

CAUTION - READ MANUAL & ALL NOTES BEFORE INSTALLING OR OPERATING CONTROL. SEE NOTE 1.

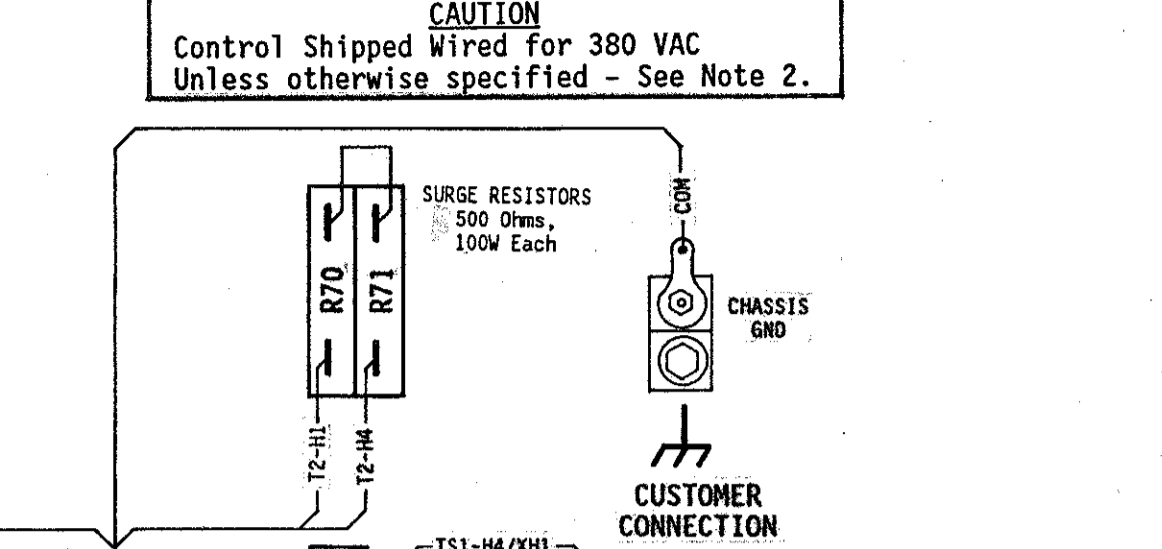
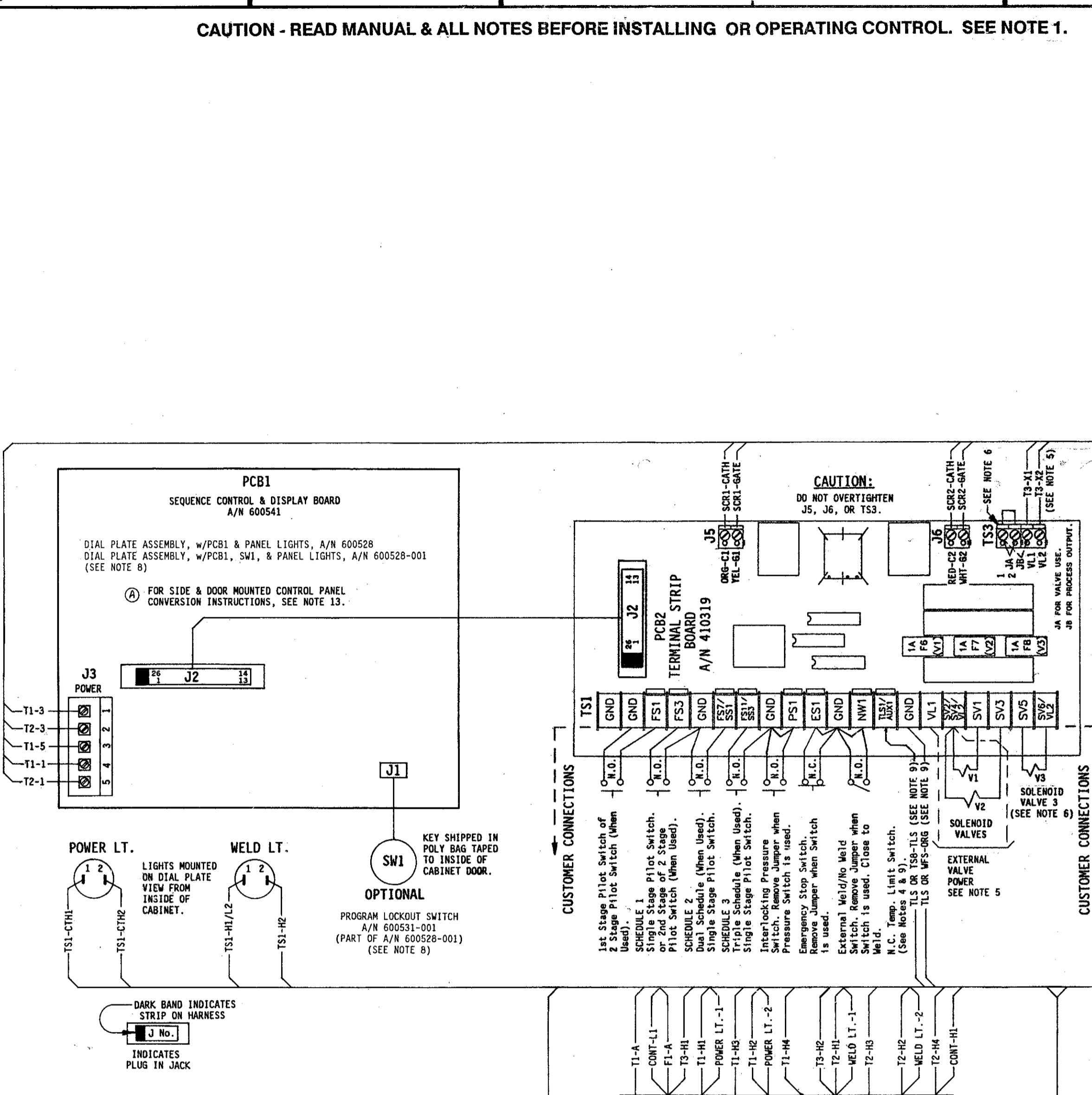
