



# INSTRUCTIONS

J05323

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## LED BATTERY CHARGE INDICATOR HARNESS

### GENERAL

#### Kit Number

66000005

#### Models

This Three-Pin Battery Charging Harness fits all Harley-Davidson® motorcycles equipped with a 12 volt battery, and allows an easy connection to any Harley-Davidson battery charger equipped with a black quick disconnect connector to properly charge and maintain the battery. The LED indicator light will flash red when the battery needs charging. Regularly monitor the status of the indicator light. If battery voltage falls below 3V, the indicator light may no longer flash.

#### Additional Parts

#### NOTICE

**Always use replacement fuses that are of the correct type and amperage rating. Use of incorrect fuses can result in damage to electrical systems. (00222a)**

#### NOTE

*A replacement 7.5 A Type ATO automotive fuse can be purchased locally.*

### OPERATION

- If the battery charge is low, the low battery charge indicator light on the harness will turn on after being connected for 60 seconds.
- Connecting the harness to a Harley-Davidson® charger will turn off the low battery indicator light.
- If the motorcycle's ignition switch is turned on and the vehicle is not started within 60 seconds, the electrical draw from the headlight or radio may also activate the indicator light. The indicator light will turn off when the motorcycle is started.

### INSTALLATION

#### NOTE

*Several variations of battery terminals and connecting hardware have been used over the years on Harley-Davidson motorcycles. Refer to Figure 1 to determine the terminal and hardware type used on your battery.*

*The indicator light may initially flash upon installation. This is normal. If the light continues to flash after installation is complete, connect your battery to a Harley-Davidson approved charger.*

The following procedures apply to all models when connecting and disconnecting battery terminals.

#### ⚠ 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)**

1. See Figure 1. Follow the instructions in the owner's manual to remove the seat and any other components (side covers, etc.) necessary to provide access to the battery.
2. Refer to the correct view in Figure 1 for your model. Break the battery negative (-) connection by removing the hardware assembly from the negative battery terminal.
3. Break the positive (+) battery connection by removing the hardware assembly from the positive battery terminal.
4. Clean the battery terminals and cable connectors using a wire brush or sandpaper to remove any oxidation.

#### NOTE

**For 2006 and Later FXD (Dyna) Models:** *The Battery Charging Harness must be routed through the back of the battery tray before connection to the battery. See the **Harness Routing** section for details.*

5. Apply a light coating of Harley-Davidson electrical contact lubricant (Part Number 99861-02), petroleum jelly or other corrosion retardant material to the battery terminals, cable connectors, Battery Charging Harness ring terminals and connector located under the weathershield cap.

#### ⚠ 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)**

6. Refer to the view in Figure 1 used for disassembly. Install the positive (red) lead of the Battery Charging Harness to the positive (+) battery post in the sequence shown. Tighten the positive (+) terminal post bolt to the value shown in the owner's manual.

- Attach the negative (black) lead of the Battery Charging Harness to the negative (-) battery post in the sequence shown. Tighten the negative (-) terminal post bolt to the value shown in the owner's manual.

