Complete Weather Monitoring Solutions

# Replacing the Temperature/Humidity Sensor for Davis Vantage Pro2

Models with naturally aspirated radiation shields (6152, 6162 and variants)

1. Remove the rain cone.
2. Open the transmitter cover and unplug the cable labeled TEMP/HUM. Slide the cable out the access port
3. Remove the 3 long screws holding the radiation shield plates together.
4. Separate the plates taking care to remember the order in which they were placed.
5. Remove the 3 screws holding the temperature/humidity sensor in place
6. As you have done this, you will have noticed the plates have accumulated a considerable amount of moss, mould, cobwebs and other detritus. This is a good opportunity to clean all the plates in warm water. This will keep the air flow around the sensor clear and allow more accurate readings.
7. Screw the new sensor onto the second plate. Note: The orientation of the original sensor may be different from station to station. Even if the sensor is inverted and attached to spacers, these should still be removed and the new sensor installed as pictured.
8. Reassemble the plates in the original order, taking care that they are aligned properly so the long screws reach right through to the bottom plate.
9. Thread the cable out and plug it into the transmitter box
10. Reattach the rain cone
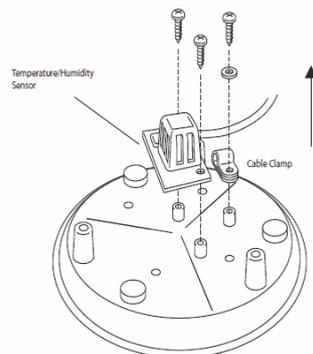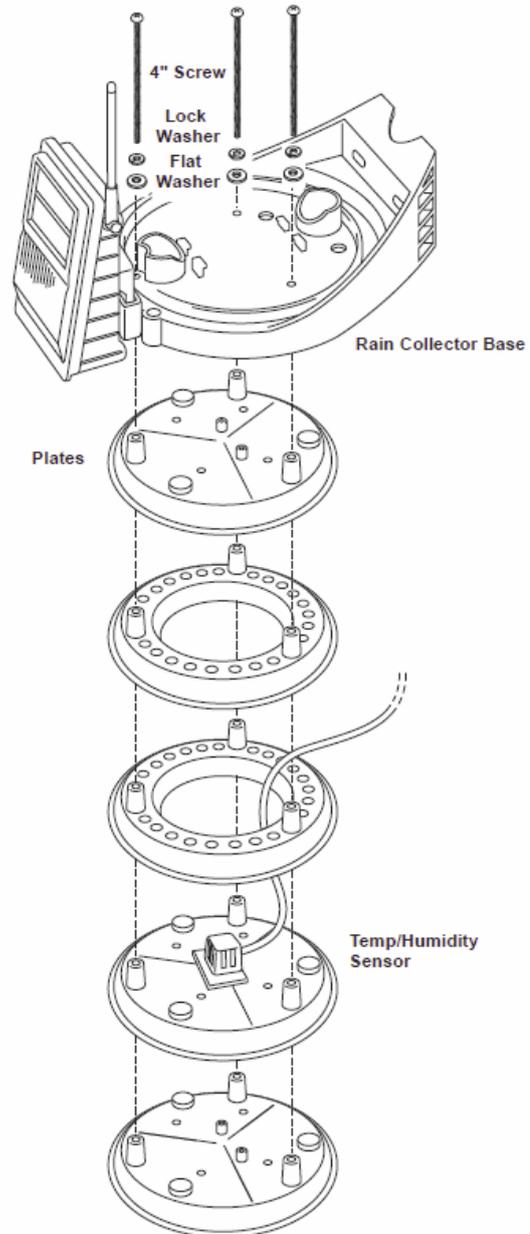
Models with fan aspirated radiation shields (6163 and variants)

1. Remove the rain cone.
2. Open the transmitter cover and unplug the cable labeled TEMP/HUM. Slide the cable out the access port.
3. Remove the three screws connecting the rain collector base to the threaded spacers.

