



INSTRUCTIONS

94100086

2019-08-21



MOUNTING HARDWARE KIT

GENERAL

Kit Number

76000278A

Models

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

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

Electrical Overload

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

⚠ 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)

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

Kit Contents

PREPARE

NOTE

For vehicles equipped with security siren:

- Verify that the hands-free fob is present.
- Turn ignition on.

NOTE

The following steps are provided as an outline of the process. Follow all steps outlined in appropriate sections in the service manual.

1. Remove seat.
2. Remove fuel tank.
3. Remove main fuse.
4. Remove outer fairing.
5. Remove air duct.
6. See Figure 1. Remove wire trough cover.
7. See Figure 2. Release connector anchors for connectors [184] and [280] from radio support bracket.
8. See Figure 3. If present, detach XM/NAV antennas from radio support bracket and position aside.
9. Remove the two screws holding Telematic Control Unit (TCU) to bracket. Retain screws for later use.
10. See Figure 4. If present, remove existing TCU bracket (2).
 - a. Remove the four screws (3). Retain screws for later use.
11. See Figure 5. Position and install TCU on bracket using two screws. Tighten.
Torque: 7–8 N·m (62–71 in-lbs)
12. If equipped, position hidden antenna module at rear of amplifier.
13. Route cable to socket at rear of radio.

14. See Figure 6. Remove the four radio support bracket to radio screws. Retain screws for later use.
15. Position amplifier bracket.
16. Install the four radio support bracket to radio screws. Tighten.
Torque: 2–3 N·m (18–27 in-lbs)
17. If equipped, route hidden antenna cable around left side (amplifier connector end) of **new** bracket.

