



INSTRUCTIONS

94100060

2019-01-31



BOOM! AUDIO STAGE II FAIRING SPEAKER KIT (FLHT/FLHX)

GENERAL

Dealer installation is recommended.

Kit Number

76000955

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

2014-2017 FLHTKSE models: Separate purchase of harness (part number 69200489) and harness interconnect (part number 69200714) is required.

2018 and later FLHTKSE models: Separate purchase of harness (part number 69200489) and harness interconnect (part number 69201930) is required.

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 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

⚠ 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)

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

Kit Contents

See Figure 3 and Table 1.

PREPARATION

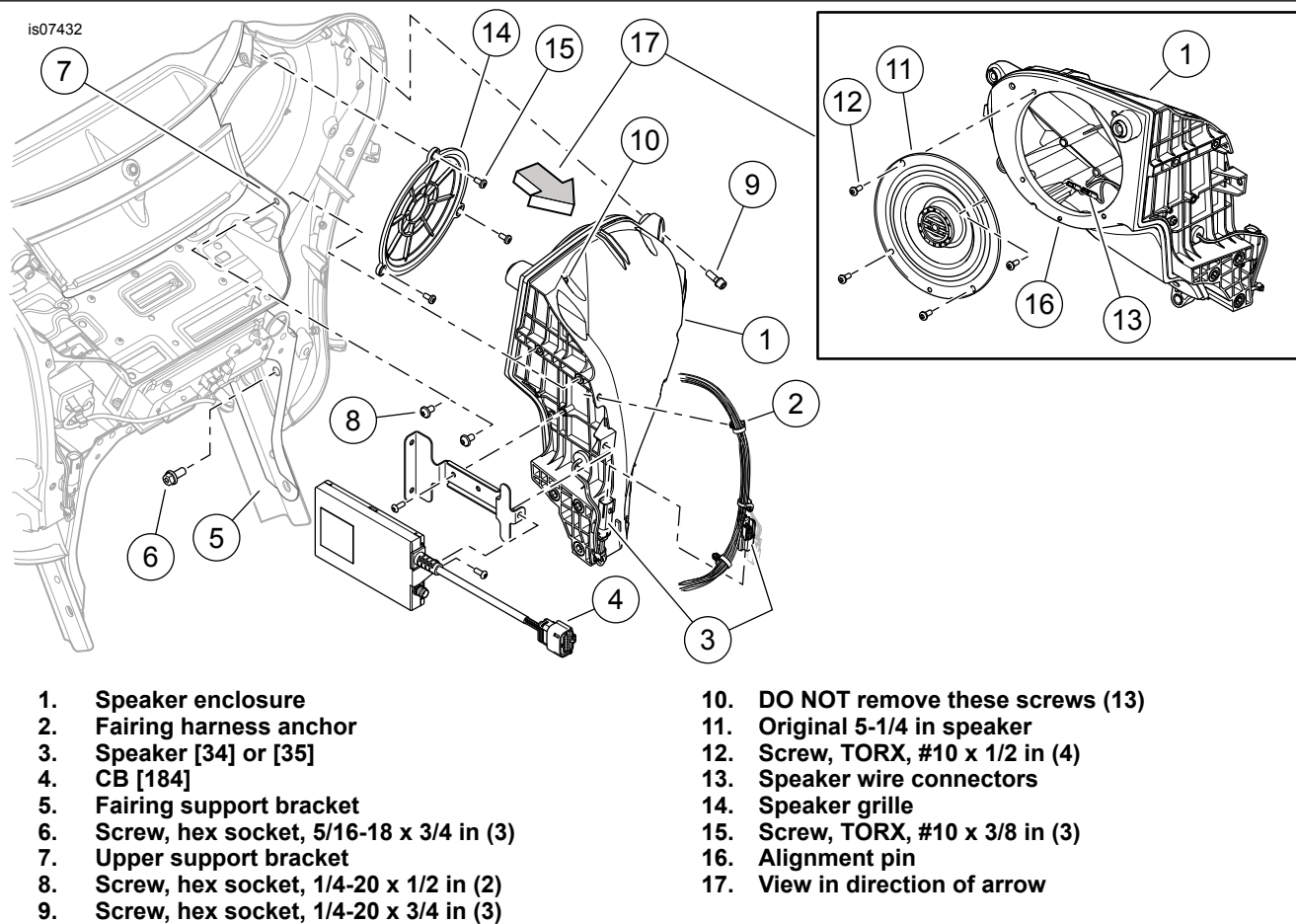
⚠ WARNING

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 owners manual.

