

STP/IST Static Pressure Testing

The purpose of this document is to provide the recommended procedure for verifying that FE Petro's STP/IST is holding proper static pressure. If a STP/IST is not holding proper static pressure, it may be a sign of severe problems in your system, so be sure to investigate any occurrence if you should come across one.

Warning: Highly flammable vapors or liquids may be present in the environment in which this equipment is installed or serviced. Installing or working on this equipment means working in an environment that presents risks of severe injury or death if instructions and standard industry practices are not followed. Follow all applicable codes governing the installation and servicing of this product and the entire system. Always lock out and tag electrical circuit breakers while installing or servicing this equipment and related equipment. Refer to the *Installation and Owner's Manual* of this equipment and related equipment for complete installation and safety information.



Procedure

1. Turn the electrical power supply off. Lock out and tag the electrical power supply to the STP/IST.
2. Relieve line pressure by first removing the brass Manual Pressure Relief (MPR) cap. Next, turn the MPR screw located underneath the MPR cap counter-clockwise until it reaches the retaining ring. Leave it open for 5-10 seconds.
3. Turn the MPR screw clockwise until it is seated back into its normal operating position (completely down). Replace the MPR cap.
4. Remove the 1/4" pipe plug at the Line Test Port (see Figure 1) using a 3/8" eight point socket wrench to remove the 1/4" pipe plug, if one is available.
5. Install a 0-60 psi pressure gauge into the Line Test Port.

Note: FE Petro always recommends that a 0-60 psi liquid-filled pressure gauge be installed in the STP/IST line test port even if electronic line leak detection is being used.

6. Make sure all covers/caps and electrical connectors are in place.
7. Turn the STP/IST's power on at the electrical supply box.
8. Turn the STP/IST on by activating the dispenser hook signal.

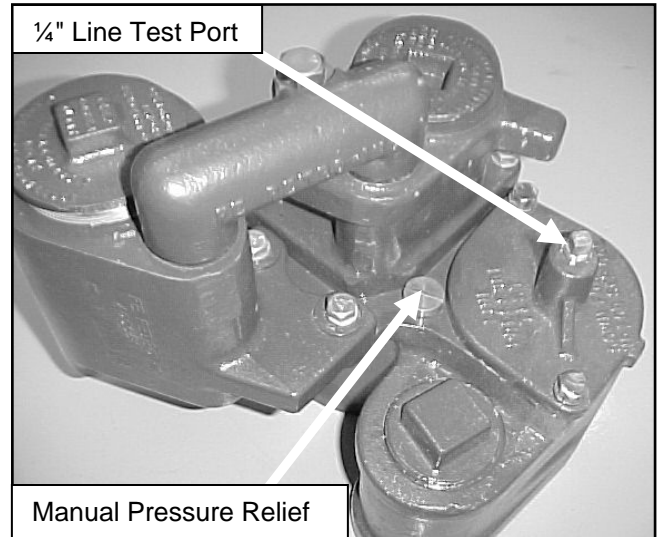


Figure 1

9. Examine the Line Test Port for leaks. If leaks are present, correct them before proceeding. If no leaks are present, purge the air from the system and then turn the STP/IST off. Within 5-10 seconds after turning the STP/IST off, the pressure gauge should read and maintain the pressures listed in Technical Bulletin TB010 for your check valve model.

Note: When isolating the STP/IST from the line with an in-line ball valve, make sure the ball valve is not closed until after the STP/IST is turned off or inaccurate check valve holding pressures may be seen.

10. If the STP/IST is not holding the correct pressure for the check valve model installed, the following are likely causes:
 - Thermal Contraction is present (see Technical Bulletin TB001 for details).
 - The MPR is not tightened down sufficiently or is leaking (see Technical Bulletin TB005 for testing procedures).
 - There is a problem with the check valve (debris on check valve or seat, internal relief not holding, etc.).
 - If you are using a ball valve to isolate the STP/IST from the line, make sure it is holding pressure. To check the line, monitor pressure on both sides.
11. After troubleshooting has been completed, proceed with the following:
 1. Complete Steps 1, 2, and 3 from above.
 2. Remove the pressure gauge from 1/4" Line Test Port and reinstall the 1/4" pipe plug. **Do not over-tighten.**
 3. Complete steps 6, 7, and 8 from above and check for leaks. If leaks are present, correct.

Please contact Technical Support if we may be of any assistance.