



INSTRUCTIONS

94100061

2020-12-01



BOOM! AUDIO STAGE II FAIRING SPEAKER KIT (FLTR)

GENERAL

Dealer installation is recommended.

Kit Number

76000956

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 no. 76000523).

FLTRUSE models only: Separate purchase of harness (Part no. 69200489) and harness interconnect (Part no. 69200714) is required.

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

NOTE

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

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**.

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. See the service manual. Remove main fuse.

REMOVAL

1. Remove windshield. Remove outer fairing. See the service manual.
2. Remove the fairing speaker grille assemblies. See the service manual.

3. Remove the fairing speakers.
 - a. Remove four screws securing speaker to enclosure.
 - b. Hold speaker away from enclosure. Disconnect wires. Remove speaker.
 - c. Repeat on opposite side.
 - d. Discard speakers.

NOTE

The letters "A" and "B" stamped on the outer rim (6) of the speaker.

- For the left speaker, rotate so the letter "B" is at the bottom.
- For the right speaker, rotate so the letter "A" is at the bottom.

INSTALLATION

1. See Figure 1. Attach the speaker harness connectors (1) inside the speaker enclosure (2) to the spade terminals on the back of the woofer (3). Different size spade contacts prevent improper assembly.
2. Position the speaker over the opening in the speaker enclosure.

3. Position the midrange speaker mounting assembly (4) over the woofer. Rotate the midrange assembly to align the mounting holes with the woofer. Position the wires at the top of the midrange mounting ring.

4. Fasten the woofer and midrange speakers to the enclosure with four screws (5). Tighten.

Torque: 1.6–2.3 N·m (14.2–20.4 in-lbs)

