



INSTRUCTIONS

-J02813

REV. 2008-08-15

MULTI-FIT CLUTCH CABLE KITS

GENERAL

Kit Numbers

See Table 2.

NOTE

The Multi-Fit Clutch Cable Kits are available in a variety of housing and travel lengths. Shorter or longer cables may be necessary when modifications (such as optional handlebars) have been made to the motorcycle. See the Harley-Davidson Genuine Motor Accessories and Genuine Motor Parts Catalog for fitment and length information.

Additional Parts Required

Dyna, Softail and Touring models will require separate purchase of a clutch release cover gasket. See Table 1.

Table 1. Clutch Release Cover Gasket Usage

Model	Gasket Part Number
2005 and earlier Dyna	36801-87C
2006 and later Dyna	36805-06
2006 and earlier Softail	36801-87C
2007 and later Softail	36805-06
2006 and earlier Touring	36801-87C
2007 and later Touring	36805-06

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

This instruction sheet references service manual information. A service manual for your model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

Kit Contents

See Figure 15 and Table 3.

KIT NUMBERS

Table 2. Kit Numbers

Stainless Steel Kits	Diamondback™ Kits	Diamond-Black Kits
38629-02	N/A	N/A
38660-00A	N/A	N/A
38660-03	56846-05	N/A
38674-00	N/A	N/A
38674-03	56843-05	N/A
38688-03	N/A	N/A
38727-04	38756-06	N/A
38732-04	N/A	N/A
38734-04	N/A	N/A
38750-05	38794-06	38939-09
56399-03	N/A	N/A
56410-03	N/A	N/A
56411-03	56845-05	N/A
56413-03	38884-07	N/A
56414-03	56844-05	N/A
56416-03	38886-07	N/A
56417-03	38888-07	N/A
56590-02	56842-05	N/A
N/A	38615-08	N/A
N/A	38624-08	N/A
N/A	38654-08	N/A
N/A	38655-08	N/A
N/A	38668-08	N/A
N/A	38679-08	N/A
N/A	38684-06A	38876-09
N/A	38771-06A	38916-09
N/A	38771-06A	N/A
N/A	38806-07	N/A
N/A	38808-07	N/A
N/A	38810-07	38877-09
N/A	38812-07	38941-09
N/A	38879-07	38911-09
N/A	38885-07	N/A
N/A	38889-07	N/A
N/A	38890-07	N/A
N/A	56307-07	38940-09
N/A	56318-07	N/A
N/A	56348-07	N/A
N/A	56404-07	N/A
N/A	56507-07	N/A
N/A	56610-07	N/A

REMOVAL

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. Disconnect the battery, negative (-) cable first or remove the main fuse.

All Models Except Touring

NOTE

When performing cable disassembly procedures, make careful notes as to the existing cable routing. Pay special attention to existing cable strap locations before removing so new straps can be installed in the same locations.

1. Loosen the clutch adjuster to create slack in the clutch cable by performing the following:
 - a. See Figure 1. Slide the rubber boot (4) off the cable adjuster (1).
 - b. Loosen the jam nut (3).
 - c. Turn the cable adjuster until there is a large amount of free-play at the hand lever.
2. See Figure 2. Remove the retaining ring (1) and pivot pin (2) from the hand lever bracket.
3. Remove the clutch lever (6) from the clutch lever bracket (5).
4. Remove the clutch cable anchor pin (3). Disconnect the upper section of the clutch cable (4) from the lever.

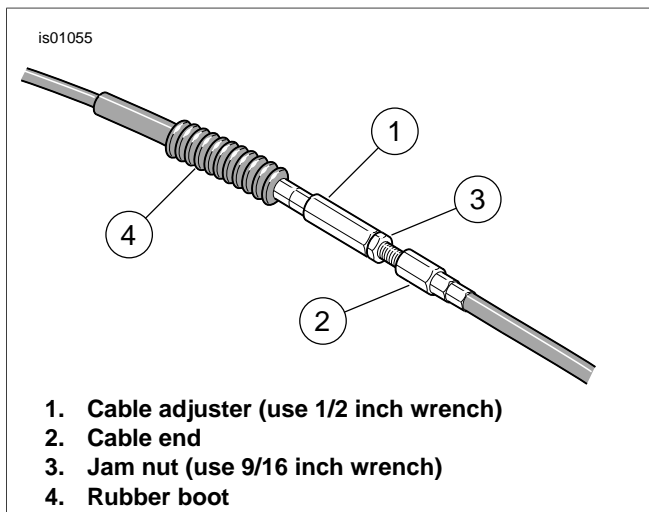
NOTES

If installing different handlebars, install them now (refer to the appropriate handlebar instruction sheet), and measure the change in distance that will be required from the end of the cable housing to the clutch lever.

Compare the additional required length to the cable provided in the kit. If the cable is more than 2.0 inches (50.8 mm) longer or more than 1.0 inch (25.4 mm) shorter than the above measured distance, see a Harley-Davidson dealer for the correct cable length.

