



**CAUTION**

This symbol is used to indicate presence of hazards that can cause minor property damage.

**C616 Alternator**

1. Mounting lug width on alternator complies with SAE J180 (May 1987) standards.
2. Units are shipped with shaft collar, hardened washer and locknut. Remove and discard shaft collar. Install pulley and furnished hardened washer. Torque locknut to 163 Nm/ 120 lb. ft.
3. Use hardened washers between aluminum surfaces and bolt heads and nuts. Torque mounting bolts to 88 Nm/65 lb. ft.

**CAUTION**

Slip bushing in lower rear mounting lug must be securely tightened against mounting bracket on engine. Failure to do so can result in broken mounting lugs or broken upper mounting bracket.

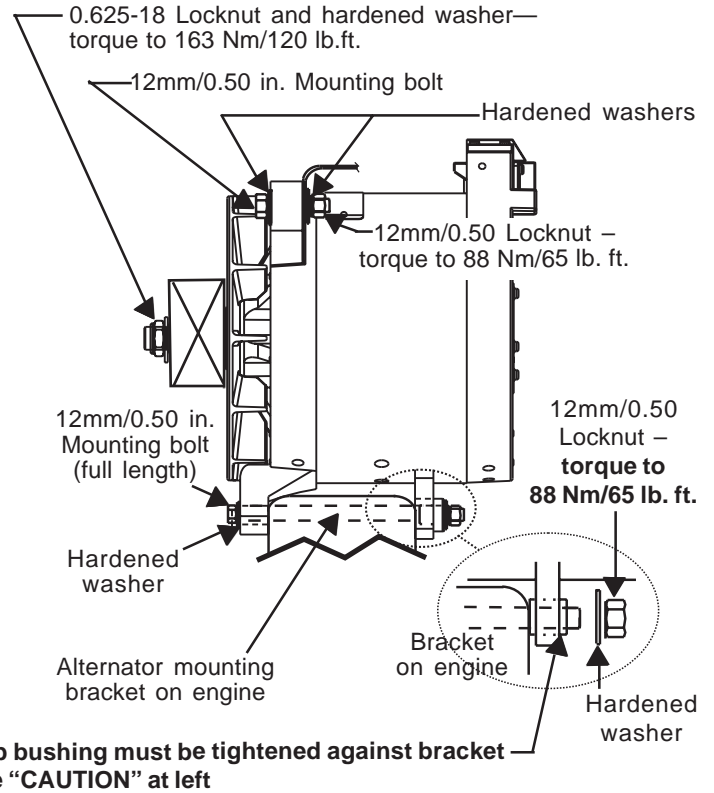


Figure 1 - C616 Alternator Installation

**A8-205 External Rectifier and A4-501 Bracket**

1. Mounting location of rectifier and bracket should provide proper cooling and protect rectifier from direct water, road debris, or chemicals.
2. Using the standard A9-463 wiring harness, rectifier can be mounted up to 6 feet away from alternator.
3. Use hardened washers between aluminum surfaces and bolt heads and nuts. Bracket mounting bolts must have minimum .50 in. thread engagement. See Figure 2 for torque values.
4. Use a suitable adhesive such as Loctite® 222 or equivalent on screws. Follow manufacturer’s instructions.

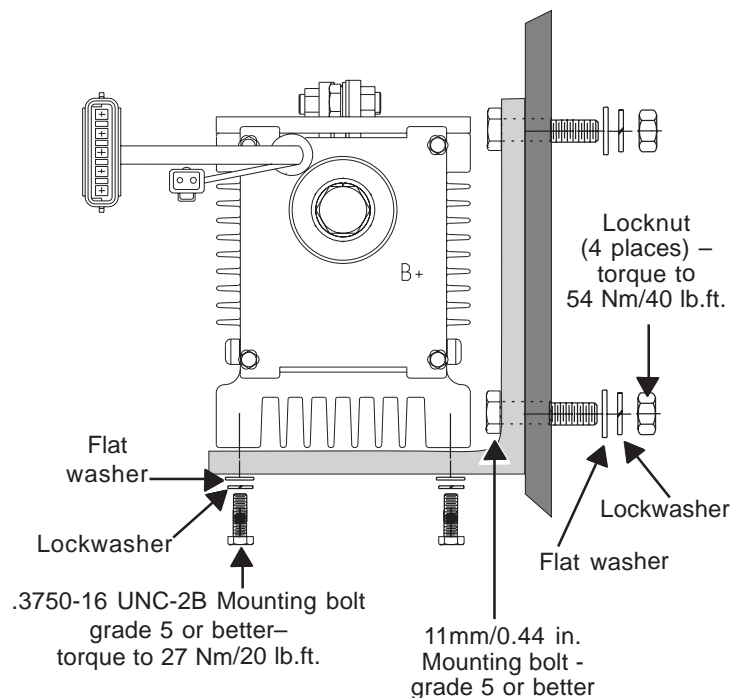


Figure 2 - Rectifier and Bracket Installation

## A2-136 Regulator

1. Mounting location of regulator must provide protection from water, road debris, or chemicals.

Regulator can be located up to 18 inches away from the rectifier. If extension harness CEN A9-448 is added, the regulator can be moved an additional 43 in. away.

