# **REAR TURN SIGNAL RELOCATION KIT**

# **GENERAL**

#### Kit Number

68474-04

#### Models

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

This kit must be used when saddlebags (part numbers 91010-91A, 91004-94 or 90342-04A) are installed.

# **Additional Parts Required**

# **AWARNING**

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)

Separate purchase of additional parts or accessories may be required for proper installation on your model motorcycle. Refer to the latest P&A Retail Catalog for a list of required parts or accessories for your vehicle.

Proper installation of this kit also requires a Snap-On TT600-3 pick tool and a Kent-Moore Ultra Torch UT-100 or equivalent.

Loctite® 243 (blue) Part Number 99642-97 is available from a Harley-Davidson dealer.

#### 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 5 and Table 1 or Figure 6 and Table 2.

# **REMOVAL**

# WARNING

To prevent accidental vehicle start-up, which could cause death or serious injury, disconnect battery cables (negative (-) cable first) before proceeding. (00307a)

# WARNING

Disconnect negative (-) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00049a)

- Refer to the Service Manual and follow the instructions given to remove the seat and disconnect the battery cables, negative (-) cable first. Remove sissy bar and sideplate if applicable. Retain all parts and hardware.
- Properly support motorcycle under frame to prepare for removal of right and left shocks.
- 3. See Figure 1. With rear fender and frame securely supported, back out upper mounting screw (1) enough to allow the shock stud cover to slide outward so the fender support cover (4) can be removed.

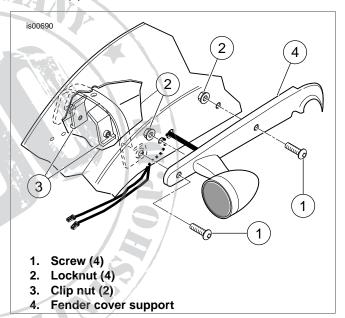


Figure 1. Rear Fender Support Removal

4. Refer to the Rear Turn Signal removal section of the Service Manual and follow the instructions given to remove the turn signals located on the fender support covers.

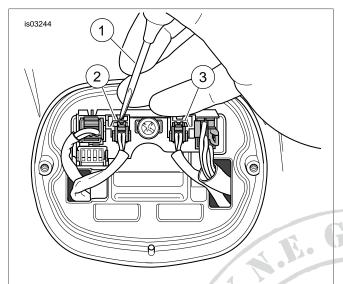
#### NOTE

Perform the following procedures one side at a time until instructed to go to opposite side of vehicle.

- See Figure 2. Remove the tail lens from the tail light base. Remove the terminals (2) and (3) from the rear tail light base and push the terminals through the holes and inside the fender.
- See Figure 3. Remove the rear turn signal stalk nut (1) and the button head screw nuts (4) from inside the rear fender.
- 7. Disengage the turn signal wiring harness from wire retention brackets (3). Push the turn signal wiring terminal through retention bracket hole under the fender.

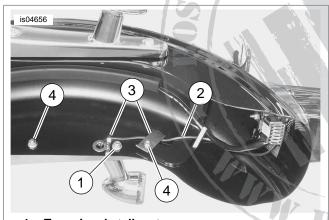
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- See Figure 1. Remove button head screws (4) that secure fender support cover to frame. Retain hardware for later installation.
- Remove fender support cover with turn signal assembly from rear fender strut.



- 1. Terminal pick tool
- 2. Left turn signal connector
- 8. Right turn signal connector

Figure 2. Turn Signal Connectors



- 1. Turn signal stalk nut
- 2. Right turn signal wire
- 3. Wire retention brackets
  - . Button head nuts

Figure 3. Rear Turn Signal Wire Routing

- Remove the stock 5/16-18 rear turn signal stud with a deep well socket from the fender support cover and the turn signal housing. Discard stud.
- Make note of how rear turn signal wire is routed on inside of fender support cover (for later rerouting) and untape wire from fender support cover.
- 12. See Figure 6. Using a small piece of tape, tack the thick spacer (7) from kit between rear strut and fender support cover. Insert the button head screw removed in Step 6 through the fender support cover hole from where the stock rear turn signal support was removed.

#### NOTE

Use caution not to scratch chrome surface of the turn signal when removing bulb assembly.

#### INSTALLATION

# **Butt Splice Connections**

#### NOTE

See Service Manual for more detailed instructions on installing and removing multilock amp electrical connectors.

#### NOTE

After the rear signals are relocated, the stock turn signal wires will not reach the connectors under the tail light lens. The wires with the terminals supplied in the kit will be spliced onto the stock wires.

- See Service Manual Instructions for removal of the Amp Multi-Lock connectors from the stock turn signal wire.
- Cut the terminals from the ends of the turn signal wires.
  Cut away approximately 2 inches (5.0 cm) of the black conduit covering the end of the wire pair.
- Strip a 3/8 inch (9.5 cm) section of the insulation from the cut ends of the signal wires.

