



INSTRUCTIONS

-J02553

2011-05-27

TURN SIGNAL RELOCATION KIT

GENERAL

Kit Number

53859-02A

Models

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

Additional Parts Required

LOCTITE® 243 Threadlocker and Sealant (blue) P/N 99642-97

Kent-Moore Crimping Tool P/N HD-38125-8 or equivalent

UltraTorch UT-100, Kent-Moore P/N HD-39969, Robinair Heat Gun P/N HD-25070 with Heatshrink Attachment P/N HD-41183 or other suitable radiant heating device.

▲ 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 references Service Manual information. A Service Manual for your model motorcycle is required for this installation and is available from a Harley-Davidson Dealer.

Kit Contents

See Figure 7 and Table 1.

INSTALLATION

NOTE

Models with a Softail Wide Tire Kit will utilize the hardware found in that kit.

▲ WARNING

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

1. Remove the seat and disconnect the battery negative cable.
2. Remove the two screws and lens from the tail lamp.

3. See Figure 1 and Figure 2. Press the lock tabs (1) on the turn signal connectors, (2) and (3), with a terminal pick or small screw driver, and unplug the connectors.
4. Push the turn signal connectors and wires through the openings on each side of the tail lamp base.
5. Reach under the fender and locate the fender clips that hold the turn signal wires in place. Carefully pull the wires out of the clips and pull the turn signal connectors and wires out from under the fender.

NOTE

The wires must be cut to allow them to fit through the new turn signal stalk. They will be spliced back together later in the installation.

6. Push back the plastic conduit at the turn signal connectors and cut one turn signal wire approximately 1-1/2 inches (3.8 cm) from the connector. Cut the other wire about 2-1/2 inches (6.4 cm) from the connector. This allows "staggering" butt connectors so the conduit can be slipped over them.
7. Save the turn signal connectors with the short wires for later reinstallation. Pull the vinyl conduit off the turn signal wires and save.

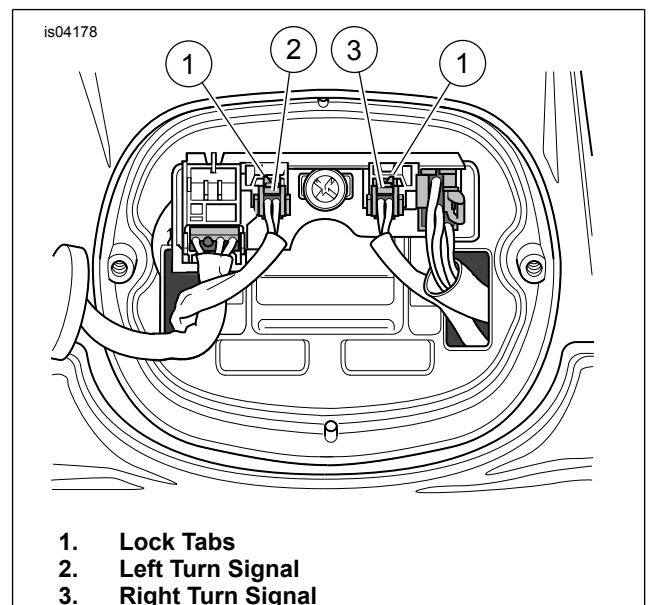
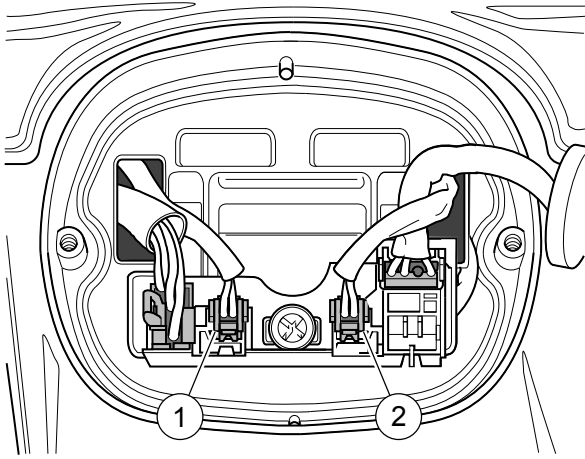


Figure 1. Turn Signals-FLSTF, FLSTS Models



1. Left Turn Signal
2. Right Turn Signal

Figure 2. Turn Signals-FXST, FXSTB, FXSTS Models

Removing Turn Signal Support

Remove the turn signal lamps and lamp supports from the fender support brackets as follows:

For FXST/S/B Models:

