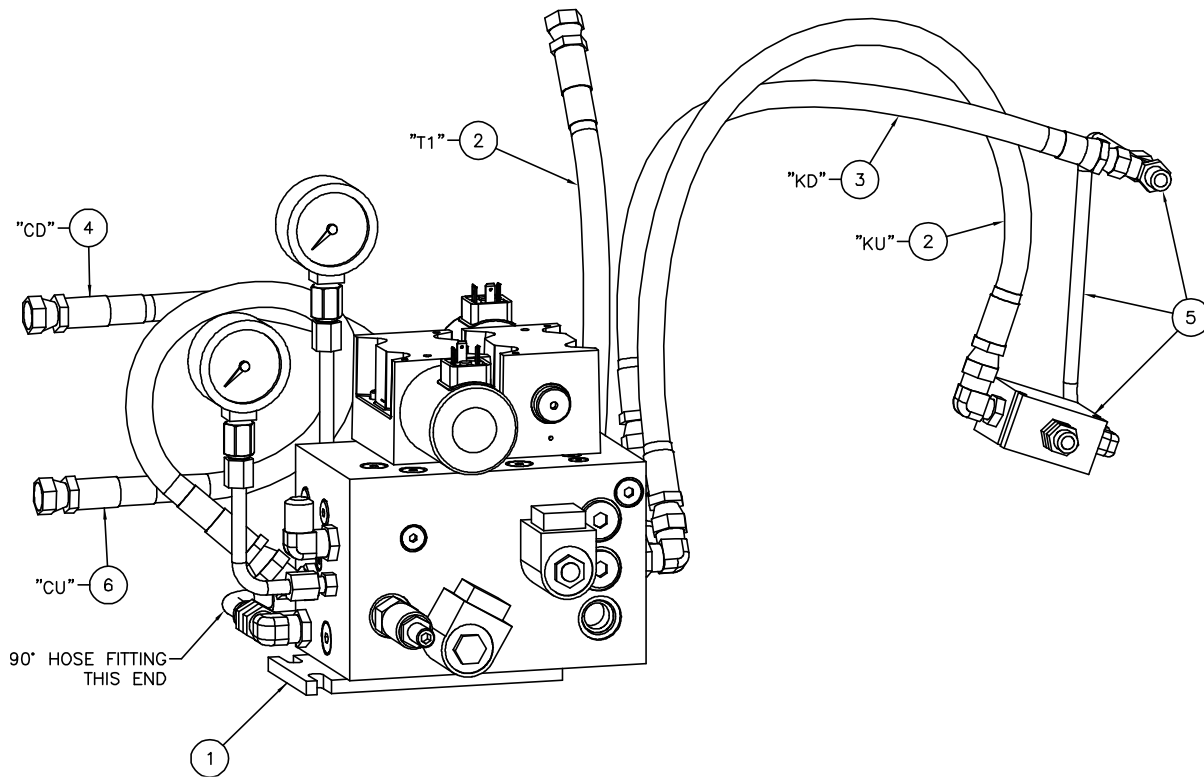
15.21 Interconnection Diagram

E-3463 rev. "B" (LED Table Light)



15.22 Hydraulic Manifold Kit

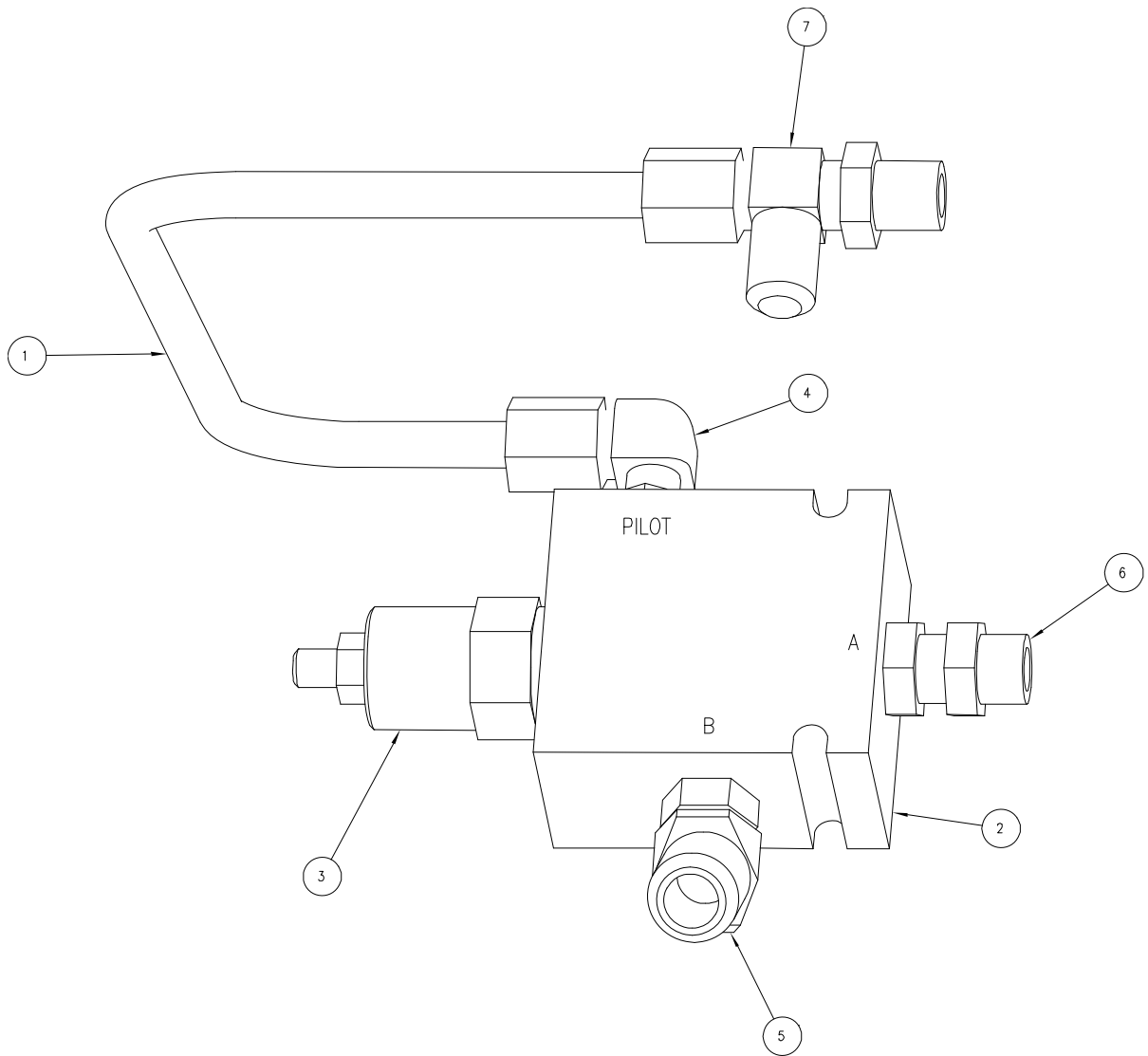
H-504-1, Rev. "D"



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	H-465-2	MANIFOLD ASSEMBLY	1
2	H-242-37	HYDRAULIC HOSE ASSEMBLY (30" LONG)	2
3	H-242-43	HYDRAULIC HOSE ASSEMBLY (21" LONG)	1
4	H-242-84	HYDRAULIC HOSE ASSEMBLY (42" LONG)	1
5	H-437-1	VALVE ASM. - KNIFE DOWN SEQUENCE	1
6	H-242-65	HYDRAULIC HOSE ASSEMBLY (50" LONG)	1
7	S-1694-5	TYRAP- IDENTIFICATION	5

15.22.1 Knife Down Sequence Valve Assembly

H-437-1, Rev. D

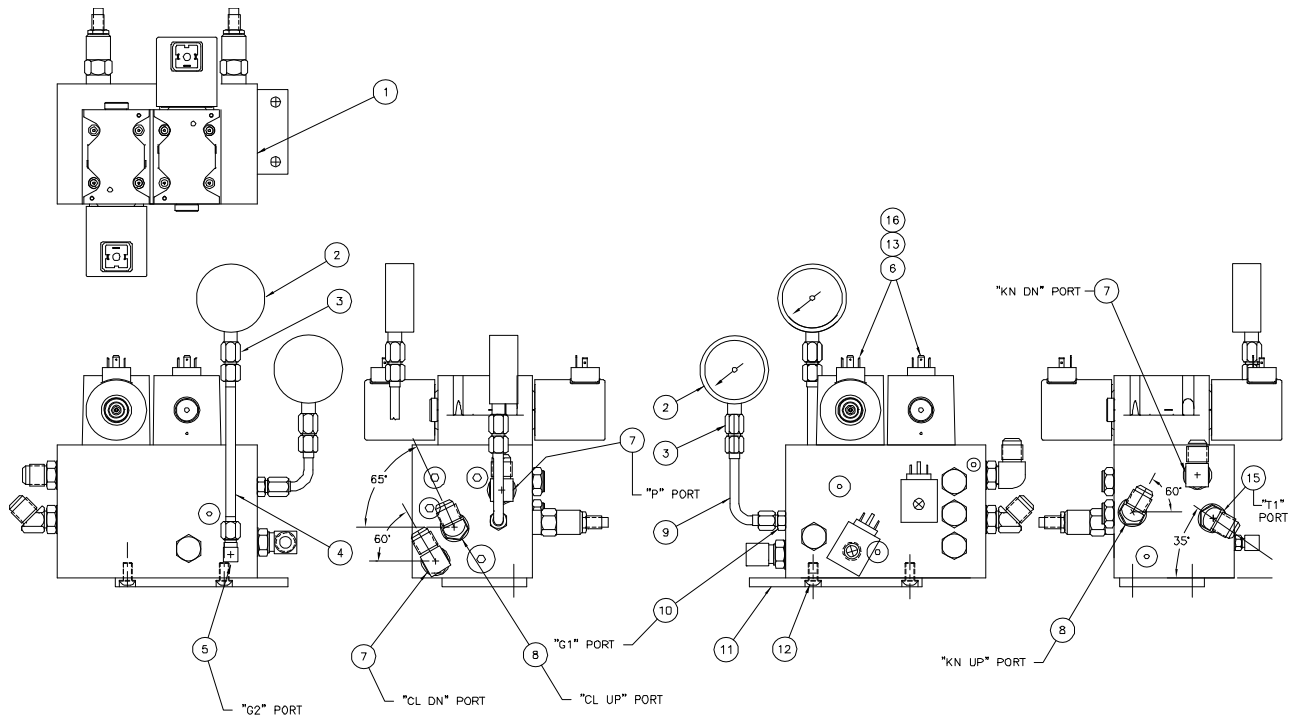


NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	56162-1	TUBE ASM.	1
2	56167	ALUMINUM BODY - COUNTER BAL. VALVE KIT	1
3	H-203-40	COUNTER BALANCE VALVE	1
4	H-230-10	ELBOW- ORING TO TUBE	1
5	H-230-6	ELBOW- 'O'-RING TO TUBE	1
6	H-434	CONNECTOR - ORING TO ORING	1
7	H-435	MALE RUN TEE - ORING TO TUBE	1

