

7 ALTERNATOR - REGULATOR

⚠ WARNING
If connections are inverted the regulator will be irreversibly damaged.
Check that the regulator earth connections are efficient. Possible checks to be carried out on the alternator or regulator if the battery fails to re-charge or the power supply is no longer regulated.

ALTERNATOR

With the engine switched off, disconnect the two yellow generator cables from the rest of the system and then carry out the following tests with a ohmmeter:

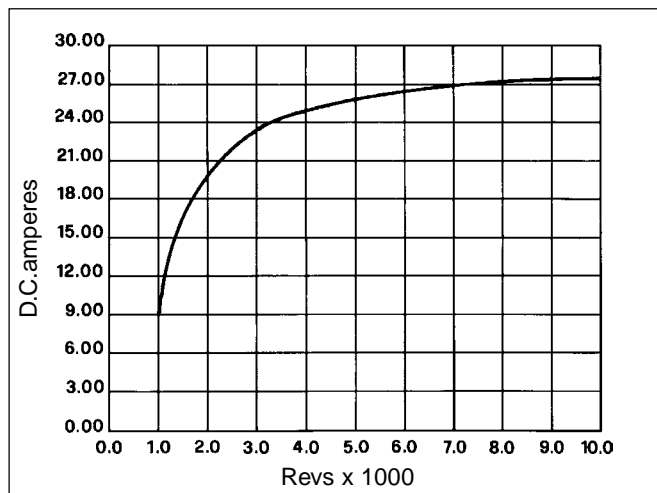
CHECK THE WINDING ISOLATION TOWARDS EARTH
 Connect one connecting point of the ohmmeter to one of the two yellow cables and the other connecting point to earth (laminar pack).
 The instrument should indicate a value above 10 MΩ.

CHECK THE WINDING CONTINUITY
 Connect the two connecting points of the ohmmeter to the two yellow cables.
 The instrument should indicate a value of 0.2÷0.3 Ω.

CHECK THE VOLTAGE OUTPUT
 Connect an alternate 200 Volt capacity voltmeter to the two yellow cables.
 Start the motor and check that the voltage output is included within the values indicated on the following tables:

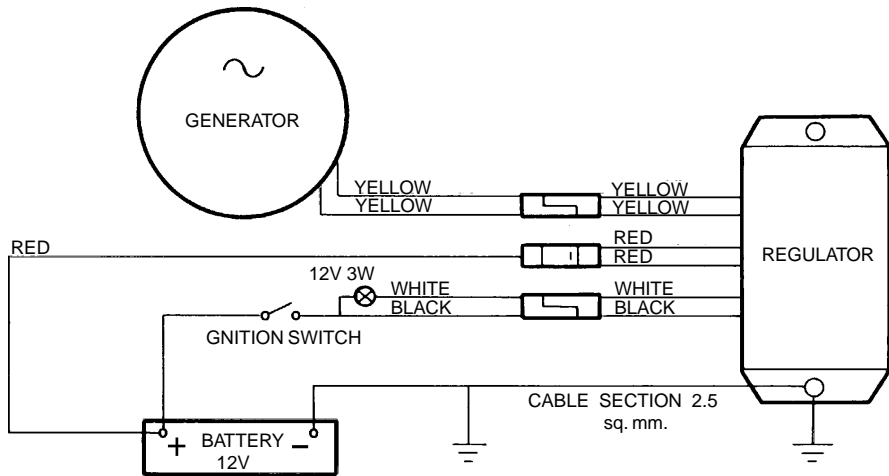
r.p.m.	1000	3000	6000
A.C. volts	15	40	80

CURRENT INTENSITY DIAGRAM
GRAFIK DER STROMSTÄRKE
DIAGRAM STROOMINTENSITEIT



r.p.m.	D.C.Amps
1000	9,50
1200	13,00
1500	16,50
2000	20,00
3000	23,50
4000	25,00
6000	26,50
10000	27,50

WIRING DIAGRAM - SCHALTPLAN - BEDRADINGSHEMA





REGULATOR

The regulator has been calibrated in order to maintain the battery voltage at a value between 14÷14.6 Volts. The pilot light (illuminated when the engine is not running, but the key is in ON position) will switch off when the generator begins to charge, (approx. 700 r.p.m.)

REGULATOR CHECKS

Normal work-shop tools are generally insufficient for regulator checking, however, listed below are certain operations that can be carried out in order to detect regulators that are defective.

THE REGULATOR IS CERTAINLY DEFECTIVE IF:

After having isolated it from the rest of the system short circuits can be detected between the earth (aluminum casing) and any of the output cables.

A

B

C

D