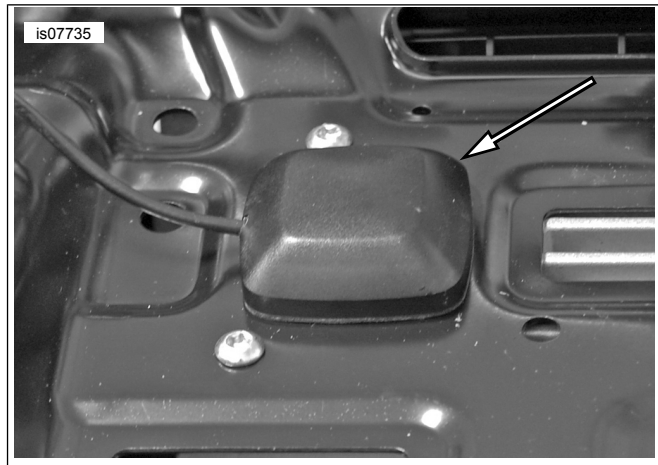


Figure 3. Antenna Removal



Figure 1. Wire Trough

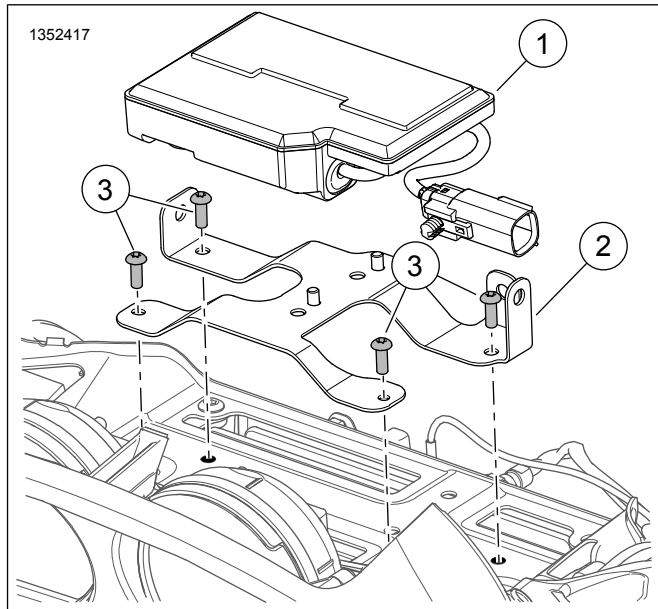


Figure 4. TCU Bracket

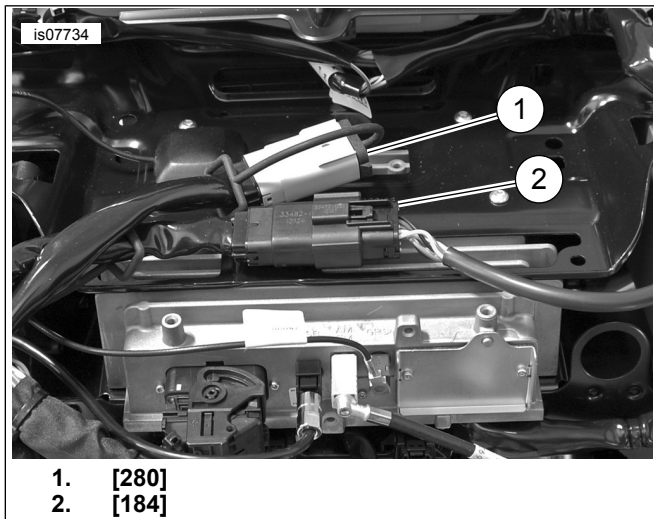


Figure 2. [280] and [184]

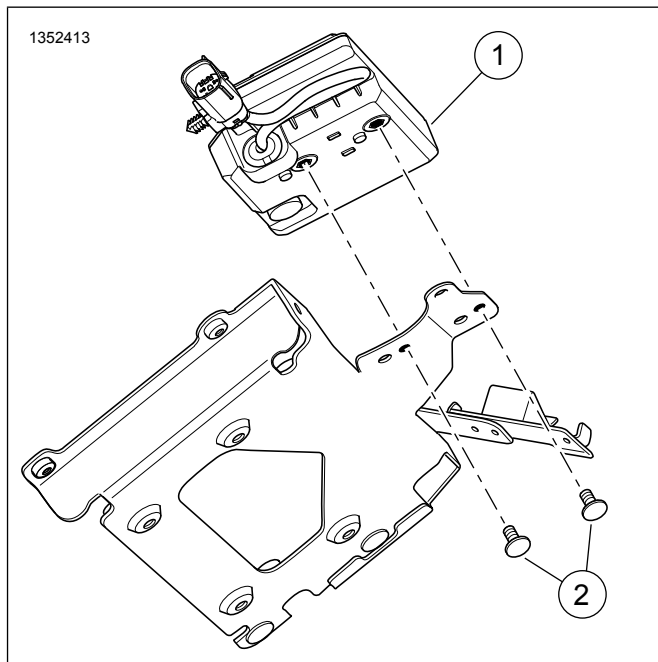


Figure 5. TCU Screw

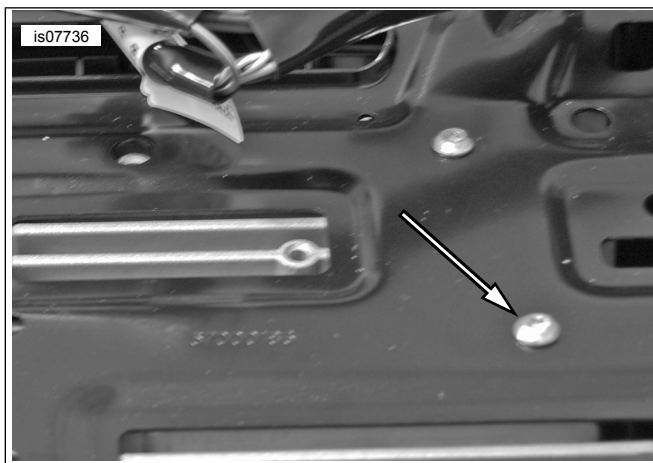
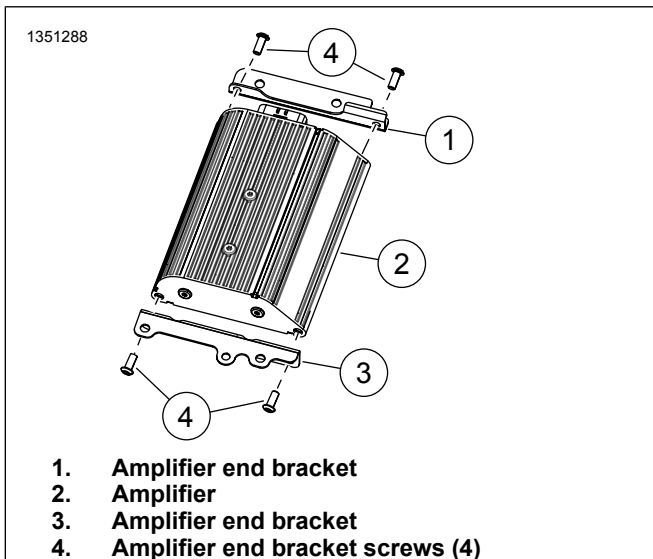


