SERVICE PROCEDURE

G-07511
SEPTEMBER 2007

SUBJECT: SAFETY RECALL (U.S., EXPORT)
SR-7™ SPRING BRAKE MODULATING VALVE on certain 5900*i*, 7000 and 8600 Models built 11/1/2005 thru 4/30/2007

DEFECT DESCRIPTION

An internal check valve in the Bendix® SR-7™ Spring Brake Modulating Valve may not properly seat, causing internal air leakage. This internal leakage can cause a delay in the application of the spring brakes to park the vehicle after the operator pulls the dash valve button. A delay in the application of the spring brakes can contribute to a vehicle roll away. A vehicle roll away may cause a **vehicle crash**, possibly resulting in **property damage**, **personal injury**, or **death**.

MODELS INVOLVED

This Safety Recall involves 5900*i*, 7000 and 8600 6X4 and 6X6 *TRUCK* models and 5900*i*, 7000 and 8600 *TRACTORS* with feature code 04WDT -- *SPRING BRAKE MODULATOR VALVE with Relay Function* built 11/1/2005 thru 4/30/2007.

PARTS INFORMATION

The parts required for this recall are:

Part Number	Part Description	Quantity
8900204R91	KIT, CARTRIDGE SR-7 RECALL	**1**
8900205R91	KIT, BRK SPRING VLV SR-7 FIELD	**1 as Required by Service Procedure**

SERVICE PROCEDURE

WARNING:

TO PREVENT SERIOUS EYE INJURY, ALWAYS WEAR SAFE EYE PROTECTION WHEN YOU PERFORM VEHICLE MAINTENANCE OR SERVICE.

WARNING:

TO PREVENT UNEXPECTED MOVEMENT OF THE VEHICLE AND POSSIBLE SERIOUS PERSONAL INJURY OR DEATH, BLOCK THE WHEELS TO PREVENT THE VEHICLE FROM MOVING IN BOTH DIRECTIONS.

SPECIAL INSTRUCTIONS – G-06506:

Please check the VIN in ISIS to determine if the vehicle is currently eligible for Safety Recall G-06506. If the vehicle is eligible for G-06506, please perform that service procedure first, before proceeding with this service procedure.

If not, then continue on with this procedure.

BENDIX INSTRUCTION SHEET

Please refer to the attached Bendix Instruction sheet for the cartridge replacement procedure.

END OF SERVICE PROCEDURE

LABOR INFORMATION

Operation No.	Description	Time
A40-07511-1	***Install Cartridge Assembly***	0.5 hr
A40-07511-2	***ADD ON, for replacement of valve (if req'd)***	0.5 hr

All vehicles will require the cartridge installation. On vehicles where the valve is replaced, please file BOTH labor operations.

CAMPAIGN IDENTIFICATION LABEL

*Each vehicle corrected in accordance with this campaign **must be** marked with a CTS-1075 Campaign Identification Label.*

Complete the label and attach on a clean surface next to the vehicle identification number (VIN) plate.

ADMINISTRATIVE/DEALER RESPONSIBILITIES (U.S. & POSSESSIONS)

Proceed immediately to make necessary correction to units in inventory. **All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery.** If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified **IMMEDIATELY** from your dealer location.

Dealers must correct all vehicles subject to this campaign at no charge to the owner, regardless of mileage, age of vehicle, or ownership, from this time forward.

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle that is subject to a vehicle recall campaign must be adequately **repaired** within a reasonable time after the owner has tendered it for repair. A failure to adequately repair within **60 days** after a tender of a vehicle is prima facie evidence of failure to repair within a reasonable time. If the condition is not adequately repaired within 60 days, the owner may be entitled to **replacement** with an identical or reasonable equivalent vehicle at no charge, or to a **refund** of the purchase price less a reasonable allowance for depreciation.

However, consistent with the customer notification, dealers are expected to complete the repairs on the mutually agreed upon service date.

