



Wiring the AquaGuard® AG-3180E - Micro Pan Sensor

Work Safe, READ THIS!

ATTENTION: FAILURE TO READ AND COMPLY WITH ALL WARNINGS, CAUTIONS AND INSTRUCTIONS PRIOR TO STARTING INSTALLATION MAY CAUSE PERSONAL INJURY AND/OR PROPERTY DAMAGE AND VOID WARRANTY.

ATTENTION: Clean surface with included alcohol pad before mounting with adhesive tape.

STOP/READ: This device must be installed in accordance with manufacturer's instructions. This unit must be in accordance with all applicable local plumbing, drainage and electrical codes.

WARNING: Remove electrical shock hazard – DISCONNECT THE POWER BEFORE INSTALLING THE AQUAGUARD AG- 3180E to avoid electrical shock and/or equipment damage. Do not use on circuits exceeding 24 VAC to avoid damage to switch, shock or fire hazard.

CAUTION: In some situations the switch may cause the unit to rapidly cycle on and off as water level rises slowly in pan. After a brief period the unit will turn off completely. Condensation drain must be serviced if this occurs.

CAUTION: In any installation where property damage and/or personal injury may result from an inoperative switch due to power outages, a back-up system(s) and /or alarm should be installed.

NOTICE: The AquaGuard AG-3180E must only be installed by a licensed contractor or under the direct supervision of a licensed contractor. Condensation pan must be properly maintained after installation and be kept free of foreign matter, rust or other obstructions that may interfere with the proper operation of the AquaGuard AG-3180E.

NOTICE: Exposing the sensor to cleaning solutions may cause sensor malfunction. If exposed, thoroughly rinse sensor with water. It is highly recommended that sensor be removed from unit prior to cleaning coil and/or pan with cleaning solutions.

WIRING THE AG-3180E:

(To ensure proper performance of product, instructions must be followed.)

- 1. Ensure the power is disconnected to the unit at the main panel prior to moving to step 2. Refer to the appliance manufacturer's installation and operating instructions and also review the wiring diagram in their instructions.
- 2. Locate the RED 24 VAC wire coming from the 24 VAC thermostat "R" terminal.
- 3. Disconnect RED wire from the "R" terminal and connect to PURPLE wire of AG-3180E Secondary Pan Sensor using wire nut. Connect the RED wire from AG-3180E Secondary Pan Sensor to the "R" terminal of unit. Incorporating both wires in the RED circuit will shut the unit completely off when water is present.
- 4. Connect the BLACK wire to the "C" terminal.
- 5. Test the AG-3180E. (At start-up check initial amperage load) while the HVAC unit is on and functioning correctly. See installation of the AG-3180E: Step 4

6. For wiring the normally open fourth wire (WHITE) refer to the following diagram: (fig. 1)

HVAC Installation w/ optional external alarm or accessory

THERMOSTAT

C (Transformer Common)

Typically Red

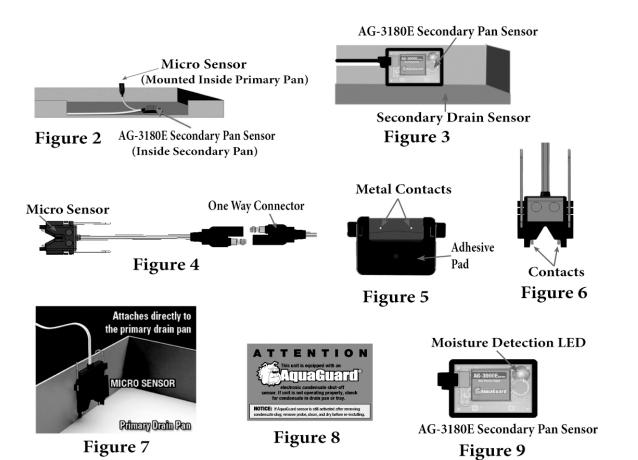
*TO AG-9100 REMOTE ALARM OR COMMUNICATION SYSTEM OR NORMALLY OPEN HOME ALARM SYSTEM OR IF NOT USED, WIRE NUT AND TAPE

NOTE: For communicating HVAC systems, refer to equipment manufacturers recommendations for specific wiring instructions.

INSTALLATION OF THE AG-3180E:

(To ensure proper performance of product, instructions must be followed.)

- 1. Clean desiRED mounting area with included alcohol pad.
- 2. Using the double-sided tape provided with the AG-3180E, affix the mounting bracket in the lowest point of the (fig. 2) and snap the AG-3180E Secondary Pan Sensor into mounting bracket. Note: If not using a secondary drain pan, AG-3180E Secondary Pan Sensor may be mounted to the side of the HVAC unit using the double sided tape or mounting bracket (fig. 3).
- 3. Couple the micro sensor and the AG-3180E secondary pan sensor using the one-way connector (fig. 4).
- 4. Test the sensor using one of the following methods:
 - A. Using two wetted fingers, simultaneously touch the two metal contacts on the back of the AG-3180E Secondary Pan sensor for up to 2 minutes and LED will illuminate (fig. 5). HVAC unit will stop running if is correctly wired
 - B. Using two wetted fingers, simultaneously touch the two contacts at the end of the micro sensor (fig. 6). HVAC unit will stop running if the AG-3180E Secondary Pan Sensor is correctly wired (Time-On-Delay up to 2 minutes).
- C. Place the micro sensor in water such that both contacts are submerged under water. Note: Do not fully submerge the micro sensor. HVAC unit will stop running if the AG-3180E Secondary Pan Sensor is correctly wiRED (Time-On-Delay up to 2 minutes).
- After testing the micro sensor, uncouple the one-way connector to facilitate installation of the AG-3180E.
- 6. Gain access to the primary drain pan inside of the air handler. Install the micro sensor onto the primary drain pan using the mounting clips as shown in (fig. 7).
- 7. Re-couple the one-way connector between the micro sensor and the AG-3180E (when installed, refer to Step 3), routing the wire appropriately. The HVAC system should now be operational.
- 8. Place the ATTENTION sticker on HVAC unit in a clearly visible location (fig. 8).
- 9. Test the HVAC unit by plugging the condensate line and filling the primary drain pan with water. If AG-3180E has been installed properly, the HVAC unit will shut down prior to the pan overflowing. Check for leaks (Time-On-Delay up to 2 minutes).