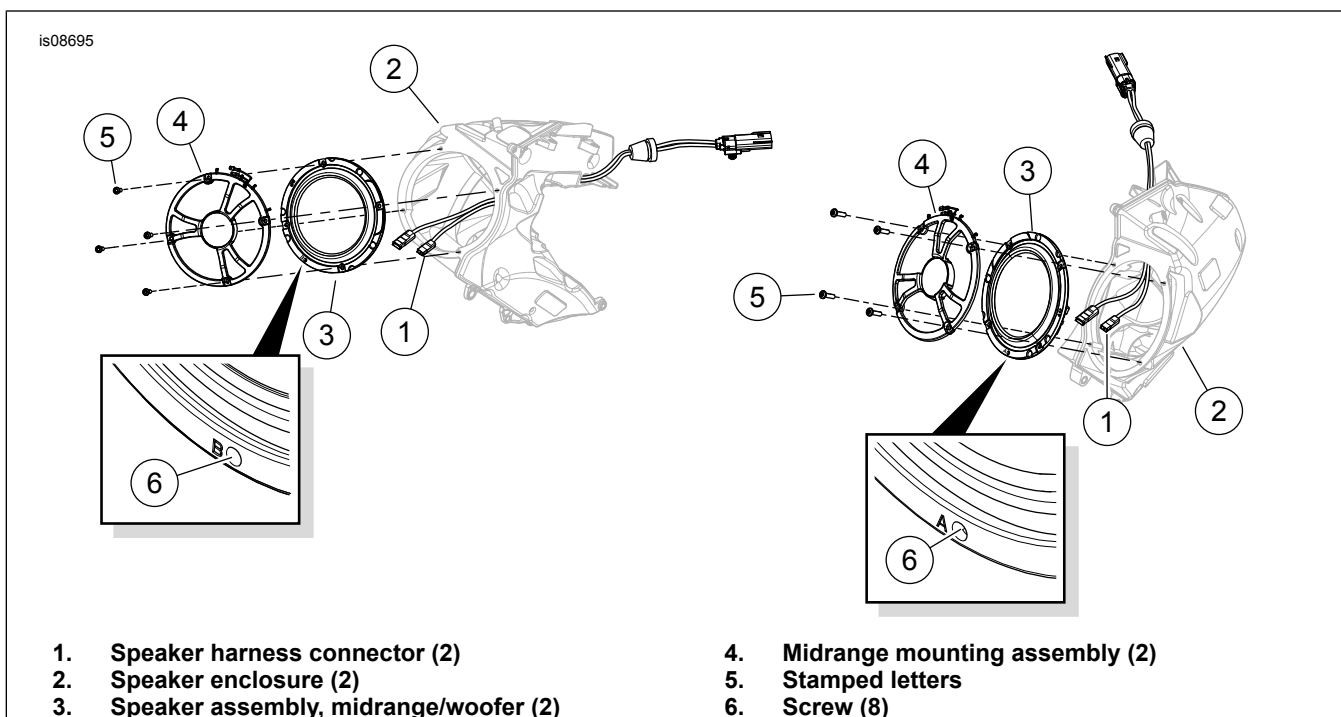


Figure 1. Woofer Speaker Installation

NOTE

- The tweeter/speaker grille assemblies are side-specific. The right grille has the text "BOOM! AUDIO STAGE II" to the right of the tweeter housing. The left grille has no text.
- To ease the midrange to tweeter lead connection in Step 5a, slide back the jacket over the female terminal. Connect the terminals. Slide the jacket forward over the connected terminals.

5. See Figure 2. Install grille assembly (1):
 - a. Connect the two individual leads from the midrange speaker to the tweeter leads on the speaker grille.
 - b. Verify that the rubber gasket (2) is in place around the perimeter of the grille. Check that the two clips (3) are in place on the grille tabs (4). Replace components if damaged or missing.
 - c. Insert the tweeter wiring and connector into the space between the upper inboard corner of the inner fairing speaker opening and the speaker housing.
 - d. Engage tab (4) into the outboard side of the speaker opening.
 - e. Engage the grille retainer clips in the slots (5).
 - f. Push on the grille in each retainer area until an audible click is heard.
 - g. Repeat on the opposite side.

