Installation Instructions

KIT
PC. No. 281126

FIELD MAINTENANCE KIT FOR PP-1 & RD-3 CONTROL VALVES

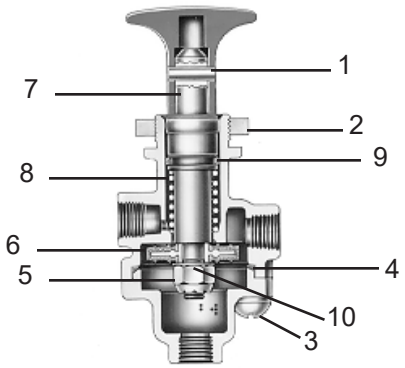


Figure 2 PP-1

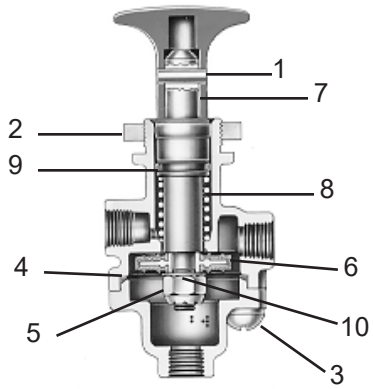


Figure 1 RD-3

Qty.	Description	Key
1	Sealing Ring	4
1	Lock Nut	5
1	Inlet and Exhaust Valve	6
1	Plunger O-Ring	9
1	Washer	10
1	Tube of Lubricant	

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.**

REMOVAL

Block and/or hold the vehicle by a means other than air brakes and drain all reservoirs.

1. Drive the button roll-pin (1) out with a punch and remove the button.
2. Disconnect the air fittings, identify supply and delivery lines, remove the panel mounting nut (2) and remove the valve.

DISASSEMBLY - PP-1, RD-3

1. Remove the two cap screws (3) which retain the lower cover and remove cover. Remove the sealing ring (4) and discard.
2. Insert a small punch through the roll pin hole in the stem and remove the lock nut (5) with a 7/16" wrench. Discard lock nut.
3. Remove inlet/exhaust valve (6), plunger (7), spring (8), washer (10) and discard items 6 and 10.
4. Remove O-Ring (9) from plunger and discard.

REASSEMBLY

1. Before reassembly, clean all parts and coat the plunger bore and O-Ring grooves with the lubricant provided.
2. Install plunger O-Ring (9) on plunger.
3. Install plunger spring (8) on plunger (7) and insert and hold in the valve body.
4. Install inlet/exhaust valve (6) and washer (10) on plunger and tighten lock nut (5) to 20-25 inch pounds torque.
5. Install sealing ring (4) on the cover and install the cover on the body. Tighten cap screws (3) to 30-60 inch pounds torque.

OPERATING AND LEAKAGE TESTS PP-1, RD-3

1. Connect a 120 p.s.i. air source to the supply port. An accurate test gauge should be tee'd into the supply line and a means of controlling the supply pressure provided. A small volume reservoir (or similar) with a gauge should be connected to the delivery port.
2. Push the button in (applied position). Leakage at the exhaust port should not exceed a 1" bubble in 3 seconds; at the plunger a 1" bubble in 3 seconds. (The RD-3 will have to be manually held in this position.) There should be no leakage between upper and lower body.
3. With 120 p.s.i. supply pressure and the button pulled out (exhaust position), leakage at the exhaust port should not exceed a 1" bubble in 5 seconds.
4. With the button pushed in, reduce the supply pressure. At a pressure between 60 and 20 p.s.i., the button should pop out automatically, exhausting the delivery volume. The pressure at which the button pops out will depend on the spring installed. (This does not apply to the RD-3 and some PP-1's.)

INSTALLING

1. Install valve in panel, securing with the panel mounting nut.
2. Reconnect the air lines and check for proper piping of supply and delivery lines.
3. Install the operating button. Secure the operating button by installing the roll pin (1).

For additional information on the PP-1 or RD-3, a copy of the Service Data Sheet SD-03-61 can be obtained from the nearest authorized Bendix distributor.

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