# SERVICE BULLETIN



M1482 2018-10-27

## M1482: RECALL 0173 - SECONDARY ACTUATOR ASSEMBLY REPLACEMENT

## **Purpose for Service Bulletin**

Harley-Davidson has learned that the hydraulic clutch system with secondary clutch actuator (P/N 37200131, 37200131A) on certain motorcycles listed in Table 2 may exhibit an internal leak of fluid past the secondary clutch actuator piston/seal. If this leak continues for an extended period, 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. If this condition remains undetected, it could lead to a loss of control of the vehicle when started in gear, first shifted into gear, or coming to a stop.

## Overview

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 1.

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

Table 1. DOT 4 Brake Fluid

Description	Part Number Regions		
	41800770		
	U.S., Mexico, South America		
	41800771		
	Canada		
DOT 4 Brake Fluid	41800772		
DOT 4 Brake Fluid	Asia Pacific		
	41800773		
	EMEA		
	41800774		
	Russia		

## **Motorcycles Affected**

Refer to Table 2.

**Table 2. Motorcycles Affected** 

Year	Platform	Models		
	Softail	FLSS, FLSTFBS, FXSE		
2017	Touring, CVO Touring, Touring Police, Trike	FLHP, FLHR, FLHRC, FLHRXS, FLHTCU, FLHTK, FLHTKL, FLHTK SHRINE, FLHTP, FLHX, FLHXS, FLTRU, FLTRX, FLTRXS, FLRT, FLHTCUTG, FLHTKSE, FLHXSE		
2018	TELHP, FLHR FLHRXS, FLHT FLHTK ANV, FLH FLHTKL, FLH FLHX ANV, FLHX ANV, FLHXS ANX FLTRX, FLTR FLHTCUTG, F ANV FLHTKSE, FLH FLHXSE. F			

## **Markets Affected**

All markets are affected.

#### Kit Part Number

Refer to Table 3.

Table 3. Kit Part Number

Kit Part No.	Item Description
	Secondary clutch actuator piston assembly kit

## Kit Ordering Information

Kits will start shipping the week of November 5, 2018.

#### **U.S. Market**

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

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

#### **Canada Market**

Contact the In-Market Service and Customization Consultant.

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

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

#### 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.

#### **Japan Market**

Contact the local service department at HDJ.

## **Required Dealer Action**

1. Verify that vehicle is part of recall 0173.

### **Prepare**

#### NOTE

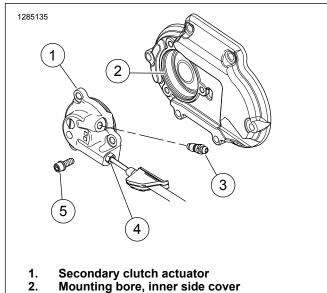
- To avoid cross contamination, this procedure must be preformed in a clean work area. Continuously clean the work area of any brake fluid and/or transmission fluid. Clean all tools and anything that comes in contact with parts or gloved
- **Touring:** When referred to "See the service manual", use the 2019 Touring service manual.
- Softail: When referred to "See the service manual", use the 2017 Softail service manual.
- Touring: Remove main fuse. See the service manual: Electrical > Power Disconnect > Main Fuse.
- Softail: Remove main fuse.
  - Models with security: Disable security system.
  - b. Verify that fob is present.
  - Turn OFF/RUN switch to RUN. C.
  - Turn ignition switch ON. d.
  - Remove seat. See the service manual: Chassis > e. Seat (select model).
  - Remove main fuse. See the service manual: f. Electrical > Fuse > Removal.
  - Turn ignition switch OFF. g.

#### 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).
- Refer to Figure 1. Remove secondary clutch actuator (1) from inner side cover mounting bore (2).
  - Remove screws (5) and secondary clutch actuator.
- Refer to Figure 2. Place clean lint free shop towel over transmission inner side cover at secondary actuator bore.



