

# TSL.3001

hand dryer

installation + maintenance

+ THE  
SPLASH  
LAB

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# TSL-3001 hand dryer

**Read and save these instructions**

**WARNING** 

To reduce the risk of fire, electric shock or injury to persons, observe the following:

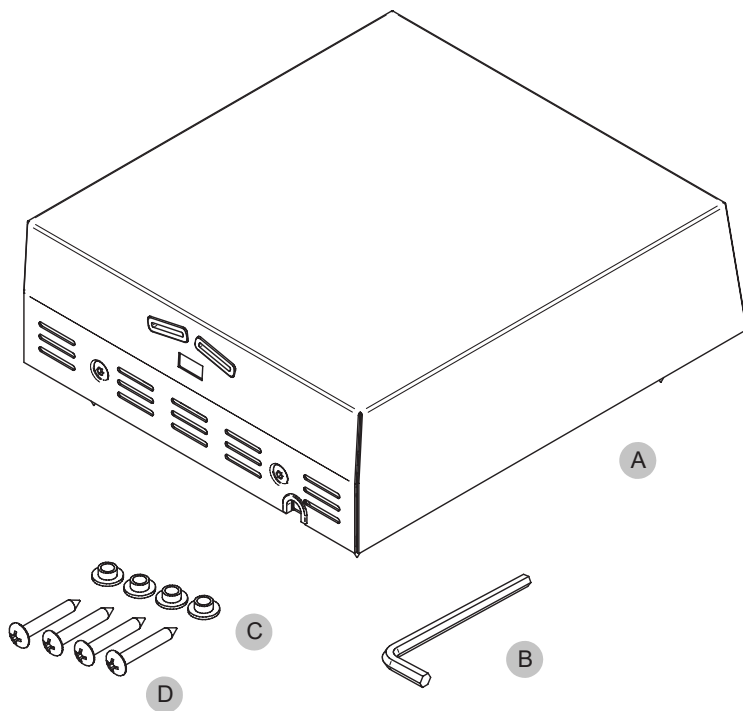
- + This product is not intended for use in a domestic or residential application.
- + The dryer must be installed in accordance with the electrical installation regulations in force at the time of installation.
- + The hand dryer must be earthed.

**For more information contact:**

Tel: +1 310 410 5008

Email: [technical@thesplashlab.com](mailto:technical@thesplashlab.com)

# box contents



- A TSL-3001 Hand Dryer
- B Security allen key
- C Rubber mounting bushes
- D Screws

# technical data

<b>Finishes</b>	CS (Brushed satin stainless steel) / CP (Brushed copper finish) / BK (Brushed black finish) / BZ (Brushed bronze finish) / BR (Brushed brass finish)
<b>Power Consumption</b>	4.2A
<b>Voltages</b>	110 - 120V / 60Hz
<b>Drying time</b>	less than 15 seconds
<b>Circuit operation</b>	Infrared automatic, self-adjusting
<b>Weight</b>	10lb 12oz
<b>Stainless steel</b>	AISI 304
<b>Noise levels</b>	Min 69dB to 76.6dB Max @ 39"
<b>Air speed</b>	311 - 377 ft/s
<b>Heating element</b>	450W adjustable
<b>Motor type</b>	Brush type, Dual ball bearings
<b>Motor power</b>	250W - 500W
<b>Motor speed</b>	16,000 - 29,000 RPM variable speed
<b>Sensor range</b>	4" - 9" variable; standard set at 7"
<b>Approvals</b>	CE, UL, RoHS
<b>Insulation</b>	Class 1
<b>IP rating</b>	IP24
<b>Warranty</b>	1 year parts and labour; additional 4 years parts-only. (Motor brushes excluded as these are a wearing part, and dependent on usage)

