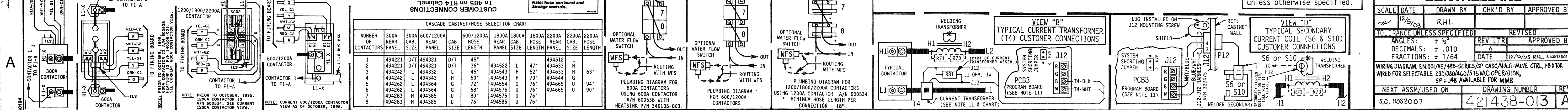
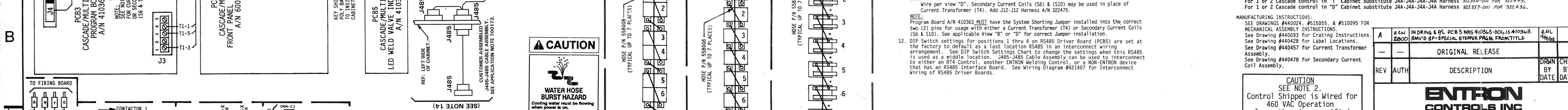
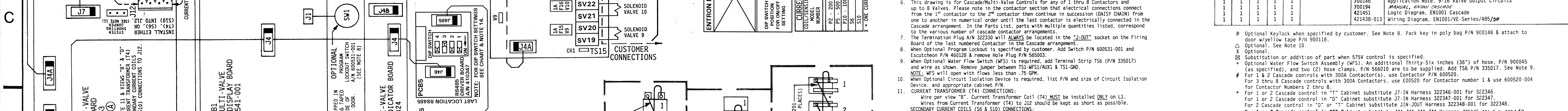
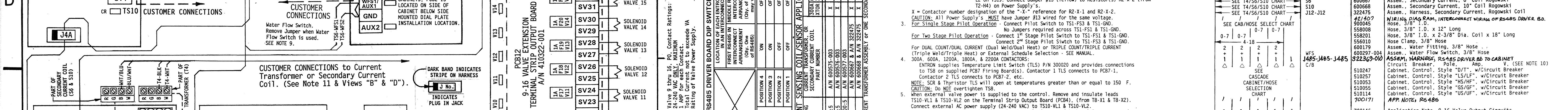
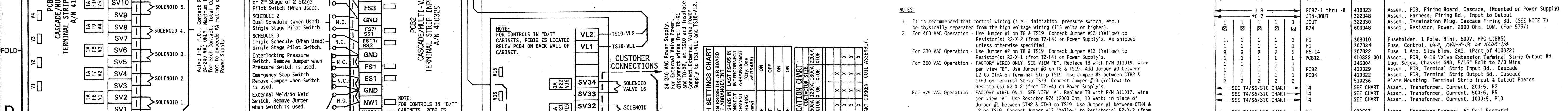
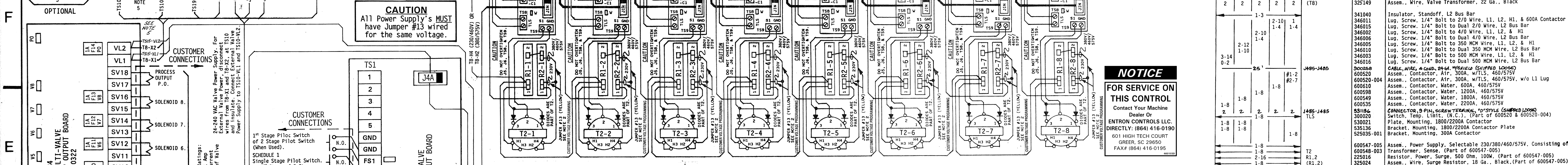
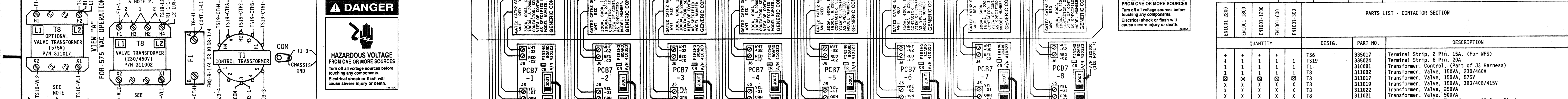
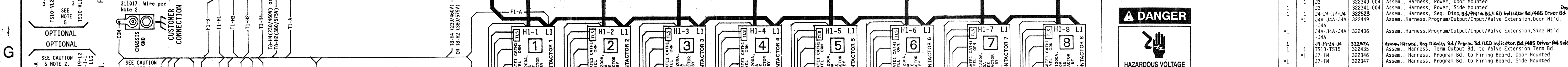
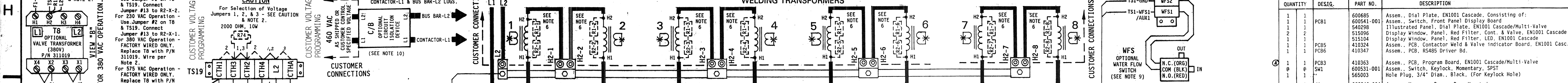


