



INSTRUCTIONS

J06330

2016-10-07



SPECTRA GLO LED R/G/B ROUND STAGE II SPEAKER LIGHT KIT

Kit Numbers

68000231

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

Separate purchase of Harley-Davidson LED Controller Kit (Part No. 68000218), if not already installed.

Tri Glide® Trike. Separate purchase of two Harley-Davidson Wire Harnesses with Grommet (Part No. 69201595).

⚠ 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)

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.

Spectra Glo light pods are designed and intended for display use only. Some local regulations prohibit using colored or indirect lighting during vehicle operation on public streets. Check local regulations before installation.

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)

Kit Contents

See Figure 28. and Table 1.

INSTALLATION

Prepare

1. See the owner's manual. Remove main fuse.

Upper Fairing FLH Model

1. If Controller Kit (Part No. 68000218) is not installed, install now following instructions in that kit.

2. **NOTE**

Use caution when working with tweeters and grilles. These components are delicate and can be damaged if mishandled.

See Figure 1. See service manual. Remove upper fairing speaker enclosures. Speaker can remain in the enclosure for light engine installation. Remove three screws that hold tweeter bridge (5) to speaker grille (6) and carefully separate the two. Use caution as not to damage or stress the tweeter speaker wires. Retain hardware for installation.

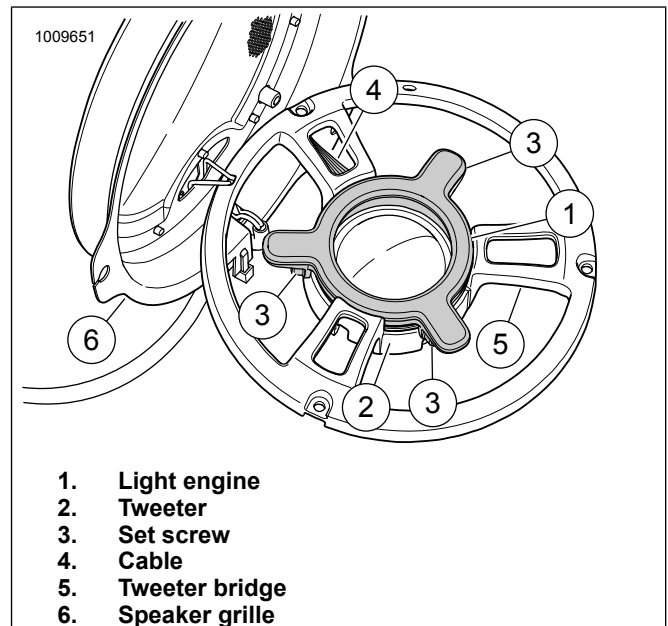


Figure 1. Speaker Grille, Tweeter Bridge and LED Light

3. See Figure 2. Remove protective paper (6) from foam tape (5) on back of light engine (1).

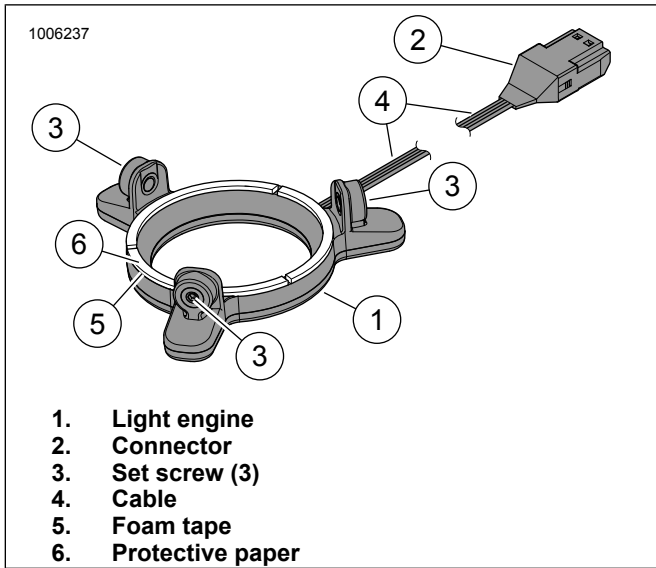


Figure 2. LED Light, Round Stage II Speaker

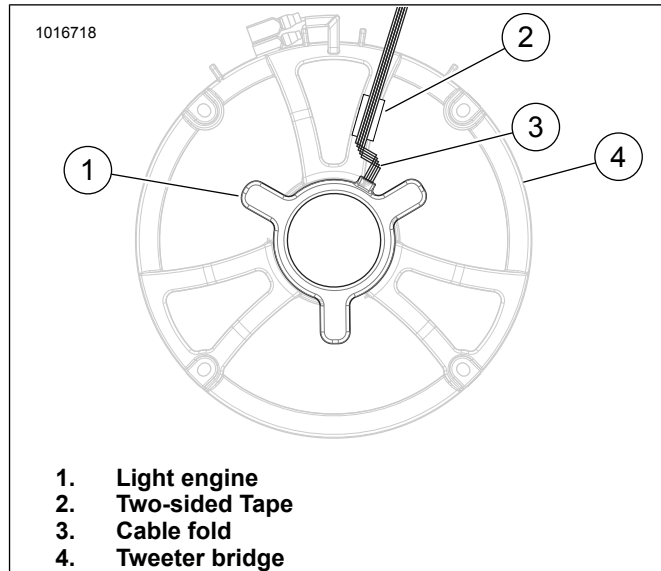


Figure 3. Cable Routing, Frame-Mounted Fairing Models

4. **NOTE**
- Wipe clean the mounting surface area of the tweeter. Position light engine where the cable (4) can be routed under the tweeter bridge.
 - Orient light engine so cable is near a leg on the bridge that is near the speaker wires.

See Figure 1. Place light engine (1) on tweeter (2) as shown. Lightly compress light engine in place.

5. **NOTE**
- DO NOT over tighten set screws. Over tightening may cause unit damage, tweeter bridge damage, or may render the unit inoperable.

Use the wrench provided. Slowly tighten each set screw (3), alternating one turn at a time, until each set screw just makes contact with tweeter bridge (4). Once all screws make contact with bridge, tighten each screw an additional ¼-½ turn. This should hold the light engine in place without over-flexing light engine housing.

6. See Figure 3. Route cable and fold (3) along tweeter bridge (4) leg. Using the tape in kit, cut to length and secure cable to tweeter bridge.

7. See Figure 4. Assemble tweeter bridge (5) to speaker grille (6). Use hardware that was previously removed.
- a. Install speaker enclosure. See service manual.

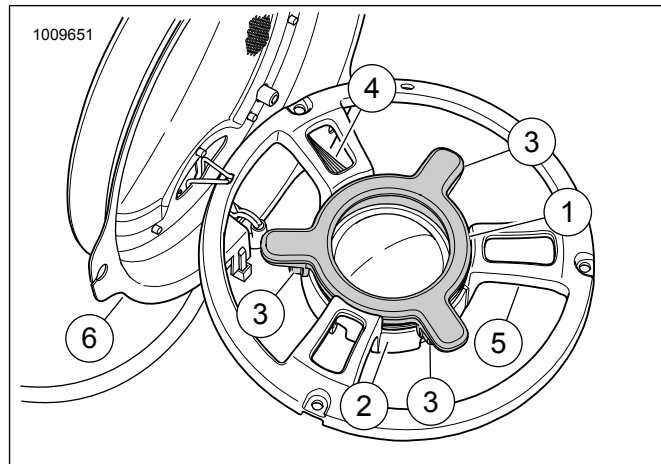


Figure 4. Speaker Grille, Tweeter Bridge and LED Light

8. See Figure 5. Route light engine cable (1) as shown. Secure cable with cable strap.
- a. See Figure 28. and Refer to Table 1. Join connectors from the light engine to RGB three-way wire harness (8).
- b. Stabilize the connectors, secure light engine cable and RGB harness with cable straps as needed.
- c. Route three-way wire harness toward steering head.

