

September 15, 2005

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MAILING ADDRESS: P.O. BOX 6400 CYPRESS, CALIFORNIA 90630-0064

Ms. Kathleen DeMeter, Esq. Director, Office of Defects Investigation National Highway Traffic Safety Administration 400 Seventh Street, S.W. Washington, D.C. 20590

## Re: Defect Information Report

05V-409 (11 pages)

Ms. DeMeter:

In accordance with the provisions of 49 CFR 573 - Defect and Noncompliance Reports, Mitsubishi Motors North America, Inc. (MMNA) hereby furnishes this Defect Information Report, which contains details of a potential brake master cylinder defect in certain 2005 model year MMNA manufactured Endeavor and Galant vehicles equipped with Anti-Lock Brake Systems (ABS).

The recall affects 2,901 vehicles distributed by MMNA in the United States and involves replacement of the brake master cylinder. This recall will also be launched in Canada and Mexico for vehicles distributed in those markets by their separate distributors. Thirteen affected vehicles located in Puerto Rico are still under their control and held at their Port of Entry facility and will be modified prior to shipment to dealers. Those vehicles are not included in the above vehicle numbers.

Should you have any questions or need additional information, you may reach me at one of the contact points listed below.

Sincerely,

Kent Reeves, Manager

Technical Compliance and Quality Engineering

Mitsubishi Motors North America, Inc.

Telephone: 714-372-6362

Fax: 714-934-4242

Email: kreeves@mmsa.com

#### **Defect Information Report**

Mitsubishi Motors North America, Inc hereby submits this <u>Defect Information Report</u> covering certain 2005 model year Endeavor and Galant vehicles equipped with ABS. The contents of this report have been arranged to follow the sequence set forth in 49 CFR 573.5.

1. The manufacturer's name:

Mitsubishi Motors North America, Inc - Manufacturing Division

2. Identification of the vehicles and defect item;

<u>Make</u>	<u>Line</u>	Model Year	Dates of Manufacture	
Mitsubishi	Endeavor	2005	25 May '05 ~ 13 July '05	
	Galant	2005	25 May '05 ~ 10 Aug '05	

Item: Brake Master Cylinder Assembly.

3. Total number of vehicles:

<u>Make</u> <u>Line</u>		Number of Involved	
Mitsubishi	Endeavor	2,536	
	Galant	<u>365</u>	
	Total	2,901	

4. Percentage of vehicles estimated to contain the potential defect:

It is impossible to know the actual percentage of vehicles that may contain the defect; however, all potentially affected vehicles will be included in the recall for replacement of the master cylinder assembly.

5. Description of the defect including summary:

During assembly of the master cylinder, the spacer (washer) that is normally placed between the alloy master cylinder application piston and the rubber pressure cup was not installed. As a result, the rubber pressure cup in the master cylinder may become damaged and allow brake fluid to by-pass. This may result in reduced braking pressure and allow a longer than normal pedal stroke. Should this condition occur, the braking distance required to stop the vehicle will increase and may lead to a vehicle crash. Diagrams explaining the misassembled components are included at item 12.

# 6. Chronological summary of events leading to this determination:

On or about 15 August 2005, the MMNA technical assistance group received field information advising them of a 2005 Endeavor vehicle experiencing a "soft pedal" condition similar to the condition affecting certain 2006 Eclipse vehicles subject to safety recall 05V-299. MMNA checked the parts demand and found that an additional three other master cylinders had been ordered. MMNA arranged for the replacement master cylinders to be returned to the vendor for inspection. The inspection revealed that the metal spacer between the alloy application piston and the rubber cup seal that is required for master cylinders built for ABS equipped vehicles had not been installed. The vendor was able to confirm that due to operator error, only those ABS style master cylinders produced on May 19, 2005 were improperly built. Following receipt of this information MMNA decided on September 8, 2005 that that a safety recall would be launched to replace the master cylinder assemblies on all of the subject vehicles.

## 7. Test results for a noncompliance:

Not applicable.

## 8. Description of the proposed remedy:

The owners of all subject vehicles will be notified by mail first class mail and requested to bring their vehicle back to their dealer for replacement of the master cylinder free of charge. A copy of the draft TSB and proposed letter are attached for your review and approval.

#### 9. Launch date:

MMNA will conduct a recall campaign to replace the master cylinders on the effected vehicles, no inspection is required. A letter outlining the problem will be sent to owners instructing them to return to their dealer for replacement of the master cylinder free of charge. Any vehicles still in dealer inventory will be repaired prior to vehicle sale. MMNA has determined that the nature of the master cylinder defect does not constitute an immediate threat to motor vehicle safety as it takes some time for the master cylinder rubber cup to deteriorate and while the brake pedal stroke may increase should the rubber cup be damaged, braking ability remains. Therefore, dealer notification will be on or about 26 Sept. 2005 and the owner notification will occur on or about 3 October 2005.

