



INSTRUCTIONS

-J05413

REV. 2011-06-01

BOOM! AUDIO FAIRING LOWER SPEAKER KIT

GENERAL

Kit Number

76000050

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 provided in these kits 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).

*Use of these speakers on 2005 and earlier Harley-Davidson audio systems **WILL cause permanent damage** to those systems.*

Additional Parts Required

Proper installation of this kit requires separate purchase and installation of Harley-Davidson VENTED fairing lowers (or replacement if the vehicle is currently equipped with the NON-VENTED style). See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

Loctite® 243 Medium Strength Threadlocker and Sealant - Blue (Part No. 99642-97) is required for proper installation of this kit.

One 5/16 in (8 mm) ID flat washer will be needed temporarily as an installation aid.

If the vehicle is **CURRENTLY EQUIPPED** with fairing lowers, two rubber washers (Part No. 7415A) will be needed.

Separate purchase of a Radio Harness (Part No. 69200106) or a Non-Ultra Overlay Harness (Part No. 70169-06A) MAY be required.

The purchase of this kit entitles you to a specially developed sound equalization software that is used in conjunction with the Advanced Audio system. This unique equalization was designed to optimize the performance and sound response of the BOOM! Audio fairing lower speakers.

Even if this kit is not being installed by a Harley-Davidson dealer, this special equalization **software** is available without charge from any dealer through Digital Technician II. Dealer labor rates may apply for the upgrade procedure.

⚠ WARNING

The rider's safety depends 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. (00333a)

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.

Kit Contents

See Figure 4 and Table 1.



PREPARATION

NOTE

For 2007 and later vehicles equipped with security siren:

- Verify that the Hands-Free Fob is present.
- Turn the ignition key switch to IGNITION.

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 instructions to remove the main fuse.
2. **Models Equipped With Fairing Lower:** See Figure 4. Remove the lower fairings (B) per service manual instructions. Discard the rubber washers (E) at the bottom of the fairing.
3. **ALL Models:** Follow service manual instructions to remove the outer fairing and windshield.

LOWER FAIRING ASSEMBLY AND INSTALLATION

1. See Figure 1. Remove the door flap and tether (2) from the glove box (1) on a lower fairing. Cut the back side of the four plastic snaps (3), remove from the front of the glove box and discard.
2. Use a 5/16 in (8 mm) bit to drill out the former snap holes.

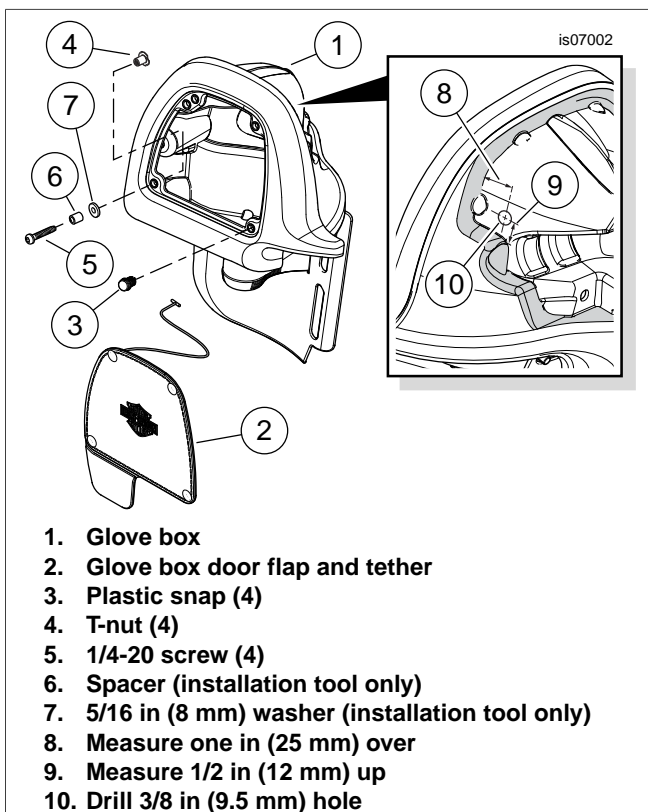


Figure 1. Prepare Glove Box for Speaker Installation (Left Side Shown)

NOTE

Check the prongs on the back of the T-nuts and make sure they are not bent over. If they are bent, straighten them out.

