

PARTS LIST

Table with columns: QTY, DESIG, PART NO, DESCRIPTION. Lists various components like PCB10, PCB4, and TS13 with their respective quantities and descriptions.

SEE NOTE 1 BEFORE INSTALLING PRESSURE CONTROL SYSTEM.

- Supply quantity one (1) of J4B-J4 Harness Assembly per customer specified cabinet size. SEE NOTE 4.
Supply quantity one (1) of TS3AC-T8 Harness Assembly per customer specified cabinet size. SEE NOTE 3.

MANUFACTURING INSTRUCTIONS:
Ship appropriate EN1000 or EN1001 Cascade/Multi-Valve Wiring Diagram with this Wiring Diagram when Integrated Pressure Control System Control is also shipped.
Install TS3AC-T8 Harness per Note 3.
When either a Proportional Valve (PV), Pressure Sense (PS), or TS13-J13 Harness is specified, ship part(s) loose.
See Drawing 440475 for Packing Instructions of the Proportional Valve.

NOTES:

1. This Integrated Pressure Control System Option Wiring Diagram represents interconnection wiring between the Optional Integrated Pressure Control System and either EN1000 or EN1001 Cascade control. The wiring application of the Optional Integrated Pressure Control System to EN1000 & EN1001 Cascade controls is made from this Wiring Diagram ONLY.

2. The Integrated Pressure Control System requires the use of either a Proportional Valve (PV) and/or Pressure Sense (PS). Pressure Control wiring & components are installed per correct application of either a Proportional Valve and/or a Pressure Sense.

PROPORTIONAL VALVE:
When PV is required, customer is to specify an Internal Thread size of either 1/2" or 1-1/4" NPT for the Air Pressure Ports. Customer is required to determine the mounting location and provide for the installation of the PV. See installation instructions that are supplied with the Proportional Valve (PV).

TS13-J13 CABLE ASSEMBLY:
TS13-J13 Cable Assembly is to be installed when a Proportional Valve is specified. Customer to install TS13-J13 Cable Assembly per applicable Proportional Valve Wiring Diagram view. Connect the three (3) wires per each wire color into TS13 connector located on PCB10. Also connect the J13 connector of TS13-J13 Cable Assembly into P13 connector of the Proportional Valve (PV). See View "A" or "B" for P13 connector.

NOTE: TS13-J13 Cable Assembly is shipped loose.
CAUTION: The Proportional Valve should NOT alone cause activation of Air Cylinder(s). A Solenoid Valve(s) should be used between the Proportional Valve and the Air Cylinder(s). Use a Solenoid Valve(s) to bring Air Pressure to the Air Cylinder(s) with the Solenoid Valve(s) connected electrically on Cascade Terminal Strip Output Board (PCB4). A quantity of 1 thru 8 Solenoid Valve(s) can be connected to TS10-SV1 thru TS10-SV16. (SEE MANUAL 700178).

PRESSURE SENSE:
Customer is required to determine the mounting location and provide for installation of the PS. The Pressure Sense Air Pressure Port has an External Thread size of 1/4" NPT. Customer is to install the Black (or Blue/White) & White (or White/Blue) wires of the Pressure Sense Assembly into the TS13 connector located on PCB10. Connect PS-BLK (or BLU/WHT) to TS13-5 & also connect PS-WHT (or WHT/BLU) to TS13-2. Refer to correct Pressure Sense Wiring Diagram view for Pressure Sense wiring.

