

INSTRUCTIONS

J05539

2012-08-02



BOOM! AUDIO SPEAKER EXPANSION KIT

GENERAL

It is **strongly advised** that this kit be installed by an authorized Harley-Davidson dealer.

Kit Number

76000263

Models

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

NOTE

The speakers being installed along with this kit have an impedance of 2 Ohms, and are for use ONLY with the Harley-Davidson® Advanced Audio System by Harmon/Kardon® AM/FM/CD radio on select fitments. See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Using these speakers on 2005 or earlier Harley-Davidson audio systems **WILL cause permanent damage** to those systems.

Installation Requirements

Prior or concurrent installation of either a fairing or Tour-Pak[®] mounted amplifier is required for proper installation of this kit. See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) for Boom! Audio Amplifier Kit part numbers and fitments.

In these instructions: the Harman-Kardon[®] amplifier (either Tour-Pak or fairing mount) is considered the "primary" amplifier. The saddlebag or trunk mounted amplifier is referred to as the "secondary" amplifier.

NOTE

For all models except Trike:

- If saddlebag speakers had been previously installed, it MAY be necessary to plug the wire holes drilled in the saddlebag inboard walls. 16 mm (5/8 in) diameter hole plugs can be purchased from most automotive parts or home improvement stores.
- Check desired speaker configuration BEFORE cutting or drilling holes in saddlebags. Use of template(s) may vary with speakers used and accessories installed.
- The left-side saddlebag WILL BE MODIFIED using the template provided in this kit. DO NOT MODIFY the right-side saddlebag with the template unless installing the iPod Module Relocation Kit.
- In order to enable eight speakers, the Tour-Pak mounted Boom! Audio Amplifier Kit must be used.

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For ALL vehicles:

 A fairing mounted amplifier is not compatible with a rigid or detachable Tour-Pak equipped vehicle. The Tour-Pak mounted Boom! Audio Amplifier Kit must be used.

Depending on the desired speaker quantity, combination and location, separate purchase of some or all of the following items may be required. See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) for:

- Boom! Audio Fairing Lower Speaker Kit and Color-Matched Vented Fairing Lower Kit
- Boom! Audio High Performance Fairing Speakers or Rear Speakers
- · Boom! Audio Rear Speaker Pod Kit

Only six speakers can be enabled.

- Boom! Audio Bass Booster Tour-Pak Port Kit
- Boom! Audio Saddlebag Speaker Kit and Saddlebag Speaker Lids (all models except Trike)
- Boom! Audio Saddlebag iPod Mount Kit or Saddlebag iPod Module Relocation Kit (all models except Trike)

Separate purchase of a wire harness may be required for some of these installations. Refer to the Audio Harness Matrix in the P&A retail catalog or www.harley-davidson.com to determine if a harness or harnesses will be required. See a Harley-Davidson dealer for the necessary harnesses for a specific model and sound option.

An UltraTorch UT-100 (Part No. HD-39969), Robinair Heat Gun (Part No. HD-25070) with Heatshrink Attachment (Part No. HD-41183), or other suitable radiant heating device is required for the proper installation of this kit.

NOTE

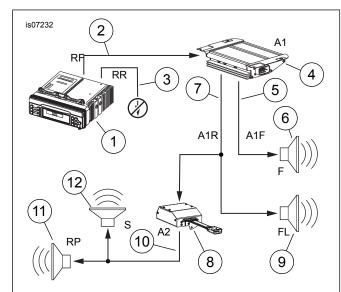
For Trike models:

 The help of an assistant will be required for body removal and installation.

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)

For Trike models:



- 1. Advanced Audio AM/FM/CD radio
- 2. RF=Radio front output circuit
- 3. RR=Radio rear output circuit (disabled)
- 4. A1=Primary amplifier
- 5. A1F=Primary amplifier front output circuit
- 6. F=Fairing speakers
- 7. A1R=Primary amplifier rear output circuit
- 8. A2=Secondary amplifier
- 9. FL=Fairing lower speakers
- 10. Secondary amplifier output circuit
- 11. RP=Rear pod speakers
- 2. S=Saddlebag speakers (except Trike)

Figure 1. Speaker Expansion Kit System Diagram

NOTE

This instruction sheet refers to service manual information. A service manual for this year/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)

A 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 amplifier installed with this Speaker Expansion Kit requires up to **16 amps** additional current from the electrical system.

Kit Contents

See Figure 7 and Table 1.

