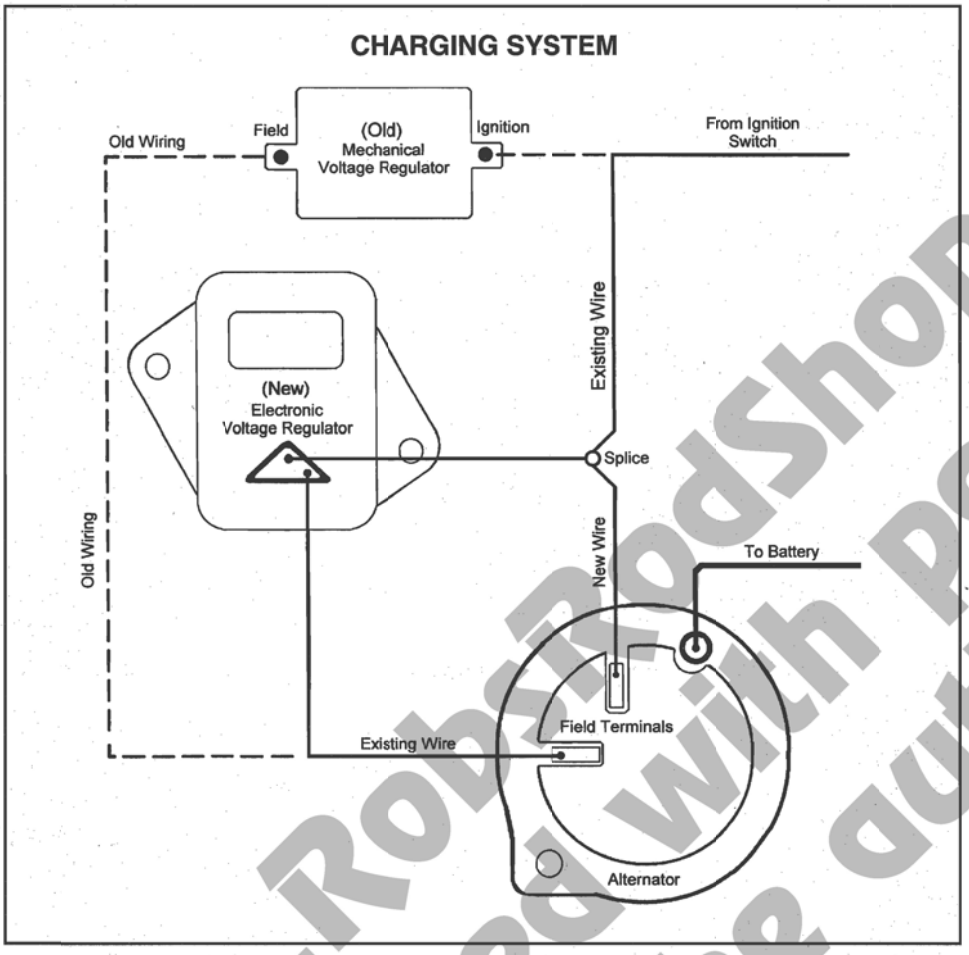
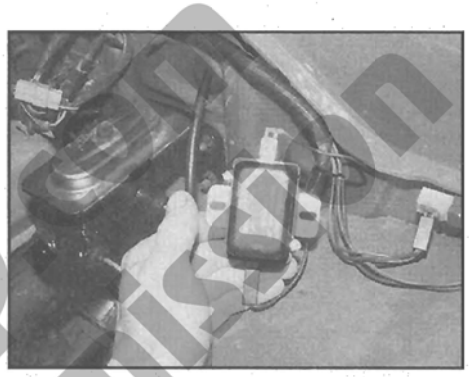
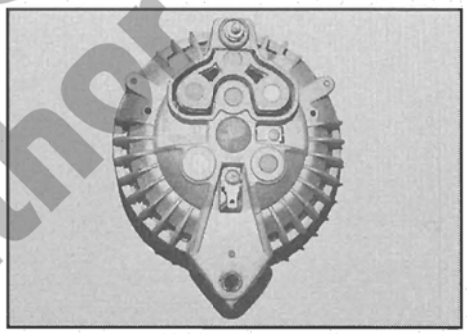




