

IMPORTANT SERVICE INFORMATION FOR: ✓ SERVICE MANAGER ✓ SERVICE ADVISOR

- ✓ TECHNICIAN
- ✓ PARTS DEPARTMENT
- ✓ WARRANTY PERSONNEL

Campaign Service

BULLETIN NUMBER: CB07-H-001

> ISSUE DATE: OCTOBER 2007

> > GROUP: BRAKES

Bendix SR-7 Air Brake Park Control Valve Leak Safety Recall 07V-385



AFFECTED VEHICLES

- 2006-2007 Isuzu F-Series
- 2006-2007 Isuzu H-Series
 Straight Towing and Non-Towing (RPO RQ2 + JYV or RQ2 -JYV) Trucks Equipped with Air Brakes (RPO JE4)

SERVICE INFORMATION

CONDITION

The manufacturer General Motors has decided that a defect, which relates to motor vehicle safety, exists in certain 2006 and 2007 model year Isuzu F-Series and H-Series straight towing and non-towing vehicles equipped with air brakes. The air brake park control valve may develop either an internal air leak or an air restriction. With this condition, the park brake may not release or may release only partially. If the vehicle is on an uneven surface, the park brake may not hold the vehicle and could result in unintended vehicle movement and a vehicle crash. This condition does not affect normal service braking.

CORRECTION

Dealers are to inspect and replace the external check valve on the air brake park control valve. If the inspection determines the external check valve is damaged, the air brake park control valve will be replaced. Most vehicles will also require the replacement of an internal check valve in the air brake control valve.

DEALER RESPONSIBILITY

All unsold new vehicles in dealers' possession and subject to this recall <u>must</u> be held and inspected/repaired per the service procedure of this recall bulletin <u>before</u> customers take possession of these vehicles.

Dealers are to service all vehicles subject to this recall at no charge to customers, regardless of mileage, age of vehicle, or ownership, from this time forward.

Customers who have recently purchased vehicles sold from your vehicle inventory, and for which there is no customer information indicated on the dealer listing, are to be contacted by the dealer. Arrangements are to be made to make the required correction according to the instructions contained in this bulletin. A copy of the customer letter is provided in this bulletin for your use in contacting customers.

In summary, whenever a vehicle subject to this recall enters your vehicle inventory, or is in your dealership for service in the future, you must take the steps necessary to be sure the recall correction has been made before selling or releasing the vehicle.

Whenever a vehicle subject to this campaign is in a dealer's vehicle inventory, or arrives at the dealership for service, the dealer must take the necessary steps to ensure that this campaign correction has been made before selling or releasing the vehicle.

OWNER NOTIFICATION

Isuzu Commercial Truck of America (ICTA) will send a notification letter to owners of affected vehicles already retailed (see enclosed copy).

VEHICLES INVOLVED

Involved are 2006-2007 Isuzu F and H Series straight towing and non-towing (RPO RQ2 & JYV/RQ2-JYV) vehicles equipped with air brakes (RPO JE4).

Important: Dealers are to confirm vehicle eligibility prior to beginning repairs by using the Isuzu Vehicle Inquiry System (IVIS) below. Not all vehicles may be involved.

For dealers with involved vehicles, a listing with involved vehicles containing the complete vehicle identification number, customer name, and address information has been or will be provided. Dealers will not have a report available if they have no involved vehicles currently assigned.

The listing may contain customer names and addresses obtained from Motor Vehicle Registration Records. The use of such motor vehicle registration data for any purpose other than follow-up necessary to complete this recall is a violation of law in several states/provinces/countries. Accordingly, you are urged to limit the use of this report to the follow-up necessary to complete this recall.

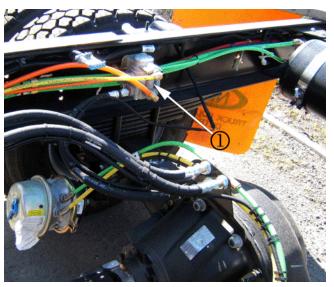
PARTS INFORMATION

Parts required to complete this recall are to be obtained from American Isuzu Parts Distribution Network (AIPDN). Please refer to your "involved vehicles listing" before ordering parts. Normal orders should be placed on a Daily Order. In an emergency situation, parts should be ordered on a VOR (Vehicle Off Road) Order.

