

- 3 Energize the [reg on] terminal by either turning on the ignition switch (DO NOT START THE ENGINE) or by putting a jumper across switch S1 (see figure 14). Check whether the 3 yellow LED's start to blink. After approx. 10 seconds the yellow bulk led will illuminate.

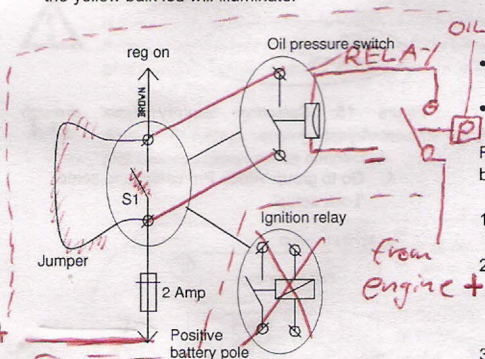


Figure 14: Jumper across switch S1

- 4 Check whether the alternator field is energized by touching the shaft of the alternator with a screwdriver. It should be strongly magnetic.
- 5 De-energize the [reg on] terminal by turning off the ignition switch or by removing the jumper across switch S1 again. All LED's should go off and the field should no longer be strongly magnetic.



#### CAUTION!

After performing this test, be sure to turn de-energize the [reg on] terminal, otherwise the field windings of the alternator will be damaged due to overheating

If you cannot pass the tests mentioned above, remove the DC-fuses and double check the wiring. Refer to the Trouble shooting section (section 8).

- 6 Check whether all bolts are securely mounted. Check both the aligning and tension of the V-belts.

#### 5.2.2 In operation test

To check for proper operation you will need a hand held digital meter. If you have installed a battery monitor such as the MasterShunt or any other digital voltage measuring device, you can use this as well.



#### WARNING

When the engine is running, be aware of moving parts like V-belts.



#### NOTE!

See section 3.2.1 for explanation of the bulk, absorption and float mode.

- Be sure no loads or any other charging sources are on!
- Be sure the battery is (almost) fully charged

Follow all steps in order of succession as described below:

- 1 Measure and record the battery voltage at idle.
- 2 Start the engine. The three LEDs on the Alpha Pro II blink together to indicate the start up mode.
- 3 Check for abnormal noise or vibration.
- 4 The yellow [bulk] LED on the Alpha Pro II regulator (see figure 15) illuminates, indicating that the charge-cycle begins.
- 5 Measure and record the battery voltage. The battery voltage should be higher than measured before at step 1. The battery voltage rises until the yellow [abs] LED illuminates.
- 6 When the yellow [abs] LED illuminates, the absorption mode commences. Measure and record the voltage at which the battery stabilizes (@ 25°C / 77°F).
- 7 An absorption timer starts to keep the Alpha Pro II regulator in the absorption mode. The factory setting of this timer is 4 hours.



#### NOTE!

For testing you might want to reduce the absorption time temporarily.

- 8 When absorption time has elapsed, the green [float] LED will illuminate. This means that the float mode has started.

If you have passed the above mentioned tests, the charging system is ready for operation. Else check trouble shooting.

Depending on your settings the regulator can switch to Float before a 100% SOC has been reached, refer to section 6.3.4