# INSTRUCTIONS

2019-05-01



# REMOTE CONTROL GARAGE DOOR OPENER KITS

## **GENERAL**

#### Kit Numbers

91558-01B (Transmitter/Receiver Kit), 91561-01B (Transmitter Kit), 91562-01 (Receiver Kit)

J05688

#### Models

For model fitment information, see the P&A retail catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

#### NOTE

**2014-Later Touring models with Dual Halogen Headlights** require use of the three-wire transmitter from **these** kits. The earlier four-wire transmitter from Transmitter/Receiver Kits 91558-01 and 91558-01A or Transmitter Kit 91561-01 cannot be used with these headlights.

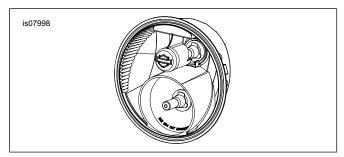


Figure 1. Dual Bulb Halogen Headlamp Identification

# Installation Requirements

2011-2017 Softail models, 2012-Later Dyna models and 2014-Later Sportster models require separate purchase of an Electrical Connection Harness (Part No. 72673-11).

**2018-Later Softail models** require separate purchase of an Electrical Connection Harness (Part No. 69201599A).

**2014-2016 Touring models** require separate purchase of an Electrical Connection Harness (Part No. 69200722).

**2017-Later Touring models** require separate purchase of an Electrical Connection Harness (Part No. 69201599A).

**2014-Later Street models** require separate purchase of a six-way Deutsch socket housing (Part No. 72136-94GY), a secondary lock (Part No. 72156-94), two socket terminals (Part No. 72191-94) and four seal pins (Part No. 72195-94).

When replacing the original equipment (OE) transmitter **on a CVO vehicle**, separate purchase of three electrical terminals (Part No. 74191-98) and one seal pin (Part No. 74195-98) is required.

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

#### **A 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**

#### 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)

# **▲** 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 Remote Control Transmitter in kits 91558-01B and 91561-01B requires up to **0.5 Amps** more current from the electrical system.

#### Kit Contents

See Figure 34, Table 4, Table 5, and Table 6

# **FCC NOTICES**

#### NOTE

Changes or modifications to this unit not expressly approved by the manufacturer could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for Class B digital devices pursuant to Part 15, Subpart B of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential environment. This equipment generates, uses and can radiate radio-frequency energy, and if not installed and used in accordance with the instruction manual, 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:

- · Re-orient or relocate the receiving antenna.
- Increase the distance between the equipment and the receiver.
- Connect the equipment to 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.

## RECEIVER INSTALLATION

#### Kits 91558-01B and 91562-01 only

- 1. Unplug the power cord from the garage door drive unit to prevent door activation during installation.
- Select an unswitched 110 V power outlet in the garage located either highest in the garage, closest to the front of the garage, or both. Plug the Harley-Davidson remote control garage door opener receiver (14) into this outlet.

#### 3. NOTE

With SOME garage door opener systems, the Harley-Davidson receiver must be plugged into an outlet away from the original opener receiver. If plugged in too close to the original receiver, effective range of both transmitters can be reduced to an unsatisfactory level.

Find the two garage door activation switch terminals at one of the following locations:

- The existing wall-mounted, hard-wired door opener button.
- b. The garage door drive unit connected to the opener button.
- 4. See Figure 34. Fasten the stripped end of the Harley-Davidson garage door opener receiver cable assembly (15) to the door opener terminals that activate the door opener drive unit. Refer to the door opener manufacturer's documentation for terminal locations and connections.

# 5. NOTE

Do not remove the wires originally connected to the door opener button or drive unit terminals.

After assembly, install the garage door opener button or door opener drive unit in the original location.

Route the Harley-Davidson garage door opener receiver cable assembly connected in Step 4 to the power outlet selected in Step 2.

- See Figure 2. Plug the connector on the Harley-Davidson garage door opener receiver cable assembly into the back of the Harley-Davidson garage door opener receiver in the location shown.
- 8. Plug the garage door opener receiver into the selected power outlet. Plug the power cord from the garage door drive unit into the power outlet.
- 9. Press the wall-mounted garage door opener button to test the button operation.

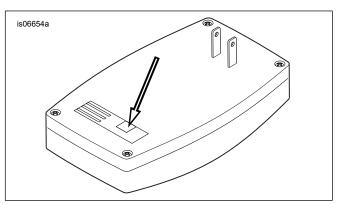


Figure 2. Garage Door Opener Receiver, Back View

#### **PREPARATION**

#### General

Each vehicle will require the fuel system to be purged or drained, the battery negative cable disconnected, and in some instances the fuel tank to be removed or raised. It is imperative that the proper service manual is used in conjunction with the kit

# **Fuel System**

#### **▲ 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)

## **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)

## **A 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. EFI Models EXCEPT V-Rod:

Purge and disconnect fuel supply line. See service manual

#### 2. Carbureted Models:

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

#### 3. Dyna, Softail and Sportster models:

a. The fuel tank must be removed or slightly raised to access the wiring harness. See the correct section (Carbureted or EFI Engine) of the service manual for fuel tank removal instructions.

#### NOTE

If a fuel tank with an instrument console must be removed, follow service manual instructions to remove the instrument console from the fuel tank before removing the tank.

# **Electrical System**

#### **WARNING**

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

#### **A WARNING**

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

#### NOTE

For 2004-later Sportster<sup>®</sup> models, the negative battery cable is most easily disconnected at the engine crankcase.

# **WITH Security Siren**

- 1. For 2007-later vehicles equipped with security siren:
  - a. With security fob present, turn ignition switch ON.
  - b. After system is disarmed, turn ignition switch OFF.
  - IMMEDIATELY remove main fuse. See service manual.

#### 2. For 2006-earlier vehicles equipped with security siren:

- Disarm siren with key fob or security code.
- Remove main fuse or negative battery cable. See service manual.
- c. Turn ignition switch OFF.

# **WITHOUT Security Siren**

- Models with main fuse:
  - Remove main fuse. See service manual.
- 2. Models with main circuit breaker:
  - Remove seat and retain all seat mounting hardware.
     See service manual.
  - Disconnect negative battery cable. See service manual.
  - c. Turn ignition switch OFF.

# All Vehicles With Main Fuse

- All models except VRSC: Remove seat and retain seat mounting hardware. Remove main fuse. See service manual.
- VRSC models: Remove right side cover. Remove main fuse. See service manual.

#### All Vehicles With Main Circuit Breaker

- Remove seat and retain seat mounting hardware. Disconnect the negative (black) battery cable. See service manual.
- 2. **ALL models:** Turn the ignition OFF unless already done.

# TRANSMITTER INSTALLATION

Table 1. Transmitter Installation Quick Reference

Model	Fasten Transmitter To:	Route Wires:
Dyna (all)	Wire harness under seat near battery with cable straps (See Figure 3.).	Forward along right side of
		frame.
Softail	Fasten transmitter <b>case</b> and short section of conduit to	Toward the headlamp.
(1999-earlier)	vehicle wires under seat with cable straps ( See Figure 4. ).	
Softail (2000-2017	Wire harness between vehicle frame, rear fork and rear tire	To the battery compartment,
except Deuce)	with cable straps ( See Figure 5. and Figure 6 ).	then along right side of frame.
Softail (2018-later)	Main wire harness under RH side cover with cable straps. (See Figure 9.	Follow main harness up under
	1/	front of seat.
Softail <b>Deuce</b>	Surface under seat below ECM/ignition module with foam pad	Forward along right side of
(2000-later)	( See Figure 7. ).	frame.
Sportster	Main wire harness under seat, as far from oil tank as possible,	Forward to headlamp.
(1994-2003)	with cable straps ( See Figure 8. ).	
Sportster	Wire harness next to main fuse holder, behind electrical side cover. Face	Forward to headlamp.
(2004-later)	printed circuit side away from battery. Fasten with cable straps.	
Street	Under seat near ECM, with foam tape.	Forward to headlamp.

