



INSTRUCTIONS

-J01920

REV. 05-24-2004

Kit Number 94624-97B

BATTERY CHARGING HARNESS (THREE-PIN)

General

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.

CAUTION

Always use replacement fuses that are the same type and value, or damage to the electrical system may occur.

NOTE

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

Harness 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 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)

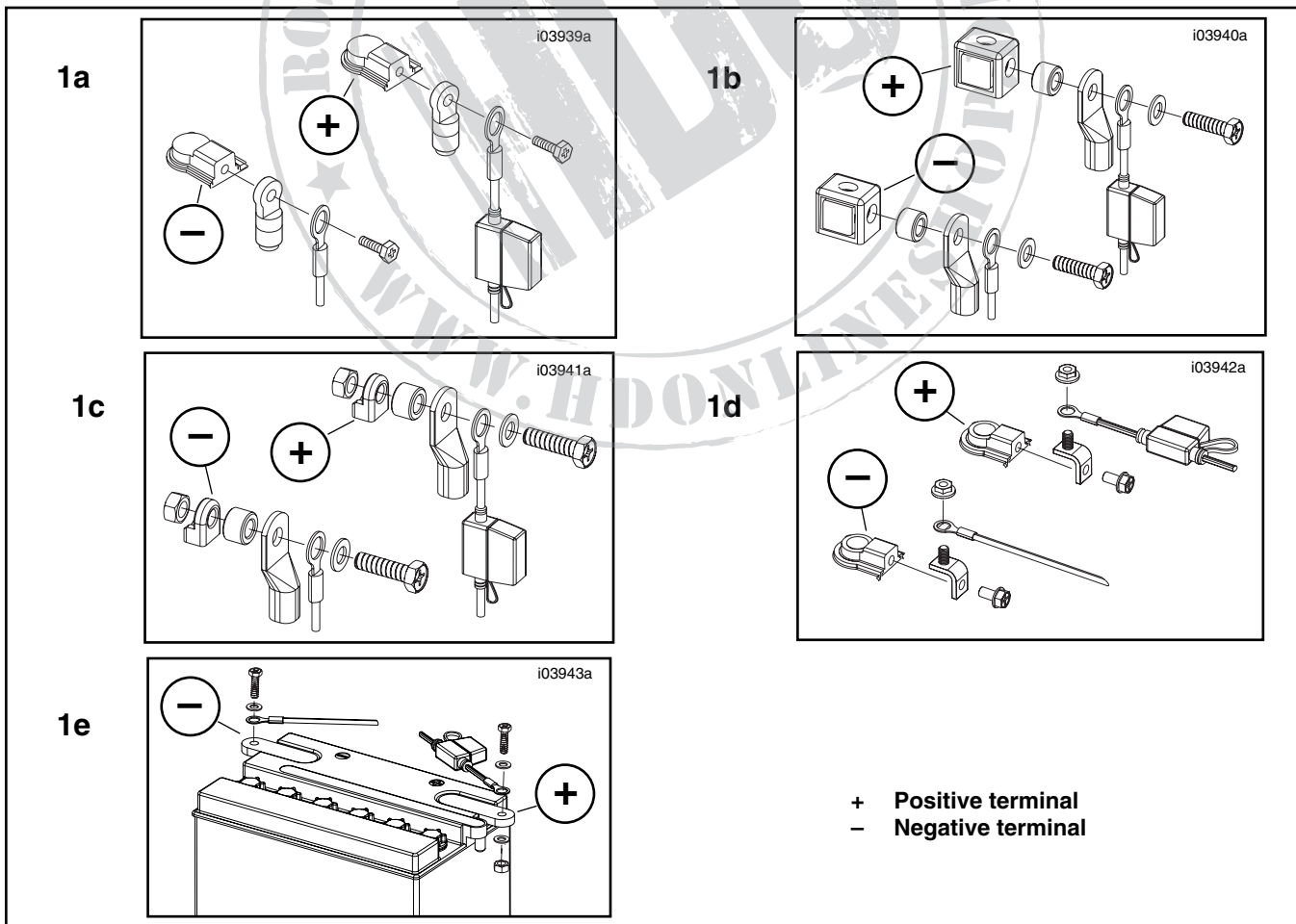


Figure 1. Battery Connection Types

1. Follow the instructions in your 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 applicable 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.
5. Apply a light coating of Harley-Davidson electrical contact lubricant (Part Number 99861-02) to the battery terminals, cable connectors, battery charging harness ring terminals and connector located under the weather-shield 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 harness to the positive (+) battery post following the sequence shown.
 - On 1999 and earlier models (with original equipment), torque the positive (+) terminal post bolt to 40 in-lbs (4.5 Nm).
 - On 2000 and later models (with original equipment), torque the positive (+) terminal post bolt to 60-96 in-lbs (6.8-10.9 Nm).
7. Attach the negative (BLACK) lead of the harness to the negative (-) battery post following the sequence shown.
