

# 1986 Corvette: Recall Notice: Anti-Skid Brake System Master Cylinder Center Valve

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**Model Year:** 1986 Chevrolet Corvette

**Subject:** Anti-Skid Brake System Master Cylinder Center Valve

**Source:** Chevrolet Dealer Product Campaign Bulletin

**Bulletin No:** 86C12, Number 5

**Date:** September 1986



CHEVROLET MOTOR DIVISION  
General Motors Corporation



# Chevrolet Dealer Product Campaign Bulletin

86C12  
Number: 5  
Section:  
September, 1986  
Date:

Subject: PRODUCT SAFETY CAMPAIGN 86C12  
ANTI-SKID BRAKE SYSTEM  
MASTER CYLINDER CENTER VALVE

Attn: Service Manager

Model and Year: 1986 CHEVROLET CORVETTE

TO: ALL CHEVROLET DEALERS

The National Traffic and Motor Vehicle Safety Act, as amended, provides that each vehicle which is subject to a recall campaign of this type 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 tender of a vehicle is prima facie evidence of failure to repair within a reasonable time.

If the condition is not adequately repaired within a reasonable time, the owners may be entitled to an identical or reasonably equivalent vehicle at no charge or to a refund of the purchase price less a reasonable allowance for depreciation.

To avoid having to provide these burdensome solutions, every effort must be made to promptly schedule an appointment with each owner and to repair their vehicle as soon as possible. As you will see in reading the attached copy of the letter which is being sent to owners, the owners are being instructed to contact the nearest Chevrolet Zone Office if their dealer does not remedy the condition within five days of the mutually agreed upon service date. If the condition is not remedied within a reasonable time, they are instructed on how to contact the National Highway Traffic Safety Administration.

#### DEFECT INVOLVED

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1986 Corvettes. Certain severe and unusual braking conditions may cause damage to the brake master cylinder center valve. If sufficient damage accumulates, loss of front brakes may occur with accompanying increased pedal travel and reduced braking ability. A reduction of braking ability at a time when minimum stopping distance is required could result in a vehicle crash without prior warning.

DEFECT INVOLVED (CONT'D)

To prevent possibility of this condition occurring, Chevrolet Dealers are to install a brake master cylinder piston kit on all involved vehicles in accordance with instructions contained in this campaign bulletin.

VEHICLES INVOLVED

Involved are all 1986 Chevrolet Corvette Models within the following breakpoints:

<u>PLANT</u>	<u>FROM</u>	<u>THROUGH</u>
Bowling Green	G5100001	G5118892

Involved vehicles have been identified by Vehicle Identification Number Computer Listings. Computer listings contain the complete Vehicle Identification Number, owner name and address data, and are furnished to the involved dealers with the campaign bulletin. Owner name and address data furnished will enable dealers to follow-up with owners involved in this campaign.

These listings may contain owner names and addresses obtained from State Motor Vehicle Registration Records. The use of such motor vehicle registration data for any other purpose is a violation of law in several states. Accordingly, you are urged to limit the use of this listing to the follow-up necessary to complete this campaign. Any dealer not receiving a computer listing with the campaign bulletin has no involved vehicles currently assigned.

OWNER NOTIFICATION

Owners will be notified of this campaign on their vehicles by Chevrolet Motor Division (see copy of Owner Letter included with this bulletin).

DEALER CAMPAIGN RESPONSIBILITY

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

Whenever a vehicle subject to this campaign is taken into your new or used vehicle inventory, or it is in your dealership for service in the future, you should take the steps necessary to be sure the campaign correction has been made before reselling or releasing the vehicle.

DEALER CAMPAIGN RESPONSIBILITY (CONT'D)

Owners of vehicles recently sold from your new vehicle inventory are to be contacted by the dealer, and arrangements made to make the required modification according to instructions contained in this bulletin.

PARTS INFORMATION

Parts required to complete this modification are to be obtained from General Motors Warehousing and Distribution Division (GMWDD). To ensure these parts will be obtained as soon as possible, they should be ordered from GMWDD on a C.I.O. order with no special instruction code, but on an advise code (2).

