



parts return program

news

U.S. DEPARTMENT OF TRANSPORTATION • NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Vol. 2, No. 2

August, 1976

BRAKE PEDAL SUPPORT BRACKET

The PRP has received a brake pedal support bracket from GUS COOPER SERVICES, INC., Seattle, Washington. This part, which attaches to the firewall and dash support, was removed from a 1967 Ford Mustang with a mileage of 62,000. The vehicle was equipped with power brakes and an automatic transmission.

The bushing which supports the brake pedal swing shaft on the right side of this bracket is elongated and split (see figure 1). The hole in the bracket thru which the bushing fits is also elongated, approximately $\frac{3}{8}$ of an inch, and the bracket has a light coating of rust. Reportedly, the failed bushing can prevent the brake pedal from returning, possibly resulting in brake lock-up, or cause enough resistance to require excessive effort to apply the brakes.

Mr. Tom Young, the service manager at GUS COOPER SERVICES, INC. states that he has seen three other Ford vehicles with similar failures. If your shop encounters such a failure, we would like to hear from you.

RESEARCH ON DURABILITY OF BRAKE FLUID PRESSURE WARNING SYSTEMS

The brake, fluid pressure loss, warning systems in dual hydraulically braked vehicles may be expected to deteriorate with time. Eventually the system may not operate when a leak or rupture occurs in one of the two brake fluid circuits. The NHTSA is currently supporting research to determine the durability of such systems and their modes of failures.

A warning system consists of an illuminated "brake" display sign in the vehicle's instrument panel, a special switch, and a proportioning valve. The switch is operated by *differential* pressure on the ends of a sliding rod. When the brake pedal is pressed and one of the brake lines is open, the rod will be forced to move. It is designed to provide cam operation of the switch which operates the brake warning light (see figure 2).

(Continued on page 2)

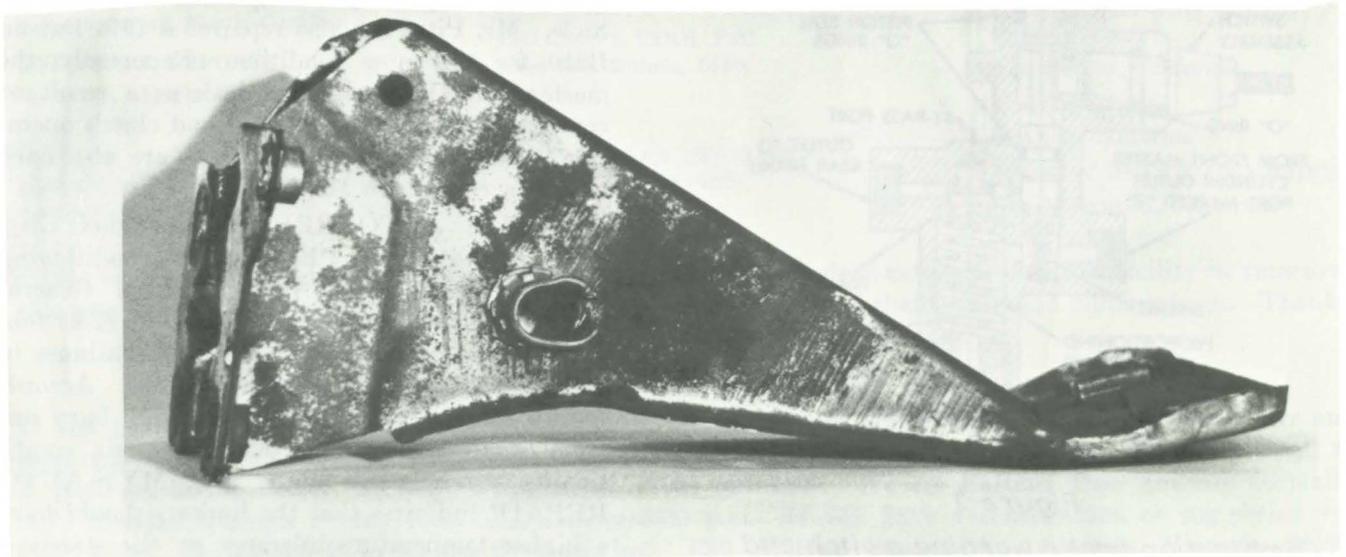


Figure 1

The NHTSA recently sponsored some work involving the inspection of brake fluid pressure warning systems in used passenger cars. Fifty-three 1968-1973 cars of different domestic and foreign models were examined by the Automobile Club of Southern California (ACSC). In eleven of them the brake pressure warning light failed to come on, when the pressure was relieved in one of the two brake lines and the brakes were applied. In five it took two or three brake applications before the switch would operate. In another car, the wire to the switch was not connected.

