INSTRUCTIONS

-J03223 REV. 05-26-2004

Kit Number 46414-05 (Chrome) and 46415-05 (Black)

HYDRAULIC CLUTCH KIT

General

These kits are designed for installation on 2005 and later Touring model motorcycles.

The kits **are not** compatible with:

- Accessory handlebar kits that include clutch cables of non-standard length,
- Larger-than-standard-diameter handlebars having no depression for clutch master-cylinder clearance,
- Bullet Spoilers and Chin Spoilers,
- Engine/ Transmission Interface Covers,
- Oil Pump Covers 66394-93 or 66088-96,
- Chrome Clutch Ferrule and Banjo Bolt Cover Kit 32714-98,
- Chrome Billet Clutch Cable Clamp 10260 or 91147-02,
- Screamin' Eagle® Race Clutch Kit 37960-98A.

These kits consist of a black or chrome **clutch master-cylinder assembly** and **transmission side cover**, a **clutch-fluid line** and all internal mechanical components necessary for a hydraulic clutch installation.

Kit Number 46414-05 contains Chrome components.
Kit Number 46415-05 contains Black components.

See the Service Parts list on the last two pages of these instructions for kit contents.

⚠WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate Service Manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

NOTE

A Service Manual for your model motorcycle is available from any Harley-Davidson dealer.

Removing Existing Components

Support the motorcycle securely on the jiffy stand on a firm, level surface.

⚠WARNING

Perform this installation when the engine is cool. Working on or near the exhaust system when the engine is hot could result in severe burns. (00311a)

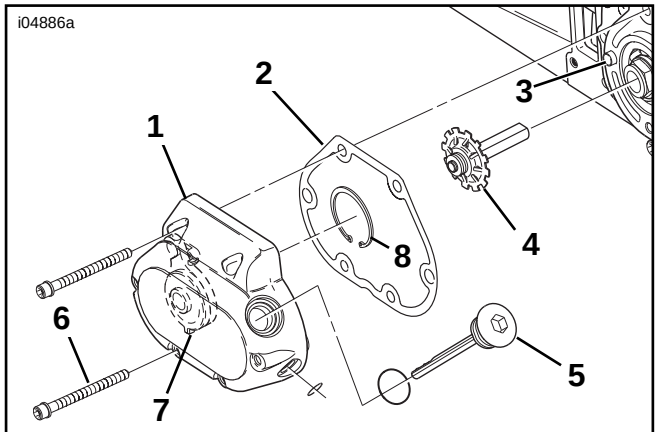
⚠WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative (-) cable first) before proceeding. (00307a)

⚠WARNING

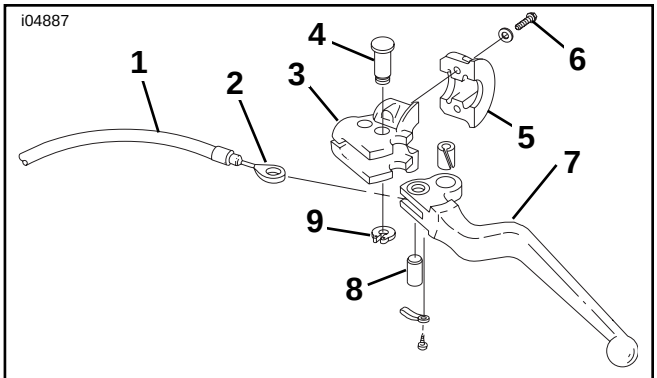
Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

1. Refer to the SEAT and BATTERY sections of the Service Manual. Remove the seat and disconnect the battery cables, negative cable first.
2. Remove the left-side mirror and mounting hardware. Save all parts for later installation.
3. Remove the right-side saddlebag, if so equipped. Refer to SADDLEBAG REMOVAL in the Service Manual.
4. To access the transmission side cover assembly, see EXHAUST SYSTEM REMOVAL in the Service Manual. For some models, the right-side exhaust system will need to be removed. In most cases, you will need to perform at least the following:
   a. Loosen, but do not remove the front and rear header pipes at the cylinder heads.
   b. Loosen the exhaust support bracket at the starter.
   c. Loosen the exhaust system heat shields as needed to access the transmission side cover screws.
   d. Remove the clamp holding the rear exhaust pipe to the transmission bracket. Set aside for re-installation.
   e. Remove and retain the two bolts and lockwashers attaching the right-side muffler to the rear bracket.
5. Remove the magnetic drain plug at the bottom-right side of the oil pan, and drain the transmission lubricant into a suitable container.



1. Transmission side cover
2. Cover gasket
3. Locating pin (2)
4. Oil slinger
5. Filler plug/ dipstick
6. Screw (6)
7. Ramp
8. Retaining ring

Figure 1. Original Transmission Side Cover



1. Clutch cable
2. Cable eyelet
3. Clutch lever bracket
4. Pivot pin
5. Handlebar clamp
6. Screw
7. Hand lever
8. Anchor pin
9. Retaining ring

Figure 2. Original Clutch Hand Lever Assembly

6. See Figure 1. Remove and retain the filler plug/dipstick (5) for later installation. Remove the six socket-head screws with washers (6) to free the transmission side cover (1) from the transmission case. Retain two screws and discard the remaining four.

7. Actuate the clutch lever to break the cover seal. Remove the cover. Remove and discard the cover gasket (2).

8. Remove the clutch ramp retaining ring (8).Rotate the inner ramp (7) to a position that will allow the clutch coupling to be disconnected. Disconnect the clutch coupling and disconnect the cable end from the coupling.

9. Unscrew the cable fitting from the transmission side cover. Remove the clutch cable and fitting, and discard the cover. Leave the clutch cable in place at this point.

10. Remove the oil slinger (4) as an assembly from the transmission mainshaft. Discard the oil slinger.

IMPORTANT

After the clutch cable has been disconnected at both ends, but before pulling the cable out, note the entire cable routing and the location of all cable straps and "P"-clamps (if used). In many cases, you will be installing the new hydraulic fluid line the same way.

