

WhisperGen Electronics replacement

Date of issue:
11-08-2014

Reason : procedure to replace a faulty electronics set (same for 12V & 24V)

The instructions below describe the removal of the electronics unit.

Note that when the electronics is replaced, the installation specific variables (battery bank size, charge parameters, engine run hours etc.) need to be updated as well.

1. Isolate the WhisperGen from the battery bank, remove enclosure and electronics front panel.

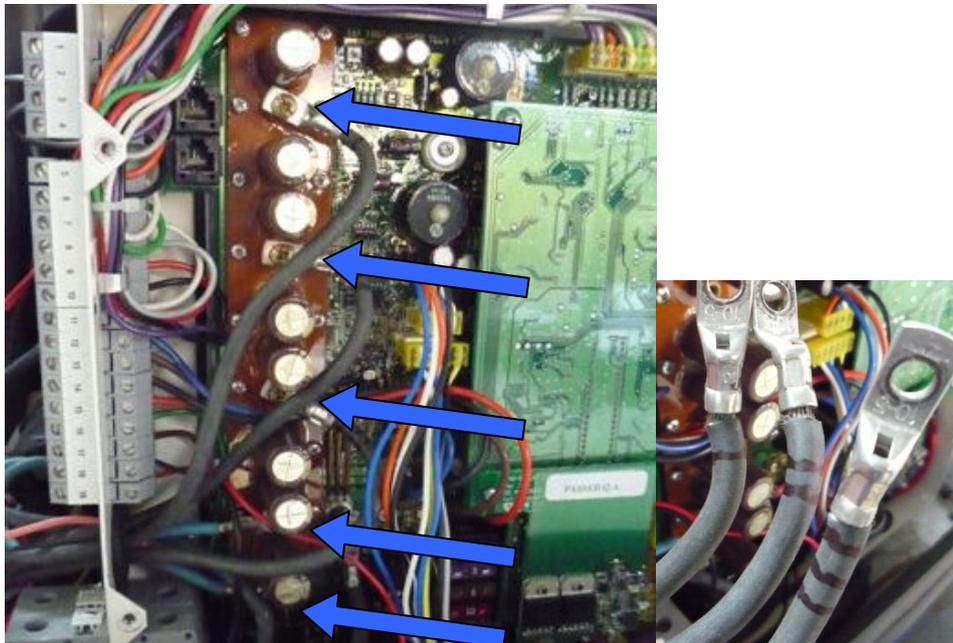


2. Remove all wires from the terminal block at the left side of the electronics. Careful with the voltage sensor wire (nr. 9) which is still connected to the battery bank.

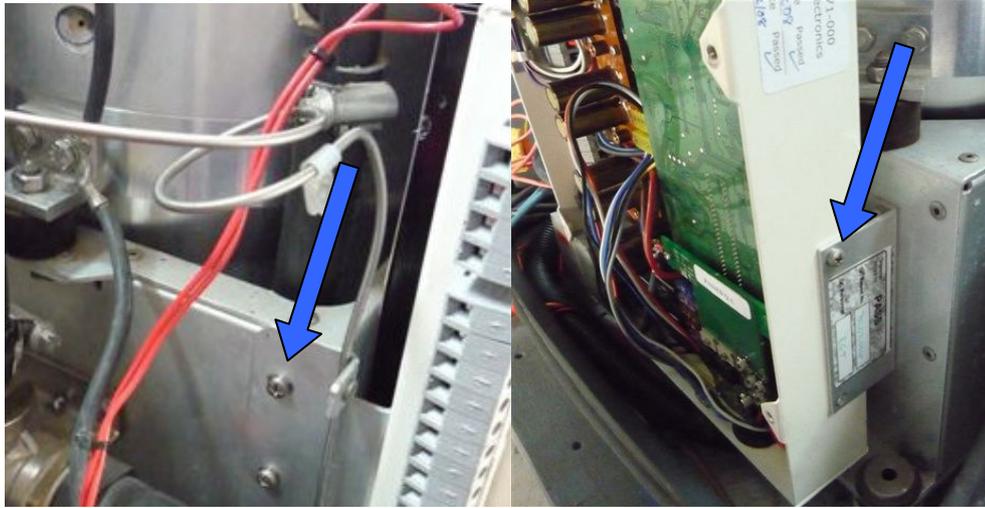
3. Disconnect the battery cables, the glow plug wire and the earth cable which is connected to the core engine (see below)



