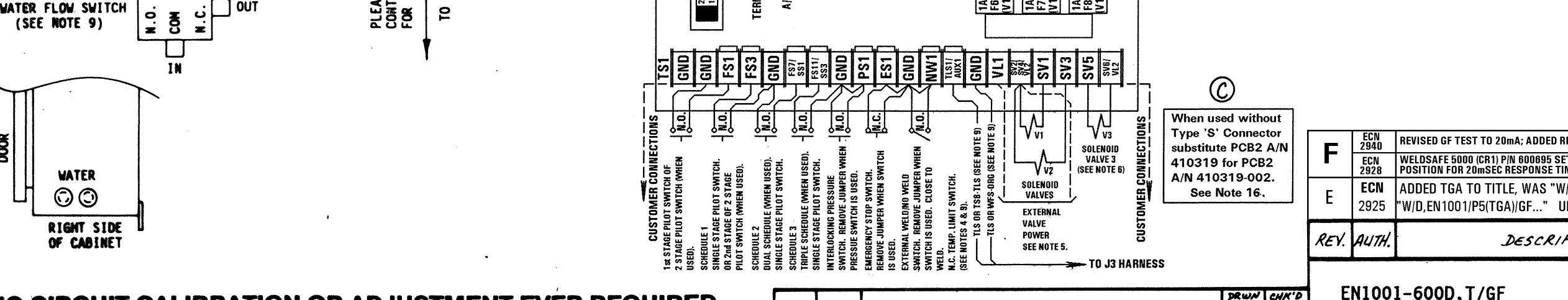
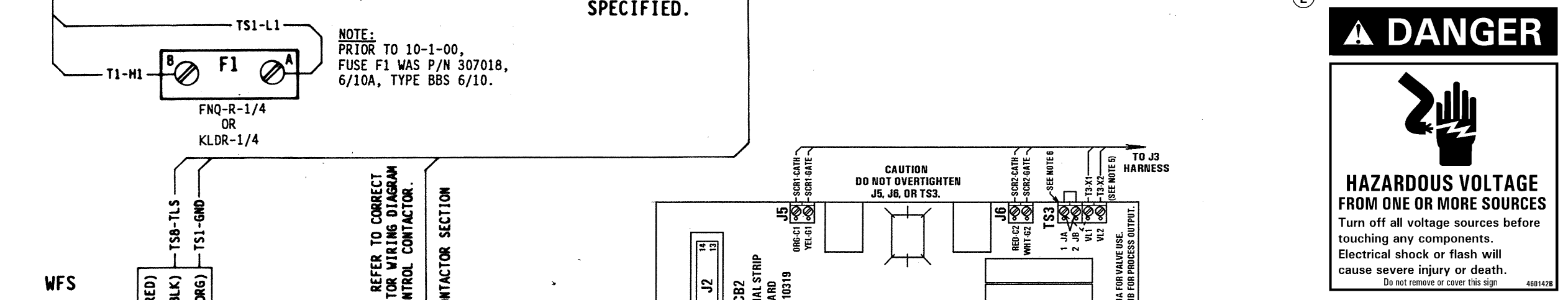