3. From the back side, insert a T-nut (4) from the kit into one of the 5/16 in (8 mm) holes using a pair of locking pliers. Press the prongs into the plastic enough to hold the nut in place.
4. Use a 1/4-20 screw (5), spacer (6), and flat washer (7) from the kit as tools to draw the T-nut in. One to 1-1/2 turns should be sufficient.

NOTE

The T-nut does NOT need to be fully "bottomed out" against the back of the glove box.

5. Repeat with the remaining three T-nuts in the other holes.
6. On the back side of the glove box, measure about 1.0 in (25 mm) over (8) and 0.5 in (12 mm) up (9) from the lower fairing cap mating flange (shaded area), and drill a 3/8 in (9.5 mm) hole (10) in the glove box inboard side wall.
7. Repeat Steps 1-6 for the remaining lower fairing.
8. See Figure 4. Get the lower fairing wire harness (4) from the kit.

NOTE

Right-side speaker wire colors are:

- cavity 5, Green,
- cavity 6, Light Green/Brown.

Left-side speaker wire colors are:

- cavity 5, Brown,
- cavity 6, White/Brown.

9. Get either the left- or right-side lower fairing. See Figure 4, inset. Slit (D) one of the grommets (5) from outer edge to center hole, and install over the correct (left- or right-side) wires of the lower fairing wire harness (4) leg, about 4.0 in (100 mm) past the start of the conduit on the end with two female terminals.
10. Route the speaker wires through the hole drilled in Step 6, and fit the grommet into the hole.
11. Position the lower fairing to the vehicle per service manual instructions, and install to the lower tube of the engine guard using a **new** rubber washer (E, Part No. 7415A, purchased separately) and the remaining original fasteners at the bottom attachment point.

NOTE

Take care not to pinch the wire harness between the fairing sections and the engine guard.

12. Place the fairing cap (C) against the top of the lower fairing, align and install to the upper tube of the engine guard per service manual instructions.
13. Get the remaining lower fairing, and install to the lower tube of the engine guard using a **new** rubber washer and original fasteners.
14. Slit the remaining grommet from outer edge to center hole, and install over the second leg of the lower fairing wire harness in the same manner as the first.

Route the speaker wires through the hole in the lower fairing, and fit the grommet into the hole.

15. Place the fairing cap against the lower fairing and install to the engine guard upper tube.
16. Connect the speaker wires to the speaker terminals on one side of the vehicle. Different size spade contacts prevent improper assembly.
17. Insert the speaker assembly (1) into the glove box opening.
18. Insert four screws (6) through the bezel (3) and speaker, and into the T-nuts in the glove box door. Tighten the screws to 25-35 **in-lbs** (2.8-4.0 Nm)
19. Repeat Steps 16-18 for the opposite-side speaker.
20. Route the two legs of the lower fairing wire harness to the center of the engine guard, then up along the right side of the steering head.

NOTE

Position socket housings [41A] and [42A] near the outside of the upper fairing to allow easy disconnection when removing fairing lowers.

21. Secure the wire harness to the engine guard and steering head with cable straps (7) from the kit.

LOWER FAIRING HARNESS CONNECTION

NOTE

*If the vehicle has an **amplifier mounted underneath the Tour-Pak**, the rear amplifier can be used to power the lower fairing speakers instead of rear speaker pods. See "FOR VEHICLES EQUIPPED WITH AMPLIFIER UNDER TOUR-PAK" at the end of these instructions for steps to be taken **before** connecting the lower fairing wire harness from this kit.*

1. See Figure 2. If not already done, plug the 35-way socket housing [28B] (3) from the radio harness (1) or non-Ultra overlay harness (2) into the back of the radio.
Connect the six-way pin housing [6A] (4) to the vehicle interconnect harness.
Secure with cable straps.

NOTE

For non-Ultra overlay harness: Connectors [41A] and [42A] are marked "RIGHT REAR SPEAKER" and "LEFT REAR SPEAKER".

For radio harness: Connectors [41A] and [42A] are NOT marked.