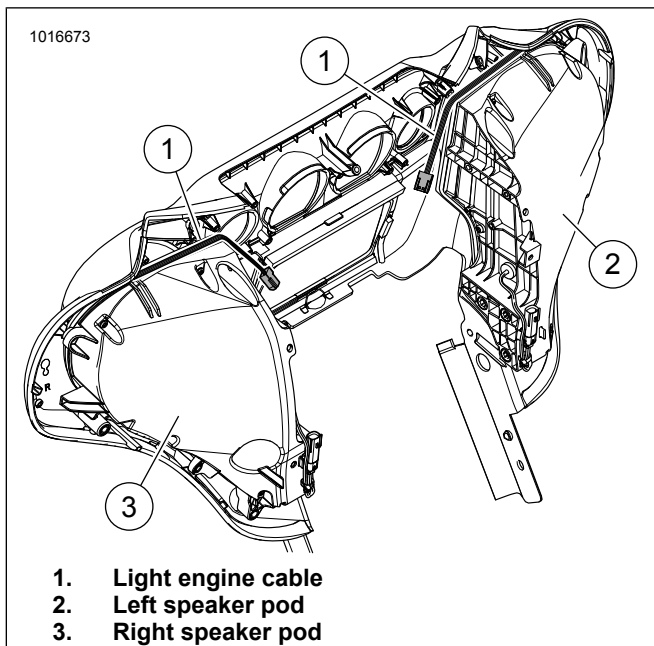


Figure 5. FLH Fairing

9. **NOTE**
See Instruction Sheet J06266, Spectra Glo Controller and Remote FOB, for installing multiple RGB products.

See Figure 28. and Table 1. Connect and route 48-in. harness (12) from LED R/G/B controller through the wire trough and up the back bone.

10. See Figure 6. Route end of 48-in. harness to steering head (1). Use caddy (2) to secure harness.

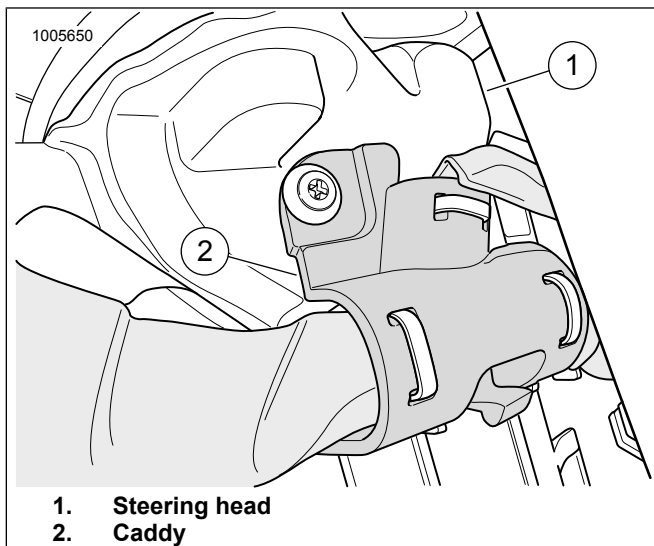


Figure 6. Steering Head

11. See Figure 28. and Table 1. Route light engine harness from speaker to steering head and connect to the 48-in. harness (12) at steering head using 3-way harness (8).
12. Bundle the harnesses from the controller and speakers. Secure the harnesses with cable straps.
13. Install outer fairing. See the service manual.

Upper Fairing FLTR Model

1. If Controller Kit (Part No. 68000218) is not installed, install now following instructions in that kit. See service manual. Remove outer fairing.

2. **NOTE**
Use caution when working with tweeters and grilles. These components are delicate and can be damaged if mishandled.

See Figure 8. See service manual. Remove outer fairing and speaker grilles. Speaker can remain in the fairing for light engine installation. Remove three screws that hold tweeter bridge (5) to speaker. Use caution as not to damage or stress the tweeter speaker wires. Retain hardware for installation.

3. See Figure 7. Remove protective paper (6) from foam tape (5) on back of light engine (1).

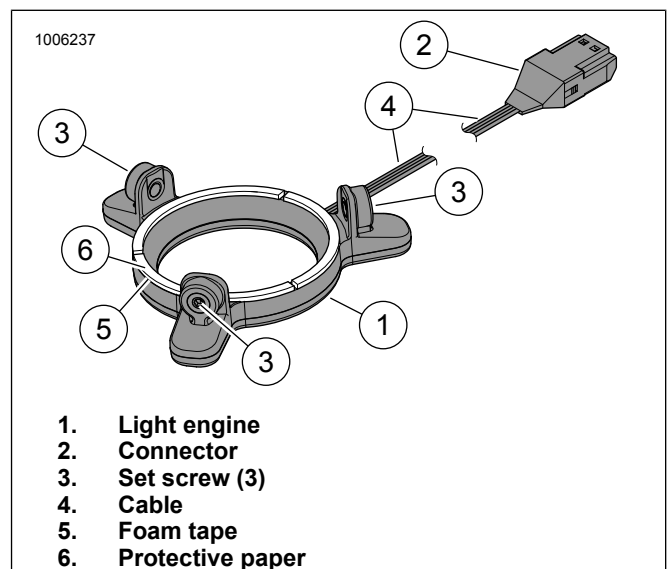


Figure 7. LED Light, Round Stage II Speaker

4. **NOTE**
- Wipe clean the mounting surface area of the tweeter.
 - Orient light engine so cable (4) is near a leg on the tweeter bridge that is near the speaker wires.
 - The left light engine should be positioned on the tweeter so that the cable exits at the 1 o'clock position and the right light engine cable exits at the 11 o'clock position.

See Figure 8. Place light engine (1) on tweeter (2) as shown. Lightly compress light engine in place.

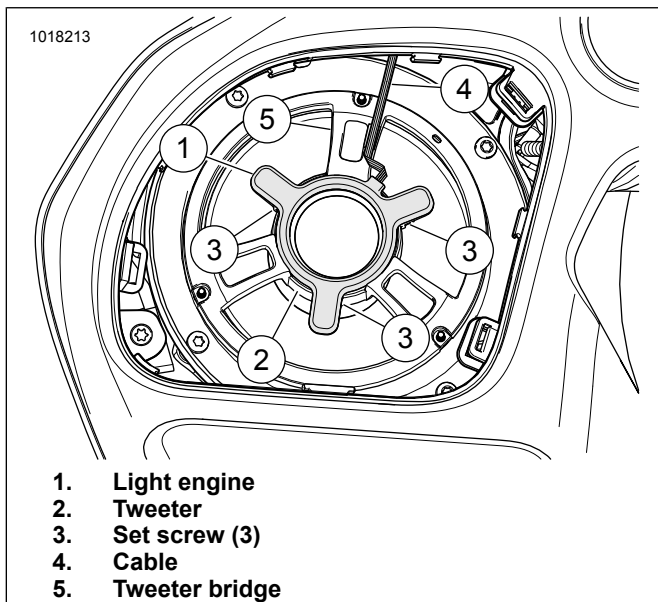
5. **NOTE**
DO NOT over tighten set screws. Over tightening may cause unit damage, tweeter bridge damage, or may render the unit inoperable.

