

-J02911 REV. 5-22-03

Kit Numbers 76330-03A (Domestic) and 76339-03A (HDI)

FLHT 1998 AND LATER MODELS RADIO/CD KIT

General

This radio kit fits 1998 and later FLHT® models.

NOTE

1998 to 2003 FLHT models require additional setup procedures for Automatic Volume Control to function. Setup procedures are included in these instructions.

See the Service Parts illustration for kit contents.

This kit requires installing **Antenna Part Number 76306-98**, sold separately and available from your Harley-Davidson dealer.

Installation

Outer Fairing Removal

- 1. Remove the seat according to the applicable servicemanual instructions.
- 2. Disconnect the battery, negative cable first.

To protect against shock and accidental start-up of vehicle, disconnect the battery cables, negative cable first, before proceeding. Inadequate safety precautions could result in death or serious injury.

AWARNING

Always disconnect the negative battery cable first. If the positive battery cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion which could result in death or serious injury.

- 3. See Figure 1. Remove the outer fairing and windshield:
 - a. Remove the TORX® screws (1, 2, 3) from the outer fairing to remove the windshield.
 - b. Remove the TORX screws (4, 5, 6, 7) from the inner fairing. Turn the handlebar to access screws 6 and 7.
 - c. Tilt the outer fairing toward the front, then squeeze the two external tabs to remove the wire connector from the back of the headlamp assembly.
 - d. **HDI models only:** Remove the black and orange/white wires from the stake-on connectors near the bottom of the headlight.
 - e. Lift the fairing and headlamp assembly from the motorcycle.
- 4. Remove the four screws fastening the sides of the storage box to the inner-fairing brackets. Save the screws for installation.

Install the Radio/CD Player

NOTE

Copy the serial number from the label, located on top of the radio chassis, before installing the radio. The serial number must be included on the warranty form.

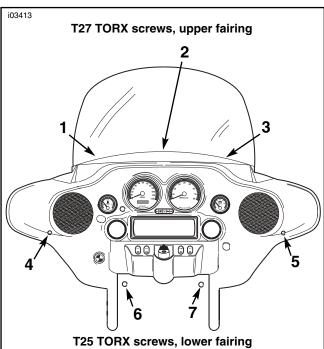


Figure 1. Removing Outer Fairing Fasteners

NOTE

Connector numbers in brackets (for example, [27]) correspond to the connector numbers in the service-manual wiring diagrams. A service manual is available from your Harley-Davidson dealer.

1. Hold the radio between the support brackets with the radio nose seal in position over the hole in the fairing.

NOTE

To assist installation, apply soapy water to the nose seal, then gently rock the radio back and forth while inserting the radio into the fairing.

- 2. Tilt the back of the radio up 45 degrees. Gradually push the radio nose seal into the hole in the inner fairing while lowering the back of the radio. Check that the nose seal is not distorted, compressed, or pinched.
- Fasten the radio to the inner-fairing brackets using the four screws and washers from Step 4 in Outer Fairing Removal. Torque the screws to 45–60 in-lbs (5.0–6.7 Nm).
- 4. See Figure 2. Plug the radio-antenna cable connector into the back of the radio. Tuck excess cable under the right corner of the radio.
- 5. Plug the 23-place connector [27] from the wiring harness into the connector on the back of the radio.

