SERVICE BULLETIN
M-1086 Safety Recall Code 099 August 18, 1999

1998 MODEL YEAR
SIDE CAR AXLE

General
As recently advised in ML-367, Harley-Davidson has determined that the affected sidecars may have been manufactured with an axle that could break. This could cause loss of control of the motorcycle and result in an accident.

As a precautionary measure, Harley-Davidson has elected to initiate a voluntary recall campaign in the interest of motor vehicle safety and customer satisfaction. This voluntary recall applies to all 1998 model year sidecars produced between April 2, 1997 through July 8, 1998.

This condition will be remedied by inspecting, and if required, replacing the axle on all potentially affected vehicles.

Dealer Action
Affected Vehicles
Harley-Davidson has attached a complete list of all sidecars shipped to your dealership involved in this recall. To ensure the safety of all affected riders, it is your responsibility to perform the required service on all affected sidecars, even if it was not purchased from your dealership. You also are required to perform the recall service on all affected vehicles in your dealership inventory, prior to selling or leasing those vehicles. The full 17 digit Vehicle Identification Number (V.I.N.) is stamped on a metal plate fastened to the sidecar left frame tube approximately midway between lower front and rear mounts.

To identify those sidecars requiring retrofit, reference Axle Inspection and Identification under Service Procedures on Page 2 of this Service Bulletin.

If you are not sure that a safety recall has been completed on a particular sidecar, contact the Harley-Davidson Recall Information Line at 1-800-448-1708 for a computer check of our recall records. Recall information is also available on TALON and hdnet.com.

IMPORTANT NOTE:
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).

An initial shipment of Safety Recall Code 099 Kits (P/N 93942) will contain approximately 80% of your total estimated kit requirements and will begin the week of August 30, 1999. All kits will be shipped no charge, transportation paid.

To order the remainder of kits that may be needed, please fill out the attached order form and send/fax to Warranty Department at (414)-343-8346 (fax). Harley-Davidson reserves the right to conduct wave shipments in lieu of processing orders and/or adjusting order quantities, depending on the availability of parts.

NOTE:
No orders for additional kits will be processed until the initial shipment is completed.

Side Car Axle Kit
See Table 1. The Safety Recall Code 099 Kit (P/N 93942) contains the following items:

<table>
<thead>
<tr>
<th>QTY</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>1</td>
<td>Spacer, wheel</td>
</tr>
<tr>
<td>1</td>
<td>Nut, hex</td>
</tr>
<tr>
<td>1</td>
<td>Axle</td>
</tr>
<tr>
<td>2</td>
<td>Ty-wraps</td>
</tr>
</tbody>
</table>

Table 1. Part No. 93942

Table 2. 1999 Harley-Davidson® Inc.
Service Procedures

**WARNING**

To prevent accidental start-up of motorcycle, disconnect the battery cables (negative cable (-) first) before performing any procedures. If the positive cable (+) should contact ground with the negative (-) cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.

### Axle Inspection and Identification

1. Inspect the axle and axle nut on your side car.
   - See Figure 1. If you have an axle with a painted spacer and hex nut, proceed to the Axle Replacement instructions in this Service Bulletin.
   - See Figure 2. and Figure 3. If you have a stainless axle and hex nut, you do not need to replace the axle or hex nut. Proceed to the Credit Procedure instructions in this Service Bulletin.

### Axle Removal

1. If you have a painted spacer and hex nut, as identified in Figure 1. (Axle Inspection and Identification), raise and block side car chassis high enough to allow wheel removal.
2. Remove axle cap.
3. Remove roll pin from axle nut.
4. Loosen the axle nut 2-3 turns.
6. Remove fender from chassis by removing fasteners from the outer fender brace and inner fender brace.
7. Gently place fender on a protective cover to prevent scratching paint.
8. Remove two caliper mounting bolts from brake caliper and gently move brake caliper down so wheel assembly with brake disc can be removed.
9. Secure the brake caliper off to the side to prevent damage to brake line.
10. Remove wheel assembly and brake disc.
11. Remove spacer from wheel seal on brake disc side.
12. With a soft hammer, strike axle nut to loosen tapered end of axle.
13. Remove axle nut, lockwasher, and slide axle from frame.
14. Destroy and discard the original axle.

### Axle Installation

15. See Figure 3. Coat new axle with a thin layer of Loctite® ANTI-SEIZE LUBRICANT.
16. Wipe both sides of brake disc with a clean shop towel.
17. Gently glide wheel assembly and brake disc on axle and check that axle spacer enters oil seal.
18. Align brake caliper mounting holes with holes in frame.
19. Install caliper mounting bolts and tighten to 15-25 ft-lbs (20-27 Nm) torque.
20. Check that brake caliper banjo bolt torque is 17-22 ft-lbs (23-30 Nm).
21. Gently position outer fender braces on axle and install washer and steel nut finger tight.
22. Tighten inner fender brace 3/8 in. bolt to 24 ft-lbs (32.5 Nm) torque and 5/8 in. bolt to 85 ft-lbs (115.2 Nm) torque.
23. Tighten axle nut to 38 ft-lbs (51.5 Nm) torque.
24. Replace roll pin in axle nut.
25. Install axle cap.
26. Install ty-wraps to hold electrical wiring.
27. Rotate wheel and check for binding or excessive end play. Refer to Service Manual for end play specifications.
28. Pump rear brake pedal to check brake operation.
29. Remove block from underneath side car.
30. Reconnect battery.
   - Connect positive (+) cable, first.

**WARNING**

When connecting battery cables, DO NOT allow the positive (+) cable to contact ground with the negative (-) cable installed, the resulting sparks may cause a battery explosion, which could result in death or serious injury.

31. Road test vehicle.

**WARNING**

After completing repairs or bleeding the system, always test motorcycle brakes at low speed. If brakes are not operating properly or braking efficiency is poor, testing at high speeds could result in loss of control of vehicle, death or serious injury.

**Credit Procedures**

**Axle Inspection Only**

For each vehicle inspected that does not require a new axle replacement, place an "I" in the letter box on the Dealer Service Card. Send the properly completed dealer service cards to Harley-Davidson Motor Company (P.O. Box 653, Milwaukee, WI 53201). Upon receipt and processing of your properly completed dealer service cards, you will be credited for 0.2 hours for performing the inspection. The time includes 0.1 hour administrative time.

**Axle Replacement**

For each vehicle that required a new axle to be installed, place a “C” in the letter box on the Dealer Service Card. Destroy and discard the original axle. Send the properly completed dealer service cards to Harley-Davidson Motor Company (P.O. Box 653, Milwaukee, WI 53201). Upon receipt and processing of your properly completed dealer service cards, you will be credited for 0.9 hours for performing the inspection. The time includes 0.1 hour administrative time. No credit will be issued for the kits as they were sent no charge, transportation paid.
Code 099: SIDECAR AXLE KIT

**NOTE:** All orders subject to approval. You may not receive the total quantity of kits ordered, due to parts availability. If this happens, the remainder of the quantity ordered will go on future order status until parts become available.

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<table>
<thead>
<tr>
<th>QUANTITY</th>
<th>PART NUMBER</th>
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<tbody>
<tr>
<td></td>
<td>93942</td>
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**WARRANTY CODE 099**