



INSTRUCTIONS

-J03651

REV. 2008-06-13

ADVANCED AUDIO HIGH-OUTPUT SOUND SYSTEM KIT

GENERAL

Kit Number

76418-06A

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

Separate purchase of additional parts or accessories is required for proper installation of this High-Output Sound System Kit on your model vehicle. See the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only) for a list of required parts or accessories for your model.

⚠ 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 references service manual information. A service manual for this year and model vehicle is required for this installation and is available from a Harley-Davidson Dealer.

Electrical Overload

CAUTION

It is possible to overload your motorcycle's charging system by adding too many electrical accessories. If your combined electrical accessories operating at any one time consume more electrical current than your vehicle's charging system can produce, the electrical consumption can discharge the battery and cause vehicle electrical system damage. See a Harley-Davidson dealer for advice about the amount of current consumed by additional electrical accessories, or for necessary wiring changes. (00211b)

⚠ 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 High-Output Sound System requires up to **11 amps** additional current from the electrical system.

Kit Contents

See Figure 8 and Table 1.

INSTALLATION

Preparation

1. Refer to the service manual and follow the instructions given to remove the main fuse.
2. Follow the service manual instructions to remove the seat.

⚠ WARNING

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

3. **For 2006 and 2007 models:** See the service manual, and remove the battery from the vehicle.
For 2008 and later models: Refer to the service manual and follow the instructions given to remove the ECM caddy from the top of the battery. Disconnect the battery cables, negative (-) cable first.
4. **For ALL models:** Refer to the service manual, and follow the instructions given to remove the fuel tank console and fuel tank.

For Touring models only:

NOTE

*If stronger headset receptacle retention is desired, the existing spring assembly can be replaced with **new** spring assembly 76300-06 (purchased separately).*

5. **If a passenger headset harness is installed:** Grasp the cable strap on the end of the vinyl spring sleeve, and unhook the sleeve and the end of the spring from the tab at the upper right of the license plate holder.
Use a cable strap from the kit to fasten the end of the spring to the **lower left** slot on the license plate holder.

For ALL models: Proceed to the "Amplifier Installation" instructions for the correct year and model vehicle.

Amplifier Installation, 2008 and Earlier Touring Models

NOTE

The Tour-Pak® **does not** have to be removed from the vehicle to perform this installation.

1. Open the Tour-Pak lid and remove all items from the Tour-Pak base.
2. **Models with rubber mat:** Remove the mat.
Models with molded liner: Open the map pocket and remove the acorn nuts with flat washers. Remove the map pocket and liner.

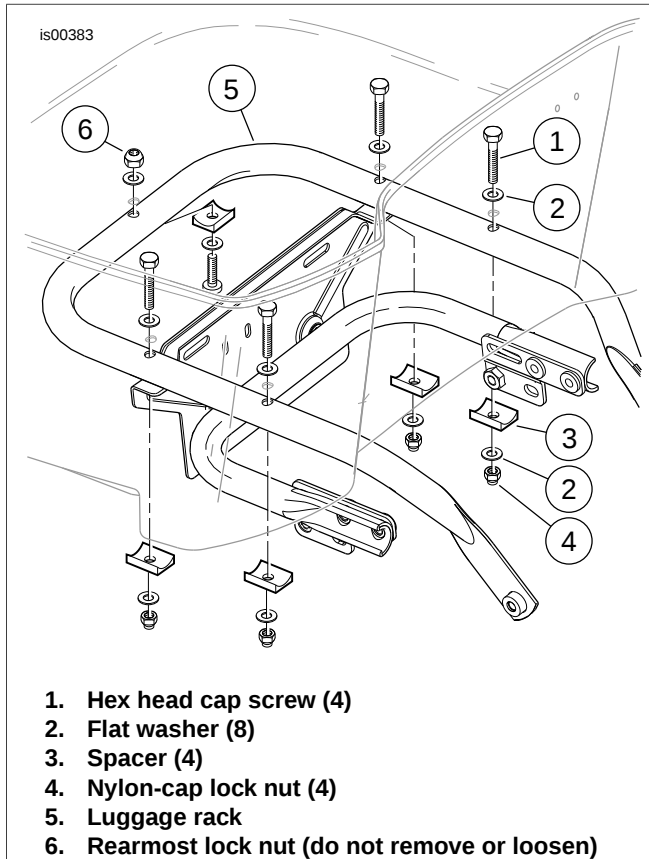


Figure 1. Tour-Pak Attaching Hardware, 2008 and Earlier Touring Models

NOTES

Do not remove the screws (1) from the Tour-Pak attaching holes at this time.

