

MCC Automatic Start-Stop Microcomputer Charger Control

Troubleshooting Procedure

Use the MCC's lights as a guide. Is a light on? Which one? Is it "steady" or "flashing"?

A "steady" red **FAULT** light indicates that the microprocessor has sensed an unusual voltage or voltage change and turned off the charger. This will happen if the battery voltage is greater than the charger voltage (for example, a 36 volt battery connected to a 24 volt charger). If the jumper trace "J1" has been cut (see installation step 9.3), a "steady" red **FAULT** light could also indicate a charger problem, power outage, erratic ac line voltage or bad connector contacts.

If the battery is not fully charged but the green **CHARGE COMPLETE** light is on "steady", a power outage may have occurred during the finish charge. If an outage did not occur, the charger probably has too low a finish rate. The MCC can be adapted somewhat to a low finish rate charger by raising the calibration point slightly (consult the factory). It is much better, however, to increase the charger's finish rate or replace the charger.

If the red **FAULT** light is "flashing", it usually means that the battery has failed to reach 80% charge within 9.5 hours. This indicates that the battery has a fault, the charger is undersized for the job or a lengthy power outage occurred during the initial charge. The MCC can be adapted somewhat to an undersized charger by lowering the calibration point slightly (consult the factory). It is much better, however, to replace the charger.

If the battery is **fully charged** and the red **FAULT** light is "flashing", the charger voltage is greater than the battery voltage (for example, a 36 volt charger connected to a 24 volt battery). A "flashing" red **FAULT** light will also occur if the ten position rotary switch is on position 9 (see installation step 6 - program options).

If the battery voltage is low due to over-discharge or to an internal battery problem, there may be insufficient voltage to close the MCC's internal relay to activate the charger's line contactor even though the **INITIAL CHARGE** light is on. The minimum voltage required is approximately 1.4 volts per cell.

Troubleshooting Chart -- If Needed, Please Print Out