Figure 6. Radio Support Bracket Screws



1. Amplifier end bracket
2. Amplifier
3. Amplifier end bracket
4. Amplifier end bracket screws (4)

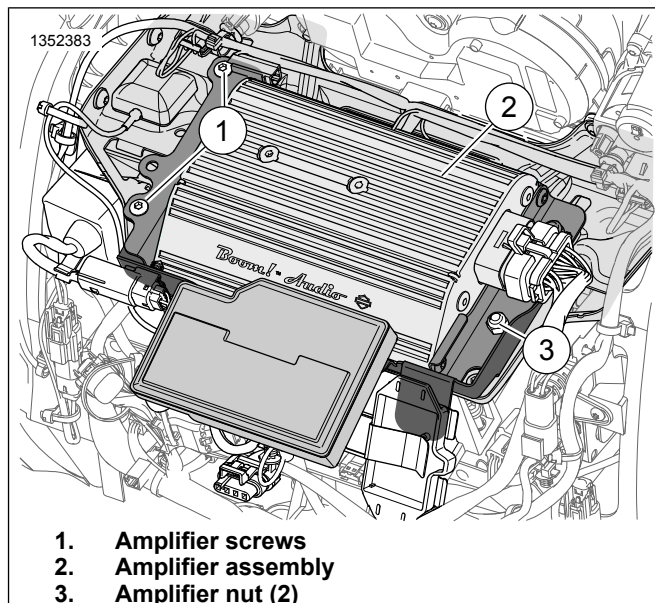
Figure 7. Amplifier Brackets

INSTALL

1. See Figure 7. Install amplifier brackets to amplifier.
2. See Figure 8. Install amplifier.
 - a. Position holes of amplifier side brackets over studs in amplifier bracket.
 - b. Install two screws. Tighten.
Torque: 10–12 N·m (7–9 ft-lbs)
 - c. Install two nuts. Tighten.
Torque: 8–11 N·m (6–8 ft-lbs)

NOTE

Do not scratch amplifier on bracket.



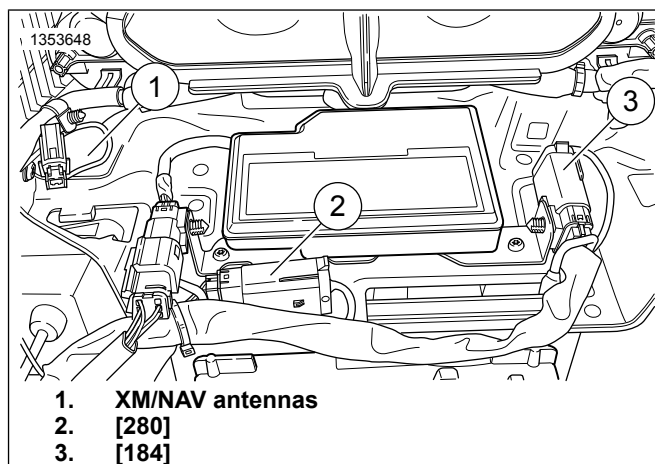
1. Amplifier screws
2. Amplifier assembly
3. Amplifier nut (2)

Figure 8. Amplifier Installation

3. See Figure 9. Insert connector [184] and [280] connector anchors into amplifier bracket and if present, position the SiriusXM & NAV antennas.

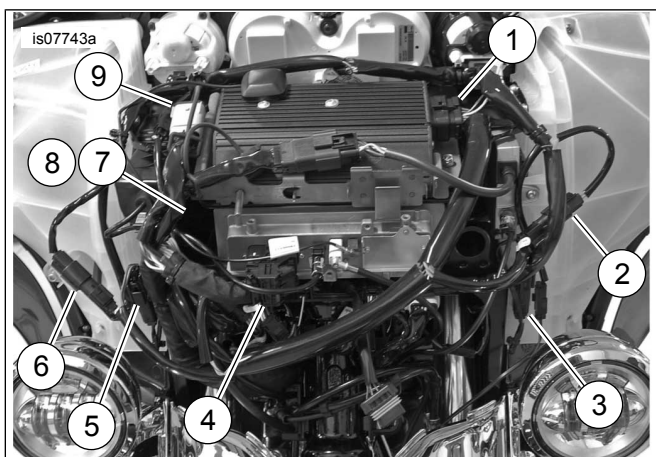
NOTE

The amplifier bracket has a clip for a garage door opener transmitter. If motorcycle has one, relocate it to this location. The stud on front of bracket is for CVO use only.