⚠WARNING

Wear safety glasses or goggles when removing or installing retaining rings. Retaining rings can slip from the pliers and could be propelled with enough force to cause serious eye injury. (00312a)

NOTE

Make sure you are using the correct retaining-ring pliers. Verify that tips of pliers are not excessively worn or damaged.

11. See Figure 2. Remove the retaining ring (9) from the clutch hand-lever pivot pin (4). Remove the pivot pin and clutch hand-lever (7) from the clutch-lever bracket (3).

12. Remove the anchor pin (8) and the clutch-cable eyelet (2) from the clutch hand-lever. Remove any clamps retaining the clutch cable to the bike, and remove the cable. Discard all components and hardware removed in this step.

13. Using a T27 TORX drive head, remove the two screws (6) with flat washers securing the handlebar clamp (5) to the clutch-lever bracket.

    If installing Kit 46414-05 (Chrome), discard the handlebar clamp, but save the hardware for later installation.

    If installing Kit 46415-05 (Black), save the handlebar clamp and hardware for later installation.

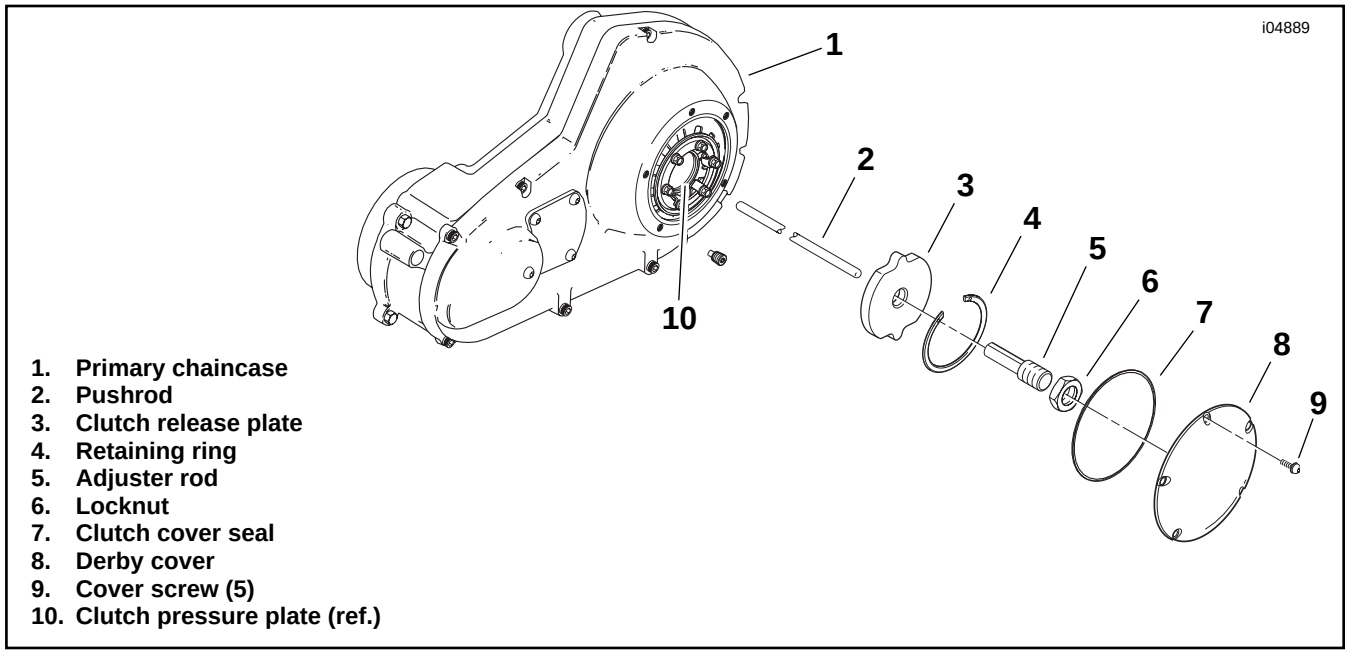
NOTE

Standing the motorcycle upright is required so fluid doesn't spill. Ensure that the vehicle is supported securely.

14. If necessary, remove the left-side passenger footpeg or footboard. See Figure 3. Using a T27 TORX drive head, remove the clutch-inspection (derby) cover (8) from the primary chaincase (1).

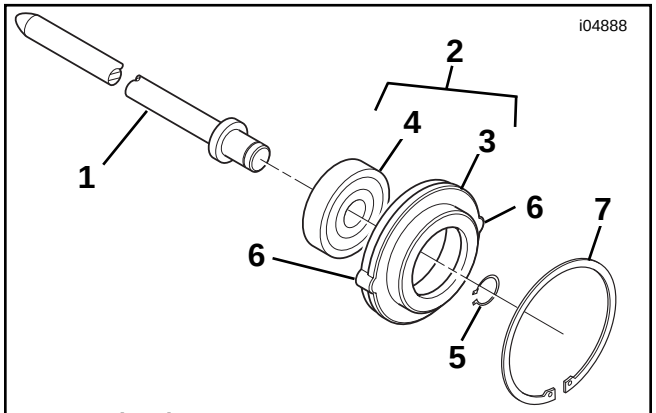
15. Remove the clutch release plate retaining ring (4) and discard. Remove the release plate (3), adjuster rod (5) and nut (6) as an assembly, and discard.

16. Extract the pushrod (2) by pushing it through from the right (transmission side cover) side until it can be grasped through the clutch pressure plate (10). Pull the pushrod out of the chaincase opening and discard it.



