



Installation Instructions

AD-IS® Governor Adapter Block
Delivery Check Valve
Replacement Kit
Pc. No. 5011033

AD-IS® AIR DRYER ADAPTER BLOCK DELIVERY CHECK VALVE REPLACEMENT KIT

Kit piece number 5011033 consists of the following:

Item	Description	Qty.
1	Delivery Check Valve	1
2	Spring	1
3	Check Valve O-ring (small)	1
4	Governor Adapter Block O-ring (medium)	1
5	Governor Adapter Block O-ring (large)	1
6	Governor Adapter Block with Insert	1
7	Insert	1
8	Plug	1
9	1/4" Cap Screws	2
10	Lubricant	1

FIGURE 1 - AD-IS® ADAPTER BLOCK DELIVERY CHECK VALVE KIT

KIT DESCRIPTION

This kit is intended for installing the governor adapter block with a delivery port check valve on a Bendix® AD-IS® air dryer.

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 an 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® 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 Antilock 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.

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. (0 kPa).
3. Clean the exterior of the air dryer.

DISASSEMBLY

General

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

1. Disconnect the air line from the air dryer delivery port or governor adapter, if present.
2. If present, remove and discard the governor adapter block, fitting, o-rings, spring, delivery check valve and mounting hardware.

CLEANING & INSPECTION

1. Use a suitable solvent to clean all metal parts, and use a cotton swab to clean the bore (Note: Do not use abrasives or tools to clean the bore: any scratches caused may necessitate replacing the AD-IS assembly.) Superficial external corrosion and/or pitting is acceptable.
2. Inspect for physical damage to the bore and the check valve seat.
3. Inspect all air line fittings for corrosion and replace as necessary.

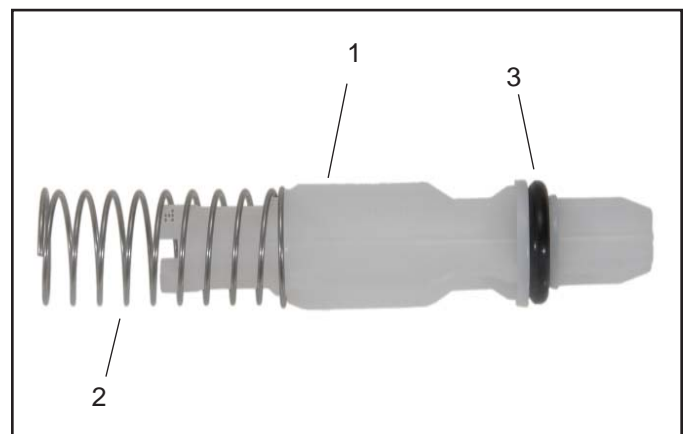


FIGURE 2 - DELIVERY CHECK VALVE ASSEMBLY

ASSEMBLY

See Figures 1 and 2.

1. Lubricate the smallest o-ring(3) and delivery check valve(1) with the supplied lubricant(10). **Note:** Use only the lubricant packaged with this kit.
2. Install this o-ring(3) on the delivery check valve(1) by sliding the o-ring over the set of 4 tapered guide lands. The o-ring groove holds the small o-ring(3) in its correct location.
3. At the other end of the delivery check valve(1), place the spring(2) over the set of 4 straight guide lands. Gently rotating the check valve(1) counterclockwise will help position the spring(2) into the correct position. Once in the correct location, the delivery check valve(1) will hold the end of the spring(2) in position - be sure that the spring(2) is not loose before continuing with this installation.
4. Install the assembled delivery check valve(1), o-ring(3) and spring(2) in the air dryer delivery port so that the o-ring(3) rests on its seat and the free end of the spring(2) is visible.

5. Install the remaining two o-rings(4 and 5) in the governor adapter block(6) as shown in Figure 1.
6. Mount the governor adapter block(6) to the air dryer aligning the insert(7) with the spring(2) in the air dryer delivery port.
7. Insert the 1/4" cap screws(9) and tighten (to 125 in-lbs).
8. Install the 1/4" NPT pipe plug(8) in the front port on the governor adapter block(6).
9. Connect the air line that was removed from the delivery port of the air dryer or governor adapter block.
10. Before placing vehicle back into service, perform the OPERATIONAL TESTS stated below.

TESTING THE AD-IS® AIR DRYER

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

1. Close all reservoir drain valves.
2. Build up system pressure to governor cut-out and note that the AD-IS® air dryer purges with an audible burst of air, followed immediately by approximately 30 seconds of air flowing out of the purge valve.
3. "Fan" 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 AD-IS® air dryer exhaust.
4. It is recommended that the total air system be tested for leakage to assure that the AD-IS® air dryer will not cycle excessively.