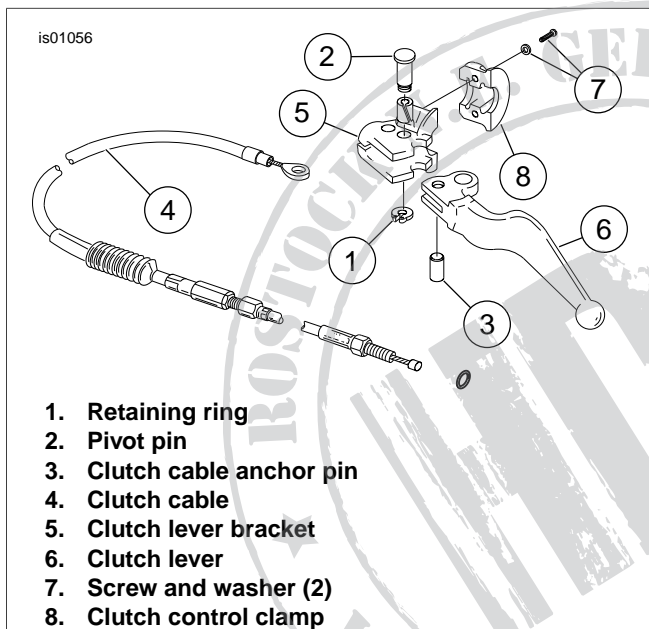
WARNING

Install proper length clutch cables. Incorrect cable length can adversely affect motorcycle operation, which could cause loss of control resulting in death or serious injury. (00448b)



1. Cable adjuster (use 1/2 inch wrench)
2. Cable end
3. Jam nut (use 9/16 inch wrench)
4. Rubber boot

Figure 1. Clutch Cable Adjuster



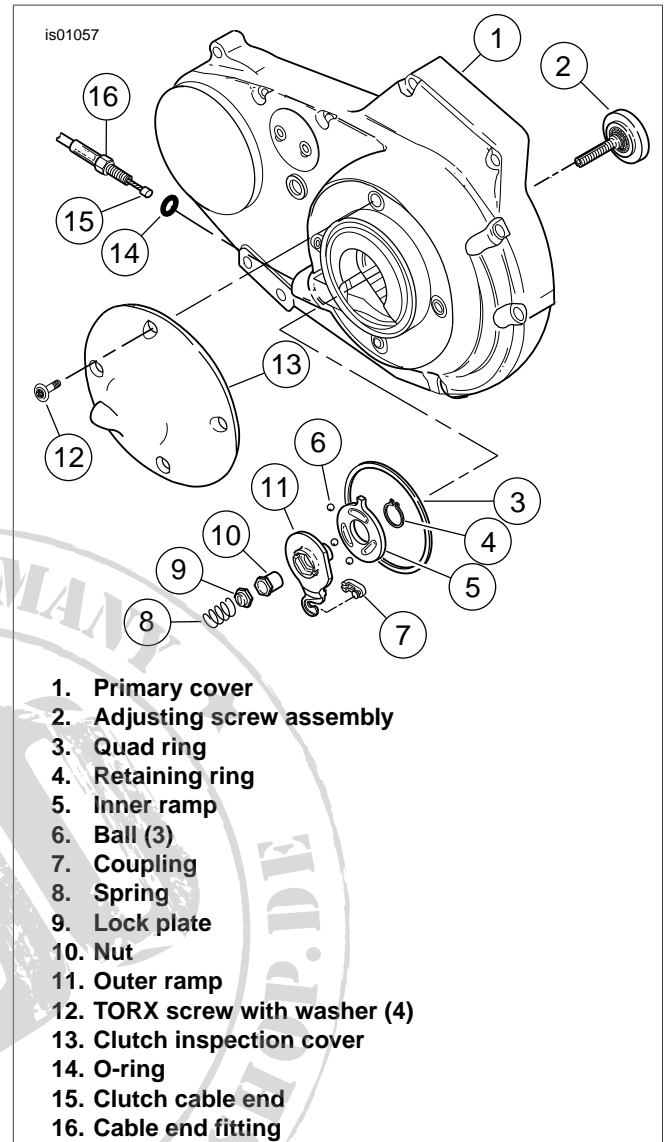
1. Retaining ring
2. Pivot pin
3. Clutch cable anchor pin
4. Clutch cable
5. Clutch lever bracket
6. Clutch lever
7. Screw and washer (2)
8. Clutch control clamp

Figure 2. Clutch Cable Components

Sportster Models

1. See Figure 3. Remove four TORX® screws, washers (12) and the clutch inspection cover (13). Exercise caution to avoid damaging or dislodging the quad ring (3) in the primary cover (1).
2. Slide the spring (8) with attached hex lock plate (9) from the flats of the adjusting screw (2).
3. Turn the adjusting screw clockwise to release the ramp and coupling mechanism. As the adjusting screw is turned, the ramp assembly moves forward. Remove the nut (10) from the end of the adjusting screw.
4. Remove the hook of the outer ramp (11) from the cable end coupling (7). Remove the cable end (15) from the slot in the coupling.
5. Loosen the cable clip at the lower left front engine mount.
6. Turn the cable end fitting (16) counterclockwise to remove the clutch cable lower section from the primary cover (1). Remove the O-ring (14) from the cable end fitting.

7. Remove and discard the clutch cable.



1. Primary cover
2. Adjusting screw assembly
3. Quad ring
4. Retaining ring
5. Inner ramp
6. Ball (3)
7. Coupling
8. Spring
9. Lock plate
10. Nut
11. Outer ramp
12. TORX screw with washer (4)
13. Clutch inspection cover
14. O-ring
15. Clutch cable end
16. Cable end fitting

Figure 3. Clutch Release Mechanism (Sportster)

Dyna and Softail Models

1. See Figure 4. Loosen the cable fittings (2) at the clutch release cover.

NOTE

See Table 1. The clutch release cover gasket (purchased separately) will need to be replaced to prevent leakage.