<u>PART NUMBER</u>	<u>DESCRIPTION</u>	<u>QUANTITY/VEHICLE</u>
10052271	Master Cylinder Piston Kit	1

SERVICE PROCEDURE

DISASSEMBLY

1. Remove master cylinder from vehicle.
2. Drain and discard brake fluid from master cylinder reservoir and bore.
3. Fully depress the master cylinder pistons with a brass rod or wooden dowel (28) (as shown in Fig. 1) and remove stop bolt (9). Then remove snap ring (1) with suitable Truarc pliers.  

Do not remove stop bolt (9) unless both  
pistons are fully bottomed in bore.
4. Remove brass rod or wooden dowel (28) and gently bump open end of master cylinder body on a piece of wood to remove primary piston (3) secondary piston assembly (7) and center valve assembly (8).
5. Discard secondary piston assembly and center valve assembly (7 & 8).
6. Remove primary piston seal retainer (6) by carefully prying open the legs of the seal retainer with a small screwdriver. Discard the retainer.
7. Remove and discard the primary piston seals (2 & 5). Do not dismantle any other part of the master cylinder.

SERVICE PROCEDURE (CONT'D)

INSTALLATION

1. Lubricate new secondary seal (2) with clean brake fluid and install on primary piston with seal lip facing as shown (Fig. 2).
2. Insure recuperating guide (4) is located on primary piston as shown (Fig. 2).
3. Lubricate new main seal (5) with clean brake fluid and install on primary piston (3) with lip facing as shown (Fig. 2).
4. Press new seal retainer (6) onto primary piston (3). Make sure retainer tabs snap into piston groove.
5. Flush bore of master cylinder with fresh clean brake fluid, drain and discard excess fluid.
6. Insert new center valve assembly (8) into secondary piston assembly (7), then install in cylinder bore.
7. Install primary piston assembly (3) in cylinder bore.
8. Using brass rod or wooden dowel (28), push the primary piston (3) down the cylinder bore until both primary and secondary pistons bottom in cylinder bore. Then install stop bolt (9) and torque to 9 - 12 N.M (7-9 lb.ft.).

Do not install stop bolt (9) unless both pistons (3 & 7) are fully bottomed in bore.

9. Install snap ring (1) in the master cylinder bore making sure it fits into the groove properly. Remove brass rod or wooden dowel (28).
10. Fit plastic tie wrap identification tag around body of master cylinder adjacent to stop bolt to show that cylinder has been reworked.
11. Reinstall cylinder on vehicle, torque attaching nuts to 20-34 N.M (15 - 25 lb.Ft.), bleed brake system and top off fluid reservoir with Supreme No. 11 or DOT-3 brake fluid. Instructions for brake system bleeding can be found in the 1986 Corvette Shop Manual (ST-364-86) pages 5-4 through 5-7.
12. Reconnect warning switch electrical connection.
13. Install Campaign Completion Label.