PREPARATION

NOTE

For vehicles equipped with security siren:

- 2007 and later: Verify that the Hands-Free Fob is present.
 Turn the ignition key switch to IGNITION.
- 2006 and earlier: Disarm the siren with the key fob.

A WARNING

To prevent spray of fuel, purge system of high-pressure fuel before supply line is disconnected. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00275a)

1. See the service manual to purge the fuel supply of high pressure gasoline and remove the fuel supply line.

A WARNING

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

- 2. Remove the main fuse per the service manual. Remove the seat. Retain the seat and all mounting hardware.
- 3. Turn the ignition key switch OFF.

A 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)

- Remove the instrument console (if equipped) from the fuel tank per the service manual.
- See the service manual for fuel tank removal instructions.
- Release the catches on the wire trough cover. Remove the cover.
- See the service manual to remove the outer fairing and windshield.
- All models except Trike: Remove all items from the left-side saddlebag. Trike models:
 - a. Remove all items from the trunk.
 - b. Remove the trunk liner per the service manual.
 - With assistance, remove the Trike body (midsection) per the service manual. The Tour-Pak and fenders can remain assembled to the body.

INSTALLATION: GENERAL (ALL MODELS)

NOTE

This system is designed to work with Boom! Audio speakers only. Any original equipment (OE) speakers must be removed.

- If not already on the vehicle, install either a per the instructions in that kit.
 - a. fairing mounted Boom! Audio Amplifier Kit (all models except Trike), or
 - Tour-Pak mounted Boom! Audio Amplifier Kit (ALL models)
- If any of these additional Boom! Audio kits are already installed or will be installed with this kit:
- High Performance Fairing Speakers: Install and connect the speakers per the instructions in that kit.
- High Performance Rear Speakers: Install the speakers
 per the instructions in that kit, but do not connect the
 terminals from the vehicle harness or install the speaker
 attaching screws at this time. If already installed, remove
 the four screws fastening each speaker. Disconnect the
 vehicle harness terminals from the speakers.
- Fairing Lower Speaker Kit: Install the lower fairings and speakers per the instructions in that kit, but do not connect terminals [41A] and [42A] from the vehicle harness to the lower fairing speaker harness at this time. If already installed, disconnect vehicle harness terminals [41A] and [42A] from the lower fairing speaker harness.
- Rear Speaker Pod Kit: Install the pods and speakers per the instructions in that kit, but do not connect the terminals from the vehicle harness or install the speaker attaching screws at this time. If already installed, remove the four screws fastening each speaker. Disconnect the vehicle harness terminals from the speakers.
- Bass Booster Tour-Pak Port Kit: Install per the instructions in that kit.

Proceed to INSTALLATION (CONT'D.) for the specific model.

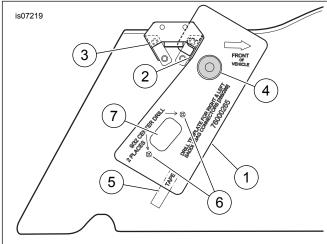
INSTALLATION (CONT'D.): ALL MODELS EXCEPT TRIKE

Saddlebag Speaker Kit: Remove the saddlebag lids and saddlebags per the instructions in that kit. Do not drill the 16 mm (0.62 in) diameter hole in the LEFT-side saddlebag called for under Saddlebag Drilling in the Saddlebag Speaker Kit instructions. The rear speaker harness (Part No. 69200022) from the Saddlebag Speaker Kit will not be required. If previously installed, remove from the vehicle. If a hole was drilled in the left-side saddlebag during a prior installation, plug it. 16 mm (5/8 in) diameter hole plugs can be purchased from most automotive parts or home improvement stores. If NOT INSTALLING an iPod Module Relocation Kit, drill the 16 mm (0.62 in) diameter hole in the RIGHT-side saddlebag as indicated in the Saddlebag Speaker Kit instructions. Complete the saddlebag lid assembly for both saddlebags as indicated in the Saddlebag Speaker Kit instructions. Install the saddlebag speaker jumper harness (inside the saddlebag) to the right-side saddlebag only. Do not install the rear speaker harness from that kit into the vehicle. If INSTALLING an iPod Module Relocation Kit, see the "With iPod Module Relocation Kit" section at the end of these instructions. Complete the saddlebag lid assembly as indicated in the Saddlebag Speaker Kit instructions. Do not install the rear speaker harness from that kit into the vehicle.

