



INSTRUCTIONS

J05386

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BOOM!™ AUDIO SADDLEBAG SPEAKER KIT

GENERAL

Kit Number

76000202

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 in 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

Proper installation of this kit requires the replacement of the saddlebag lids. Lids are available separately from a Harley-Davidson dealer.

Unless one has already been fitted as part of another Advanced Audio kit installation, separate purchase of a Radio Harness (Part No. 69200106) or Non-Ultra Overlay Harness (Part No. 70169-06A) will be required.

RTV sealant is required for proper installation of this kit.

NOTE

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 saddlebag 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

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 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 7, Table 1 and Table 2.

SADDLEBAG PREPARATION

Saddlebag Lid Removal

NOTE

For 2007 and later vehicles equipped with security siren:

- Verify that the Hands-Free Fob is present.

NOTE

For ALL vehicles:

- Remove all items from the saddlebags.
- The saddlebags do not have to be removed from the vehicle to perform the **lid removal** procedure.
- Take care to avoid damage to the saddlebag bottom when removing the lid.

1. Remove two screws to release the check strap from the **saddlebag lid only**.
2. Remove five screws to release the lid from the saddlebag latch. The latch can remain attached to the saddlebag bottom. Retain the screws and backing plate for installation of the **new** saddlebag lid. The removed lid can be discarded or set aside.
3. Repeat for the remaining saddlebag lid.

Saddlebag Drilling

1. Lay a clean pad or blanket on the work surface to protect the painted surfaces of the saddlebag.
2. Remove one saddlebag bottom from the vehicle per service manual instructions. Lay it, outboard side down, on the protected work surface.
3. See Figure 1. Measure about 216 mm (8.5 in) from the rear of the saddlebag, in line with the top of the bag as shown. Drill a 16 mm (0.62 in) diameter hole in that location.



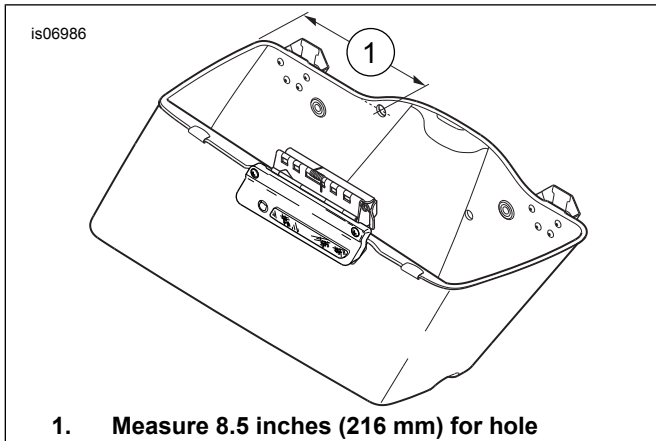


Figure 1. Drill Hole in Inboard Saddlebag Wall (Right-Side Shown)

- Set the saddlebag aside, and repeat Steps 1-3 for the opposite side saddlebag.

Saddlebag Lid Assembly

NOTE

Unfinished saddlebag lids must be finish painted before installation.

- See Figure 7. Get the gasket (C), mounting plate (D), two wear plates (B) and the finish painted saddlebag lid (A) from one of the saddlebag lid kits (purchased separately).

NOTE

Ambient temperature should be **at least 16 °C (60 °F)** for proper adhesion of the wear plates and gasket to the saddlebag lid.

- See Figure 2. Remove the liner from the adhesive backing of one of the wear plates (2). Carefully position the wear plate to the saddlebag lid (1), centering it on the tab (3), and press firmly into place. Hold the wear plate in position with steady pressure for about a minute. Repeat with the second wear plate at the other end of the lid.

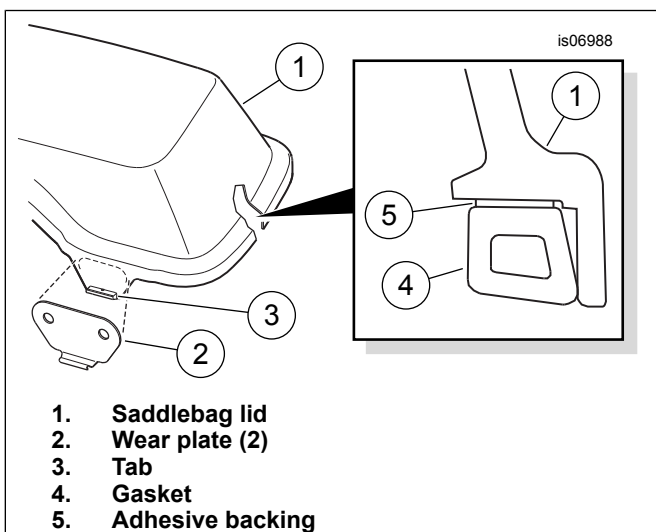


Figure 2. Assemble Wear Plates and Gasket to Saddlebag Lid

- See Figure 7. Lay the mounting bracket (D) onto the saddlebag lid flange, lining up the five mounting holes.

