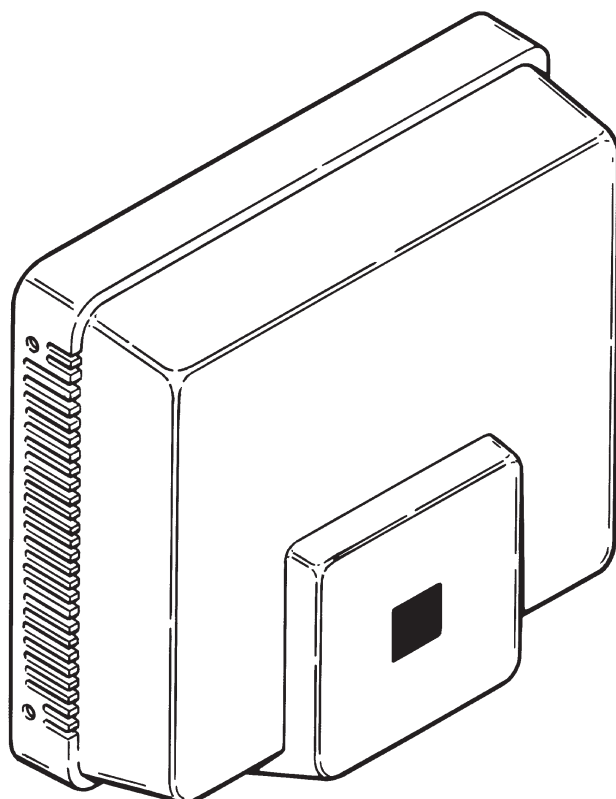




**MAINTENANCE GUIDE
OPTIMA™ SYSTEMS
SENSOR OPERATED
SURFACE MOUNTED ELECTRONIC
HAND DRYER**



Model EHD 120
Sensor Operated Hand Dryer
120 VAC

Model EHD 208/240
Sensor Operated Hand Dryer
208 VAC or 240 VAC

Made in the U.S.A.



Installation of the Sloan OPTIMA Series Electronic Hand Dryer makes drying of hands totally "hands-free" providing the ultimate in sanitary protection and automatic operation. There are no buttons to push. The OPTIMA series electronic hand dryer uses fiber optic and adaptive sensing technology to sense the user's presence and activate. When the user's presence is no longer detected, the hand dryer automatically stops.

The OPTIMA series electronic hand dryer is designed for easy installation and maintenance, quiet and efficient operation, and years of dependable, trouble-free service.

The following instructions will serve as a guide when installing the OPTIMA Series electronic hand dryer. As always, good safety practices and care are recommended when installing your new hand dryer. If further assistance is required, contact your nearest Sloan Representative office.

LIMITED WARRANTY

Sloan Valve Company warrants its Electronic Hand Dryers 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 five 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 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.