# before you install

## Location

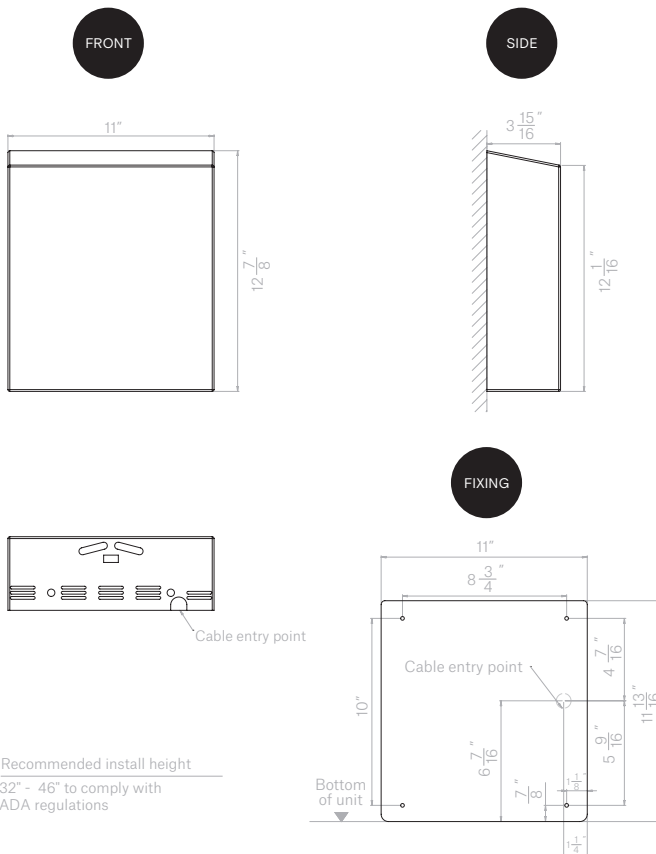
The dryer should typically be installed between the wash-basin and the washroom exit.

## Power Supply

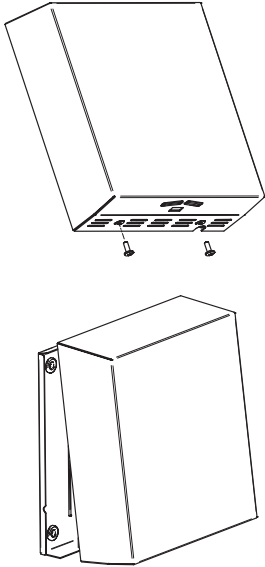
A fused 8A power supply is required for connection to the dryer. All units must be supplied with a 3-wire service. The ground wire must be connected to the dryer backplate.

## Recommended fixing heights (from finished floor level)

Male washrooms	42"
Female washroom	40"
Primary School	30 - 40"
Wheelchair accessible (ADA compliant)	34"

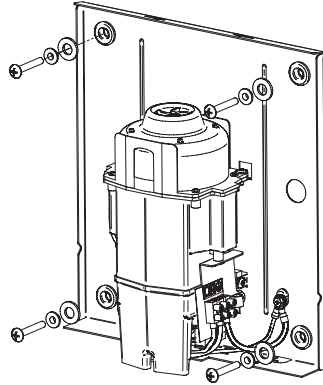


# how to install



**1**

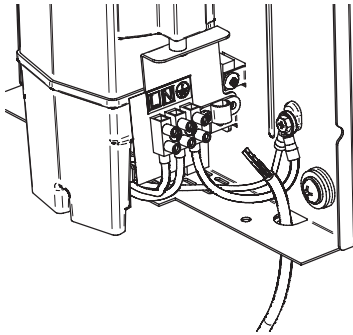
Undo screws from base of dryer, and pull cover forward at bottom and lift the cover off the top mounting hooks.



**2**

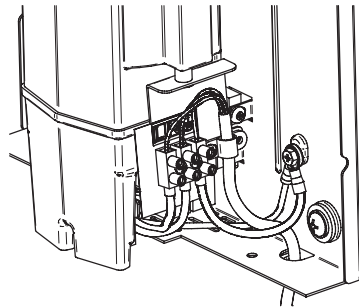
Mark fixing holes on wall through template supplied

# how to install



## 3

Fix dryer base-plate to wall with appropriate fixings, and feed cable through the cable entry hole. (either in lower edge or through back plate)



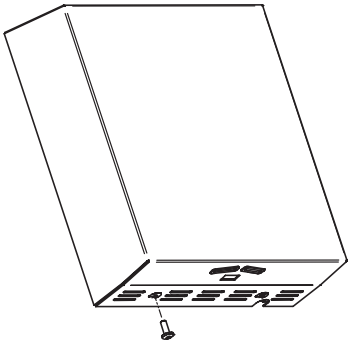
## 4

Connect the cable to the terminal block in accordance with the relevant markings ensuring that the cable does not interfere with the function of the motor.

(Connections: A. Connect the live wire (colored red or black) to the terminal block marked "L". B. Connect the neutral wire (colored white or blue) to the terminal block marked "N". C. Connect the ground wire (colored green or green and yellow) to the green screw marked "⏏" ensuring that the cable does not interfere with the function of the motor.