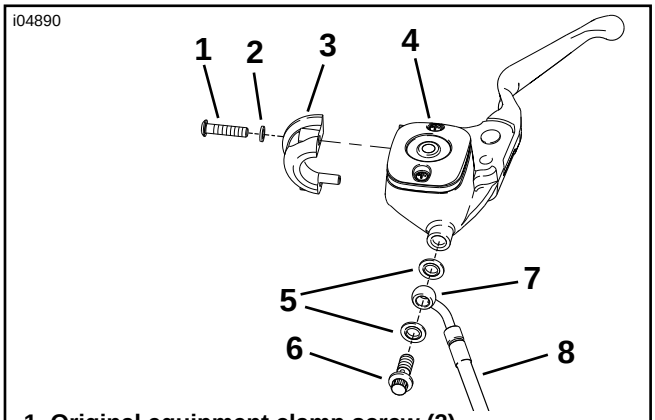
1. **Primary chaincase**
2. **Pushrod**
3. **Clutch release plate**
4. **Retaining ring**
5. **Adjuster rod**
6. **Locknut**
7. **Clutch cover seal**
8. **Derby cover**
9. **Cover screw (5)**
10. **Clutch pressure plate (ref.)**

Figure 3. Clutch Pushrod Removal



1. **Pushrod**
2. **Release plate assembly**
3. **Release plate**
4. **Bearing (pressed into release plate)**
5. **Retaining ring (small)**
6. **Release plate ears (2)**
7. **Retaining ring (large)**

Figure 4. New Clutch Release Plate Assembly



1. **Original equipment clamp screw (2)**
2. **Original equipment washer (2)**
3. **Handlebar clamp**
4. **Clutch lever/ master cylinder**
5. **Gasket (2)**
6. **Banjo bolt**
7. **Banjo fitting**
8. **Clutch fluid line**

Figure 5. Clutch Master Cylinder/Reservoir

Installing the Clutch-Release Plate

1. Refer to Figure 4. Assemble the new clutch-release plate assembly (2) to the new pushrod (1) as shown, with the large diameter first. Install the small retaining ring (5) from the kit onto the pushrod.

2. Install the assembly into the clutch pressure plate. Fit the two ears (6) into the notches in the pressure-release plate. Push in until the clutch-release plate (3) bottoms out against the shoulder in the pressure plate. Install the new large retaining ring (7) to the clutch-release plate, and verify that the ring is fully seated.

Installing the Clutch Master Cylinder

1. See Figure 5. Obtain the clutch lever/ master cylinder assembly (4) from the kit, and the two screws (1) and two flat washers (2) saved earlier.
   - **If installing Kit 46414-05 (Chrome),** obtain the handlebar clamp (3) from the kit
   - **If installing Kit 46415-05 (Black),** use the existing clamp saved during removal of the original clutch lever

2. Slightly loosen the two screws holding the left-hand switch housing to the handlebar.

3. Position the clutch lever/ master cylinder assembly to the handlebar, inboard of the left-hand switch housing assembly. Align the holes in the handlebar clamp with those in the master-cylinder housing and start the two screws (with flat washers).

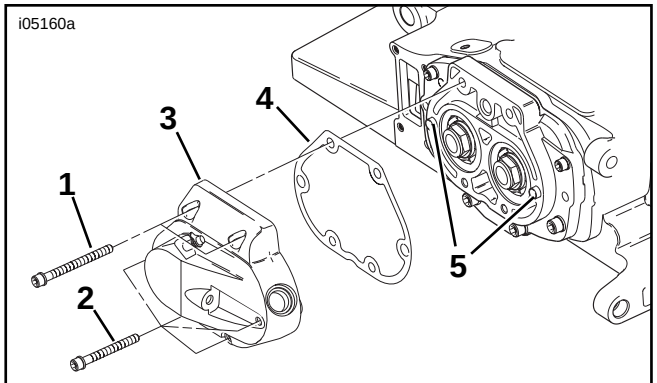
4. Adjust the clutch lever for rider posture and comfort. Use a T27 TORX drive head to tighten first the upper, then the lower clutch-lever clamp screws to 60-80 **in-lbs** (7-9 Nm).

NOTE

Tighten the lower switch-housing screw before tightening the upper switch-housing screw. This will leave any gap in the switch housing at the front of the switch-housing assembly for best appearance.

5. Adjust the switch housing for rider posture and comfort. Using a T25 TORX drive head, tighten first the lower, then the upper handlebar-switch housing screws to 35-45 **in-lbs** (4-5 Nm).

Installing the Transmission Side Cover



1. Upper screw (2-1/4 inch long) (saved) (2)
2. New screw (1-3/4 inch long) (from kit) (4)
3. Transmission side cover
4. Side cover gasket
5. Locating pins (2)

Figure 6. New Transmission Side Cover Installation

1. Refer to Figure 6. Place the new cover gasket from the kit over the hollow locating pins (5) in the transmission housing. Line up the new transmission side cover assembly (which includes the secondary actuator [slave] cylinder and bleeder screw) on the locating pins.

2. Loosely install the two 2-1/4 in. (57 mm) long screws (saved from the old cover) into the top two holes in the new cover. Loosely install four new 1-3/4 in. (44 mm) long screws from the kit into the remaining four holes.

3. See Figure 7. Tighten the side cover screws, in the sequence shown, to 120-144 **in-lbs** (14-16 Nm).

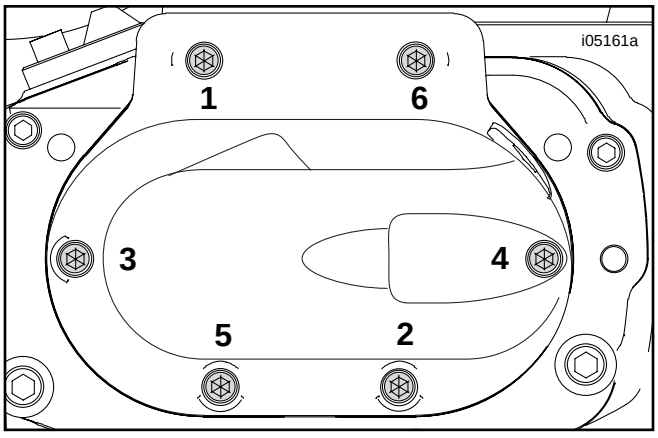


Figure 7. Torque Sequence, Transmission Side Cover

Installing the Clutch-Fluid Line

CAUTION

Avoid leakage. Be sure gaskets, banjo bolt(s) and clutch line are clean and undamaged before assembly. (00329a)

1. See Figure 5. Obtain the clutch-fluid line assembly (8), banjo bolt (6) and **new** gaskets (steel/rubber washers, item 5) from the kit. Position the washers on each side of the hydraulic clutch-line banjo fitting.