CAUTION - READ MANUAL & ALL NOTES BEFORE INSTALLING OR OPERATING CONTROL - SEE NOTE 1. NO CIRCUIT CALIBRATION OR ADJUSTMENT EVER REQUIRED.



421438-013 A

QUANTITY	DESIG.	PART NO.	DESCRIPTION
1	PCB1	600885	Assem. Dial Plate, EN1001 Cascade, Consisting of:
1	PCB1	600841-001	Assem. Switch, Front Panel, Display Board
1	PCB1	540298	Illustrated Panel, Dial Plate, EN1001 Cascade/Multi-Valve
1	PCB1	510996	Display Window, Panel, Red Filter, Cont. & Valve, EN1001 Cascade
1	PCB1	510997	Display Window, Panel, Red Filter, LED, EN1001 Cascade
1	PCB5	410324	Assem. PCB, Contactor Weld & Valve Indicator Board, EN1001 Casc.
1	PCB5	410347	Assem. PCB, RS485 Driver Bd.
1	PCB3	410363	Assem. PCB, Program Board, EN1001 Cascade/Multi-Valve
1	SM1	600531-001	Assem. Switch, Keylock, Momentary, SPST
1	SM1	565003	Hole Plug, 3/4" Diam., Black, (For Keylock Hole)
1	J33	322340-004	Assem. Harness, Power, Door Mounted
1	J34	322341-004	Assem. Harness, Power, Side Mounted
1	J34	322523	Assem. Harness, Seq. Disp. Bd./Prgrm Bd./LED Ind. Extn. Bd./465 Driver Bd.
1	J34	322449	Assem. Harness, Program/Output/Input/Valve Extension, Door Mt'd.
1	J34	322436	Assem. Harness, Program/Output/Input/Valve Extension, Side Mt'd.
1	J34	322524	Assem. Harness, Seq. Display Bd./Prgrm Bd./LED Ind. Extn. Bd./465 Driver Bd. Side
1	J34	322449	Assem. Harness, Program/Output/Input/Valve Extension, Door Mt'd.
1	J34	322436	Assem. Harness, Program Bd. to Firing Board, Door Mounted
1	J34	322347	Assem. Harness, Program Bd. to Firing Board, Side Mounted

