



Advantages of the new Sunny Boy Disconnect Switch

AC and DC disconnects



Sunny Boy 3000 US and
Sunny Boy 4000 US
came with DC disconnects



Sunny Boy 5000 US
Sunny Boy 6000 US and
Sunny Boy 7000 US
came with AC/DC disconnects



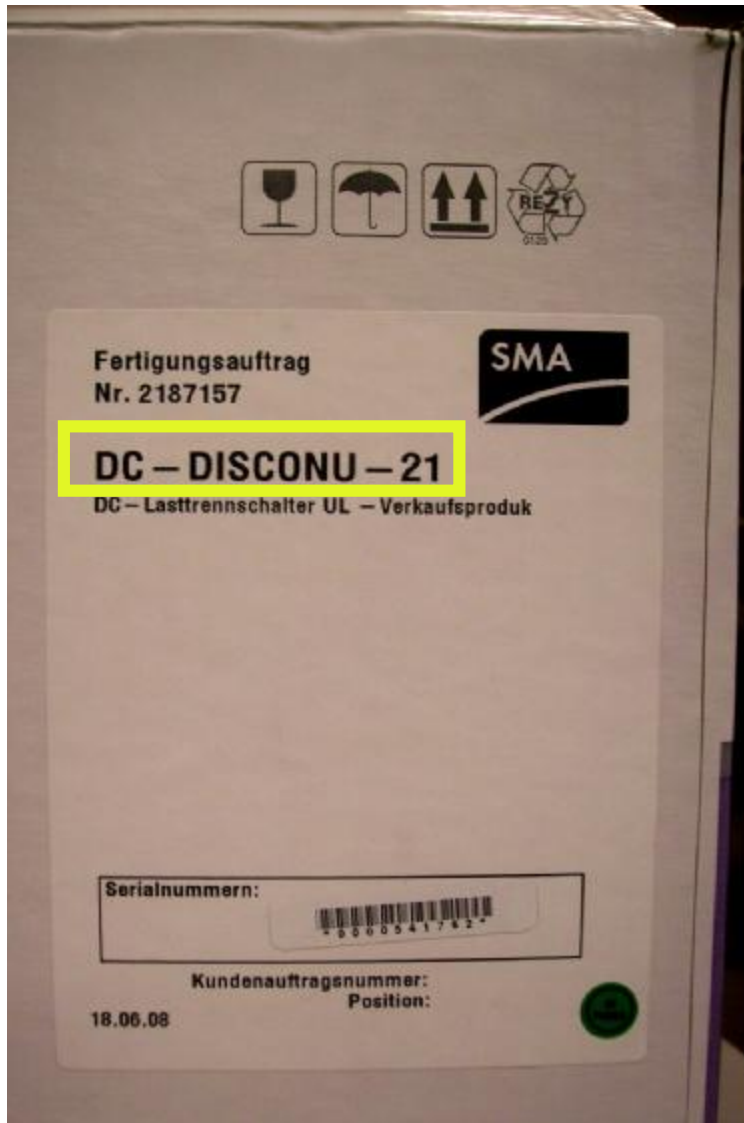
As of August 2008 all the Sunny Boy inverter models come with a new disconnect that will switch only DC.
There is only one model of DC disconnect for all the inverter models.