2. Remove the cap plugs from the handlebar end of the clutch-fluid line, if present.

NOTE

If a windshield is present, adjust the position of the clutch-fluid line banjo fitting and/or the handlebar to ensure that there is at least one inch (25.4 mm) clearance between the clutch-fluid line and the windshield.

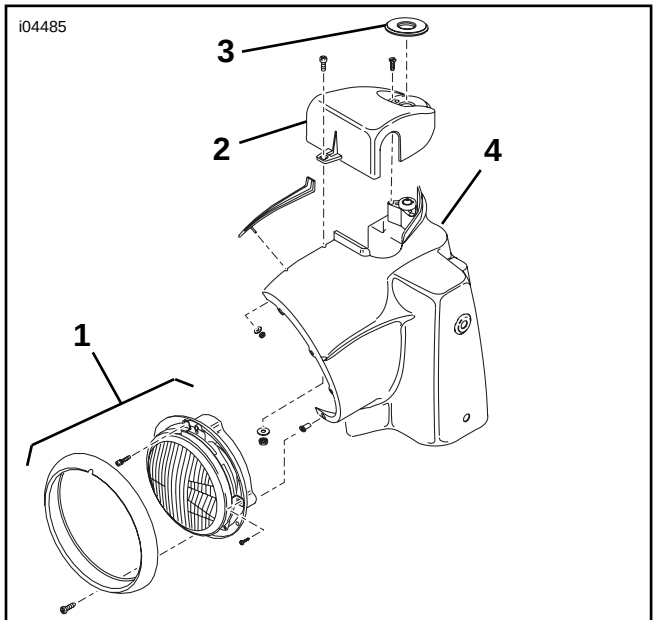
3. Insert the banjo bolt through one brake line gasket, the clutch-fluid line banjo fitting, and the second brake line gasket. Thread the bolt into the master-cylinder housing but do not fully tighten at this time. Proceed to Step 4 for your model motorcycle.

For FLHR and FLHRC models:

4. See Figure 8. Carefully pry off the fork-lock label plate (3) from the handlebar cover (2). Remove the entire plastic plate; do not remove the adhesive label from the plate.

5. Remove and retain the Phillips-head screws holding the handlebar cover for later installation.

6. Remove the headlamp assembly from the headlamp nacelle. See HEADLAMP in the Service Manual.



1 Headlamp
2 Handlebar cover
3 Fork-lock plate
4 Nacelle

Figure 8. Nacelle, Headlamp, and Handlebar Cover (FLHR/ FLHRC Models)

7. Route the clutch-fluid line:
   a. into the left top opening of the headlamp nacelle,
   b. down between the steering head and the harness mounting plate,
   c. around the front of the steering head to the right side,
   d. out of the nacelle, over the lower triple-clamp, and over the right-side engine guard,
   e. down along the front of the right-side frame downtube,
   f. behind the rear-brake master cylinder, and
   g. over the footboard brackets to the transmission housing.
8. Remove the cap plugs from the clutch-fluid line and transmission side cover, if present. Install the fitting to the cover and tighten to 80-115 **in-lbs** (9-13 Nm).

CAUTION

The "P"-clamps should position the clutch-fluid line to be at least one inch (25.4 mm) from the re-installed muffler or exhaust pipe and 1/2 inch (12.7 mm) away from any part of the exhaust heat shield.

9. Attach the clutch-fluid line to the bottom right-side frame tube using the two "P"-clamps from the kit. Bring the clutch-fluid line down in a reverse "S"-curve to the bottom right-side frame tube, then:
   a. attach the line to the frame tube just below and to the rear of the cam cover, and
   b. just below and to the front of the cam cover.

CAUTION

Attaching the "P"-clamps in any other way will allow chafing of the clutch-fluid line against the cam cover or crankcase.

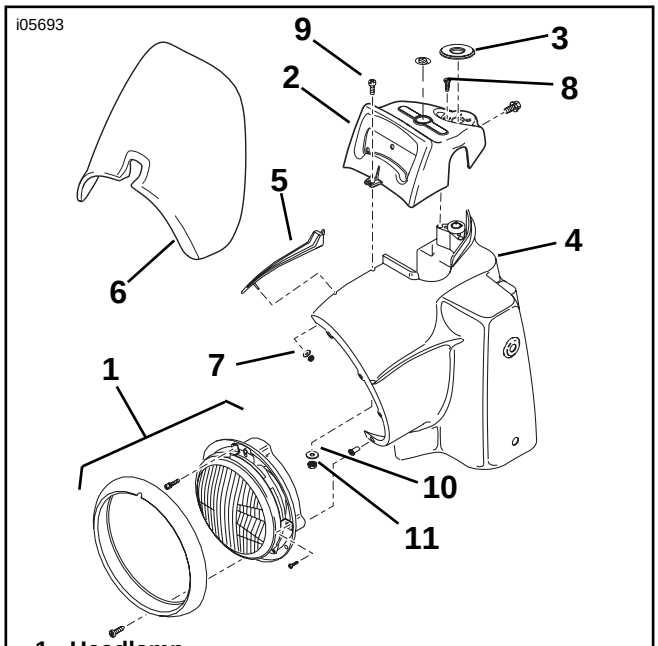
NOTE

Position the clutch-fluid line so any excess slack occurs between the frame and the steering head

10. Attach the clutch-fluid line to the motorcycle using the tie straps included in the kit:
    a. at two points on the bottom frame tube,
    b. near the bottom of the right side frame down-tube,
    c. to the front of the down-tube above the reflector, and
    d. to the switch-wire harness near the handlebar cover.
11. Tighten the banjo fitting bolt into the master-cylinder housing to 17-22 ft-lbs (23-31 Nm). Proceed to **"Bleeding the Clutch-Fluid Line"**.

