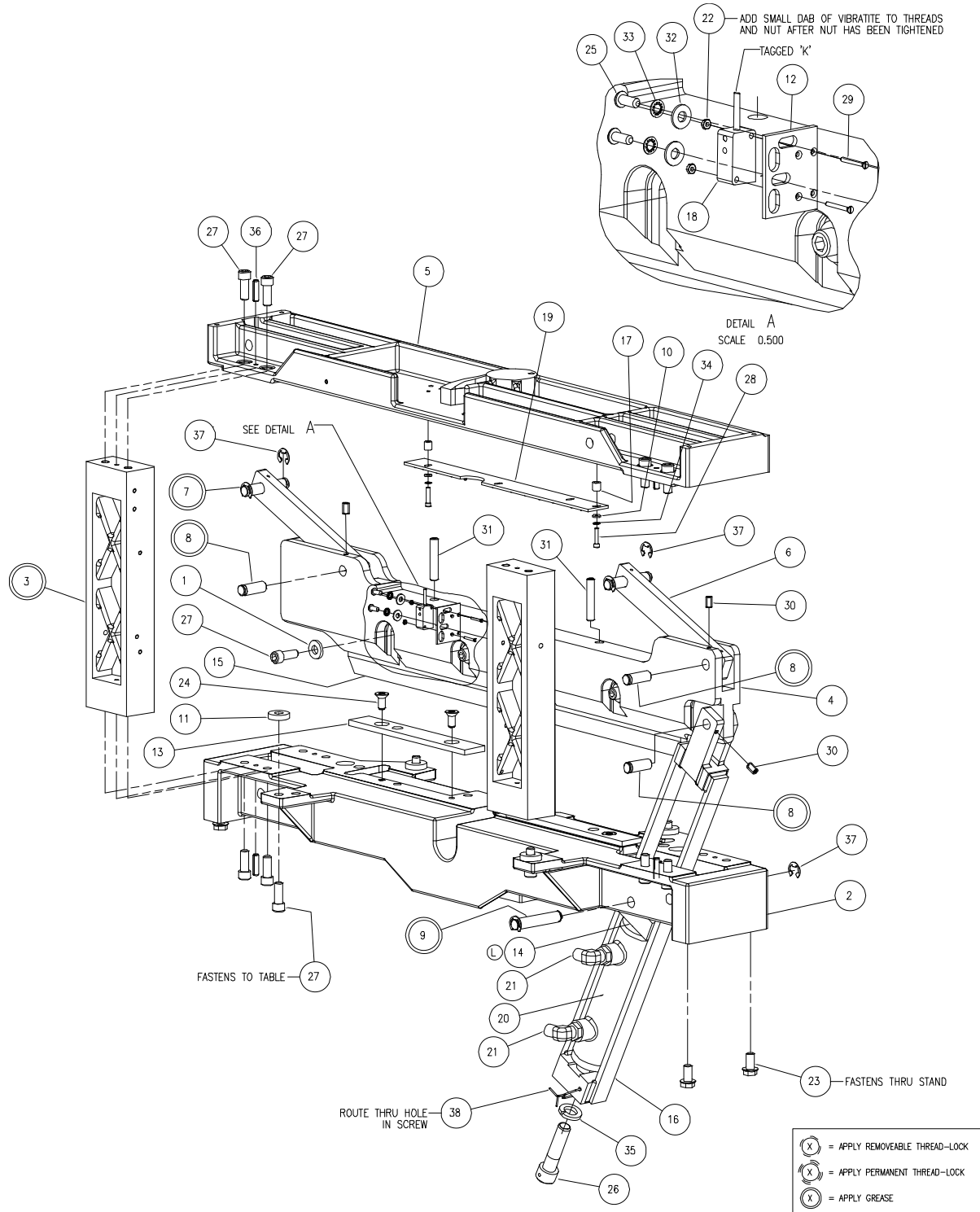


# 4.0 Schematics & Parts Lists

## 4.1 Main Assembly– Knife

71000 Sht. 1



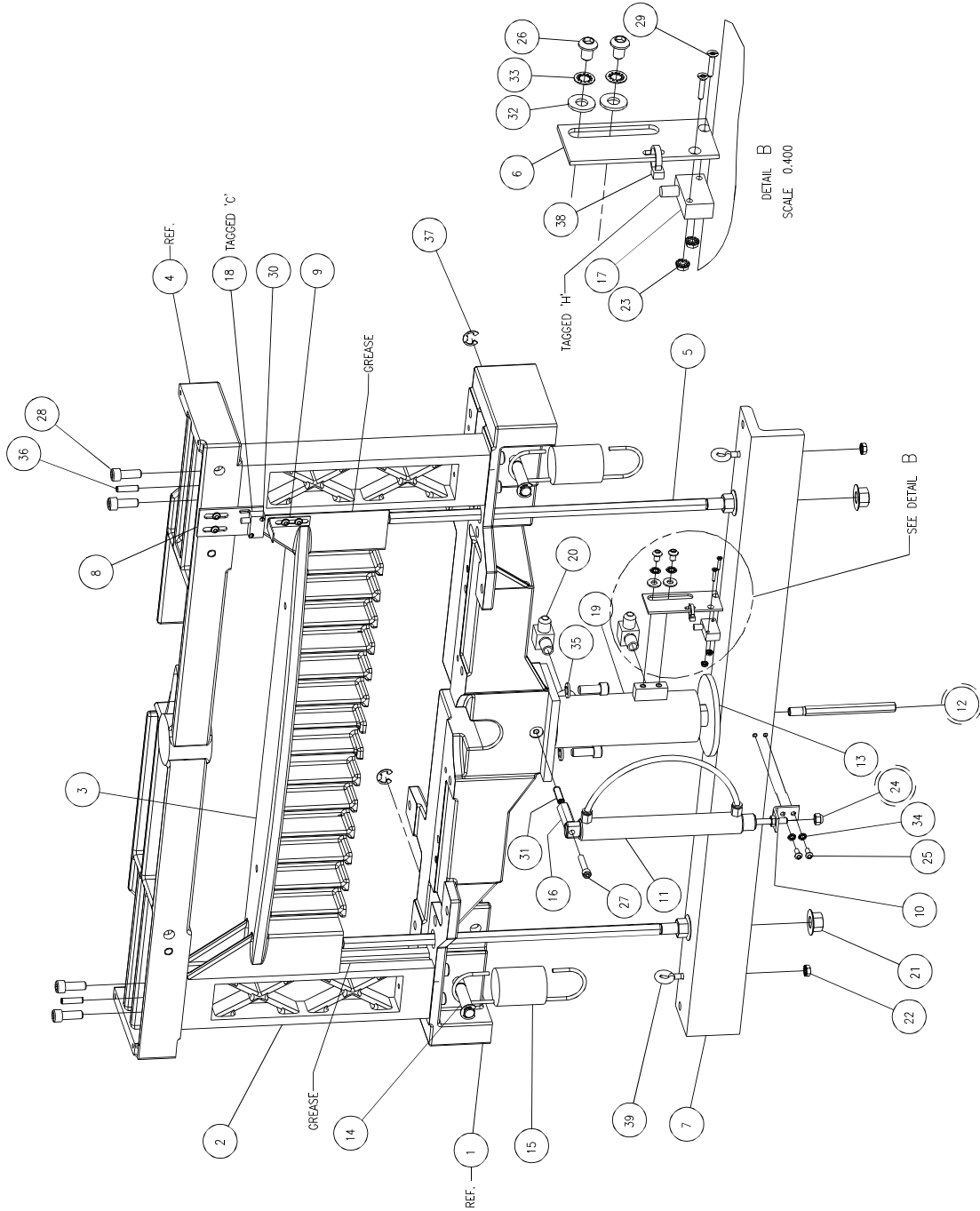
## Main Assembly- Knife

71000 Sht. 1

NO.	PART NO.	DESCRIPTION	QTY
1	8815	WASHER - 3/8 HEAVY	4
2	10001-1	BASE	1
3	10002-2	FRONT GUIDE	2
4	10003	KNIFE BAR	1
5	10007-2	ARCH	1
6	10008	LINK- KNIFE BAR	2
7	10009	PIN- LINK	2
8	10010	PIN- KNIFE BAR	3
9	10064	PIN -- STRAIGHT ROD END	1
10	11288-7	WASHER/SPACER	2
11	20075-9	SHIM	4
12	41008	BRACKET- PROX, KNIFE DOWN	1
13	43056	SPACER- TABLE	2
14	71008	CYL. SPACER BLOCK	1
15	A-10034	KNIFE	1
16	AA-10018-1	CYLINDER BRACKET WELDMENT	1
17	E-1152-73	STANDOFF	2
18	EE-2770-4	PROX. ASM.- KNIFE UP LIMIT	REF
19	EE-3081-2	BOARD	1
20	H-210-3	KNIFE CYL, NPT PORTS (S/N 14xxxxx & BELOW)	1
	H-210-4	KNIFE CYL, O-RING PORTS (S/N 14xxxxx & ABOVE)	
21	H-237-4	ELBOW- NPT TO TUBE (S/N 14xxxxx & BELOW)	2
	H-230-3	ELBOW- ORING TO TUBE (S/N 14xxxxx & ABOVE)	
22	H-6417-#2	NUT - #2-56 HEX	2
23	H-6894-606	SCREW - 3/8-16 X 3/4 WHIZ LOCK	4
24	H-6909-506	SCREW - 5/16-18 X 3/4" FLAT HEAD CAP	4
25	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	2
26	H-6918-1020HH	SCREW - 5/8-11 X 2-1/2 SOC HEAD - HOLE IN HEAD	1
27	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	16
28	H-6918-83206	SCREW - #8-32 X 3/4 SOCKET HEAD CAP	2
29	H-6922-25612	SCREW - #2-56 X 3/4 FLAT HEAD CAP	2
30	H-6938-102408	SCREW - #10-24 X 1/2 CUP SOC SET	3
31	H-6940-632	SCREW - 3/8-16 X 2 FLAT SOC SET	2
32	H-7321-#10	WASHER - #10 SAE PLAIN	2
33	H-7324-#10	WASHER - #10 INT TOOTH	2
34	H-7324-#8	WASHER - #8 INT TOOTH	2
35	H-7327-20	WASHER - 5/8 MEDIUM LOCK	1
36	H-21S-250-1000	ROLL PIN - 1/4 X 1	4
37	S-1193-50	E-RING - 1/2"	6
38	S-2024	SAFETY WIRE	1

# 4.2 Main Assembly- Clamp

71000 Sht. 2



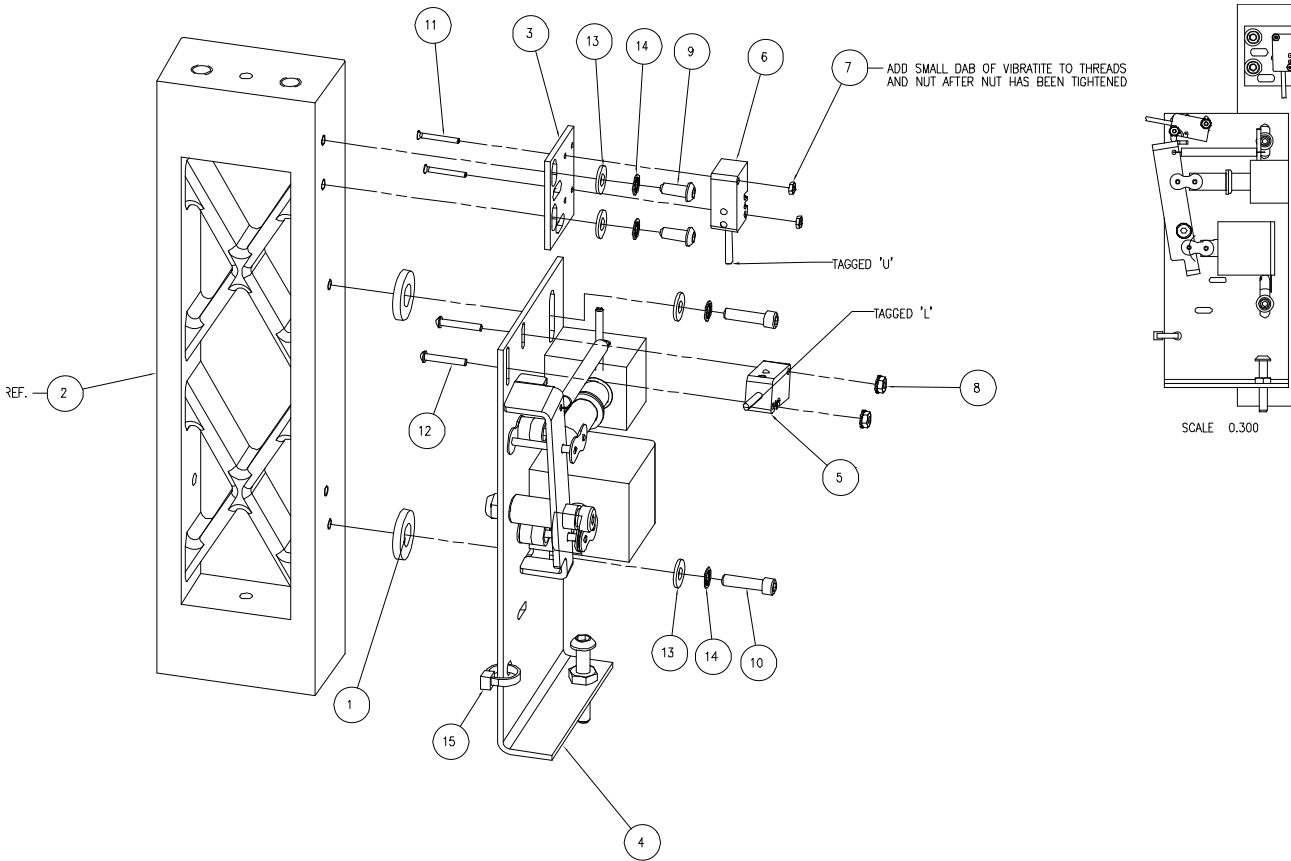
## Main Assembly- Clamp

71000 Sht. 2

NO.	PART NO.	DESCRIPTION	QTY
1	10001-1	BASE	1
2	10002-3	REAR GUIDE	2
3	10004-3	CLAMP	1
4	10007-2	ARCH	1
5	10075-1	ROD- CLAMP	2
6	41033	BRACKET- CLAMP UP	1
7	43030	PULLDOWN- FOOT PEDAL	1
8	43033	BRACKET- CLAMP UP PROX.	1
9	43034	ACTUATOR- CLAMP UP	1
10	43061	BRACKET- DAMPER	1
11	43073	DAMPER ASSEMBLY	1
12	43074	ROD - CLAMP CYLINDER	1
13	43076	ACTUATOR - HYDRAULIC UP PROX.	1
14	47086	PIN- BELL CRANK	2
15	47136-3	EXTENSION SPRING	2
16	E-1152-68	STANDOFF	1
17	EE-2770-1	PROX. ASM.- HYDRAULIC UP	1
18	EE-2770-2	PROX. ASM.- CLAMP UP LIMIT	1
19	H-211-1	CLAMP CYL, NPT PORTS (S/N 14xxxxx & BELOW)	1
	H-211-3	CLAMP CYL, O-RING PORTS (S/N 14xxxxx & ABOVE)	
20	H-237-4	ELBOW- NPT TO TUBE (S/N 14xxxxx & BELOW)	2
	H-230-3	ELBOW- ORING TO TUBE (S/N 14xxxxx & ABOVE)	
21	H-6414-8	NUT - 1/2-13 WHIZ LOCK	4
22	H-6423-4	NUT - 1/4-20 HEX KEP	2
23	H-6423-N4	NUT - #4-40 HEX KEP	2
24	H-6443-4	NUT - 1/4-20 UNF FLEX LOCK	1
25	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	6
26	H-6910-403	SCREW - 1/4-20 X 3/8 BUTTON HEAD CAP	2
27	H-6918-410	SCREW - 1/4-20 X 1-1/4 SOCKET HEAD CAP	1
28	H-6918-608	SCREW - 3/8-16 X 1 SOCKET HEAD CAP	10
29	H-6922-44010	SCREW - #4-40 X 5/8 FLAT HEAD CAP	2
30	H-6923-44012	SCREW - #4-40 X 3/4 ROUND HD MACH	2
31	H-6938-416	SCREW - 1/4-20 X 1 CUP SOC SET	1
32	H-7321-4	WASHER - 1/4 SAE PLAIN	2
33	H-7324-8	WASHER - 1/4 INT TOOTH	2
34	H-7324-#10	WASHER - #10 INT TOOTH	6
35	H-7327-12	WASHER - 3/8 MEDIUM LOCK	2
36	H-21S-250-1000	ROLL PIN - 1/4 X 1	4
37	S-1193-50	E-RING - 1/2"	4
38	S-1694	TYRAP	1
39	S-1884	EYE BOLT W/ NUT	2

### 4.3 Main Assembly- Knife Latch

71000 Sht. 3

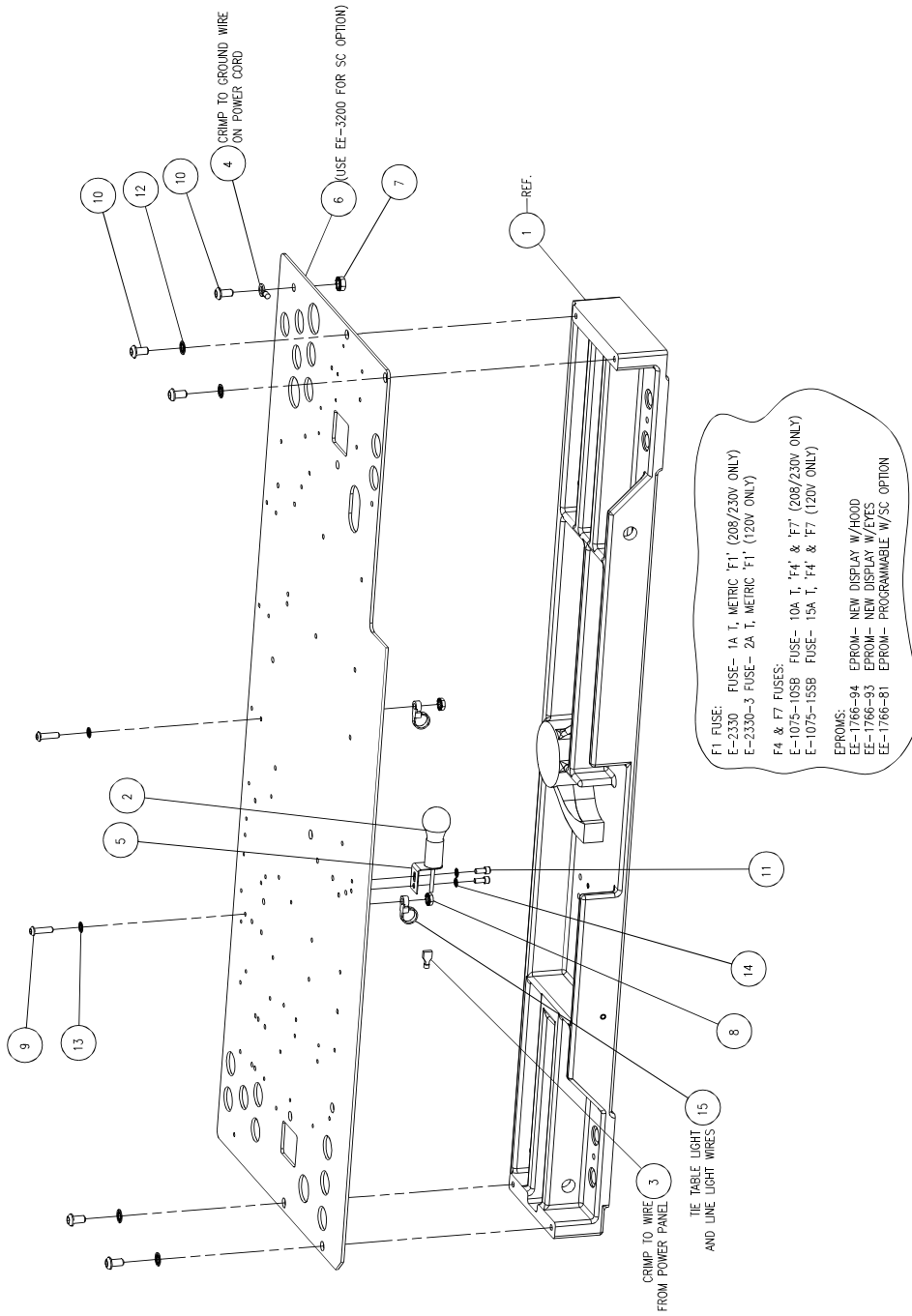


NO.	PART NO.	DESCRIPTION	QTY
1	8815	WASHER - KNIFE SCREWS	2
2	10002-2	FRONT GUIDE	1
3	41008	BRACKET- PROX, KNIFE DOWN	1
4	41120-4	ASSEMBLY- KNIFE LATCH	1
5	EE-2770	PROX. ASM.- KNIFE LATCH	1
6	EE-2770-4	PROX. ASM.- KNIFE UP LIMIT	1
7	H-6417-N2	NUT - #2-56 HEX	2
8	H-6423-N4	NUT - #4-40 HEX KEP	2
9	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	2
10	H-6918-102406	SCREW - #10-24 X 3/4 SOCKET HEAD CAP	2
11	H-6922-25612	SCREW - #2-56 X 3/4 FLAT HEAD CAP	2
12	H-6923-44012	SCREW - #4-40 X 3/4 ROUND HD MACH	2
13	H-7321-N10	WASHER - #10 SAE PLAIN	4
14	H-7324-N10	WASHER - #10 INT TOOTH	4
15	S-1694	TYRAP	1

