



Thermo 5014i/5030i Particulate Maintenance Schedule

Routinely (weekly/monthly)

1. Check the instrument for any alarms
2. Check recent ambient data for anomalies
3. Check key diagnostics such as RH, mass, flow, pressures and temperatures.
Recommend graphing 1-month periods to check for drift.

Every 1 month

1. Check the spots on the filter tape for uniform coverage and clean crisp edges.
2. Perform a flow calibration and leak test.
3. Check pump for excessive noise/vibration/heat.
4. For the 5030i, check the Neph zero using a Hepa filter to verify auto-zero.

Every 3 months

1. Clean fan filter
2. Clean the PM10 and PM2.5 inlets.

Every 6 months

1. Calibrate the RH and Temperature sensors.
2. Calibrate the pressure/vacuum sensors.
3. Verify the Mass Calibration using a zero/span foil set.
4. Perform a Detector Calibration.
5. For the 5030i, adjust the Nephelometer Source Level to 65 mA.

Annually

1. Clean the heater/inlet tube

Other - as needed

1. Install pump kit when flow cannot be maintained.
2. Replace sample pump if excessive noise/vibration/heat.
3. Replace filter tape when tape count approaches 500.
4. For the 5030i, disassemble and clean Nephelometer if Neph readings become noisy and erratic.
5. If the beta signal becomes very erratic or the tape spot indicates a foreign body in the filter chamber, then the filter chamber should be disassembled and cleaned.