

SERVICE BULLETIN



M-988

SAFETY RECALL CODE 068

October 27, 1989

1989 - 1990 FXST, FXSTC, FXSTS MODELS REAR BRAKE LINE ASSEMBLY

General

Harley-Davidson has become aware the possibility exists that the steel tube of the rear brake line assembly could develop a fatigue fracture as the result of vehicle operation. This fracture will result in loss of brake fluid and loss of rear brake which could cause a reduction of stopping ability.

As a precautionary measure, Harley-Davidson recently elected to initiate a voluntary recall campaign in the interest of motor vehicle safety. The potential problem will be remedied by replacing the rear brake line assembly on the potentially affected vehicles.

This recall applies to 1989 and 1990 FXST, FXSTC and FXSTS model motorcycles manufactured and shipped from our York, Pennsylvania plant from the beginning of the 1989 model year, July 11, 1988 through October 13, 1989.

We have attached a list that contains both registered owners and unregistered vehicles delivered to your dealership which are involved in this campaign. To insure the safety of all affected riders, it is your responsibility to perform the required service on all potentially affected vehicles even if the motorcycle was not purchased from your dealership. We are enclosing sufficient blank Dealer Service Cards for those vehicles. If necessary, additional cards are available through the Harley-Davidson Service Department.

Important

Because only registered owners as shown on the attached list will receive notification from us, we request that you contact any owners of vehicles still listed as unregistered. Advise them of the safety recall and make arrangements for them to come in for recall service. We also require that you provide us with their names, addresses and VIN's as soon as possible to enable us to mail them an owner's letter as required by the National Traffic and Motor Vehicle Safety Act as amended.

If you are not sure that a safety recall has been completed on a particular motorcycle, contact the Harley-Davidson Service Department for a computer check of our recall records.

An initial shipment of Code 068 rear brake line kits (93615), consisting of 25% of your anticipated requirements will begin on October 30, 1989. A second shipment, consisting of another 25% of your anticipated requirements, will automatically be sent to you upon

completion of the initial shipment.

All Code 068 kits will be shipped no charge, transportation paid. Once you receive your automatic two shipments, carefully calculate your remaining requirements and order them on the attached blue order form. Code 068 kits ordered on this form will also be sent no charge, transportation paid.

REPLACEMENT PROCEDURE

WARNING

D.O.T. 5 brake fluid can cause eye irritation. In case of contact with eyes, flush with plenty of water and get medical attention. KEEP BRAKE FLUID OUT OF THE REACH OF CHILDREN!

CAUTION

Whenever a hydraulic brake line assembly or fitting is opened the fitting should be flushed with brake fluid and the brake system must be bled. Do this to eliminate any air or contaminants from the brake system. Air in the fluid will cause the brake pedal to have a spongy feel. If a contaminant becomes lodged in the seat of a fitting, leakage of fluid could occur, and/or air could be drawn into the system.

KIT # 93615

QTY	PART NO.	DESCRIPTION
1	45156-89B	Brake line assembly
1	9990W	Clamp
4	41731-88	Banjo washer

Required tools:

1/2 in. wrench
1/2 in. Socket
3/8 in. 12 point socket
Breaker bar
1/4 in. allen socket
1/8 in. ball end allen wrench
1 in. open end wrench
Large screw driver
D.O.T. 5 Brake fluid
Catch pan, rags
Teflon pipe compound

NOTE

The front muffler has to be removed to replace the brake line assembly. The exhaust system does not have to be removed.

ROUTING	SERVICE MANAGER	SALES MANAGER	PARTS MANAGER	LEAD TECHNICIAN	TECHNICIAN NO. 1	TECHNICIAN NO. 2	TECHNICIAN NO. 3	TECHNICIAN NO. 4	RETURN THIS TO
INITIAL HERE									

1989 Harley-Davidson, Inc.

REMOVAL (Figure 1)

1. Remove the front muffler.
2. Use the 3/8 in. 12 point socket and long breaker bar and remove brake line assembly banjo bolts and washers at both ends of rear brake line assembly. Discard the washers.
3. Use the 1/4 in. allen socket and remove allen head bolt that secures the brake line assembly support bracket to transmission case. Remove the bottom, right side transmission case allen head bolt also.
4. Use the large screwdriver and open welded clamps on the swing arm lower frame tube and at the back of the swing arm forging.
5. Disconnect the rear brake light switch leads and remove the brake line assembly.
6. Lock support bracket in vise and use 1 in. open end wrench to remove the rear brake light switch. Retain the switch.

INSTALLATION

1. Use Teflon pipe compound on the rear brake light switch threads and install the switch in the new brake line assembly. Lock support bracket in vise to install brake light switch.
2. Place new brake line assembly in position and install the switch leads.
3. Place new brake line assembly under welded clamps. Do not tighten clamps at this time.
4. Install the transmission case allen head bolt in the brake line assembly support bracket. Be sure the bent tang on the bracket rotates up against the transmission case. Close the welded clamps, but do not pinch the brake hose.
5. Install the new hose clamp using the bottom, right side transmission case allen head bolt. Be sure the round part of the clamp is toward the inside of the motorcycle. Tighten allen head bolts to 10 - 12 ft-lbs torque.
6. Follow Service Manual procedure and install banjo bolts and new washers. Hold the brake line assembly fitting while tightening the master cylinder banjo bolt.

Tighten the master cylinder banjo bolt so the brake line fitting is at a 45° angle to horizontal. This will prevent the fitting from contacting the frame. Tighten banjo bolts to 17 - 22 ft-lbs torque.

