

**TECHNICAL SERVICE BULLETIN (TSB) 20190225**

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**LEAK TEST PROCEDURE FOR MIDLAND A-1400 SERIES COMBINATION DEVICES**

1. Pressurize the tank car to the standard test pressure according to your company's procedures.
2. If the PRV has a tell-tale needle valve with a threaded outlet (1/8" NPT, Figure 1, left), remove the outlet cap, open needle valve, and proceed to step 4.
3. Remove the tell-tale needle valve (Figure 1, right) from the PRV body using a wrench (5/8" hex).

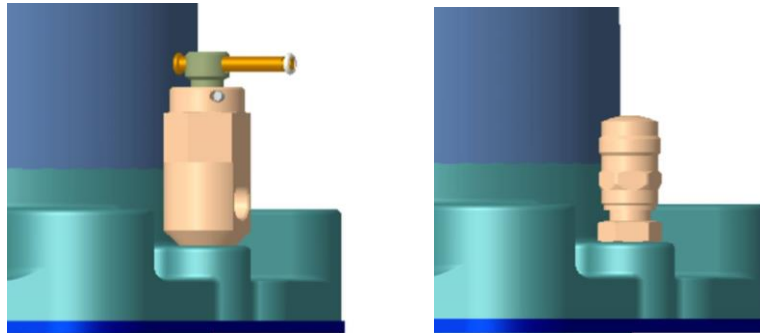


Figure 1 Valve with 1/8" NPT (left) ready for testing. Valve without outlet (right) requires removal for testing.

4. Thread an air fitting into the threaded hole (1/8" NPT). Apply Teflon tape as needed.
5. Attach pressure line to installed air fitting.
6. Confirm tank pressure.
7. Pressurize the valve through the fitting to a minimum pressure of 10 psig and a maximum pressure of the tank pressure  $\pm 5$  psig.

 **DO NOT EXCEED A NET PRESSURE DIFFERENTIAL OF MORE THAN 5 PSIG OR DISK MAY BURST OR INVERT.**

8. Check for leaks at base of valve (Figure 2, red). Note the weather seal does not retain pressure in excess of 5 psig.
9. Release pressure applied to valve fitting.

 **DO NOT VENT TANK CAR PRESSURE BEFORE VALVE PRESSURE OR DISK MAY BURST OR INVERT.**

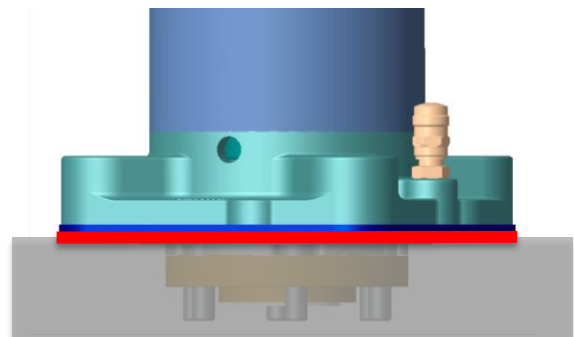


Figure 2 Bubble Leak Test at base of valve (red) to check primary PRV mounting gasket.

10. Remove air fitting.
11. If the tell-tale needle valve was removed, reinstall the tell-tale valve. Otherwise, replace outlet cap. Apply Teflon tape as needed.
12. Close needle valve.

