M1482: RECALL 0173 - SECONDARY ACTUATOR ASSEMBLY REPLACEMENT

Reason for Revision

Refer to Table 1.

Table 1. Document History

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018-10-26</td>
<td>Initial release</td>
</tr>
<tr>
<td>2018-10-31</td>
<td>Updated Section Purpose for Service Bulletin, Section Overview: Table 2, Section kit ORDERING Information: Section U.S. and Canada Markets, Section Disassembly, Section Clean and Inspect, Added Section Procedure Video</td>
</tr>
<tr>
<td>2019-02-22</td>
<td>Updated Section Purpose for Service Bulletin, Section Overview, Section Kit Ordering Information, Section Required Dealer Action, Section Dealer Inventory Instructions: Table 5 &amp; Table 6, Section Credit Procedure: Table 9, Added Section Early Recall Kits</td>
</tr>
</tbody>
</table>

Purpose for Service Bulletin

Harley-Davidson has learned that the hydraulic clutch system with secondary clutch actuator (P/N 37200131, 37200131A) may, on certain motorcycles (see Table 3), exhibit an internal leak of fluid past the secondary clutch actuator piston/seal. If this leak continues, the clutch master cylinder reservoir could lose enough fluid to expose the hydraulic clutch circuit to air, which may result in the inability to generate enough lift to disengage the clutch. This could lead to a loss of control of the vehicle when started in gear, first shifted into gear, or coming to a stop, increasing the risk of a crash.

To Align with a continuous improvement change being made in current 2019 production, Harley-Davidson is revising this recall kit. The new kit is Part No. 91500093A.

No action required on previous repairs made with the earlier kit (Part No. 91500093).

Overview

1. This procedure entails removing the secondary clutch actuator assembly and replacing the actuator piston assembly. During this procedure it will be necessary to drain and bleed the clutch hydraulic system. Dealers will need to add a bottle of DOT 4 to complete service bulletin. Refer to Table 2.

Consumable: Harley-Davidson Platinum Label DOT 4 Brake Fluid (418007xx)

2. Claims processing replacement kit part number is now 91500093A. Use the following Part No. on the dates the work was performed on vehicle. Refer to Table 9.

   a. Prior to February 28, 2019: 91500093
   b. Between March 1, 2019 and March 15, 2019: 91500093 or 91500093A
   c. March 16, 2019 and after: 91500093A

Table 2. DOT 4 Brake Fluid

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT 4 Brake Fluid</td>
<td>41800770</td>
<td>U.S., Mexico, South America</td>
</tr>
<tr>
<td></td>
<td>91500091</td>
<td>Canada</td>
</tr>
<tr>
<td></td>
<td>41800772</td>
<td>Asia Pacific</td>
</tr>
<tr>
<td></td>
<td>41800773</td>
<td>EMEA</td>
</tr>
<tr>
<td></td>
<td>41800774</td>
<td>Russia</td>
</tr>
</tbody>
</table>

Motorcycles Affected

Refer to Table 3.

NOTE
In the interest of preserving customer safety and satisfaction, always check for outstanding recalls whenever any motorcycle is brought into your dealership for either maintenance or service.

<table>
<thead>
<tr>
<th>ROUTING</th>
<th>SERVICE MANAGER</th>
<th>SALES MANAGER</th>
<th>PARTS MANAGER</th>
<th>WARRANTY PROCESS MANAGER</th>
<th>LEAD TECHNICIAN</th>
<th>TECHNICIAN NO. 1</th>
<th>TECHNICIAN NO. 2</th>
<th>TECHNICIAN NO. 3</th>
<th>RETURN THIS TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>INITIAL HERE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3. Motorcycles Affected

<table>
<thead>
<tr>
<th>Year</th>
<th>Platform</th>
<th>Models</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>Softail</td>
<td>FLSS, FLSTFBS, FXSE, FLHP, FLHR, FLHRC, FLHFK, FLHTK, FLHTK SHRINE, FLHTP, FLHX, FLHXS, FLTRU, FLTRX, FLTRXS, FLRT, FLHTCUTG, FLHTKSE, FLHXSE</td>
</tr>
<tr>
<td>2018</td>
<td>Touring, CVO Touring, Touring Police, Trike</td>
<td>FLHP, FLHR, FLHRC, FLHFK, FLHTK, FLHTK ANV, FLHTK SHRINE, FLHTK ANV, FLHX, FLHX ANV, FLHX ANX, FLTRU, FLTRX, FLTRXS, FLRT, FLHTCUTG, FLHTCUTG ANV, FLHTKSE, FLHTKSE ANV, FLHXSE, FLHXSE</td>
</tr>
</tbody>
</table>

Markets Affected

All markets are affected.