J05688 3 / 22

Table 1. Transmitter Installation Quick Reference

Model	Fasten Transmitter To:	Route Wires:
FLHR Touring/	Right side of frame near fork tube, inside nacelle,	
FLRT Trike (all)	with foam pad (remove headlamp first) ( See Figure 10. ).	
Touring/Trike	Upper inside of fairing, with foam pad (remove outer fairing first)	
(FLHT/X, FLTR,	( See Figure 11. and Figure 12 ).	
2013-earlier)		
Touring/Trike (FLHT/X, FLTR,	• FLHT/X WITHOUT fairing-mounted amplifier: Left side of upper support bracket, with foam pad ( See Figure 13., top view).	
2014-later)	FLHT/X WITH fairing-mounted amplifier: Clip to front of amplifier mounting bracket ( See Figure 13., bottom view).	
	FLTR WITH or WITHOUT fairing-mounted amplifier: Flat surface between right side of radio and right speaker enclosure, with foam pad ( See Figure 14. ).	
V-Rod (2002-2003)	Motorcycle wire casing under left louver cover, with cable straps	
	( See Figure 15. and Figure 16 ).	
V-Rod (2004-later)	Underside of fuse block harnesses under air box, with cable straps	
	( See Figure 15. and Figure 17 ).	
See more detailed	installation information for a specific model in the sections following	this table.

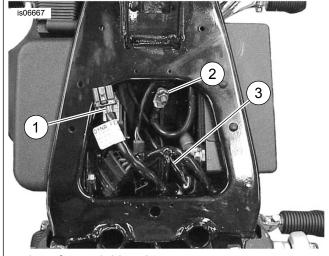
#### Kits 91558-01B and 91561-01B Only

#### NOTE

- 2014-Later Touring models with Dual Halogen Headlights require use of the three-wire transmitter from these kits. Earlier four-wire transmitters from Transmitter/Receiver Kits 91558-01 and 91558-01A or Transmitter Kit 91561-01 cannot be used with dual halogen headlights (See Figure 1.).
- Transmitter effective range may vary between motorcycle models. For best garage door opener range, position the transmitter on the motorcycle as far as possible from large metal surfaces.
- For best garage door opener performance, keep the transmitter and wires as far from vehicle heat sources as possible
- Do not cover the view of circuitry on the transmitter when fastening the adhesive-backed foam pad to the transmitter or mounting the transmitter to the vehicle. A red LED on the circuitry side must remain visible for programming the receiver-transmitter. For best adhesion, use isopropyl alcohol to clean the foam pad mounting surfaces.
- See Figure 34. Remove the protective tape from the adhesive backing on one side of the foam pad (3). Position the pad to the plastic casing of the transmitter (1). Press firmly into place.
- 2. Find specific model instructions in the sections that follow.

# **Dyna Models**

- Remove the fuel tank mounting bolts. See the correct section (Carbureted or EFI Engine) of the service manual.
- See Figure 3. Use cable straps to fasten the transmitter to the Dyna wire harness (3), located under the seat and near the battery compartment. Route the transmitter wires forward along the right side of the frame.
- 3. Proceed to the Harness Connection section.

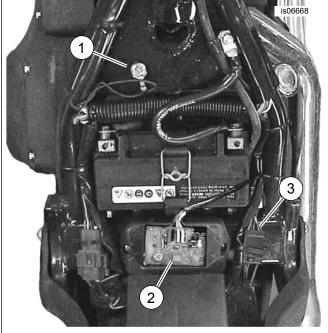


- 1. Orange/white wire
- 2. Ground connection
- 3. Strap transmitter to wire harness

Figure 3. Transmitter Mounting (Dyna)

## 1999-Earlier Softail Models

- Remove the fuel tank mounting bolts. See the correct section (Carbureted or EFI Engine) of the service manual.
- 2. See Figure 4. Remove the ground screw (1), on top of the frame, under the seat near the fuel tank.
- See Figure 34. Use cable straps (8) to fasten only the transmitter case and the short section of conduit to the motorcycle wires leading forward toward the headlamp.
- 4. Proceed to the Harness Connection section.

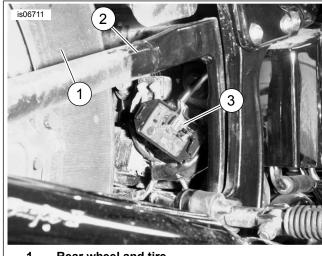


- **Ground connection** 1.
- Garage opener transmitter 2.
- Orange/white wire

Figure 4. Transmitter Mounting (1999-Earlier Softail)

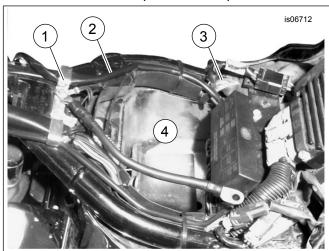
# 2000-2017 Softail Models Except Deuce (FXSTD)

- Remove the fuel tank mounting bolts. See the correct section (Carbureted or EFI Engine) of the service manual.
- Remove the rear splash guard (inner fender) per service manual instructions.
- 3. See Figure 5. Use cable straps to fasten the transmitter (3) to the wire harness located between the frame, rear fork (2), and rear tire (1).
- 4. See Figure 6. Route the transmitter wires (2) up to the battery compartment (4) and along the right side of the
- 5. Proceed to the **Harness Connection** section.



- Rear wheel and tire
- Rear fork
- **Transmitter**

Figure 5. Transmitter Mounting, 2000-2017 Softail Except Deuce (FLSTC Shown)



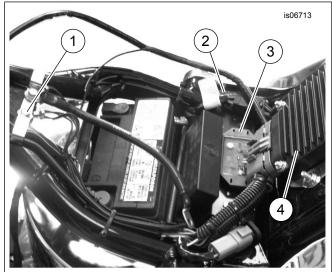
- **Ground connection** 1.
- 2. Transmitter wires to headlamp
- 3. Orange/white wire
- **Battery compartment (reference)**

Figure 6. Power and Ground Connections, 2000-2017 Softail (FLSTC Shown)

# Softail Deuce (FXSTD)

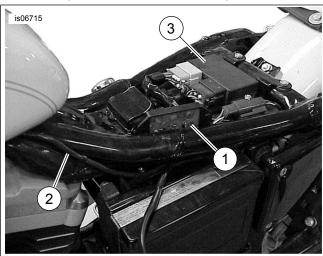
- Remove the fuel tank mounting bolts. See the correct section (Carbureted or EFI Engine) of the service manual.
- 2. Remove the protective tape from the adhesive backing of the foam pad on the transmitter.
- See Figure 7. Mount the transmitter to the surface below the ECM/ignition module. Route the transmitter wires forward along the right side of the frame.
- 4. Proceed to the Harness Connection section.

J05688 5/22



- 1. Ground connection
- 2. Orange/white wire
- 3. Transmitter
- . ECM/ignition module

Figure 7. Transmitter Mounting, Deuce



- 1. Transmitter mounting location
- 2. Wires to headlamp
- 3. Ignition module

Figure 8. Transmitter Mounting and Wire Routing (2003-Earlier Sportster)

#### 2018-Later Softail

- 1. Remove right side cover.
- See Figure 9. On the transmitter: Cut the orange/white wire (2) to be the same length as the black wire (3). Remove cut orange/white wire from sheath.
- 3. Install transmitter with cable straps.
  - Place transmitter (6) in front of main wire harness, mounting at a near horizontal position. Wires exiting the housing should be at top and routed inward toward vehicle components.
  - Install cable strap (5) into front slot of transmitter housing.

- c. Make final positional adjustments to transmitter.
- d. Tighten cable strap (5).
- Tuck transmitter wires (4) behind the main harness wires.
   Follow main harness wires around ABS/HCU module and under the front of the seat.
- 5. Proceed to Harness Connection section.

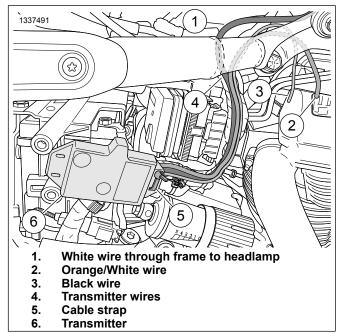


Figure 9. Transmitter Mounting and Wire Routing (2018-Later Softail)

## 1994-2003 Sportster Models

- Remove fuel tank. See the correct section (Carbureted or EFI Engine) of the service manual.
- 2. See Figure 8. Position the transmitter (1) to the main wire harness in the area under the seat, as far as possible from the oil tank. Fasten the transmitter to the harness using cable straps from the kit.
- 3. Proceed to the **Harness Connection** section.

# 2004-Later Sportster Models

- Remove fuel tank. See the correct section (Carbureted or EFI Engine) of the service manual.
- Remove the electrical side cover, on the left side near the battery.
- See Figure 34. Position the transmitter (1) behind the electrical side cover. Orient the transmitter so the printed circuit side faces away from the battery. Fasten the transmitter to the wire harness next to the main fuse holder with cable straps (8).
- 4. Proceed to the Harness Connection section.