New DC disconnect has the same Packaging as the old one



Label in the new DC Disconnect Packaging



Model Number DC-DISCONU-21

New Disconnect



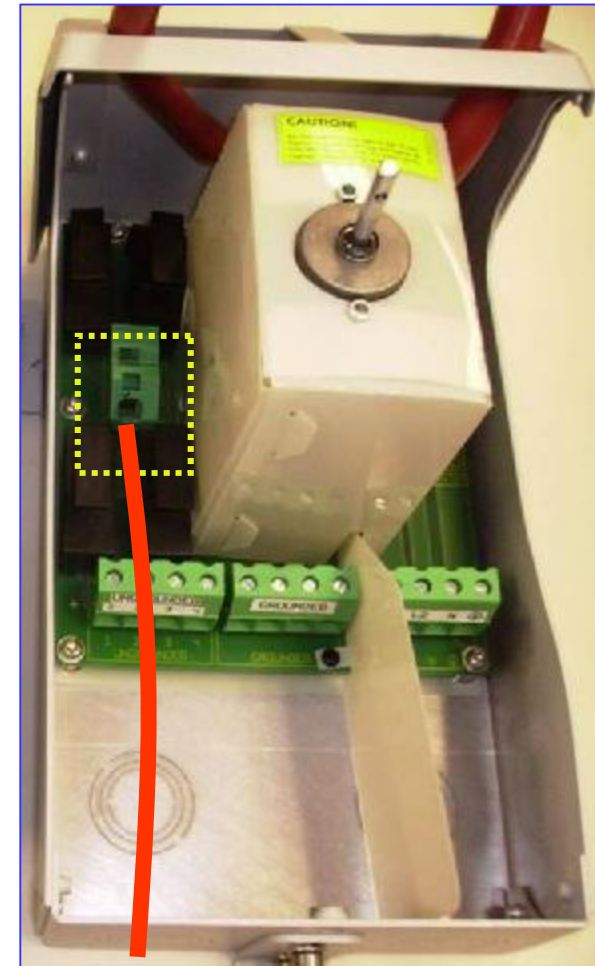
Differences between the Old Disconnect and the New Disconnect

Old Disconnect



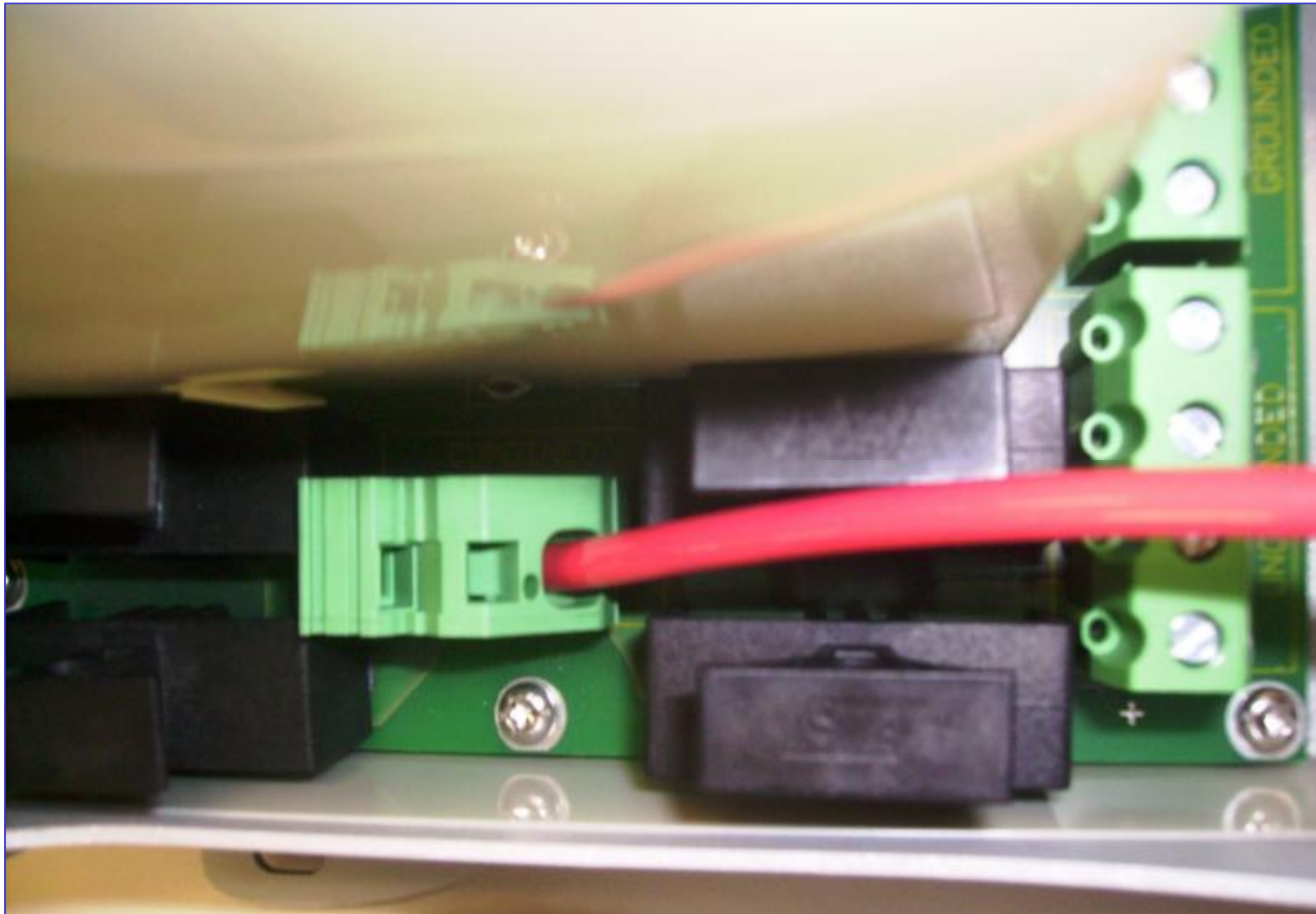
With the Old Disconnect you could not connect the output of a combiner box larger than 15 Amps.