For FLHRS models

4. See Figure 9. Carefully pry off the fork-lock label plate (3) from the handlebar cover (2). Remove the entire plastic plate; do not remove the adhesive label from the plate.
5. Remove and retain the two flat head Pozidrive screws (8) underneath the fork-lock label plate.
6. Loosen, but do not remove the pan head Pozidrive screw (9), nut (11) and flat washer (10) holding the front of the handlebar cover (2) and wind deflector (6) assembly.
7. Raise the handlebar clamp cover slightly, and while separating the halves of the headlamp nacelle, slide the cover and wind deflector assembly forward, running the shaft of the screw down the gap until the assembly is free of the nacelle.



1 Headlamp
2 Handlebar cover
3 Fork-lock plate
4 Nacelle (left half)
5 Nacelle trim strip
6 Wind deflector
7 Flange nut
8 Flat head screw (2)
9 Pan head screw
10 Flat washer
11 Nut with washer

Figure 9. Nacelle, Headlamp, and Handlebar Cover (FLHRS Model)

8. Remove the headlamp assembly from the headlamp nacelle. See HEADLAMP in the Service Manual.
9. Route the clutch-fluid line:
   a. into the left top opening of the headlamp nacelle,
   b. behind the handlebar risers, over to the right side,
   c. downward, out of the nacelle, around the front of the right-side engine guard,
   d. down along the front of the right-side frame down tube,
   e. behind the rear-brake master cylinder, and
   f. over the footboard brackets to the transmission housing.
10. Remove the cap plugs from the clutch-fluid line and transmission side cover, if present. Install the fitting to the cover and tighten to 80-115 **in-lbs** (9-13 Nm).

CAUTION

The "P"-clamps should position the clutch-fluid line to be at least one inch (25.4 mm) from the re-installed muffler or exhaust pipe and 1/2 inch (12.7 mm) away from any part of the exhaust heat shield.

11. Attach the clutch-fluid line to the bottom right-side frame tube using the two “P”-clamps from the kit. Bring the clutch-fluid line down in a reverse “S”-curve to the bottom right-side frame tube, then:
    a. attach the line to the frame tube just below and to the rear of the cam cover, and
    b. just below and to the front of the cam cover.

CAUTION

Attaching the “P”-clamps in any other way will allow chafing of the clutch-fluid line against the cam cover or crankcase.

NOTE

Position the clutch-fluid line so any excess slack occurs between the frame and the steering head

12. Attach the clutch-fluid line to the motorcycle using the tie straps included in the kit:
    a. at two points on the bottom frame tube,
    b. near the bottom of the right side frame down-tube,
    c. to the front of the down-tube above the reflector, and
    d. to the switch-wire harness near the handlebar cover.
13. Tighten the banjo fitting bolt into the master-cylinder housing to 17-22 ft-lbs (23-31 Nm). Proceed to **“Bleeding the Clutch-Fluid Line”**.

For FLHT, FLHTC and FLHTCU models:

4. Route the clutch-fluid line:
    a. through the grommeted opening in the fairing, under the fuel gauge,
    b. down along the front of the left-side frame down tube,
    c. across and down the frame to the right-side frame down tube,
    d. over the engine mount, down to the bottom right-side frame tube, and
    e. along the top inside of the frame tube.
5. Remove the cap plugs from the clutch-fluid line and transmission side cover, if present. Install the fitting to the cover and tighten to 80-115 **in-lbs** (9-13 Nm).

CAUTION

The “P”-clamps should position the clutch-fluid line along the top inside of the right-side frame tube, at least one inch (25.4 mm) from the re-installed muffler or exhaust pipe and 1/2 inch (12.7 mm) away from any part of the exhaust heat shield.

6. Attach the clutch-fluid line to the bottom right-side frame tube using the two “P”-clamps from the kit. Bring the clutch-fluid line down in a reverse “S”-curve to the bottom right-side frame tube, then:
    a. attach the line to the frame tube just below and to the rear of the cam cover, and
    b. just below and to the front of the cam cover.

CAUTION

Attaching the “P”-clamps in any other way will allow chafing of the clutch-fluid line against the cam cover or crankcase.

NOTE

Position the clutch-fluid line so any excess slack occurs between the frame and the steering head

7. Attach the clutch-fluid line to the motorcycle using the tie straps included in the kit:
    a. to the right-side frame down tube, at a point above the voltage regulator

CAUTION

Attaching the cable strap too low will allow chafing of the clutch-fluid line against the voltage regulator.

    b. to the left-side frame down tube just below the engine guard.
8. Tighten the banjo fitting bolt into the master-cylinder housing to 17-22 ft-lbs (23-31 Nm). Proceed to **“Bleeding the Clutch-Fluid Line”**.

For FLTR models:

4. Route the clutch-fluid line:
    a. along the left side of the handlebar, down to the top of the left-side frame down tube,
    b. across and down the frame to the right-side frame down tube,
    c. over the engine mount, down to the bottom right-side frame tube, and
    d. along the top inside of the frame tube.
5. Remove the cap plugs from the clutch-fluid line and transmission side cover, if present. Install the fitting to the cover and tighten to 80-115 **in-lbs** (9-13 Nm).

CAUTION

The “P”-clamps should position the clutch-fluid line along the top of the right-side frame tube, inboard of the rear brake line or electrical wires, at least one inch (25.4 mm) from the re-installed muffler or exhaust pipe and 1/2 inch (12.7 mm) away from any part of the exhaust heat shield.

6. Attach the clutch-fluid line to the bottom right-side frame tube using the two “P”-clamps from the kit. Bring the clutch-fluid line down in a reverse “S”-curve to the bottom right-side frame tube, then:
    a. attach the line to the frame tube just below the front exhaust mount, and
    b. at the bottom of the right-side frame down tube, near the engine mount.

CAUTION

Attaching the “P”-clamps in any other way will allow chafing of the clutch-fluid line against the engine mount or exhaust mount.

NOTE

Position the clutch-fluid line so any excess slack occurs between the frame and the steering head

7. Attach the clutch-fluid line to the motorcycle using the tie straps included in the kit:

   a. to the right-side frame down tube, at a point above the voltage regulator

CAUTION

Attaching the cable strap too low will allow chafing of the clutch-fluid line against the voltage regulator.

   b. to the existing clutch-cable retainer, if so equipped, or to the upper portion of the left-side frame down tube.

