



INSTRUCTIONS

J06100

2016-05-10



BOOM! AUDIO TOUR-PAK SPEAKER INSTALLATION KIT

GENERAL

Dealer installation is recommended.

Kit Number

76000618

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

Amplifier Kit (part number 76000277).

Loctite® 243 Threadlocker and Sealant - Blue (Part No. 99642-97).

These speakers are for use **ONLY** on **2014 and later** Harley-Davidson audio systems. Using these speakers on **2006-2013** Harley-Davidson audio systems **WILL permanently damage these speakers**. Using these speakers on **2005 or earlier** Harley-Davidson audio systems **WILL permanently damage those systems**.

NOTE

DO NOT mix Stage I and Stage II speakers on the same vehicle.

NOTICE

Radio EQ MUST be updated by a Harley-Davidson dealer BEFORE operating the audio system. Operating the audio system prior to radio EQ update will IMMEDIATELY damage the speakers. (00645d)

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.

⚠ 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. One is available from a Harley-Davidson dealer.

Electrical Overload

⚠ 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)

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)

The purchase of this kit entitles you to a specially developed sound equalization software that is used with the Advanced Audio System. This unique equalization was designed to optimize the performance and sound response of the BOOM! Audio fairing lower speakers. If this kit is not 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.

This amplifier 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)

1. Remove main fuse. See the service manual.
2. Remove seat. See the service manual.
3. Remove passenger grab rail. See the service manual.
4. Remove side covers. See the service manual.
5. Remove trunk liner. See the service manual.

6. Remove trunk door wire harness. Remove trunk plastic panel. Unroute harness. See the service manual.
7. Remove body and place on protective pad. See the service manual. The fenders and Tour-Pak can remain attached to the body.
8. Remove speakers from Tour-Pak pods. Cover speaker spade terminals with electrical tape. All speaker connections are available on new harness. See the service manual.

INSTALLATION

NOTE

If concurrent installation of kit Stage I or II Speaker Expansion Kit for Trikes, cut hole in body for left speaker enclosure. This hole in main Trike body provides greater access for cutting grommet hole.

1. Cut hole for rectangular grommet (9). See Figure 1.
 - a. Remove and discard grommet from existing hole (4). Align template (5) over existing hole so the upper right of the template edge aligns with hole. The existing hole becomes the upper edge of the new rectangular hole.
 - b. Trace the template. Center punch the three corner holes.
 - c. Drill 13 mm (0.50 in) diameter hole in the center punch locations.
 - d. Use an air saw (or equivalent) to cut the traced opening.

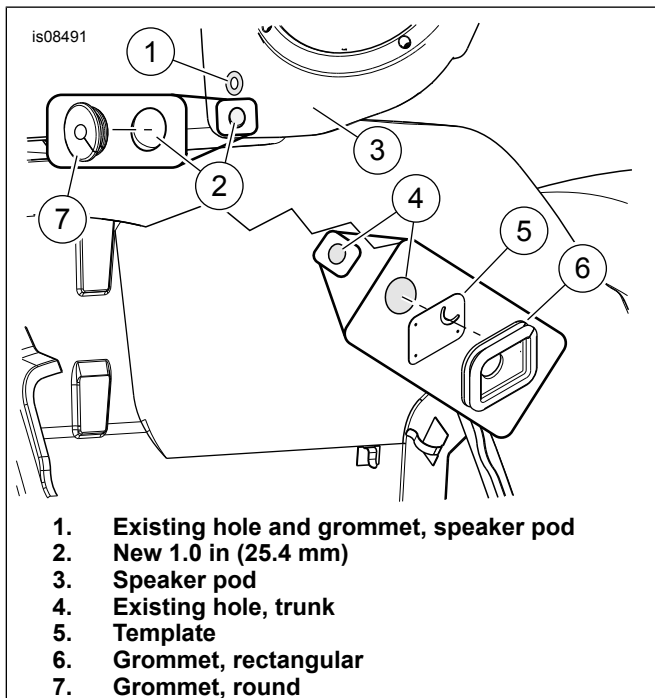


Figure 1. Grommet Installation

2. Lightly sand the body around the grommet hole.
3. Use a step drill to create a new 25.4 mm (1.0 in) hole (2) the speaker pod (3). This hole is used for the new harness.