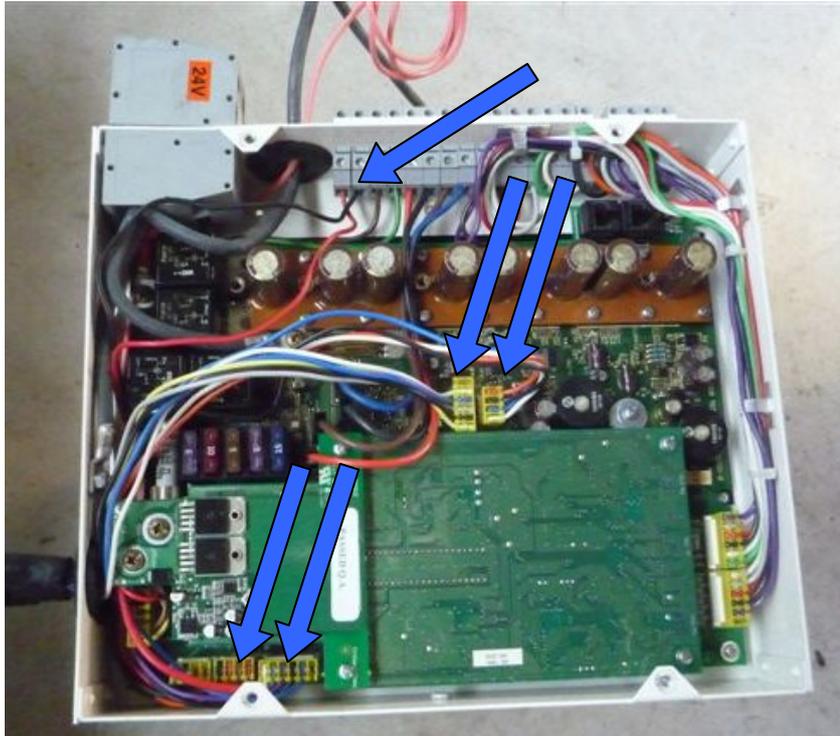
4. Disconnect the three alternator wires and the two wires for the clamp element. Pull all wires back through the rubber grommet. Mark the alternator wires (nr 1 at the top) to ensure alternator is spinning in the right direction after. If connected in wrong order, the engine will not operate. Following the reverse procedure when installing the electronics, be careful when tightening these screws. Too much force can result in a broken solder joint between stud and circuit board. Best to hold the lug when tightening the screw to reduce torque on the stud.



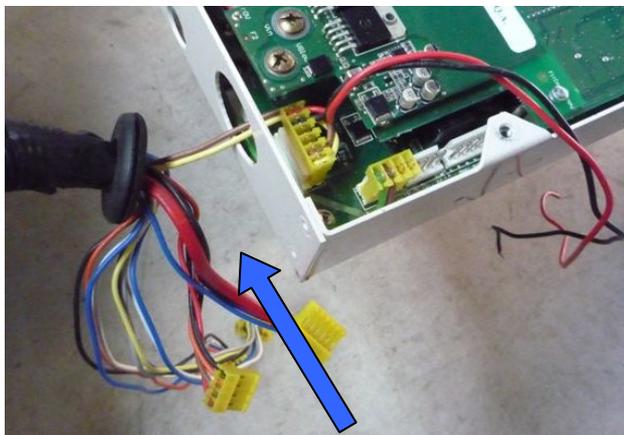
5. Disconnect the brackets and fuel line from the engine mount as shown below. The only connection left between engine and electronics is wiring loom.



- 6 Disconnect the two wires and connectors shown below. Remove the rubber grommet and pull the connectors one by one out of the electronics enclosure. Start with removing the small connectors through the hole in the enclosure.