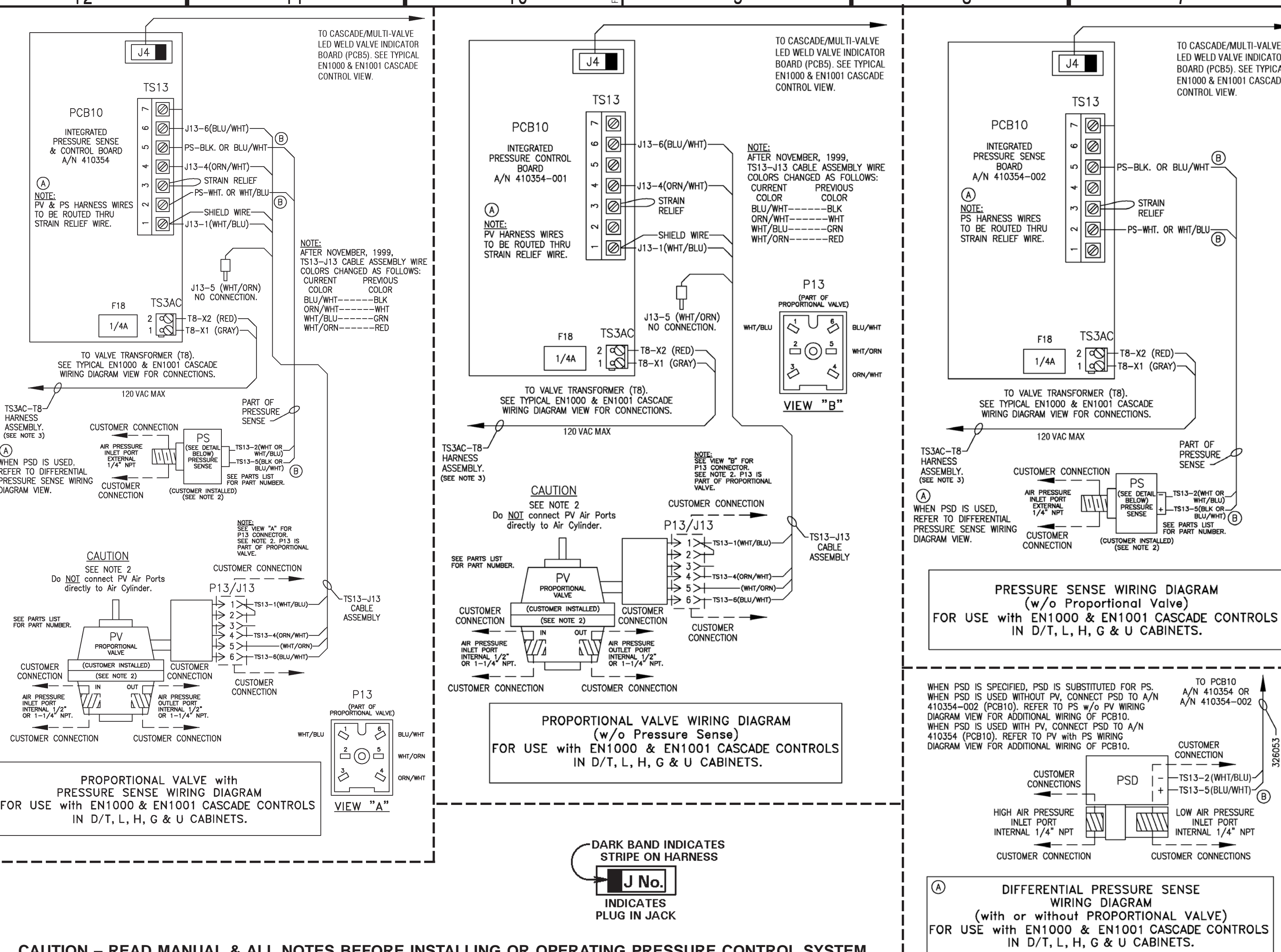
TS3AC-T8 HARNESS:
TS3AC-T8 Harness is factory installed per applicable cabinet size. TS3AC-T8 Harness is connected from the Integrated Pressure Sense and/or Control Board (PCB10) to Valve Transformer (T8). Connect connector terminal TS3AC-1 to Valve Transformer T8-X1. Also connect terminal TS3AC-2 to Valve Transformer T8-X2.

J4B-J4 HARNESS:
J4B-J4 Harness is factory installed per applicable cabinet size. The J4B-J4 Harness is connected between the J4B connector on the LED Indicator Board (PCB5) and the J4 connector on the Integrated Pressure Sense and/or Control Board (PCB10).