Do not remove or loosen the **rearmost** locknut (6).

The luggage rack spacers (3) will drop free as the locknuts are removed.

3. See Figure 1. Holding the hex-head cap screws (1) at the bottom of the Tour-Pak, remove the four **forward** nylon cap locknuts (4), washers (2) and spacers (3) on the underside that fasten the Tour-Pak to the luggage rack (5) side rails.

Do not remove or loosen the rearmost locknut (6). Do not remove the screws from the holes.

4. See Figure 2. Obtain the two cushion bumpers (2) from the kit.

5. Use isopropyl alcohol to thoroughly clean the rear fender surface in the area (4) behind the seat retention nut (3).
6. Peel the liner from the adhesive backing on one of the bumpers, and fasten the bumper to the fender as shown, crosswise on center about one inch (25 mm) behind the seat retention nut.
Hold for a few seconds to set the adhesive.
7. Peel the liner from the backing on the remaining bumper, and fasten that bumper about one inch (25 mm) behind the first bumper.

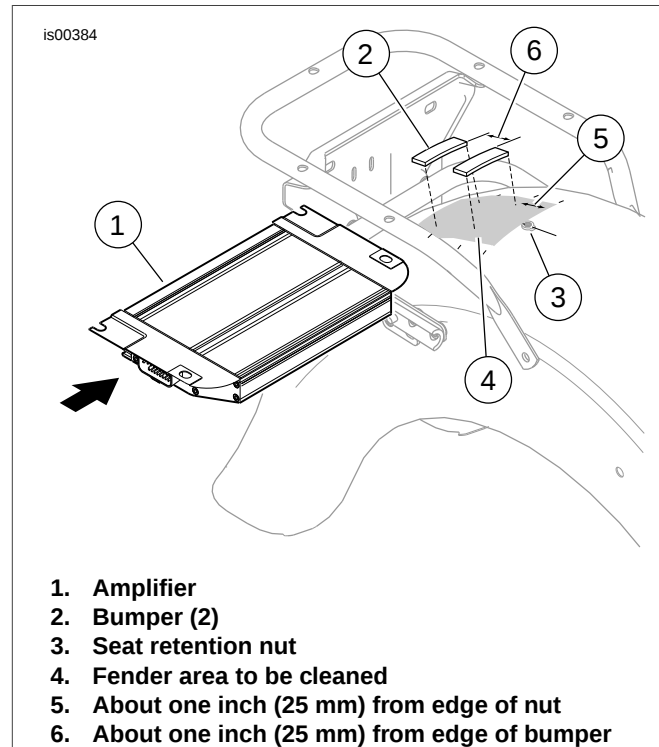


Figure 2. Amplifier Installation, 2008 and Earlier Touring Models

NOTE

For standard or King Tour-Paks: Use the longer screws if the Tour-Pak interior color is gray. Use the shorter screws if the Tour-Pak interior color is black.

For chopped Tour-Paks: Use the longer screws.

8. Obtain the amplifier (1) and correct attaching screws from the kit.
9. Hold the amplifier with the mounting flanges **up**, and the electrical connector toward you. From the right side of the vehicle, slide the amplifier underneath the Tour-Pak, between the fender and the luggage rack side rails.

NOTE

Always install the mounting screws from inside the Tour-Pak. If the screws are installed from the bottom, the threaded ends can tear the rubber mat or molded liner, and scratch items (such as helmets) stored inside.

10. See Figure 1. One at a time starting at the front, remove the Tour-Pak attaching screws (1) and flat washers (2), replacing them with **new** screws and flat washers from the kit.

On the underside of the luggage rack, install the original spacers (3, concave side up), **new** flat washers (2) and Nylon cap locknuts (4) on the screws. With the spacer concavity in line with the luggage rack rails, hold the nuts and tighten the screws until snug.

