



INSTRUCTIONS

-J06395

REV. 2016-03-17

BOOM! AUDIO CRUISER AMP AND SPEAKER KIT

GENERAL

Kit Numbers

76000635, 76000636

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 through 2016 Road King® (FLHR) models require separate purchase of, Part Number 69200722.

2017 Road King (FLHR) models require separate purchase of a electrical connection kit, Part Number 69201599.

2010 and later Softail, 2011 and later Dyna, 2014 and later XL models require separate purchase of electrical connection kit, Part Number 72673-11.

If also installing a Boom! Audio Cruiser Amp and Speaker Expansion Kit, connect both front and rear speakers to the electrical connection kit at the same time. If removable rear system is desired, separate purchase and installation of additional parts are required. See speaker expansion kit for details.

Bluetooth® operation does not require use of 1/8-inch (3.5 mm audio connector.) Non-Bluetooth devices must be connected with an 1/8-inch (3.5 mm audio connector.) audio male to male jumper (available separately - part number 92383-09).

Loctite® 243 Medium Strength Threadlocker and Sealant - Blue (Part No. 99642-97) is required for proper installation of this kit.

NOTES

A Boom! Audio Tank Pouch (Part Number 91003-10) can be used to secure a **solid-state** portable audio player.

DO NOT secure a portable audio player with a **hard drive memory** on or to the vehicle.

For best sound quality, an installed windshield is recommended.

An UltraTorch UT-100 (Part Number HD-39969), Robinair Heat Gun (Part Number HD-25070) with Heatshrink Attachment (Part Number HD-41183), or other suitable radiant heating device is required for the proper installation of this kit.

Electrical Contact Lubricant (Part Number 99861-02) or equivalent is required after battery cable disconnection. This item is available from a Harley-Davidson dealer.

⚠ WARNING

The rider's safety depends 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. (00333a)

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

NOTICE

It is possible to overload your 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. See an authorized Harley-Davidson dealer for advice about the amount of current consumed by additional electrical accessories or for necessary wiring changes. (00211c)

⚠ 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)

The speakers installed with this kit require up to **4 amps** more current from the electrical system.

Kit Contents

See Figure 7 and Table 2.

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 fuse.
2. See the service manual. Remove seat. Retain the seat and all mounting hardware.

EFI Models:

WARNING

To prevent spray of fuel, purge system of high-pressure fuel before supply line is disconnected. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00275a)

1. See the service manual. Purge and disconnect fuel supply line.

For ALL Vehicles With Main Circuit Breaker:

WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect negative (-) battery cable before proceeding. (00048a)

1. See the service manual. Remove seat.
2. See the service manual. Disconnect the negative (black) battery cable from the negative (-) battery terminal. Retain all seat mounting hardware.
3. **ALL models:** Turn ignition switch OFF.
4. See the service manual. Remove windshield. Protect the windshield from scratches during removal and installation, and while off the vehicle.

For Carbureted Models:

WARNING

Gasoline can drain from the carburetor fuel line when disconnected from fuel valve fitting. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. Wipe up spilled fuel immediately and dispose of rags in a suitable manner. (00256a)

1. Turn the fuel supply valve OFF. Remove the fuel line from the valve.

ALL models:

WARNING

When servicing the fuel system, do not smoke or allow open flame or sparks in the vicinity. Gasoline is extremely flammable and highly explosive, which could result in death or serious injury. (00330a)

1. See the service manual. Remove the instrument console (if equipped) from the fuel tank.
2. See the service manual. Remove fuel tank.
3. **For Road King models only:** Remove the handlebar cover from the vehicle. Separate the left and right nacelle halves. Remove the headlamp assembly per service manual instructions.