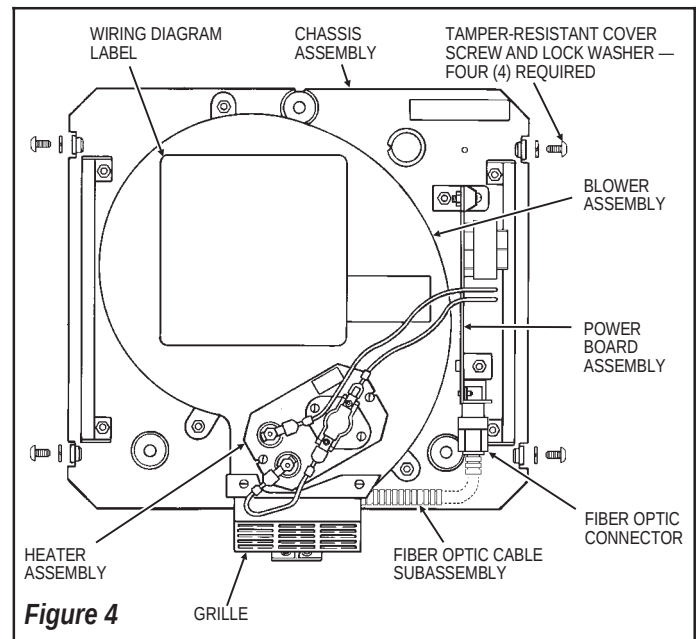
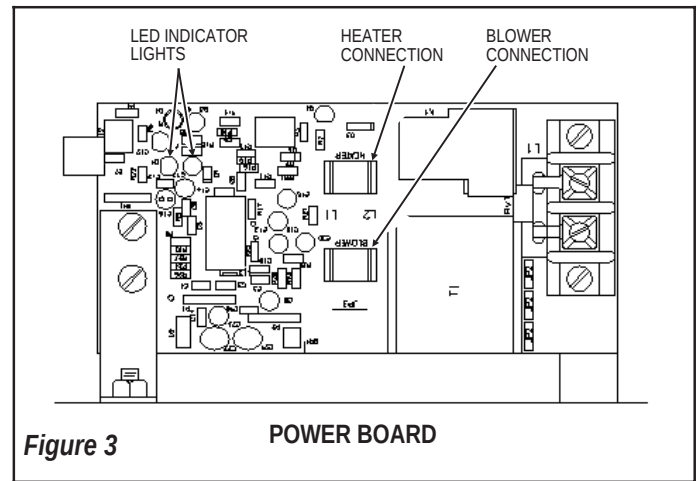
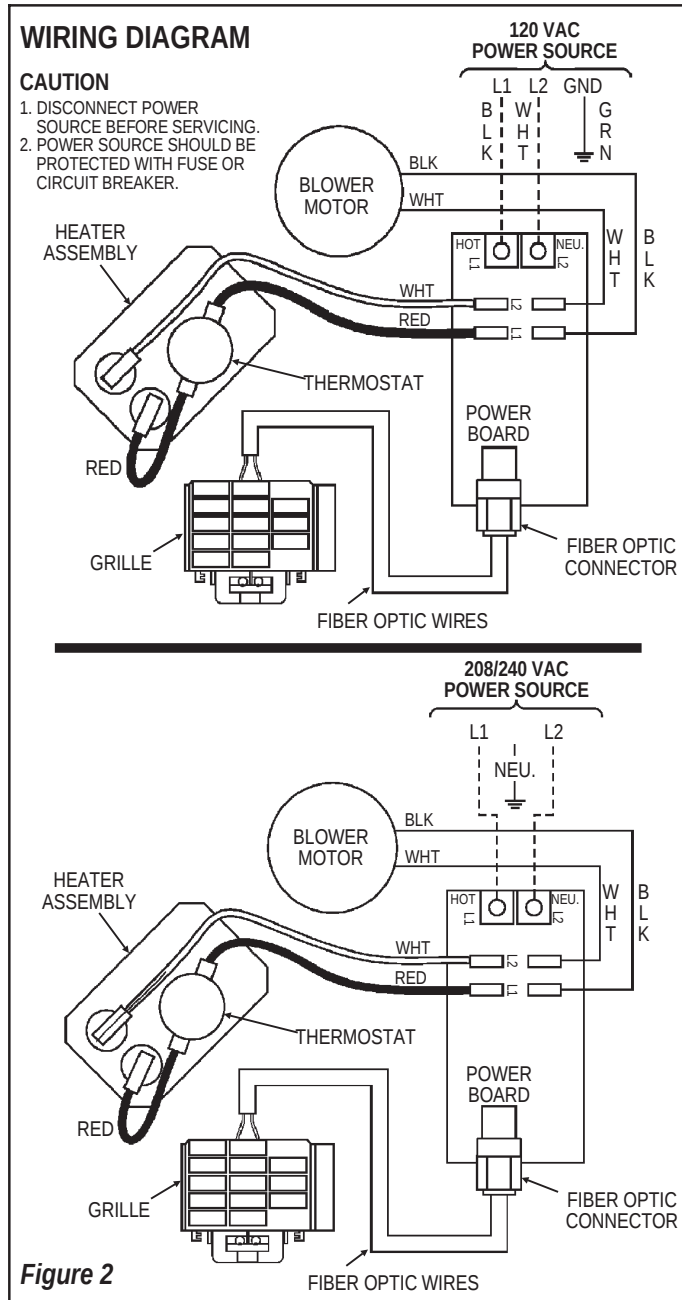
INSTALLATION

