GREENHECK
Building Value in Air.

# Installation, Operation and Maintenance Manual

Please read and save these instructions for future reference. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions will result in voiding of the product warranty and may result in personal injury and/or property damage.

**Motion Sensor**
Part No. 880689

**Motion + Humidity Combination Sensor**
Part No. 880690

**Humidity Sensor**
Part No. 386429

## General Safety Information

Only qualified personnel should install this product. Personnel should have a clear understanding of these instructions and should be aware of general safety precautions. Improper installation can result in electric shock, possible injury due to coming in contact with moving parts, as well as other potential hazards. If more information is needed, contact a licensed professional engineer before proceeding with installation.

1. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the National Fire Protection Agency (NFPA), where applicable. Follow the Canadian Electric Code (CEC) in Canada.
2. Motor must be securely and adequately grounded.
3. Do not allow the power cable to kink or come in contact with oil, grease, hot surfaces or chemicals. Replace cord immediately if damaged.
4. Verify that the power source is compatible with the equipment.

| **DANGER** |
| --- |
| Always disconnect, lock and tag power source before installing or servicing. Failure to disconnect power source can result in fire, shock or serious injury. |
| **CAUTION** |
| When servicing the fan, motor may be hot enough to cause pain or injury. Allow motor to cool before servicing. |
| **CAUTION** |
| Precaution should be taken in explosive atmospheres. |
| **DANGER** |
| Pour écarter les risques d'incendie, de choc électrique ou de blessure grave, veiller à toujours débrancher, verrouiller et étiqueter la source de courant avant l'installation ou l'entretien. |
| **ATTENTION** |
| Lors de toute intervention sur la soufflante, le moteur peut être suffisamment chaud pour provoquer une douleur voire une blessure. Laisser le moteur refroidir avant toute maintenance. |
| **ATTENTION** |
| Faire preuve de précaution dans les atmosphères explosives. |

## Receiving

Upon receiving the product, check to ensure all items are accounted for by referencing the delivery receipt or packing list. Inspect each crate or carton for shipping damage before accepting delivery. Alert the carrier of any damage detected. The customer will make notification of damage (or shortage of items) on the delivery receipt and all copies of the bill of lading which is countersigned by the delivering carrier. If damaged, immediately contact your Representative. Any physical damage to the unit after acceptance is not the responsibility of the manufacturer.

## Unpacking

Verify that all required parts and the correct quantity of each item have been received. If any items are missing, report shortages to your local representative to arrange for obtaining missing parts. Sometimes it is not possible that all items for the unit be shipped together due to availability of transportation and truck space. Confirmation of shipment(s) must be limited to only items on the bill of lading.

## Handling

The sensor amperage and voltage ratings must be checked for compatibility to supply voltage prior to final electrical connection. Wiring must conform to local and national codes. Consult local code authorities for specific requirements.

## Storage

Product is protected against damage during shipment. If the product cannot be installed and operated immediately, precautions need to be taken to prevent deterioration of the product during storage. The user assumes responsibility of the product and accessories while in storage. The manufacturer will not be responsible for damage during storage. These suggestions are provided solely as a convenience to the user.

## Indoor Only

Do not store this product outdoors. The ideal environment for the storage of product is indoors, above grade, in a low humidity atmosphere which is sealed to prevent the entry of blowing dust, rain or snow. Temperatures should be evenly maintained between 30° to 110°F (-1° to 43°C) (wide temperature swings may cause condensation and “sweating” of metal parts). All accessories must be stored indoors in a clean, dry atmosphere.

Remove any accumulations of dirt, water, ice or snow and wipe dry before moving to indoor storage. Allow cold parts to reach room temperature to avoid “sweating” of metal parts. To dry parts and packages, use a portable electric heater to get rid of any moisture buildup. Leave coverings loose to permit air circulation and to allow for periodic inspection. The product should not be stored on the floor.

## Inspection & Maintenance During Storage

While in storage, inspect product once per month. Keep a record of inspection and maintenance performed. If moisture or dirt accumulations are found on parts, the source should be located and eliminated.

## Removing From Storage

As parts are removed from storage to be installed in their final location, they should be protected and maintained in a similar fashion until the fan equipment goes into operation.

## Installation and Setup Guide

This guide provides instructions for how to install, wire, set and service ceiling fan sensor packages. When installed, this system is capable of automatically signaling the fan to run when desired conditions are met in the space.

# Installation

## Integrated Humidity Sensor

**SP-A, sizes 50 to 390, new install or retrofit*, available in 115 volt only**

1. For best performance of the humidity sensor, the fan will need to be located as close to the humidity source as acceptable per the fan's instructions.
2. If sensor is not pre-installed, remove sensor from package, snap onto blower support bracket and slide sensor over the rivets as shown in Fig. 1.

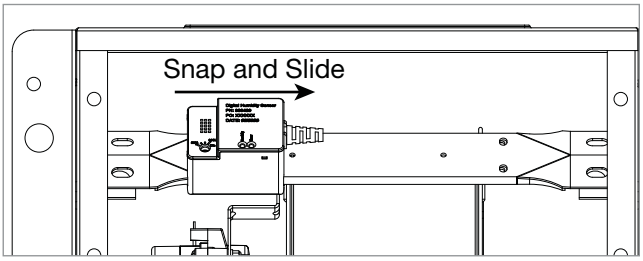



**Fig. 1**

**NOTE**

Sensor to be installed after ceiling finish is completed to prevent damage to sensor.
*Integrated humidity sensor (Part No. 386429) is not suitable for use in a retrofit application where the fan is installed directly above a bathtub or shower.