 See Figure 7. Get the drilling template (7) from the kit. The left-side saddlebag WILL BE MODIFIED using the template. DO NOT MODIFY the right-side saddlebag with the template unless installing the iPod Module Relocation kit

NOTE

The plastic template is ready for use. The paper template (which may be found in some kits) must be cut before use.



- 1. Template
- 2. Slot in template
- 3. Saddlebag rear mounting bracket
- 4. Rear saddlebag grommet
- 5. Tape template in place
- 6. Center punch for hole (2)
- Connector cutout

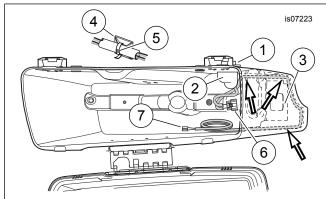
Figure 2. Saddlebag Drilling for 12-Way Panel Mount Connector

- See Figure 2. Hook the slot (2) in the template (1) over the saddlebag rear mounting bracket (3). Align the template hole over the rear grommet (4). Tape the template in place as shown (5).
- Mark the locations of the two holes (6) with a center punch.
 Trace the outline for the connector cutout (7) on the saddlebag inboard wall. Remove the template.
- Drill two 7.25 mm (9/32 in) diameter holes at the center punch marks. Carefully cut out the opening for the connector.

Left-Side Saddlebag, Amplifier and Speaker Harness Installation (All Models Except Trike)

- 1. See Figure 7. Get the jumper harness (8), a plug cover (9) and two screws (10) from the kit.
- 2. See Figure 3. Feed the jumper harness connectors [149R] (6) and [42S] (7), from the outside, through the rectangular opening cut in the saddlebag inboard wall so the 12-way panel mount connector [288A] (1) fits into the opening.

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- 1. Jumper harness panel mount connector [288A]
- 2. Plug cover
- 3. Rear amplifier, bracket and cover
- 4. Wire retainer (3)
- Cable strap (3)
- Amplifier connector [149R]
- 7. Speaker connector [42S]

Figure 3. Harness Routing Inside Left Saddlebag

- Install the plug cover (2) over the panel mount connector and jumper harness from the **inside** of the saddlebag. Insert two screws through the connector flange and saddlebag wall, and into the threaded holes in the plug cover. Tighten to 3.95–4.52 N·m (35–40 in-lbs).
- 4. Route the harness:
 - a. downward to the bottom of the saddlebag, and
 - rearward along the inboard wall.
 - Route the long leg of the harness, with connector [42S], across the rear of the saddlebag,
 - d. forward along the outboard wall, and
 - e. If NOT installing saddlebag speakers, seal the connector with electrical tape. Coil the harness up in the bottom of the saddlebag. If installing saddlebag speakers, follow instructions in that kit to route the harness to the speaker. Connect terminals [42S] to the speaker spade terminals.

NOTE

Additional wire retainers and cable straps are used to retain the harness if connected to a speaker. Follow instructions in the saddlebag speaker kit.

- 5. See Figure 7. Get three wire retainers (14) and three cable straps (15) from the kit. Remove the liner from the adhesive backing of each wire retainer and affix to the inside walls of the saddlebag, about 25 mm (1 in) above the bottom of the saddlebag as shown in Figure 3. Fasten the jumper harness to the wire retainers (4) with the cable straps (5).
- 6. See Figure 7. Get the rear amplifier (1), bracket (2), T-stud anchor (3), screw (4), foam cover (5) and three push-in clips (6) from the kit.

- 7. Remove the liners from the adhesive backing of the amplifier bracket. Carefully position the bracket to the rear inboard corner of the saddlebag in the orientation shown in Figure 7, and press firmly into place. Hold the bracket in position with steady pressure for a few minutes.
- Position the amplifier onto the bracket, with the metal cones on one end fitting firmly into the rubber grommets in the bracket.
- Fasten the amplifier to the bracket with the screw.
- 10. Attach the T-stud connector to the amplifier connector.
- Plug saddlebag speaker jumper harness 16-way connector [149R] into the amplifier connector. Attach the anchor to the T-stud on the amplifier bracket.

NOTE

Some trimming of the foam cover edges may be required due to saddlebag geometry and bracket position.

12. Place the foam cover over the amplifier. Install the cover to the amplifier bracket with the three push-in screws. Remove the old saddlebag capacity label. Replace with a new label (12) from the kit. Proceed to HARNESS ROUTING: ALL MODELS EXCEPT TRIKE.

