



# INSTRUCTIONS

J03106

2005-01-05



## CHROME HEADLIGHT NACELLE

### GENERAL

#### Kit Number

67971-04

#### Models

This kit fits 1987 and later XL model motorcycles.

This kit fits 1994 through 2005 Dyna model motorcycles, except FXDWG, FXDS-CONV and FXDXT model motorcycles.

This kit fits 1991-1994 FXR model motorcycles.

This kit will not fit on any motorcycle with a windshield.

#### Additional Parts Required

##### ⚠ 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 for a list of the kit contents.

#### REMOVAL

1. Remove the windshield (if equipped).
2. Remove the seat according to the procedure in the applicable Service Manual.

##### ⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

##### ⚠ 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)

3. Disconnect battery cables, negative cable first.

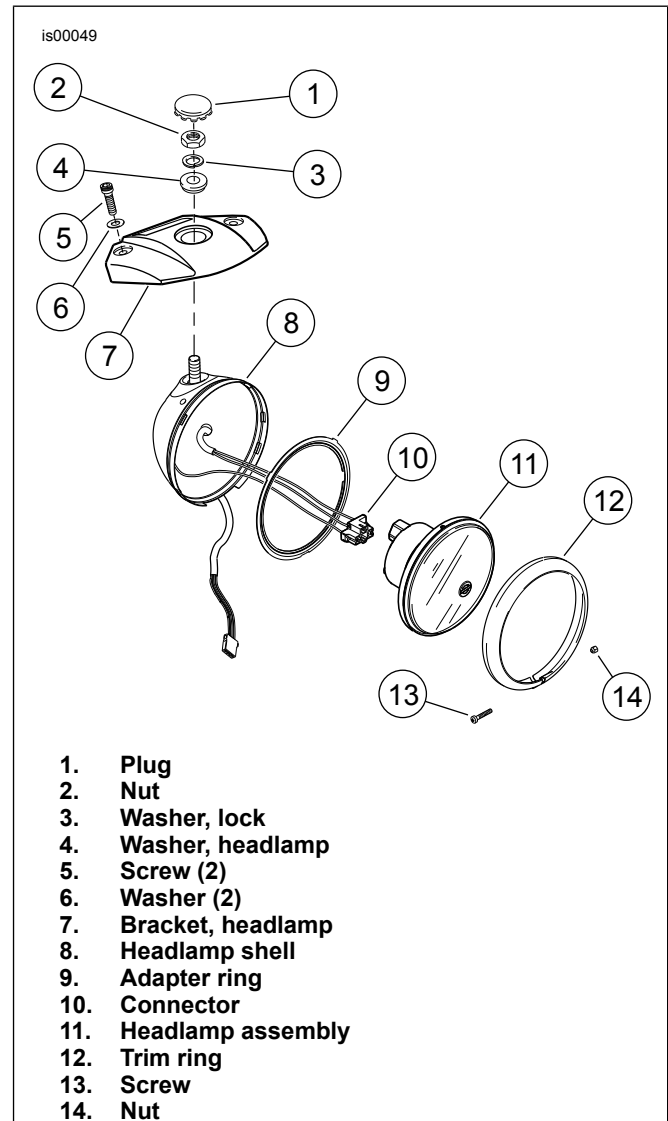
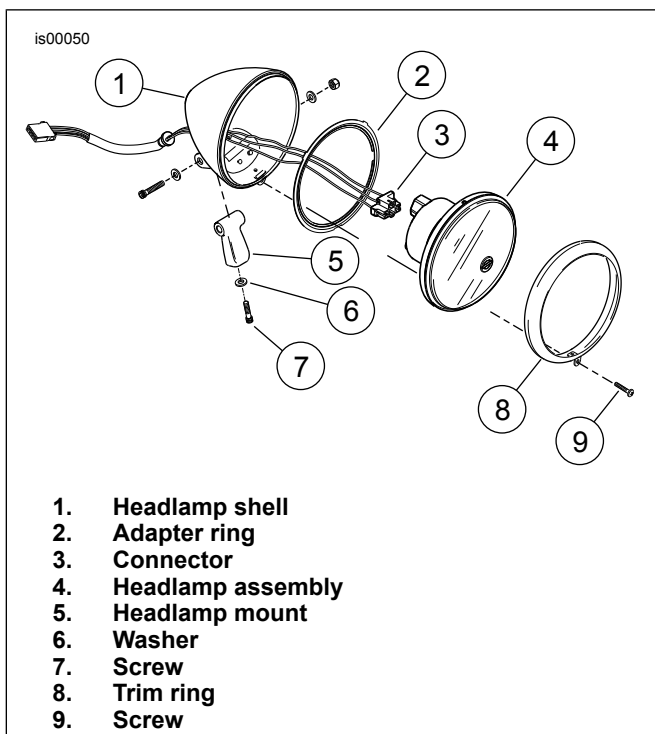
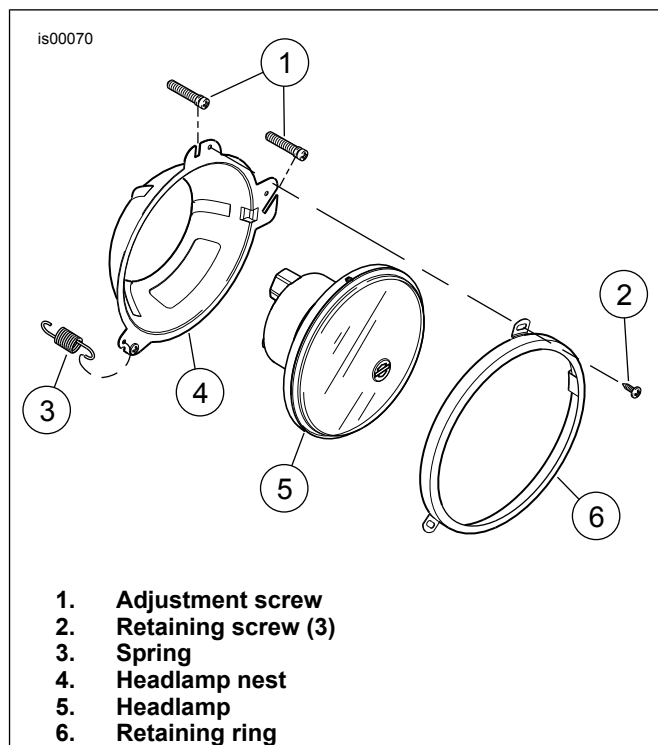