Note that colors of live and neutral wires depend on voltage of supply service.



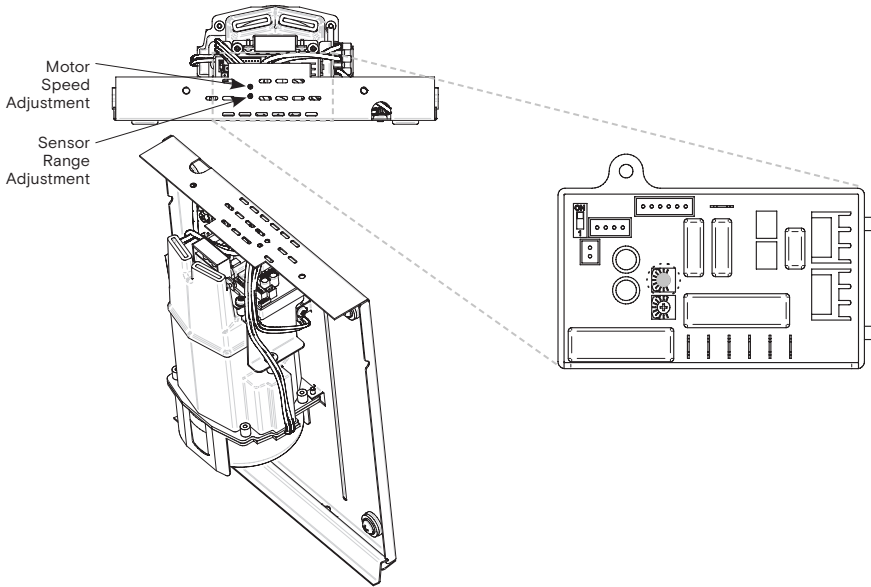


## 5

Re-fit the dryer cover, by fitting the top edge on first, then securing using the two screws that were previously removed. Take care not to overtighten the screws.

# commissioning

Turn on the power supply to the dryer, and then test that the dryer will operate when the user's hands are placed within the detection range.

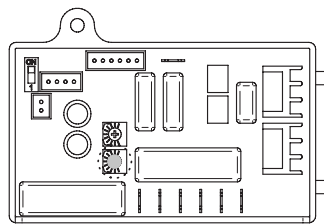
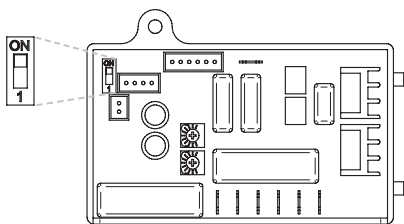


## Location of adjustment screws

The air speed and the sensor detection range can be adjusted if necessary. The adjuster screws are located on the control module, and can be accessed through the dryer base-p

## Warm air speed adjustment

1. Switch off the power, loosen the cover screws and remove the cover.
2. Use small Philips head screwdriver or small instrument screwdriver to turn variable resistor shaft. Clock-wise [CW] to increase power to maximum (+)  
↻, turn tool gently [CCW] to reduce power as required(-) ↻.



### Heater Element Switch ON/ OFF

1. Switch off the power, loosen the cover screws and remove the cover.
2. Adjust the heater switch on the PCB with a small plastic or wood flat blade probe.
  - 2-1. Slide the switch to “ON” :  
Enables heater.
  - 2-2. Slide the switch to “1” :  
Disables heater.

### Sensor range adjustment

1. The range is 4” - 9”;  
standard setting is 7” ± 3/4”
2. Clockwise: Increases the sensing range(+) ↻.
3. Counterclockwise: Decreases the sensing range(-) ↻.

### 4. DO NOT OVERTURN!

# operation

- + The user is to shake excess water off their hands.
- + The user then places their hands within the detection range of the sensor on the underside the dryer to activate the hand dryer.
- + The motor will start and air is blown onto the user's hands.
- + The motor will stop when the user's hands are removed from the detection range.

# maintenance

- + The hand dryer should be serviced on a regular basis to ensue long service life of the unit.
- + Isolate the unit from the power supply before any servicing or maintenance work is carried out.
- + Remove the cover by unscrewing the fixing screws on the underside of the cover.
- + Remove any dust or foreign body from the air intake and (both inside and outside the dryer). Where necessary, use a brush or vacuum cleaner.

