Bendix[®] C-5[™] Cut-Out Cock

Bendix[®]

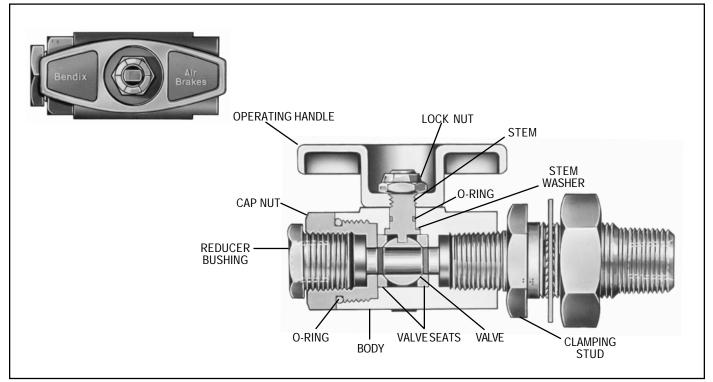


FIGURE 1

DESCRIPTION

The C-5[™] cut-out cock is a manually operated on-off valve. Cut-out cocks are used in an air brake system where a manual shut off air lines is desirable such as in trailer and trailer dolly systems.

OPERATION

Note that in Figure 1 the C-5^T cut-out cock uses a metal ball valve between two valve seats. Rotating the ball valve 90° will either open or close the air passage through the cut-out cock.

PREVENTIVE MAINTENANCE

Every six months, 1800 operating hours, or 50,000 miles the cut-out cock should be checked for leakage around the ball valve and past the stem o-ring. Once each year, 3600 hours, or 100,000 miles the C-5TH cut-out cock should be disassembled, cleaned, and inspected for signs of wear or deterioration.

LEAKAGE CHECK

With the valve in the closed position and air pressure present on either side, a soap solution is applied to the side open to atmosphere. A leakage of not more than a 1" bubble in 5 seconds is permitted.

NOTE: Leakage should be checked in each direction since it is possible for the valve to seal in one direction but not the other.

If the cut-out cock leaks excessively or if wear or deterioration is noted during routine maintenance, it is recommended that it be replaced with a new unit or repaired with genuine Bendix parts.

REMOVING AND INSTALLING

REMOVING

Block and hold vehicle by means other than air brakes. Completely drain all reservoirs. Disconnect air lines from both sides of the cut-out cock.

INSTALLING

Prior to installing, check, and if necessary, clean or replace lines leading to the cut-out cock.

Install the valve taking care the operating handle is in a convenient position for use.

DISASSEMBLY

Unscrew cap nut from body and remove cap nut o-ring.

NOTE: Early models of the C-5[™] cut-out cock had a cap nut at both ends of the body. Parts from the earlier model C-5[™] cut-out cock are not interchangeable with the new model and are not available. When service is required on the older model it should be replaced with the current style.

Rotate the operating handle of the cut-out cock until the passage through the valve is closed. Note the position of the handle for reassembly.

Lightly tap the open end of the valve body on the work surface. The ball valve and both seats will drop out.

Remove the lock nut located in the center of the operating handle and remove the handle from the stem.

Remove handle stem by pushing into valve body and shaking out.

Remove stem washer and o-ring from stem.

CLEANING AND INSPECTION

Wash all metal parts in mineral spirits.

Ball valve seats and o-rings should be wiped clean.

Inspect seats and o-rings for nicks, wear or deterioration.

Inspect valve body, cap nut, handle and stem for cracks and wear. Any part considered unserviceable will necessitate that the entire valve be rebuilt or replaced.

ASSEMBLY

All o-rings should be lightly lubricated with Bendix silicone lubricate BW650M piece no. 291126.

Position stem washer and o-ring on stem.

Push stem through body (threaded end first) from the inside out.

Position operating handle on stem and replace and tighten stem lock nut. Torque to 30-70 inch pounds.

Position one of the two valve seats in the body with the contoured side up.

Place operating handle in position noted during disassembly. (Drive tang on end of stem should be parallel with center line of body.)

Place ball valve in body with slot coinciding with stem.

Place remaining valve seat in body with contoured side down and against the ball valve.

Place o-ring on cap nut and install cap nut in body and tighten (Torque to 150-400 inch pounds).

TESTING

Perform leakage test on reassembled or rebuilt valve.

<u>WARNING! PLEASE READ AND FOLLOW</u> <u>THESE INSTRUCTIONS TO AVOID</u> <u>PERSONAL INJURY OR DEATH:</u>

When working on or around a vehicle, the following general precautions should be observed <u>at all times</u>.

- 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, <u>EXTREME CAUTION</u> 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 <u>ANY</u> 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.