

TROUBLESHOOTING GUIDE

NOTE: Each power board has two (2) LEDs: a green power indicator and a red sensor indicator. Electrical power must be supplied to Hand Dryer for indicator lights to function. **If none of the solutions shown below works, the power board may need to be reset; disconnect then reconnect electrical power and retest.**

No air is supplied when hands are placed in Sensor's detection zone.

Remove cover and check LED indicator lights on the Power Board.

If green LED does NOT illuminate:

- Power is not being supplied to dryer; check all electrical connections and main power supply.
- Power Board has failed; replace.

If green LED illuminates first and then red LED illuminates when hands are placed in the Sensor's beam:

- Blower Motor is not connected properly; check Blower Motor leads for secure connection.
- Power Board has failed; replace.
- Blower Motor has failed; replace.

If green LED illuminates first, but red LED does NOT illuminate when hands are placed in the Sensor's beam:

- Power Board or Power Board detection circuit has failed; replace.

If only the red LED illuminates (green LED does NOT illuminate when hands are removed from the Sensor's beam):

- Power Board or Power Board self-calibration circuit has failed; replace Power Board.
- OPTIMA Sensor has failed; replace.

Only unheated air is supplied when hands are placed in the Sensor's beam.

- Heater is not properly connected; check Heater leads for secure connection.
- Heater Assembly is defective; replace.

Air cycles intermittently on and off.

- The Power Board's range feature is not functioning properly; replace Power Board.

Dryer runs continuously (will not stop).

Disconnect OPTIMA Fiber Optic Cable from Fiber Optic Connector on the Power Board.

- If dryer keeps running, the Power Board has failed; replace.
- If dryer stops running, the OPTIMA Sensor has failed; replace.

If further assistance is required, please contact the Sloan Valve Company Installation Engineering Department at 1-800-9-VALVE-9.

Older Sloan EHD Hand Dryers

Sloan Valve Company is dedicated to providing sensor-operated products that incorporate today's latest electronic technologies. To keep pace with these new technologies it is often necessary to make changes to our products. Current EHD Hand Dryer Power Boards and OPTIMA Fiber Optic Sensors will operate in older Sloan EHD Hand Dryers if the following conditions are met:

- Hand dryers built between September 1995 and June 1999 used Power Board Assemblies EHD-1004-A (120 VAC) and the EHD-1005-A (208/240 VAC) and OPTIMA Sensor Assembly EHD-1003-A. These units can be identified by a Range Potentiometer located on the Power Board.
- Hand dryers built before September 1995 used Power Boards EHD-12-A (120 VAC) and EHD-65-A (208/240 VAC) and OPTIMA Sensor EHD-234-A (EHD-13-A if built before 1991). These units can be identified by a Range Potentiometer located on the OPTIMA Sensor (NOT on the Power Board).

IF EITHER THE POWER BOARD OR THE OPTIMA SENSOR HAS FAILED IN AN OLDER UNIT, **BOTH COMPONENTS MUST BE REPLACED.**

Note: Hand Dryers built before 1991 included a flashing indicator light visible through a window on the Hand Dryer Cover. Replacement covers no longer furnish the indicator light; therefore disconnect and remove the light if replacing the Cover or OPTIMA Sensor.

LIMITED WARRANTY

Sloan Valve Company warrants its products to be made of first class materials, free from defects of material or workmanship under normal use and to perform the service for which they are intended in a thoroughly reliable and efficient manner when properly installed and serviced for a period of 5 years from date of purchase.

During this period, Sloan Valve Company will, at its option, repair or replace any part or parts which prove to be thus defective if returned to Sloan Valve Company, at customer's cost, and this shall be the sole remedy available under this warranty. No claims will be allowed for labor, transportation or other incidental costs. This warranty extends only to those persons or organizations who purchase Sloan Valve Company's products directly from Sloan Valve Company for purpose of resale.

THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO EVENT IS SLOAN VALVE COMPANY RESPONSIBLE FOR ANY CONSEQUENTIAL DAMAGES OF ANY MEASURE WHATSOEVER.

