

**FUNCTION TEST OF RECTIFIER-REGULATOR**1) General information

For transformation of the alternating current 12V 140W supplied by the generator there are 2 kinds of rectifier-regulators available:

- A) ROTAX part no. 866 080 can be used with or without battery. This single-phase-regulator requires imperatively a minimum consumption of 12 watts (1 Amp).
- B) ROTAX part no. 264 870 can be used with or without battery. This 3-phase regulator does not require any minimum consumption.

2) Checking of regulator function of 866 080

2.1 Proceed as follows to check regulator function:

2.2 Connect a completely charged 12 V battery with a capacity of 15 to 25 Ah.

2.3. Connect a lamp (bulb) of 12V 55W interposing a switch.

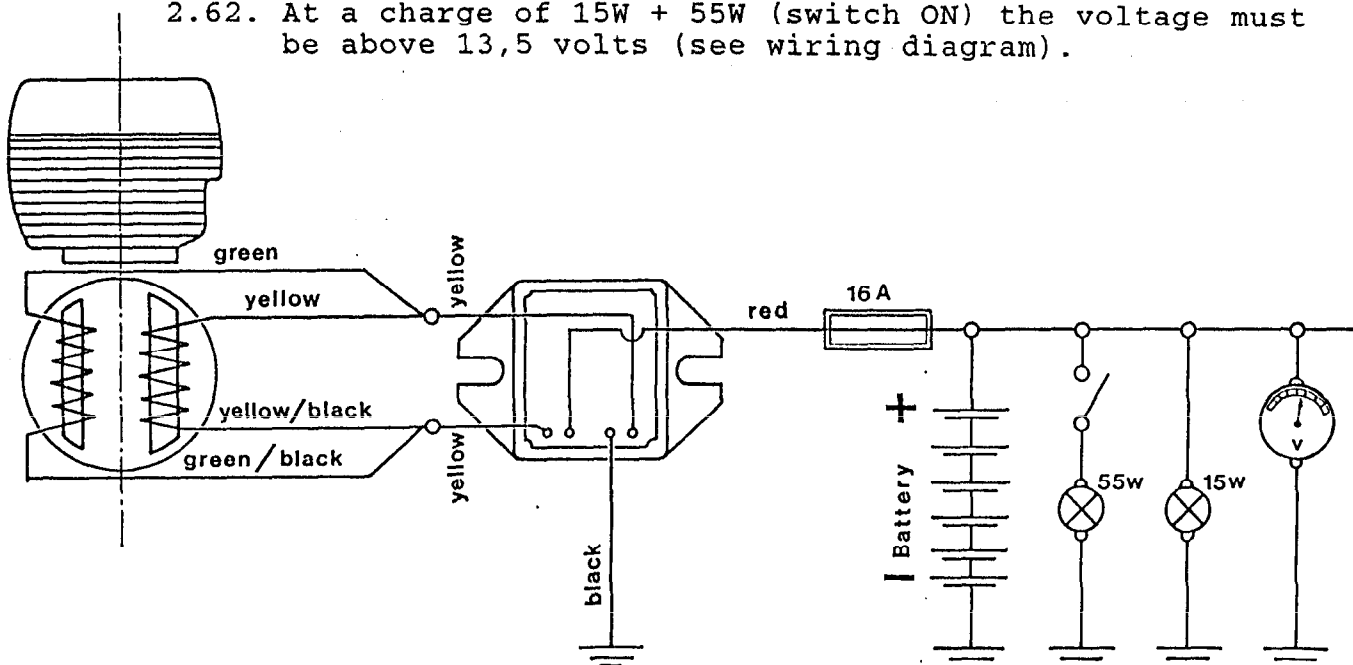
2.4. Connect a lamp (bulb) of 12V 15W directly, because a minimum charge of 1 Amp is required when using this rectifier-regulator.

