

# stern

STERN ENGINEERING LTD.



## TUBULAR & EVER HAND DRYER

---

INSTALLATION AND MAINTENANCE GUIDE

## INDEX

1	PRE-INSTALLATION INFORMATION
2	INSTRUCTIONS FOR SAFE USE
3	TECHNICAL DATA - ALL MODELS
4	PACK CONTENTS - TUBULAR HD
5	TECHNICAL DATA - TUBULAR HD
6	PACK CONTENTS - TUBULAR DP HD
7	TECHNICAL DATA - TUBULAR DP HD
8	PACK CONTENTS - EVER HD
9	TECHNICAL DATA - EVER HD
10-14	INSTALLATION
14	MAINTENANCE
15-16	SETTINGS ADJUSTMENT
17	LIMITED WARRANTY
18-19	TROUBLESHOOTING
20	SPARE PARTS LIST

The information in this document reflects products at the date of printing. Stern Engineering Ltd. reserves the right, subject to all applicable laws, at any time, at its sole discretion, and without notice, to discontinue or change the features, designs, materials and other specifications of its products, and to either permanently or temporarily withdraw any of the foregoing from the market. All information in this document is provided "as is" without warranty of any kind, either expressed or implied, including but not limited to any implied warranties of merchantability, fitness for a particular purpose, or non-infringement. Stern Engineering Ltd. assumes no responsibility for errors or omissions in the information presented in this document. In no event shall Stern Engineering Ltd. be liable for any special, incidental, indirect or consequential damages of any kind, or any damages whatsoever arising out of or in connection with the use or performance of this information. The tradenames, trademarks, logos and service marks presented in this document, including their design, are the property of Stern Engineering Ltd or other third parties and you are not permitted to use them without the prior written consent of Stern Engineering Ltd. or such third party as may own them.

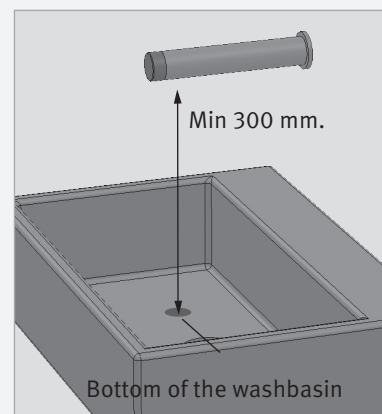
## PRE-INSTALLATION INFO

### CHECK CONTENTS

Separate all parts from the packaging and check each part with the pack contents section. Pay attention to the variations of the different models.

Make sure all parts are accounted for before discarding any packaging material.

If any parts are missing, do not attempt to install your electronic hand dryer until you obtain the missing parts.



### WARNING

1) To avoid reflection problems keep a distance of more than 300 mm. between the sink and the spout.

2) Model that have an infrared sensor pointing down, are not intended to be used together with a sink of a reflective material such as stainless steel.

### IMPORTANT

Wiring / installation of the appliance should be done according to AS/NZS 3000 (Australian/New Zealand Wiring Rules).

## INSTRUCTIONS FOR SAFE USE

- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless supervised or unless they have been given instruction concerning the use of the appliance by a person responsible for their safety.
- This appliance can be used by children aged from 8 years and above if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved (EN 60335 1, EN 60335 2 23/A11).
- Children shall not play with the appliance (EN 60335 1, EN 60335 2 23/A11).
- Keep the appliance and its cord out of reach of children aged less than 8 years.
- When connecting the unit to electricity, there must be means incorporated in the fixed wiring for a disconnection of the unit from the supply mains in accordance with the wiring rules, having a contact separation in all poles that provide full disconnection under overvoltage category III conditions.
- The insulation of the fixed wiring must be protected , for example by insulating sleeving having an appropriate temperature rating.

### WARNING

#### WARNING! RISK OF FIRE OR ELECTRICAL SHOCK

- All electrical work is to be done in accordance with applicable codes and regulations.
- All electrical work must be done by qualified electricians
- Use this unit only in the manner intended by the manufacturer.
- Disconnect power before installing or servicing.

