



INSTRUCTIONS

-J05996

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BOOM! AUDIO STAGE II TOUR-PAK AMPLIFIER INSTALLATION KIT

GENERAL

Dealer installation is recommended. Radio EQ update using the Digital Technician® II diagnostic tool is:

- Recommended **before** speaker INSTALLATION
- Required **before** audio system OPERATION.
- Only available through authorized Harley-Davidson dealers.

Kit Number

76000585

Models

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

Installation Requirements

This kit must be installed:

- **Before** installation of the Boom! Audio Stage II Tour-Pak Speaker Kit (Part No. 76000526).
- **After** installation of a PRIMARY fairing-mounted amplifier.

The amplifier (Part No. 76000277A) installed **with this kit** must be purchased separately from a Harley-Davidson dealer.

FLHX, FLHXS and FLHXSE models require installation of an original equipment (OE) rigid Tour-Pak Mounting Rack. See a Harley-Davidson dealer for the correct parts, available separately. Install per the service manual.

ALL models: If installing **more than TWO** amplifiers, an AUDIO IN Three-Way Y-Connector (Part No. 69201092) **AND** a Battery+ Three-Way Y-Connector (Part No. 70270-04A) are needed. Purchase separately from a Harley-Davidson dealer.

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/model motorcycle is required for this installation. One is available from a Harley-Davidson dealer.

Electrical Overload

NOTICE

It is possible to overload your 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. See an authorized Harley-Davidson dealer for advice about the amount of current consumed by additional electrical accessories or for necessary wiring changes. (00211c)

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 kit** requires up to **8 amps** more current from the electrical system.

Kit Contents

See Figure 4 and Table 1.

PREPARATION

WARNING

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

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)

NOTE

- **WITH security siren:** With security fob present, turn ignition switch ON. See the service manual. Disarm security system. **IMMEDIATELY** remove the main fuse.
- **WITHOUT security siren:** See the service manual. Remove main fuse. Turn ignition switch OFF.

1. See the service manual to perform the following generalized steps:
 - a. Remove seat. Retain all seat mounting hardware.
 - b. Remove the ECM caddy from the top of the battery.
 - c. Disconnect both battery cables, negative battery cable first.
 - d. Remove battery.
 - e. Remove right side cover.
 - f. Remove left side cover.
 - g. Remove the two bolts attaching the electrical caddy under the left side cover.

AMPLIFIER INSTALLATION

1. Clean the capacity label inside the Tour-Pak with a 50-50 mixture of isopropyl alcohol and distilled water.
See Figure 4. Apply the **new** capacity label (13) from the kit to cover the original label. Note the revised load limit due to the amplifier installation.
2. Install the brackets (4 and 8) to amplifier (A) with screws (6). Alternately tighten to 84-108 **in-lbs** (9.5-12.2 N-m).
3. Remove all items from Tour-Pak®. Remove Tour-Pak. Remove Tour-Pak liner (if present). Place Tour-Pak on a protected surface.

NOTES

- *Disconnect and remove speakers from speaker pods to avoid damage to wiring inside.*
 - *Use of a step drill bit is recommended to prevent damage to the speaker pod covering.*
4. See Figure 1. Drill a **new** 1.0 in (25.4 mm) hole (3) in each speaker pod (1), away from the existing grommet (2), approximately where shown.

NOTE

These holes are for leads [36TB] and [37TB] of the amplifier harness (Figure 4, Item 3), which are connected during installation of the Boom! Audio Stage II Tour-Pak Speaker Kit (Part No. 76000526).

5. Lightly sand the speaker housings around the grommet holes.

NOTE

*If the amplifier is installed **before** the Tour-Pak is mounted, it is not possible to secure the Tour-Pak.*

6. See Figure 2. Place hex nuts (1) into hex pockets (3) on the Tour-Pak support (5).
7. Install Tour-Pak. See the service manual. Tighten screws to 60-72 **in-lbs** (6.8-8.1 N-m).
8. Cover the rear fender with a towel. Slide the amplifier with brackets in from the side.
9. Install the amplifier. Secure with flat washers (7), lockwashers (8) and screws (6). Tighten screws to 60-72 **in-lbs** (6.8-8.1 N-m).

