

BC 2006 Dolphin Velocity Semi-Recessed, High Speed Hand Dryer

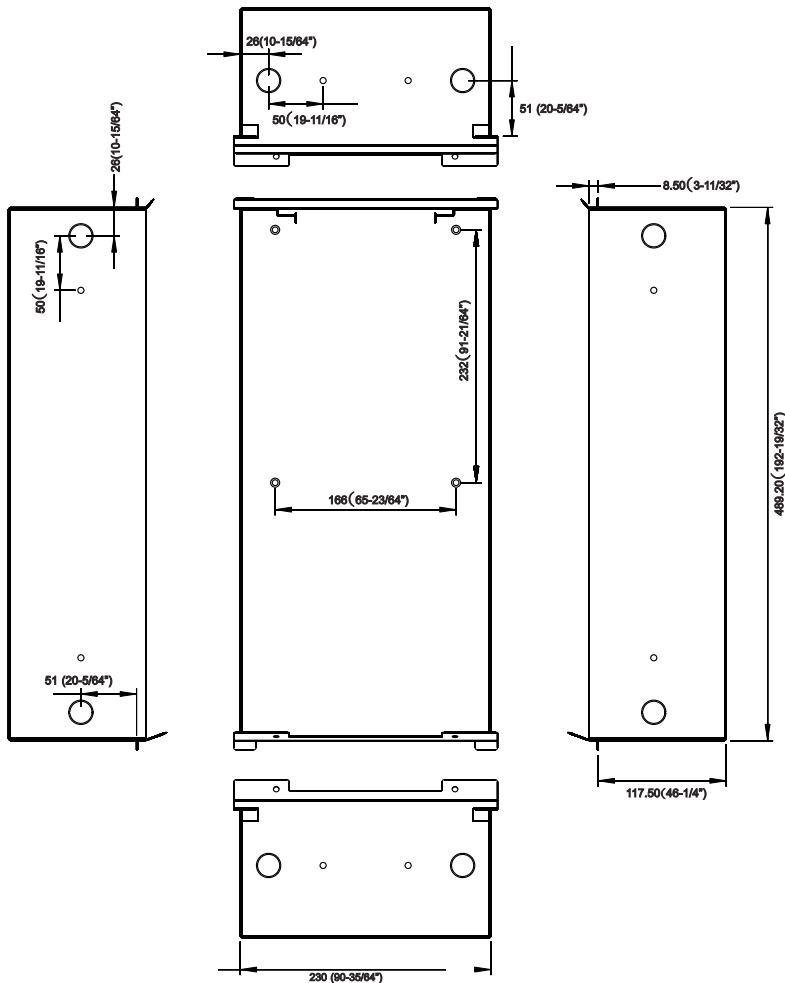
User Manual

Please read carefully before use



Diagram: mm

Rough wall opening: 235 x 495 x 123 mm (92-33/64" x 194-57/64" x 48-27/64")



Important Information

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



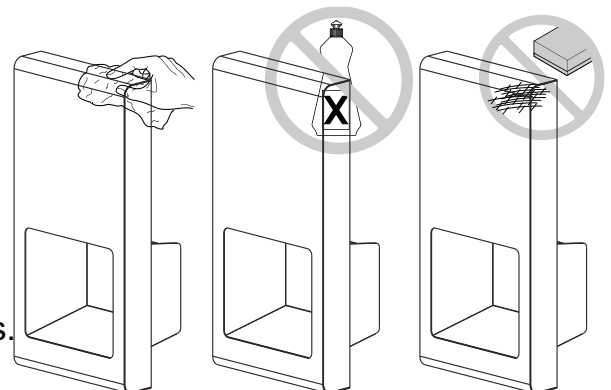
NOTE:

This Product should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority for recycling advice.