**NOTES**

### 4.4 Main Assembly- Power Panel

71000 Sht. 4



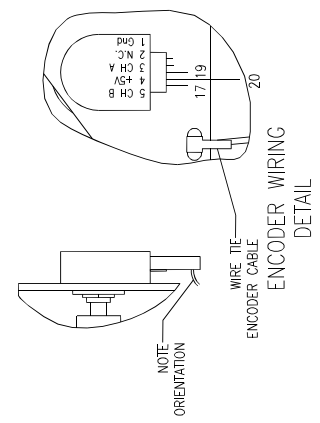
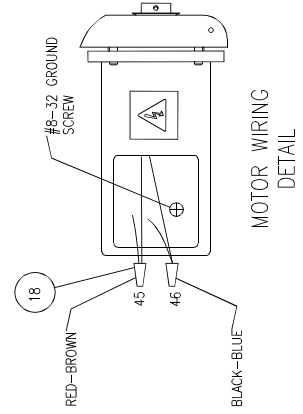
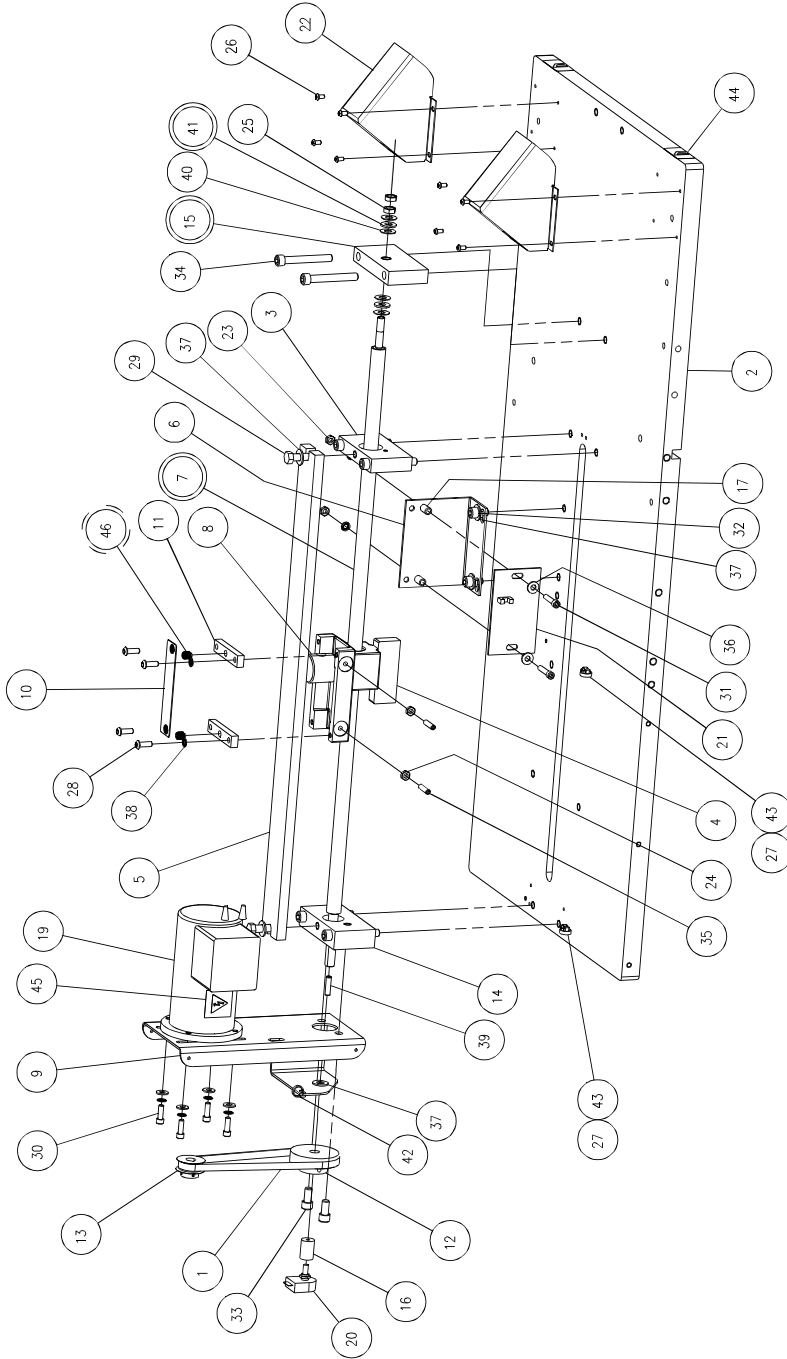
## Main Assembly- Power Panel

71000 Sht 4

NO.	PART NO.	DESCRIPTION	QTY
1	10007-2	ARCH	1
2	E-967-1	LIGHT BULB	1
3	E-1214-47	CONNECTOR - WIRE	1
4	E-1214-63	CONNECTOR - #10-RING	1
5	E-1260-1	SOCKET - LINE LIGHT	1
6	EE-2765-2	POWER PANEL	1
7	H-6423-4	NUT - 1/4-20 HEX KEP	1
8	H-6423-#10	NUT - #10-24 HEX KEP	2
9	H-6910-102406	SCREW - #10-24 X 3/4 BUTTON HEAD CAP	2
10	H-6910-404	SCREW - 1/4-20 X 1/2 BUTTON HEAD CAP	5
11	H-6918-83203	SCREW - #8-32 X 3/8 SOCKET HEAD CAP	2
12	H-7324-8	WASHER - 1/4 INT TOOTH	4
13	H-7324-#10	WASHER - #10 INT TOOTH	2
14	H-7324-#8	WASHER - #8 INT TOOTH	2
15	S-1694-2	TYRAP - #10	2

### 4.5 Main Assembly- Lead Screw

71000 Sht. 5  
 Serial Numbers 123692 and Below



## Main Assembly- Lead Screw

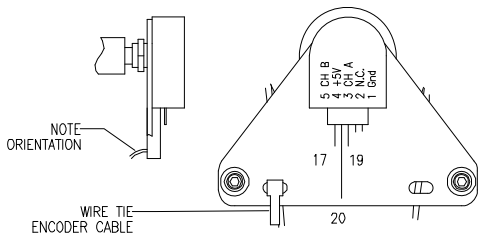
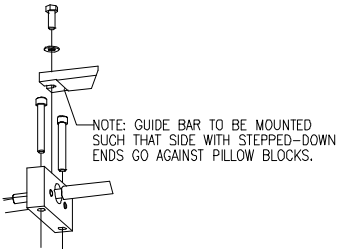
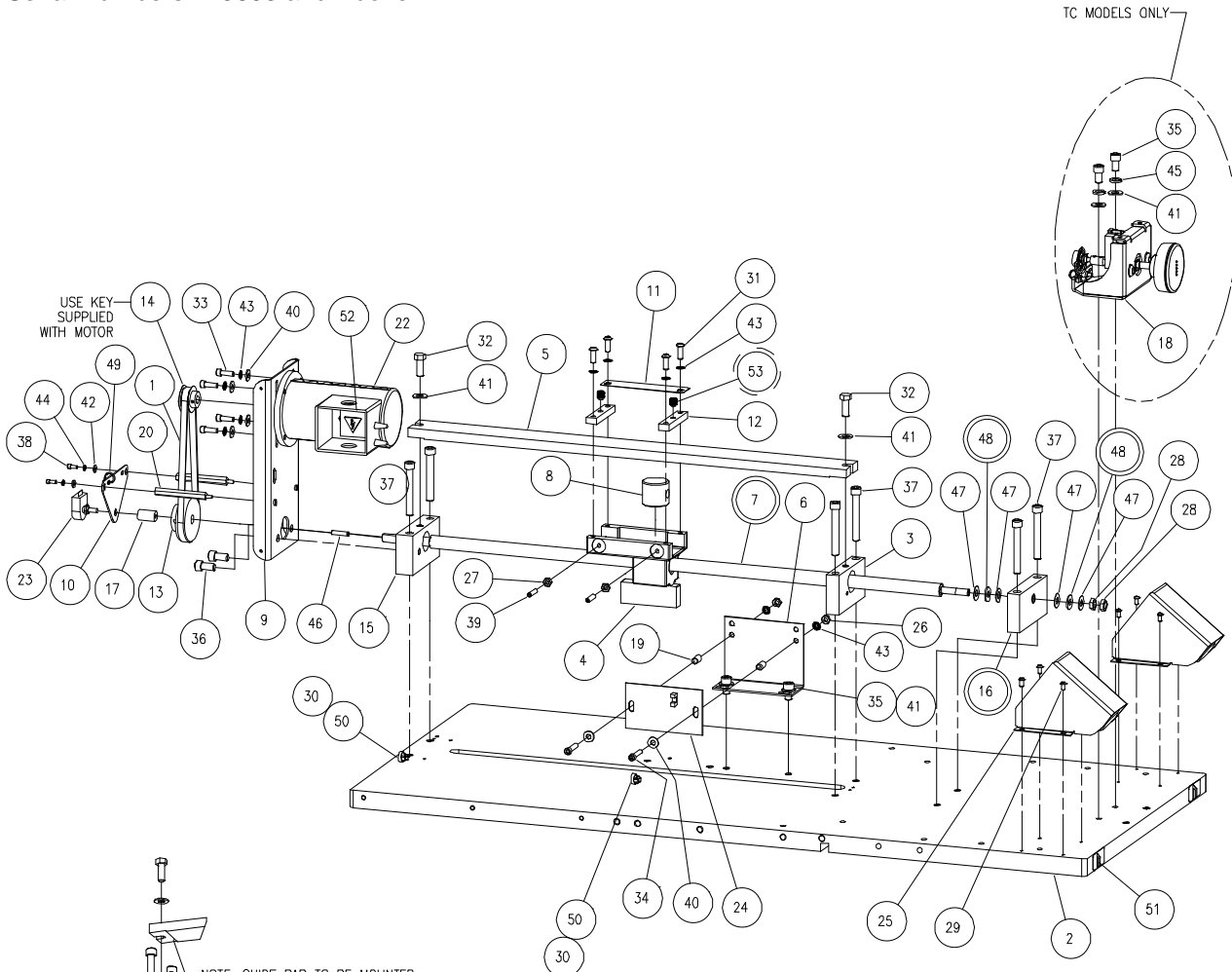
71000 Sht. 5

Serial Numbers 123692 and Below

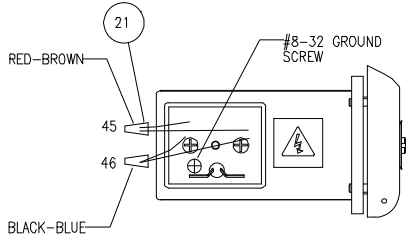
NO.	PART NO.	DESCRIPTION	QTY
1	7954	TIMING BELT- 200XL037	1
2	10025-2	TABLE	1
3	10026-5	PILLOW BLOCK- MIDDLE	1
4	10027-1	BACKGAUGE CARRIER	1
5	10028-2	GUIDE- BACKGAUGE BRACKET	1
6	10040-1	BRACKET- PRESET	1
7	43004-1	LEADSCREW- TITAN 200	1
8	43005-1	NUT- LEADSCREW	1
9	43027-2	BRACKET- MOTOR MOUNT	1
10	43032	WAND- PRESET	1
11	43060	STRAP	2
12	43062	PULLEY- LEADSCREW	1
13	43063	PULLEY- TIMING	1
14	43068	REAR PILLOW BLOCK ASSEMBLY	1
15	43069	PILLOW BLOCK ASM- FRONT	1
16	47053	COUPLING	1
17	E-1152-12	STANDOFF	2
18	E-1237-6	WIRE NUT - RED	2
19	E-1600-166	MOTOR- 180VDC	1
20	E-2467	ENCODER	1
21	EE-1688-1	PCB ASM- PRESET	1
22	EE-2851-3	BUTTON ASM. - CUT	2
23	H-6424-4	NUT - 1/4-20 HEX JAM	2
24	H-6428-4	NUT - 1/4-28 HEX JAM	2
25	H-6428-6	NUT - 3/8-24 HEX JAM	2
26	H-6910-102403	SCREW - #10-24 X 3/8 BUTTON HEAD CAP	8
27	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	2
28	H-6910-406	SCREW - 1/4-20 X 3/4 BUTTON HEAD CAP	4
29	H-6913-608	SCREW - 3/8-16 X 1 HEX HEAD CAP	2
30	H-6918-406	SCREW - 1/4-20 X 3/4 SOCKET HEAD CAP	4
31	H-6918-410	SCREW - 1/4-20 X 1-1/4 SOCKET HEAD CAP	2
32	H-6918-605	SCREW - 3/8-16 X 5/8 SOCKET HEAD CAP	2
33	H-6918-606	SCREW - 3/8-16 X 3/4 SOCKET HEAD CAP	2
34	H-6918-622	SCREW - 3/8-16 X 2-3/4 SOCKET HEAD CAP	6
35	H-6974-416	SCREW - 1/4-28 X 1 BRASS TIP SET	2
36	H-7321-4	WASHER - 1/4 SAE PLAIN	6
37	H-7321-6	WASHER - 3/8 SAE PLAIN	5
38	H-7324-8	WASHER - 1/4 INT TOOTH	10
39	H-215-250-1000	ROLL PIN - 1/4 X 1	1
40	S-1295-3	THRUST WASHER	4
41	S-1300-2	THRUST BEARING	2
42	S-1694	TYRAP	1
43	S-1694-2	TYRAP - #10	2
44	S-1781-115	LABEL	2
45	S-1781-50	LABEL - ELECTRIC SHOCK	1
46	S-1944-1	SCREW- NYLON TIP	2

### 4.6 Main Assembly- Lead Screw

71000 Sht. 5  
 Serial Numbers 123693 and Above



ENCODER WIRING  
 DETAIL  
 SCALE 0.500



MOTOR WIRING  
 DETAIL  
 SCALE 0.250

- (X) = APPLY REMOVEABLE THREAD-LOCK
- (X) = APPLY PERMANENT THREAD-LOCK
- (X) = APPLY GREASE

## Main Assembly- Lead Screw

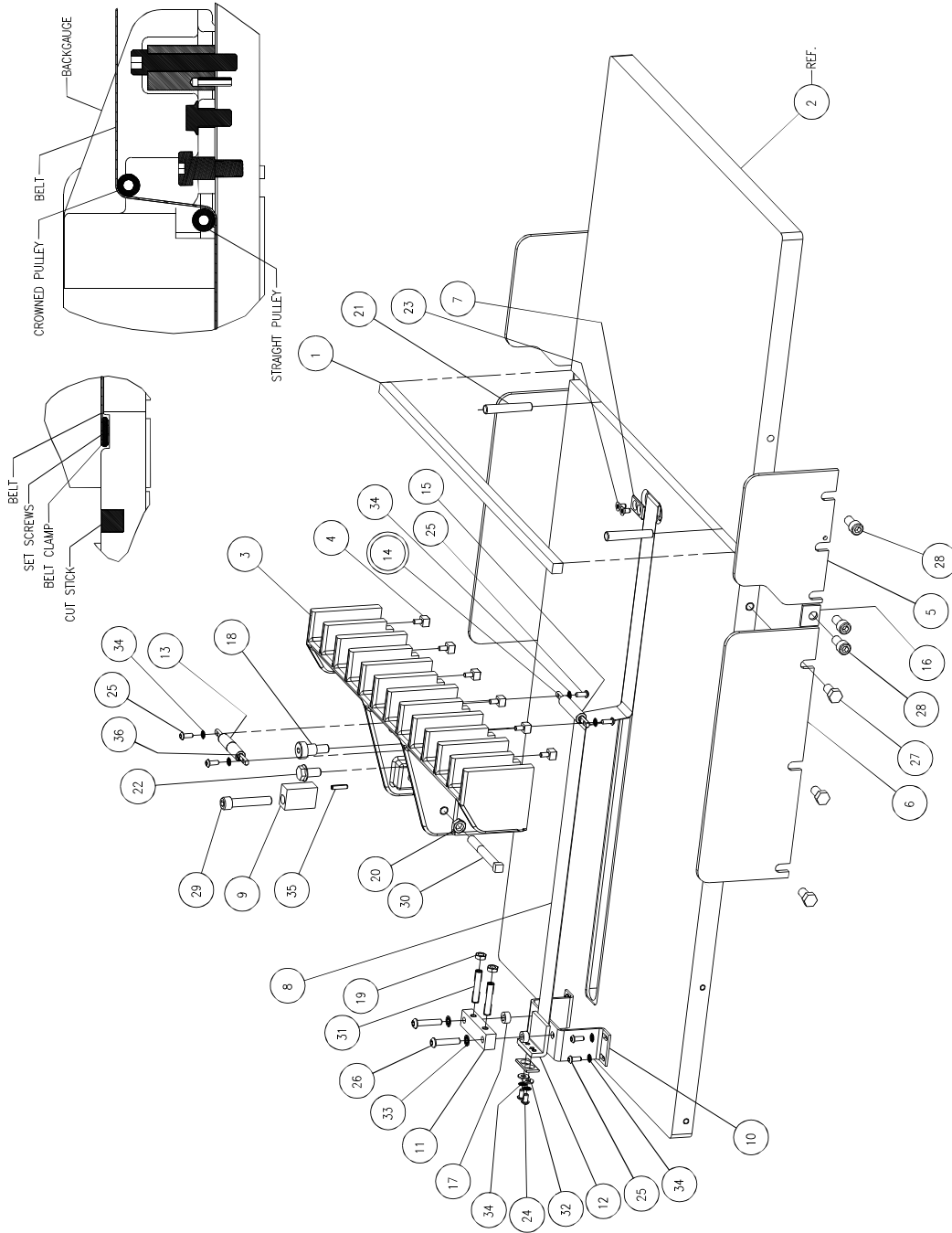
71000 Sht. 5

Serial Numbers 123693 and Above

NO.	PART NO.	DESCRIPTION	QTY
1	7954	TIMING BELT- 200XL037	1
2	10025-2	TABLE	1
3	10026-5	PILLOW BLOCK- MIDDLE	1
4	10027-1	BACKGAUGE CARRIER	1
5	10028-2	GUIDE- BACKGAUGE BRACKET	1
6	10040-1	BRACKET- PRESET	1
7	43004-1	LEADSCREW- TITAN 200	1
8	43005-1	NUT- LEADSCREW	1
9	43027-2	BRACKET- MOTOR MOUNT	1
10	43029	PLATE- ENCODER MOUNT	1
11	43032	WAND- PRESET	1
12	43060	STRAP	2
13	43062	PULLEY- LEADSCREW	1
14	43063	PULLEY- TIMING	1
15	43068	REAR PILLOW BLOCK ASSEMBLY	1
16	43069	PILLOW BLOCK ASM- FRONT	1
17	47053	COUPLING	1
18	49249	BACKGAUGE CONTROL ASSEMBLY	1
19	E-1152-12	STANDOFF	2
20	E-1152-60	STANDOFF	2
21	E-1237-6	WIRE NUT - BLUE	2
22	E-1600-166	MOTOR- 180VDC	1
23	E-2467	ENCODER	1
24	EE-1688-1	PCB ASM- PRESET	1
25	EE-2851-3	BUTTON ASM. - CUT	2
26	H-6424-4	NUT - 1/4-20 HEX JAM	2
27	H-6428-4	NUT - 1/4-28 HEX JAM	2
28	H-6428-6	NUT - 3/8-24 HEX JAM	2
29	H-6910-102403	SCREW - #10-24 X 3/8 BUTTON HEAD CAP	8
30	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	2
31	H-6910-406	SCREW - 1/4-20 X 3/4 BUTTON HEAD CAP	4
32	H-6913-608	SCREW - 3/8-16 X 1 HEX HEAD CAP	2
33	H-6918-406	SCREW - 1/4-20 X 3/4 SOCKET HEAD CAP	4
34	H-6918-410	SCREW - 1/4-20 X 1-1/4 SOCKET HEAD CAP	2
35	H-6918-605	SCREW - 3/8-16 X 5/8 SOCKET HEAD CAP	4
36	H-6918-606	SCREW - 3/8-16 X 3/4 SOCKET HEAD CAP	2
37	H-6918-622	SCREW - 3/8-16 X 2-3/4 SOCKET HEAD CAP	6
38	H-6918-83203	SCREW - #8-32 X 3/8 SOCKET HEAD CAP	2
39	H-6974-416	SCREW - 1/4-28 X 1 BRASS TIP SET	2
40	H-7321-4	WASHER - 1/4 SAE PLAIN	6
41	H-7321-6	WASHER - 3/8 SAE PLAIN	6
42	H-7321-#8	WASHER - #8 SAE PLAIN	2
43	H-7324-8	WASHER - 1/4 INT TOOTH	10
44	H-7324-#8	WASHER - #8 INT TOOTH	2
45	H-7327-12	WASHER - 3/8 MEDIUM LOCK	2
46	H-21S-250-1000	ROLL PIN - 1/4 X 1	1
47	S-1295-3	THRUST WASHER	4
48	S-1300-2	THRUST BEARING	2
49	S-1694	TYRAP	1
50	S-1694-2	TYRAP - #10	2
51	S-1781-115	LABEL	2
52	S-1781-50	LABEL - ELECTRIC SHOCK	1
53	S-1944-1	SCREW- NYLON TIP	2