INSTALLATION (CONT'D.): TRIKE MODELS

- 1. See Figure 7. Get the drilling template (7) from the kit.
- 2. See Figure 4. Locate the left-side body fastener hole (6) on the trunk forward wall (2) behind the Trike body front face (1).
- Measure up from the center of the left-side body fastener hole, 89 mm (3.5 in) (7) and toward the outboard side, 51 mm (2.0 in) (8). Mark the trunk forward wall in that location.
- 4. Cut the template (4) surrounding the "SADDLEBAG CONNECTOR" mounting holes approximately as indicated by the dashed line (5).
- Center the rectangular connector cutout hole in the template over the mark made in the trunk wall in Step 3, and tape into position.

NOTE

Get the jumper harness (see Figure 7, Item 8) from the kit, and temporarily place the panel connector over the template. Note that the jumper harness will be later installed inside the trunk.

Template position can be adjusted slightly if the panel connector flange will not seat on a flat surface or will be too close to the rear lighting harness (Figure 4, Item 3) grommet.

- 6. Mark the locations of the two holes (10) with a center punch. Trace the outline for the connector cutout (9) on the trunk wall. Remove the template.
- Drill two 7.25 mm (9/32 in) diameter holes at the center punch marks. Carefully cut out the opening in the trunk wall for the connector.

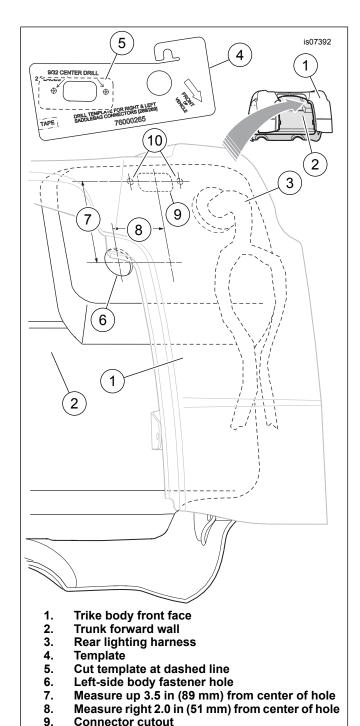
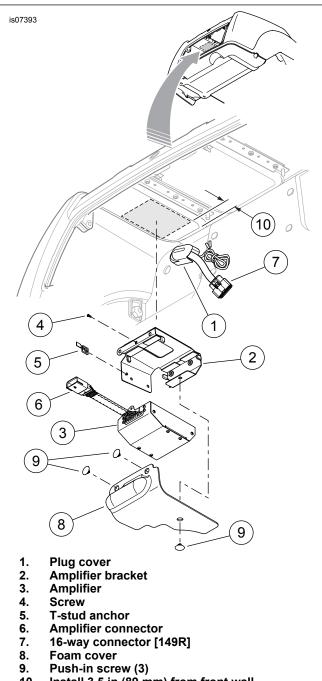


Figure 4. Trike Body Drilling for 12-Way Panel Mount Connector

9/32 in (7.25 mm) diameter hole (2)

Amplifier and Speaker Harness Installation (Trike Models)

- 1. See Figure 7. Get a plug cover (9) and two screws (10) from the kit, and the jumper harness (8) retrieved earlier.
- Feed the jumper harness connectors, from the outside into the trunk, through the rectangular opening cut in the trunk wall so the 12-way panel mount connector fits into the opening.



0. Install 3.5 in (89 mm) from front wall

Figure 5. Secondary Amplifier Mounting

- See Figure 5. Install the plug cover (1) over the panel mount connector and jumper harness from the **inside** of the trunk. Insert two screws through the connector flange and trunk wall from the **outside** of the trunk, and into the threaded holes in the plug cover. Tighten to 3.95–4.52 N·m (35–40 **in-lbs**).
- 4. See Figure 7. Get the rear amplifier (1), bracket (2), T-stud anchor (3), screw (4), foam cover (5) and three push-in clips (6) from the kit.
- See Figure 5. Clean the flat area on the underside of the trunk ceiling to the rear of the panel mount connector plug cover (1) with a 50-50 mixture of isopropyl alcohol and distilled water. Allow to dry thoroughly.