INSTALLATION

Electrical Connection

1. **2017 Road King and Freewheeler models only:** Install power, ground and accessory/ignition to electrical connection kit (purchased separately). Locate connector [325] on vehicle. Install connector per instructions in that kit. Splice and heatshrink wires from connection kit to speakers matching colors. Splice inline fuse holder to red/blue wire.
2010 and later Softail, 2011 and later Dyna, 2014 and later XL models: Install power, ground and accessory/ignition to electrical connection kit (purchased separately). Locate connector [91A] on vehicle. Install

connector per instructions in that kit. Splice and heatshrink wires from connection kit to speakers matching as: black to black, red/yellow to violet/blue, red/blue to inline fuse holder.

2009-2013 Road King, 2006-2011 Dyna, 2000-2010 Softail, 2004-2013 XL models only: Crimp ring terminal from kit to black wire. Install to negative battery terminal. Crimp ring terminal to the other end of the fuse holder and connect to positive battery terminal. Locate orange/white at the rear lighting connector. cut and splice it to violet/blue wire.

2. **All models:** Install the 10A fuse into the inline fuse holder.
3. If a rear speaker expansion system will be installed follow those instructions. Install that system now.

Hand Control Installation

1. See Figure 7. Choose the appropriate hand control base and spacer for your application.

NOTE

Failure to properly clean surface will result in poor adhesion and possible loose hand control.

2. See Figure 1. Clean with a mixture of 50-70 percent isopropyl alcohol and 30-50 percent distilled water.
Cut tape (1) and apply on hand control base (2 or 3) in locations shown.

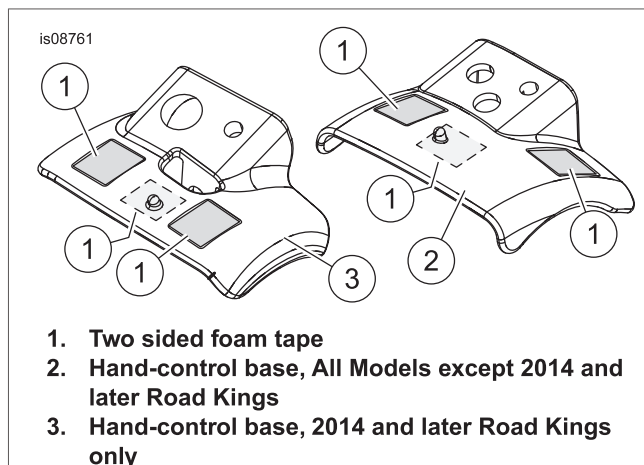


Figure 1. Hand-Control Base and Tape

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

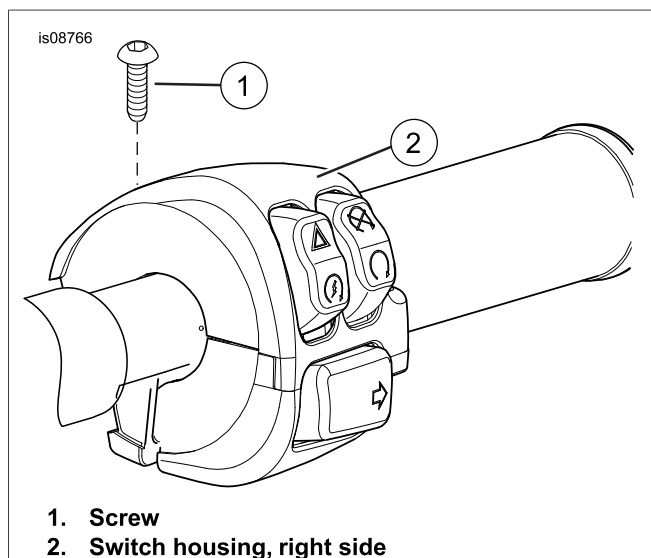


Figure 2. Screw and Switch Housing

3. See Figure 2. Remove screw (1) from right side switch housing (2). **2014 and later Road King models:** Retain screw for later use. **All other models:** Discard screw.
4. See Figure 3. Align the spacer selected earlier with the correct hole (2 or 3).