Right-side speaker wire colors in connector [41A] on the radio harness:

- cavity 4, Orange/Black,
- cavity 5, Green,
- cavity 6, Light Green/Brown.

Left-side speaker wire colors in connector [42A] on the radio harness:

- cavity 4, Brown/White,
- cavity 5, Brown,
- cavity 6, White/Brown.

2. Mating the fairing lower speaker connectors:

See Figure 4. Match the wire colors in cavities 5 and 6 of the six-way socket housings (A) on the lower fairing wire harness (4) with those in the six-way pin housings [41A] and [42A] on the radio harness or non-Ultra overlay harness.

Plug the right- and left-side speaker socket housings into the correct pin housings.

With radio harness and NO front amplifier:

- a. Insert the terminated Green wire of the radio harness into cavity 1 of radio harness connector [28B].
- b. Insert the terminated Light Green/Brown wire into cavity 24 of radio harness connector [28B].
- c. Insert the terminated Brown wire into cavity 2 of radio harness connector [28B].
- d. Insert the terminated White/Brown wire into cavity 25 of radio harness connector [28B].

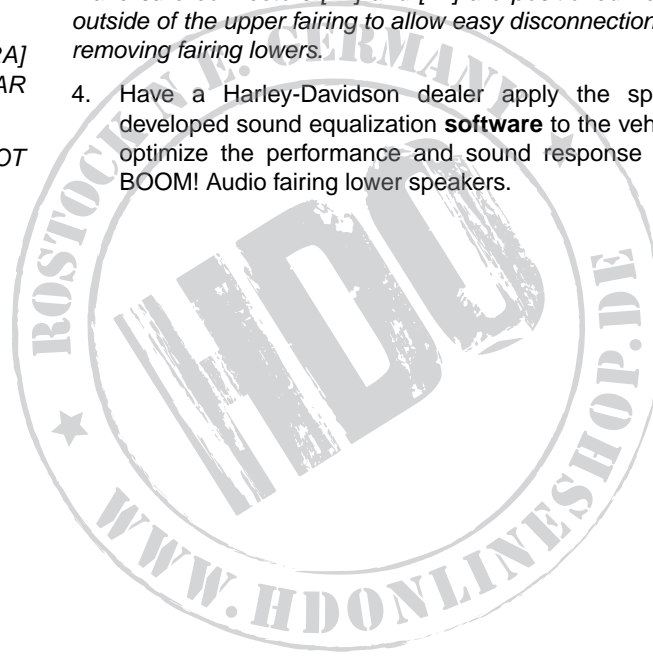
With radio harness AND front amplifier: Insert the four terminated wires into amplifier harness connector [149B]. Refer to the Boom! Audio Amplifier Kit instructions.

3. Use cable straps from the kit to fasten the harnesses to nearby wiring.

NOTE

Make sure connectors [41] and [42] are positioned near the outside of the upper fairing to allow easy disconnection when removing fairing lowers.

4. Have a Harley-Davidson dealer apply the specially developed sound equalization **software** to the vehicle to optimize the performance and sound response of the BOOM! Audio fairing lower speakers.



