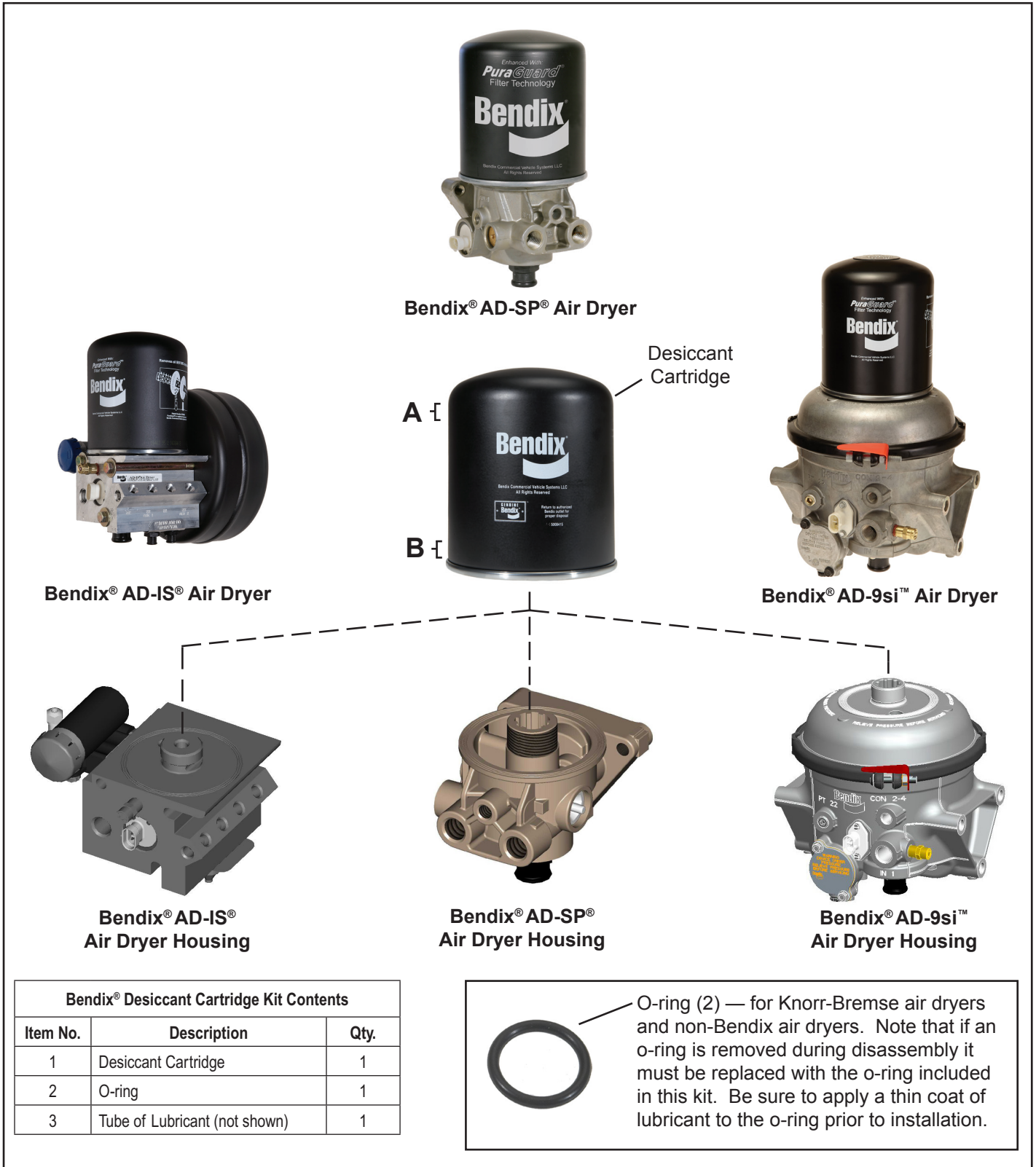




Installation Instructions

BENDIX® AD-IS®, AD-SP® AND AD-9si™ AIR DRYER DESICCANT CARTRIDGE KITS



Bendix® AD-IS® Air Dryer

Bendix® AD-SP® Air Dryer

Bendix® AD-9si™ Air Dryer

Bendix® AD-IS®
Air Dryer Housing

Bendix® AD-SP®
Air Dryer Housing

Bendix® AD-9si™
Air Dryer Housing

Bendix® Desiccant Cartridge Kit Contents		
Item No.	Description	Qty.
1	Desiccant Cartridge	1
2	O-ring	1
3	Tube of Lubricant (not shown)	1

O-ring (2) — for Knorr-Bremse air dryers and non-Bendix air dryers. Note that if an o-ring is removed during disassembly it must be replaced with the o-ring included in this kit. Be sure to apply a thin coat of lubricant to the o-ring prior to installation.