Use the wrench provided. Slowly tighten each set screw (3), alternating one turn at a time, until each set screw just makes contact with tweeter bridge (5). Once all screws make contact with bridge, tighten each screw an additional ¼-½ turn. This should hold the light engine in place without over-flexing light engine housing.

6. **NOTE**

The left light engine cable exits at the 1 o'clock position and the right light engine cable exits at the 11 o'clock position.

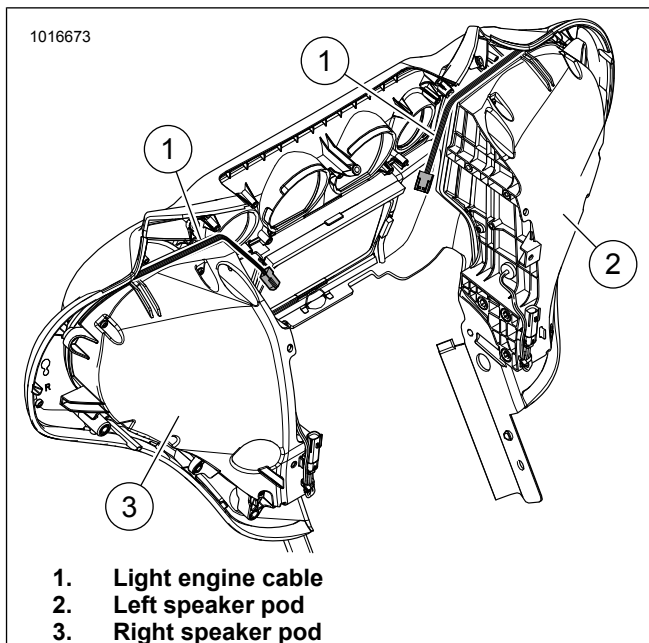
Fold cable (4) as needed to align with bridge leg. Route cable toward the top of the speaker and exit cable toward the front of the vehicle (behind speaker pod). Secure to bridge leg with two-sided tape from kit. Route cable and harnesses toward steering head.



- 1. Light engine
- 2. Tweeter
- 3. Set screw (3)
- 4. Cable
- 5. Tweeter bridge

Figure 8. FLTR Left Fairing Speaker

- 7. See Figure 9. Route light engine cable (1) as shown.
 - a. See Figure 28. and Table 1. Join connectors from the light engine to RGB three-way wire harness (8).
 - b. Stabilize the connectors, secure light engine cable and RGB harness with cable straps as needed.
 - c. Route three-way wire harness toward steering head.



- 1. Light engine cable
- 2. Left speaker pod
- 3. Right speaker pod

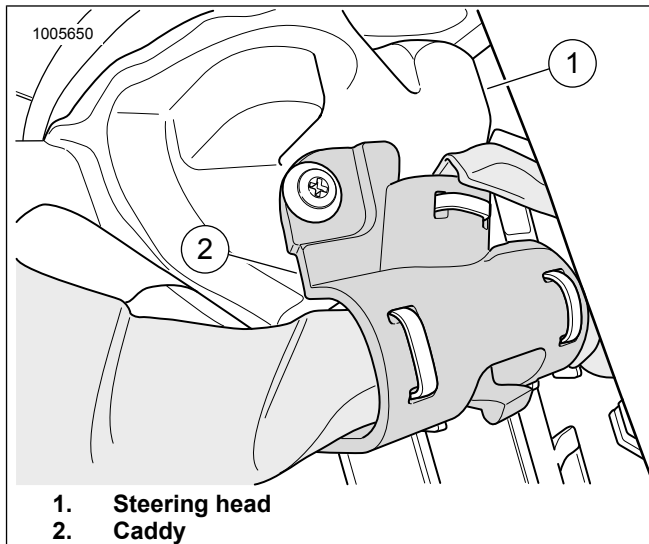
Figure 9. FLH Fairing Shown, FLTR Cable Routing is Similar

8. **NOTE**

See Instruction Sheet J06266, Spectra Glo Controller and Remote FOB, for installing multiple RGB products.

See Figure 28. and Table 1. Connect and route 48-in. harness (12) from LED R/G/B controller through the wire trough and up the back bone.

- 9. See Figure 10. Route end of 48-in. harness to steering head (1). Use caddy (2) to secure harness.



- 1. Steering head
- 2. Caddy

Figure 10. Steering Head

- 10. See Figure 28. and Table 1. Route light engine harness from speaker to steering head and connect to the 48-in. harness (12) at steering head using 3-way harness (8).
- 11. Bundle the harnesses from the controller and speakers. Secure the harnesses with cable straps.
- 12. Repeat steps for opposite speaker.

13. Install outer fairing and speaker grille. See the service manual.

Lower Fairing

NOTE

Stage II RGB light kit **DOES NOT** fit Twin-Cooled fairing lowers.

1. If Controller Kit (Part No. 68000218) is not installed, install one now following instructions in that kit.

2.

NOTE

Use caution when working with tweeters and grilles. These components are delicate and can be damaged if mishandled.

See service manual. Remove lower fairing speakers. Retain hardware for installing speakers.

3. See service manual. Remove lower fairing cap.

4.

NOTE

Do not tear gasket, the hidden screw will back out of the "X" created with the hobby knife.

See Figure 11. and Figure 12. Locate hidden screw (4) under foam. carefully make a small "X" with a hobby knife over the screw.