New Disconnect

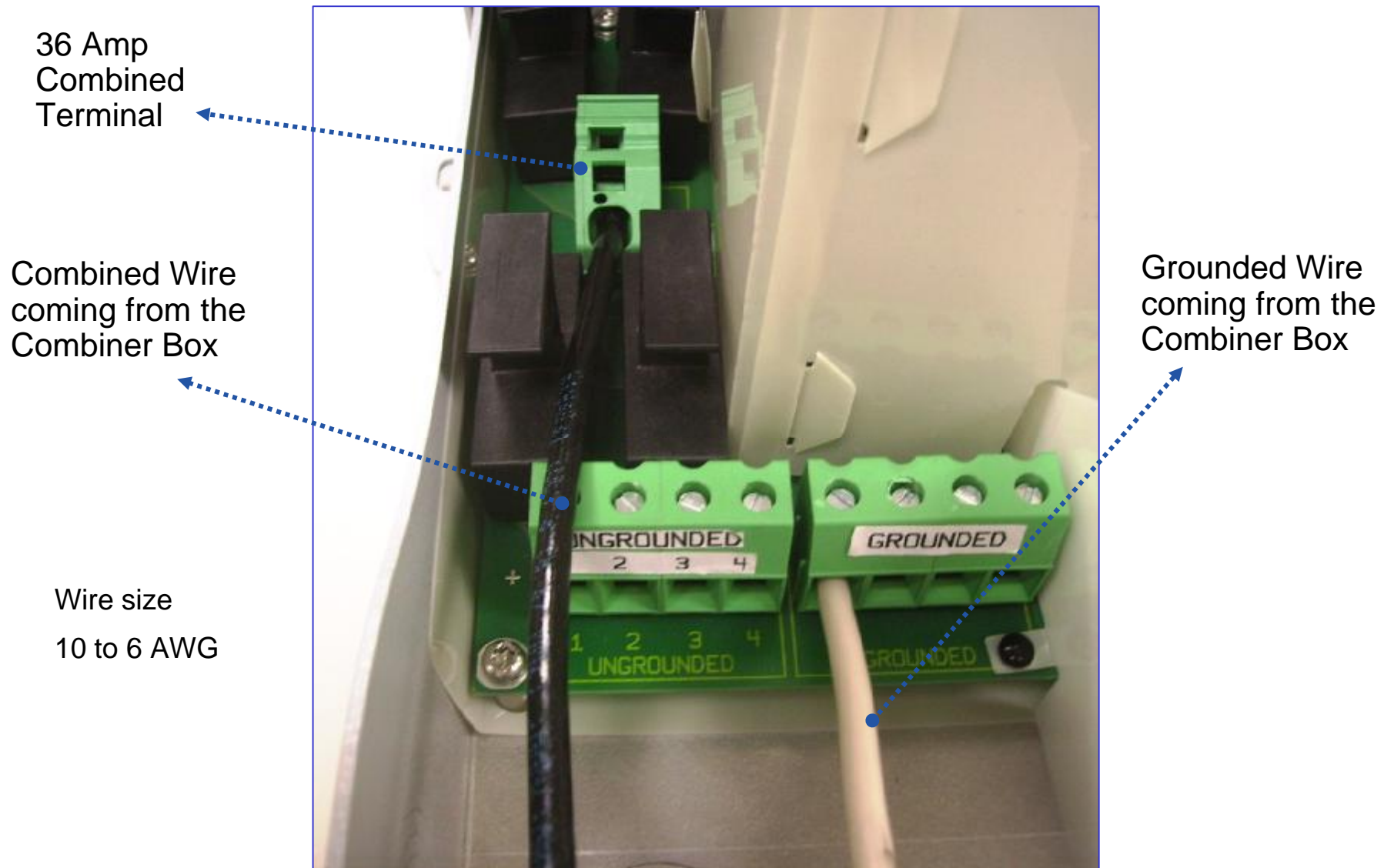


The New Disconnect has a 36 Amp terminal for the combined output from a combiner box .