2. See Figure 5. Drain the transmission lubricant into a suitable container and remove the fill plug dipstick. Remove the six screws that hold the clutch release cover in place. Remove the clutch release cover and discard the gasket.
3. See Figure 4. Note the position of the opening in the retaining ring (1) fastening the ball-and-ramp mechanism to the clutch release cover. The retaining ring opening must be positioned in approximately the same location during assembly. Remove the retaining ring.
4. Pull the inner ramp (5) and coupling (4) out of the side cover. Hold the inner and outer ramps together to keep the balls from falling free.

5. Rotate the inner ramp to a position that will allow the coupling (4) to be disconnected from the inner ramp lever arm. Disconnect the coupling from the inner ramp. Disconnect the cable end from the coupling.
6. Back out the threaded cable fitting from the side cover. Ensure that the O-ring is removed with the cable. Discard the O-ring.
7. Remove and discard the clutch cable.

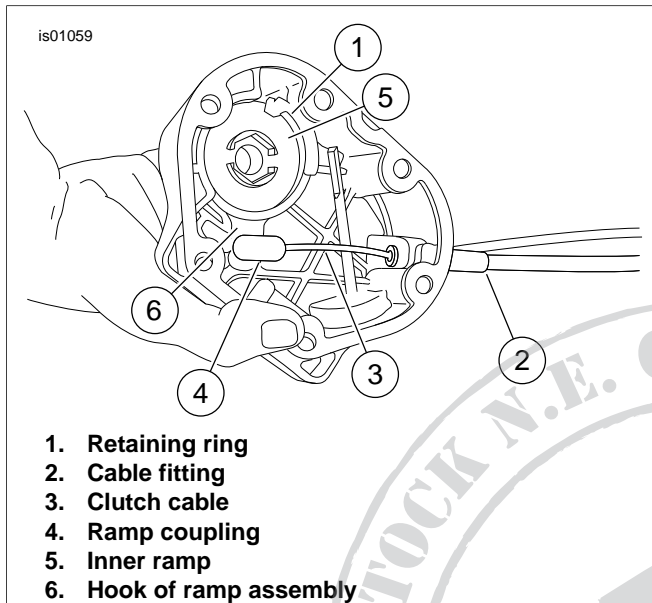


Figure 4. Clutch Cable Connection

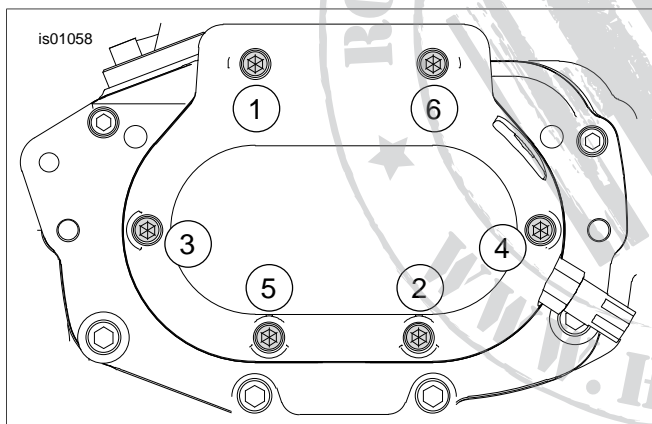


Figure 5. Clutch Release Cover Screws

Touring Models

1. To access the clutch release cover assembly, remove the exhaust pipes as needed. Refer to the service manual.
2. Remove the magnetic drain plug at the bottom right side of the oil pan. Drain the transmission lubricant into a suitable container.
3. Remove the transmission fluid dipstick from the fill spout.
4. See Figure 1. Slide the rubber boot (4) off of the clutch cable adjuster (1). Hold the cable adjuster with a 1/2 inch wrench and loosen the jam nut (3) with a 9/16 inch wrench. Back the jam nut away from the cable adjuster. Move the adjuster toward the jam nut to provide free-play at the hand lever.

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)

5. See Figure 6. Remove the retaining ring (12) from the pivot pin groove at the bottom of the clutch lever bracket (2). Remove the pivot pin (3) and clutch cable anchor pin (11) from the clutch hand lever (8).

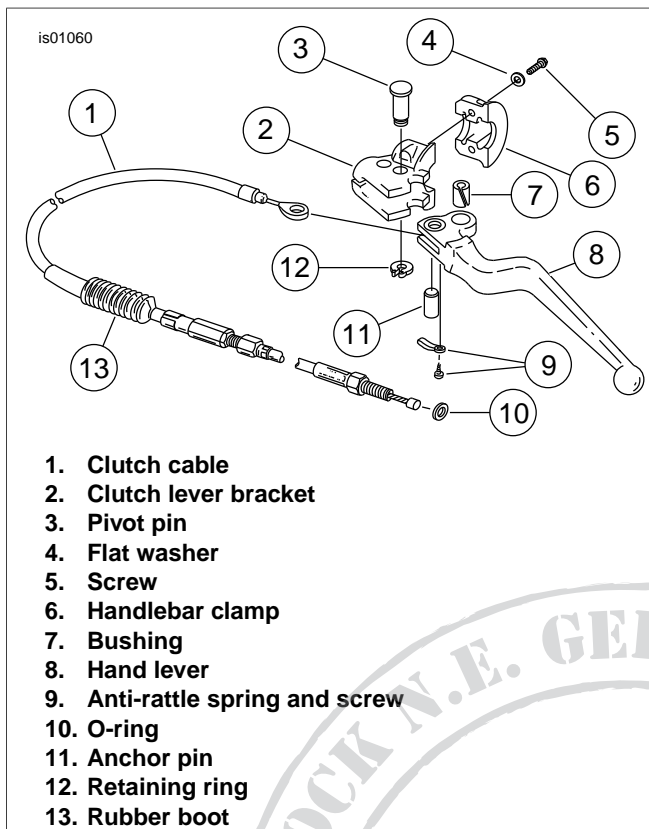
NOTE

See Table 1. The clutch release cover gasket (purchased separately) will need to be replaced to prevent leakage.

