



INSTRUCTIONS

J03645

2012-11-16



ADVANCED AUDIO CB RADIO KIT

GENERAL

Kit Number

76416-06C

Models

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

Additional Parts Required

2006 models: communication switch 77173-06

2007 models: communication switch 77173-07

2008-later models: communication switch 77173-08

FLHT models will require prior installation of:

- Advanced Audio AM/ FM/ CD Radio Kit (76412-06)
- AM/ FM Antenna Kit (76325-06 or 76317-06)

Unless one has already been fitted as part of another Advanced Audio kit installation:

2006-2007 FLHX models will require the separate purchase of:

- fuel tank console (61270-98A),
- tank console gasket (71294-89C),
- a button-head screw (3652),
- nut (7964)
- clip (10103 and 10120).
- tank pod mounting screws (2462) quantity 3
- FLHT trim piece (52447-96) and cb pod trim badge

2008-later FLHX models:

- fuel tank console (61270-08)
- clips (10103 and 10120)

NOTE

The console screws, fuel door, gasket, mounting bracket will all need to be reused.

FLTR models will require the separate purchase of:

- a Console Pod Assembly (77136-03), and
- three pan-head screws (2462).

NOTE

See a Harley-Davidson dealer for availability of optional decorative inserts for the Console Pod Assembly.

ALL models will require the additional purchase of:

- a Non-Ultra Overlay Harness (70169-06A), and **EITHER:**
- a Premium Stereo Helmet Headset (77117-10) **OR** a Hand-Held CB Microphone Kit (76312-98).

All of these items are available from a Harley-Davidson Dealer.

If two modules are already installed on top of the radio, two Dual-Lock™ mounts, (76434-06), will be needed.

Models WITHOUT a Tour-Pak installed will require additional purchase of a Frame Mount CB Antenna Kit. 2006 through 2008 models: 76415-06. 2009 and later models: 76410-09.

Models WITH a Tour-Pak installed will require additional purchase of a Tour-Pak Mount CB Antenna Kit. 2006 through 2008 models: 76414-06. 2009 and later models: 76400-09.

All of these items are available from a Harley-Davidson Dealer.

⚠ 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.

Electrical Overload

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)

⚠ WARNING

When installing any electrical accessory, be certain not to exceed the maximum amperage rating of the fuse or circuit breaker protecting the affected circuit being modified. Exceeding the maximum amperage can lead to electrical failures, which could result in death or serious injury. (00310a)

The CB Radio requires up to **two Amps** additional current from the electrical system.



Kit Contents

CB module, (76236-06).

INSTALLATION

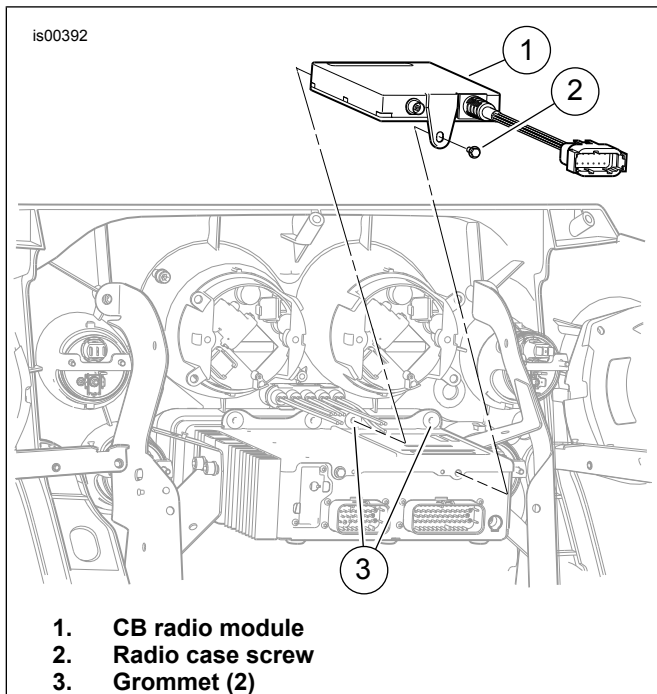


Figure 1. CB Radio Module Installation

⚠ WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)

1. Refer to the service manual and follow the instructions given to remove the maxi-fuse.
2. Remove the outer fairing and windshield. Refer to OUTER FAIRING/ WINDSHIELD REMOVAL in the service manual.

NOTE

If another module has been installed in the location reserved for the CB radio module, relocate **that** module per the instructions supplied with that kit.

3. See Figure 1. Locate the CB radio module (1) on top of the AM-FM radio case:
 - a. Remove the screw (2) at the back of the radio.
 - b. Position the CB radio module on top of the AM-FM radio, with the metal cones on one end of the module fitting firmly into the rightmost rubber grommets (3) at the front of the radio.
 - c. Fasten the module to the radio with the radio case screw (2). Tighten to 35-45 **in-lbs** (4.0-5.1 Nm).

