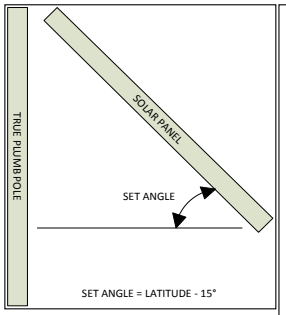
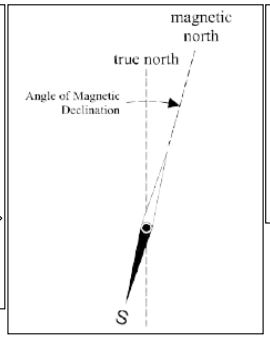
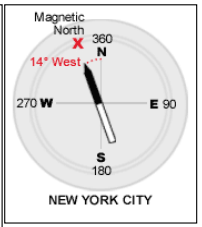
Solar System Troubleshooting Report

Name:
Date:
Time:

The purpose of this form is to gather information regarding existing solar locations. The data is to then be used to determine if the location has been sized and installed according to the requirements of the specific location in question. Accurate information is required in order for a proper diagnoses. If possible, please provide digital photos of the existing equipment.







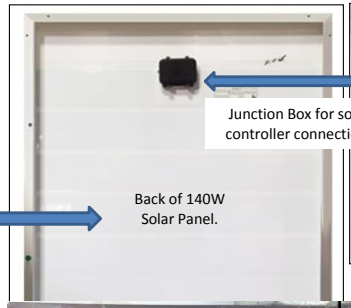
Facing true north, magnetic north would be to your left (west) by about 14 degrees.

System Level

Solar Output Voltage Reading (should be taken during clear sunlight conditions) at Array +/- on SunSaver
Distance between Solar Modules and Batteries:
Is there any shading on the solar module surface (during daylight hours):
Type of Load Equipment deployed (AP, PoE injector, etc.)
Solar Load Voltage Reading (should be taken during clear sunlight conditions) at Load +/- on SunSaver
Inverter Load Voltage Reading (should be taken during clear sunlight conditions) at + (red)/-(black) connectors on Inverter
Load Amperage Drain in Normal Mode (Ammeter placed between battery breaker and +(red) connector of inverter):
Load Amperage Drain in Active Mode (Ammeter placed between battery breaker and +(red) connector of inverter):
Number of Hours each Day in Normal Mode:
Number of Hours each Day in Active Mode:
Solar Battery Voltage Reading (should be taken during clear sunlight conditions) at Bat +/- on SunSaver

Solar Array

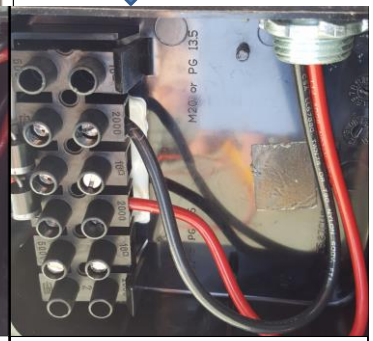
Are the solar modules clean?
Is the glass broken on any solar modules?
Confirm all hardware is tight and secure.
Comfirm array tilt angle and orientation. (tilt = latittude + 15˚ or -55˚; true south is + 14˚ W of magnetic South)
Inspect all electrical connections for looseness, corrosion, & chafing.
Inspect all solar module electrical connections to insure that the polarity is correct (panel cables to SunSaver).
Inspect the module back surface for damage or punctures.
Seal any punctures that are found with a commercial grade RTV sealant.



Solar Controller

Inspect all electrical connections for looseness or corrosion.
Check Charge Controller operation per the manual.
Status LED illuminated
Battery Status LED illuminated

Junction Box: Connections to solar controller and second solar panel in parallel



Junction Box: Connections to second solar panel in parallel

Battery Bank

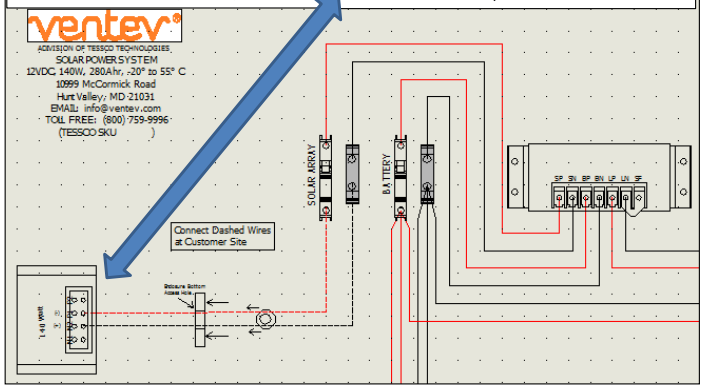
Check all connections for tightness. Retorque as necessary.
Clean any corrosion from battery terminal, and protect with battery grease.
Check and record battery voltages of each battery.

DC/AC Inverter

Converter input voltage (pin 2 and 3 of converter)
Converter output voltage (pin 5 and 7 of converter)

System Wiring

Inspect all wiring and connections for tightness, corrosion, insulation integrity, damage, etc. Repair or replace as necessary.



Notes:
Ventev assumpts that the system was deployed using all the material supplied from manufacturer.

Please return this form to: Jim Baker
Ventev
375 W. Padonia Road
Timonium, MD 21093
bakerj@ventev.com