6. See Figure 5. Remove the six screws that hold the clutch release cover in place. Remove the clutch release cover and discard the gasket.
7. See Figure 4. Remove the retaining ring (1) fastening the ball-and-ramp mechanism to the clutch release cover.
8. Lift the inner ramp (5) out of the clutch release cover and turn the assembly over so that the ball sockets are facing out.
9. Remove the hook of the ramp assembly (6) from the button on the coupling (4).
10. Remove the coupling (4) from the clutch cable end (3).
11. Remove the balls from the outer ramp sockets.
12. Remove the outer ramp from the clutch release cover.
13. Remove the cable fitting (2) from the clutch release cover.
14. Remove the clutch cable (3) and fitting (2).
15. Cut the cable straps as necessary to release the clutch cable from the frame downtubes.
16. Release the cable from the fingers on the clutch cable clamp.
17. Carefully remove the clutch cable from around the coiled opening on the clutch cable guide.
18. Remove and discard the clutch cable.

NOTE

If the ball and ramp or throwout bearing and clutch pushrod need service, follow the applicable service manual procedures.



1. Clutch cable
2. Clutch lever bracket
3. Pivot pin
4. Flat washer
5. Screw
6. Handlebar clamp
7. Bushing
8. Hand lever
9. Anti-rattle spring and screw
10. O-ring
11. Anchor pin
12. Retaining ring
13. Rubber boot

Figure 6. Clutch Hand Lever Components

INSTALLATION

Sportster Models

1. See Figure 3. Apply a light coat of oil on the new O-ring (14) and install the O-ring onto the threaded portion of the clutch cable end (16). Turn the fitting clockwise to install into the primary cover (1), being careful not to exert any sideways force on the fitting during installation. Tighten the fitting to 36-60 **in-lbs** (4-7 Nm).

⚠ WARNING

Do not over-tighten clutch cable threaded end fitting. Use recommended torque values. Damage to threaded fitting can lead to loss of transmission fluid, which could result in loss of control and death or serious injury. (00449c)

NOTE

Breakage of the clutch cable threaded end fitting due to improper handling/installation is not covered under the Harley-Davidson Motor Company Warranty.

2. Fit the coupling (7) over the cable end with the rounded side inboard and the ramp connector button outboard. With the retaining ring side of the ramp assembly facing in, place the hook of the ramp around the coupling button and rotate the assembly counterclockwise until the tang on the inner ramp (5) fits in the slot of the primary cover (1).
3. Install the nut (10) onto the adjusting screw (2) until the slot of the screw is accessible. Fit the hex nut into the recess of the outer ramp (11), and turn the adjusting screw counterclockwise until resistance is felt. Back off the adjusting screw one-quarter turn.

4. Route the clutch cable forward from the primary cover up through the clip on the lower left front engine mount to the outboard side of the left front slider tube, and then back to the clutch lever. Tighten the cable clip.
5. See Figure 2. Connect the end of the clutch cable upper section to the clutch lever (6) using the clutch cable anchor pin (3).
6. Position the lever within the clutch lever bracket (5).

Dyna and Softail Models

1. See Figure 4. Apply a light coat of oil to the new O-ring and install the O-ring onto the threaded portion of the clutch cable (3). Insert the clutch cable fitting (2) into the clutch release cover, being careful not to exert any sideways force on the fitting during installation. Do not tighten the cable fitting at this time.
2. Connect the cable end to the coupling (4). Rotate the ramps for best access and install the coupling on the inner ramp. Place the ramp assembly in position in the clutch release cover.

⚠ 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)

3. Install the retaining ring (1). Position the retaining ring opening so it is located approximately over the outer ramp tang (the stop that prevents rotation).
4. See Figure 5. Install the **new** gasket (purchased separately) on the clutch release cover, and install the cover. Tighten the six screws in the order shown to 84-108 **in-lbs** (9.5-10.2 Nm).
5. Tighten the clutch cable fitting to 36-60 **in-lbs** (4-7 Nm).

⚠ WARNING

Do not over-tighten clutch cable threaded end fitting. Use recommended torque values. Damage to threaded fitting can lead to loss of transmission fluid, which could result in loss of control and death or serious injury. (00449c)

NOTE

Breakage of the clutch cable threaded end fitting due to improper handling/installation is not covered under the Harley-Davidson Motor Company Warranty.

6. Route the cable:

Cable Routing, 1996-2005 Dyna Models

All Dyna models: See Figure 7. Route the clutch cable (1) from the clutch release cover, under the frame and across to the left side of the vehicle. Insert the cable into the clip (2) at the bottom left side of the frame.

See Figure 8. Continue routing the cable up in front of the frame downtube and insert into the clips (3), keeping the rubber hexagon boot (2) between the clips.

- *All Dyna models (except FXDWG):* Route the cable inside the left fork tube between the upper and lower fork brackets and along the left side of the headlamp.
- *FXDWG models:* Route the cable behind the front fork upper bracket and over the handlebar.
- *FXDWG2 and FXDWG3 models:* Also pass the clutch cable through the clutch cable guide ring.