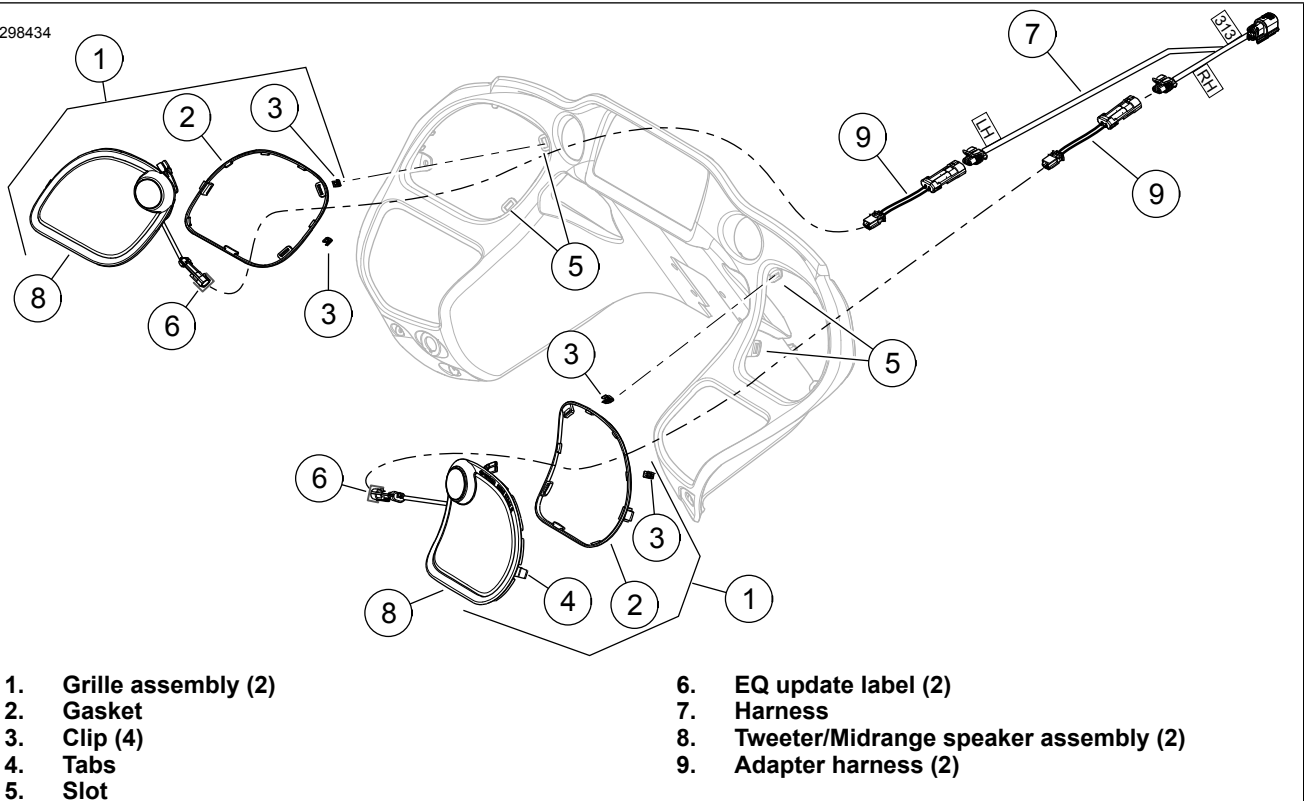


Figure 2. Speaker Tweeter/Midrange and Grille

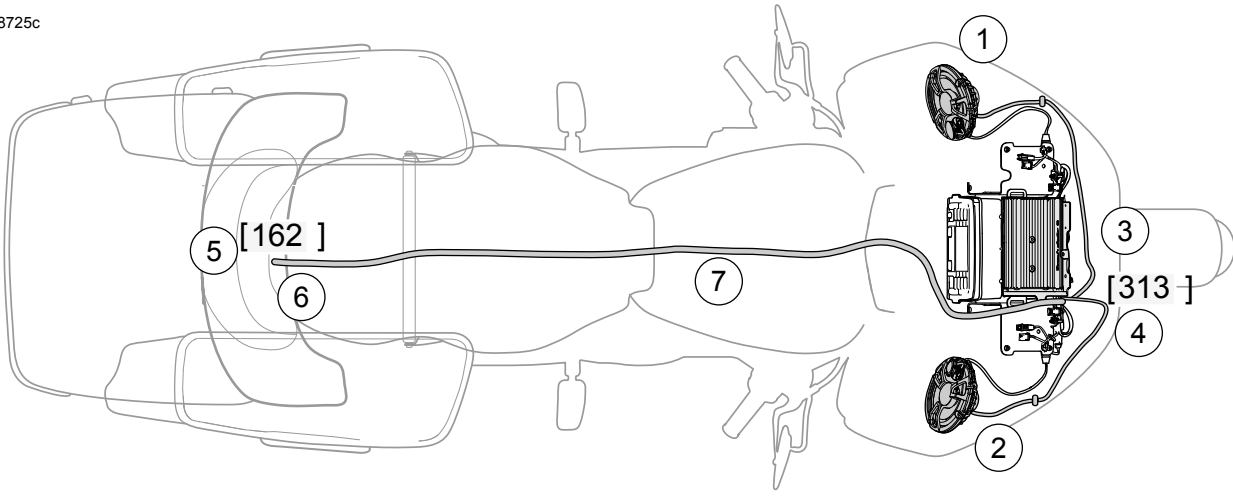
1. Grille assembly (2)
 2. Gasket
 3. Clip (4)
 4. Tabs
 5. Slot
 6. EQ update label (2)
 7. Harness
 8. Tweeter/Midrange speaker assembly (2)
 9. Adapter harness (2)
6. **FLTRUSE models:** Install rear speaker interconnect harness (Part no. 69200714) and rear speaker jumper harness (Part no. 69200489), each purchased separately. The rear jumper harness connects the rear speakers to the fairing amplifier.
- a. Locate the rear audio [162] beneath the passenger backrest and disconnect [162].
 - b. Connect [162A] and [162B] to the mating connectors on the rear speaker **interconnect** harness.
 - c. Connect the four-way [162A] on the rear speaker **jumper** harness to the four-way [162D] on the interconnect harness.
 - d. Use a cap to plug the unused four-way [162C] on the interconnect harness.
 - e. Route the rear speaker jumper harness [162B] along the wiring caddy to the fairing amplifier. Becoming connection [313] for **FLTRUSE model** fairings.
7. See Figure 2. **ALL models:** Position harness (7) inside inner fairing.
8. **All models except FLTRUSE:** Connect the four-way Molex **socket** connector [313B] of the Y-harness into the amplifier harness rear speaker output **socket** [313]. **FLTRUSE models:** Connect the four-way Molex **socket** connector [313B] of the Y-harness into the amplifier harness rear speaker output **socket** [162B].
- NOTE*
- Adapter harness (9) Figure 2 or adapter harness (10) Figure 4 is required for the generation of speakers identified in this kit, but may not be required on all models. Some speaker and harness combinations may have harness connections that differ. Use adapter (69200925) to resolve connection.*
9. See Figure 4. Add adapter harness (10) from kit.
 10. See Figure 2. Mate adapter harness to harness (7).
 - The Y-harness connectors are labeled "RH" or "LH" (right side or left side as viewed from the rider position). Or, match the wire colors of the Y-harness to the speaker wire colors. Route each leg of the harness to the correct speaker.
 11. Plug the connectors into each speaker.