LIMITED WARRANTIES AND LIMITATION OF LIABILITY

REGISTER YOUR PRODUCT ONLINE: www.rectorseal.com

1 YEAR SWITCH AND SENSOR LIMITED WARRANTY AND LIMITATION OF LIABILITY

The limitations of liability set forth below include body and all component parts as well as the product itself as a whole.

Rectorseal warrants to the original consumer purchaser ("Purchaser) of its AquaGuard switch and sensor products, that they are free from defects in material or workmanship for a period of one (1) year from the date of purchase. If this product shall prove to be defective within the one (1) year period from the date of purchase, it shall be repaired or replaced, at Rectorseal 's option, subject to the GENERAL TERMS and CONDITIONS set forth below.

EXCLUSIONS

This warranty does not cover damages resulting from use of components or accessories not approved by Rectorseal. 3, and 10 YEAR SEC-ONDARY DRAIN PAN LIMITED WARRANTY AND LIMITATION OF LIABILITY

This warranty applies only to secondary drain pans installed in the United States and Canada.

Rectorseal warrants to the original consumer purchaser ("Purchaser") of its AquaGuard secondary drain pan products, that they are free from defects in material or workmanship for a period of three (3) years for Titan pan models, ten (10) years for Goliath and Goliath Furnace models, from the date of purchase. If this product shall prove to be defective within the three, five or ten (3, or 10) year period from the date of purchase, it shall be repaired or replaced, at Rectorseal's option, subject to the GENERAL TERMS and CONDITIONS set forth below. This warranty extends only to the original consumer purchaser and is nontransferable.

EXCLUSIONS

This warranty does not cover damages resulting from the use of corrosive material (including, but not limited to: Acetone, MEK and petroleum-based products); nor damages resulting from use of components or accessories not approved by Rectorseal.

GENERAL TERMS AND CONDITIONS

To be eligible for the warranty the purchaser must provide Rectorseal with the following:

- 1. Proof of Purchase (Original Receipt)
- 2. Installer's Testimony
- 3. Original Product
- 4. Original Work Order
- 5. Photos of Installation

PURCHASER MUST PAY ALL LABOR AND SHIPPING CHARGES NECESSARY TO REPLACE PRODUCT COVERED BY THIS WAR-RANTY. This warranty shall not apply to acts of God, nor shall it apply to products which, in the sole judgment of Rectorseal have been subject to negligence, abuse, accident, tampering, misapplication, alteration; nor due to improper installation, operation or maintenance or storage; nor moved from its original place of installation; nor to other than normal application, use or service, including but not limited to, operational failures caused by corrosion, rust or other foreign materials in the system. Requests for service under this warranty shall be made by returning the defective product to the Retail outlet or to Rectorseal as soon as possible after the discovery of any alleged defect. Rectorseal will subsequently take corrective action as promptly as reasonably possible. No requests for service under this warranty will be accepted if received more than thirty-one (31) days after the term of the warranty 1hiswarranty sets forth Rectorseal's sole obligation and purchaser's exclusive remedy for defective products. For your benefit and protection register your product online at www.rectorseal.com within thirty (30) days of installation. This will initiate the Warranty period and will allow us to contact you, should it become necessary. In the absence of a recorded product registration, the Warranty period will begin upon product shipment from Rectorseal. In the event that Rectorseal attempts to contact consumers regarding a recall or other matter, and any damages occur, which could have been avoided by registration by the consumer, Rectorseal shall have no liability. IN ALL CIRCUMSTANCES, RECTORSEAL'S MAXIMUM LIABILITY SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID FOR THE PRODUCT ALONE. Warranty claims must be registered with Rectorseal within thirty (30) days of damage or malfunction. Rectorseal reserves the right to visit the site of the installation or to require documentation of the claim before assuming any responsibility under the provisions of this Warranty Consumer agrees to inspect the product at the time of installation for any reasonable discernable defects and, further, agrees to inspect the product annually. Any damages occurring, which could have been avoided by proper inspection will not be the responsibility of Rectorseal. RECTORSEAL SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, OR CONTINGENT DAMAGES WHATSOEVER TO THE PURCHASER OR ANY THIRD PARTY. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL EXPRESSED WARRANTIES. IMPLIED WARRANTIES. INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. SHALL NOT EXTEND BEYOND THE DURATION OF THE APPLICA-BLE EXPRESSED WARRANTIES PROVIDED HEREIN.

Some states do not allow the exclusion of limitation of incidental and consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other legal rights that vary from state to state.

VENUE: Any purchaser or third party actions brought for any reason hereunder shall be commenced in Houston, TX and no other jurisdiction, and such action shall be governed by and construed in accordance with the laws of the State of Texas. Any notice herein shall be sent by certified or registered mail to 2601 Spenwick Drive, Houston, TX USA

RectorSeal® Houston, TX USA www.rectorseal.com US Patent 8,578,770