QUANTITY	DESIG.	PART NO.	DESCRIPTION
1	T56	335017	Terminal Strip, 2 Pin, 15A, (For WFS)
1	T59	335018	Terminal Strip, 6 Pin, 20A
1	T11	310001	Transformer, Control, (Part of J3 Harness)
1	T8	311002	Transformer, Valve, 150VA, 230/460V
1	T8	311017	Transformer, Valve, 150VA, 230/460V
1	T8	311019	Transformer, Valve, 150VA, 380/400/415V
1	T8	311022	Transformer, Valve, 250VA
1	T8	311021	Transformer, Valve, 250VA
1	T8	325149	Assem. Wire, Valve Transformer, 22 Ga., Black
1-3		341400	Insulator, Standoff, L2 Bus Bar
1		346011	Lug, Screw, 1/4" Bolt to 2/0 Wire, L1, L2, H1, & 600A Contactor
1		346015	Lug, Screw, 1/4" Bolt to Dual 2/0 Wire, L2 Bus Bar
1		346002	Lug, Screw, 1/4" Bolt to Dual 4/0 Wire, L1, L2, & H1
1		346006	Lug, Screw, 1/4" Bolt to Dual 4/0 Wire, L2 Bus Bar
1		346005	Lug, Screw, 1/4" Bolt to 350 MCM Wire, L1, L2, & H1
1		346010	Lug, Screw, 1/4" Bolt to Dual 350 MCM Wire, L2 Bus Bar
1		346013	Lug, Screw, 1/4" Bolt to 500 MCM Wire, L1, L2, & H1
1		346016	Lug, Screw, 1/4" Bolt to Dual 500 MCM Wire, L2 Bus Bar
2-6	J485-J485	900888	CABLE, WIRE, 4 Con., 24 AWG, 100' (SEE NOTE 10)
1	J485-J485	600520	Assem. Contactor, Atr. 300A, W/L.S., 460/575V
1	J485-J485	600520-004	Assem. Contactor, Atr. 300A, W/L.S., 460/575V, w/o L1 Lug
1	J485-J485	600610	Assem. Contactor, Water, 600A, 460/575V
1	J485-J485	600598	Assem. Contactor, Water, 1200A, 460/575V
1	J485-J485	600549	Assem. Contactor, Water, 1800A, 460/575V
1	J485-J485	600535	Assem. Contactor, Water, 2200A, 460/575V
1	J485-J485	831836	CONNECTOR, 9 Pin, 600V, 100' (SEE NOTE 10)
1	J485-J485	350018	Switch, Temp. Limit, 100' (Part of 600520-004)
1	J485-J485	530021	Plate, Mounting, 1800/2200A Contactor
1	J485-J485	531336	Bracket, Mounting, 1800/2200A Contactor Plate
1	J485-J485	525035-001	Bracket, Mounting, 300A Contactor
1	J485-J485	600547-005	Assem. Power Supply, Selectable 230/380/460/575V, Consisting of:
1	J485-J485	225016	Resistor, Power, Surge, 500 Ohm, 100W, (Part of 600547-005)
1	J485-J485	325024	Assem. Wire, Surge Resistor, 18 Ga., Black, (Part of 600547-005)
1	J485-J485	410323	Assem. PCB, Firing Board, Cascade, (Mounted on Power Supply)
1	J485-J485	322348	Assem. Harness, Firing Bd., Input to Output
1	J485-J485	322330	Assem. Termination, JIN-30UT Harness 322348-001 (SEE NOTE 7)
1	J485-J485	600408	Assem. Resistor, Power, 2000 Ohm, 10W, (For 575V)
1	J485-J485	388010	Fuseholder, 1 Pole, Mini, 600V, HPC-L (885)
1	J485-J485	307024	Fuse, Control, 1/4A, 250V, 4A or KDD-1/4
1	J485-J485	307022	Fuse, 1 Amp, Slow Blow, 2AG, (Part of 410322)
1	J485-J485	410322-001	Assem. PCB, 9-16 Valve Extension Terminal Strip Output Bd.
1	J485-J485	410329	Assem. PCB, Terminal Strip Input Bd., Cascade
1	J485-J485	410332	Assem. PCB, Terminal Strip Input Bd., Cascade
1	J485-J485	510336	Plate Mounting, Terminal Strip Input & Output Boards
1	J485-J485	510335	Assem. Transformer, Current, 200.5, P2
1	J485-J485	510334	Assem. Transformer, Current, 500.5, P5
1	J485-J485	510333	Assem. Transformer, Current, 1000.5, P10
1	J485-J485	600667	Assem. Secondary Current, 6" Coil Rogowski
1	J485-J485	600668	Assem. Secondary Current, 12" Coil Rogowski
1	J485-J485	322475	Assem. Harness, Secondary Current, Rogowski Coil
1	J485-J485	410407	WIRING DIAGRAM, INTERCONNECT WIRING OF RS485 DRIVER BD.
1	J485-J485	900045	Hose, 3/8" I.D. x 12' Long
1	J485-J485	558018	Hose, 3/8" I.D. x 2-3/8" Dia. Coil x 18' Long
1	J485-J485	558010	Hose, 3/8" I.D. x 2-3/8" Dia. Coil x 18' Long
1	J485-J485	600119	Assem. Water Fitting, 3/8" Hose
1	J485-J485	600297-004	Assem. Water Flow Switch, 3/8" Hose
1	J485-J485	322329-000	Assem. HARNESS, RS485 DRIVER BD. TO CABINET (SEE NOTE 10)
1	J485-J485	510247	Circuit Breaker, 1 Pole, 600V, 100' (SEE NOTE 10)
1	J485-J485	510257	Cabinet, Control, Style "D/T", w/Circuit Breaker
1	J485-J485	510053	Cabinet, Control, Style "L5/LP", w/Circuit Breaker
1	J485-J485	510055	Cabinet, Control, Style "MS/HP", w/Circuit Breaker
1	J485-J485	510114	Cabinet, Control, Style "GS/GF", w/Circuit Breaker
1	J485-J485	510114	Cabinet, Control, Style "US/UP", w/Circuit Breaker
1	J485-J485	700171	APP. NOTES, RS-485
1	J485-J485	700146	Application Note, 9-16 Valve Output Circuits
1	J485-J485	700194	Manual, 9-16 Valve Output Circuits
1	J485-J485	421451	Logic Diagram, EN1001 Cascade
1	J485-J485	421438-013	Wiring Diagram, EN1001/VE-Series/485/SP