## 10. Notices, bulletins and communication:

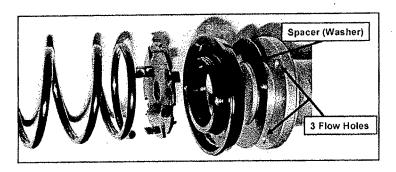
Attached please find draft Technical Service Bulletin SR-05-005 outlining the replacement procedures for the brake master cylinder, which includes a sample copy of the owner notification letter (page 7 of 7) for your review and approval.

### 11. Reimbursements:

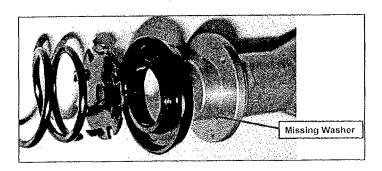
While it is not expected that any owners will have experienced any expense related to this recall, they will be notified in the notification letter that they may seek reimbursement by contacting the Mitsubishi Customer Relations Department.

## 12. Diagrams:

Diagrams showing proper and improper assembly of the master cylinder application piston.



Properly assembled piston with spacer (washer)



Improperly assembled piston without spacer (washer)



# SAFETY RECALL BULLETIN

SUBJECT:

# BRAKE MASTER CYLINDER REPLACEMENT — SAFETY RECALL CAMPAIGN

No: SR-05-005

DATE: September, 2005

MODEL: 2005 Galant, Endeavor

CIRCULATE TO: [ ] GENERAL MANAGER [X] PARTS MANAGER [X] TECHNICIAN

[X] SERVICE ADVISOR [X] SERVICE MANAGER [X] WARRANTY PROCESSOR [ ] SALES MANAGER

DRAFT

#### **PURPOSE**

Some affected vehicles may have a defective brake master cylinder. An internal seal may have been installed incorrectly, allowing brake fluid to bypass during braking, resulting in partial reduction in braking function, which could lead to a crash.

Dealers are instructed to <u>replace the master cylinder on all affected vehicles</u>, using the appropriate replacement master cylinder listed in the PARTS INFORMATION section of this bulletin.

## **AFFECTED VEHICLES**

2005 Galant and Endeavor models equipped with anti-lock brakes (ABS) produced before 8/5/05

#### **IMPORTANT**

Affected new or used inventory vehicles must be repaired before the vehicle is sold. Dealers must check their inventory vehicles' VINs on the Warranty Super Screen to verify whether the vehicle is involved in this recall campaign.

## **CUSTOMER NOTIFICATION**

A letter will be sent to all owners of affected vehicles, asking them to bring their vehicle to their selling Mitsubishi Motors dealer to have the brake master cylinder replaced. A copy of the customer notification letter appears later in this bulletin. Dealers are also asked to contact their customers (by phone, e-mail, or fax), asking them to bring their vehicle to the dealership for this repair.

## REQUIRED OPERATIONS

Before starting this campaign procedure, **CHECK ON THE WARRANTY SUPERSCREEN** to verify that the vehicle is an affected VIN for this recall campaign and that this recall campaign procedure has not already been completed.

- 1. Record the customer's audio system settings, so you can re-set them after the battery is reconnected.
- 2. Remove the strut tower bar (if equipped).
- 3. Remove the battery.
- 4. Remove the intake air hose, air cleaner, and top half of the air cleaner housing.
- 5. Release vacuum from the brake booster.
- 6. Disconnect the brake fluid level indicator switch connector.

FILE UNDER:

Safety Recall Bulletins in the Dealer Service Information Binder

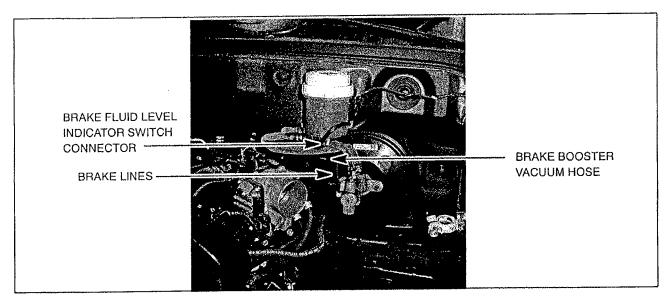
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## **⚠** CAUTION

# Be careful during this procedure to prevent spilling any brake fluid on painted surfaces.

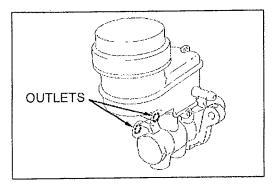
- 7. Drain the brake fluid from the master cylinder and dispose of properly.
- 8. Remove the brake master cylinder from the brake booster, keeping the brake fluid reservoir and hoses attached to the master cylinder.
  - a. Remove and save the attachment nuts and O-ring for re-use.