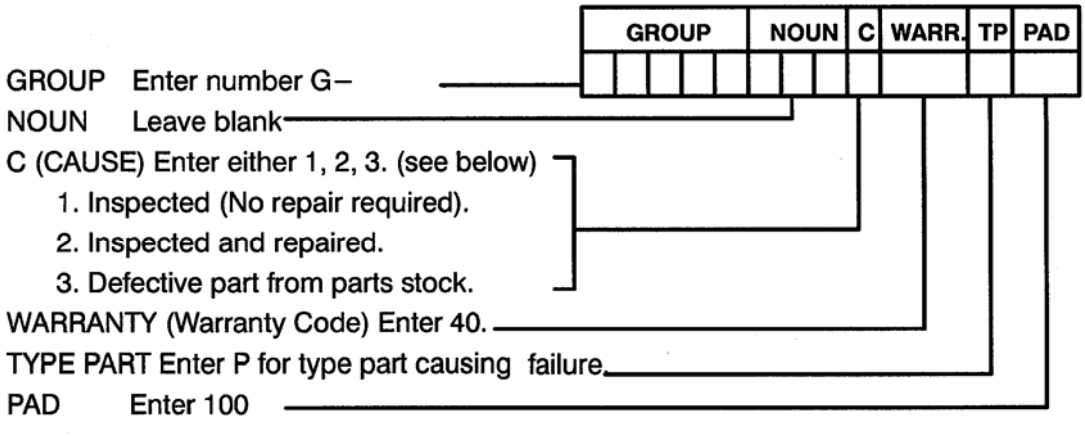
To avoid having to replace an owner vehicle or refund the purchase price, every effort must be made to promptly schedule an appointment with each owner to repair his or her vehicle as soon as possible.

During the recall process, a listing of owner names and addresses will be furnished to the involved dealers to enable dealers to follow up with owners and have the vehicles corrected. You must limit the use of this listing to this campaign because the list may contain information obtained from state motor vehicle registration records and the use of such motor vehicle registration data for purposes other than this campaign is a violation of law in several states.

WARRANTY CLAIMS

Refer to Dealer Warranty Manual for procedures to conduct Recall Campaigns.

It is important that the Recall Coding be completed properly to assist in processing the warranty claim. Complete instructions will be found in the Warranty Manual, Section 7-1. Special attention should be given to Items 39 through 44:



ADMINISTRATIVE/DISTRIBUTOR RESPONSIBILITY (EXPORT)

Proceed immediately to make necessary correction to units in inventory. All inventory vehicles subject to this recall campaign must be corrected prior to sale, transfer or delivery. If vehicles have been sold or transferred and you are in receipt of Customer Notification Letters and Authorization for Recall Service cards for those vehicles, the transfer location or customer must be notified from your distributor location.

Export locations are to submit warranty claims in the usual manner making reference to this recall number.

We ask for your full cooperation and follow-up to this important subject matter. If you have any questions or need further assistance, please contact the Regional Service Manager at your regional office.

INTERNATIONAL TRUCK AND ENGINE CORPORATION

Installation Instructions

INTERNAL CHECK VALVE CARTRIDGE RETROFIT KIT

BENDIX® SR-7™ SPRING BRAKE MODULATING VALVE

Recall Campaign No.: 07E-037

Vous pouvez vous procurer une copie de ce document en français sur le site www.Bendix.com en cliquant sur le lien “Recall Assistance Center” (Centre d’assistance pour les rappels produits).

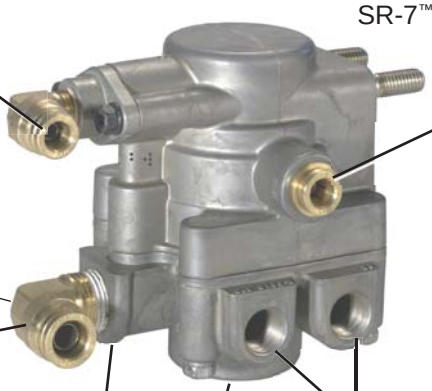
Para obtener una copia de este documento en español, usted puede visitarnos al sitio en Internet www.Bendix.com y hacer un clic en el anexo “Recall Assistance Center” (Centro de asistencia para los productos devueltos).