# 4.7 Main Assembly- Backgauge

71000 Sht. 6



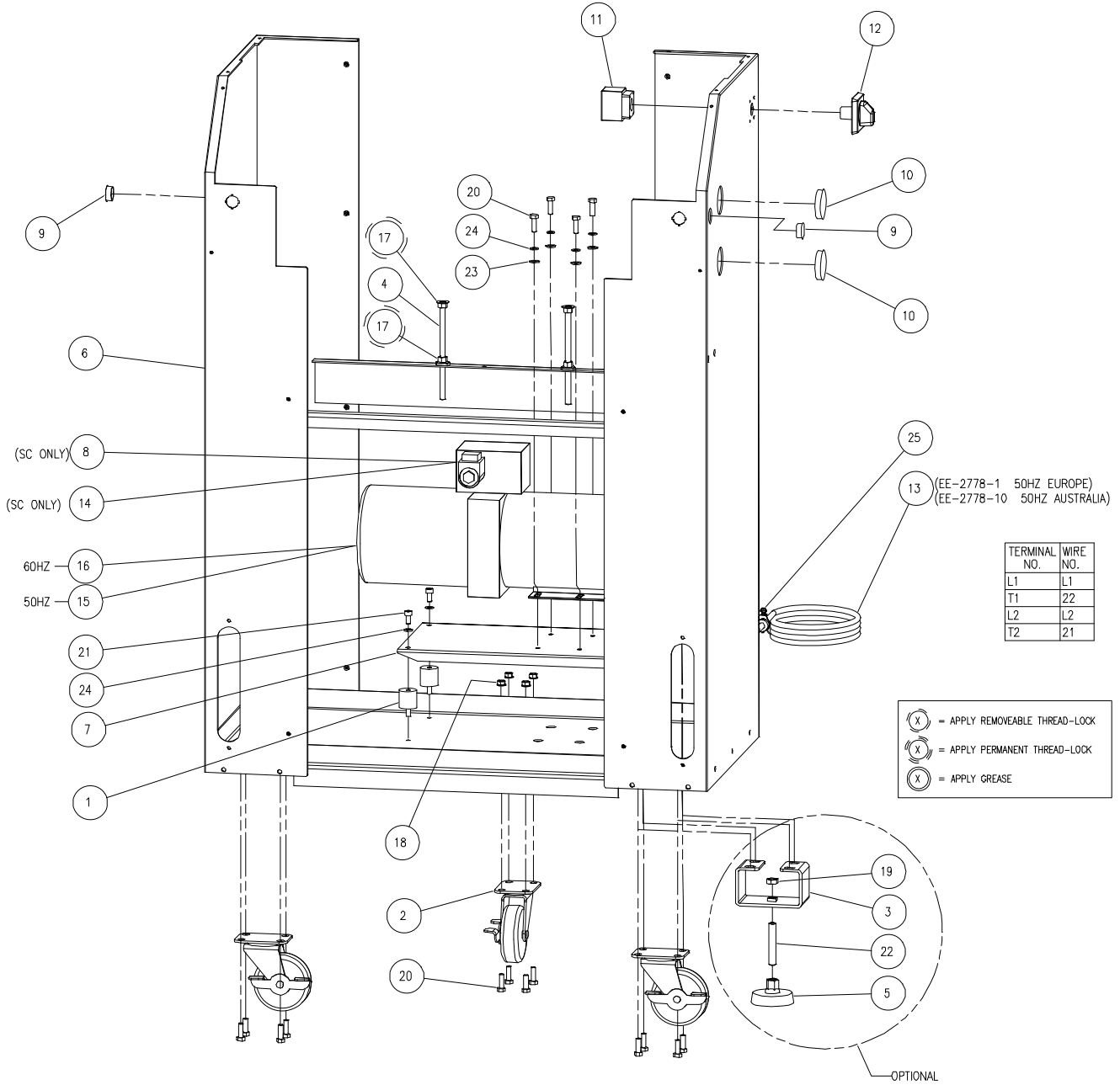
## Main Assembly- Backgauge

71000 Sht. 6

NO.	PART NO.	DESCRIPTION	QTY
1	4166	PLASTIC CUTTING STICK	1
2	10025-2	TABLE	1
3	10031-1	BACKGAGE	1
4	10065	PIN- BACKGAGE	6
5	43058	SIDE GUIDE - FRONT	2
6	43059-1	SIDE GUIDE - REAR	2
7	43103	BELT CLAMP	2
8	43104	BELT - SLOT CLOSURE	1
9	43107	BACKGAUGE BLOCK	1
10	44155	BRACKET - BELT	1
11	44156	BELT ADJ. BLOCK	1
12	44157	BRACKET - BELT MOUNTING	1
13	47588	CROWNED PULLEY	1
14	47597	PIN- PULLEY	2
15	47601	STRAIGHT PULLEY	1
16	47630	CUT STICK STOP	2
17	E-1152-93	STANDOFF	2
18	H-5254-804	SCREW - 1/2 X 1/2 SHSS	1
19	H-6424-4	NUT - 1/4-20 HEX JAM	2
20	H-6424-6	NUT - 3/8-16 HEX JAM	2
21	H-6633-718	PIN- TAPER, #7 X 2-1/4	2
22	H-6894-606	SCREW - 3/8-16 X 3/4 WHIZ LOCK	1
23	H-6909-102403	SCREW - #10-24 X 3/8" FLAT HEAD CAP	2
24	H-6910-102403	SCREW - #10-24 X 3/8 BUTTON HEAD CAP	2
25	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	8
26	H-6910-410	SCREW - 1/4-20 X 1-1/4 BUTTON HEAD CAP	2
27	H-6913-606	SCREW - 3/8-16 X 3/4 HEX HEAD CAP	6
28	H-6918-606	SCREW - 3/8-16 X 3/4 SOCKET HEAD CAP	6
29	H-6918-616	SCREW - 3/8-16 X 2 SOCKET HEAD CAP	1
30	H-6931-624	SCREW - 3/8-16 X 3 SQUARE HEAD SET	2
31	H-6938-424	SCREW - 1/4-20 X 1-1/2 CUP SOC SET	2
32	H-7321-#10	WASHER - #10 SAE PLAIN	2
33	H-7324-8	WASHER - 1/4 INT TOOTH	2
34	H-7324-#10	WASHER - #10 INT TOOTH	10
35	H-21S-187-0750	ROLL PIN - 3/16 X 3/4	1
36	S-1073-25	RETAINING RING	4

### 4.8 Main Assembly- Stand

71000 Sht. 7



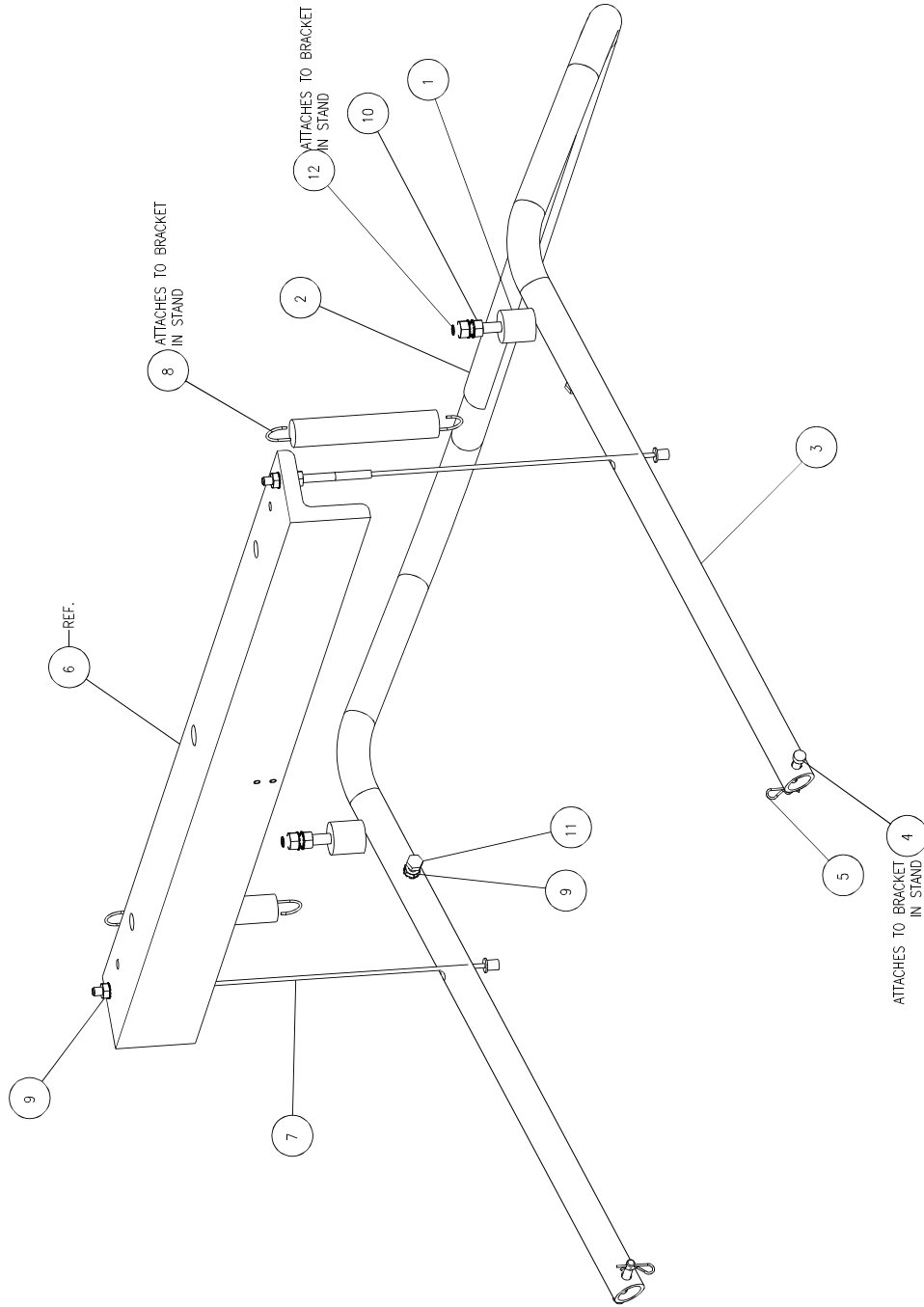
## Main Assembly- Stand

71000 Sht. 7

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	40016-8	MOUNT - VIBRATION	4
2	41014	SWIVEL CASTER WITH BRAKE	3
3	42057-1	FOOT BRACKET	OPT
4	44084	JACKSCREW - TABLE	2
5	51036	FOOT	OPT
6	70100	STAND WELDMENT - TITAN 200	1
7	71009	HYD. UNIT MOUNTING PLATE	1
8	E-1069-19	24V DC COIL	1
9	E-2196-13	HOLE PLUG	2
10	E-2196-21	HOLE PLUG	2
11	E-3082	SWITCH - MAIN DISCONNECT	1
12	E-3083	SWITCH FACE - MAIN DISCONNECT	1
13	EE-2778	POWER CORD - 230V 60HZ	1
14	H-203-33	PRESSURE REDUCING VALVE (ELECTRICAL)	1
15	H-477-10	HYDRAULIC POWER UNIT- 208/230V 50HZ	1
16	H-477-9	HYDRAULIC POWER UNIT- 208/230V 60HZ	1
17	H-6414-6	NUT - 3/8-16 WHIZ LOCK	4
18	H-6423-5	NUT - 5/16-18 HEX KEP	12
19	H-6424-8	NUT - 1/2-13 HEX JAM	OPT
20	H-6913-508	SCREW - 5/16-18 X 1 HEX HEAD CAP	16
21	H-6918-505	SCREW - 5/16-18 X 5/8 SOCKET HEAD CAP	4
22	H-6938-848	SCREW - 1/2-13 X 3 CUP SOC SET	OPT
23	H-7321-5	WASHER - 5/16 SAE PLAIN	4
24	H-7327-10	WASHER - 5/16 MEDIUM LOCK	8
25	S-1350-16	STRAIN RELIEF BUSHING	1
26	S-1694-1	TYRAP	2

### 4.9 Main Assembly- Foot Pedal

71000 Sht. 8



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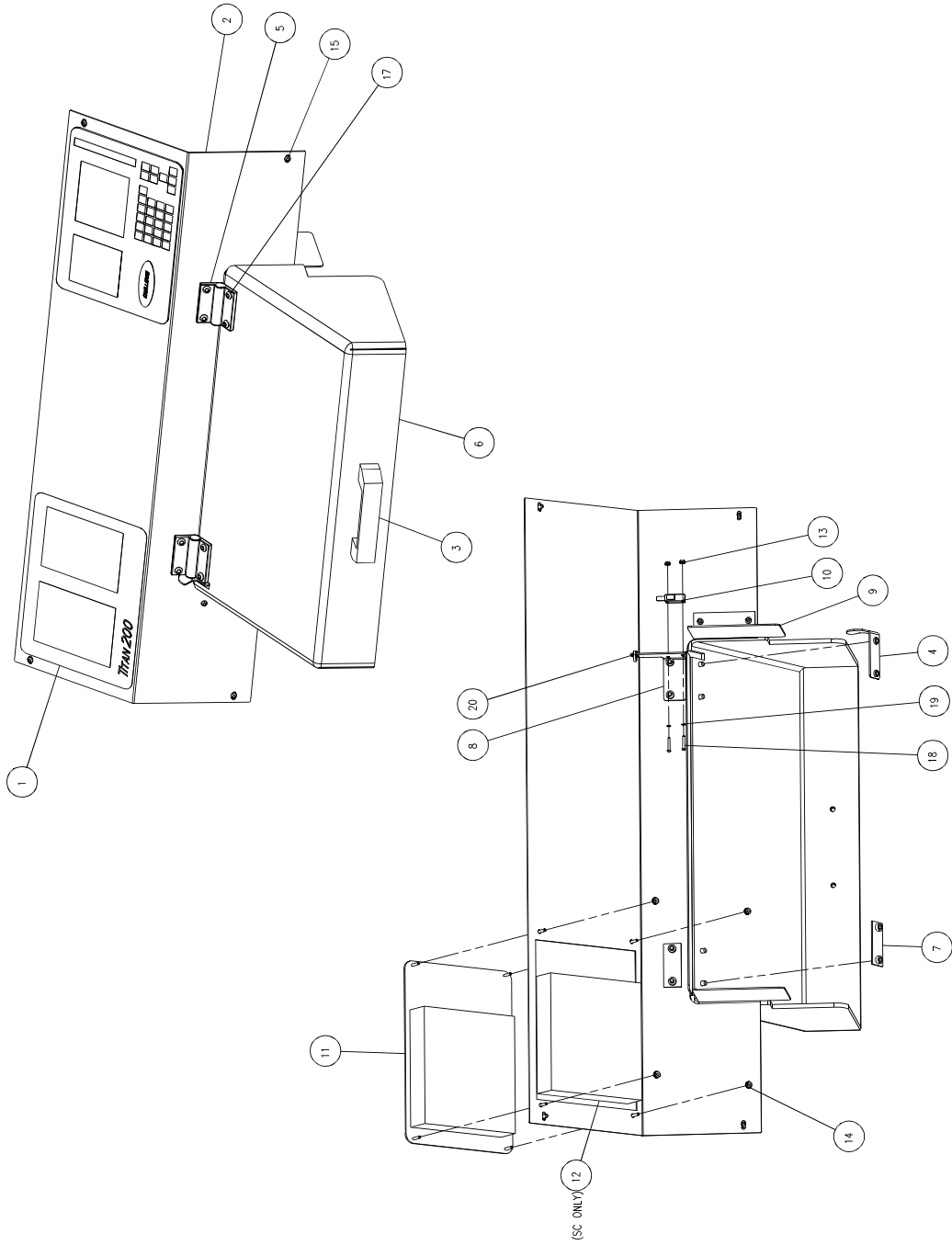
## Main Assembly- Foot Pedal

71000 Sht. 8

NO.	PART NO.	DESCRIPTION	QTY
1	40016-3	MOUNT- VIBRATION	2
2	43021	TAPE, ANTI-SKID	1
3	43022	PEDAL	1
4	43023	CLEVIS PIN	2
5	43024	HAIRPIN COTTER	2
6	43030	PULLDOWN- FOOT PEDAL	1
7	43077	CABLE- FOOT PEDAL	2
8	47136-4	EXTENSION SPRING	2
9	H-6423-4	NUT - 1/4-20 HEX KEP	6
10	H-6423-5	NUT - 5/16-18 HEX KEP	4
11	H-6913-406	SCREW - 1/4-20 X 3/4 HEX HEAD CAP	2
12	H-6938-532	SCREW - 5/16-18 X 2 CUP SOC SET	2

### 4.10 Main Assembly- Tilt Shield

71000 Sht. 9



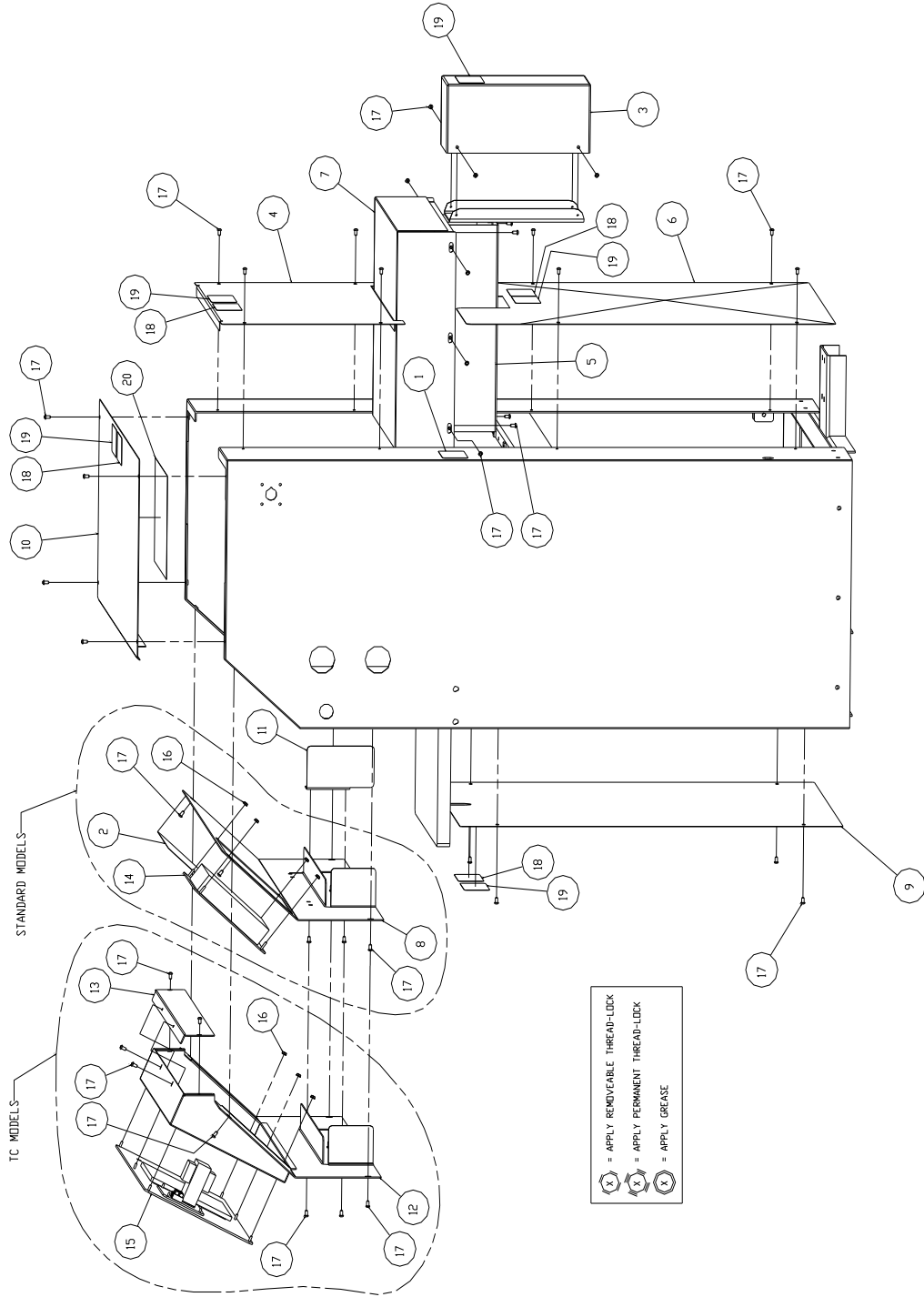
## Main Assembly- Tilt Shield

71000 Sht. 9

NO.	PART NO.	DESCRIPTION	QTY
1	43003-1	LABEL- CONSOLE WARNING	1
2	43114	BEVELED COVER	1
3	56657	HANDLE W/ HDW	1
4	70016	SWITCH ACTUATOR	1
5	70018	POSITIONING HINGE MH14-122	2
6	70019	SHIELD	1
7	70020	HINGE BACKER	2
8	70021	INTERLOCK SWITCH BRACKET	1
9	70030	KNIFE LATCH GUARD	1
10	E-866-9	POSITIVE ACTION MICROSWITCH	1
11	EE-3035-2	PANEL - CONTROL CONSOLE	1
12	EE-3208-1	PANEL - CONTROL CONSOLE (SC ONLY)	1
13	H-6423-#4	NUT - #4-40 HEX KEP	2
14	H-6423-#6	NUT - #6-32 HEX KEP	4
15	H-6910-102403	SCREW - #10-24 X 3/8 BUTTON HEAD CAP	4
16	H-6910-102404	SCREW - #10-24 X 1/2 BUTTON HEAD CAP	2
17	H-6910-406	SCREW - 1/4-20 X 3/4 BUTTON HEAD CAP	8
18	H-6923-44012	SCREW - #4-40 X 3/4 ROUND HD MACH	2
19	H-7324-#4	WASHER - #4 INT TOOTH	2
20	S-1694	TYRAP	1

