

8-24 ALTERNATOR-REGULATOR—ELECTRICAL

Results

- (1) If the reading is less than specified the alternator should be removed from vehicle and "bench tested".
- (2) After current output test is completed reduce engine speed, turn off carbon pile and turn off ignition switch.
- (3) Disconnect battery ground cable.
- (4) Remove test ammeter, voltmeter and carbon pile.
- (5) Remove "jumper wire" between alternator field terminal and ground. Connect the green field wire to the alternator field terminal.
- (6) Reconnect the battery ground cable.

VOLTAGE REGULATOR TEST (When Tester C-4133 is Not Available) (Fig. 6)

Preparation

(1) Clean the battery terminals and check the specific gravity. It should be above 1.200 to allow a properly regulated voltage check.

If the specific gravity is below 1.200, charge or use another battery and do not leave the uncharged battery in the circuit.

(2) Connect positive lead of voltmeter to positive post on battery.

(3) Connect the negative lead from the voltmeter to a good vehicle body ground.

Test

(1) Start and operate engine at 1250 rpm with all lights and accessories turned off. Check voltmeter, the regulator is working properly if the voltage readings are in accordance with the following chart.

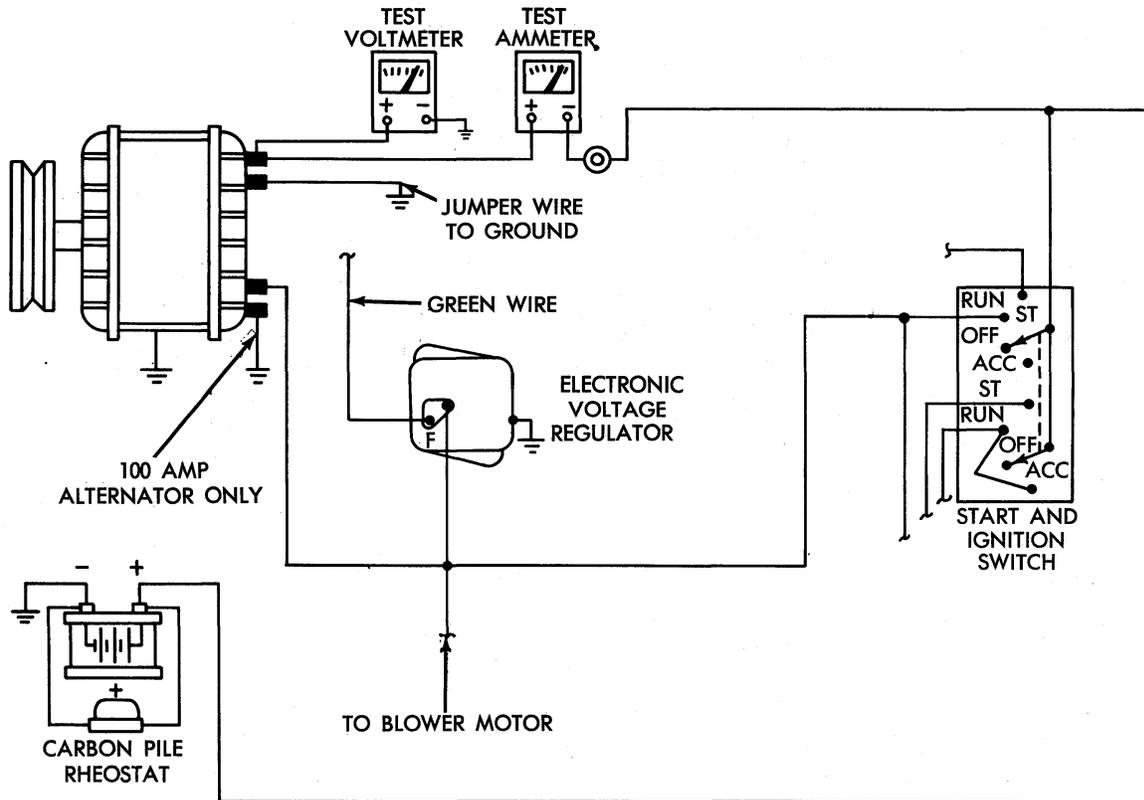
AMBIENT TEMPERATURE NEAR VOLTAGE REGULATOR	VOLTAGE RANGE
-20°F	14.9 to 15.9
80°F	13.9 to 14.6
140°F	13.3 to 13.9
Above 140°F	Less than 13.60

It is normal for the car ammeter to show an immediate charge and then gradually return to normal position. The duration the ammeter hand remains to the right will be dependent on the length of cranking time.

Results

(1) If the voltage is below limits or is fluctuating, proceed as follows:

(a) Check for a good voltage regulator ground. Voltage regulator ground is obtained through regulator case, to mounting screws and to sheet metal of ve-



H-N-R-W-X-S-P-D-C MODELS

Fig. 5—Current Output Test

PK226B