

Tamer Lite

INSTALLATION MANUAL

Manual Slave Cylinder Kit

VT No. 18-1109
18-1110

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OVERVIEW

This kit replaces the OE (Original Equipment) or "stock" clutch slave cylinder. This part is designed specifically for your motorcycle to ensure optimal performance.

INSTALLATION TIPS

- Read this entire Instruction Manual before performing any steps.
- Protect eyes and skin – wear safety glasses and work gloves.
- Use the torque values listed in the instructions. Otherwise, use the torque specifications found in your OE service manual.



CLUTCH FLUID TYPE

⚠ CAUTION

Failure to use the correct clutch fluid type will cause seal damage. Read the information located on your bike's clutch fluid reservoir cap to determine which fluid was installed with your bike.

Harley Davidson recommends using DOT 4 fluid from a sealed container

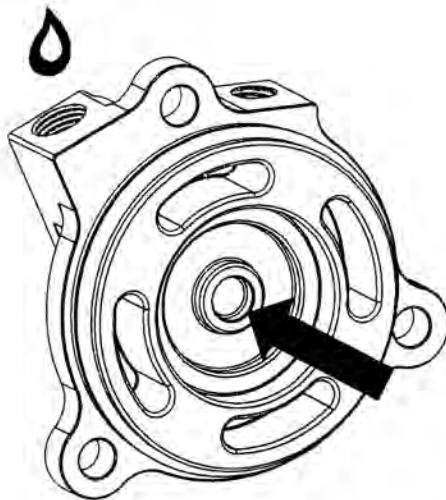
TOOLS NEEDED

- 5/16, 3/8, 7/16, 1/2, & 9/16 wrenches
- 1/2 & 9/16 sockets
- 3/16 hex driver
- Phillips screwdriver
- Torque wrench (in-lbs & ft-lbs, or N-m)
- DOT 4 fluid from a sealed container
- Rubber gloves & safety glasses
- Shop towels
- Plastic sheet

PRIME THE NEW SLAVE CYLINDER

Note: When compressing the piston, fluid can shoot out from the slave cylinder port. Be sure to wear eye protection.

1. Hold the Tamer Slave Cylinder with the ports upright.
2. Fill it with fluid while slowly depressing the piston several times. This will work out any air bubbles and aid in the final bleeding procedure.

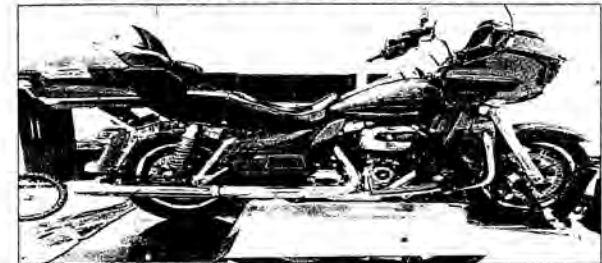


3. Continue to fill until no more bubbles are present and the fluid is at the brim.

REMOVE THE OE SLAVE CYLINDER

Installing the new Tamer slave cylinder takes several steps. Please read the entire section before beginning the process to ensure you have the right equipment and clutch fluid needed for the replacement.

1. Stand the bike up on a suitable bike stand or lift.

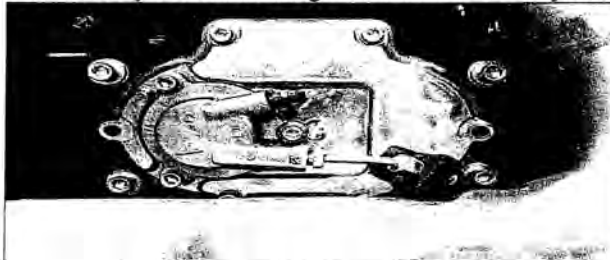


2. Loosen the exhaust system (muffler and header assembly) to gain access to the transmission side cover. Removing the exhaust heat shields will also give more clearance and help prevent damage from brake fluid.
3. Remove the two transmission side cover bolts located on the left and right side of the cover.



