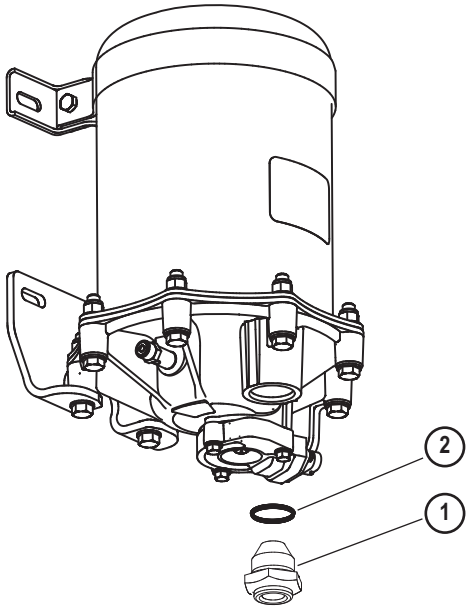
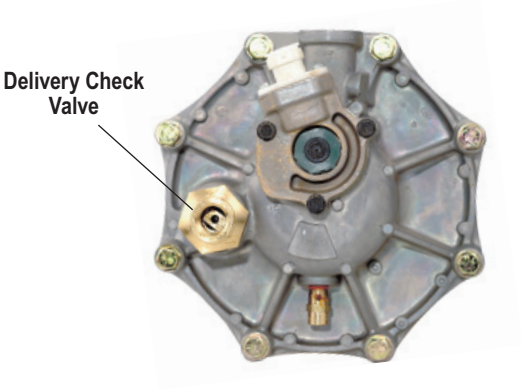
Installation Instructions

BENDIX® AD-9® AIR DRYER CHECK VALVE REPLACEMENT KIT



CHECK VALVE
REPLACEMENT KIT PIECE NOS.
107799 (3/4" PT) & 107800 (1/2" PT)



Bendix® AD-9® Air Dryer Check Valve Replacement Kit		
Item	**Description**	**Qty**
1	Check valve	1
2	O-ring	1
3	Lubricant (not shown)	1

Figure 1 **Bendix® AD-9® Air Dryer Check Valve Replacement Kit**

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 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. Always wear safety glasses.
2. Stop the engine and remove 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.
3. 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.
4. 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 or a dryer reservoir module, be sure to drain the purge reservoir.
5. Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in a manner that safely removes all electrical power from the vehicle.
6. Never exceed manufacturer's recommended pressures.
7. 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.
8. 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.
9. 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.
10. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.
11. 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.

IMPORTANT: Prior to assembly of any kit, coat all o-rings, o-ring grooves and bores with the supplied lubricant. Refer to Figure 1 during assembly.

CLEANING AND INSPECTION

1. Using mineral spirits or an equivalent solvent, clean and thoroughly dry all metal parts.
2. Inspect the interior and exterior of all metal parts for severe corrosion, pitting and cracks. If this condition exists, replace the air dryer. Superficial corrosion and/or pitting on the exterior portion of the upper and lower body halves is acceptable.
3. Inspect all air line fittings for corrosion. Repair or replace any leaking or damaged lines or fittings. Clean all old thread sealant from the pipe threads.

REMOVING & INSTALLING CHECK VALVE KITS

1. Using an adjustable wrench or socket, remove the delivery port check valve assembly (1) and o-ring (2). Check with an authorized Bendix® parts outlet for the possible core value of the check valve assembly (1) and discard the o-ring (2).
2. Check the CLEANING AND INSPECTION section of this instruction sheet and perform any steps that apply.
3. Inspect the bore of the end cover. Make certain that the end cover passage is open and free of obstructions.
4. Inspect the pipe threads in the end cover. Make certain they are clean and free of thread sealant.
5. Lubricate the o-ring groove on the new check valve assembly (1) and o-ring (2) using the lubricant (3) provided. Install the o-ring (2) on the new check valve assembly (1), then install the assembly in the Bendix® AD-9® air dryer end cover. Torque to 200-250 in. lbs.
6. Conduct the Operation and Leakage Test detailed in this document.

OPERATION AND LEAKAGE TEST

Test the outlet port check valve by building the air system to governor cut-out and observing a test air gauge installed in the #1 reservoir.

Check all lines and fittings leading to and from the air dryer for leakage and integrity. A rapid loss of pressure could indicate a malfunctioning outlet check valve. This can be confirmed by bleeding the system down and removing the check valve assembly from the end cover.

Bench test by applying air pressure to the check valve and soaping the other end. Leakage should not exceed a 1" bubble in one (1) second. Replace the check valve if excessive leakage is found.