

a. **Positive Polarity.** The positive regulator controls a positive excitation voltage. Inside the alternator, one end of the field is connected to the negative polarity. Alternators with this configuration include Bosch, Motorola, Ingram, Sev-Marchal (older models), Silver Bullet, Lestek, Balmar:

- (1) **Polarity Test.** To test, use a multimeter on the ohms $\times 1$ range and connect across the field connection to an unpainted part of the alternator case or negative output terminal.
- (2) **Meter Reading.** The reading should be in the range of 3 to 8 ohms.

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b. **Negative Polarity.** The negative regulator controls a negative excitation voltage. Inside the alternator, one end of the field is connected to the positive polarity. Alternators with this configuration include Hitachi, Lucas A127, ACR 17-25, and AC5, CAV, Paris-Rhone, new model Sev-Marchal, and Valeo, AC Delco, Mitsubishi:

Alternators we have converted negative polarity for ZM4 operation;

Bosch and Ingram (same design different manufacturer)

Leece Neville

Delco

Motorola

Denso

Idkra/Letrika

Mando

Prestolite

Valeo