11. In a crosswise pattern, alternately tighten the screws to 96-108 **in-lbs** (10.8-12.2 Nm). Be sure that the concavity of each spacer remains in line with the rail and has not rotated out of position.
12. Install the rubber mat or molded liner. Close the Tour-Pak lid.
13. Obtain the amplifier harness and plug the 23-way socket housing into the amplifier connector. Listen for a definite "click".
14. Route the harness forward on the vehicle, along the right-side Tour-Pak support. Use a cable strap from the kit to fasten the main body and the long two-wire branch of the harness to the support.

The amplifier mounting bracket and all hardware not used can be discarded. Proceed to **Amplifier Harness Routing and Connection**.

Amplifier Installation, 2009 and Later Touring Models

NOTE

The Tour-Pak **must be removed** from the vehicle to perform this installation.

1. Refer to the service manual and follow the instructions given to remove the Tour-Pak.
2. See Figure 3. Obtain the two cushion bumpers (2) from the kit.
3. Use isopropyl alcohol to thoroughly clean the rear fender surface in the area (4) behind the seat retention nut (3).
4. Peel the liner from the adhesive backing on one of the bumpers, and fasten the bumper to the fender as shown, crosswise on center about one inch (25 mm) behind the seat retention nut.
Hold for a few seconds to set the adhesive.
5. Peel the liner from the backing on the remaining bumper, and fasten that bumper about one inch (25 mm) behind the first bumper.

NOTE

Cover the rear fender with a clean shop towel to prevent scratching. Damage to the finish could result.

6. Install the amplifier mounting plate (7) onto the top of the Tour-Pak rack (1).
 - a. Slide one bent tab (8) under the rack side rail and rotate the mounting plate downward to position the second bent tab under the opposite side rail.
 - b. Adjust the mounting plate to align the mounting holes (9) with the Tour-Pak mounting holes on the side rail assembly.
7. **Loosen** (do not remove) the forward screws (10) holding the Tour-Pak rack.
Remove the four rear screws (11) holding the rack.

