Nyont www.nyontsensors.com
Laboratory Safety Equipment

Tel: 800-668-4444
Fax: 416-438-6822
E-mail: nyontcorp@aol.com

Model DC-14/1988 Installation Instructions

NOTE: Your hood should be in proper working condition and comply with the standards and regulations in your area. Instructions for proper testing can be found in ACGIH or other pertinent guidelines.
The following instructions apply to sites that do not have formal in-house installation and calibration procedures. Installation and calibration at sites that have applicable formal in-house procedures shall be governed by those procedures.

Package Contents

DC-14/1988 air flow sensor alarm (1)
9volt battery (1)
Plastic tubing (10')
Plastic duct sensing tap (1)
Velcro® mounting kit (1)(optional)
#8 ½" sheet metal screws (2)

Required Tools

Slotted (flat end) screwdriver
Phillips (cross end) screwdriver
3/8" drill
1/8" drill bit for metal
3/8" drill bit for metal
Scissors or snips for cutting plastic tubing
Felt tip pen
Step ladder

Procedure

1) Identify location for the sensor alarm. If using Velcro® mounts, follow instructions provided for Velcro® mounting kit, then proceed to step (3); if using sheet metal screws, go to step (2)

2) Remove cover from sensor unit, using a flat head screwdriver. Hold unit against chosen location and mark holes with felt tip pen. Drill out with 1/8" drill bit. Mount unit using Phillips screwdriver.

3) Mark a spot in the fume hood duct roughly one foot above the top surface of the hood. Location is not critical – convenience is top priority, make sure the drill can reach it. If there are exhaust filters involved put the sensor probe before the filter (between the hood and the filter), so that filter blockage can be monitored. Drill out hole in duct using first the 1/8" drill bit, and then the 3/8" drill bit.

4) Attach plastic duct sensing tap to plastic tubing securely. Insert sensing tap into duct. Confirm and record that duct sensing tap is secured, fixed, gasketed and sealed, and stationary to the ductwork. Run tubing to sensor unit, making sure not to crimp it. Leave enough to route around cables or obstructions from the ductwork to the sensor unit, and have enough to slide over barbed fitting inside sensor unit. When length has been determined, cut tubing to fit. Fit tubing over barbed fitting inside sensor unit.

5) Install battery

6) Arm the sensor unit by flicking the "armed" switch. Don't be surprised if nothing happens. To set the alarm point use the slotted screwdriver to turn the pressure differential (PD) switch adjustment control (silver slotted shaft in the centre of the round drum) clockwise (not too fast) until alarm sounds fully. Gradually back off (counterclockwise) until alarm first ticks, then shuts off completely. For an alarm setting that will sound at approximately a 17.5% reduction in airflow gently back off the PD adjustment (turn counterclockwise some more) ½ turn. For an alarm setting of a higher reduction value, back off the PD adjustment further -- one full turn equates to approximately 35%. Alarm is set.

7) Re-install cover.

Specific Set-Up

To establish an alarm set point at a specific volumetric air flow loss setting the following equipment will be required:

a) An appropriate pressure gauge
b) A three way valve
c) A tee connector (1/4" ID)

1) After installing the alarm properly, and ensuring the air system is at peak operating efficiency, splice the tee and the three way valve into the sensing tube at a convenient location between the sensor unit and the duct sensing tap. Install the pressure gauge off the tee.

2) Using the pressure gauge, take a reading of the static pressure with the valve in the fully open position, (e.g., a reading of -0.25"w.c.)
3) Adjust the valve until the pressure gauge reads the static pressure at the point you wish the sensor unit to alarm (e.g., if the valve is adjusted to a reading of -0.20"w.c., then the pressure drop would be 20% from peak operating efficiency).
4) Turn the PD screw on the sensor unit clockwise until the alarm sounds. Unit is now set to alarm at the indicated -0.20"w.c., e.g.
5) Remove the gauge, tee and three way valve and connect the sensor unit directly to the duct sensing tap as before.

Instructions for Nyont VELCRO® Mounting Kit

PRODUCT DESCRIPTION

- The Nyont VELCRO® mounting kit allows the Nyont sensor alarm to be installed on surfaces where drilling holes for screw mounting is undesirable. The kit contains two pre-fitted hook and loop VELCRO® tapes.

SPECIFICATIONS

- Material: VELCRO® 2" with 0172 adhesive
- Max load: 11 pounds per inch width (adhesive, under test)
- Mounting: Surface
- Shipping weight: 0.15 lbs.

INSTALLATION

- Room temperature should be 68° F or higher for best results.
- Make sure mounting areas are clean, dry, and free of grease/oil/cobwebs. Use isopropyl alcohol to free surface of contaminants and allow to dry.
- Peel and stick loop portions (horizontally) to hood wall (be careful not to touch adhesive with your fingers).
- Peel and stick hook portions (horizontally) to back of Nyont air flow monitor unit.
- Wait 24 hours to permit adhesive set-up.
- Stick 'em together.
- Set up Nyont unit as per installation instructions.

Questions? Call us,

Help line: 1-800-668-4444

Write to us: Head Office -- 1-515 Milner, Toronto, Ontario, Canada M1B 2K4