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- 6. Remove the liners from the adhesive backing of the amplifier bracket (2). Carefully position the bracket to the underside of the trunk ceiling as shown, centered in the flat area, approximately 89 mm (3.5 in) from the trunk front wall, and press firmly into place. Hold the bracket in position with steady pressure for a few minutes.
- Position the amplifier (3) onto the bracket, with the metal cones on one end fitting firmly into the rubber grommets in the bracket.
- 8. Fasten the amplifier to the bracket with the screw (4).
- 9. Attach the T-stud anchor (5) to the amplifier connector (6).
- Plug the jumper harness 16-way connector [149R] (7) into the amplifier connector. Attach the anchor to the T-stud on the amplifier bracket.

NOTE

Some trimming of the foam cover edges may be required due to trunk ceiling geometry and bracket position.

- 11. Place the foam cover (8) over the amplifier. Install the cover to the amplifier bracket with the three push-in screws (9).
- Coil the harness leg with two insulated terminals out of the way inside the trunk, and hold in place with a cable strap from the kit. Proceed to HARNESS ROUTING: TRIKE MODELS.

HARNESS ROUTING: ALL MODELS EXCEPT TRIKE

 See Figure 7. Get the secondary amplifier wire harness (17) from the kit.

NOTE

Each connector on the harness is labeled with the mating connector location on the vehicle. See the service manual for connector description and location.

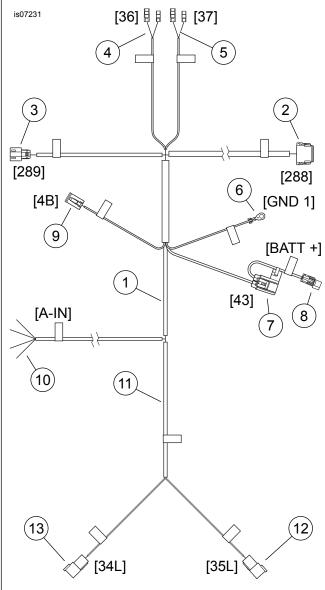
- See Figure 6. Plug the twelve-way connector (2), labeled "LH S-BAG LOC 288" into the receptacle on the left-side saddlebag (see Figure 3, Item 1). The connector has a key feature to prevent improper assembly. Listen for a definite "click".
- Route the wire harness (Figure 6, Item 1) forward to the front of the rear fender. Use cable straps from the kit to fasten that leg of the wire harness to the upper rear of the saddlebag support so there is just enough harness loose at the rear to comfortably reach the saddlebag.

NOTE

If installing an iPod Module Relocation Kit: See the "With iPod Module Relocation Kit" section at the end of these instructions.

The **left-side** saddlebag **WILL BE MODIFIED** using the template provided in this kit. **DO NOT MODIFY the right-side** saddlebag with the template unless installing the iPod Module Relocation Kit.

4. If saddlebag speakers are installed: Plug the six-way connector (3), labeled "RH S-BAG LOC 289" into the receptacle coming from the right-side saddlebag. Fasten that leg of the wire harness to the upper rear of the saddlebag support. follow the instructions in the Saddlebag Speaker Kit to apply the foam saddlebag latch pads (see Figure 7, item 11) as required. If NOT installing saddlebag speakers, seal the connector with electrical tape. Coil the harness leg labeled "RH S-BAG LOC 289" in the area under the seat. Proceed to HARNESS ROUTING: ALL.



- 1. Secondary amplifier wire harness
- 2. Twelve-way connector "LH S-BAG LOC 288"
- 3. Six-way connector "RH S-BAG LOC 289"
- 4. Socket terminal "RH REAR POD LOC 36" (2)
- 5. Socket terminal "LH REAR POD LOC 37" (2)
- 6. Ground wire "[GND 1]"
- 7. Fuse holder [43]
- 8. "[BATT + LOC 160]" connector
- 9. "ACCESSORY CONNECTOR LOC 4B"
- 10. Unterminated wires "AUDIO INPUT LOC A-IN"
- 11. Forward harness leg
- 12. Six-way connector "LH LOWER LOC 35L"
- 13. Six-way connector "RH LOWER LOC 34L"

Figure 6. Secondary Amplifier Wire Harness

HARNESS ROUTING: TRIKE MODELS

- With assistance, set the body onto the rear frame, but do not attach at this time.
- 2. See Figure 7. Get the secondary amplifier wire harness (17) from the kit.

NOTE

Each connector on the harness is labeled with the mating connector location on the vehicle. See the service manual for connector description and location.