## TECHNICAL DATA

<b>Operating Voltage</b>	110-120 Vac, 50/60 Hz, 12.2-13.4 A, 1.34-2Kw 220-240 Vac, 50/60 Hz, 6.1-6.7 A, 1.34-2Kw
<b>Motor Thermal Protection</b>	Auto Resetting Thermostat turns unit off, 120V at 135 °C (275 °F), 240V at 95 °C (203 °F)
<b>Heater Element</b>	450-900 W, adjustable
<b>Heater Thermal Protection:</b>	Auto Resetting Thermostat turns unit off at 85 °C [185 °F] Thermal fuse cuts unit off at 142 °C [288 °F]
<b>Standby Power</b>	0.3-0.4 W
<b>Circuit Operation</b>	Infrared Automatic, self adjusting
<b>Sensor Range</b>	3" to 18" [80 mm to 450 mm], Adjustable; standart 8.66" [220 mm ± 20 mm]
<b>Timing Protection</b>	60 seconds auto shut off
<b>Drip proof</b>	IP 34

## PACK CONTENTS

### TUBULAR HD

1 x Hand dryer and attachments

Hose + 2 clamps

1 x Allen key 2.5mm

1 x Allen key 3mm

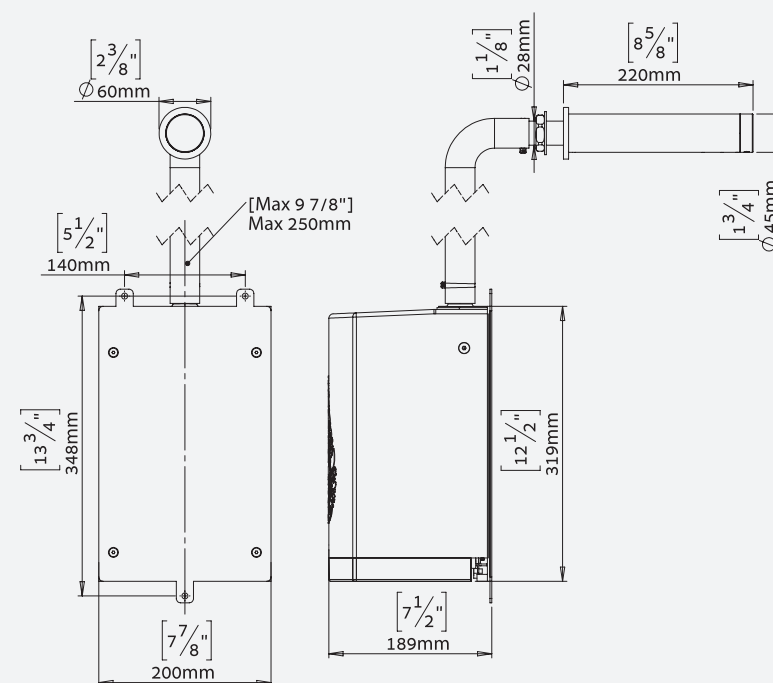
1 x Allen key 7mm

1 x Hand dryer unit

4 x Screws & Ancors

