

## PREVOST

ENREGISTRÉ-REGISTERED ISO 9001 & ISO 14001

SAFETY RECALL

Sr07-11



DATE: September-2007 SECTION: 12

SUBJECT: BENDIX SR-7 SPRING BRAKE MODULATING

VALVE – INTERNAL CHECK VALVE RETROFIT

#### **APPLICATION**

Model	VIN	PREVOST CAR INC.
XL2-45 motorhomes MTH XL2-45 Entertainer X3-45 coaches	From 2PCY3	3494 <b>6</b> 102 <b>8868</b> up to 2PCY33490 <b>7</b> C72 <b>9252</b> incl.
Model Year : 2006 - 2007		
H3-41 & H3-45 coaches VIP motorhomes	From 2PCH3	341X <b>6</b> 101 <b>0448</b> up to 2PCV33490 <b>7</b> C71 <b>0963</b> incl.
Model Year : 2006 - 2007		

This Safety Recall does not necessarily apply to all the above-mentioned vehicles, some vehicles may have been modified before delivery. The owners of the vehicles affected by this recall will be advised by a letter indicating the Vehicle Identification Number (VIN) of each vehicle concerned.

#### **DESCRIPTION**

Bendix Commercial Vehicle Systems LLC has determined that a manufacturing defect exists in the internal rubber check valves inside the SR-7 spring brake modulating valves manufactured **between November 4, 2005 and April 17, 2007**. The component supplier of the internal check valve made unauthorized changes to its manufacturing process leading to the internal check valve rubber becoming deformed over time and potentially resulting in the check valve not properly seating. This condition can occur intermittently. The resulting leakage can cause a delay in the application of the spring brakes to park the vehicle after the operator pulls the parking brake control valve. The delayed parking brake application can occur without warning, leading to unintended vehicle rollaway. Normal service braking isn't affected by this condition.

Prevost asks to its customers to perform the following Bendix SR-7 valve recall campaign identification guidelines (Part 1). Only if the spring brake modulating valve is identified as subject to this recall, perform Bendix's internal check valve retrofit procedure described in this bulletin (Part 2).

Reference: Bendix Recall Campaign No.: 07E-037

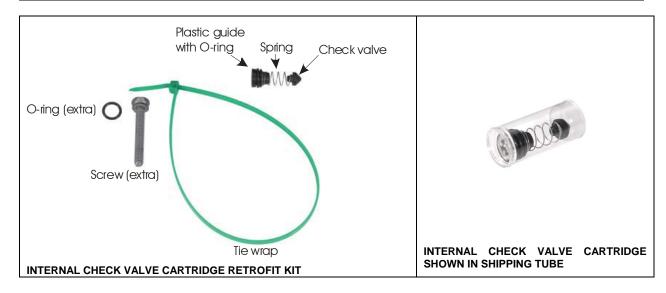
## **MATERIAL**

Kit #643385 includes the following parts:

Description	Qty
Internal Check Valve Cartridge	
<ul> <li>Plastic guide with O-ring</li> </ul>	1
■ Spring	
■ Check valve	
O-ring (extra)	1
Screw (extra)	1
Green tie wrap	1

#### NOTE

Material can be obtained through regular channels.



## **PROCEDURE**



## **DANGER**

Park vehicle safely, apply parking brake, stop engine and set battery master switch(es) to the OFF position prior to working on the vehicle.

#### Part 1 - Identification

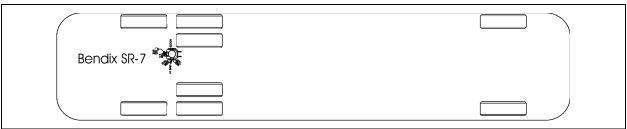
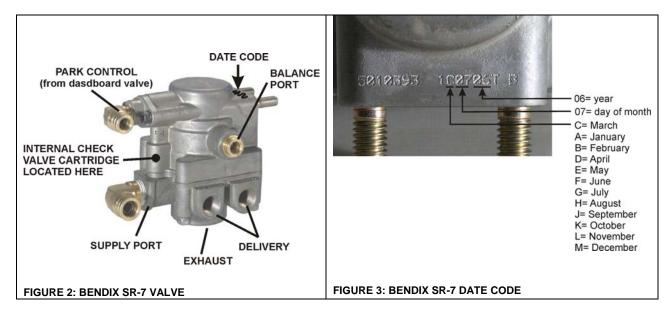


FIGURE 1: BENDIX SR-7 LOCATION ON H3, X3 AND XLII MTH SERIES VEHICLES (TYPICAL)

- 1. Locate the SR-7 spring brake modulating valve (see figure 1 & 2). Typically, the SR-7 valve is located between the drive and the tag axle, behind the L.H. side rear fender (H3 series coaches) or above the drive axle in the rear underframe (X3 & XLII MTH series).
- 2. Remove the L.H. side rear fender (H3 series coaches) or raise the vehicle to access the spring brake modulating valve (X3 & XLII MTH series).



3. Check the date code found on the SR-7 valve body (see figure 3). If the SR-7 valve was manufactured between **November 4, 2005 and April 17, 2007(inclusive)**, it is necessary to retrofit the internal check valve cartridge as described in Part 2.

#### NOTE

You will need a small telescoping mirror to see the date code on the SR-7 valve body. For X3 & XLII series vehicles, remove the two mounting nuts that secure the valve to the underframe and move the valve slightly to ease sight on the date code.