NOTE

- Orient the gasket with the **tall edge** toward the outer lip of the cover as shown in Figure 2.
 - Begin gasket installation in the center of the inboard side of the lid, opposite the hinge (see Figure 4, Item 9).
 - Gasket adhesive will hold the mounting plate in place.
- Gradually remove the liner from the adhesive backing (Figure 2, Item 5) of the saddlebag lid gasket (4) as the gasket is pressed into place around the inside perimeter of the lid (1) as shown.
 - Set the lid, gasket side down, on the clean pad or blanket of the work surface.
 - See Figure 7. Get a saddlebag speaker assembly (7), speaker basket (1) and four #8-18 x 31.8 mm (1.25 in) long screws (8) from the speaker kit.
 - From the underside of the saddlebag lid, and with the large rectangular opening (F) toward the front, place the speaker basket under the speaker cavity and snap it into the lid.
 - Insert a screw, from the top, through each mounting hole in the speaker. With the tweeter (E) toward the front of the saddlebag, install the speaker into the cavity at the front of the saddlebag lid.
 - Align the four screws with the mounting holes in the basket, and tighten to 25.4–38.1 N·m (10–15 in-lbs).
 - Get the correct speaker grille (2 or 3), four rubber washers (9) and four #8-18 x 19 mm (0.75 in) long screws (10) from the speaker kit.
 - Place a rubber washer into the well surrounding each grille mounting hole in the lid.
 - Place the speaker grille into position over the speaker face. From the underside of the saddlebag lid, insert the screws through the holes in the lid and into the mounting pads in the grille. Tighten the screws to 25.4–38.1 N·m (10–15 in-lbs).
 - Repeat Steps 1 through 12 for the opposite-side saddlebag lid.
 - Fasten the **new** lid to the saddlebag latch and bottom with the five screws (G) removed earlier. Tighten to 2.3–2.8 N·m (20–25 in-lbs).

NOTE

See Figure 3. The saddlebag latch hinge is shown with the pins removed for clarity.

15. Get two foam pads (Figure 7, Item 15) from the kit. Cut one piece in half as shown in Figure 3. Remove the liner from the adhesive backing of the **uncut** pad and affix to the flat side of the latch hinge connector segment (3). Remove the liner from the adhesive backing of one cut pad and affix to the hinge side of the latch connector segment as shown.

NOTE

The remaining foam pad segment can be cut and used as needed to eliminate any saddlebag vibration induced by speaker operation.

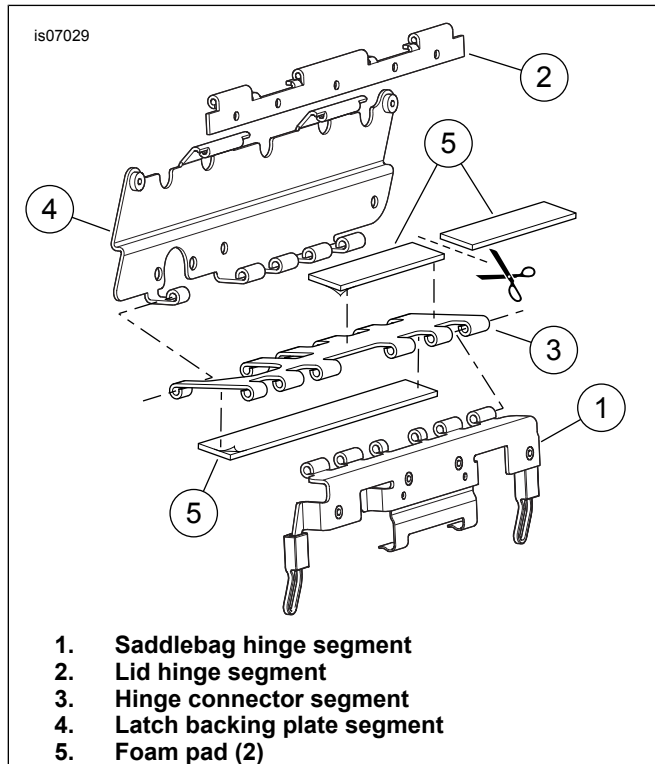


Figure 3. Install Foam Pads to Saddlebag Latch Hinge (Left Side Shown)

