



The CEN A9-4077 Metri-Pack adapter harness allows compatible alternators with a Metri-Pack regulator harness to be retrofitted with a smart regulator.

Follow these instructions to properly install an A9-4077 Metri-Pack adapter harness.

1. Remove Existing Regulator:

- a. Turn off master switch or disconnect battery.
- b. Disconnect alternator-to-regulator harness from regulator.
- c. Disconnect wires from regulator terminals as necessary to remove regulator.
- d. Remove mounting screws and remove regulator.

2. Install New Regulator:

- a. Turn regulator over and make sure voltage selection switch setting is appropriate for type of battery used. If necessary, change switch setting. See Table 1 and Figure 1.
- b. Install regulator securely on alternator and torque regulator mounting hardware to 8.5 Nm/75 lb. in.

Refer to Figure 1 and connect regulator terminals as required by vehicle:

IGN terminal (required): Receives DC voltage from ignition source or multiplex in order to energize regulator. Connect ignition source or multiplex to regulator IGN terminal. Torque terminal hardware to 4.5 Nm/40 lb. in.

NOTICE Voltage should be present at regulator IGN terminal when ignition is on or engine is running. No voltage should be present when ignition is off or engine is not running.

- **D+ terminal (if required):** D+ terminal provides DC system battery voltage (5A maximum) to vehicle charge indicator lamp, relay, or multiplex while alternator is producing output. If required, connect vehicle lamp, relay, or multiplex to regulator D+ terminal and torque hardware to 4.5 Nm/40 lb. in.

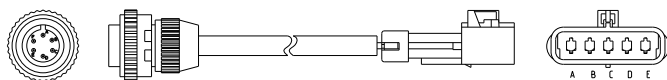


Figure 2: A9-4077 Metri-Pack Adapter Harness

- **P terminal (if required):** P terminal taps AC voltage from alternator, typically half the charge voltage (3A maximum), for use with a tachometer. If required, connect vehicle tachometer to regulator P terminal and torque terminal hardware to 4.5 Nm/40 lb. in.

NOTICE If using relay for P/AC circuit, coil must be diode-protected and properly rated.

3. Connect A9-4077 Harness to Regulator Harness:

- a. Connect Metri-Pack connector on A9-4077 adapter harness to Metri-Pack connector on alternator-to-regulator harness.
- b. Connect round connector on A9-4077 harness to 6 pin connector on regulator and tighten securely.

CAUTION *Harness must be secured with cable tie or clamp to prevent wires from rubbing or chafing.*

- c. If installing a J1939/sense harness, follow separate installation instructions provided with harness. Harness supplied separately.

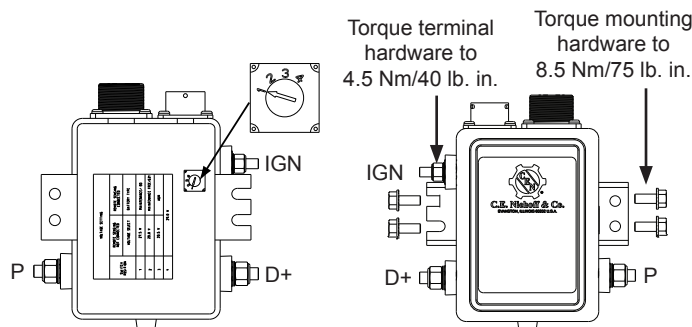


Figure 1: Typical Smart Regulator

Table 1: Voltage Selection Switch Settings		
Switch Position	Remote Sensing Not Connected	Remote Sensing Connected
	Voltage Select	Battery Type
1	27.5 V	Maintenance/8D
2	28.0 V	Maintenance-free (G31)
3	28.5 V	AGM
4	29.0 V	