

# INSTRUCTIONS

2005-06-15



## ADVANCED AUDIO CB ANTENNA KIT (FRAME MOUNT)

## **GENERAL**

### Kit Number

76415-06

#### Models

This kit fits 2006 and later FLHT (Electra Glide<sup>®</sup>), FLHTC (Electra Glide Classic), FLHX (Street Glide<sup>TM</sup>) and FLTR (Road Glide<sup>®</sup>) model motorcycles.

## **Additional Parts Required**

J03648

For ALL models, a CB Radio Kit (Part Number 76416-06) is needed.

**FLHX models** will also require separate purchase of a CB antenna grommet (Part Number 59778-06).

Unless they have already been fitted:

**FLHT models** will require the installation of an Advanced Audio AM/ FM/ CD Radio Kit (Part Number 76412-06), and a Frame Mount AM/ FM Antenna Kit (Part Number 76325-06).

#### **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.

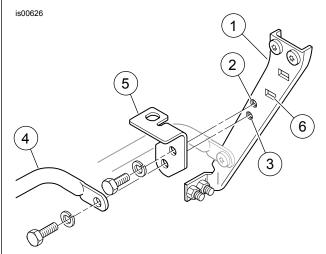
## **Kit Contents**

See Figure 2 and Table 1.

## **INSTALLATION**

- Refer to the Service Manual and follow the instructions given to remove the right-side saddlebag.
- 2. See Figure 1. Obtain the antenna bracket (5) from the kit.

- 3. Mount the antenna bracket to the right-side saddlebag rear support bracket (1). In the upper hole (2), use a 5/16-18 x 5/8 in. in. screw and lockwasher from the kit. If NO saddlebag guard (4), use a 5/16-18 x 5/8 in. screw and lockwasher from the kit to attach the antenna bracket to the lower hole (3) in the support bracket. If a saddlebag guard (4) is mounted, remove and discard the original upper rear guard mounting screw. Use the 5/16-18 x 7/8 in. screw and lockwasher from the kit to attach the antenna bracket and guard at the lower hole (3) in the support bracket.
- 4. Tighten the mounting screws to 19 ft-lbs (26 Nm).
- 5. **FLHX models:** Remove and discard the hole plug from the right-side rear fender fascia (ground effects).
- See Figure 2. Obtain the antenna adapter (4), two set screws (5) and the antenna base (6) from the kit. Thread the set screws part way into the holes in the side of the adapter. Thread the antenna adapter onto the antenna base.
- 7. Thread one of the 1/2-20 thin nuts (7) from the kit onto the antenna base assembly. Place the large internal tooth lockwasher (8) on the threads of the antenna base and insert the antenna base, from the top, through the hole in the antenna mounting bracket.
- 8. Install the second 1/2-20 nut on the antenna base threads. Place a wrench on the upper nut and tighten the lower nut to 40 **in-lbs** (4.5 Nm).
- FLHX models: Install the CB antenna grommet (Part Number 59778-06, sold separately) into the opening in the right-side rear fender fascia.
- 10. Thread the loading coil (2) into the top of the antenna adapter.



- 1. Right-side saddlebag rear support bracket
- 2. Antenna bracket upper mounting hole
- 3. Antenna bracket lower mounting hole
- 4. Upper saddlebag guard
- 5. CB antenna bracket
- Rectangular hole

Figure 1. Antenna Mounting Location

- 11. Place a wrench on the flats on the antenna base, and another on the loading coil hex flats. Securely tighten the loading coil and antenna adapter to the antenna base. Tighten the two set screws on the side of the adapter.
- 12. Use a 2 mm hex key to loosen the set screw (3) at the top of the loading coil. Insert the antenna mast (1) into the loading coil, and securely tighten the set screw to hold the mast in place.
- 13. Refer to the Service Manual and follow the instructions given to remove the maxi-fuse.
- 14. Obtain the CB antenna cable (14) and cable straps (13) from the kit.
- Plug the 90° antenna cable connector into the antenna base.
- Tighten the knurled nut to secure the connector to the antenna base.
- See Figure 1. Fasten the antenna cable to the saddlebag rear support bracket at the rectangular hole (6) with a cable strap.
- 18. Route the CB antenna cable up the saddlebag rear support bracket, along the inside of the luggage rack, forward to the front luggage rack mount, then across to the left side of the vehicle.
- Use a second cable strap to tie the cable to the frame rail, underneath the chrome cover.