7. One more connector to be removed and the electronics is completely disconnected from the unit.

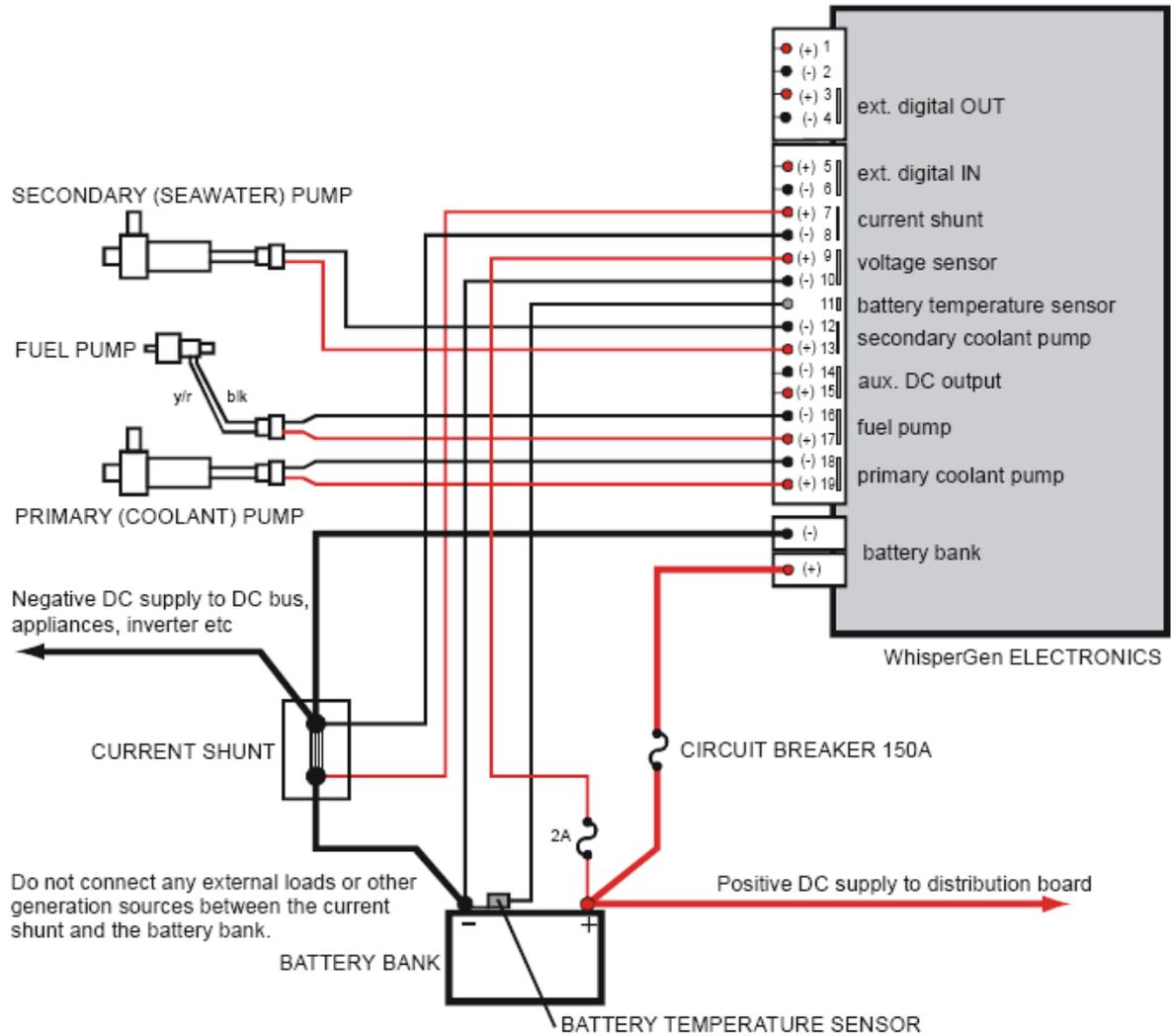


When installing the electronics the described procedure can be followed in reverse order.

Few comments to keep in mind:

- Make sure the connector for the user display is one of the first to be fitted in through the rubber grommet, otherwise there is not enough space left once the other cables are fitted.
- Note the position of the positive and negative voltage wires in the terminal block. Some pairs have the plus at the top, some the negative. See schematic further down.

