

Stator and rotor removal and installation procedures are covered in Chapter Four.

### Rotor Testing

The rotor is permanently magnetized and cannot be tested except by replacement with a rotor known to be good. A rotor can lose magnetism from old age or a sharp blow. If defective, the rotor must be replaced; it cannot be remagnetized.

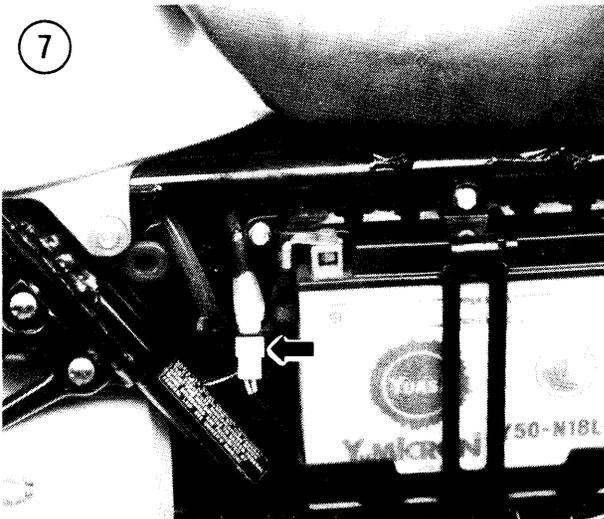
### Stator Testing (1984 Models Only)

Honda has determined that there was a problem with the stator assembly on 1984 models and this is covered in Honda Service Bulletin GL1200 # 6 Revised, dated August 1989 (supersedes GL1200 #16 January 1988). The results were a very low or no output from the alternator assembly that caused a frequent discharged battery. Honda extended the warranty for 4 years after the purchase date for the original owner. This date has since passed, but if you purchased a used 1984 model and are having battery charging problems, the stator may have not been replaced by the original owner(s). If the stator is faulty, you will have to purchase a new assembly since it is no longer covered by any applicable warranty. Perform the following test to see if the alternator is producing the correct amount of voltage:

1. Start the engine and let it reach normal operating temperature. Ten minutes of stop-and-go riding is usually sufficient. Shut off the engine.
2. Place the bike on the centerstand and remove the left-hand side cover.

#### CAUTION

*In the next step, do not disconnect the alternator stator 3-pin electrical connector with the engine running.*



3. With the engine *turned off*, disconnect the 3-pin electrical connector (**Figure 7**) containing 3 yellow wires.
4. Connect a portable tachometer following the *manufacturer's instructions*.
5. Restart the engine and let it idle, then increase the engine speed to 3,000 rpm.
6. Using an AC voltmeter, measure the voltage between each of the 3 yellow wires. At an engine speed of 3,000 rpm there should be 50 volts at each wire. If 50 volts are present at each wire, then the stator is performing correctly.
7. If the stator is not producing 50 volts at each wire, the stator is faulty and must be replaced. Even if only one of the yellow wires is below 50 volts, the stator is considered faulty.
8. Disconnect the AC voltmeter.
9. Turn the engine off and disconnect the portable tachometer.
- 10A. If the stator assembly is performing correctly, reconnect the 3-pin electrical connector and install the left-hand side cover.
- 10B. If the stator assembly is faulty, replace the alternator stator assembly as described in Chapter Four.
11. The part number for the new stator assembly is: P/N 31120-MG9-325 (Honda code H/C 3190337).

### Stator Testing (All Models)

1. Remove the left-hand side cover.
2. Disconnect the 3-pin alternator electrical connector (**Figure 7**).
3. Use an ohmmeter set at  $R \times 1$  and check continuity between each yellow terminal. Replace the stator if any yellow terminal shows no continuity to any other. This would indicate an open in the winding.
4. Use an ohmmeter and check for continuity between each yellow terminal and ground. Replace the stator if any of the terminals show continuity to ground. This would indicate a short within a winding.

#### NOTE

*Prior to replacing the stator with a new one, check the electrical wires to and within the terminal connector for any opens or poor connections.*

## VOLTAGE REGULATOR/RECTIFIER

### Removal/Installation

1. Remove both side covers and the seat.
2. Disconnect the battery negative lead (**Figure 2**).
3. Remove the top compartment as described in Chapter Thirteen.
4. Disconnect the electrical connector containing 8 wires (A, **Figure 8**).