In four others there were defective or missing light assembly parts. The switch contact in one proportioning valve had a tough black insulating coating that prevented it from making contact.

Follow-up work is being conducted by the ACSC to examine 200 more passenger cars for faulty brake pressure warning systems. The results of that study may indicate the need to inspect, and replace or repair such warning systems at specified times or mileage.

You as participating repairs shops in the NHTSA Parts Return Program can provide additional data on these pressure warning systems. Please send us any failed proportioning valves that you encounter.

ITEMS OF INTEREST

- Mr. John Cummins of UNIVERSAL IMPORTS, INC. in Rockville, Md., reports that Pirelli tires which are supplied as original equipment on DeTomaso Pantera's have been discontinued. However, according to Mr. Cummins, the 235 x 60 VR 15 for the rear axle and size 215 x 60 VR 15 for the front are comparable. Also, Goodyear Arriva style tires which are supplied as original equipment on other Panteras may still be ordered from Goodyear stores. Mr. Cummins also reported receiving a new 1976 BMW model 2002, with original equipment tires and wheels, on which the tire scraped the fender when turning. The wheels are reportedly of a new design this year, which may be causing the interference. The PRP would like to know if your shop has encountered similar conditions on vehicles.
- As reported in the June issue of the PRP Newsletter, Mr. Julius Meisner of BRANCH AUTO PARTS in Albany, New York, reported having difficulty with the braking system on his 1974 Ford Gran Torino. Mr. Daniel T. Walz of LINCOLN SAFETY SERVICE CO., in Lincoln, Nebraska, has suggested that because of the length of time the car was in storage, the seals in the master cylinder may have been affected. The front brake circuit may be bypassing internally causing the abnormal pedal travel. No fluid loss or leakage may be detected. We have passed this information along to Mr. Meisner.
- Mr. Tom Pitre, an automobile mechanics instructor and a member of the California Council for Adult Education, reports repairing a 1971 and a 1972 Datsun model 510. The clutch slave and master cylinders were leaking past the dust boot and into the passenger compartment of each vehicle. Mr. Pitre has also repaired a 1974 Datsun B210 for the same condition. Reportedly, the master and slave cylinders leak as a result of corrosion, causing loss of fluid and clutch operation. Slave cylinder rebuild kits are also hard to find according to Mr. Pitre.
- TOMMY'S AUTO REPAIR in Sioux City, Iowa has sent the PRP six air conditioning thermal limiter fuses removed from General Motors vehicles. Reportedly, when the \$2.65 fuse disrupts the current, the fan motor continues to operate and only the compressor stops. According to the shop, 75% of the limiters burn out from small malfunction while the air conditioning system is still intact. TOMMY'S AUTO REPAIR indicates that the limiters should have a higher temperature tolerance or else standard fuses should be used.

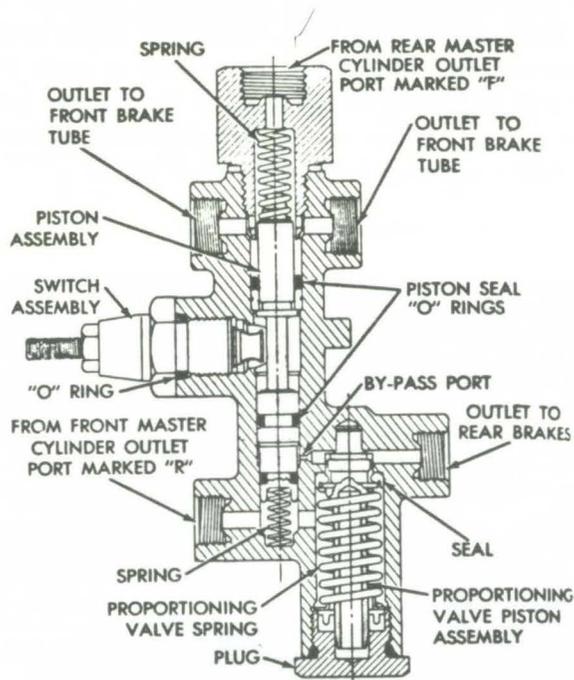


Figure 2

Combination brake warning switch and proportioning valve assembly (sectional)