 - On 1999 and earlier models (with original equipment), torque the negative (-) terminal post bolt to 40 in-lbs (4.5 Nm).
 - On 2000 and later models (with original equipment), torque the negative (-) terminal post bolt to 60-96 in-lbs (6.8-10.9 Nm).

Harness Routing

CAUTION

Do not route the harness near any moving parts. Contact with moving parts may result in damage to harness.

Refer to the following sections to determine the correct harness routing for your model. Be sure to avoid any components that may pinch or cut the harness, and avoid components that radiate heat. Take up any slack in the cable and store out of sight. Secure the harness with cable straps (H-D Part Number 10006), which can be purchased separately from any Harley Davidson Dealer.

VRSC Model Harness Routing

1. See Figure 2. Route the battery harness/ connector (3) toward the front of the bike following the upper left frame tube. Cleanly tuck the in-line fuse (2) into the space in front of the battery.
2. Continue to route the harness/ gray connector to the front of the bike 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.

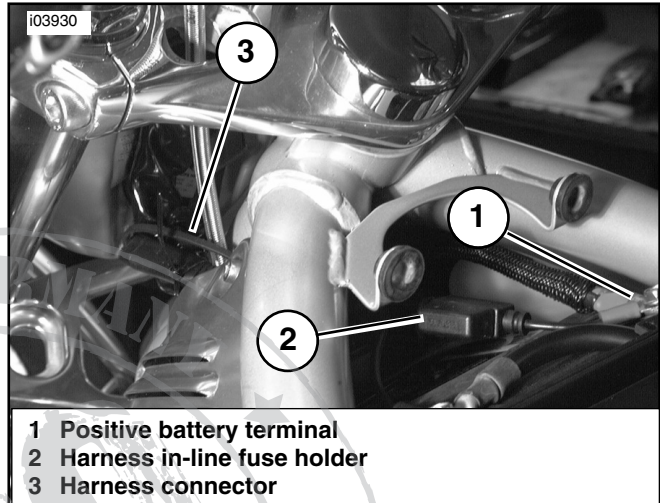


Figure 2. VRSC Battery Harness Routing

2003 and Earlier Sportster Model Harness Routing

1. See Figure 3. Route the harness/ connector (5) toward the rear of the bike following the upper left frame tube. 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.

