

PL Why.is.my.solar.charge.current.reading.twice.as.much.as.it.should (DRAFT).doc

Your problem is very simple to solve.

Due to a small problem with your wiring, the charge current from the solar panels is being measured twice.

Let me explain:

The solar charge current is measured internally to the regulator as it passes through.

This solar charge current **SHOULD NOT** also pass through your external shunt otherwise it is being measured internally by the regulator and externally by the shunt (thus giving twice the reading).

The solution is to simply swap a couple of cables around:

(1) If your shunt is in the positive battery cable...

Make sure that your solar positive cable is going to the **BATTERY SIDE** of the shunt (**NOT** the load side, otherwise the solar charge current is incorrectly going through the external shunt to the battery).

The regulator cable coming from regulator BAT+ should also go to this same battery side of the shunt (or better still, directly to the positive terminal on the physical battery through a small fuse).

(2) If your shunt is in the negative battery cable...

Make sure that the cable from regulator BAT- is going to the **BATTERY SIDE** side of your shunt (**NOT** the load side, otherwise the solar charge current is incorrectly going through the external shunt to the battery).

Please see attached vehicle wiring diagram.