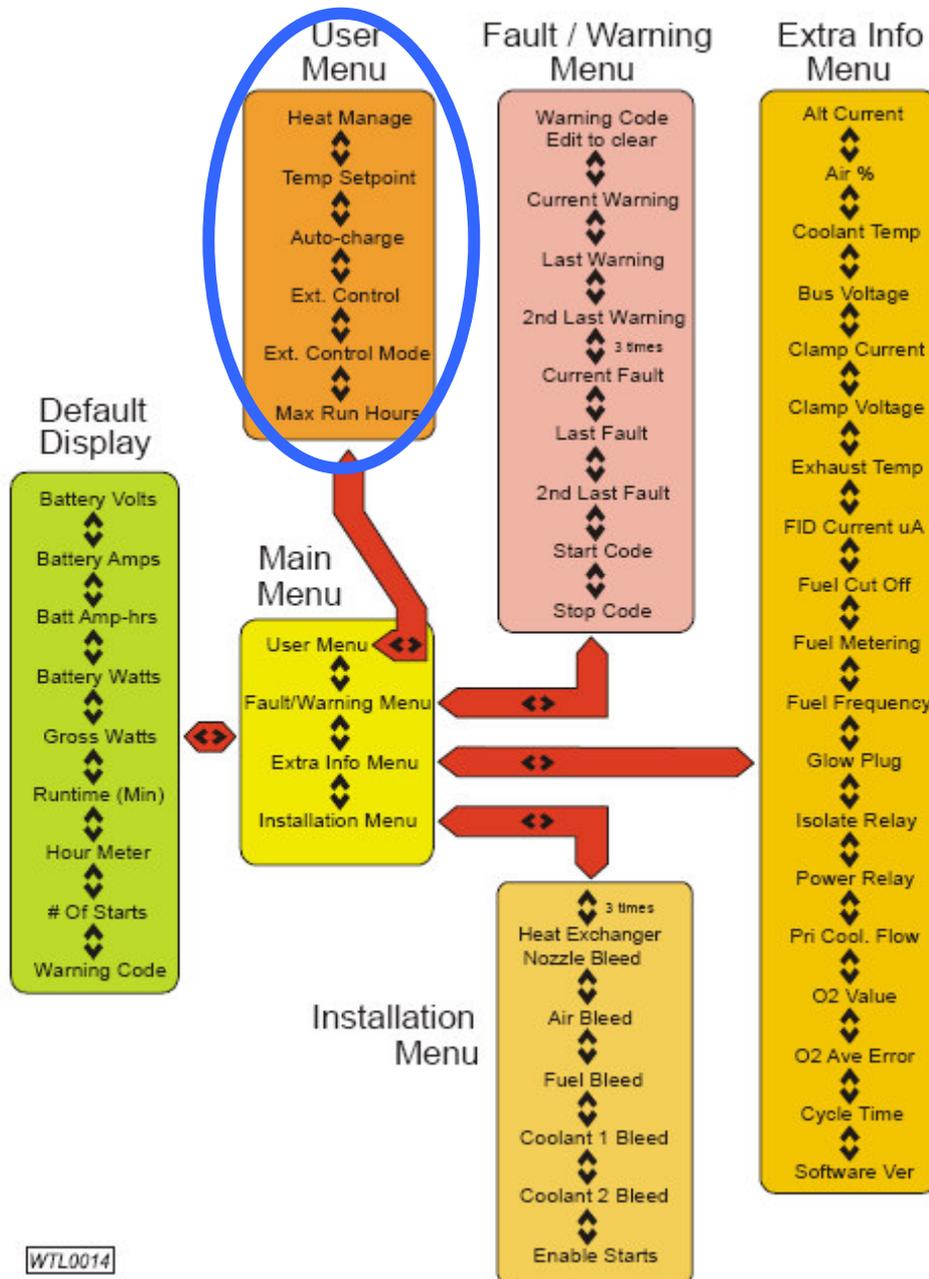
Connection diagram



System specific software parameters

Those variables that are system specific like heat management, battery charging and burner setup need to be recorded so that they can be loaded into the new electronics.

The required settings are marked below. Some are direct accessible in the menu, others are in a service menu that can be accessed by entering the key sequence as shown on the hidden menu page below.



Access Hidden Service Menu

