C629 Alternator

Installation Instructions

C629 Alternator Installation

CEN model C629 is a hinge mount, negative ground alternator rated at 28V/260A. Follow these instructions to ensure proper installation.

- Alternators not shipped with pulley are shipped with shaft collar, disc spring washer, and nut installed. Remove and discard shaft collar. Make sure Woodruff key is securely wedged in slot in shaft.
- Install pulley with furnished flat washer and locknut. Torque pulley nut to 163 Nm/120 lb. ft. See Figure 1.



Do not hammer pulley when installing pulley on shaft. Carefully slip-fit pulley over shaft to prevent woodruff key from moving out of place.

- 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 (Metric Grade 8.8), minimum.
- 4. Tension belt to vehicle manufactuer's specifications.
- Connect vehicle B+ cable to alternator B+ terminal. Install hardware on B+ terminal in stacking order shown in Figure 2. Torque to 15 Nm/11 lb. ft.
- Connect vehicle B- cable to alternator B- terminal. Install B- hardware in stacking order shown in Figure 3. Torque to 9 Nm/7 lb. ft.

NOTICE

Wire gauge must be capable of handling maximum alternator output with minimum voltage drop. All cables must be supported within 300 mm (12 in.) to prevent twisting, loosening, and damage to terminals.

- 7. Connect alternator-to-regulator harness to regulator as shown in Figure 1.
- If regulator was supplied separately, install regulator according to instructions on page 2.

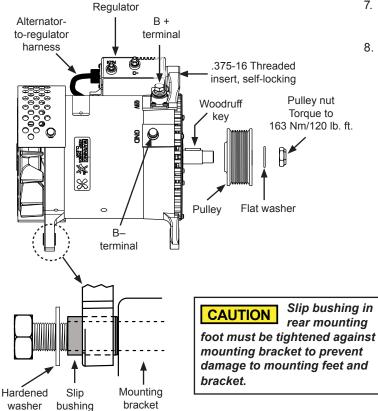


Figure 1: C629 Alternator Connections

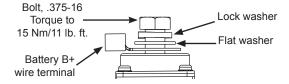


Figure 2: B+ Terminal Hardware Stacking Order

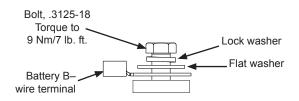


Figure 3: B- Terminal Hardware Stacking Order

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Page 1 of 2

Regulator Installation

- Turn regulator over and make sure set point of switch at bottom of regulator is appropriate for type of battery used in vehicle. If necessary, change switch set point. See Figure 4 and Table 1 for voltage set point options.
- Mount regulator on alternator with included hardware and spacer as shown in Figure 5.
 - Torque the two 10-32 hex screws with lock washer and flat washer on alternator drive-end housing to 3.4 Nm/30 lb. in.
 - Place spacer between regulator housing and alternator shell and torque .25-28 hex screw with lock washer and flat washer to 8.5 Nm/75 lb. in.
- Securely plug alternator-to-regulator harness into receptacle on regulator. See Figure 5 for receptacle location.

- 4. Connect regulator terminals as required by vehicle:
 - IGN terminal (required) must receive voltage from vehicle switched DC ignition source or multiplex in order to energize regulator. Torque to 3.4 Nm/30 lb. in. See Figure 5.

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.

• **D+ terminal** (if required) provides DC system battery voltage to vehicle (5A maximum) for charge indicator lamp, relay, or multiplex while alternator is producing output. Torque terminal hardware to 3.4 Nm/30 lb. in. See Figure 5.

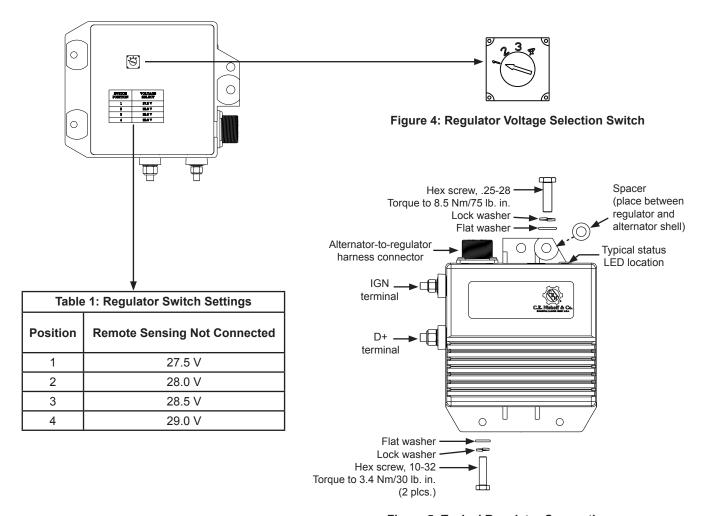


Figure 5: Typical Regulator Connections

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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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TEL: 800.643.4633 USA and Canada • TEL: 847.866.6030 outside USA and Canada • FAX: 847.492.1242 E-mail us at service@ CENiehoff.com

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Page 2 of 2

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