

## BOSCH REGULATORS

Audi  
 BMW  
 Capri  
 Mercedes Benz  
 Lancia  
 Porsche  
 Saab  
 Volkswagen  
 Volvo

**NOTE** — For models using integral alternator regulators, see Bosch Alternators in this section.

### DESCRIPTION

Bosch alternator regulators are provided in two types, vibrating contact points or transistorized solid state. The vibrating contact regulator is two contact, single field units. The field coil of the alternator is grounded and voltage contacts of the regulator are in series with the field. Vibrator types are models AD(N), AB, & AE. Transistorized models are EA, ED, & EE.

### TESTING

#### ON CAR TEST

**Vibrator Type** — Install a battery post adapter at the positive post of the battery. Connect voltmeter across battery. Connect a tachometer to ignition system. Make sure all electrical accessories are turned off. Start engine with battery post adapter switch closed; open switch as soon as engine is started. With engine speed at 4000 RPM, after voltage reading stabilizes, any reading between 13.7 and 14.8 volts is satisfactory.

**Transistorized (Solid State)** — 1) For type ED 14 V 3, regulated voltage should be 13.7 to 14.6 with a 10 amp. load current.

2) For type EE 14 V 3, regulated voltage should be 13.7 to 14.6 with a load current of 5 to 7 amps.

3) For type ED 14 V 2, regulated voltage should be 13.9 to 14.9 with load current of 5 amps.

4) For ED 14 V 3 (Only part numbers 0192062 002 and 0192062 003) regulated voltage should be 13.7 to 14.5.

### ADJUSTMENT

#### VIBRATOR TYPE

If voltage reading is out of limits, remove regulator cover and adjust voltage regulator armature spring tension to obtain a

middle reading of 14.0 volts. If reading fluctuates, voltage contacts are dirty. Replace regulator cover and recheck voltage setting. A steady voltage reading between 13.5 and 14.5 volts indicates regulator is in good condition.

#### TRANSISTOR TYPE

Adjust alternator current and voltage to balance by altering the load resistance and readjust the alternator speed if necessary. Adjust to 14.0 volts.

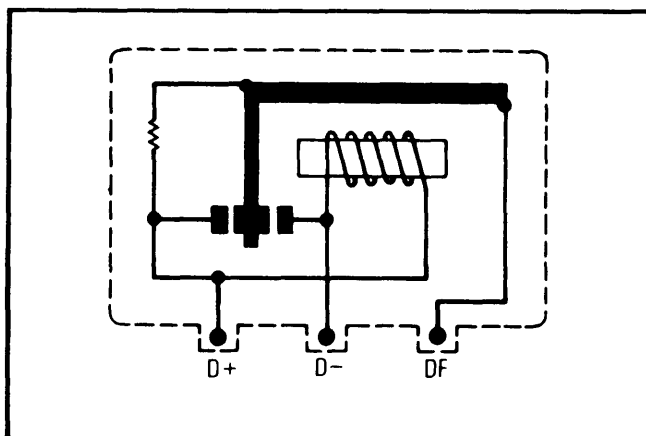


Fig. 1 Bosch Vibrator Type Alternator Regulator

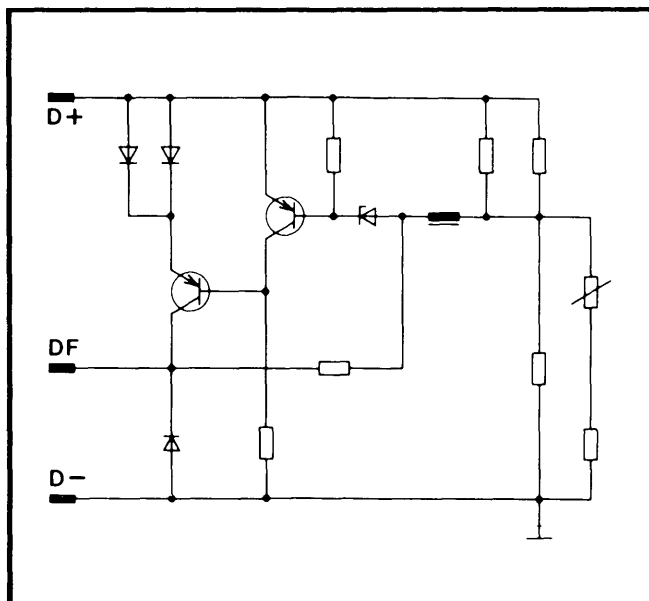


Fig. 2 Typical Bosch Transistorized Voltage Regulator Wiring Diagram