



C570 Alternator Installation

The CEN model C570 alternator is a pad mount, negative ground alternator rated at 14 volts, 415 amps. Follow these instructions to ensure proper installation.

1. If alternator does not include a factory-installed pulley, remove nut, disc spring washer, and shaft collar. Discard shaft collar. Make sure Woodruff key is securely wedged in shaft channel.
2. Install pulley on shaft and secure with disc spring washer and flange nut. Torque nut to 135 Nm/100 lb. ft.

CAUTION

Do not hammer pulley when installing it on shaft. Damage to alternator may occur. Slip-fit pulley over shaft to prevent shaft from moving out of place.

3. Install alternator on mounting bracket according to vehicle manufacturer's specifications. Use hardened flat washers between mounting surfaces and bolt heads or lockwashers. Mounting bolts should be Grade 5, minimum.

4. Tension belt to vehicle manufacturer's recommendation.

CAUTION

All cables and wires must be supported within 300 mm (12 in.) or terminals to prevent rotation, loosening, and damage to terminals.

5. Connect vehicle B+ cable to alternator B+ terminal. Install mounting hardware in stacking order shown in Figure 2. Torque hardware to 15 Nm/11 lb. ft.
6. Connect vehicle B- cable to alternator B- terminal. Install mounting hardware in stacking order shown in Figure 3. Torque hardware to 10.8 Nm/8 lb. ft.
7. If regulator was supplied separately, or if replacing regulator, install regulator according to instructions on page 2.

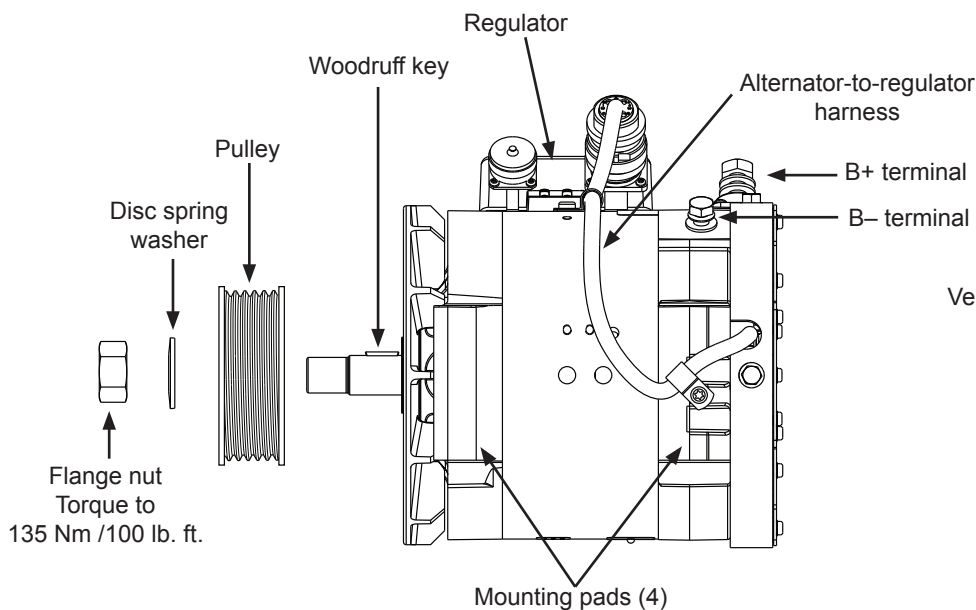


Figure 1: C570 Alternator

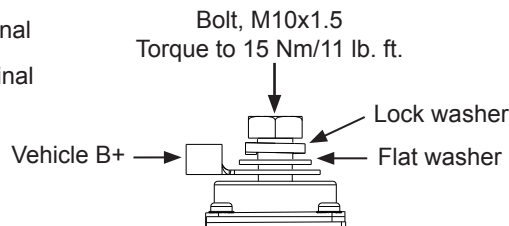


Figure 2: B+ Terminal Hardware Stacking Order

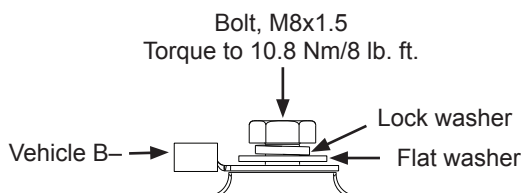


Figure 3: B- Terminal Hardware Stacking Order

Regulator Installation

The C570 alternator is available with a smart regulator that automatically optimizes charge voltage for battery type, based on temperature, when connected to a J1939/sense harness. Harness supplied separately. Smart regulators available for C570 alternator are also capable of controlling multiple alternators in parallel. Follow these instructions to properly install a CEN smart regulator for the C570 alternator.