- 3. Bleeder screw and cap
- Clutch fluid line 4.
- 5. Screw (3)

Figure 1. Secondary Clutch Actuator

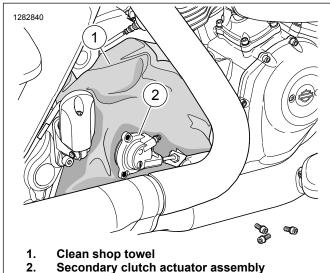


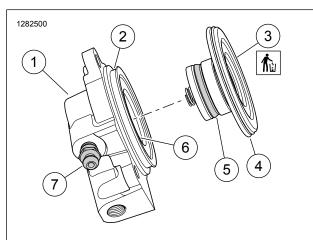
Figure 2. Towel In-Place on Transmission

## Disassembly

#### NOTE

**Do not** use any tools to remove the transmission seal boot (4) from actuator housing (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

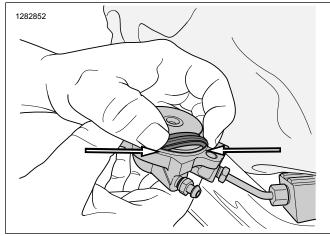


Figure 4. Pinching Actuator Transmisson Seal Boot

## **Clean and Inspect**

#### **A WARNING**

Use denatured alcohol to clean clutch system components. Do not use mineral-based solvents (such as gasoline or paint thinner), which will deteriorate rubber parts even after assembly. Deterioration of these components can cause clutch failure, which could result in death or serious injury. (00296a)

- 1. Put supplied hand gloves on (may contain latex).
  - Verify that hands are free of transmission fluid, dirt or debris before putting on gloves.
- 2. Refer to Figure 3. Clean actuator.
  - a. Use the provided wipe, thoroughly clean the actuator bore and transmission seal seat area (2, 6).
- 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.
- 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.
  - Refer to Figure 3. Install the transmission boot seal
     (4) around the transmission seal seat (2).

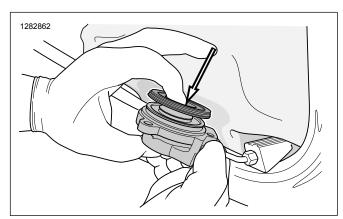


Figure 5. Installing Actuator Piston Assembly

#### Install

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

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#### NOTE

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

- Refer to Figure 1. Install secondary clutch actuator (1).
  - Lubricate mounting bore (2) in the inner side cover a. with a film of transmission fluid.
  - b. Install secondary clutch actuator (1) and screws (5).
  - Refer to Figure 6. Draw screws down evenly to C. prevent binding and possible breakage of mounting ears. Tighten in sequence.

Torque: 11.2-13.6 N·m (8-10 ft-lbs)

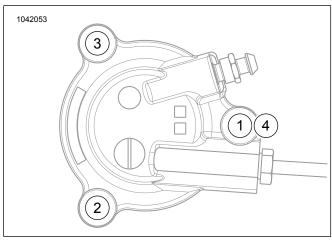


Figure 6. Secondary Clutch Actuator Torque Sequence

- 3. 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.
- After bleeding, remove clutch cover and measure release plate movement.

### **A 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)

- Attach a dial indicator to measure pushrod axial movement.
- Actuate clutch lever to measure axial movement of pushrod and clutch-release plate assembly.
  - а Minimum release plate movement is 2.18 mm
  - If release plate movement is equal to or greater than b. minimum value, go to Section Clutch Lever Hold-In Test.

If release plate movement is less than minimum C. value, repeat bleed procedure.

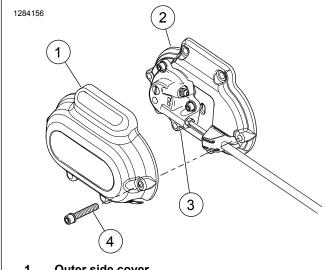
#### **Clutch Lever Hold-In Test**

- 1. Pull in clutch lever to handlebar grip and hold for 1 min.
- With clutch lever pulled in, verify the dial indicator reading does not change.
- If reading holds, go to Section Complete.
- If reading does not hold:
  - a. Repeat bleed procedure, and test again.
  - Refer to Figure 3. If hold-in test continues to fail, b. remove actuator piston assembly (3) and inspect piston seal (5) and actuator housing bore (6). Refer to Section Clean and Inspect.
  - Call Technical Service if damage is found.

## Complete

- 1. Refer to Figure 7. Install outer transmission side cover.
  - Install outer cover (1).
  - b. Install screws (4). Tighten.