- 20. Continue routing the antenna cable forward on the vehicle:
  - a. Tuck the cable inboard of the frame tube and avoid the forward saddlebag guard mounting screw head so the cable does not get pinched by the seat. Use four tie straps from the kit to fasten the antenna cable to the frame tube.
  - b. Route the cable along the left side of the battery cavity and harness tray to the rear of the fuel tank.
  - Remove the fuel tank console attaching hardware and lift the console from the tank.
  - d. Route the antenna cable forward under the left rear edge of the console, along the left side of the fuel tank canopy, and out under the left front edge of the console. Re-install the console, taking care not to pinch the antenna cable under the console.
  - Route the cable down tight to the fuel tank and tie wrap tight to the main harness, as close to the fuel tank as possible.
  - f. Continue the antenna cable forward into the fairing, using tie wraps to fasten to the main harness.

#### **A 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)

- Be sure the wires or antenna cable do not pull tight when handlebars are turned fully to left or right fork stops.
- Remove the outer fairing and windshield. Refer to OUTER FAIRING/ WINDSHIELD REMOVAL in the Service Manual.
- 22. If not already done, install the AM/ FM radio, AM/ FM antenna and CB radio per the instructions in **those** kits.
- 23. Locate the front end of the CB antenna cable.
- 24. Route the antenna cable over to the CB module.
- Plug the antenna cable connector into the back of the CB module.
- Tighten the knurled nut to secure the connector to the CB module.
- 27. Use tie straps from the kit to fasten the antenna cable to the existing harnesses inside the fairing.

#### NOTE

To prevent possible damage to the sound system, verify that the Ignition/ Light Key Switch is in the OFF position before re-installing the maxi-fuse.

- 28. Verify that the Ignition/ Light Key Switch is in the OFF position. Refer to the Service Manual and follow the instructions given to re-install the maxi-fuse.
- Test the CB radio functions for proper operation. If poor reception or transmission is noted, see SWR ADJUSTMENT, below.
- Re-install the outer fairing and windshield. Refer to OUTER FAIRING/ WINDSHIELD INSTALLATION in the Service Manual.

2/3 J03648

## **SWR ADJUSTMENT**

Standing wave ratio (SWR) is a technical term for the procedure that checks how well the CB transmitter and antenna are matched. If poor CB reception or transmission is noticed, the SWR should be checked.

Adjusting the SWR is described in detail in the Harley-Davidson FLT Electrical Diagnostic Manual; however, the SWR of the antenna in **this** kit is adjusted by moving the two rings on the

loading coil up or down, rather than moving the antenna up or down, or shortening the antenna by grinding.

To check SWR, an SWR meter or bridge is required. A Harley-Davidson dealer will either have an SWR meter and the appropriate adapters, or can direct you to a CB repair shop for an SWR check.

Since the operating procedures for SWR meters vary, be sure the operating instructions for the SWR meter being used are carefully followed.

## **SERVICE PARTS**

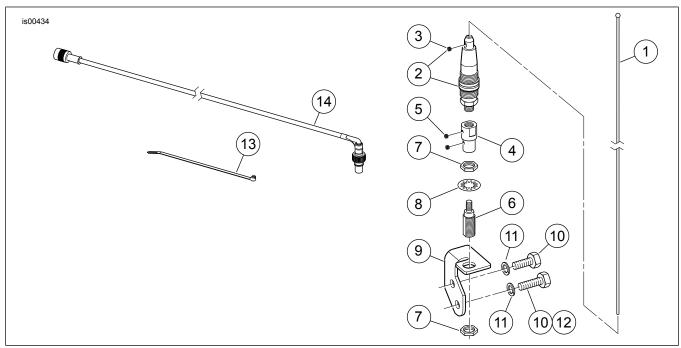


Figure 2. Service Parts, CB Frame Mount Antenna

**Table 1. Service Parts Table** 

Item	Description (Quantity)	Part Number
1	Mast, CB antenna	76341-98
2	CB loading coil (includes Item 3)	76344-98
3	Set screw	Not Sold Separately
4	Antenna adapter	76470-06
5	Set screw, M4 (2)	3372
6	Antenna base	76354-00
7	Hex nut, thin, 1/2-20 (2)	76353-00
8	Lock washer, internal tooth, 1/2 in.	7129
9	Bracket, antenna mounting	76429-06
10	Screw, hex head, 5/16-18 x 5/8 in. (2)	2882W
11	Lock washer, split, 5/16 in. (2)	7041
12	Screw, hex head, 5/16-18 x 7/8 in.	3991
13	Tie strap (10)	10006
14	CB antenna cable	76428-06

J03648 3 / 3