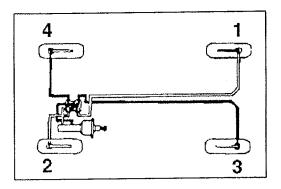
- 9. Install the brake fluid reservoir and hoses onto the new master cylinder. Refer to the PARTS INFORMATION section of this bulletin.
- 10. Carefully install the O-ring from the old master cylinder onto the new one. Apply lithium grease to the O-ring.
- 11. Install the new brake master cylinder onto the brake booster. Tighten the attachment nuts to  $25 \pm 2$  Nm (18  $\pm$  2 ft/lb).
- 12. Install the brake lines to the new brake master cylinder. Do not tighten the brake line attachment nuts yet.
- 13. Connect the brake fluid level indicator switch connector.
- 14. Fill the master cylinder reservoir with brake fluid. Use Mitsubishi Brake Fluid p/n MZ311987. Lightly tap the brake fluid reservoir and hose to remove air bubbles.



## 15. Thoroughly bleed the master cylinder and brake lines as follows:



- a. Press and hold the brake pedal.
- b. Have another person cover the master cylinder outlets with their fingers.
- c. Release the brake pedal.
- d. Repeat steps a. through c. at least three times, holding the pedal to the floor the third time. Ensure that all air is removed.
- 16. Tighten the brake line attachment nuts to 15  $\pm$  2 Nm (12  $\pm$  1 ft/lbs).
- 17. Use brake cleaner to remove any brake fluid on the battery tray.
- 18. Reinstall the battery.
- 19. Reinstall the air intake hose, air cleaner housing, and air cleaner.
- 20. Reinstall the strut tower bar (if equipped).



21. Start the engine and bleed the air in the brake lines at each caliper, in the sequence shown.

- 22. Reset the customer's audio system settings.
- 23. CANADA VEHICLES ONLY: The outside temperature display defaults to Fahrenheit degrees when power is interrupted, such as battery disconnection. To change the display to Celsius degrees, push in the "H" and "M" buttons at the same time, and hold for 10 seconds.
- 24. THROTTLE BODY INITIALIZATION PROCEDURE
  Initialize the throttle body as follows: Turn the ignition switch to ON, then to OFF. Wait for at least 10 seconds before turning the key back to ON.



## PARTS INFORMATION

A supply of master cylinders for both models will be automatically shipped to each dealer, based on in-stock inventory as of 9/21/05. Additional parts can be ordered through the normal parts system.

Due to the limited number of affected Galants for this campaign, dealers should not order additional master cylinders for Galants unless they have actual customer requests.

Description	Model	Part Number	Dealer Net
Brake Master Cylinder	2005 Endeavor	MR569685	\$ 51.03
Brake Master Cylinder	2005 Galant	MR955669	\$ 67.02
Mitsubishi Brake Fluid	_	MZ311987	-

#### WARRANTY INFORMATION

## Campaign Operation Number: C0506MXX

Enter this campaign claim over the MDL, using the Recall claim type option. Sample recall claim screens for this campaign are shown on the following pages.

#### Labor Time:

Endeavors with ABS - 1.2 hours

Galants with ABS - 1.3 hours

## **Required Parts:**

Endeavors with ABS: Master Cylinder p/n MR569685

Galants with ABS: Master Cylinder p/n MR955669

Other allowable parts: Mitsubishi Brake Fluid p/n MZ311987 (up to 2 bottles)

## Replaced Parts Storage and Retention:

Retain all replaced brake master cylinders for at least five (5) days after the payment of the related recall campaign claim. The 5 days begins the day after the claim first appears in the "Paid" section of your warranty claim statement. If the part is requested during those 5 days, you must return the part to the location indicated on the parts return request letter.

If you not receive a request after 5 days from the claim payment date, you may scrap the replaced brake master cylinder.

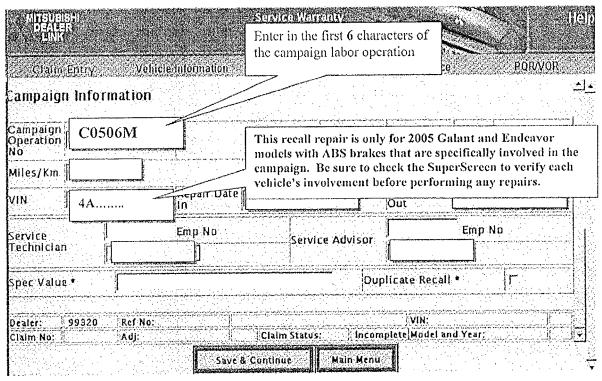
Mitsubishi Motors North America, Inc.

