



INSTRUCTIONS

J03955

2006-11-03



CHROME FRONT END KIT

GENERAL

Kit Number

46398-06

Models

For model fitment information, please see the P&A Retail Catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Additional Parts Required

Proper installation of this kit requires the separate purchase of an appropriate braided brake line and a fork stop kit (46072-02 for FXST and FXSTB or 46074-02 for FXDWG). See an authorized Harley-Davidson dealer for an appropriate braided brake line kit.

This kit can be installed along with Quick Release Windshields (59802-05, 58751-05, or 57199-05) with the separate purchase and installation of Turn Signal Relocation Kit (68952-98).

This kit also requires LOCTITE® 243 - Blue (99642-97) and ANTI-SEIZE LUBRICANT (98960-97) for proper installation.

⚠ WARNING

Rider and passenger safety depend 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. (00333b)

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 the Service Parts section of this Instruction Sheet for a list of kit contents

REMOVAL

NOTE

See the appropriate Service Manual for detailed information on the following generalized steps.

1. Remove the seat.

⚠ 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)

2. Disconnect the battery cables, negative (-) cable first.
3. Remove the fuel tank.
4. Disconnect the wire harnesses, from the handlebar and fork assembly, at the connector on the frame backbone.
5. Using a lift or blocks, raise the motorcycle so that the motorcycle is level with the front wheel off the ground.
6. Remove front brake caliper, front brake line, front fender and front wheel. Discard the axle. Save wheel spacers for later installation.
7. Remove the headlamp assembly.
8. Disconnect turn signal wiring harnesses.
9. Remove screw securing front brake line clip and ground wire to the rear of the upper fork bracket.

NOTE

Right side riser bolt also secures a ground wire to the bottom of the upper fork bracket. Save ground wire for later installation.

10. Remove riser bolts and set handlebar assembly aside with controls and attached control cables.
11. Remove the front forks and fork brackets (steering head).

INSTALLATION

Install Triple Tree

1. Refer to the appropriate Service Manual and inspect the steering head bearing races. Replace the races, if necessary.
2. See Figure 4. Obtain the two new bearings (9) from the kit and pack them with grease.



3. Slide the small lower dust shield (10) and a new bearing (9) onto the fork stem (11) as shown.
4. Insert the fork stem/billet lower triple tree (11) into the steering head on the frame from the bottom upward.
5. Slide a new bearing (9) and the larger dust shield (8) onto the fork stem.
6. Thread the adjusting nut (7) onto the fork stem, tapered side upward (See Figure 1.), flat side against the dust shield (8). Tighten the adjusting nut until the bearings show no lateral motion in their bearing cups, but not so tight that the fork stem does not move easily and freely from side to side.

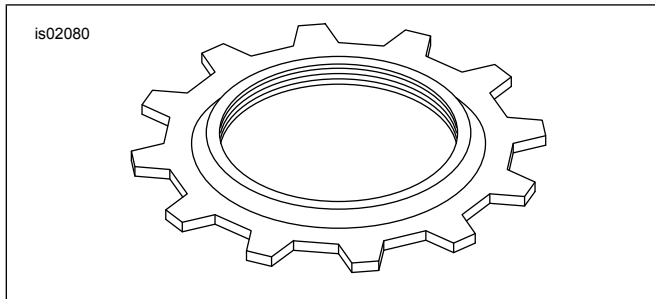


Figure 1. Adjusting Nut (Tapered Side Upward)

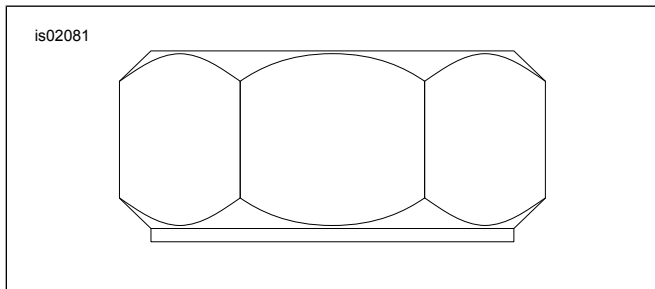


Figure 2. Fork Stem Nut (Stepped Side Down)

7. Place the upper billet triple tree clamp (5), with the large diameter bore up and the tapered bore down, against the tapered side of the adjusting nut on the fork stem.
8. Slide the Belleville washer (4), concave side down, onto the fork stem.
9. Thread the new fork stem nut (3), stepped side down (See Figure 2.), onto fork stem. Finger tighten only at this time.