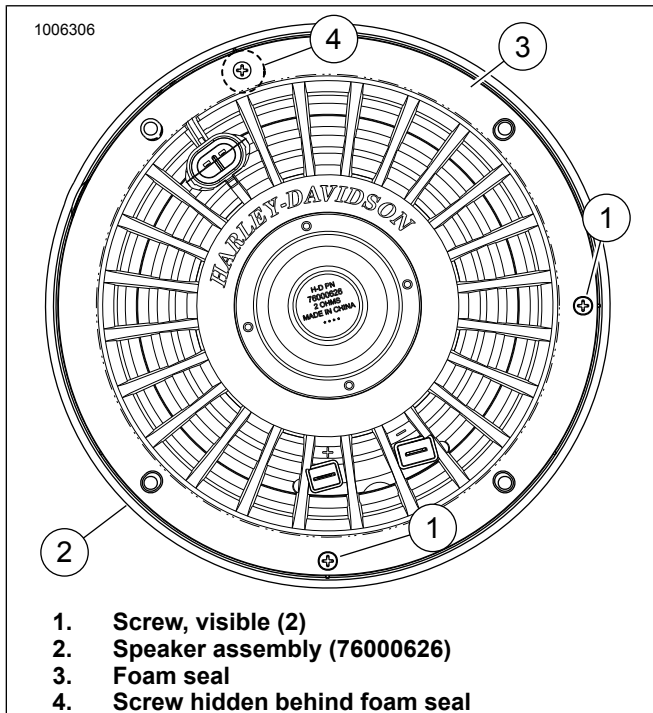


Figure 11. Left Stage II Speaker Assembly

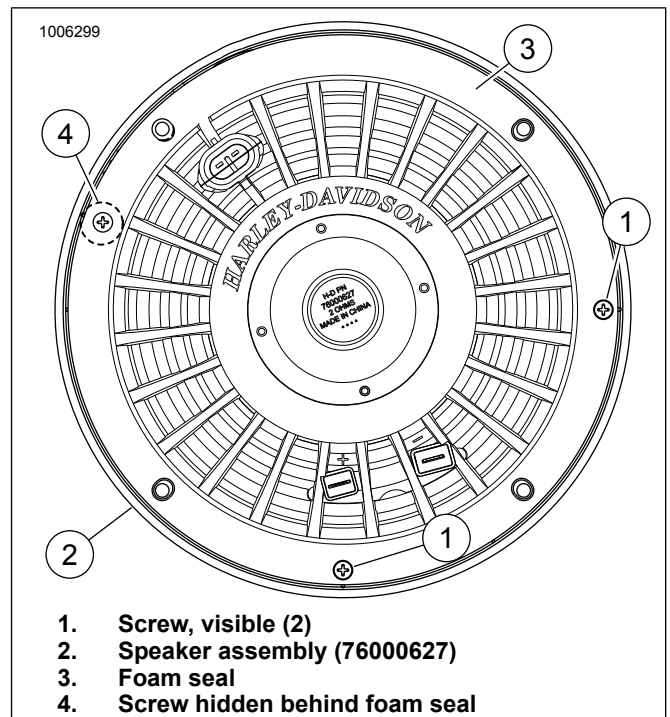


Figure 12. Right Stage II Speaker Assembly

5. See Figure 13. Remove the three screws that hold the tweeter bridge (5) to the speaker grille (6) and carefully separate the two. Use caution as not to damage or stress the tweeter speaker wires. Retain hardware for later use.

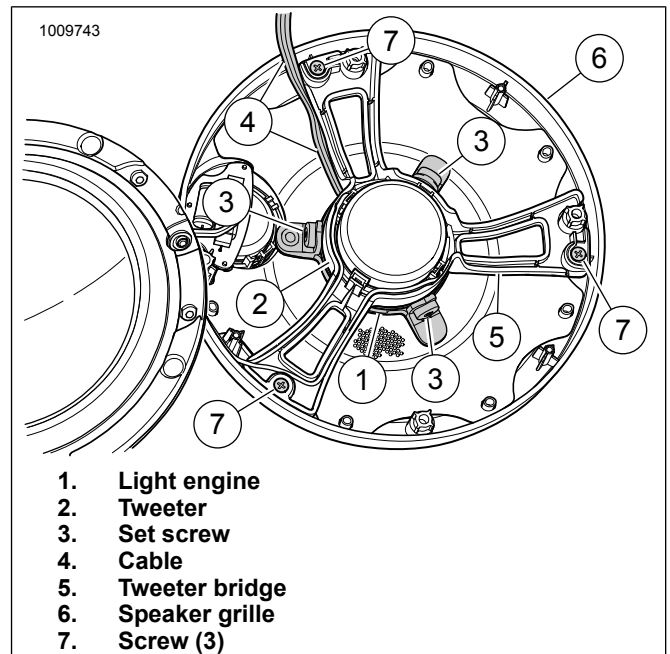


Figure 13. Speaker Grille, Tweeter Bridge and LED Light

6. See Figure 14. Remove protective paper (6) from foam tape (5) on back of light engine (1).

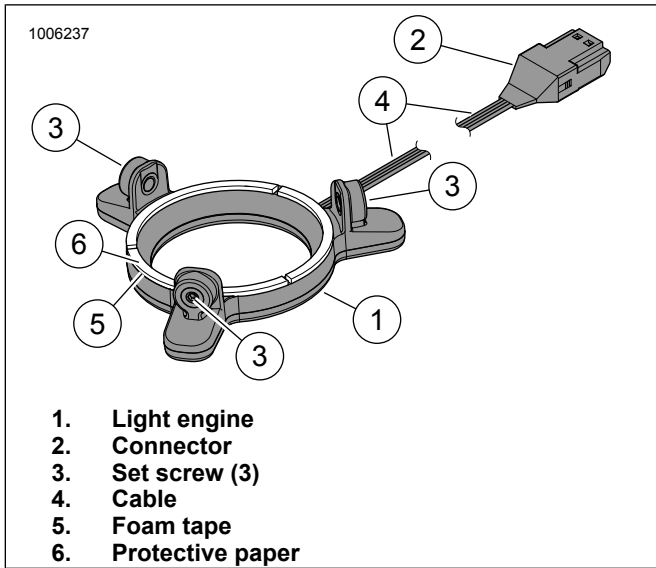


Figure 14. LED Light, Round Stage II Speaker

7. **NOTE**

Wipe clean the mounting surface area of the tweeter.

See Figure 13. Place light engine (1) on tweeter (2) as shown. Lightly compress light engine in place.

8. **NOTE**

DO NOT over tighten set screws. Over tightening may cause unit damage, tweeter bridge damage, or may render the unit inoperable.

Use the wrench provided. Slowly tighten each set screw (3), alternating one turn at a time, until each set screw just makes contact with tweeter bridge (5). Once all screws make contact with bridge, tighten each screw an additional 1/4-1/2 turn. This should hold the light engine in place without over-flexing light engine housing.

9. Route the cable (4) along tweeter bridge leg. Using the tape in kit, cut to length and secure cable to back of tweeter bridge.

10. See Figure 15. Put tweeter assembly and speaker (1) together. Align holes for screws (5).

11. Install screws and tighten.

12. Connect light cable.

- a. Join connectors (4) from the light engine (3) to RGB harness (6).
- b. Route light engine cable (3) along the back of the speaker (1) as shown. To stabilize the connectors (4), secure light engine cable (3) and RGB harness (6) with cable straps (2) as shown.
- c. Install additional cable straps as needed to support the light cable and connector.

