

## BATTERY/CHARGING SYSTEM

- The battery will self-discharge when the motorcycle is not in use. For this reason, charge the battery every two weeks to prevent sulfation from occurring.
- Filling a new battery with electrolyte will produce some voltage, but in order to achieve its maximum performance, always charge the battery. Also, the battery life is lengthened when it is initially charged.
- When checking the charging system, always follow the steps in the troubleshooting flow chart (page 16-3).

### Battery charging

This model comes with a maintenance-free (MF) battery. Remember the following about MF batteries.

- Use only the electrolyte that comes with the battery
- Use all of the electrolyte
- Seal the battery properly
- Never open the seals again

### CAUTION:

**For battery charging, do not exceed the charging current and time specified on the battery. Use of excessive current or charging time may damage the battery.**

### BATTERY TESTING

Refer to the instruction of the Operation Manual for the recommended battery tester. The recommended battery tester puts a "load" on the battery so that the actual battery condition of the load can be measured.

**Recommended battery tester** BM-210 or BATTERY MATE or equivalent

### SPECIFICATIONS

ITEM		SPECIFICATIONS	
Battery	Capacity	12V – 10 AH	
	Current leakage	0.2 mA max.	
	Voltage (20 °C/68 °F)	Fully charged	13.0 – 13.2 V
		Needs charging	Below 12.3 V
	Charging current	Normal	0.9 A/5 – 10 h
Quick		4.0 A/0.5 h	
Alternator	Capacity	0.46 kW/5,000 min <sup>-1</sup> (rpm)	
	Charging coil resistance (20 °C/68 °F)	0.1 – 1.0 Ω	

### NOTE

The maintenance free battery must be replaced when it reaches the end of its service life.

### CAUTION:

The battery caps should not be removed. Attempting to remove the sealing caps from the cells may damage the battery.

• The battery can be damaged if overcharged or undercharged, or if left to discharge for long periods. These same conditions continue to shorten the "life span" of the battery. Even under normal use, the performance of the battery deteriorates after 2 – 3 years.

• Battery voltage may recover after battery charging, but under heavy load, battery voltage will drop quickly and eventually die out. For this reason, the charging system is often suspected as the problem. Battery overcharge often results from problems in the battery itself, which may appear to be an overcharging symptom. If one of the battery cells is shorted and battery voltage does not increase, the regulator/rectifier supplies excess voltage to the battery. Under these conditions, the electrolyte level goes down quickly.

• Before troubleshooting the charging system, check for proper use and maintenance of the battery. Check if the battery is frequently under heavy load, such as leaving the headlight and taillight ON for long periods of time without riding the motorcycle.