Fork and Front Wheel Installation

1. See applicable Service Manual and Figure 3. Install left side front fork (7) and the right side front fork (8) into the upper and lower fork brackets.
2. See Figure 5. Fasten the forks to the upper triple tree clamp using the seal (3), washer (2), and fork tube cap (1). Tighten cap to 54–81 N·m (40–60 ft-lbs).

NOTE

Do not remove the screws that secure the fender mounts to the fork sliders.

3. See Figure 5. Apply a small amount of Loctite 243 (blue) to the four new fender mounting screws (25), then install the front fender to the the Billet Front Forks using the four screws (25) and four washers (24). Tighten screws to 20.3–24.4 N·m (15–18 ft-lbs)

NOTE

See Figure 3 for Steps 4 through 9.

4. Apply a light coat of Loctite ANTI-SEIZE Lubricant to the threads and bearing area of the new axle (1).

NOTE

Install wheel spacers into place before installing the front wheel assembly.

5. Install the front wheel assembly and stock spacers with the new axle from the kit, threading the axle into the left front fork slider. Tighten axle to 68–75 N·m (50–55 ft-lbs).
6. Temporarily lower the motorcycle and compress the suspension by pressing down on the handlebars several times. This will center the fork legs and relieve any binding on the axle.
7. Apply a small amount of Loctite 243 (blue) to the axle set screw (4), then install it to the bottom of the right side front fork (8), as shown. Tighten the axle set screw to 68–75 N·m (50–55 ft-lbs).
8. Apply a small amount of Loctite 243 (blue) to the axle cover screw (3), then install the axle cover (2) and axle cover screw to the axle.
9. Remove the protective tape from the back side of the right side reflector (5) and apply the reflector to the right side slider. Repeat for opposite side.

NOTE

The braided brake line will be installed later in this procedure.

10. Refer to the appropriate Service Manual and install the front brake caliper.

▲ WARNING

Adjustments to steering head bearings should be performed by a Harley-Davidson dealer. Improperly adjusted bearings can adversely affect handling and stability, which could result in death or serious injury. (00051b)

11. See Figure 4. Adjust the adjusting nut (7) to set steering head fall-away according to the Service Manual instructions. Refer to the STEERING HEAD BEARINGS section in the appropriate service manual.
12. Tighten the stem nut (3) to 4.2–61 N·m (40–45 ft-lbs).
13. See Figure 4. Apply Loctite 243 (blue) to the six lower triple tree pinch bolts (13).

14. Loosely fasten the pinch bolts to the lower triple tree clamp as shown. Torque the bolts in these steps:
 - a. Middle, then top, then bottom bolts to 9 N·m (80 **in-lbs**) each.
 - b. Middle, then top, then bottom bolts to 11.5 N·m (100 **in-lbs**) each.
 - c. Middle, then top, then bottom bolts to 13.5–14.7 N·m (120–130 **in-lbs**) each.

NOTE

The steering stops may need to be pressed into the triple tree clamp far enough for the steering stop screw to thread into the stop from the bottom of the triple tree clamp.

On FXDWG models, the steering stops are not functional other than to fill the holes, and to provide a brake line P-clip fastener on the bottom of the lower triple tree. The tops of properly installed steering stops on FXDWG models must be flush with the top of the lower triple tree.

15. See Figure 4. Install the steering stops:
 - a. Insert steering stops (12) in the left and right side holes on the top of the lower triple tree clamp.
 - b. Apply Loctite 243 (blue) to the steering stop screw (14) provided in the steering stop kit.
 - c. Fasten the stops to the triple tree clamp with the screw through the bottom of the lower triple tree clamp. Torque the screws to 13.5 N·m (120 **in-lbs**).
16. See Figure 4. Install the O-ring (2) on the stem-nut cover (1).
17. Apply rubbing alcohol to the O-ring on the stem nut cover.
18. Press the stem nut cover into position on top of the upper triple tree clamp.