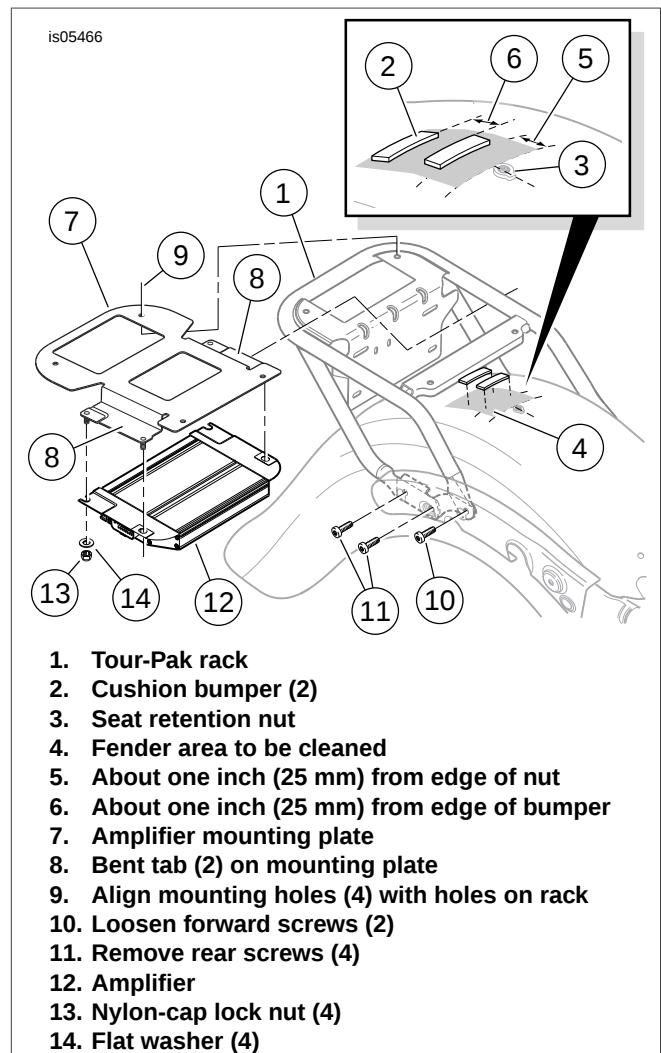


Figure 3. Amplifier Installation, 2009 and Later Touring Models

8. Rotate the rack upward to install the amplifier (12).
 - a. Hold the amplifier with the mounting flanges facing up, and the electrical connector toward you.
 - b. From the right side, slide the amplifier underneath the Tour-Pak rack. Mount the amplifier on the studs of the mounting plate installed in step 6.
 - c. Install flat washers (14) and locknuts (13) onto the studs. Tighten the nuts to 60-80 **in-lbs** (6.8-9.0 Nm).
 - d. Rotate the Tour-Pak rack back downward and install the rear mounting screws. Tighten the front and rear mounting screws to 15-20 ft-lbs (20.3-27.1 Nm).
9. Refer to the service manual and follow the instructions given to install the Tour-Pak.
10. Obtain the amplifier harness and plug the 23-way socket housing into the amplifier connector. Listen for a definite "click".
11. Route the harness forward on the vehicle, along the right-side Tour-Pak support. Use a cable strap from the kit to fasten the main body and the long two-wire branch of the harness to the support.
Hardware not used can be discarded. Proceed to **Amplifier Harness Routing and Connection**.

Amplifier Installation, 2009 and Later Tri Glide™ Models

NOTE

The body assembly **must be removed** from the vehicle to perform this installation.

The body should be placed on a mat to prevent damage to the leading edge of the fenders, and the bottom of the body at the rear of the fender openings.

1. Refer to the service manual and follow the instructions given to remove the body assembly.
2. Place the amplifier on the front of the body, and mark the drill locations using the amplifier as a template.
 - a. See Figure 4. Measure and determine the center (1) of the outside front body wall.
 - b. Lay a strip of two-inch (51 mm) wide masking tape from top to bottom over the approximate center of the outside front body wall.
 - c. Very carefully measure again, and mark the center near the top of the tape strip. Measure and mark the center near the bottom of the strip. Draw a line from the top mark to the bottom mark.
 - d. Facing the tape, measure 5.0 inches (127 mm) from the center line to the left side of the outside front body wall (2). Measure 5.0 inches (127 mm) from the center line to the right side of the outside front body wall.
 - e. Lay a strip of two-inch (51 mm) wide masking tape from the top to approximately half way down the outside front body wall at the 5.0 inch (127 mm) distance from the center line, on both the left and right sides.
 - f. Measure down 2.0 inches (50.8 mm) from the top edge of the front body wall on the left-side tape (3), and draw a horizontal line across the tape. Repeat on the right-side tape.
 - g. Hold the amplifier (4) with the mounting flanges facing the body, and the electrical connector toward the left. Center the amplifier on the front of the body, with the upper mounting holes on the horizontal lines on the tapes.Mark the drill locations using the amplifier as a template, then remove the amplifier.