## **Street Models**

- See the service manual. Remove fuel tank.
- Remove right side cover.
- Remove the protective tape from the adhesive backing of the foam pad on the transmitter.
- Position the transmitter (1) under the seat, near the ECM. Verify that the seat pan does not contact the transmitter.
- 5. Proceed to the **Harness Connection** section.

# FLHR Touring/FLRT Trike Models

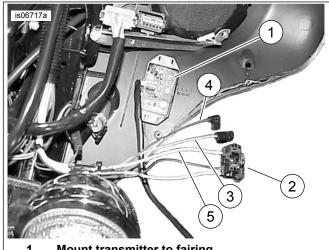
- Remove the headlamp from the nacelle per the instructions in the service manual.
- Remove the protective tape from the adhesive backing of the foam pad on the transmitter.
- See Figure 10. Mount the transmitter to the right side of the frame near the fork tube.
- Proceed to the Harness Connection section.



Figure 10. Transmitter Mounting Near Fork Tube (2013-Earlier FLHR)

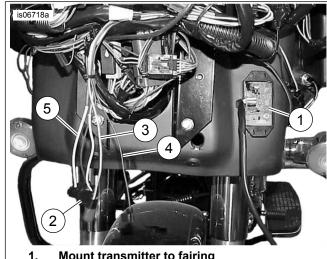
# 2013-Earlier FLHT, FLHX and FLTR Touring Models, or Trike Models

- Remove the outer fairing per the instructions in the service manual.
- 2. Remove the protective tape from the adhesive backing of the foam pad on the transmitter.
- See Figure 11. (FLHT, FLHX models) or Figure 12. (FLTR models). Mount the transmitter to the upper inside of the fairing.
- Proceed to the Harness Connection section.



- Mount transmitter to fairing
- 2. Headlamp connector
- 3. Orange/white wire
- 4. Black wire
  - White wire

Figure 11. Wires for Transmitter Connections (2013-Earlier FLHT/X)



- Mount transmitter to fairing
- 2. **Headlamp connector**
- 3. Orange/white wire
- Black wire 4.
- White wire

Figure 12. Wires for Transmitter Connections (2013-Earlier FLTR)

# 2014-2016 FLHT and FLHX Touring or Trike Models

- · Requires separate purchase of Electrical Connection Harness (Part No. 69200722), unless already installed.
- Up to three accessories can be spliced into the electrical connection harness.
- Electrical connectors are identified in the service manual by the number and letter shown here within brackets.
- 1. Remove outer fairing per instructions in service manual.

J05688 7/22

# 2. See Figure 13. **Models WITHOUT fairing-mounted amplifier:**

- a. Remove the protective tape from the adhesive backing of the foam pad on the transmitter.
- Mount the transmitter (1) to the left side of the upper support bracket.
- c. Proceed to the **Harness Connection** section.

#### 3. Models WITH fairing-mounted amplifier:

- Insert the transmitter (1) into the clip (3) on the front of the amplifier mounting bracket.
- b. Proceed to the Harness Connection section.

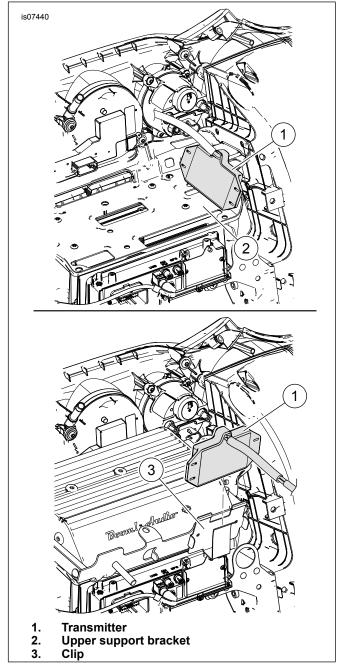


Figure 13. Transmitter Mounting (2014-2016 FLHT and FLHX Touring or Trike Models)

# 2014-2016 FLTR Touring Models

#### NOTE

- Requires separate purchase of Electrical Connection Harness (Part No. 69200722), unless already installed.
- Up to three accessories can be spliced into the electrical connection harness.
- Electrical connectors are identified in the service manual by the number and letter shown here within brackets.
- Remove the outer fairing per the instructions in the service manual.
- 2. See Figure 14. Remove the protective tape from the adhesive backing of the foam pad on the transmitter.

- Mount the transmitter to the flat surface between the right side of the radio and the right speaker enclosure.
- Proceed to the Harness Connection section.

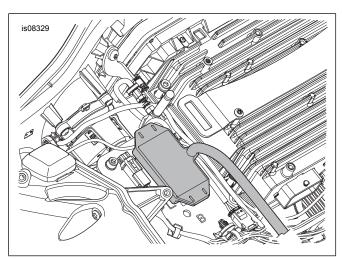


Figure 14. Transmitter Mounting (2015-2016 FLTR Touring Models)

# 2017-Later FLHT and FLHX Touring or Trike Models

#### NOTE

- Requires separate purchase of Electrical Connection Harness (Part No. 69201599), unless already installed.
- Up to three accessories can be spliced into the electrical connection harness.
- Electrical connectors are identified in the service manual by the number and letter shown here within brackets.
- 1. Remove outer fairing per instructions in service manual.
- 2. See Figure 15.. **Models WITHOUT fairing-mounted amplifier:** 
  - a. Remove the protective tape from the adhesive backing of the foam pad on the transmitter.
  - b. Mount the transmitter (1) to the left side of the upper support bracket.
  - c. Proceed to the **Harness Connection** section.

#### 3. Models WITH fairing-mounted amplifier:

- a. Insert the transmitter (1) into the clip (3) on the front of the amplifier mounting bracket.
- b. Proceed to the Harness Connection section.

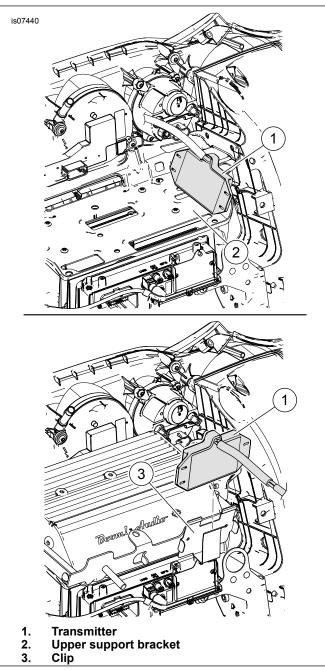


Figure 15. Transmitter Mounting (2017-Later FLHT and FLHX Touring or Trike Models)

# 2017-Later FLTR Touring Models

#### NOTE

- Requires separate purchase of Electrical Connection Harness (Part No. 69201599), unless already installed.
- Up to three accessories can be spliced into the electrical connection harness.
- Electrical connectors are identified in the service manual by the number and letter shown here within brackets.
- Remove the outer fairing per the instructions in the service manual.
- 2. Figure 16. Remove the protective tape from the adhesive backing of the foam pad on the transmitter.

J05688 9 / 22

- 3. Mount the transmitter to the flat surface between the right side of the radio and the right speaker enclosure.
- 4. Proceed to the Harness Connection section.

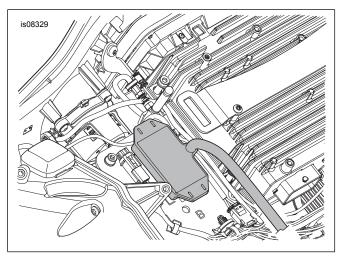
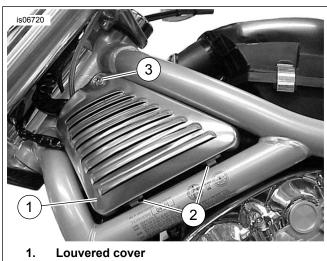


Figure 16. Transmitter Mounting (2017-Later FLTR Touring Models)

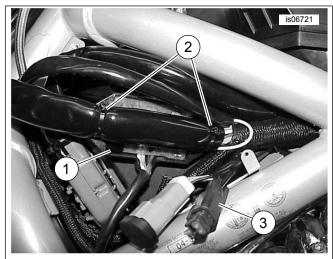
# 2002-2003 V-Rod Models

- See Figure 17. Remove the screw (3) fastening the front left louvered cover (1) to the motorcycle. Lift the louvered cover off the tabs (2) to remove the cover.
- 2. See Figure 18. Use cable straps to fasten the transmitter (1) to the motorcycle wire casing (2) as shown.
- 3. Proceed to the Harness Connection section.