16. Assemble the remaining saddlebag in the same manner.

SADDLEBAG HARNESS INSTALLATION

1. See Figure 7. Get a saddlebag speaker jumper harness (11) and a strain relief grommet (12) from the kit.
2. With the large end facing the six-way pin housing (1), snap the grommet onto the harness conduit near the pin housing.
3. See Figure 4. Insert the bare socket terminal (1) end of the jumper harness, from the outside, through the 16 mm (0.62 in) diameter hole (2) drilled in the saddlebag side wall earlier. Route the harness:
 - a. downward to the bottom of the saddlebag,
 - b. rearward along the inboard wall,
 - c. across the rear of the saddlebag,
 - d. forward along the outboard wall, and

- e. upward in front of the saddlebag lid tether.

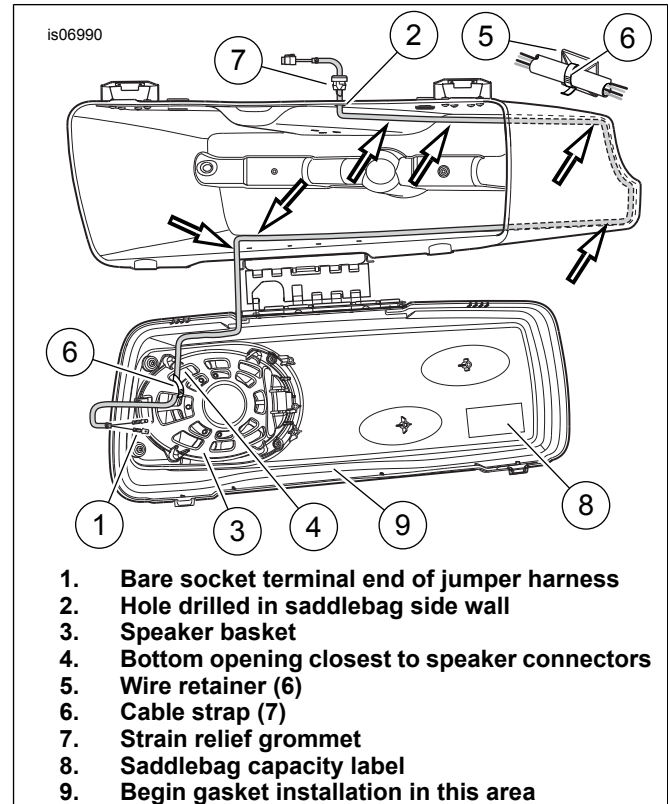


Figure 4. Harness Routing Inside Saddlebag

4. Route the socket terminals through the bottom opening (4) of the speaker basket (3) closest to the speaker connectors, and install the terminals to the speaker spade terminals. The spade terminals are different-sized to prevent improper assembly.
5. Get six wire retainers (5) and seven cable straps (6) from the kit. Use one cable strap to bind the wires to the basket.
6. 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. Fasten the jumper harness to the wire retainers with the cable straps.
7. Press the strain relief grommet (7) into the hole in the saddlebag side wall. Apply RTV sealant around the grommet and hole to seal against water leaks.
8. Affix the saddlebag capacity label (8) to the inside of the lid.
9. Repeat for the opposite side saddlebag.
10. Install the saddlebags to the vehicle per service manual instructions.

VEHICLE PREPARATION

1. Have a Harley-Davidson dealer perform the sound equalization software upgrade to the radio.

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 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)

2. Follow service manual instructions to purge the fuel supply of high pressure gasoline and remove the fuel supply line.

▲ WARNING

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

3. Refer to the service manual and follow instructions to remove the main fuse.

▲ 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)

4. Follow the instructions in the service manual to remove the instrument console (if equipped) from the fuel tank.
5. See the service manual for fuel tank removal instructions.

VEHICLE WIRING

Install Rear Speaker Harness

1. See Figure 7. Inspect the socket housings on the two long branches at one end of the rear speaker harness (4). In one of the socket housings (labeled "RIGHT"): Plug this housing into the pin connector coming from the **right** saddlebag. In the remaining socket housing (not labeled): Plug this housing into the pin connector coming from the **left** saddlebag.
 - a. Cavity 4 has an orange/black wire,
 - b. Cavity 5 has a green wire,
 - c. Cavity 6 has a light-green/brown wire.
 - a. Cavity 4 has a brown/white wire,
 - b. Cavity 5 has a brown wire,
 - c. Cavity 6 has a white/brown wire.