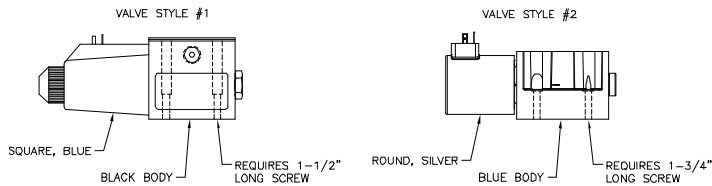
15.0 Schematics & Parts Lists

15.22.2 Hydraulic Manifold Assembly

H-465-2, Rev. B



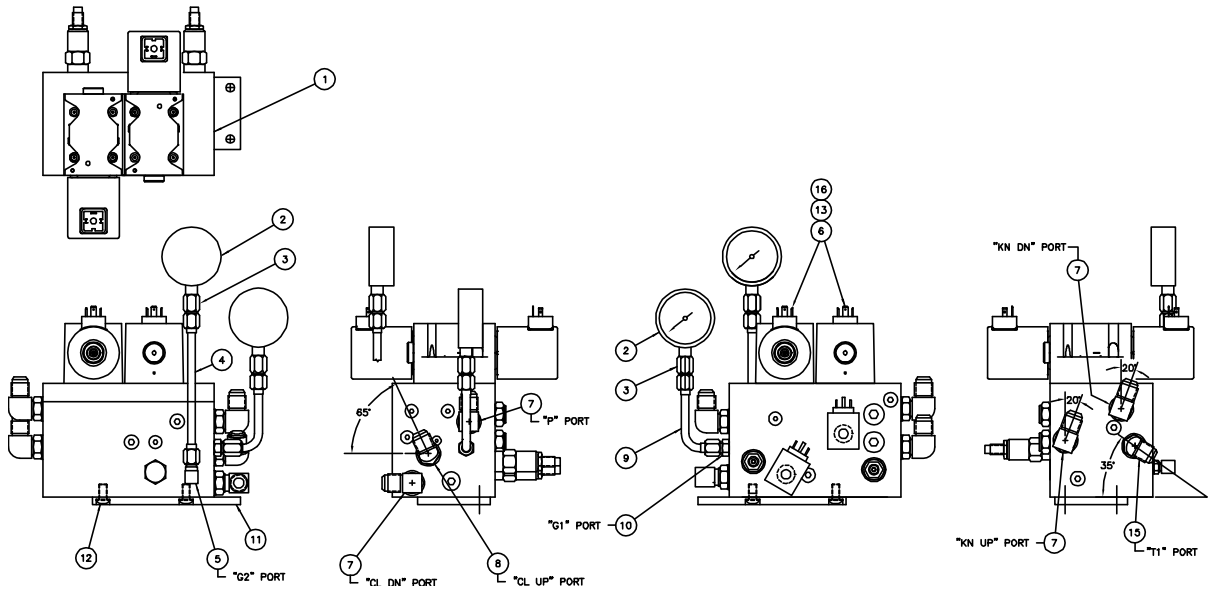
HARDWARE NOTE



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	H-468-3	MANIFOLD - HYDRAULIC	1
2	8P-629-3	GAGE	2
3	H-253-2	ADAPTER - PIPE TO TUBE	2
4	H-425-1	TUBE ASSEMBLY - "G2" PORT	1
5	H-230	ELBOW - 'O' RING TO TUBE	1
6	H-6918-414	1/4-20 X 1-3/4" SOC HD. SCR (SEE NOTE)	8
	H-6918-412	1/4-20 X 1-1/2" SOC HD. SCR (SEE NOTE)	
7	H-230-4	ELBOW - 90% $\%D$ 'O' RING TO TUBE	3
8	H-272-3	ELBOW - 45% $\%D$ 'O' RING TO TUBE	2
9	H-518	TUBE ASSEMBLY - "G1" PORT	1
10	H-236-5	ADAPTER - 'O' RING TO TUBE	1
11	47256	PLATE - MANIFOLD MOUNT	1
12	H-6910-606	3/8-16 X 3/4 BUTTON HD. CAP SCREW	3
13	H-557	VALVE - 4 WAY (24 VDC)	2
14			
15	H-230-8	ELBOW - 90% $\%D$ 'O' RING TO TUBE	2
16	H-7329-4	WASHER - 1/4 HIGH COLLAR LOCK	8

15.22.2.1 Hydraulic Manifold Assembly

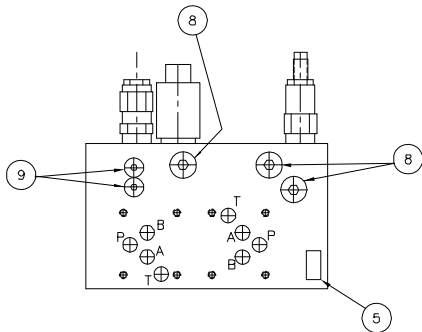
H-465-2 rev. "E"



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	H-468-3	MANIFOLD - HYDRAULIC	1
2	8P-629-3	GAGE	2
3	H-253-2	ADAPTER - PIPE TO TUBE	2
4	H-425-1	TUBE ASSEMBLY - "G2" PORT	1
5	H-230	ELBOW - 'O' RING TO TUBE	1
6	H-6918-414	1/4-20 X 1-3/4" SOC HD. SCR	8
7	H-230-4	ELBOW - 90%%D 'O' RING TO TUBE	4
8	H-272-3	ELBOW - 45%%D 'O' RING TO TUBE	1
9	H-518	TUBE ASSEMBLY - "G1" PORT	1
10	H-236-5	ADAPTER - 'O' RING TO TUBE	1
11	47256	PLATE - MANIFOLD MOUNT	1
12	H-6910-606	3/8-16 X 3/4 BUTTON HD. CAP SCREW	3
13	H-557	VALVE - 4 WAY (24 VDC)	2
14			
15	H-230-8	ELBOW - 90%%D 'O' RING TO TUBE	2
16	H-7329-4	WASHER - 1/4 HIGH COLLAR LOCK	8

15.22.2.2 Hydraulic Manifold

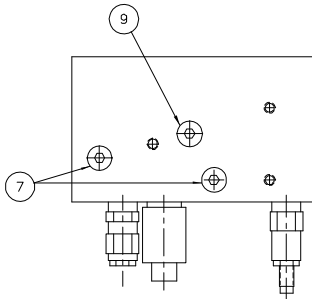
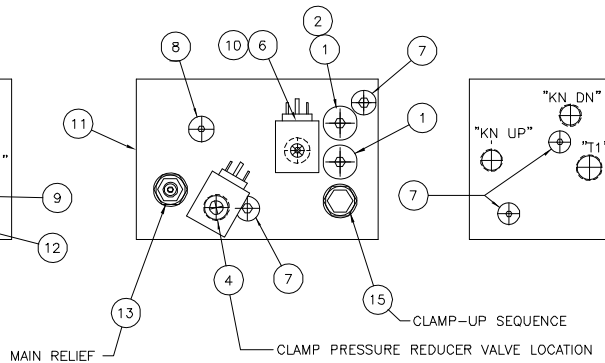
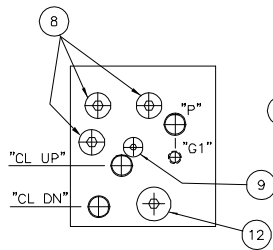
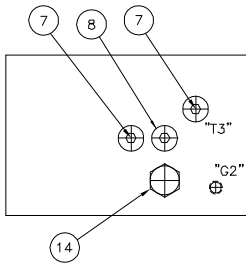
H-468-3, Rev. B



NOTES:
TORQUE ALL CARTRIDGES & PLUGS PER MC SPEC NO. 19020.

PORT SIZES:
"G1" & "G2"-----SAE #4(7/16-20 THD.)
"CL UP", "CL DN", "KN UP", "KN DN",
"P"-----SAE #8(3/4-16 THD.)
"T1"-----SAE #10(7/8-14 THD.)
(2) DO2 MTG. PADS

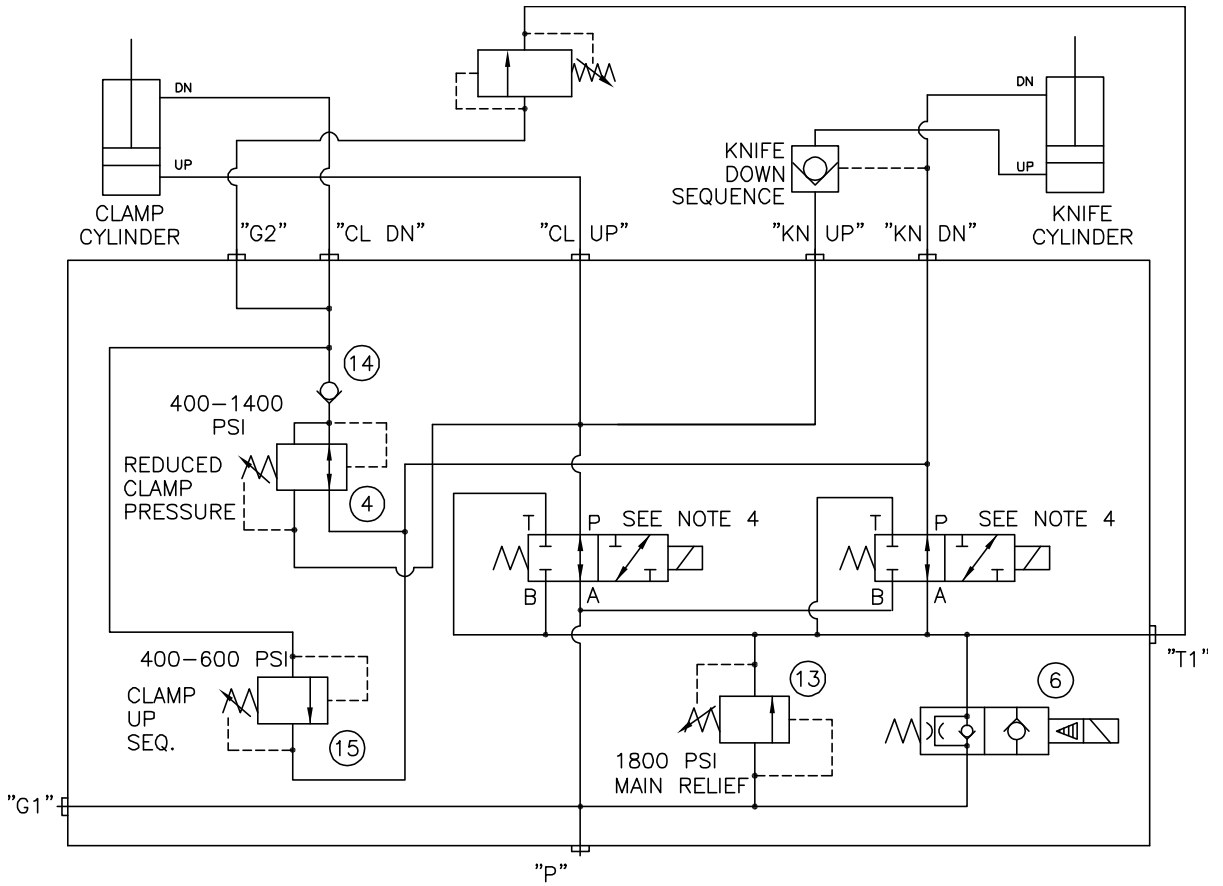
REPAIR NOTES:
"O" RING REPLACEMENT KIT - PART NUMBER H-504-SK
PLUG REPLACEMENT KIT- PART NUMBER H-504-PK
'O' RING REPLACEMENT KIT FOR PLUGS PART NUMBER H-504-PSK
TIGHTEN PLUGS TO TORQUES SPECIFIED IN PARTS LIST



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	H-427-4	PLUG - SAE	2
2	H-427	PLUG - SAE	1
3			
4	H-203-41	PRESSURE REDUCING VALVE- ELECTRICAL (TC)	1
5	N/P	NAMEPLATE	1
6	E-1069-17	COIL (24 VAC)	1
7	H-427-5	SAE PLUG (220 IN-LB TORQUE)	8
8	H-427-2	SAE PLUG SAE PLUG (180 IN-LB TORQUE)	9
9	H-427	SAE PLUG (35 IN-LB TORQUE) SAE PLUG	4
10	H-200-3	CARTRIDGE VALVE	1
11	N/P	VALVE MANIFOLD	1
12	H-427-3	SAE PLUG (550 IN-LB TORQUE)	2
13	H-203-26	RELIEF VALVE	2
14	H-203-38	CHECK VALVE - 10 PSI (305 MANUAL & TITAN 265)	1
15	H-203-43	RELIEF VALVE	1