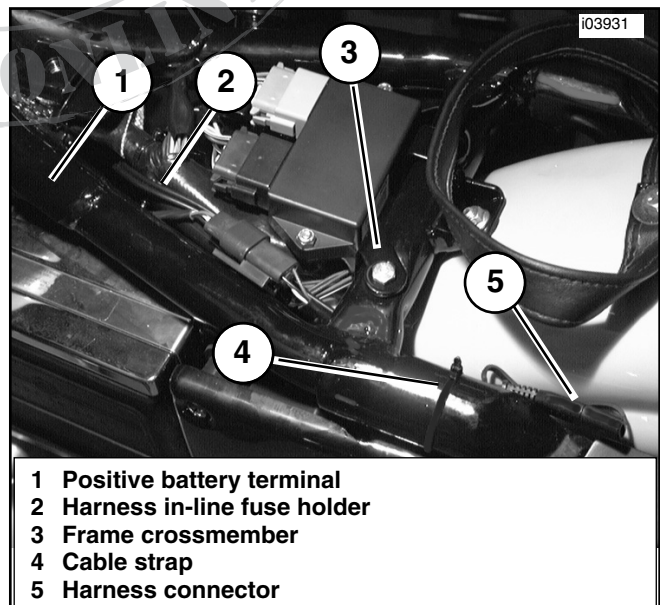


Figure 3. Sportster Battery Harness Routing (2003 and Earlier Models)

2004 and later Sportster Model Harness Routing

1. See Figure 4. Route the harness/ connector (4) toward the rear of the bike 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 (a Red wire with an unused Gray connector) on the main electrical harness, routed under the seat, beneath the Ignition Control Module (5). Secure the harness battery connector close to the B+ connector with a cable strap (3). Trim any excess from the cable strap.

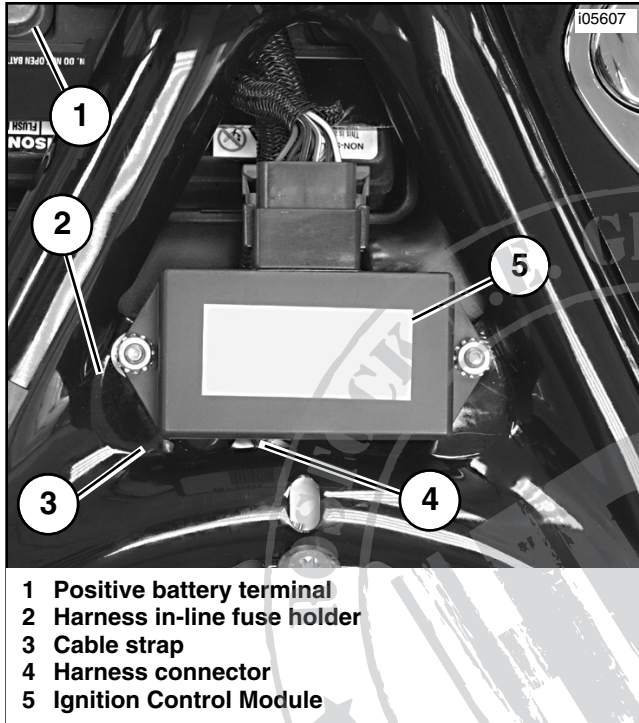


Figure 4. Sportster Battery Harness Routing (2004 and Later Models)

Dyna Model Harness Routing

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.
2. On 1999 and earlier models (with original equipment) continue to route the harness/ connector under the upper left frame pan and use a cable strap (3) to secure the connector to the vent tube as shown. Trim any excess from the cable strap.