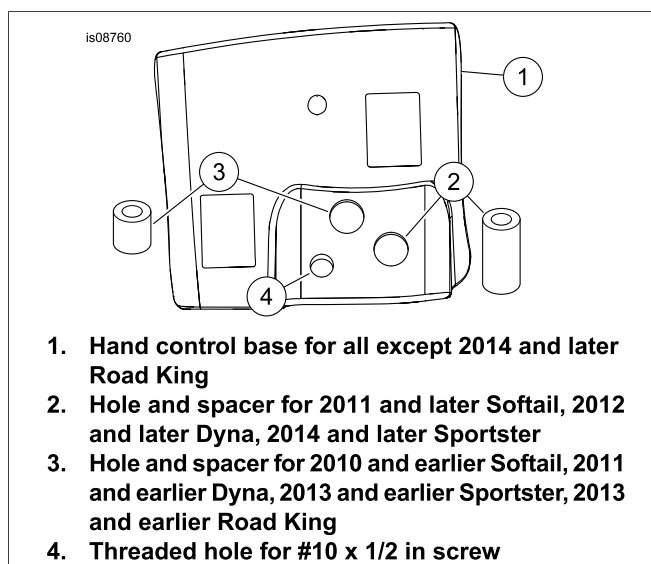


Figure 3. Hand-Control Base and Spacers

5. See Figure 4. Set spacer (1) on switch housing over the hole where the screw was removed earlier.
6. Set hand control base (3) over spacer and switch housing. **2014 and later Road King models:** No spacer is used.
7. **All models except 2014 and later Road King:** Align screw (4) with correct hole in hand control base, through spacer into hole on switch housing.
Secure hand control bracket with screw. Tighten to 35-45 **in-lbs** (3.9-5.0 Nm).
2014 and later Road King models: Align screw removed earlier with hole in hand control base.
Secure hand control bracket with screw. Tighten to 35-45 **in-lbs** (3.9-5.0 Nm).
8. Set hand control (5) onto hand control base.

Secure hand control base with screw (6) into threaded hole (7). Tighten to 35-45 **in-lbs** (3.9-5.0 Nm).