REMOVAL

1. Remove outer fairing. Remove windshield. See the service manual.
2. See Figure 1. Remove the harness anchor (2) from each speaker enclosure (1).
3. **Right side only:** Disconnect power port [132] (not shown). See the service manual. **Left side only, CB-equipped models:** See the service manual. Disconnect CB [184] (4) and CB antenna. **DO NOT** remove the module.
4. Remove the three screws (6) securing the lower portion of the enclosure to the fairing support bracket (5).
5. Remove two screws (8) securing the upper portion of the enclosure to the upper support bracket (7).



- | | |
|--|-------------------------------------|
| 1. Speaker enclosure | 10. DO NOT remove these screws (13) |
| 2. Fairing harness anchor | 11. Original 5-1/4 in speaker |
| 3. Speaker [34] or [35] | 12. Screw, TORX, #10 x 1/2 in (4) |
| 4. CB [184] | 13. Speaker wire connectors |
| 5. Fairing support bracket | 14. Speaker grille |
| 6. Screw, hex socket, 5/16-18 x 3/4 in (3) | 15. Screw, TORX, #10 x 3/8 in (3) |
| 7. Upper support bracket | 16. Alignment pin |
| 8. Screw, hex socket, 1/4-20 x 1/2 in (2) | 17. View in direction of arrow |
| 9. Screw, hex socket, 1/4-20 x 3/4 in (3) | |

Figure 1. Speaker Enclosure Removal (Left Side Shown)

NOTE

Do not remove any of the screws (10) securing the speaker enclosure halves together.

6. Remove three screws (9) securing the speaker enclosure to the inner fairing. Remove the speaker enclosure from the vehicle. Save the screws.
7. Remove four screws (12) to free the speaker (11) from the enclosure. Save the screws.
8. Disconnect wires (13). Remove the speaker from the enclosure. Discard the speaker.
9. Remove the three screws (15) securing the speaker grille (14) to the inner fairing. Remove the speaker grille from the fairing. Save the screws. Discard the grille.
10. Repeat steps 3-9 to remove the remaining speaker enclosure, speaker and grille.

NOTE

Never operate vehicle with the speaker enclosures removed. These components provide important structural support to the fairing. Operating without these components can result in damage to fairing assembly.

INSTALLATION

1. Verify that Fairing Amplifier Kit is installed.

2.

NOTE

Position the woofer over the opening in the speaker enclosure. Note the letters "A" and "B" stamped on the outer rim (C) 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.

See Figure 3. Attach the speaker jumper wire connectors (B) inside the speaker enclosure (A) to the spade terminals on the back of the **new** woofer (1). Different size spade contacts prevent improper assembly.

3.

NOTE

- The tweeter/midrange fairing speaker assemblies are side-specific. The right speaker trim ring has the text "BOOM! AUDIO STAGE II" to the right of the tweeter housing. The left speaker trim ring has no text.
- Rotate the speaker so the tweeter (E) is at the top, inboard of the upper mounting hole.

Fasten the speaker to the enclosure with the four screws (D) removed earlier. Tighten.

Torque: 1.6–2.3 N·m (14–20 in-lbs)

4. From the inside, insert the correct tweeter/midrange speaker assembly (2 or 3) through the speaker opening in the inner fairing. Secure with three TORX screws (F) removed earlier. Tighten.
Torque: 1–1.4 N·m (9–12 **in-lbs**)
5. Repeat steps 2-4 for the opposite speakers.
6. Install one speaker enclosure to the inner fairing. Secure with 3 hex socket screws (see Figure 1, Item 9) removed earlier. Tighten.
Torque: 5.4–6.8 N·m (48–60 **in-lbs**)
7. Secure the lower portion of the enclosure to the fairing support bracket (5) with 3 hex head socket screws (6) removed earlier. Tighten.
Torque: 24.1–32.5 N·m (18–24 **ft-lbs**)
8. Secure the enclosure to the upper support bracket with 2 hex socket screws (8). Tighten.
Torque: 5.4–6.8 N·m (48–60 **in-lbs**)
9. Repeat steps 6-8 with the remaining enclosure.
10. See Figure 3. Position the Y-harness (4) inside the fairing.
11. **FLHTKSE models:** Install rear speaker interconnect harness (**2014-2017** part number 69200714) or (**2018 and later** part number 69201930) and rear speaker jumper harness (part number 69200489), each purchased separately. The rear jumper harness connects the rear speakers to the fairing amplifier.
 - a. Locate rear audio [162] beneath the passenger backrest and disconnect [162]. See the service/electrical diagnostic manual.
 - b. Connect [162A] and [162B] to the mating connectors on the rear speaker **interconnect** harness.
 - c. Connect the four-way pin [162A] on the rear speaker **jumper** harness to the four-way socket [162D] on the interconnect harness.
 - d. Use a cap to plug the unused four-way-pin [162C] on the interconnect harness.
 - e. Route the rear speaker jumper harness socket [162B] along the wiring caddy to the fairing amplifier. Becoming connection [313] for **FLHTKSE model** fairings.
12. **ALL models except FLHTKSE:** Connect [313B] of the Y-harness (4) into the amplifier harness rear speaker output **socket** [313]. **FLHTKSE models:** Connect [313B] of the Y-harness (4) into the amplifier harness rear speaker output **socket** [162B].