# recommended maintenance schedule

## Daily

- + Wipe surface of dryer with soft cloth

## Weekly

- + Clear dust from air-intake grille

## Monthly

- + Remove carbon brushes and check for wear; replace if necessary
- + Clean dust / fluff from within motor housing (vacuum)

# cleaning

All grades of stainless steel will stain or discolour if due care and attention is not taken. The surface must be regularly cleaned to ensure a long service life of the hand dryer.

Use a soft cloth or sponge with a mild solution of soapy water as part of the regular washroom janitorial routine. Do not use abrasive or cream cleaners as these will damage the surface finish.

If the hand dryer is subjected to a highly chlorinated environment eg swimming pools or marine coastal locations, a further treatment, in addition to the regular cleaning as described above, is recommended by the application of a household cleaning product containing silicone.

If further information is required, contact The Splash Lab technical team for more detailed stainless-steel care guidelines.

# troubleshooting

## Corrective Actions for Initial Installation Failures

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### If the dryer will not run:

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- + First ensure that the breaker supplying the dryer is operational. If it is, disconnect the power and remove the dryer cover. Taking suitable precautions to avoid shock hazard, reconnect the power and check for voltage at the terminal block. Verify that connections are made correctly.
- 

### The dryer cycles by itself or runs constantly:

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- + Ensure that there is no obstruction on or in front of the IR sensor. Clean any dirt or debris off the sensor lens. If problem persists, replace sensor.
- 

### The dryer makes a loud noise and does not run for a complete cycle:

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- + Ensure that the supply voltage is correct. Dryer will make a loud humming noise if the input voltage is too high. Verify voltage requirement on unit rating label and correct supply as required. (If circuit board module has been damaged, replace it and the infra-red sensor module.)
- 

### The dryer runs but air stream is low pressure and/or low velocity:

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- + Ensure that the supply voltage is correct. Dryer will run weakly if the input voltage is too low. Verify voltage requirement on unit rating label and correct supply as required.
- 

We are always looking to improve. If these did not solve your problem please contact us and we will endeavour to help.

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## **Corrective Actions for Initial Installation Failures**

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### **If the dryer will not run:**

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- + First ensure that the breaker supplying the dryer is operational. If it is, disconnect the power and remove the dryer cover. Replace the CBM and IR sensor module. Taking suitable precautions to avoid shock hazard, reconnect the power and check for Voltage at the terminal block.
- 

### **The IR sensor only sees close range objects:**

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- + Ensure that there is no obstruction on or in front of the IR sensor. Clean any dirt or debris off the sensor lens. Check variable resistor for sensor range setting, If problem persists, disconnect the power and remove the dryer cover and replace CBM, IR sensor module.
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### **The heater gets hot but no air stream is produced:**

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- + Disconnect the power. Remove the dryer cover. Check variable resistor for speed setting Disassemble the blower- motor/ fan housing. Replace the fan motor. Reassemble.
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### **The dryer only blows cold air during a full cycle:**

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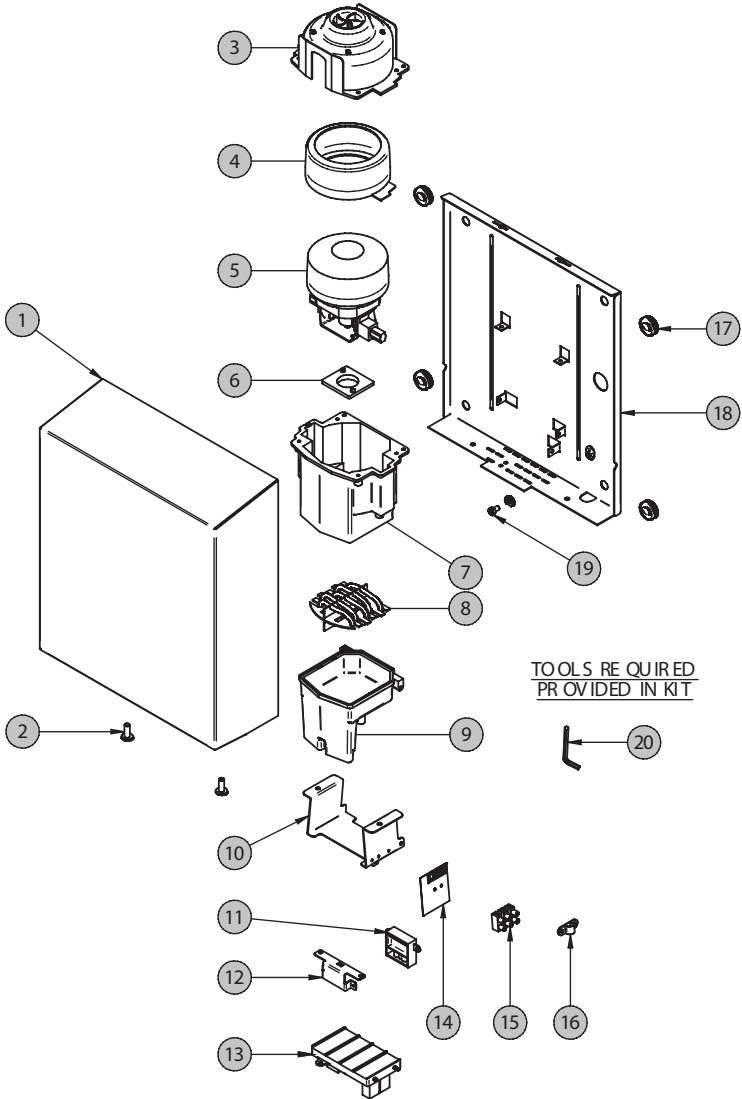
- + Disconnect the power. Remove the dryer cover and check/ ensure heater switch is ON. Disassemble the blower-motor/fan housing. Test the thermostat for open circuit. Check the heater element for signs of burning or breakage. Damaged element must be replaced.
- 