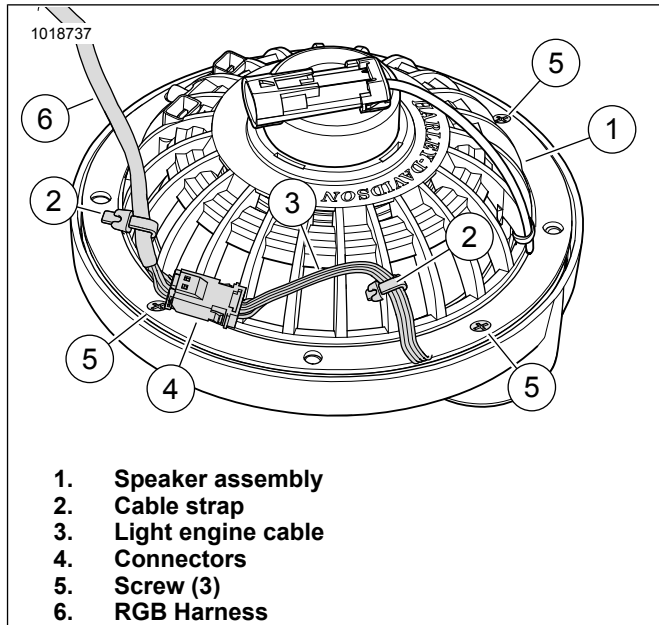


Figure 15. Speaker Back, Cable and Cable Strap

13. See Figure 16. Remove speaker wire grommet (1) from lower fairing.

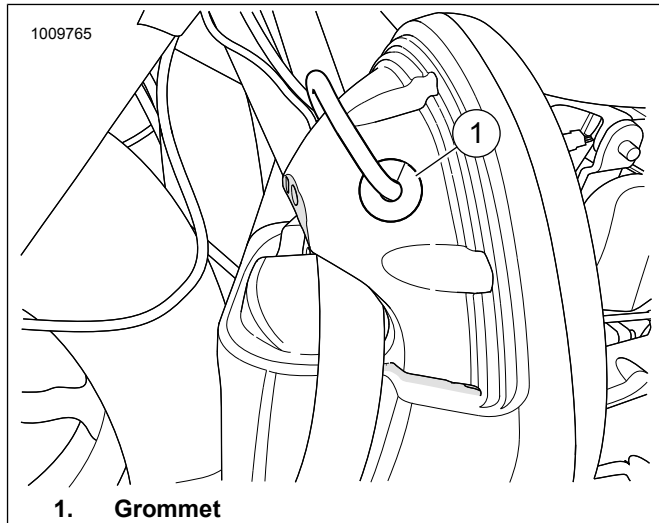


Figure 16. Lower Fairing Shown

14. See Figure 28. and Table 1. Route male end of harness (7) through hole of lower fairing.

15. Spread open grommet and insert harness.

16. Press the grommet into the hole by first starting one tapered edge of the grommet into the hole. Correctly installed the outside of the grommet should seat against the fairing. Press around the perimeter of the grommet to seat it in place.

17. Install speaker in lower fairing.

- a. Connect the two harnesses.
- b. Connect speaker wires to speaker and position in speaker box.

c. Install grille and screws for speaker.

18. Route harness toward the frame using the engine guard.

19. See service manual. Install fairing cap.

20. Repeat previous steps to install light engine to other fairing lower speaker.

21. Route controller and light kit connectors and harnesses.

22. **NOTE**

See *Instruction Sheet J06266, Spectra Glo Controller and Remote FOB*, for installing multiple RGB products.

Bundle the harnesses from the controller and speakers. Secure the harnesses with cable straps.

Tour-Pak®

1. If Controller Kit (Part No. 68000218) is not installed, install one now following instructions in that kit.

2. **NOTE**

Use caution when working with tweeters and grilles. These components are delicate and can be damaged if mishandled.

See service manual. Remove Tour-Pak speakers. Retain hardware for later use.

3. **NOTE**

Do not tear gasket. The hidden screw will back out of the "X" created with the hobby knife.

See Figure 17. and Figure 18. Locate hidden screw (4) under foam. Carefully make a small "X" with a hobby knife over the screw.

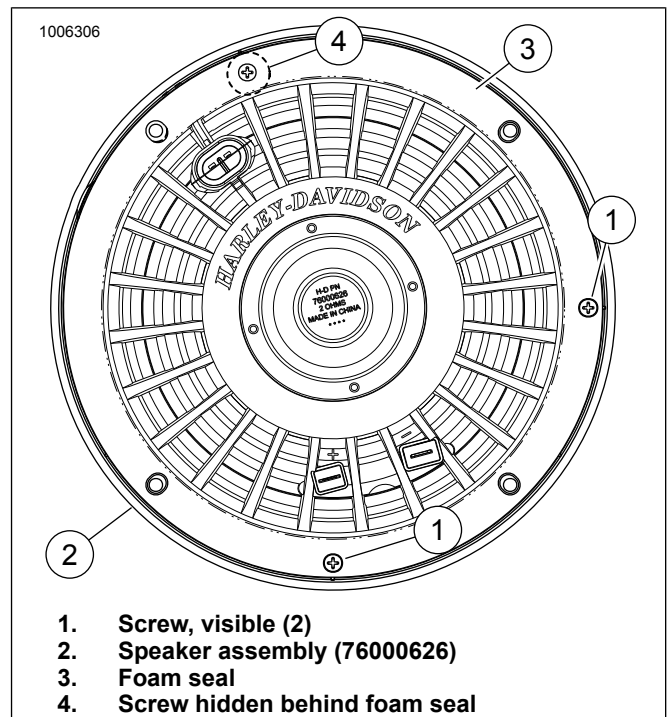


Figure 17. Left Stage II Speaker Assembly

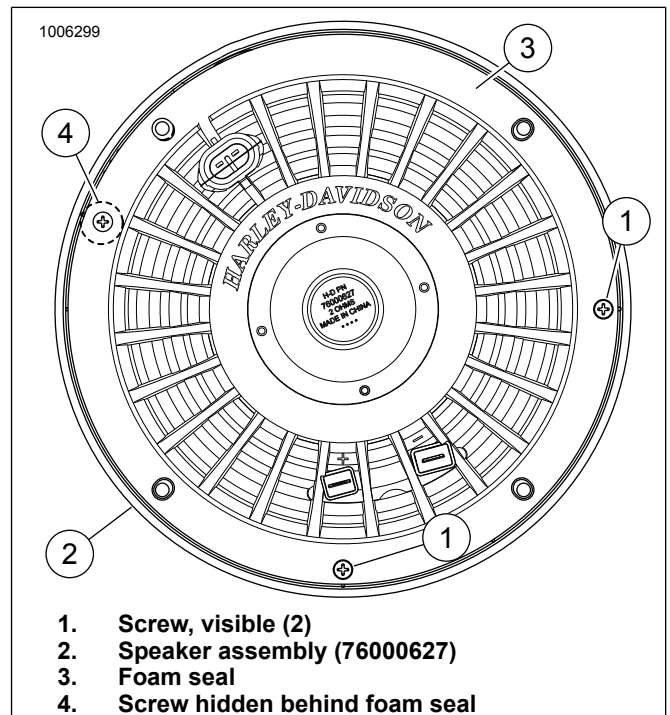


Figure 18. Right Stage II Speaker Assembly

4. See Figure 19. Remove the three screws that hold the tweeter bridge (5) to the speaker grille (6) and carefully separate the two. Use caution as not to damage or stress the tweeter speaker wires. Retain hardware for later use.

