



Installation Instructions

KIT PC. No.
106469

MAINTENANCE KIT FOR INLET REGULATING VALVE

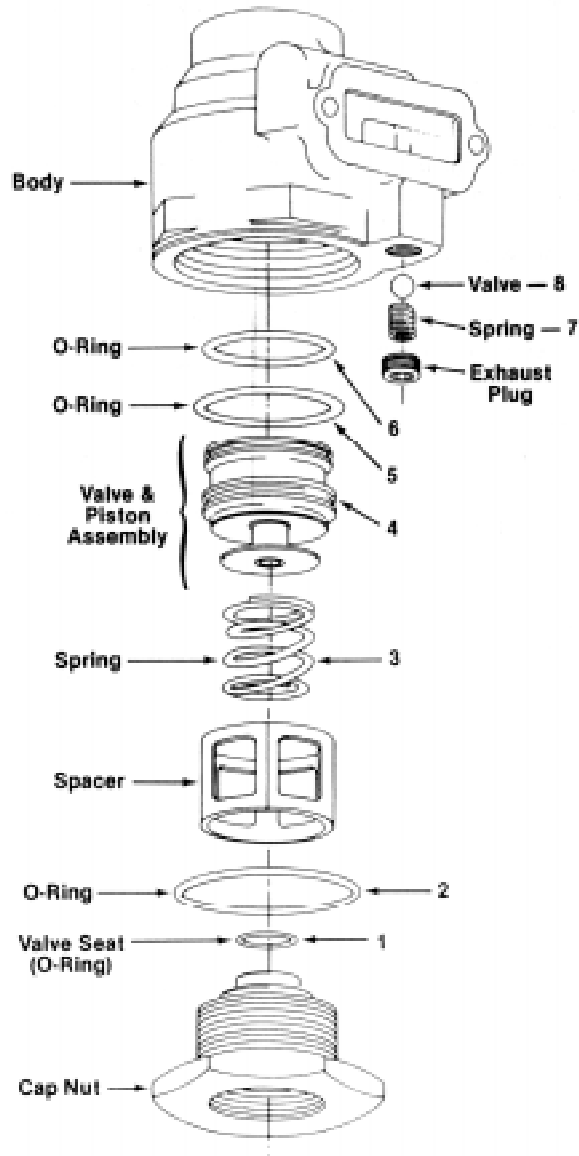


Figure 1 - Inlet Regulating Valve

Key	Description	Qty.
1	O-Ring	1
2	O-Ring	1
3	Spring	1
4	Valve and Piston Assy.	1
5	O-Ring	1
6	O-Ring	1
7	Spring	1
8	5/16" Steel Ball	1
-	Lubricant	1

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.
6. 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.
9. 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.

REMOVAL

1. Park the vehicle on a level surface and block the wheels and/or hold the vehicle by means other than the air brakes.
2. Drain the air pressure from all vehicle reservoirs.
3. Disconnect the turbocharged air line at the 3/4 inch NPT turbo supply port of the IRV.
4. Remove the two cap screws that secure the IRV; then remove the valve itself.

DISASSEMBLY (Figure 1)

1. Using an adjustable or two inch wrench remove the cap nut from the body.
2. Remove the spring (3) and spacer.

3. Remove the large diameter O-ring (2) located beneath the hex head of the cap nut.
4. Taking care not to damage the roll crimp of the cap nut, remove the small diameter O-ring (1) which serves as the valve seat.
5. Gently tap the open end of the valve body on a non-metallic surface in order to remove the valve and piston assembly (4).
6. Using a 3/16 inch Allen wrench, remove the safety valve exhaust plug.
7. Remove the valve spring (7) and safety valve (8).
8. Discard all parts that have replacements in the kit.

CLEANING & INSPECTION

1. Using mineral spirits, clean and thoroughly dry all metal parts. Using a thin wire make certain that the vent hole in the IRV body is open and clean.
2. Check all metal parts for severe corrosion, pitting and cracks. Superficial corrosion and shallow pitting on the exterior of the cap nut and body are acceptable.

ASSEMBLY

The appropriate lubricant is packaged in Bendix maintenance kits and should be used as directed in the kit instruction sheet. Refer to Figure 1 throughout Assembly.

1. Install the safety valve (8) and valve spring (7) in the IRV body. Using a 3/16 inch Allen wrench, install the exhaust plug.
2. Lubricate the interior bore of the body and the O-ring grooves of the valve and piston assembly. Avoid disturbing the special high temperature lubricant which has been pre-applied in the bore of this assembly.
3. Lubricate and install the large and small diameter O-rings (5 & 6) on the valve and piston assembly.
4. Carefully insert the valve and piston assembly (4) into the body, making certain that it is completely seated.
5. Carefully work the small diameter O-ring (1), which serves as the valve seat, into the cap nut groove. When properly installed, this O-ring is evenly retained by the rolled over crimped edges of the cap nut groove.
IMPORTANT: Do not lubricate this O-ring or the cap nut groove in which it is installed.
6. Lubricate the cap nut groove for the large diameter O-ring. Lubricate, then install the large diameter O-ring (2) on the cap nut.
7. Install the spacer, then the spring (3) in the valve body.
8. Install the cap nut in the body and torque it to between 58 and 72 pound feet.
9. Perform the operation and leakage tests called out in SD-01-3408 before placing the valve in service.

INSTALLATION

1. Install a new gasket on the mounting flange of the IRV and using two cap screws secure the IRV. NOTE: If the IRV is to be secured to the compressor inlet with 5/16 inch cap screws, torque these screws to between 125 and 150 pound inches.
2. Reconnect the turbocharged air line to the 3/4 inch NPT turbo supply port of the IRV.
3. Before placing the vehicle in service, close all reservoir drain cocks and build air system pressure to governor cut-out.