

# TDP05K/TDP05K-E

## Cleaning Regiment for Airflow Sensor Hood Assemblies



The Thermal Dispersion Airflow station has sensors placed along the body of a probe that extends into ductwork. The sensors read airflow and temperature as it flows across the station. In many installations, the probe is installed in un-filtered air. As a result, the probe collects debris on the inside of the flow hood housing and sensors. Accumulation of debris will affect device accuracy. Removal of the debris is recommended by the following cleaning instructions.

When debris is present and allowed to build over time, temperature references will not match local ambient temperature. In extreme cases, the station may not be able to read airflow.

### ITEMS NEEDED

- ▶ Cotton Swabs
- ▶ Isopropyl Alcohol 70% or Higher
- ▶ Clean Rags
- ▶ Inspection Flashlight

### CLEANING REGIMENT

During the diagnostic, review if debris has collected in or around the flow hoods. Inspect inside the flow hood for dirt, lint, salt residue, grease, or insect nesting in or around the sensors. All types of debris collected on or in the passageway will affect that sensor's ability to function efficiently. See photos of *Dirty Sensors* and *Clean Sensors* shown below.

### COMPLETE THE FOLLOWING FOR EACH SENSOR HOOD

1. Remove power to the Thermal Dispersion Airflow station.
2. Visually check sensor hood assemblies for any signs of debris or contamination.
  - a. If contaminants are found inside the hood assembly, cleaning is required.
3. Use a Cotton Swab to clean the sensors within the flow hood. See *Photo a*.
  - a. Soak or spray a cotton swab in 70% or higher Isopropyl Alcohol (IPA).
  - b. Insert the cotton swab into the opening of the flow hood assembly, remaining cautious. See *Photo b*.
4. Gently press the cotton swab over the sensor surface area when removing debris or contaminants.

**IMPORTANT:** Twisting or applying excessive force could result in damage to the sensor's protective coating.
5. Using a new cotton swab (not the swab from step #4), soak or spray in 70% or higher Isopropyl Alcohol (IPA).
  - a. Gently clean away any debris on the sides and top surface area of the sensors.
7. Let the Isopropyl Alcohol (IPA) fully evaporate before applying power to the Thermal Dispersion Airflow station.



Photo a

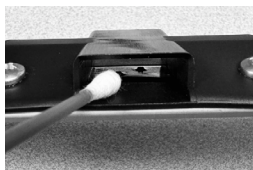


Photo b



Dirty Sensors



Clean Sensors

### CAUTION!

1. If excessive force is used when cleaning the sensors, damage could occur. This will cause mis-readings, inaccurate airflow accuracy, and sensor failures to occur.
  2. If device power is not removed prior to cleaning the sensors it could result in thermal shock, damage could occur.
  3. Not fully allowing Isopropyl Alcohol (IPA) to evaporate before applying device power can cause inaccurate airflow readings, damage could occur.
- NOTICE:** Failure to implement a site cleaning schedule and/or adhere to the manufacturers cleaning guidelines could result in equipment failure, not covered under manufacturer's warranty.

### FINAL INSPECTION

Using clean rags, gently wipe all areas around the hoods; removing all remaining dirt or debris discovered during the cleaning regiment. Wipe the entire probe clean. Isopropyl Alcohol (IPA) can be used if needed.



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