Figure 1. Headlights with Eyebrow Style Mount



**Figure 2. Lower Mount Style Headlamp**



**Figure 3. Headlamp Nest**

4. Remove the trim ring screw and nut, and remove the trim ring.
5. Remove the headlamp lens assembly and disconnect the wiring connector from the bulb prongs. Save the headlamp.
6. Remove the adapter ring from the headlamp shell.

**NOTE**

*Note the location of the wires in the connector before removing.*

7. Remove the headlamp connectors from the headlamp harness using a pick tool (Snap-on® TT600-3).
8. Work the wires of the headlamp harness through the grommet and remove the harness from the headlamp shell.
9. For Dyna model motorcycles, XL883C and XL1200C model motorcycles: Remove and discard the headlamp shell mounting bolt, internal tooth lockwasher and headlamp shell assembly. For XL883/L and XL1200R model motorcycles: Remove and discard the plug, nut, washers and headlamp shell assembly. Then remove and discard two screws and washers and headlamp mounting bracket.
10. Remove two screws and the upper triple clamp cover. Discard removed parts.
11. Cut any cable straps connecting the clutch cable to front fork or frame.
12. If necessary, re-route the clutch cable outside of the fork. The clutch cable must be routed outside of the headlight nacelle.

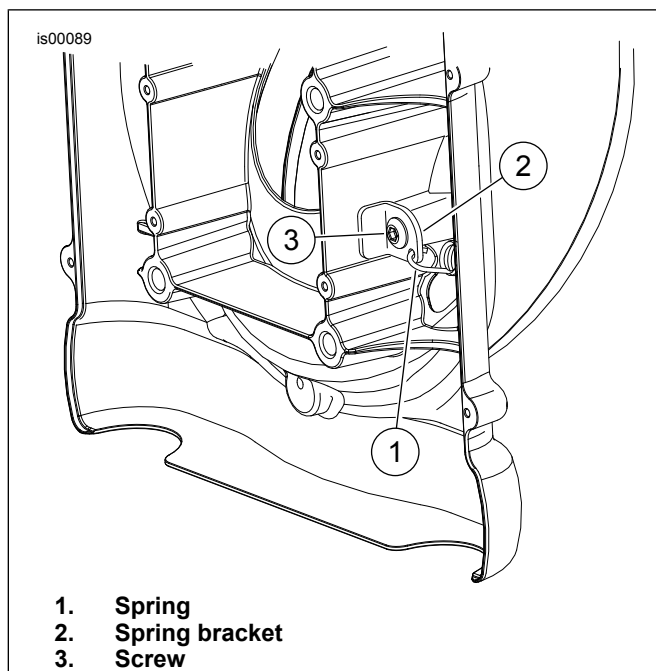
## INSTALLATION

### Nacelle Installation

**NOTE**

*Use caution during installation, to prevent scratching the headlamp nacelle.*

1. See Figure 4. Install spring bracket (2) and screw (3) to the nacelle. Tighten to 8.5–11.3 N·m (75–100 in-lbs)
2. See Figure 3. Install the previously removed headlamp into the nest using the retaining ring and three screws (2).
3. Install the assembled headlamp nest into the nacelle using two adjustment screws.
4. Install the wiring harness wires into the headlamp connector in the same locations as noted during the removal process.