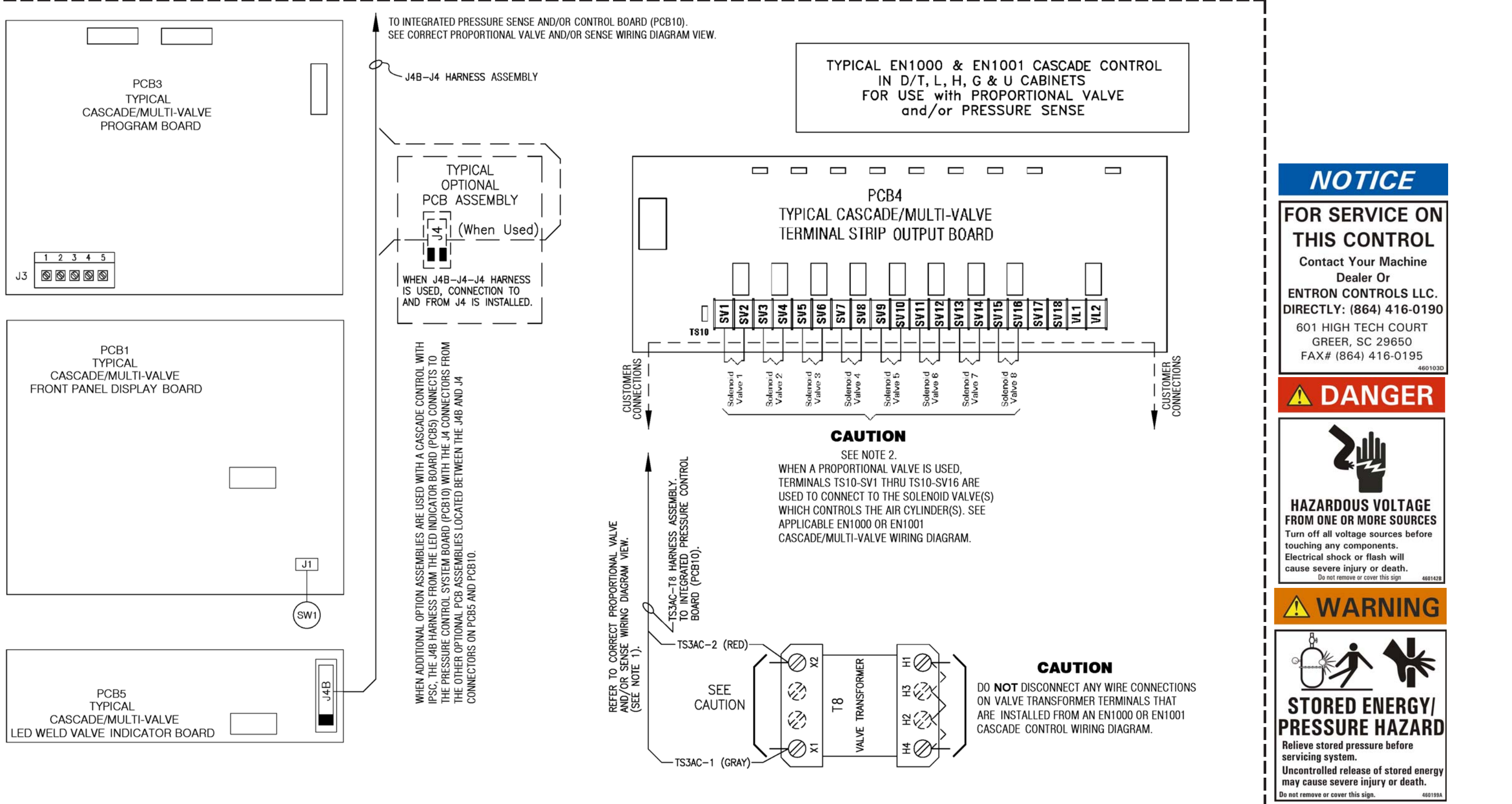
PRESSURE SENSE WIRING DIAGRAM (w/o Proportional Valve) FOR USE WITH EN1000 & EN1001 CASCADE CONTROLS IN D/T, L, H, G & U CABINETS.

PROPORTIONAL VALVE WIRING DIAGRAM (w/o Pressure Sense) FOR USE WITH EN1000 & EN1001 CASCADE CONTROLS IN D/T, L, H, G & U CABINETS.

DIFFERENTIAL PRESSURE SENSE WIRING DIAGRAM (with or without PROPORTIONAL VALVE) FOR USE WITH EN1000 & EN1001 CASCADE CONTROLS IN D/T, L, H, G & U CABINETS.



CAUTION - READ MANUAL & ALL NOTES BEFORE INSTALLING OR OPERATING PRESSURE CONTROL SYSTEM.