NOTE

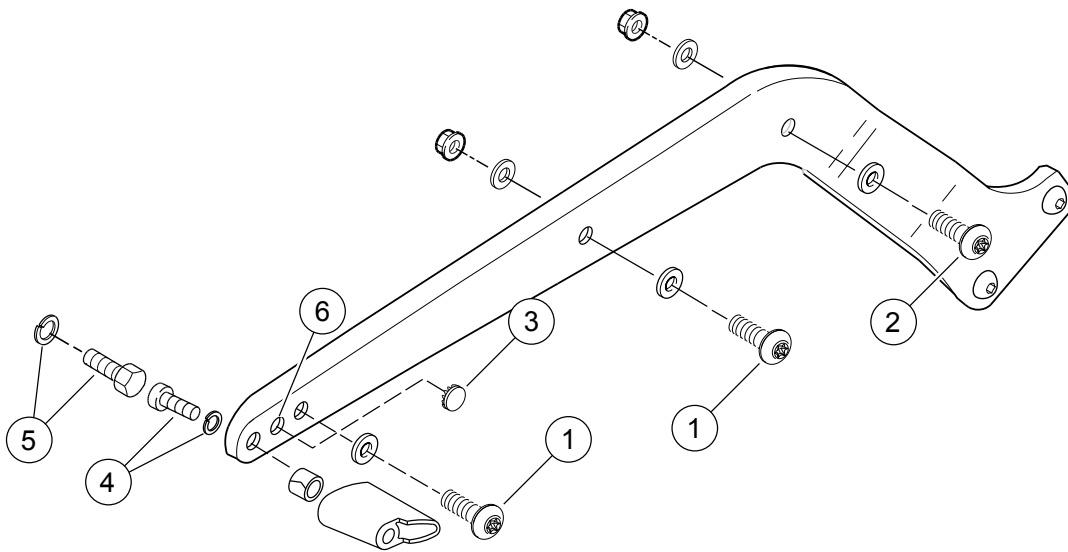
When removing the sissy bar, if so equipped, make sure the sissy bar does not contact the fender or the fender paint will be scratched.

1. Remove the sissy bar/sideplate assembly, if so equipped.

NOTE

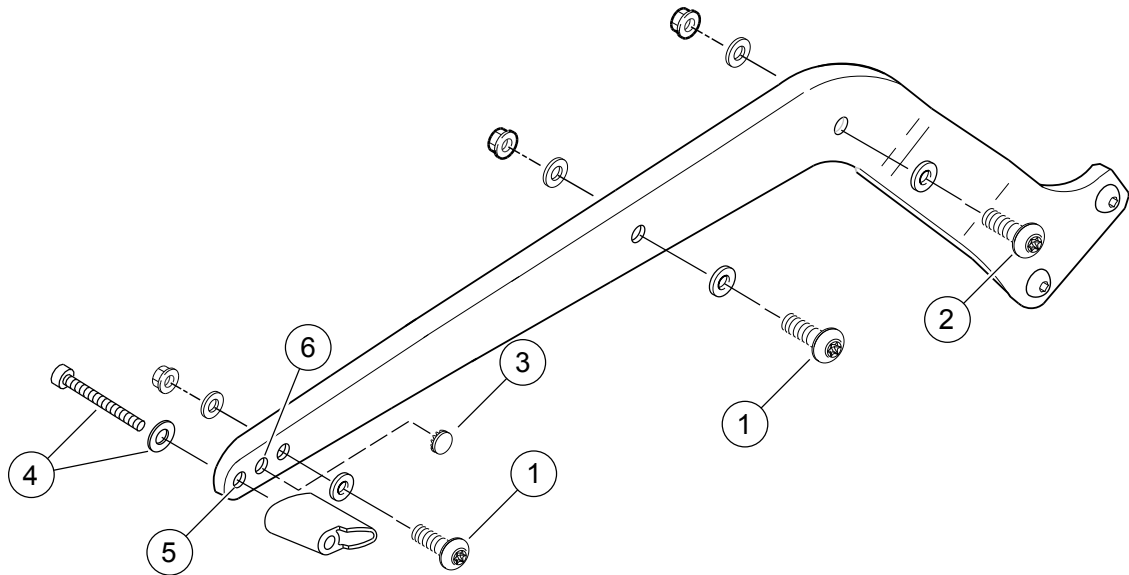
Support the fender before removing the fender hardware to prevent scratching of the fender paint.

2. See Figure 3. Remove the two TORX® screws (1) in each of the fender support brackets. Loosen, but do not remove, the two TORX screws (2).