4. Clean all surfaces of the body work with 50-70% isopropyl alcohol and 30-50% distilled water. Allow to dry completely.
5. See Figure 4. Attach brackets (4 and 8) to amplifier (amplifier sold separately). Secure with screws (6). Tighten to 9.4–12.2 N·m (7–9 ft-lbs).
6. Install amplifier:
 - a. See the service manual. Remove Tour-Pak nuts. Discard the four front nuts.
 - b. See Figure 2. Position amplifier and brackets (2) over the four studs (1). Place a drop of 243 thread lock on special nuts (3). Tighten special nuts to 6.8–8.1 N·m (60–72 in-lbs).

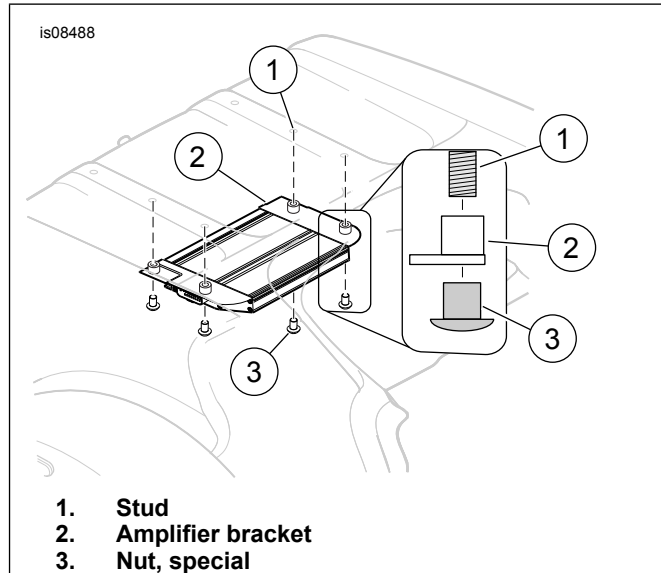


Figure 2. Amplifier Installation

7. See Figure 3. Route wire harness to speaker pods (12 and 13) and through grommets (7).
8. Route wire harness through grommet (9) and to amplifier. Attach harness to amplifier.
9. See Figure 1. Install round grommets. Install rectangular grommet.
10. Install stage II speakers:
 - a. Install spade terminals from wire harness to the back of speakers. Connectors are different sizes for (-) and (+).
 - b. Install stage II connector (3 and 11) to the back of tweeter/grille combo.
 - c. Rotate tweeter/grille so the tweeter is outward of the vehicle center line.
 - d. Install grilles securing with screws. Tighten screws to 1.6 N·m (15 in-lbs).

NOTE

If concurrent installation of kit Trike Body Mounted Speaker Expansion Kit, verify that all amplifier mounting steps and harness routing are complete before attaching body to the frame.

11. Position body onto frame. See service manual. Body can remain unsecured until all wiring is complete.

NOTE

If the body is removed later for service, the harness must be disconnected from the main vehicle/frame. It can remain connected to the amp and speakers.

NOTE

Configure harness to match amplifier. Incorrect harness configuration can cause improper EQ file to load and damage speakers. Locate configuration wire [32] along the main harness and connect male and female terminals.

12. Complete Routing harness:

- a. Route kit harness forward along right side frame tube (14).
- b. Route harness along the right side of battery cavity between the battery and reverse module. Place the red fuse wire and black ground wire in front of the battery.

- c. Digital Tech connectors in front of the battery and over to the left side cover. Attach connector (8) [91B] to Digital Tech input on the OE harness. Connector (7) [91A] serve as the new Digital Tech input.
- d. Attach (+) (5) and (-) (6) battery cables. If necessary, use 3-way B+ connector for the (+) terminal.