| Part Number | Description | Quantity/Vehicle | |
|---------------|--|------------------|--|
| 8-25913-686-0 | Valve Kit – Spring Park Brk Mod Cont | 1 | |
| 8-25913-684-0 | Valve, Spring Park Brk Mod Cont | 1 (If Req'd) | |
| | (Single Axle or Tandem Axle with Air Suspension) | | |
| 8-25913-685-0 | Valve, Spring Park Brk Mod Cont | 1 (If Req'd) | |
| | (Tandem Axle without Air Suspension) | | |
| 2-90028-700-0 | Campaign Label | 1 | |

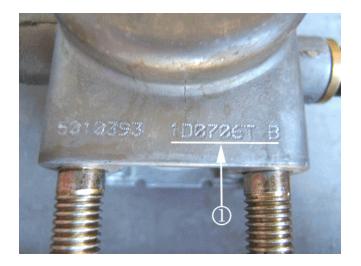
SERVICE PROCEDURE

Inspection



Important: Lift and support the vehicle to perform the inspection and service procedures in this bulletin. Refer to *Lifting and Jacking the Vehicle* in the appropriate service manual.

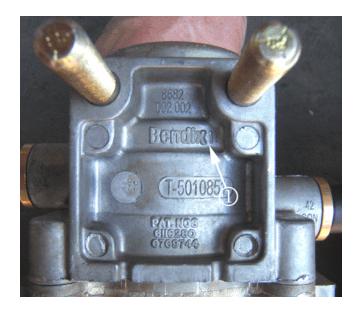
Important: The air brake park control valve (1) (also known as the SR-7 spring brake modulation valve) is located on the chassis, near the rear differential.



- 1. Identify and <u>record</u> the date of manufacture for the air brake park control valve. The date code is located on the top of the air brake park control valve.
 - a. If the date code (1) is within the range of D0106 and E2406, proceed to Step 2.
 - b. If the date code (1) is outside the range of D0106 and E2406, proceed to the *External Check Valve Service Kit Procedure* below.

Important: Do not remove the air lines from the valve of the air brake park control valve.

2. Remove the air brake park control valve nuts from the chassis mount and identify the casting as either "Bendix 1" or "Bendix 2". The casting information is located on the stud side of the air brake park control valve.



a. If the casting has "Bendix 1" (1) on the stud side of the air brake park control valve, replace the air park brake control valve and the external check valve. Refer to the *Chassis Mount Air Brake Park Control Valve Replacement* procedure in the appropriate service manual. Notice: Before performing the *Chassis Mount Air Brake Park Control Valve Replacement* procedure, read the following valve removal information:

Important: The external check valve that is threaded into the supply port of the valve <u>MUST BE REPLACED</u>. Do not transfer it to the new valve.

- Compare the air brake park control valve that was removed, to the replacement air brake park control valve. If the valve that was removed contains fittings or pipe plugs that the new air brake park control valve does not have, note their orientation before removing them from the air brake park control valve. These fittings will be used on the replacement (new) air brake park control valve. **DO NOT** transfer the external check valve; it must be replaced. Order kit number 8-25913-686-0, which contains the external check valve. Discard the internal check valve cartridge that is also contained in the kit. It is not required when the entire valve is replaced.
- Apply pipe sealant to the fittings or pipe plugs that were removed from the old air brake park control valve before installing them onto the replacement (new) air brake park control valve. Teflon tape is not an acceptable substitute for pipe sealant.
- Ensure that the orientations of the fittings are the same.
- Install the fittings finger tight, and then tighten 1.5 to 2 turns. For shaped fittings, such as tees and elbows, tighten no more than one additional turn to the final position.



b. If the casting has "Bendix 2" (2) on the stud side of the air brake park control valve, proceed to the *External Check Valve Service Kit Procedure* below.