## TECHNICAL DATA

### TUBULAR HD



Tubular HD

350030

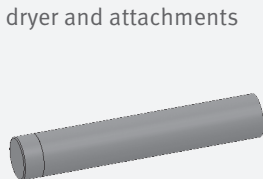
Tubular HD AISI316

350040

## PACK CONTENTS

## TUBULAR DP HD

1 x Hand dryer and attachments



4 x Screws & Ancors

Hose + 2 clamps

1 x Allen key 2.5mm

1 x Allen key 3mm

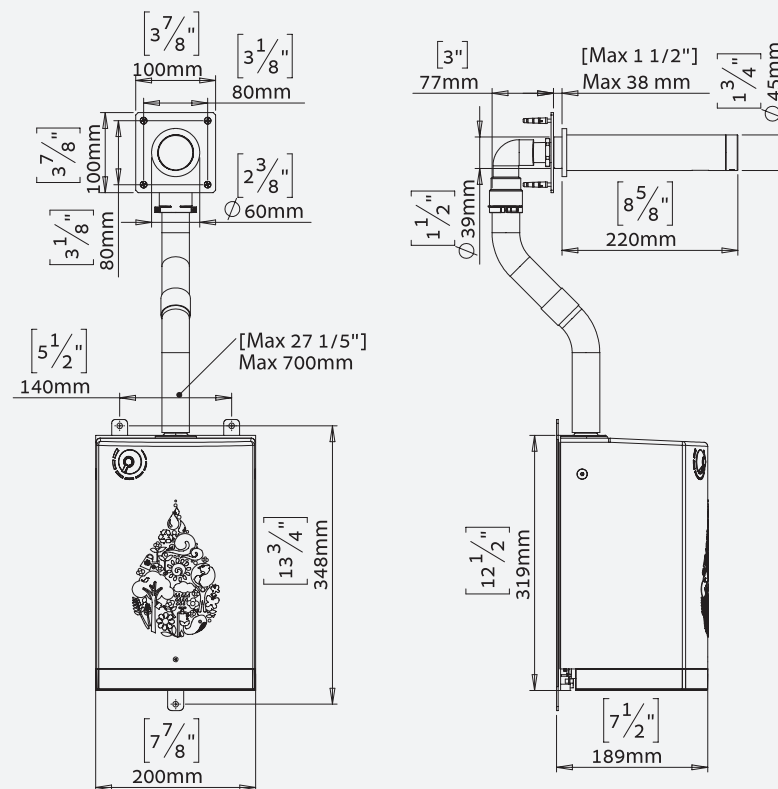
1 x Allen key 7mm

1 x Hand dryer unit

4 x Screws & Ancors

## TECHNICAL DATA

## TUBULAR DP HD

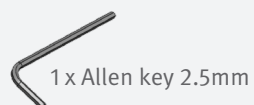


Tubular DP HD	350020
Tubular DP HD AISI 316	350010

## PACK CONTENTS

EVER HD

1 x Hand dryer and attachments



Hose + 2 clamps

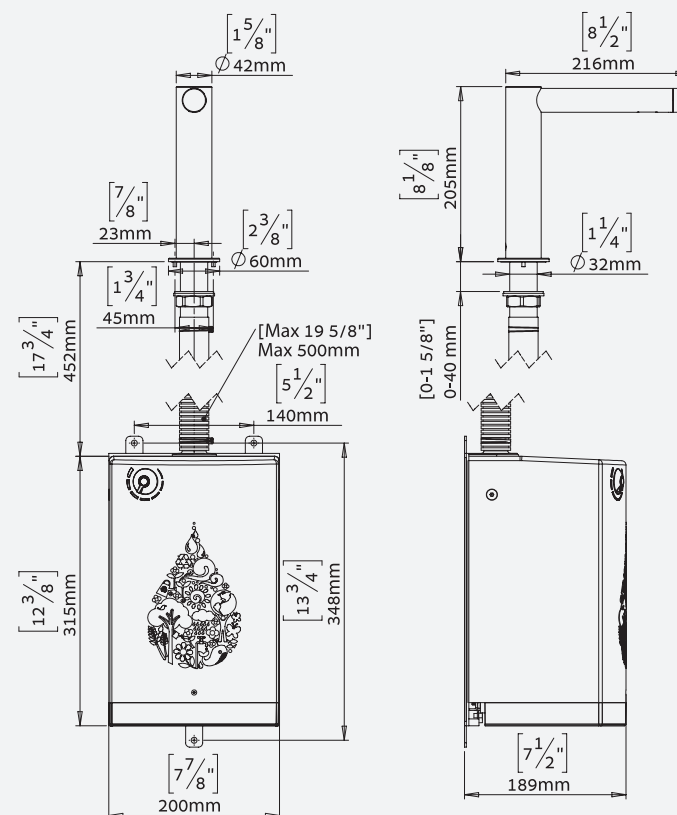
1 x Hand dryer unit



4 x Screws & Ancors

## TECHNICAL DATA

EVER HD

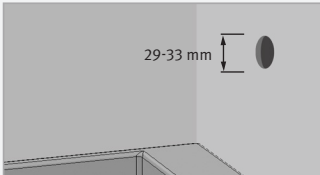
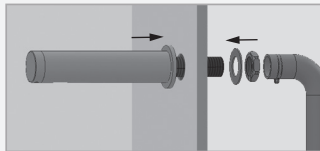


EVER HD

230510

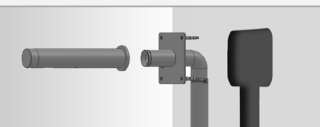
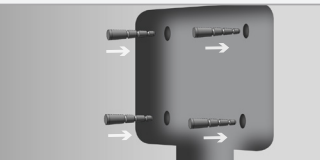
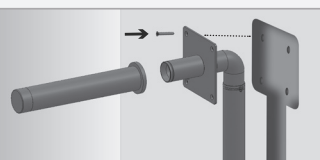
## INSTALLATION