Kit Part Number

Refer to Table 4.

Table 4. Kit Part Number

<table>
<thead>
<tr>
<th>Early Kit Part No.</th>
<th>Item Description</th>
<th>New Kit Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>91500093</td>
<td>Secondary clutch actuator piston assembly kit</td>
<td>91500093A</td>
</tr>
</tbody>
</table>

Kit Ordering Information

Early Kits: Kits will start shipping the week of November 5, 2018 and ending February 22, 2019.

New Kits: Kits will start shipping the week of February 25, 2019.

U.S. and Canada Markets

Wave shipments of kits will be done automatically by Harley-Davidson.

An updated service bulletin will be released once dealer ordering may begin.

Asia Pacific Market

Contact the Service and Customization Consultant.

Europe Market

Contact the Service and Customization Consultant.

India Market

Contact the Service and Customization Consultant.

Mexico Market

Contact the local service area representative at Harley-Davidson Mexico.

Procedure Video

A video of the procedure has been posted on SIP (Service information portal). This video covers the procedures that are not covered in the service manuals.

SIP Video Link: Video: M1482 - Recall 0173

Required Dealer Action

1. Verify that vehicle is part of recall 0173.

Prepare

NOTE

• To avoid cross contamination, this procedure must be performed in a clean work area. Continuously clean the work area of any brake fluid and/or transmission fluid. Clean all tools and anything that comes in contact with parts or gloved hands.

• Touring: When referred to “See the service manual”, use the 2019 Touring service manual.

• Softail: When referred to “See the service manual”, use the 2017 Softail service manual.

1. Touring: Remove main fuse. See the service manual: Electrical > Power Disconnect > Main Fuse.

2. Softail: Remove main fuse.
   a. Models with security: Disable security system.
   b. Verify that fob is present.
   c. Turn OFF/RUN switch to RUN.
   d. Turn ignition switch ON.
   e. Remove seat. See the service manual: Chassis > Seat (select model).
   f. Remove main fuse. See the service manual: Electrical > Fuse > Removal.
   g. Turn ignition switch OFF.

Removal

1. Drain clutch control system.
   a. Touring: See the service manual: Chassis > Bleed Clutch Control System > Drain and Fill > Drain.
   b. Softail: See the service manual: Chassis > Bleeding Clutch Fluid Line: Hydraulic Clutch > Drain and Fill > Drain.

   NOTE

   • A small amount of transmission lubricant may drain when secondary clutch actuator is removed.
   • Do not disconnect clutch fluid line (4).
2. Refer to Figure 1. Remove secondary clutch actuator (1) from inner side cover mounting bore (2).
   a. Remove screws (5) and secondary clutch actuator.

3. Refer to Figure 2. Place clean lint free shop towel over transmission inner side cover at secondary actuator bore.

1. Secondary clutch actuator
2. Mounting bore, inner side cover
3. Bleeder screw and cap
4. Clutch fluid line
5. Screw (3)

Figure 1. Secondary Clutch Actuator

1. Clean shop towel
2. Secondary clutch actuator assembly

Figure 2. Towel In-Place on Transmission

Disassembly

NOTE
To avoid scratching the transmission seal seat (2), do not use any tools to remove the transmission seal boot (4) from actuator housing (1).

1. Refer to Figure 3. Remove the actuator piston assembly (3).
   a. Refer to Figure 4. Pinch the actuator transmission seal boot (4).
   b. Refer to Figure 3. Remove the transmission seal boot from the transmission seal seat (2).
   c. Remove piston assembly from actuator housing (1).

2. Discard old actuator piston assembly.

1. Actuator housing
2. Transmission seal seat
3. Actuator piston assembly
4. Boot seal, transmission
5. Piston seal
6. Actuator housing bore
7. Bleeder screw

Figure 3. Secondary Actuator Assembly

Figure 4. Pinching Actuator Transmission Seal Boot

Clean and Inspect

1. Put supplied hand gloves on (may contain latex).
   a. Verify that hands are free of transmission fluid, dirt or debris before putting on gloves.
NOTE
Only use the provided wipe to clean the actuator bore and transmission seal seat area (2, 6).