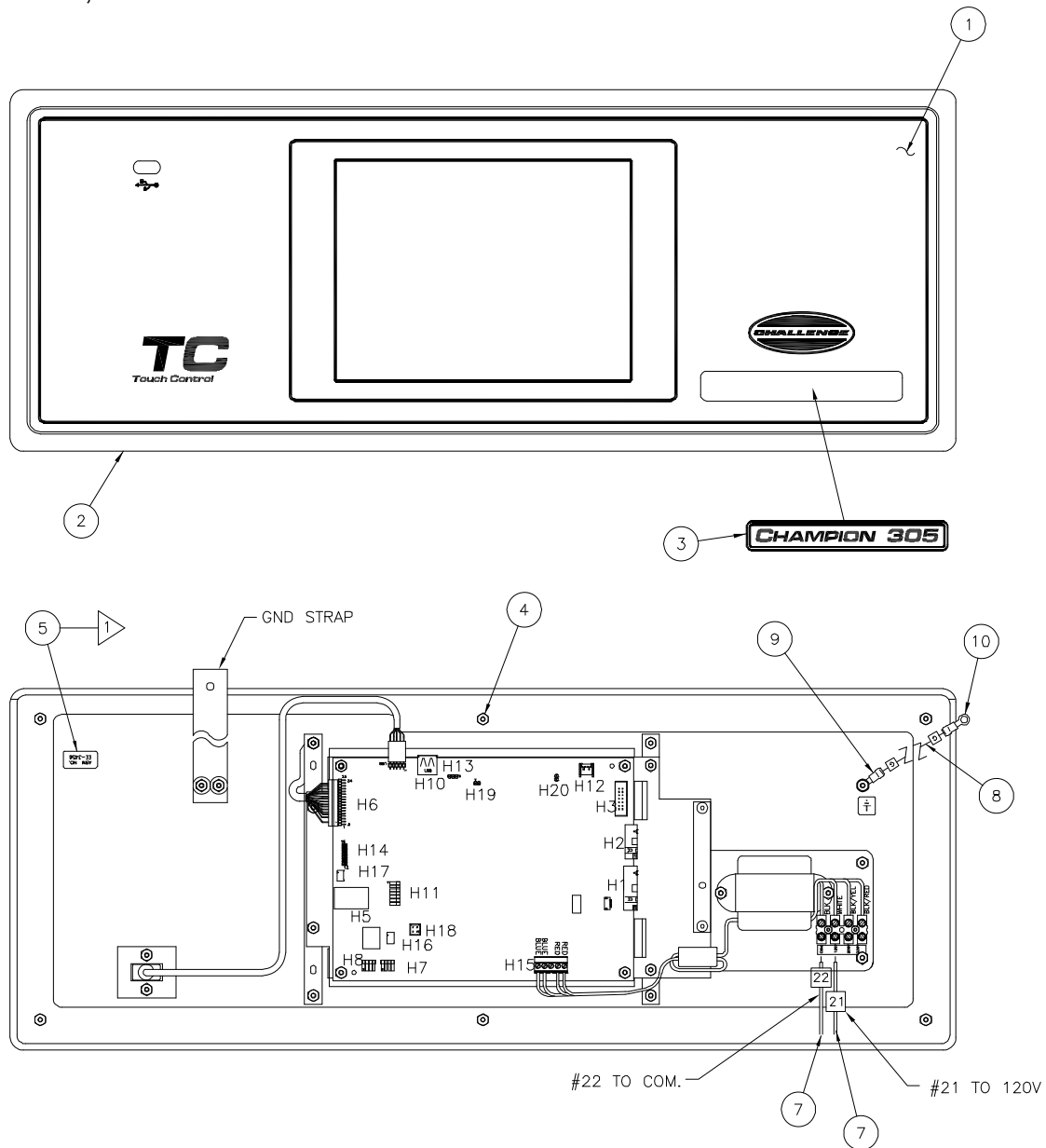
15.23 Hydraulic Schematic

H-468-3, Rev. B



15.24 TC Control Console Assembly

EE-3456, Rev. D

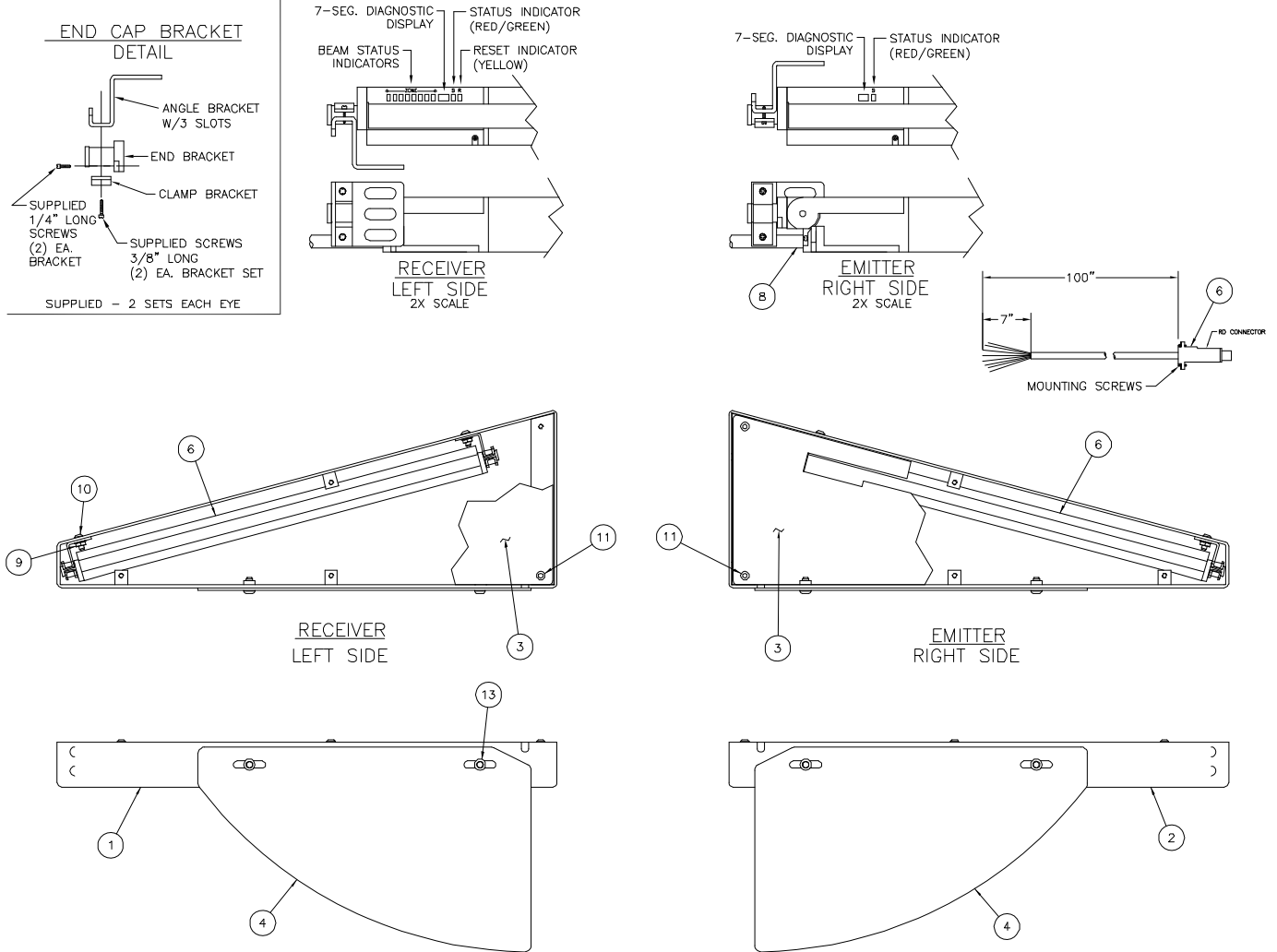


NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	EE-3471	PANEL ASM. - FRONT CONTROL, TC	1
2	16013-1	BEZEL - CONTROL CONSOLE	1
3	47701-1	TC PANEL INSERT - CHAMPION 305	1
4	H-6423-#6	NUT - #6-32 HEX (KEP)	6
5	E-1584-()	LABEL - ASM. NO./REV. LEVEL	1
6			
7	E-849-R	WIRE - #16 GA. RED 34" LONG (#21 & 22)	2
8	E-2743	WIRE - #18 GA. YEL/GREEN MTW 8" LONG	1
9	E-1214-2	CONNECTOR - #6 INS. RING	1
10	E-1214-8	CONNECTOR - #10 INS. RING	1

NOTES:

15.25 Electric Eye Assembly

EE-3339 Sheet 1, Rev. F



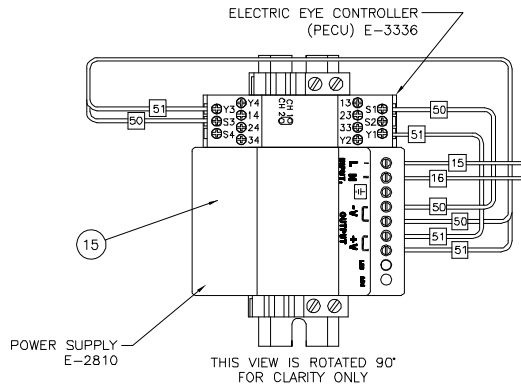
NO.	PART NO.	DESCRIPTION	QTY
1	47944	HOUSING - ELEC EYE, LH	1
2	47945	HOUSING - ELEC EYE, RH	1
3	47946	ELECTRIC EYE COVER	2
4	47943	SHIELD - TABLE	2
5			
6	E-3370	16" LIGHT CURTAIN SET	1
7	E-1163-B	WIRE - #20GA. BLACK HOOK-UP 22" TOTAL	1
8	E-709-R	WIRE - #18GA. RED MTW 102" TOTAL	1
9	H-6423-#10	NUT - #10-24 HEX (KEP)	4
10	H-6910-102404	SCREW - #10-24 X 1/2 BHC	4
11	H-6910-102403	SCREW - #10-24 X 3/8 BHC	10
12			
13	H-6910-404	SCREW - 1/4-20 X 1/2 BUT HD CAP	4
14	S-1694-2	TYRAP - #10 SCREW MOUNT	2
15	EE-3411	ASM - CONTROL RELAY/POWER SUPPLY	1

EE-3339 Sheet 2, Rev. F

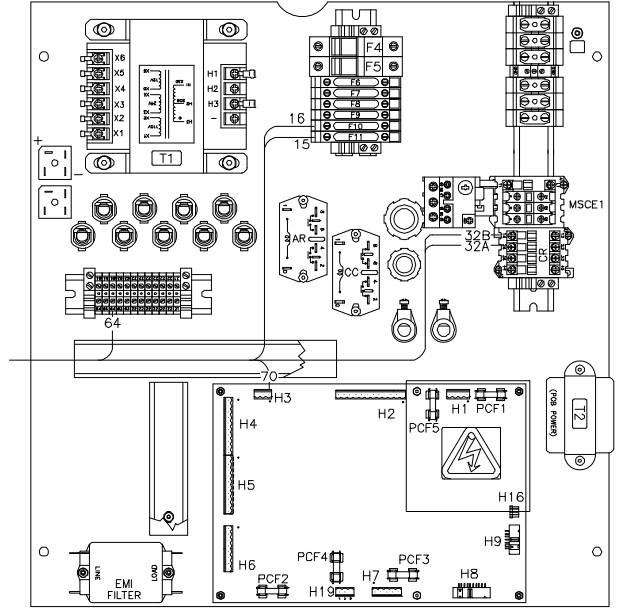
WIRING DETAIL



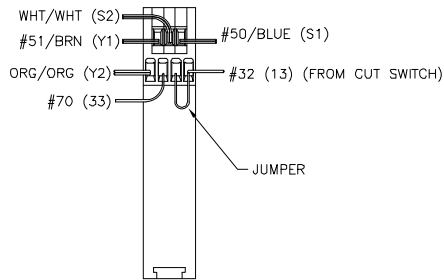
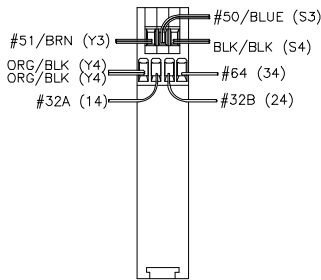
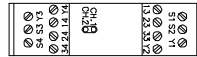
WIRES FROM ELECTRIC EYE CABLES	
WIRE NO.	WHERE USED
BLACK	EYE CONTROLLER - S4 (BOTH)
WHITE	EYE CONTROLLER - S2 (BOTH)
BROWN	EYE CONTROLLER - Y1(+) EYE CONTROLLER - Y3(+)
ORANGE	EYE CONTROLLER - Y2 (BOTH)
ORG/BLK	EYE CONTROLLER - Y4 (BOTH)
VIOLET	NOT USED (WIRE NUT TOGETHER)
BLUE	EYE CONTROLLER - S1(-) EYE CONTROLLER - S3(-)
GRN/YEL	MACHINE GND (ATTACH TO BRACKET MOUNTING SCREW) (1) E-1214-49



NOTE: "T1" TRANSFORMER IS LOCATED IN OPPOSITE DOOR FOR MACHINES WITH THE SUPPLY VOLTAGE OF 380/415 OR 460V.