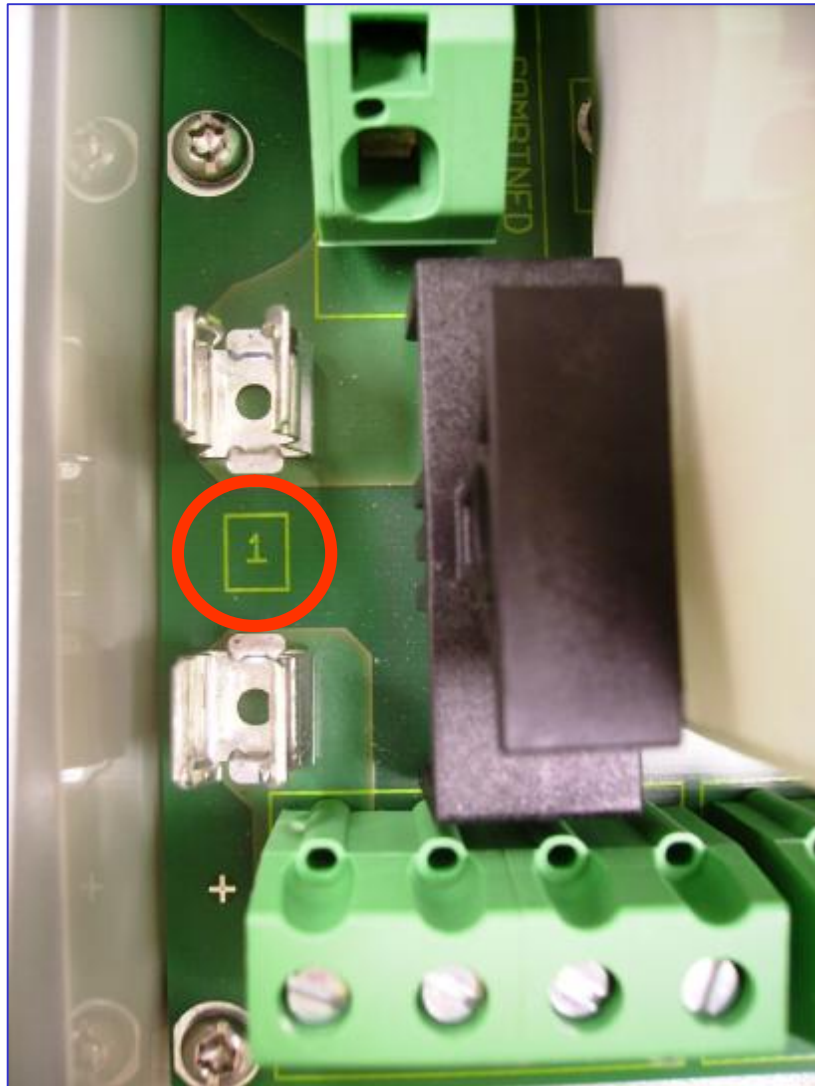
36 Amp Combined Ungrounded Terminal



Combined DC input up to 36 Amps



The Fuse Number matches the Terminal Number



Removing a blown fuse shows the number of the string where the ground fault is.