⚠ 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)

- Make sure that wires, harnesses or lines do not pull tight when handlebars are turned fully to left or right fork stops.

12. Verify that steering is smooth and clear from stop to stop.



- 1. Left fairing speaker
- 2. Left fairing speaker
- 3. Amplifier, fairing (purchased separately)
- 4. Tweeter midrange [313]
- 5. 16-way rear audio [162]
- 6. Interconnect, CVO only, (Part no. 6920714)
- 7. Jumper, CVO only, (Part no. 6920489)

Figure 3. Fairing Speakers, Amplifier and Approximate Connection Locations

COMPLETION

NOTE

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

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)

1. See the service manual. Install main fuse.
2. Have a Harley-Davidson dealer update the radio EQ using Digital Technician II.

3. Turn the ignition ON, but do not start the motorcycle.
4. Refer to the BOOM! BOX INFOTAINMENT SYSTEM section of the owner's manual. Turn the radio ON. Make sure that all speakers are working and front/rear fader function is operating correctly. If not, check speaker wiring. Understand that buzzing, squeaks and rattles could be heard until outer fairing is installed.
5. See the service manual. Install outer fairing. Install windshield.

IN USE

Avoid direct contact with speaker grilles by a pressure washer. Damage to speakers can result.

SERVICE PARTS

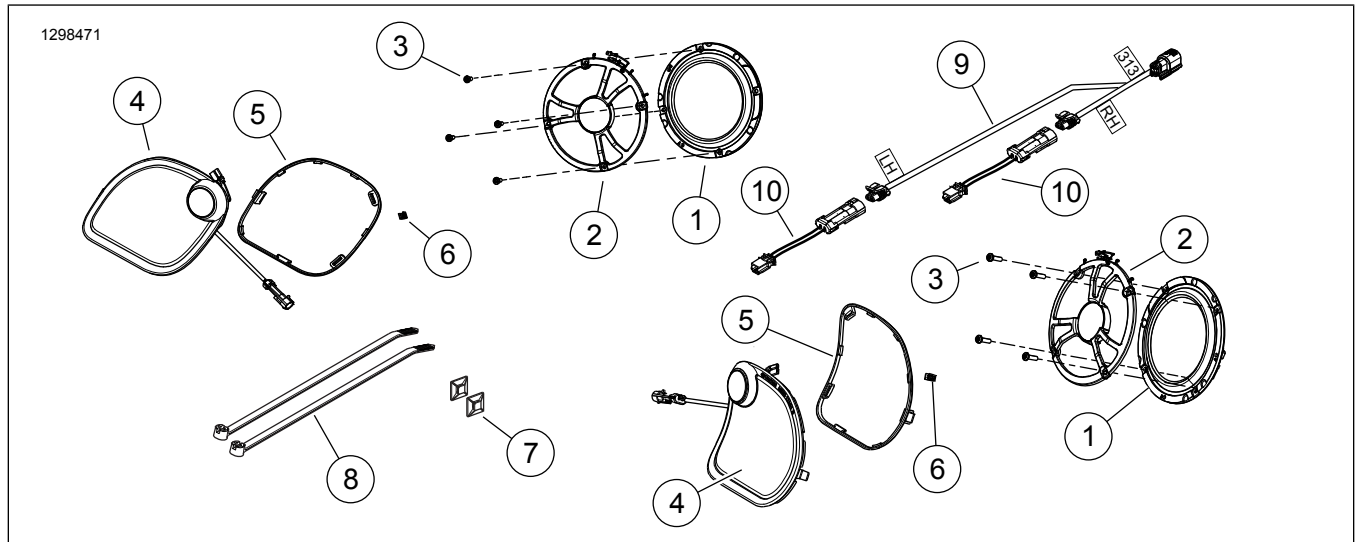


Figure 4. Service Parts, BOOM! Audio Stage II Fairing Speaker Kit (FLTR)

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Speaker assembly (woofer), fairing (2)	76000822
2	Speaker assembly, midrange (2)	76000872
3	Screw (8)	10200376
4	Tweeter/speaker grille assembly (left) (includes items 5-6) Tweeter/speaker grille assembly (right) (includes items 5-6)	76000870 76000871
5	• Gasket (left) • Gasket (right)	76000917 76000918
6	• Clip (2)	12200025
7	Wire retainer, adhesive back (2)	69200342
8	Cable strap (2)	10065
9	Wire harness, tweeter/midrange speaker	69200925
10	Adapter harness (2)	69202459

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.