- Place the wire harness (Figure 6, Item 1) in the underseat area. Route the twelve-way connector (2), labeled "LH S-BAG LOC 288" beneath the intermediate frame crosspieces and under the left-side body fastener boss.
- 4. Lift the left side of the body slightly off the rear frame. Plug the twelve-way connector into the receptacle on the trunk forward wall. The connector has a key feature to prevent improper assembly. Listen for a definite "click".
- Seal the connector labeled "RH S-BAG LOC 289" with electrical tape. Coil the harness leg in the area under the seat. Place the harness legs labeled "RH REAR POD LOC 36" and "LH REAR POD LOC 37" over the intermediate frame crosspieces.
- Route the remainder of the wire harness (Figure 6, Item 1) forward. Use cable straps from the kit to fasten that leg of the wire harness to the vehicle frame.
- Complete the body installation to the frame per the service manual.

HARNESS ROUTING: ALL

- If rear speaker pods are installed:If NOT installing rear speaker pods, seal the connectors with electrical tape. Coil the harness legs labeled "RH REAR POD LOC 36" and "LH REAR POD LOC 37" in the area under the seat.
 - a. Connect the socket terminals (4), labeled "RH REAR POD LOC 36" into the spade terminals on the back of the **right-side** rear speaker. Different size spade contacts prevent improper assembly.
 - Fasten that leg of the wire harness to the right-side Tour-Pak support.
 - c. Connect the socket terminals (5), labeled "LH REAR POD LOC 37" to the **left-side** speaker terminals in the same manner. Tie the harness to the left-side Tour-Pak support.
 - d. Install the speakers to the pods with the speaker attaching screws.
- Route the harness forward, tucking the harness inboard of the right-side frame tube and along the right side of the battery cavity. all models except Trike: Avoid the forward saddlebag guard mounting screw head so the harness does not get pinched by the seat.

NOTE

If the B+ connector or pin housing [4A] on the vehicle are already in use, an Electrical Accessory Adapter (Part No. 70270-04) is available from a Harley-Davidson dealer.

- 3. Position the "[BATT + LOC 160]" connector (8) and "ACCESSORY CONNECTOR LOC 4B" (9) in the area under the seat. Mate connector [160] (8) to the B+connector on the vehicle. Mate gray four-way socket housing [4B] (9) to pin housing [4A] on the vehicle.
- Bring the fuse holder [43] (7) and ground wire (6) "[GND 1]" into the front of the battery compartment. Use the existing nut to fasten ring terminal [GND 1] to the ground stud.
- Route only the larger diameter leg of the harness (11, with two six-way pin housings) forward through the right side of the wire trough. Use cable straps from the kit to fasten to existing harnesses.
- 6. If fairing lower speakers were installed earlier: Plug the six-way connector (12), labeled "LH LOWER LOC 35L" into the receptacle coming from the left-side fairing lower. Plug the six-way connector (13), labeled "RH LOWER LOC 34L" into the receptacle coming from the right-side fairing lower. Secure the forward legs of the harness to the steering head and engine guard with cable straps from the kit. If NOT installing fairing lower speakers: Coil the forward harness leg inside the fairing.

NOTE

The amplifier disables the rear output circuit of the radio. DO NOT connect **ANY** speakers to the rear output circuit of the radio.

7. The remaining leg (10) of the secondary amplifier wire harness (with four unterminated wires, labeled "AUDIO INPUT LOC A-IN") will connect to the rear output of the primary amplifier mounted either inside the front fairing or under the Tour-Pak. Route this harness leg forward or rearward on the vehicle as necessary, following the path of the harness as already installed.

Splicing of wire leads is necessary in the installation of the harness to the motorcycle. Refer to the service manual appendix for proper wire splicing procedures.

▲ WARNING

Be sure to follow manufacturer's instructions when using the UltraTorch UT-100 or any other radiant heating device. Failure to follow manufacturer's instructions can cause a fire, which could result in death or serious injury. (00335a)

- Avoid directing heat toward any fuel system component.
 Extreme heat can cause fuel ignition/explosion resulting in death or serious injury.
- Avoid directing heat toward any electrical system component other than the connectors on which heat shrink work is being performed.
- Always keep hands away from tool tip area and heat shrink attachment.
- Use a heat gun or suitable radiant-heating device to shrink the connectors to the wires.