NOTE

If not already installed, the Fairing Speaker Switch and Left-Hand Control Switch Assembly (purchased separately, individually or as part of the

Communication Switch Kit) must be installed at this time according to the instructions that follow.

4. On the fairing cap, remove the inner left side hole plug. See the FAIRING CAP SWITCHES (FLHTC/U) section in the service manual. Install the fairing speaker switch in the opening as follows: **If a cruise control switch IS present:** See FAIRING CAP SWITCHES (FLHTC/U) in the service manual. Install the Fairing Speaker Switch (purchased separately or as part of the Communication Switch Kit) in the opening and connect the wiring already there. **If a cruise control switch IS NOT present:**
 - a. Obtain the speaker switch adapter wire (purchased separately or as part of the Communication Switch Kit) and the butt splice connector included with the speaker switch.
 - b. Refer to SEALED BUTT SPLICE CONNECTORS in the service manual. Splice the adapter wire to the black/ green speaker switch lead.
 - c. Insert the terminated end of the adapter wire into cavity 12 of the fairing cap switch connector [105B]
5. Remove the original equipment left-hand control switch assembly per the HANDLEBAR SWITCHES, REMOVAL, LEFT HANDLEBAR CONTROLS instructions in the service manual.
6. Install the **new** left-hand control switch assembly (purchased separately or as part of the Communication Switch Kit).

⚠ WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

7. **ALL models:** Install the Console Pod Assembly.
 - a. Note the routing of the main harness, fuel level sender/ fuel pump conduit, and fuel vapor vent tube as they travel beneath the console.
 - b. Carefully cut the anchored cable strap securing the main harness, fuel level sender/ fuel pump conduit, and fuel vapor vent tube to the left side of the frame backbone.
 - c. Open the fuel door on the console. Remove the two Allen head screws inboard of the rubber bumpers. These screws secure the console to the clip nuts on the canopy bracket. **All models EXCEPT FLHX:** Remove the Allen head screw to detach the flange at the rear of the console from the clip nut on the fuel tank weldment. **FLHX models:** Remove the bolt (with flat washer) at the rear of the fuel tank to release the console bracket. This also frees the rear of the tank from the frame backbone. Remove the two screws that fasten the fuel door to the console, and remove the door. Remove the hinge mounting clip, and the hinge pin. Save these parts for installation.

- d. Lay a clean shop towel on the forward part of the rear fender. Remove the filler cap from the neck of the fuel tank. **All models EXCEPT FLHX:** Remove the console and lay it upside down on the shop towel. Install the filler cap. **FLHX models:** Remove the console and discard it. Install the filler cap. Obtain the **new** fuel tank console, 2006-2007 models use (61270-98A) and 2008 and later models use (61270-08). Install the fuel door to the new console, and tighten securely. Lay the console upside down on the shop towel. Install the bolt (with flat washer) to secure the rear of the fuel tank to the frame backbone. Tighten the bolt to 15-20 ft-lbs (20-27 Nm).
 - e. Feed the pin housing and console pod conduit through the top of the console, seating the Console Pod Assembly in the recess. 2006 and 2007 models use pod (77136-03) and 2008 and later models use pod (77136-08). Pods come in communication switch kits. Install three Phillips screws (2462) from the underside to secure the pod to the console. Alternately tighten the screws to 6-11 **in-lbs** (0.7-1.2 Nm). Route the pod harness toward the front of the console.
8. Install the CB Antenna Mounting Kit per the instructions in **that** kit.

▲ WARNING

Do not kink or pinch the fuel overflow line when installing console. A blocked line can cause an overfilled tank to leak. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00264a)

NOTE

2006 and 2007 models require new rubber molding and 2008 and later models reuse rubber molding.

*Make sure the rubber molding (**new** rubber molding 71294-89 for FLHX models) on the bottom of the console is seated properly along its entire length.*

FLHX models: Mount the adhesive-backed metal wire clip (10103) to the underside of the console to hold the pod harness and CB antenna.

Mount the plastic wire clip (10120) to the underside of the console to hold the fuel vapor vent tube.

- a. Remove the filler cap. Place the console over the filler neck onto the canopy. Route the cables from beneath the console in the same way as installed originally. Route the pod harness and the CB antenna cable forward along the left side of the fuel tank canopy, and out under the left front edge of the console. Be sure that the hoses and wires are not pinched by the console during installation. Install the filler cap.
- b. **All models EXCEPT FLHX:** Install the Allen head screw removed earlier to fasten the rear flange of the console to the clip nut on the fuel tank weldment. **FLHX models:** Install the 1/4-20 clip nut (7964) onto the bracket on the fuel tank. Install the console extension (52446-96) onto the rear of the console with the button-head screw (3652) and clip nut. **ALL models:** Tighten the screw to 25-30 **in-lbs** (2.8-3.4 Nm).
- c. Open the fuel door on the console. Install the two Allen head screws to secure the front of the console to the clip nuts on the canopy bracket. Alternately tighten the screws to 25-30 **in-lbs** (2.8-3.4 Nm).
- d. Snap the anchor of a **new** cable strap (10006, from the CB Antenna Kit) into the hole on the left side of the frame backbone. Tighten the cable strap capturing the main harness, CB antenna cable, fuel level sender/ fuel pump conduit, and fuel vapor vent tube. Cut any excess cable strap material.
- e. Route the harness and antenna 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 harness and cable forward into the fairing, using tie wraps to fasten to the main harness.