2. See Figure 3 for torque values.

#10-32 x .62 flange lock screw (4 places) - torque to 8.5 Nm/75 lb. in.

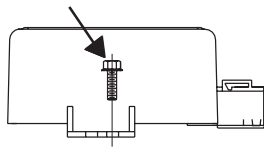


Figure 3 - Regulator Installation

### Wiring Connections

1. Alternator phase cable:
  - a. Remove and save terminal cover screws and terminal cover.
  - b. Connect phase cable into terminal block on top of alternator either through anti-drive end (as shown in Figure 4) or through drive end:
    - 1) Run phase cable through cable bracket mounted in one of two locations (LOC. A or LOC. B). See Figure 4.

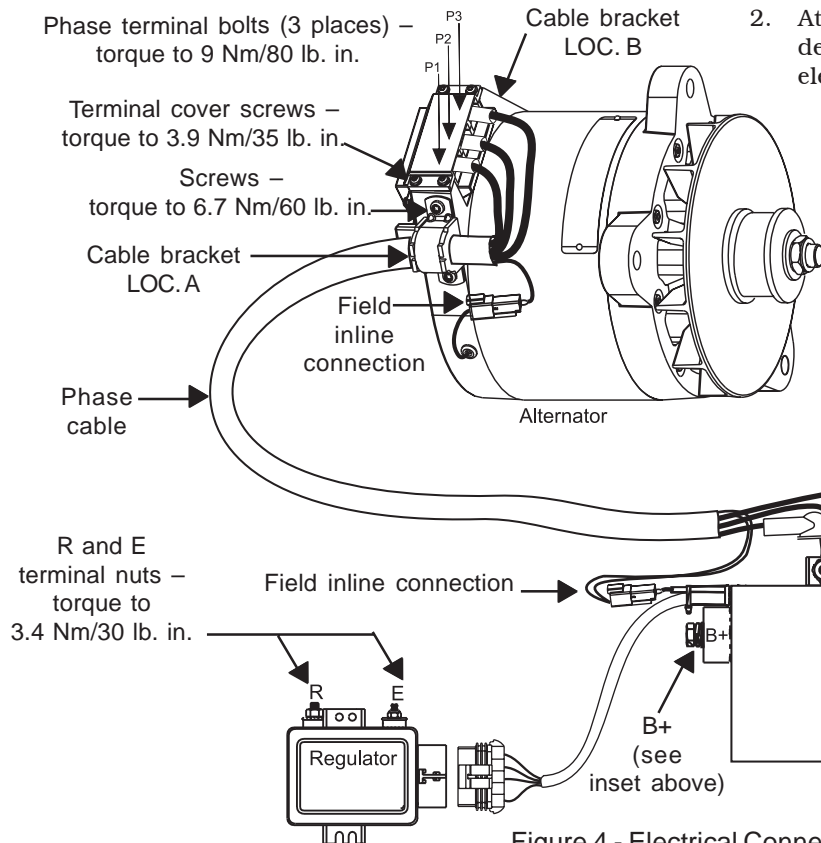


Figure 4 - Electrical Connections

- 2) Use torque values shown to fasten cables to terminal block.
- 3) Coat terminals with Dow Corning® 1-2577 Low VOC RTV coating or equivalent. Do not use coating containing acetic acid (vinegar smell) on electrical components.

- c. Replace terminal cover on terminal block. If phase cable was routed through the anti-drive end, the terminal cover must be rotated 180° before re-installing. Use torque value shown to fasten screws in terminal cover.
2. Connect remaining harnesses between components as shown in Figure 4. Use torque values shown.
  3. Choose wire gauge for B+ and B- cables capable of handling maximum alternator output with minimum voltage drop.
  4. Connect E terminal on regulator to ignition source through oil pressure switch, using #10 ring terminal. Torque #10-24 terminal nut to 3.4 Nm/30 lb. in.
  5. If required, connect R terminal to tachometer or relay, using 1/4 in. ring terminal. Torque terminal nut to 3.4 Nm/30 lb.in.

### Sealing Wiring Connections

1. On ALL metallic electrical connections to rectifier (including B+ and B- connections), alternator, regulator, and their harness connectors, apply Dow Corning® 1-2577 Low VOC RTV coating or equivalent. Do not use coating containing acetic acid (vinegar smell) on electrical components.
2. At regulator harness connections, apply coating as described in step 1, then wrap connection in electrical tape from sleeve to sleeve.