### STEP 1 –INSTALL THE WALL UNIT - TUBULAR HD

1	Drill a 29-33 mm hole in the wall at the desired location.	
2	Insert the base through the hole and fasten the nut and metal ring onto the base of the HD to hold it firmly in place. Attach hose to base using the hose clamp (supplied).	
Continue with STEP 2: INSTALLING THE MOTOR (pages 10-11)		

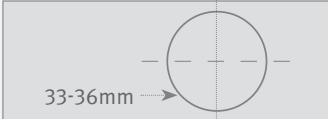
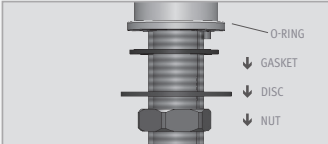
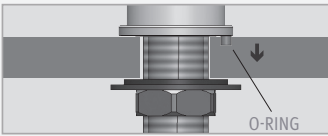
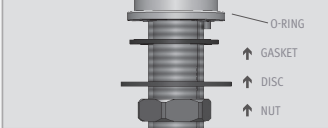
### STEP 1 –INSTALL THE ROUGH IN PART - TUBULAR HD DP

In the brick or concrete wall, a hole must be carved into the wall to make space for the wall mount and air duct. The body must be removed from the base by opening the set screw at the base of the body.

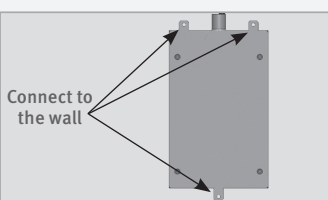
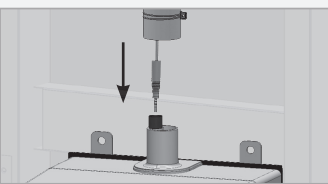
1	Cut an adequate opening in the wall according to the dimensions of the Tubular DP HD, the cables sleeve and the hose.	
2	Drill 4 small holes for the tubular base support and drive the anchors in.	
3	Secure the base support using the 4 screws. make sure that the base is leveled to the center. After tiling mount the Tubular body onto the base and thread the cable through the base and air hose.	
Continue with STEP 2: INSTALLING THE MOTOR (pages 10-11)		

## INSTALLATION

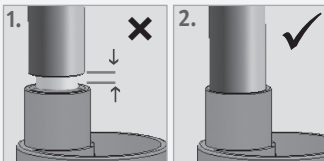
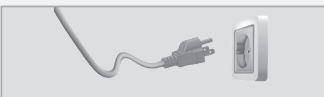
### STEP 1 –INSTALL THE DECK UNIT - EVER HD

Recommended hole size		
1	Remove the hexagonal nut, the disk and the gasket. Do not remove the O-ring from the base of the HD.	
2	Place the HD with O-ring into the hole in deck or lavatory. Make sure the O-ring is located between the deck or lavatory and the bottom of the HD.	
3	Slide the gasket, disk and hexagonal nut over the flexible hose and secure the HD into place.	

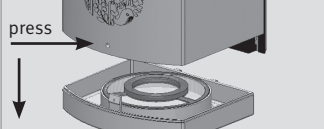


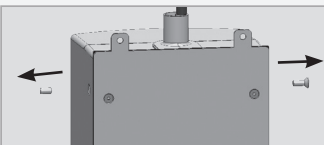
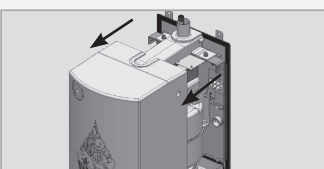
### STEP 2 – CONNECTING OPEN WIRE - ALL MODELS

6	Position unit at the end of the air hose. Connect the unit firmly to the wall. <b>Note: Hose length can not be cut.</b> <b>Note: make sure the bottom of the unit has a clearing of a minimum 10 cm (4") from any obstacle.</b>	
7	Attach the connector.	