Cleaning and Maintenance

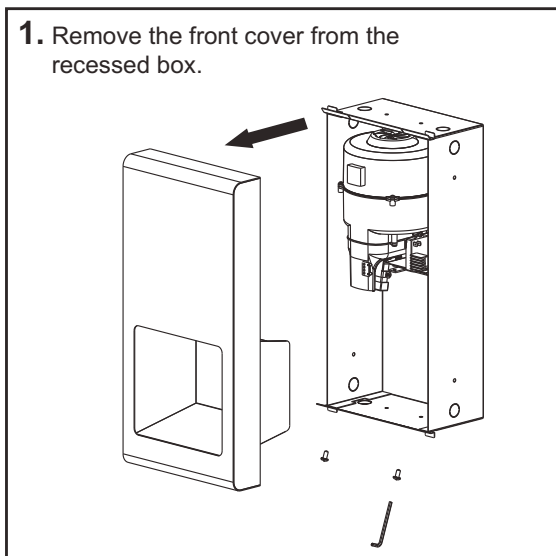
Periodic cleaning of the unit is recommended to ensure optimum performance.

- Disconnect the electrical supply.
- Remove the two cover-mounting screws.
- Remove the cover.
- Clean all dust lint from the interior of the dryer.
- Wipe the cover with a damp cloth and mild cleaning solution. Do not Soak. Never use abrasives to clean the cover.
- Replace the cover. Do not over tighten the screws.

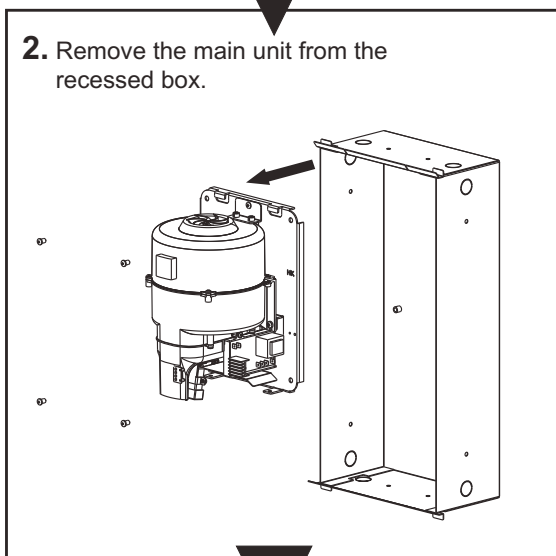


Installation

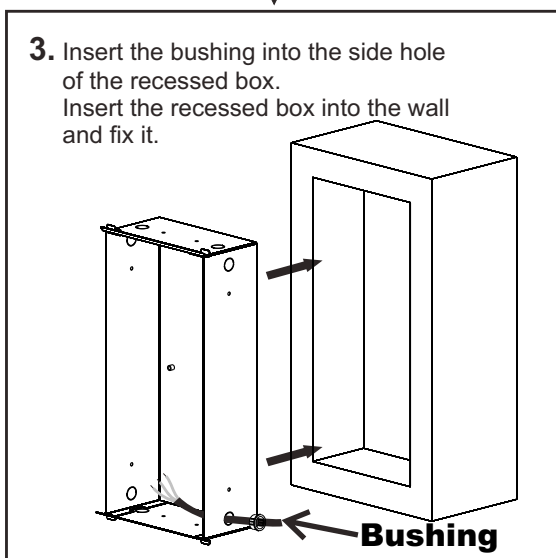
- 1.** Remove the front cover from the recessed box.



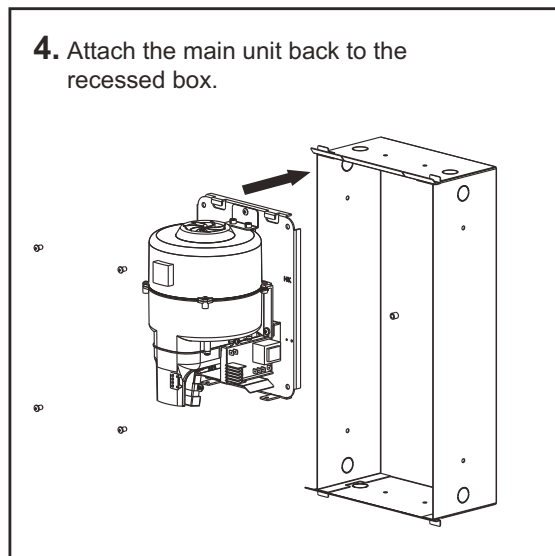
- 2.** Remove the main unit from the recessed box.