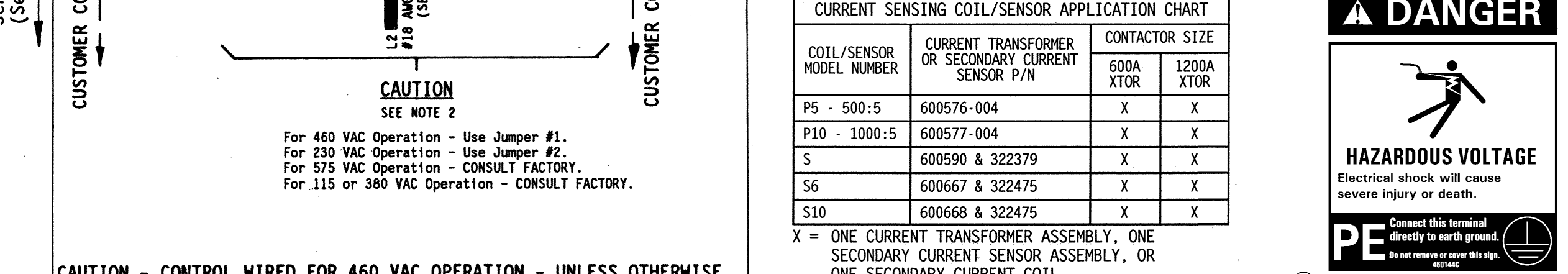
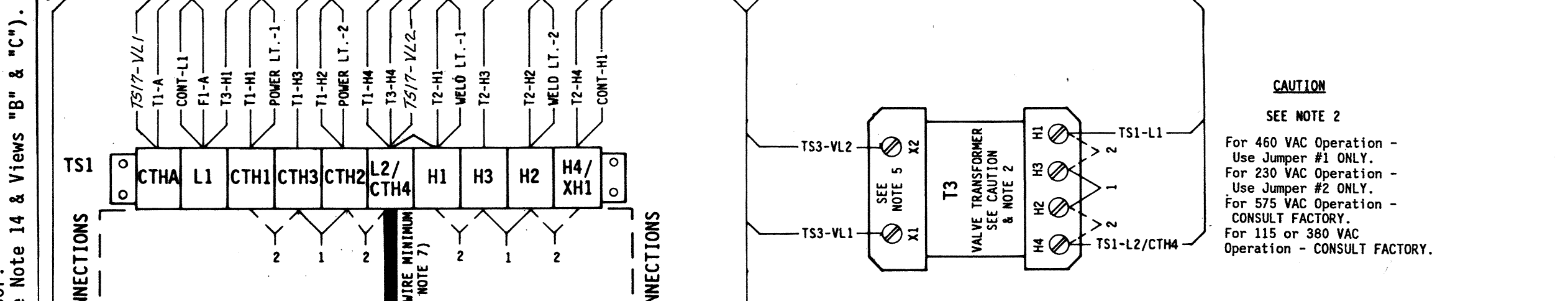