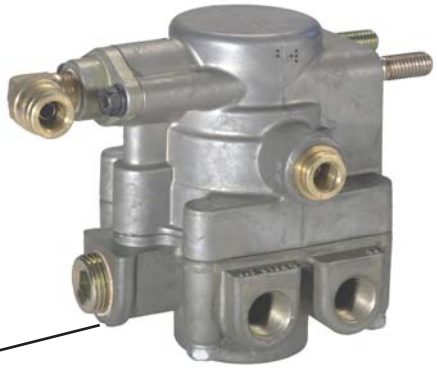
Single Check Valves that might be found in the supply port of the SR-7™ valve

Parker Single Check Valve
Replace under Recall Campaign No. 07E-038

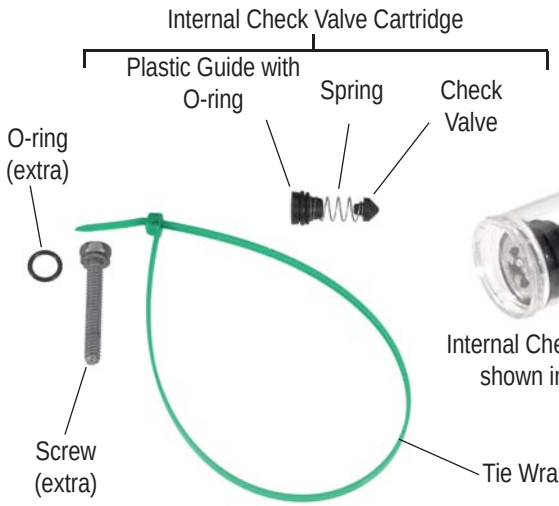
No replacement necessary

SR-7™ Valves





Kit Contents



Internal Check Valve Cartridge shown in shipping tube.

Internal Check Valve Cartridge Retrofit Kit part number K022699 contains the following components:

Description	Qty.
Internal Check Valve Cartridge	1
Plastic guide with o-ring	
Spring	
Check valve	
O-ring	1 (extra)
Screw	1 (extra)
Green tie wrap	1

Figure 1 - *BENDIX® SR-7™ SPRING BRAKE MODULATING VALVE PORT DESIGNATIONS AND KIT CONTENTS*

GENERAL

This instruction sheet is intended to provide the necessary information to service the Bendix® SR-7™ spring brake modulating valve with a retrofit internal check valve cartridge. This is in connection with Recall Campaign number 07E-037.

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.

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, EXTREME CAUTION 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 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.
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.
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.

SUPPLY LINE REMOVAL

CAUTION: **Do not** disconnect air lines and fittings unless specified. Installation of this kit does not require that the SR-7™ spring brake modulating valve be removed or that all the air lines be disconnected. **Note:** Instructions for SR-7™ valve removal and installation are included in this document in the event that this kit cannot be installed with the SR-7™ valve mounted on the vehicle.

1. Locate the SR-7™ spring brake modulating valve on the vehicle. Typically it is located near the rear axle mounted on the frame rail or cross member.
2. Identify the supply (SUP 1) port. Note: this port will contain either an external single check valve or a pipe plug. Refer to Figure 1.
3. If an external single check valve is present, disconnect the air line to the check valve. Refer to Figures 2 and 3.