OUTSTANDING SHOPS

Our outstanding shops are those shops that have sent into the PRP at least one part during the current month. A shop that sends in parts in consecutive months is identified by a number in parenthesis before the name. This number identifies the consecutive months the shop has sent in a part. New shops that have just become active in the PRP are identified with an asterisk before their name. During August 1976, eight shops became active participants in the PRP. Four shops have sent in failed parts in consecutive months.

REGION 0

BEN-SAL AUTO SERVICE
CENTER, INC.
Hartford, Connecticut

REGION 1

ARTIE'S SERVICE STATION
Lagrangeville, New York
A SAFEWAY MUFFLER SHOP
Albany, New York
BERT'S ARCO STATION
Wilmington, Delaware
EARL R. LAMBERT'S MOBIL
STATION
Downington, Pennsylvania

(3) LONGBARD'S EXXON STATION

Poughkeepsie, New York
NEW YORK AUTO REPAIR
AND ALIGNMENT
Poughkeepsie, New York

* W. J. KREAN AND SON
Toms River, New Jersey

REGION 2

(2) AUTO BRAKE CORP.
Norfolk, Virginia
MIKE'S SERVICE CENTER, INC.
Winchester, Virginia
MUSTEN AUTO SERVICE
Winston-Salem, North Carolina
UNIVERSAL IMPORTS
Rockville, Maryland

REGION 3

HAGAN SERVICE CENTER
Gainsville, Georgia

IKE'S AUTOMOTIVE
MAINTENANCE
Montgomery, Alabama

REGION 4

* AUTO INN GARAGE
South Bend, Indiana
CHESTER BODY AND
REPAIR CO.
Cleveland, Ohio
EVAN'S BRAKE SERVICE
Cleveland, Ohio
MASTER TIRE COMPANY
Evansville, Indiana
* WADE'S ALL CAR SERVICE
Lansing, Michigan

REGION 5

DAVE McMILLEN'S AUTO
REPAIR SERVICE
Duluth, Minnesota
DAY-NITE AUTO STATION
Kaukauna, Wisconsin
HERFELL'S 66 SERVICE
Sioux City, Iowa
RICHFIELD WHEEL
ALIGNMENT
Minneapolis, Minnesota
ROEHL'S BEE-LINE BRAKE
AND ALIGNMENT
Appleton, Wisconsin
TOMMY'S AUTO REPAIR
Sioux City, Iowa
YEARIAN'S TIRE, INC.
West Des Moines, Iowa

REGION 6

(11) DICK JORDAN STANDARD
SERVICE STATION
Clayton, Missouri

(2) J. GARTNER AUTO SERVICE
Chicago, Illinois

LINCOLN SAFETY SERVICE CO.
Lincoln, Nebraska

STEELE AUTOMOTIVE SERVICE
Topeka, Kansas

REGION 7

* IRVING RADIATOR AND
AUTO CENTER
Irving, Texas
* MOONEY'S WHEEL ALIGNMENT
AND BRAKE SERVICE
Oklahoma City, Oklahoma

REGION 8

NATIONAL SAFETY CLINIC
AUTO REPAIR
Salt Lake City, Utah
TERRY MOTOR CO.
Beaver, Utah

REGION 9

* AUTOMOTIVE CITY SERVICE
CENTER
San Francisco, California
BIG BRAKE OF STOCKTON
Stockton, California
* DANA MEYER FOREIGN CAR
SERVICE
Albany, California
SAMO WHEEL AND BRAKE
SERVICE
Santa Monica, California
* MR. TOM PITRE
Los Altos, California
VANOWEN BRAKE AND WHEEL
North Hollywood, California

NOTE: We need more participating shops. If you know of an independent automotive repair facility in your area who you think might want to help out in this Program, please send their name and address to us. Thanks.