### 4.11 Main Assembly- Covers

71000 Sht. 11 rev.L



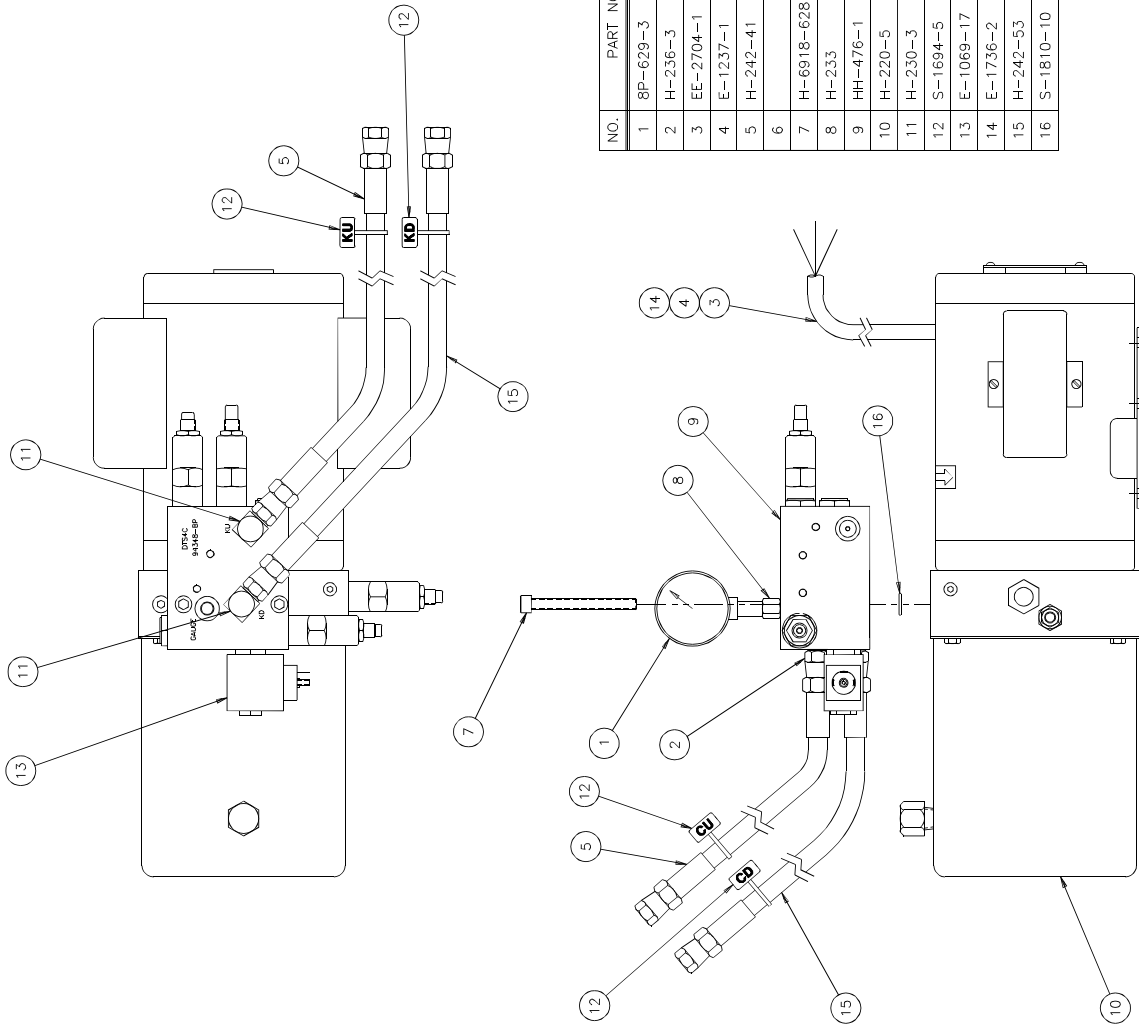
## Main Assembly- Covers

71000 Sht. 10

NO.	PART NO.	DESCRIPTION	QTY
1	41130	LABEL - SERIAL NUMBER	1
2	43003-1	LABEL- CONSOLE WARNING	1
3	43028-1	COVER - BACKGAUGE DRIVE	1
4	43041-2	COVER- REAR STAND (TOP)	1
5	43042	COVER- LEADSCREW	1
6	43044-1	COVER- REAR STAND	1
7	43113	BACKGAUGE COVER - TITAN 200	1
8	43114	BEVELED COVER	1
9	70022	LOWER FRONT COVER	1
10	70023-1	TOP COVER	1
11	70030	KNIFE LATCH GUARD	1
12	71005	WELDMENT - 200 TC CONSOLE HOOD	1
13	71006	COVER - TC CONSOLE BACK	1
14	EE-3035-2	PANEL - CONTROL CONSOLE	1
15	EE-3456-3	CONSOLE ASM - 200 TC	1
16	H-6423-N6	NUT - #6-32 HEX KEP	10
17	H-6910-102403	SCREW - #10-24 X 3/8 BUTTON HEAD CAP	46
18	S-1781-11	LABEL- SHOCK HAZARD	4
19	S-1781-16	LABEL- CRUSH HAZARD	5
20	S-1781-205	LABEL - INTERCONNECTION	1

### 4.12 Hydraulic Power Unit – 60 Hz

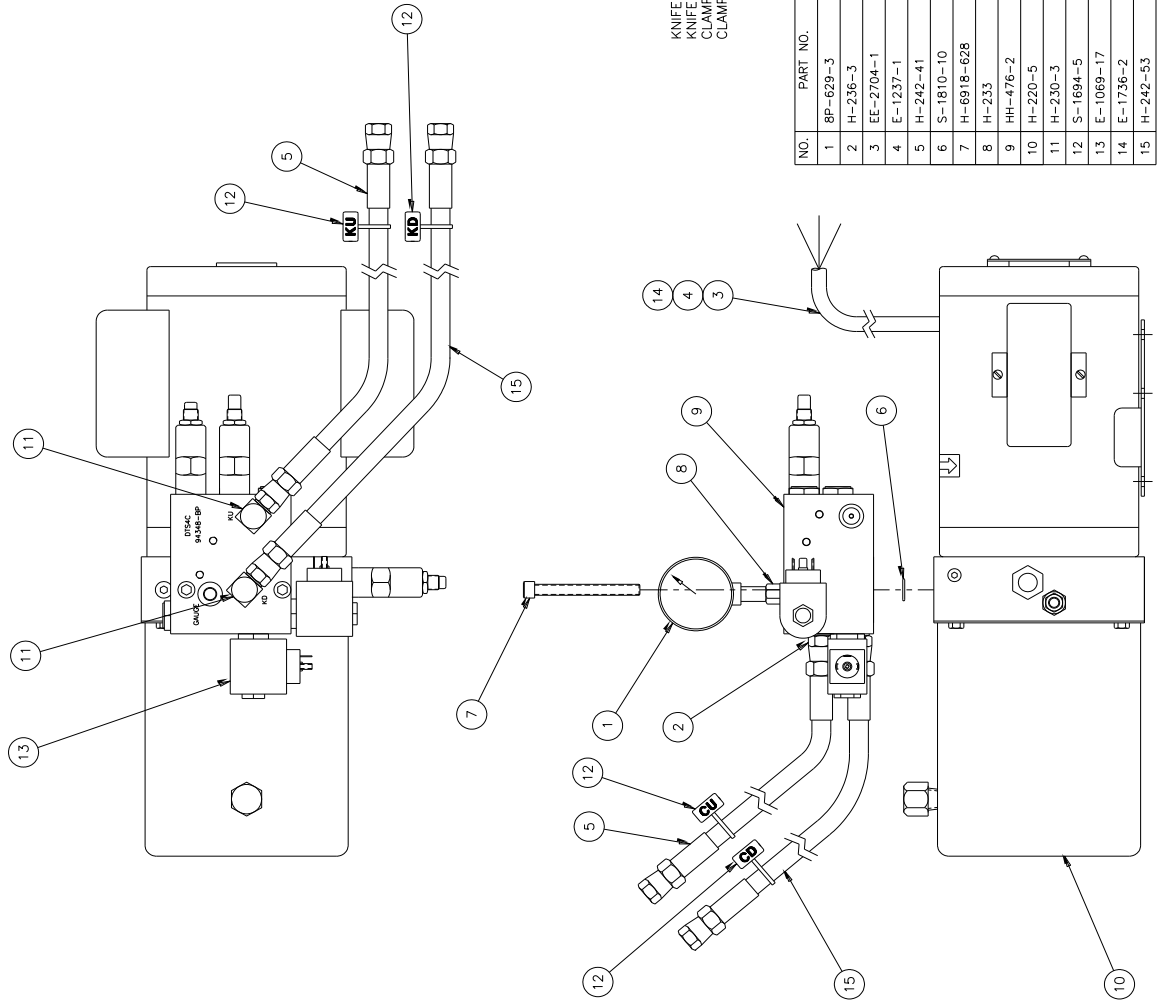
(MANUAL ADJUSTED VALVE)  
 H-477-1, Rev. B (SERIAL #133842 AND BELOW)



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY.
1	8P-629-3	GAUGE	1
2	H-236-3	ADAPTER, 9/16-18 "O" RING TO 9/16-18 TUBE	2
3	EE-2704-1	CORD ASSEMBLY - HYD. MOTOR	1
4	E-1237-1	WIRE NUT	2
5	H-242-41	HYDRAULIC HOSE ASM., 25" LONG (KU & CU)	2
6			
7	H-6918-628	3/8-16 X 3-1/2 SOCKET HD CAP SCREW	2
8	H-233	ADAPTER	1
9	HH-476-1	MANIFOLD ASSEMBLY	1
10	H-220-5	HYDRAULIC POWER UNIT (60 HZ)	1
11	H-230-3	ELBOW - 9/16-18 "O" RING TO 9/16-18 TUBE	2
12	S-1694-5	TYRAP - IDENTIFICATION	4
13	E-1069-17	COIL - 24V	1
14	E-1736-2	QUENCH ARC	1
15	H-242-53	HYDRAULIC HOSE ASSEMBLY, 35" LONG (KD & CD)	2
16	S-1810-10	O-RING	2

### 4.13 Hydraulic Power Unit – 60 Hz

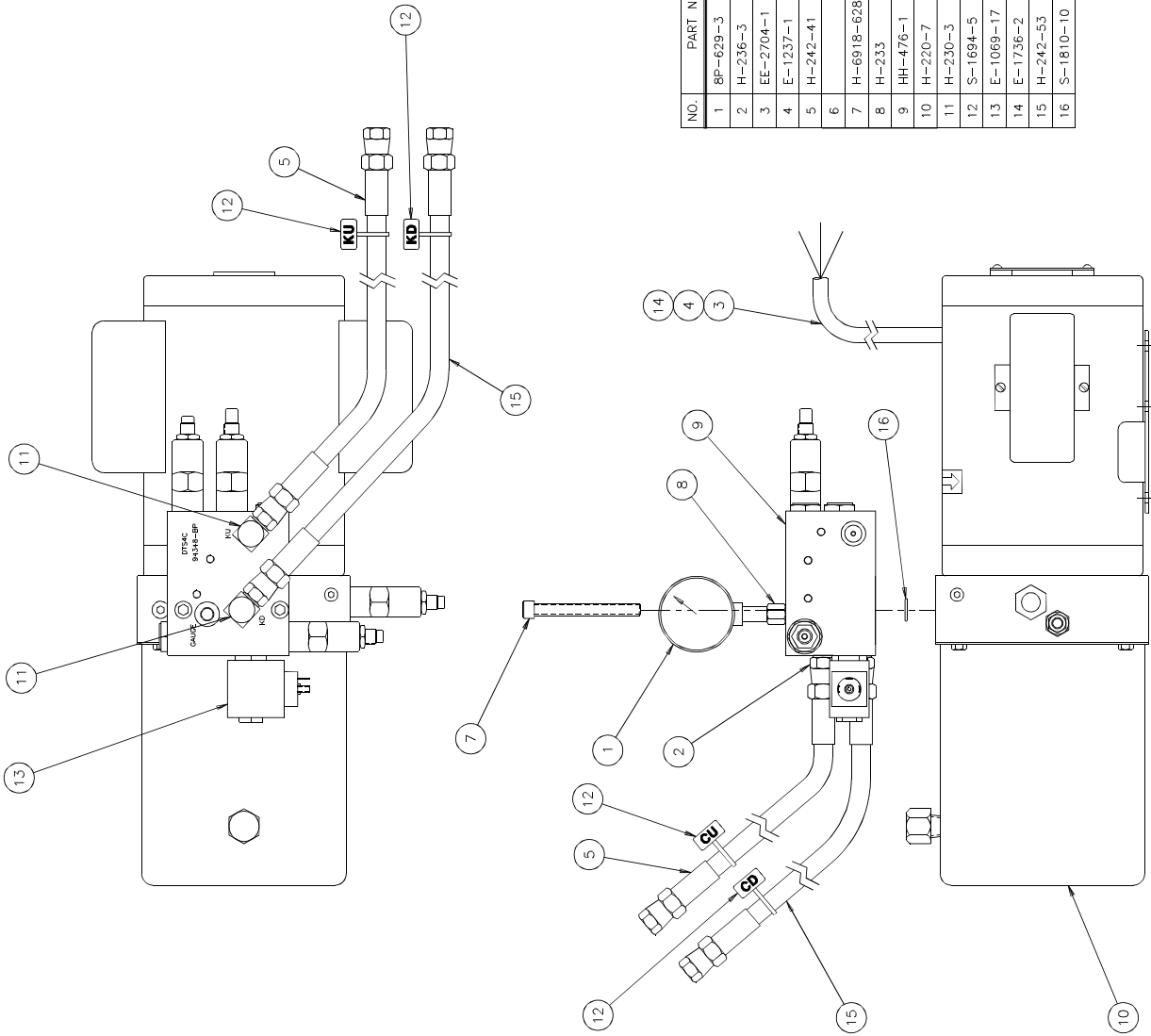
(ELECTICALLY ADJUSTED VALVE)  
 H-477-9, Rev. A (SERIAL #133843 AND UP)



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	8P-629-3	GAUGE	1
2	H-236-3	ADAPTER, 9/16-18 "O" RING TO 9/16-18 TUBE	2
3	EE-2704-1	CORD ASSEMBLY - HYD. MOTOR	1
4	E-1237-1	WIRE NUT	2
5	H-242-41	HYDRAULIC HOSE ASM., 25" LONG (KU & CU)	2
6	S-1810-10	O-RING	2
7	H-6918-628	3/8-16 X 3-1/2 SOCKET HD CAP SCREW	2
8	H-233	ADAPTER	1
9	HH-476-2	MANIFOLD ASSEMBLY W/ELEC. PRES. ADJUST.	1
10	H-220-5	HYDRAULIC POWER UNIT (60 HZ)	1
11	H-230-3	ELBOW - 9/16-18 "O" RING TO 9/16-18 TUBE	2
12	S-1694-5	TYRAP - IDENTIFICATION	4
13	E-1069-17	COIL - 24V	1
14	E-1736-2	QUENCH ARC	1
15	H-242-53	HYDRAULIC HOSE ASSEMBLY, 35" LONG (KD & CD)	2

### 4.14 Hydraulic Power Unit – 50 Hz

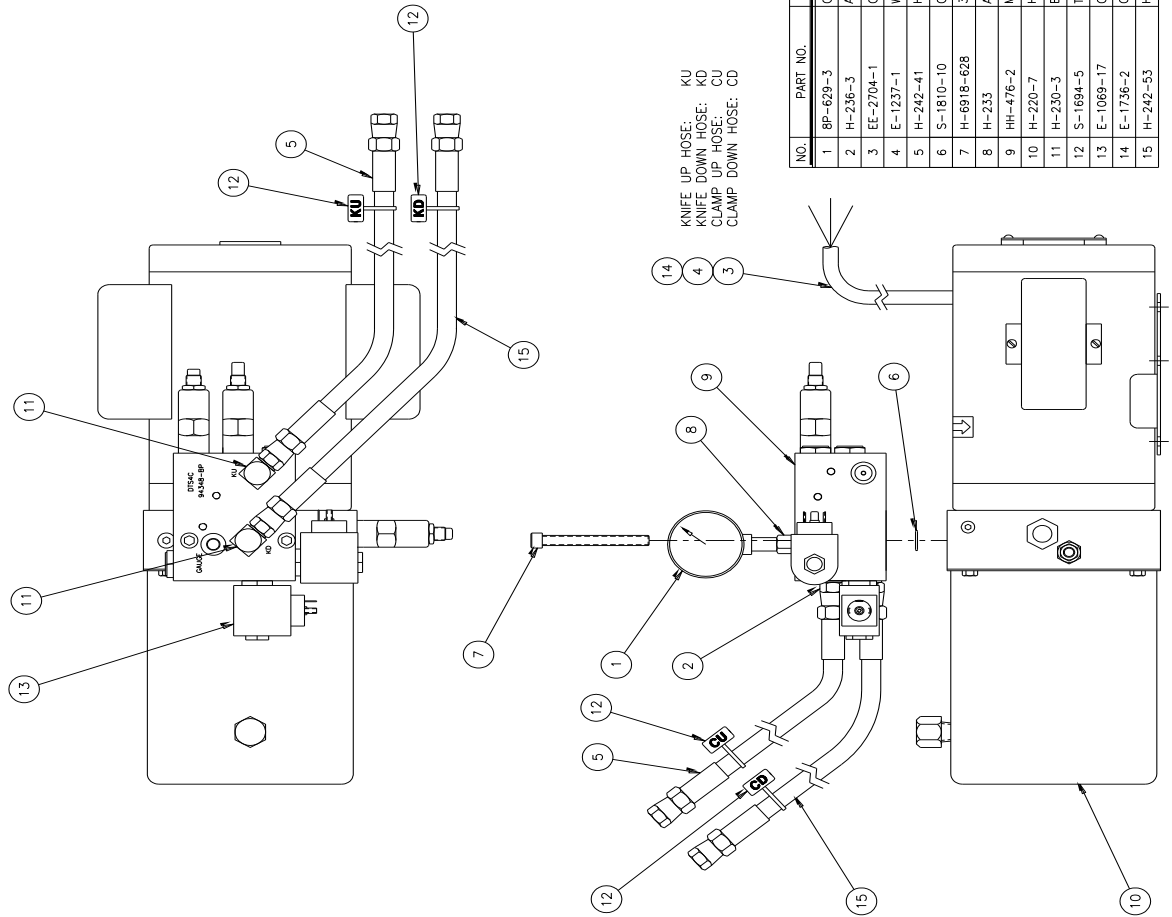
(MANUAL ADJUSTMENT VALVE)  
 H-477-2, Rev. A (SERIAL #133842 AND BELOW)



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY.
1	8P-629-3	GAUGE	1
2	H-236-3	ADAPTER, 9/16-18 "O" RING TO 9/16-18 TUBE	2
3	EE-2704-1	CORD ASSEMBLY - HYD. MOTOR	1
4	E-1237-1	WIRE NUT	2
5	H-242-41	HYDRAULIC HOSE ASM., 25" LONG (KU & CU)	2
6			
7	H-6918-628	3/8-16 X 3-1/2 SOCKET HD CAP SCREW	2
8	H-233	ADAPTER	1
9	HH-476-1	MANIFOLD ASSEMBLY	1
10	H-220-7	HYDRAULIC POWER UNIT (50HZ)	1
11	H-230-3	ELBOW - 9/16-18 "O" RING TO 9/16-18 TUBE	2
12	S-1694-5	TYRAP - IDENTIFICATION	4
13	E-1069-17	COIL - 24V	1
14	E-1736-2	QUENCH ARC	1
15	H-242-53	HYDRAULIC HOSE ASSEMBLY, 35" LONG (KD & CD)	2
16	S-1810-10	O-RING	2

### 4.15 Hydraulic Power Unit – 50 Hz

(MANUAL ADJUSTMENT VALVE)  
 H-477-10, Rev. A (SERIAL #133843 AND UP)