### Part 2 - Internal check valve retrofit

#### INTERNAL CHECK VALVE REMOVAL

- 1. Drain the air pressure from primary and secondary air tanks.
- 2. Clean the SR-7 valve body thoroughly with water jet and dry with pressurized air.



## **CAUTION**

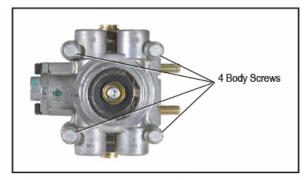
It is very important to properly clean the valve body in order to prevent dirt from entering inside the valve body during separation of the upper and lower halves.

3. For X3 & XLII series vehicles, remove the two mounting nuts that secure the valve to the underframe.

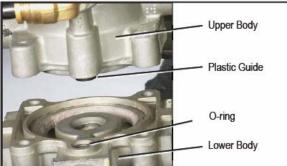
#### NOTE

If possible, do not disconnect air lines and fittings. If air lines have to be disconnected :

- Identify and mark all air lines before disconnecting then disconnect the lines and hoses from the SR-7 spring brake modulating valve.
- 4. Using a 7/16" wrench, remove the four screws that secure the upper and lower bodies of the SR-7™ valve. 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<sup>TM</sup> 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.
- 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.

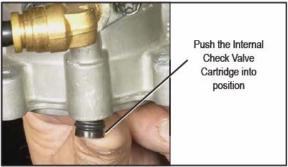


#### **CARTRIDGE INSTALLATION**

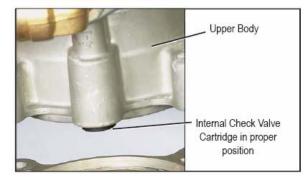
1. Insert the replacement cartridge in the bore where the check valve, spring and plastic guide were removed. Note: Be sure to remove the replacement cartridge from its shipping tube prior to installation.



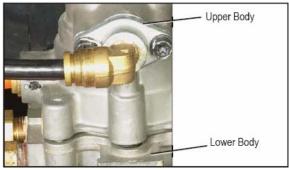
2. Push the cartridge into position until it stops.



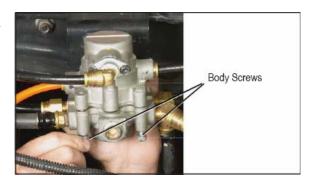
- 3. A portion of the plastic guide in the cartridge will stick out as shown. DO NOT FORCE THE CARTRIDGE FURTHER INTO THE BORE.
- 4. Before reassembling the body halves together, clean inside the lower body with pressurized air in order to prevent dirt from entering the valve body.



- 5. Align the valve lower body with the upper body. Push the body halves together.
- 6. 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.



- 7. Insert the remaining two screws and tighten finger tight. Tighten all four screws to **80-100 in-lbs**.
- If applicable, reconnect any air lines that were disconnected.
- Proceed to "Leakage Test" as per the instructions below.
- 10. Proceed to "Testing the SR-7™ Spring Brake Modulating Valve."
- 11. Fix SR-7 valve to underframe.
- Secure the enclosed tie wrap on the valve or fitting in a conspicuous location to identify the field repair has been performed.



#### **LEAKAGE TEST**

Close primary and secondary air tank drain cocks. Charge air brake system to governor cut-out pressure (120 psi on the dashboard gauge). 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<sup>TM</sup> valve does not function as described, or if leakage is excessive, it is recommended that it be replaced with a new unit available from Prevost Parts.

#### **TESTING THE SR-7 SPRING BRAKE MODULATING VALVE**

- 1. Block vehicle and hold by means other than vehicle brakes. Charge air brake system to governor cutout pressure.
- 2. Place parking control valve in "park" position. Observe that spring brake actuators apply promptly, within 3 seconds.
- 3. Place parking control valve in "release" position. Observe that spring brake actuators release fully.

#### NOTE

For the two previous steps, you can proceed as follow:

- Drive the vehicle at very low speed (3 to 6 mph) and then apply the parking brake.
- Apply the parking brake. Place the transmission to D (drive) position and press gently on the accelerator pedal (<u>not faster than 1000 rpm</u>). Vehicle should not move.
- Apply the parking brake. Place the transmission to D (drive) position and press gently on the
  accelerator pedal (<u>not faster than 1000 rpm</u>). Using the parking brake control valve, release
  the parking brake. Vehicle should move promptly.
- 4. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.

## **WARRANTY**

This modification is covered by Prevost Car's normal warranty. We will reimburse you the parts and one hour (1.0) of labor upon receipt of the parts and a completed A.F.A. form on which you must specify as per "Safety Recall 07-11". You also have to fill the 'Safety Recall Certification Sheet' provided with this bulletin and return it with your A.F.A. form to be reimbursed.

# Parts disposition:

- You **must** return parts to Prevost Car with A.F.A. for full **reimbursement**.





# Safety Recall Certification Sheet (Ref: Sr07-11)

SFRIAL NUMBER:



	<u> </u>			
PERFORMED BY	OWNER/OPERATOR			
We hereby certify that Safety Recall Instructions with regard to Safety Recall #07-11 have been performed.				
Name:	Name:			
Addr:	Addr:			
Phone:	Phone:			
Fax:	Fax:			
Signature :	Signature :			
Date:	Date:			
	ove is incorrect or you are not the please fill this section and return to			
BUSINESS:				
ADDRESS (including County):				
TELEPHONE: FAX:				

Please return this completed document with your A.F.A. form