TROUBLESHOOTING

BATTERY IS NOT CHARGED.

Procedure

1. Fuse "MAIN" inspection
2. Battery inspection
3. Charging voltage test
4. Charging coil resistance test
5. Brush inspection
6. Field coil (Rotor) resistance test
7. Wiring connection check (Entire charging system)

NOTE:

Remove the following before troubleshooting.

- Side cowling (Left)
- Seat
- Side cover (Left)

1. Fuse "MAIN" inspection

- Connect the Pocket Tester "Ω x 1" to the fuse.
- Check the fuse for continuity.

NO CONTINUITY → Replace fuse.

CONTINUITY ↓

2. Battery inspection

- Check the battery condition. Refer to "CHAPTER 3. BATTERY INSPECTION".

Specific Gravity:
1.280 at 20°C (68°F)

INCORRECT/LOW SPECIFIC GRAVITY → Refill battery fluid. Clean battery terminals. Recharge or replace battery.

OK ↓

3. Charging voltage test

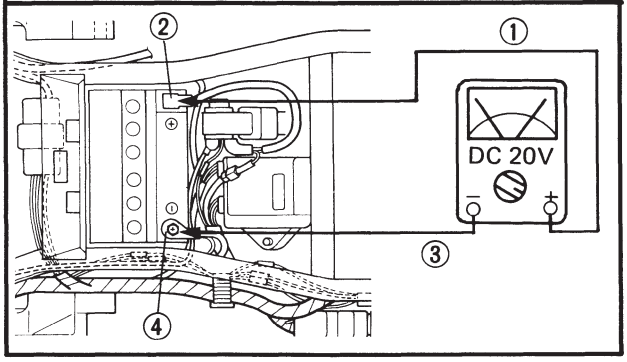
- Connect the Pocket Tester "DC20V" to the battery.
- Start the engine and accelerate to about 5,000 r/min.
- Measure the charging voltage.

Charging Voltage:
14 ~ 15V at 5,000 r/min

CAUTION:

Never disconnect the battery cables while the A.C. generator is operating or the rectifier/regulator will be damaged.

① Positive lead (Pocket Tester)
② Positive terminal (Battery)
③ Negative lead (Pocket Tester)
④ Negative terminal (Battery)



CHARGING VOLTAGE MEETS SPECIFICATION

Replace battery.

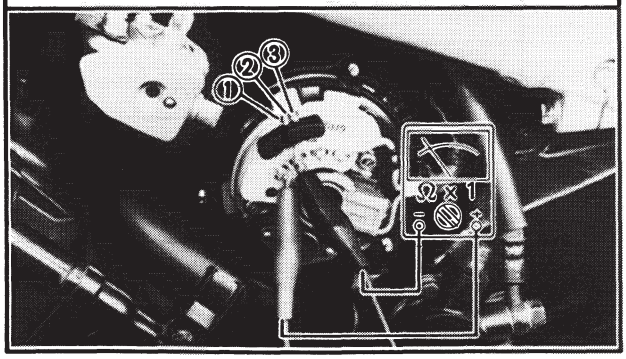
LESS THAN 13V

MORE THAN 15V

4. Stator coil resistance test

- Remove the generator cover.
- Connect the Pocket Tester "Ω x 1" to the stator coils.
- Measure the stator coil resistances.

Stator Coil Resistance:
(White ① – White ②, White ① – White ③, White ② – White ③)
0.16 ~ 0.18Ω at 20°C (68°F)



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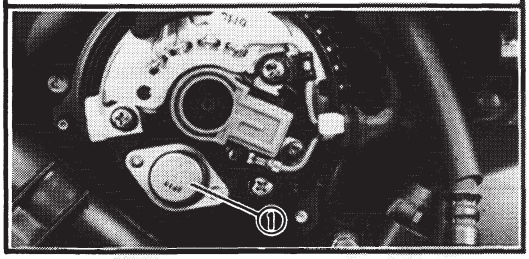
Replace rectifier with regulator ①.



OUT OF SPECIFICATION

Replace stator assembly.