## INSTALLATION

8	<p>Please note that since the connector is water proof, some friction might apply.</p> <p>1. O-RING VISIBLE – NOT CONNECTED PROPERLY 2. ONLY THE GROOVES ARE VISIBLE – CONNECTED PROPERLY</p>	
9	<p>Reassemble cover, knob, filter housing. Connect the electricity (cable not included).</p>	

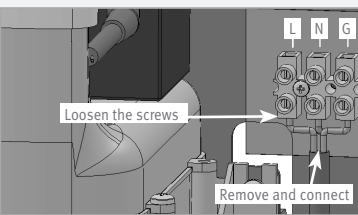
### STEP 2 – CONNECTING OPEN WIRE - ALL MODELS

1	<p>Remove the filter cover by releasing it by pressing the button</p>	
2	<p>Remove knob cover using a flat screw driver. Remove screw using Allen key. Remove knob.</p>	
3	<p>Loosen the lower locking bolt with a 3 mm Allen Key.</p>	
4	<p>Remove the 2 locking screws located on either side of the motor unit using Allen key supplied.</p>	
5	<p>Remove the cover of the motor unit.</p>	

Note: To connect a hardwire cable see relevant section below.

## INSTALLATION

### CONNECTING OPEN WIRE CABLES (NOT PROVIDED)

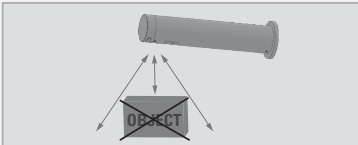
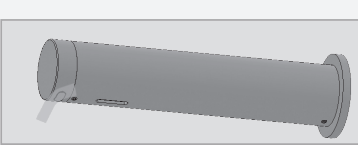
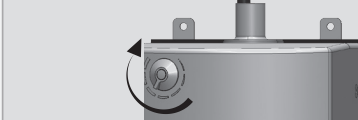
1	<p>Loosen the screws to remove the existing cable.</p>	
2	<p>Connect the hardwire cable.</p>	

Reassemble cover, knob and filter housing.

### WARNING

Please refer to Page 2 of this manual for Instructions for Safe Use

### OPERATING THE HAND DRYER

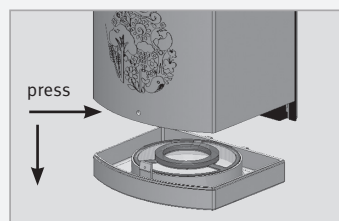
<p>Before proceeding, check that no objects are in front of the sensor aside from the washbasin.</p>		
1	<p>Remove the sticker covering the sensor eye wait 15 seconds for the sensor to set up.</p>	
2	<p>Activate the hand dryer by placing hand below the sensor unit Remove hands when finished drying.</p>	
3	<p>Air power can be increased or decreased by adjusting the power selector knob located on the motor unit.</p>	



## INSTALLATION

### CHANGING THE FILTER

Press button to release the filter housing, remove and clean or replace filter. Click the filter housing back into place.



## MAINTENANCE

- Regular cleaning of the hand dryer is recommended to ensure optimum functioning of the dryer.
- Any access to the dryer will be done only after it has been disconnected from the power supply.
- Clean the dryer with a damp cloth.
- Do not squeeze the cloth.
- Do not rinse the dryer with a water hose.
- Do not use any material that is worn or scratched (iron, scotch, etc.).
- Do not use any aggressive cleaning agent (acid or base).
- No cleaning is required for internal parts.
- Be sure to clean the motor unit filter every few months (depending on the nature of use) replace if necessary.

## SETTINGS ADJUSTMENT



### Adjusting the settings with the remote control

If necessary, the sensor settings can be adjusted as following:

Shut off the water supply. In order to adjust the sensor with the remote control, hold the remote control straight in front of the sensor in a distance of about 6-8" (15-20cm). Choose the function you want to adjust by pressing once on one of the function buttons. After pressing once on a specific function button, a quick flashing of the LED at the front of the sensor will occur. At this stage, you can change the setting by pressing the (+) or the (-) buttons, every push will increase or decrease one level. After finishing the adjustment, turn the water supply back on.









**DETECTION RANGE:** This Hand Dryer was supplied with a self adjusting sensor. The ideal detection range for the specific location will be set automatically.

Only if necessary, use the remote control to adjust the sensor range as follows: Press the RANGE button. Wait until a quick flashing of the LED in the sensor eye is perceived. Then, press + to increase the range and – to reduce it. Every push will increase or decrease one level.

**Note:** Once you have changed the detection range with the remote control, the distance will be remembered by the sensor, even if the power source is disconnected. To get back to the self adjustment mode, use the ADJ button only.