Table 2. Wire Color Codes

ALPHA CODE	WIRE COLOR
PK	Pink
R	Red
TN	Tan
V	Violet
W	White
Y	Yellow

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

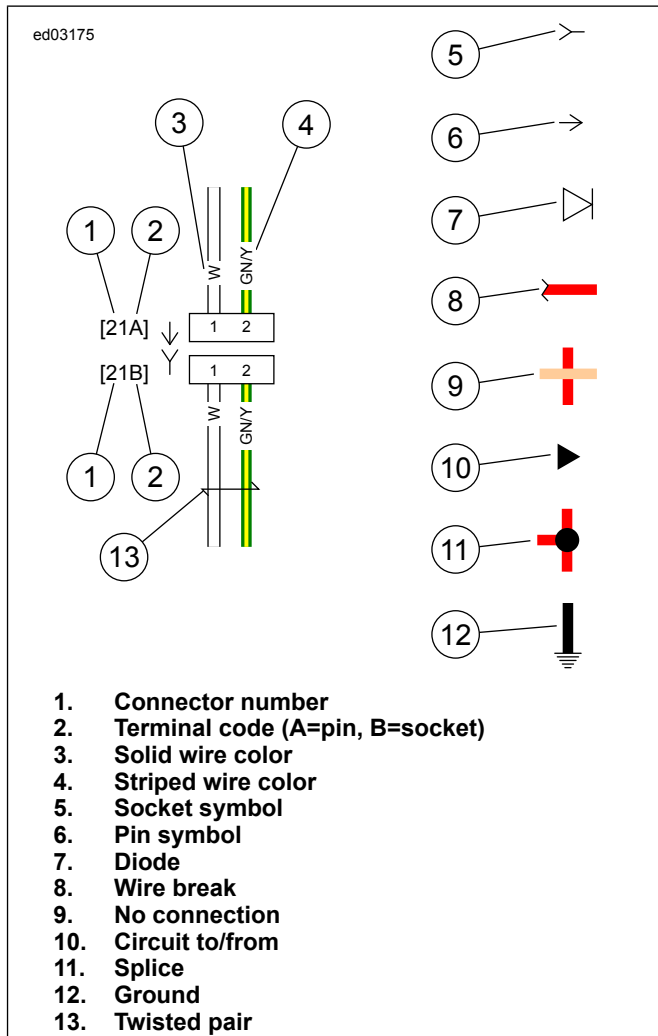


Figure 5. Connector/Wiring Diagram Symbols

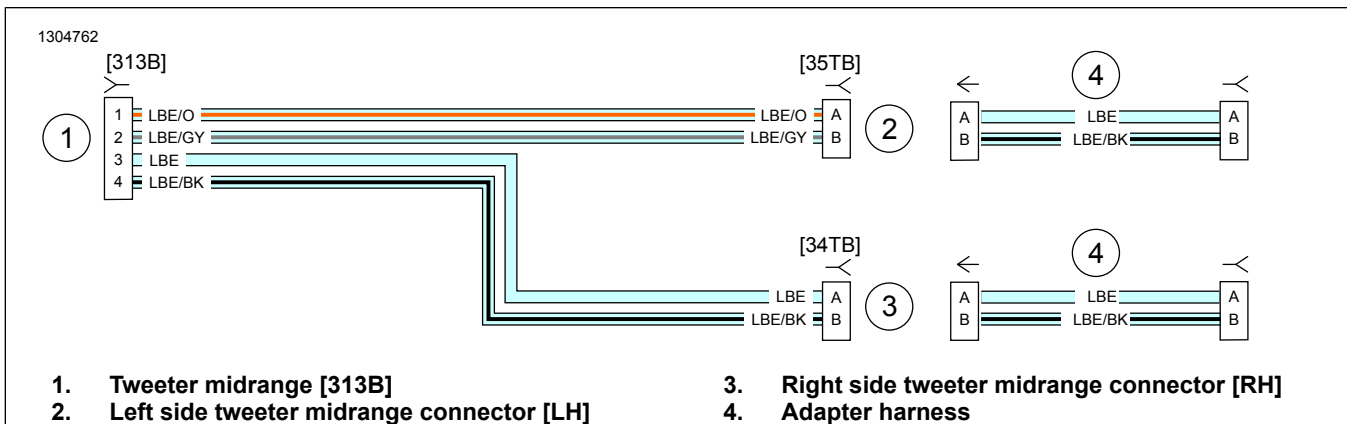


Figure 6. Tweeter Midrange Fairing Wire Harness