Figure 1 Bendix® AD-IS®, AD-SP® and AD-9si™ Air Dryers



GENERAL SAFETY GUIDELINES



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

When working on or around a vehicle, the following guidelines should be observed **AT ALL TIMES**:

- ▲ Park the vehicle on a level surface, apply the parking brakes and always block the wheels. Always wear personal protection equipment.
- ▲ Stop the engine and remove the ignition key when working under or around the vehicle. When working in the engine compartment, the engine should be shut off and the ignition key should be removed. 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.
- ▲ 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.
- ▲ If the work is being performed on the vehicle's air brake system, or any auxiliary pressurized air systems, make certain to drain the air pressure from all reservoirs before beginning ANY work on the vehicle. If the vehicle is equipped with a Bendix® AD-IS® air dryer system, a Bendix® DRM™ dryer reservoir module, or a Bendix® AD-9si™ air dryer, be sure to drain the purge reservoir.
- ▲ Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that safely removes all electrical power from the vehicle.
- ▲ You should consult the vehicle manufacturer's operating and service manuals, and any related literature, in conjunction with the Guidelines above.
- ▲ Never exceed manufacturer's recommended pressures.
- ▲ 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.
- ▲ Use only genuine Bendix® brand replacement parts, components and kits. Replacement hardware, tubing, hose, fittings, etc. must be of equivalent size, type and strength as original equipment and be designed specifically for such applications and systems.
- ▲ Components with stripped threads or damaged parts should be replaced rather than repaired. Do not attempt repairs requiring machining or welding unless specifically stated and approved by the vehicle and component manufacturer.
- ▲ Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.
- ▲ For vehicles with Automatic Traction Control (ATC), the ATC function must be disabled (ATC indicator lamp should be ON) prior to performing any vehicle maintenance where one or more wheels on a drive axle are lifted off the ground and moving.
- ▲ The power **MUST** be temporarily disconnected from the radar sensor whenever any tests **USING A DYNAMOMETER** are conducted on a Bendix® Wingman® Advanced™-equipped vehicle.

Important! These instructions are the same for standard and Bendix® PuraGuard® oil coalescing cartridges. Note that standard air dryer cartridges may be serviced with oil coalescing types, however, oil coalescing cartridges must only be serviced with oil coalescing cartridges. Before installing this kit, verify the kit is correct for the application.

DESCRIPTION

The contents of this kit provide all the necessary components to replace either the standard or PuraGuard® oil coalescing cartridge for a Bendix® AD-IS®, AD-SP® or AD-9si™ air dryer, as well as non-Bendix air dryers. When servicing the Bendix AD-IS, AD-SP or AD-9si air dryers, discard the o-ring included in the kit.

GENERAL

When rebuilding or replacing components of the air dryer use only genuine Bendix® brand replacement parts.

Bendix® AD-IS® AIR DRYER CAUTION: Always depressurize the AD-IS air dryer purge reservoir, and all other reservoirs on the vehicle to 0 psi before servicing the air dryer. The purge reservoir drain valve is below the dryer housing. Draining the air from the purge reservoir also depressurizes the desiccant cartridge, preventing a rapid escape of air when removing the cartridge.

WARNING

DO NOT ATTEMPT TO REMOVE THE CLAMP BAND THAT RETAINS THE TWO HOUSINGS TOGETHER. SERIOUS INJURY OR DEATH MAY OCCUR IF THESE INSTRUCTIONS ARE NOT FOLLOWED COMPLETELY.

DISASSEMBLY

1. Using an appropriate filter wrench, loosen the old cartridge (1) and remove it from the air dryer housing by turning in a counterclockwise direction. Be careful not to allow dirt or other contaminants to fall into the dryer housing.

Note: Return the old desiccant cartridge to an authorized outlet for disposal.

2. Clean the surface area of the dryer housing with a clean cloth. Be careful not to allow dirt or other contaminants to fall into the dryer housing.

ASSEMBLY

When servicing the Bendix® AD-IS®, AD-SP® or AD-9si™ air dryers, discard the o-ring (2) included in the kit.

1. Using the tube of lubricant (3) provided in this kit, apply a thin coat of lubricant to the sealing ring on the bottom of the new desiccant cartridge (1) and o-ring (2), if applicable.
2. Apply the remaining lubricant to the air dryer cartridge mounting threads on the housing.
3. Spin the new desiccant cartridge (1) onto the dryer housing in a clockwise direction until the seal makes contact with the dryer housing. Using an appropriate filter wrench (if necessary), tighten the desiccant cartridge (1) one full turn. Note: Place the filter wrench only on areas A or B as shown in Figure 1 to avoid damage to the cartridge.

TESTING THE AIR DRYER

Before placing the vehicle in service, perform the following tests.

1. Close all reservoir drain valves.
2. Build up the system air pressure and check the air dryer for leaks. When the governor cut-out pressure is reached, note that the air dryer purges with an audible escape of air.
3. Apply and release the service brakes to reduce system air pressure to governor cut-in. Note that the system once again builds to full pressure and is followed by a purge at the air dryer exhaust.
4. It is recommended that the total air system be tested for leakage to ensure that the air dryer will not cycle excessively.

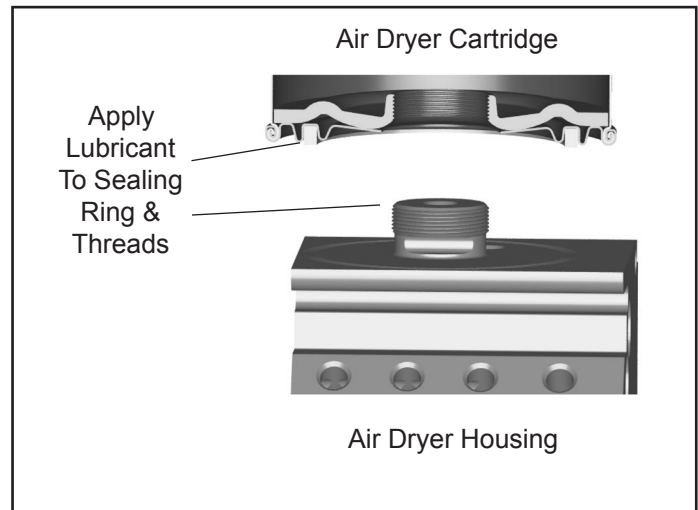


Figure 2 **Lubricating the Cartridge Sealing Ring & Housing Threads**

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