4. Lift the rain collector base off the threaded spacers. Take note of the cable placement and routing so you can replace it correctly. For easier re-assembly, mark the holes used by the rain collector base, the holes used by the radiation shield, and the orientation of the bracket relative to the radiation shield.
5. Unscrew the three threaded spacers holding the solar bracket and radiation shield together.
6. Remove the three screws from the bottom of the radiation shielding and separate the shield stack, taking care to maintain the order in which the plates are assembled.
7. Unplug the fan power cable from the junction board and remove the fan assembly.
8. Remove all debris from inside the shield and fan and wipe the interior surfaces.
9. Slide the temperature/RH sensor out of the sensor chamber, and slide the new one in
9. Replace the fan and plug the fan power cable back into the junction board. Expose the solar panel to the sun and make sure the fan rotates. Replace the fan motor and batteries as needed.
10. Reassemble the radiation shield, routing cables as observed earlier, and plug the temp/humidity cable back into the sensor interface via the access port in the bottom of the shelter. Replace the foam insert and close the transmitter shelter.
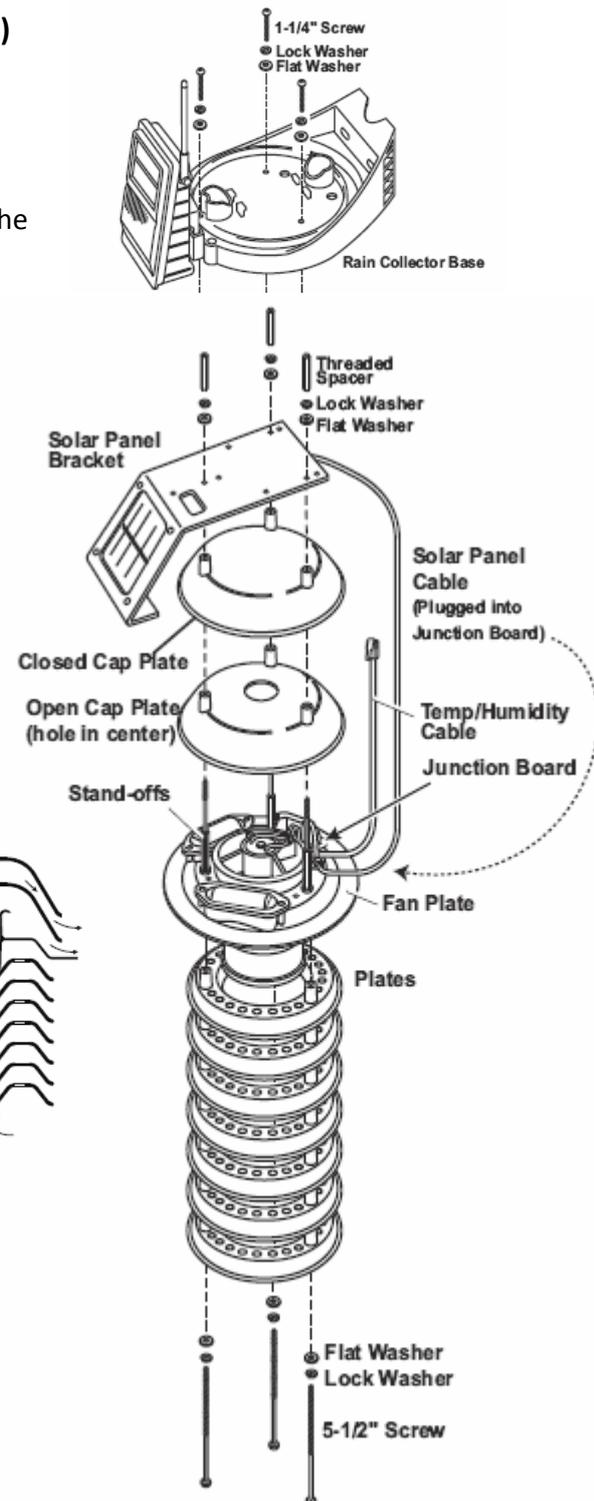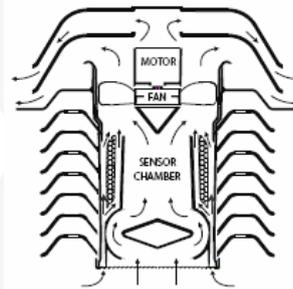
Calibrating Temperature

1. Pressing the TEMP button on the console to select Temperature. Press the button again to toggle between Indoor & Outdoor readings. The small graph sign will indicate which one is currently active.
2. Press and release 2ND, then press and hold ALARM (SET). After a moment, the variable you've selected begins to blink. Keep holding the button until the Calibration Offset message displays in the ticker at the bottom of the screen. The ticker displays the current calibration offset.
3. Press the + and - keys to add or subtract from the temperature offset value. Temperature is calibrated in 0.1° F or 0.1° C increments, up to a maximum offset of +12.7 and a minimum offset of -12.8. The variable will change value and the ticker will show the offset you've entered. If you are using a 7346.070 sensor in an older model console (pre-2016), this offset should be -0.5°C.
4. Press DONE to exit calibration.