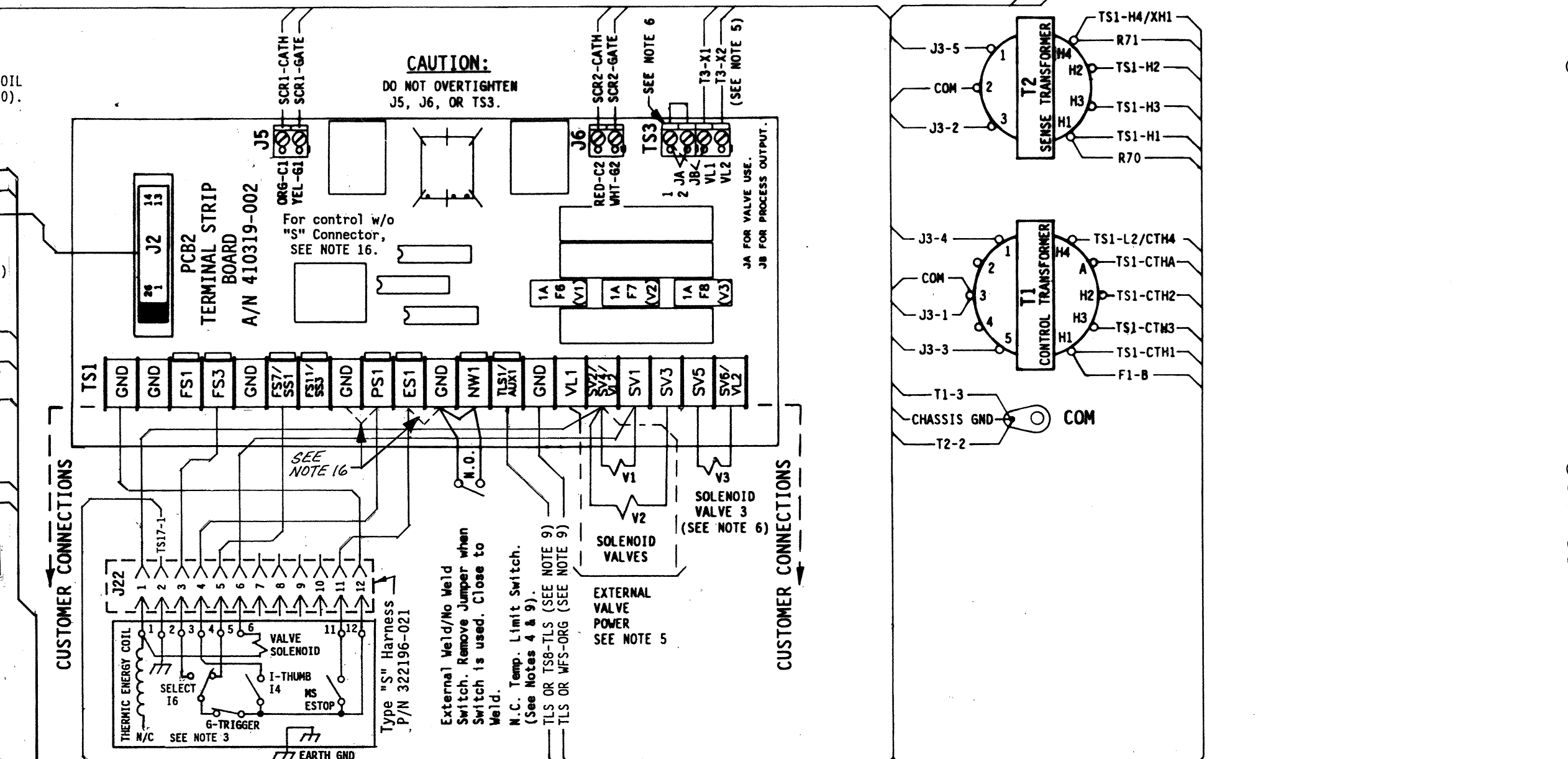
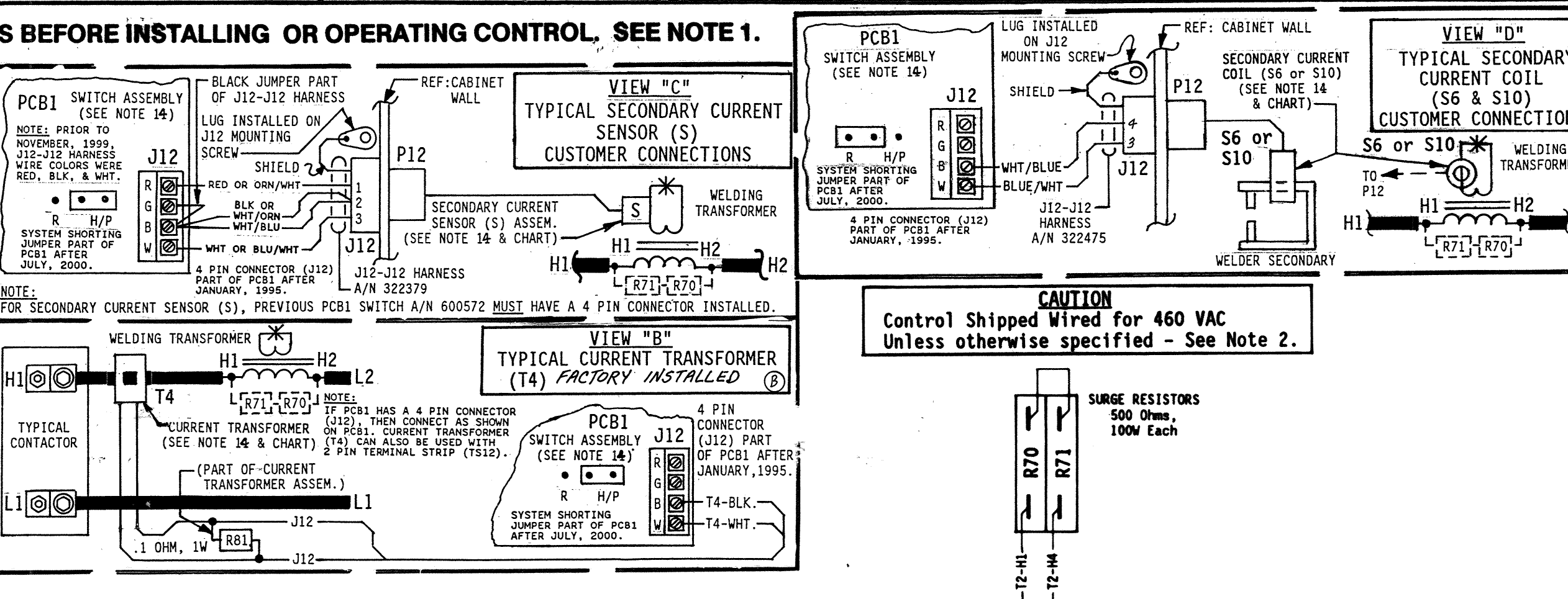
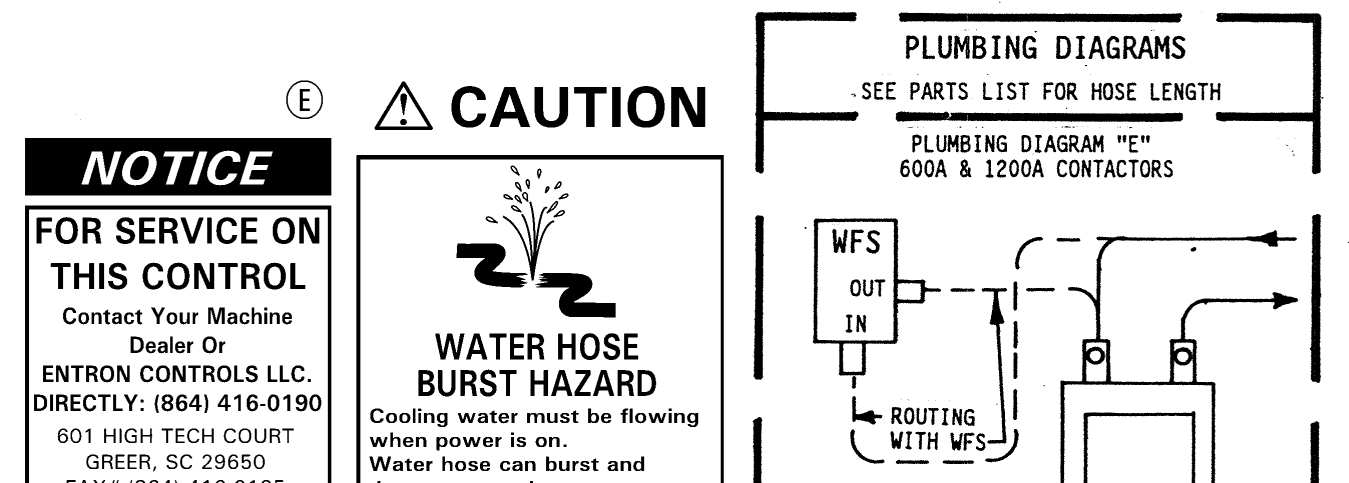