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If connecting to a front fairing amp (all models except Trike):If connecting to a Tour-Pak amp (ALL models):

- a. The rear speaker harness (Part No. 69200022) from the Saddlebag Speaker Kit will not be required. If previously installed, remove from the vehicle. Note the colors of the four unterminated wires (10) of the secondary amplifier wire harness. Note the wire colors and positions in cavities 5 and 6 of the six-way pin housings [41A] and [42A] of the radio harness (Part No. 69200106).
- b. Refer to the service manual appendix to remove the wires from cavities 5 and 6 of each pin housing. Cut the terminals from the wires. Strip the insulation from the eight wire ends.
- c. Use the four sealed splice connectors (see Figure 7, item 16) from the kit to splice each wire from the secondary amplifier wire harness to the matching color wire from the pin housings.
- a. Note the colors of the four unterminated wires (10) of the secondary amplifier wire harness. Note the wire colors of the "speaker output" spade terminals [36D] and [37D] on the 1.3 m (52 in) long and 0.43 m (17 in) long legs of the rear amplifier harness on the vehicle.
- b. Cut the spade terminals from the four wires. Strip the insulation from the eight wire ends.
- c. Use the four sealed splice connectors (see Figure 7, item 16) from the kit to splice each wire from the secondary amplifier wire harness to the matching color wire from the rear amplifier harness on the vehicle.
- d. Vehicles that WERE equipped with OE rear speakers: Seal the two terminals from the unused rear radio circuit with electrical tape.

COMPLETION

NOTE

For ALL models: To prevent possible damage to the sound system, verify that the ignition key switch is in the OFF position **before** installing the main fuse.

- See the service manual to install the main fuse. all models except Trike: Install the saddlebags if removed. Connect the harnesses on the vehicle rear fender to the saddlebag harnesses. Trike models: Install the trunk liner per the service manual. Secure the body (midsection) fasteners. Secure the speakers to the rear pods.
- 2. Turn the ignition key switch to IGNITION, but do not start the motorcycle.

NOTE

If Fairing Lower Speakers are installed, the fader control will operate differently from a traditional front-to-back system. The fairing lower speakers are wired into the rear circuit on the principle that, like the rear speakers, the fairing lowers are farther away from your ears than the upper fairing speakers.

- Test the radio and speaker controls for proper operation.
- 4. After the test is complete, disconnect the main fuse. Install the fuel tank per service manual instructions.

Install the outer fairing and windshield. See the service manual.

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)

6. See the service manual to install the seat.

IN USE

The weather cap (see Figure 7, item 13) is provided to seal off the saddlebag connector if disconnected for cleaning or service.

With iPod Module Relocation Kit:

All Models Except Trike

If the iPod Module Relocation Kit (Part No, 76000238) had been **previously installed** in the left-side saddlebag, the module and harness must be moved to the right-side saddlebag.

NOTE

To allow more usable space in the right-side saddlebag, a CVO iPod bracket (Part No. 69200244) is available, and can be used to mount the iPod module on the inside of the saddlebag lid. Three screws (Part No. 3612) and an iPod docking harness (Part No. 69200157) would also be needed.

Refer to the 2012 FLHXSE3 service manual for installation instructions.

If installing this kit **at the same time** as the iPod Module Relocation Kit, the module and harness must be installed in the right-side saddlebag. Proceed to Step 2.

- Note the location of the cable straps holding the iPod relocation wire harness assembly to the left side of the rear fender. Cut the cable straps to release the end of the harness from the fender. See the service manual appendix to remove the brown and white/brown wires from cavities 8 and 9 of the twelve-way Deutsch socket housing.
- See Figure 6. Cut the green and light green/brown wires from cavities 5 and 6 of the six-way Molex connector (3) labeled "RH S-BAG LOC 289" on the secondary amplifier wire harness. Recycle or properly dispose of the connector. Install two Deutsch socket terminals (Part No. 72191-94, purchased separately) onto the wire ends per the service manual.

NOTE

The iPod relocation wire harness assembly (Part No. 69200354) consists of two separate harnesses bound by four cable straps.

The harness labeled "69200352" (with a single connector at each end) is the only portion needed in this application.

Cut the four straps to remove the harness labeled "69200353" (with three six-way connectors and two terminated wires), which can be recycled or properly disposed of.

 Transfer the routing of the iPod relocation wire harness (Part No. 69200352) from the left side over to the right side of the fender.