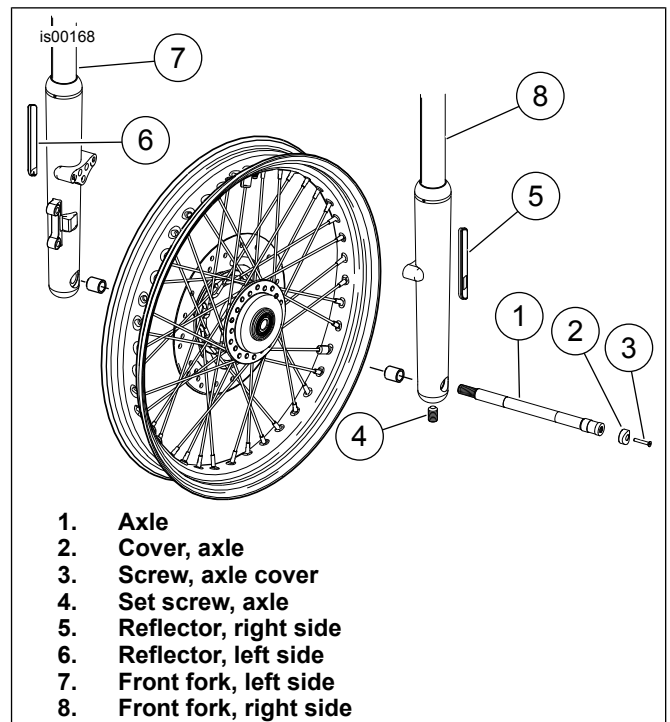


Figure 3. Front Wheel Installation

Return Motorcycle to Service

NOTE

Refer to the appropriate Service Manual for Steps 1-3.

1. Install the stock riser rubber bushings on the upper triple tree clamp. Install new bushings if the stock bushings are worn or damaged.

NOTE

A ground strap fastens between the right riser bolt and the brake line P-clip on the back, right side of the upper triple tree clamp.

2. Fasten the stock risers and one end of the ground strap to the upper triple tree clamp according to the service manual instructions.
3. Install the handlebars according to the service manual instructions.
4. Fasten the headlight assembly to the top of the lower triple tree clamp using the screw (15) (See Figure 4.) from this kit and stock lock washer. Apply Loctite 243 (blue) to the screw. Insert the screw upward through the bottom of the clamp. Tighten the screw to 33.9–40.7 N·m (25–30 ft-lbs).
5. Install the braided front brake line kit (sold separately) according to the Braided Brake Line kit Instruction Sheet with the following exceptions:
 - Use the self-tapping screw (6) (See Figure 4.) from this kit to fasten the loose end of the ground strap and the top P-clip to the back, right side of the upper triple tree clamp. Tighten the screw to 2.3 N·m (20 **in-lbs**).

- Apply Loctite 243 (blue) to the P-clip screw, then fasten the brake line bottom P-clip to the bottom of the lower triple tree clamp using the right side steering stop screw. Tighten the screw to 13.5 N·m (120 in-lbs).
6. See Figure 4. Route the handlebar wiring through the hole (A) in the front center of the upper triple tree clamp.
 7. Connect the headlight and handlebar wiring to the main wiring harness.
 8. Refer to the appropriate Service Manual and install the fuel tank.
 9. Turn the handlebars full right and left. Check that:
 - The handlebars and triple tree clamps do not contact the fuel tank.
 - The steering stops function properly.
 - The wiring and brake line are not pinched or kinked in the steering assembly.
 - The fork lock functions properly (Softails only).
 - Throttle returns from full open to close at both fork stops.
 10. Refer to the appropriate Service Manual and lubricate the steering head through the lubrication fitting.

⚠ 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)

11. Connect the battery cables, positive cable first.

⚠ WARNING

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

12. Install the seat.

CARE & MAINTENANCE

Perform the following service on your vehicle **every 2,500 miles (4,000 km)** after installing this kit:

- Refer to the appropriate Service Manual and check the steering head fall-away. Adjust the fall-away, if necessary.
- Refer to the appropriate Service Manual and lubricate the steering head.