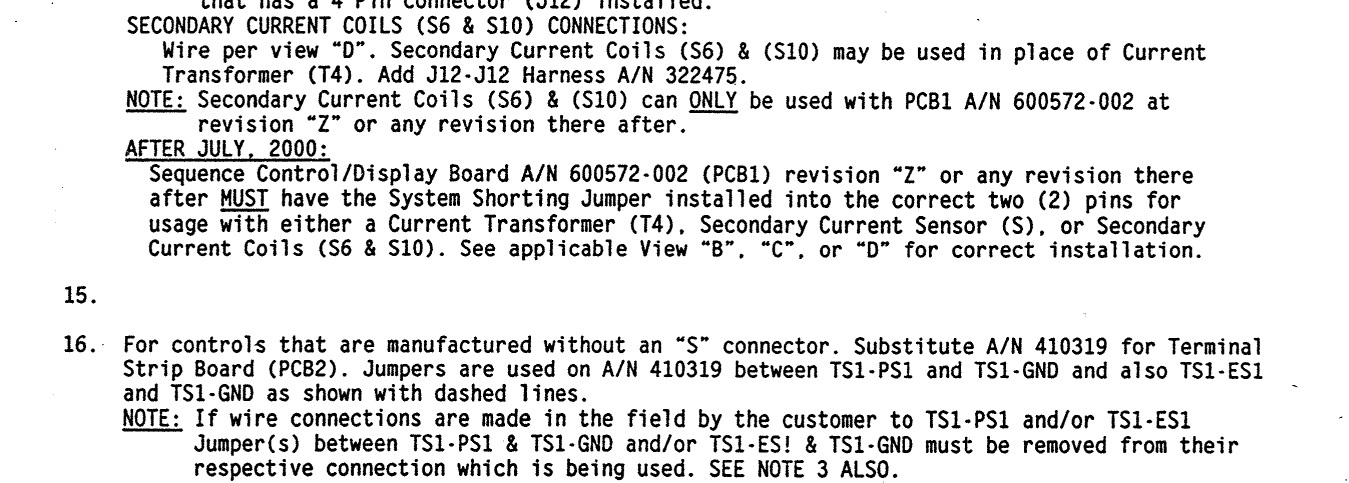
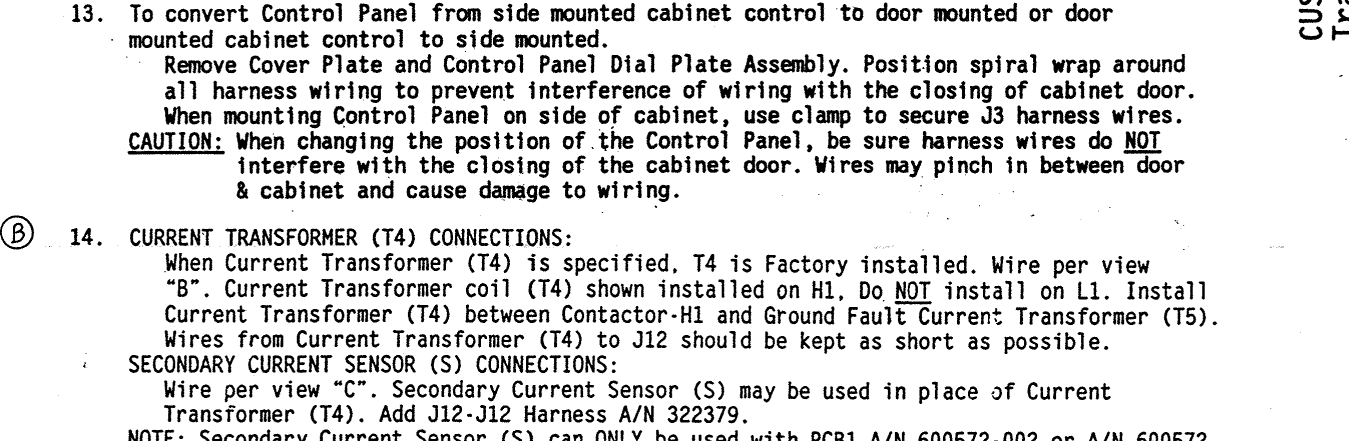