Note: Brake fluid is highly corrosive, it is recommended to cover the exhaust with plastic. Perform the following steps quickly. This method retains the fluid inside the line and makes the final bleeding much easier.

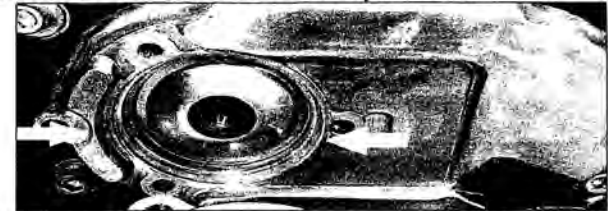
4. While leaving the OE slave cylinder (secondary clutch actuator) attached to the transmission inner side cover, use a wrench to loosen the hydraulic line assembly (A). The bleed screw (B) will not be reused. Note the location of the rubber grommet (C), it will need to be positioned the same way when installing the Rekluse slave cylinder.



5. Remove the OE slave cylinder from the transmission inner side cover.
6. Remove the hydraulic line assembly from the OE slave cylinder.

INSTALL THE SLAVE CYLINDER

1. Clean the area where the slave cylinder will mount



2. Attach the hydraulic line to the Tamer slave cylinder and finger tighten.

Note: Some models use a flared hydraulic line and are still compatible with the Tamer slave cylinder. The flared crush washer is not reused.



3. Mount the Tamer slave cylinder to the transmission case using the OE bolts, correctly returning each bolt to its original location and positioning the hydraulic line rubber grommet. Tighten the bolts in small increments. Torque to **84-108 in-lbs (9.5-12.2 Nm)**.

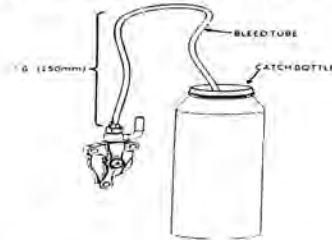
Note: The seal fitment on the Tamer Slave Cylinder is tighter than the OE slave cylinder. It is easiest to install the slave using the OE bolts, tightening in small increments, to gently press the slave into the case. The OEM rubber boot will not be reused with the Tamer Slave Cylinder.

4. Tighten the hydraulic line to OE specifications

Note: Do not reattach the transmission side cover, it will be reattached after the bleeding process.

BLEED THE CLUTCH LINE

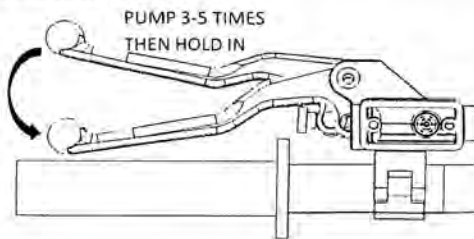
1. Attach one end of the supplied bleed tube to the bleed screw, then loop the opposite end into a suitable catch bottle.



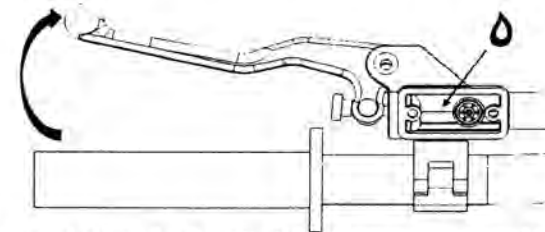
2. On the handlebar, adjust the clutch master cylinder reservoir so that it is somewhat level. Remove the cap and bladder from the clutch master cylinder.



3. Fill the master cylinder with **Dot 4** fluid until it is 75% full.
4. Pump the clutch lever 3 to 5 times, then hold it against the handlebar/grip.