- | | |
|---------------|-----------------------|
| 1. TORX Screw | 4. Screw |
| 2. TORX Screw | 5. Screw |
| 3. Plug | 6. Hole to be Plugged |

Figure 3. Hardware for FXST/S/B



- | | |
|--|---|
| <p>1. TORX Screw</p> <p>2. TORX Screw</p> <p>3. Plug</p> | <p>4. Screw</p> <p>5. Hole used as Drilling Template</p> <p>6. Hole to be Plugged</p> |
|--|---|

Figure 4. Hardware for FLSTF and FLSTS

3. Being careful not to scratch the fender paint or damage the turn signal wires, gently lift the rear of the fender until the screws and washers (4) that hold the turn signal lamp supports in place can be removed. Remove the lamps and supports, then pull the turn signal wires through the fender holes. Discard the supports, screws and washers.
4. Remove the two bolts (5) that attach the fender to the license plate bracket, and discard the bolts. Proceed to Step 5.

For FLSTF and FLSTS Models:

NOTE

Support the fender before removing the fender hardware to prevent scratching of the fender paint.

1. See Figure 4. Remove the two TORX screws (1) in each of the fender support brackets. The rear TORX screws (1) have washers and nuts inside fender (outside with Wide Tire Kit). Loosen, but do not remove, the two TORX screws (2).

NOTE

Apply masking tape to the area to be drilled to reduce the chance of paint damage.

2. Being careful not to scratch the fender paint or damage the turn signal wires, gently lift the rear of the fender until the bolts and washers (4) that hold the turn signal lamp supports in place can be removed. Remove the lamps and supports, then pull the turn signal wires through the fender holes. Discard the supports, bolts and washers.
3. Carefully lower the fender into its correct position between the fender supports, lining up the holes used by bolts (1) and the original wire holes. Mark the fender on both sides of the bike using the rearmost fender support hole (5) as a template.

▲ WARNING

Do not contact tire with drill bit when drilling fender holes. Drill bit contact with tire can lead to premature tire failure, which could result in death or serious injury. (00403f)

NOTE

To prevent corrosion, apply a small amount of silicone sealant to the drilled-hole surfaces before installing the turn signal stalks.

4. Carefully raise the fender and drill an 11/32 inch hole through each side of the fender in the marked locations. Proceed to Step 5.

For All Models:

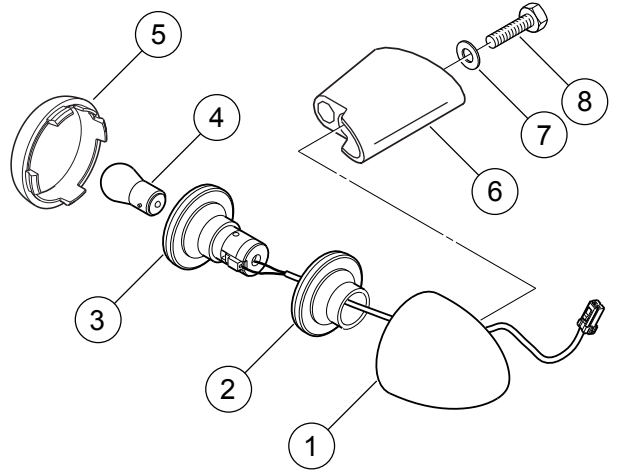
NOTE

Complete ALL the following procedures (through "Reconnecting the Turn Signal Wires," Step 3) on one side of the motorcycle before starting the other side.

▲ WARNING

Button head screws from wide tire kit must be installed with button heads on inside of fender. Fastener contact with tire can lead to premature tire failure, which could result in death or serious injury. (00417b)

5. See Figure 3 and Figure 4. Replace rear TORX screws (1), but do not tighten. Models with a Softail Wide Tire Kit will utilize the hardware found in that kit. The Wide Tire Kit Hardware will re-orient fasteners to come from the inside out.



1. Housing
2. Grommet
3. Reflector
4. Bulb
5. Lens
6. Support
7. Washer
8. Bolt

Figure 5. Removing Stock Turn Signal Stalk

6. See Figure 5. Remove lens (5) from rear turn signal housing (1). Remove bulb (4) from the socket of reflector (3).
7. Carefully pry the reflector and grommet (2) from the housing. Gently pull the wires from the smooth hole in the housing.

Installing Turn Signal stalk

NOTE

The turn signal will be mounted in the rearmost fender support hole.

For FXST/S/B Models:

1. See Figure 7. Insert the long threaded end of the new turn signal stalk (4) through the rear mounting hole in the fender support bracket, spacer (6), and the rear fender.
2. Apply Loctite 243 (blue) to the threads of the turn signal stalk. Thread the stalk into the threaded hole in the license plate bracket. With a wrench on the flats on the stalk, tighten the stalk to 20.3 N·m (15 ft-lbs).