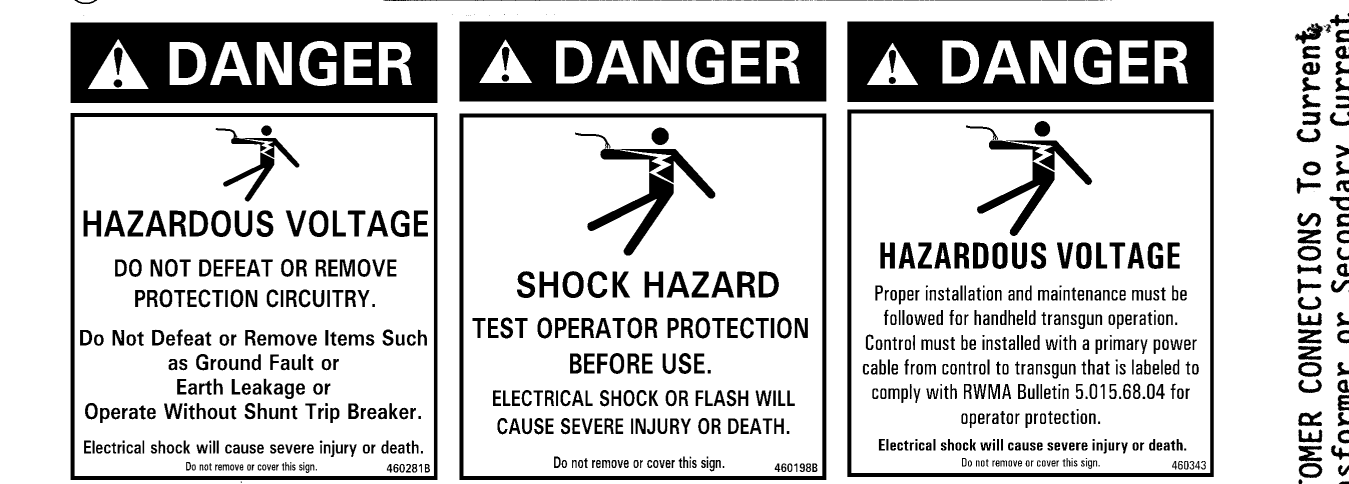
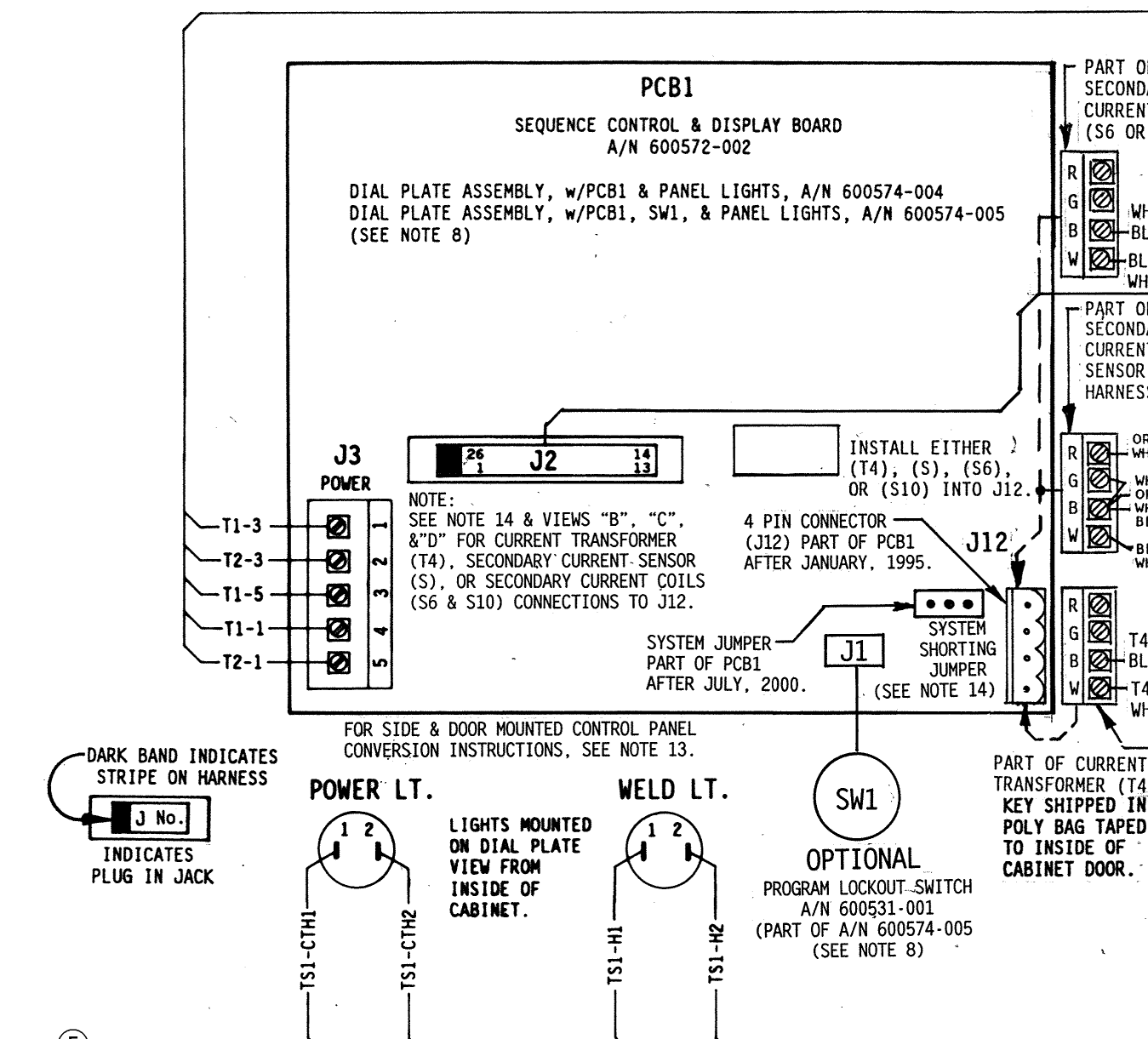