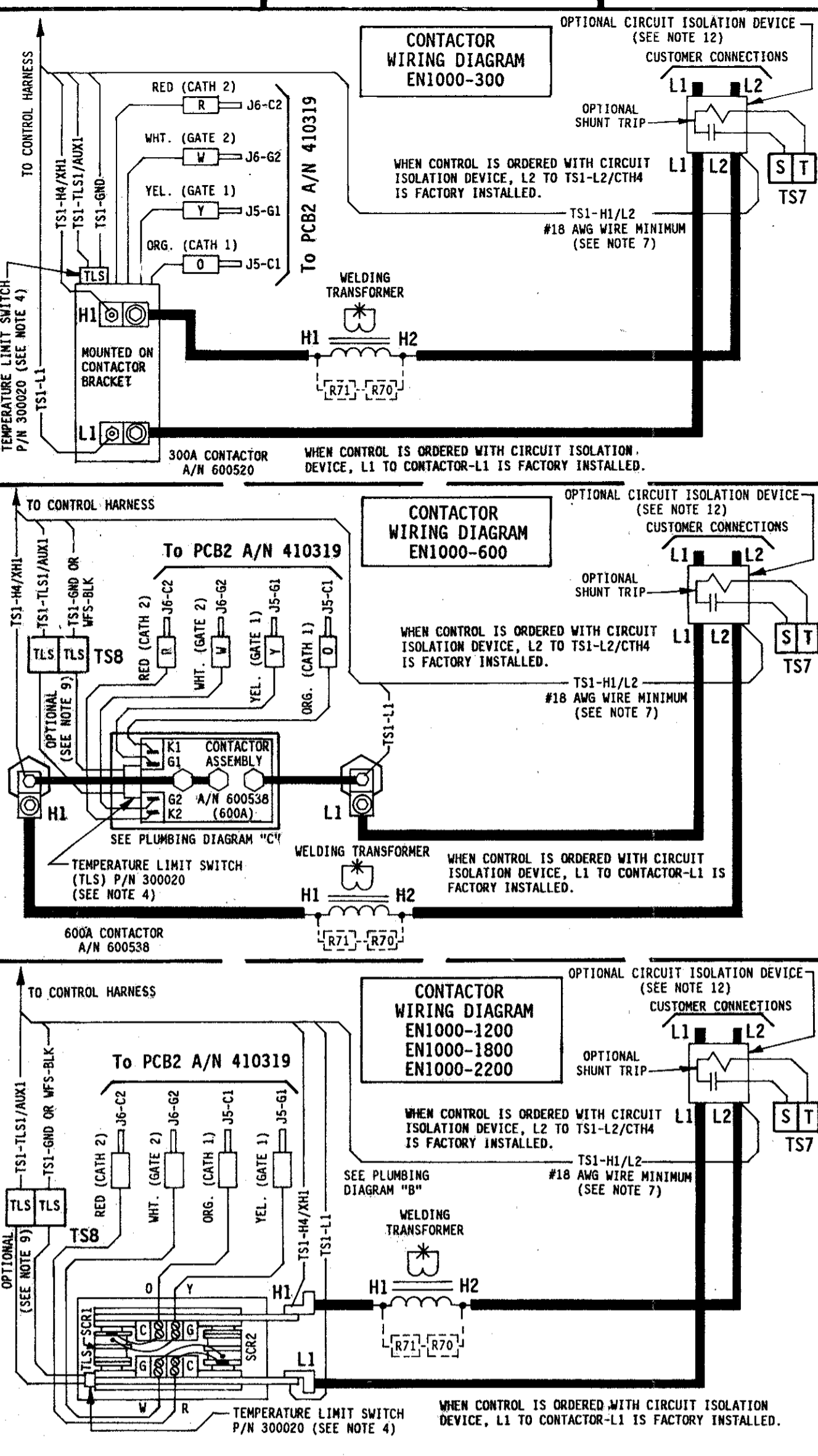
WARNING: HIGH VOLTAGE