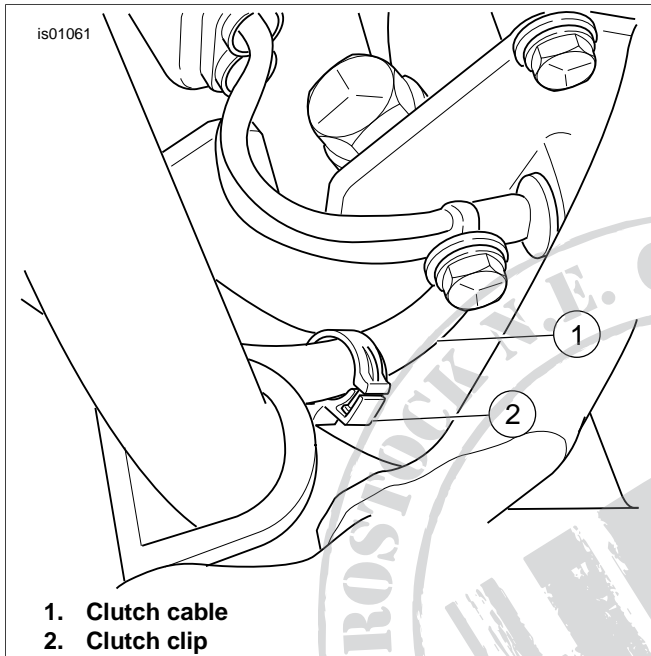


Figure 7. Bottom Clutch Cable Clip

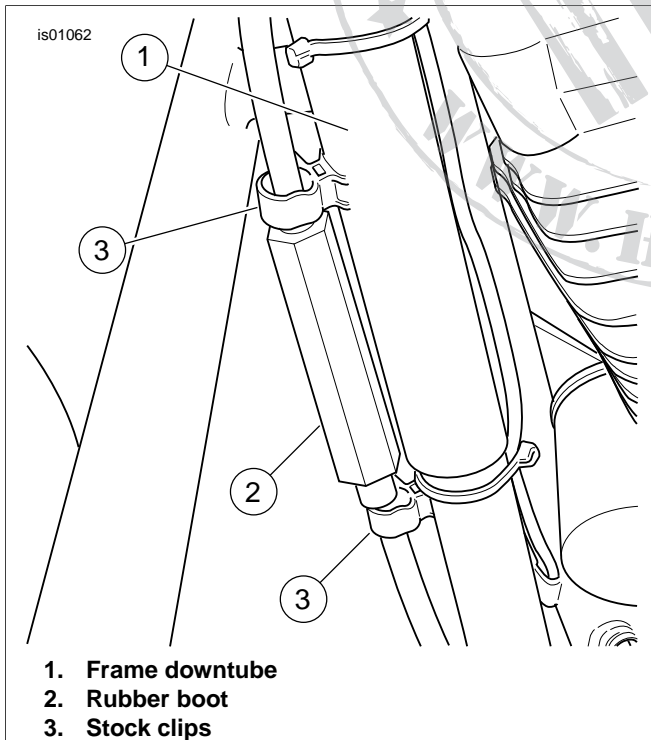


Figure 8. Left Downtube Cable Clips (1996-2005 Dyna Models)

Cable Routing, 2006 and Later Dyna Models

All Dyna models: See Figure 7. Route the clutch cable (1) from the clutch release cover, under the frame and across to the left side of the vehicle. Insert the cable into the clip (2) at the bottom left side of the frame.

See Figure 9. Verify there is approximately 1.0 in (25.4 mm) clearance between the cable (2) and the front engine mount (3).

See Figure 10. Continue routing the cable (1) up the side of the frame downtube (2) and secure the stock clips (3), keeping the rubber boot (4) between the clips.

All Dyna models (except FXDBI): See Figure 11. Route the clutch cable (1) behind the front fork upper bracket (2) and **under** the handlebar (3).

FXDBI models: Route the clutch cable (1) behind the front fork upper bracket (2) and **over** the handlebar (3).

Cable Routing, Softtail Models

FLST, FLSTN, FXSTD, FLSTS, FXST, FXSTB, and FXSTS models: Route the clutch cable from the clutch release cover, across the frame, up along the front frame downtubes and **across the front** of the handlebars. Cable straps (Figure 15, Item 6) should be used in the same location as the original equipment straps.

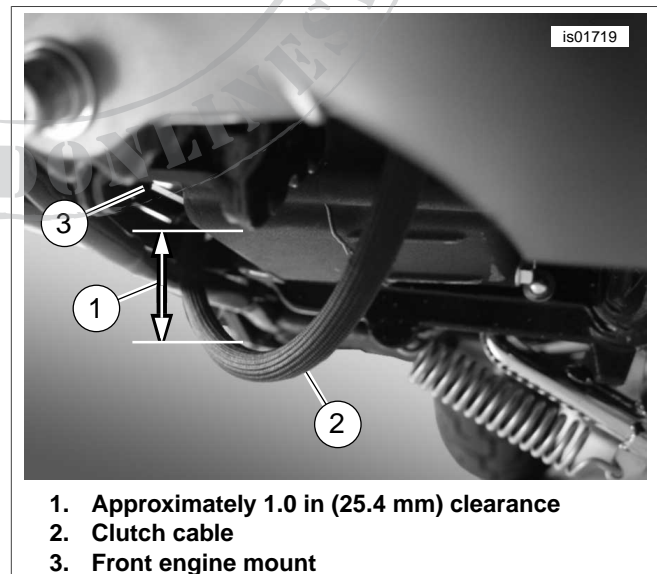
FLSTSC, FLSTF, and FLSTC models: Route the clutch cable from the clutch release cover, across the frame and up along the front frame downtubes, up to and **behind** the handlebars. Cable straps (, Item 5) should be used in the same location as the original equipment straps.