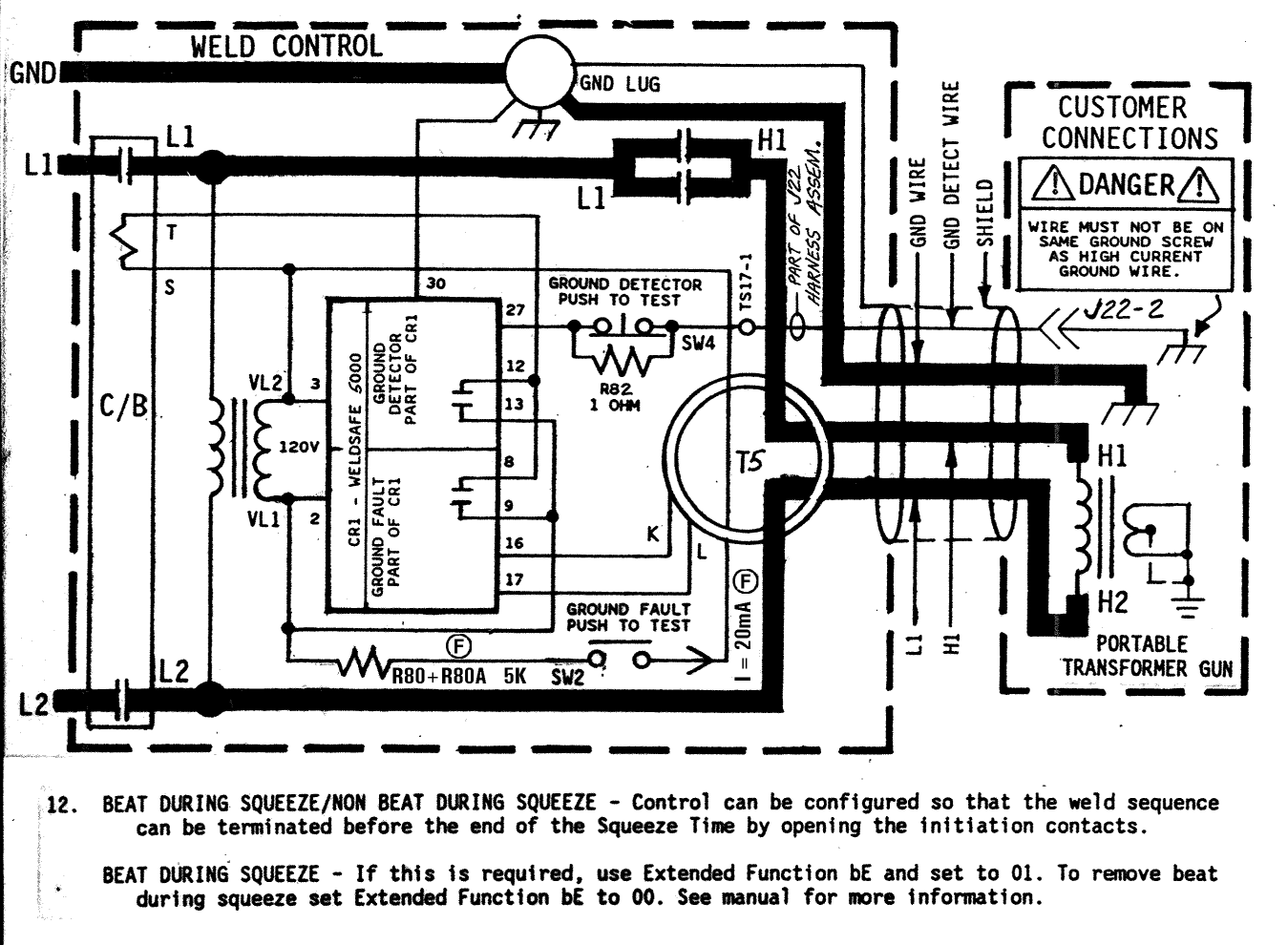
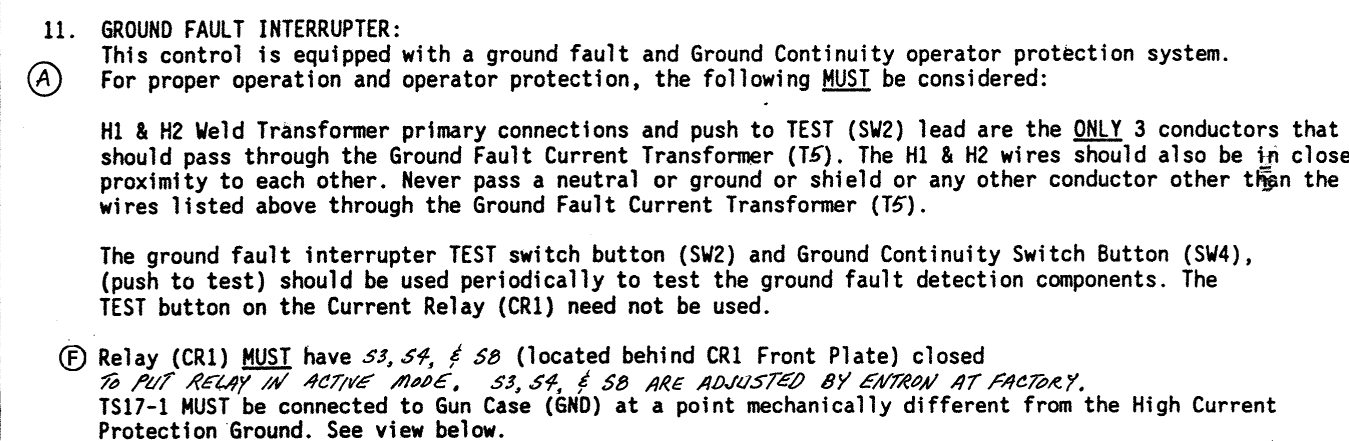


