# **BOOM! AUDIO AMP AND SPEAKER RELAY SERVICE KIT**

## **GENERAL**

## **Kit Number**

69200397

#### Models

This kit is used to modify the previous installation of a Boom! Audio Amp and Speaker Kit (Part No. 76262-08, 76320-08 or 76321-09) on the following models:

- 2000-2010 Softail® models
- 2010-2011 FXDWG (Dyna Wide Glide®) models
- 2004 and later XL Sportster<sup>®</sup> models
- 1999 and later Road King® models

## **Installation Requirements**

An UltraTorch UT-100 (Part No. HD-39969), Robinair Heat Gun (Part No. HD-25070) with Heatshrink Attachment (Part No. HD-41183), or other suitable radiant heating device is required for the proper installation of this kit.

Electrical Contact Lubricant (Part No. 99861-02) or equivalent is required after battery cable disconnection. This item is available from a Harley-Davidson dealer.

# **A**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 and is available from a Harley-Davidson dealer.

## **Kit Contents**

See Figure 4 and Table 2.

- If installing this service kit at the same time as a Boom!
   Audio Amp and Speaker Kit, refer to the instructions in THAT kit. See Table 1.
- If installing this service kit to a vehicle other than those listed earlier under "Models" with an already-installed Amp and Speaker Kit, see P&A Service Bulletin P-66.

Table 1. Boom! Audio Amp and Speaker Kits

Kit No.	Description	I-Sheet No.
76262-08	Handlebar Mount, Chrome	J05522
76320-08	Handlebar Mount, Black	J05522
76321-09	Windshield Mount	J05523

## **PREPARATION**

### NOTE

For 2007 and later vehicles equipped with security siren:

- Verify that the Hands-Free Fob is present.
- Turn the ignition key switch to IGNITION.

## For Vehicles With Main Fuse:

## **AWARNING**

To prevent accidental vehicle start-up, which could cause death or serious injury, remove main fuse before proceeding. (00251b)

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

For Vehicles With Main Circuit Breaker:

# **AWARNING**

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

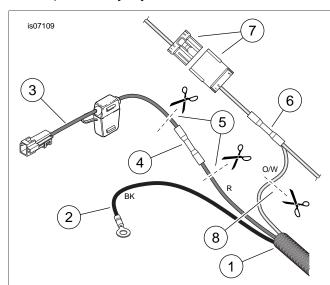
### NOTE

For 2004 and later XL Sportster models, the negative battery cable is most easily disconnected at the engine crankcase.

- See the service manual to remove the seat and disconnect the negative (black) battery cable from the negative (-) battery terminal. Retain all seat mounting hardware.
- For ALL models: Turn the ignition key switch OFF if not already done.

## INSTALLATION

- 1. See Figure 1. Locate the Amp and Speaker Kit wire harness (1) under the seat. Remove the nut from the black wire (2) ring terminal at the vehicle ground stud.
- Unplug the red power wire (3) from the B+ (battery positive) connector [160].



- 1. Amp and Speaker Kit wire harness
- 2. Black wire
- 3. Red power wire
- 4. Red wire sealed splice connector
- 5. Cut red power wire in these two areas
- Orange/white wire sealed splice connector on main harness
- 7. Tail lamp harness connector [7]
- 8. Cut orange/white switched power wire here

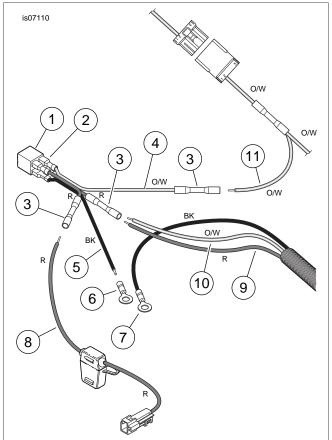
Figure 1. Amp and Speaker Kit Wire Connections

 See Figure 2. Find a suitable location under the seat for the relay (1), so that the terminals (2) face down or horizontally. The terminals should not face upward.