Optional Keylock when specified by customer. See Note 8. Pack key in poly bag P/N 900148 & attach to door w/nylon tape P/N 900118.

Optional.

Substitution or addition of part when 575V control is specified.

Optional Water Flow Switch Assembly (WFS). An additional Thirty-Six inches (36") of hose, P/N 900045 (as specified), and two (2) hose clamps, P/N 566010 are to be supplied. Add T56 P/N 335017. See Note 9.

For 1 & 2 Cascade controls with 300A Contactors, use Contactor P/N 600520.

For 3 thru 8 Cascade controls with 300A Contactors, use 600520 for Contactor number 1 & use 600520-004 for Contactor Numbers 2 thru 8.

For 1 or 2 Cascade control in "T" Cabinet substitute J7-IN Harness 322346-001 for 322346.

For 1 or 2 Cascade control in "D" or "DT" Cabinet substitute J7-IN Harness 322347-001 for 322346.

For 2 Cascade control in "D" or "DT" Cabinet substitute JIN-30UT Harness 322348-001 for 322348.

For 1 or 2 Cascade control in "D" Cabinet substitute J4A-J4A-J4A Harness 322355-001 for 322449.

For 1 or 2 Cascade control in "D" Cabinet substitute J4A-J4A-J4A Harness 322357-001 for 322449.

MANUFACTURING INSTRUCTIONS:

SEE DRAWINGS #440024, #515055, & #510095 FOR MECHANICAL ASSEMBLY INSTRUCTIONS.

See Drawing #440093 for Crating Instructions.

See Drawing #440428 for Label Locations.

See Drawing #440457 for Current Transformer Assembly.

See Drawing #440478 for Secondary Current Coil Assembly.

REV	AUTH	DESCRIPTION	DATE	CHK'D BY	APPROVED BY
1		ORIGINAL RELEASE	12/15/03	RHL	
2		CAUTION SEE NOTE 2. Control Shipped is Wired for 460 VAC Operation unless otherwise specified.	12/15/03	RHL	