- NOTES:**
- It is recommended that control wiring (i.e.: initiation, pressure switch, etc.) be physically separated from the high voltage wiring (115 volts or higher).
 - For 460 VAC Operation - Use Jumper #1 on T3 & TS1. As shipped unless otherwise specified.
For 230 VAC Operation - Use Jumper #2 on T3 & TS1.
For 380 VAC Operation - CONSULT FACTORY.
For 575 VAC Operation - CONSULT FACTORY.
 - Type "S" (J22): DO NOT CONNECT GND TO CONTROL GND (TS1-GND)!
Control Factory wired for GND Loss Protection. Loss of ground will prevent Control Initiation. Gun internal connections must be modified for correct operation of Ground Loss Protection Circuitry. The wire that connects the Thermic Energy Coil to P22-2 should be disconnected from Terminal Strip in Gun and Insulated. This same Terminal Strip connection should then be grounded to the gun at some point on the gun that no other wires share. For customer connections to Type "S" connector, see J22 Harness wiring configuration.
 - EN1001-SERIES "D/T" Cabinet:
ENTRON supplies Temperature Limit Switch (TLS) P/N 300020 and provides connections to TS1-TLS/AUX1 & TS1-GND. Jumper not required between TS1-TLS/AUX1 & TS1-GND. NOTE: TLS Thyristor will open at temperatures greater than or equal to 150°F.
 - When external valve power is supplied to the control. Remove and insulate leads TS3-VL1 & TS3-VL2 on the Terminal Strip Board (PCB2) (from T3-X1 & T3-X2). Connect external AC power supply (24-240 VAC) to TS1-VL1 & TS1-SV2/SV4/VL2.
CAUTION: Do not overheat T3S.
 - Valve Usage:
When using this control with air over oil Portable Transformer Guns with Extend and Intensify and/or Blocking valves the following valve assignments and Jumper placement must be followed:
TS1-SV1 & TS1-SV2 connect to Solenoid Valve.
TS1-SV3 & TS1-SV4 connect to Intensify solenoid valve.
TS1-SV5 & TS1-SV6 connect to Blocking solenoid valve (when used).
NOTE: TS1-SV5 & TS1-SV6 can be used for a valve output or a Process Output (Blocking Valve). When using TS1-SV5 & TS1-SV6 as a valve output use Jumper "A" on TS3. When using TS1-SV5 & TS1-SV6 as a Process Output (Blocking Valve) use Jumper "B" on TS3.
CAUTION: Do not overheat T3S.
WARNING: Use of Jumper "B" bypasses control relay contacts to allow a Process Output without an initiation. See MANUAL.
 - TS1-L2/CTH4 to Circuit Breaker L2 is Factory installed.
 - When Optional Program Lockout is specified by customer. Dial Plate A/N 600574-005 replaces A/N 600574-004. Add Switch P/N 600551-001 & remove Note Plug P/N 565003.
 - When TLS and WFS are used together, add WFS P/N 600297 & Terminal Strip TS8 P/N 335017. Wire as shown below. Jumper not required between TS1-TLS/AUX1 & TS1-GND. WFS will open with flow less than .75 GPM.