1. XM/NAV antennas
2. [280]
3. [184]

Figure 9. Connector Relocation



1. [149] Amplifier
2. [35A] LH speaker (input from radio)
3. [35B] LH speaker (amp output)
4. [22] RHCM
5. [34A] RH speaker (input from radio)
6. [34B] RH speaker (amp output)
7. [162] Rear channel output (from radio) (FLHX shown)
8. [313] Rear channel output (from amp)
9. [299] P&A power

Figure 10. Harness Connections

4. See Figure 10. Position harness as shown and connect the connectors. Connections for [162] and [313] are detailed in the following notes.

NOTE

- **FLHX models:** If this installation adds an amplifier to previously installed speakers, see the "Upgrade" section for wire harness connection instructions.
- If this amplifier is used with a secondary amplifier to enable six or eight speakers, see connection details for [162] and [313] in Table 1, Table 2 and kit 76000280. FLHX(S) [162] (F) a 4-way Molex rear channel output from radio. Used for speaker output without amp. See Figure 8. Unused with primary amp, used for secondary amp INPUT. See Figure 10. FLHTC/FLHTK/TRIKE [162] (R) a 16-way Molex rear channel output from radio. Contains all rear speaker pod wiring. Install 69200714 to use with amplifiers (see Step 7). Fairing Amp [313] a 4-way Molex rear channel output of the primary amplifier, can be used for saddlebag speakers, rear pods or fairing lowers. Reserved for fairing lowers when used on six or eight speaker configuration.

Table 1. Connector [313] of Amplifier Harness

MODEL	NUMBER OF SPEAKERS			
	2	4	6	8
FLHX(S)	N/A	A	B	B
FLHTCU	N/A	C	F	F
FLHTK	N/A	C	F	NO FIT

Table 1. Connector [313] of Amplifier Harness

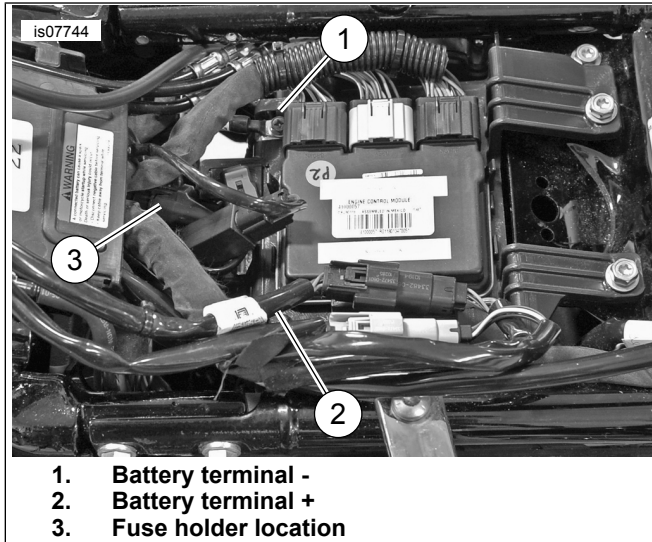
MODEL	NUMBER OF SPEAKERS			
	TRIKE	N/A	C	NO FIT
A: Connect to 69200489 jumper (for covers or R. Pods) or fairing lower harness 69200612				
B: Connect to 69200489 jumper. Other end of jumper to speaker expansion harness 69200490 [296]				
C: Connect to 69200489 jumper. Other end of jumper to rear speaker interconnect 69200714 (see below)				
F: Connect [313] to fairing lowers only. 69200489 jumper not needed				
N/A: 2 speaker system does not require use of [313]				