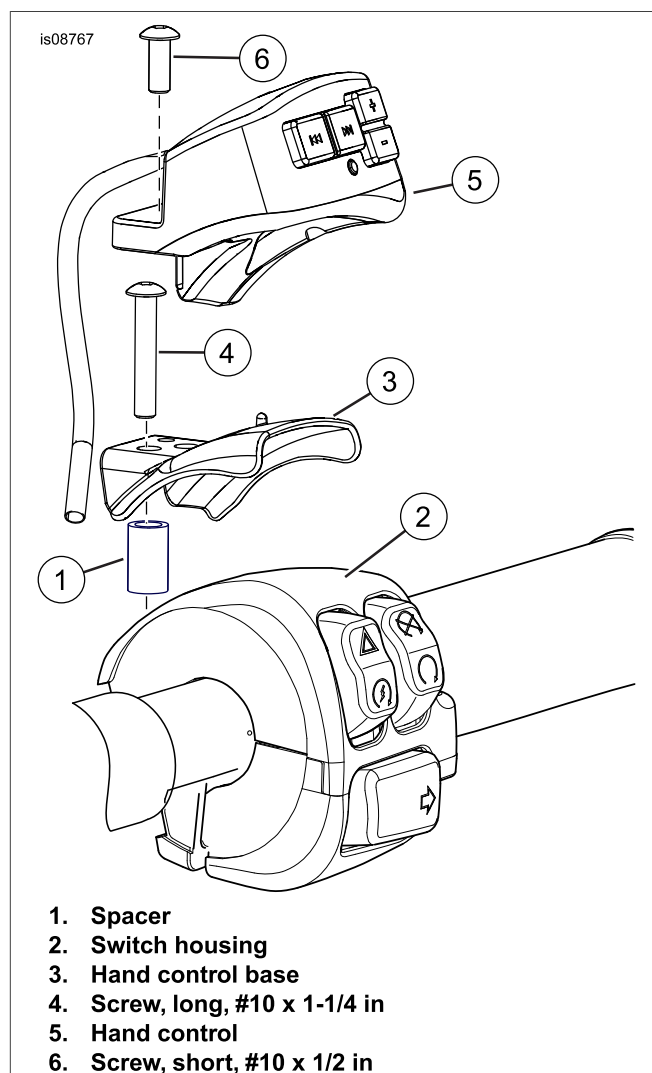


Figure 4. Hand Control Installation

Speaker Installation

NOTES

Test-fit to determine the desired location for the speaker pods on the handlebar.

- See Figure 5. Mount the speakers as shown. Position the speaker clamps (4) so the speakers are inside the handlebar. Position the speakers symmetrically to the left and right of the handlebar clamp, and be placed low and as close to the center as possible.
- See Figure 7. The speaker pod (2) with **five** electrical connectors mounts on the **brake** side of the handlebar. The speaker pod (1) with **one** electrical connector (1) mounts on the **clutch** side.
- If the vehicle is normally equipped with a windshield, position the speakers symmetrically to the left and right of the handlebar clamp, and be placed low and as close to the center as possible.

NOTE: For best sound quality, an installed windshield is recommended.

- Check to make sure that speaker and clamp positioning does not interfere with steering function, control operation or visibility of instruments.

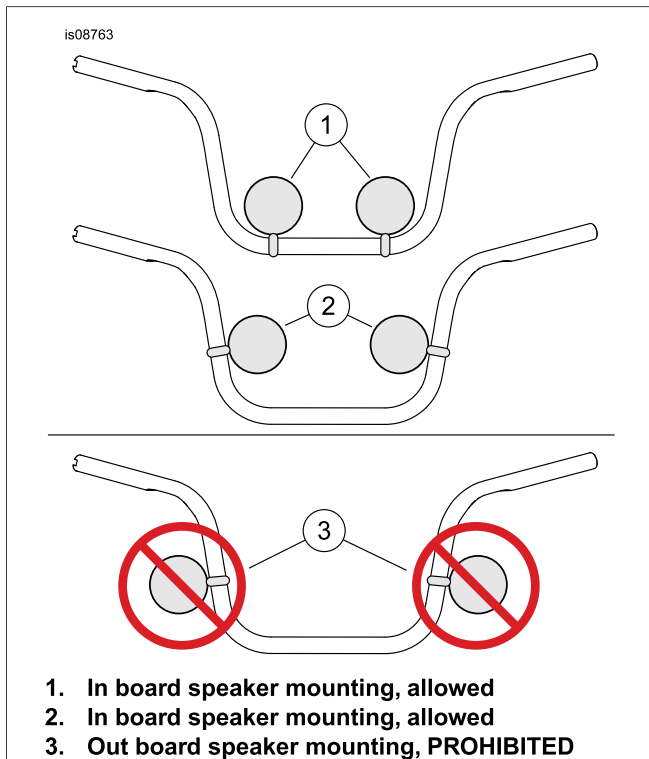


Figure 5. Speaker Location on Handlebar

If mounting to 1-1/4 in (31.8 mm) diameter handlebars, the spacers (12) can be discarded.

NOTE

Insert the spacers inside the clamps (14 and 11) for vehicles with 1.0 in (25.4 mm) diameter handlebars. Verify the spacers seat in the recesses inside the clamps.

1. See Figure 7. Place speakers in locations determined earlier. Some models may require relocating of the clutch cable.

Place a few drops of blue Loctite on all clamp screws (10 and 13). Secure speakers to handlebar using clamps (14 and 11) and screws (10).

Tighten screw (10) to 40-60 **in-lbs** (4.5-6.8 Nm).

Tighten screw (13) to 180-240 **in-lbs** (20-27 Nm).