CAUTION

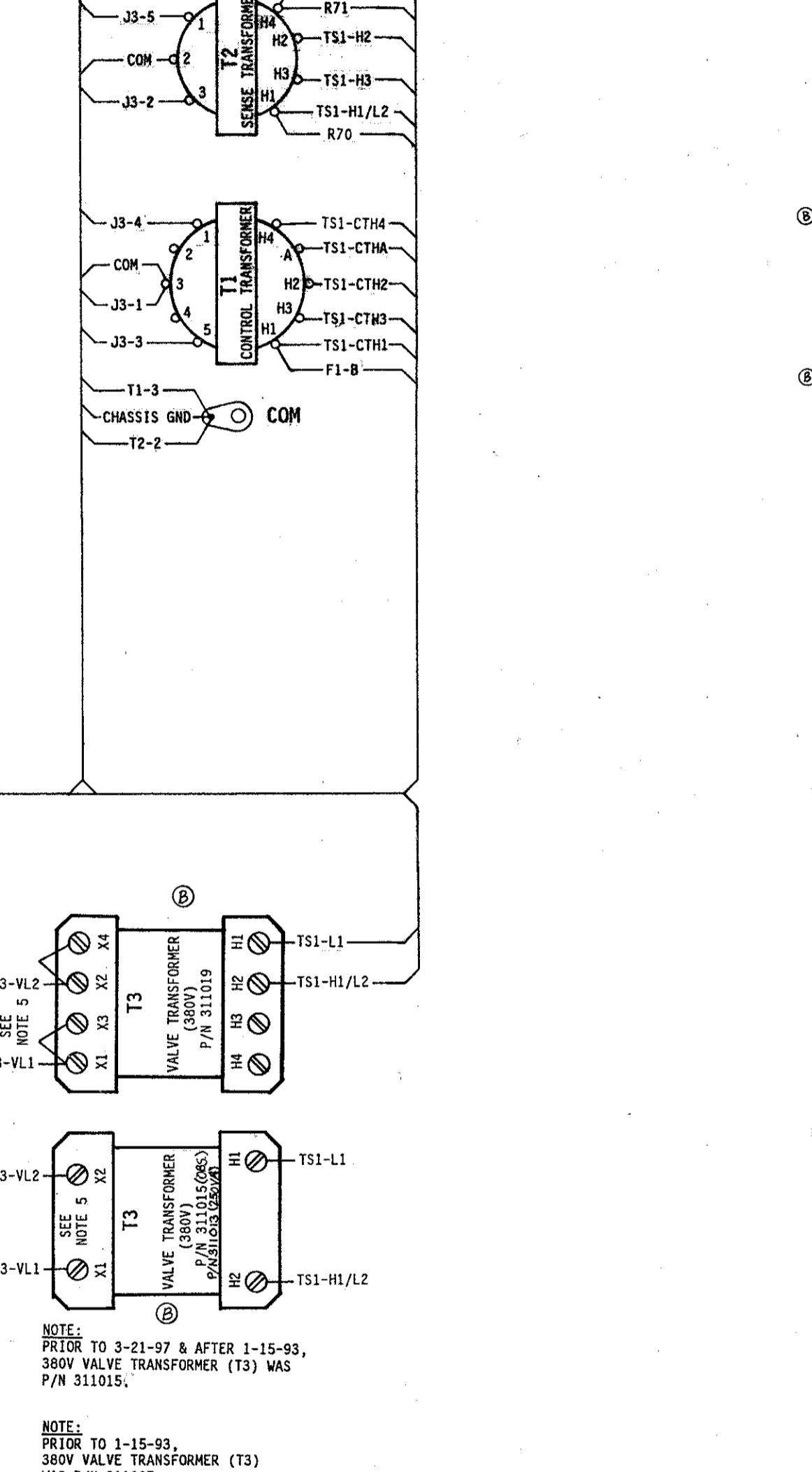
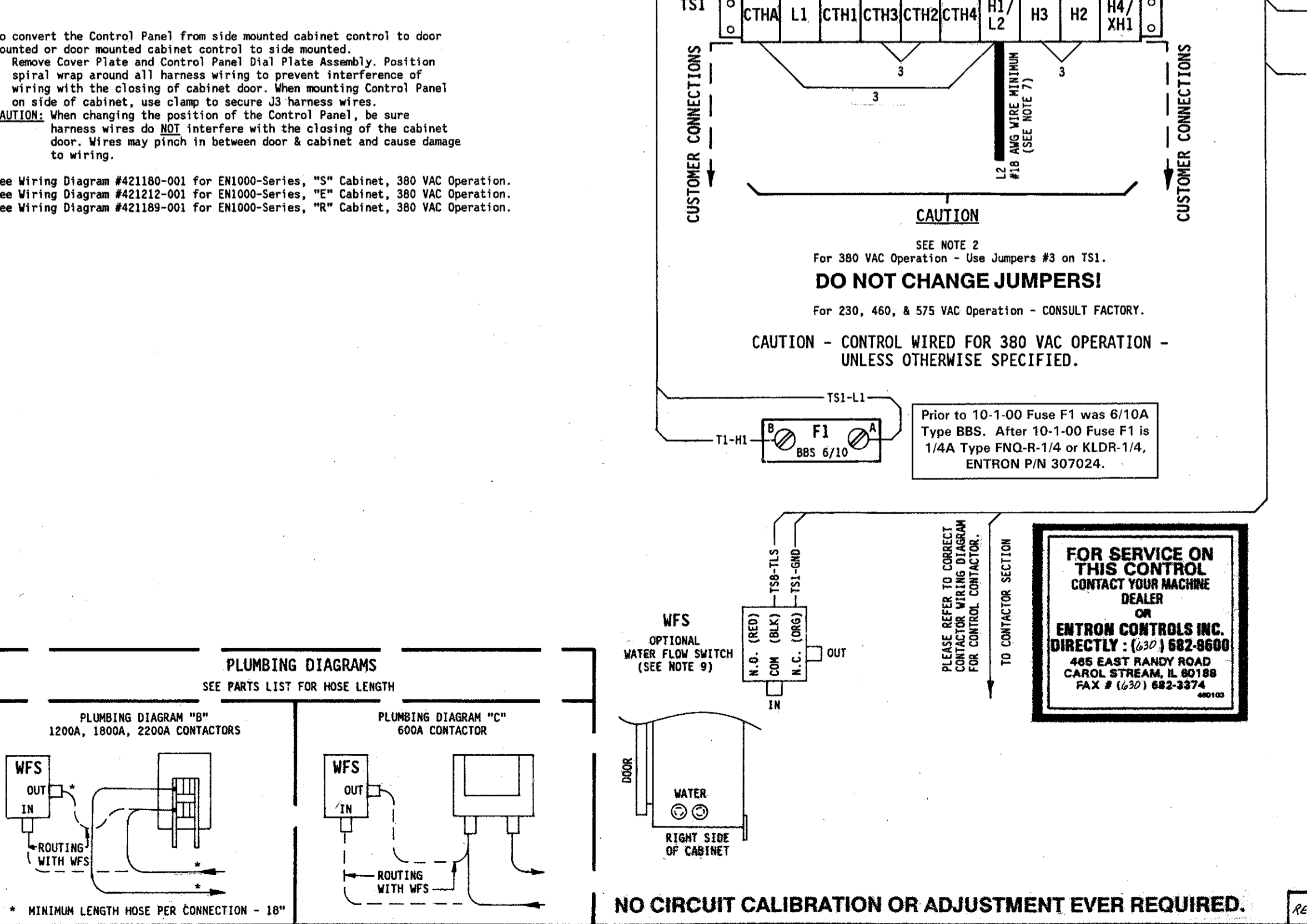
VOLTAGES PRESENT IN THIS CONTROL CAN CAUSE SEVERE OR FATAL INJURIES. NOTE: EVEN THOUGH SUPPLY POWER TO THIS UNIT HAS BEEN DISCONNECTED, THERE MAY BE VOLTAGES IN THIS CONTROL ORIGINATING FROM OTHER SOURCES. FOR ALL VOLTAGE POTENTIAL TO BE REMOVED FROM THIS CONTROL, POWER MUST BE REMOVED FROM ALL EXTERNAL CONTROL CIRCUITS CONNECTED TO TERMINALS IN THIS CABINET.