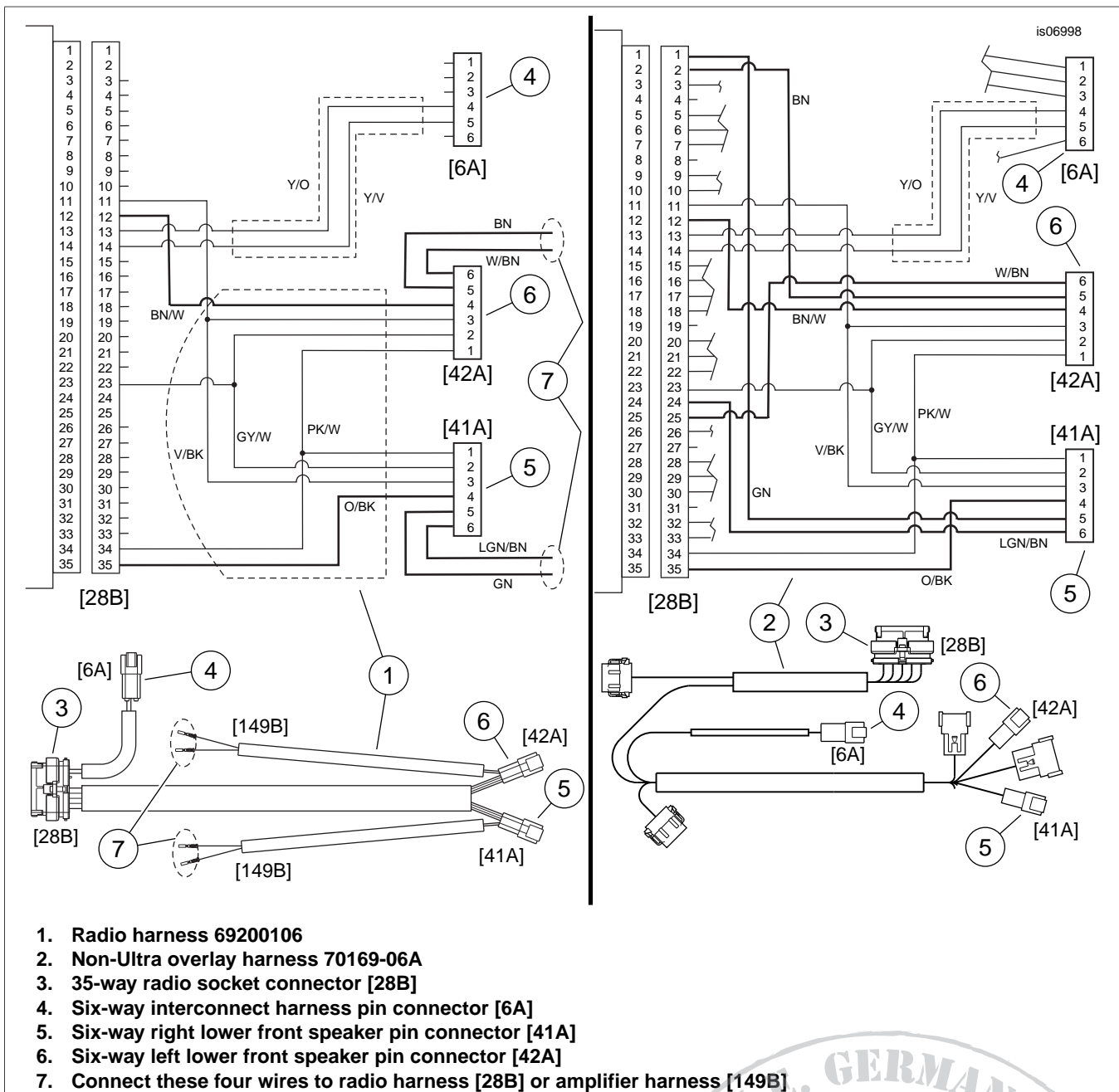
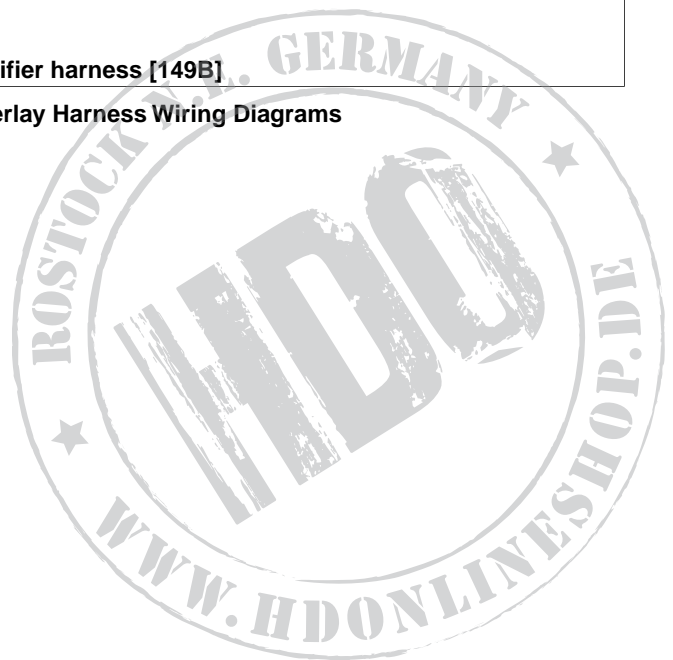


Figure 2. Radio Harness/Non-Ultra Overlay Harness Wiring Diagrams



FOR VEHICLES EQUIPPED WITH AMPLIFIER UNDER TOUR-PAK

If the vehicle has an amplifier mounted underneath the Tour-Pak, the rear amplifier can be used to power the lower fairing speakers instead of rear speaker pods.