Routing and Connections

1. Route the wires and connectors that join the two speakers together. Align the arrows on the connectors. Secure together using the threaded collar.
2. Connect the hand control to the mating connector on the right side speaker. Align the arrows on the connectors. Secure together using the threaded collar.
3. Route the remaining wires from the center of the handlebars to the trough.

4. If a rear speaker system has been installed connect it to the front speaker system now.
5. If the 1/8 in (3.5 mm) auxiliary connector IS going to be used, attach jumper. Route to desired location (see catalog for: magnetic tank pouch or phone mount). Secure in such a manner that does not interfere with dynamic movement or steering. If audio jack is used or disconnected frequently, place it in an accessible location.
If the 1/8 in (3.5 mm) auxiliary connector is not going to be used stow it now.

6. Secure wires with cable straps.

COMPLETION

1. **For Road King models only:** See the service manual and assemble the left and right nacelle halves. Assemble the handlebar cover to the vehicle.
2. **ALL models:** See the service manual, Install fuel tank.
3. Install the windshield (if equipped) to the vehicle per the instructions in the service manual or accessory kit. Make sure to protect the windshield and speaker pods from scratches during installation.

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)

4. Make sure the speaker pods do not interfere with steering function, controls operation or visibility of instruments.

NOTE

Verify that the ignition switch is in the **OFF** position **before** installing the main fuse or attaching the battery cable.

5. **Models with main fuse:** See the service manual. Install main fuse.

Models with main circuit breaker:

- a. **ALL models except XL Sportster:** See the service manual and attach the negative battery cable. Apply a light coat of petroleum jelly or corrosion retardant material to battery terminals.
 - b. **For XL Sportster models only:** See the service manual, and connect the negative battery cable at the engine crankcase.
6. See the service manual. Install seat. After installing seat, pull up on the seat to verify that it is secure.
 7. Turn the ignition switch to IGNITION, but do not start the motorcycle.

NOTE

DO NOT secure an audio player with a **hard drive memory** on or to the vehicle. Vehicle vibration can permanently damage the device.

Refer to the audio player instructions to determine if the device to be used has a hard drive memory.

OPERATION

See Figure 6.

Power ON/OFF:

1. While In standby mode (Ignition ON), press Play/Pause/Mute (5) on back of hand controller button to turn on the system
2. Press and hold the Play/Pause/Mute button for 3 seconds to turn off.
3. System will also turn ON/OFF with the ignition switch based on its last power state.

Bluetooth and Auxiliary Audio Mode Switching:

1. The default mode for the system is Bluetooth.
2. System will automatically switch to Auxiliary mode when a male plug is inserted into the 1/8 (3.5mm) audio jack.

NOTE

System will not operate in Bluetooth mode when a male plug is inserted into the 1/8 (3.5mm) audio jack

Bluetooth Pairing to your Device:

NOTE

Verify the 1/8 (3.5mm) audio jack is not connected to the system during the pairing mode.

1. While in Bluetooth mode (indicated by a slow flashing blue LED), press Play/Pause/Mute (5) and volume down (4) button together. Hold for 2 seconds, until audible tone.
2. Blue LED indicator will flash rapidly signifying Bluetooth pairing mode. System shall be discovered on device as BOOM! AUDIO. Enter the passcode "1234" on the device.
3. Once successfully paired, the system emits an audible tone and the blue LED remains on.
4. The system pairs with only one device at a time. To pair to a different device, repeat above steps for each new Bluetooth connection.
5. Once paired, your smart phone device should automatically connect to the system.

NOTE

Certain smartphones will not automatically connect and require user to select device connection.

Receiving a call in Bluetooth mode:

1. System pauses and mutes the current audio playback when receiving a call. Audio play resumes when call has ended.
2. Phone conversation is through the phone speaker and not through the system.

NOTE

Certain smartphones require that the PAUSE button be pressed after call end to resume music playback.