PARTS LIST - CONTROL SECTION

QTY.	DESIG.	PART NO.	DESCRIPTION
1	0	600574-004	Assem., Dial Plate, w/w. Assem., EN1001, Consisting of:
1	0	600574-005	Assem., Dial Plate, w/w. Assem. & keylock, EN1001, Consisting of:
1	1	600572-002	Assem., Switch, Sequence Control & Display Board
1	1	330001	Assem., Switch, Keylock, Momentary, SPST
1	1	540245	(1)Illustrated Panel, Dial Plate, EN1001
1	1	515104	Panel, Display Window, Red Filter, EN1001
1	1	565003	Hole Plug, 3/4" Diam., Black
1	1	350501	Lamp, Neon, Red, 230V
1	1	350502	Lamp, Neon, Clear, 230V
1	1	322326	Assem., Harness, Sec. Ctrl Bd. to Terminal Strip Bd.
1	1	322334-007	Assem., Harness, Power, EN1001/GF. "D/T" Cabinet

PARTS LIST - CONTACTOR SECTION

QUANTITY	DESIG.	PART NO.	DESCRIPTION
2	2	335034	Terminal Strip, 10 Pin, (Part of J3 Harness)
1	1	335044	Terminal Strip, 2 Pin, (For TLS/WFS)
1	1	335017	Terminal Strip, 2 Pin, (For TLS/WFS)
1	1	330001	Transformer, Control, (Part of J3 Harness)
1	1	310002	Transformer, Sense, (Part of J3 Harness)
1	1	311011	Transformer, Valve, 150VA, 24V
2	2	R70, T1	Resistor, Power, Surge, 500 Ohm, 100W
1	1	R80, R80A	600645
1	1	R1	210198
1	1	R82	210198
1	1	F1	308010
1	1	F1	307024
3	3	F6, 7, 8 (PCB2)	307022
1	1	325024	Fuse, 1 Amp, Slow Blow, 250, (Part of 410319 & 410319-002)
2	2	(T3)	325149
2	2	(T3)	325149
1	1	600810	Assem., Contactor, Thyristor, Water, 600A, 460/575V
1	1	346004	Lug, Screw, 5/16 Bolt to 2/0 Wire, 600A Thyristor Contactor, HI
1	1	346011	Lug, Screw, 1/4 Bolt to 2/0 Wire, 600A Thyristor Contactor, LI
1	1	341400	Standoff, Insulator, 600/1200A Thyristor Contactor, LI
1	1	346002	Assem., Wire, Contactor-LI to LugLI, 600/1200A Thy. Contactor
2	2	346002	Assem., Contactor, Thyristor, Water, 1200A, 460/575V
1	1	346002	Lug, Screw, 5/16 Bolt to 250 MCM Wire, 1200A Contactor, LI & HI
1	1	(TS2)	600649
1	1	341045	Assem., Standoff, w/Insulator, TS2-HI, Consisting of:
1	1	341045	Insulator, Insulation between HI & H2 Lugs, TS2-HI
1	1	341040-001	Standoff, Modified for Insulator, TS2-HI
4	4	(TS2)	346002
1	1	(TS2)	346002
1	1	346011	Lug, Screw, 1/4 Bolt to 2/0 Wire, 600A Cont., TS2-HI & TS2-H2
1	1	J22	322196-021
1	1	T5	309514
1	1	CR1	600295
1	1	SW2	302024
1	1	SW4	302024
1	1	TLS	300020
1	1	PCB2	346004
1	1	PCB2	410319
1	1	(PCB2)	510236
1	1	550021	Plate, Mounting, Terminal Strip Board
1	1	324371	Plate, Mounting, 600/1200A Thyristor Contactor
1	1	324372	Wire, 2/0, 600A Thyristor Contactor, TS2-H2 to C/B-L2, 30" Long
1	1	324365	Wire, 2/0, 600A Thyristor Contactor, C/B-L1 to Cont-HI, 20" Long
1	1	324373	Wire, 250 MCM, 1200A Thyristor Contactor, TS2-H2 to C/B-L2, 25" Lg.
1	1	324374	Wire, 250 MCM, 1200A Thyristor Contactor, TS2-H1 to Cont-HI, 18" Lg.
1	1	324368	Assem., Secondary Current Sensor (S)
1	1	J12-J12	Assem., Harness, Secondary Current Sensor
1	1	T4	SEE CHART
1	1	T4	SEE CHART
1	1	S6	600647
1	1	S10	600648
1	1	J12-J12	Assem., Secondary Current Sensor (S), w/ Cable Assembly
36"	36"	900045	Hose, 3/8" I.D.
4	4	566010	Hose Clamp, 3/8" Hose
4	4	600179	Assem., Water Fitting, 3/8" Hose
2	2	600297	Water Flow Switch, 3/8" Hose
1	1	WFS	Water Flow Switch, 3/8" Hose
1	1	550014	Valve Closing Door Mechanism, "D/T" Cabinet
1	1	510247-002	Cabinet, Control, Style "D/T", Modified for GF
1	1	510248	Door, Cabinet, Control, Style "D/T", V, w/110 VAC Shunt Trip
1	1	C/B	Circuit Breaker, Pole, Amp, V, w/110 VAC Shunt Trip
1	1	700120	Manual, EN1001
1	1	421271	Logic Diagram, EN1001 Control
1	1	421377-002	Wiring Diagram, EN1001/600-1200/GF, "D/T" Cabinet

CAUTION
SEE NOTE 2

For 460 VAC Operation - Use Jumper #1 ONLY.
For 230 VAC Operation - Use Jumper #2 ONLY.
For 380 VAC Operation - CONSULT FACTORY.
For 575 VAC Operation - CONSULT FACTORY.

HAZARDOUS VOLTAGE
Electrical shock will cause severe injury or death.

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NOTICE

This weld control complies with the RWMA Bulletin 5.015.68.04 for use with a hand-held transponder.

Proper installation and maintenance must be followed for hand-held transponder operation. See instructions.

ENTRON CONTROLS INC

SCALE	DATE	DRAWN BY	CHK'D BY	APPROVED BY
1/16"	6/15/01	RHL		

WIRING DIAGRAM, EN1001(GT&G)-600/1200/GF, "D/T" CABINET

WITH OR WITHOUT "S" CONNECTOR, WITH 24 VAC VALVE TRANSFORMER & CIRCUIT BREAKER

REV.	DATE	DESCRIPTION	DATE	BY
1	6/15/01	ISSUED		RHL

EN1001-600D, T/GF EN1001-1200D, T/GF

NOTICE

FOR SERVICE ON THIS CONTROL

Contact Your Machine Dealer Or

ENTRON CONTROLS INC

DIRECTLY: (864) 416-0190

601 HIGH TECH COURT

GREENSBORO, NC 27405

FAX: (864) 416-0195

