

Installation Instructions

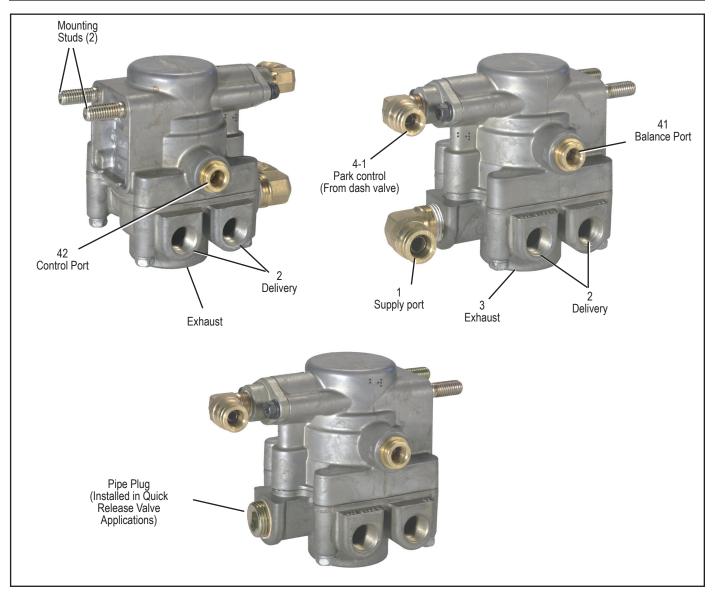


Figure 1 - BENDIX® SR-7™ SPRING BRAKE MODULATING VALVE PORT DESIGNATIONS

GENERAL

This instruction sheet is intended to provide the necessary information to replace the Bendix® SR-7™ spring brake modulating valve in connection with recall campaign number 06E051.

Before installing this valve, verify that the valve being replaced qualifies for the SR-7™ recall campaign.

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.

- 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.

- 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.
- 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.
- 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.
- 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.
- 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.

VALVE IDENTIFICATION

Refer to Figure 2 for valve identification.

- 1. Locate the SR-7[™] valve on the vehicle. Typically it is located near the rear axle mounted on the frame rail.
- On the mounting stud side of the valve look for "Bendix" cast into the valve body. If the valve needs to be removed to properly see this portion of the body, remove per the Valve Removal section of this document.

- If the casting has "Bendix 2" on the side, it is not affected by the recall campaign and no further action is required.
- If the casting has "Bendix 1" on the side, it is potentially affected by the recall campaign and must be further identified.
- 5. To further identify the valve, locate the manufacture date code on the top of the valve. Vehicle paint may need to be removed to identify the date code. SR-7™ valves with the casting code "Bendix 1" manufactured between April 1, 2006 and May 24, 2006 are subject to the recall campaign and must be replaced. Interpret the manufacturing date code to identify if the valve is subject to the recall.

Manufacturing Date Code Interpretation:

The key date code characters used for identification are the 2nd through the 6th alphanumeric characters; all others can be disregarded.

The second character in the date code is an alpha character representing the month of manufacture (A through M skipping the letter I) corresponding to January through December (D = April and E = May). The next four characters are numbers representing the two digit day of the month followed by the two digit year. For example the date code 1C0706T, key characters C0706, indicates the valve was manufactured 30706 or March 7, 2006.

- 6. If the valve date code does not fall within the dates of April 1, 2006 (D0106) and May 24, 2006 (E2406) inclusive, then no further action is needed.
- If the SR-7™ valve has a casting code "Bendix 1" and was manufactured <u>between April 1, 2006 and</u> <u>May 24, 2006</u> it is subject to the recall campaign and <u>must be replaced</u>.

VALVE REMOVAL

- 1. Prior to removing the SR-7[™] valve, review the general safety guidelines of this document.
- 2. Identify all air lines before disconnecting.
- 3. Remove the two mounting nuts that secure the valve to the frame rail and remove the valve.
- 4. Compare the valve that was removed to the replacement valve. If the valve that was removed contains fittings or pipe plugs that the new valve does not, note their orientation and remove the fittings.
- 5. Using pipe sealant, install the fittings that were removed into the replacement SR-7[™] valve. Be sure that orientation of the fittings is the same. <u>Teflon tape is not an acceptable substitute for pipe sealant.</u> Install fittings finger tight, then tighten 1.5 2 turns. For shaped fittings, such as tees and elbows, tighten no more than one additional turn to the final position.

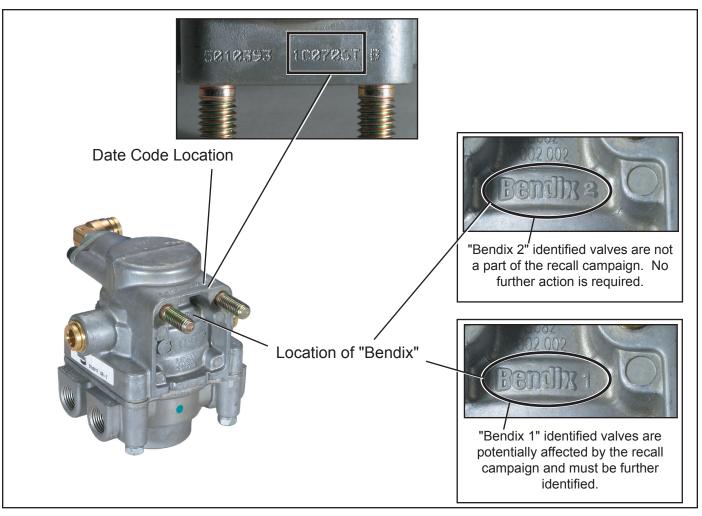


Figure 2 - LOCATION OF IDENTIFICATION CODES

6. If a single check valve is located in the supply port of the SR-7[™] valve being removed, it must be removed and installed on the replacement valve. A standard fitting **is not** an acceptable substitute.

VALVE INSTALLATION

- 1. Align the valve mounting studs with the mounting holes on the vehicle frame rail. Tighten the mounting nuts to 180-220 in. lbs.
- 2. Install the valve onto the vehicle ensuring all air lines are connected as marked during disassembly.

TESTING THE REPLACEMENT SR-7™ SPRING BRAKE MODULATING VALVE

Perform operating and leakage tests as outlined in "Operating Tests" section.

LEAKAGE TEST

Place the park control valve in the "release" position; using a soap solution, coat all ports including the exhaust port. A 1" bubble in 3 seconds is permitted (175 SCCM).

If the valve does not function as described, or if leakage is excessive, it is recommended that it be replaced with

a new unit available from a Bendix parts outlet. **DO NOT ATTEMPT TO DISASSEMBLE THE SR-7™ VALVE. THE VALVE CONTAINS HIGH SPRING FORCES THAT COULD RESULT IN PERSONAL INJURY IF DISASSEMBLY IS ATTEMPTED!**

OPERATING TEST

Block vehicle and hold by means other than vehicle brakes. Charge air brake system to governor cut-out pressure.

Place parking control valve in "park" position. Observe that spring brake actuators apply promptly, within 3 seconds. Place parking control valve in "release" position. Observe that spring brake actuators release fully.

Once the system is functioning normally, the field repair is considered complete.

LABOR REIMBURSEMENT

Complete and submit the labor reimbursement form, BW2586.