Volume UP and Volume Down Operation all Modes:

When system is in either Bluetooth or Auxiliary mode, momentarily press volume up (3) or volume down (4) button to adjust the volume up or down.

When either Bluetooth or Auxiliary mode, press and hold volume up (3) or volume down (4) button to rapidly adjust the volume up or down.

Note: This system does not control the device volume. Verify that the device is at maximum volume.

Track Reverse and Track Forward (Operational in Bluetooth Mode Only):

1. When system is in Bluetooth mode and music playing, momentarily press track reverse (1) or track forward (2) buttons to change the audio track. Press and holding these buttons has no function.

Play/Pause/Mute (On the Back of the Control) (Operational in Bluetooth Mode Only):

1. When System in Bluetooth mode press play/pause/mute (5) to play or pause music.
2. When System in Auxiliary mode press play/pause/mute (5) to mute music.

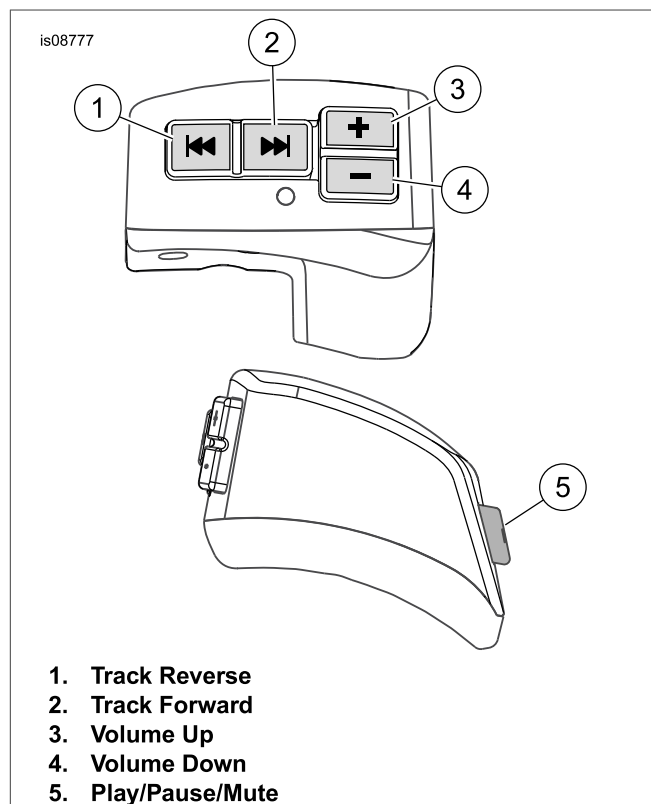


Figure 6. Buttons on Hand Control

LED INDICATOR TABLE

Table 1. LED Indicator Table

Condition	LED Indication
System Off	No LEDs on
AUX (3.5mm) input	Solid Green LED
Bluetooth - Searching for most recently paired device	Slow blinking Blue LED
Bluetooth - Searching for new device (pairing mode)	Fast blinking Blue LED
Bluetooth - Paired with Audio Playing	Solid Blue LED
Bluetooth - Paired with Audio Paused	Blue LED flashes twice, then 1 second pause