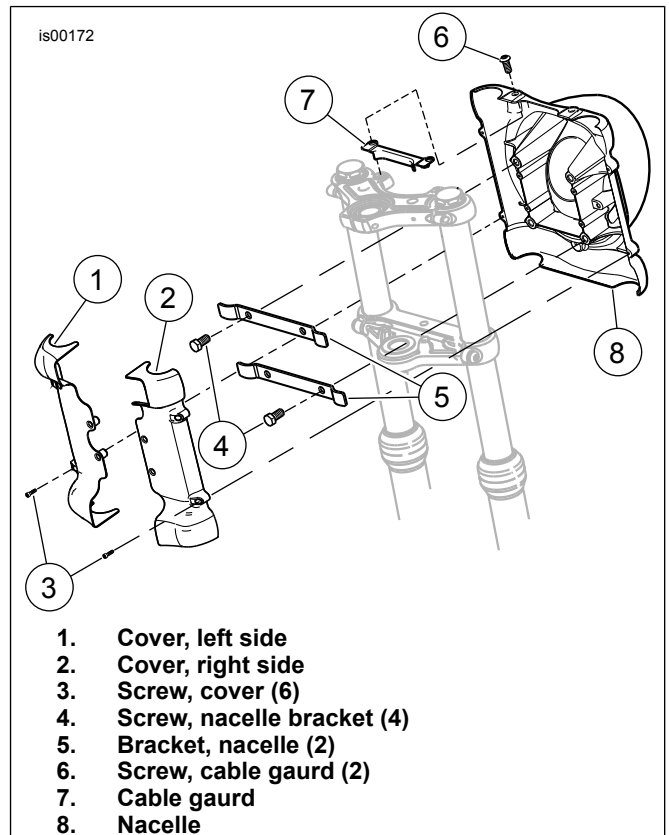
**Figure 4. Spring Bracket**

5. See Figure 4. Connect the spring (1) to the headlamp nest and the spring bracket (2) on the back of the nacelle.
6. See Figure 8. Install two metal grommets (8) and screws (1) to the nacelle. Tighten screws to 1.1–1.7 N·m (10–15 in-lbs).
7. See Figure 8. Install three screws (15) and the trim ring bracket (7) to the trim ring (6). Tighten screws to 2.3–3.4 N·m (20–30 in-lbs). Set the assembled parts aside for later installation.
8. See Figure 5. Apply 2-3 drops of Loctite® 242 (blue) to the threads of two screws (6). Install cable guard (7) and nacelle (8) to the upper triple clamp using two screws (6), ensuring cable guard locates between the nacelle and upper fork bracket. Tighten the screws to 13.5–20.3 N·m (10–15 ft-lbs).
9. See Figure 5. Apply 2-3 drops of Loctite® 242 (blue) to the threads of four screws (4). Install two brackets (5) to the nacelle using the four screws (4). Tighten screws to 33.9–40.7 N·m (25–30 ft-lbs).
10. Connect the headlamp connector to the headlamp.
11. Secure loose headlamp wires with cable ties to avoid wear and damage to the wires.
12. Turn handlebars back and forth, from stop to stop, and check for cable binding or wire pinching. Adjust the wires or cables as necessary to correct any binding or pinching.

#### ⚠ 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)**

13. Reconnect the battery cables. Connect the positive (+) cable first.
14. Install the left rear cover (1) and the right rear cover (2) to the nacelle using eight screws (3). Tighten the screws to 1.1–1.7 N·m (10–15 in-lbs).
15. See **Headlamp Adjustment** below. Check and, if necessary, adjust the headlamp position.



**Figure 5. Nacelle and Cover Installation**

## Headlamp Adjustment

1. See the Owner's Manual. Verify correct front and rear tire inflation pressure.
2. Place motorcycle on level floor (or pavement) in an area with minimum light.
3. See Figure 6. Position the motorcycle 25 ft (7.6 m) away from a screen or wall. Measure the distance from directly below the front axle to the base of the wall or screen.
4. Draw a horizontal on the screen or wall, 35 in. (0.9 m) above the floor.
5. Load the vehicle with rider, passenger (if normally present) and any cargo normally carried. Weight will compress the vehicle suspension slightly.
6. Stand the motorcycle upright with both tires resting on the floor and with front wheel held in straight alignment (directly forward).
7. Turn the ignition/headlamp switch to IGNITION position. Set handlebar headlamp switch to HIGH beam position.

8. Check and the light beam for proper adjustment:
  - a. The main beam of light (broad, flat pattern of light) should be centered equally above and below the horizontal line on the screen or wall.
  - b. The main beam of the light should be directed straight ahead. Properly adjusted headlamps project an equal area of light to the left and right of center.
9. If necessary, adjust the headlamp beam as follows:
  - a. See Figure 6. Raise or lower the headlamp beam, as necessary, by turning the vertical adjusting screw (1). Turn the screw clockwise to raise the beam or counterclockwise to lower the beam.
  - b. See Figure 6. Adjust the headlamp beam left or right, as necessary, by turning the horizontal adjusting screw (2). Turn the screw clockwise to adjust the beam towards the rightside of the motorcycle or counterclockwise to adjust the beam towards the leftside of the motorcycle.
10. Turn the ignition/headlamp switch to OFF position.

## Final Assembly

1. See Figure 6. Install trim ring over grommets (3) and turn the trim ring counterclockwise until the trim ring retaining screw can be threaded into the nacelle.
2. Thread trim ring retaining screw to secure the trim ring to the nacelle. Tighten screw to 2.3–3.4 N·m (20–30 in-lbs).

