



### 9.3.2.2 Replacing the Solid State Relay

- **See Figure 9-9.**
  1. Install the new solid-state relay, sliding it down into place onto the bottom screw.
  2. Using a screwdriver, reinstall and tighten the top screw and tighten the bottom screw.
  3. Reinstall the wires to the appropriate contacts. The bottom VDC wires must be installed as show in **Figure 9-9** because of polarity.
  4. Close the Control Panel door and lock the 2 metal clasps on the right-hand side of the Control Panel.
  5. Remove locks and tags from lockout tagout.
  6. Turn the Power Switch to the ON position.
  7. If there is an alarm on the Main Screen, refer to Vacuum Pump Alarm Troubleshooting is Section 8.6.

## 9.4 Pressure Sensor Replacement

### Safety



Use lockout / tagout procedures prior to starting work.

### 9.4.1 Removing the Pressure Sensor

- **See Figure 9-10.**
  1. Turn OFF power to the VST Control Panel at the Power Switch located on the front of the VST Control Panel. (The power, ground, and neutral will be completely disconnected from the GREEN MACHINE).
  2. Follow lockout & tagout procedures prior to starting work.
  3. Unlock the hasps and remove the cover from the GREEN MACHINE.
  4. Close the 3-way ball valve below the Pressure Sensor. (The handle is horizontal.)
  5. Remove the cover from the Internal Junction Box.
  6. Disconnect the 3 Pressure Sensor wires from the terminal block inside the Internal Junction Box. **See Figure 9-11.**
  7. Loosen and remove the Liquidtight conduit from the Internal Junction Box and at the top of the Pressure Sensor. Keep for re-use. The Pressure Sensor cable will come out of the conduit.
  8. Loosen the clamp screw and remove the Pressure Sensor from the piping.

**CAUTION: Use the nut on the bottom of the Pressure Sensor during removal.**

9. Loosen and remove the bushing from the top of the Pressure Sensor. Keep for re-use.



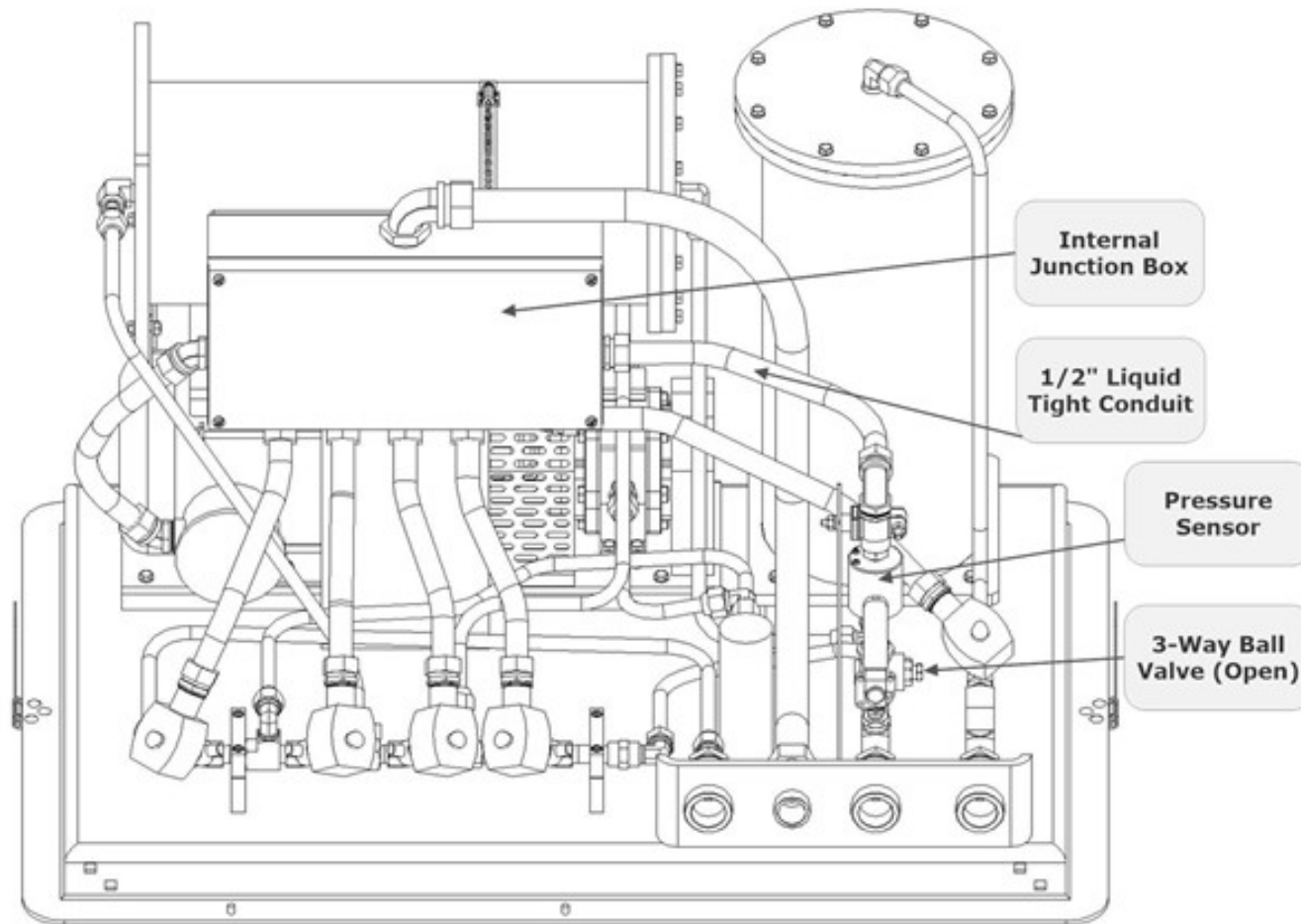
## 9.4.2 Installing the Pressure Sensor

- **See Figure 9-10.**

1. Install and tighten the bushing on the top of the Pressure Sensor.
2. Install the new Pressure Sensor. Use gasoline resistant PTFE tape on the pipe threads.

