

TSB-1003 DUAL: PROPORTIONAL VALVE ADJUSTMENT-DUAL PUMP

The Proportional Valve is the device used to control the output pressure of the hydraulic pump. When a pressure setting is input at the operator input screen, a signal is sent to the proportional valve. The proportional valve then controls the hydraulic pump output and pressure. This valve comes preset from the factory when a pump is purchased, but there are situations where one would need to re-adjust it. One instance would be if there is a large discrepancy between the pressures entered on the OIT screen and the actual pressure output by the pump. Additionally, if you happen to replace the proportional valve due to wear it will need to be recalibrated. Follow this procedure for adjusting the proportional valve settings.

The Part Numbers for the Hand-Held Controller and Cable needed are 610037-1 and 610037-2, respectively.

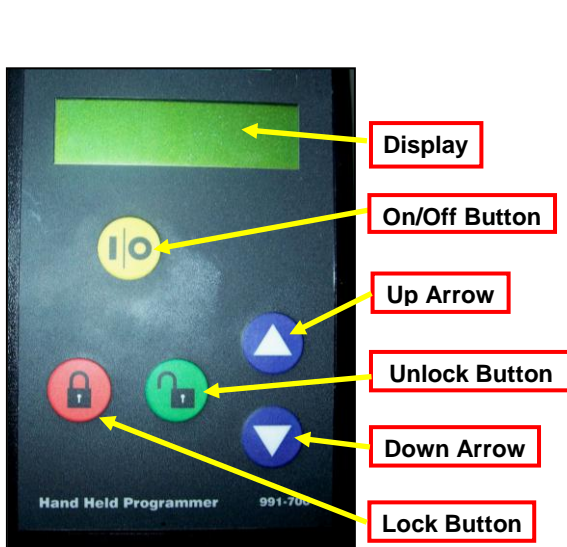


FIGURE 1

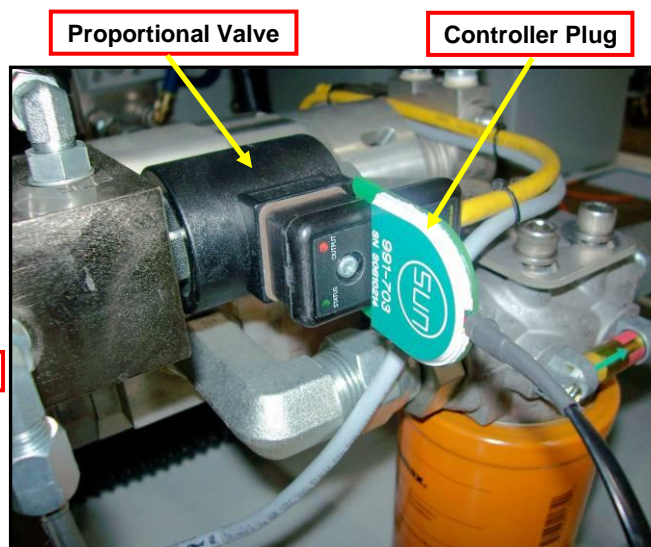


FIGURE 2

PROCEDURE:

1. Press the E-Stop button to shut off the pump. Leave the power to the unit on.
2. Open the front door and locate the two hydraulic manifolds bolted to the hydraulic pumps. On the side of each manifold is the proportional valve.
3. The pump closest to the electric motor is pressurizing the front intensifier, and its gauge is mounted to the manifold. The pump furthest from the motor is pressurizing the rear intensifier, and its gauge is located below the touchscreen.

Locate the pump that is outputting pressure above 3000psi.

4. Plug the controller into that proportional valve as shown. Ensure the proper orientation of the plug. The plug has a label on it that must face the yellow cord. **See Figure 2.**
5. Turn the controller on by pressing and holding the I/O button. **See Figure 1.**
6. Using the controller, press the down arrow until you get to "MAXIMUM OUTPUT." Press the unlock button, and then use the down arrow to adjust the mA value to 300mA. **See Figure 3.**
7. Start the pump. Set the pump to 40,000psi on the touchscreen.
8. Shut off all water flow out of the pump to "dead head" the pump.

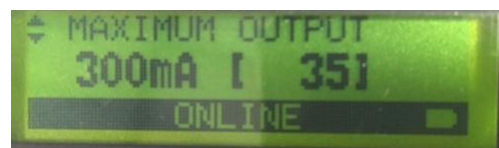


FIGURE 3



TECHNICAL SERVICE BULLETIN 606048-1 PROPORTIONAL VALVE SETTINGS AND ADJUSTMENT

9. Use the up arrow on the controller to increase the mA value until the hydraulic gauge on the manifold exactly matches the second hydraulic gauge. The gauge should read 3000psi.
10. Press the red lock button to lock the value.
11. Turn the controller off by pressing and holding the yellow I/O button.
12. Remove the controller from the pump.
13. Run the pump for 10 minutes to ensure both intensifiers are stroking at the same rate. If one intensifier is still stroking faster than the other, lower the Maximum Output on the corresponding proportional valve until balance is achieved.
14. The pump can now be used for normal operation.