8. Tighten the banjo fitting bolt into the master-cylinder housing to 17-22 ft-lbs (23-31 Nm). Proceed to **"Bleeding the Clutch-Fluid Line"**.

Bleeding the Clutch Fluid Line

CAUTION

Cover adjacent surfaces when removing, draining, filling and/or bleeding brake system components. Spilling D.O.T. 4 brake fluid on painted or other finished surfaces can result in cosmetic damage. Immediately wipe up any spilled brake fluid and thoroughly clean affected area with water or 50/50 mix of water and denatured alcohol.

NOTE

D.O.T. 4 Hydraulic Brake Fluid is used for the hydraulic clutch. It is referred to as clutch fluid in these instructions and in the Service Manuals. Do not use other types of fluid as they are not compatible.

⚠CAUTION

Direct contact of D.O.T. 4 brake fluid with eyes can cause irritation. Avoid eye contact. In case of eye contact flush with large amounts of water and get medical attention. Swallowing large amounts of D.O.T. 4 brake fluid can cause digestive discomfort. If swallowed, obtain medical attention. Use in well ventilated area. KEEP OUT OF REACH OF CHILDREN. (00240a)

1. Remove the bleeder cap from the transmission side cover bleeder valve. Install one end of a length of plastic tubing over the valve. Place the free end of the tube in a clean container.

CAUTION

Do NOT allow dirt or debris to enter the clutch master cylinder reservoir. Dirt or debris in the reservoir can cause improper operation of the clutch and equipment damage. (00205a)

2. Stand the motorcycle upright so that the master cylinder is in a level position. Remove the master-cylinder cover and gasket.

⚠WARNING

Use only fresh, uncontaminated D.O.T. 4 brake fluid. Fluid containers that have been opened may have been contaminated by dirt or moisture. Use of contaminated brake fluid may adversely affect braking ability and lead to brake failure which could result in death or serious injury.

⚠WARNING

Never mix D.O.T 4 with other brake fluids (such as D.O.T. 5). Mixing different types of fluid may adversely affect braking ability and lead to brake failure which could result in death or serious injury.

NOTE
DO NOT OVERFILL.

3. Add D.O.T. 4 HYDRAULIC BRAKE FLUID to the master-cylinder reservoir until the fluid level is at or just below the fill line. Do not reuse old fluid. Use only D.O.T. 4 fluid from a sealed container.

4. Activate the clutch lever 5-10 times.

5. Open the bleeder valve. Clutch fluid will flow from the bleeder valve through the tubing. It may take several minutes for fluid to exit the bleeder.

6. Once fluid exits the bleeder, close the bleeder valve.

NOTE
DO NOT OVERFILL.

7. If necessary, add additional clutch fluid to the master cylinder reservoir until the fluid level is at or just below the fill line.

8. Depress and hold the clutch hand-lever to build up hydraulic pressure.

9. Open the bleeder valve about one-half-turn. Clutch fluid will flow from the bleeder valve through the tubing. Close the bleeder valve when the clutch hand-lever has moved 50% to 75% of its full range of travel. Allow the clutch hand-lever to return slowly to its released position.

10. Repeat Steps 7 through 9 until all air bubbles are purged.

11. Tighten the bleeder valve to 80-100 **in-lbs** (9.0-11.3 Nm) and install the bleeder cap.

12. Again, if necessary, add clutch fluid to the master cylinder reservoir until the fluid level is at or just below the fill line.

13. Verify proper operation of the master-cylinder relief port. Actuate the clutch hand-lever. A slight spurt of fluid will break the fluid surface in the reservoir compartment if all internal components are working properly.

NOTE

The angular shape of the clutch master-cylinder cover makes one side thicker than the other.

13. Install the clutch master-cylinder cover (with gasket) on the master-cylinder reservoir so that the thicker side is over the clutch-line fitting. Fasten the cover with the two Phillips screws removed earlier. Tighten the screws to 6-8 **in-lbs** (0.7-0.9 Nm).

NOTE

The sight glass enables the rider to visually check clutch fluid level without removing the master-cylinder cover. When the reservoir is full, the sight glass is dark. As the fluid level drops, the glass lightens up to indicate this condition to the rider.

Measuring Clutch Plate Lift

1. Attach the standoff of a dial indicator to one of the 1/4-20 clutch-inspection (derby) cover mounting holes. Position the anvil to the end of the push rod.

⚠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.

2. Actuate the clutch lever to measure the axial movement of the push rod and the clutch-release plate assembly. The axial movement needs to be **at least** 0.065 in. (1.65 mm).

IMPORTANT

Proper bleeding of the system will typically yield plate movement of greater than .065 in. (1.65 mm). If clutch release plate movement is less than .065 in., the system must be re-bled.

Installing the Clutch-Inspection Cover

1. See Figure 3. Remove the quad-ring clutch-inspection cover seal (7) from the groove in the primary chaincase cover. Wipe all lubricant from the seal and inspect it for cuts, tears or signs of deterioration. Replace if necessary.

2. Swab all lubricant from the quad-ring groove. Install the seal into the groove with the nubs contacting the groove walls.

3. Using a T27 TORX drive head, install the derby cover to the primary-chaincase cover with the five screws (with captive washers) removed earlier.

4. See Figure 10. Tighten the derby cover screws, in the sequence shown, to 84-108 **in-lbs** (10-12 Nm).

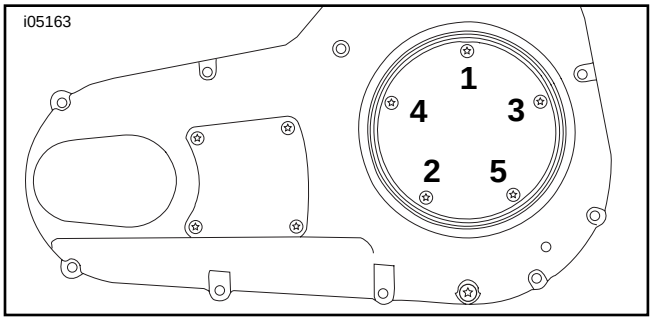


Figure 10. Torque Sequence, Primary Chaincase Cover

Final Assembly

1. Check the “O”-ring on the transmission drain plug removed earlier for tears, cuts or general deterioration, and replace if necessary.