1. Before installing regulator, turn it over and make sure voltage selection switch on back of regulator is set for type of battery used. If necessary, change voltage selection switch setting. See Figure 4 and Table 1 for setting options. Factory setting is position 2.
2. Mount regulator on alternator with A4-127 adapter plate or mount remotely¹. Torque mounting screws to 8.5 Nm/75 lb. in. See Figure 5.

Switch Position	Remote Sense Not Connected	Remote Sense Connected
	Voltage	Battery Type
1	13.8 V	Maintenance (8D)
2	14.0 V	Maintenance-Free (G31)
3	14.3 V	AGM
4	14.5 V	

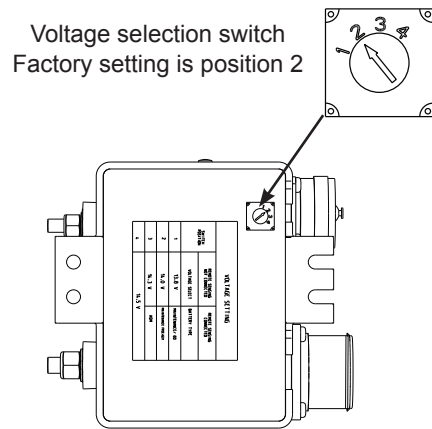


Figure 4: Voltage Selection Switch

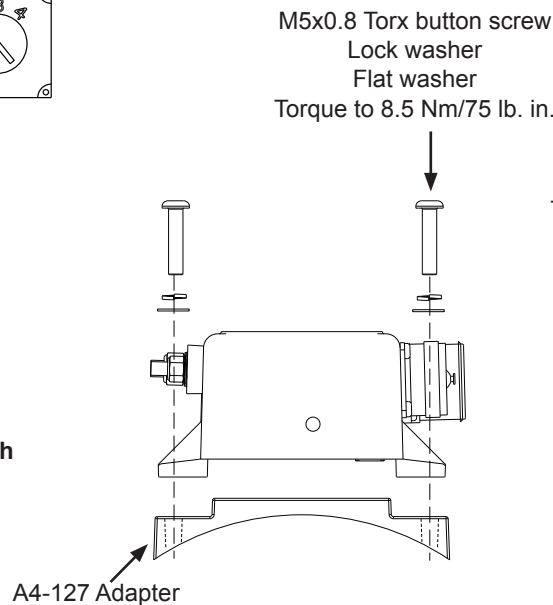


Figure 5: Mounting Adapter Installation

CAUTION All cables and wires must be supported within 300 mm (12 in.) to prevent rotation, loosening, and damage to terminals.

3. Connect alternator-to-regulator harness to 8-pin receptacle on regulator. See Figure 6 for receptacle location.
4. Refer to Figure 6 and connect regulator terminals as required by vehicle:
 - **IGN terminal (required)** must receive voltage from vehicle DC ignition source or multiplex in order to energize regulator. Torque to 4.5 Nm/40 lb. in.

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

- **P terminal (if required)** taps AC voltage from alternator, typically half the charge voltage (5 amps maximum). P terminal provides alternator RPM frequency at 7.5:1 ratio for use with tachometer. Torque terminal hardware to 4.5 Nm/40 lb. in. If using relay for R/P/AC circuit, coil must be diode-protected and properly rated.
5. If using a J1939/sense harness, plug harness into J1939 receptacle on regulator. See Figure 6 for receptacle location. Harness sold separately².

¹ Contact CEN for extension harness options.

² Contact CEN for J1939/sense harness installation information.

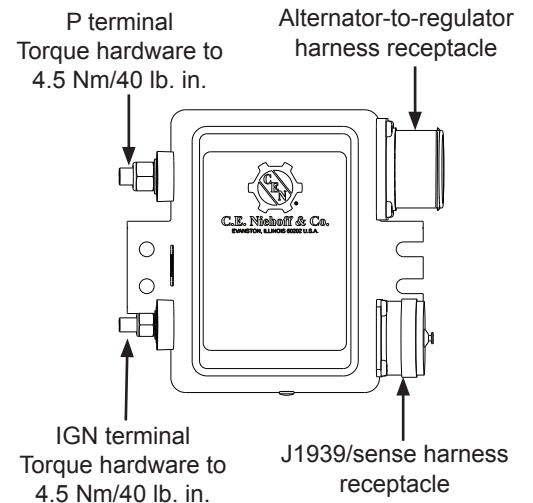


Figure 6: Regulator Connections

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