NOTE

If concurrent installation of kit Trike Body Mounted Speaker Expansion Kit, both kits contain the same harness and the Digital Tech connectors must be chained together. Attach connector [91B] of harness #1 to the OE vehicle. Connect [91A] of harness #1 into [91B] of harness #2 and route in front the battery compartment. Route [91A] of harness #2 over to the side cover to serve as the new Digital Tech input. Which harness is designated #1 and #2 are not relevant.

13. Connect amplifier input:

- a. **Stage II 4-speaker configuration:** Install harness (9) [296] directly into the 16-way harness (previously installed through fairing amplifier kit), located behind the passenger seat. **Stage II 6-speaker configurations** Install 3-way interconnect harness into the 16-way harness (previously installed through fairing amplifier kit), located behind the passenger seat. Install harness (9) [296] into 3-way interconnector.

14. Secure wire harness with cable straps as needed.

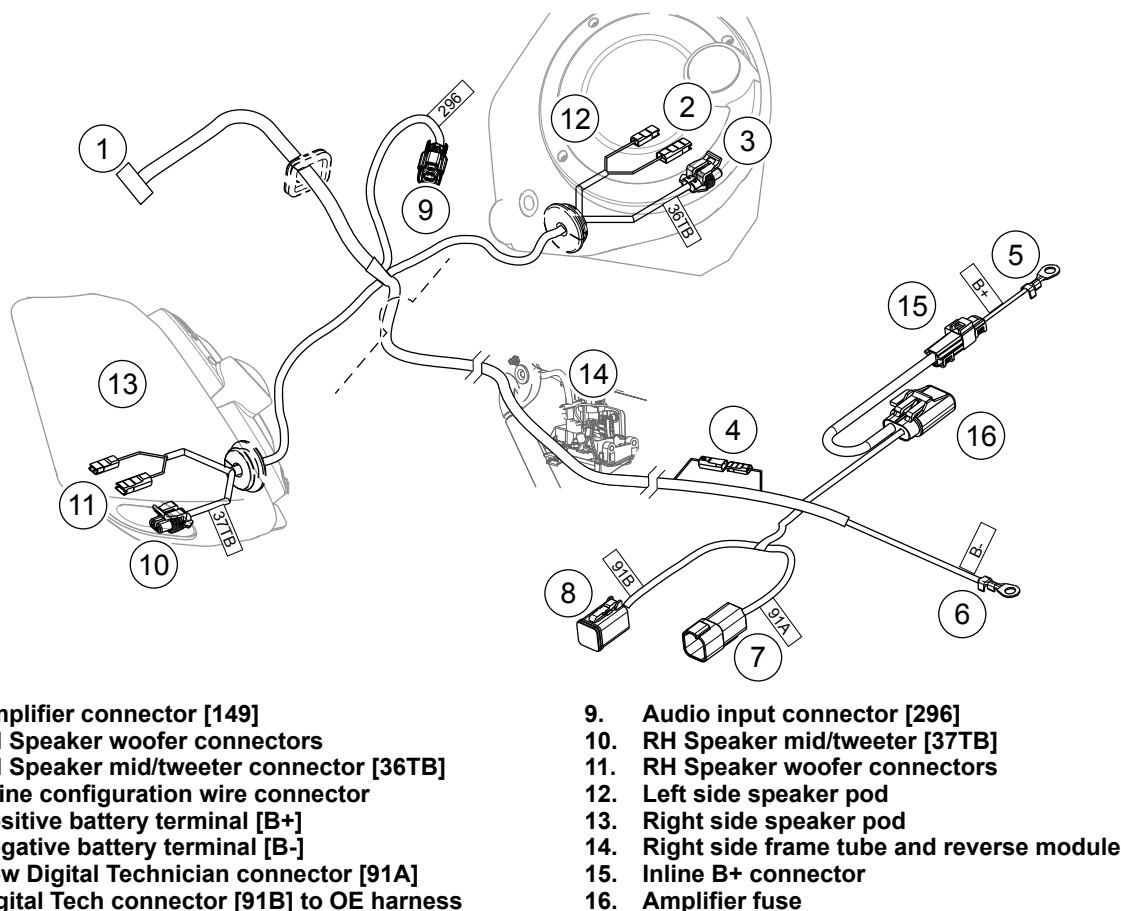


Figure 3. Wire Harness

NOTICE

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- 15. Install the body. See the service manual.
- 16. Install passenger grab rail. See the service manual.