Table 2. Connector [162] of Stock Fairing Harness and Amp

MODEL	NUMBER OF SPEAKERS			
	2	4	6	8
FLHX(S)	N/A	D	E	E
ULTRA	N/A	C	G	G
FLHTK	N/A	C	G	NO FIT
TRIKE	N/A	C	NO FIT	NO FIT
D: Do not connect, leave stock weather-cap in place				
E: Connect to 69200489 jumper. Other end of jumper to speaker expansion harness 69200490 [296]				
G: Connect rear speaker interconnect 69200714 to speaker expansion [296] and [297] 69200489 jumper not used.				
N/A: 2 speaker system does not require use of [162]				

5. Route battery wires through wire trough and to their respective battery terminals.
6. Remove - and + battery terminals.
 - a. Place ring terminal labeled B+ on positive battery terminal.
 - b. Install bolt.
 - c. Place terminal labeled B- on negative battery post.
 - d. Install bolt.
 - e. Secure bolts. Tighten.
Torque: 6.8–7.9 N·m (60–70 in-lbs)
 - f. Position in-line fuse holder in a location that can be accessed with minimal disassembly, do not place inside wire trough.
7. **FLHTCU/K and Trike models only:** See Table 1 and Table 2. Install the rear speaker pod interconnect harness (69200714).
 - a. See Figure 11. Disconnect [162] located behind passenger backrest.
 - b. Connect appropriate connectors to interconnect harness [162A/B].
 - c. Connect 4-way socket side of 69200714 to 4-way pin side of 69200489 jumper.
 - d. Use cap (from 313) to plug unused 4-pin side of 69200714.

- e. If using speaker expansion kit 76000280, connect 4-way pin side of 69200714 to mating 4-way socket side of [296].
 - f. Connect 4-way socket side of 69200714 to mating 4-way pin side [297].
8. See Figure 11. Install wire trough cover.
 9. Cap any unused pin-side connectors with 72632-10, provided with 692000478 [313] or from stock fairing harness connector [162] on FLHX models.



1. Battery terminal -
2. Battery terminal +
3. Fuse holder location

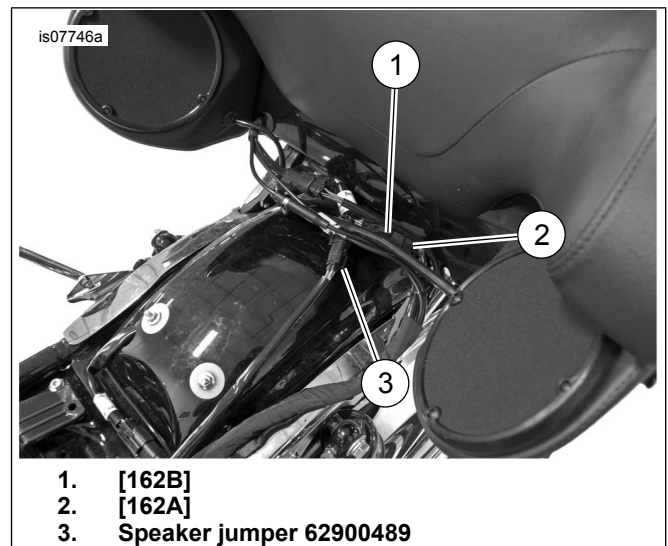
Figure 11. Battery Connection

10. Secure wire harness with cable straps. Verify that wiring does not interfere with steering or suspension travel.

▲ 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)

11. See Figure 12. **SiriusXM-equipped models:** Relocate the SiriusXM antenna with the bracket and instructions from that kit. Install the main fuse and check radio operation.



1. [162B]
2. [162A]
3. Speaker jumper 62900489

Figure 12. Rear Speaker Pod Interconnect

12. Load amplifier EQ based on speaker configuration using amplifier flash section of Dealer Service Tool (Digital Technician).
 - a. Check for updates to the Amplifier Base Calibration.
 - b. Install newest version of Base Calibration, if updates are available.
 - c. Proceed to radio reflash.
 - d. Select **new** speakers configuration.
 - e. The correct EQ based on speakers configuration is available in the information section.
 - f. Complete reflash of radio with **new** speakers configuration.
 - g. Proceed to Amplifier reflash.
 - h. Load Amplifier EQ based on speakers configuration as noted in Radio reflash section.
 - i. Complete Amplifier reflash.
13. Install air duct. See service manual.
14. Install outer fairing. See service manual.
15. Install main fuse. See service manual.
16. Install fuel tank. See service manual.
17. Install seat. After installing seat, pull up on the seat to verify that it is secure. See service manual.
18. If equipped, secure hidden AM/FM antenna to mounting surface under windshield vent behind amplifier.
19. Refer to **Odometer Self-Diagnostics** in the EDM to clear any codes that were set during the installation.