Refer to the appropriate Service Manual when disassembling or assembling the front forks. The front fork and triple tree procedures included in the manual are applicable to the front forks and triple trees included in this kit. Refer to the Service Parts section of this Instruction Sheet for the appropriate service parts when performing any maintenance procedures.

SERVICE PARTS

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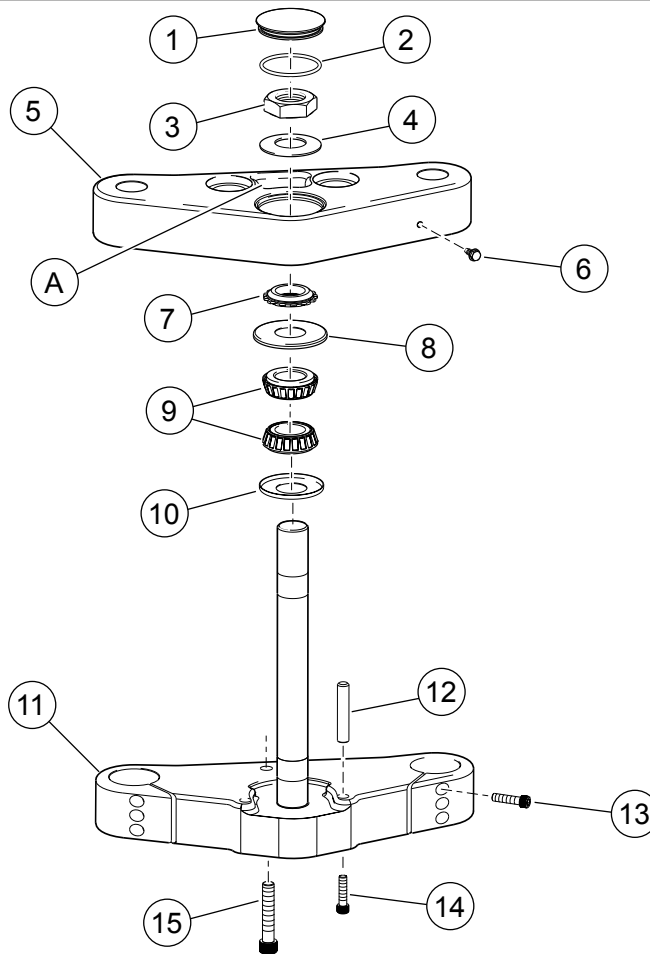


Figure 4. Service Parts for Chrome Front End Kit (Triple Tree)

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
1	Cover, stem nut	29799-01
2	O-ring	11188
3	Nut, fork stem	45718-60
4	Belleville washer	37000-01
5	Triple tree clamp	46291-04
6	Self-tapping screw	4091
7	Adjusting nut	48324-00
8	Upper dust shield	48361-80
9	Steering head bearing (2)	48345-60
10	Lower dust shield	48365-48A
11	Fork stem/lower triple tree	46341-04
12	Steering stop (2) (sold separately) (2000 and later Softail models)	46072-02
	Steering stop (2) (sold separately) (2000-2003 FXDWG models)	46074-02
13	Socket head cap screw (6)	94314-91T
14	Socket head cap screw (sold with Item 12)	Not Sold Separately
15	Socket head cap screw	94358-91T
Items Mentioned in Text		
A	Through hole for handlebar wiring	