### NOTE

Cut the red wire and orange/white wire from the Amp and Speaker Kit wire harness in the following steps:

- to easily reach one of the red wires on the relay, and
- to approximately equal lengths.
- See Figure 1. Cut the red power wire in two places at location (5), on each side of the sealed splice connector (4). Discard the sealed splice connector. Save the end section (with the power connector and in-line fuse holder) for later assembly.
- 5. Cut the orange/white switched power wire at location (8), **between** the wire harness (1) conduit and the sealed splice connector (6) on the vehicle main harness near tail lamp harness connector [7B] (7).



- 1. Relay
- 2. Relay terminal (4)
- 3. Sealed splice connector (3)
- 4. Orange/white wire from relay terminal 2
- 5. Black wire from relay terminal 1
- 6. Ring terminal
- Amp and speaker harness black wire ring terminal
- 8. Red wire cut from amp and speaker harness
- 9. Red amp and speaker harness wire
- 10. Orange/white amp and speaker harness wire
- 11. Orange/white vehicle harness wire

Figure 2. Relay Connections to Amp and Speaker Kit Harness

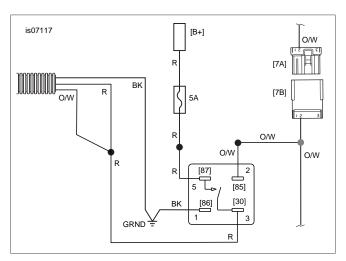


Figure 3. Wiring Diagram, Relay Connections

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- 6. See Figure 2 and Figure 3. If not already in place, install a sealed splice connector (3) to the end of the red wire from relay terminal 3 per instructions in the service manual appendix.
  - Install sealed splice connectors to the end of the red wire from relay terminal 5 and the orange/white wire (4) from relay terminal 2 in the same manner.
- 7. If the ring terminal (6) is not already in place on the black wire (5) from relay terminal 1, determine the length needed to easily reach the vehicle ground stud and install the terminal to the black wire per instructions in the service manual appendix.
- 8. Install the relay black wire ring terminal onto to the vehicle ground stud with the amp and speaker harness black wire ring terminal (7), and install the nut removed in Step 1. Tighten per service manual specifications.
- Get the red wire (8) with the power connector and in-line fuse holder cut from the amp and speaker harness in Step 4. Splice and seal the wire to the sealed splice connector (3) on one of the red wires from the relay per instructions in the service manual appendix.
- 10. Splice and seal the red (9) and orange/white (10) amp and speaker wires to the sealed splice connector on the remaining **red** relay wire.
- 11. Splice and seal the cut end of the orange/white wire (11) coming from the vehicle harness to the sealed splice connector (3) on the orange/white wire (4) from relay terminal 2.
- 12. Plug the red power wire (8) into the B+ (battery positive) connector [160].

# **RETURN TO SERVICE**

### NOTE

To prevent possible damage to the sound system, verify that the ignition key switch is in the OFF position **before** installing the main fuse or attaching the negative battery cable.

 Models with main fuse: See the service manual and install the main fuse.

#### Models with main circuit breaker:

- a. For ALL models except XL Sportster: See the service manual and attach the negative battery cable. Apply a light coat of Harley-Davidson electrical contact lubricant (Part No.99861-02), petroleum jelly or corrosion retardant material to the negative battery terminal.
- For XL Sportster models only: See the service manual, and connect the negative (-) battery cable at the engine crankcase.

# **AWARNING**

After installing seat, pull upward on seat to be sure it is locked in position. While riding, a loose seat can shift causing loss of control, which could result in death or serious injury. (00070b)

For ALL models: See the service manual and install the seat.

## SERVICE PARTS

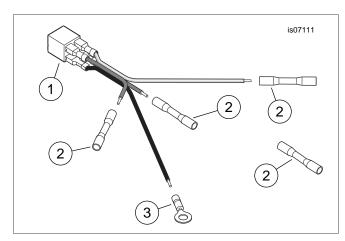


Figure 4. Service Parts, Amp and Speaker Relay Service
Kit

Table 2. Service Parts

Item	Description (Quantity)	Part Number
1	Relay	31586-07
2	Sealed splice connector, blue (4)	70586-93
3	Ring terminal, 1/4 in	9858

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