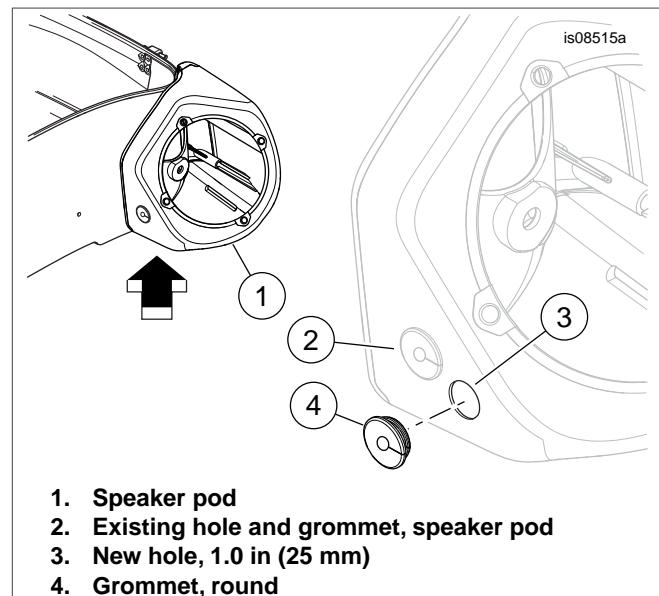


Figure 1. Grommet Installation

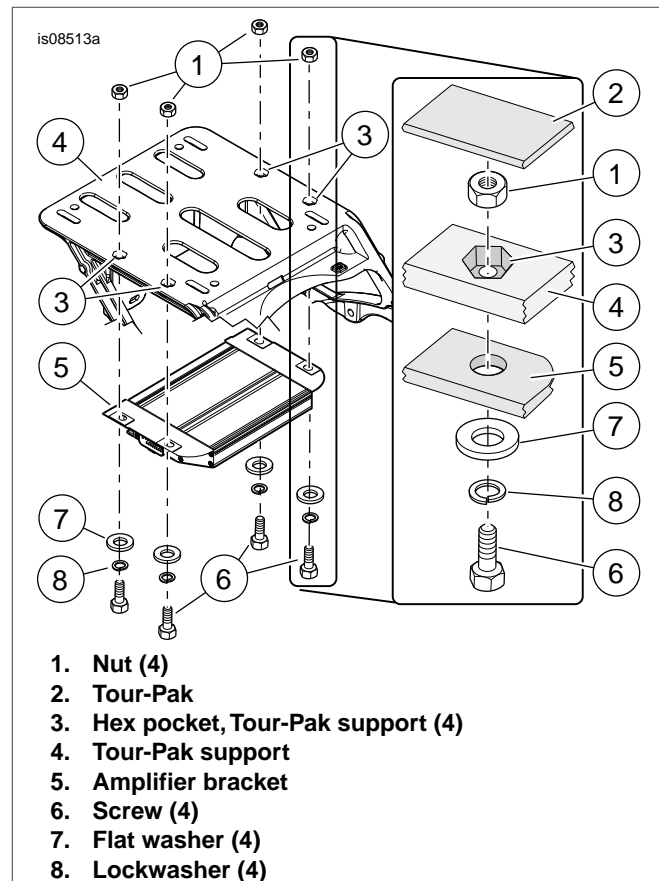


Figure 2. Amplifier Installation

AMPLIFIER HARNESS INSTALLATION

NOTES

These tips help make sure all wiring fits under the seat, especially in multiple amplifier installations:

- *See Figure 3. Begin routing the amplifier harness from the large 23-way connector [149] (1), moving forward on the*

vehicle. The large connector **does not fit** through narrower passages.