## SETTINGS ADJUSTMENT

	<p><b>ENTRANCE TO THE SELF ADJUSTMENT MODE:</b> Check that no objects are in front of the sensor. Press the ADJ button. Once a quick flashing of the LED of the sensor eye is perceived, remove your hand holding the remote control and move away from the sensor area. The ideal sensor range for the specific location will be set automatically. Once the self adjustment has taken place, the hand dryer will activate for 1 second as an indication that the ideal sensor range was set and the product is ready for use.</p>
	<p><b>SECURITY TIME:</b> The Security time, prevents continuous running due to reflections or vandalism. By default, if the sensor is covered for more than 90 seconds the unit will shut off automatically. To resume regular operation any obstruction must be removed.</p> <p>Press the SEC button. Wait until a quick flashing of the LED in the sensor eye is perceived. Then, press + to increase the security time and – to reduce it.</p>
	<p><b>DELAY IN TIME:</b> If required, the delay in time can also be modified as follows: Press the IN button. Wait until a quick flashing of the LED in the sensor eye is perceived. Then, press + to increase the delay in time and – to reduce it.</p>
	<p><b>DELAY OUT TIME:</b> The delay out time is the amount of time it takes for the unit to shut off after the user removes their hands.</p> <p>If required, the delay out time can be modified as follows: Press the OUT button. Wait until a quick flashing of the LED in the sensor eye is perceived. Then, press + to increase the delay out time and – to reduce it.</p>
	<p><b>TEMPORARY OFF FUNCTION:</b> This function is ideal to perform any kind of activity in front of the sensor without operating the system (for example, cleaning). The Hand Dryer will remain shut for 1 minute when this button is pressed once. To cancel this function and to return to normal operation press the On/Off button again or wait 1 minute.</p>
	<p><b>RESET BUTTON:</b> This function restores all the factory settings except for the sensor range. If required, press the Reset button and without releasing it, press the + button once.</p>
<p><b>NOTE:</b> To enter the self adjusting mode, use the ADJ button. To change the sensor range, use the RANGE button.</p>	

## LIMITED WARRANTY

Y. Stern Engineering Ltd. warrants that its electronic products will be free of defects in material and workmanship during normal use for two years from the date the product is purchased.

If a defect is found in normal use, Y. Stern Engineering Ltd. will, at its discretion, repair, provide a replacement part or product, or make appropriate adjustments. Damage caused by accident, misuse, or abuse is not covered by this warranty. Improper care and cleaning will void the warranty. Proof of purchase (original sales receipt) must be provided to Stern Engineering Ltd. with all warranty claims.

Stern Engineering Ltd is not responsible for labor charges, installation, or other incidental or consequential costs other than those noted above. In no event shall the liability of Stern Engineering Ltd. exceed the purchase price of the product.

If you believe that you have a warranty claim, contact your Stern Distributor, Dealer or Plumbing Contractor. Please be sure to provide all pertinent information regarding your claim, including a complete description of the problem, the product, model number, the date the product was purchased, from whom the product was purchased and the installation date. Also include your original invoice.

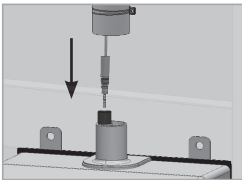
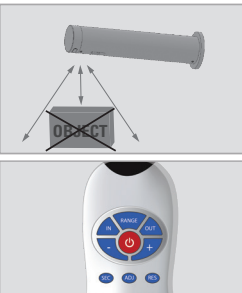
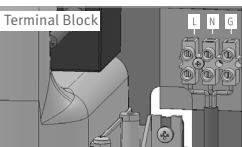
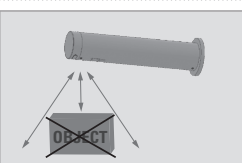
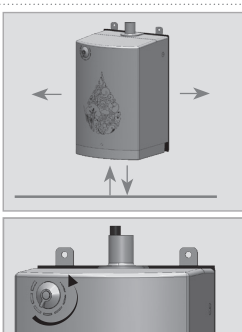
Y. STERN ENGINEERING AND/OR SELLER DISCLAIM ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty excludes product damage due to installation error, incorrect maintenance, wear and tear, battery, product abuse, or product misuse, whether performed by a contractor, service company, or the consumer. This warranty does not cover product damage caused by the following:

- Incorrect installation.
- Inversions of supply pipes.
- Pressures or temperatures exceeding recommended limits.
- Improper manipulation, tampering, bad or lapsed maintenance.
- Foreign bodies, dirt or scale introduced by the water supply or sanitizer tank.
- Use of the soap or sanitizer outside of viscosity specifications.
- Alteration of the original soap/foam/sanitizer dispenser components (including pipes).