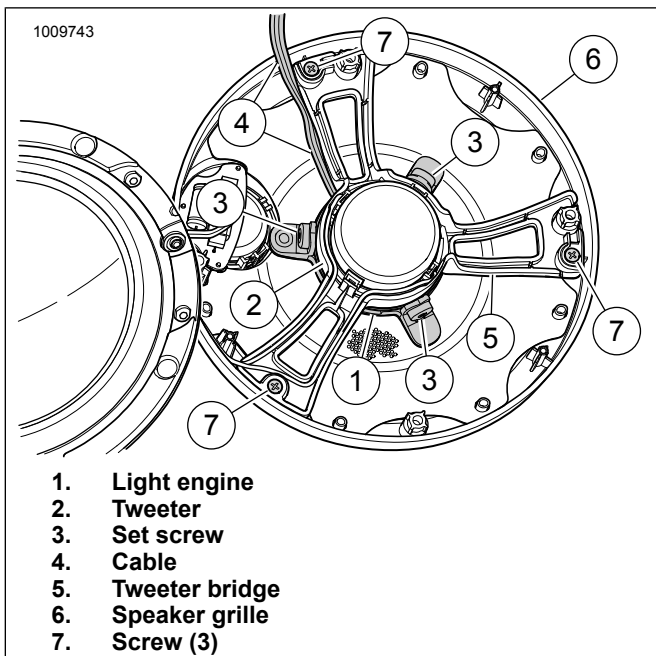


Figure 19. Speaker Grille, Tweeter Bridge and LED Light

5. See Figure 20. Remove protective paper (6) from foam tape (5) on back of light engine (1).

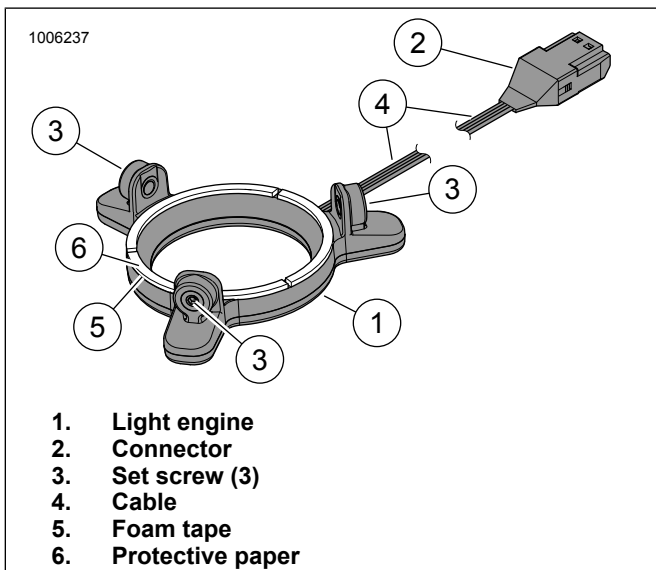


Figure 20. LED Light, Round Stage II Speaker

6. **NOTE**
Wipe clean the mounting surface area of the tweeter.

See Figure 19. Place light engine (1) on tweeter (2) as shown. Lightly compress light engine in place.

7. **NOTE**
DO NOT over tighten set screws. Over tightening may cause unit damage, tweeter bridge damage, or may render the unit inoperable.

Use the wrench provided. Slowly tighten each set screw (3), alternating one turn at a time, until each set screw just makes contact with tweeter bridge (5). Once all screws make contact with bridge, tighten each screw an additional ¼-½ turn. This should hold the light engine in place without over-flexing light engine housing.

8. Route the cable (4) along tweeter bridge leg. Using the tape in kit, cut to length and secure cable to back of tweeter bridge.
9. See Figure 21. Assemble tweeter (4) and speaker (1) assemblies. Align holes for screws (5).
10. Install screws and tighten.
11. Connect light cable.
 - a. Join connectors (4) from the light engine (3) to RGB harness (6).
 - b. Route light engine cable (3) along the back of the speaker (1) as shown. To stabilize the connectors (4), secure light engine cable (3) and RGB harness (6) with cable straps (2) as shown.
 - c. Install additional cable straps as needed to support the light cable and connector.

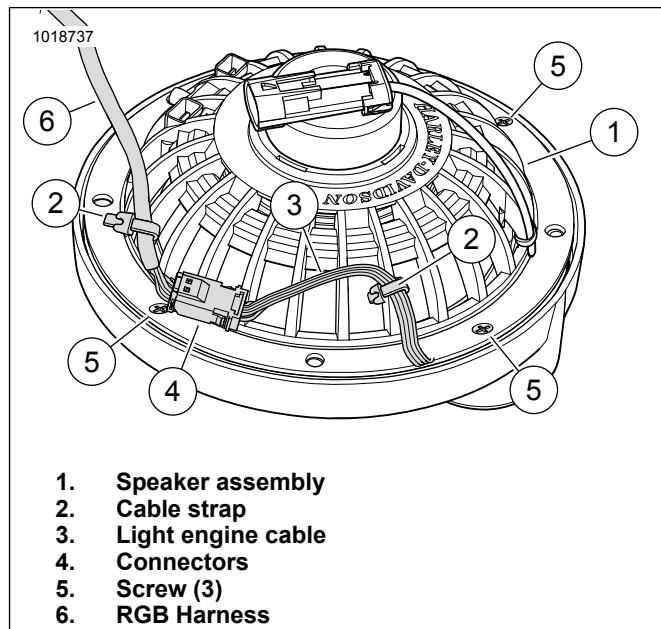


Figure 21. Speaker Back, Cable and Cable Strap

12. See Figure 22. Remove existing grommet from speaker pod (1) and insert new harness (3) into existing grommet (4) with harness.
13. Insert the male end of the harness (3) with grommet. Press the grommet (4) into the hole by first starting one tapered edge of the grommet into the hole. Correctly installed the outside of the grommet should seat against the outside of the speaker pod. Press around the perimeter of the grommet to seat it in place.

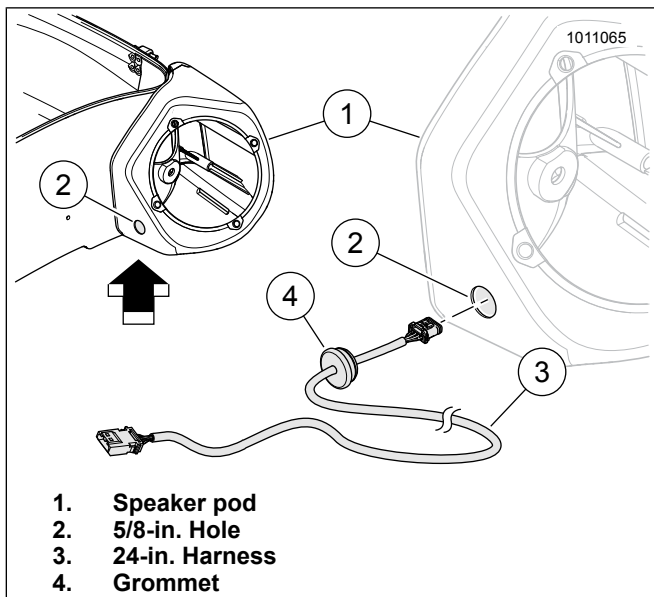


Figure 22. Left Speaker Pod

14. Repeat previous steps to remove speaker and install light engine.

15. Route controller, light kit connectors and harnesses.

16. **NOTE**

See Instruction Sheet J06266, Spectra Glo Controller and Remote FOB, for installing multiple RGB products.

Bundle the harnesses from the controller and speakers. Secure the harnesses with cable straps.

17. See the service manual. Install speakers.

Tri Glide® Trike

1. If Controller Kit (Part No. 68000218) is not installed, install now following instructions in that kit.

2. **NOTE**

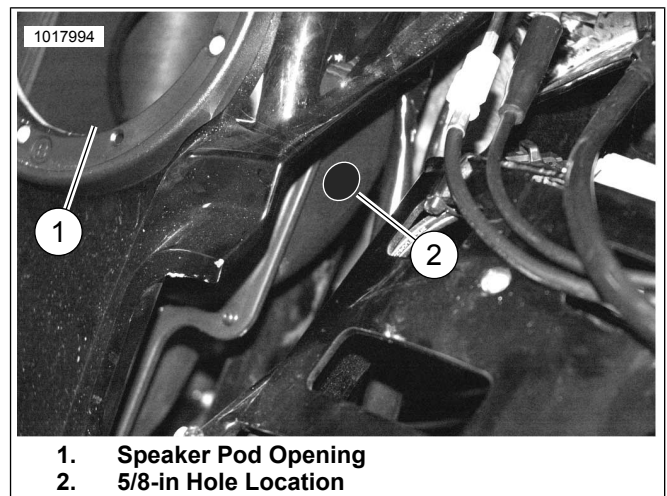
Use caution when working with tweeters and grilles. These components are delicate and can be damaged if mishandled.