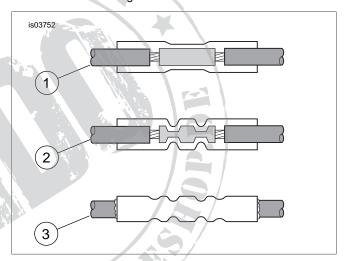


Figure 4. Installing the Sealed Butt Connectors

4. Determine the length of the additional wire required to reach the connectors under the tail light lens. Cut the wires with the terminals from the kit (one black and one violet) to the proper lengths. Strip a 3/8 inch (9.5 mm) section of the insulation from the cut ends of the wires.

#### NOTE

For proper fit of conduit (installed in a later step), make sure butt splices are staggered.

- See Figure 3. Insert the two black turn signal wires into opposite ends of a butt splice connector. Insert the two violet wires into opposite ends of a second butt splice connector.
- 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.

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# **AWARNING**

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)

- 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 heatshrink work is being performed.
- Always keep hands away from tool tip area and heatshrink attachment.
- 7. Using the Ultra Torch, UT-100, 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.

# Final Connection of Turn Signal Wires

- 8. Slide the conduit over the wire pair (staggering connectors) making sure it overlaps the stock conduit. Trim the excess if necessary.
- Attach the connectors to the terminals. Route the connectors through the opening in the fender behind the tail lamp and plug it it.
- 10. Repeat Steps 1 through 9 for the opposite side.

# For Models with Saddlebag Kits 91010-91A and 91004-94

#### NOTE

The narrow end of relocation pad should point to the rear of the motorcycle.

- For Models with Sissy Bar Upright: Put fender support cover over fender support. Reinstall sissy bar sideplate over cover and secure with original hardware.
- See Figure 6. Insert mounting screw (5) into hole from inside of fender out through rear hole at narrow end of relocation pad (6). Apply Loctite 242 (blue) on exterior threads of mounting screw (5).
- Slide turn signal stalk and housing on mounting screw and thread mounting screw (5) into turn signal housing and tighten. With a 5/8 inch box-end wrench on mounting screw (5) flat section, tighten screw, while holding turn signal housing in proper location, to 132-216 in-lbs (14.9-24.4 Nm).
- 4. Insert the lamp wire through the center hole in relocation pad, along channel on the inside of the pad and through second hole from rear in fender support cover and through the second hole from the end of the fender strut. Firmly pull lamp wire through fender strut.
- Coat the rubber bulb assembly isolator with a suitable lubricant. This will ease installation of the assembly into the turn signal housing. Press light bulb assembly evenly into turn signal housing until seated below lens cover groove.

- Install button head screw (9) from kit through forward most hole of relocation pad (6), fender support cover, thick spacer (7) (taped to frame) and fender strut. Reinstall using original nut removed in Step 6 of Removal section.
- Tighten button head screws (9) to 132-216 in-lbs (14.9-24.4 Nm).
- 8. Reinstall bulb and rear turn signal lens.
- Tighten upper mounting screw to 45-50 ft-lbs (61.1-67.9 Nm).
- 10. Repeat Steps 1 through 7 for opposite side of vehicle.

# **A**WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

11. Reconnect battery (positive cable first) and test rear turn signals for proper operation. Reinstall seat.

# **A**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)

### For Models with Saddlebag Kit 90342-04A

- See Figure 6. Using a small piece of tape, tape spacer (9) from kit to frame over hole from where the rear turn signal stud was removed.
- 2. Remove turn signal stud from turn signal housing.
- 3. On models with sissy bars, reinstall sissy bar sideplate between fender and fender support cover.
- 4. From the inside of the fender, insert a 5/16-18 x 4.1 inch bolt (18) through the hole at the narrow end of the rear most hole in fender, through fender support and cover, and out through the hole at the narrow end of the rear relocation pad (1).
- 5. Apply Loctite 243 (blue) on the threads of the mounting bolt. Loosely arrange turn signal housing and stalk on mounting bolt, running the lamp wire through the center hole in rear relocation pad, along channel on the inside of the pad and through the third hole from the rear in fender support cover.
- Tighten bolt in turn signal housing to 132-216 in-lbs (14.9-24.4 Nm). Firmly pull lamp wire through fender support.
- Reinstall the stock button head screw and locknut saved in Step 6 of removal procedure and tighten to 24-27 ft-lbs (33-37 Nm).
- 8. Repeat Steps 1 through 6 for opposite side of motorcycle.
- Refer to saddlebag instruction sheet for the installation of the saddlebags.