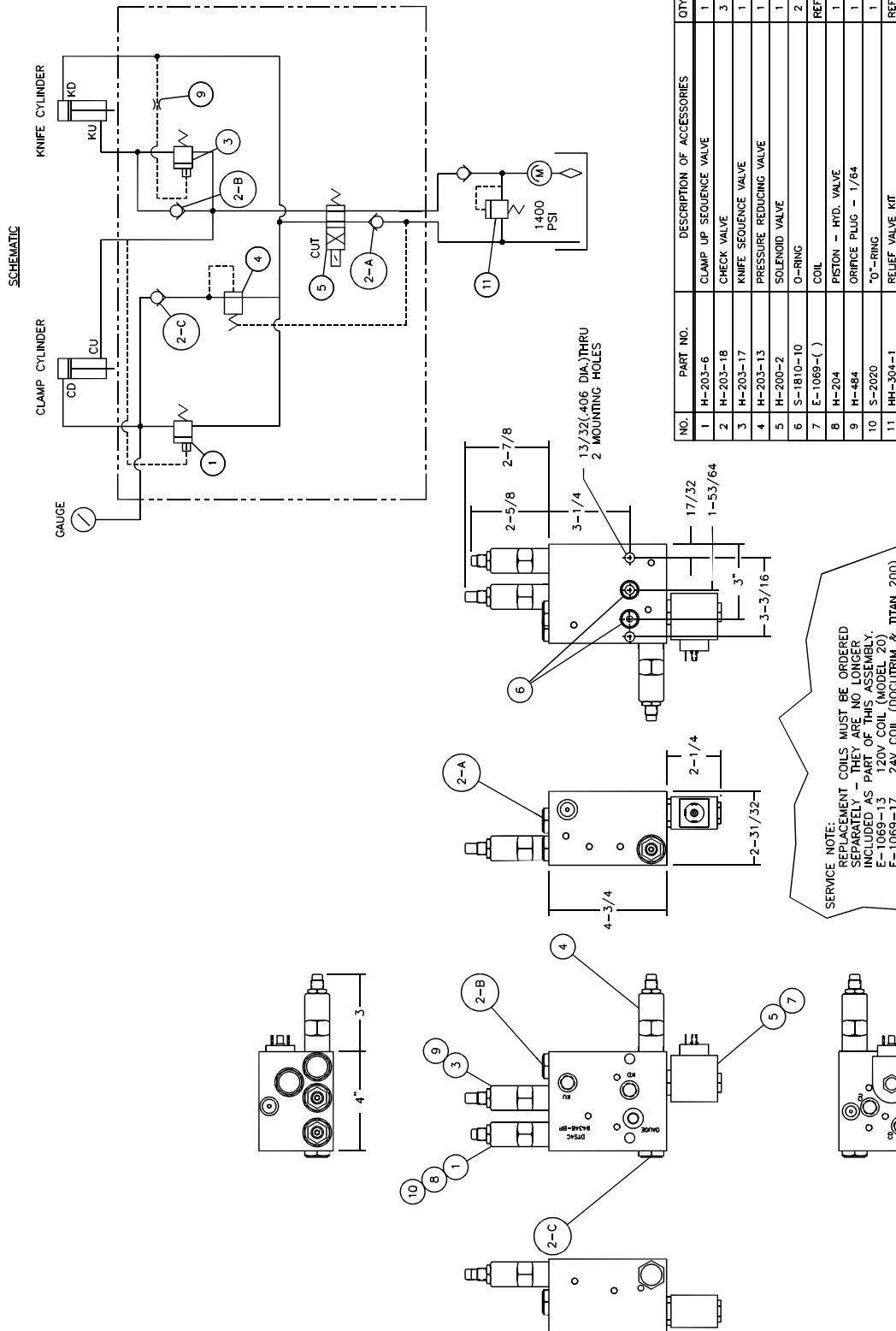


KNIFE UP HOSE: KU  
 KNIFE DOWN HOSE: KD  
 CLAMP UP HOSE: CU  
 CLAMP DOWN HOSE: CD

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY.
1	BP-629-3	GAUGE	1
2	H-236-3	ADAPTER, 9/16-18 "O" RING TO 9/16-18 TUBE	2
3	EE-2704-1	CORD ASSEMBLY - HYD. MOTOR	1
4	E-1237-1	WIRE NUT	2
5	H-242-41	HYDRAULIC HOSE ASM., 25" LONG (KU & CU)	2
6	S-1810-10	O-RING	2
7	H-6918-628	3/8-16 X 3-1/2 SOCKET HD CAP SCREW	2
8	H-233	ADAPTER	1
9	HH-476-2	MANIFOLD ASSEMBLY W/ELEC. PRES. ADJUST.	1
10	H-220-7	HYDRAULIC POWER UNIT (50 HZ)	1
11	H-230-3	ELBOW - 9/16-18 "O" RING TO 9/16-18 TUBE	2
12	S-1694-5	TYRAP - IDENTIFICATION	4
13	E-1069-17	COIL - 24V	1
14	E-1736-2	QUENCH ARC	1
15	H-242-53	HYDRAULIC HOSE ASSEMBLY, 35" LONG (KD & CD)	2

### 4.16 Hydraulic Manifold Assembly & Schematic

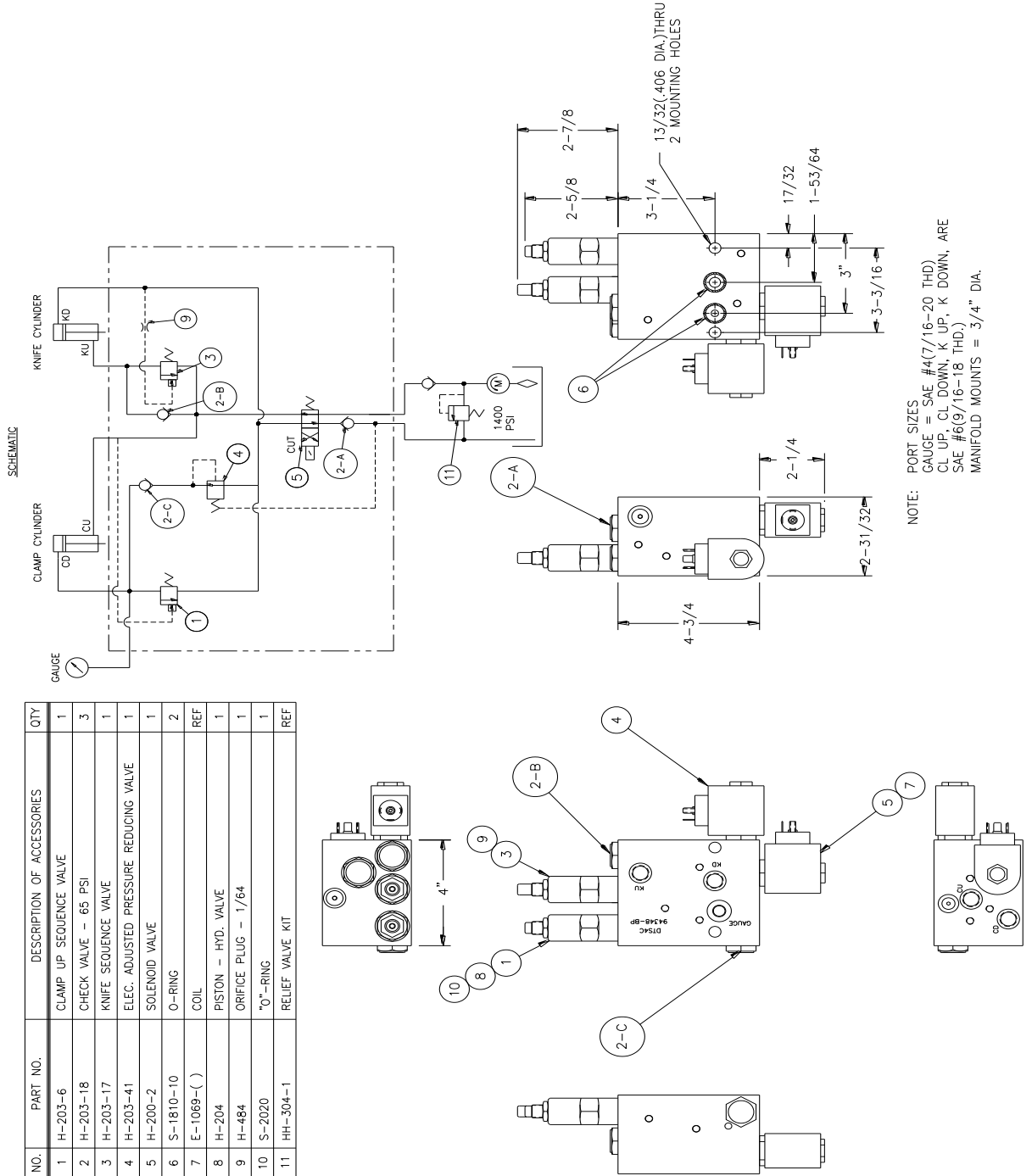
HH-476-1, Rev. A (SERIAL #133842 AND BELOW)  
 (With Manual Adjusted Pressure Valve – Standard)



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	H-203-6	CLAMP UP SEQUENCE VALVE	1
2	H-203-18	CHECK VALVE	3
3	H-203-17	KNIFE SEQUENCE VALVE	1
4	H-203-13	PRESSURE REDUCING VALVE	1
5	H-200-2	SOLENOID VALVE	1
6	S-1810-10	O-RING	2
7	E-1069-( )	COIL	REF
8	H-204	PISTON - HYD. VALVE	1
9	H-484	ORIFICE PLUG - 1/64	1
10	S-2020	"O"-RING	1
11	HH-304-1	RELIEF VALVE KIT	REF

### 4.17 Hydraulic Manifold Assembly & Schematic

HH-476-2, Rev. A (SERIAL #133843 AND UP)  
 (With Electrical Adjusted Pressure Valve - Standard)



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	H-203-6	CLAMP UP SEQUENCE VALVE	1
2	H-203-18	CHECK VALVE - 65 PSI	3
3	H-203-17	KNIFE SEQUENCE VALVE	1
4	H-203-41	ELEC. ADJUSTED PRESSURE REDUCING VALVE	1
5	H-200-2	SOLENOID VALVE	1
6	S-1810-10	O-RING	2
7	E-1069-( )	COIL	REF
8	H-204	PISTON - HYD. VALVE	1
9	H-484	ORIFICE PLUG - 1/64	1
10	S-2020	O-RING	1
11	HH-304-1	RELIEF VALVE KIT	REF

### 4.18 Power Panel Label – Standard and TC

S-1781-205

TITAN 200 & TC OPTION
**!! NOTICE !!**
S-1781-205

**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 IN THE INSTRUCTION AND PARTS MANUAL.

INCORRECT POWER HOOK-UP WILL DAMAGE YOUR MACHINE!

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

CHANGE TERMINAL JUMPER FOR CORRECT SUPPLY VOLTAGE – AS FOLLOWS;  
16,16A & 16B for 208v  
16,16C & 16D for 230v

208V/230V MACHINES	PCF1 & PCF4	2A T	E-2330-3
	PCF2	3.15A T	E-2330-5
	PCF3	5A T	E-2330-7
	PCF5	5A T	E-2330-7
	F4 & F7	10A T (60HZ) 12A T (50HZ)	E-1075-10SB E-1075-12SB
	F5	.5A T	E-889-12
	F6	1.25A T	E-889
	<b>TITAN 200</b>		

'TC' OPTION CONTROL PANEL ONLY

MOVE THIS WIRE TO THE PROPER MACHINE SUPPLY VOLTAGE TERMINAL  
COMMON WIRE – LEAVE IN TERMINAL

### 4.19 Power Connection Procedure Label

S-1781-65

## !! NOTICE !!

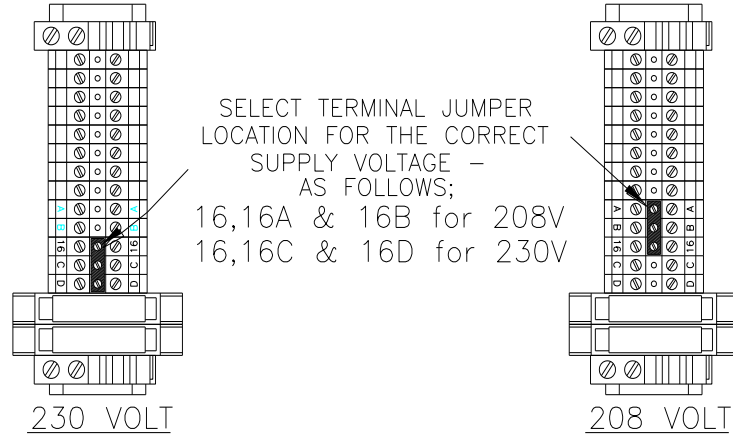
MACHINE HAS BEEN SHIPPED WITH THE VOLTAGE SELECTION JUMPER REMOVED AND WILL NOT RUN UNTIL PROPER INSTALLATION OF THE JUMPER HAS BEEN MADE. FOLLOW THE INSTRUCTIONS BELOW. JUMPERS ARE PROVIDED IN THE ATTACHED BAG.

### ⚠ 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 LOCK-OUT PROCEDURE IN THE OPERATOR AND PARTS MANUALS.

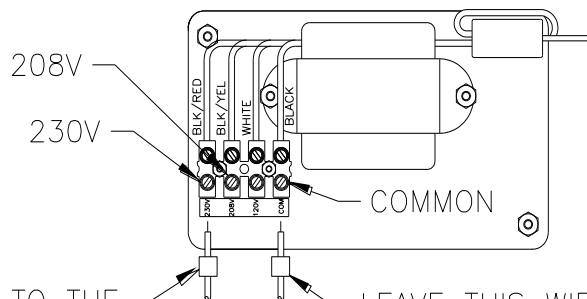
INCORRECT POWER HOOK-UP MAY DAMAGE YOUR MACHINE!

MEASURE THE SUPPLY VOLTAGE AND SELECT THE PROPER TERMINAL JUMPER LOCATION - AS SHOWN.



NOTE: The terminal strip shown (above) is located on the power panel under the top cover of the machine.

### 'TC' OPTION CONTROL PANEL ONLY



MOVE THIS WIRE TO THE PROPER MACHINE SUPPLY VOLTAGE TERMINAL

LEAVE THIS WIRE IN THE COMMON TERMINAL

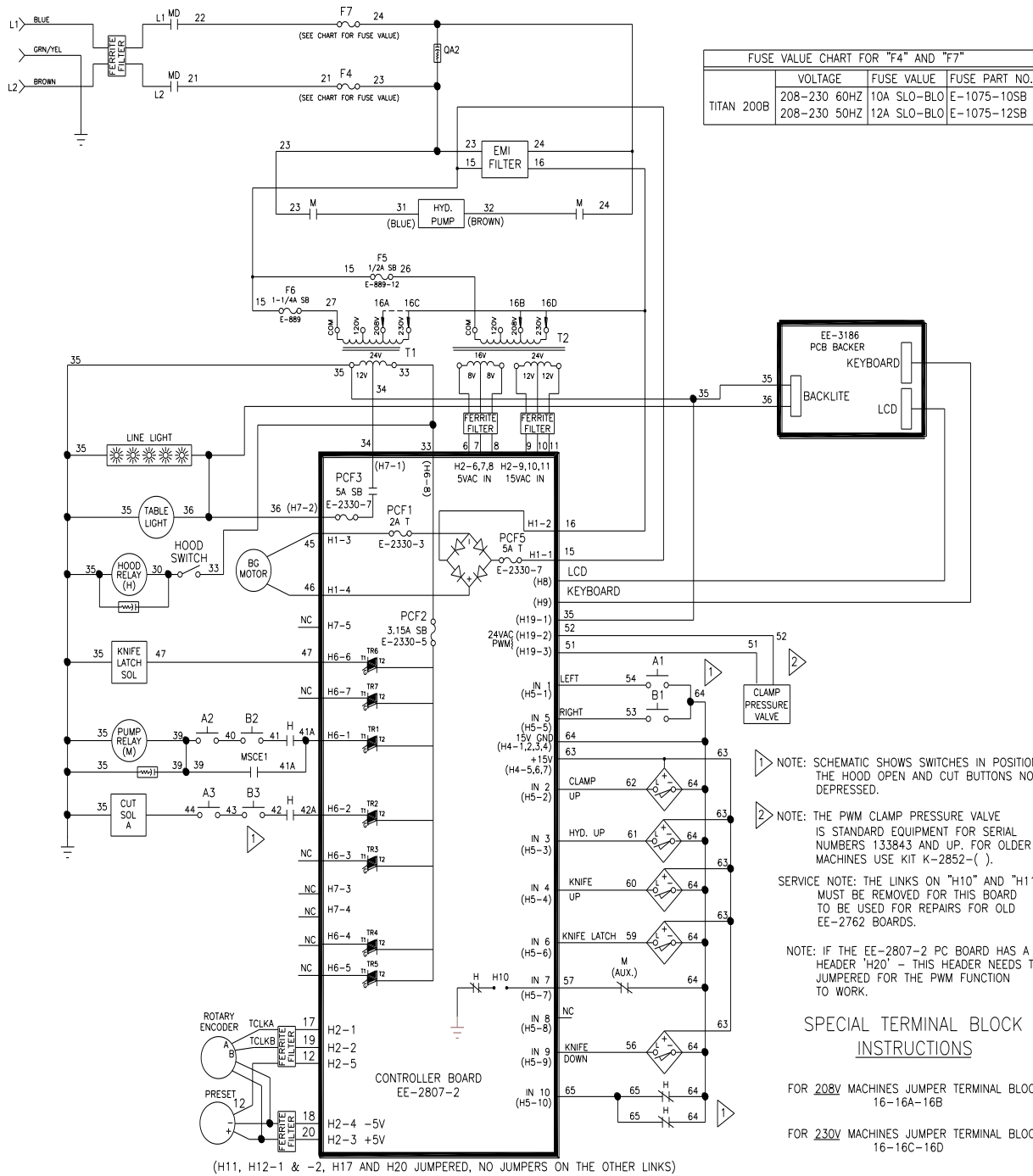
**!CAUTION - BLADE HAS BEEN INSTALLED!**

TITAN SERIES

S-1781-65

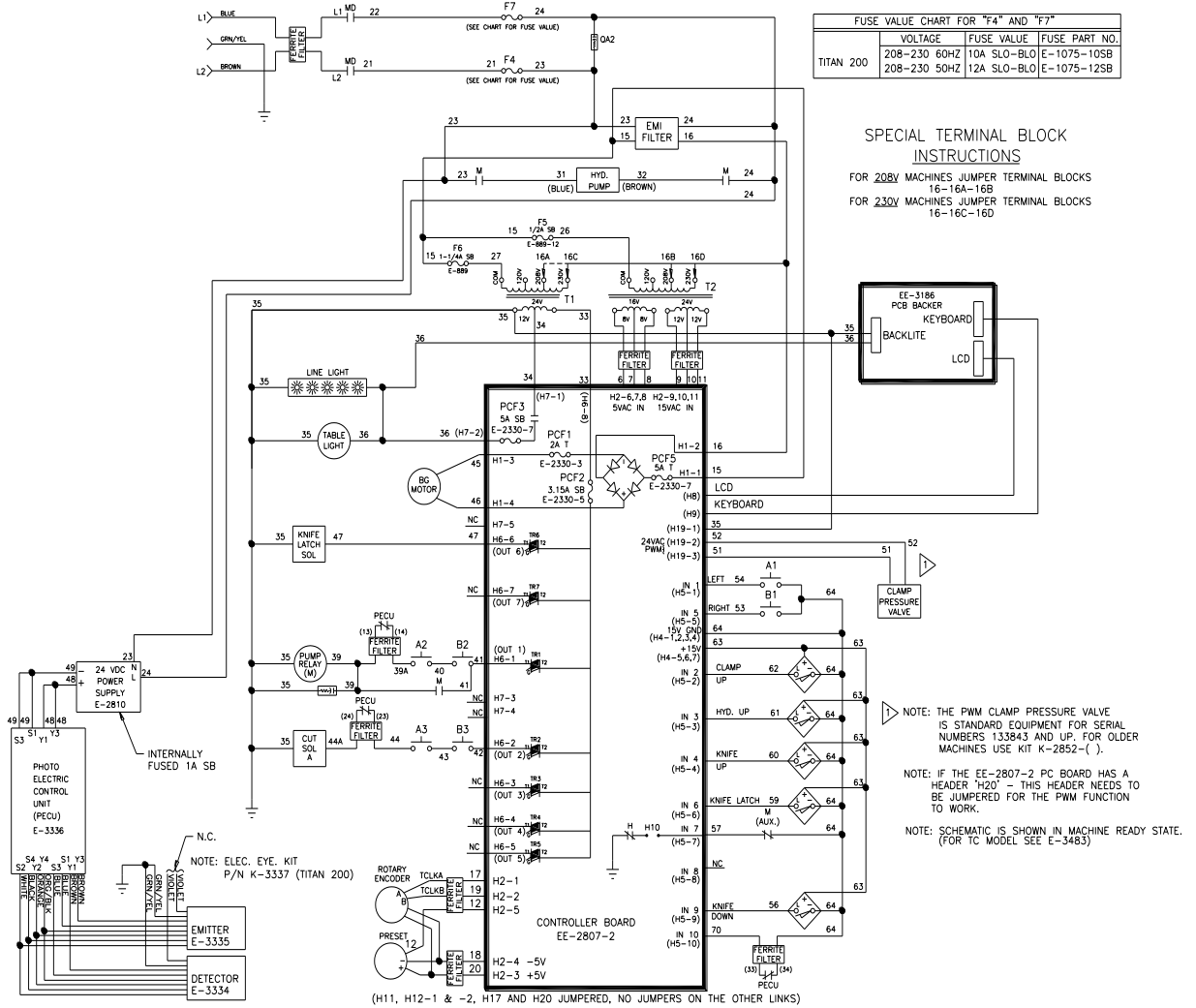
# 4.20 Schematic – Basic Machine, Standard w/Tilt Shield Option

E-2771-10 Rev. "B"