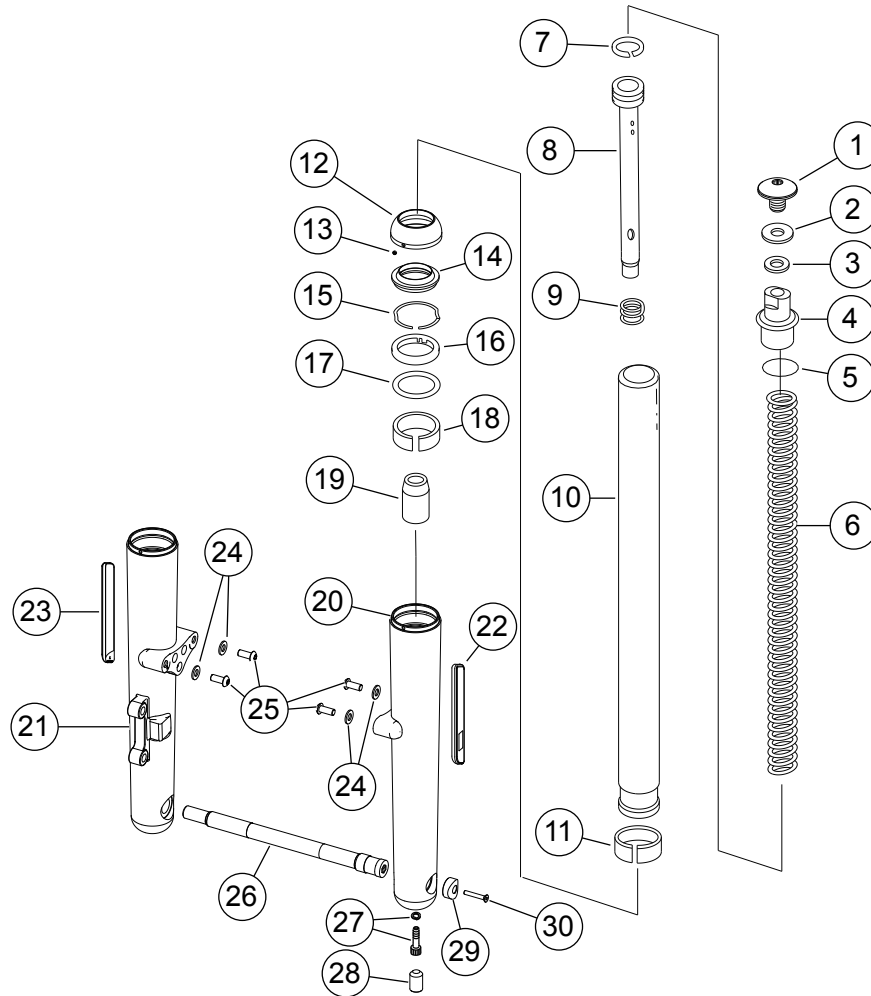


Figure 5. Service Parts for Chrome Front End Kit (Front Forks and Axle)

Table 2. Service Parts

Item	Description (Quantity)	Part Number	Item	Description (Quantity)	Part Number
1	Chrome fork cap (2)	Not Sold Separately*	16	Oil seal, slider (2)	45875-84A
2	Spacer (2)	5710	17	Washer, slider (2)	45865-84
3	Seal, oil (2)	45733-48	18	Bushing, slider tube (2)	45940-84
4	Plug, fork tube (2)	45838-77	19	Stop, lower (2)	45803-97
5	O-ring (2)	45845-77	20	Fork slider assembly, right side	46598-03
6	Spring	46048-00	21	Fork slider assembly, left side	46544-03
7	Wear ring (2)	45859-77A	22	Reflector, amber, right side	59481-00
8	Damper tube with wear ring (2)	45418-00	23	Reflector, amber, left side	59482-00
9	Spring, damper tube (2)	45933-86	24	Flat washer, chrome (4)	Not Sold Separately*
10	Fork tube (2)	45417-00	25	Button head screw, Torx (4)	Not Sold Separately*
11	Bushing, fork tube (2)	45866-84	26	Axle, front	Not Sold Separately*
12	Dust cap, slider (2)	Not Sold Separately*	27	Screw with washer (2)	45405-75A
13	Set screw, #8-32 X 1/8 in. (2)	Not Sold Separately*	28	Set screw, cup point hex drive	Not Sold Separately*
14	Seal, dust (2)	46175-00	29	Cover, axle	Not Sold Separately*
15	Ring, oil seal retaining (2)	45842-77A	30	Screw	Not Sold Separately*
* - This part is available for purchase as part of one of the kits listed below.					
	Kit, cover - includes slider dust cap (item 12) and set screw (item 13)	46742-03		Kit, axle cover - includes axle cover (item 29) and screw (item 30)	41418-03
	Kit, axle - includes axle (item 26) and set screw (item 28)	41419-03		Kit, fender hardware - includes four washers (item 24) and four screws (item 25)	95500-03
	Kit, chrome fork cover - includes two fork covers (item 1)	46468-05			