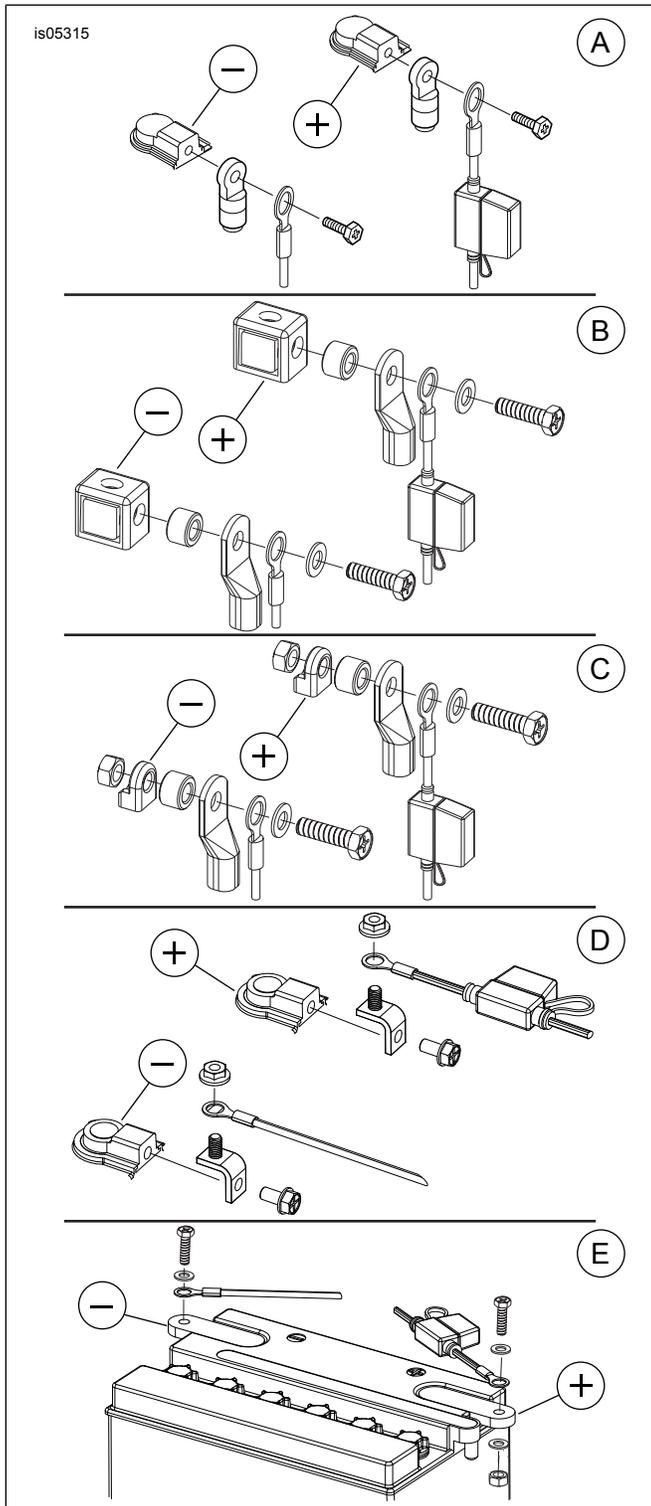


Figure 1. Battery Connection Types

## Harness Routing

### NOTICE

When routing wires and harnesses, verify that they are clear of moving parts, heat sources and pinch points to avoid wire damage or a short circuit, which could result in electrical system damage. (00579b)

The following sub-sections show the correct harness routing for many models. Whether your specific application is shown or not, be sure to follow these general guidelines:

- Do not tie off the harness end to the fuel tank vent hose.
- Avoid vehicle components that could pinch or cut the harness.
- Keep the harness away from vehicle components that radiate heat.
- Take up any slack in the cable and store out of sight.
- Secure the harness with cable straps (Part Number 10006), available from a Harley Davidson dealer.

### VRSC (V-Rod) Models

- See Figure 2. Route the battery harness connector (3) toward the front of the motorcycle following the upper left frame tube. Cleanly tuck the in-line fuse (2) into the space in front of the battery.
- Continue to route the harness connector to the front of the vehicle and behind the vent cover. Secure the harness with a cable strap and let the connector protrude past the cover for easy access. Trim any excess from the cable strap.
- Proceed to **ALL Models**, Step 4.