NOTE

The Y-harness legs are labeled "RH" (right side as viewed from the rider position) or "LH" (left side). Unless labeled, match the wire colors of the Y-harness to the speaker wire colors.

13. Route each leg of the Y-harness to the correct speaker.
14. If present, remove read labels covering speaker connectors. Remove labels.
15. Plug in the connectors to each speaker.
16. Mate the speaker and power port connectors. Secure harness anchors to the speaker enclosures.
17. Use plugs to cover all unused connectors.
18. **CB-equipped models:** Connect CB [184] and CB antenna. See the service/electrical diagnostic manual.

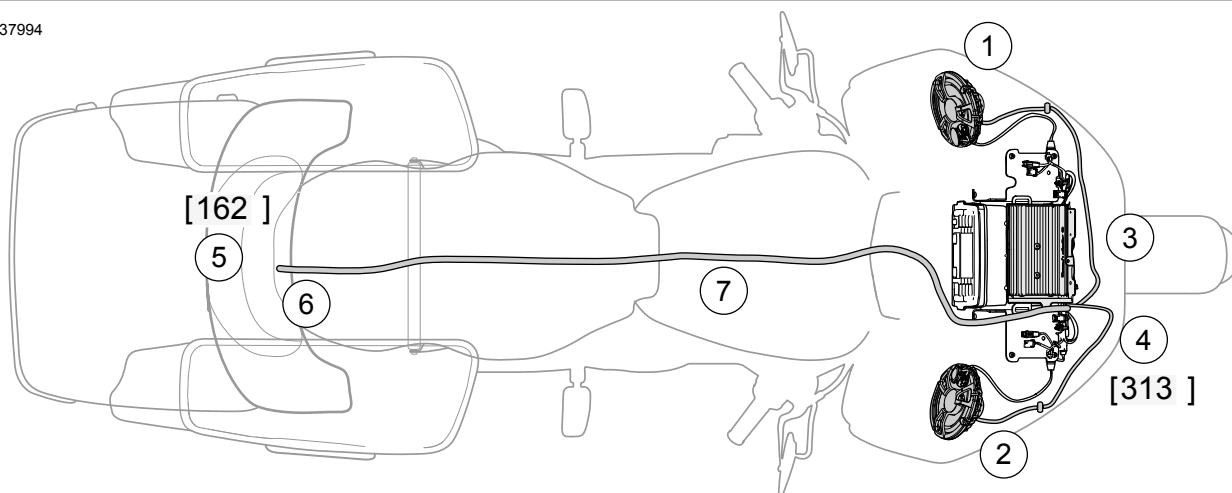
▲ WARNING

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

COMPLETION

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1. Left fairing speaker
2. Left fairing speaker
3. Amplifier, fairing (purchased separately)
4. Tweeter midrange [313]
5. 16-way rear audio [162] (2014-2017 FLHTKSE) or 8-way rear audio [162] (2018 and later FLHTKSE)
6. Interconnect, CVO only, (part number 6920714)
7. Jumper, CVO only, (part number 6920489)

Figure 2. Fairing Speakers, Amplifier and Approximate Connection Locations

NOTE

To prevent possible damage to the audio system, verify that the ignition and audio system are 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 the outer fairing and windshield.