7. Place the motorcycle upright and level and bleed the rear brake following Service Manual procedure. Replenish brake fluid with D.O.T. 5 Brake fluid as required.
8. Pump the rear brake several times and check carefully for leaks.
9. Install the front muffler.

Credit Procedure

After servicing each motorcycle, be sure to completely fill out the special Dealer Service Card provided. For each vehicle serviced place a "C" in the letter box and a "1" in the quantity box. Fill in your Dealer Account Number, the Service Code (068), the Vehicle Identification Number (VIN), and your Dealership name and address with the owner information, if it is blank.

Package the replaced rear brake line assembly and banjo bolt washers.

Upon receipt of the properly completed 068 Card(s) and rear brake line assembly and banjo bolt washers, you will be credited for 0.5 labor hours, 0.1 administrative hours and 0.1 hours to compensate you for brake fluid.

Credit will not be issued for parts because they were shipped no charge, transportation paid.

Parts order stock

Rear brake line assemblies, 45156-89 and 45156-89A which were shipped from our Parts and Accessories Division are also being recalled. Any of these units in your stock must be returned to Harley-Davidson. Fill out a warranty claim form referencing this bulletin in the Remarks Section. Return the claim with the parts, following normal warranty procedure. Upon receipt at Harley-Davidson you will be credited for parts and return postage.

If any of these parts were installed in a vehicle, please contact the owner and make arrangements to have the recall service performed. Upon completion, complete a warranty claim form using labor code 2413 and indicate Code 068 Service in the Remark Section of the claim form. Return the claim and original brake line assembly following normal warranty procedures. Upon receipt you will be credited 0.5 hours, 0.1 for administrative and 0.1 hr. for brake fluid used and return postage. Credit will not be issued for parts as they were shipped "no charge".

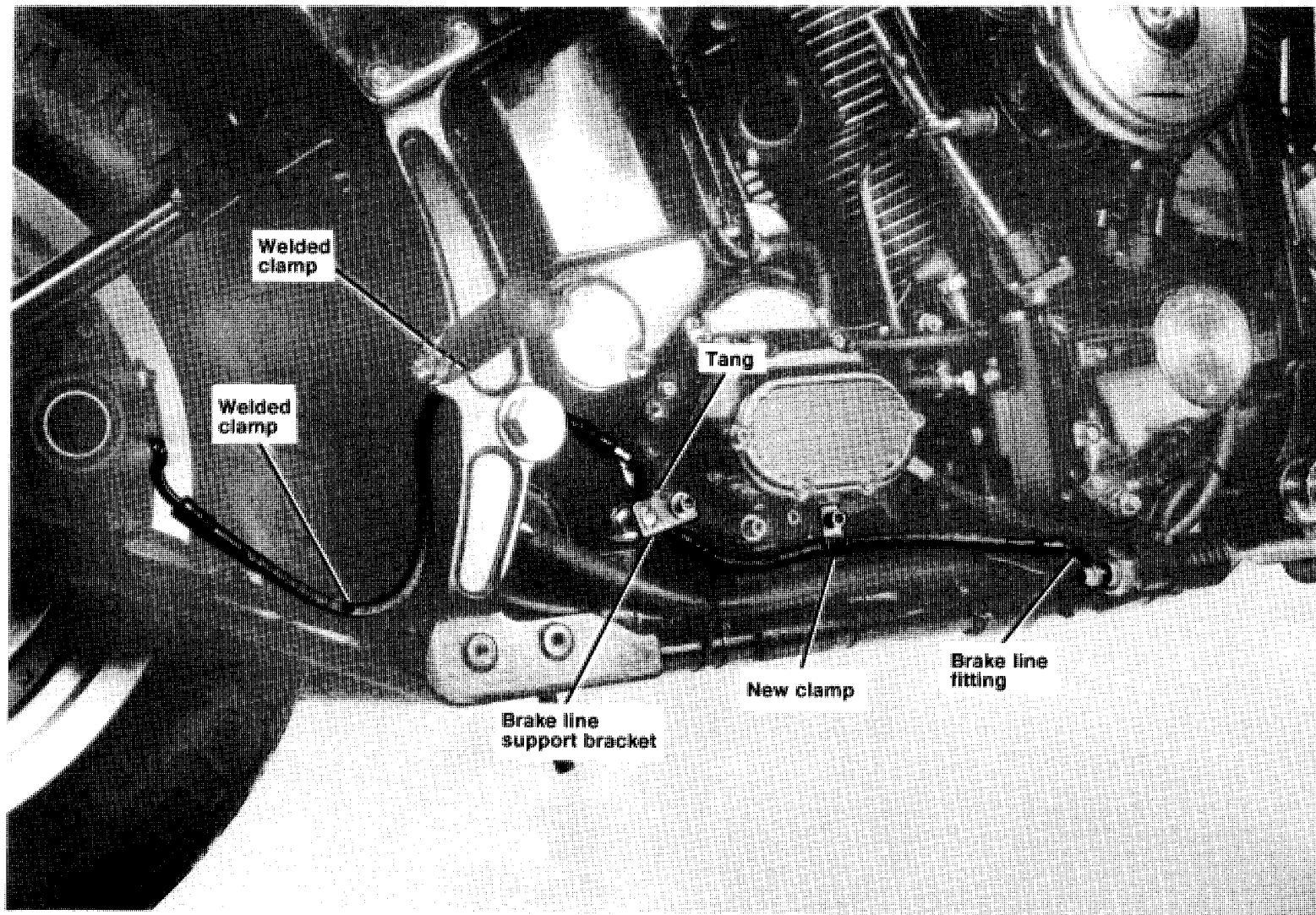


Figure 1. Replacement Brake Hose (Exhaust Removed For Illustration Purposes)