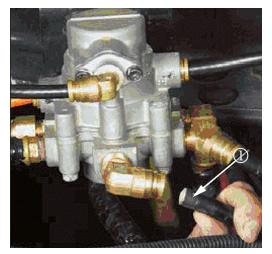
External Check Valve Service Kit Procedure

Caution:

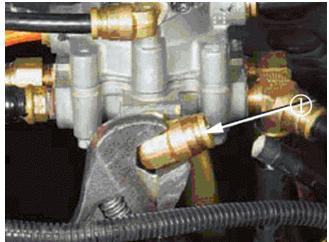
- Never connect or disconnect a hose or line containing air pressure. It may whip as air escapes. Never remove a component or a pipe plug unless you are certain all system air pressure has been exhausted.
- Never exceed the recommended working air pressure and always wear safety glasses when working with air pressure. Never look directly into the component ports or direct a pressurized air flow at anyone.
- Never attempt to disassemble a component until you have read and understood all recommended procedures. Some components contain powerful springs and injury can result if not properly disassembled. Use only proper tools and observe all precautions pertaining to the use of those tools.
- 1. Drain all of the air reservoirs. Refer to *Draining Reservoirs* in Air Brakes in the appropriate service manual.

Important: Do not disconnect air lines and fittings unless specified. Installation of this kit does not require that the air brake park control valve be removed or that all the air lines be disconnected.

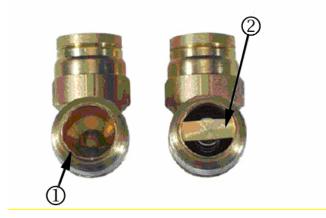
2. Locate the external check valve installed in the supply port of the valve.



3. Remove the 1/2" OD supply line (1) from the external check valve supply port.



4. Note the orientation of the external check valve (1). Some valve assemblies may have a fitting between the external check valve (1) and the air brake park control valve. Use a wrench to remove the external check valve (1).



(1) Brass retainer and internal components are missing. Replace the air brake park control valve (SR-7) and external check valve.

(2) Brass retainer is intact. Replace the external check valve.

Important: Inspect the outlet (threaded side) of the external check valve to ensure the presence of check valve components. Verify that the brass retainer is present and intact.

 If the brass retainer is NOT present and intact, both the external check valve <u>AND</u> the air brake park control valve must be replaced. Refer to the *Chassis Mount Air Brake Park Control Valve Replacement* procedure in the appropriate service manual. Notice: Before performing the *Chassis Mount Air Brake Park Control Valve Replacement* procedure, read the following valve removal information:

Important: The external check valve that is threaded into the supply port of the valve <u>MUST BE REPLACED</u>. Do not transfer it to the new valve.

- Compare the air brake park control valve that was removed, to the replacement air brake park control valve. If the valve that was removed contains fittings or pipe plugs that the new air brake park control valve does not have, note their orientation before removing them from the air brake park control valve. These fittings will be used on the replacement (new) air brake park control valve. **DO NOT** transfer the external check valve; it must be replaced. Order kit number 8-25913-686-0, which contains the external check valve. <u>Discard the internal check valve cartridge that is also contained in the kit. It is not required when the entire valve is replaced.</u>
- Apply pipe sealant to the fittings or pipe plugs that were removed from the old air brake park control valve before installing them onto the replacement (new) air brake park control valve. Teflon tape is not an acceptable substitute for pipe sealant.
- Ensure that the orientations of the fittings are the same.
- Install fittings fnger tight, then tighten 1.5 to 2 turns. For shaped fittings, such as tees and elbows, tighten no more than one additional turn to the final position.

- If no other repairs are required, lower the vehicle.
- Start the engine and recharge the air brake system pressure. Refer to the appropriate service manual, if required.
- Verify that all of the air brake system functions properly. Refer to the appropriate service manual, if required.
- If the brass retainer IS present and intact, replace the external check valve from the service kit and then proceed to the *Internal Check Valve Removal* procedure below.

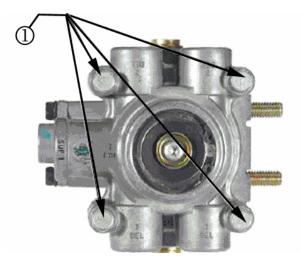
Internal Check Valve Removal

- 1. Using the date code recorded in Step 1 of the Inspection Procedure, determine if the internal check valve requires replacement.
 - If the date code is D1807 or greater, the internal check valve does NOT require replacement. No other repairs are required:
 - Lower the vehicle
 - Start the engine and recharge the air brake system pressure. Refer to the appropriate service manual, if required.
 - Verify that the air brake system functions properly. Refer to the appropriate service manual, if required.
 - If the date code is less than D1807, the internal check valve requires replacement. Continue with this procedure.