2. Tab (2) 3. Screw

Figure 17. Left-Side Louvered Cover (2002-2003 V-Rod Shown)

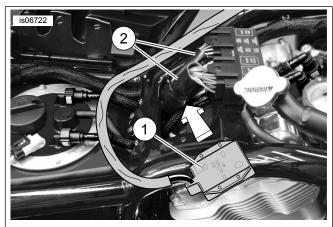


- 1. Transmitter
- 2. Tie transmitter cable to wire casing
- 3. Connector with black (ground) and orange wires

Figure 18. Transmitter Mounting (2002-2003 V-Rod Only)

# 2004-Later V-Rod Models

- See Figure 17. Remove the screw (3) fastening the front left louvered cover (1) to the motorcycle. Lift the louvered cover off the tabs (2) to remove the cover.
- See Figure 19. Remove the air box cover. Rotate the transmitter (1) so the exposed circuit side faces up. Tuck the transmitter under the fuse block wire harnesses. Use two cable straps from the kit through the flanges of the transmitter to secure the transmitter to the fuse block harnesses.
- 3. Proceed to the Harness Connection section.



- 1. Transmitter
- 2. Fuse block wire harness (2)

Figure 19. Transmitter Mounting (2004-Later V-Rod)

# HARNESS CONNECTION

#### NOTE

- 2014-later Touring models with Dual Halogen Headlights require use of the three-wire transmitter from these kits. Earlier four-wire transmitters from Transmitter/Receiver Kits 91558-01 and 91558-01A or Transmitter Kit 91561-01 cannot be used with dual halogen headlights (See Figure 1.).
- If the newly installed transmitter has both a white wire and a yellow wire (a four-wire transmitter), splice those wires to the corresponding headlamp wires (white to white, yellow to yellow).

If the newly installed transmitter is replacing **an OE transmitter** on a CVO vehicle:

- Extract the three wires and terminals from the four-way Deutsch connector on the old transmitter (Part No. 92600009) per service manual instructions.
- Cut the wires on the new transmitter to the same length as the old transmitter.
- Install a terminal (Part No. 74191-98, purchased separately) onto the ends of each wire per service manual instructions.
- Insert the wires and terminals into the four-way Deutsch connector as noted in Table 2.

**Table 2. Transmitter Connector Wiring (CVO Models)** 

Cavity	Wire Color
1	Orange/White
2	Plug
3	White
4	Black

**Table 3. Transmitter Harness Connection Quick Reference** 

Model	Black (Ground) Wire:	Orange/White (Power) Wire:	White (Hi Beam Signal) Wire:
Dyna (2003-earlier)	Ring terminal to ground stud.	Splice to vehicle Orange/White wire.	Splice to headlamp White wire.
Dyna (2004-2011)	Ring terminal to ground stud.	To fuse block adapter.	Splice to headlamp White wire.
Dyna (2012-later)	To Black wire of electrical connection harness 72673-11.	To Red/Yellow wire of electrical connection harness 72673-11.	Splice to vehicle Blue/White wire.
Softail (2003-earlier)	Ring terminal to ground stud.	Splice to vehicle Orange/White wire.	Splice to headlamp White wire.
Softail (2004-2010)	Ring terminal to ground stud.	To fuse block adapter.	Splice to headlamp White wire.
Softail (2011-2017)	To Black wire of electrical connection harness 72673-11.	To Red/Yellow wire of electrical connection harness 72673-11.	Splice to headlamp Blue/White wire.
Softail (2018-later)	To Black wire of electrical connection harness 69201599.	al connection harness 69201599.	Splice to vehicle Blue/White wire.
Sportster	Ring terminal to ground stud.	Splice to vehicle	Splice to headlamp White wire.
(2013-earlier)		Orange/White wire.	
Sportster (2014-later)	To Black wire of electrical connection harness 72673-11.	To Red/Yellow wire of electrical connection harness 72673-11.	Splice to headlamp White wire.
Street (2014-later)	To cavity 2 of Datalink socket housing [92B].	To cavity 5 of Datalink socket housing [92B].	Splice to vehicle Blue/White wire.
Touring/Trike (2013-earlier)	Ring terminal to ground stud.	Splice to HDI position lamp Orange/White wire from unused connector [29B].	Splice to headlamp White wire.
Touring/Trike (2014-2016)	To Black wire of electrical connection harness 69200722.	To Violet/Blue wire of electrical connection harness 69200722.	Splice to vehicle Blue/White wire.
Touring/Trike (2017-later)	To Black wire of electrical connection harness 69201599.	To Violet/Blue wire of electrical connection harness 69201599A.	Splice to vehicle Blue/White wire.
V-Rod (2004-earlier)	Ring terminal to ground stud.	Splice to HDI position lamp Orange/White wire from unused connector [29A].	Splice to headlamp White wire.
V-Rod (2005-later)	Ring terminal to ground stud.	White wire at connector [38A].	
See more detailed co	nnection information for a specif	ic model in the sections fol	lowing this table.

## General

Splicing of wire leads is necessary in the installation of the garage door opener to the vehicle. Find the instructions for a specific model in the sections that follow. Refer to the service manual appendix for proper wire splicing procedures.

#### **A WARNING**

Be sure to follow manufacturer's instructions when using the UltraTorch UT-100 or any other radiant heating device. Failure to follow manufacturer's instructions can cause a fire, which could result in death or serious injury. (00335a)

J05688 11 / 22

- Avoid directing heat toward any fuel system component.
   Extreme heat can cause fuel ignition/explosion, resulting in death or serious injury.
- Avoid directing heat toward any electrical system component other than the connectors on which heat shrink work is being performed.
- Always keep hands away from tool tip area and heat shrink attachment.

For 2012-later Dyna models: Proceed to the next section.

For 2011-later Softail models: Proceed to the next section.

For 2014-later Sportster models: Proceed to the next section.

For 2014-later Street models: Proceed to that section.

**For Touring and Trike models:** Proceed to the **correct** section for the specific year/model.

For ALL OTHER models: Proceed to Black Lead Connection for the specific model.

# 2012-later Dyna, 2011-2017 Softail and 2014-Later Sportster Models

NOTE

Requires separate purchase of an Electrical Connection Harness (Part No. 72673-11).

Electrical connectors are identified in the service manual by the number and letter shown here within brackets.

- Locate the Digital Technician connector [91A] (a gray six-way Deutsch pin connector with a rubber boot) under the seat. Place the Electrical Connection Harness at connector [91A], but DO NOT connect now.
- Route the garage door opener wires over to the Electrical Connection Harness. Remove the orange/white wire from the conduit. Cut the orange/white and black wires to a suitable length to reach the sealed splice connectors on the Electrical Connection Harness easily. DO NOT cut the white wire.
- 3. Splice the black garage door opener wire to the **black** wires in the Electrical Connection Harness.
- Splice the orange/white garage door opener wire to the red/yellow wires in the Electrical Connection Harness.
- Use a heat gun or suitable radiant-heating device to shrink the connector to the wires.
- Use the heat gun or heating device to seal the open end of the sealed splice connector on the red/blue wires in the Electrical Connection Harness.
- 7. Pull the rubber boot out from the gray Digital Technician pin connector [91A]. Cut the boot off the wires.
- 8. Connect the socket housing of the Electrical Connection Harness to connector [91A].
- 9. Insert the rubber boot into the open pin connector of the Electrical Connection Harness.

 Loosen or remove the four screws holding the ECM to the mounting bracket. Route the Electrical Connection Harness under the ECM connector. Tighten the four screws..

Torque: 5.1-6.2 N·m (45-55 in-lbs) hex socket screw

 Proceed to the White Lead Connections section for the specific model.

#### 2018-Later Softail Models

- Remove accessory power plug 325B (Molex MX150, 3 pin) from dust cover on left side of vehicle.
  - Remove dust cover from connector mounting plate.
     Raise catch behind dust cover to slide it forward and off
- Attach male Molex 3 pin connector from harness 69201599A to connector 325B. Then slide male connector back onto connector mounting plate and lock it in place.
- Leave the other 2 connector dust covers in place on harness 69201599A.
- Route harness forward and route connectors back towards the plate. Position them where they will not interfere with other components.
- Route the 3 wires without a connector towards the rear of the fuel tank
- 6. See Figure 20.

