MID-WEST INSTRUMENT TEST PROCEDURE- SPILL-RESISTANT PVB ASSEMBLIES

NOTE: IT IS THE TESTER'S RESPONSIBILITY TO DETERMINE IF THIS PROCEDURE IS ACCEPTED BY LOCAL AUTHORITIES.

- **<u>TEST SET UP:</u>** 1. Obtain permission to shut off the water supply.
 - 2. Determine the direction of flow.
 - 3. "Blow out" test cock and vent valve and install appropriate adapter.
 - 4. All test kit valves are closed.

IMPORTANT: THE TEST KIT AND HOSE MUST BE HELD AT THE SAME LEVEL AS THE SVB DURING TESTS 1 & 2



TEST NO.1 – DOES THE AIR INLET VALVE OPEN WHEN THE INLET PRESSURE IS AT LEAST 1 PSI ABOVE ATMOSPHERIC PRESSURE? IS THE AIR INLET VALVE FULLY OPEN WHEN THE INLET PRESSURE IS ATMOSPHERIC?

- 1. Remove air inlet valve canopy.
- 2. Connect a bleed-off valve assembly (such as Mid-West P.N. 830-0001 not included with test kit) to the test cock.
- 3. Connect a hose between the bleed-off valve and the high side connection on the test kit. Open the test cock.
- 4. Bleed the high side by opening the bleed high valve. (High and by-pass valves on a 3-valve test kit)
- Close the bleed high valve. (High valve on a 3-valve test kit)
- 5. Close No. 2 shut off valve, then close No. 1 shut off valve.
- 6. Open the vent valve on the SVB. (If gauge reading drops, record the reading if the air inlet valve opens.)
- 7. SLOWLY open the bleed high valve (high valve on a 3-valve test kit) no more than ¼ turn dropping the pressure slowly. Record the pressure reading when the air inlet valve opens. It should be 1 PSI OR HIGHER. If the inlet valve does not open, close the bleed high valve (high valve on a 3-valve test kit) and go to step 10.
- 8. Fully open the bleed high valve (high valve on a 3-valve test kit). Check if the air inlet valve is fully open. Close the bleed high valve. (High valve on a 3-valve test kit)
- 9. Close the vent valve on the SVB. **SLOWLY** open No. 1 shut off valve. Proceed to TEST NO. 2.
- 10. The No. 1 shut off valve is leaking. Open and close shut off valve No. 1 to attempt a better seal. Repeat step 7. If step 7 cannot be passed go to step 11.
- 11. Slowly open the bleed-off valve dropping the gauge reading to about 10 PSI. Repeat step 7. If step 7 cannot be passed when the bleed-off valve is fully open, the No. 1 shut off valve must be repaired or replaced.

TEST NO. 2 - IS THE STATIC PRESSURE DROP ACROSS THE CHECK VALVE 1 PSID OR HIGHER

- 1. Close No. 1 shut off valve. (If No. 1 shut off valve was leaking in TEST NO. 1 go to step 3.)
- 2. Open the vent valve on the SVB. Record the gauge reading when water stops draining from the vent valve. It should be 1 PSI or higher. Go to step 4.
- 3. Open the vent valve on the SVB. **SLOWLY** open the bleed-off valve until the water stops draining from the vent valve. Record the gauge reading. It should be 1 PSI or higher.
 - If the flow from the vent valve cannot be stopped by open the bleed-off valve, the No. 1 shut off valve must be repaired or replaced.
- 4. Close the test cock and vent valve. Open both shut off valves. Remove all test equipment. Replace air inlet valve canopy. Drain test kit.