Remove screws and body speakers. Retain hardware for later use.

3. **NOTE**

Drill a 1/8 in pilot hole.

See Figure 23. From within the speaker pod opening (1), drill a 5/8 in (16 mm) hole (2) in general area of the flat surface.



1. Speaker Pod Opening
2. 5/8-in Hole Location

Figure 23. Hole Location

4. Deburr holes as needed and clean speaker pods from residual cutting material.

5. **NOTE**

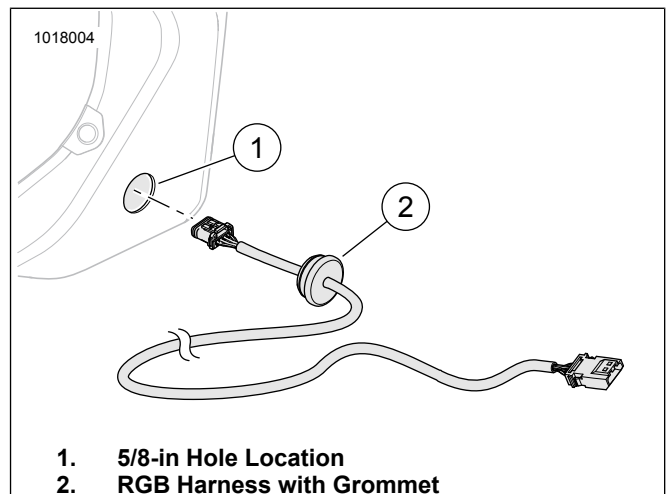
Tapered edge of the grommet faces the male end of the harness.

See Figure 28. and Table 1. Slide the grommet about 6 in (15 cm) from the male end of the harness (10).

6. **NOTE**

Tapered edge of the grommet faces the inside of the speaker pod when installed.

See Figure 24. From the inboard side of the speaker pod, insert the male end of the harness with grommet (2). Press the grommet into the 5/8 in (16 mm) hole (1) by first starting one tapered edge of the grommet into the hole. Correctly installed the outside of the grommet should seat against the outside of the speaker pod. Press around the perimeter of the grommet to seat it in place.



1. 5/8-in Hole Location
2. RGB Harness with Grommet

Figure 24. RGB Harness Installation

7. See Figure 25. Remove protective paper (6) from foam tape (5) on back of light engine (1).

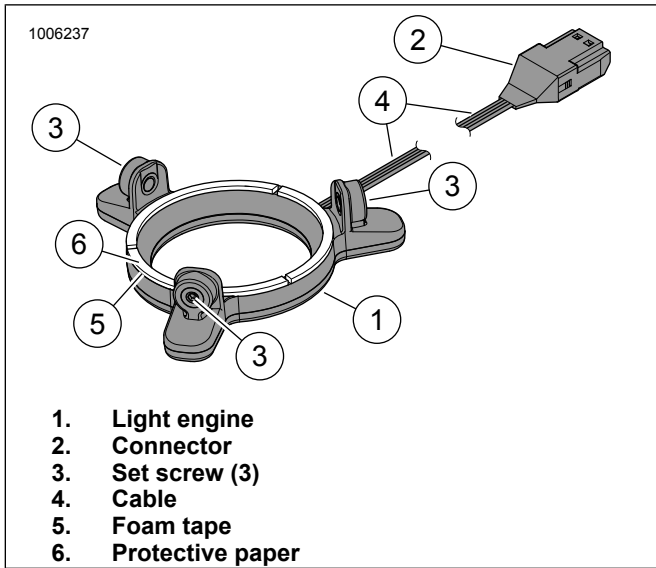


Figure 25. LED Light, Round Stage II Speaker

8. **NOTE**
Wipe clean the mounting surface area of the tweeter.

See Figure 26. Place light engine (1) on tweeter (2) as shown. Lightly compress light engine in place.

9. **NOTE**
DO NOT over tighten set screws. Over tightening may cause unit damage, tweeter bridge damage, or may render the unit inoperable.

Use the wrench provided. Slowly tighten each set screw (3), alternating one turn at a time, until each set screw just makes contact with tweeter bridge (5). Once all screws make contact with bridge, tighten each screw $\frac{1}{4}$ - $\frac{1}{2}$ turn clockwise. This should hold the light engine in place without over-flexing light engine housing.

10. Route the cable (4) along tweeter bridge (5) leg. Using the tape in kit, cut to length and secure cable to back of tweeter bridge.

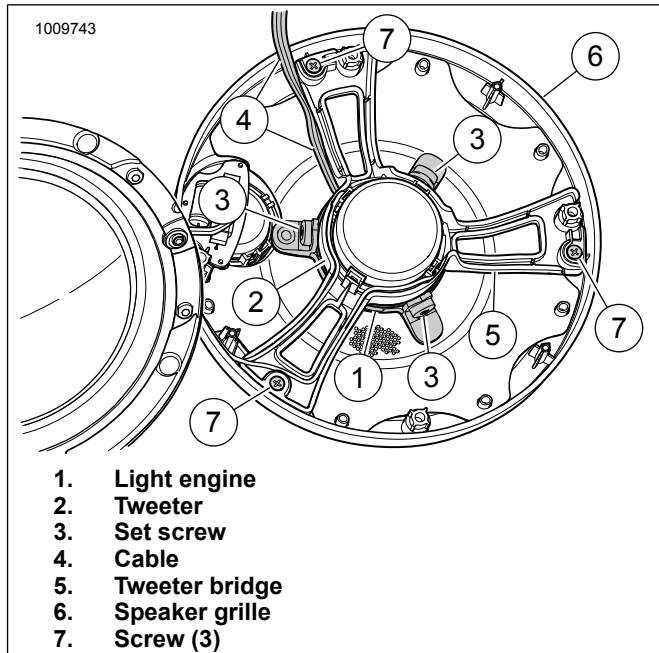


Figure 26. Speaker Grille, Tweeter Bridge and LED Light

11. See service manual. Install body speaker.

- a. See Figure 27. Join connectors (4) from the light engine (3) to RGB harness (6).
- b. Route light engine cable (3) along the back of the speaker (1) as shown. To stabilize the connectors (4), secure light engine cable (3) and RGB harness (6) with cable straps (2) as shown.
- c. Connect speaker wires to speaker and position in speaker pod.
- d. Install grille and screws (5) for speaker.

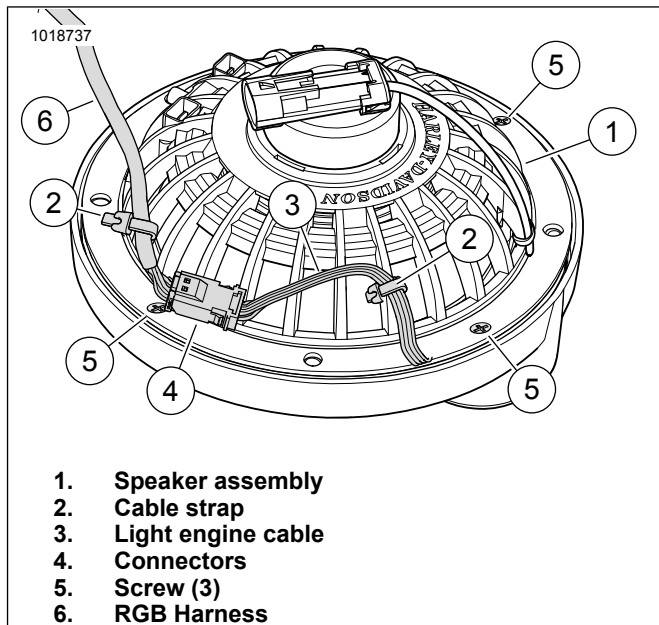


Figure 27. Speaker Back, Cable and Cable Strap

12.

