

## 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**.