**CAUTION: Be sure to tighten the Pressure Sensor using the nut on the bottom of the sensor during the installation.**

3. Install the screw and tighten the clamp screw on the bushing.
4. Place the Pressure Sensor cable inside the Liquidtight conduit then tighten the Liquidtight conduit on the Pressure Sensor bushing and the Internal Junction Box.
5. Connect the Pressure Sensor wires to the terminal blocks inside the Internal Junction Box. **See Figure 9-11.**
6. Install the Internal Junction Box cover.
7. Remove the lock(s) and tags from the lockout & tagout.
8. Turn the Maintenance Switch OFF at the VST Control Panel so the GREEN MACHINE cannot operate.
9. Turn power ON to the VST Control Panel.
10. Verify Pressure Sensor Alarm is not active and the pressure reading on the PLC is approximately zero IWC.
11. Open the 3-way ball valve below the Pressure Sensor. (The handle is vertical.)
12. Put the cover on the GREEN MACHINE and lock the hasps.
13. Turn the Maintenance Switch ON so the GREEN MACHINE will operate when turned ON.
14. The GREEN MACHINE is now operational.



Green Machine Dual Canister Pressure Sensor Replacement, 09-23-2019

Figure 9-10: Pressure Sensor Replacement

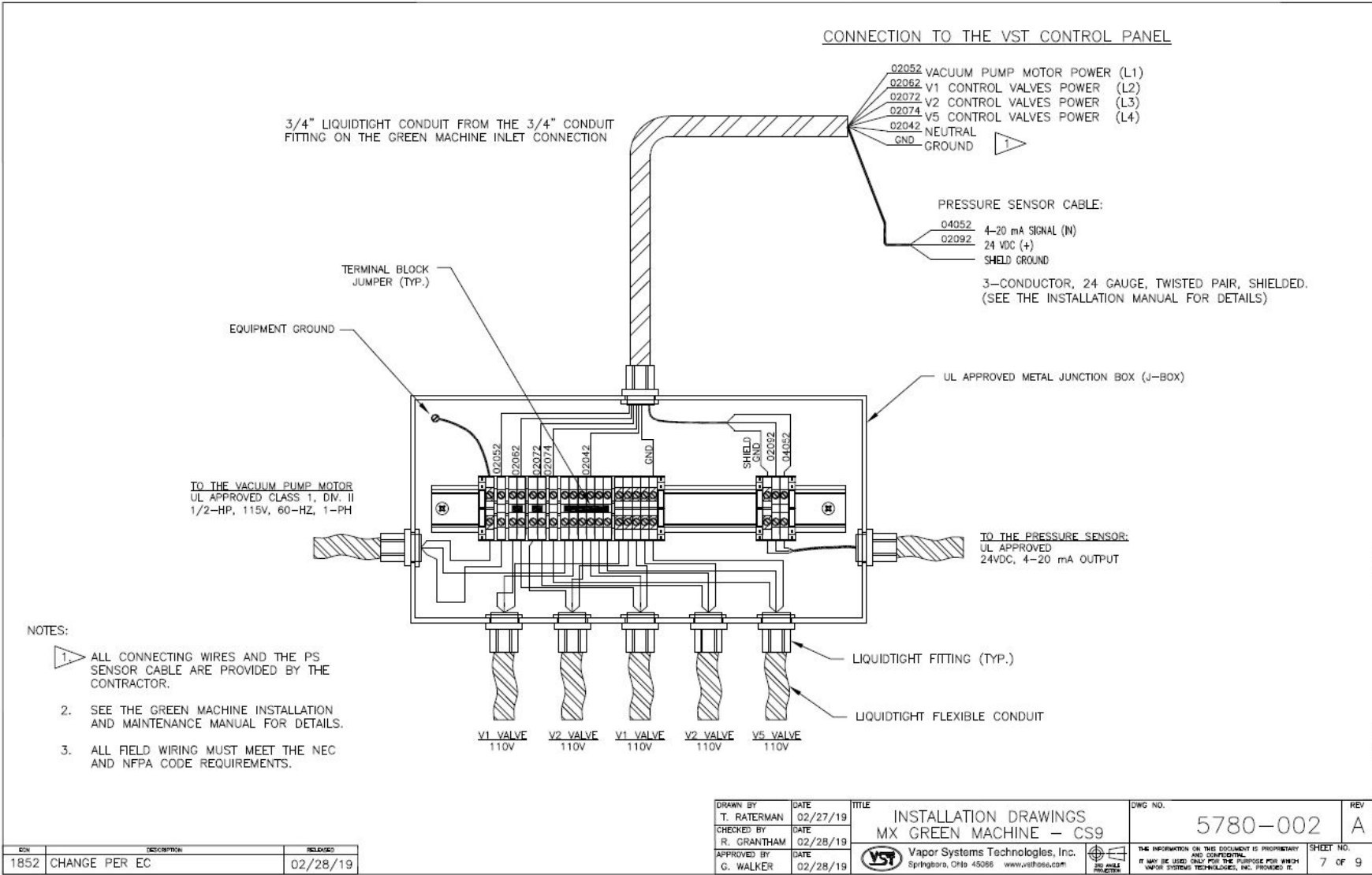


Figure 9-11: Wiring the Pressure Sensor Inside the Internal Junction Box