SLOAN OPTIMA EHD Electronic Hand Dryer Fiber Optic Upgrade Kits

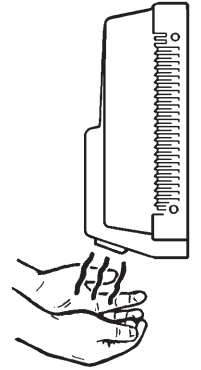
EHD-1006-A Hand Dryer Repair Kit, 120 VAC (Code no. **3366007**)

EHD-1007-A Hand Dryer Repair Kit, 208/240 VAC (Code no. **3366008**)

OPERATION

The Sloan Electronic Hand Dryer operates by means of an adaptive fiber optic sensory device. The Sensor automatically activates the unit when hands are placed in front of the Sensor located at the exhaust port. A powerful flow of warm air dries hands in approximately thirty (30) seconds and stops automatically two (2) seconds after hands are withdrawn, or after a maximum of sixty (60) seconds of continuous operation.

1. The OPTIMA EHD functions by means of an electronic Fiber Optic Sensor located at the exhaust port beneath the Hand Dryer.
2. When the Fiber Optic Sensor detects hands beneath the exhaust port, it activates the Hand Dryer. A powerful flow of warm air dries hands within thirty (30) seconds.
3. After hands are withdrawn from the Sensor's detection zone, the Hand Dryer automatically stops. It is then ready for the next user.



SELF-ADAPTIVE FIBER OPTIC SENSING

When this Hand Dryer powers up, it automatically sets its sensing range depending on the environment in which it is installed. No mechanical range adjustment is required.

NOTE: Older Sloan Hand Dryers had an adjustable Sensor range feature. This feature is not required with the current adaptive Sensor. For more information on older Hand Dryer designs, see back page.

INSTALLATION

ALL ELECTRICAL WIRING SHOULD BE INSTALLED IN ACCORDANCE WITH NATIONAL/LOCAL CODES AND REGULATIONS.

STEP 1 - ELECTRICAL DISCONNECTION

Before installing the replacement Power Board and Grille/Fiber Optic Cable Subassembly, be certain that the power supply to Hand Dryer is disconnected at the main power source.

STEP 2 - REMOVE COVER ASSEMBLY

Remove Cover from Chassis Assembly by removing four (4) tamper-resistant Cover Screws and Lock Washers. Use a 5/32" hex wrench to remove the Cover Screws. Set the screws and washers aside to reinstall the Cover Assembly in Step 10.

STEP 3 - DISCONNECT OLD POWER BOARD ASSEMBLY

NOTE: The OPTIMA Power Board is located on the right side of the Blower Assembly.

Disconnect wires from the old Power Board leading to the power source, the Blower Assembly, and the Heater Assembly (refer to appropriate wiring diagram for 120 VAC or 208/240 VAC unit). Remove Power Board Mounting Nuts holding Power Board to Chassis Assembly and set aside. These nuts will be used to install the new Power Board Assembly in Step 5.

STEP 4 - REMOVE OLD OPTIMA SENSOR AND EXHAUST GRILLE

Remove Grille Mounting Screws from the bottom of the Blower Assembly and set aside. These screws will be used to install the new Grille/Fiber Optic Cable Subassembly in Step 6.

Remove and discard old components: Grille, Sensor, and Power Board assembly.

The information contained in this document is subject to change without notice.

EHD Upgrade I.I. – Rev. 0 (7/99)

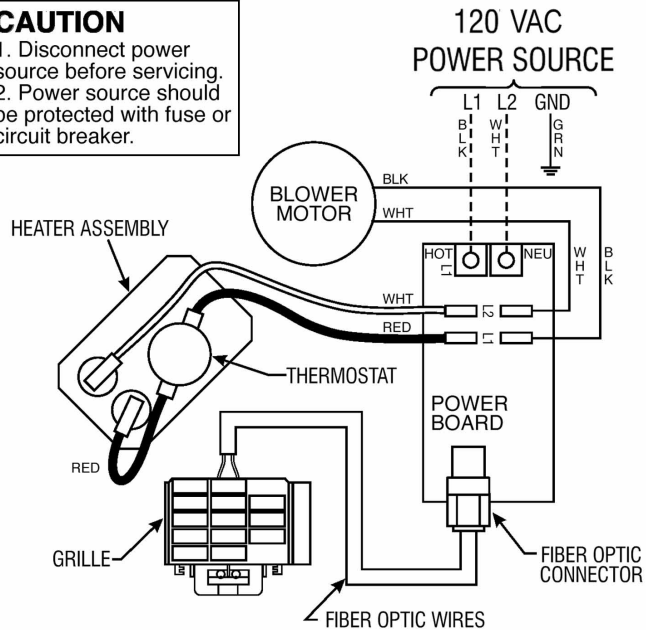
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CAUTION

1. Disconnect power source before servicing.
2. Power source should be protected with fuse or circuit breaker.



STEP 5 - INSTALL NEW POWER BOARD

Insert new Power Board into Chassis Assembly as shown. Install with Power Board Mounting Nuts set aside from Step 3.