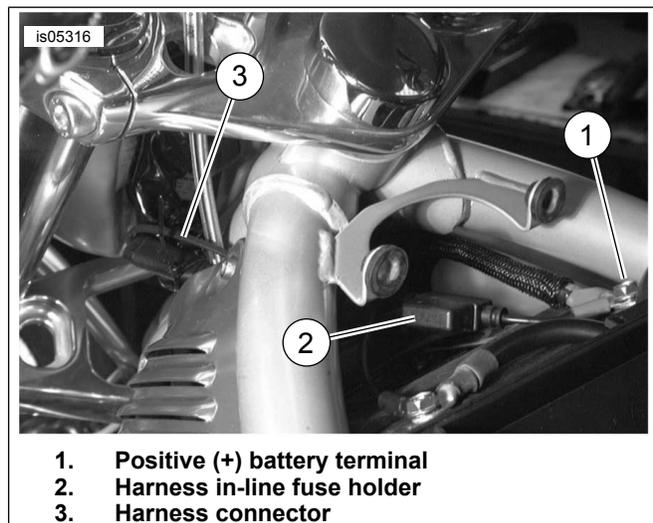
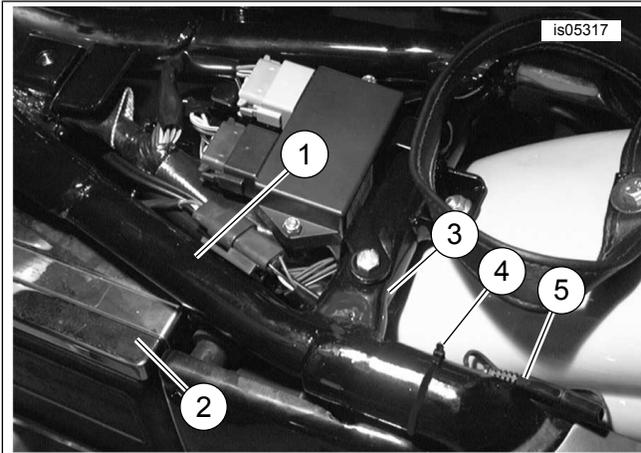


Figure 2. VRSC Battery Harness Routing

### 2003 and Earlier XL (Sportster) Models

- See Figure 3. Route the harness connector (5) toward the rear of the motorcycle following the upper left frame tube (1). Cleanly tuck the in-line fuse into the space on the side of the battery (2).
- Continue to route the harness connector under the frame crossmember (3) and back between the left frame rail and the fender. Secure the connector to the inside of the left rear frame tube using a cable strap (4). Trim any excess from the cable strap.

3. Proceed to **ALL Models**, Step 4.

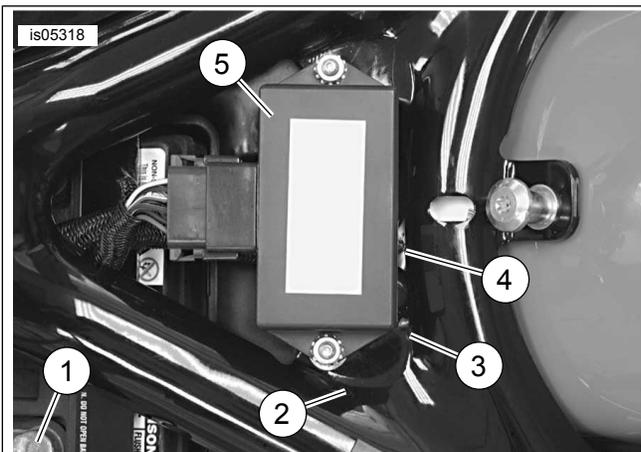


1. Upper left frame tube
2. Battery
3. Frame crossmember
4. Cable strap
5. Harness connector

**Figure 3. XL (Sportster) Battery Harness Routing (2003 and Earlier Models)**

### 2004 and Later XL (Sportster) Models

1. See Figure 4. Route the harness connector (4) toward the rear of the motorcycle following the upper left frame tube. Cleanly tuck the in-line fuse into the space on the side of the battery.
2. Locate the B + (battery positive) connector (unused gray connector with a red wire) on the main electrical harness, routed under the seat beneath the ignition control module (5). Secure the Battery Charging Harness connector close to the B + connector with a cable strap (3). Trim any excess from the cable strap.
3. Proceed to **ALL Models**, Step 4.