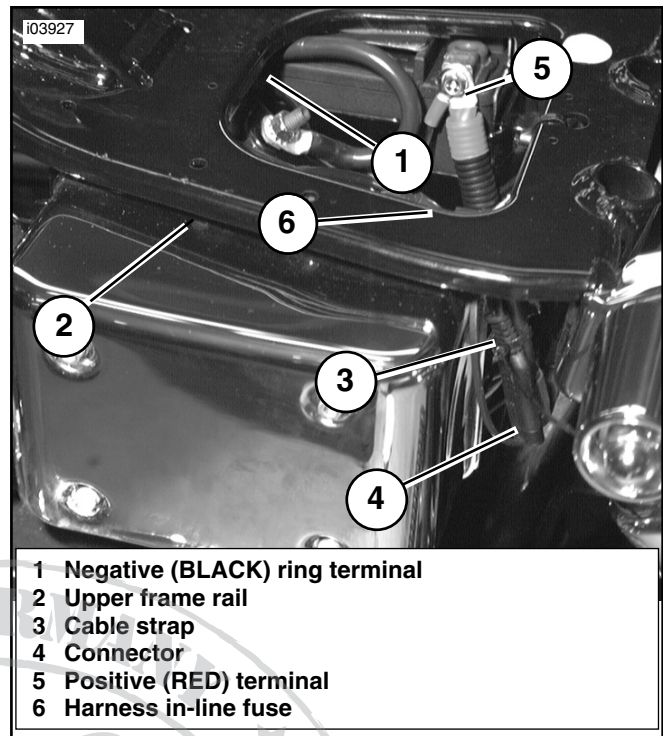


Figure 5. Dyna Battery Harness Routing

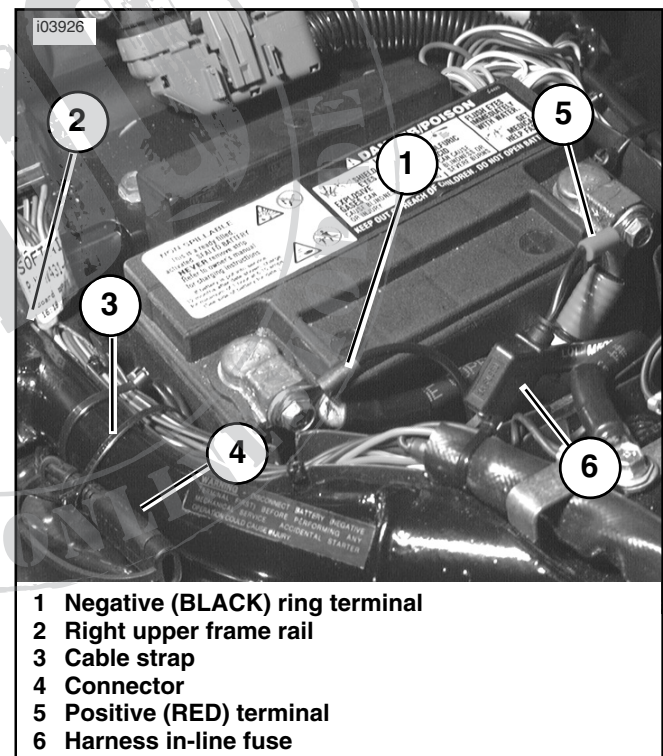


Figure 6. Softail Battery Harness Routing

Softail Model Harness Routing

1. See Figure 6. 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 bike, use a cable strap (3) and secure to both the inner and outer side of the frame rail. Trim any excess from the cable strap.

FL Touring Models Harness Routing

1. See Figures 7 and 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 the 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.

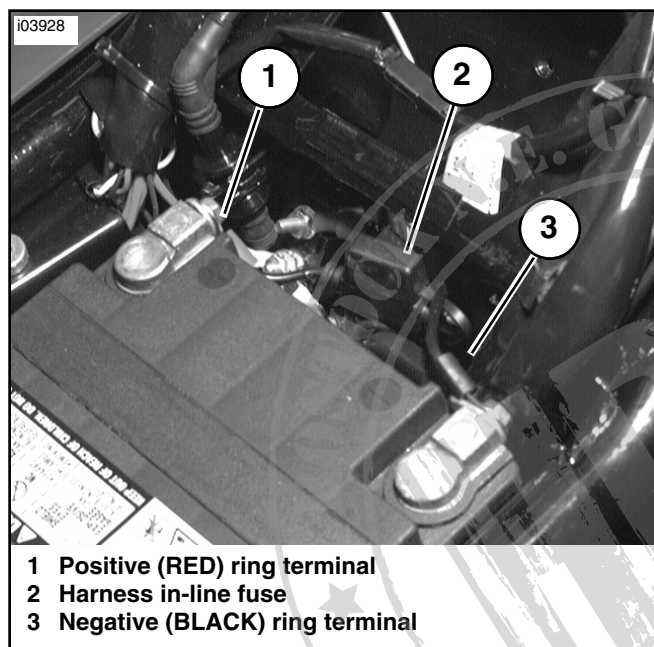


Figure 7. Battery Harness Routing (FLHT Models)