STEP 6 - INSTALL NEW GRILLE/FIBER OPTIC CABLE SUBASSEMBLY

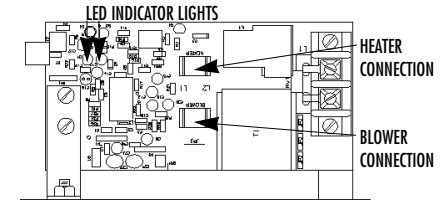
Insert new Grille/Fiber Optic Cable Subassembly into the Blower Assembly. Install with Grille Mounting Screws set aside from Step 4. Remove protective rubber cap from the Fiber Optic Connector.

STEP 7 - CONNECT FIBER OPTIC SENSOR

Insert Fiber Optic Connector from Grille/Fiber Optic Cable Subassembly into receptacle on Power Board.

STEP 8 - ELECTRICAL HOOK-UP

Connect electrical wiring to the Hand Dryer Power Board as shown in the appropriate wiring diagram (120 or 208/240 VAC). Peel backing off of new Wiring Diagram Label and attach to Blower Assembly in location shown below.



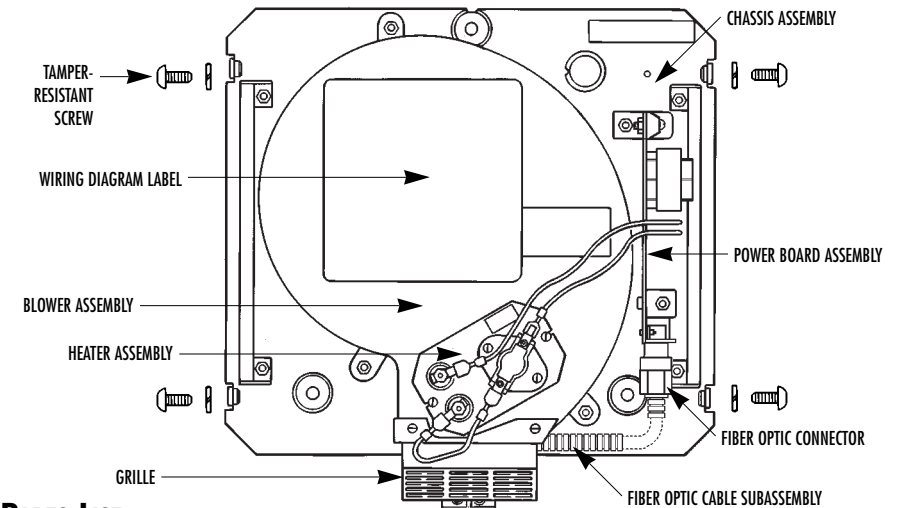
STEP 9 - TEST SELF-CALIBRATION AND OPERATION

Turn on electrical power. The red LED should illuminate for approximately thirty (30) seconds. The green LED should then illuminate, indicating that the self-calibration procedure has completed and the unit is ready for use. Place hands in the sensor's detection zone (beneath the exhaust part of the dryer). The Dryer should start and emit a powerful flow of warm air. Remove hands from beneath dryer. The Dryer should stop.

STEP 10 - REINSTALL COVER ASSEMBLY

Install Cover over Chassis Assembly. Secure using four (4) Tamper-Resistant Cover Screws and Lock Washers set aside from Step 1.

Note: Do not overtighten fasteners.



PARTS LIST

For 120 VAC Hand Dryers

EHD-1006-A Repair Kit (Code no. **3366007**)

Includes EHD-182-A Power Board Assembly,
EHD-184-A Grille/Fiber Optic Cable Subassembly,
and EHD-227 Wiring Diagram Label

For 208/240 VAC Hand Dryers

EHD-1007-A Repair Kit (Code no. **3366008**)

Includes EHD-183-A Power Board Assembly,
EHD-184-A Grille/Fiber Optic Cable Subassembly,
and EHD-178 Wiring Diagram Label