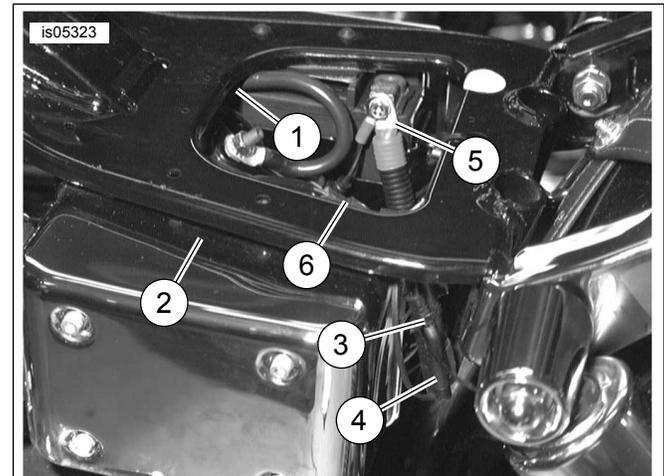


1. Positive (+) battery terminal
2. Harness in-line fuse holder
3. Cable strap
4. Harness connector
5. Ignition control module

**Figure 4. XL (Sportster) Battery Harness Routing (2004 and Later Models)**

### 2005 and Earlier FXD (Dyna) Models

1. See Figure 5. Route the harness connector (4) toward the left (opposite) side of the frame. Cleanly tuck the in-line fuse (6) into the battery nesting area.



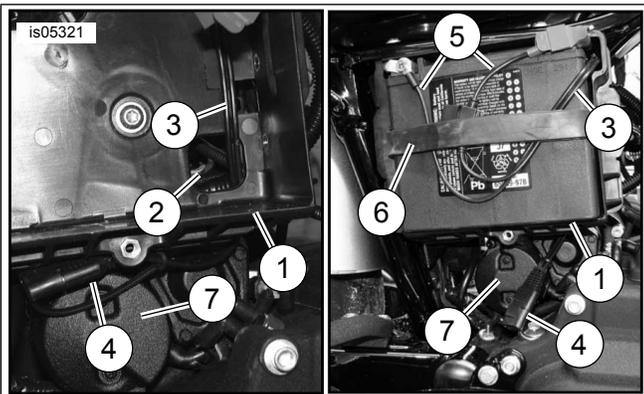
1. Negative (black) ring terminal
2. Upper frame rail
3. Cable strap
4. Harness connector
5. Positive (red) terminal
6. Harness in-line fuse

**Figure 5. FXD (Dyna) Battery Harness Routing (2005 and Earlier Models)**

2. Continue to route the harness connector under the upper left frame pan and use a cable strap (3) to secure the Battery Charging Harness connector to the vent tube as shown. Trim any excess from the cable strap.
3. Proceed to **ALL Models**, Step 4.

### 2006 and Later FXD (Dyna) Models

1. See Figure 6. Before installing the Battery Charging Harness to the battery terminals, route the harness as follows:
  - a. Feed the connector (4) on the Battery Charging Harness (3) out through the rectangular cutout (2) at the bottom-right of the battery tray (1) rear wall. Bring the connector around the underside of the battery tray, and out toward the right side of the motorcycle.
  - b. Route the battery end (5) of the harness upward, closely following the inside wall of the battery tray in the space between the right-side wall of the tray and the battery.



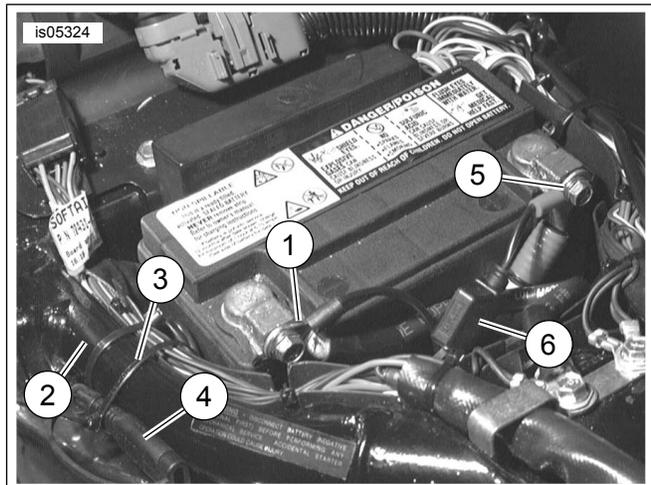
1. Battery tray
2. Rectangular cutout
3. Battery Charging Harness
4. Harness connector
5. Battery end of harness
6. Battery strap
7. Starter