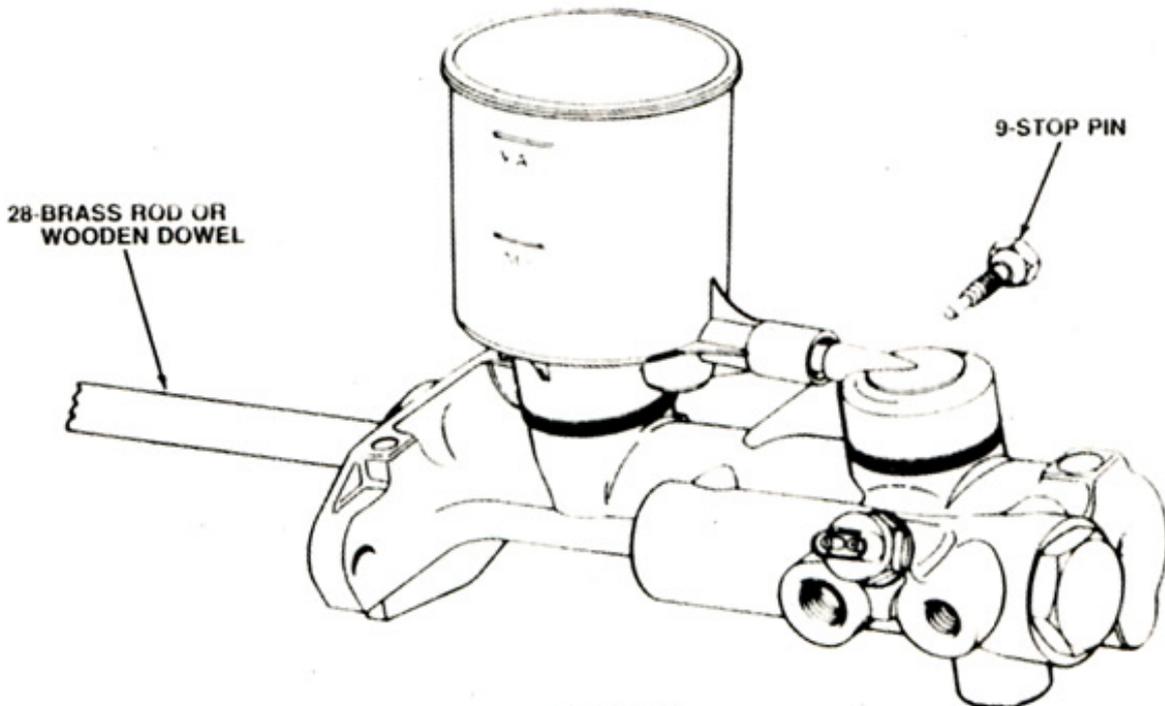
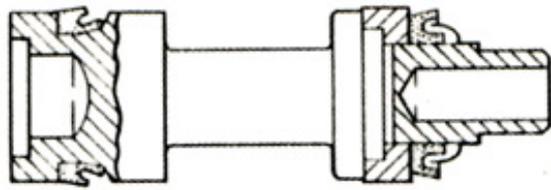


FIGURE 1



PRIMARY PISTON

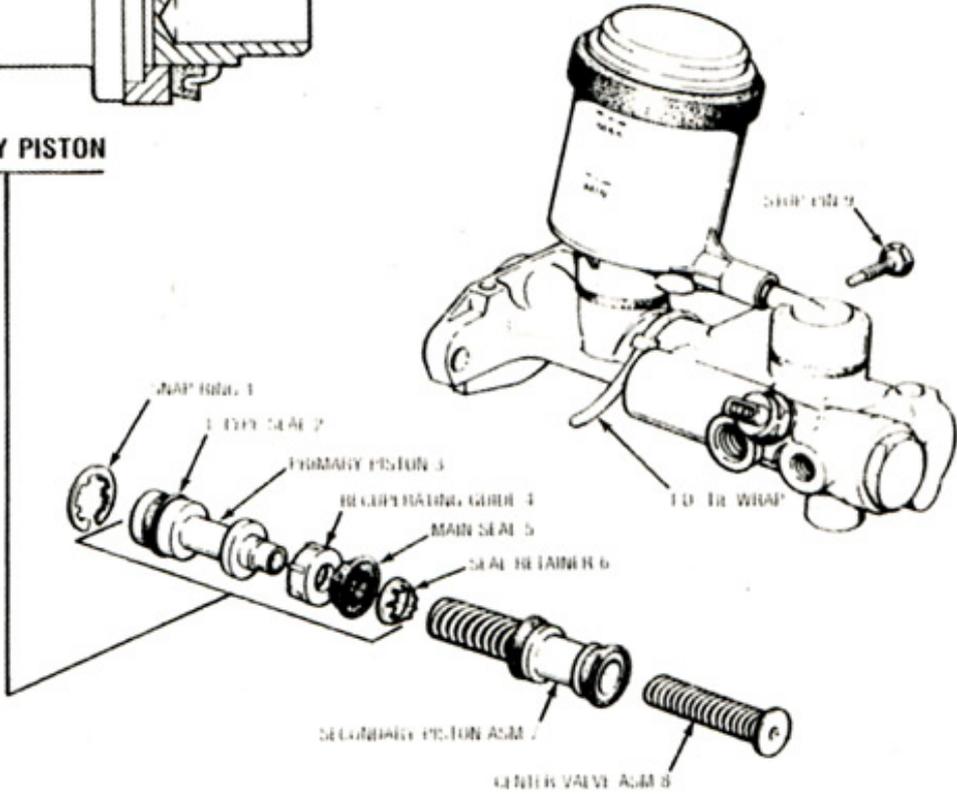


FIGURE 2

**CLAIM INFORMATION**

Submit a Product Campaign Claim with the information indicated below:

REPAIR PERFORMED	PC	FAILED PART NO.	PARTS ALLOW	FC	LABOR OP	LAB HRS	* OTH HRS	*** NET AMT
o INSTALL MASTER CYLINDER PISTON KIT	1	10052271	**	00	V3550	1.4	.1	\$3.86

\*Campaign Administrative Allowance.