#### **Transmitter Harness:**

- Hold white wire (1) at the very end of the lead so it does not get pulled from the sheath (4) with the orange/white wire.
- b. Pull orange/white (1) wire out of the sheath (4) at the break (3).
- Route white wire and long section of sheath up the frame backbone to the harness outlet at the front of the vehicle.
- 8. Find blue/white wire from headlamp connector 38B and splice white wire from transmitter. Splice at suitable distance away from connector 38B.
- Splice black wire from transmitter harness to black wire in harness 69201599.
- Splice orange/white wire from transmitter harness to violet/blue wire in harness 69201599.
- 11. Secure installed harnesses with cable straps.
- 12. Assemble components that were previously disassembled.

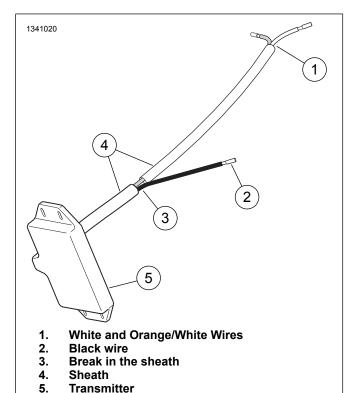


Figure 20.

#### 2014-Later Street Models

1. NOTE

Requires separate purchase of a six-way Deutsch socket housing (Part No. 72136-94GY), a secondary lock (Part No. 72156-94), two socket terminals (Part No. 72191-94) and four seal pins (Part No. 72195-94).

Remove only the orange/white wire from the transmitter conduit. DO NOT remove the white wire from the conduit.

- Route the white wire toward the front of the vehicle. If the newly installed transmitter has both a white wire and a yellow wire (a four-wire transmitter), route the yellow wire forward alongside the white wire.
- Locate the blue/white wire near the four-way headlamp connector [38].
- 4. See Figure 34. Get a **blue** sealed splice connector (5) from the kit. Splice the white transmitter wire to the blue/white high beam headlamp wire. If the transmitter also has a yellow wire, splice THAT to the blue/yellow low beam wire.
- Get a red sealed splice connector (4) from the kit. Splice the black wire (13) from the kit to the black transmitter ground wire.
- Route the black wire and the orange/white wire to the six-way data link connector [91] under the right side cover. Cut the wires to length.
- See the service manual appendix. Terminate both wire ends with socket terminals (Part No. 72191-94, purchased separately).

- Insert the black terminated wire into cavity 2 of six-way Deutsch socket housing (Part No. 72136-94GY, also purchased separately). Insert the orange/white terminated wire into cavity 5. Insert seal pins (Part No. 72195-94) into the four open cavities. Install the secondary lock (Part No. 72156-94).
- 9. Mate the socket housing to data link connector [91]. Secure with cable straps from the kit.

# 2013-Earlier FLHT, FLHX and FLTR Touring Models, or Trike Models

 Cut the white and orange/white transmitter wires to about the same length as the transmitter black ground wire. Cut to allow enough wire to strip and splice the wires easily.

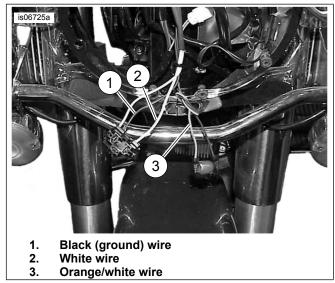


Figure 21. Wires for Transmitter Connections (2013-Earlier FLHR)

2.

- a. 2013-Earlier FLHR Touring Models: See Figure 21.
  Cut the black (1) and white (2) headlamp wires inside
  the nacelle, staggering the lengths a bit to avoid the
  splices being together.
- 2013-Earlier FLHT and FLHX Touring and Trike Models: See Figure 11. Cut the black (4) and white (5) headlamp wires inside the fairing, staggering the lengths a bit to avoid the splices being together.
- c. 2013-Earlier FLTR Touring Models: See Figure 12. Cut the black (4) and white (5) headlamp wires inside the fairing, staggering the lengths a bit to avoid the splices being together.
- d. ALL 2013-Earlier Touring/Trike Models: Slide the woven wire conduit from the kit (see Figure 34, Item 9) over the black and white headlamp wires.
- See Figure 22. The "two into one" splice configuration. Get a red sealed splice connector (see Figure 34, Item 4) from the kit. Splice the black garage door opener transmitter wire to the black wires from the headlamp. Trim back the transmitter wire harness casing to assist splicing.

J05688 13 / 22

#### NOTE

Electrical connectors are identified in the service manual by the number and letter shown here within brackets.

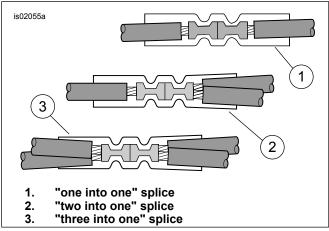


Figure 22. Splice Configurations

- 4. Use the remaining red sealed splice connector to splice the orange/white transmitter wire to the orange/white wire on the unused position lamp connector [29B]:
  - For 2013-Earlier FLHR Touring Models, the orange/white wire is tied to the main harness inside the nacelle.
  - b. For ALL OTHER 2013-Earlier Touring/Trike Models, the orange/white wire is tied to the interconnect harness near the headlamp.
- See Figure 34.Get a **blue** sealed splice connector (5) from the kit. Splice the white transmitter wire to the white headlamp wires.
- Slide the wire conduit over the splice area of the two headlamp wires.
- Proceed to the Receiver and Transmitter Programming section to program the garage door opener controls.

# 2014-2016 Touring or Trike Models

- Remove left side cover. Locate connector [4A], a gray eight-way Molex pin connector in the electrical caddy.
- If installing the electrical connection harness: Route the harness per the instructions in that kit, but DO NOT plug into connector [4A] now.
- 3. **If the electrical connection harness is already installed:** Unplug the harness from connector [4A].
  - a. Splice wires to the sealed cap ends of the electrical connection harness as required. If the electrical connection harness was spliced in a previous accessory installation, cut off the existing splices. DO NOT REMOVE the sealed cap from the RED wire. See Figure 22. for multiple splice configurations.

- b. Clip the cap off the Black wire, strip back, crimp and seal to BLACK wire of the wire harness from **this** kit, using the additional black wire (10) from the hardware pack as an extension.
- Clip the cap off the Violet/Blue wire, strip back, crimp and seal to Orange/White wire of the wire harness from this kit.
- 4. Remove the weather cap from connector [4A] and mate the eight-way connectors.
- Proceed to the White Lead Connections section for the specific model.

# 2017-Later Touring or Trike and 2018-Later Softail Models

- Locate connector [325B], a gray three-way Molex pin connector in the electrical caddy.
  - a. Touring and Trike: Remove right side cover.
  - b. Softail: Remove left side cover.
- If installing the electrical connection harness: Route the harness per the instructions in that kit, but DO NOT plug into connector [325B] now.
- 3. If the electrical connection harness is already installed: Unplug the harness from connector [325B].
  - a. Splice wires to the sealed cap ends of the electrical connection harness as required. If the electrical connection harness was spliced in a previous accessory installation, cut off the existing splices. DO NOT REMOVE the sealed cap from the RED wire. See Figure 22. for multiple splice configurations.
  - b. Clip the cap off the Black wire, strip back, crimp and seal to BLACK wire of the wire harness from **this** kit, using the additional black wire (10) from the hardware pack as an extension.
  - Clip the cap off the Violet/Blue wire, strip back, crimp and seal to Orange/White wire of the wire harness from this kit.
- 4. Remove the weather cap from connector [325B] and mate the three-way connectors.
- Proceed to the White Lead Connections section for the specific model.

# BLACK LEAD CONNECTION TO GROUND 2011-Earlier Dyna Models

- 1. Remove the nut from the ground stud, on top of the frame, under the seat near the fuel tank.
- 2. See Figure 34. Select the correct ring terminal (6 or 7) from the kit to fit the ground stud.

- See Figure 3. Cut the black ground wire (2) on the garage door opener wire harness to reach the ground location easily. Crimp the ring terminal to the end of the wire per the Packard crimping tool instructions in the service manual appendix.
- 4. Install the ring terminal to the ground connection. Secure per the torque specification in the service manual.
- Proceed to the Orange/White Lead Connection section for the specific model.