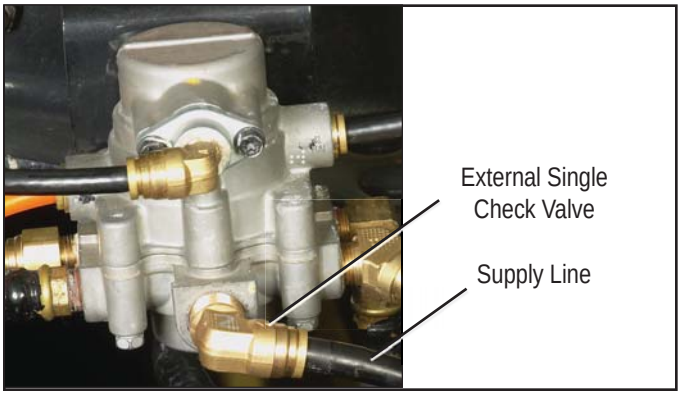


Figure 2 - *SR-7™ VALVE AND EXTERNAL SINGLE CHECK VALVE*

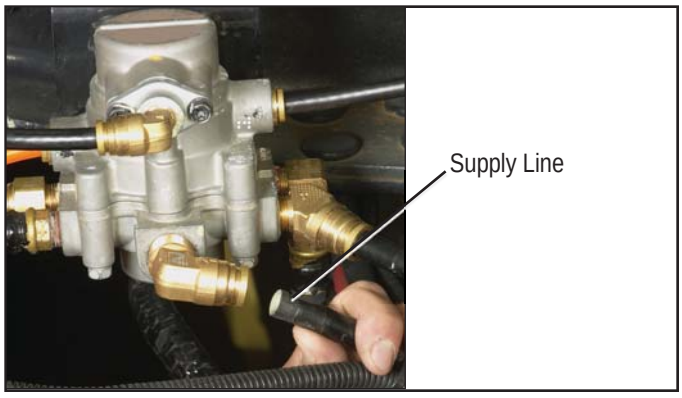


Figure 3 - *DISCONNECTING THE SUPPLY LINE*

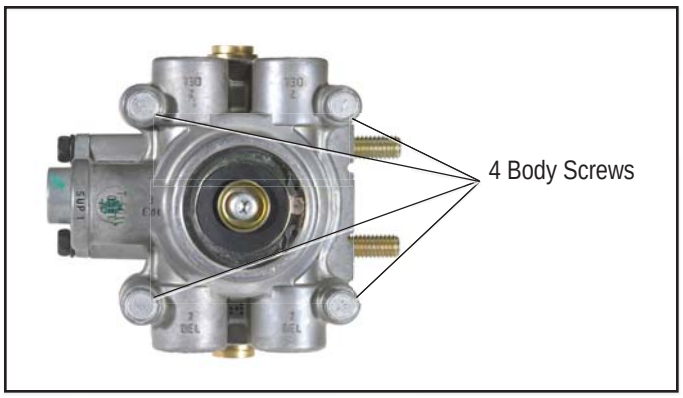


Figure 4 - *BOTTOM VIEW OF SR-7™ VALVE*

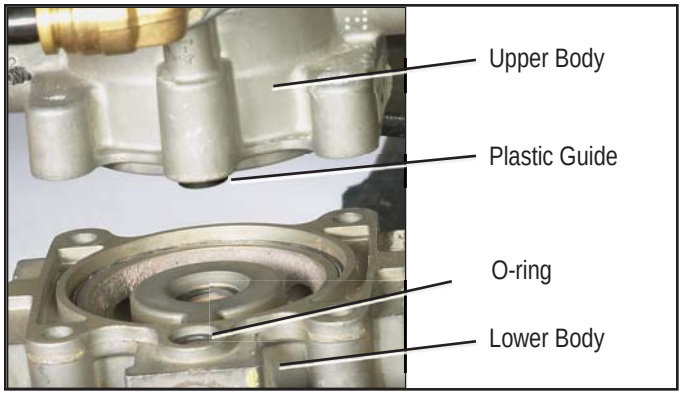


Figure 5 - *PLASTIC GUIDE AND O-RING SEAL*

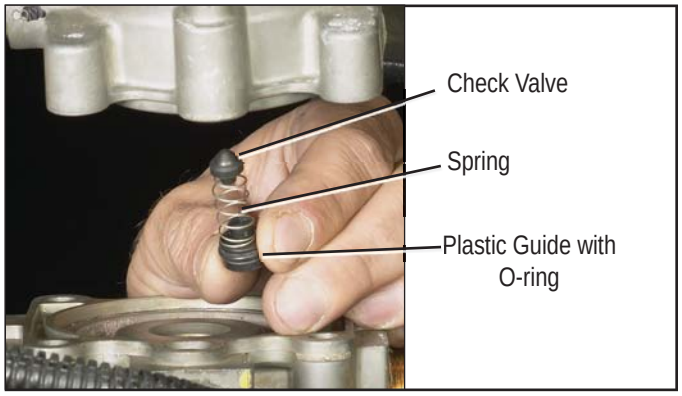


Figure 6 - *INTERNAL CHECK VALVE*

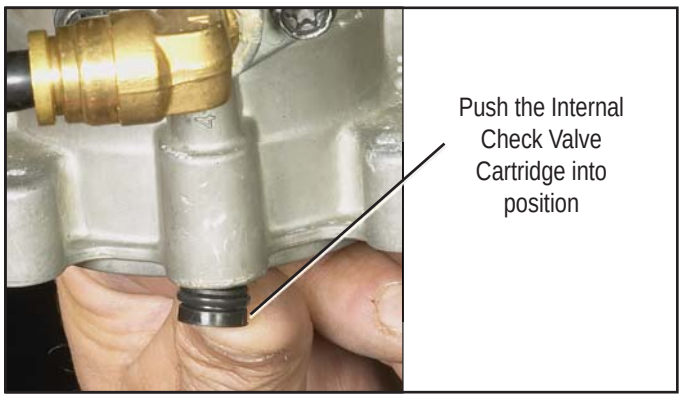


Figure 7 - *CARTRIDGE INSTALLATION*

INTERNAL CHECK VALVE REMOVAL

4. Using a 7/16" wrench remove the four screws that secure the upper and lower bodies of the SR-7™ valve. Refer to Figure 4. Do not disconnect additional hoses or fittings. The separation between the upper and lower body should be approximately three inches to allow adequate room to install this kit.
5. Locate the plastic guide in the upper body of the SR-7™ valve directly above the supply port. The o-ring seal from the lower body may stick to the plastic guide when the bodies are separated. If so, remove it from the guide and place it back into the lower body. An extra o-ring has been included in this kit in the event that the o-ring is lost or damaged during servicing. Refer to Figure 5.