### NOTE

*If the clutch cable is not routed as shown, damage to the nacelle or clutch cable may occur.*

3. See Figure 7. Route the clutch cable to the rear of the headlight nacelle as shown.

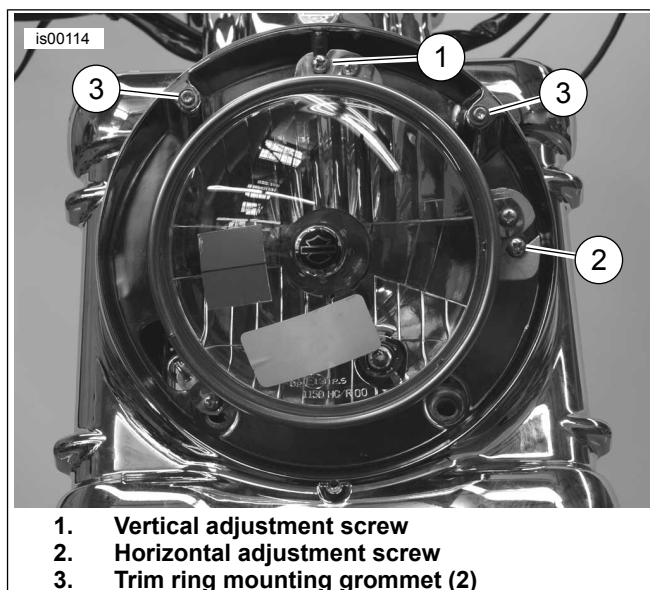


Figure 6. Headlamp Adjustment

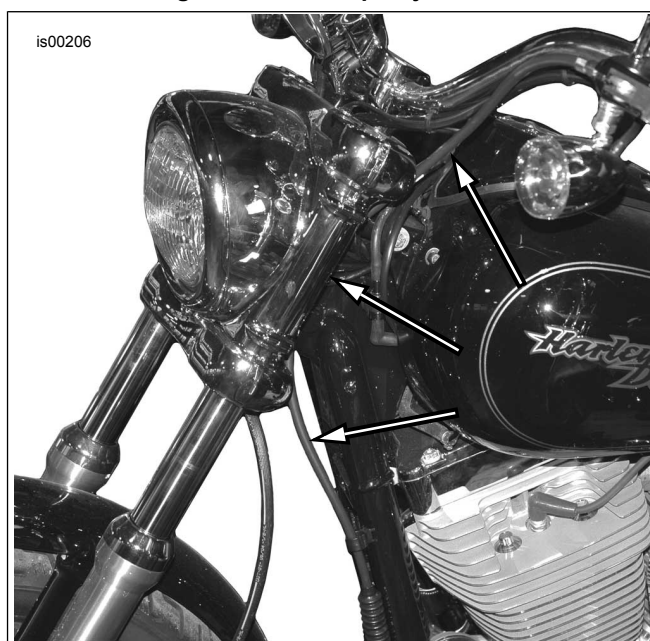
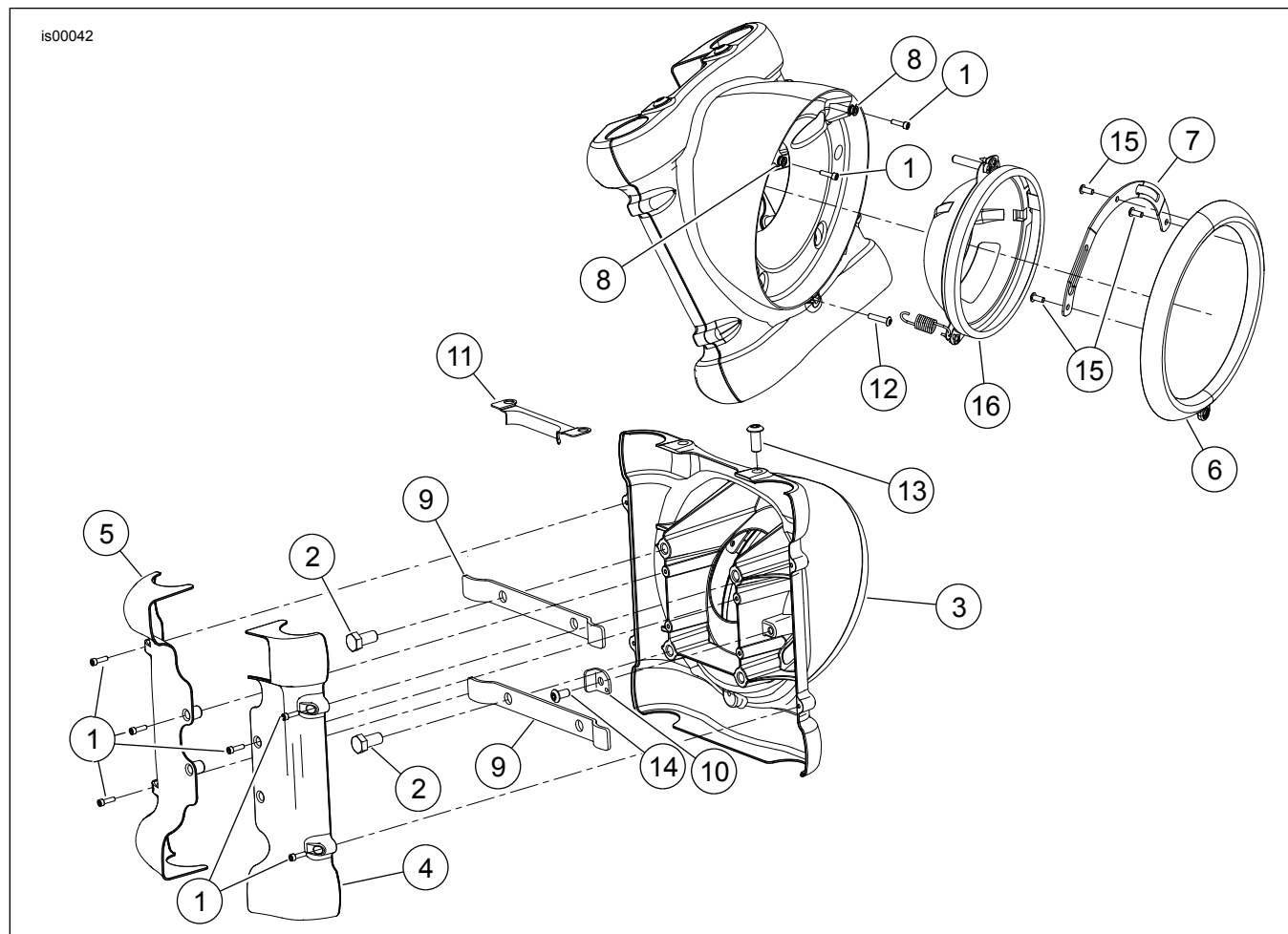


