BULLETIN

No. 656

SAFETY DEFECT CODE 023

February 11, 1974

FRAME REINFORCEMENT AND TAIL LAMP WIRING / XL, XLCH

All 1973 XL and XLCH motorcycle frames will require corrective modification as specified in this bulletin to prevent possible breakage at the welded junction of the frame tubes and the rear fender and shock absorber support bracket. Some cases of breakage have been reported from the field and is caused by heavy stress concentration in this location.

Frame breakage may occur after varying periods of motorcycle operation and could result in poor handling, possibly causing loss of driver control of the vehicle.

In compliance with the National Motor Vehicle Safety Act, this has been declared a safety defect and all affected vehicles will require welded reinforcing braces installed according to the instructions given in this bulletin.

In conjunction with this recall program, a further improvement in tail lamp wiring is to be made to correct the short circuit problem originally communicated in Service Bulletin No. 650 (Safety Defect Code 020), dated May 15, 1973. The rear fender support attaching bolts will be relocated to raise the fender rear end and provide more clearance between the tire and tail light wires to prevent possible short circuit caused by the tire rubbing through wire insulation under abnormal rear end loading of the motorcycle.

Because the same range of vehicle V.I.N.'s are involved, both frame correction and wiring correction will be handled together.

Affected vehicles are as follows:

XL or XLCH from V.I.N. 3A or 4A 40000 to 50772 H3 XL or XLCH from V.I.N. 3A or 4A 60000 to 71568 H3

NOTE: A group of 28 motorcycles with reinforced frames V.I.N. 3A 71058 to 71086 H3 supplied to the U.S. Army will require fender relocation only.

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 make directed changes on all affected vehicles, and to contact owners of affected vehicles which you have sold but which are not shown on enclosed lists. We are notifying owners of affected motorcycles in your dealership to contact you for this service.

We are enclosing a copy of the customer letter and referral card for your information. Each letter to the owner will include Special Service Card 023 which must be completed and signed by both the customer and you, the dealer, to verify that service has been satisfactorily completed. A sample service card and extra cards for undelivered vehicles are enclosed.

To take care of your immediate requirements we are shipping four Frame Brace and Fender Support Kits, part No. 47420-74. You should determine additional requirements and order them on the special parts order form enclosed. The dealer net price of these kits will be charged in the regular way.

Immediately after service is performed, return completed Service Cards 023. You will receive credit for the dealer net price of \$2.00 for parts and an additional \$10.50 for labor for each properly completed Service Card returned to the factory.

INSTRUCTIONS FOR INSTALLATION OF PARTS

Kit, part No. 47420-74, includes the following parts:

No.	Part No.	Qty.	Item
1 2 3 4 5 6 7 8	47087-74 59660-73 59798-52 6702 10013 10014 10006 68204-74	(2) (2) (1) (1) (2) (1) (1) (1)	Brace, for welding to each side of frame Plate, for relocating fender support bolt Fender Pad Washer, to space out oil tank (if required) Oil hose clamp (if required) Oil hose clamp (if required) Strap fastener (if required) Tail lamp wire (green)
9	68203-74	(1)	Stop lamp wire (red)
10	68203-74 68202-74	(1) (1)	Stop lamp wire (red) Rubber boot, for lamp socket
11	72039-71	(3)	Pin Terminal, for tail and stop lamp wires

INSTRUCTIONS

Kit contains braces and other parts required for reinforcing frame, raising rear end of fender and repairing tail lamp wiring. Note: Paint braces gloss black (except ends) and allow to dry before welding to motorcycle frame.

- 1. Insert cardboard underneath rear end of seat to protect painted surface of fender, unclip and rotate front end of seat to the side 90° .
- 2. Disconnect and remove battery from motorcycle.
- 3. Remove gas line from carburetor and remove gas tank from motorcycle.
- 4. Remove regulator and relay -- wires need not be disconnected.
- 5. Remove fender brace rear bolts and chisel weld nuts from inside of braces (See Figure 2 for location).