Figure 6. FXD (Dyna) Battery Harness Routing (2006 and Later Models)

2. Slide the battery into the tray, and loop the Battery Charging Harness across the front of the battery as shown. Connect the battery and Battery Charging Harness terminals per **INSTALLATION** Steps 5, 6 and 7.
3. Arrange the Battery Charging Harness wires in a smooth, flat loop against the front of the battery. Install the battery strap (6), capturing the wire loops to hold them in place. Position the connector end of the harness to be accessible for use, and tucked above the starter (7) when not in use, then pull the loops under the strap to adjust the length of the harness and remove any slack. Proceed to **ALL Models**, Step 4.

### FLS/FXC/FXS (Softail) Models

1. See Figure 7. Route the harness connector (4) toward the rear of the battery following along the right side. Cleanly tuck the in-line fuse (6) in the nest directly in front of the battery.
2. Route the harness connector between the right upper frame rail (2) and the oil tank. With the connector opening facing toward the front of the motorcycle, use a cable strap (3) and secure the Battery Charging Harness to both the inner and outer side of the frame rail. Trim any excess from the cable strap.
3. Proceed to **ALL Models**, Step 4.



1. Negative (black) ring terminal
2. Right upper frame rail
3. Cable strap
4. Harness connector
5. Positive (red) terminal
6. Harness in-line fuse

Figure 7. FLS/FXS (Softail) Battery Harness Routing

### FL (Touring) Models

1. See Figure 8. Route the harness connector (6) down along the front of the battery, then to the right toward the space between the right frame tube and battery box (5).
2. Cleanly tuck the in-line fuse (2) into the nest directly in front of the battery. Bring the harness connector out under the right side of the battery box and continue to route through the hole or slot in the frame sheet metal (4) down to just above the oil fill (7) dipstick. Use a cable strap and secure the connector to the conduit on the existing harness running vertically near the frame tube. Trim any excess from the cable strap.
3. Proceed to **ALL Models**, Step 4.