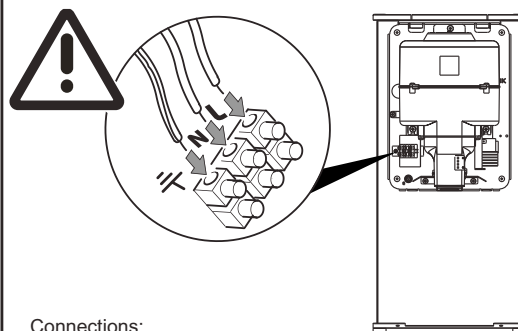
- 3.** Insert the bushing into the side hole of the recessed box. Insert the recessed box into the wall and fix it.



- 4.** Attach the main unit back to the recessed box.



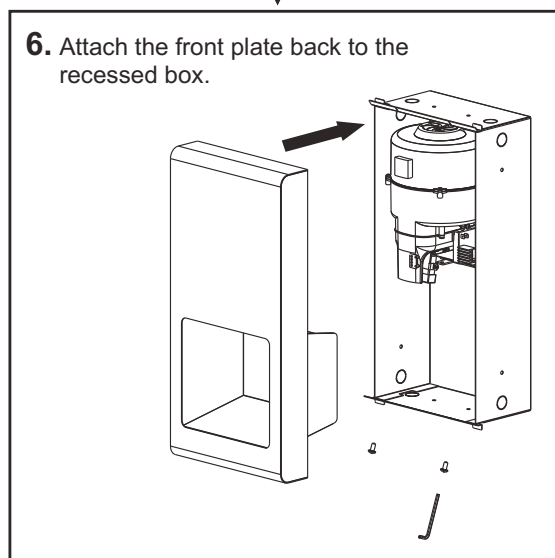
- 5.** The wire connections are as follows :



Connections:

- A. Connect the live wire (colored red or brown) to the terminal block marked "L".
- B. Connect the neutral wire (colored black or blue) to the terminal block marked "N".
- C. Connect the ground wire (colored green and yellow) to the green screw marked ⏏ .

- 6.** Attach the front plate back to the recessed box.



General safety information:

⚠ WARNING

This product is intended for installation by a qualified service person. Use AWG NO. 14 (1.6 mm²) solid conductor for wiring.

⚠ WARNING

Disconnect power at the service breaker before installing or servicing.

⚠ DANGER

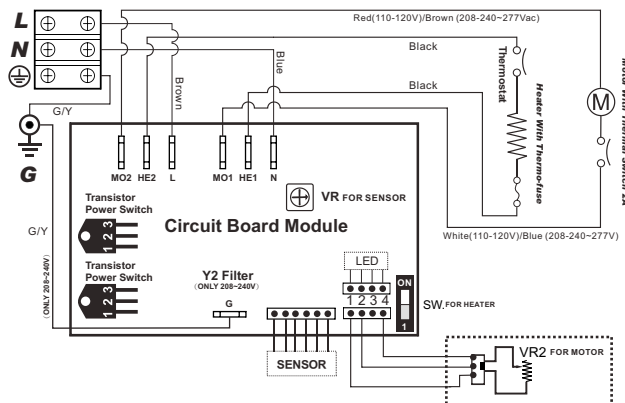
Failure to properly ground unit could result in severe electrical shock and/or death.

⚠ WARNING

All units must be supplied with a 3-wire service. The ground wire must be connected to the dryer's backplate.