SERVICE PARTS

1339146

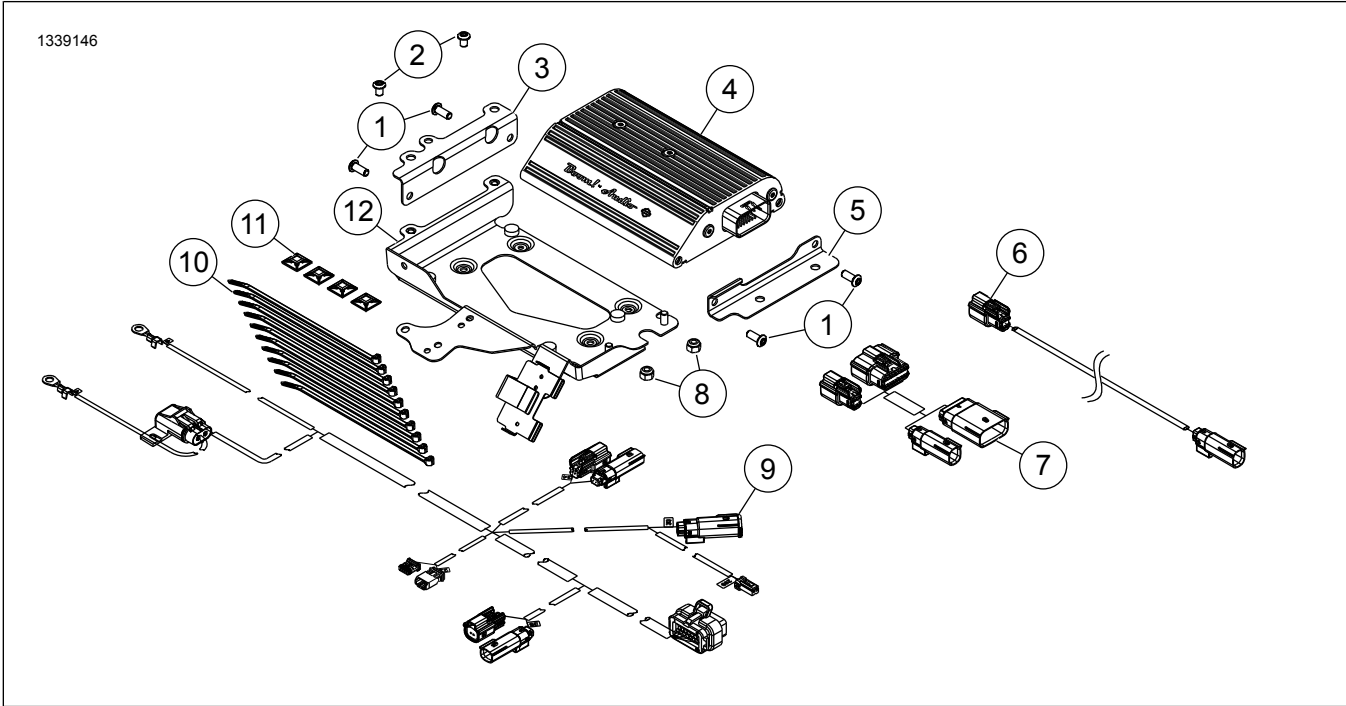


Figure 13. Service Parts, Boom! Audio Amplifier Kit

Table 3. Service Parts

Item	Description (Quantity)	Part Number
1	Hex socket button head screws (4)	926
2	Screw, Torx button head (2)	10500053
3	Bracket, amplifier, right side	76000945
4	Amplifier	76000277B
5	Bracket, amplifier, angle	76000330
6	Jumper, rear speaker	69200489
7	Harness, rear speaker interconnect	69200714
8	Lock nut (2)	7686
9	Harness, amplifier primary amp	69200487
10	Cable straps (10)	10006
11	Adhesive base (4)	69200342
12	Bracket, amplifier fairing mount	76000923

