

# Alternator Regulators

## DELCO-REMY DOUBLE CONTACT REGULATORS

### DESCRIPTION

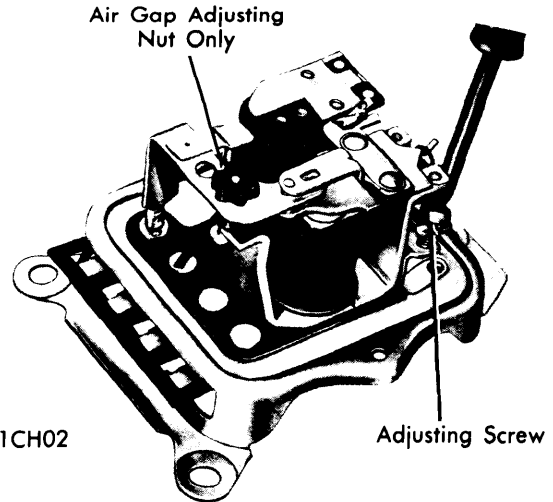
Conventional design double contact voltage regulators are used with Delco-Remy Delcotron alternators. Regulators control field current to regulate alternator output according to load requirements and battery charge. Field control relay is located inside regulator housing.

### TESTING

**CAUTION** — When removing or installing regulator cover, four terminal connector must be disconnected to prevent short circuits.

#### REGULATOR VOLTAGE

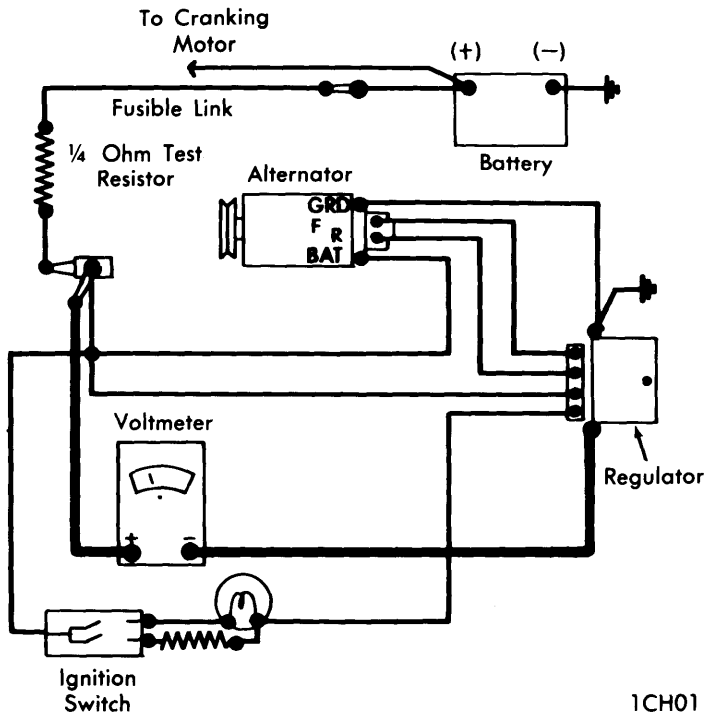
- 1) Connect a ¼ ohm 25 watt fixed resistor into charging circuit at horn relay junction block (see illustration). Run engine at 1500 RPM or more for at least 15 minutes to establish regulator at normal operating temperature.
- 2) Cycle regulator voltage control by disconnecting and reconnecting four terminal connector. With voltmeter connected between junction block on horn relay and ground on regulator base, read voltage. If reading is 13.5-15.2, regulator is good.
- 3) If voltage reading is not within limits, disconnect four terminal connector and remove regulator cover. Reconnect terminal connector, turn on high beam of headlights and heater blower motor to high speed, run engine at 1500 RPM or more and adjust voltage to read 14.2-14.6. *NOTE* — Always make final adjustment by turning screw clockwise. This insures that screw head is firmly against spring holder.
- 4) Disconnect terminal connector and reinstall cover. Reconnect terminal connector and run engine for 5-10 minutes at 1500 RPM to re-establish regulator internal temperature. Cycle regulator and read voltage. A reading of 13.5-15.2 indicates a good regulator.



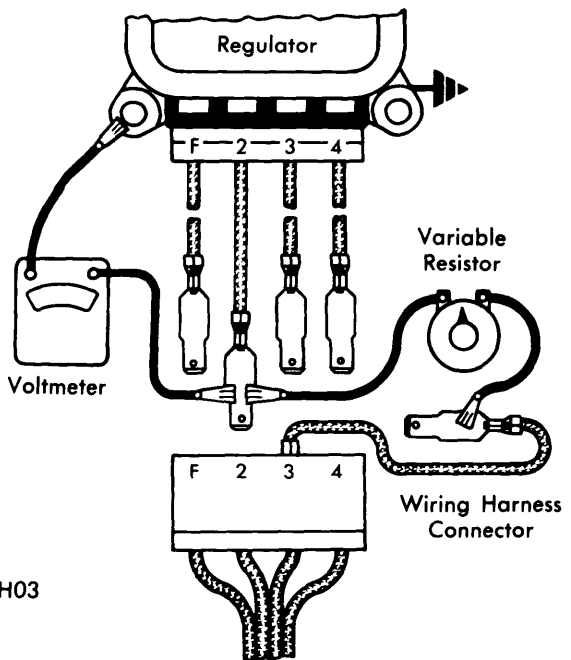
ADJUSTING VOLTAGE SETTING

#### FIELD CONTROL RELAY

- 1) Connect a voltmeter into system at regulator No. 2 terminal to ground. Operate engine at fast idle (1500-2000 RPM) and read voltage. If voltmeter shows zero voltage, check circuit between No. 2 terminal on regulator to "R" terminal on alternator. If voltage at regulator exceeds closing voltage specifications (2.3-3.7 volts), regulator field relay is faulty.
- 2) To adjust, make connections as shown in illustration using a 50 ohm variable resistor. Turn resistor to open position and turn ignition switch "OFF". Slowly decrease resistance and note closing voltage of relay. Adjust by bending heal iron on field relay contacts of regulator.



VOLTAGE SETTING TEST CONNECTIONS



1CH03

FIELD CONTROL RELAY ADJUSTMENT CONNECTIONS