2. Route the harness branches forward on the vehicle:
 - a. Along the left and right rear frame fender support arms. Use cable straps from the kit to fasten the branches of the harness to the fender supports.
 - b. Continue the branches forward to the front of the fender, then cross the **right** branch over to the **left** side of the rear frame. Use a cable strap to fasten both branches of the harness to the frame.
 - c. Continue routing the main branch forward, tucking the harness inboard of the frame tube and avoiding the forward saddlebag guard mounting screw head so the harness does not get pinched by the seat. Use four cable straps to fasten the main branch of the harness to the frame tube.
 - d. Route the harness along the left side of the battery cavity, continuing forward to the harness tray.
 - e. Open the cover of the harness tray. Route the harness through the openings in the tray, using cable straps to fasten to the main harness.
 - f. Continue the rear speaker harness forward into the fairing.

▲ 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 wires do not pull tight when handlebars are turned fully to left or right fork stops.
3. Remove the outer fairing and windshield. Refer to the service manual.
 4. Route the two branches of the front section of the rear speaker harness inside the fairing along the path of the interconnect harness to the top left of the inner fairing.
 5. See Figure 5. 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.

6. **Mating the rear speaker connectors:** See Figure 7. Match the wire colors in cavities 5 and 6 of the six-way socket housings on the rear 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:** With radio harness **AND front amplifier:** Insert the four terminated wires into amplifier harness connector [149B]. Refer to the Boom!™ Audio Amplifier Kit instructions.
 - 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].
7. Use cable straps from the kit to fasten the harnesses to nearby wiring.

NOTE

To prevent possible damage to the sound system, verify that the ignition switch is in the OFF position before installing the main fuse.

8. Verify that the ignition switch is in the OFF position. Refer to the service manual and follow the instructions to install the main fuse.
9. Test the radio and speaker controls for proper operation.
10. After the test is complete, disconnect the main fuse again and install the tank per service manual instructions.
11. Install the outer fairing and windshield. Refer to the service manual.
12. Refer to the service manual and follow the instructions to install the seat.

⚠ 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)