DO NOT OPERATE WITHOUT WATER ON POWER ON WITHOUT WATER FLOW MAY CAUSE DAMAGE TO CONTROL. TURN POWER OFF WHEN CONTROL IS NOT IN USE.

CAUTION Control Shipped Wired for 380 VAC Unless otherwise specified - See Note 2.



- NOTES: 1. It is recommended that control wiring (i.e., initiation, pressure switch, etc.) be physically separated from the high voltage wiring (115 volts or higher). 2. For 380 VAC Operation - Use Jumpers #3 on TS1. DO NOT CHANGE JUMPERS! For 230, 460, & 575 VAC Operation - CONSULT FACTORY. 3. For Single Stage Pilot Operation - Connect pilot switch to TS1-FS3 & TS1-GND. No jumpers required across TS1-FS1 & TS1-GND. For Two Stage Pilot Operation - Connect 1st stage pilot switch to TS1-FS1 & TS1-GND. Connect 2nd stage pilot switch to TS1-FS3 & TS1-GND. For DUAL COUNT/DUAL CURRENT (Dual Weld/Dual Heat) or TRIPLE COUNT/TRIPLE CURRENT (Triple Weld/Triple Heat) or External Schedule Selection, SEE MANUAL. 4. EN1000-SERIES "D/T/LS/LF" Cabinet: ENTRON supplies Temperature Limit Switch (TLS) P/N 300020 and provides connections to TS1-TLS1/AUX1 & TS1-GND. Jumper not required between TS1-TLS1/AUX1 & TS1-GND. NOTE: TLS SCR will open at temperatures greater than or equal to 150°F. 5. 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 overtighten TSS. 6. VALVE 3 OUTPUT USAGE: TS1-SV5 & TS1-SV6 (Valve 3) can be used for either a Valve output or a Process output. When TS1-SV5 & TS1-SV6 is used as a Valve output use Jumper "A" on TS3. When TS1-SV5 & TS1-SV6 is used as a Process output use Jumper "B" on TS3. CAUTION: Do not overtighten TSS. WARNING: Use of Jumper "B" bypasses control relay contacts to allow a process output without an initiation. SEE MANUAL. 7. Connect TS1-H1/L2 to L2/H2 side of Welding Transformer Primary (Factory wired on controls supplied with Circuit Isolation Device). 8. When Optional Program Lockout is specified by customer, Dial Plate A/N 600528-001 replaces A/N 600528. Add Switch P/N 600531-001 & remove Hole Plug P/N 565003. 9. 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-TLS1/AUX1 & TS1-GND. WFS will open with flows less than .75 GPM. 10. 11. 12. When Optional Circuit Isolation Device is required list P/N and size of Circuit Isolation Device, and note appropriate cabinet A/N.



CAUTION - CONTROL WIRED FOR 380 VAC OPERATION - UNLESS OTHERWISE SPECIFIED.

SEE NOTE 2 For 380 VAC Operation - Use Jumpers #3 on TS1. For 230, 460, & 575 VAC Operation - CONSULT FACTORY.

FOR SERVICE ON THIS CONTROL CONTACT YOUR MACHINE DEALER OR ENTRON CONTROLS INC. DIRECTLY: (630) 682-9600 485 EAST RANDY ROAD CAROL STREAM, IL 60188 FAX # (630) 682-3374

NO CIRCUIT CALIBRATION OR ADJUSTMENT EVER REQUIRED.

Table with 4 columns: QTY., DESIG., PART NO., DESCRIPTION. Lists parts for the control section including dial plate, switches, and panel lights.

Table with 4 columns: QTY., DESIG., PART NO., DESCRIPTION. Lists parts for the contactor section including terminal strips, surge resistors, and contactors.

MANUFACTURING INSTRUCTIONS: See Drawings #440565, #515112, #515114, & #600552 for Mechanical Assembly Instructions of EN1000 "LS/LF" Cabinet. See Drawing #440190-001 for Mechanical Layout of "LS/LF" Cabinet Rear Panel. See Drawing #440093 for Crating Instructions of "LS/LF" Cabinet. See Drawing #600552 for Mechanical Assembly of EN1000 "D/T" Cabinet. See Drawing #440366 Inner Pack & Use Carton #600016 for "D/T" Cabinet Packing Instructions. See Drawing #440493 for Circuit Breaker to Contactor L1 Cable Connection. See Drawing #600826 for Layout Assembly of Front Panel.

Revision table with columns: REV, AUTH, DESCRIPTION, DRN, CHK, BY, DATE. Includes drawing title 'WIRING DIAGRAM, EN1000-SERIES, "D", "T", "LS", "LF", OR "LF" CABINET, WIRED FOR 380 VAC OPERATION' and drawing number 421210-008 B.