The information contained in this bulletin is subject to change. For the latest version of this document, go to the Mitsubishi Dealer Link, MEDIC, or the Mitsubishi Service Information website (www.mitsubishitechinfo.com).

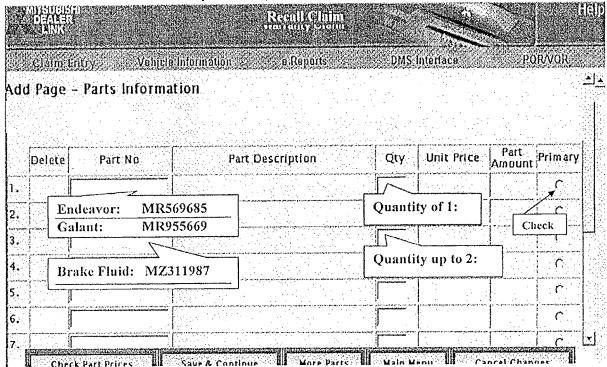


# Specific 2005 Galants and Endeavors with ABS Brakes Brake Master Cylinder Replacement

#### **Header Section**

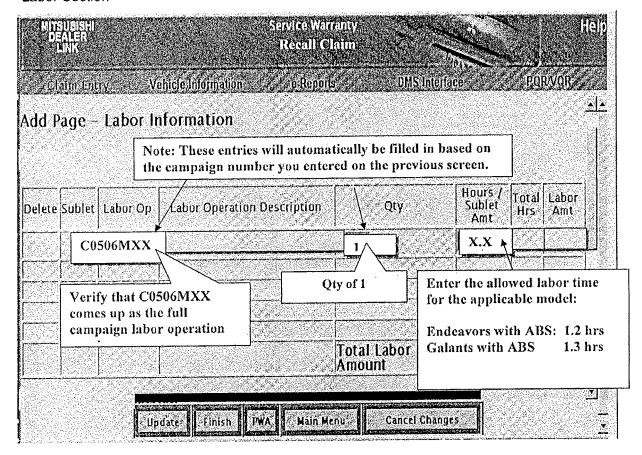


Parts Section - Brake Master Cylinder Replacement Required





#### Labor Section



AFFECTED VEHICLES:

MODELS: 2005 ENDEAVOR 2005 GALANT

ICLES:
ENDEAVOR



Date: October, 2005

RE: IMPORTANT SAFETY RECALL NOTIFICATION: SR-05-005

Dear Mitsubishi Owner,

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Reason For Notice: Mitsubishi Motors North America, Inc. has decided that a defect that relates to vehicle

safety exists in certain 2005 Galant and Endeavor vehicles equipped with anti-lock brakes. The brake master cylinder, which controls the fluid pressure to your vehicle's brakes, may allow brake fluid to bypass internally during stopping. This may result in partial loss of braking, increased stopping distances and could lead to a vehicle crash.

What you should do: Please contact your Authorized Mitsubishi Dealer to schedule a repair date. Parts for your

vehicle have already been allocated to the selling dealership. If you must go to a dealer other than your selling dealer, please contact Mitsubishi Customer Relations at 1-888-648-7820 to arrange for special parts handling. When you bring your vehicle in, show this

letter. (If you misplace this letter, they will still make the repair, free of charge.)

What your dealer will do: The dealership will replace the brake master cylinder.

How long will it take? The time needed for the actual repair is approximately 2 hours. The dealer may need your

vehicle for a longer period of time due to service scheduling issues, but every effort will be

made to minimize your inconvenience.

If you have any trouble having your vehicle repaired promptly and at no charge, please inform us by calling:

Mitsubishi Customer Relations Department 888-MITSU-2005 (888-648-7820)

Hours: Monday - Saturday 7 a.m. to 10 p.m. (Central Standard Time)

If after contacting Mitsubishi Customer Relations, you still have a problem having this repair made promptly and without charge, write to the Administrator, National Highway Traffic Safety Administration, 400 Seventh Street SW, Washington, D.C. 20590, or call the Auto Safety Hotline toll-free (888) 327-4236.

If you have already encountered a problem regarding the above and have paid for the repair, you may send your original receipts and/or other adequate proof of payment to the following address for reimbursement: Mitsubishl Customer Relations Department, P.O. Box 6400, Cypress, CA 90630-0064

Notice to Lessors: If you are a lessor of five or more leased vehicles as of the date of this letter, you have an obligation under federal law, (49 CFR Part 577), to provide the lessee of the above referenced vehicle with a copy of this letter by first class mail within ten days of receipt. Further, you must maintain a record, which identifies the lessee to whom you sent a copy of this letter, the date you sent it, and the vehicle identification number (VIN) of the subject vehicle.

We appreciate your prompt attention to this matter. If you have any questions, please contact your Mitsubishi Dealer.

Sincerely.

Dave McKenzje Vice President, Service

C0506MXX