7. See Figure 6. Insert the new anchor pin (11) through the hand lever (8) and the clutch cable eyelet.

NOTE

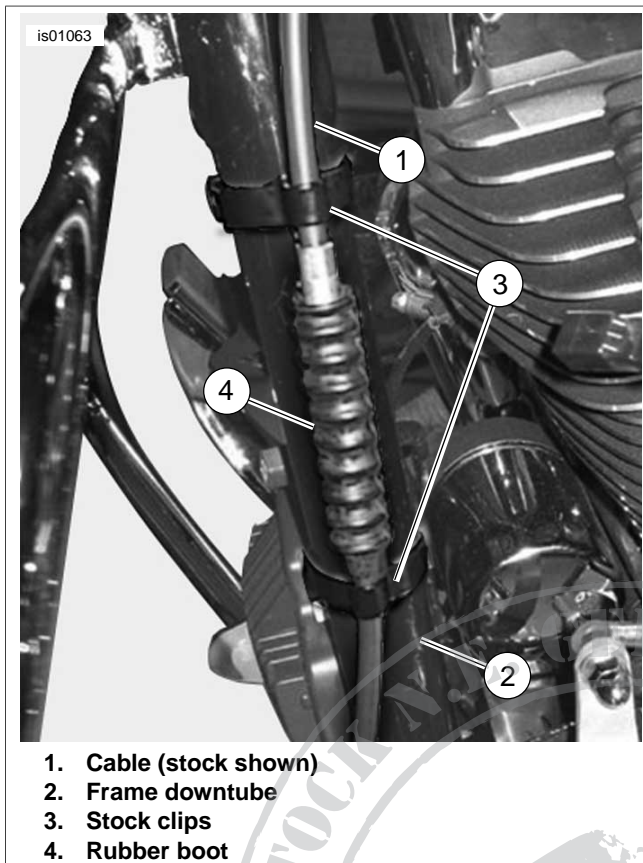
The anchor pin does not require lubrication.

8. Place the hand lever in the bracket and install the pivot pin (3) and retaining ring (12).



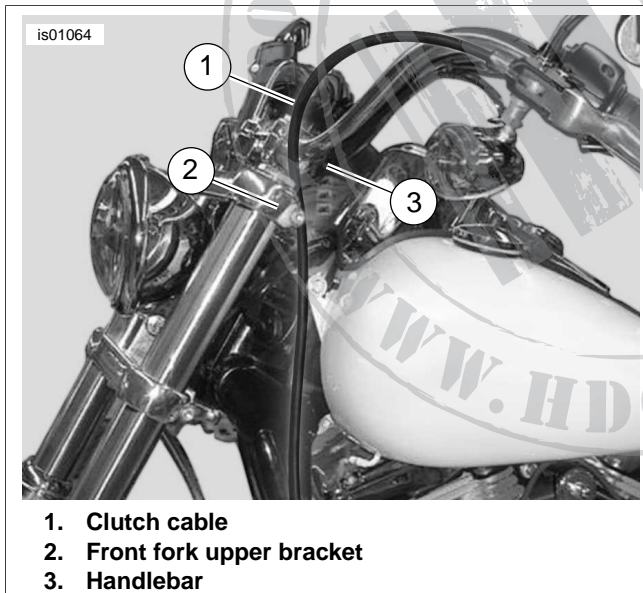
1. Approximately 1.0 in (25.4 mm) clearance
2. Clutch cable
3. Front engine mount

Figure 9. Clearance Between Clutch Cable and Front Engine Mount (2006-Later Dyna Models)



1. Cable (stock shown)
2. Frame downtube
3. Stock clips
4. Rubber boot

Figure 10. Clutch Cable Routing, Lower



1. Clutch cable
2. Front fork upper bracket
3. Handlebar

Figure 11. Clutch Cable Routing, Upper (2006-Later Dyna Models Except FXDBI)

Touring Models

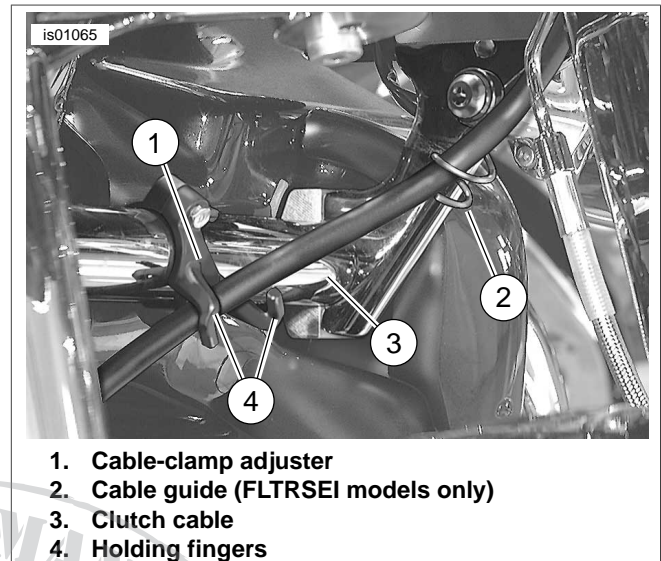
Cable Routing, FLHR/C Models

Insert the clutch cable in the clamp fastened to the upper left passing lamp bracket.

Refer to "Clutch Cable Installation, All Touring Models" subtopic.

Cable Routing, FLTR Models with Fairing Lower

1. See Figure 12. Carefully wrap the clutch cable around the coiled opening in the clutch cable guide (Item 2, FLTRSEI models only) with the eyelet toward the left handlebar.