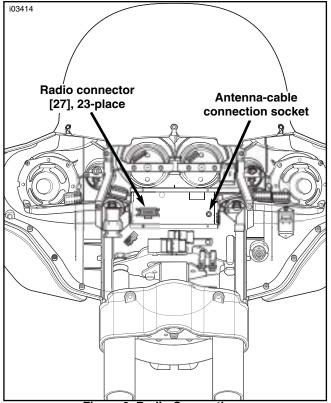


Figure 2. Radio Connections

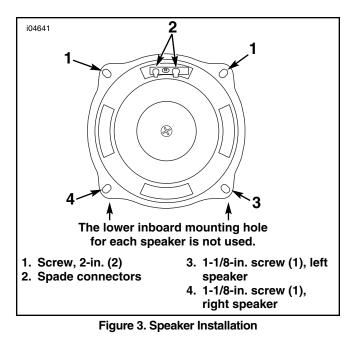
Install the Speakers

- 1. Remove the three screws fastening the right-side speaker adapter and grill to the fairing. Discard the screws and adapter.
- 2. See the Service Parts illustration. Align the holes in the speaker with those in the new adapter. Position the speaker spade contacts at the top of the adapter, the top being the thickest edge. Snap the speaker into the adapter.
- See Figure 3. Install two 2-inch screws at the top of the speaker to fasten the speaker adapter assembly to the inner fairing. Torque the screws to 22–28 in-Ibs (2.5–3.2 Nm).
- 4. Fasten the bottom of the speaker and the fairing support brace using one 1-1/8 inch screw in the speaker's lower-outboard mounting hole. Torque the screw to 35–50 **in-lbs** (4.0–5.7 Nm).

NOTE

The speaker mounting hole on the lower inboard side of either speaker is not used.

- 5. Connect the speaker wires to their respective-size spade connectors.
 - **Right-side speaker:** Connect the grey/red and light green/black wires from the right side of the fairing to the right-speaker spade connectors.
 - Left-side speaker: Connect the white/orange and light green/white wires from the left side of the fairing to the left-speaker spade connectors.
- 6. Repeat steps 1 through 5 to install the left speaker.



Install the Antenna on Vehicles without a Tour-Pak

Install the Antenna Bracket

- 1. See Figure 4. Remove the right-side saddlebag.
- Fasten the antenna bracket (5) to the right fender-support bracket using two 5/16-18 X 5/8-inch screws (9) and lockwashers (8) from the kit.

NOTE

If a saddlebag guard or rail is mounted at the lower hole in the support bracket, use the 5/16-18 X 7/8-inch screw (10) to fasten the antenna bracket and saddlebag guard to the support bracket.

3. Tighten the mounting screws to 19 ft-lbs (26 Nm).

Fasten the Antenna to the Antenna Base

1. See Figure 4. Screw the antenna (sold separately) onto the antenna base assembly (2) and tighten the set screw in the antenna to secure it to the base.

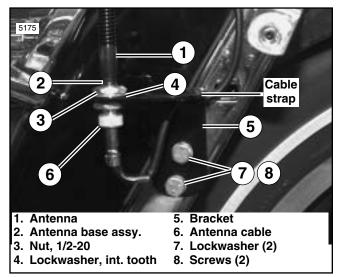


Figure 4. Antenna Mounting

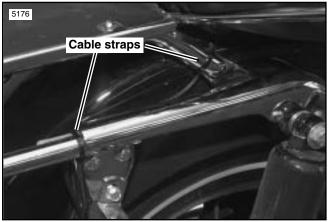


Figure 5. Cable Strap Locations

NOTE

Tighten the set screw holding the antenna mast to the antenna base assembly. The antenna set screws have metric threads (M4-0.7 x 3 mm) and require a 2.0 mm Allen® wrench.

- 2. Thread one of the large nuts (3) onto the antenna base assembly.
- 3. Insert the antenna base through the large, internal-tooth lockwasher (4) and hole in the antenna mounting bracket (5).
- Fasten the other large nut (3) to the antenna base to secure the base to the bracket. With a wrench on the upper nut, tighten the lower nut to 40 in-lbs (4.5 Nm).

Connect the Antenna Cable

- 1. Remove the left sidecover from the vehicle to reveal the antenna cable.
- 2. Cut the cable strap fastening the antenna cable to the frame.
- 3. Route the antenna cable to the right side of the vehicle and foward of the luggage-rack mount.
- 4. See Figure 4. Plug the antenna-cable connector into the antenna base.
- 5. Tighten the knurled nut on the antenna-cable connector to secure the connector to the antenna base.
- 6. See Figures 4 and 5. Secure the antenna cable to the vehicle using cable straps at the locations shown.
- 7. Install additional cable straps on the left side of the front luggage-rack mount and as required to secure the antenna cable.

Install the Antenna on Vehicles Equipped with a Tour-Pak

Preparation

NOTE

Install the antenna where indicated to avoid antenna interference when opening and closing the Tour-Pak lid. Install the antenna base in the upper-left corner of the Tour-Pak outside-rear wall.