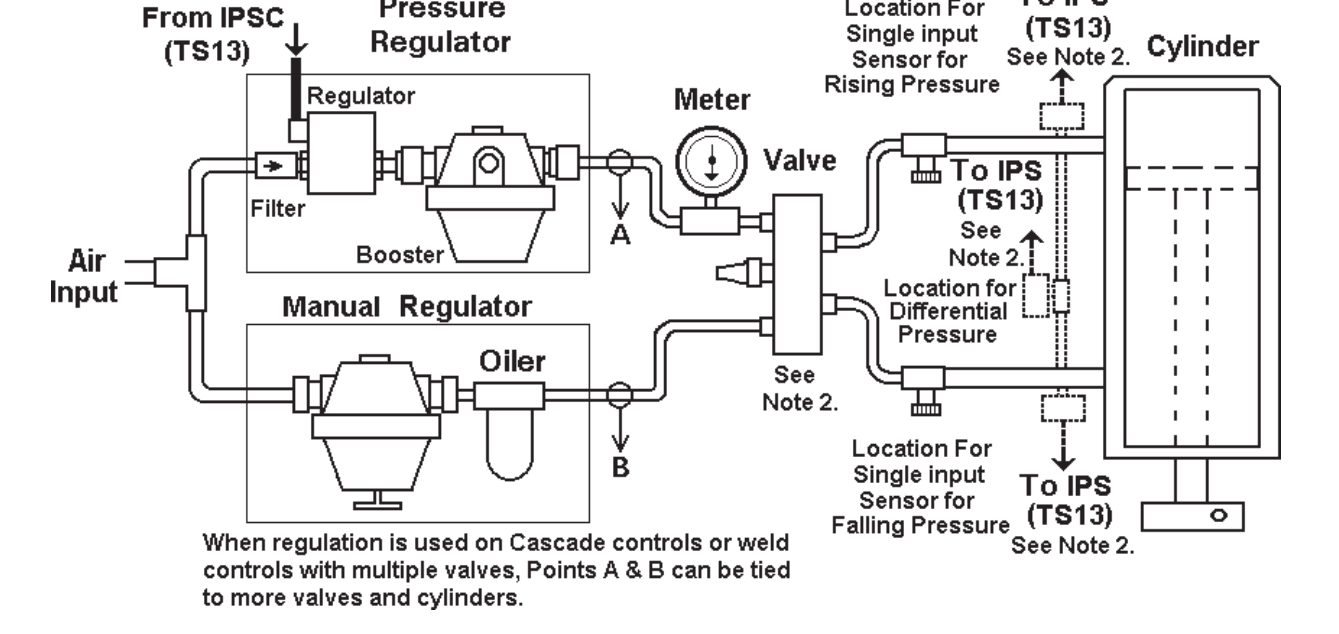


NOTICE FOR SERVICE ON THIS CONTROL
Contact Your Machine Dealer Or
ENTRON CONTROLS LLC.
DIRECTLY: (864) 416-0190
601 HIGH TECH COURT
GREER, SC 29650
FAX# (864) 416-0195

DANGER HAZARDOUS VOLTAGE FROM ONE OR MORE SOURCES
Turn off all voltage sources before touching any components.
Electrical shock or flash will cause severe injury or death.

WARNING STORED ENERGY/PRESSURE HAZARD
Relieve stored pressure before servicing system.
Uncontrolled release of stored energy may cause severe injury or death.

STANDARD PRESSURE SYSTEM COMPONENT LOCATIONS



When regulation is used on Cascade controls or weld controls with multiple valves, Points A & B can be tied to more valves and cylinders.

See Manual 700178 for additional Component locations and information.

! WARNING !
Cylinders/Electrodes/Tooling may not stay up/open with Power Off
If Manual Regulator Is Not Used As Shown Above To Supply Return Pressure To The Cylinder Head After The Valve Is Turned Off.
If Pressure Regulator is used to return the head after the valve is turned off, a disruption in power to the Regulator could cause a change in regulated output pressure and gravity may cause the cylinder to closed position.

USED ON

NOTE: For correct control model number, substitute appropriate Integrated Pressure Control System Option application for the "OPTION" reference below.

EN1000-Series/OPTION, Cascade/Multi-Valve, "D/T", "LS/LF", "HS/HF", "GS/GF" & "US/UF" Cabinet Controls
EN1001-Series/OPTION, Cascade/Multi-Valve, "D/T", "LS/LF", "HS/HF", "GS/GF" & "US/UF" Cabinet Controls

REF: For the EN1000 or EN1001 Cascade/Multi-Valve control application with an Integrated Pressure Control System option, see appropriate Cascade/Multi-Valve Wiring Diagram below.

- 421214-Series EN1000-Series/OPTION, Cascade/Multi-Valve, "D/T", "LS/LF", "HS/HF", "GS/GF" & "US/UF" Cabinet Controls
421438-Series EN1001-Series/OPTION, Cascade/Multi-Valve, "D/T", "LS/LF", "HS/HF", "GS/GF" & "US/UF" Cabinet Controls

Table with columns: REV, AUTH, DESCRIPTION, DATE. Lists revision history for the drawing.

ENTRON logo and drawing metadata including SCALE, DATE, DRAWN BY, CHKD BY, APPROVED BY, and WIRING DIAGRAM, OPTIONAL INTEGRATED PRESSURE CONTROL SYSTEM FOR use WITH EN1000 & EN1001 CASCADE CTRLS.