NOTES

- The amplifier **CANNOT** be used to power more than two pairs of speakers.
- Some vehicles with rear speaker pods **MAY** already have rear speaker wire harness (Part No. 77157-06).
- If rear speaker pods and a rear speaker wire harness are installed, remove them from the vehicle.

See Figure 3. A rear speaker wire harness (Item 1, Part No. 77157-06), two 0.19 in (4.8 mm) spade terminals (Item 4, Part No. 72438-06), two 0.25 in (6.4 mm) spade terminals (Item 5, Part No. 72446-06) and six cable straps (Part No. 10006) will be needed.

1. Remove the six-way **socket** housings (3) from the rear speaker wire harness by cutting the wires **as close as possible** to the housings. Discard the socket housings.
2. Install a narrow spade terminal (4) onto the end of the **solid brown** wire per instructions in the service manual appendix. Install the remaining narrow terminal onto the end of the **solid green** wire in the other branch of the harness.
3. Install a wide spade terminal (5) onto the end of the **white/brown** wire. Install the remaining wide terminal onto the end of the **light green/brown** wire.

NOTES

- **DO NOT** remove the **green or light green/brown** wires installed in cavities 5 and 6 of the pin housing labeled **RIGHT** at the opposite end of the harness.
 - **DO NOT** remove the **brown or white/brown** wires installed in cavities 5 and 6 of the unlabeled pin housing.
4. At the opposite end of the harness, remove the wires from **ONLY** cavities 1, 2, 3 and 4 of the six-way pin housings (2).

NOTE

The unconnected wires can be trimmed or taped back to the vinyl conduits, or removed from the harness as desired.

5. Go to the seat area **in front of** the right and left front corners of the Tour-Pak. Locate two 2-wire branches of the amplifier harness ending in insulated female terminals.
6. Match the wire colors, and plug the spade terminals from the rear speaker wire harness into the insulated female terminals of the amplifier harness. Different size spade contacts prevent improper assembly.
7. Route the rear speaker wire harness forward on the vehicle, along the path of the amplifier harness into the area just outside the upper fairing. Use cable straps to fasten the rear speaker wire harness to the amplifier harness.
8. Connect the pin housings (Figure 3, Item 2) of the rear speaker wire harness to the socket housings (Figure 4, Item A) of the lower fairing speaker wire harness.

Go to "LOWER FAIRING HARNESS CONNECTION" at the front of these instructions for wire color reference, then proceed to steps 3 and 4 of that section.