New Labels for DC Terminals

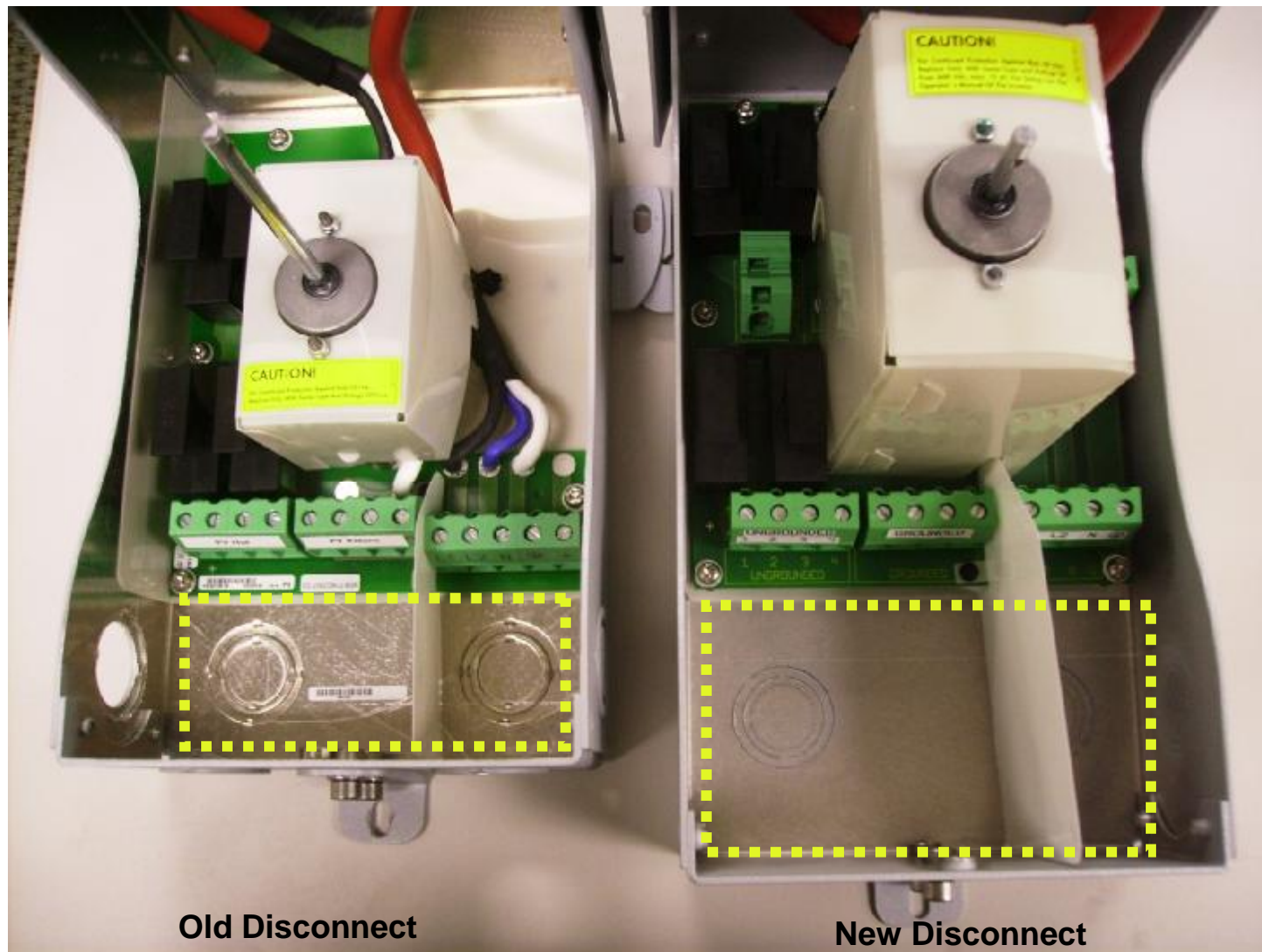
Old Disconnect



New Disconnect



Larger Volume of Field Wiring Area

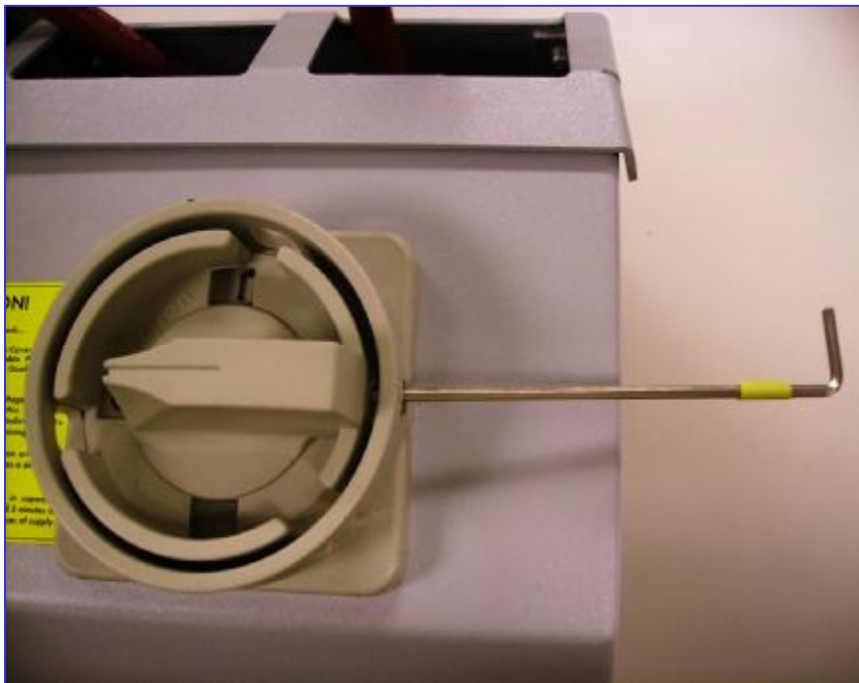


Old Disconnect

New Disconnect

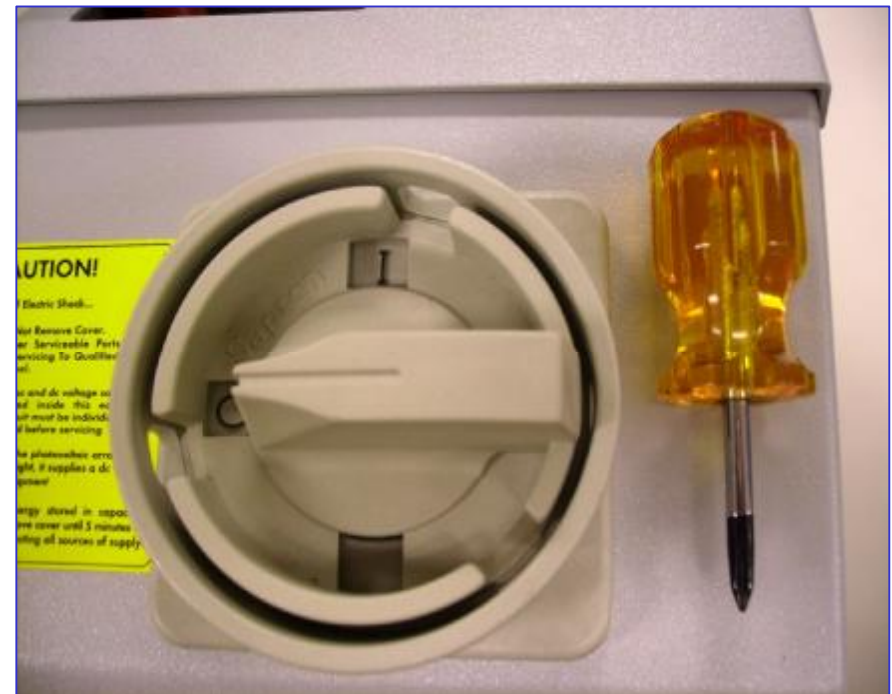
New handle screw

Old Disconnect



