10694-9800 Rev A

MSO T/RH

Upgrade Instructions

Equipment Required:
1. Phillips Screwdriver size #2

Materials Required:
1. MSO (-232, -485) 5-in-1 Sensor
2. 10694 MSO Temperature-RH Sensor Upgrade kit. See Figure 1.
   a. 10697 Temperature-RH Sensor Assembly.
   b. 10699 Splash Guard, with #8 Kep nut.
   c. This Instruction sheet.

Figure 1
Installation Precautions:

1. Disconnect power source to completely remove power from device before attempting to perform the steps outlined in this procedure.

2. This product contains ESD sensitive devices. Use of proper ESD handling practices (such as anti-static wrist straps) should be used when working on the internal components of this product.

Disassembly

1. Remove the PCB Housing/Shield Assembly with a #2 Phillips Screwdriver by removing 3 ea. 8-32 x 3/8” Screws MOI PN 601710 and #8 Star Washers MOI PN 602270 from the Tri-mount Plate. See Figure 2.

2. Remove the Moisture Shield MOI PN 10417 taking care not to crush the edges or misshape the dome of the Moisture Shield. See Figure 3.
3. Locate and remove with a #2 Phillips Screwdriver the 3 ea. 6-32 x 5/8" Screws MOI PN 601580 and #6 Star Washers MOI PN 602260 from the Circuit Board MOI PN 10460-3. See Figure 4.

![Figure 4](image)

4. Push the shield wire out of the way and carefully lift the PCB straight up just far enough for the Temp-RH Sensor Assy. to clear the PCB Housing Grommet. Turn the PCB over so that the Temp-RH Sensor Assy. is facing upwards. See Figure 5.

![Figure 5](image)
5. Remove and discard both rubber grommets and old temp-RH sensor.

![Diagram of Temp-RH Sensor Assy. with grommets highlighted]

**Note:**
Be aware that it is possible that the surface of the Temp-RH Sensor Assy. Grommet may stick to the surface of the PCB Housing Grommet causing the Temp-RH Sensor to separate from the 8 pin connector on the PCB and remain stuck in the PCB Housing. If this happens, gently pry the two grommet surfaces apart so that the Temp-RH Sensor can be removed from the PCB Housing. See Figure 6.

**Reassembly**

1. With textured side up place the splash shield in the housing as pictured in figure 7. The splash shield will only fit one way; ensure that it is pushed all the way to the bottom. Place the #8 Kep nut as shown and tighten.

![Diagram of splash shield and #8 Kep nut]
2. Install the new Temp-RH Sensor Assy. MOI PN 10697 onto the 8 pin Connector located in the center of the PCB making sure that the White Dot on the new Temp-RH Sensor Assy. is facing the J3 Connector on the PCB. See Figure 8.

3. Carefully install the PCB into the PCB Housing wire side down and while guiding the Temp-RH Sensor Assy. through the center of the Housing, line up the three PCB mounting holes with the PEM Standoffs in the PCB Housing. They will only line up one way.

4. Referring to figure 4, reinstall the 3 ea. 6-32 x 5/8” Screws and #6 Star Washers that were removed in step 3 of the Disassembly Instructions. Fasten the Ring Lug as shown being careful to position it and hold it in place while tightening the screw so that it does not touch any traces or components on the PCB.

5. Referring to figure 3, carefully tuck the wires down next to the PCB to create a service loop and to provide space for the edge of the Moisture Shield. Install the Moisture Shield over the PCB taking care not to crush the edges or misshape the dome of the Moisture Shield.

6. Referring to figure 2, reinstall the PCB Housing/Shield Assembly with the 3 ea. 8-32 x 3/8” Screws and #8 Star Washers that were removed in step 1 of the Disassembly Instructions by lining up the Tri-mount plate and tightening the screws. The Tri-mount plate has one flattened corner that is longer than the other two. This longer flattened corner should be positioned on the south side of the MSO opposite of the mounting arm.