2. Install the drain plug and torque to 14-21 ft-lbs (19-28 Nm).

CAUTION

Do not overtighten filler or drain plugs. Overtightening plugs may cause leaks.

3. Fill the transmission with the proper transmission lubricant. See the MAINTENANCE section of the applicable Service Manual.

4. Check the “O”-ring on the filler plug/dipstick removed from the old transmission side cover for tears, cuts or general deterioration, and replace if necessary. Install the filler plug/dipstick into the new transmission side cover assembly.

CAUTION

Be sure exhaust pipes do not contact frame or components. Contact will transmit vibration to the rider. (00348a)

5. See EXHAUST SYSTEM INSTALLATION in the Service Manual. Re-install and tighten all exhaust-system components loosened or removed at the beginning of the installation. Replace any gaskets or clamps that were removed with new parts.

⚠WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

6. Refer to the Service Manual, and follow instructions to connect the battery cables, positive cable first.

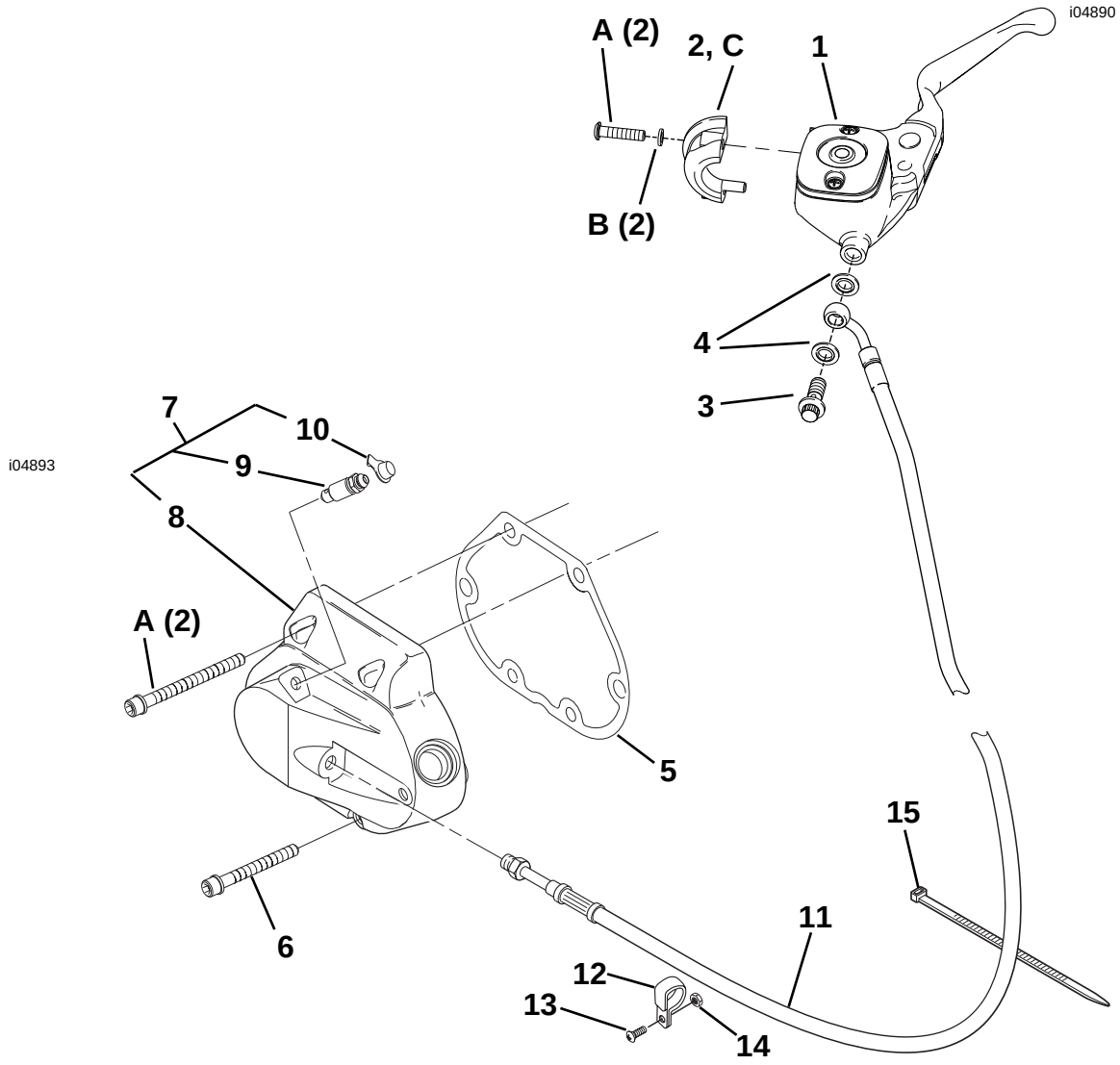
7. Follow the instructions in the Service Manual to install the seat.

⚠WARNING

After installing seat, pull upward on front of seat to be sure it is in locked position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070a)

8. If necessary, install the right-side saddlebag.

9. Test ride the motorcycle. If the clutch does not work properly, it may be necessary to re-bleed the clutch fluid line and re-measure the clutch-plate lift.



