



C2031/C2032/C2033 Current Sensor

CEN current sensors C2031 (± 600 amp), C2032 (± 200 amp), and C2033 (± 100 amp) are hall-effect sensors designed to measure and report battery current to compatible CEN devices such as equalizers and DC/DC converters, etc.

C2031/C2032/C2033 current sensors are supplied with mounting brackets to secure sensors to battery cables with cable ties or straps. Each battery sensor has an integrated Metri-Pack 150 series sealed male connector. Current sensor harnesses are not included and must be configured and assembled or sourced separately. Follow instructions below for typical installation guidelines.

1. Prepare current sensor for mounting by removing the three screws and flat washers that secure the mounting bracket to the sensor. Keep parts for reinstallation. See Figure 1.
2. Install current sensor on battery cable.
 - a. Insert battery cable through hole in current sensor. See Figure 2.

NOTICE For most applications, current sensors will be installed on battery positive cables. For these applications, install sensor with arrow on nameplate pointing towards the battery. If using on ground cable, arrow should face away from battery.

- b. Slip mounting bracket over battery cable into sensor cavity.
 - c. Fasten bracket to current sensor with previously removed screws and flat washers. Torque screws to 1.3 Nm/12 lb. in. See Figure 3.
 - d. Secure current sensor bracket to battery cable with cable tie or strap on both sides of the bracket.
3. Plug current sensor harness into sensor receptacle until it snaps into place.

NOTICE Each sensor harness must be configured to compatible CEN device (equalizer, DC-DC converter, etc.) using sensor pin designations in Figure 4.

- Power and signal ground pins may be jumped together for most applications unless significant voltage drop is present due to long wire runs.
- See equalizer (or DC-DC converter, etc.) device model-specific data sheet for signal and power input/output pin designations.

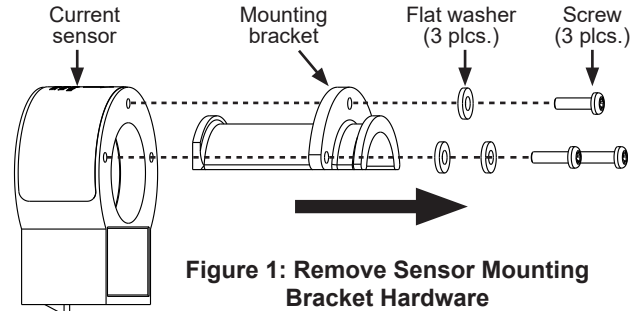


Figure 1: Remove Sensor Mounting Bracket Hardware

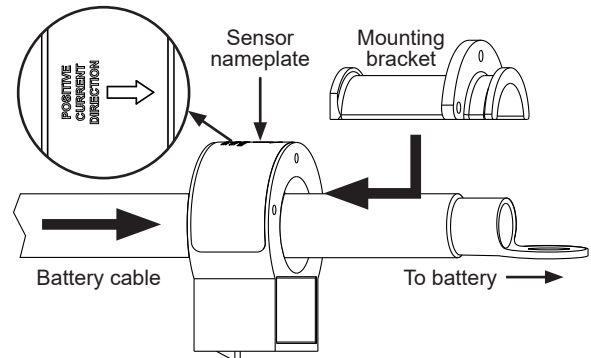


Figure 2: Install Sensor on Battery Cable

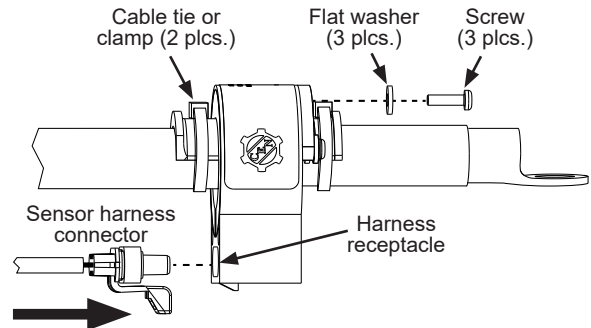
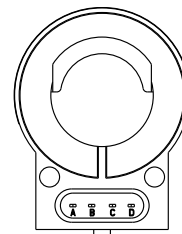


Figure 3: Secure Bracket and Connect Harness



- Pin A = +12VDC (power)
- Pin B = Output (signal)
- Pin C = Ground (signal)
- Pin D = Ground (power)

Figure 4: Connector Pin Designations

If you have questions about your alternator or any of these instructions, or if you need to locate a Factory Authorized Service Distributor, please contact us at:
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