WIRE NO.	WIRE GA.	CUT LENGTH	WHERE USED
16	18	24"	POWER SUPPLY TERM. "N" TO 'F10' FUSE HOLDER (PPNL)
15	18	24"	POWER SUPPLY TERM. "L" TO 'F11' FUSE HOLDER (PPNL)
32	-	-	PECU TERM. #13 - FROM CUT SWITCH ASM.
32A	18	25"	PECU TERM. #14 - TO 'CR' RELAY TERM. #24
32B	18	25"	PECU TERM. #24 - TO 'CR' RELAY TERM. #14
70	20	12"	PECU TERM. #33 TO PCB H3-1 (IN 13)
64	20	10"	PECU TERM. #34 TO TERMINAL BLOCK #64



SCALE: 2X

15.26 Cut Button Assembly – Standard

EE-3382, Rev. C

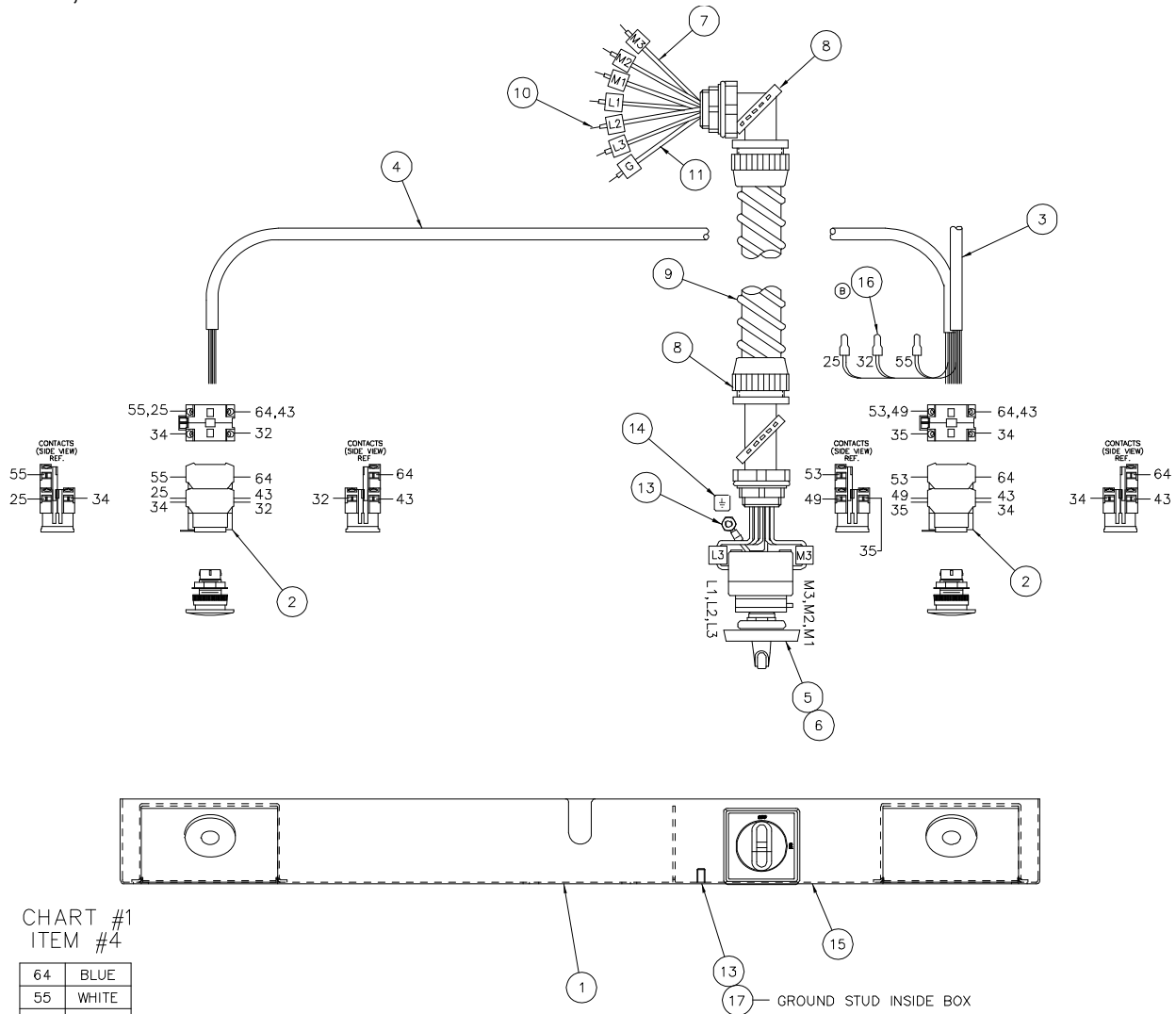


CHART #1
ITEM #4

64	BLUE
55	WHITE
43	ORANGE
34	GREEN
32	BLACK
25	RED
WIRE NO.	COLOR

CHART #2
ITEM #3

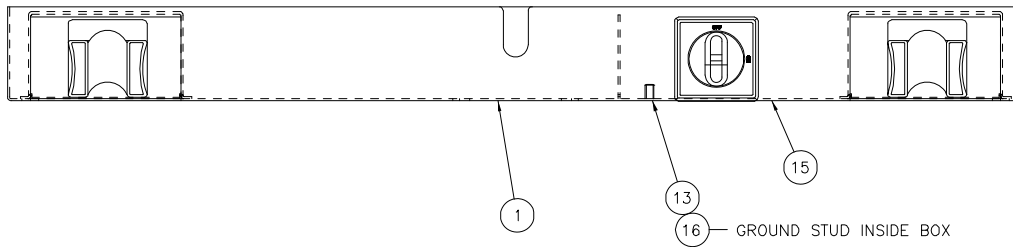
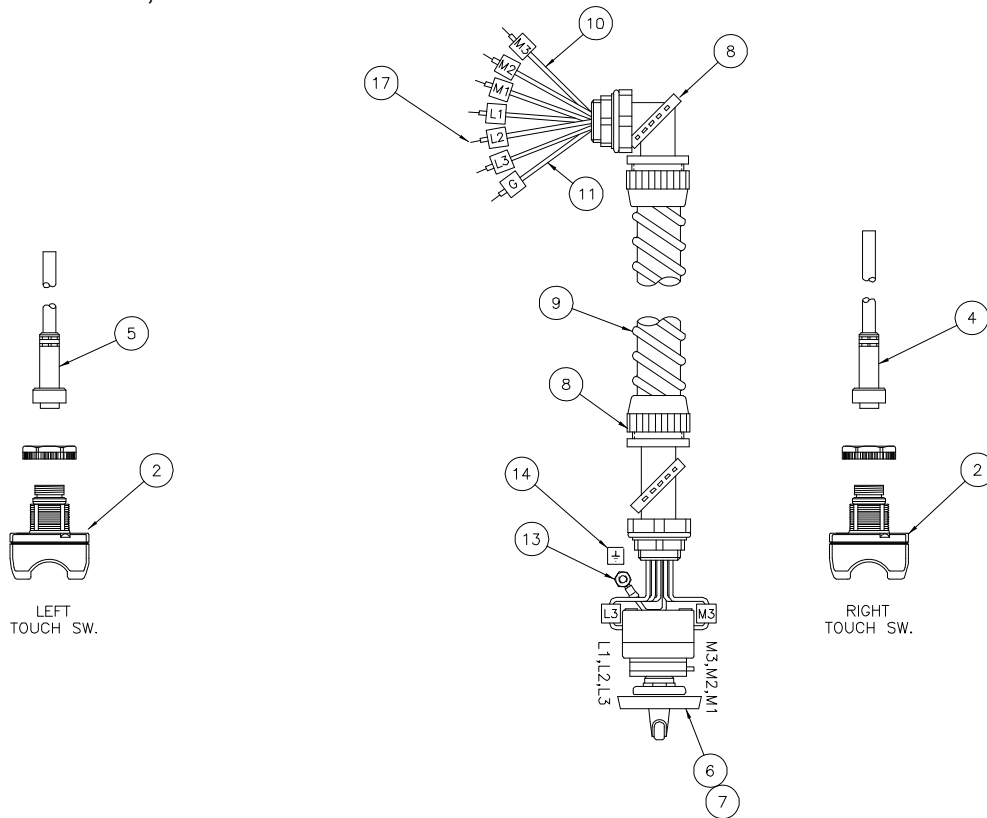
64	BLUE
55	WHITE
53	YELLOW
49	BROWN
35	ORANGE
32	BLACK
25	RED
WIRE NO.	COLOR

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	47665	CONTROL BOX ASSEMBLY	1
2	E-3437-4	PUSHBUTTON SWITCH - MUSHROOM, 3 N.O.	2
3	E-2078-3	CABLE - #18GA. 8 COND. 49" LONG	1
4	E-2078	CABLE - #18GA. 6 COND. 38" LONG	1
5	E-3082	SWITCH - MAIN DISCONNECT (BODY)	1
6	E-3083	SWITCH FACE - MAIN DISCONNECT	1
7			
8	E-2190-2	3/4" CONDUIT CONNECTOR - 90% ϕ d	2
9	E-2189-2	CONDUIT - PLASTIC, 16" LONG	1
10	E-1213-B	WIRE - #10 GA. BLACK MTW 38" LONG	6
11	E-2743-1	WIRE - #14 GA. GRN/YEL TEW 38" LONG	1
12	E-1214-64	CONNECTOR - 1/4" RING (16-14GA)	1
13	H-6423-4	NUT - 1/4-20 HEX	1
14	S-1781-42	LABEL - GROUND SYMBOL, SECONDARY	1
15	S-1781-11	LABEL - ELECTRIC SHOCK	1
16	E-1237-6	WIRE NUT - BLUE	3
17	H-6910-404	SCREW - 1/4-20 X 1/2" BUT HD CAP	1

NOTES:

15.27 Cut Button Assembly – ErgoTouch

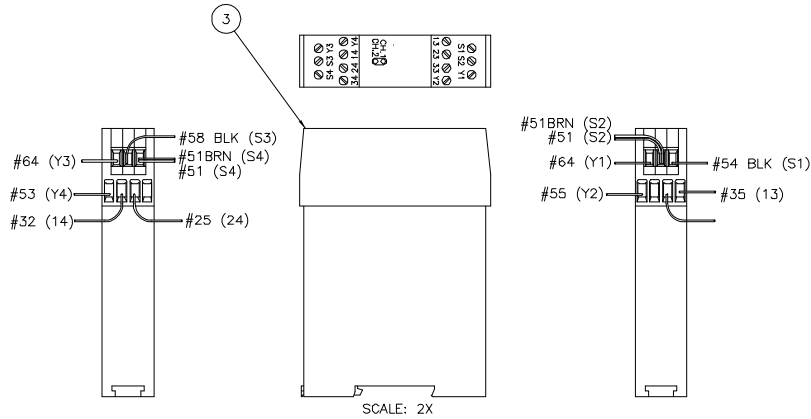
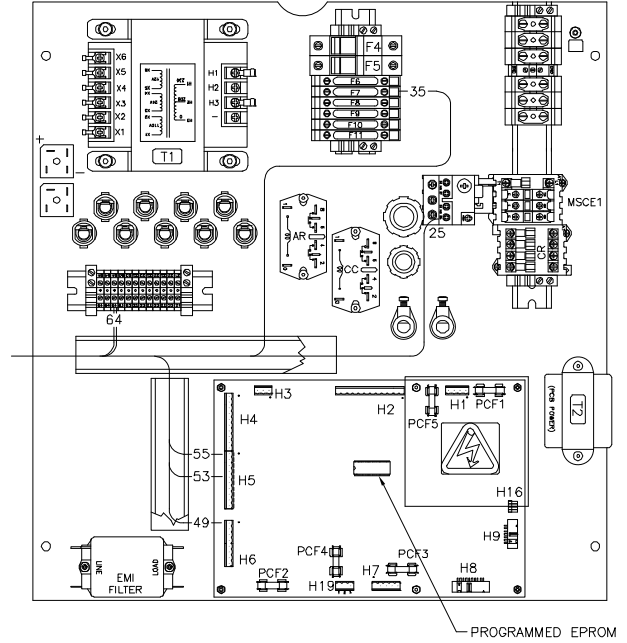
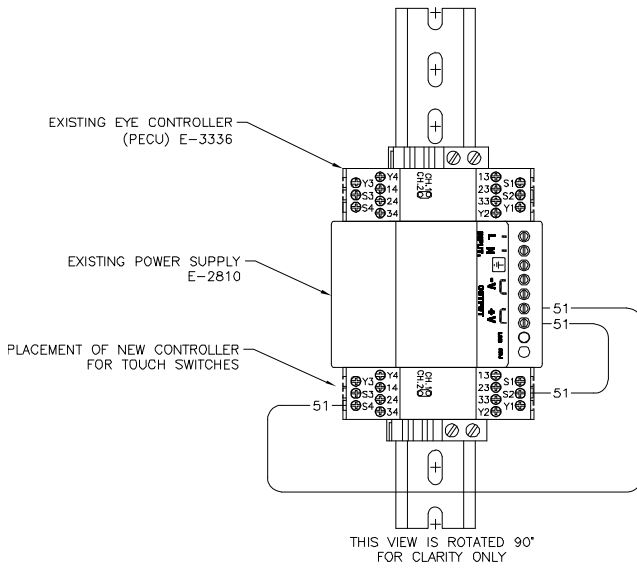
EE-3382-1 Sheet 1, Rev. A