4. Insert the green wire and terminal from Step 2 into cavity 8 of the twelve-way Deutsch socket housing on the iPod relocation wire harness. Insert the light green/brown wire and terminal into cavity 9. Use cable straps from the kit to tie the harness in the same manner as the left side mounting.

NOTE

If a 16 mm (5/8 in) diameter hole was drilled in the right-side saddlebag during a prior installation, plug it. Hole plugs can be purchased from most automotive parts or home improvement stores.

 See Figure 7. Get the drilling template (7) from the kit. DO NOT MODIFY the right-side saddlebag with the template unless installing the iPod Module Relocation Kit.

NOTE

The plastic template is ready for use. The paper template (which may be found in some kits) must be cut before use.

 See Figure 2, but use the opposite-side template to fit the right-side saddlebag. Hook the slot (2) in the template (1) over the saddlebag rear mounting bracket (3). Align the template hole over the rear grommet (4). Tape the template in place as shown (5).

- Mark the locations of the two holes (6) with a center punch.
 Trace the outline for the connector cutout (7) on the saddlebag inboard wall. Remove the template.
- Drill two 7.25 mm (9/32 in) diameter holes at the center punch marks. Carefully cut out the opening for the connector.
- The amplifier bracket (2), TORX screw (4), cover (5) and push-in clips (6) from the Speaker Expansion Kit are identical to the items in the iPod Module Relocation Kit. The amplifier will fit the already-installed iPod rear mounting bracket, and the Speaker Expansion Kit items can then be used to mount the iPod module in the right-side saddlebag.
- 10. Note the routing of the harness and location of cable straps and adhesive clips in the left-side saddlebag. Remove the saddlebag iPod wire harness from the left-side saddlebag. Install in the right-side saddlebag using new clips and straps from this kit, and following the same routing. The speaker wire colors will no longer match, but will still work.
- 11. Connect the two speaker terminals and the eight-way iPod module connector inside the right-side saddlebag. Connect the twelve-way Deutsch socket housing on the iPod relocation wire harness (Part No. 69200352) to the mating twelve-way saddlebag connector installed in Step 10.
- 12. Return to the previous section to complete the saddlebag speaker and/or harness installation.

SERVICE PARTS

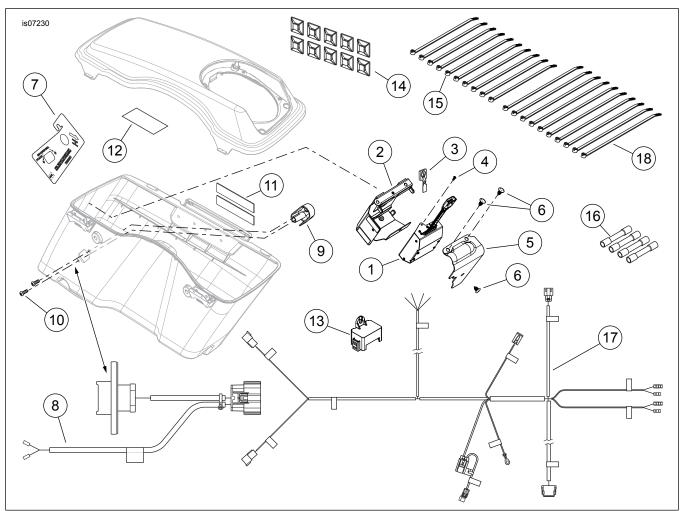


Figure 7. Service Parts, Boom! Audio Speaker Expansion Kit

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SERVICE PARTS

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Amplifier	76000141
2	Amplifier bracket	76000139
3	T-stud anchor	73212-07
4	Screw, TORX, #10-24 x 12.7 mm (0.50 in) long	3658
5	Cover, amplifier	76000140
6	Clip, push-in (3)	12600068
7	Drill template, saddlebag connector	76000265
8	Harness, saddlebag jumper (left)	Not sold separately
9	Plug cover (2)	69200329
10	Screw, TORX button head, 1/4-20 x 19 mm (0.75 in) long (2)	940
11	Pad, saddlebag latch (4)	Not sold separately
12	Saddlebag capacity label (2)	14000069
13	Weather cap	25700176
14	Wire retainer, adhesive back (10)	Not sold separately
15	Cable strap, 152 mm (6.0 in) long (10)	10065
16	Sealed splice connector, blue (4)	70586-93
17	Wire harness, secondary amplifier	Not sold separately
18	Cable strap, 190 mm (7.5 in) long (10)	10006