AMF HARLEY-DAVIDSON SERVICE BULLETIN

No. M-727

SAFETY DEFECT CODE 036

April 11, 1978

REAR BRAKE CONTROL LINKAGE / 1979 XLH-1000

Certain early 1979 XLH-1000 motorcycles were produced and shipped with deficient rear brake linkage parts during the period from February 15, 1978 to March 22, 1978.

Note: Mailgram ML-85 dated March 23, 1978, notified all dealers that affected motorcycles must not be sold or used until corrected. This service bulletin repeats some of the information given in the Mailgram and contains further information including the procedure you are to follow.

The problem involves distortion of the brake linkage inner pivot arm at the pivot shaft hole when a high brake pedal force is applied. The distortion of the square hole in the pivot arm and mating square on the pivot shaft increases the brake linkage free play and results in excessive brake pedal travel and a lowered pedal position. The lowered pedal position decreases the operator's ability to effectively apply the rear brake.

Although the motorcycle operator would still have the use of the front brake, impaired operation of the rear brake while applying both brakes, or the rear brake only, could reduce braking effectiveness enough to cause loss of vehicle control and an accident.

The increase in rear brake pedal free play and lowered position of the pedal due to linkage distortion occurs gradually and will serve as a warning to the operator of decreased rear brake effectiveness. The motorcycle must not be operated in this condition.

In compliance with the National Motor Vehicle Safety Act, this problem has been declared a safety defect and the affected motorcycles must be corrected as soon as possible by installing new strengthened parts.

A total of $568\ \text{XLH}$ motorcycles, 100% containing the defect, are within the following V.I.N. range:

3A 10001 H9 to 3A 12067 H9

After March 21, 1978, the new correct parts were used in motorcycles \underline{above} VIN 3A 12067 H9 and these motorcycles will not require correction.

We are sending the required quantity of parts for correcting the motorcycles shipped to your dealership. Parts required for correcting one motorcycle are contained in a special kit, consisting of the following parts:

423 57- 79	Inner Pivot Arm	(Replaces 42365-79)	
42359-79	Pivot Shaft	(Replaces 42366-79)	
7041	5/16 in. Lockwasher	(Replaces 7036 1/4 in. Lockwasher)	
7057	5/16 in. x $1/2$ in.	(Replaces 7737W $1/4$ in. x $7/16$ in.	
	Hex Acorn Nut	Hex Acorn Nut)	

Please contact our Service Department if you require additional parts.

Instructions for installing these parts and an illustration showing location on the motorcycle appear at the end of this bulletin.

The new Inner Pivot Arm has a reinforced (thicker) section, the new Pivot Shaft has a longer square section to accommodate the thicker Pivot Arm, and the outer Acorn Nut and Lockwasher size has been increased from 1/4 in. to 5/16 in. diameter. As a means of identifying the new parts, the outer acorn nut which attaches the outer pivot arm to the pivot shaft now has a 1/2 in. hex size instead of a 7/16 in. hex size.

IMPORTANT! ANY MOTORCYCLE WHICH HAS THE ABOVE PARTS WILL NOT REQUIRE CORRECTION-INSPECT FOR REVISED PARTS BEFORE SERVICING.

All registered owners of record are being notified of this safety defect and are being instructed to bring their motorcycles to their dealer for service. A copy of the owner letter is enclosed for your information. Each letter to the registered owner will include Dealer Service Card 036 which must be completed and signed by both the customer and the dealer, to verify that service has been satisfactorily completed.