Step 1 — Mount Chassis to Wall (Figure 1)

String electrical wires through Chassis Assembly and secure Chassis Assembly to wall using the recommended Fasteners listed in Table 2.

Step 2 — Electrical Hook-Up (Figures 2, 3 and 4)

Be certain that power is disconnected at the main power source. Connect electrical wiring to the Hand Dryer as shown in the appropriate wiring diagram in Figure 2.



Step 3 — 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 Dryer is ready for use. Place hands in the sensor's detection zone (beneath the exhaust port of the Dryer). The Dryer should start and emit a powerful flow of warm air. Remove hands from beneath the Dryer. The Dryer should stop.

Step 4 — Install Cover Assembly

Install Cover over Chassis Assembly. Use a 5/32" hex wrench to secure using four (4) Tamper-Resistant Cover Screws and Lock Washers.

Note: Do not overtighten fasteners.

SELF-ADAPTIVE 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.

The OPTIMA Series electronic hand dryer is factory set to operate at a range of 4 to 11 inches (102 to 279 mm). This range should be satisfactory for most installations.

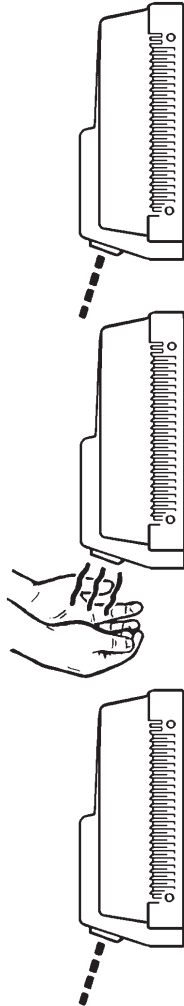
OPERATION

The Sloan Electronic Hand Dryer operates by means of an optical 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 will dry hands in approximately 30 seconds and will shut off automatically when hands are withdrawn, or after 60 seconds of continuous operation.

1. The OPTIMA/EHD functions by means of an electronic fiber optic photo-sensor located at the exhaust port beneath the Hand Dryer.

2. When hands are placed beneath the exhaust port, the fiber optic photo-sensor activates the Hand Dryer which emits a powerful flow of warm air to dry hands within 30 seconds.