- 17. Install side covers. See the service manual.

- 18. See the service manual. Install seat. After installing seat, pull up on the seat to verify that it is secure.
- 19. Install main fuse. See the service manual.

DIGITAL TECHNICIAN NOTES

- 1. With the harness configured properly, the amplifier installed in this kit is recognized as AMP 4. Even though this amplifier is the second or third amplifier physically installed.
- 2. Channel 1 is left woofer. Channel 2 is right woofer. Channel 3 is left mid/tweeter. Channel 4 is right mid/tweeter.

SERVICE PARTS

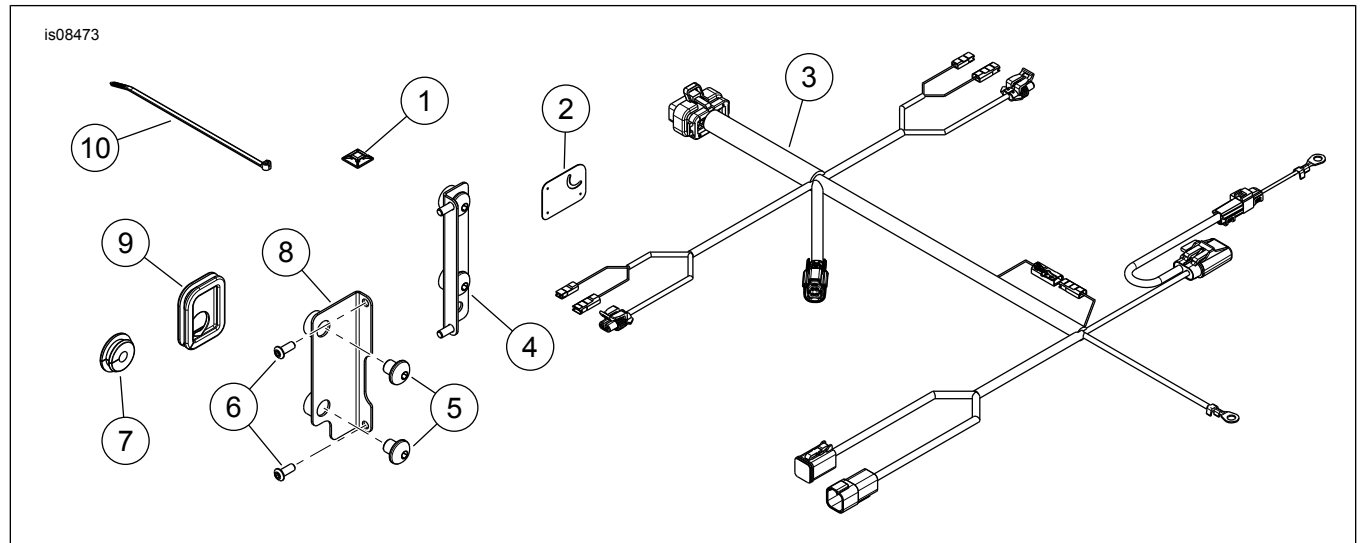


Figure 4. Service Parts, Tour-Pak Speaker Installation Kit

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Bracket, wire retainer (4)	69200342
2	Template, trunk harness	69201285
3	Wire harness, trunk amplifier	Not sold separately
4	Amplifier bracket	Not sold separately
5	Nut (4)	10400027
6	Screw (4)	962
7	Grommet, round (2)	12100071
8	Amplifier bracket	Not sold separately
9	Grommet, rectangular, body	12100072
10	Cable strap (6)	10006

Wiring Diagram Information

Wire Color Codes

For Solid Color Wires: See Connector/Wiring Diagram Symbols (Typical) . The alpha code identifies wire color.