- Route the remainder of the harness forward on the vehicle through the space between the Tour-Pak support (3) and fender (4).
- Route all wire harnesses **under** the frame rail to avoid pinching by cover or seat.
- Connections [36TB] (right pod speaker) and [37TB] (left pod speaker) are connected during installation of the Boom! Audio Stage II Tour-Pak Speaker Kit (Part No. 76000526).
- Take care to route ALL amplifier harness branches away from spark plug wires. Close proximity induces spark noise into the audio system.
- When routing wires from right to left sides of the vehicle, tuck harnesses **under** the frame tray **behind** the battery. Keep the battery compartment accessible.
- Route the six-way black, pink-wired audio connectors **under** the right frame rail, into the right side cover. Bundle in front of ABS module, if present.
- Route the six-way, gray DLCs along the left frame rail. Bundle the connectors in a pocket in the frame in front of the battery, under the wire trough along the frame backbone.
- Locate the black, four-way Molex connector [296A] near the back of the underseat area.

FLHX/FLTRX models: On a jumper harness coming from the fairing.

FLHTCU/FLHTK models: On an adapter harness with two 16-way ([162C] and [162D]) and two four-way ([296A] and [297B]) connectors.

With ONLY ONE Stage II amplifier installed in the rear: Remove the plug in the [296A] connector. Connect the amplifier harness.

With TWO or more Stage II amplifiers installed in the rear: Plug the audio input harness (Part No. 69201092, purchased separately) into connector halves [296A] and [297B] on the interconnect harness (2). Plug amplifier harness (3) connector [296A] into the audio input harness.

- Confirm that the amplifier harness connectors and harness routing are clear of all moving parts.
- Route the battery terminal branch to the battery terminals, but **DO NOT** connect the battery cables now.
- If more than two amplifiers or other accessories already use the ground post of the battery, use one of the frame ground studs.
- If more than two amplifiers are installed on the vehicle, a Battery+ Three-Way Y-Connector (Part No. 70270-04A, available separately) is required.
- Once routing is finalized, secure with cable straps (10) and retainers (1).

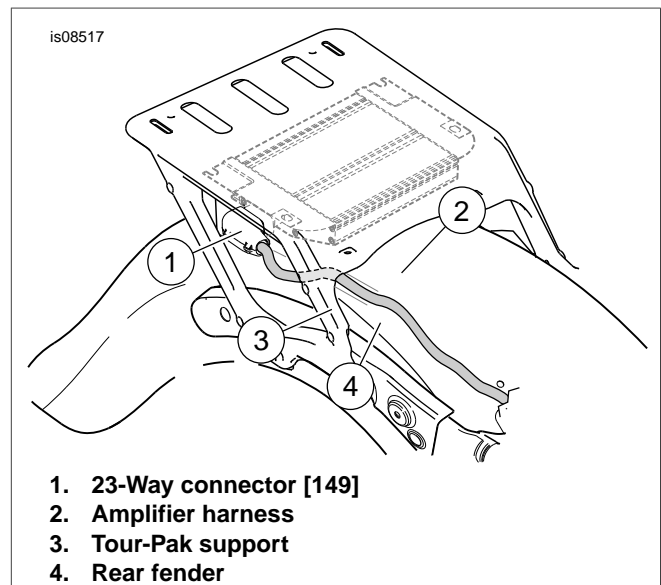


Figure 3. Harness Routing

DATA LINK CONNECTOR (DLC) RELOCATION

1. Locate the gray six-way Data Link Connector (DLC) [91A] in the electrical caddy. Cut the tether attaching the rubber plug around the harness.
2. Pull connector [91A] back through the electrical caddy to a location under the seat, behind the caddy.
3. See Figure 4. Plug in socket connector [91B] on the amplifier harness (6) to connector [91A] under the seat.

NOTE

The **amplifier harness** gray six-way pin connector [91A] replaces the original equipment (OE) connector [91A] in the electrical caddy.

4. Route the **new** pin connector [91A] under the seat, and into the electrical caddy.
5. Insert the rubber plug removed in Step 1 into the new pin connector [91A]. Use a cable strap (10) from the kit to attach the tether to the harness.