2.5. Keep engine running at 3000 to 5000 r.p.m.

2.6. Check voltage with a voltmeter:

2.61. At a charge of 15W (switch OFF) the voltage must be below 14,5 volts.

2.62. At a charge of 15W + 55W (switch ON) the voltage must be above 13,5 volts (see wiring diagram).





### 3) Checking of regulator function of 264 870

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3.1. For checking of the regulator function proceed as follows:

3.2. Connect a fully charged 12 V battery with a capacity of 15 to 25 Ah.

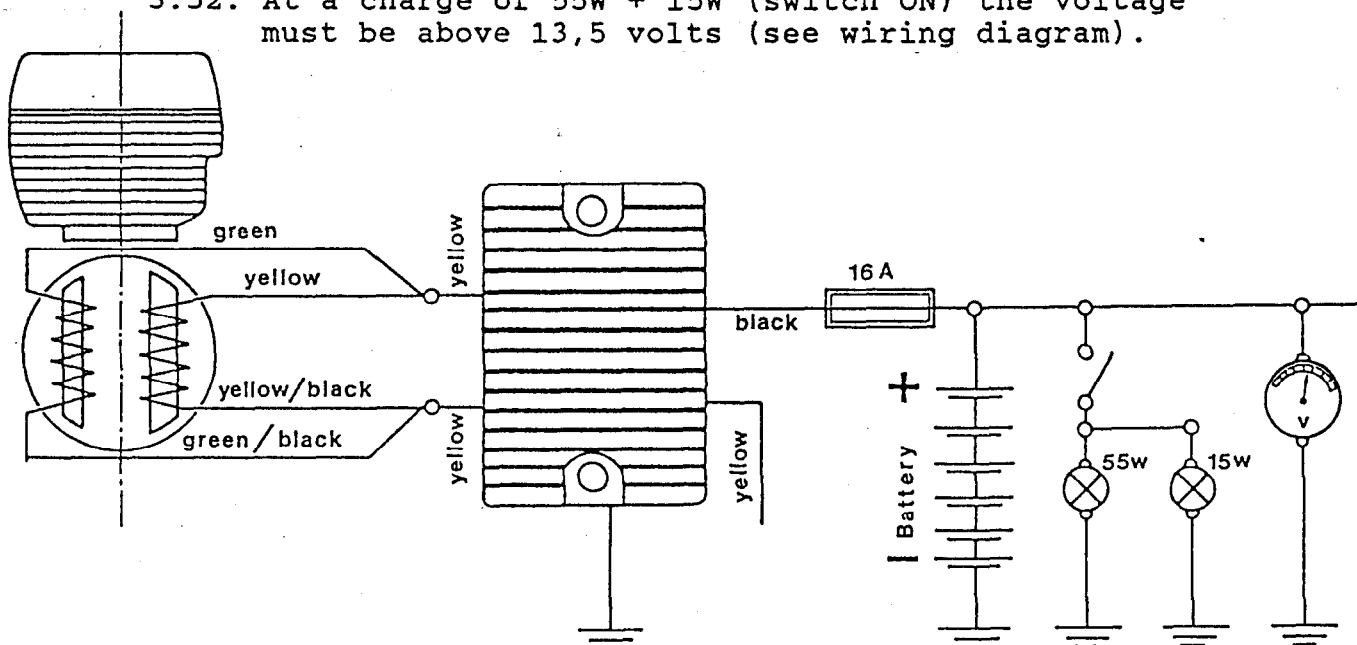
3.3. Connect a lamp (bulb) of 12V 55W and one lamp 12V 15W interposing a switch.

3.4. Keep engine running at 3000 to 5000 r.p.m.

3.5. Checking the voltage with a voltmeter:

3.51. Without charge (switch OFF) the voltage must be below 14 volts.

3.52. At a charge of 55W + 15W (switch ON) the voltage must be above 13,5 volts (see wiring diagram).



### 4) If the measuring values are beyond the indicated values, proceed as follows:

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4.1. Check all cable connections and mass connections.

4.2. Check fuse and its connections.

4.3. Check charge of battery.

4.4. Check conductivity of 110 W lighting coil (yellow / yellow-black).

4.5. Check correct connection of additional lighting coil 30W.

4.6. If no fault is found so far, exchange rectifier regulator.

### 5) These measuring values are also valid if the 30 watts lighting coil (green-green/black) is not connected to the rectifier-regulator and is used e.g. for a tachometer.