For Striped Wires: The code is written with a slash (/) between the solid color code and the stripe code. For example, a trace labeled GN/Y is a green wire with a yellow stripe.

Wiring Diagram Symbols

See Connector/Wiring Diagram Symbols (Typical) . Brackets [] indicate connector numbers. The letter inside the brackets identifies whether the housing is a socket or pin housing.

A=Pin: The letter A and the pin symbol after a connector number identifies the pin side of the terminal connectors.

B=Socket: The letter B and the socket symbol after a connector number identifies the socket side of the terminal connectors. Other symbols found on the wiring diagrams include the following:

Diode: The diode allows current flow in one direction only in a circuit.

Wire break: The wire breaks are used to show option variances or page breaks.

No Connection: Two wires crossing over each other in a wiring diagram that are shown with no splice indicating they are not connected together.

Circuit to/from: This symbol indicates a complete circuit diagram on another page. The symbol is also identifying the direction of current flow.

Splice: Splices are where two or more wires are connected together along a wiring diagram. The indication of a splice only indicates that wires are spliced to that circuit. It is not the true location of the splice in the wiring harness.

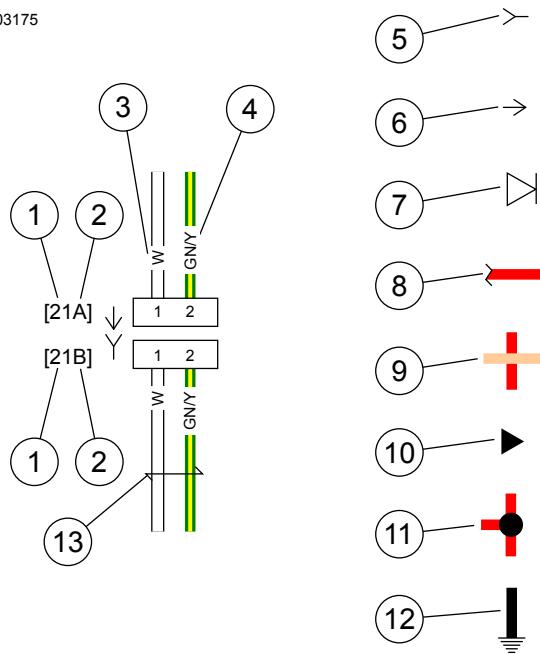
Ground: Grounds can be classified as either clean or dirty grounds. Clean grounds are identified by a (BK/GN) wire and are normally used for sensors or modules.

NOTE

Clean grounds usually do not have electric motors, coils or anything that may cause electrical interference on the ground circuit.

Dirty grounds are identified by a (BK) wire and are used for components that are not as sensitive to electrical interference.

Twisted pair: This symbol indicates that the two wires are twisted together in the harness. This minimizes the circuit's electromagnetic interference from external sources. If repairs are necessary to these wires, they should remain as twisted wires.



1. Connector number
2. Terminal code (A=pin, B=socket)
3. Solid wire color
4. Striped wire color
5. Socket symbol
6. Pin symbol
7. Diode
8. Wire break
9. No connection
10. Circuit to/from
11. Splice
12. Ground
13. Twisted pair

Table 2. Wire Color Codes

ALPHA CODE	WIRE COLOR
BE	Blue
BK	Black
BN	Brown
GN	Green
GY	Gray
LBE	Light Blue
LGN	Light Green
O	Orange
PK	Pink
R	Red
TN	Tan
V	Violet
W	White
Y	Yellow

