S.E.V. MOTOROLA

Alfa Romeo
Porsche
Renault
Volvo

▶ CHANGES, CAUTIONS, CORRECTIONS

▶ *SERVICE CAUTION — When servicing alternator or regulator, note following precautions to avoid damage to components:*

Field Terminal – Never ground field energizing terminal on alternator, regulator or connecting lead.

Voltage Regulator – Never operate voltage regulator without a good ground connection. Immediate damage will result.

Alternator – Do not ground output terminal. Always disconnect battery negative cable before removing wire from alternator output terminal. Do not attempt to polarize alternator as polarization is not required and any attempt to polarize will damage voltage regulator and wiring harness.

DESCRIPTION

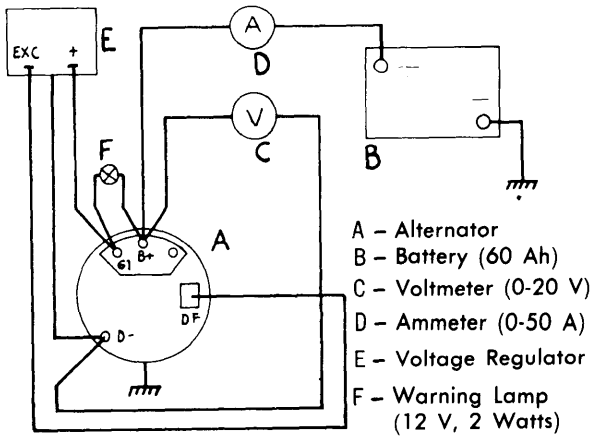
SEV Motorola alternators use either an electronic or mechanical type voltage regulator. The electronic unit contains neither mechanical contacts nor relays; it requires no adjustments or maintenance. It is sealed, and if found defective, it should be replaced. The mechanical voltage regulator is a dual contact unit with upper and lower moving contacts. Regulator also contains three resistors and one thermistor.

APPLICATION

Model	Part No.
Alfa Romeo	
Porsche	901 603 206 11
Renault	7700544686
Volvo	
4Cyl.	33525
6 Cyl.	33544

SPECIFICATIONS

Application	Voltage Setting @ 77°F
Alfa Romeo	
Porsche	
Renault	13.8-14.8
Volvo	13.1-14.4



2V003 **REGULATOR TEST CIRCUIT**

TESTING

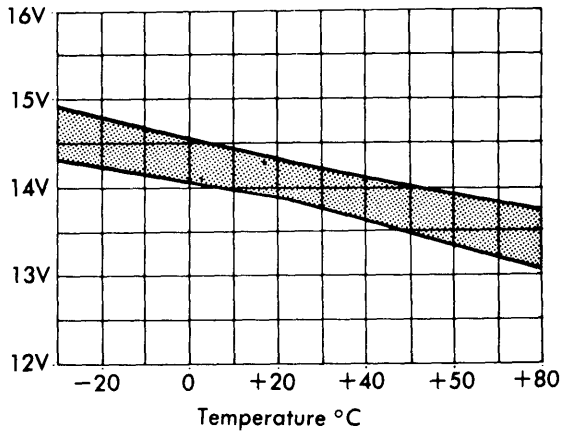
ON CAR TEST

1) Connect alternator and regulator as shown in illustration. For an accurate test, drive vehicle or operate system (on bench) for about 45 minutes at 30 miles per hour or more. This will allow regulator to reach its normal operating temperature.

2) Run alternator at 5000 RPM (engine speed - 2500 RPM) for 15 seconds. Voltage with no load should be as shown in specifications.

3) Load alternator with 10-15 amperes (for example, high beam headlights). Record voltage reading. The voltage should also be as shown in specifications.

4) For the 14V-33525 and 14V-33544 regulators, the chart below gives voltage values for other ambient temperatures. If voltage is outside the tolerance limits, regulator must be replaced.



VOLTAGE-TEMPERATURE VARIATION WITH VOLTAGE REGULATOR WARM