For FLSTF and FLSTS Models:

3. See Figure 7. Insert the long threaded end of the new turn signal stalk (4) through the rear mounting hole in the fender support bracket, spacer (6), and the new hole in the rear fender.
4. Apply Loctite 243 (blue) to the threads of the turn signal stalk. Secure the stalk with washer (7) and locknut (8) from the kit. With a wrench on the stalk wrench flats, tighten the stalk and locknut to 20.3 N·m (15 ft-lbs).

For All Models

NOTE

Models with a Softail Wide Tire Kit will utilize the hardware found in that kit. The Wide Tire Kit Hardware will re-orient fasteners to come from the inside out.

5. See Figure 3 and Figure 4. Tighten screws (1) and (2) to 28–37 N·m (21–27 ft-lbs).

▲ WARNING

Button head screws from wide tire kit must be installed with button heads on inside of fender. Fastener contact with tire can lead to premature tire failure, which could result in death or serious injury. (00417b)

6. See Figure 7. Loosely install a jam nut (3), followed by a lock washer (2) onto the short threaded end of the turn signal stalk (4).

NOTE

Apply a drop of liquid soap to the wires to ease insertion through the stalk or use a thin wire to pull the wires through.

7. Place the recess cover (1) into position over the recess on the turn signal housing. Insert the wires from the reflector through the grommet into the turn signal housing, through the threaded hole and the recess cover, and into the turn signal stalk.
8. Route the wires through the stalk until they come out inside the fender.
9. Screw the turn-signal housing onto the stud. Be careful that the wires are not twisted or damaged as the stalk and housing are assembled. The lock washer will fit inside the hole in the recess cover. Hand tighten the jam nut against the lock washer.
10. While pulling the turn-signal wires into the inside of the fender, guide the turn-signal socket and grommet into the housing.
11. Align the rear turn signal housing so that the lens, when installed, will be aimed rearward for proper visibility. If necessary, back off the jam nut to allow adjustment of the turn signal housing, then tighten the jam nut against the lock washer to 11 N·m (8 ft-lbs).

NOTE

To achieve a snug fit, the tines of the hole plug may need to be spread apart. Holding the cap end of the plug firmly, use a pliers to bend each of the tines outward slightly. Repeat as necessary for a snug fit.

12. Install chrome hole plug (5) into the fender support hole previously used for the turn signal wire.

Reconnecting Turn Signal Wires

NOTE

Before splicing the wires, slide the conduit saved earlier over the turn signal wires running from the lamps.

NOTE

Be sure to match the wire colors before splicing.

1. Strip a 3/8 inch (9.5 mm) section of insulation from the ends of the four turn signal wires underneath the fender.

- See Figure 6. Insert the two black turn signal wires into opposite ends of a butt splice connector. Insert the two violet/ brown wires into opposite ends of a second connector.

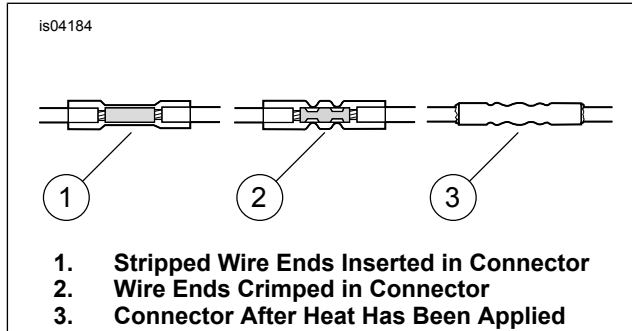


Figure 6. Installed Sealed Butt Connectors

- Match the color of the butt splice connector with the color of the crimp cavity of the crimping tool (Kent-Moore Part Number HD-38125-8 or equivalent). Crimp the wires into the connector.

⚠ 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)

- Using the UltraTorch UT-100 (Kent-Moore Part Number HD-39969), Robinair Heat Gun (HD-25070) with Heatshrink Attachment (HD-41183), or other suitable radiant heating device, heat the crimped splice to encapsulate the butt splice connection. Apply heat from the center of the crimp out to each end until the meltable sealant comes out of both ends of the connector.
- Route the harness back under the fender and slip the 2-place connectors through the openings in the tail lamp.
- Plug the connectors into the tail lamp as shown in Figure 1 or Figure 2.
- Reach under the fender and insert the harnesses into the fender clips that hold the turn signal wires in place.
- Install the tail lamp lens with two mounting screws.
- Connect the battery negative cable.