2. Refer to Figure 3. Clean actuator.
   a. Use the provided wipe, thoroughly clean the actuator bore and transmission seal seat area (2, 6).

3. Inspect actuator bore for damage.
   a. If damage is found, call Technical Service.

Assembly
1. Locate new actuator piston assembly.
   
   NOTE
   Do not touch pre-lubed piston seal (5) when removing from packaging.

2. Refer to Figure 3. Remove new actuator piston assembly (3) from packaging.

3. Inspect new actuator piston assembly for dirt or damage.
   a. If dirty or damaged, do not use.

4. Install new actuator piston assembly.
   a. Align new actuator piston assembly squarely to the actuator housing bore (6).
   b. Refer to Figure 5. Push down on center of piston until fully seated in bore.
   c. Refer to Figure 3. Install the transmission boot seal (4) around the transmission seal seat (2).

Figure 5. Installing Actuator Piston Assembly

Install
1. Remove shop towel over transmission inner side cover at secondary actuator bore.

NOTE
Do not actuate clutch while secondary actuator assembly is removed from inner side cover after installing the new actuator piston assembly.

2. Refer to Figure 1. Install secondary clutch actuator (1).
   a. Lubricate mounting bore (2) in the inner side cover with a film of transmission fluid.
   b. Install secondary clutch actuator (1) and screws (5).
   c. Refer to Figure 6. Draw screws down evenly to prevent binding and possible breakage of mounting ears. Tighten in sequence as shown.
   Torque: 8–10 ft-lbs (11.2–13.6 N·m)

Figure 6. Secondary Clutch Actuator Torque Sequence

NOTE
Use a mechanical spring loaded center punch, if not available use a standard center punch.

3. Kit 91500093A: Refer to Figure 7. Install identifying mark in secondary clutch actuator.
   a. Using a center punch, lightly punch a identifying mark as shown.

Figure 7. Identifying Mark Location
4. Fill and bleed clutch control system.
   a. **Touring**: See the service manual: *Chassis > Bleed Clutch Control System > Drain and Fill > Fill*.
   b. **Softail**: See the service manual: *Chassis > Bleeding Clutch Fluid Line: Hydraulic Clutch > Drain and Fill > Fill*.

5. After bleeding, remove clutch cover and measure release plate movement.

**WARNING**

Insufficient clutch-release plate movement can lead to difficulty or inability to shift, causing loss of control, which could result in death or serious injury. (00345a)

6. Attach a dial indicator to measure pushrod axial movement.

7. Actuate clutch lever to measure axial movement of pushrod and clutch-release plate assembly.
   a. Minimum release plate movement is 0.086 in (2.18 mm)
   b. If release plate movement is equal to or greater than minimum value, go to Section Clutch Lever Hold-In Test.
   c. If release plate movement is less than minimum value, repeat bleed procedure.

**Clutch Lever Hold-In Test**

1. Pull in clutch lever to handlebar grip and hold for 1 min.

2. With clutch lever pulled in, verify the dial indicator reading does not change.

3. If reading holds, go to Section Complete.

4. If reading does not hold:
   a. Repeat bleed procedure, and test again.
   b. Refer to Figure 3. If hold-in test continues to fail, remove actuator piston assembly (3) and inspect piston seal (5) and actuator housing bore (6). Refer to Section Clean and Inspect.
   c. Call Technical Service if damage is found.

**Complete**

1. Refer to Figure 8. Install outer transmission side cover.
   a. Install outer cover (1).
   b. Install screws (4). Tighten. Torque: 99–120 in-lbs (11.2–13.6 N·m)

2. Secure exhaust system.
   a. **Touring**: See the service manual: *Fuel and Exhaust > Exhaust System > Install*.
   b. **Softail**: See the service manual: *Fuel System > Exhaust System > System: (select model) > Installation*.

3. Install clutch cover.
   a. Thoroughly clean oil from clutch cover and mating surface on primary cover.
   b. Install clutch cover, new gasket and screws.
   c. Refer to Figure 9. Tighten screws in sequence shown. Torque: 84–108 in-lbs (9.5–12.2 N·m)
4. Install main fuse.
   a. Touring: See the service manual: Electrical > Power Disconnect > Main Fuse.
   b. Softail: See the service manual: Electrical > Fuse > Installation.

5. Perform a road test to verify clutch operation.

Dealer Inventory Instructions

Old Secondary Actuator Piston Assembly Stock

If dealers have old stock. Refer to Table 5.

File a DFS (Defective stock) claim and replace with update part. Refer to Table 6.

