

9.1.2 Replacement Procedures by Part

- 9.2 PLC (Controller) Replacement
- 9.3 Control Panel Small Components Replacement
 - 9.3.1 Vacuum Pump Motor Breaker Replacement
 - 9.3.2 Vacuum Pump Motor Solid State Relay Replacement
 - 9.3.3 Remote Monitoring System (RMS) Replacement
- 9.4 Pressure Sensor Replacement
- 9.5 Rubber Flange Sleeve Replacement
- 9.6 Vacuum Pump Motor (Only) Replacement
- 9.7 Control Valve Replacement
- 9.8 Vacuum Pump (Only) Replacement
- 9.9 Vapor Filtration Cartridge Assembly Replacement
- 9.10 Separator Replacement
- 9.11 Leak Test

9.2 PLC (Controller) Replacement

Safety



Use lockout / tagout procedures prior to starting work.

9.2.1 Removing the PLC

- 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. Open the VST Control Panel door for access to the PLC.
- 4. Loosen and remove the two terminal blocks on the top and bottom of the PLC. DO NOT REMOVE ANY OF THE WIRES INSTALLED ON THE TERMINAL BLOCKS. See Figures 9-5 and 9-6.
- 5. Loosen and remove the two hold-down clips on the sides of the PLC for removal. **See Figure 9-7**.
- 6. Remove the PLC from the front door of the VST Control Panel.



9.2.2 Installing the New PLC

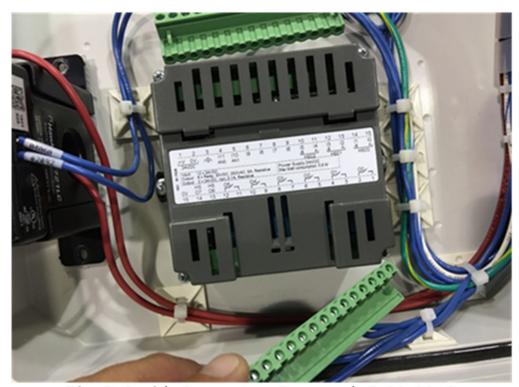
- 1. Install the new PLC in the front door of the VST Control Panel in the same orientation the old PLC was removed.
- 2. Install the two hold-down clips on the side of the PLC and lightly tighten. Do not over tighten.
- 3. Reinstall the two terminal blocks on the PLC. Make sure they are fully inserted into the PLC.
- 4. Close the VST Control Panel door.
- 5. After all the work is complete, remove the lock(s) and tags from the lockout & tagout.
- 6. Turn ON power to the VST Control Panel. The GREEN MACHINE is now operational and will operate if the UST pressure is greater or equal to 0.20 IWC.
- 7. Check the VST Control Panel to make sure the Main Screen is showing.



Removing the PLC Connectors, 2-28-2018

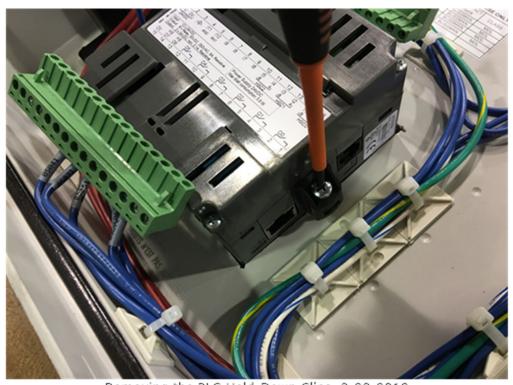
Figure 9-5: Removing the PLC Connectors





The PLC with Connectors Removed, 2-28-2018

Figure 9-6: The PLC with Connectors Removed



Removing the PLC Hold-Down Clips, 2-28-2018

Figure 9-7: Removing the PLC Hold Down Clips