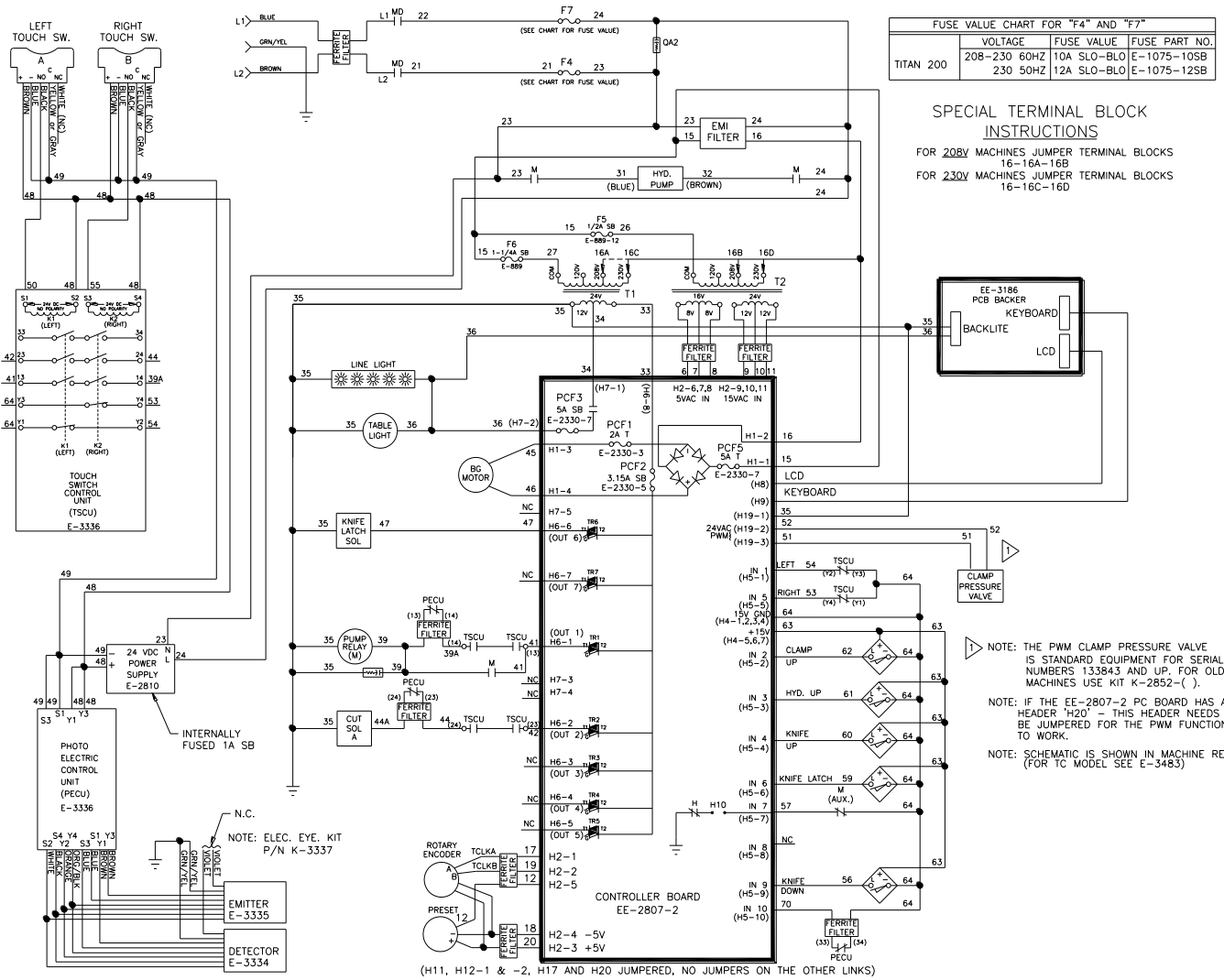
### 4.21 Schematic – Basic Machine, Standard w/Electric Eye Option

E-2771-8 Rev. "C"



# 4.22 Schematic – Basic Machine, Standard w/Touch Switch Option

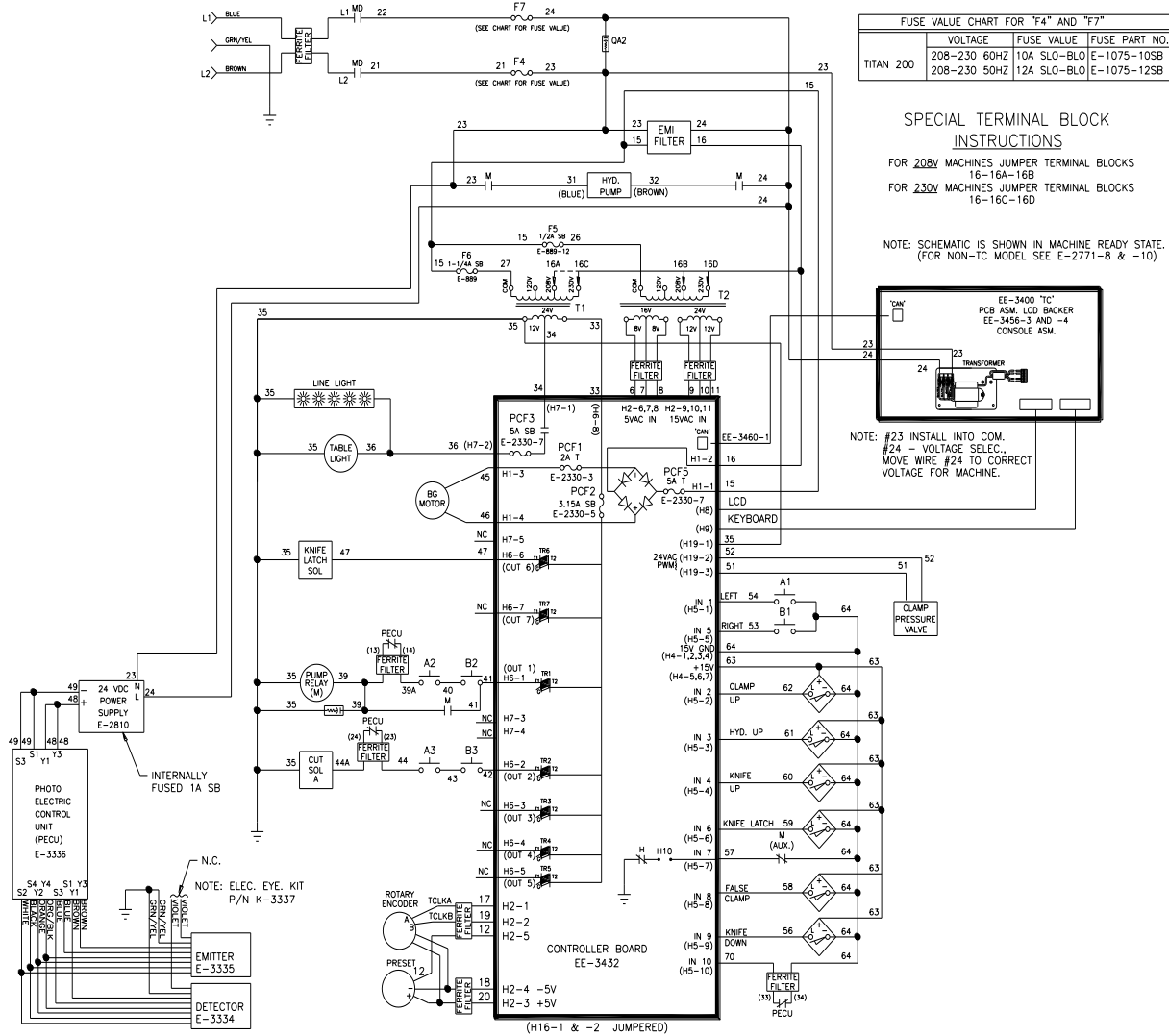
E-2771-8 Rev. "B"



NOTES:

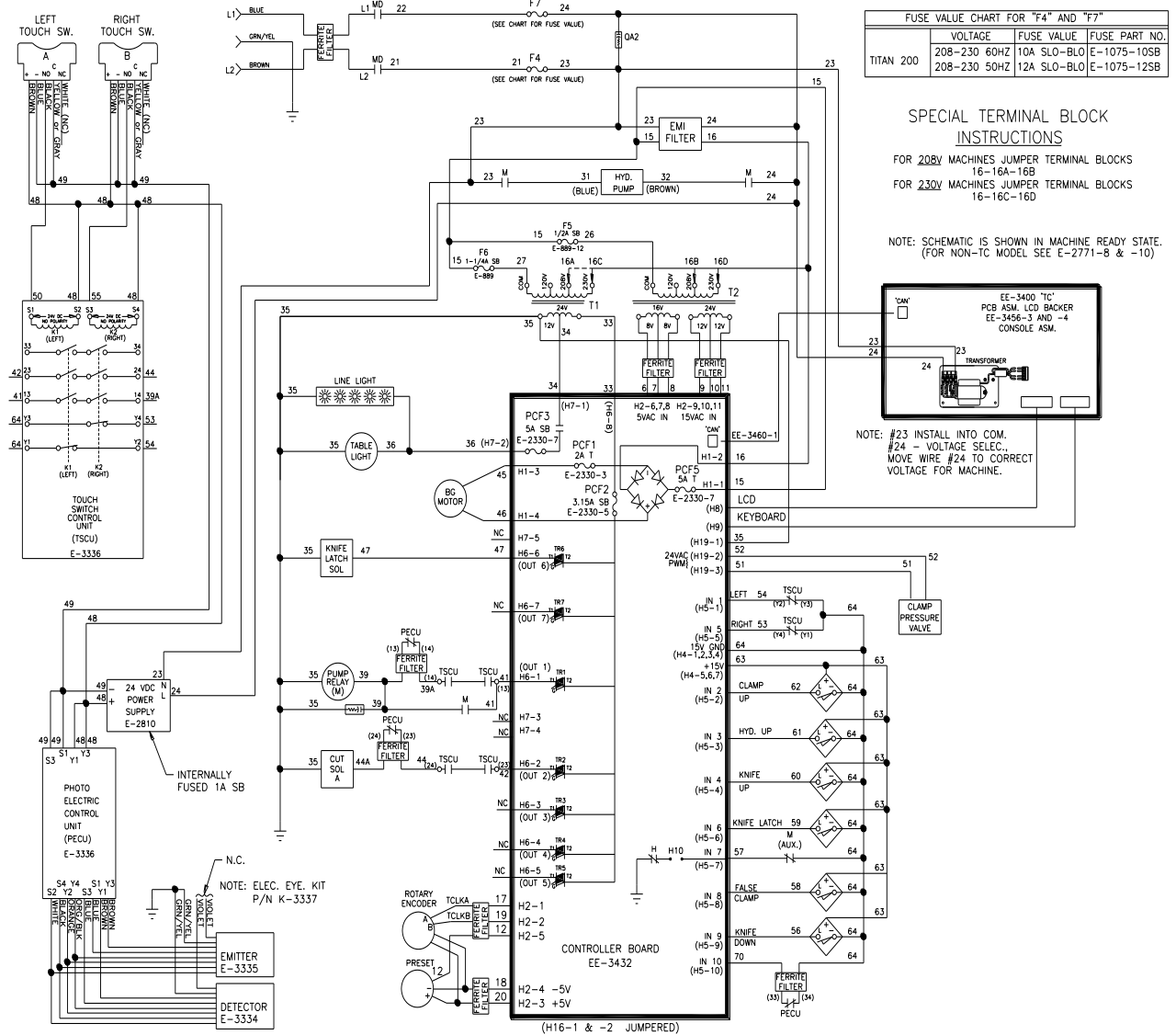
### 4.23 Schematic – Basic Machine, Touch Control 'TC' Option

E-3483 Rev. "A" – (Serial numbers 133834 and above ONLY)



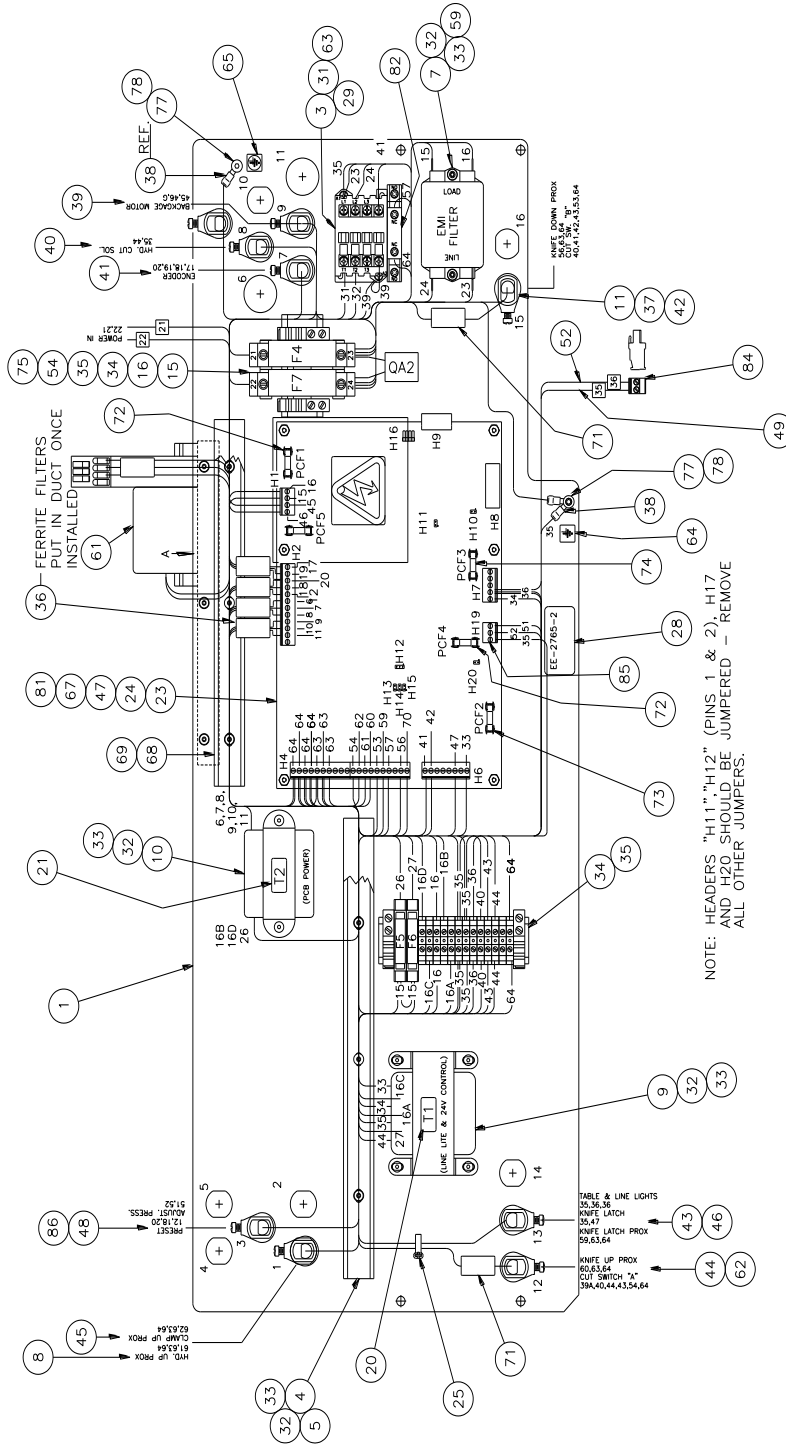
### 4.24 Schematic – Basic Machine, 'TC' w/touch switches (optional)

E-3483 Rev. "A" – (Serial numbers 133834 and above ONLY)



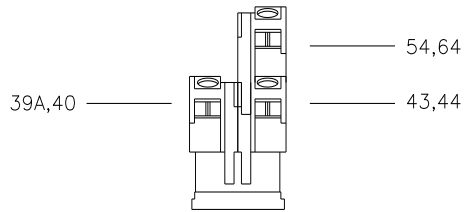
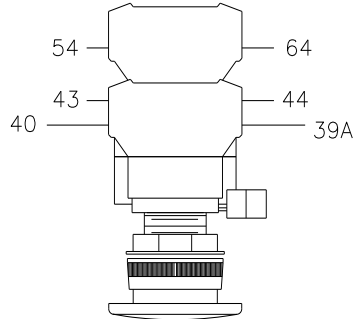
### 4.25 Power Panel Assembly - Standard

EE-2765-2 Rev. "V" - Two hand control with electric eyes

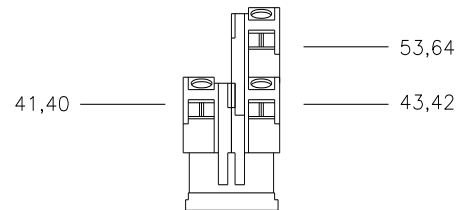
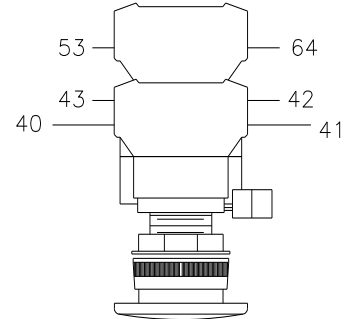


Power Panel Assembly (cont.)

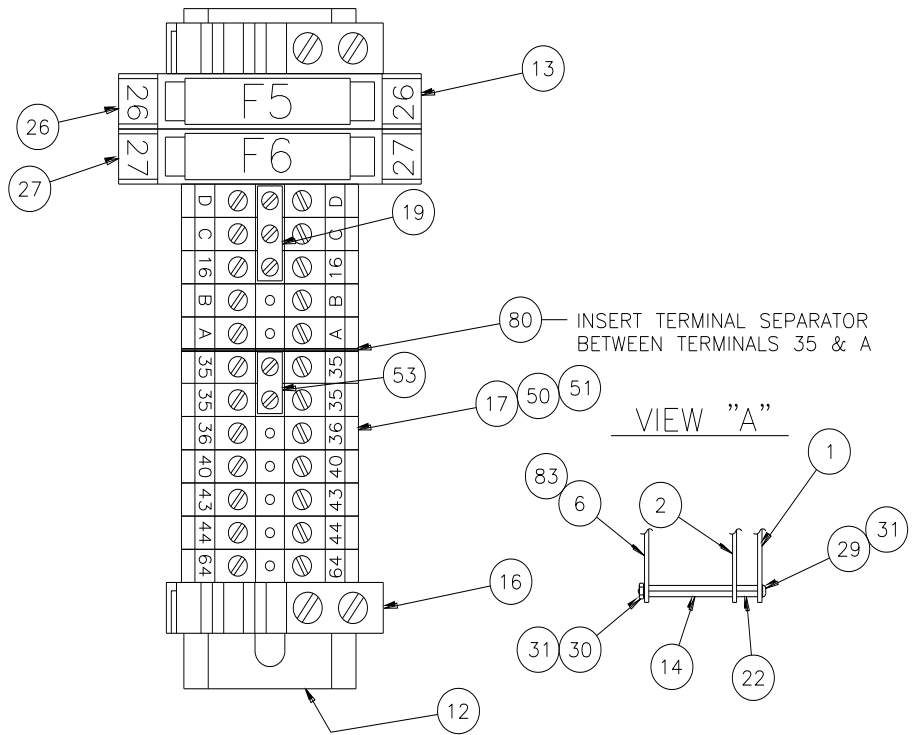
L.H. CUT SWITCH DETAIL  
WIRING DETAIL



R.H. CUT SWITCH DETAIL  
WIRING DETAIL



TRANSFORMER COLOR CODE	
T1	
WIRE COLOR	WIRE NO.
BLACK	27
BLACK/YELLOW	16A
BLACK/RED	16C
WHITE	35
YELLOW	34
RED	33
GREEN	-
T2	
WIRE COLOR	WIRE NO.
BLACK	26
BLACK/YELLOW	16B
BLACK/RED	16D
BLUE	9
BLUE/YELLOW	10
BLUE	11
RED	8
RED/YELLOW	7
RED	6



Power Panel Assembly (cont.)