-- NOTE: Do not install dryer over washbasin --

Circuit Diagram



TECHNICAL SPECIFICATIONS

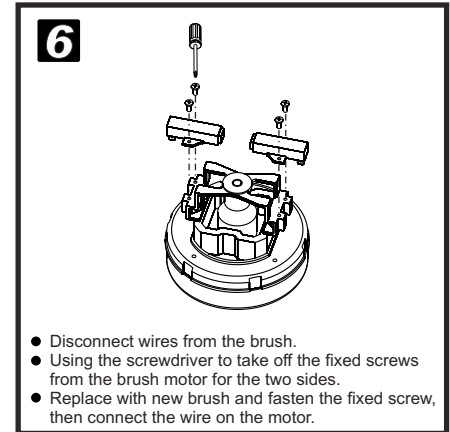
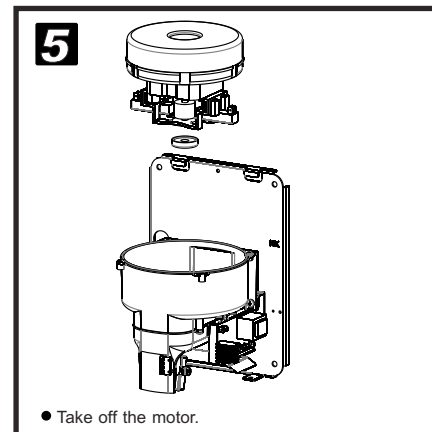
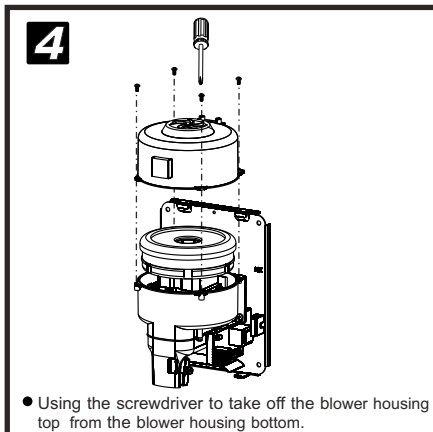
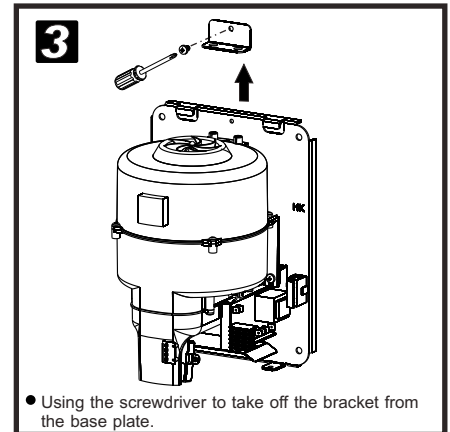
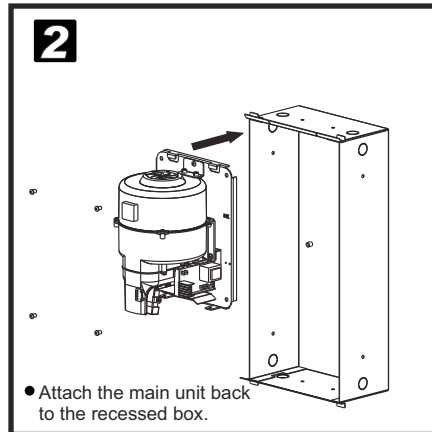
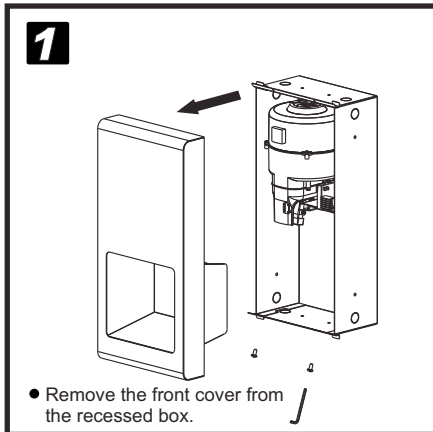
ITEM CATEGORY	PERFORMANCE DATA
Operating Voltage	110-120Vac, 50/60 Hz, 1.34-1.6 kW 220-240Vac, 50/60 Hz, 1.34-1.6 kW
Warm Air Speed Output	168-224 mi/hr (75-100 m/s), adjustable
Air Output Temperature	113°F (45°C) – Ambient Temp. 68°F (20°C)
Dryer Shall Deliver	51-68 CFM (87-116 m ³ /h)
Motor Type	15/16HP, 350-700W, 12000-18000 R.R.M., Adjustable; Brush Type, Dual Ball Bearings
Motor Thermal Protection	Auto Resetting Thermostat turns unit off, 120V at 275°F (135°C), 240V at 221°F (95°C) - US-Spec 240V at 221°F (105°C) - EURO Spec
Heater Element	450-900W, adjustable
Heater Thermal Protection	Auto Resetting Thermostat turns unit off at, 149°F (65°C)
Drying Time	Less than 15 seconds
Stand-by Power	Less than 0.5W
Circuit Operation	Infrared Automatic, self adjusting
Sensor Range	Standard 7" [170 mm±20 mm], Adjustable
Timing Protection	60 seconds auto shut off
Drip proof	IP21
Isolation	CLASS 1
Net Weight	12.8 lbs (5.8 kg)
Shipping Weight	14.6 lbs (6.6 kg)
Unit Size	8-5/64" W x 11-19/64" H x 7-6/64" D [205 mm x 287 mm x 180 mm]