To remove the switch handle you had to use a specific metric Allen Wrench and the screw could fall and get lost.

New Disconnect



To remove the switch handle you use a regular Philips screwdriver (in inches) and the screw stays with the handle.

Equipment Ground Wire to the Inverter



Old Disconnect : No Equipment Ground Wire; Eq.Gnd. is transferred mechanically to inverter chassis.

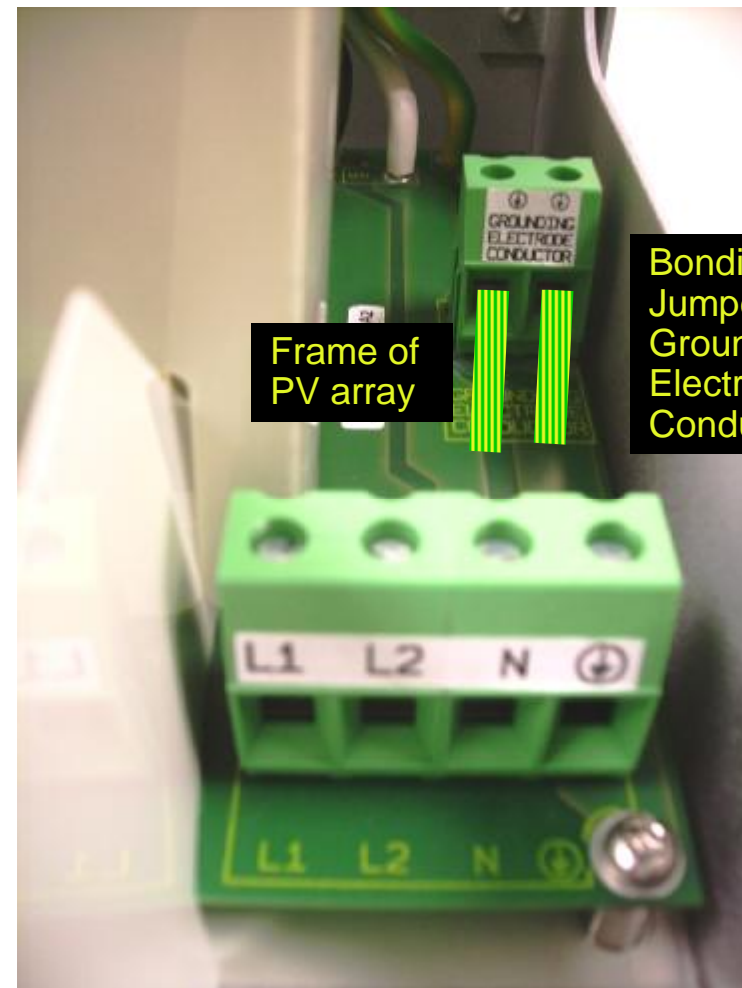


New Disconnect : There is a dedicated Equipment Ground wire to the Inverter

The new Disconnect has Three Grounding Terminals



Equipment Ground from the AC distribution panel



Frame of PV array

Bonding Jumper to Grounding Electrode Conductor



n Thank you