NOTE

The measurements in this procedure refer and apply to the lower half of the Tour-Pak only and do not involve or include measurements from or on the Tour-Pak lid.

- 1. See Figure 6. Measure the width to find the center of the Tour-Pak outside-rear wall.
- 2. Fasten a 2-inch wide strip of masking tape, vertically from top to bottom, on the outside back center of the Tour-Pak.
- 3. Repeat Step 1 to mark the Tour-Pak vertical center on the top and bottom of the tape strip.
- 4. Draw a vertical line on the tape from the top mark to the bottom mark.
- 5. From the drawn center line, measure 9-1/4 inch to the left.
- 6. At the 9-1/4-inch measurement, fasten a 2 inch wide strip of masking tape vertically from the Tour-Pak top edge to the horizontal middle of the Tour-Pak wall.
- 7. Repeat Step 5 to mark a vertical line on the masking tape from Step 6.
- 8. Across the vertical line on the left tape strip, draw a short horizontal line:
 - a. 1-1/4 inch down from the Tour-Pak top edge, and
 - b. 1-1/2 inch down from the horizontal line drawn in step 8a (2-3/4 inch from the Tour-Pak top edge)
- 9. Mark the center of the crossed lines with a center punch and drill 1/8-inch pilot holes in the Tour-Pak wall at the marked points
- 10. From the outside of the Tour-Pak, drill the pilot holes from Step 9 to a:
 - 17/32-inch hole through the TOP pilot hole
 - 1/4-inch hole through the BOTTOM pilot hole
- 11. Remove the tape from the Tour-Pak.

NOTE

Some Tour-Paks are equipped with a 5/8-inch hole in the bottom at the front-left side. This hole is for antenna-cable routing. If your Tour-Pak does not have this hole, complete Step 12. Otherwise, continue to the next section.

- 12. Drill an antenna-cable access hole:
 - a. Remove the Tour-Pak liner.
 - b. See Figure 1. Locate the pattern of eight 0.31-inch diameter holes in the metal plate on the insidebottom of the Tour-Pak.
 - c. From the front left-hand hole, measure forward 1 inch and left (outboard) 4 inch Mark this location.
 - d. Drill a small pilot hole at the marked location.
 - e. From the **underside** of the Tour-Pak, drill a 5/8-inch hole from **outside** the Tour-Pak to the inside.

Antenna Installation

1. See the Service Parts Illustration. Place the gasket (12) on the antenna-base assembly (5).

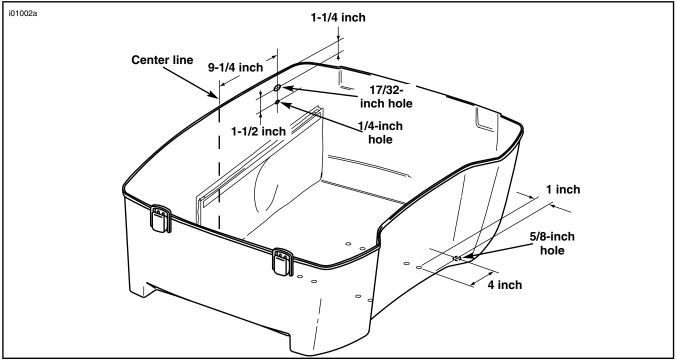


Figure 6. Drilling the Tour-Pak for Radio-Antenna Installation

- 2. Place the base assembly, with the antenna-mast stud facing upward, into the drilled holes on the back of the Tour-Pak.
- 3. Place the reinforcement plate (13) on the antenna-base assembly studs inside the Tour-Pak.
- 4. Place the ground cable (6) on the antenna-base assembly antenna stud.
- 5. Fasten the antenna-base assembly, reinforcement plate, and ground stud to the Tour-Pak using a lock-washer (4) and nut (3).
- 6. Attach the other end of the ground cable to a mounting bolt on the inside-bottom of the Tour-Pak.
- 7. Install the screw (15) and small lockwasher (14) in the bottom hole of the antenna base and from inside the Tour-Pak.
- 8. Screw the antenna (sold separately) onto the antenna base assembly (2) and tighten the set screw in the antenna to secure it to the base.