# 2010-Earlier Softail Models

- Remove the ground screw, on top of the frame, under the seat near the fuel tank.
- 2. See Figure 34. Select the correct ring terminal (6 or 7) from the kit to fit the ground screw.
- 3. Cut the black wire on the garage door opener wire harness to reach the ground location easily. Crimp the ring terminal to the end of the wire per the Packard crimping tool instructions in the service manual appendix.
- See Figure 6. Install the ring terminal onto the ground screw threads. Fasten the ground screw to the frame. Secure per the torque specification in the service manual.
- Proceed to the Orange/White Lead Connection section for the specific model.

# 2013-Earlier Sportster Models

- Remove the electrical side cover, on the left side near the battery.
- Route the garage door opener wire harness through the top of the frame under the seat. Route to the circuit breaker on the inside of the electrical side cover.
- 3. See Figure 25. Remove the ground screw (1), located:
  - a. Under the seat on some 1996-2003 models
  - b. Near the rear forks on 1995-earlier models, and 1996-2003 models without a screw under the seat
  - c. On the engine near the starter on 2004-later models
- 4. See Figure 34. Select the correct ring terminal (6 or 7) from the kit to fit the ground screw.
- Cut the black wire on the garage door opener wire harness to reach the ground location easily. Crimp the ring terminal to the end of the wire per the Packard crimping tool instructions in the service manual appendix.
- 6. Install the ring terminal onto the ground screw threads. Fasten the ground screw at the original location. Secure per the torque specification in the service manual.
- 7. Proceed to the **Orange/White Lead Connection** section for the specific model.

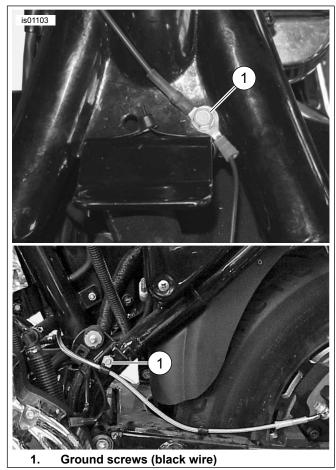


Figure 23. Ground Connections (Sportster Models)

#### 2002-2003 V-Rod Models

- Cut the black transmitter ground wire to within easy reach
  of one of the ground screws on the engine cam covers.
  Remove the ground screw.
- See Figure 34. Select the smaller diameter ring terminal (7) from the kit. Crimp the ring terminal onto the black transmitter wire per the Packard crimping tool instructions in the service manual appendix.
- Fasten the ring terminal to the engine with the ground screw. Secure per the torque specification in the service manual.
- Proceed to the Orange/White Lead Connection section for the specific model.

#### 2004-Later V-Rod Models

- See Figure 24. the "two into one" splice configuration. Get a red sealed splice connector (see Figure 34, Item 4) from the kit. Splice the black wire (13) from the kit to the black transmitter ground wire per the service manual appendix. Slip the conduit (10) from the kit over the spliced ground wire.
- 2. Route the ground wire and conduit
  - Along the motorcycle frame to the left of the air box

J05688 15 / 22

- b. Next to the main harness
- c. To a location under the left side louvered cover
- Cut the black transmitter ground wire and conduit to within easy reach of one of the ground studs on the ends of the battery ground cable.
- Select the smaller diameter ring terminal (7) from the kit.
   Crimp the ring terminal onto the black transmitter wire per the Packard crimping tool instructions in the service manual appendix.
- Fasten the black wire ring terminal to the negative terminal mounting post on the battery. Tighten the terminal fastener.
   Torque: 7–10 N·m (60–96 in-lbs) Hex nut
- Proceed to the Orange/White Lead Connection section for the specific model.

# ORANGE/WHITE LEAD CONNECTION TO SWITCHED POWER SOURCE

Use the service manual wiring diagrams for a specific model and year vehicle to locate a power source that is fed through the ignition switch.

# 2003-Earlier Dyna Models

The garage door opener **switched** power source is an orange/white (O/W) main harness power lead under the seat or inside the side cover.

- Remove the electrical side cover, on the left side near the battery.
- See Figure 3. Carefully slice open an area of the main harness wrap under the seat or inside the side cover at an accessible point. Cut an orange/white main harness power lead.
- Pull only the orange/white wire out of the longer piece of conduit on the garage door opener wire harness. Cut the excess length from the orange/white wire to within easy reach of the cut orange/white wires on the main vehicle harness.
- 4. See Figure 22. The "two into one" splice configuration. Get a red sealed splice connector (see Figure 34, Item 4) from the kit. Splice the garage door opener wire harness power lead to the main harness orange/white wires per the service manual appendix.
- Proceed to the White Lead Connections section for the specific model.

# 2004-2011 Dyna Models

The garage door opener **switched** power source is an open fuse position on the fuse panel. See the FUSES section of the service manual and the correct wiring diagram in the service manual appendix.

 Locate the electrical side cover on the left side near the battery, While firmly grasping both sides, pull outward to remove.

- Remove the electrical panel from the vehicle per service manual instructions.
- See Figure 34. Get the orange/white fuse block adapter wire (12) from the kit. Note the terminal on each end ( See Figure 34. ). Only the terminal with the spring tabs fits into this fuse block. Carefully cut the unused terminal from the wire and discard it.
- 4. See Figure 25. Locate the fuse cavity indicated as "OPEN" on the fuse block cover in the right fuse block. Insert the terminal on the orange/white adapter wire until it stops. Refer to a nearby factory installed terminal for comparison to verify proper orientation and depth.
- Pull only the orange/white wire out of the longer piece of conduit on the garage door opener wire harness. Cut the excess length from the orange/white wire to within easy reach of the adapter wire.
- 6. See Figure 24. The "one into one" splice configuration. Get a blue sealed splice connector (see Figure 34, Item 5) from the kit. Splice the garage door opener wire harness power lead to the adapter wire per the service manual appendix.
- 7. See Figure 34. Install the 2A fuse (11) from the kit into the "OPEN" fuse cavity to complete the circuit.
- Install the electrical panel per the instructions in the service manual. Install the electrical panel cover by aligning the pins with the rubber bushings in the electrical panel. Push firmly into place.
- Proceed to the White Lead Connections section for the specific model.

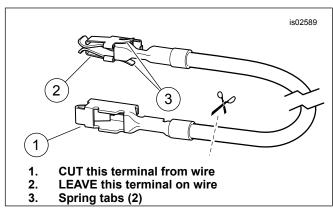


Figure 24. Fuse Block Adapter Wire (Dyna and Softail)

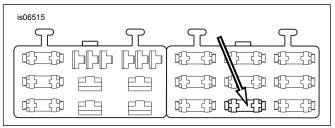


Figure 25. "OPEN" Fuse Block Cavity (2004-Later Dyna)

#### 2003-Earlier Softail Models

The garage door opener **switched** power source is the orange/white (O/W) wire in the tail lamp harness under the seat.

- See Figure 3. Carefully slice open an area of the tail lamp harness (1) wrap at an accessible point under the seat. Cut the orange/white wire.
- Pull only the orange/white wire out of the longer piece of conduit on the garage door opener wire harness. Cut the excess length from the orange/white wire to within easy reach of the cut orange/white wires under the seat.
- See Figure 3. The "two into one" splice configuration. Get a red sealed splice connector (see Figure 34, Item 4) from the kit. Splice the garage door opener wire harness power lead to the cut orange/white wires per the service manual appendix.
- Proceed to the White Lead Connections section for the specific model.

# 2004-2010 Softail Models

The garage door opener **switched** power source is an open fuse position on the fuse panel. See the FUSES section of the service manual and the correct wiring diagram in the service manual appendix.

- Remove the fuse block cover. Remove the two hex head screws fastening the fuse block bracket. Pull the bracket and fuse block assembly away from the vehicle frame.
- 2. Press the tab retaining the left fuse block. Slide the block out of the mounting slots.
- See Figure 34. Get the orange/white fuse block adapter wire (12) from the kit. Note the terminal on each end (see Figure 24). Only the terminal with the spring tabs fits into this fuse block. Carefully cut the unused terminal from the wire and discard.
- 4. See Figure 26. Locate the fuse cavity indicated as "P&A IGN" on the fuse block cover in the right fuse block. Insert the terminal on the orange/white adapter wire until it stops. Refer to a nearby factory installed terminal for comparison to verify proper orientation and depth.
- Pull only the orange/white wire out of the longer piece of conduit on the garage door opener wire harness. Cut the excess length from the orange/white wire to within easy reach of the adapter wire.
- 6. See Figure 22. The "one into one" splice configuration. Get a **blue** sealed splice connector (see Figure 34, Item 5) from the kit. Splice the garage door opener wire harness power lead to the adapter wire per the service manual appendix.
- 7. See Figure 34. Install the 2A fuse (11) from the kit into the "P&A IGN" fuse cavity to complete the circuit.
- Slide the fuse block into the mounting slots in the fuse block bracket until it clicks firmly into place. Install the bracket and fuse block assembly into position. Fasten with the two hex head screws removed earlier. Tighten securely.

