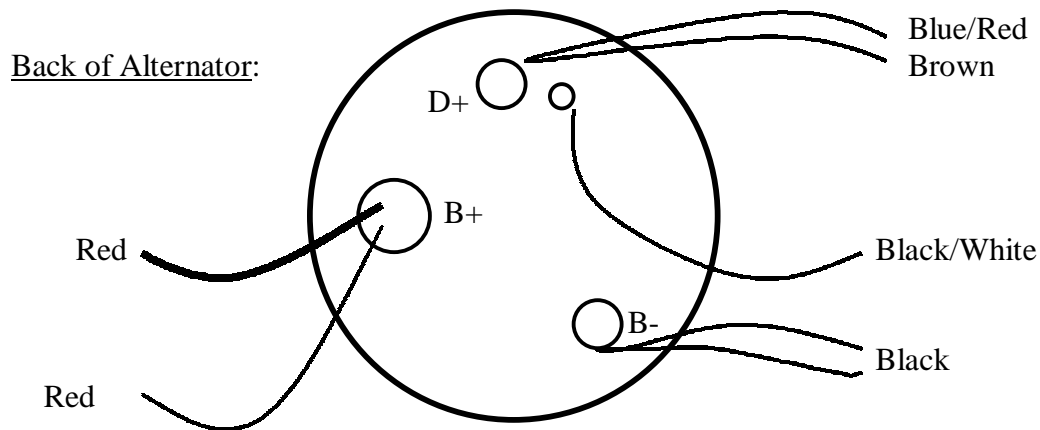


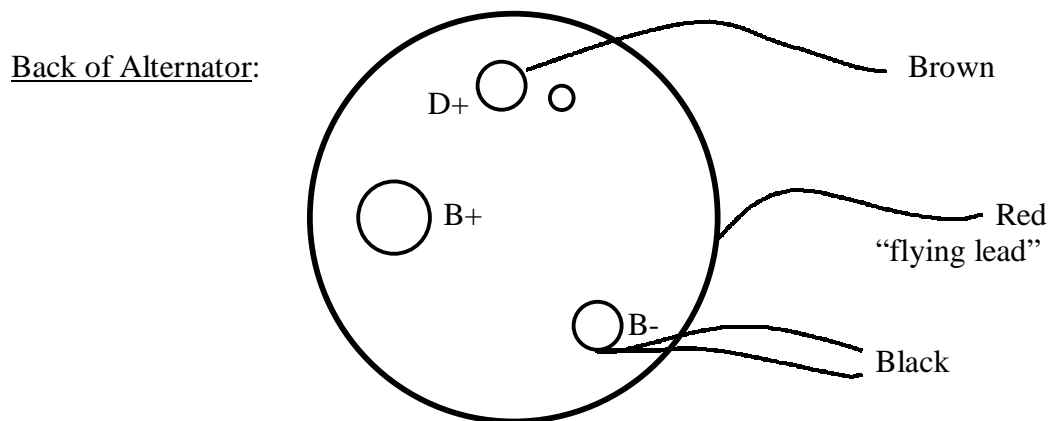
VALEO ALTERNATOR CONNECTIONS

ON BOARD YACHT TIGER MOON:

Boat Wiring Loom Connections:



Sterling Universal Advanced Regulator connections:



Port-most connection (B+) ...

... thick red wire with white tape at the end of it is the wire which carries the charging current for the batteries. From the alternator it runs to the front of the engine compartment where it terminates at the split charge diode. From the diode, battery connections wires run to the two main battery switches (Engine (Port) and Domestics (Starboard)) – on un-switched (permanent 12v) connections obviously.

... thinner red wire carries power to the hour-meter at Nav Station.

The B+ connection is held by a 10mm nut with integral washer. Connection also has a yellow wire under a second similar nut – this comes from inside the alternator.

Uppermost connection (D+) ...

... has three wires connected:

- a) Two boat wiring loom wires (a blue/red and a brown) which are joined to the same connector tag
- b) The brown wire from the Sterling Universal Advanced Regulator. This monitors the output voltage and operates the high voltage trip if it exceeds 17.5v.

They are held by an 8mm nut with separate washer.

Just below and to starboard of the D+ connection is a third connector: ...

... which has a single black/white wire from the boat wiring loom. It is held in place by a 7mm nut with separate washer.

Lowest connection (B-) ...

... has four black wires connected (and is, I assume, an earth):

- a) Two boat wiring loom wires
 - b) Two wires from the Sterling Universal Advanced Regulator.
- ... all of which are on separate connector tags. They are held by an 8mm nut with separate washer.

Flying red wire with bullet connector ...

... is the field wire, connected directly (inside the alternator) to one of the alternator brushes, and which is connected to the Sterling Universal Advanced Regulator alternator control cable through the black on/off switch next to the Sterling box. Turning this switch off turns the Sterling Universal Advanced Regulator off and restores normal (alternator regulated) charging.

There are also two wires which are part of the boat wiring loom:

- (a) one with a female spade connector (engine coolant temperature gauge – not used);
- (b) one with a female bullet connector (Engine coolant high temperature warning – connects to sensor in engine block above alternator).

For completeness the other the Sterling Universal Advanced Regulator wires are:

- a) Power supply (yellow, goes from engine power supply main switch (switched side) to the Sterling Universal Advanced Regulator).
- b) Battery voltage sense wire (Red, runs from starboard-most domestic battery through engine compartment to the Sterling Universal Advanced Regulator).

For more information on the Sterling Universal Advanced Regulator see pocket 108 in the on-board Systems Pack.

Simon Springett
10 August 2002