Bendix® AD-IS® Air Dryer System

Field Inspection

WARNING: Be sure to follow all the General Safety Guidelines outlined in the Bendix® AD-IS® Service Data Sheet, SD-08-2418, before performing any service on the air brake system.

1. Chock the vehicle wheels. Start the engine and charge the air brake system to governor cut-out, around 130 psi.
2. The primary or secondary air gauge should start to rise. As the pressure in one gauge reaches 110 psi, it may stop and the other gauge will start to rise. As the second gauge reaches 110 psi, both gauges will begin to climb to 130 – 140 psi (due to the inaccuracy of the gauges) and stop. The air dryer will then purge. Note that at the end of the purge cycle if the air dryer exhibits fluttering, perform the unloader leakage test on the compressor, per the manufacturers guidelines, before continuing.
3. Shut off the engine and push in the yellow button to release the parking brakes. Note that the gauges will drop a small amount. Check the air gauges. If either gauge indicates a continued loss of pressure, check the system for leaks.
4. Apply and hold the service brakes by fully depressing the brake pedal, the gauges will drop a small amount and again check for a loss of pressure by watching both gauges. If either gauge indicates a continued loss of air pressure, check the system for leaks.
5. Release the service brakes. Continue to apply and release the service brakes until the pressure drops below governor cut-in (approximately 100 psi).
6. Start the engine and charge the air brake system again. Turn the engine off.

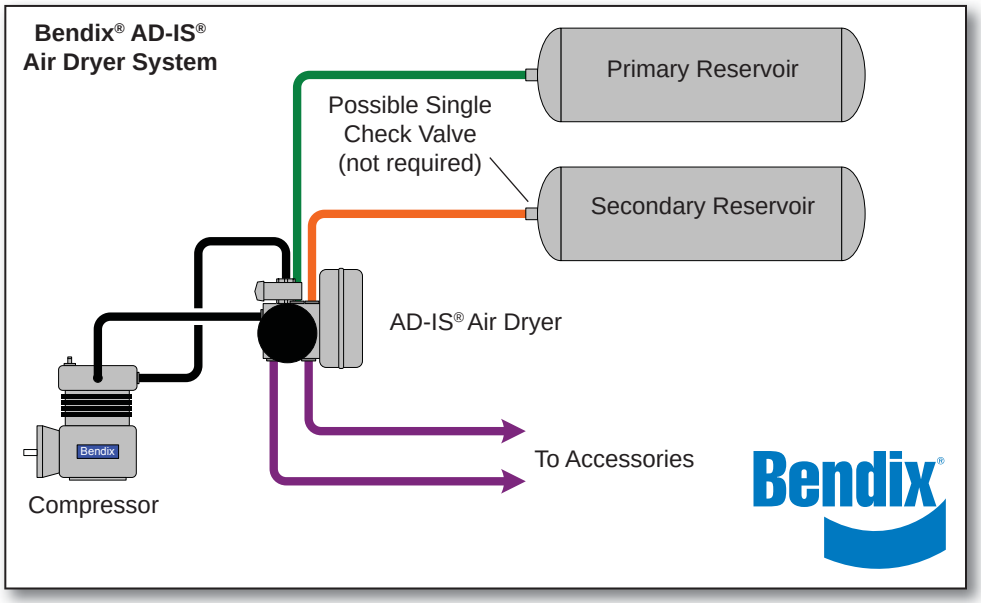
   Note: The pressure protection valves in the Bendix® AD-IS® air dryer help protect the air brake system in the event that one circuit leaks. If the pressure protection valves are functioning properly and one circuit leaks, the other circuit will not drain below 70 psi. To verify that the pressure protection valves are working properly, perform steps 7 through 9 in the Pressure Protection Valve Test to the right. **The pressure protection valves are not serviceable and if found to be not functioning properly, the AD-IS air dryer must be replaced.**

Pressure Protection Valve Test

7. Locate and manually drain a reservoir. While this reservoir is being drained the other reservoir will start to lose pressure, but must stop showing a pressure drop when the pressure is above 70 psi. If this reservoir continues to show a drop in pressure below 70 psi, the pressure protection valve located in the AD-IS air dryer is determined to be not functioning properly therefore, the AD-IS air dryer must be replaced.

   Note: Although it is not required, a check valve may be located in the supply line of the secondary reservoir. If a check valve is in the supply line to the reservoir, this reservoir will remain at full system (approximately 130 psi) pressure when the other reservoir is manually drained. To properly test the pressure protection valve the reservoir check valve must be removed. **Note:** If check valves are installed in both the primary and secondary reservoirs, there must be at least one (600 $in.^3$ minimum volume) reservoir without a check valve connected to one of the four pressure protection valves in the AD-IS air dryer.
8. Start the engine and charge the air brake system again. Turn the engine off.
9. Repeat steps 7 and 8 manually draining the other (not previously drained manually) reservoir. **If a pressure protection valve is found to be not functioning properly when testing either reservoir, the AD-IS air dryer must be replaced.**

   If additional information is needed, see Bendix® AD-IS® Air Dryer Service Data Sheet SD-08-2418.



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