Figure 7. Clutch Cable Routing

## SERVICE PARTS

is00042



**Figure 8. Service Parts for Chrome Headlight Nacelle**

**Table 1. Service Parts Table**

Item	Description (Quantity)	Part Number
1	Screw, socket head, chrome, #6-32 x 1/2 in. (10)	3410
2	Screw, hex head, 3/8-16 x 3/4 in. (4)	4713W
3	Headlight nacelle, chrome	Not Sold Separately
4	Cover, back, right, chrome	68179-04
5	Cover, back, left, chrome	68182-04
6	Trim ring, nacelle, chrome	68190-04
7	Bracket, trim ring retaining, chrome	68194-04
8	Grommet, trim ring (2)	68201-04
9	Bracket, nacelle, chrome (2)	68202-04
10	Bracket, spring	68203-04
11	Cable guard	68338-04
12	Screw, button head, chrome, #8-32 x 3/4 in.	94380-92T
13	Screw, button head, chrome, 5/16-18 x 3/4 in. (2)	94393-92T
14	Screw, button head, chrome, 1/4-20 x 1/2 in.	94407-94T
15	Screw, button head, chrome, #8-32 x 3/8 in. (3)	94634-99
16	Headlight nest, with retaining ring, spring, adjustment screws and mounting screws	68204-04