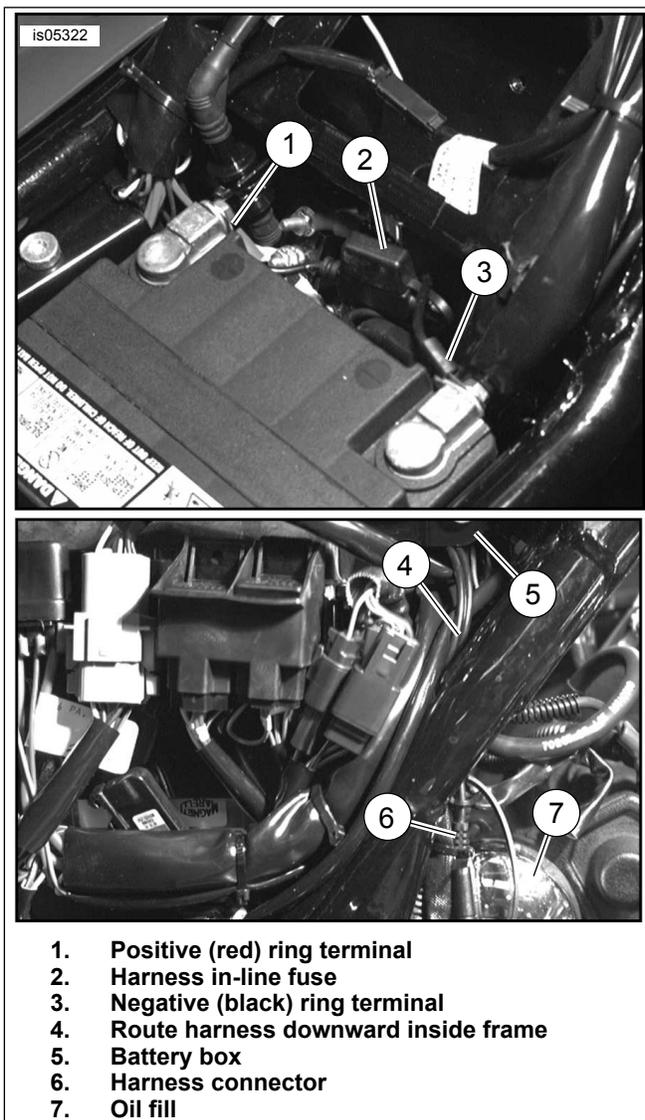


Figure 8. FL (Touring) Battery Harness Routing

## ALL Models

### ⚠ 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)

1. Refer to the owner's manual and follow the instructions given to install the seat and any other components removed.

## IN USE

### Connecting to a Two-Pin Battery Charger

See Figure 9 a. Connect the two-pin connector (2) from the battery charger to the three-pin connector (1) on the battery harness.

### Connecting to a Three-Pin Battery Charger

See Figure 9 b. Connect the three-pin connector (3) from the battery charger to the three-pin connector (1) on the battery harness.

### When Not Connected to a Battery Charger

See Figure 9 c. The protective cap (4) should be installed over the entire battery harness connector (1) to protect all three terminals from damage and corrosion.

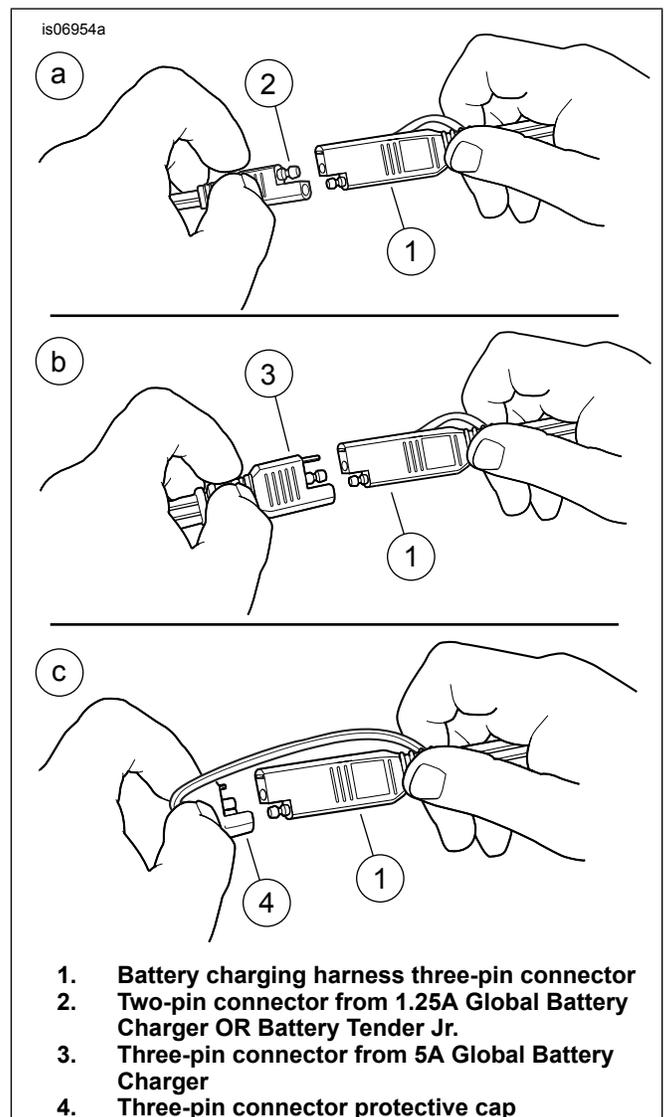


Figure 9. Connection to Battery Charger



- 1. Battery charger connector
- 2. Protective cover
- 3. Positive connector

- 4. Negative connector
- 5. Fuse cover
- 6. LED indicator light

Figure 10. Battery Charging Harness