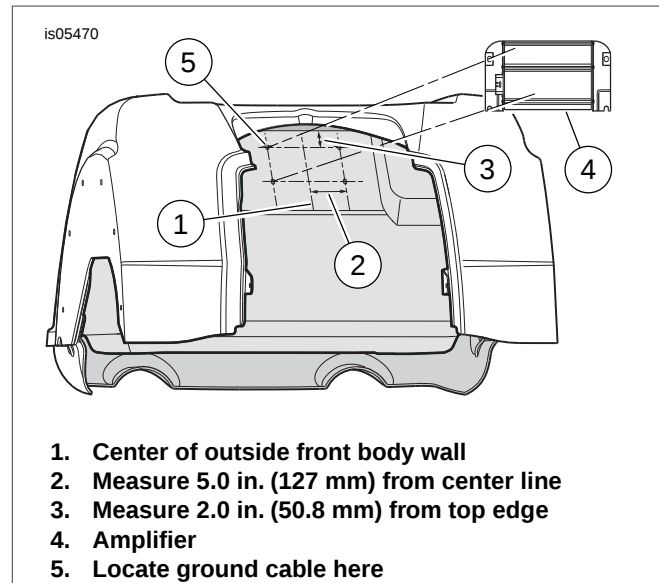


Figure 4. Amplifier Installation, 2009 and Later Tri Glide Models

3. Drill the mounting holes as follows:
 - a. Mark the center of the amplifier mounting holes on the tape with a center punch.
 - b. drill four 1/8 inch (3 mm) guide holes through the body wall,
 - c. drill four 5/16 inch (8 mm) holes through the guide holes.
4. Remove the tape. Lightly sand the hole to remove burrs and sharp edges. Clean the body surface of tape residue with a mixture of 50 to 70% isopropyl alcohol and 30 to 50% distilled water.
5. See Figure 8. Place a large washer (7) onto the threads of the four button head screws (6) from the kit. From inside the trunk, insert the screws through the holes in the front body wall.
6. Obtain the ground cable (13) from the kit. The ground cable includes a separate 1/4-inch (6.4 mm) ring terminal. Connect the installed 5/16-inch (7.9 mm) ring terminal to the ground strap inside the trunk.
7. Route the ground cable to the outside of the trunk through the wire grommet.
8. Crimp the supplied 1/4-inch (6.4 mm) ring terminal onto the end of the ground cable.
9. See Figure 4. Viewing from the outside of the body, install the ground cable ring terminal onto the upper left (5) screw threads (right side of the body).

NOTE

The paint has been removed from the underside of the amplifier mounting flange at the ground cable installation location.

10. See Figure 8. With the amplifier connector facing left, mount the amplifier to the outside front body wall with the nylon lock nuts (5) and small washers (4). Tighten the nuts to 96-108 in-lbs (10.8-12.2 Nm).
11. Refer to the service manual and follow the instructions given to install the body assembly.

12. Obtain the amplifier harness and plug the 23-way socket housing into the amplifier connector. Listen for a definite "click".
13. Guide the harness through the openings in the frame below the passenger pillion seat.
The amplifier mounting bracket and all hardware not used can be discarded. Proceed to **Amplifier Harness Routing and Connection**.

Amplifier Harness Routing and Connection

1. Continue to route the harness forward on the vehicle:
 - a. Route the short two-wire branch of the harness to the right front of the Tour-Pak (or the right-rear speaker pod if so equipped).
 - b. **Touring Models:** Continue the long two-wire branch forward to the front of the fender, then cross over to the left side of the frame and back to the left front of the Tour-Pak (or the left-rear speaker pod if so equipped).
Tri Glide Models: Route the long two-wire branch to the left front of the Tour-Pak (or the left-rear speaker pod if so equipped).
 - c. Continue the main branch forward, tucking the harness inboard of the frame tube and (on Touring models) avoiding the forward saddlebag guard mounting screw head so the harness does not get pinched by the seat.
Use four cable straps from the kit to fasten the main branch and the long two-wire branch of the harness to the frame tube.
 - d. Route the harness along the right side of the battery cavity. Bring the red fuse wire and black ground wire into the front of the battery compartment. Continue the main branch forward to the harness tray.
 - e. Open the cover of the harness tray. Route the amplifier harness through the openings in the tray.
 - f. Continue the amplifier harness forward into the fairing, using cable straps (10) 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 wires do not pull tight when handlebars are turned fully to left or right fork stops.**
2. Remove the outer fairing and windshield. Refer to the service manual.
 3. Route the three branches of the front section of the amplifier harness inside the fairing along the path of the interconnect harness to the top left of the inner fairing.

4. **FLHTCU Touring and FLHTCUTG Tri Glide models:** Separate the audio harness pin housing [6A] from the interconnect harness socket housing [6B].

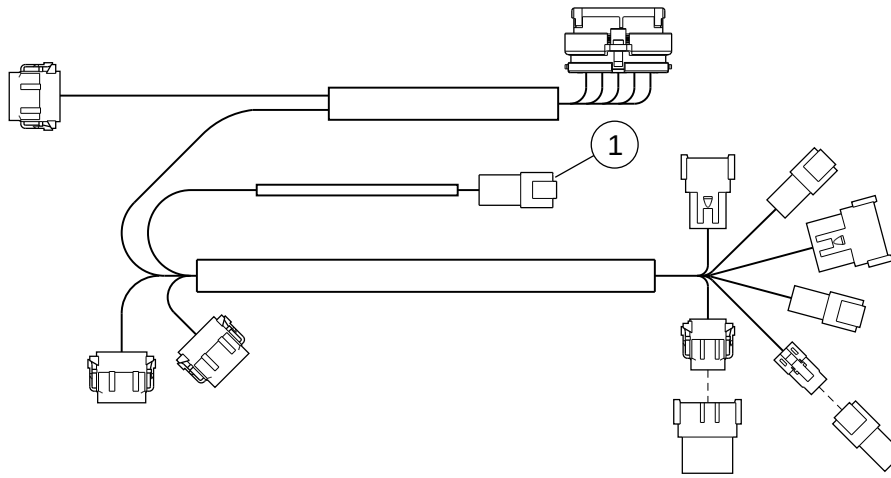
FLHT, FLHTC, FLHX and FLTR Touring models: Locate the interconnect harness audio connector [6B] near the back of the radio.