Kit number 46414-05 (Chrome) or 46415-05 (Black)

Item	Description	Part Number
1	Clutch master cylinder assembly	
	Chrome	46413-05
	Black	46416-05
2	Clamp, handlebar control (in Chrome kit only)	45282-99
3	Bolt, banjo	41747-82A
4	Gasket, brake line (2)	41731-01
5	Gasket, transmission side cover	36801-87C
6	Screws (4)	3480A
7	Side cover assembly (includes items 8 through 10)	
7	Chrome	37121-03A
	Black	38689-03A
8	Cover, side	38689-03A (black)
9	Bleeder screw	44613-02
10	Cap, bleeder screw	43817-02

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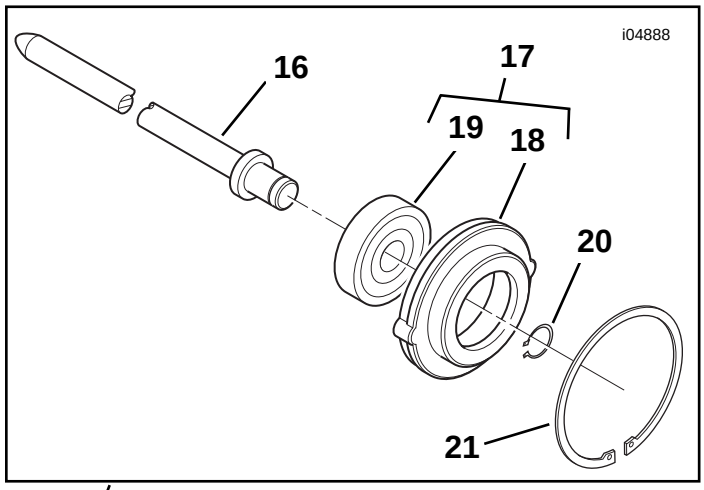

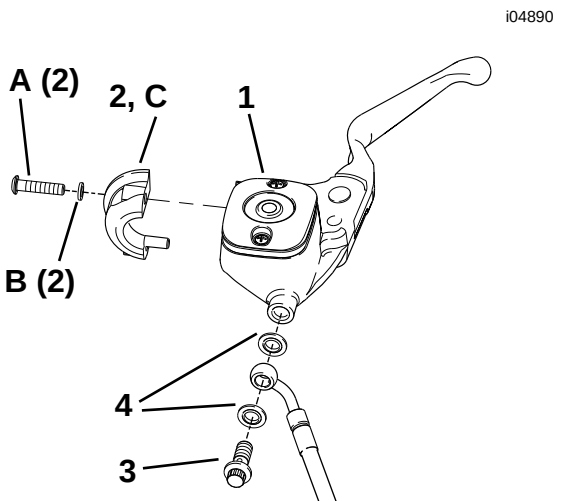

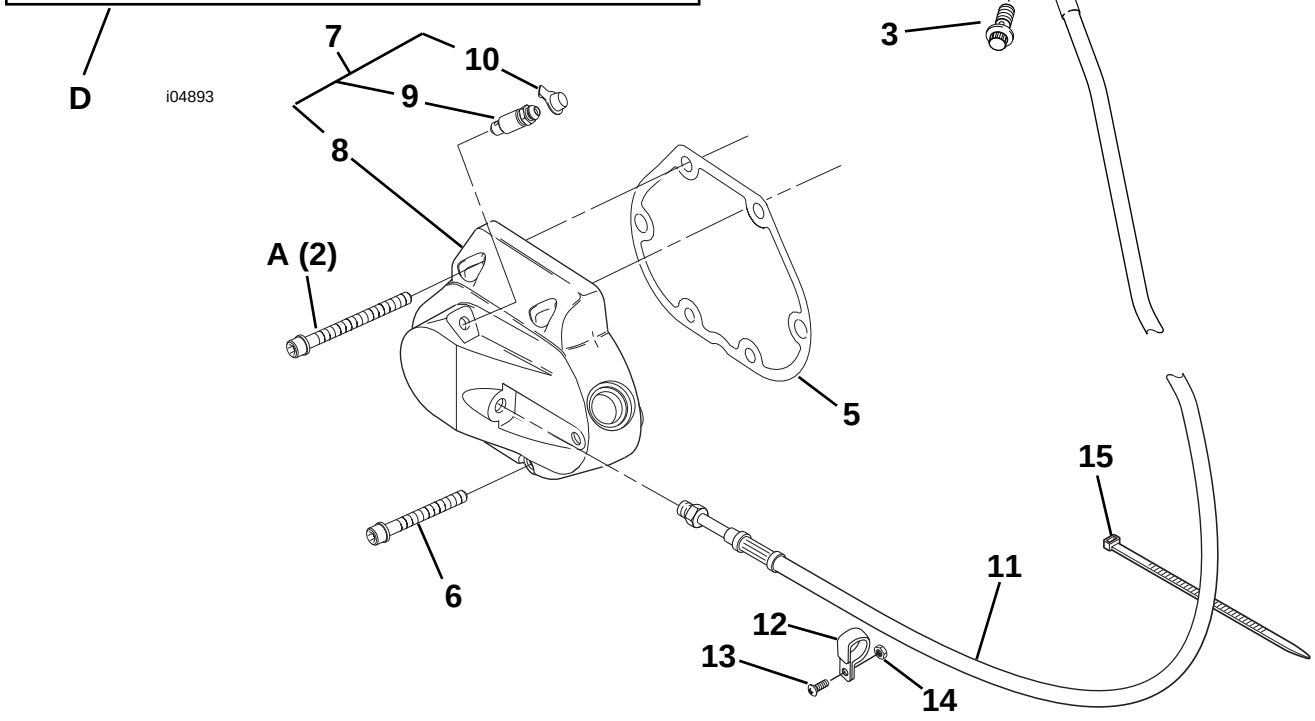

Kit number 46414-05 (Chrome) or 46415-05 (Black)

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Item	Description	Part Number
11	Clutch line assembly (Braided stainless steel w/ Chrome fittings)	38669-03
12	“P”-clamp (2)	69336-03
13	Screw, 1/4-20 x 3/8 in. (2)	3652
14	Locknut, 1/4-20 (2)	7686
15	Strap, cable (6)	10006
16	Pushrod, clutch release	36814-03
17	Release plate assembly (includes items 18 and 19)	Not sold separately
18	Release plate	37918-91
19	Bearing	8885
20	Retaining ring, external (3/8 in.)	11143
21	Retaining ring, internal (2 in.)	37909-90

Items not included in kit:

A	Original equipment screws
B	Original equipment washers
C	Handlebar clamp is not included in Black Kit 45992-03. Use the original equipment black clamp
D	Clutch release plate components