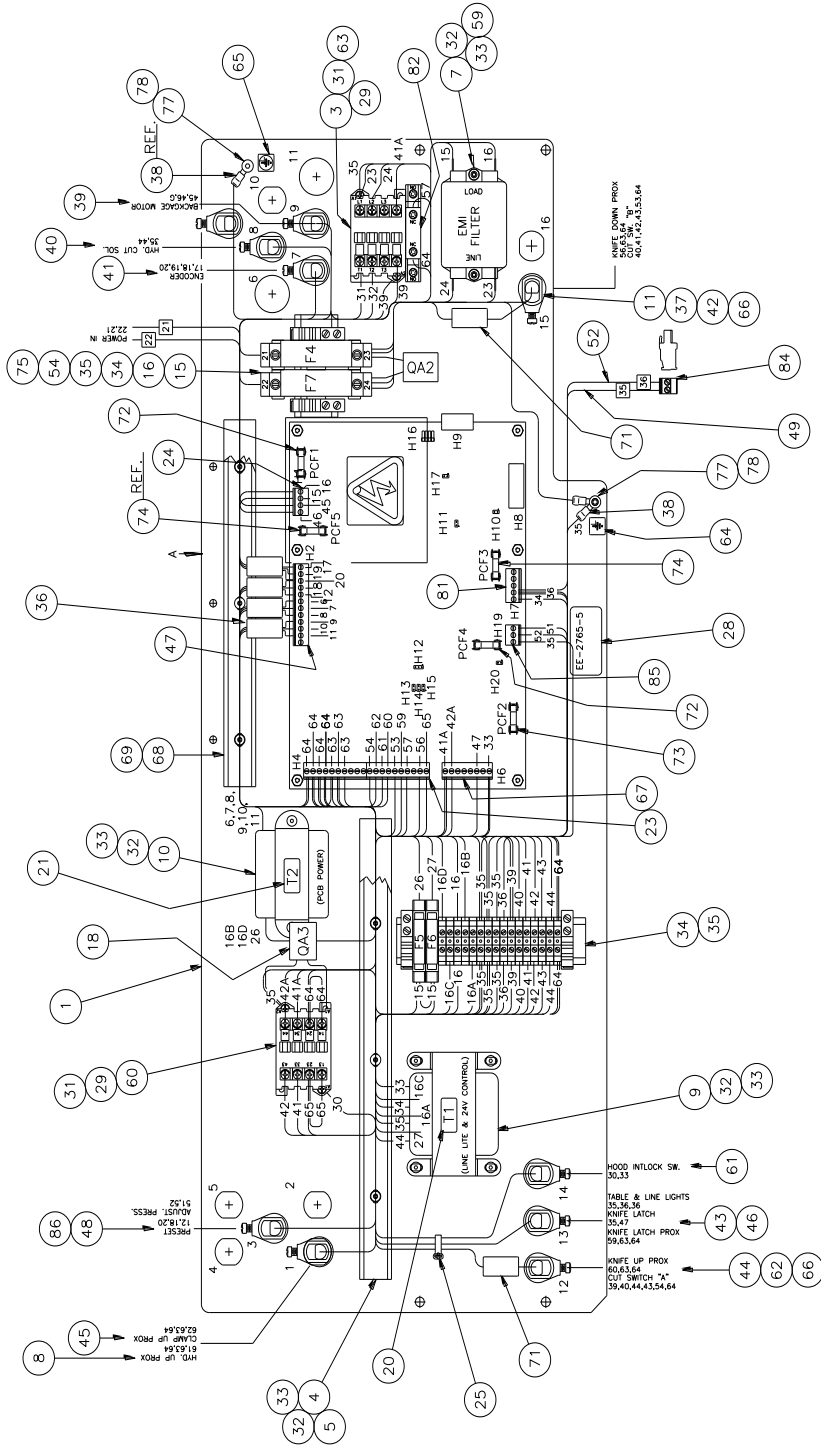
NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	43006-1	PANEL - ELECTRICAL	1
2	EE-2807-2	P.C.B. ASSEMBLY - CONTROLLER	1
3	E-2805	STARTER - CONTACTOR	1
4	E-1429-14	WIRE DUCT - 13-1/2" LONG	1
5	E-2719-14	COVER - WIRE DUCT, 13-1/2" LONG	1
6	47157-7	P.C.B. COVER - CLEAR	1
7	E-2730-3	FILTER - EMI, PANEL MOUNT	1
8	EE-2770-1	PROXIMITY ASSEMBLY - HYDRUALIC UP	1
9	E-2742-6	TRANSFORMER - 120/208/230V, 12/24V SEC.	1
10	E-2742-5	TRANSFORMER - 120/230V PRIM., 16/24V SEC.	1
11	S-1350-16	STRAIN RELIEF - CABLE	11
12	E-1977-18	RAIL - TERMINAL BLOCK, 6-1/2 LONG	1
13	E-1974-9	FUSE BLOCK - TERMINAL MOUNT, GLASS FUSE	2
14	E-1152-43	STAND-OFF - 2" LONG, #6-32 THR'D	2
15	E-1974-10	FUSE HOLDER - RAIL MOUNT, MIDGET	2
16	E-2070-1	END BRACKET - TERMINAL BLOCK	4
17	E-2068-8	TERMINAL BLOCK - THROUGH, #10 GA.	12
18			
19	E-2507-3	FIXED BRIDGE - TERMINAL BLOCK - 3 POLE	1
20	E-1584-51	LABEL - TRANSFORMER, "T1"	1
21	E-1584-52	LABEL - TRANSFORMER, "T2"	1
22	E-1152-56	STAND-OFF - 1/2" LONG, #6-32 THR'D	6
23	E-2066-10	CONNECTOR - PLUG IN PCB TERMINAL BLOCK	2
24	E-2066-4	CONNECTOR - PLUG IN PCB TERMINAL BLOCK	1
25	S-1694	CABLE TIE	7
26	E-889-12	FUSE - GLASS, 1/2A T "F5"	1
27	E-889	FUSE - GLASS, 1-1/4A T "F6"	1
28	E-1584-( )	LABEL - PART NUMBER/ REVISION LEVEL	1
29	H-6910-63203	SCREW - #6-32 X 3/8" BUT HD	8
30	H-6423-#6	NUT - #6-32 HEX	6
31	H-7324-#6	WASHER - #6 INT. TOOTHLOCK	14
32	H-6910-83204	SCREW - #8-32 X 1/2" BUT	14
33	H-7324-#8	WASHER - #8 INT. TOOTHLOCK	14
34	H-6910-102403	SCREW - #10-24 X 3/8" BUT HD	4
35	H-7324-#10	WASHER - #10 INT. TOOTHLOCK	4
36	E-2756-3	FILTER - FERRITE CORE	4
37	EE-2774	CABLE ASSEMBLY - CUT SWITCH R.H.	1
38	E-1214-63	CONNECTOR-1/4" NON-INS RING	1
39	EE-3106	CABLE ASSEMBLY - BACKGAGE MOTOR	1
40	EE-2769-19	CABLE ASSEMBLY - CUT SOLENOID	1
41	EE-3105	CABLE ASSEMBLY - ENCODER	1
42	EE-2770-3	PROXIMITY SWITCH ASSEMBLY - KNIFE DOWN	1

## Power Panel Assembly (cont.)

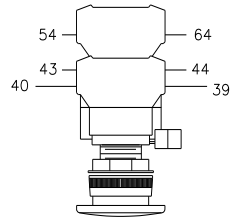
NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
43	EE-2770	PROX. SWITCH ASSEMBLY - KNIFE LATCH	1
44	EE-2770-4	PROX. SWITCH ASSEMBLY - KNIFE UP	1
45	EE-2770-2	PROXIMITY SWITCH ASSEMBLY - CLAMP UP	1
46	EE-2775	CABLE ASSEMBLY - KNIFE LATCH	1
47	E-2066-12	CONNECTOR - PLUG-IN PCB TERM. BLOCK	1
48	EE-1688-1	CABLE ASSEMBLY - PRESET	1
49	E-2743	WIRE - #18GA. GRN/YEL MTW 14" LONG	1
50	E-1356-131	LABEL - TERMINAL BLOCK	1
51	E-1356-132	LABEL - TERMINAL BLOCK	1
52	E-1163-10	WIRE - #20GA. BLK HOOK-UP, 144" TOTAL	1
53	E-2507-2	FIXED BRIDGE - TERMINAL BLOCK - 2 POLE	1
54	E-1977-3	RAIL - TERMINAL BLOCK, 3" LONG	1
55	E-849-R	WIRE - #16 GA. RED MTW, 118" TOTAL	1
56	E-709-R	WIRE - #18 GA. RED MTW, 418" TOTAL	1
57	E-1214-9	CONNECTOR - #8 INS. RING	1
58	E-1214-54	CONNECTOR - 1/4" FULLY INS. MALE Q.D.	3
59	E-1214-49	CONNECTOR - 1/4" FULLY INS. FEMALE Q.D.	4
60	E-1214-4	CONNECTOR - #8 INS. LOCKING FORK	16
61	EE-3359	ASSEMBLY - ELEC. EYES	1
62	EE-2774-4	CABLE ASSEMBLY - CUT SWITCH, L.H."	1
63	E-1736-4	QUENCHARC - RELAY MOUNT (QA1)	1
64	S-1781-42	LABEL - GROUND SYMBOL, SECONDARY	1
65	S-1781-197	LABEL - GROUND SYMBOL, PRIMARY	1
66			
67	E-2066-8	CONNECTOR - PLUG IN PCB TERMINAL BLOCK	1
68	E-1429-15	WIRE DUCT - 10-3/4" LONG	1
69	E-2719-15	COVER - WIRE DUCT, 10-3/4" LONG	1
70	E-702-R	WIRE - #14 GA. RED MTW, 62" TOTAL	1
71	E-2756-6	FILTER - FERRITE CORE	2
72	E-2330-3	FUSE - 2A SLO-BLO, GLASS METRIC (PCF1)	1
73	E-2330-5	FUSE - 3.15A SLO-BLO, GLASS METRIC (PCF2)	1
74	E-2330-7	FUSE - 5A SLO-BLO, GLASS METRIC (PCF3)	1
75	E-1736-2	QUENCHARC (QA2)	1
76	E-1453-6	SHRINK TUBING - 1/8" DIA., 1" LONG	2
77	H-6910-404	SCREW - 1/4-20 X 1/2 BUT HD CAP	2
78	H-7324-8	WASHER - 1/4" INT. TOOTHLOCK	2
79	E-1599-11	IC - 32 PIN PACKAGE (BLANK)	1
80	E-2864	SEPARATOR PLATE - TERMINAL BLOCK	1
81	E-2066-5	CONNECTOR - PLUG IN PCB TERM. 5 POLE	1
82	E-2376-4	CONTACTOR - AUX. (1) N.O. (1) N.C.)	1
83	S-1781-35	LABEL - CAUTION, ELECTRICAL SHOCK	1
84	E-2066-2	HEADER - 2 POS (PHOENIX)	1
85	E-2066-3	HEADER - 3 POS (PHOENIX)	1
86	EE-2769-3	CABLE ASSEMBLY - ADJUST. PRESS. SOL.	1

### 4.26 Power Panel Assembly - Standard

EE-2765-5 Rev. "C" - Two hand control with tilt shield

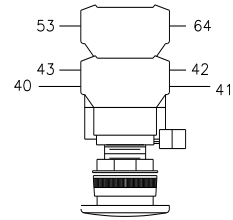
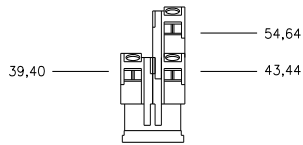


Power Panel Assembly (cont.)



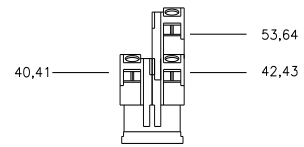
LEFT HAND "A"  
CUT SWITCH

WIRING DETAIL  
SCALE: NONE

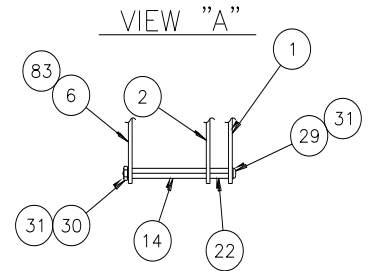
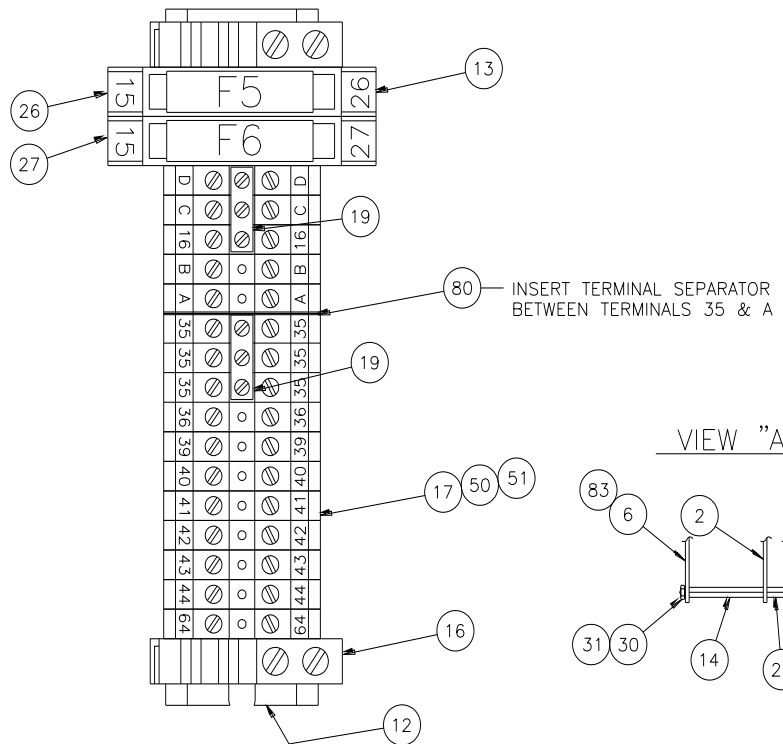


RIGHT HAND "B"  
CUT SWITCH

WIRING DETAIL  
SCALE: NONE



TRANSFORMER COLOR CODE	
T1	
WIRE COLOR	WIRE NO.
BLACK	27
BLACK/YELLOW	16A
BLACK/RED	16C
WHITE	35
YELLOW	34
RED	33
GREEN	-
T2	
WIRE COLOR	WIRE NO.
BLACK	26
BLACK/YELLOW	16B
BLACK/RED	16D
BLUE	9
BLUE/YELLOW	10
BLUE	11
RED	8
RED/YELLOW	7
RED	6



## Power Panel Assembly (cont.)

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	43006-1	PANEL - ELECTRICAL	1
2	EE-2807-2	P.C.B. ASSEMBLY - CONTROLLER	1
3	E-2805	STARTER - CONTACTOR	1
4	E-1429-14	WIRE DUCT - 13-1/2" LONG	1
5	E-2719-14	COVER - WIRE DUCT, 13-1/2" LONG	1
6	47157-7	P.C.B. COVER - CLEAR	1
7	E-2730-3	FILTER - EMI, PANEL MOUNT	1
8	EE-2770-1	PROXIMITY ASSEMBLY - HYDRUALIC UP	1
9	E-2742-6	TRANSFORMER - 120/208/230V, 12/24V SEC.	1
10	E-2742-5	TRANSFORMER - 120/230V PRIM., 16/24V SEC.	1
11	S-1350-16	STRAIN RELIEF - CABLE	11
12	E-1977-13	RAIL - TERMINAL BLOCK, 6" LONG	1
13	E-1974-9	FUSE BLOCK - TERMINAL MOUNT, GLASS FUSE	2
14	E-1152-43	STAND-OFF - 2" LONG, #6-32 THR'D	2
15	E-1974-10	FUSE HOLDER - RAIL MOUNT, MIDGET	2
16	E-2070-1	END BRACKET - TERMINAL BLOCK	4
17	E-2068-8	TERMINAL BLOCK - THROUGH, #10 GA.	16
18	E-1736-2	QUENCHARC - WIRE LEADS	2
19	E-2507-3	FIXED BRIDGE - TERMINAL BLOCK - 3 POLE	2
20	E-1584-51	LABEL - TRANSFORMER, "T1"	1
21	E-1584-52	LABEL - TRANSFORMER, "T2"	1
22	E-1152-56	STAND-OFF - 1/2" LONG, #6-32 THR'D	6
23	E-2066-10	CONNECTOR - PLUG IN PCB TERMINAL BLOCK	2
24	E-2066-4	CONNECTOR - PLUG IN PCB TERMINAL BLOCK	1
25	S-1694	CABLE TIE	7
26	E-889-12	FUSE - GLASS, 1/2A T "F5"	1
27	E-889	FUSE - GLASS, 1-1/4A T "F6"	1
28	E-1584-()	LABEL - PART NUMBER/ REVISION LEVEL	1
29	H-6910-63203	SCREW - #6-32 X 3/8" BUT HD	10
30	H-6423-#6	NUT - #6-32 HEX	6
31	H-7324-#6	WASHER - #6 INT. TOOTHLOCK	16
32	H-6910-83204	SCREW - #8-32 X 1/2" BUT	14
33	H-7324-#8	WASHER - #8 INT. TOOTHLOCK	14
34	H-6910-102403	SCREW - #10-24 X 3/8" BUT HD	4
35	H-7324-#10	WASHER - #10 INT. TOOTHLOCK	4
36	E-2756-3	FILTER - FERRITE CORE	4
37	EE-2774	CABLE ASM. - RIGHT HAND CUT SWITCH "B"	1
38	E-1214-64	CONNECTOR-1/4" NON-INS RING	1
39	EE-3106	CABLE ASSEMBLY - BACKGAGE MOTOR	1
40	EE-2769	CABLE ASSEMBLY - CUT SOLENOID	1
41	EE-3105	CABLE ASSEMBLY - ENCODER	1
42	EE-2770-3	PROXIMITY SWITCH ASSEMBLY - KNIFE DOWN	1
43	EE-2770	PROXIMITY SWITCH ASSEMBLY - KNIFE LATCH	1

## Power Panel Assembly (cont.)

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
44	EE-2770-4	PROXIMITY SWITCH ASSEMBLY - KNIFE UP	1
45	EE-2770-2	PROXIMITY SWITCH ASSEMBLY - CLAMP UP	1
46	EE-2775	CABLE ASSEMBLY - KNIFE LATCH	1
47	E-2066-12	CONNECTOR - PLUG-IN PCB TERM. BLOCK	1
48	EE-1688-1	CABLE ASSEMBLY - PRESET	1
49	E-2743	WIRE - #18GA. GRN/YEL MTW 14" LONG	1
50	E-1356-131	LABEL - TERMINAL BLOCK	1
51	E-1356-132	LABEL - TERMINAL BLOCK	1
52	E-1214-4	CONNECTOR - #8 INS. LOCKING FORK	17
53			
54	E-1977-3	RAIL - TERMINAL BLOCK, 3" LONG	1
55	E-849-R	WIRE - #16 GA. RED MTW 121" TOTAL	1
56	E-709-R	WIRE - #18 GA. RED MTW 466" TOTAL	1
57	E-1214-9	CONNECTOR - #8 INS. RING	1
58	E-1214-54	CONNECTOR - 1/4" FULLY INS. MALE Q.D.	3
59	E-1214-49	CONNECTOR - 1/4" FULLY INS. FEMALE Q.D.	4
60	E-2403-9	RELAY - CONTACTOR (24VAC COIL)	1
61	EE-3436	CABLE ASSEMBLY - SHIELD SWITCH	1
62	EE-2774-1	CABLE ASM. - LEFT HAND CUT SWITCH "A"	1
63	E-1736-4	QUENCHARC - RELAY MOUNT	1
64	S-1781-42	LABEL - GROUND SYMBOL, SECONDARY	1
65	S-1781-197	LABEL - GROUND SYMBOL, PRIMARY	1
66	EE-2851-3	CUT SWITCH ASSEMBLY	2
67	E-2066-8	CONNECTOR - PLUG IN PCB TERMINAL BLOCK	1
68	E-1429-15	WIRE DUCT - 10-3/4" LONG	1
69	E-2719-15	COVER - WIRE DUCT, 10-3/4" LONG	1
70	E-702-R	WIRE - #14 GA. RED MTW 62" TOTAL	1
71	E-2756-6	FILTER - FERRITE CORE	2
72	E-2330-3	FUSE - 2A SB, GLASS METRIC (PCF1&4)	2
73	E-2330-5	FUSE - 3.15A SLO-BLO, GLASS METRIC (PCF2)	1
74	E-2330-7	FUSE - 5A SLO-BLO, GLASS METRIC (PCF3)	1
75	E-1736-2	QUENCHARC (QA2)	1
76	E-1453-6	SHRINK TUBING - 1/8" DIA., 1" LONG	2
77	H-6910-404	SCREW - 1/4-20 X 1/2 BUT HD CAP	2
78	H-7324-8	WASHER - 1/4" INT. TOOTHLOCK	2
79	E-1599-11	IC - 32 PIN PACKAGE (BLANK)	1
80	E-2864	SEPARATOR PLATE - TERMINAL BLOCK	1
81	E-2066-5	CONNECTOR - PLUG IN PCB TERM. 5 POLE	1
82	E-2376-4	CONTACTOR - AUX. (1) N.O. (1) N.C.)	1
83	S-1781-35	LABEL - CAUTION, ELECTRICAL SHOCK	1
84	E-2066-2	HEADER - 2 POS (PHOENIX)	1
85	E-2066-3	HEADER - 3 POS (PHOENIX)	1
86	EE-2769-3	CABLE ASSEMBLY - ADJUST. PRESS SOL.	1



## Power Panel Assembly (cont.)

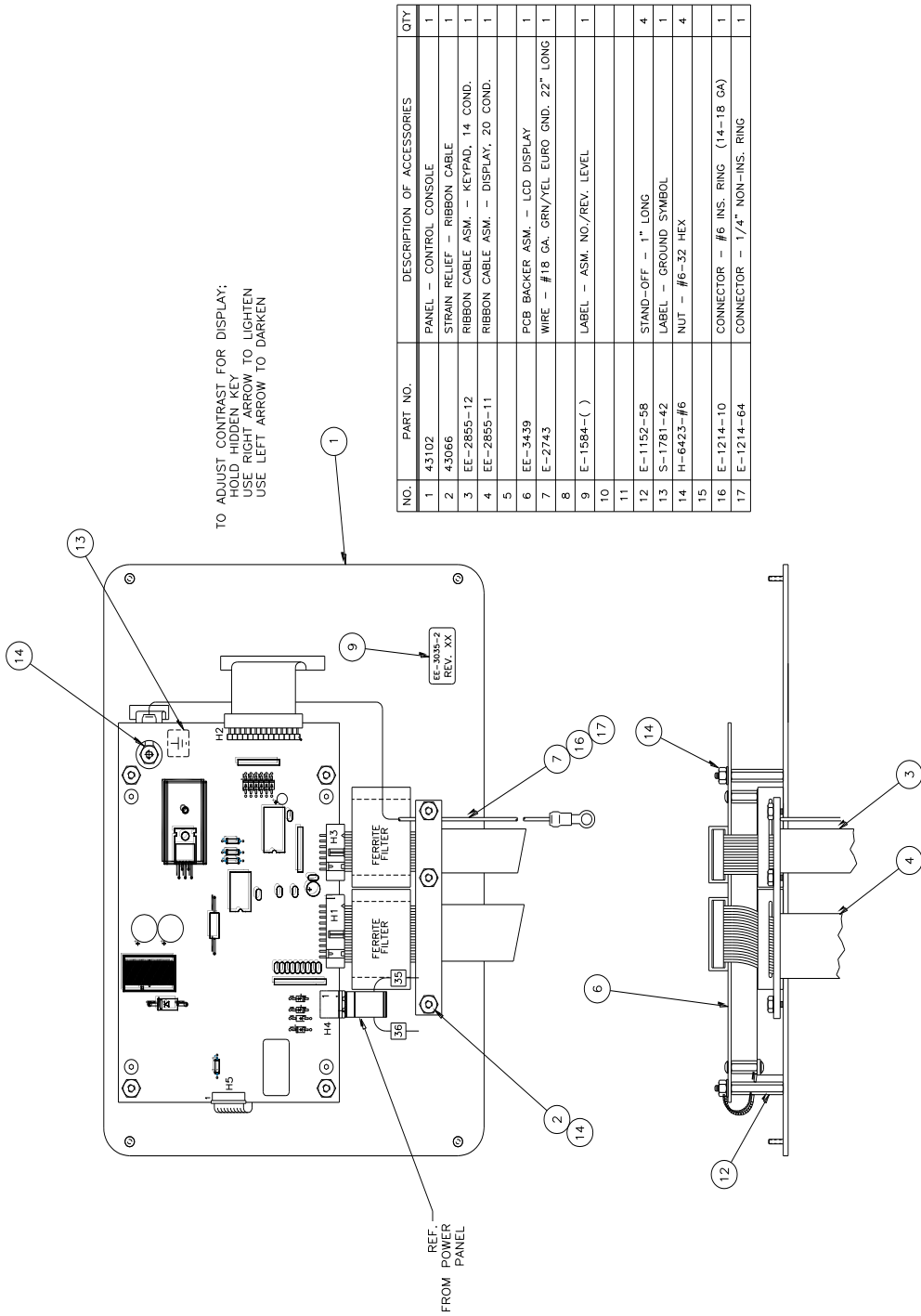
### NOTES:

- 1) REMOVE THE MAIN PC BOARD (EE-2807-2) AND REPLACE WITH ITEM #2.
- 2) ALL OF THE WIRED PLUGS PLUG INTO THE SAME SPOT ON THE NEW PCB AS THEY DID ON THE OLD PCB.
- 3) TRANSFER ALL OF THE OLD FUSES TO THE SAME LOCATIONS ON THE NEW BOARD.
- 4) PLUG ITEM #7 (CAN PLUG) INTO HEADER #10 OR #11 - CABLE TIE TO THE PANEL AS SHOWN AND HANG OFF THE FRONT OF THE PANEL.
- 5) MOVE THE JUMPER ON HEADER 16 SO THAT PINS 1 AND 2 ARE JUMPED.

NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	EE-2765-2	PANEL ASSEMBLY - ELECTRICAL	ref
2	EE-3432	P.C.B. ASSEMBLY - TC I/O	1
3	E-2066-5	CONNECTOR - PLUG IN PCB TERM. 5 POLE	1
4	EE-2770-7	PROX. ASSEMBLY - FALSE CLAMP	1
5	EE-2855-11	CABLE ASSEMBLY - RIBBON, 20 PIN	1
6	EE-2855-12	CABLE ASSEMBLY - RIBBON, 14 PIN	1
7	EE-3460-1	CABLE ASSEMBLY - 'CAN' PLUG	1
8	H-6910-102403	SCREW - #10-24 X 3/8" BUT HD	1
9	S-1694	CABLE TIE - SCREW DOWN	1
10	E-1584-( )	LABEL - PART NUMBER/ REVISION LEVEL	1
11	E-849-R	WIRE - #16GA. RED MTW 34" LONG	2
12	S-1350-16	STRAIN RELIEF - CABLE	1
13	E-2330-3	FUSE - 2A SB METRIC (PCF4)	1
14	E-3483	SCHEMATIC - BASIC MACH. - TC (PRINT ONLY)	1

### 4.28 Control Console Assembly – Backlit Display

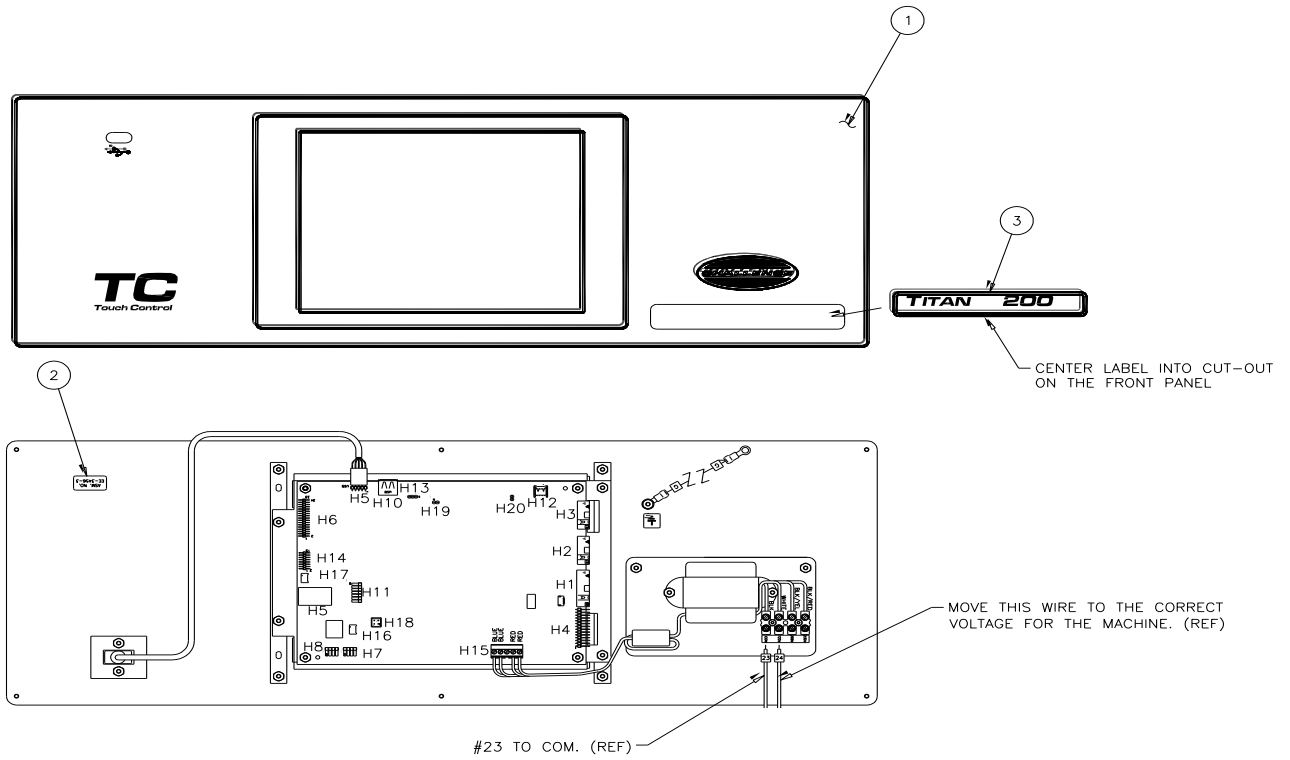
EE-3035-2 Rev. "F - Standard"



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	43102	PANEL — CONTROL CONSOLE	1
2	43066	STRAIN RELIEF — RIBBON CABLE	1
3	EE-2855-12	RIBBON CABLE ASM. — KEYPAD, 14 COND.	1
4	EE-2855-11	RIBBON CABLE ASM. — DISPLAY, 20 COND.	1
5			
6	EE-3439	PCB BACKER ASM. — LCD DISPLAY	1
7	E-2743	WIRE — #18 GA. GRN/YEL EURO GND. 22" LONG	1
8			
9	E-1584-( )	LABEL — ASM. NO./REV. LEVEL	1
10			
11			
12	E-1152-58	STAND-OFF — 1" LONG	4
13	S-1781-42	LABEL — GROUND SYMBOL	1
14	H-6423-#6	NUT — #6-32 HEX	4
15			
16	E-1214-10	CONNECTOR — #6 INS. RING (14-18 GA)	1
17	E-1214-64	CONNECTOR — 1/4" NON-INS. RING	1

## 4.29 Control Console Assembly – Touch Control ‘TC’

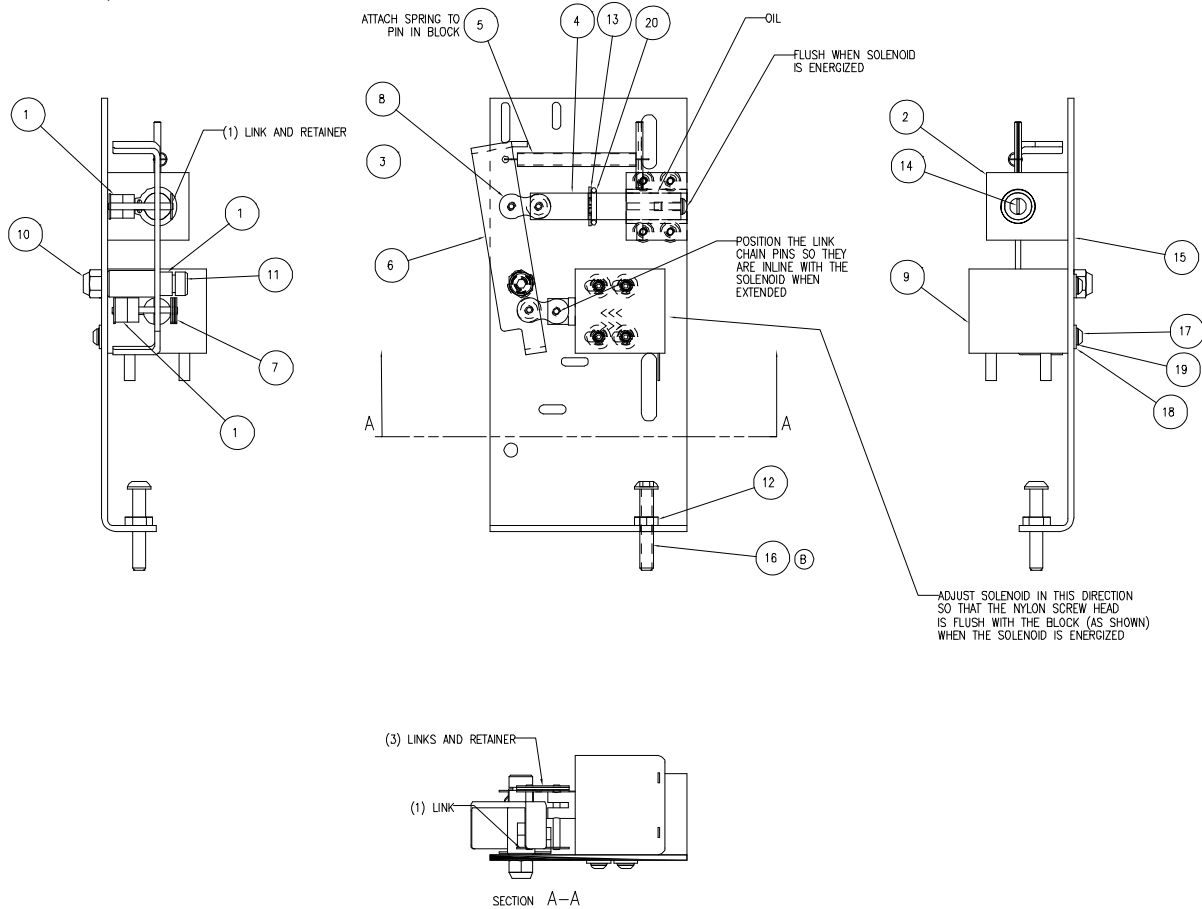
EE-3456-3 Rev. “B” - Optional



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	EE-3471	PANEL ASM. – FRONT CONTROL, TC	1
2	E-1584-( )	LABEL – ASM. NO./REV. LEVEL	1
3	47701-4	TC PANEL INSERT – TITAN 200B	1
4	EE-3480	FLASH DRIVE – PROGRAMMED	1
5	E-2743	WIRE – #18 GA. YEL/GREEN MTW 27" LONG	1
6	E-1214-2	CONNECTOR – #6 INS. RING	1
7	E-1214-64	CONNECTOR – 1/4" NON- INS. RING	1

### 4.30 Knife Latch Assembly

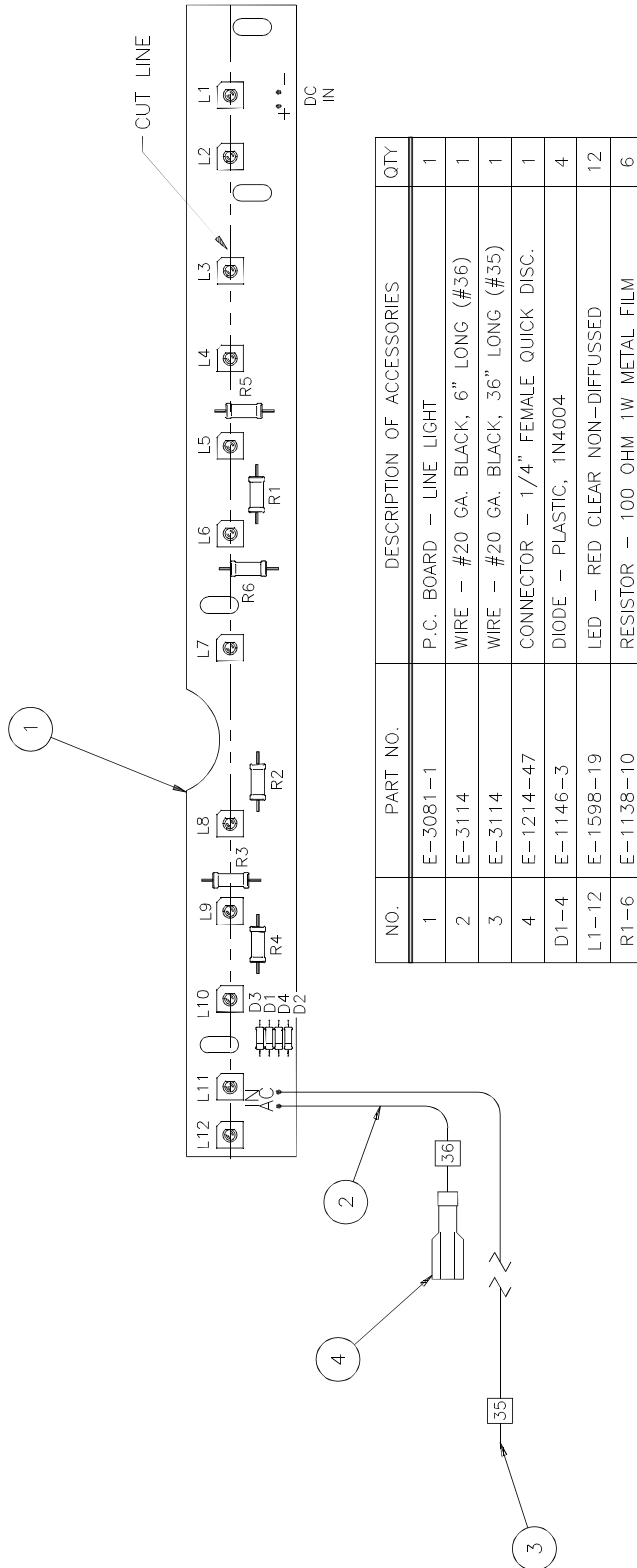
41120-4, Rev. B



NO.	PART NO.	DESCRIPTION	QTY
1	11288-28	WASHER/SPACER	5
2	41112-2	ASSEMBLY - KNIFE LATCH BLOCK	1
3	41115-2	PLATE- KNIFE LATCH	1
4	41116-3	ROD- KNIFE LATCH	1
5	41117-1	SPRING - EXTENSION	1
6	47553-2	LINK ASSEMBLY- KNIFE LATCH	1
7	47567	LINK - CHAIN	1
8	47567	LINK - CHAIN	1
9	E-974-3	SOLENOID	1
10	H-5247-4	NUT - 1/4-20 FLEX LOCK	1
11	H-5254-510	SCREW - 5/16 X 1-1/4 SHSS	1
12	H-6424-4	NUT - 1/4-20 HEX JAM	1
13	H-6451-0500	RING - EXTERNAL GRIPPING	1
14	H-6880-83206	SCREW - #8-32 X 3/8 NYLON ROUND HD MACH	1
15	H-6909-83203	SCREW - #8-32 X 3/8" FLAT HEAD CAP	4
16	H-6910-412	SCREW - 1/4-20 X 1-1/2 BUTTON HEAD CAP	1
17	H-6910-83203	SCREW - #8-32 X 3/8 BUTTON HEAD CAP	4
18	H-7321-N8	WASHER - #8 SAE PLAIN	4
19	H-7324-N8	WASHER - #8 INT TOOTH	4
20	S-1810-9	O-RING	1

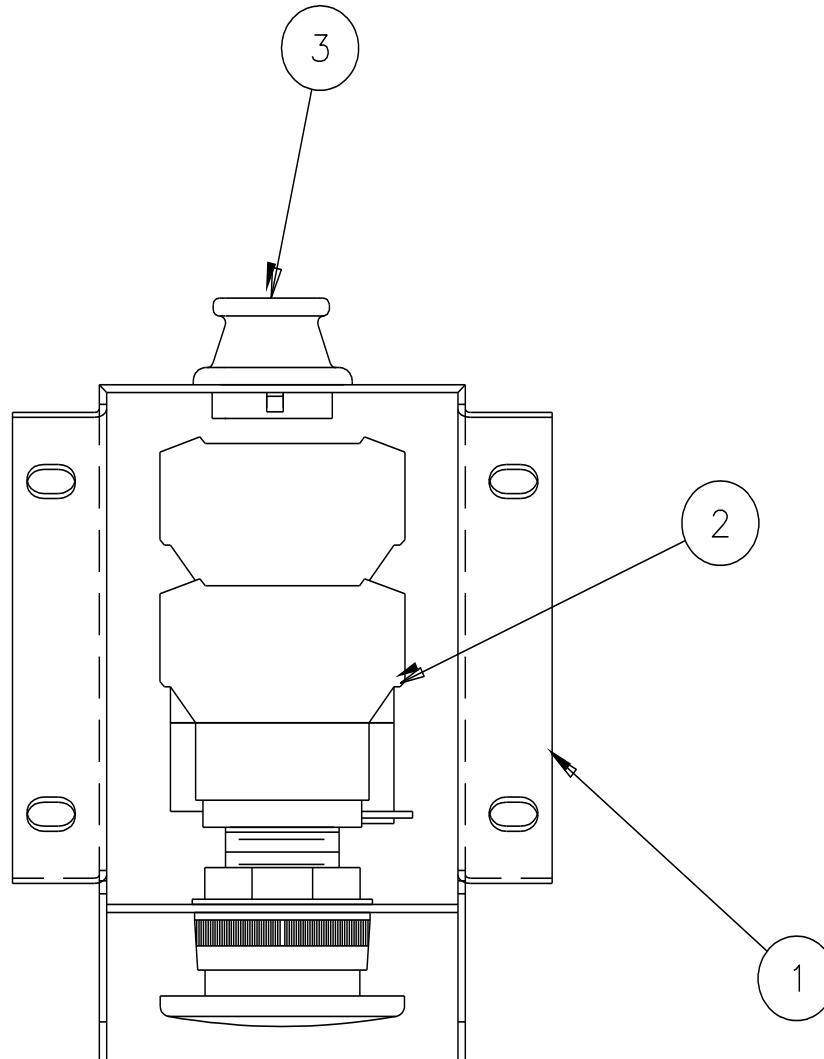
### 4.31 Line Light Assembly – LED's

EE-3081-1 Rev. "C"



### 4.32 Cut Button Assembly

EE-2851-3 Rev. "E"



NO.	PART NO.	DESCRIPTION OF ACCESSORIES	QTY
1	16566-1	BOX - PUSHBUTTON	1
2	E-3437-4	SWITCH - MUSHROOM PUSHBUTTON	1
3	S-1350-16	STRAIN RELIEF - CABLE	1

## 4.33 Fuse Value and Function

Location	Fuse Value/Type	Circuit	CMC Fuse P/N	Dimension
PCF1	2A-T	Secondary Backgauge Motor	E-2330-3	5mm x 20mm
PCF2	3.15A-T	Pcb output	E-2330-5	5mm x 20mm
PCF3	5A-T	Line Lights	E-2330-7	5mm x 20mm
PCF4	2A-T	PWM control	E-2330-5	5mm x 20mm
F4	10A T	Main – Hot	E-1075-10SB	13/32 x 1-1/2
PCF5	5A-T	Secondary Backgauge Motor	E-2330-7	5mm x 20mm
F5	.5A T	T1 Primary	E-889-12	¼" x 1-1/4"
F6	1.25A-T	T2 primary	E-889	¼" x 1-1/4"
F7	10A-T	Main – Neutral	E-1075-10SB	13/32" x 1-1/2"

T = Time Delay Fuse