

Job - Combiner Boxes

REVISED 11/1/2012

MAIN WIRES ("FEEDERS")

- 5 wires go to the Inverter: 2 "Positive", 2 "Negative", and 1 "Ground".
- 2 wires will go to the "Disconnect Switch"; 2 will go to the "Common" Terminal Block, and 1 (the smaller wire) will go to the "Ground" lug.
- Cut the smaller wire to length for it to connect to the "Ground" lug, mark with "Green" electrical tape, and connect it to the Ground lug.
- Prepare to cut the 4 large wires ("300 MCM") to the SAME LENGTH - so they can either connect to the Disconnect Switch or the Common Block.
NOTE: BEFORE YOU CUT A WIRE: RE-IDENTIFY IT WITH THE CORRECT COLORED ELECTRICAL TAPE BEFORE YOU CUT IT !!! Cut, strip, coat with "Penetrox".

- Connect as follows:

"POS"itively grounded Rows: # 1,2,3; 7,8,9; 13,14,15:

- * 2 big wires ("300 MCM") with "GRAY" or "WHITE" tape connect to the Common Block. If marked with "GRAY" tape, or "Duct Tape", relabel with "WHITE" electrical tape.
- * 2 big wires with "RED" tape connect to the Disconnect Switch.

"NEG"atively grounded Rows: # 4,5,6; 10,11,12; 16,17,18:

- * 2 big wires ("300 MCM") with "GRAY" or "WHITE" tape connect to the Common Block. If marked with "WHITE" tape, or "Duct Tape", relabel with "GRAY" electrical tape.
- * 2 big wires with NO TAPE connect to the Disconnect Switch.
- ANYTHING THAT'S NOT LIKE THIS: NOTIFY SUPERVISOR BEFORE YOU CONNECT.

ARRAY WIRES (FROM SOLAR PANELS - 10 GAUGE)

- 30 wires from the "Left" side of the Array will run through one 2-inch "Nonmetallic" conduit to the Combiner Box; 30 wires from the "Right" side of the Array will run through a second 2-inch "Nonmetallic" conduit.
- Connect as follows:
"POS"itively grounded Rows: # 1,2,3; 7,8,9; 13,14,15:
 - * ~~BLACK~~^{WHITE} colored wires ("Negative") connect to the Fuses. Connect wire #1 to Fuse #1, wire #2 to Fuse #2, etc.
 - * ~~WHITE~~^{BLACK} colored wires ("Positive") connect to the Common Block. Connect wire #1 to the 1st Screw, wire #2 to the 2nd Screw, etc.

"NEG"atively grounded Rows: # 4,5,6; 10,11,12; 16,17,18:

 - * ~~WHITE~~^{BLACK} colored wires ("Positive") connect to the Fuses. Connect wire #1 to Fuse #1, wire #2 to Fuse #2, etc.
 - * ~~BLACK~~^{WHITE} colored wires ("Negative") connect to the Common Block. Connect wire #1 to the 1st Screw, wire #2 to the 2nd Screw, etc.
- ANYTHING THAT'S NOT LIKE THIS: NOTIFY SUPERVISOR BEFORE YOU CONNECT.