Failure to adhere to the safety precautions and/or installation recommendations outlined in this Installation Guide will void the warranty.

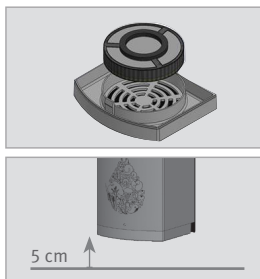
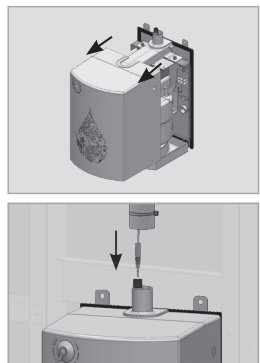
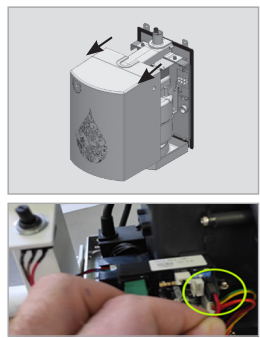
## TROUBLESHOOTING

TUBULAR HD / TUBULAR DP HD / EVER HD

PROBLEM	INDICATION	CAUSE	SOLUTION	ILLUSTRATION
False activation: Air Flowing	Continuous Air Flow without pause	AUX connector not fully inserted	The connector should be inserted fully until white o-ring is not visible. Remove the o-ring if necessary	
False activation: Air Flowing	Random Air Flow Activation	Reflection issue from object is causing dryer to activate on its own accord.	Eliminate any cause of reflection and if necessary use appropriate remote control to shorten detection range	
Dryer doesn't turn on (no sensor light)	No Air Flow	Power is not connected	Take precautions to avoid shock hazard, disconnect and reconnect the power and check for voltage at the terminal block.	
Dryer repeatedly shuts off	The unit might be too close to a surface, you might need to shorten range	The sensor has a 90 second security time feature, so if it is constantly being powered, after 90 seconds, it will shut off and then will not continue	Remove the object obstructing the range.	
Dryer repeatedly shuts off	The unit might be overheating.	Auto Resetting Thermostat turns unit off at 85 °C [185 °F] Thermal fuse cuts unit off at 142 °C [288 °F]	Remove any interference that may be causing the dryer to overheat. Lower the Air-speed dial.	

## TROUBLESHOOTING

TUBULAR HD / TUBULAR DP HD / EVER HD

PROBLEM	INDICATION	CAUSE	SOLUTION	ILLUSTRATION
Air Flow diminished	Filter house is clogged	Check the air filter for blockage and remove it if required. Ensure that there is a gap of minimum 5 cm from filter outlet. If the problem persists contact customer service. (replace filter)	Press button to release the filter housing. Remove and clean or replace filter. Click the filter housing back into place	
"The dryer will not run. LED on the sensor is blinking"			Disconnect the power and remove the dryer cover and air adjustment unit. Ensure that the AUX connector is correctly connected to the dryer. If the problem persists contact customer service (replace AUX connector)	
Air speed adjustment is not responding		Adjustment unit is not properly connected.	Disconnect the power and remove the dryer cover and air adjustment unit. Ensure that the air adjustment unit is properly connected to the PCB board of the dryer.	

## SPARE PARTS LIST

Description	S/N
Sensor for Ever HD	08004034
Sensor for Tubular HD	08004051
Sensor for Tubular DP HD	08004040
Hand Dryer (cover & filter included)	560010
Filter for Hand Dryer	08530022
Full motor and PCB	94010017
PCB for HD 240V	94010017.3
PCB for HD 120V (USA)	94010017.4
Potentiometer for HD	94010017.5
4 contacts WP Connector for Dryer (female jack cable)	06000245

# stern

STERN ENGINEERING LTD.

777 Passaic Avenue, Clifton NJ, 07012, USA

Tel: +1-973 773 8011 | Fax: +1-973-779-8768

Toll Free: 1-800-4364410

[info@sternfaucets.com](mailto:info@sternfaucets.com) | [tech@sternfaucets.com](mailto:tech@sternfaucets.com)