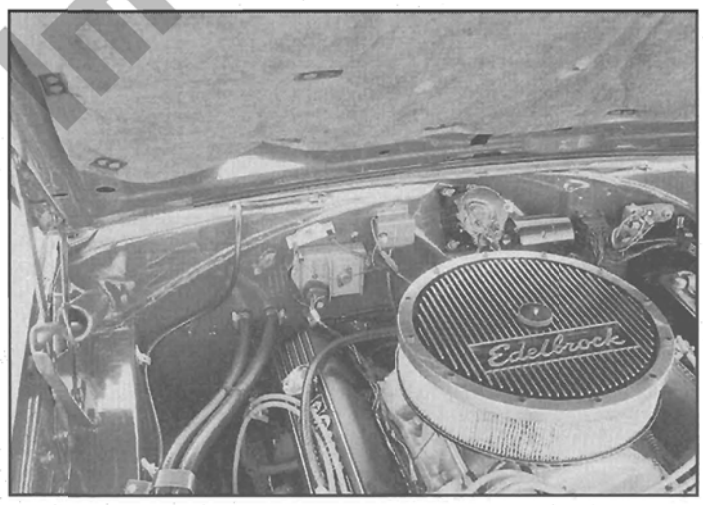
This is the pre-1970 mechanical regulator. The input terminal from the ignition switch has a spade connection, while the output terminal to the alternator field has a screw type connection.



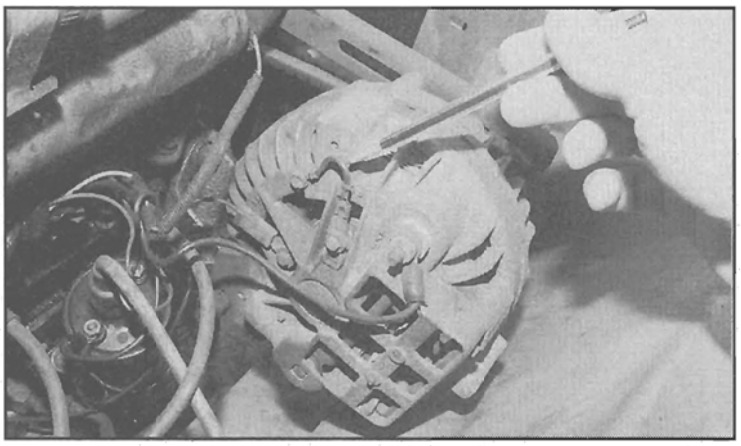
Alternators designed for mechanically regulated charging systems have only one field terminal.

output of this system eliminated such inconveniences as flickering lights and popping radio. It is also better suited for charging maintenance-free batteries and insures against the ghost spark that is possible when using electronic ignition with a mechanically regulated charging system. This system was so simple and worked so well that it was used until the advent of the computer age, when onboard computers began controlling charging system functions. Its last application was on Cummins Turbo Diesel trucks.

The electronically regulated charging system controlled the ground side of the alternator field instead of limiting the voltage supplied to the field windings. Schematically, current was supplied from the ignition terminal of the ignition switch directly to one field terminal of the alternator, but one terminal of the voltage regulator was also fed by this wire. Current flowed through the field windings in the alternator, out the other field terminal, and on to the second terminal on the regulator. The regulator sensed system voltage by sampling what was being



To the left of the windshield wiper motor is an old Mopar Performance replacement voltage regulator with electronic circuitry. Originally intended for racing, they worked well but usually didn't last long on street driven cars.



Many electrical component rebuilders call for post-1969 alternators on pre-1970 vehicles. This is made possible by the use of a small jumper wire that grounds the second field terminal. If your car has a jumper wire such as this, simply remove it and wire up the later electronic voltage regulator. If not, you will need a later alternator.