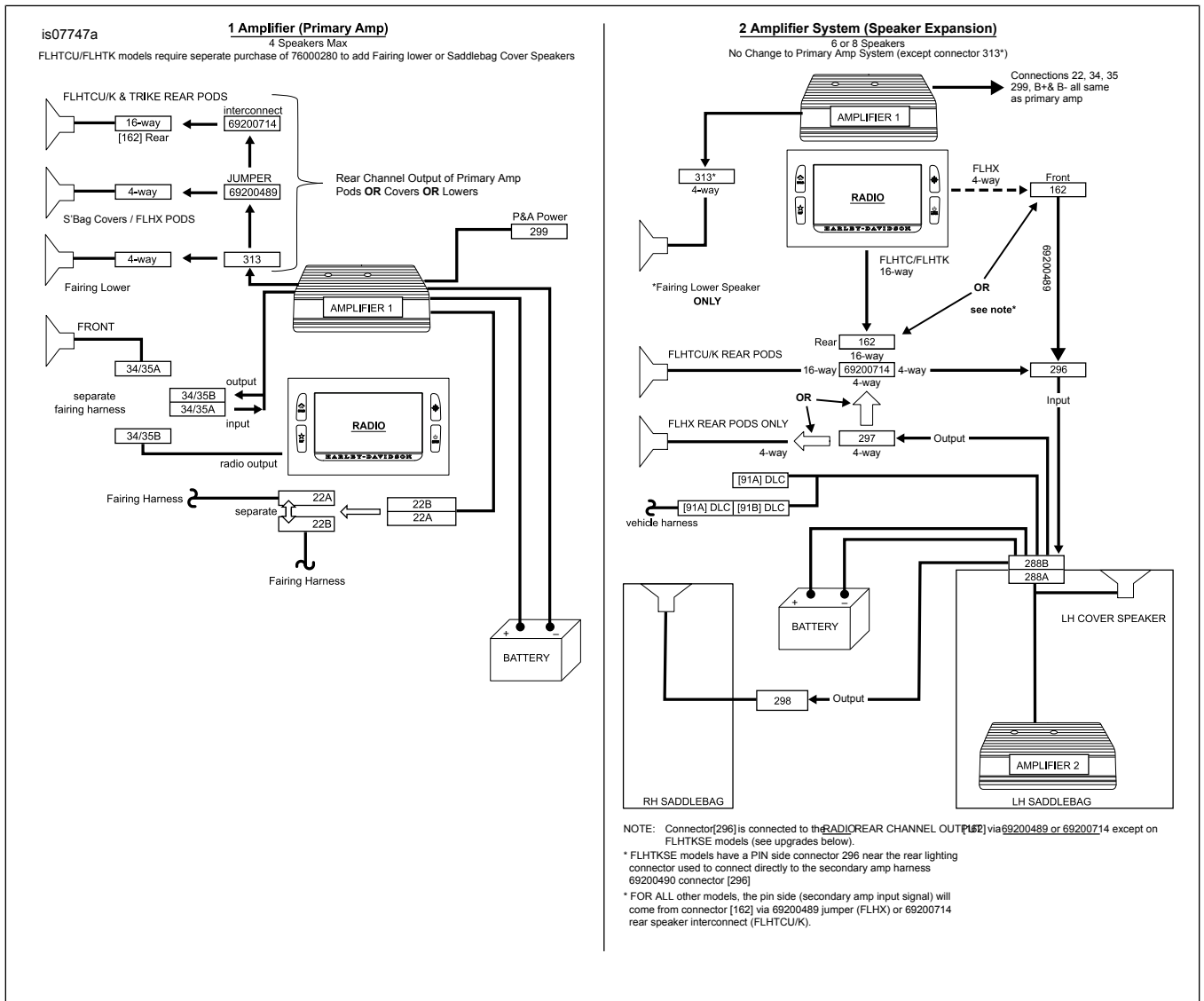


Figure 14. Amplifier Configuration

Table 4. Upgrades

UPGRADES	
FLHX models with 4 speaker system: upgrading to Primary Amp	
Loweres	Disconnect Lower harness (69200612) from vehicle harness radio output [162]. Reconnect to [313] of the fairing amplifier harness.
Pods/Covers	<ul style="list-style-type: none"> Disconnect Jumper 69200489 from vehicle harness radio output [162]. Reconnect to [313] of the fairing amplifier Replace weather cap from [313] in [162].