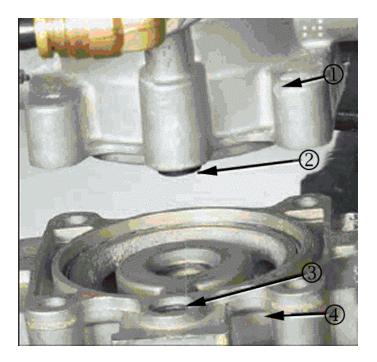
Installation of this kit requires that the air brake park control valve (SR-7) valve be removed and that all the air lines be disconnected.

Refer to the *Chassis Mount Air Brake Park Control Valve Replacement* procedure in the appropriate service manual for valve removal instructions.

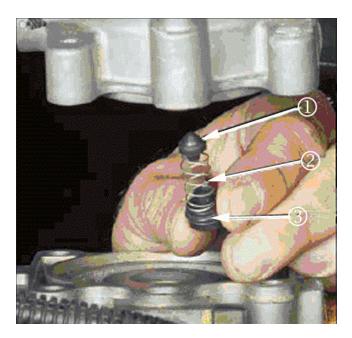
NOTICE: Clamp the valve carefully in a vise while protecting the valve assembly from damage/deformation.



2. Using a 7/16" wrench, remove the four screws (1) that secure the upper and lower bodies of the air brake park control valve.



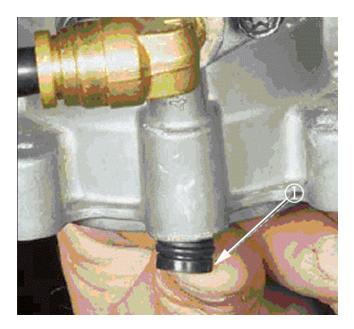
3. Locate the plastic guide (2) in the upper body (1) of the air brake park control valve, directly above the supply port. The O-ring seal (3) from the lower body (4) may stick to the plastic guide (2) when the bodies are separated. If so, remove it from the guide and place it back into the lower body (4). An extra O-ring has been included in this kit in the event that the O-ring is lost or damaged during servicing.



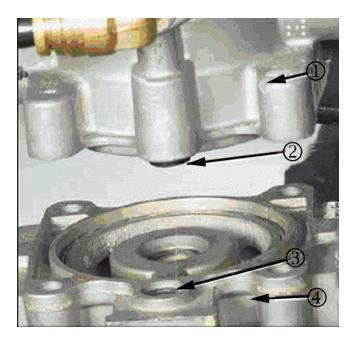
4. Remove the plastic guide (3), spring (2) and check valve (1) from the valve bore and discard. The check valve (1) may stick to its seat in the upper body. Ensure that all of the components are removed before proceeding to the next step.

Cartridge Installation

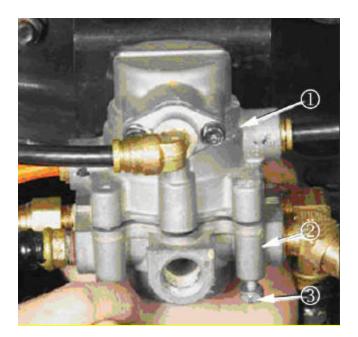
1. Remove the replacement cartridge from its shipping tube.



2. Insert the replacement cartridge (1) in the bore where the check valve, spring, and plastic guide were removed. Push the cartridge into position until it stops as shown in illustration. A portion of the plastic guide in the cartridge will stick out. DO NOT FORCE THE CARTRIDGE FURTHER INTO THE BORE.



3. 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.



4. Insert the remaining two screws (3) and tighten finger tight. Tighten all four screws to 10 N⋅m (90 in lbs).

Important: Teflon tape is not an acceptable substitute for pipe sealant.

- 5. Using pipe sealant, install the new external check valve and any fittings that were removed. Be sure that orientation of the fittings is the same. 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.
- 6. Refer to the *Chassis Mount Air Brake Park Control Valve Replacement* procedure in the appropriate service manual and reinstall the air brake park control valve.
- 7. Reconnect all air lines.
- 8. Secure the enclosed tie wrap on the valve or fitting in a conspicuous location to identify the field repair has been performed.
- 9. Lower the vehicle.
 - Start the engine and recharge the air brake system pressure. Refer to the appropriate service information, if required.
 - Verify that the air brake system functions properly. Refer to the appropriate service manual, if required.