<table>
<thead>
<tr>
<th>Table 5. Part Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Old Part No.</strong></td>
</tr>
<tr>
<td>37200131</td>
</tr>
<tr>
<td>37200131A</td>
</tr>
<tr>
<td>37200131B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 6. Kits in Dealer Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ITEM</strong></td>
</tr>
<tr>
<td>Claim Type</td>
</tr>
<tr>
<td>Problem Part Number</td>
</tr>
<tr>
<td>Customer Concern Code</td>
</tr>
<tr>
<td>Condition Code</td>
</tr>
</tbody>
</table>

Early Recall Kits

If dealers have early recall kits. Refer to Table 4.

File a claim and replace with update kit.

Submit a warranty claim per Table 7 or Table 8 for all existing recall kits in dealer stock.

NOTE

**These kits can be used until March 15, 2019**

U.S Dealers only:

<table>
<thead>
<tr>
<th>Table 7. Kits in Dealer Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ITEM</strong></td>
</tr>
<tr>
<td>Claim Type</td>
</tr>
<tr>
<td>Problem Part Number</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
<tr>
<td>Customer Concern Code</td>
</tr>
<tr>
<td>Condition Code</td>
</tr>
</tbody>
</table>

SAP/GDP System Users:

<table>
<thead>
<tr>
<th>Table 8. Kits in Dealer Stock</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ITEM</strong></td>
</tr>
<tr>
<td>Claim Type</td>
</tr>
<tr>
<td>Problem Part Number</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
<tr>
<td>Customer Concern Code</td>
</tr>
<tr>
<td>Condition Code</td>
</tr>
</tbody>
</table>

Credit Procedure

Upon submission of the properly completed claim, dealers will be credited for 1.1 h of labor time for performing the procedure, plus appropriate administrative time. Credit will also be issued for the brake fluid and the recall kit (U.S. only). Submit campaign events on the dealers own warranty claim. Do not mix them with other warranty events.

NOTE

Enter bulletin number into comment section of claim.

Credit Procedure: Talon/h-dnet.com warranty claim system users

Submit a claim for each motorcycle serviced in this bulletin for which VIN (Vehicle identification number) involvement was verified on H-Dnet.com. Refer to Table 9.

<table>
<thead>
<tr>
<th>Table 9.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ITEM</strong></td>
</tr>
<tr>
<td>Claim Type</td>
</tr>
<tr>
<td>Problem Part Number</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
<tr>
<td>Primary Labor Code</td>
</tr>
<tr>
<td>Time</td>
</tr>
<tr>
<td>Customer Concern Code</td>
</tr>
<tr>
<td>Condition Code</td>
</tr>
<tr>
<td>Replacement Part No.</td>
</tr>
<tr>
<td>Quantity</td>
</tr>
</tbody>
</table>

(1) Download may be required.
(2) See Section Overview: Step 2 for correct Part No.

Credit Procedure: SAP system users

Submit a claim for each motorcycle serviced in this bulletin for which VIN involvement was verified on H-Dnet.com. Refer to Table 10.

<table>
<thead>
<tr>
<th>Table 10.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ITEM</strong></td>
</tr>
<tr>
<td>Claim Type</td>
</tr>
<tr>
<td>Fix ID-Found in Recall Number</td>
</tr>
<tr>
<td>Problem Part Number</td>
</tr>
<tr>
<td>Customer Concern Code</td>
</tr>
<tr>
<td>Condition Code</td>
</tr>
</tbody>
</table>

Credit Procedure: All Other System Users

Claim Date
Campaign Number (0173) - 1.1 h
FIX ID - (C)
Full Seventeen Character VIN

Return Parts

Hold all claimed parts for 60 d from date of credit issued for possible field inspection and/or request to return to factory. After 60 d, destroy and discard the parts.
### Table 11. Service Kit - 0173

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>QTY</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Clutch Actuator Piston Assembly</td>
<td>1</td>
<td>Not Sold Separately</td>
</tr>
<tr>
<td>2</td>
<td>Clutch Cover Gasket</td>
<td>1</td>
<td>Not Sold Separately</td>
</tr>
<tr>
<td>3</td>
<td>Cleaner Wipe</td>
<td>1</td>
<td>Not Sold Separately</td>
</tr>
<tr>
<td>4</td>
<td>Hand Gloves, Vinyl (may contain latex)</td>
<td>2</td>
<td>Not Sold Separately</td>
</tr>
</tbody>
</table>