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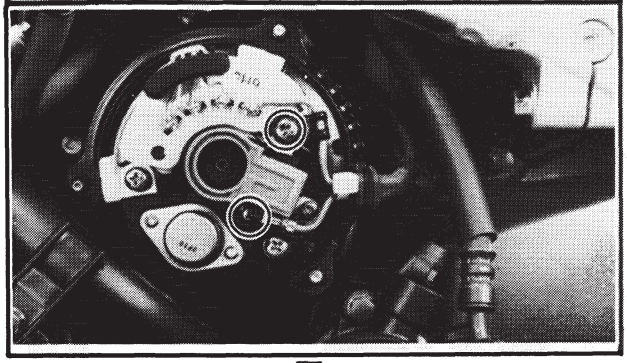
5. Brush inspection

- Remove the brush holder.
- Inspect the brush spring.
- Measure the brush length.

Minimum Brush Length:
5 mm (0.2 in)



WEAR/DAMAGE
OUT OF SPECIFICATION

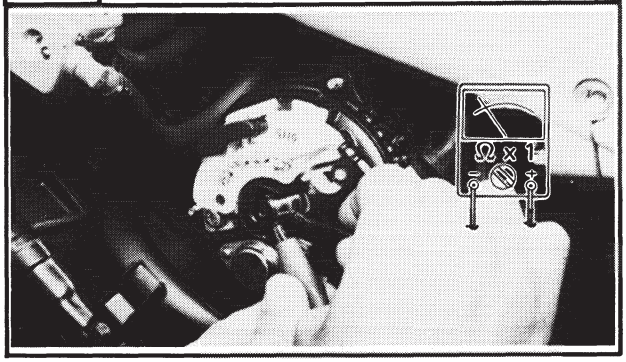
Replace brush and/or spring.

OK

6. Field coil (Rotor) resistance test

- Connect the Pocket Tester "Ω x 1" to the rotor.
- Measure the resistance.

Field Coil (Rotor) Resistance:
3.8 ~ 4.2Ω at 20°C (68°F)



OUT OF SPECIFICATION

Replace field coil (Rotor).

RESISTANCE
MEETS SPECIFICATION

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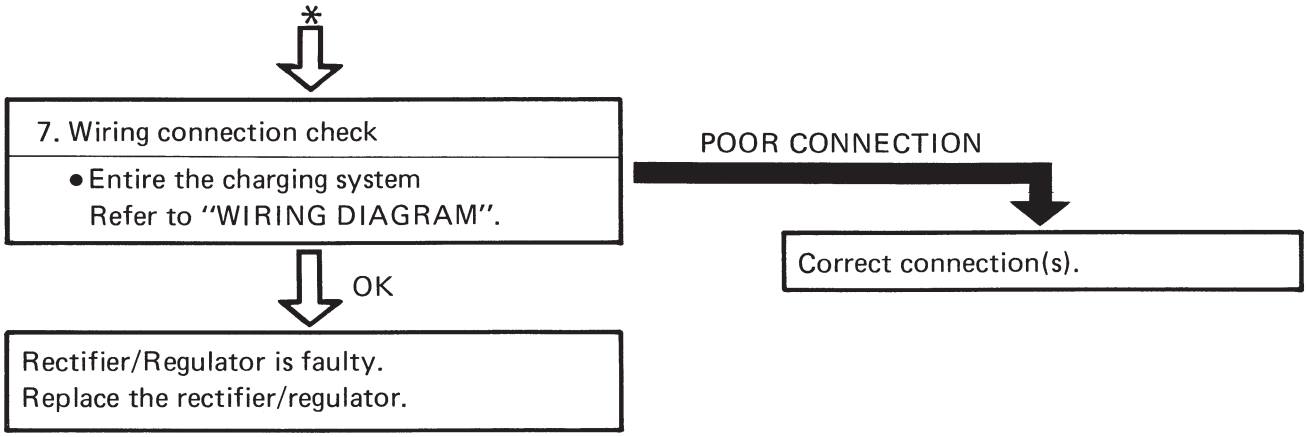
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7. Wiring connection check
• Entire the charging system
Refer to "WIRING DIAGRAM".
POOR CONNECTION
Correct connection(s).
OK
Rectifier/Regulator is faulty.
Replace the rectifier/regulator.