Figure 5. Connector/Wiring Diagram Symbols

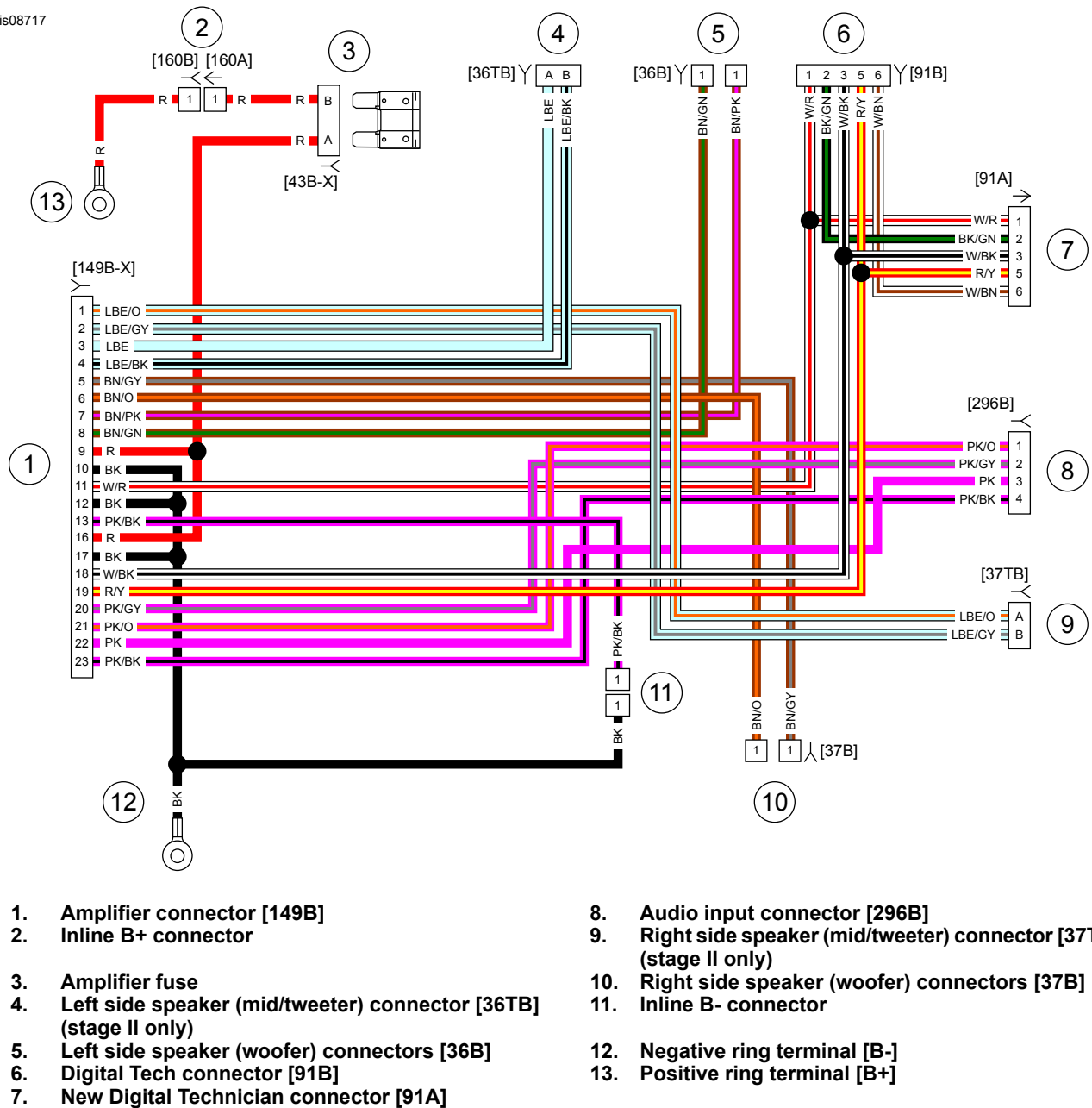


Figure 6. Main Amplifier Wiring Schematic