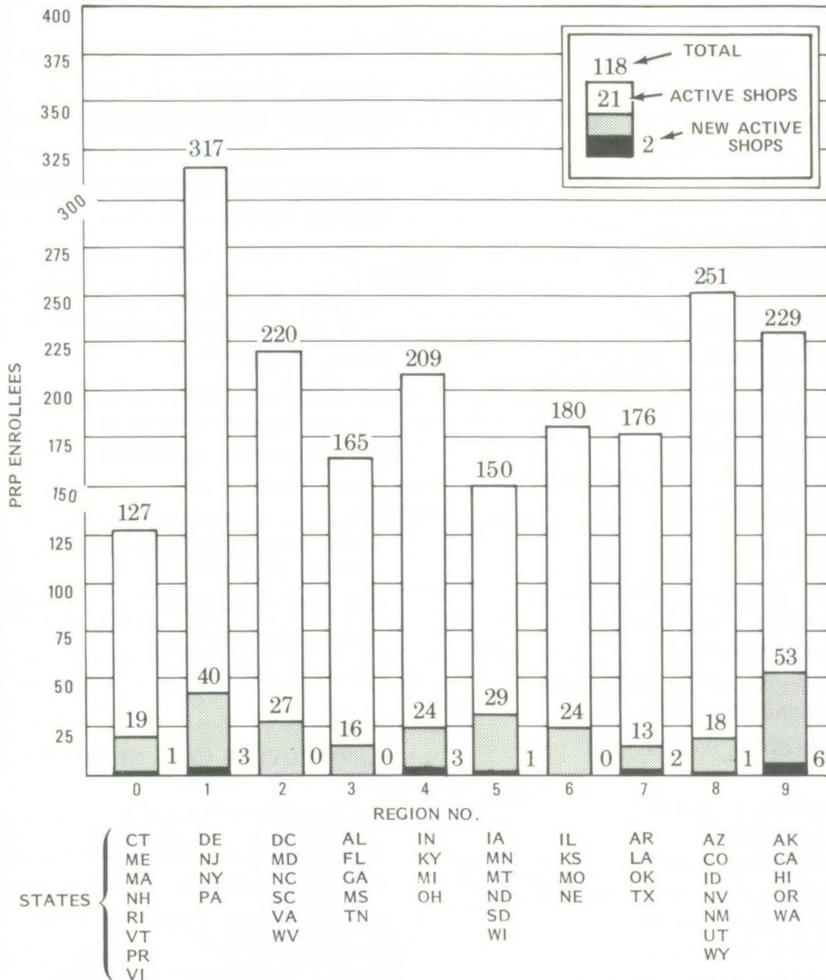
TELEPHONE CALLS

If you have any problems regarding this program, are in need of additional mailbags, tags, etc., have any questions which need answers, or would like to pass on comments, please call us collect. Place your call to Bruce Beddow, Jonni Peizer, or Guy Whiddon at (703) 527-4500. We are Eastern Time and are normally available Monday through Friday from 8:30 a.m. to 5:30 p.m. If you have a contribution or suggestion for the *PRP News*, please send it to Kappa Systems, Inc., 1501 Wilson Boulevard, Arlington, Virginia 22209, Attention: Bruce E. Beddow.

CURRENT PRP PARTICIPATION

The graph below identifies the number of active shops within each Region. Seventeen shops have joined our active team and sent in a part. Keep up the good work. We still need many more shops on our active team and a lot more parts.

(As of 31 August 1976)



National Parts Return Program

Description and Function

- The PRP involves the voluntary submittal by independent repair shops of failed automotive components. Components are submitted to a representative (Kappa Systems, Inc.) of the National Highway Traffic Safety Administration (NHTSA).
 - The purpose of the PRP is to gather information on these components to help the NHTSA identify the existence of safety-related, manufacturing defects in design, materials, construction, or performance of motor vehicle equipment. Under the authority of the National Traffic and Motor Vehicle Safety Act of 1966, and Amendments to the Act of 1974, the NHTSA can require manufacturers to conduct safety defect notification campaigns when it has been determined that a defect relating to motor vehicle safety exists.
 - The information obtained from these parts is also valuable in preparing Federal motor vehicle safety standards.
- Your shop can help. The parts that you send in will give vital information that cannot be obtained in any other way.

U.S. DEPARTMENT OF TRANSPORTATION
NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION
WASHINGTON, D.C. 20590

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