APPLYING THE CAMPAIGN LABEL

- 1. Using a ball-point pen, fill in a campaign label (Part No. 2-90028-700-0) with Campaign Number 07V-385, Isuzu dealer code, and repair date.
- 2. Affix the campaign label onto the driver's side B-pillar.



CLAIM INFORMATION

| REPAIR PERFORMED | PART COUNT | PART NO. | PARTS ALLOW | CC-FC | LABO R OP | LABOR HOURS |
|--|---------------|----------|----------------|-------|-----------------|----------------|
| Inspect Date Code & Cavity Number & Replace External Check Valve | 1 | | * | MA-96 | V6186 | 0.4 |
| Inspect Date Code & Cavity Number & Replace Internal and External Check Valves | 1 | | * | MA-96 | V6187 | 0.6 |
| Inspect Date Code & Cavity Number & Replace Air Brake Park Control Valve (inc. External Check Valve) | 2 | | ** | MA-96 | V6188 | 0.9 |
| Add: Automatic Transmission | | | | | | 0.3 |

Submit a Product Recall Claim with the information indicated below:

- * The "Parts Allowance" should be the sum total of the current AIPDN Dealer net price plus applicable Mark-Up for valve kit needed to complete the repair.
- ** The "Parts Allowance" should be the sum total of the current AIPDN Dealer net price plus applicable Mark-Up for valve kit and air brake park control valve needed to complete the repair.

Refer to the Isuzu ICS Claims Processing Manual for details on Product Recall Claim Submission.

SAFETY RECALL NOTICE

Dear Isuzu F-Series / H-Series Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act. The manufacturer of your vehicle, General Motors, has decided that a defect that relates to motor vehicle safety exists in certain 2006 and 2007 model year Isuzu F-Series and H-Series straight towing and non-towing vehicles equipped with air brakes.

WHAT IS THE CONDITION?

The air brake park control valve in your vehicle may develop either an internal air leak or an air restriction. With this condition, the park brake may not release or may release only partially. If the vehicle is on an uneven surface, the park brake may not hold the vehicle and could result in unintended vehicle movement and a vehicle crash. This condition does not affect normal service braking.

WHAT WE WILL DO

To correct this condition, your Isuzu dealer will inspect and replace the external check valve on the air brake park control valve. If the inspection determines the external check valve is damaged, the air brake park control valve will be replaced. Your vehicle may also require the replacement of an internal check valve in the air brake park control valve. This service will be performed for you at **no charge**.

WHAT YOU SHOULD DO

To limit any possible inconvenience, we recommend that you contact your Isuzu dealer as soon as possible to schedule an appointment to bring your vehicle in to have this work performed. Present this Owner Notification Letter at the time of your appointment or refer to Campaign Service Bulletin CB07-H-XXX. Isuzu estimates that the repair will take between approximately 30 minutes to 1 hour and 15 minutes to perform, depending on the service required. However, additional time may be necessary depending on how appointments are scheduled and processed at your dealership. To locate the nearest Isuzu dealer you can visit our website at www.isuzucv.com, click on the dealer locator icon and enter your zip code or state. If you do not have access to a computer terminal, please contact our Customer Relations Department at 1-866-441-9638 for assistance in locating an Isuzu dealer. If you have any problems obtaining the needed repair or believe that this repair has not been or cannot be made within a reasonable time, you may contact:

Isuzu Commercial Truck of America, Inc. Customer Relations Department 46401 Commerce Center Drive Plymouth, MI 48170 1-866-441-9638

If, after contacting your Isuzu dealer or our Customer Relations Department with any problems, you still are not satisfied that we have done our best to remedy this condition without charge and within a reasonable time, you may wish to submit a complaint to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street S.W., Washington, D.C. 20590 or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY: 1-800-424-9153); or go to <u>http://www.safercar.gov</u>.

We regret any inconvenience which this action may cause you.

Sincerely,

Isuzu Commercial Truck of America, Inc.

Important: If you have sold or traded your Isuzu vehicle, please enter the owner's name and address, if known, on the attached "Change of Information" postcard, tear off at both perforations, and drop it in the mail. Postage has already been paid. We will contact the new owner.

Federal law requires that any vehicle lessor receiving this recall notice must forward a copy of this notice to the lessee within ten days. Lessor means a person or entity that is the owner, as reflected on the vehicle title, of any five or more leased vehicles.