

1-Wire Alternator Installation Instructions



Before any installation takes place, **disconnect the NEGATIVE cable from the vehicle battery**. Not doing so could short out electrical equipment during installation.



Wire Sizing: Selecting the correct size wire is critical for proper operation. 1-Wire alternators are more sensitive to wire size than an externally regulated unit. If there is too much voltage drop from the alternator to the battery, it will give a false reading to the internal regulator and cause the alternator not to charge. In many cases, the OEM wiring will not be sufficient.

Recommended Wire Size:

| AMPS | Up to 10ft. | 10 - 13ft. | 13 - 16ft. | 16 - 22ft. | 22 - 28ft. |
|-----------|-------------|------------|------------|------------|------------|
| 75 - 100 | 8 | 6 | 4 | 4 | 2 |
| 100 - 125 | 6 | 4 | 2 | 2 | 0 |
| 125 - 150 | 6 | 4 | 2 | 2 | 0 |
| 150 - 175 | 4 | 2 | 2 | 0 | 0 |
| 175 - 220 | 4 | 2 | 0 | 0 | 00 |

Fuse Protection: CVF Racing recommends that all 1-Wire alternators incorporate fuse protection between the battery and alternator. (See wiring diagram)

Ground: Your alternator must be properly grounded to operate correctly. Paint and corrosion can prevent an alternator from grounding through the “Alternator Housing -> Bracket -> Engine” ground path so we recommend a separate ground wire to make sure the alternator is properly grounded.

Torque: **Do Not Over Torque Wiring Terminals** - Recommended Torque is 65 in-lbs (5.4 ft-lbs).

Re-Clocking Alternator: Some brackets may require you to rotate the alternator housing so that the positive terminal is in a better location. CVF Racing alternators are designed to be clocked in several orientations. Carefully remove the 4 bolts holding the alternator together, loosen the rear housing and re-install the bolts. **DO NOT REMOVE HOUSING COMPLETELY** or you will have to re-install the brushes.

High Amp Wiring Kits: If you want to take the guess work out of wiring up your alternator, CVF Racing offers a wiring kit under part number **30700**.

