

# Installation Instructions

AD-IP AIR DRYER DESICCANT CARTRIDGE BOLT REPLACEMENT KIT

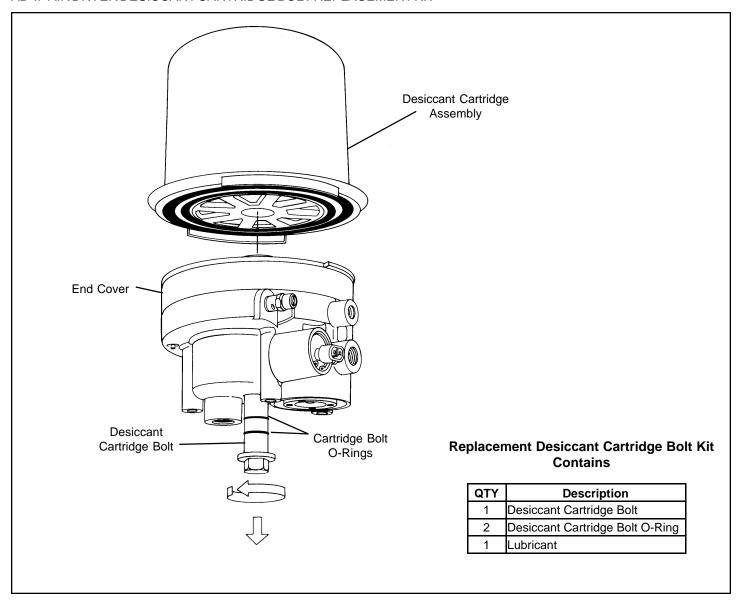


Figure 1 AD-IP Air Dryer Desiccant Cartridge Bolt Replacement

# **KIT DESCRIPTION**

This kit is intended for use in replacing the desiccant cartridge bolt in both Bendix AD-IP and AD-IP DI (Drop-In) air dryers.

# IMPORTANT! PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO AVOID PERSONAL INJURY OR DEATH:

When working on or around a vehicle, the following general precautions should be observed at all times.

1. Park the vehicle on a level surface, apply the parking brakes, and always block the wheels.

- 2. Stop the engine when working around the vehicle.
- 3. If the vehicle is equipped with air brakes, make certain to drain the air pressure from all reservoirs before beginning ANY work on the vehicle.
- 4. Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in manner that removes all electrical power from the vehicle.
- 5. When working in the engine compartment the engine should be shut off. Where circumstances require that the engine be in operation, EXTREME CAUTION should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated, or electrically charged components.

- Never connect or disconnect a hose or line containing pressure; it may whip. Never remove a component or plug unless you are certain all system pressure has been depleted.
- 7. Never exceed recommended pressures and always wear safety glasses.
- 8. Do not attempt to install, remove, disassemble or assemble a component until you have read and thoroughly understand the recommended procedures. Use only the proper tools and observe all precautions pertaining to use of those tools.
- Use only genuine Bendix replacement parts, components, and kits. Replacement hardware, tubing, hose, fittings, etc. should be of equivalent size, type, and strength as original equipment and be designed specifically for such applications and systems.
- 10. Components with stripped threads or damaged parts should be replaced rather than repaired. Repairs requiring machining or welding should not be attempted unless specifically approved and stated by the vehicle or component manufacturer.
- 11. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.

# **VEHICLE PREPARATION**

- 1. Park the vehicle on a level surface and prevent movement by means other than the brakes.
- 2. Drain all reservoirs to 0 p.s.i.
- 3. Clean the exterior of the air dryer end cover.

# DISASSEMBLY General

This maintenance kit does not require removal of the AD-IP air dryer from the vehicle.

 Using a wrench or a socket, loosen the desiccant cartridge bolt from the end cover. Pull the desiccant cartridge bolt out of the end cover and discard along with both o-rings on the bolt. Note: The desiccant cartridge need not be removed.

# **CLEANING & INSPECTION**

- Using a clean rag, wipe the bolt bore in the end cover clean.
- 2. Inspect for physical damage to the end cover.

# **ASSEMBLY**

- Lubricate the desiccant cartridge bolt o-rings, the o-ring grooves in the bolt and the end cover bore for the desiccant cartridge bolt. *Important: Use only the silicone* grease packaged with this kit.
- 2. Install both o-rings on the desiccant cartridge bolt and using a twisting motion, insert the assembled desiccant cartridge bolt in the end cover.
- 3. If the desiccant cartridge was separated from the end cover, install it on the end cover making certain the cartridge is properly seated and flush on the end cover.

  Note: It may be necessary to rotate the cartridge slightly until the anti-rotation lugs are properly aligned and allow the cartridge to rest flush against the end cover.
- Using a wrench or a socket, tighten the desiccant cartridge bolt, to secure the desiccant cartridge to the end cover. Torque the desiccant cartridge bolt to 70 foot pounds.

# **CAUTION:** Do not over torque.

5. Before placing vehicle back into service, perform the TESTING stated below.

### **TESTING**

- Close all reservoir drain cocks. Build up system pressure to governor cutout and note that AD-IP purges with an audible escape of air. "Fan" the service brakes to reduce system air pressure to governor cutin. Note that the system once again builds to full pressure and is followed by an AD-IP purge.
- 2. Check for excessive leakage around the head of the desiccant cartridge bolt and around the circumference of the desiccant cartridge where it is in contact with the end cover. With the compressor in loaded mode (compressing air), apply a soap solution to the areas specified and observe that leakage does not exceed a 1 inch bubble in 1 second. If the leakage exceeds the maximum specified, remove and re-install. If leakage persists replace the air dryer assembly.