SERVICE PARTS

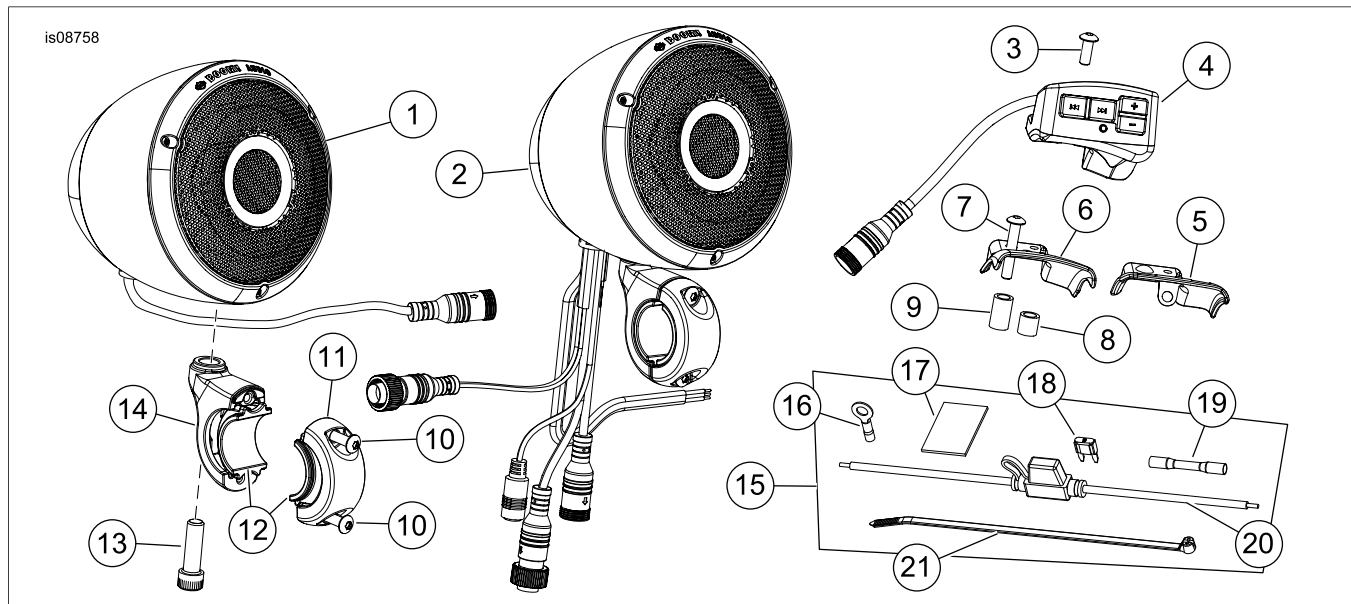


Figure 7. Service Parts, Handlebar-Mounted Speaker Kits

Table 2. Service Parts

Item	Description (Quantity)	Part Number
1	Speaker assembly, left side, black	76000656
	Speaker assembly, left side, chrome	76000655
2	Speaker assembly, right side, black	76000639
	Speaker assembly, right side, chrome	76000638
3	Screw, #10-24 x 1/2 in, black	10200492
	Screw, #10-24 x 1/2 in	10200493
4	Hand control assembly, black	71500410
	Hand control assembly, chrome	71500438
5	Mounting bracket, black	69201355
	Mounting bracket, chrome	69201487
6	Mounting bracket, black	69201354
	Mounting bracket, chrome	69201486
7	Screw, #10-24 x 1-1/4 in, black	10200488
	Screw, #10-24 x 1-1/4 in, stainless	10200489

Table 2. Service Parts

Item	Description (Quantity)	Part Number
8	Spacer, short, black	12400111
	Spacer, short	12400121
9	Spacer, long, black	12400110
	Spacer, long	12400122
10	Screw, #10-24 x 3/4 in (4), black	10200490
	Screw, #10-24 x 3/4 in (4)	10200491
11	Mounting clamp (2), black	76000651
	Mounting clamp (2), chrome	76000650
12	Spacer (4)	76000659
13	Screw, socket head (2), 5/16 x 5/8	Not Sold Separately
14	Mounting clamp (2), black	76000653
	Mounting clamp (2), chrome	76000650
15	Wire harness kit (includes items 16, 17, 18, 19, 20, 21)	69201357
16	Ring terminal, 1/4 in	9858
17	Adhesive tape	Not Sold Separately
18	Fuse, 10A, mini	72462-00
19	Butt splice, sealed, #14-16	70586-93
20	Fuse holder, mini type, with cover	70306-02
21	Cable strap	10006