6. Remove the plastic guide, spring and check valve from the valve bore and discard. Note: The check valve may stick to its seat in the upper body. Be sure that all of the components are removed before going to the next step. Refer to Figure 6.

CARTRIDGE INSTALLATION

1. Insert the replacement cartridge in the bore where the check valve, spring and plastic guide were removed. Note: Be sure to remove the replacement cartridge from its shipping tube prior to installation. Push the cartridge into position until it stops as shown in Figure 7. A portion of the plastic guide in the cartridge will stick out as shown in Figure 8. DO NOT FORCE THE CARTRIDGE FURTHER INTO THE BORE.

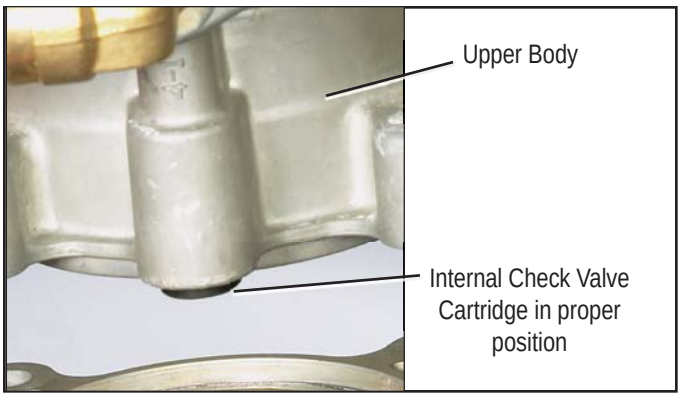


Figure 8 - *PROPER CARTRIDGE INSTALLATION*

2. As shown in Figures 9 and 10, align the valve lower body with the upper body. Push the body halves together. Insert two of the four screws (finger tight) into the lower body mounting holes closest to the supply port first. This will help with alignment. One extra screw is included in this kit in the event one is lost during installation.
3. Insert the remaining two screws and tighten finger tight. Tighten all four screws to 80-100 in. lbs.
4. Reconnect any air lines that were disconnected.
5. Secure the enclosed tie wrap on the valve or fitting in a conspicuous location to identify the field repair has been performed.
6. Proceed to "Testing the SR-7™ Spring Brake Modulating Valve."