Proceed to the White Lead Connections section for the specific model.

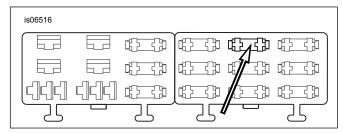


Figure 26. "P&A IGN" Fuse Block Cavity (2004-2010 Softail)

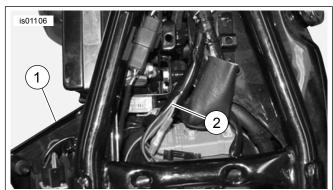
# 2013-Earlier Sportster Models

The garage door opener **switched** power source is an orange/white (O/W) main harness power lead inside the electrical side cover or under the seat.

#### NOTE

On some Sportster models, the ignition module must be removed to access the orange/white wire in the main harness.

 See Figure 27. Carefully slice open an area of the main harness wrap inside the electrical side cover or under the seat at an accessible point. Cut an orange/white main harness power lead.



- Left side cover containing circuit breaker silver terminal (red wire)
- 2. Stock wire harness (orange/white wire)

Figure 27. Power Connections (Sportster Models)

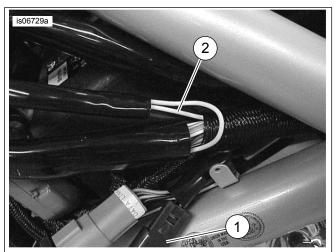
- Pull only the orange/white wire out of the longer piece of conduit on the garage door opener wire harness. Cut the excess length from the orange/white wire to within easy reach of the cut orange/white wires inside the side cover or under the seat.
- See Figure 22, the "two into one" splice configuration. Get a red sealed splice connector (see Figure 34, Item 4) from the kit. Splice the garage door opener wire harness power lead to the main harness orange/white wires per the service manual appendix.
- Proceed to the White Lead Connections section for the specific model.

J05688 17 / 22

#### 2002-2004 V-Rod Models

Electrical connectors are identified in the service manual by the number and letter shown here within brackets.

- 1. See Figure 28 or Figure 29. Cut the orange/white main vehicle harness wire near the unused position lamp connector [29A] (1).
- 2. Pull only the orange/white wire out of the longer piece of conduit on the garage door opener wire harness. Cut the excess length from the orange/white wire to within easy reach of the cut orange/white wires at connector [29A].
- 3. See Figure 22. The "two into one" splice configuration. Get a red sealed splice connector (see Figure 34, Item 4) from the kit. Splice the garage door opener wire harness power lead to the main harness orange/white wires per the service manual appendix.
- Proceed to the White Lead Connections section for the specific model



- Connector [29A] with orange/white wire
- White headlamp wire

Figure 28. Wire Splice Locations (2002-2003 V-Rod)



- 1. Connector [29A] with orange/white wire
- **Headlamp harness** 2.

Figure 29. Wire Splice Locations (2004 V-Rod)

#### 2005-Later V-Rod Models

Electrical connectors are identified in the service manual by the number and letter shown here within brackets.

- See Figure 30. Cut the orange/white main vehicle harness wire near the headlamp pin connector [38A] (1).
- Pull only the orange/white wire out of the longer piece of conduit on the garage door opener wire harness. Cut the excess length from the orange/white wire to within easy reach of the cut orange/white wires at connector [38A].
- 3. See Figure 22. The "two into one" splice configuration. Get a red sealed splice connector (see Figure 34, Item 4) from the kit. Splice the garage door opener wire harness power lead to the main harness orange/white wires per the service manual appendix.
- Proceed to the White Lead Connections section for the specific model.

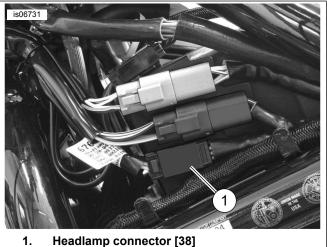


Figure 30. Wire Splice Locations (2005-Later V-Rod)

# WHITE LEAD CONNECTIONS TO **HEADLAMP**

# Dyna Models

See Figure 31. Use cable straps from the kit to fasten the remaining transmitter wire (white) and conduit to the vehicle wires leading to the headlamp. Lift the fuel tank. Feed the wires under the tank toward the headlamp.

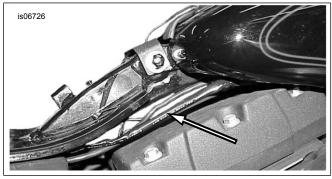


Figure 31. Transmitter Wire Routing to Headlamp (Dyna)

Route the wires into the headlamp housing through the grommet on the lower rear of the housing.

#### NOTE

To route the transmitter wires through the grommet, push a hooked piece of wire through the grommet from the inside of the headlamp housing.

Apply a **light** coat of liquid soap, window cleaner or all-purpose lubricant to pull the wires back through the grommet with the hooked wire.

In some applications, the transmitter wires do not fit through the headlight housing grommet. In that case, splice the wires outside the headlamp housing.

- Cut the white wire in the headlamp housing several inches from the headlamp connector. Cut excess length from the white transmitter wire if necessary. Cut to allow enough wire to strip and splice the wires easily.
- See Figure 22. The "one into one" splice configuration. Get a blue sealed splice connector (see Figure 34, Item 5) from the kit. Splice the white transmitter wire to the white headlamp wires.
- 5. Proceed to the **Receiver and Transmitter Programming** section to program the garage door opener controls.

## **Softail Models**

# 1. NOTE

For 2018-later Softail models Route the white wire up the backbone of the frame, entering near the front of the seat and exiting through the grommet on the left side of the frame near the steer head.

Use cable straps from the kit to fasten the remaining transmitter wire (white) and conduit to the motorcycle wires leading to the headlamp. Remove the fuel tank. Feed the wires under the tank toward the headlamp.

#### 2. NOTE

For 2011-later Softail models, the headlamp circuit wire in the vehicle harness is blue with a white tracer, rather than solid white as described in the following steps. Cut the white wire in the main vehicle harness headlamp circuit at an accessible point near the front of the vehicle. Cut excess length from the white transmitter wire if necessary. Trim back the transmitter wire harness casing to assist splicing. Cut to allow enough wire to strip and splice the wires easily.

- 3. Slide the woven wire conduit (9) from the kit over the white transmitter wires.
- See Figure 22. The "one into one" splice configuration. Get a blue sealed splice connector (see Figure 34, Item 5) from the kit. Splice the white transmitter wire to the white headlamp wires.
- 5. Slide the woven wire conduit over the white wire connection after splicing.
- 6. Proceed to the **Receiver and Transmitter Programming** section to program the garage door opener controls.

# **Sportster Models**

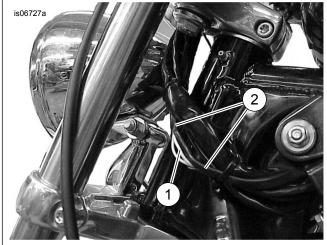
- Route the remaining transmitter wire (white) and conduit through the top of the frame under the fuel tank, and up to the headlamp. Use cable straps from the kit to fasten the wire to the harness.
- 2. Route the wires into the headlamp housing through the grommet on the lower rear of the housing.

#### NOTE

To route the transmitter wires through the grommet, push a hooked piece of wire through the grommet from the inside of the headlamp housing.

Apply a **light** coat of liquid soap, window cleaner or all-purpose lubricant to pull the wires back through the grommet with the hooked wire.

In some applications, the transmitter wires do not fit through the headlight housing grommet. In that case, splice the wires outside the headlamp housing. See Figure 32.



- 1. White headlamp wire
- 2. Cut headlamp wire casing to access white wire

Figure 32. White Wire Optional External Splice Location (Sportster Models)

J05688 19 / 22

- Cut the white wire in the headlamp housing several inches from the headlamp connector. Cut excess length from the white transmitter wire if necessary. Cut to allow enough wire to strip and splice the wires easily.
- 4. See Figure 22. The "one into one" splice configuration. Get a **blue** sealed splice connector (see Figure 34, Item 5) from the kit. Splice the white transmitter wire to the white headlamp wires.
- Proceed to the Receiver and Transmitter Programming section to program the garage door opener controls.