- a. **If socket housing [6B] is already connected to overlay harness pin housing [6A]:** Separate [6A] from [6B].
 - b. **If socket housing [6B] is not connected to an overlay harness:** Obtain the overlay harness (Part No. 70169-06, purchased separately), but do not connect at this time. See Figure 5.
5. **ALL models:** Refer to the service manual. Remove the secondary locking wedge on socket housing [6B].
 6. Remove the plugs from cavities 4 and 5.
 7. See Figure 6. Insert the **yellow/orange** wire (2) from the amplifier harness (1) into the empty cavity 4.
Insert the **yellow/violet** wire (3) into cavity 5.
 8. Assemble the socket housing, and connect to the mating pin housing [6A] on the audio or overlay harness.

NOTE

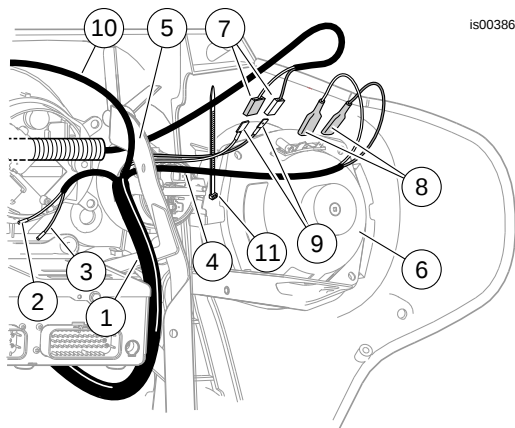
FLHT, FLHTC and FLHX models, route the short branch (4) of the amplifier harness **underneath** the left-side fairing support bracket (5).

9. Take the short branch of the amplifier harness (with white/orange and light-green/white wires) and route it to the left-side speaker (6).
10. Carefully disconnect the interconnect harness socket terminals (7) from the left-side speaker spade terminals.
11. Install the socket terminals (8) from the amplifier harness to the speaker spade terminals. The spade terminals are different-sized to prevent improper assembly.
12. Install the spade terminals (9) from the amplifier harness to the socket terminals (7) from the interconnect harness. The spade terminals are different-sized to prevent improper assembly.
13. Take the long branch (10) of the amplifier harness (with gray/red and light-green/black wires) and route it to the right-side speaker.
14. Carefully disconnect the interconnect harness socket terminals from the right-side speaker spade terminals.
15. Install the socket terminals from the amplifier harness to the speaker spade terminals. The spade terminals are different-sized to prevent improper assembly.
16. Install the spade terminals from the amplifier harness to the socket terminals from the interconnect harness. The spade terminals are different-sized to prevent improper assembly.
17. Use cable straps (10) from the kit to fasten the harnesses to the existing harnesses inside the fairing.



1. 6-place pin housing [6A], (labelled "Interconnect")

Figure 5. Non-Ultra Overlay Harness



1. Amplifier harness
2. Yellow/ orange wire
3. Yellow/ violet wire
4. Short branch of amplifier harness
5. Left-side fairing support bracket
6. Left-side speaker
7. Interconnect harness socket terminals (2)
8. Amplifier harness socket terminals (2)
9. Amplifier harness spade terminals (2)
10. Long branch of amplifier harness
11. Cable strap

Figure 6. Front Speaker Connections (FLH Shown)

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.

