



# INSTRUCTIONS

-J03133

REV. 06-11-2004

Kit Number 67231-04

## FLHR MINI-TACH BRACKET KIT

### General

This kit is designed for installation on 1994 and later FLHR (except FLHRSEI<sup>2</sup>) and 1986 and later Softail models equipped with Chrome Headlight Nacelle (Part No. 67907-96).

This kit requires a 1.) mini-tach kit and a 2.) mini-tach housing kit to complete the installation:

#### Mini-Tach Kits

Mini-Tach Kit (black face)  
Mini-Tach Kit (silver face)  
Mini-Tach Kit (metal face)  
Mini-Tach Kit (nostalgic face)

Part No.  
68953-04  
68986-04  
67201-04A  
68031-05

#### Housing Kit

Mini-Tach Tapered Gauge Housing  
Mini-Tach Standard Gauge Housing

Part No.  
67295-04  
67523-04

See the Service Parts illustration for the contents of this kit.

### 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 instructions. A Service Manual for your motorcycle is available from your Harley-Davidson dealer.

### CAUTION

It is possible to overload your motorcycle's charging system by adding too many electrical accessories. If your combined electrical accessories operating at any one time consume more electrical current than your vehicle's charging system can produce, the electrical consumption can discharge the battery and cause vehicle electrical system damage. See a Harley-Davidson dealer for advice about the amount of current consumed by additional electrical accessories, or for necessary wiring changes (00211b).

### Installation

#### Prepare the Motorcycle

1. Follow the Service Manual instructions to remove the seat.

### WARNING

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

2. Disconnect the negative (-) battery cable.
3. Follow the instructions in the Service Manual and in the mini-tach kit instruction sheet to remove the fuel tank.

#### Wire the Tachometer

1. Follow the instructions in the Service Manual and the mini-tach instruction sheet to splice the tachometer wires to the main wire harness and to wire the fuse block.
2. Follow the instructions in the Service Manual and the mini-tach instruction sheet to route the tachometer wires.

#### Remove Handlebar Shroud

1. Follow instructions in the Service Manual to remove right saddlebag, and right side cover.

#### NOTE

When installing this kit on FLHR models, the following adjustment creates room between the inside of the windshield and the top of the nacelle.

2. To create room between the inside of the windshield and the top of the nacelle:
  - a. Remove windshield.
  - b. Loosen, but do not remove, the upper and lower nacelle/passing lamp bracket acorn nuts.
  - c. Apply constant pressure to lower portion of nacelle, toward rear of motorcycle, and move lower windshield bushings as far back as possible, then tighten lower acorn nuts to 18 ft-lbs (24 Nm).
  - d. Apply constant pressure to upper portion of nacelle, toward rear of motorcycle, and move the upper windshield bushings as far forward as possible, then tighten upper acorn nuts to 18 ft-lbs (24 Nm).
3. See Figure 1. Remove screw (1), headlamp door (chrome ring) (2), and headlamp screws (3). Retain screws.

4. Separate electrical connector and and remove headlamp assembly (4).
5. Remove speednut (5) that holds chrome trim strip (6) in place and remove trim.
- 6.. Carefully pry off fork lock plate (10) on top of nacelle handlebar shroud to access screws that hold cover in place.
7. Under plate, remove 2 screws (11) that hold shroud to fork lock.
8. Remove nut (7) that secures the handlebar shroud and remove shroud, screw (9, and fender washer (8)

### Install FLHR Mini-Tach Bracket Kit on Shroud

1. See Figure 2. Cover the front of the handlebar cover with transparent or masking tape.
2. **For 1994 to 2002 models:** Measure and mark hole locations 1 and 7/8 in. (47.63mm) from the bottom front of cover and 3 and 13/16 in. (96.84 mm) apart and centered on the front face of the shroud.

**For 2003 and later models:** Measure and mark hole locations 1 - 5/8 in. (41.28) from the bottom front of cover and 3 - 13/16 in. (96.84 mm) apart and centered on the front face of the shroud.

#### NOTE

For best results, drill the handlebar cover holes on a drill press with the drilling surface level. Be sure to use a sharp drill bit when drilling holes in the cover.

3. Center punch hole locations. Drill 1/8 in. starter hole and finish with a 9/32 in. drill bit. Remove the tape and any burrs that may have formed.
4. Attach tachometer bracket to cover with screws, lockwashers and nuts.
5. Tighten to 84-108 **in-lbs** (9-12 Nm).

### Install the Shroud

1. Fit the handlebar shroud over the handlebar clamps.
2. Install the screw through the shroud and the nacelle and from the inside of the nacelle, fit the fender washer and thread on the nut.
3. Tighten the screw to 10-20 **in-lbs** (1.1-2.3 Nm).
4. Install the 2 screws that secure the shroud to the fork lock.
5. Install the cover plate.
6. Fit chrome strip and reach inside nacelle to install the speednut. Tighten speednut to 15-20 **in-lbs** (1.7-2.3 Nm).
7. Mate the wire connector to the back of the headlamp.
8. Install the headlamp with the 8 screws.
9. Fit the square-shaped portion of the headlamp door spring into the slot at the top of the headlamp housing and then snap the headlamp door (chrome ring) into place. Install the screw at the bottom of the headlamp door.
10. Install the windshield.