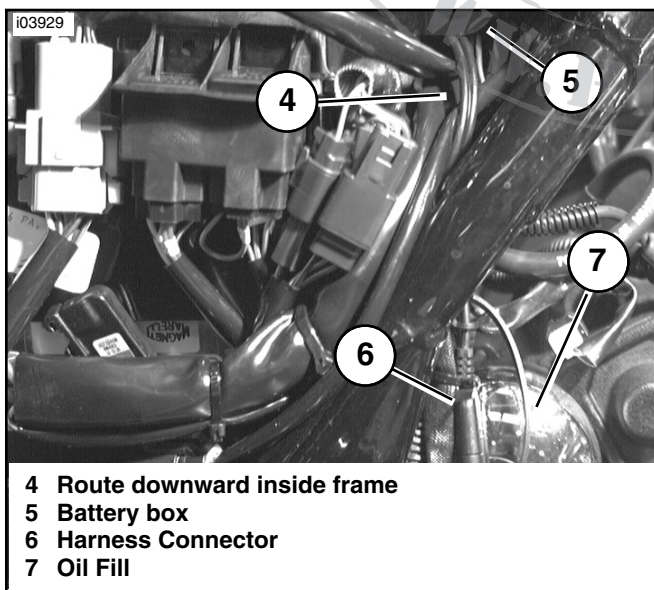


Figure 8. Battery Harness Routing (FLH Models)

ALL Models

3. Refer to the Owner's Manual and follow the instructions given to install the seat and any other components removed.

⚠ WARNING

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

In Use

Connecting to a Two-Pin Battery Charger

1. See Figure 9a. 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

1. See Figure 9b. 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

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

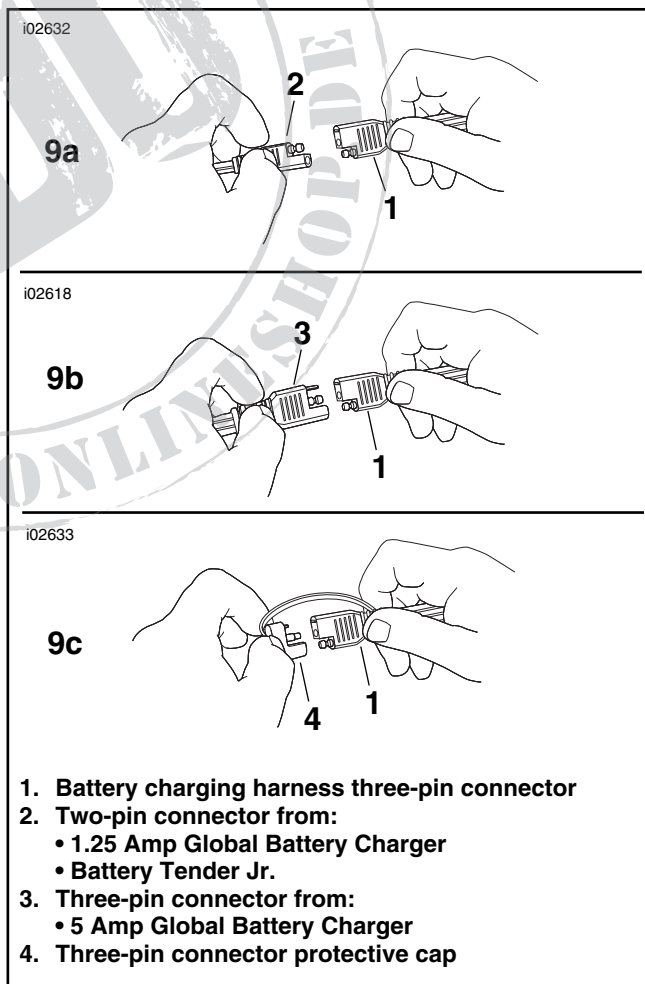


Figure 9. Connection to Battery Charger