3. When hands are withdrawn, the Hand Dryer shuts off automatically. It is then ready for the next user.



TROUBLESHOOTING GUIDE

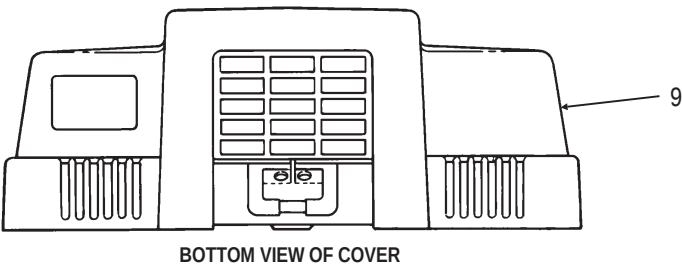
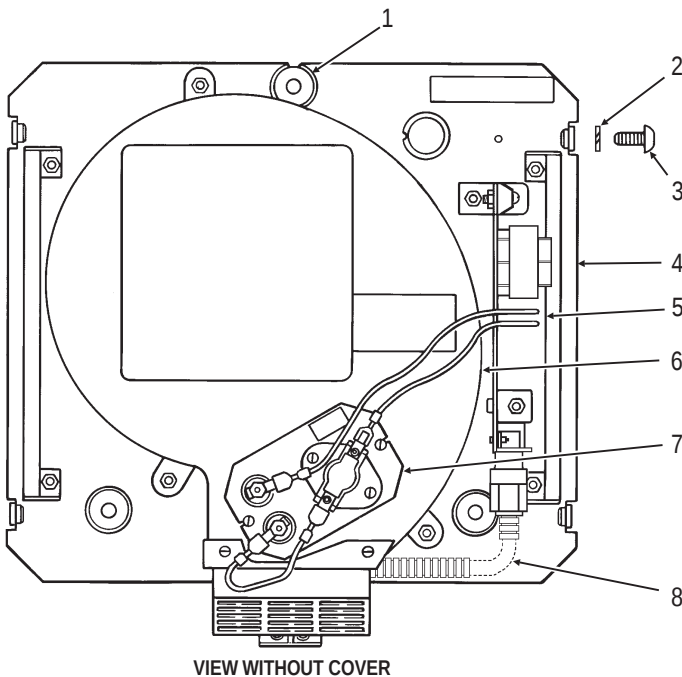
Note: Each power board has two (2) LEDs: a green power indicator and a red sensor indicator. Electrical power must be supplied to Hand Dryer for indicator lights to function.

If none of the solutions shown below works, the power board may need to be reset; disconnect then reconnect electrical power and retest.

- I. **No air is supplied when hands are placed in Sensor's detection zone.**
Remove cover and check LED indicator lights on the Power Board.
 - A. If green LED does NOT illuminate:
 1. Power is not being supplied to dryer; check all electrical connections and main power supply.
 2. Power Board has failed; replace.
 - B. If a green LED illuminates first and then red LED illuminates when hands are placed in the Sensor's beam:
 1. Blower Motor is not connected properly; check Blower Motor leads for secure connection.
 2. Power Board has failed; replace.
 3. Blower Motor has failed; replace.
 - C. If green LED illuminates first, but red LED does NOT illuminate when hands are placed in the Sensor's beam:
 1. Power Board or Power Board detection circuit has failed; replace.
 - D. If only the red LED illuminates (green LED does NOT illuminate when hands are removed from the Sensor's beam):
 1. Power Board or Power Board self-calibration circuit has failed; replace Power Board.
 2. OPTIMA Sensor has failed; replace.
- II. **Only unheated air is supplied when hands are placed in the Sensor's beam.**
 - A. Heater is not properly connected; check Heater leads for secure connection.
 - B. Heater Assembly is defective; replace.
- III. **Air cycles intermittently on and off.**
 - A. The Power Board's range feature is not functioning properly; replace Power Board.
- IV. **Dryer runs continuously (will not stop).**
 - A. Disconnect OPTIMA Fiber Optic Cable from Fiber Optic Connector on the Power Board.
 1. If dryer keeps running, the Power Board has failed; replace.
 2. 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.

PARTS LIST



Item No.	Part No.	Description
1	EHD-93	Mounting Hardware (Not Shown)
2	EHD-127	Lock Washer (4 Required)
3	EHD-17	Cover Screw (4 Required)
4	EHD-214-A	Chassis Assembly, 120 VAC
	EHD-215-A	Chassis Assembly, 208 VAC/240 VAC
5	EHD-182-A	Power Board Assembly, 120 VAC
	EHD-183-A	Power Board Assembly, 208 VAC/240 VAC
6	EHD-216-A	Blower Assembly, 120 VAC
	EHD-217-A	Blower Assembly, 208 VAC/240 VAC
7	EHD-11-A	Heater Assembly, 120 VAC
	EHD-14-A	Heater Assembly, 208 VAC/240 VAC
8	EHD-184-A	Exhaust Grille/Fiber Optic Cable Sub-Assembly
9	EHD-204-A1	Cover Assembly, White
	EHD-204-A2	Cover Assembly, Black
	EHD-204-A3	Cover Assembly, Almond
	EHD-204-A4	Cover Assembly, Gray

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 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.*

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