18. Go back to the seat area in front of the Tour-Pak.

- a. Using a T-10 TORX® drive head, remove the four screws from the rear speaker grille. Remove the speaker grille from the speaker box.
- b. Remove the speaker from the speaker box. Carefully disconnect the socket terminals from the speaker spade contacts.
- c. Install the socket terminals from the amplifier harness to the speaker spade contacts. The spade contacts are different-sized to prevent improper assembly.
- d. Use electrical tape to seal the original socket terminals to prevent short circuit. Tuck the taped terminals out of the way inside the speaker box.
- e. With the spade contacts at the bottom, install the speaker back into the speaker box. Align the holes in the speaker with those in the speaker box.
- f. Align the holes in the speaker grille with those in the speaker. Install the four screws removed earlier. Using a T-10 TORX drive head, alternately tighten the screws securely.
- g. Repeat for the opposite side of the vehicle.

19. Verify that the Ignition/Light Key Switch is turned to the OFF position.

WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

20. Connect the battery as follows:

- a. Apply a light coat of Harley-Davidson electrical contact lubricant (part number 99861-02), petroleum jelly or corrosion retardant material to the battery terminals.
- b. Install the amplifier harness fused red wire terminal along with the red battery positive (+) cable terminal to the positive (+) side of the battery.
- c. Install the amplifier harness black ground wire terminal along with the black battery negative (-) cable terminal to the negative (-) side of the battery.
- d. Tuck the fuse holder and amplifier connecting wires in front of the battery.

NOTE: It may be helpful to cut the cable strap on the strain relief arm of the fuse holder, and install a new cable strap to tie the arm in place after the fuse holder is in position.

- e. **For 2006 and 2007 models:** See the service manual, and install the battery into the vehicle.

For 2008 and later models: Be sure that all wire terminals connected to the battery are aligned with the openings in the ECM caddy.

Refer to the service manual and follow the instructions given to install the ECM caddy to the top of the battery.

- f. **For ALL models:** Install the main fuse.

21. Test the sound system for proper operation.

22. Install the outer fairing and windshield. Refer to the service manual.

23. Refer to the service manual, and follow the instructions given to install the fuel tank, console and 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)

FRONT SPEAKER TRIM RINGS

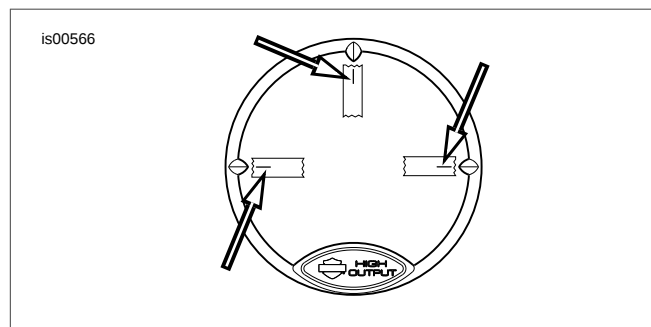


Figure 7. Trim Ring Installation

NOTES

The speaker trim rings (11) will not adhere properly if installed at temperatures below 60 °F (15 °C).

The trim rings cannot be repositioned after initial installation. Take care to properly align the trim rings before installing them.

1. Make sure the speaker grilles are completely dry and free of dirt before installing the trim rings. Gently brush or vacuum each speaker grille to remove dust and dirt.
2. Cut six one-inch (25 mm) long strips of narrow masking tape.
3. **Without removing the adhesive backing**, hold a trim ring against one of the front speaker grilles. Align the trim ring to the desired position.
4. See Figure 7. Apply masking tape directly to the speaker grille near the three points at the 3, 9 and 12 o'clock positions. Do not tape the trim ring to the speaker grille.

NOTE

Press lightly when marking the masking tape to avoid damage to the speaker grille.

5. Lightly mark a line on the masking tape near the tips of the three points of the speaker grille
6. Remove the trim ring from the speaker grille. Remove the adhesive backing from the trim ring.
7. Align the trim ring to the masking-tape guides and press the trim ring firmly into place on the speaker grille, holding for at least 60 seconds.
8. Repeat for the other speaker grille and trim ring.
9. Remove the masking-tape guides from the speaker grilles. Allow the trim ring adhesive to cure for 24 hours before operating the vehicle.