VALVE REMOVAL (IF REQUIRED)

In case installation of the internal check valve cartridge is not feasible or the entire SR-7™ valve is required to be replaced due to damaged or missing components in the Parker single check valve, follow these steps for removal.

1. Prior to removing the SR-7™ valve, review the general safety guidelines of this document.
2. Identify and mark 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. If the removed SR-7™ valve contains an external single check valve in the supply port, identify the type of single check valve. **If the SR-7™ valve contains a Parker single check valve, do not reuse it in the replacement valve. Refer to Figure 1 for single check valve identification. The Parker single check valve is covered by Recall Campaign No. 07E-038**. Contact the Bendix Recall Center for a replacement.
6. If the external check valve located in the supply port is not a Parker check valve, it must be removed and installed on the replacement SR-7™ valve. A standard fitting **is not** an acceptable substitute.
7. 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. Teflon tape is not an acceptable substitute for pipe sealant. 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.

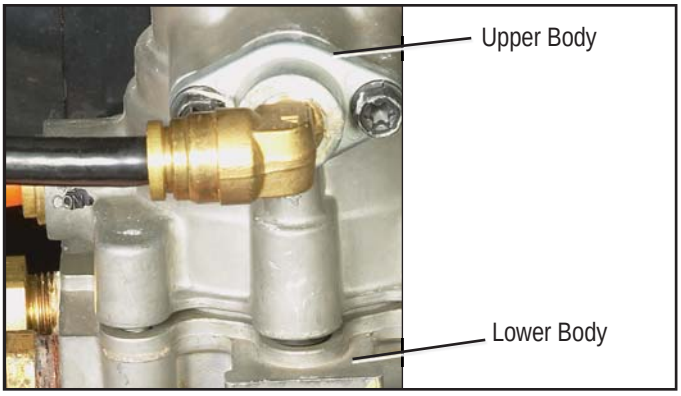


Figure 9 - *POSITIONING THE UPPER & LOWER BODY*

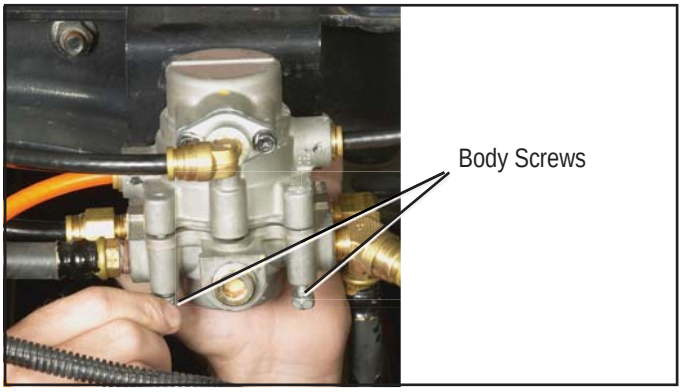


Figure 10 - *SECURING THE UPPER & LOWER BODY (QUICK RELEASE VERSION SHOWN)*

VALVE INSTALLATION (IF REQUIRED)

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 SR-7™ SPRING BRAKE MODULATING VALVE

Perform operating and leakage tests as outlined below.

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 “release” position. Observe that spring brake actuators release fully.

Place parking control valve in “park” position. Observe that spring brake actuators apply promptly, within 3 seconds.

LEAKAGE TEST

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

If the SR-7™ 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.

INSTALLATION IDENTIFICATION

If the tie wrap has not already been secured to the valve, secure it to the valve or fitting in a conspicuous location to identify that the field repair has been performed.

Recall Assistance Center
1-877-461-2732

www.Bendix.com

sr7campaign@bendix.com