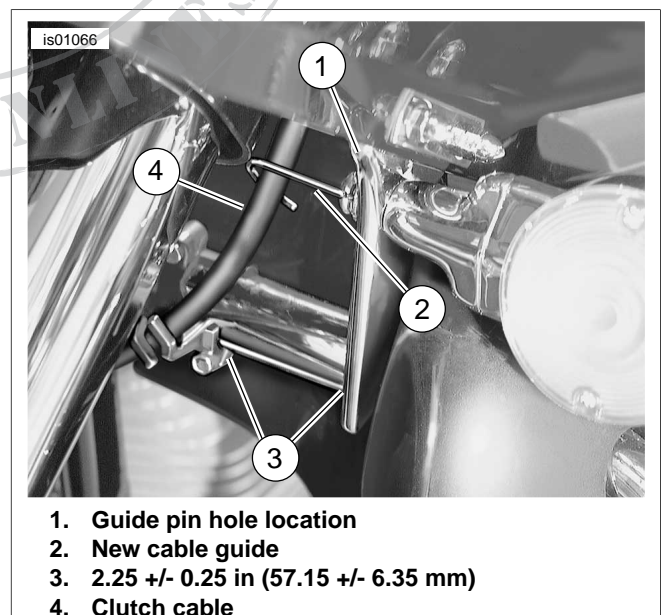
1. Cable-clamp adjuster
2. Cable guide (FLTRSEI models only)
3. Clutch cable
4. Holding fingers

Figure 12. Clutch Cable Routing, FLTR Models With Fairing Lower

2. Route the clutch cable assembly down from the clutch cable clamp while crossing to the right side of the vehicle. Run the cable between the inboard side of the right frame downtube and the outboard side of the voltage regulator.
3. The clutch cable clamp, mounted on the engine guard, has two fingers, an upper and a lower. Feed the cable assembly under one finger and over the other. Refer to the "Clutch Cable Installation, All Touring Models" subtopic.

NOTE

See Figure 13. Adjust the clutch cable clamp to 2.25 ± 0.25 in (57.15 ± 6.35 mm) as measured from the inside lower left fairing mount to the clutch cable clamp.



1. Guide pin hole location
2. New cable guide
3. 2.25 ± 0.25 in (57.15 ± 6.35 mm)
4. Clutch cable

Figure 13. Clutch Clamp Mounting Measurement FLTR Models with Fairing Lower

Clutch Cable Installation, All Touring Models

1. See Figure 6. Insert the clutch cable eyelet into the groove of the clutch hand lever (8). Align the eyelet with the hole that has no bushing. Insert the anchor pin (11) through the lever and eyelet.
2. Insert the lever into the groove of the clutch lever bracket (2), fitting the sleeve at the end of the cable housing into the bore on the inboard side of the bracket.
3. Align the hole in the hand lever with the hole in the bracket and install the pivot pin. Install the retaining ring in the pivot pin groove.
4. See Figure 14. Use the cable strap (2) from the kit to secure the clutch cable (1) to the right side frame downtube (3). The strap should go through the hole in the bracket that joins the downtubes together and around the frame.
5. Following the inboard side of the right side frame downtube, route the cable between the bottom of the cam cover and the top of the lower frame tube to the area of the clutch release cover.
6. See Figure 4. Apply a light coat of oil to the new O-ring and install the O-ring onto the threaded portion of the clutch cable. Install the clutch cable fitting (2) into the clutch release cover, being careful not to exert any sideways force on the fitting during installation. Do not tighten the cable fitting at this time.
7. Place the outer ramp in the clutch release cover recess with the tang in the cover slot.
8. Apply a multi-purpose grease to the balls and outer ramp sockets. Place a ball in each of the three outer ramp sockets.
9. Hold the coupling with the button facing outboard. Place the cable end in the coupling recess. With the ball sockets facing outboard, place the hook of the inner ramp (5) on the bottom of the coupling. Holding the inner ramp and coupling together, turn the assembly over.
10. Place the inner ramp, ball socket down, over the balls in the outer ramp sockets.

⚠ 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)

11. Install the retaining ring (1). Position the opening to the right of the outer ramp tang slot (the stop that prevents rotation) in the clutch release cover.
12. Verify that the two locating dowels are in place on the right side of the transmission case. Install the **new** gasket (purchased separately) on the clutch release cover.
13. Hold the clutch release cover in position and install the six screws. Tighten the screws to 84-132 **in-lbs** (9.5-14.9 Nm).
14. Tighten the clutch cable fitting to 36-60 **in-lbs** (4-7 Nm).

⚠ WARNING

Do not over-tighten clutch cable threaded end fitting. Use recommended torque values. Damage to threaded fitting can lead to loss of transmission fluid, which could result in loss of control and death or serious injury. (00449c)

NOTE

Breakage of the clutch cable threaded end fitting due to improper handling/installation is not covered under the Harley-Davidson Motor Company Warranty.

