



Alternator Installation

1. Alternators 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.
2. Install pulley and furnished disc spring washer. Torque pulley nut to 135 Nm/100 lb. ft. See Figure 1.

CAUTION

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

3. Install alternator on pad mount per vehicle manufacturer's instructions, including attaching hardware and torque specifications.
4. Tension belt to engine manufacturer's recommendation.

NOTICE

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

5. Connect B+ battery cable from vehicle to B+ terminal on alternator as shown in Figure 1. Secure it with mounting hardware in stacking order shown in Figure 2 and torque to 15 Nm/11 lb ft.
6. Connect B- battery ground cable to B- ground terminal on alternator as shown in Figure 1. Secure it with mounting hardware in stacking order shown in Figure 2 and torque to 10.8 Nm/8 lb ft.
7. Connect alternator-to-regulator harness to regulator as shown in Figure 1.
8. If replacing regulator, or if regulator was supplied separately, install regulator according to instructions on page 2.

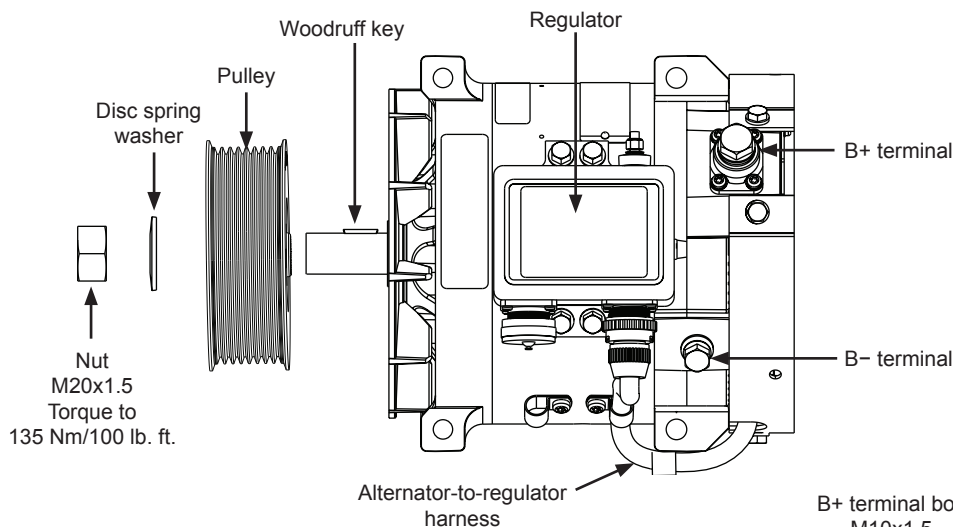


Figure 1: C528/C530/C532 Alternator Connections

NOTE: Mounting bolts must be SAE Grade 5 minimum (Metric Grade 8.8 minimum). Use hardened steel washers between bolt heads and aluminum surfaces.

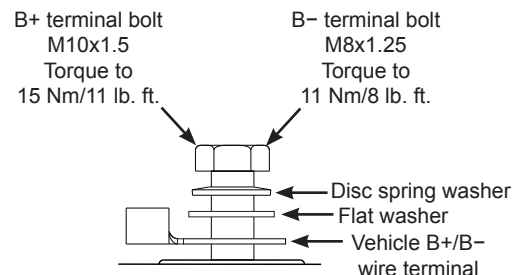


Figure 2: B+/B- Terminal Hardware Stacking Order

Regulator Operation

If a temperature-voltage sense harness is connected, regulator will automatically optimize charge voltage for battery type, based on temperature. See Table 1. Harness sold separately.

If a temperature-voltage sense harness is not connected, regulator will operate at a fixed voltage determined by set point of voltage selection switch on bottom of regulator. See Table 1 and Figure 3.

Regulator Installation

Install regulators as follows:

1. Make sure set point of voltage selection switch on bottom of regulator is appropriate for type of battery used. If necessary, change switch setpoint. See Table 1 below for options. Factory setting is position 2.

Switch Setting	Voltage (Harness Not Connected)	Battery Type (Harness Connected)
1	27.5V	Maintenance (D Category)
2	28.0V	Maintenance-Free (Group 31)
3	28.5V	AGM
4	29.0V	DO NOT USE POSITION #4

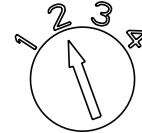


Figure 3: Voltage Selection Switch (Factory Set Point is 2)

2. Mount regulator on alternator and secure it with 4 flange lock screws. Torque screws to 12.5 Nm/110 lb. in. See Figure 4.

NOTICE

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

3. Plug alternator-to-regulator harness into regulator connector 1.
4. If used, plug temp-voltage sense harness into regulator connector 2. Harness sold separately.
5. If required, connect tachometer input to regulator P terminal. P terminal is an AC voltage tap (3A max). If P terminal drives a relay, make sure relay coil is diode-protected and properly rated.

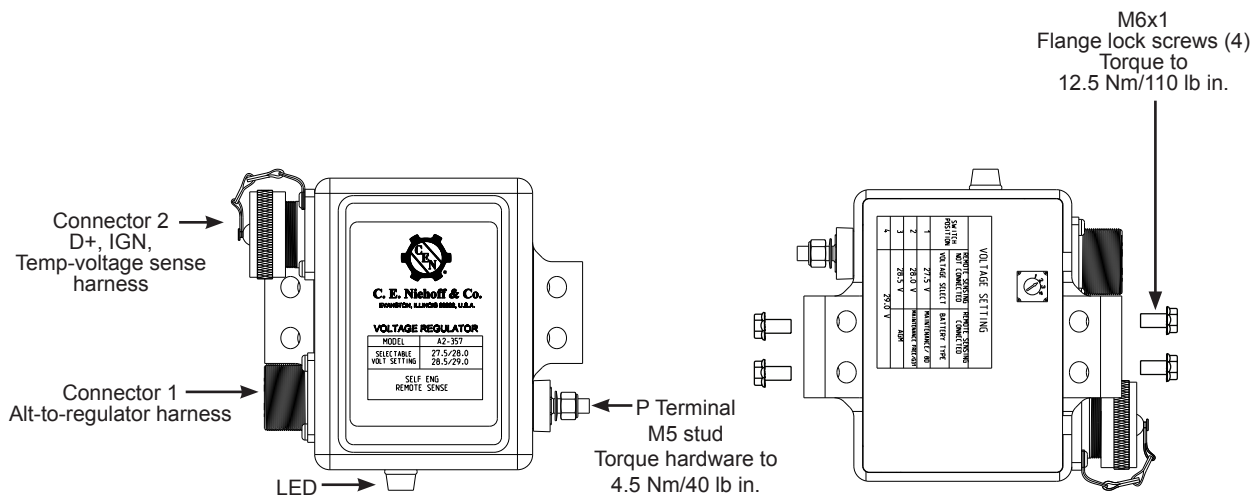


Figure 4: Regulator Connections

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

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