SERVICE PARTS

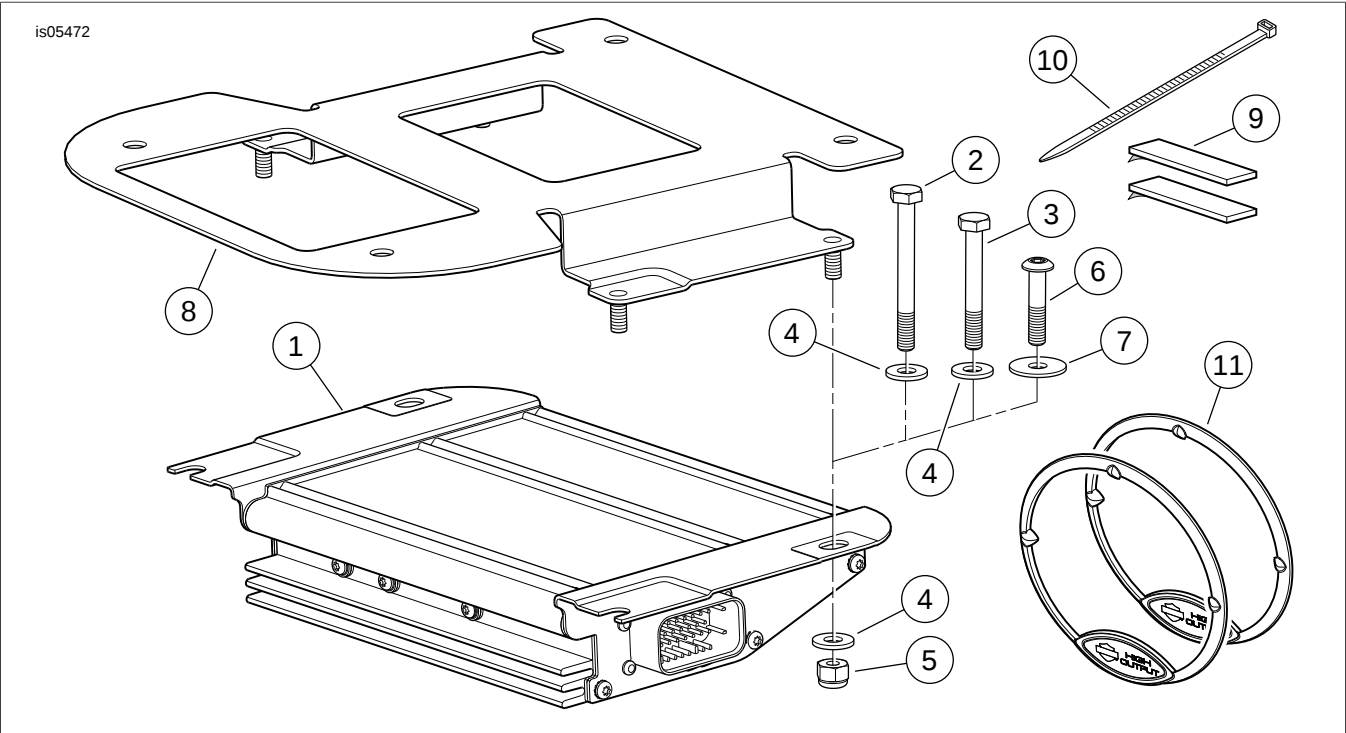


Figure 8. Service Parts, High-Output Sound System Kit

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
1	Amplifier, 2/4 channel	Not sold separately
2	Cap screw, hex head, 1/4-20 x 2-1/2 inches (64 mm) long (4)	3768
3	Cap screw, hex head, 1/4-20 x 2 inches (51 mm) long (4)	2881W
4	Flat washer, small diameter, heat treated (8)	6110
5	Hex lock nut, nylon insert, 1/4-20 (4)	7686
6	Screw, TORX, button head, 1/4-20 x 1-1/4 inches (32 mm) long (4)	2513
7	Flat washer, large diameter (4)	6036
8	Bracket, amplifier mounting	76540-09
9	Bumper (2)	76439-06
10	Cable strap (10)	10006
11	Trim ring, speaker (2)	76459-06
12	Harness, amplifier (not shown)	70178-06
13	Cable, ground (not shown). Includes one attached 5/16-inch (7.9 mm) ring terminal and one separate 1/4-inch (6.4 mm) ring terminal.	Not sold separately