IN USE

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

SERVICE PARTS

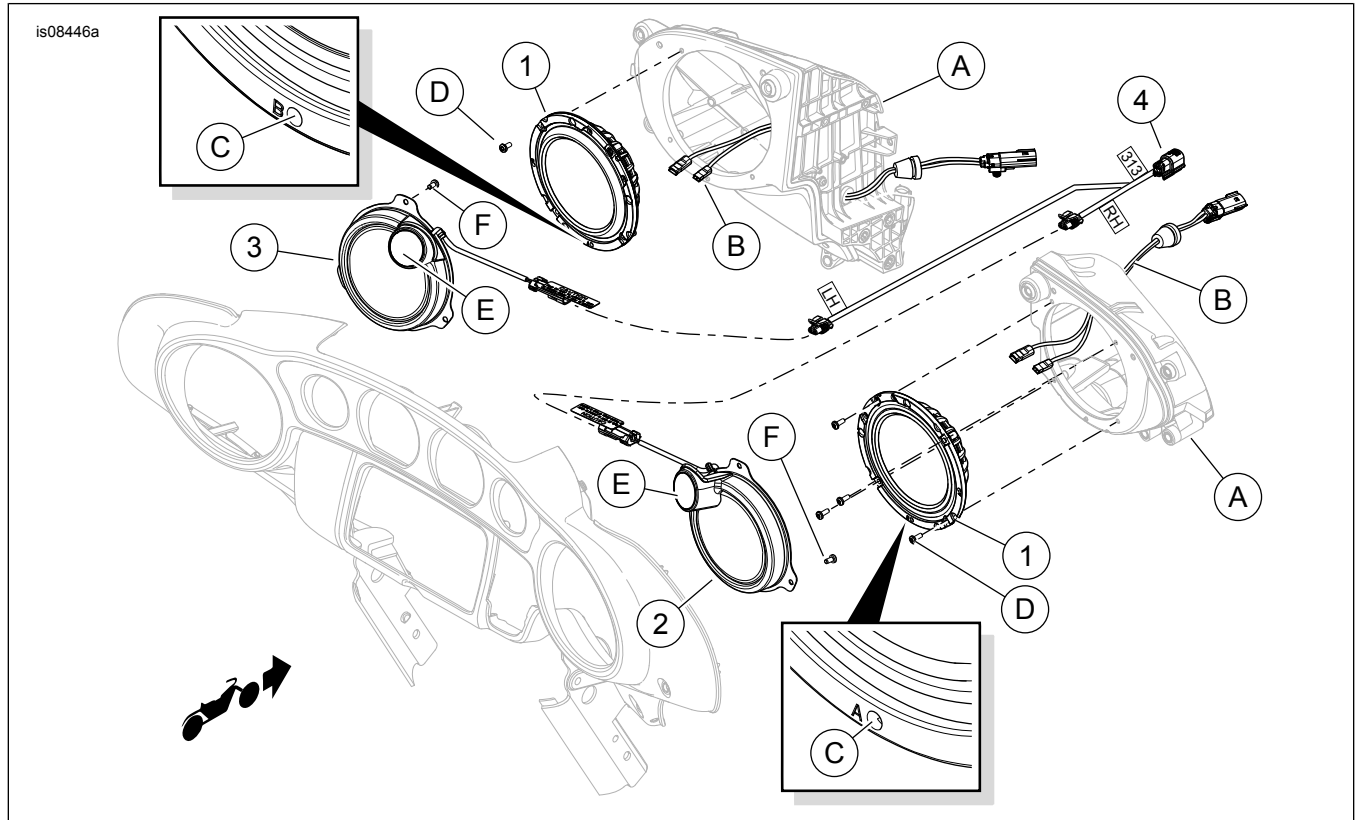


Figure 3. Service Parts, BOOM! Audio Stage II Fairing Speaker Kit (FLHT/FLHX Models)

Table 1. Service Parts

Item	Description (Quantity)	Part Number
1	Speaker assembly, woofer (2)	76000822
2	Grille, right	76000869
3	Grille, left	76000868
4	Wire harness, tweeter/midrange speaker assembly	69200925
Items mentioned in text, but not included in kit:		
A	Speaker enclosure (2)	
B	Speaker jumper wire connector (4)	
C	Reference hole at bottom of speaker frame, marked "A" (left speaker), "B" (right speaker)	
D	Original equipment (OE) screw, #10 x 1/2 in (8)	
E	Tweeter bridge	
F	Original equipment (OE) screw, #10 x 3/8 in (6)	