# 2014-Later Touring and Trike Models

- Locate the headlamp connector ([38B] or [38HB]) containing the Blue/White wire. Strip back enough of the conduit to cut the Blue/White wire of the vehicle harness headlamp circuit at an accessible point several inches from the headlamp connector. Cut excess length from the white transmitter wire if necessary. Trim back the transmitter wire harness casing to assist splicing. Cut to allow enough wire to strip and splice the wires easily.
- 2. See Figure 34. Slide the woven wire conduit (9) from the kit over the white transmitter wire.
- See Figure 22. The "one into one" splice configuration. Get a blue sealed splice connector (see Figure 34, Item 5) from the kit. Splice the white transmitter wire to the blue/white headlamp wires.
- 4. Slide the woven wire conduit over the white and white/blue wire connections after splicing.
- 5. Proceed to the **Receiver and Transmitter Programming** section to program the garage door opener controls.

#### V-Rod Models

- Cut the white wire in the main vehicle harness headlamp circuit at an accessible point several inches from the headlamp connector. Cut excess length from the white transmitter wire if necessary. Trim back the transmitter wire harness casing to assist splicing. Cut to allow enough wire to strip and splice the wires easily.
- 2. See Figure 34. Slide the woven wire conduit (9) from the kit over the white transmitter wires.
- See Figure 22. The "one into one" splice configuration. Get a blue sealed splice connector (see Figure 34, Item 5) from the kit. Splice the white transmitter wire to the white headlamp wires.
- 4. Slide the woven wire conduit over the white wire connections after splicing.
- 5. Install the front left louvered cover onto the motorcycle.
- 6. Install air box cover if previously removed.
- 7. Proceed to the **Receiver and Transmitter Programming** section to program the garage door opener controls.

# RECEIVER AND TRANSMITTER PROGRAMMING

After the receiver and transmitter are installed, program the receiver to receive the transmitter frequency. This process requires two people, depending upon how far apart the receiver and transmitter are during programming.

#### NOTE

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

- Models with main fuse: Refer to the service manual and follow the instructions to install the main fuse.
- Models with main circuit breaker: Refer to the service manual and follow the instructions to attach the negative battery cable. Apply a light coat of petroleum jelly or corrosion retardant material to battery terminals.
- Check that a red LED is illuminated on the front of the Harley-Davidson garage door opener receiver (in the garage), indicating power to the receiver.
- See Figure 33. Press and hold the SET button (1) on the Harley-Davidson garage door opener receiver. The LED (2) on the receiver blinks continuously while the SET button is pressed.

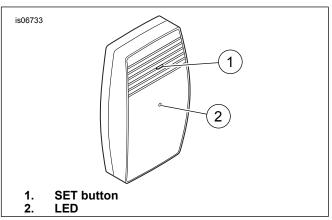


Figure 33. Garage Door Opener Receiver, Front View

· NOTE

When the **receiver** acquires a signal from the **transmitter**, the LED on the **(transmitter?)(receiver?)** turns off.

Turn the ignition switch ON, but do not start the vehicle. Operate the headlamp beam switch using one of these sequences:

- a. With headlamp on LO beam, switch to HI. Switch to
- With headlamp on HI beam, switch to LO. Switch to HI.
- 6. Release the SET button on the receiver.
- Be sure that all lights and switches operate properly before operating motorcycle.

#### 8. NOTE

Clear all obstructions between the transmitter and receiver before testing the operation of the garage door opener.

When the transmitter is activated by toggling the headlamp switch, the red LED on the **transmitter** illuminates for one second to indicate that the transmitter is functioning correctly.

Test the garage door opener, and headlamp high beam and low beam operation.

- 9. Turn ignition switch OFF.
- 10. See service manual. Install seat. After installing seat, pull up on seat to verify that it is secure.
- 11. Install any parts removed for transmitter installation.

#### TROUBLESHOOTING

# Headlamp Switch Toggled, but Garage Door Opener Does Not Function.

With the ignition ON:

- Does the LED on the vehicle transmitter flash when the headlamp switch is toggled?
- · YES. Proceed to Step 2.
- NO. Proceed to Step 3.

- 2. Does the LED on the garage-mounted receiver flash once when the signal is transmitted from the vehicle?
- YES. Proceed to Step 4.
- NO. Proceed to Reset the Receiver.
- 3. Verify proper connections to the vehicle power wires, headlamp wire and ground.
- 4. See **Receiver Installation** near the front of these instructions.
  - a. Verify that the receiver is **properly wired** to the existing garage door opener unit.
  - b. Verify that the receiver is **spaced a sufficient distance** from the existing garage door opener receiver.

#### Reset the Receiver

- 1. Unplug the receiver from the 110 Volt power outlet.
- 2. Wait ten seconds.
- Press and hold the program button on the receiver. While holding the button down, plug the receiver into the power outlet. The red LED flashes rapidly.
- Release the program button. The receiver is now reset, and all memory is erased.
- Program the receiver again. See the Receiver and Transmitter Programming section earlier in these instructions.

# **SERVICE PARTS**

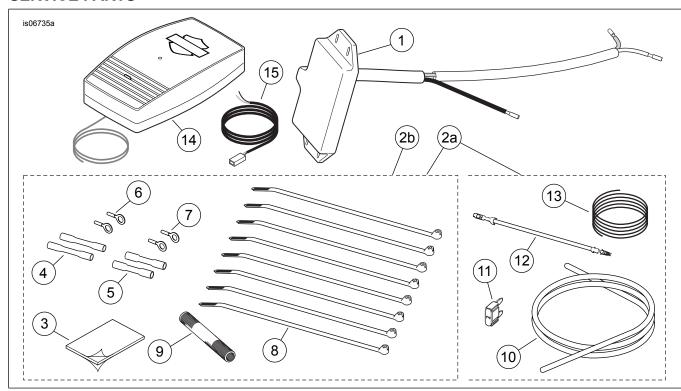


Figure 34. Service Parts, Remote Control Garage Door Opener Kits

J05688 21 / 22

# Table 4. Service Parts, Garage Door Opener Kit 91558-01B

Item	Description (Quantity)	Part Number
1	Transmitter assembly	Not sold separately
2a	Hardware kit (includes items 3-13)	91650-01A
3	Foam pad, adhesive backed both sides.	Not sold separately
	2.54 x 3.81 cm (1.0 x 1.5 in)	
4	Sealed splice connector, #18-20 AWG (red) (2)	70585-93
5	Sealed splice connector, #14-16 AWG (blue) (2)	70586-93
6	Ring Terminal, #18-22 AWG, for 5/16 in diameter stud	9859
7	Ring Terminal, #18-22 AWG, for 1/4 in diameter stud	9858
8	Cable strap, black.	10006
	20 cm (8 in) long (8)	
9	Wire conduit, woven polyester,	70599-02
	76 mm (3 in) long	
10	Wire conduit, #8 x	Not sold separately
	0.84 m (33 in) long (for 2004-later V-Rod/ 2014-later Touring models)	
11	Fuse, blade type, 2 Amp	54305-98
12	Fuse block adapter wire, orange/white	70329-04
13	Wire, insulated, black, #20 AWG,	Not sold separately
	0.86 m (34 in) long	
14	Receiver assembly	91560-01
15	Receiver cable assembly	Not sold separately

# Table 5. Service Parts, Transmitter Kit 91561-01B

Item	Description (Quantity)	Part Number
1	Transmitter assembly	Not sold separately
2b	Hardware kit (includes items 3-9)	91650-01
3	Foam pad, adhesive backed both sides.	Not sold separately
	2.54 x 3.81 cm (1.0 x 1.5 in)	
4	Sealed splice connector, #18-20 AWG (red) (2)	70585-93
5	Sealed splice connector, #14-16 AWG (blue) (2)	70586-93
6	Ring Terminal, #18-22 AWG, for 5/16 in diameter stud	9859
7	Ring Terminal, #18-22 AWG, for 1/4 in diameter stud	9858
8	Cable strap, black.	10006
	20 cm (8 in) long (8)	
9	Wire conduit, woven polyester,	70599-02
	76 mm (3 in) long	

# Table 6. Service Parts, Receiver Kit 91562-01

Item	Description (Quantity)	Part Number
14	Receiver assembly	91560-01
15	Receiver cable assembly	Not sold separately