

# **INSTRUCTIONS**



J03133

2008-01-08

# FLHR MIN-TACH BRACKET KIT

# **GENERAL**

## Kit Number

67231-04. 67231-04A

#### 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**

This kit requires a mini-tach kit and a mini-tach housing kit to complete the installation:

Table 1.

Mini-Tach Kits	Part Number	
Mini-Tach Kit (black face)	68953-04	
Mini-Tach Kit (silver face)	68986-04	
Mini-Tach Kit (metal face)	67201-04A	
Mini-Tach Kit (nostalgic face)	68031-05	
Housing Kits	Part Number	
Mini-Tach Tapered Gauge Housing	67295-04	
Mini-Tach Standard Gauge Housing	67523-04	

## **A 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.

#### NOTICE

It is possible to overload the vehicle's charging system by adding too many electrical accessories. If the combined electrical accessories operating at any one time consume more electrical current than the vehicle's charging system can produce, the electrical consumption can discharge the battery and cause damage to the vehicle's electrical system. (00211d)

# **Kit Contents**

See Figure 3 and Table 2.

# **INSTALLATION**

# **Preparation**

Follow the Service Manual instructions to remove the seat.

#### **A 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 Tachometer

- 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.
- 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.

## Remove Handlebar Shroud

 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.
- Separate electrical connector and and remove headlamp assembly (4).

- Remove speednut (5) that holds chrome trim strip (6) in place and remove trim.
- Carefully pry off fork lock plate (10) on top of nacelle handlebar shroud to access screws that hold cover in place.
- Under plate, remove two screws (11) that hold shroud to fork lock.
- Remove nut (7) that secures the handlebar shroud (12) and remove shroud, screw (9), and fender washer (8)

#### Install Mini-Tach Bracket on Shroud

- 1. See Figure 2. Cover the front of the handlebar cover with transparent or masking tape.
- For 1994 to 2002 models: Measure and mark hole locations 1 and 7/8 in. (47.63mm) from the bottom front of cover and 2-47/64 in. (69.44 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 2-47/64 in. (69.44 mm) apart and centered on the front face of the shroud.

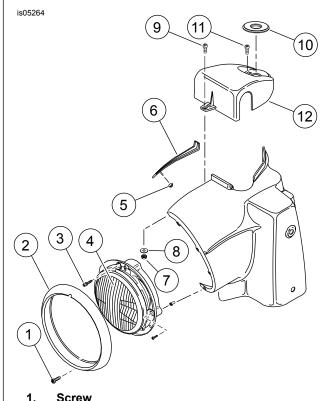
#### NOTE

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.

- 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.
- Attach tachometer bracket to cover with screws, lockwashers and nuts and tighten to 9-12 N·m (84-108 in-lbs).

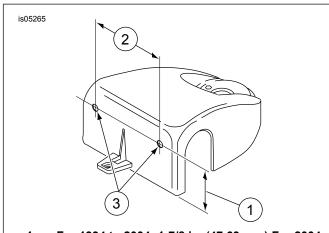
## Install Shroud

- Fit the handlebar shroud over the handlebar clamps.
- 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. Tighten to 1.1–2.3 N·m (10–20 in-lbs).
- Install the two screws that secure the shroud to the fork lock.
- Install the cover plate.
- Fit chrome strip and reach inside nacelle to install the speednut. Tighten speednut to 1.7-2.3 N·m (15-20 in-lbs).
- Mate the wire connector to the back of the headlamp.
- Install the headlamp with the eight screws.
- 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.
- Install the windshield.



- Screw
- Headlamp door 2.
- 3. Headlamp screw
- 4. Headlamp
- 5. Speednut
- 6. **Chrome strip**
- 7. Nut
- Washer 8.
- 9. Screw
- Cover plate 10.
- **Screw** 11.
- **Shroud** 12.

Figure 1. Nacelle and Handlebar Shroud Parts



- For 1994 to 2004: 1-7/8 in. (47.63 mm) For 2004 1. and Later: 1-5/8 in. (41.28 mm)
- 2. 2-47/64 in. (69.44 mm)
- 3. 9/32 in. dia. drill hole

Figure 2. Shroud Hole Locations

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# **Install Tachometer**

- Follow the instructions in the mini-tach instruction sheet to install the tachometer in the bracket.
- 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 Motorcycle to Service**

- 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.

#### **A 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)

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

# **SERVICE PARTS**

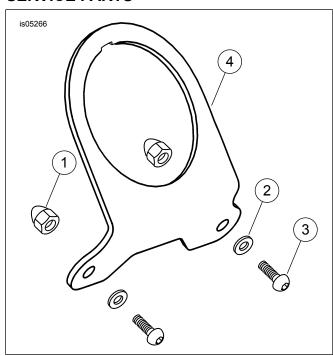


Figure 3. Service Parts: Mini-Tach Bracket

**Table 2. Service Parts Table** 

Kit	Item	Description (Quantity)	Part Number
Kit 67231-04	1	Acorn nut, locking (2)	7949
	2	Washer (2)	6099
	3	Capscrew (2)	941
	4	Tach mount	67944-96
Kit 67231-04A	1	Acorn nut, locking (2)	7949
	2	Washer (2)	6099
	3	Capscrew (2)	941
	4	Tach mount	67944-96A

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