Diagnostics and Remedies

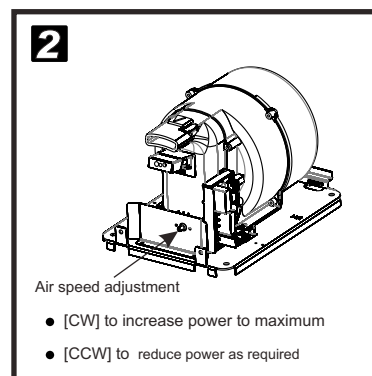
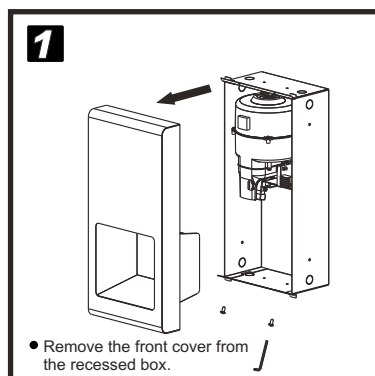
Symptom	Corrective Actions for Initial Installation Failures
If the dryer will not run	First ensure that the breaker supplying the dryer is operational. If it is, disconnect the power and remove the dryer cover. Taking suitable precautions to avoid shock hazard, reconnect the power and check for Voltage at the terminal block. Verify that connections are made correctly. Adjust the VR to make sure it is not set too low.
The dryer cycles by itself or runs constantly	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	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 CBM has been damaged, replace CBM, IR sensor module and VR component and cable.
The dryer runs but air stream is low pressure and/or low velocity	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.

Symptom	Corrective Actions for In-Service Failures
If the dryer will not run	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. Test the VR for open circuit (see Technical Specifications for value). Replace VR if $\Omega = \infty$. 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	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 heater gets hot but no air stream is produced	Disconnect the power. Remove the dryer cover and disassemble the blower-motor/fan housing. Replace the fan motor.
The dryer only blows cold air during a full cycle	Disconnect the power. Remove the dryer cover and 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	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. Disassemble the blower-motor/fan housing. Check the motor brushes for worn condition ($\leq 25/64$ " [10 mm] graphite remains) and replace them, if necessary.