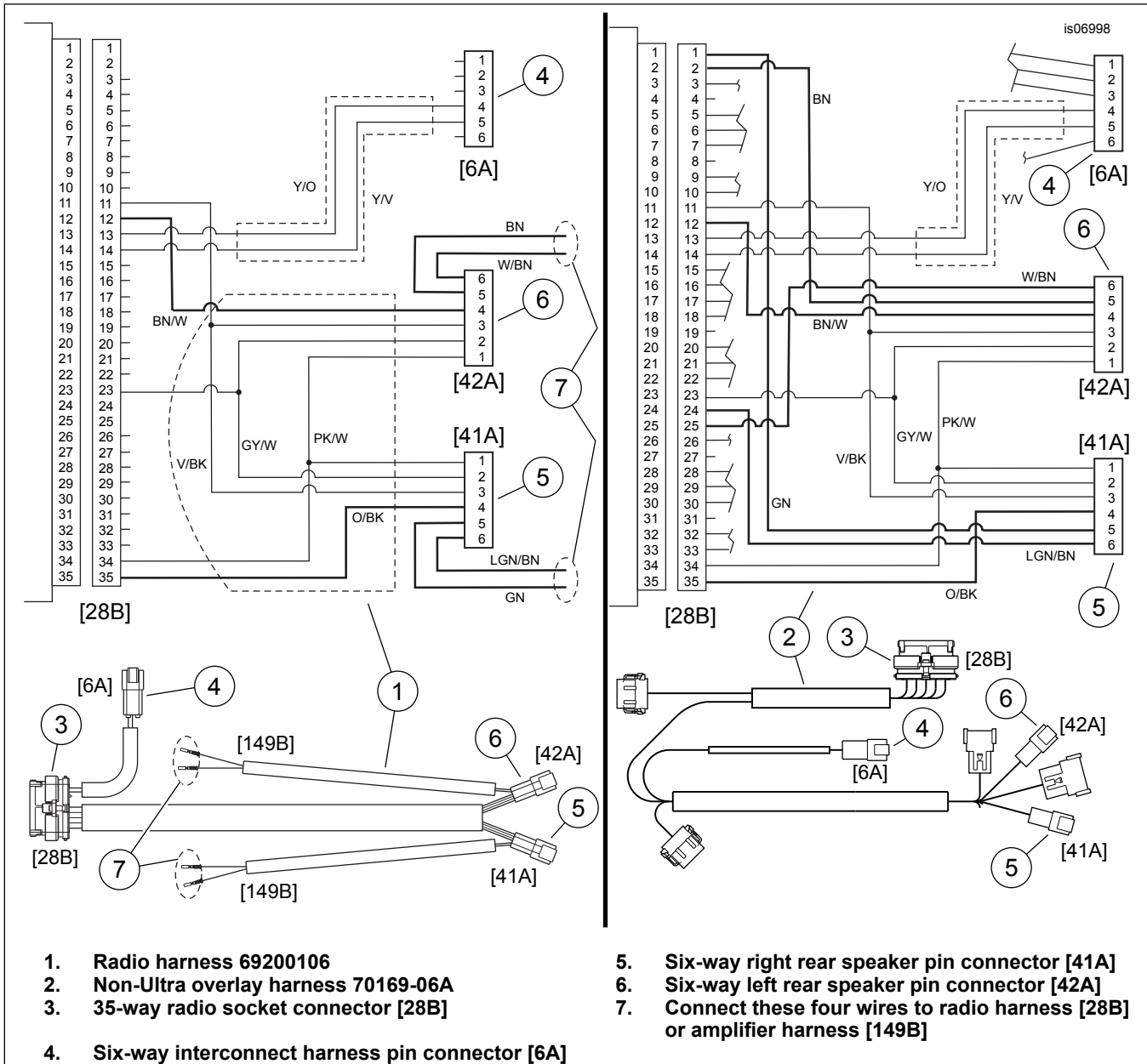


Figure 5. Radio Harness/Non-Ultra Overlay Harness Wiring Diagrams

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 saddlebag speakers instead of rear speaker pods.

NOTE

The amplifier **CANNOT** be used to power more than two pairs of speakers.

See Figure 7. Get two saddlebag speaker jumper harnesses (11) from the kit.

See Figure 6. Two 4.8 mm (0.19 in) spade terminals (Item 3, Part No. 72438-06), two 6.4 mm (0.25 in) spade terminal (Item 4, Part No. 72446-06) and twelve cable straps (Item 5, Part No. 10006) will also be needed. These items are available separately from a Harley-Davidson dealer.

1. Remove the six-way **socket** housing (2) from one saddlebag speaker jumper harness by cutting the wires **as close as possible** to the housing. Discard the socket housing.
2. Install a narrow spade terminal (3) onto the end of the **green** wire per instructions in the service manual appendix. Install a wide spade terminal (4) onto the end of the **white** wire.
3. Repeat Steps 1 and 2 for the second saddlebag speaker jumper harness.
4. 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.
5. Plug the spade terminals from one end of each saddlebag speaker jumper harness into the insulated female terminals on one branch of the amplifier harness. Different size spade contacts prevent improper assembly.

SERVICE PARTS

Table 1. Service Parts, Touring Model Saddlebag Lids With Speaker Mount

Item	Description (Quantity)	Kit or Part Number
	Saddlebag Lid Kit (includes items A-D); Available separately. Not part of Saddlebag Speaker Kit 76000202.	
A	• Lid (cover), saddlebag	Not sold separately
B	• Wear plate (2)	90962-93
C	• Gasket, cover	90675-93A
D	• Mounting bracket	12700035

Table 2. Service Parts, Boom! Audio Saddlebag Speaker Kit

Item	Description (Quantity)	Part Number
1	Basket, speaker protective (2)	76000182
2	Grille, speaker (left)	76000180
3	Grille, speaker (right)	76000181
4	Harness, rear speaker	69200022
5	Saddlebag capacity label (2)	14000069
6	Speaker kit (2) (each includes items 7 through 15)	Not sold separately
7	• Speaker assembly, 5x7	76000210
8	• Screw, Hi-Lo, #8-18 x 31.8 mm (1.25 in) long (4)	10200095
9	• Rubber washer (4)	25700117
10	• Screw, Hi-Lo, #8-18 x 19 mm (0.75 in) long (4)	10200012
11	• Wire harness, saddlebag speaker jumper	Not sold separately
12	• Grommet, strain relief	12100001
13	• Wire retainer, adhesive back (6)	69200342
14	• Cable strap (7)	10065
15	• Pad, saddlebag latch (2)	Not sold separately
Items mentioned in text, but not included in kit:		
E	Tweeter (2), part of rear speaker assemblies	
F	Large opening in speaker protective basket	
G	Saddlebag lid to bottom attaching screw (10)	
H	Jumper harness socket terminal (2)	
I	Jumper harness six-way pin housing	
J	16 mm (0.62 in) diameter hole in saddlebag side wall	