\*\*The Parts Allowance should be the sum total of the current GMWDD Dealer Net price plus 30% of all parts required for the repair.

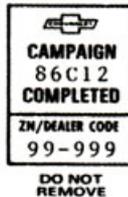
\*\*\*The \$3.86 identified in the "Net Amount" column covers the cost of brake fluid used in conjunction with labor operation V3550.

Dealers will automatically receive the correct labor and material allowance based on the labor operation performed.

Refer to the Chevrolet Claims Processing Manual for details on Product Campaign Claim submission.

**CAMPAIGN IDENTIFICATION LABEL**

Each vehicle modified in accordance with the instructions outlined in this Product Campaign Bulletin will require a "Campaign Identification Label." Each label provides a space to include the five digit dealer code of the dealer performing the campaign service. This information may be inserted with a typewriter or ballpoint pen.



Each "Campaign Identification Label" is to be located on the radiator core support in an area which will be visible when the vehicle is brought in for periodic servicing by the owner.

Apply "Campaign Identification Label" only on a clean dry surface.

Chevrolet Motor Division  
 GENERAL MOTORS CORPORATION

Chevrolet bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer." They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your Chevrolet dealer for information on whether your vehicle may benefit from that information.

CHEVROLET



Central Office

(Notification Used By Chevrolet Motor Division)

Dear Chevrolet Owner:

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

General Motors has determined that a defect which relates to motor vehicle safety exists in certain 1986 Corvette Models. Certain severe and unusual braking conditions may cause damage to the brake master cylinder center valve. If sufficient damage accumulates, loss of front brakes may occur with accompanying increased pedal travel and reduced braking ability. A reduction of braking ability at a time when minimum stopping distance is required could result in a vehicle crash without prior warning.

To prevent possibility of this condition occurring on your Corvette, please contact your Chevrolet Dealer on or after the date shown below to arrange a service date. Your dealer will install a new brake master cylinder center valve and related parts. This service will be performed for you at no charge.

Instructions for making this correction have been sent to your Chevrolet Dealer. It is estimated that parts will be available on or about September 16, 1986. The labor time to complete this repair is approximately one hour and twenty minutes. Please allow additional time for the dealer to process your vehicle.

Your Chevrolet Dealer is best equipped to obtain parts and provide service to ensure your vehicle is corrected as promptly as possible. However, if you take your vehicle to your dealer on the agreed service date, and they do not remedy this condition on that date or within five days, we recommend you contact the nearest Chevrolet Zone Office, either in person or by telephone. The Zone Office will assist you and the dealer in getting your vehicle corrected. The locations and telephone numbers of the Zone offices are listed in your owner's manual.

After contacting your dealer and the Zone Office, if you are still not satisfied that we have done our best to remedy this condition without charge and within a reasonable time, you may wish to write the Administrator, National Highway Traffic Safety Administration, 400 Seventh St., S.W., Washington, D.C. 20590 or call 800-424-9393 (Washington, D.C. residents use 426-0123).

The enclosed owner reply card identifies your vehicle. Presentation of this card to your dealer will assist in making the necessary correction in the shortest possible time. If you have sold or traded your vehicle, please let us know by completing the postage paid owner reply card and returning it to us.

We are sorry to cause you this inconvenience; however, we have taken this action in the interest of your safety and continued satisfaction with our products.

Chevrolet Motor Division  
GENERAL MOTORS CORPORATION

Enclosure

Online URL:

<https://www.corvetteactioncenter.com/tech/knowledgebase/article/1986-corvette-recall-notice-anti-skid-brake-system-master-cylinder-center-valve-895.html>