Torque: 11.2–13.6 N·m (99–120 in-lbs)



- Outer side cover
- Inner side cover 2.
- Secondary clutch actuator 3.
- Outer side cover screw (2)

Figure 7. Transmission Outer Side Covers

- Secure exhaust system. 2.
  - 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.

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- Install clutch cover.
  - Thoroughly clean oil from clutch cover and mating surface on primary cover.
  - b. Install clutch cover, new gasket and screws.
  - c. Refer to Figure 8. Tighten screws in sequence shown. Torque: 9.5–12.2 N·m (84–108 in-lbs)

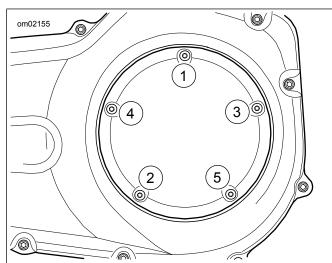


Figure 8. Clutch Cover Tightening Sequence

- 4. Install main fuse.
  - Touring: See the service manual: Electrical > Power Disconnect > Main Fuse.
  - Softail: See the service manual: Electrical > Fuse > Installation.
- 5. Preform a road test to verify clutch operation.

## **Dealer Inventory Instructions**

If dealers have old stock. Refer to Table 4.

File a DFS (Defective stock) claim and replace with update part. Refer to Table 5.

Table 4. Part Numbers

Old Part No.	·	Current Part No. To Use
	Secondary clutch actuator piston assembly	37200131B

Table 5. Kits in Dealer Stock

ITEM	DATA	
Claim Type	DFS/PAM Stock	
Problem Part Number	37200131 or	
Tobletiti ait Number	37200131A	
Customer Concern Code	9901	
Condition Code	1518	

## **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 www.h-dnet.com. Refer to Table 6.

Table 6.

ITEM	DATA
Claim Type	SRC
Problem Part Number	37200131A
Quantity	Leave Blank
Primary Labor Code <sup>(1)</sup>	4062
Time	1.1 h
Customer Concern Code <sup>(1)</sup>	0173
Condition Code	9981
Replacement Part No.	91500093 and
Treplacement i alt No.	41800770
Quantity	1

(1) Download may be required.

### Credit Procedure: SAP system users

Submit a claim for each motorcycle serviced in this bulletin for which VIN involvement was verified on www.h-dnet.com. Refer to Table 7.

Table 7.

ITEM	DATA
Claim Type	Recall Claim
Fix ID-Found in Recall Number	С
Problem Part Number	37200131A
Customer Concern Code	0173
Condition Code	9981

#### **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.

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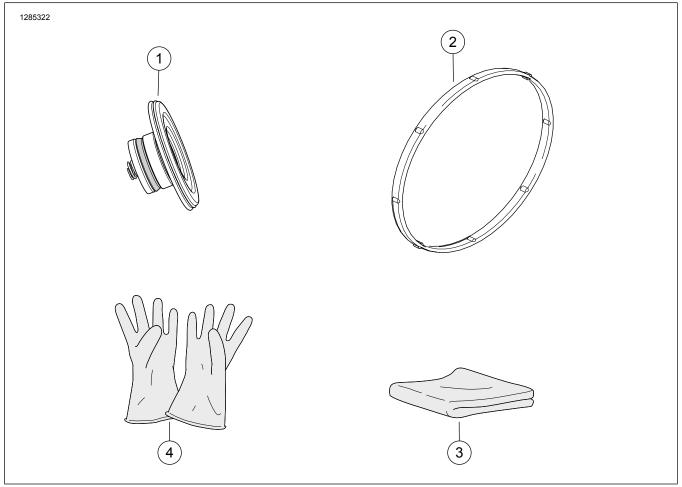


Figure 9. Service Kit - 0173

Table 8. Service Kit - 0173

Item	Description	QTY	Part Number
1	Clutch Actuator Piston Assembly	1	Not Sold Separately
2	Clutch Cover Gasket	1	Not Sold Separately
3	Cleaner Wipe	1	Not Sold Separately
4	Hand Gloves, Vinyl (may contain latex)	2	Not Sold Separately

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