NOTE

See Instruction Sheet J06266, Spectra Glo Controller and Remote FOB, for installing multiple RGB products.

13. Bundle the harnesses from the controller and speakers. Secure the harnesses with cable straps.

See Figure 28. and Table 1. Connect and route 48-in. harness (12) from LED R/G/B controller toward the body speakers. Connect 3-way harness (8) to speaker connections.

14. Repeat steps for the opposite speaker.

SERVICE PARTS

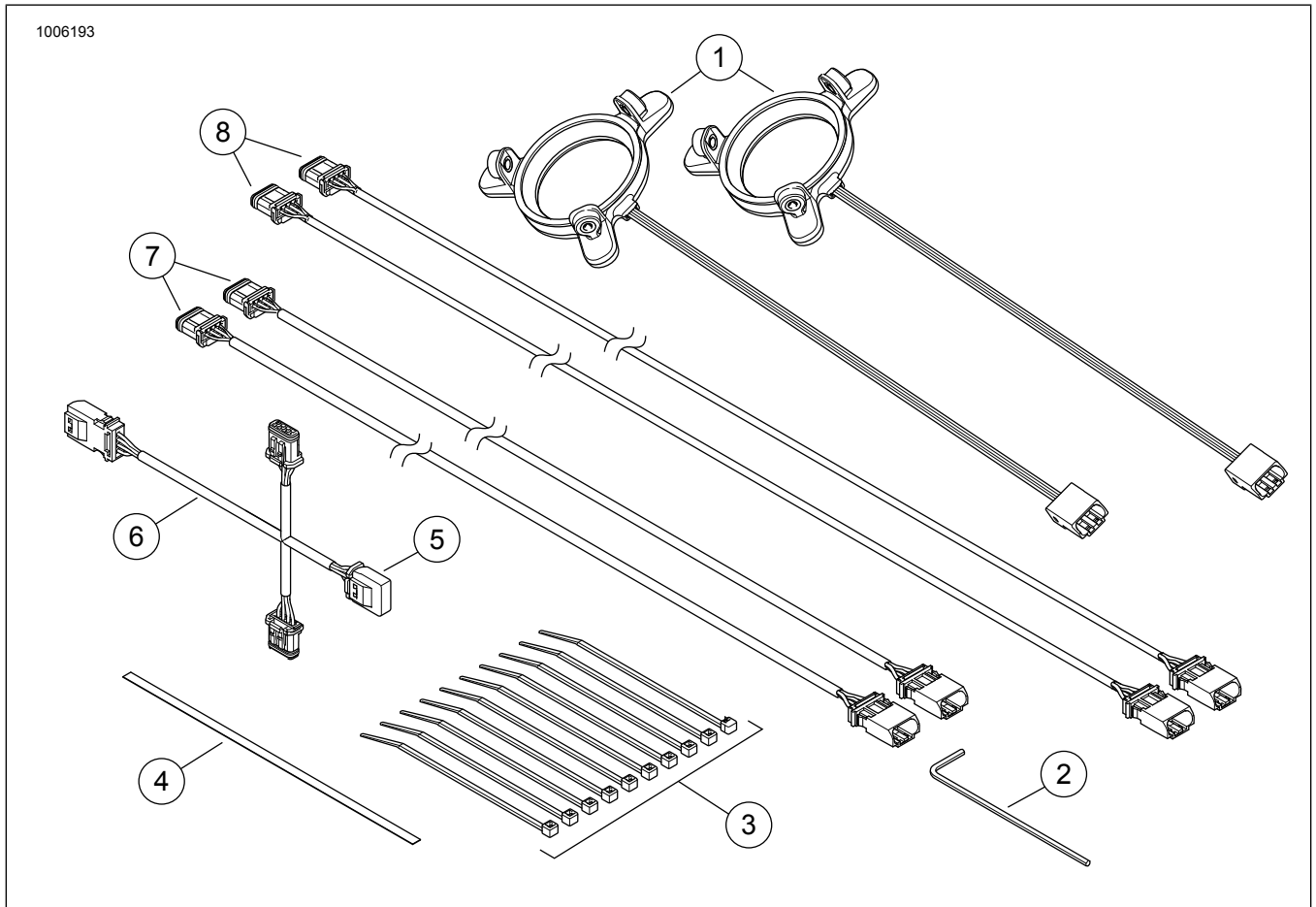


Figure 28. Service Parts, Stage II Round Speaker R/G/B/ LED Light Kits

SERVICE PARTS

Table 1. Service Parts Table

Kit	Item	Description (Quantity)	Part Number
68000231	1	Light, round, stage II, LED, R/G/B, (2)	68000210
	2	Wrench, hex, 2mm	Not sold separately
	3	Cable strap (10)	10126
	4	Tape, two sided, 6 in	Not sold separately
	5	End cap	6920197
	6	Wire harness, three-way	69201594
	7	Wire harness, 24 in (2)	69201530
	8	Wire harness, 48 in (2)	69201625

SPECTRA GLO LOAD CALCULATION INFORMATION

The Spectra Glo system is limited to 3000 mA. Use the following table to determine the total current draw of the desired

configuration. Calculate the total current draw by multiplying the number of kit(s) (each line) by the provided current draw. Sum all totals. The value should be less than or equal to 3000 mA. The following example describes how to calculate total system load.

Table 2. Calculator Example of Spectra Glo Kits

Kit Name	Kit Part Number	Number of Kits	Current mA	Total
Rider Footboards	50500492	1	500	500
Passenger Footboards	50500495	1	350	350
Fairing Vent	68000194		275	
Speaker Lights (Stage I)	68000232		125	
Speaker Lights (Stage II Round)	68000231	1	125	125
Speaker Lights (Stage II Saddle Bag)	68000233		125	
Base Light Pods (6)	68000213	2	450	900
Expansion Light Pods (4)	68000214	1	300	300
* System Total must be 3000 mA or less.			System Total =	2175

Table 3. Spectra Glo RGB Accessory Calculator

Kit Name	Kit Part Number	Number of Kits	Current mA	Total
Rider Footboards	50500492		500	
Passenger Footboards	50500495		350	
Fairing Vent	68000194		275	
Speaker Lights (Stage I)	68000232		125	
Speaker Lights (Stage II Round)	68000231		125	
Speaker Lights (Stage II Saddle Bag)	68000233		125	
Base Light Pods (6)	68000213		450	
Expansion Light Pods (4)	68000214		300	
* System Total must be 3000 mA or less.			System Total =	

Table 4. Spectra Glo RGB Accessories

Accessories	Part Number
Remote	68000217
JAЕ Cap	69201597
Y Harness (3-way)	69201594
3-in Jumper Harness	69201525
8-in Jumper Harness	69201529
24-in Jumper Harness	69201530
24-in Jumper w/grommet	69201595
48-in Jumper Harness	69201625