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
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

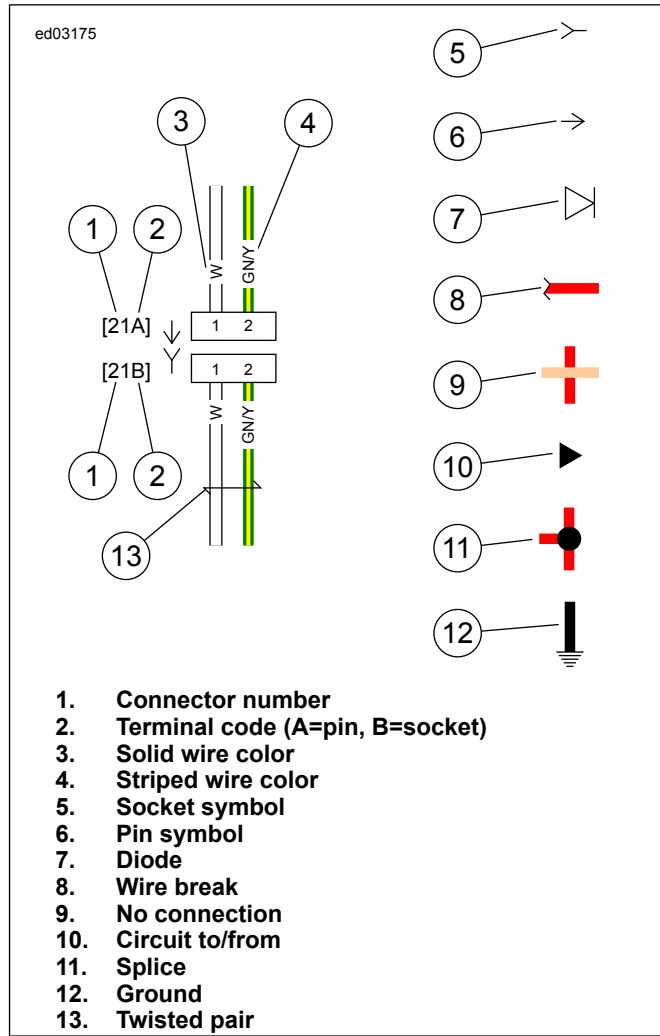


Figure 4. Connector/Wiring Diagram Symbols

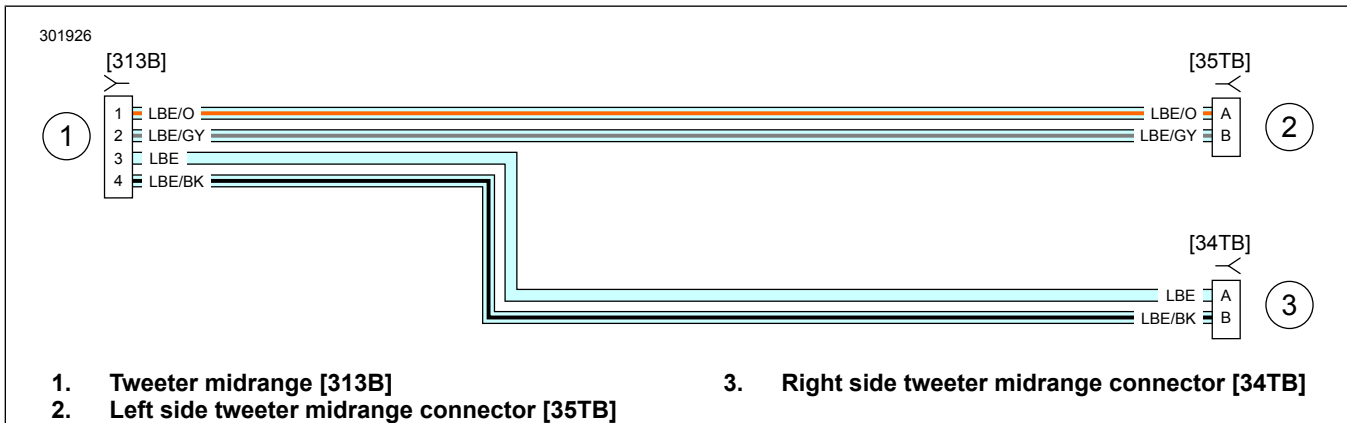


Figure 5. Tweeter Midrange Fairing Wire Harness