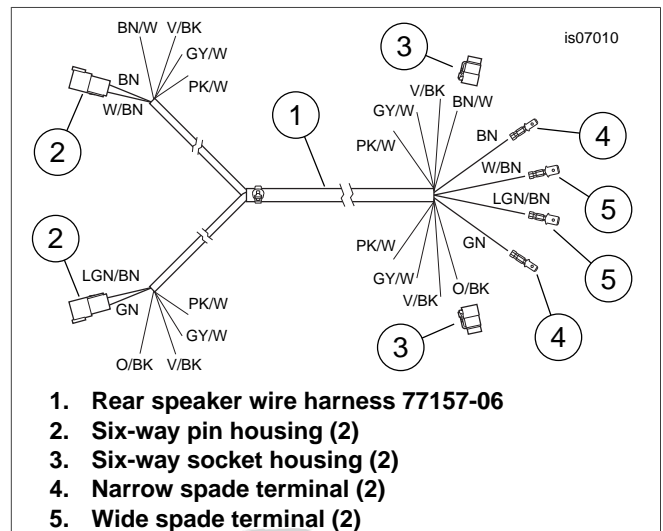


Figure 3. Harness, Lower Fairing Speaker to Rear-Mounted Amplifier

SERVICE PARTS

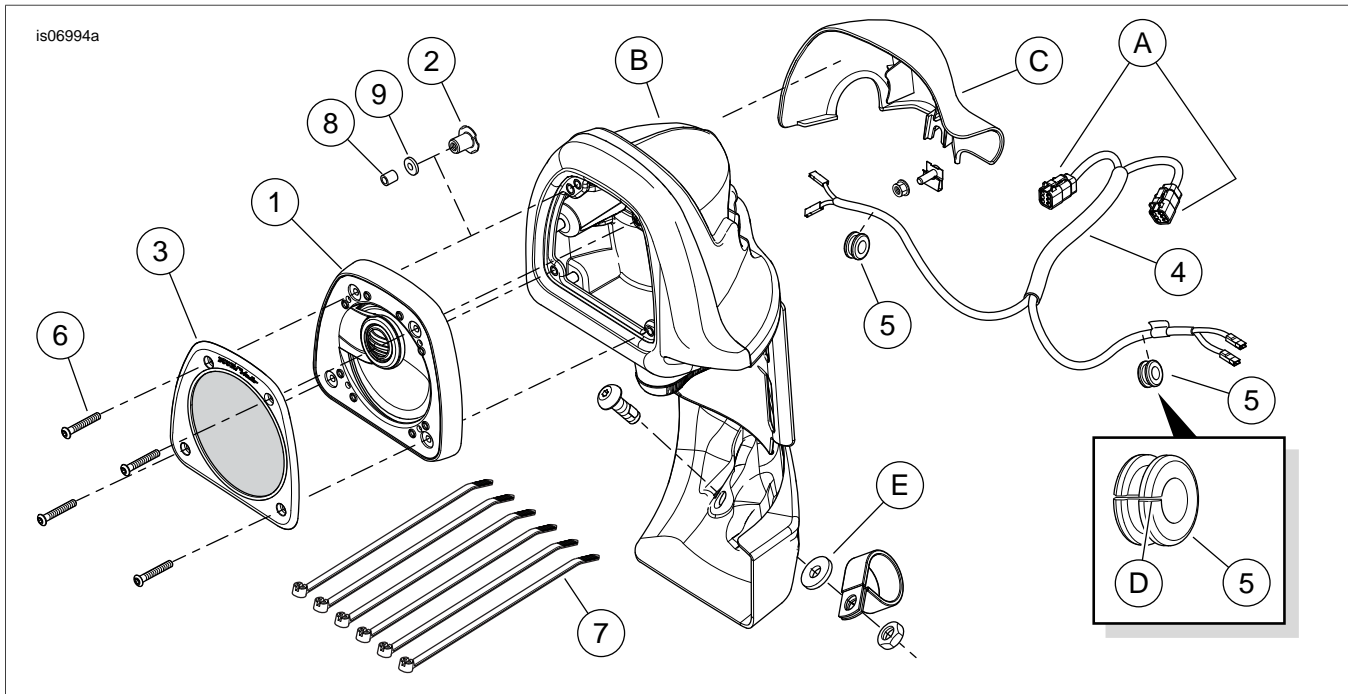


Figure 4. Service Parts, Boom! Audio Lower Fairing Speakers

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Speaker assembly, left (shown) Speaker assembly, right (not shown)	Not sold separately Not sold separately
2	T-nut (8)	10400007
3	Grille and bezel, lower fairing speaker (left, shown) Grille and bezel, lower fairing speaker (right, not shown)	76000248 76000247
4	Wire harness, lower fairing speaker	Not sold separately
5	Grommet, 1/4 in (6.4 mm) ID (2)	11410
6	Cap screw, hex socket button head, 1/4-20 x 1.625 in (41.3 mm) long (8)	Not sold separately
7	Cable strap (6)	10006
8	Spacer (used as a tool to install T-nuts, Item 2)	5775
9	Washer (used as a tool to install T-nuts, Item 2)	6771A
Items mentioned in text, but not included in kit:		
A	Six-way socket housing (2) on lower fairing wire harness	
B	Lower fairing (2)	
C	Fairing cap	
D	Slit grommet from edge to center	
E	Rubber washer (2, Part No. 7415A, purchased separately)	