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# **A**WARNING

Connect positive (+) battery cable first. If positive (+) cable should contact ground with negative (-) cable connected, the resulting sparks can cause a battery explosion, which could result in death or serious injury. (00068a)

10. Reconnect battery (positive cable first) and test rear turn signals for proper operation. Reinstall seat.

# **A**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)

# **SERVICE PARTS**

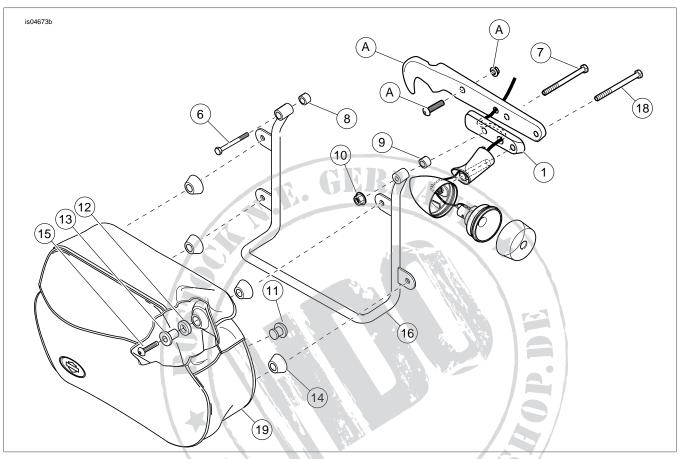


Figure 5. Service Parts: Rear Turn Signal Relocation Kit for Installation with Kit 90342-04A

Table 1. Service Parts: Rear Turn Signal Relocation Kit for Installation with Kit 90342-04A

Item	Description (Quantity)	Part Number		
1	Rear directional relocation pad (2)	68502-04		
2	Wire, black 18 AWG, 12 in. length w/terminal (2) (not shown)	Not Sold Separately		
3	Wire, violet, 18 AWG, 12 in. length with terminal (2) (not shown)	Not Sold Separately		
4	Connector, pre-insulated, sealed splice (4) (not shown)	70585-93		
5	Vinyl conduit, black, 12 in. length (not shown)(2)	Not Sold Separately		
Items 6 through 20 are included in the saddlebag kit and are shown for reference only.				
6	Screw, hex cap 1/2-13 x 3.75 (2)	3829		
7	Screw, hex cap 5/16-18 x 3.00 (2)	4375		
8	Spacer, 0.531 x 0.75 x 0.25 (2)	53035-04		
9	Spacer, 0.325 x 0.75 x 0.25 (2)	53034-04		
10	Locknut, 5/16-18 (2)	7531		

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Table 1. Service Parts: Rear Turn Signal Relocation Kit for Installation with Kit 90342-04A

Item	Description (Quantity)	Part Number	
11	Bumper (4)	62123-66	
12	Isolator washer (8)	90678-94	
13	Isolator bushing (8)	90676-94	
14	Isolator (8)	90677-94	
15	Screw, button head, 5/16-24 x 1.25 (8)	90578-94	
16	Support, left	90608-96A	
17	Support, right (not shown)	90625-96A	
18	Screw, hex cap 5/16-18 x 4.1 (2)	Not Sold Separately	
19	Saddlebag, LH, for Kit 90342-04A	90303-98A	
20	Saddlebag, RH, for Kit 90342-04A (not shown)	90304-98A	
Items mentioned in text, but not included in kit:			
Α	Fender support cover and hardware		



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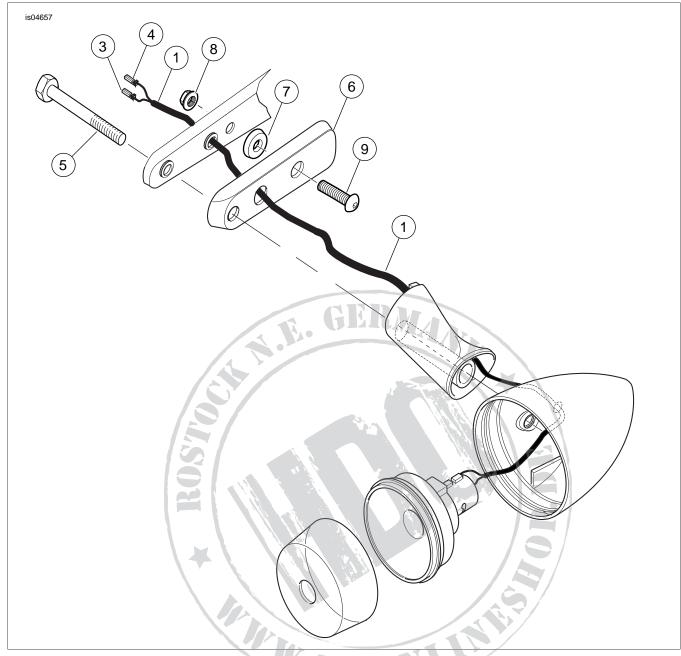


Figure 6. Service Parts: Rear Turn Signal Relocation Kit for Installation with Kits 91010-91A and 91004-94

Table 2. Service Parts: Rear Turn Signal Relocation Kit for Installation with Kits 91010-91A and 91004-94

Item	Description (Quantity)	Part Number
1	Conduit (2)	Not Sold Separately
2	Connector (not shown) (4)	Not Sold Separately
3	Wire, violet (2)	Not Sold Separately
4	Wire, black (3)	Not Sold Separately
5	Screw, hex head 5/16-18 x 4.10 inch (2)	Not Sold Separately
6	Rear directional relocation pad (2)	68502-04
7	Spacer, ID 0.13 in (thick) (2)	5792
8	Nut, flange (existing) (2)	7531
9	Screw, button head 5/16-18 x 1.75 in (2)	4783

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