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	47665	CONTROL BOX ASSEMBLY	1
2	E-3347	SWITCH - ERGO TOUCH	2
3	EE-3350-2	CONTROLLER - ASM. - TOUCH SWITCH	1
4	EE-3348-2	CABLE ASM. - TOUCH SWITCH, LH	1
5	EE-3349-2	CABLE ASM. - TOUCH SWITCH, RH	1
6	E-3083	SWITCH FACE - MAIN DISCONNECT	1
7	E-3082	SWITCH - MAIN DISCONNECT (BODY)	1
8	E-2190-2	3/4" CONDUIT CONNECTOR - 90%%d	2
9	E-2189-2	CONDUIT - PLASTIC, 16" LONG	1
10	E-1213-B	WIRE - #10 GA. BLACK MTW 38" LONG	6
11	E-2743-1	WIRE - #14 GA. GRN/YEL TEW 38" LONG	1
12	E-1214-64	CONNECTOR - 1/4" RING (16-14GA)	1
13	H-6423-4	NUT - 1/4-20 HEX	1
14	S-1781-42	LABEL - GROUND SYMBOL, SECONDARY	1
15	S-1781-11	LABEL - ELECTRIC SHOCK	1
16	H-6910-404	SCREW - 1/4-20 X 1/2" BUT HD CAP	1

EE-3382-1 Sheet 2, Rev. A

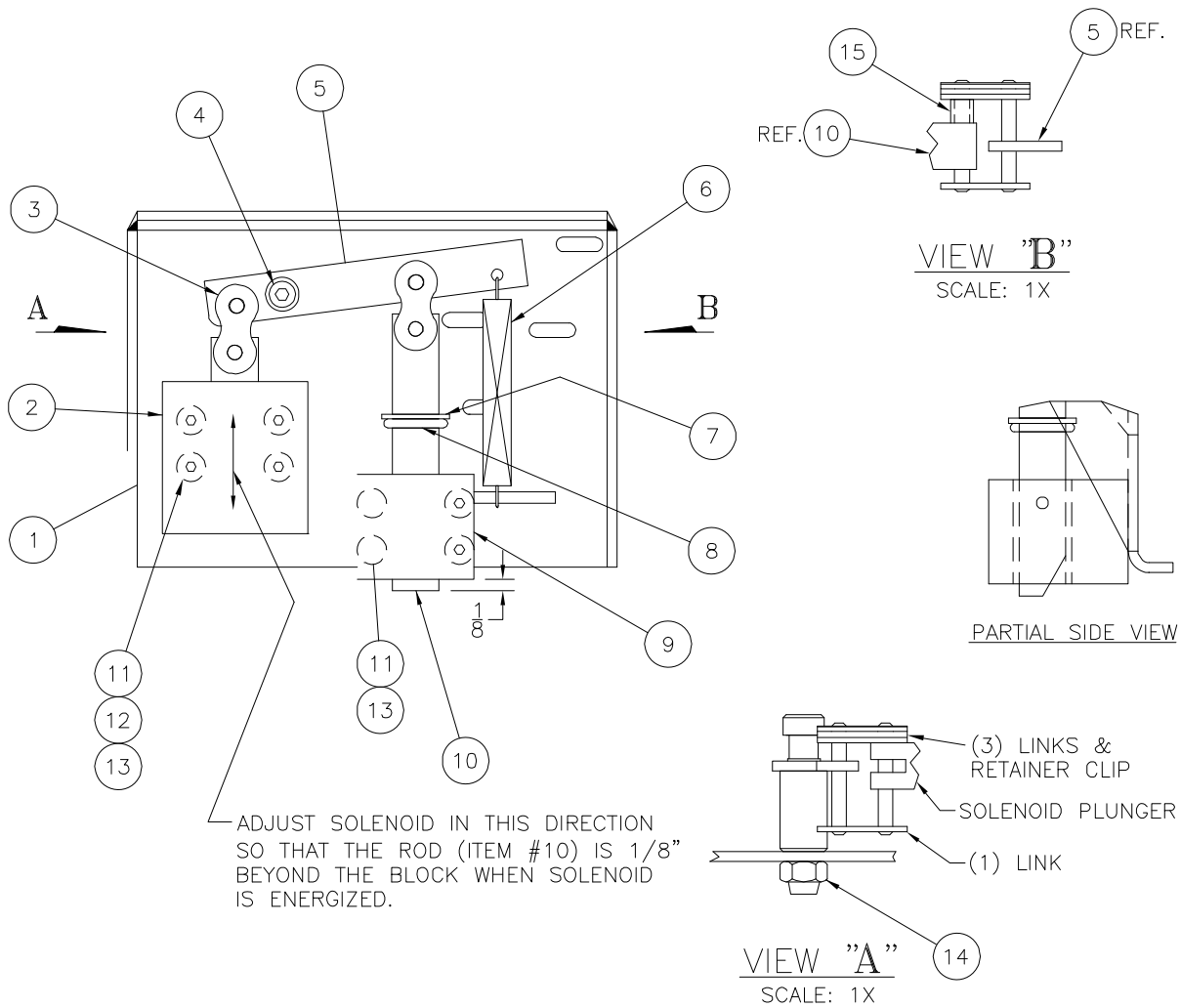
WIRING DETAIL



WIRE	ROUTE
WIRES ON THE CONTROLLER (ITEM #3)	
32	TO PECU TERMINAL (13) OR (23)
35	TO FUSE HOLDER "F7"
49	TO PCB H6-1 "OUT 1"
55	TO PCB H5-1 "IN1"
51	TO EXISTING POWER SUPPLY "+V"
51	TO EXISTING POWER SUPPLY "+V"
53	TO PCB H5-5 "IN5"
25	TO STARTER "MSCE1" N.C.
64	TO GRAY TERMINAL BLOCKS
64	TO GRAY TERMINAL BLOCKS
WIRES FROM TOUCH SW. CABLE (LH)	
50	TO EXISTING POWER SUPPLY "-V"
50	TO EXISTING POWER SUPPLY "-V"
51	TO CONTROLLER TERMINAL "S2"
54	TO CONTROLLER TERMINAL "S1"
WIRES FROM TOUCH SW. CABLE (RH)	
50	TO EXISTING POWER SUPPLY "-V"
50	TO EXISTING POWER SUPPLY "-V"
51	TO CONTROLLER TERMINAL "S4"
58	TO CONTROLLER TERMINAL "S3"

15.28 Knife Latch Assembly

47568-1, Rev. A



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	47505-1	PLATE- KNIFE LATCH MOUNT	1
2	E-974-3	SOLENOID	1
3	47567	LINK- CHAIN	2
4	H-5254-510	SCREW- 5/16 X 1-1/4 SOC. SHOULDER	1
5	47553-1	LINK ASSEMBLY- KNIFE LATCH	1
6	41117-1	SPRING- EXTENSION	1
7	H-6451-0500	RETAINING RING- GRIPPING EXTERNAL	1
8	S-1810-9	O' RING	1
9	41112-2	ASSEMBLY- KNIFE LATCH BLOCK	1
10	41116-2	ROD- KNIFE LATCH	1
11	H-6910-83203	SCREW- #8-32 X 3/8 BUT. HD. SOC.	8
12	H-7321-#8	WASHER- #8 SAE FLT PLTD	4
13	H-7324-#8	WASHER- #8 INT. TOOTH	8
14	H-5247-4	NUT- 1/4-20 FLEX LOCK	1
15	E-1152-9	SPACER	1

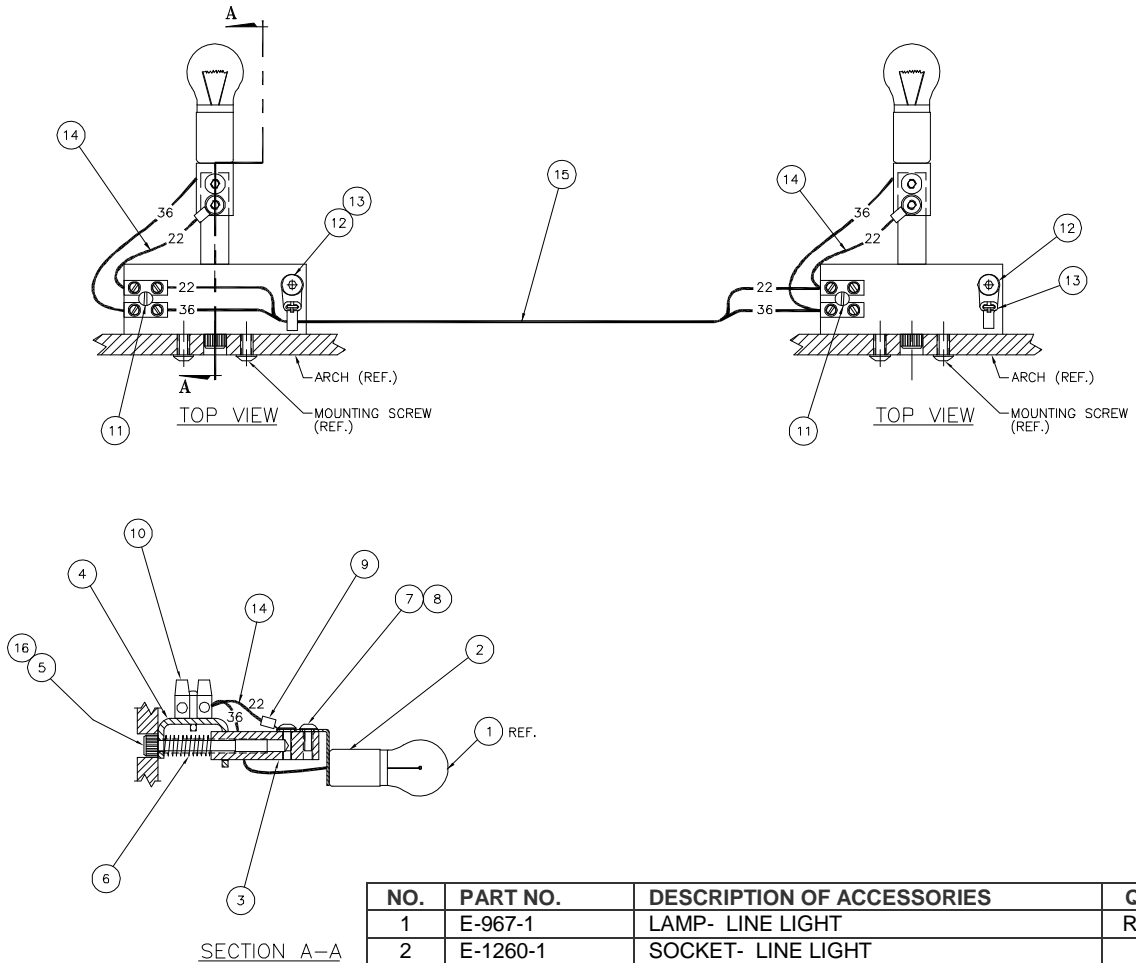
15.29 Line Light Assembly (Incandescent Type)

47538 rev. "D"