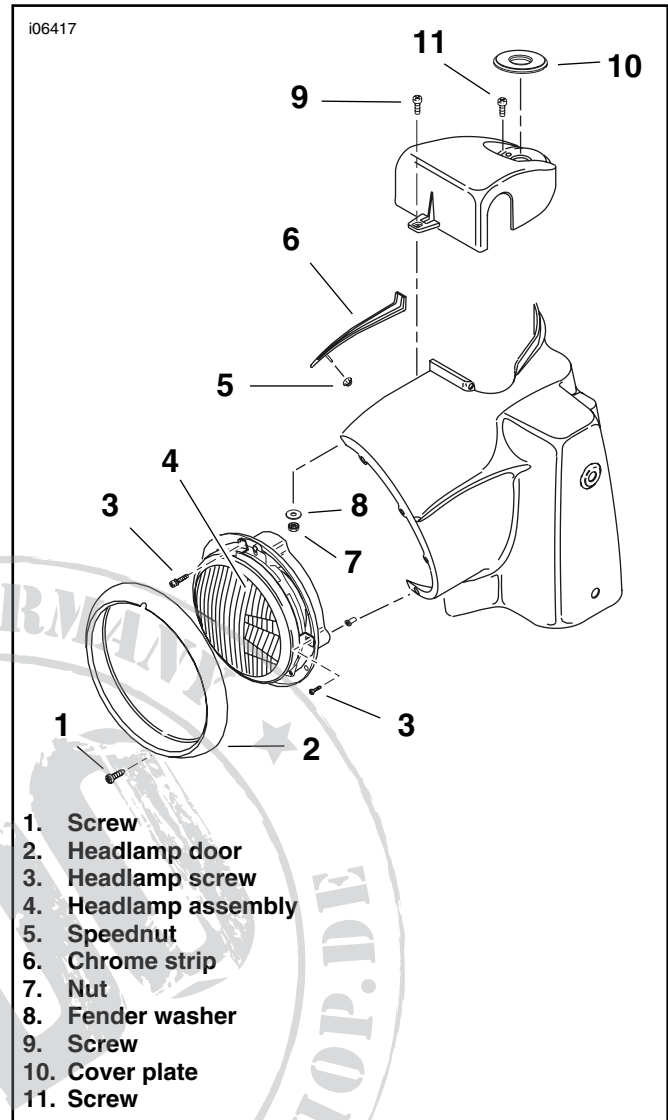


Figure 1. Nacelle and Handlebar Shroud Components

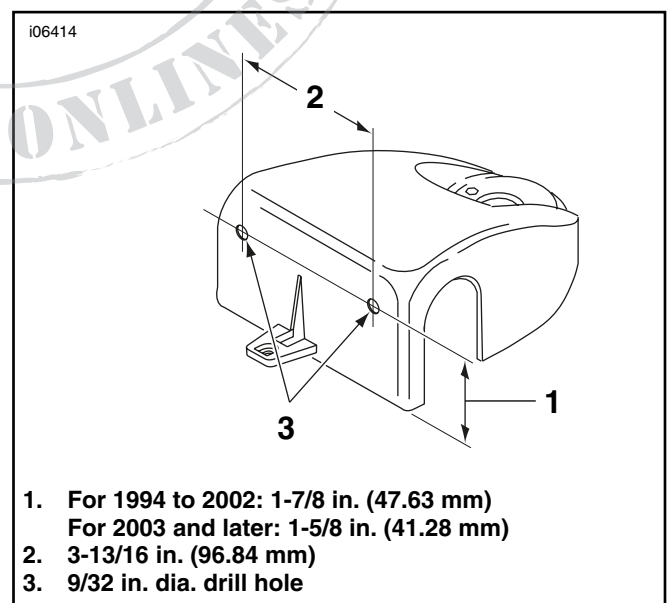


Figure 2. Nacelle Components and Hole Locations

### Install Tachometer into Bracket

1. Follow the instructions in the mini-tach instruction sheet to install the tachometer in the bracket.
2. Following the mini-tach instructions, attach the wire terminals to the terminal posts on the back of the tachometer.
3. Follow the instruction sheet that comes with the mini-tach housing kit to attach the housing.

### Return the Motorcycle to Service

1. Follow the directions in the Service Manual and the mini-tach instruction sheet to secure the wiring and install the fuel tank.
2. Connect the negative (-) battery cable to the battery.
3. Install the seat.

#### WARNING

After installing seat, pull upward on front of 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 (00070a).

4. Install right sidecover and saddlebag.
5. Follow the directions in the instruction sheet to test the operation of the tachometer.



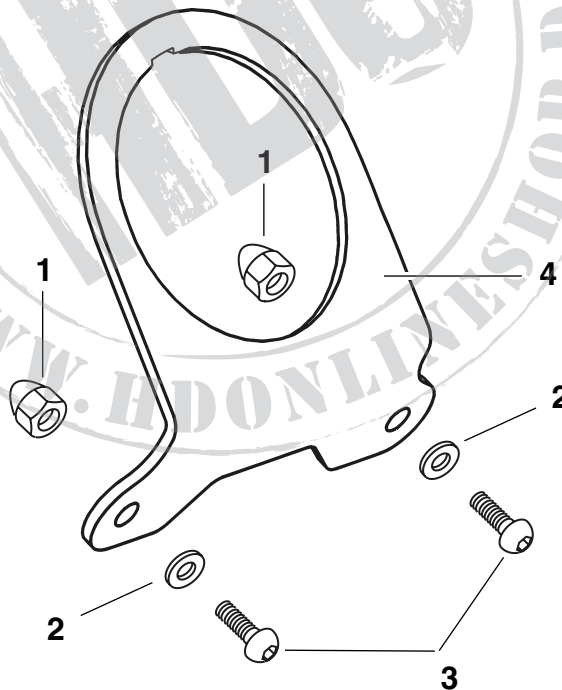
## Service Parts

Part No. 67231-04

Date 06/04

FLHR Mini-Tach Bracket Kit

106410



Item	Description (Quantity)	Part No.
1	Acorn nut (2)	7949
2	Washer (2)	6099
3	Capscrew (2)	941
4	Tach mount	67944-96