

SERIES B EQUIPMENT

# FAULT DIAGNOSIS

METER CONNECTIONS	METER READING	ACTION TO BE TAKEN	METER CONNECTIONS	METER READING	ACTION TO BE TAKEN
<b>TEST 1 (A) CHECKING DC OUTPUT</b>  With ammeter connected in series with battery. Lighting Switch alternatively in "OFF," "LOW" and "HIGH" positions.  NOTE:—If battery is in poor condition or low state of charge use TEST 1 (B).	<b>TEST 1 (A)</b> "OFF" $\frac{1}{2}$ - $1\frac{1}{2}$ amps "LOW" $2\frac{1}{2}$ - $3\frac{1}{2}$ amps "HIGH" $3\frac{1}{2}$ - $4\frac{1}{2}$ amps	Correct reading - Alternator and Charging Circuit in order.	<b>TEST 2 CHECK OUTPUT ACROSS EACH COIL</b>  With all 6 cables removed from snap connectors with 1 ohm load and AC voltmeter (at 4,000 rpm).	YELLOW-BUFF } At $7\frac{1}{4}$ YELLOW-RED } to $8\frac{1}{2}$ GREEN-PURPLE } volts. GREY-BUFF }	<b>IF READINGS CORRECT</b>  Faults from Test 1 may be caused by rectifier. Proceed to Test 3.
	<b>DEFECTS</b> (a) No reading. (b) Reading much lower than value stated.	(a) & (b) Proceed with Test 2 to check if alternator is functioning.			
<b>TEST 3 RECTIFIER CHECK</b>  With 6 volt battery and 1 ohm ballast resistance.	(a) Readings correct.	Any remaining faults must be in the wiring or switch connections - check these according to diagram with continuity meter.	<b>TEST 4 EMERGENCY BULB CHECK</b>  (1,000 rpm).	Equal brilliance across all coils.	A <b>rough</b> check only that the alternator coils are correct. Not satisfactory for showing a demagnetised rotor.
	(b) Readings incorrect.	Damaged rectifier - <b>MUST BE REPLACED.</b>			

### LOW SPEED TRAVELLING

Where the motor cycle is only used for in-town travelling at low speeds the trickle charge may be insufficient. This will be more noticeable during **winter** months when the headlamp is used more frequently.

To obtain a higher charging rate, if desirable, the following alteration should be made to the connections from the generator into the main harness:—

Disconnect the alternator **Red** lead at the snap connector under the saddle and join it to the **Green** lead from the alternator to the headlamp. This will give a higher charging rate in the "OFF" position of the lighting switch. Use a double snap connector (850641) for this so that green from headlamp and red and green from the alternator are all connected together. This is a simple method of connection and makes it easy to change to the lower charge rate for **summer** travel when higher road speeds and less frequent use of the headlamp are normal.