S/N's: 1509999 and below

S/N's: 305-J-151075 and below

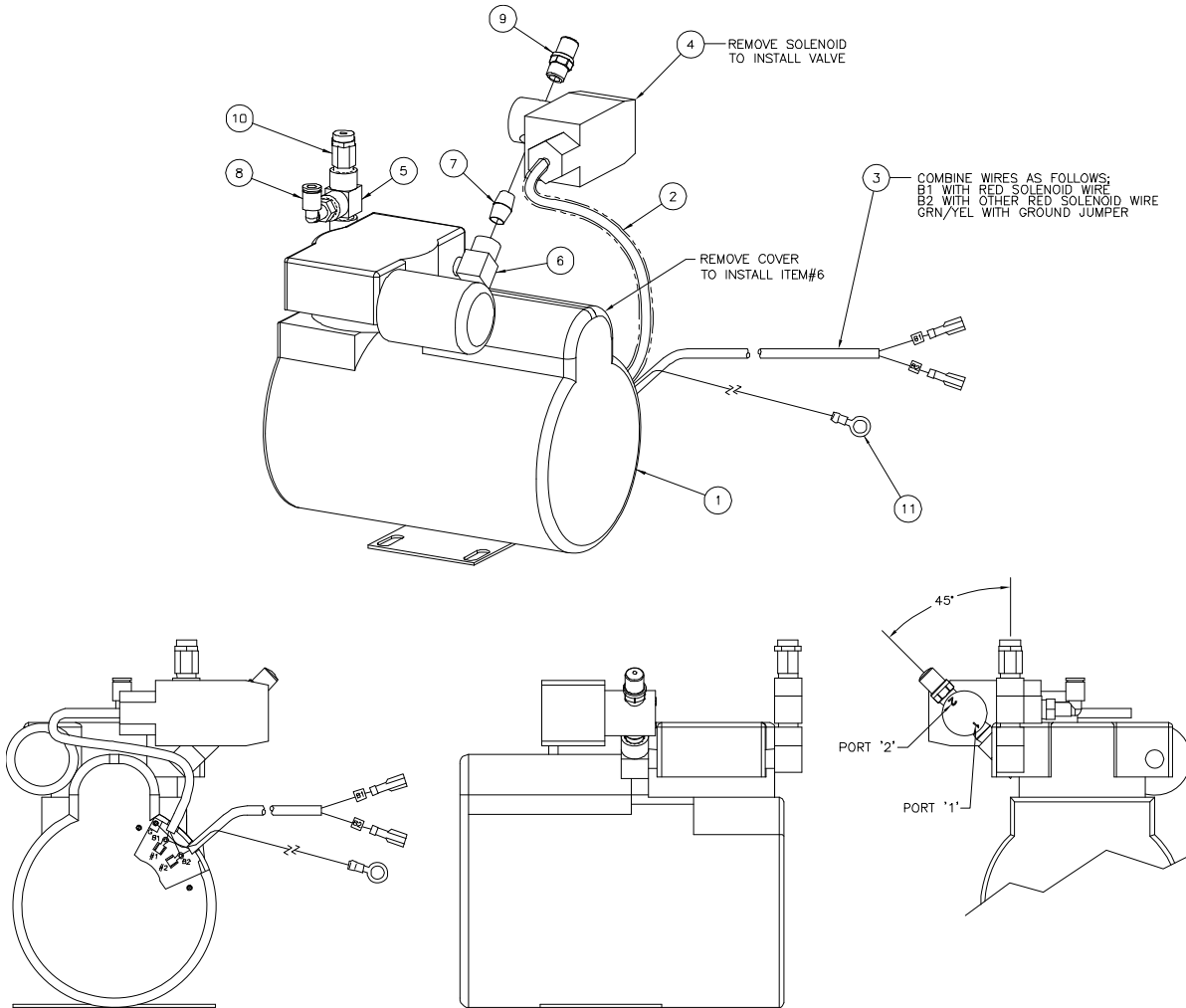
NOTE: For LED style line light (S/N's: 305-J-151076 and above), see Section 15.6 on page 66 for the LED line light assembly part number.



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	E-967-1	LAMP- LINE LIGHT	REF.
2	E-1260-1	SOCKET- LINE LIGHT	2
3	9127-1	SUPPORT- LINE LIGHT	2
4	47262	BRACKET- LINE LIGHT	2
5	H-6918-410	SCREW - 1/4-20 X 1-1/4 SOC HEAD CAP	2
6	35048-13	SPRING- COMPRESSION	2
7	H-6910-83203	SCREW- #8-32 X 3/8 BUT. HD. CAP.	4
8	H-7330-#8	WASHER- #8 INT. TOOTH	4
9	E-1214-9	CONNECTOR- #8 EYELET	2
10	E-2626-2	TERMINAL STRIP- 2 POLE	2
11	H-6923-44010	SCREW- #4-40 X 5/8 RD. HD. MACH.	2
12	H-6910-102403	SCREW- #10-24 X 3/8 BUTT. HD. CAP.	2
13	S-1694-2	TIE- CABLE	2
14	E-709-R	WIRE- #18 GA. RED MTW (4" LONG)	2
15	E-709-R	WIRE- #18 GA. RED MTW (16-1/2" LONG)	2
16	SU-10-106	GREASE - DAMPENING	1

15.30 Compressor Assembly

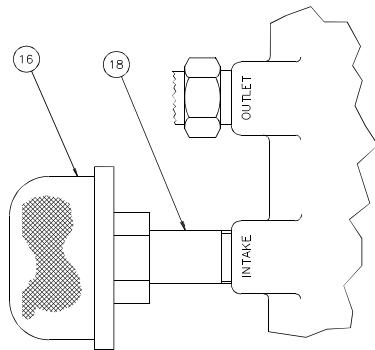
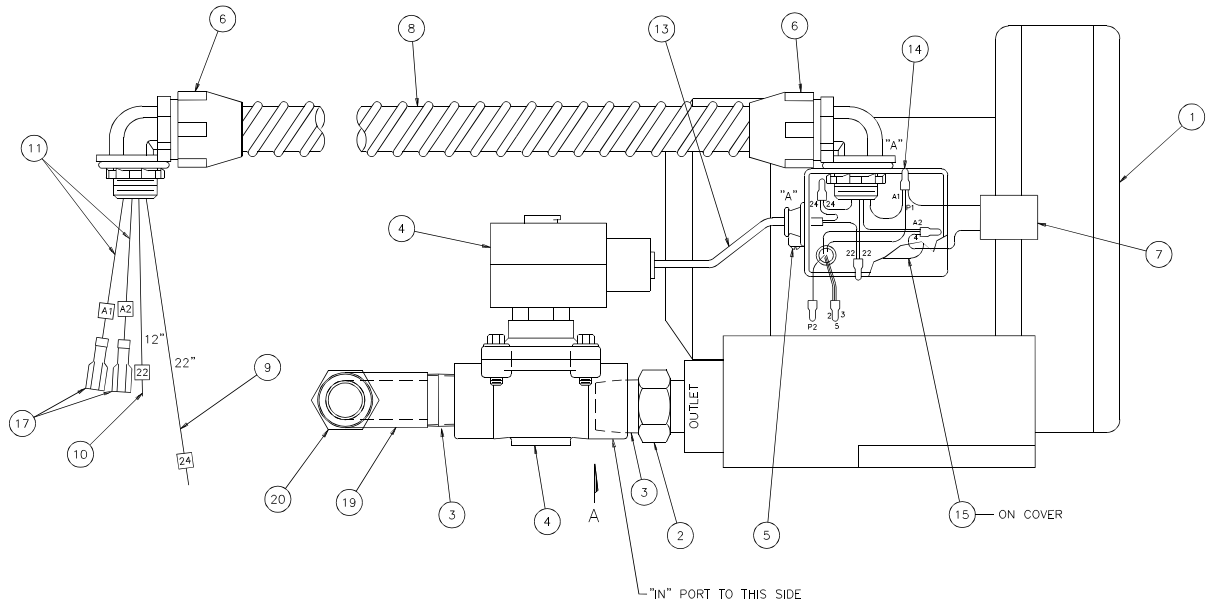
47645-1 Rev. E



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	47644	COMPRESSOR	1
2	E-1710-3	SPLIT TUBING	12"
3	EE-3210	CABLE ASSEMBLY- COMPRESSOR POWER	1
4	P-521	VALVE- 2-WAY, N.O.	1
5	H-261-3	TEE- 1/4 MALE RUN, BRASS	1
6	H-269-2	ELBOW - 90% $\frac{1}{8}$ STREET, BRASS	2
7	H-6406-407	NIPPLE- 1/4" X 7/8", BRASS	1
8	P-503-402	ELBOW-1/4 TUBE X 1/4 NPT	1
9	P-511	SILENCER - 1/4 NPT	1
10	P-520-125	VARIABLE PRESSURE RELIEF	1
11	EE-3212	WIRE ASM. - COMPRESSOR GROUND	1
12	S-1694	TYRAP - WIRE	2
13	E-1214-9	CONNECTOR - #8 RING	2

15.31 Air Table Blower Assembly

47578, Rev. C



WIRING CHART		
HIGH VOLTAGE	WIRE NO.	CONNECT TO BLOWER NO.
230V 60Hz 240V 50Hz	A1	P1
	A2	4
	-	P2
	-	2, 3 & 5

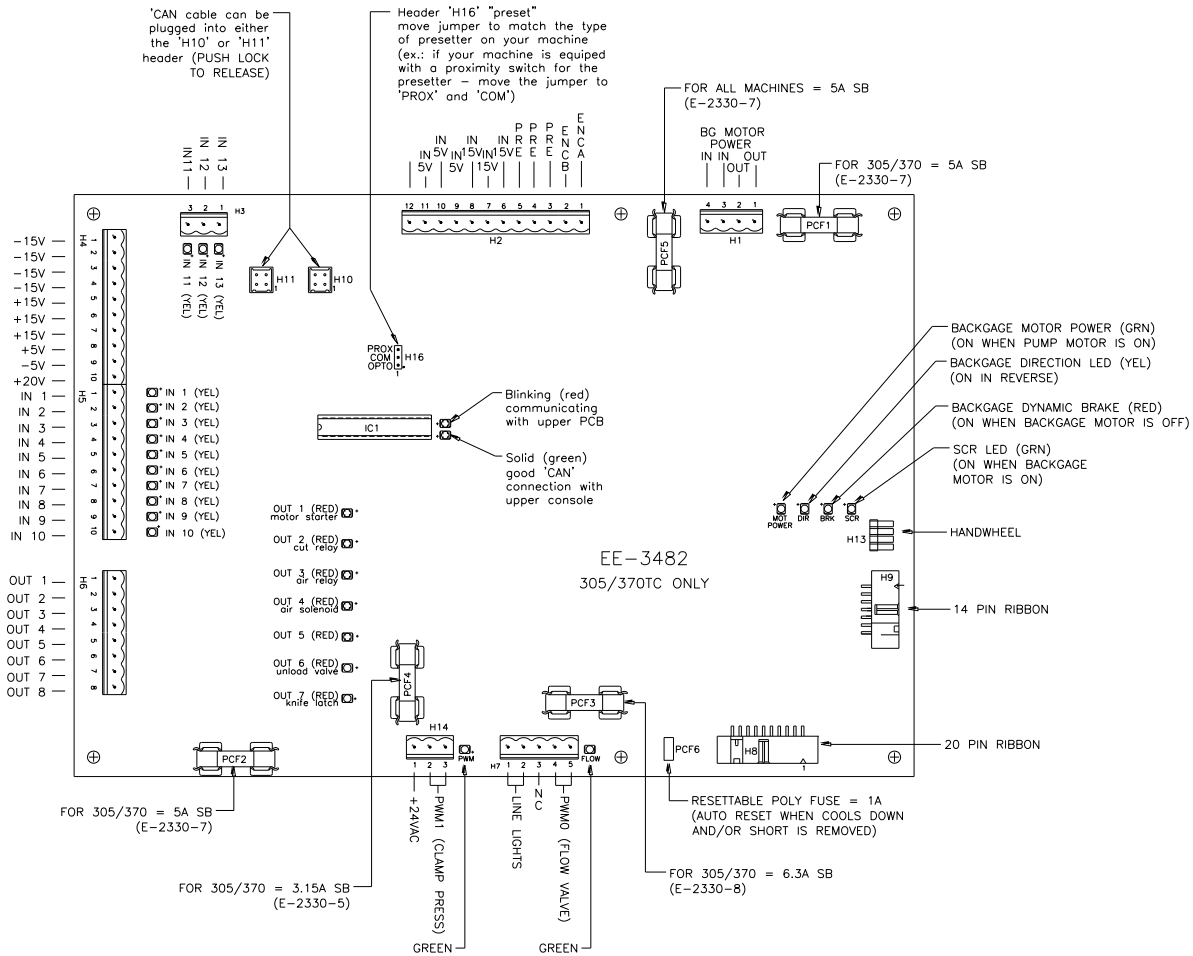
VIEW A
SCALE: NONE

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	E-1223-4	BLOWER - 1PH	1
2	P-204	REDUCER - PVC	1
3	H-6405-1212	NIPPLE - 3/4 CLOSE SCH 40	2
4	P-202-1	VALVE - SOLENOID	1
5	S-1350-16	STRAIN RELIEF	1
6	E-2190-1	CONNECTOR - 90° ELBOW	2
7	E-1736-2	QUENCHARC - 3" WIRE LEADS	1
8	E-2189-1	TUBING - 54" LONG	1
9	E-709-R	WIRE 18 GA RED MTW 81" LONG, #24	1
10	E-709-R	WIRE 18 GA RED MTW 71" LONG, #22	1
11	E-709-R	WIRE 18 GA RED MTW 67" LONG, #A1 & A2	2
12	E-1214-4	CONNECTOR - #8 INS. LOCKING FORK	1
13	E-1453-1	SHRINK TUBING - 6" LONG	1
14	E-1237-1	NUT - WIRE, SM YELLOW	6
15	S-1781-12	LABEL - EURO SHOCK W/TEXT	1
16	P-102	STRAINER	1
17	E-1214-49	CONNECTOR - 1/4" FULLY INS. QUICK DISC.	2
18	P-212-1	PIPE NIPPLE - 1" x 1-1/2 PLASTIC	1
19	P-463	THREADED "T"- PVC (3/4 NPT)	1
20	E-2191-2	CONNECTOR- STRAIGHT, PLASTIC CONDUIT	2