### **The air stream is low pressure and velocity:**

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- + Check the output nozzle for obstructions. If none are present, disconnect the power. Remove the dryer cover. Remove any dust/lint buildup from intake vent slots. Check VR for speed setting. Disassemble the blower / motor/ fan housing. Check the motor brushes for worn condition (1 1/4" graphite remains) and replace them, if necessary. Check motor brushes for wear; if less than 1 1/4" is remaining, replace brushes.
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# diagram





# spare parts & accessories

## Spare parts`

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<b>1</b>	Stainless Steel - Satin finish
<b>2</b>	Security hex screw (2 reqd.)
<b>3</b>	Blower housing - Top
<b>4</b>	Motor rubber - Large
<b>5</b>	Motor
	120V
	240V
<b>6</b>	Motor rubber - Small
<b>7</b>	Blower housing - Bottom
<b>8</b>	Heater assembly
	120V
	240V
<b>9</b>	Air outlet
<b>10</b>	Air outlet bracket
<b>11</b>	Sensor module
<b>12</b>	Sensor bracket
<b>13</b>	Circuit Board Module
	120V
	240V

<b>14</b>	Mylar shield with LNG marked
<b>15</b>	Terminal block
<b>16</b>	Cable clamp
	Cable clamp-EU
<b>17</b>	Rubber grommet -Base
<b>18</b>	Base plate
<b>19</b>	Grounding screw
<b>20</b>	Security hex wrench

**If further information is required,  
contact The Splash Lab technical team  
for more detailed guidelines.**

# warranty

We believe the future is personal. With a global mindset, we challenge conventional restroom norms via product innovation to create considered washroom solutions for corporate and educational spaces. We use rich raw materials, cutting-edge automation and considered washroom design to powerfully and positively influence the lives of people. We are The Splash Lab.

Demonstrating our commitment to quality and our belief in the strength of our designs, we can offer the following warranties.

The Splash Lab will warrant that its products will be free of manufacturing and material defects during normal use and environmental conditions as detailed below:

## **1 years' parts & labour, plus an additional 4 years parts only**

If a defect is found in normal use, The Splash Lab. will, at their 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.

Non-operation of the product due to environmental conditions beyond our control, installation error, incorrect maintenance, water quality, fair wear and tear, incorrect or inappropriate installation, misuse and abuse is not covered by the warranty.

Proof of purchase (original sales receipt) must be provided to The Splash Lab with all warranty claims.

The above warranty is valid for goods supplied within North America.

For goods supplied outside of North America, The Splash Lab will honour the above stated warranty periods for the parts only.

THE SPLASH LAB DISCLAIM ANY LIABILITY FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

The Product falls within the scope of the Waste Electrical & Electronic Equipment Directive 2002/96 EC (WEEE)



NOTE: This Product should not be disposed of with household waste.

Please recycle where facilities exist.

Check with your local authority for recycling advice,



E364850

# contact



## **General information**

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+1 310 410 5008

## **Technical support**

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**For further contact information visit:**

[www.thesplashlab.com](http://www.thesplashlab.com)