NOTE

Tighten the set screw holding the antenna mast to the antenna base assembly. The antenna set screws have metric threads (M4 - 0.7 x 3 mm) and require a 2.0 mm Allen® wrench.

- 9. Remove the left sidecover from the vehicle to reveal the antenna cable.
- 10. Cut the cable strap fastening the antenna cable to the frame.
- 11. Route antenna cable along the Tour-Pak left-side support rack and up through the 5/8 inch hole in the bottom-front left side of the Tour-Pak.

- 12. Plug the antenna-cable connector into the antenna base. Allow enough cable that, when connected, the cable rests flat on the inside bottom of the Tour-Pak.
- 13. Tighten the knurled nut on the antenna-cable connector to secure the connector to the antenna base.
- 14. Use cable straps to secure the antenna cable to the left side of the Tour-Pak support.
- 15. Install a grommet in the 5/8 inch hole at the bottom-front left side of the Tour-Pak.

Test the Sound System

NOTE

Before installing the outer fairing, test the radio/CD, antenna, and speakers.

1. Turn the ignition to the OFF position.

WARNING

Always connect the positive battery cable first. If the positive cable should contact ground with the negative cable installed, the resulting sparks may cause a battery explosion resulting in death or serious injury.

- 2. Connect the battery cables to the battery, positive cable first.
- 3. Refer to the SOUND SYSTEM manual in this kit to test the sound-system operation.
- 4. Troubleshoot the radio, CD, speaker, and antenna functions as needed. Otherwise, install the Tour-Pak liner and continue to the next section.

1998 to 2003 AVC Setup Procedures

NOTE

This setup is not required for 2004 and later FLHT Models. 1998 to 2003 models require this procedure for the Automatic Volume Control to function.

- 1. Press and hold any two preset buttons on the front panel while turning the ignition/light switch from OFF to IGNITION or ACCESS.
- Diagnostic Group 1 (d1), the first of several diagnostic screens will appear in the LCD. Press the local/distant (LO-DX) button to cycle through the diagnostic screens.
- Stop at the screen "Press 1 for bikes before MY2004" for 1998 to 2003 models. Press 2 for is your bike is MY2004 or later".
- 4. Press Preset 1 button.
- After selecting the correct model year, repeatedly press the LO-DX button until the receiver reverts back to normal radio operation.

Install the Outer Fairing

- 1. See Figure 1. Place the windshield in position on the inner fairing. Align the slots in the windshield with the threaded inserts.
- 2. Install the outer fairing:
 - a. Place the fairing and headlamp assembly on the motorcycle
 - b. Fasten the wire connector to the back of the headlamp assembly.
 - c. **HDI models only:** Fasten the black and orange/white wires to the stake-on connectors near the bottom of the headlamp assembly.
 - d. On the outer fairing, loosely fasten three screws below the windshield.
 - e. On the inner fairing, start the two fairing screws just above the wind deflectors on both the left and right side.
 - f. Turn the handlebar to the left and start the next fairing screw below the fairing cap.
 - g. Turn the handlebar to the right and start the fairing screw on the opposite side.
 - h. Alternately tighten the four fairing screws on the inner-fairing side to 45–55 **in-lbs** (5–6.2 Nm).
 - i. On the front of the vehicle, tighten the outer fairing screws below the windshield to 10–13 **in-lbs** (1.1 1.4 Nm).

After installing the seat, pull upward on the front of the seat to be sure it is locked in position. If the seat is loose, it could shift position during vehicle operation and startle the rider, causing loss of control and personal injury.

3. Install the seat.

Warranty Information

To activate the warranty for this kit:

- 1. Complete the "Premium Sound System Warranty Registration Card." The radio serial number is located on a label on top of the radio chassis.
- 2. Send the registration card to Radio Sound Inc.
- 3. Complete the "Premium Sound System Warranty/ Owner Record."
- 4. Keep the "Premium Sound System Warranty/Owner Record" and dated bill of sale for your warranty records.