5. While still holding the clutch lever against the handlebar, use a wrench to open the slave cylinder bleed port. Air and fluid should flow into the bleed tube.
6. Before releasing the clutch lever, tighten the bleed port.
7. Slowly release the clutch lever and check the fluid level in the clutch master cylinder. Fill if necessary.



8. Repeat steps 4 - 7 until air no longer comes out of the bleed port and the clutch feels normal.
9. Check that the clutch master cylinder is 75% full, then secure the reservoir bladder and cap with the original screws.
10. Remove the bleed tube from the bleed bolt and remove the bottle.
11. Torque the bleed screw to **150 in-lb (17 N-m)** with a socket or the closed end of a 3/8 wrench.

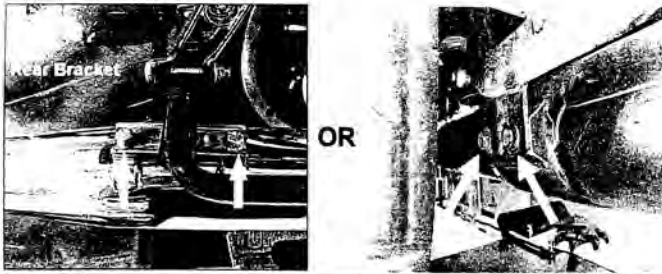
Note: Be sure to use a socket or closed-end wrench when torquing the bleed screw. Using an open-ended wrench can strip the hex screw.

REFASTEN THE COVER AND EXHAUST

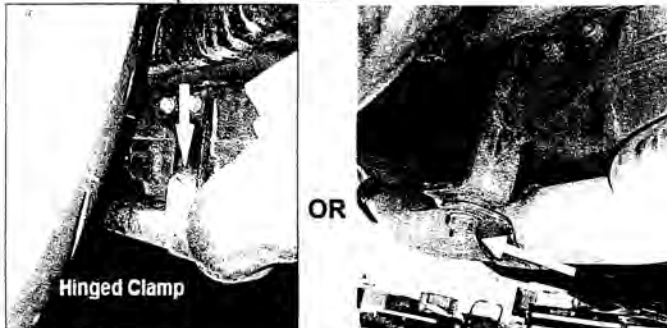
1. Check for leaks around the bleed port and hydraulic line.
2. Attach the transmission inner side cover. Torque bolts to **84-108 in-lbs (9.5-12.2 Nm)**.
3. Tighten the exhaust system using the method listed below.

a. Muffler

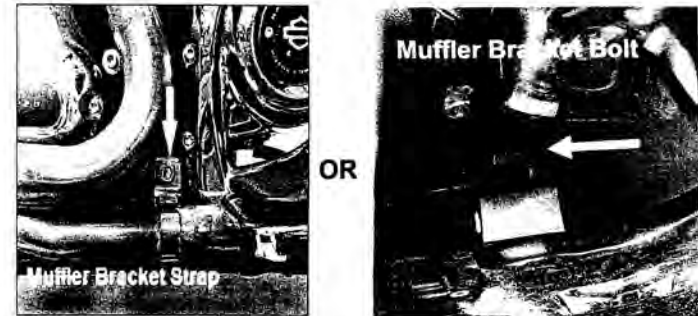
- i. Tighten the Rear mounting bracket and torque to **25 ft lbs**



- ii. Apply Loctite to the hinged clamp bolt and torque to **25 ft lbs**



- iii. Torque to the specific value for the type of mount.
 - Muffler bracket strap **18 ft-lbs**
 - Muffler bracket bolt **25 ft-lbs**



b. Header Assembly

- i. Starting with the front cylinder torque the top exhaust flange nut to **9-18 in-lbs (1.0-2.0 Nm)**
- ii. Next torque the lower exhaust flange nut to **100-120 in-lbs (11.3-13.6 Nm)**
- iii. Now torque the top exhaust flange nut to **100-120 in-lbs (11.3-13.6 Nm)**
- iv. Repeat steps i-iii for the rear cylinder exhaust flange nuts