**IMPORTANT!** If the unit you have removed from the vehicle has "locked up" or is noisy, especially if the problem seems to come from the pulley end of the alternator, **CHECK THE BELT TENSIONER!** Defective belt tensioning devices have caused numerous pulley and bearing failures on CS system alternators.

Be aware of the fact that the rear mounting brackets are a critical part of the "CS" systems structural support. Failure to reinstall a bracket during alternator replacement may result in drive end frame failure.

WIRING REQUIREMENTS FOR "CS" SERIES ALTERNATORS:

This alternator is capable of extremely high current output for its size.

GM uses several wiring configurations for this alternator. This diagram explains the purpose of each regulator terminal. Note that terminal I and L activate the alternator. The alternator will not charge without voltage present at I, L, or both I and L.
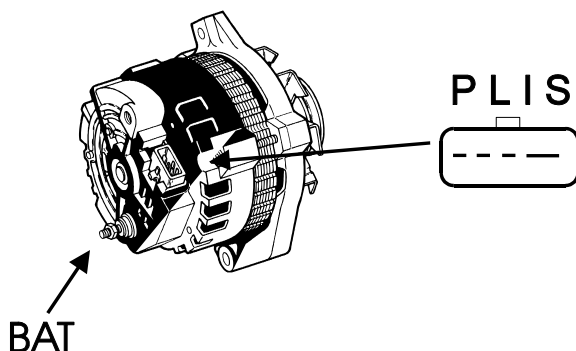
BAT terminal -- Current output. The "BAT" post on this alternator **must** receive at least twelve volts before the regulator will allow the alternator to charge. If there is less than twelve volts at this post check the battery, BAT wire, and fusible links.

P terminal -- Phase connection. This terminal is used to send a signal to a relay or frequency sensing tachometer. There may not be a wire leading to this terminal. This condition is normal.

L terminal -- Indicator lamp. When used, this terminal is connected to the vehicle's indicator lamp. A 300 to 500 ohm resistor is connected across the lamp to provide a "start charging" signal if the lamp burns out. Note that terminal I may be used, as described, instead of terminal L.

P L I S

BAT

I terminal -- Ignition terminal.
When used, this terminal is connected to the vehicle's ignition switch. Note that terminal L may be used, as described, instead of terminal I.

S terminal -- Sense battery voltage.
When used, this terminal provides the alternator with a precise battery voltage reading. If this terminal is not used, CS series alternators use the battery terminal as a voltage reference.

TO RELAY OR TACHOMETER

INDICATOR LAMP

IGNITION SWITCH

FUSE

300-500 OHMS

P L I S

BAT

(neg)

(pos)

12v