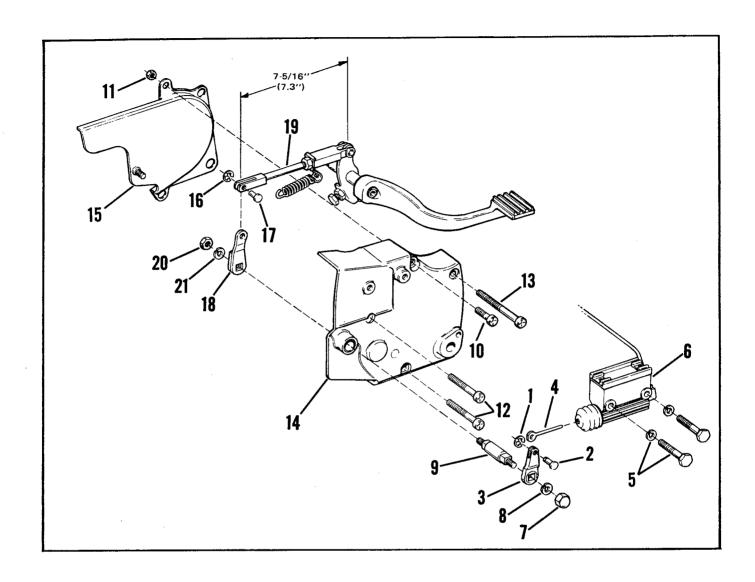
A list of registered owners and a list of unregistered vehicles involved in this campaign, which have been delivered to your dealership are included with this bulletin. It is your responsibility to perform the required service on all affected vehicles, including those which may not show on the enclosed lists. We are enclosing sufficient blank Dealer Service Cards for those vehicles.

IMPORTANT: Because only registered owners, as shown on the enclosed list, will receive notification from us, we request that you contact any owners of vehicles listed as <u>unregistered</u>, and arrange to have them come in for service.

The parts that are removed from corrected motorcycles, must be returned to Harley-Davidson Motor Co. When servicing a motorcycle, make sure to fill out the Dealer Service Card completely including code 036, vehicle identification number (VIN), your dealer account number and mark "Replace" box only for each motorcycle serviced. Upon receipt of properly completed Dealer Service Card, with removed parts, your account will be credited .6 hours for each motorcycle serviced.

INSTRUCTIONS FOR REPLACING PARTS

- 1. Disconnect master cylinder plunger rod (4) by removing retainer (1) from clevis pin (2) and removing pin from outer pivot arm (3).
- 2. Remove two master cylinder mounting bolts and lockwashers (5). Position master cylinder (6) out of way (do not disconnect hydraulic brake line).
- 3. Remove outer arm (3) from shaft (9) by removing an acorn nut (7), lock washer (8).
- 4. Loosen sprocket cover (14) by removing mounting screw (10) and nut (11), two screws (12) and long screw (13).



REAR BRAKE LINKAGE

1.	Retainer	11.	Nut
2.	Clevis Pin	12.	Screw (2)
3.	Pivot arm, outer	13.	Screw, long
4.	Plunger rod	14.	Sprocket cover, outer
5.	Bolt and lockwasher (2)	15.	Sprocket cover, inner
6.	Master cylinder	16.	Retainer
7.	Acorn nut *	17.	Clevis pin
8.	Lockwasher *	18.	Pivot arm, inner *
9.	Pivot shaft *	19.	Brake rod
10.	Screw	20.	Nut, inner
		21.	Lockwasher

^{*} Repair Kit Parts

- 5. Remove right footrest.
- 6. Loosen right rear muffler support.
- 7. Carefully pry exhaust system out to clear for sprocket cover removal. Remove outer sprocket cover (14).
- 8. Remove retainer (16) from brake rod inner clevis pin (17) and remove clevis pin from inner lever arm (18) to disconnect brake rod (19).
- 9. Remove shaft with inner lever from cover.
- 10. Disassemble inner pivot arm (18) from shaft (9) by removing inner nut (20) and lock washer (21).
- 11. Reassemble in reverse order using new inner pivot arm (18), pivot shaft (9) 1/2" hex acorn nut (7) and 5/16 in. lock washer (8).
 - NOTE: The new pivot shaft will fit one way only. The shaft square end with rounded corners fits new inner pivot arm only.
- 12. After installing inner lever and shaft on brake rod clevis and before installing covers, check brake rod clevis center distance (7-5/16 in. dimension) shown in illustration. Adjust clevis on rod threads as necessary to obtain correct center distance.
- 13. After completely assembled, check for proper master cylinder plunger rod free play and adjust brake pedal stop bolt if necessary, to obtain 1/16 in. free play before plunger contacts piston in master cylinder. See Owner's Manual for procedure.
- 14. Check brake for correct operation.

HARLEY-DAVIDSON MOTOR CO., INC.