15.32 TC POWER PANEL PCB Troubleshooting

EE-3432

The following is a description of the various diagnostic LED's in the power panel. These lights are indicators used to show input and output status.



DESCRIPTION - INPUTS
IN 1: Left Cut Switch
IN 2: Clamp Up Limit
IN 3: Hyd. Cylinder Up Limit
IN 4: Knife Up Limit
IN 5: Right Cut Switch
IN 6: Cut Relay N.O. Contacts
IN 7: Pressure Switch
IN 8: MSCE1 (motor starter)
IN 9: Knife Down Limit
IN 10: Knife Latch
IN 11: not used
IN 12: False Clamp Switch
IN 13: Safety Eyes (PECU)
IN 14: not used
IN 15: not used

DESCRIPTION - OUTPUTS
OUT 1: Pump Motor Starter
OUT 2: Cut Relay "CR"
OUT 3: Air Relay "AR"
OUT 4: Air Solenoid
OUT 5:
OUT 6: Unload Valve
OUT 7: Knife Latch Solenoid

DESCRIPTION - FUSES
PCF1: BACKGAGE MOTOR
PCF2: OUTPUTS
PCF3: LINE LIGHTS
PCF4: PWM2 (FLOW VALVE)
PCF5: BACKGAGE MOTOR
PCF6: SEC. PWM0 PROTECTION

15.33 Description of Error Messages

Message	Description	Test
Backgauge Failure	Backgauge doesn't move	Mechanical bind; encoder failure; main pc board; blown fuse
Backgauge at Limit	Backgauge is all the way forward or backward	
lamp Up Failure	Clamp failed to return to up position within 7 seconds	Clamp up sequence valve; solenoid (cut) valve
Clamp Down Failure	Clamp failed to come down	Solenoid valves; low pressure; low voltage
Clamp or Knife Down	Clamp or knife stayed downs	No main pressure; stuck solenoid valve
Cut Relay Error 1	Cut relay energized when it should be off	Cut relay is stuck
Cut Relay Error 0	Cut relay de-energized when it should be energized	Output may be bad
DATA IS OUT OF RANGE	The number is outside the limits of the machine	Informational error
Hydraulic Latch Failure 1	Latch relay was OFF when it should have been ON	Defective relay
Hydraulic Latch Failure 0	Latch relay was ON when it should have been OFF	Defective relay
Key is Invalid in Graphics Mode	Tried to delete or insert a cut in an auto-programmed job	Information error
Knife Latch Failure 1	Latch prox. ON when it should have been OFF	Loose solenoid wire; mechanical bind; knife up prox. Switch out of adjustment; defective prox.Sw.
Knife Latch Failure 0	Latch prox. OFF when it should have been ON	
Knife Down Failure	Knife failed to come down within 4 seconds	Low main pressure; low voltage; knife down sequence valve
Knife Up Failure	Knife failed to return within 1.17 seconds	Mechanical bind; solenoid (cut) valve
Knife at Both Limits	Knife up and down prox. Switches are on at the same time	Prox. Switches; broken knife bar components
Lubricate Machine	Lubricate machine alarm	Have machine lubricated
Memory Failed	A memory error occurred during test	
Memory Locked	Tried to change a locked channel	
Motor Starter Error 1	Motor starter engaged when it should not have been	Starter stuck
Motor Starter Error 0	Motor starter disengaged when it should not have been	Output may be bad
Next Channel Locked	Tried to link two channels together and the linked channel is locked	
No Finish > Parent	While entering sheet division data, the sheet dimensions were greater than the starting sheet	
Number Outside of Limit	Selected cut position beyond machine limits	Operator error; false clamp limit

15.0 Schematics & Parts Lists

Positioning Error	Backgauge failed to move to programmed position within +/- .005	Mechanical bind; encoder failure; main pc board; leadscrew thrust washers loose; gives loose
Result is Negative	When a math operation yields a negative number	
Send Cancelled	Console key was pressed while backgauge was moving	Operator error; key board failure
Sequence Error	Timing error in either up or down cycle	Low main pressure; any sequence valve
Sharpen Knife	Sharpen knife alarm	Have knife sharpened
Shorted Key Error	Console key shorted	Operator error; defective keyboard

** IF ERROR CODES CANNOT BE RESET BY DEPRESSING THE CLEAR KEY, THE POWER WILL HAVE TO BE TURNED OFF AND ON**

15.34 Sensor Data Abbreviations

RGHTCUT	0	Right Cut Button	Under RHS of table front
LEFTCUT	0	Left Cut Button	Under LHS of table front
CUTRLY (input)	1	Cut Relay	On power panel
HYDLAT	1	Hydraulic Latch Relay	Main pc board
KNFDWN	0	Knife Down Proximity Switch	On bracket attached to knife cylinder
PRESET	1	Preset Sensor	Rear of cutter, under left side of table
CUTSOL (output)	0	Cut Relay	Relay below motor contactor
AIRSOL	0	Air Solenoid	Solenoid valve on top of air motor
KNLATSOL (output)	0	Knife Latch Solenoid	Behind display console, on latch assembly
CLAMPUP	1	Clamp up Proximity Switch	Rear of cutter, right side of arch
HYDUP	1	Hyd. Clamp Up Proximity	Rear of cutter, at top of clamp cylinder
KNFUP	1	Knife Up Proximity Switch	On bracket attached to knife cylinder
MTRSTRT (input)	0	Motor Start Relay	On top of motor contactor block
KNFLAT (input)	0	Knife Latch Prox.	Behind display console, on latch assembly
HYDMOT (output)	0	Hydraulic Motor Relay	Contactora, top right of main pcb
AIRMTR	0	Air Table Motor	Behind oil tank
LTLINE (output)	1	Line Light Output	Line light relay on main pcb
UNLOAD	0	Unload Valve	Solenoid valve on front of Manifold

15.35 Power Panel Connection Procedure Label (w/Fuses)

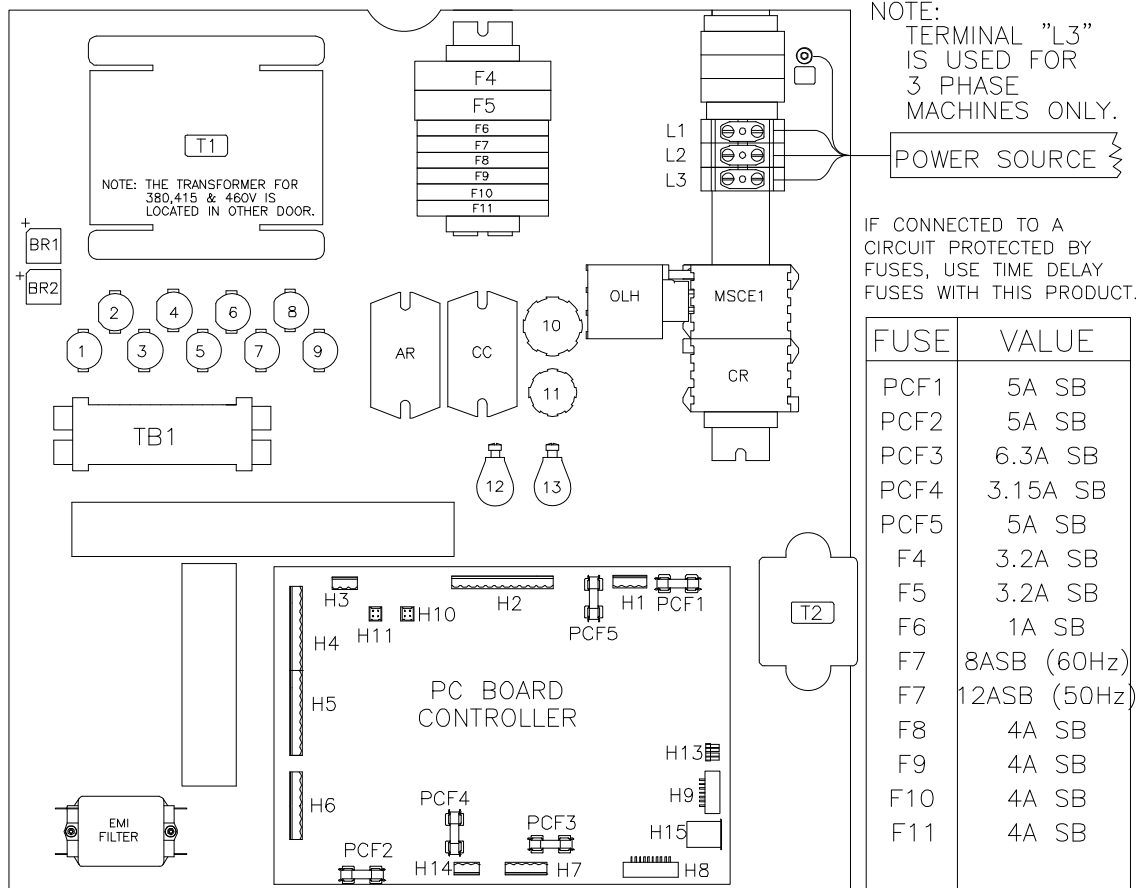
S-1781-211, Rev. A

!! NOTICE !!

INCORRECT POWER HOOK-UP WILL DAMAGE YOUR MACHINE!

⚠ WARNING: ALWAYS DISCONNECT POWER AT THE MAIN POWER PANEL BEFORE WORKING ON THE MACHINE. LOCK IT OUT TO PREVENT ACCIDENTAL POWER UP. SEE POWER PANEL LOCKOUT PROCEDURE, PAGE 4, OF THE INSTRUCTION AND PARTS MANUAL.

⚠ CAUTION: FOLLOW CONNECTION DIAGRAM ON CONTROL TRANSFORMER (T1) FOR PROPER PRIMARY TAP CONNECTION. USE PROPER TAP THAT MATCHES VOLTAGE SUPPLIED TO THE MACHINE.



⚠ CAUTION: FIRE HAZARD, REPLACE FUSE ONLY WITH SAME TYPE AND RATING
 EXPORT VOLTAGES: FOR 380, 415 AND 460V MACHINES, FUSES "F4" AND "F5" MUST BE RATED FOR 500V OR MORE.