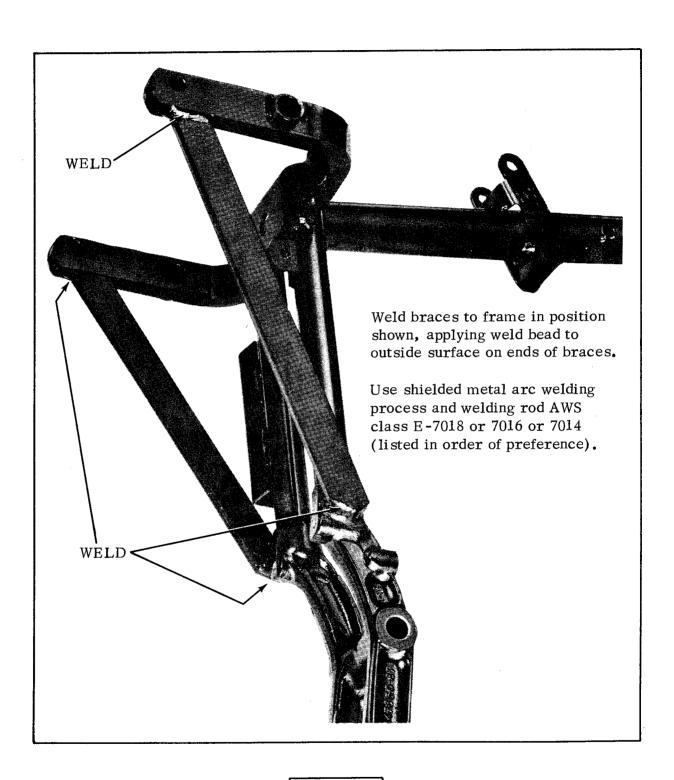
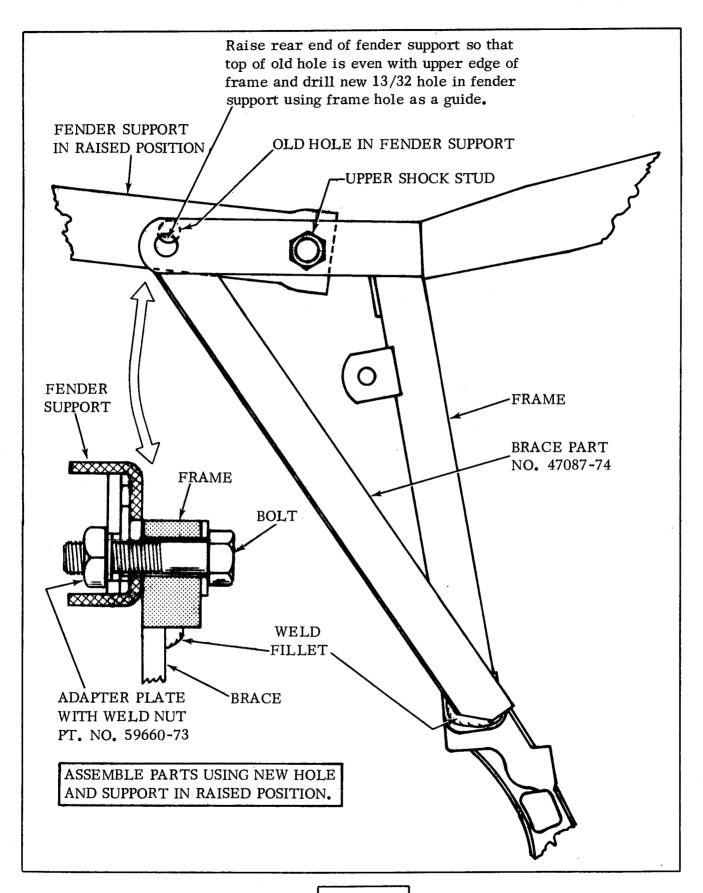


FIGURE 1



6. The mounting hole in the fender support is to be drilled 1/4 inch lower. Lowering the position of this hole will have the effect of raising the rear end of the fender 1-1/2 inches, providing more clearance between the rear wheel and fender.

To drill the new hole in the fender support, rotate fender supports upward until tip of existing hole lines up with top of frame (see Figure 2). Drill out brace with 13/32 drill on each side being careful not to damage wiring on left side.

- 7. While fender is in raised position and before reinstalling bolts, apply adhesive to fender pad from kit and install over old pad.
- 8. Lower fender and install fender adapter plates on inside of braces as shown in Figure 2. Note that weld nut is off center and should be located in lowest position to line up with bolts. Reinstall bolts with washers in new location.

Note: Check to see that there is at least 1/4 inch tire clearance at front end of fender.

9. Inspect frame at junction of tubes and frame bracket for cracks or breaks. If frame is cracked or broken, remove oil tank and weld frame as necessary to repair.

Note: Tip motorcycle on side to perform welding.

Arc weld braces (item 1) in place as shown in Figure 1 using shielded metal arc welding process. The areas to be welded MUST be free of paint, oil and dirt. Only the following 1/8 or 3/32 AWS electrodes, listed in order of preference, should be used.

AWS Class E-7018, E-7016 or E-7014

Braces should be held tightly in place and parts at room temperature for welding.

With each brace held in position, tack weld at upper end first--then weld lower end completely. Be sure to protect fender paint while welding.

Note: Brace upper end should be positioned with inside surface flush with inside surface of frame bracket as shown in Figure 2 so that weld will form a fillet with good penetration.

Power source can be DCRP (Direct Current Reverse Polarity - electrode positive) or AC (Alternating Current); DCRP is preferred. In general, good welding practice should be followed.

After welding braces in place, remove all traces of welding slag and spatter. Wire brush braces, welds and surrounding areas, prime the area and paint it gloss black. Use a brush to apply paint.

10. Inspect tail lamp wires for insulation damage near lamp socket.

If damaged, remove wires and install new wires with boot and terminals from kit as follows:

Remove tail lamp lens and bulb. Cut off wires close to socket underneath fender and remove short pieces from bulb end of socket.

Disconnect connector block at front end of fender. Cut off green and red wires leading to tail lamp about 2 inches from connector. Remove old red and green wires with plastic conduit from 4 retaining clips underneath fender.

Install new red (right side) and green (left side) wires from bulb side of socket, thread through new boot and through old plastic conduit.

Install wires with conduit in 4 clips underneath fender, through hole in fender and up to connector block.

Assemble tail lamp socket boot to socket and place conduit under retaining clip and tighten clip nut.

Remove remaining ends of red and green wires from connector block by inserting a miniature screwdriver into socket and depressing pin terminal locking tabs.

Leave short red jumper wire pin terminal in socket but cut off other end close to tail lamp pin terminal.

Install a pin terminal from kit on ends of red and green wires from tail lamp, joining the short red jumper wire and the red tail lamp wire into the same pin terminal. Solder pin terminals securely to wires, install in proper holes in socket, and reconnect sockets.

- 11. Reinstall seat.
- 12. Reinstall regulator and relay.
- 13. Install gas tank and gas line.
- 14. Install battery and reconnect battery wires.
- 15. After assembly, check motorcycle electrical system for correct operation.

AMF HARLEY-DAVIDSON MOTOR CO., INC.