▲ 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.
10. Obtain the overlay harness (purchased separately), unless already installed. See Figure 2.
 - a. Plug the overlay harness 12-place pin housing (1) labeled "Intercom" [53] into the socket housing coming from the console pod.
 - b. Plug the overlay harness 12-place socket housing (2) labeled "CB" [184] into the pin housing coming from the back of the CB radio module.
 - c. Plug the 35-place radio socket housing [28] (3) into the radio.
 - d. Locate the interconnect harness audio connector [6B] near the back of the radio. Plug 6-way pin housing [6A] (4) on the overlay harness into socket housing [6B].
 - e. Plug the antenna cable connector into the mating connector on the back of the CB radio module.
 - f. Tighten the knurled nut on the antenna cable connector to secure the connector to the module.

11. Use tie straps (purchased separately) to fasten the overlay harness and antenna wire to the existing harnesses inside the fairing.
12. Refer to the service manual and follow the instructions given to install the maxi-fuse.
13. Test the CB radio and the rest of the sound system for proper operation. If poor CB reception or transmission is noted, see SWR ADJUSTMENT, below.
14. Install the outer fairing and windshield. Refer to OUTER FAIRING/ WINDSHIELD INSTALLATION in the service manual.

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 **frame-mounted** CB antenna 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.

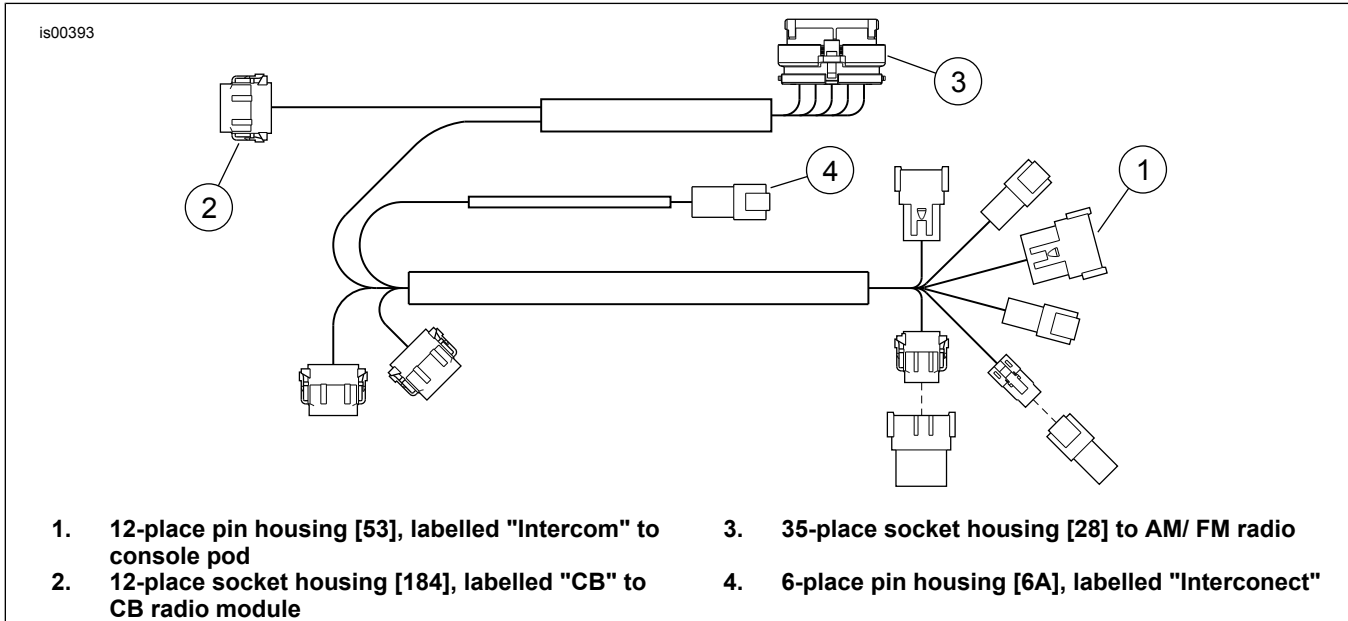


Figure 2. Non-Ultra Overlay Harness