3. Avoid any kinking and/or sharp edges; route sensor cable underneath scroll and plug into "ACC" receptacle on junction box.
   a. If fan is not equipped with "ACC" receptacle, remove motor connector from "FAN" female receptacle and plug included accessory adapter into "FAN" female receptacle.
   b. Plug motor into "FAN" receptacle and sensor into "ACC" receptacle of accessory adapter.
4. Set relative humidity based on desired performance. The lower the setting, the more sensitive the fan will be to changes in humidity levels as shown in Fig. 2.

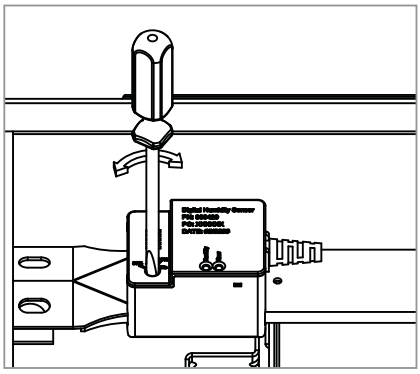


**Fig. 2**

**SP-B, sizes 50 to 200, factory install only, available in 115 volt only**

1. For best performance of the humidity sensor, the fan will need to be located as close to the humidity source as acceptable per the fan's instructions.
2. Set relative humidity based on desired performance. The lower the setting, the more sensitive the fan will be to changes in humidity levels. See Fig. 3.

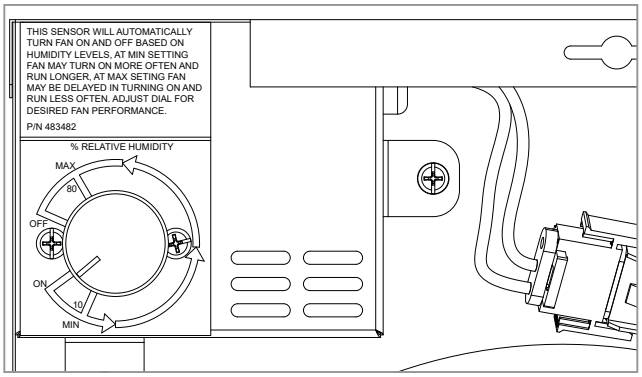
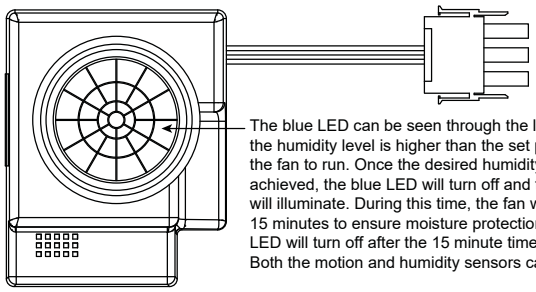



**Fig. 3**

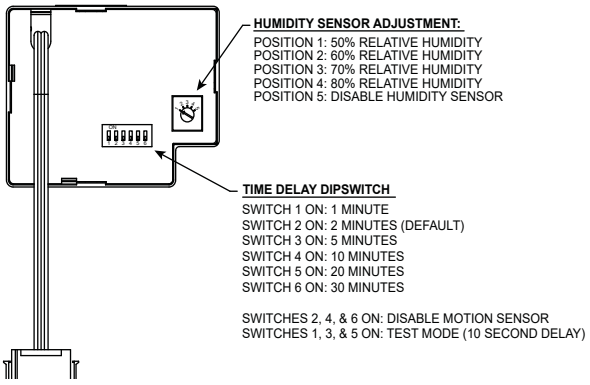
# Installation

## Motion Sensor or Motion/Humidity Combination Sensor

1. For best performance, position fan to not pick up unintended motion. Sensing diameter is set to 6 feet when installed in 8 foot ceilings.
2. Adjust time delay as needed: 1, 2, 5, 10, 20 or 30 minutes.
3. Avoid any kinking and/or sharp edges. Plug grille into "ACC" receptacle on junction box.
   a. If fan is not equipped with "ACC" receptacle, remove motor connector from "FAN" female receptacle and plug included accessory adapter into "FAN" female receptacle.
   b. Plug motor into "FAN" receptacle and sensor into "ACC" receptacle of accessory adapter.




**Front of Sensor**




**Back of Sensor**

# Our Commitment

*As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.*

Product warranties can be found online at Greenheck.com, either on the specific product page or in the literature section of the website at Greenheck.com/Resources/Library/Literature.

Greenheck's Centrifugal Ceiling Exhaust and Inline Cabinet Fans catalog provides additional information describing the equipment, fan performance, available accessories, and specification data.

AMCA Publication 410-96, Safety Practices for Users and Installers of Industrial and Commercial Fans, provides additional safety information. This publication can be obtained from AMCA International, Inc. at www.amca.org.

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