COMPLETION

NOTE

To prevent possible damage to the sound system, verify that the ignition switch is **OFF before** attaching the battery cables.

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)

1. Install battery. See the service manual.

2. See the service manual. Connect the battery terminal branch to the battery terminals (red positive cable first).
 - a. Position the + ring terminal onto the positive battery terminal. Install the bolt.
 - b. Position the in-line fuse holder in a location that can be easily accessed.
 - c. Position the - ring terminal onto the negative battery terminal. Install the bolt.
 - d. Tighten both bolts to 60-70 **in-lbs** (6.8-7.9 N-m).
3. Install the electrical caddy under the left side cover with the two bolts removed earlier. Tighten both bolts to 72-96 **in-lbs** (8.1-10.8 N-m).
4. Install the ECM caddy per the service manual.
5. Apply a light coat of petroleum jelly or corrosion retardant material to battery terminals.

⚠ 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. Install seat.
7. See the service manual. Install the main fuse.

SERVICE PARTS

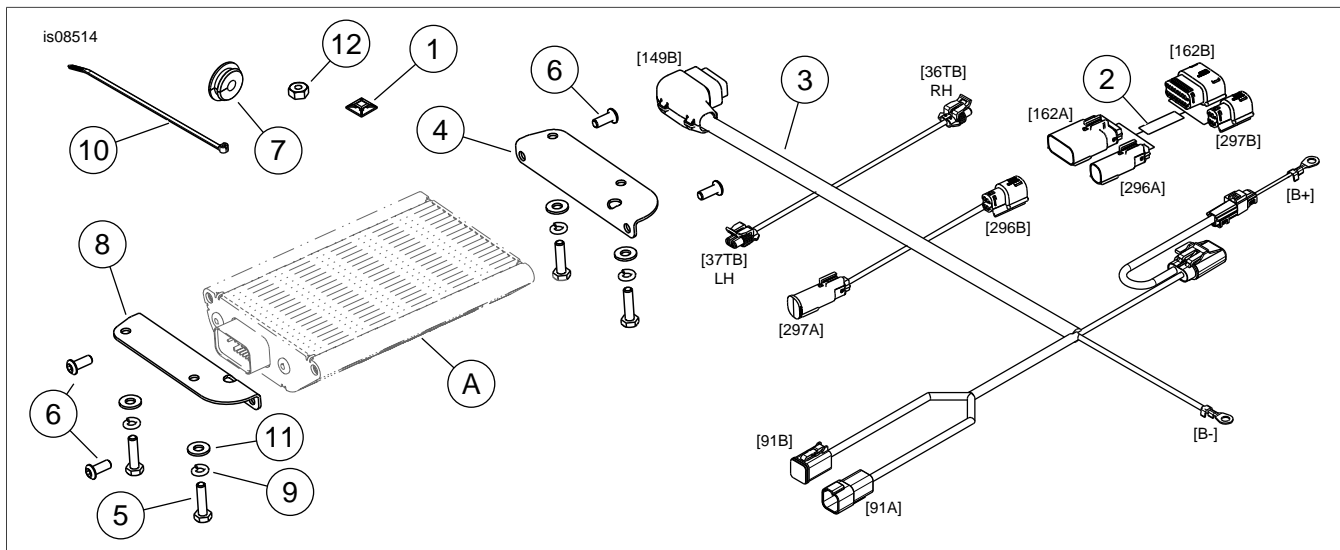


Figure 4. Service Parts, Amplifier Installation Kit

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Bracket, wire retainer (4)	69200342
2	Wire harness, speaker interconnect	69200714
3	Wire harness, Tour-Pak Amplifier	Not sold separately
4	Amplifier bracket	Not sold separately
5	Capscrew (4)	2551W
6	Screw (4)	926
7	Grommet, round (2)	12100073
8	Amplifier bracket	Not sold separately
9	Lockwasher (4)	7036
10	Cable strap (6)	10006
11	Flatwasher (4)	6703
12	Nut (4)	10100065
13	Capacity label (not shown)	14001001
Item mentioned in text, but not included in kit:		
A	Amplifier	