⚠ WARNING

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)

⚠ WARNING

Be sure headlamp, tail and stop lamp and turn signals are operating properly before riding. Poor visibility of rider to other motorists can result in death or serious injury. (00478b)

- Install seat and check the turn signals for proper operation.

SERVICE PARTS

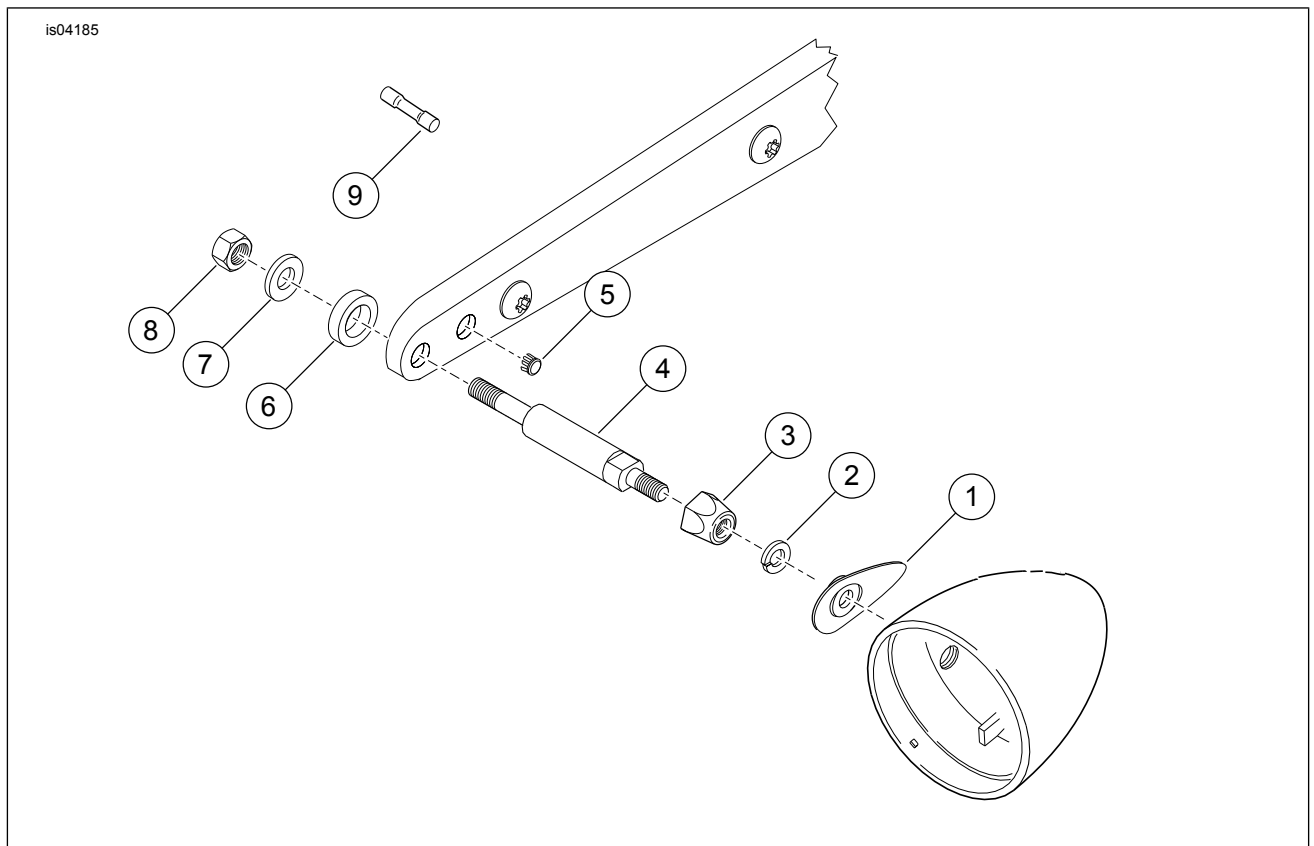


Figure 7. Service Parts: Turn Signal Relocation Kit

Table 1. Service Parts Table

Item	Description (Quantity)	Part Number
1	Cover, turn signal recess (2)	68028-03
2	Lockwasher (2)	7042
3	Jam nut, turn signal stalk (2)	68991-02
4	Stud, turn signal (2)	53664-02
5	Hole plug (2)	53830-00
6	Spacer, fender support (2)	59857-00
7	Washer, plain (2)	6702
8	Locknut (2)	7739
9	Connector, wire butt splice (4)	70585-93