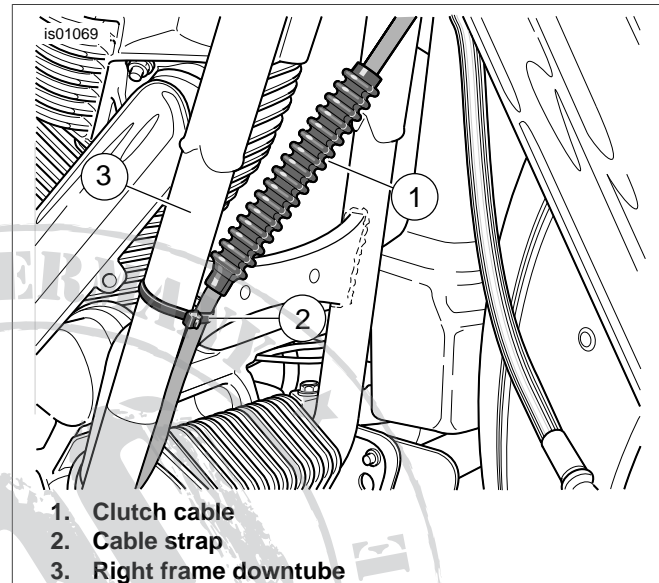


Figure 14. Clutch Cable Routing (Right Side View)

FINAL ASSEMBLY

NOTES

Some of the clutch cables in these kits contain a loose piece of clear Teflon® heat shrink tubing on the upper cable for added abrasion resistance. This heat shrink tube has been installed but not shrunk.

If the cable makes rubbing contact with motorcycle, position the heat shrink tubing so it is centered at the location of contact and shrink the tubing in place using a radiant heat source (such as the Robinair Heat Gun with Heat Shrink Attachment) (DO NOT use the Ultra-Torch!).

If the Teflon® tube has an instruction label attached, remove the label prior to heat shrinking.

1. Check the cable for any rubbing against a painted surface. Install heat shrink tubing (if equipped).
2. Fill the transmission with lubricant following the instructions in the service manual.
3. Adjust the clutch cable following the instructions in the service manual.

⚠ WARNING

Be sure that steering is smooth and free without interference. Interference with steering could result in loss of vehicle control and death or serious injury. (00371a)

⚠ 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)

4. Connect the battery cables, positive cable first or install the main fuse.



SERVICE PARTS

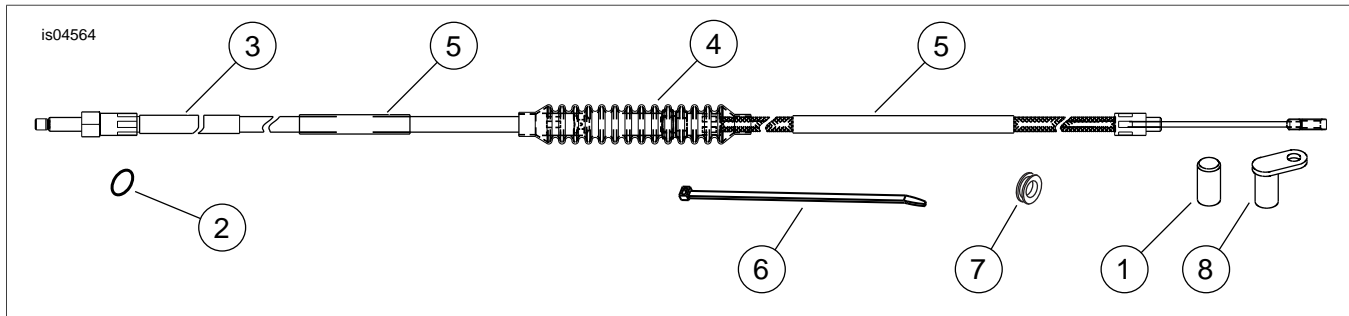


Figure 15. Service Parts, Clutch Cable Kits

Table 3. Service Parts Table

Kit	Item	Description (Quantity)	Part Number
38629-02, 38688-03, 38727-04, 38732-04, 38734-04, 38750-05, 38756-06, 38794-06, 38879-07, 56590-02, 56842-05	1	Anchor pin	45036-88
	2	O-ring	11179
	3	Clutch cable (includes Items 4 and 5)	Not Sold Separately
	4	• Rubber boot	Not Sold Separately
	5	• Heat shrink tube (if applicable)	Not Sold Separately
38674-00, 38684-06A, 38771-06A, 38808-07, 38810-07, 38812-07, 38884-07, 38885-07, 38886-07, 38887-07, 38888-07, 38889-07, 38890-07, 56307-07, 56318-07, 56348-07, 56404-07, 56507-07, 56610-07, 38916-09, 38941-09, 38939-09, 38911-09, 38940-09 38876-09, 38877-09	1	Anchor pin	45036-88
	2	O-ring	11179
	3	Clutch cable (includes Items 4 and 5)	Not Sold Separately
	4	• Rubber boot	Not Sold Separately
	5	• Heat shrink tube (if applicable)	Not Sold Separately
	6	Cable strap (4 for Kit 38674-00, 2 for all others)	10006
38660-00A, 38660-03, 38674-03, 38806-07, 56399-03, 56410-03, 56411-03, 56413-03, 56414-03, 56416-03, 56417-03, 56843-05, 56844-05, 56845-05, 56846-05	1	Anchor pin	45036-88
	2	O-ring	11179
	3	Clutch cable (includes Items 4 and 5)	Not Sold Separately
	4	• Rubber boot	Not Sold Separately
	5	• Heat shrink tube (if applicable)	Not Sold Separately
	6	Cable strap (4 for Kit 38660-00A, 2 for all others)	10006
	7	Grommet (for enlarged fairing hole. See instructions.)	11445
38615-08, 38624-08, 38654-08, 38655-08, 38668-08, 38679-08	2	O-ring	11179
	3	Clutch cable (includes Items 4 and 5)	Not Sold Separately
	4	• Rubber boot	Not Sold Separately
	5	• Heat shrink tube (if applicable)	Not Sold Separately
	6	Cable strap (2)	10006
	7	Grommet (for enlarged fairing hole. See instructions.)	11445
	8	Anchor pin	38900-08