305/370 TC SPACER

S-1781-211

15.36 Power Panel Connection Procedure Label (w/Circuit Breakers)

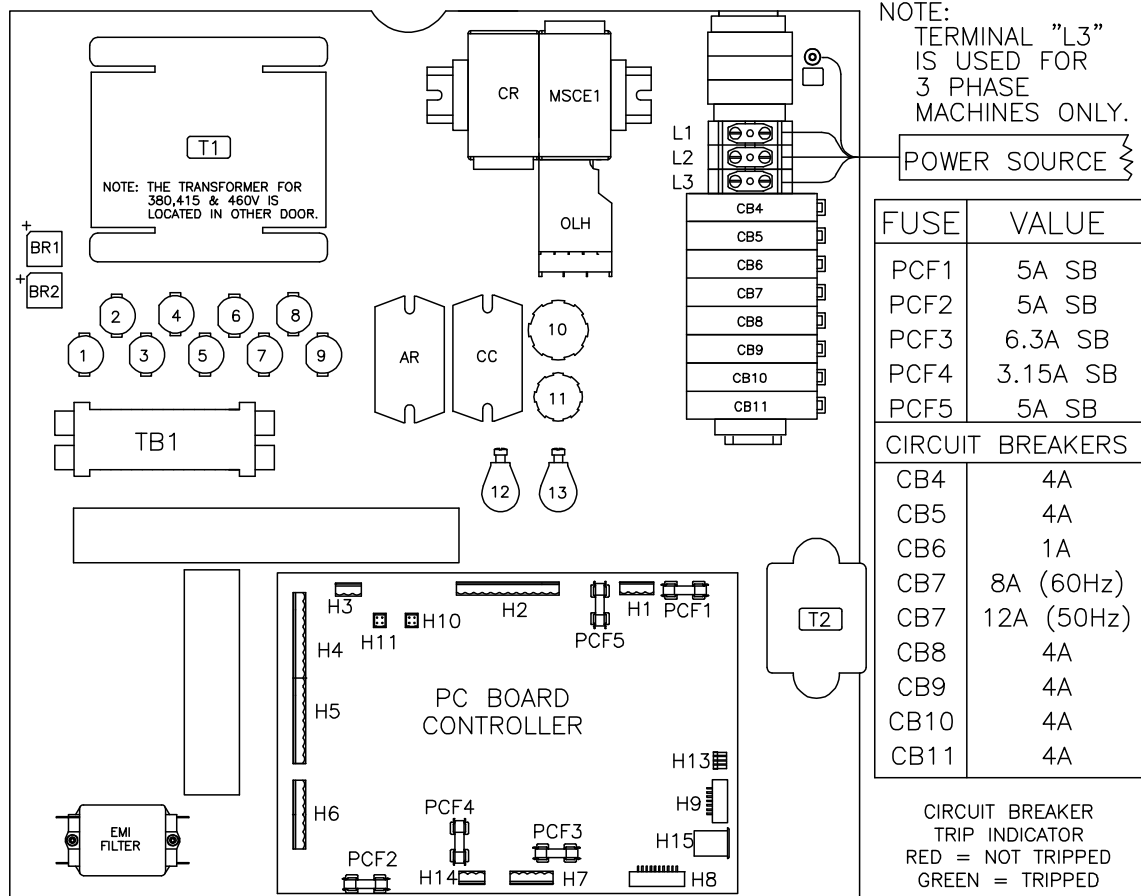
S-1781-230 rev. "A"

!! NOTICE !!

INCORRECT POWER HOOK-UP WILL DAMAGE YOUR MACHINE!

WARNING: ALWAYS DISCONNECT POWER AT THE MAIN POWER PANEL BEFORE WORKING ON THE MACHINE. LOCK IT OUT TO PREVENT ACCIDENTAL POWER UP. SEE POWER PANEL LOCKOUT PROCEDURE, PAGE 4, OF THE INSTRUCTION AND PARTS MANUAL.

CAUTION: FOLLOW CONNECTION DIAGRAM ON CONTROL TRANSFORMER (T1) FOR PROPER PRIMARY TAP CONNECTION. USE PROPER TAP THAT MATCHES VOLTAGE SUPPLIED TO THE MACHINE.











CAUTION: FIRE HAZARD, REPLACE FUSE ONLY WITH SAME TYPE AND RATING

305/370 TC SPACER (W/CIRCUIT BREAKERS)

S-1781-230

15.37 Warning Label

S-1781-116, Rev. D

 CAUTION ¡PRECAUCION! ATTENTION ACHTUNG 	
 <p>CRUSH HAZARD-keep hands from under paper clamp and knife. Use hand tools to load paper, and backsage to push out trimmed stock.</p> <p>PELIGRO DE APLASTE- no mete las manos bajo la prensa del papel o la cuchilla. Use herramientas de mano para poner papel en la prensa y el sujetador lateral para sacar el papel cortado.</p> <p>DANGER D'ECRASUREMENT- Gardez vos mains a l'ecart de la pince a papier et du couteau. Utilisez les outils pour charger le papier et la coulisseau pour pousser le matériel coupe.</p> <p>ZERQUETSCHUNGSGEFAHR-Hände nicht unter die Papierklammer und das Papierschneidmesser halten. Benutzen Sie zum Laden des Papiers Handwerkzeuge, und den Papierschlitzen, um das geschnittene Papier auszuweisen.</p>	 <p>READ the instruction manual and SAFETY PRECAUTIONS, before operating. Ask your supervisor for a copy.</p> <p>LEER DETENIDAMENTE el manual de Instrucciones y las PRECAUCIONES DE SEGURIDAD antes del funcionamiento. Pida a su distribuidor una copia.</p> <p>LIRE le manuel d'instruction et LES PRÉCAUTIONS DE SÉCURITÉ avant le fonctionnement. Demander à votre surveillant pour une copie.</p> <p>Vor Inbetriebnahme Anleitung und SICHERHEITS-VORSCHRIFTEN LESEN! Lassen Sie sich von Ihrem Vorgesetzten ein Exemplar geben.</p>
 <p>DO NOT ALTER SAFETY MECHANISMS, they are for your protection.</p> <p>NO ALTERAR LOS MECANISMOS DE SEGURIDAD, son para su protección.</p> <p>NE PAS CHANGER LES MÉCANISMES DE SÉCURITÉ, ils sont pour votre protection.</p> <p>SICHERHEITSMECHANISMEN DÜRFEN NICHT GEÄNDERT WERDEN, sie sind zur Gewährleistung Ihrer Sicherheit vorhanden.</p>	 <p>DISCONNECT POWER before cleaning, servicing, adjusting, or lubricating.</p> <p>DESCONECTAR LA CORRIENTE ELECTRICA antes de limpiar, ajustar o lubricar la maquina.</p> <p>DÉBRANCHER LA PUISSANCE avant le nettoyage, l'entretien, l'ajustage, ou avant de lubrifier.</p> <p>Vor Säuberung, Instandhaltung, Einstellung oder Schmierem STROM ABSCHALTEN!</p>
 <p>DO NOT OPERATE WITH MORE THAN ONE PERSON!</p> <p>NO MANEJAR LA MAQUINA MAS DE UNA PERSONA!</p> <p>NE PAS FAIRE FONCTIONNER AVEC PLUS D'UNE PERSONNE!</p> <p>INBETRIEBNAHME NUR MIT EINER PERSON GESTATTET!</p>	 <p>DO NOT OPERATE WITH ANY GUARDS REMOVED!</p> <p>NO TRABAJAR SIN ALGUNO DE LOS MECANISMOS DE SEGURIDAD!</p> <p>NE PAS FAIRE FONCTIONNER AVEC AUCUNES PROTECTIONS ENLEVÉES!</p> <p>NICHT IN BETRIEB NEHMEN WENN EINE SCHUTZVORRICHTUNG ENTFERNT IST!</p>

S-1781-116

15.38 Paper Deflector Kit (Option)

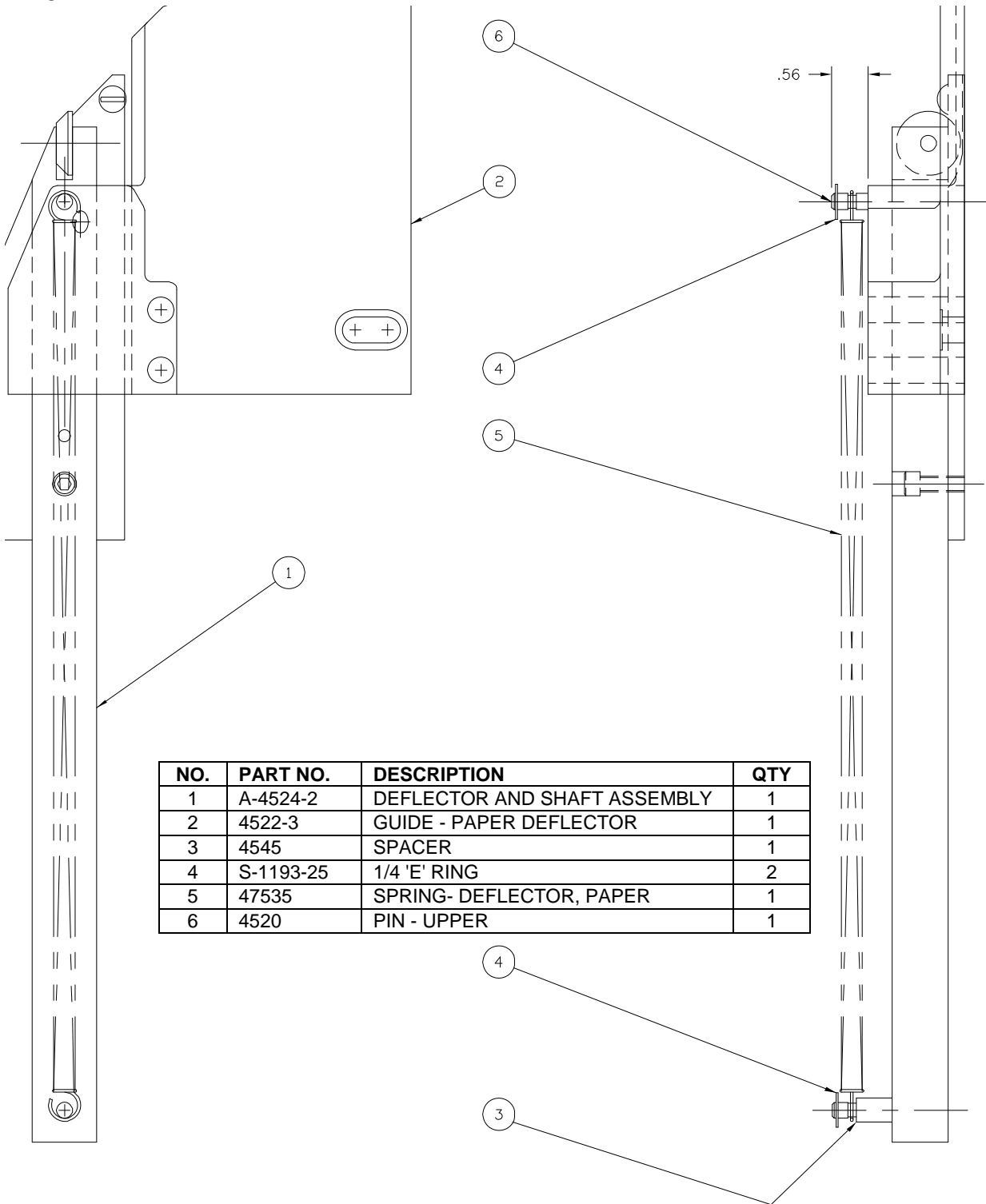
AA-13936-1, Rev. A

Kit includes the following parts:

NO.	PART NO.	DESCRIPTION	QTY
1	A-4511-2	DEFLECTOR ASSEMBLY	1
2	H-6918-616	3/8-16 X 2 SOCKET HEAD CAP SCREW	2
3	H-6918-606	3/8-16 X 3/4 SOCKET HEAD CAP SCREW	1
4	A-4497	LOCK STUD ASSEMBLY	1
5	H-7324-12	3/8 INT. TOOTH LOCKWASHER	3
6	B-2152	BOX	1
7	5-6-27B	STOP- CUT STICK, LH	1
8	H-6909-83203	SCREW- #8-32 X 3/8 FLAT HEAD	1

15.38.1 Deflector & Shaft Assembly (Part of Paper Deflector Kit)

A-4511-2



NO.	PART NO.	DESCRIPTION	QTY
1	A-4524-2	DEFLECTOR AND SHAFT ASSEMBLY	1
2	4522-3	GUIDE - PAPER DEFLECTOR	1
3	4545	SPACER	1
4	S-1193-25	1/4 'E' RING	2
5	47535	SPRING- DEFLECTOR, PAPER	1
6	4520	PIN - UPPER	1