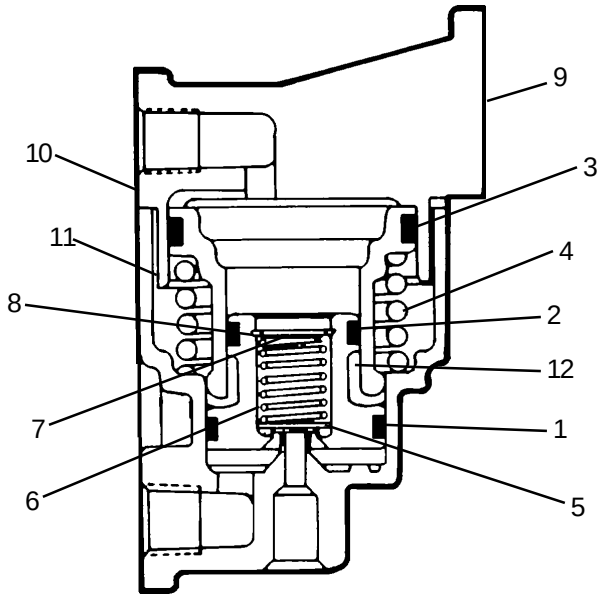
Installation Instructions

KIT
PC. No. 287365

FIELD MAINTENANCE KIT FOR FRONT AXLE RATIO VALVE

Qty.	Description	Key
1	O-Ring	1
1	O-Ring	2
1	O-Ring	3
1	Piston Spring	4
1	Inlet Valve	5
1	Inlet Spring*	6
1	Inlet Spring*	6
1	Inlet Spring*	6
1	Washer	7
1	Retaining Ring	8
1	Lubricant	–



*Select proper spring for repair of valve per instructions and discard remaining two.

Figure 1 This kit consists of the parts listed above.

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.**

DISASSEMBLY OF VALVE

1. Note and mark the position of the supply and delivery ports.
2. Remove the four 1/4" machine screws which retain the cover (9) to the body (10).
   Note: Caution should be observed when removing the cover as it is spring loaded.
3. Remove the cover (9), upper piston assembly (11), spring (4), and lower piston assembly (12).
4. Discard O-Rings (1, 2, 3), and spring (4).
5. From the lower piston assembly (12), remove and discard the retaining ring (8), washer (7), spring (6), and valve (5).
6. Prior to reassembly, wash all parts in a cleaning solvent equivalent to mineral spirits, making sure all surfaces, bores, and passages are clean and dry.
7. Coat all parts, bores, and surfaces with a film of BW-650-M lubricant supplied in kit.

Before reassembly of valve, it must first be determined which of the three small springs provided in the kit is to be used. Stamped on the side of the cover is the valve piece number and nominal hold-off pressure for that valve.
For a 4 psi hold-off pressure, use the smallest of the three springs. (Approx. free height 3/4" with 6-1/2 coils.)
For a 10 psi hold-off pressure, use the medium size spring. (Approx. free height 3/4" with 4-1/2 coils.)
For a 20 psi hold-off pressure, use the largest of the springs. (Approx. free height 1-1/4" with 8 coils.)

REASSEMBLY OF VALVE

8. Drop valve (5) into the lower piston (12) making sure it is laying flat.
9. Position spring (8) on four ears of valve (5). Place washer (7) and retaining ring (8) on top of spring, compress assembly into piston and secure retaining ring in piston.
10. Position O-Rings (1, 2, and 3) in their respective grooves on the upper and lower pistons.
11. Insert spring (4) and reassemble valve in reverse order of disassembly, making sure the supply and delivery ports are in their proper position.
12. Test valve in accordance with Bendix Service Data Sheet SD-03-951.