Brushes replacement



Warm air speed adjustment



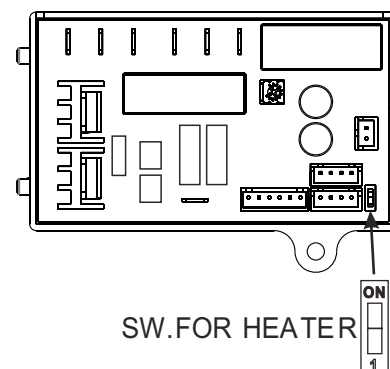
Heater Element Switch ON/ OFF

1. Cut off the power, loosen the screw of the cover and remove the cover.

2. Adjust the heater switch on the PCB with a flathead screwdriver.

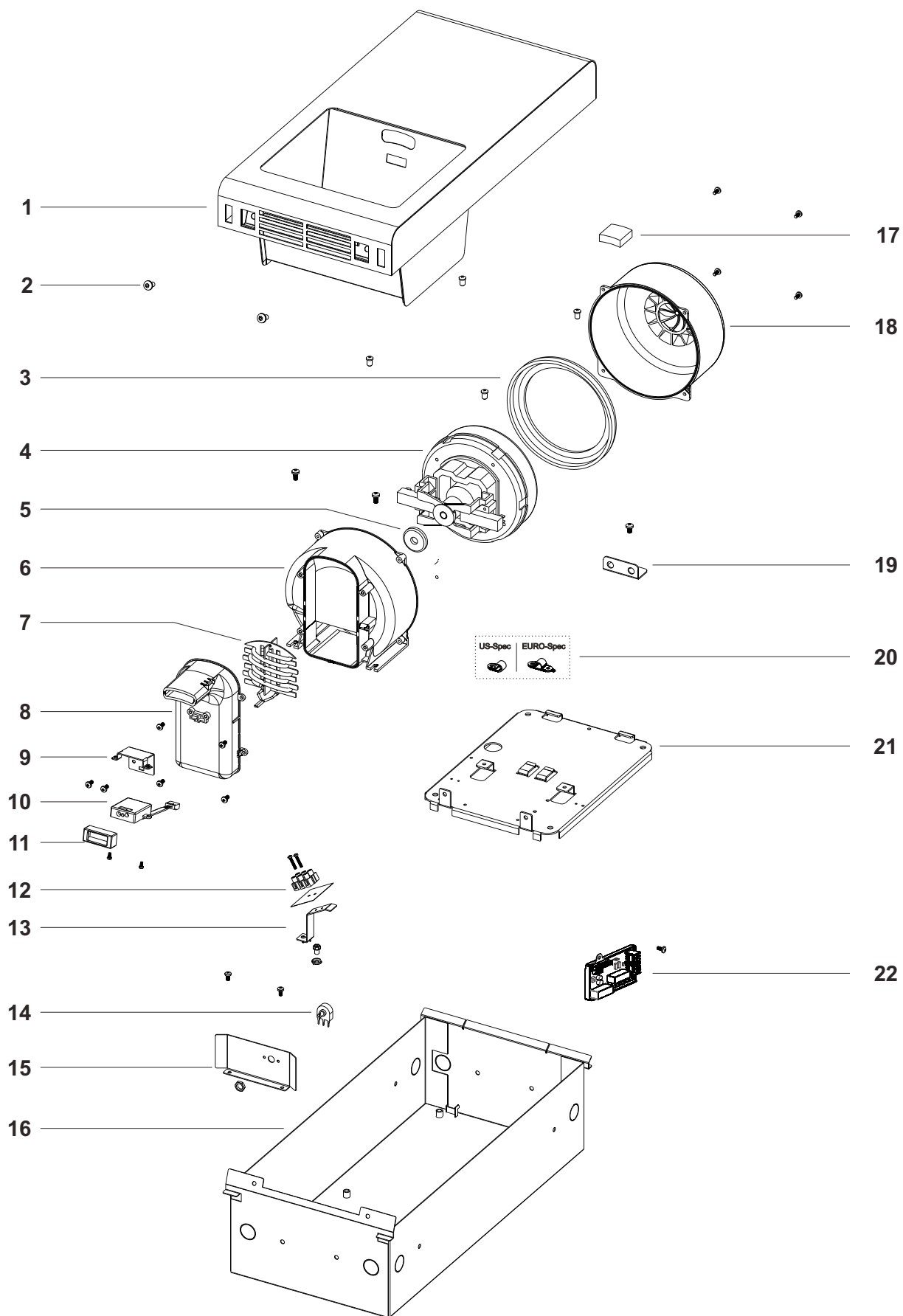
2.1 Turn the switch to "ON": heater on

2.2. Turn the switch to "1": heater off



THIS UNIT MUST BE FITTED AND SERVICED BY SUITABLY QUALIFIED PERSONNEL

Assembly Diagram



Repair parts list

Key	Description	Qty
1	Cover	1
2	Security hex screw	2
3	Motor rubber - Large	1
4	Motor	1
	110-120Vac 700W (US-Spec)	
	220-240Vac 700W (US-Spec)	
	220-240Vac 700W (EURO-Spec)	
5	Motor rubber - Small	1
6	Blower housing - Bottom	1
7	Heater assembly	1
	900W@120Vac,16Ω	
	900W@240Vac,64Ω	
8	Air outlet	1
9	Sensor module bracket	1
10	Sensor module	1
11	Sensor protector	1
12	Terminal block	1
13	Terminal block bracket	1
14	Variable resistance (VR)	1
	50KΩ@240Vac	
	100KΩ@240Vac	
15	Variable resistance bracket	1
16	Recessed box	1
17	Shock absorbed	1
18	Blower housing - Top	1
19	Blower housing bracket	1
20	Nylon cable clamp	1
	US-Spec	
	EURO-Spec	
21	Base plate	1
22	Circuit Board Module (CBM)	1
	CBM@120Vac	
	CBM@240Vac	

Bell-Chem Products Company

Southpoint, Compass Park, Bodiam, Robertsbridge TN32 5BS

Tel: 01424 202224

Fax: 01424 205200

www.dolphindispensers.co.uk

info@dolphindispensers.co.uk

