

BC200I / BC200IB

DOLPHIN VELOCITY HIGH SPEED HAND DRYER

User Manual



Please read carefully before use



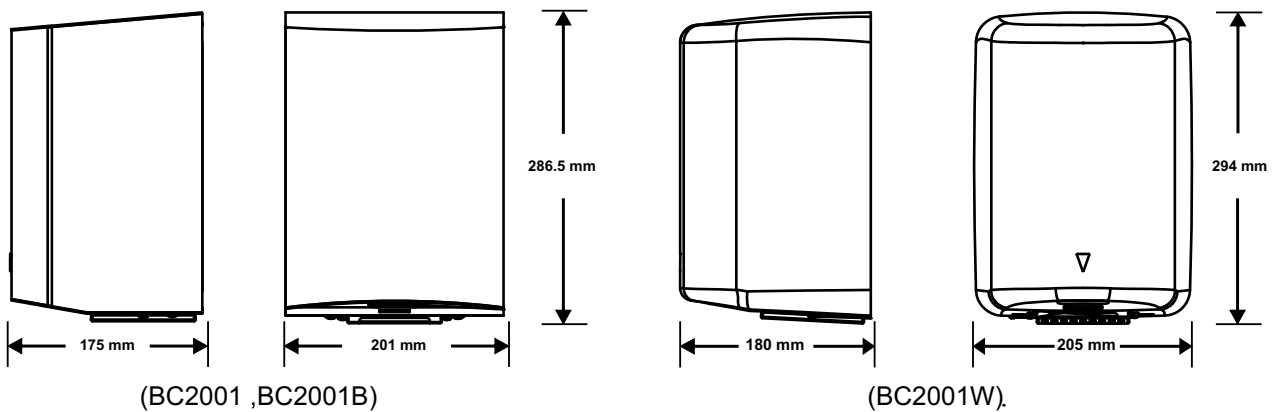


High-Speed Hand drier

**BC2001
BC2001B
BC2001W**

Operating Instructions and Parts Manual (Automatic)

Surface Mount



TECHNICAL SPECIFICATIONS

ITEM CATEGORY

PERFORMANCE DATA

Operating Voltage	220-240Vac, 50/60Hz, 1.34-1.6kW
Warm Air Speed Output	75-100m/s, adjustable
Motor Type	350-700W, 12000-18000r.p.m., Adjustable; Brush Type, Dual Ball Bearings
Motor Thermal Protection	Auto Resetting Thermostat turns unit off at 95°C {203°F}
Heater Element	450-900W, adjustable
Heater Thermal Protection	Auto Resetting Thermostat turns unit off at 85°C {185°F}
Drying Time	Less than 15 seconds
Stand-by Power	Less than 0.5W
Circuit Operation	Infrared Automatic, self adjusting
Sensor Range	Standard [170 ± 20mm], Adjustable, The range is [120 - 220mm]
Timing Protection	60 seconds auto shut off
Drip proof	IP21 ♦
Isolation	CLASS 1
Net Weight	5.8kg
Shipping Weight	6.6kg
Unit Size	201mm (W) x 286.5mm(H) x 175mm (D) (BC2001 ,BC2001B) 205mm (W) x 294mm (H) x 180mm (D) (BC2001W)

COVER TYPE/ COVER FINISH

BC2001- Stainless steel; #4 satin finished. (AISI 304 t:1.2 mm)

BC2001B- Stainless steel; Bright finished. (AISI 304 t:1.2 mm)

BC2001W- Steel; White porcelain enameled coating. (t:1.6 mm)

General safety information

⚠ WARNING

This product is intended for installation by a qualified service person.
Use 1.2mm² solid conductor for wiring.

⚠ DANGER

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

⚠ WARNING

Disconnect power at the service breaker before installing or servicing. Not for household use may cause burns.

⚠ WARNING

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

NOTE: We do not recommend installing this dryer above a basin. If you are installing this dryer above a basin, please make sure that reflection won't occur.

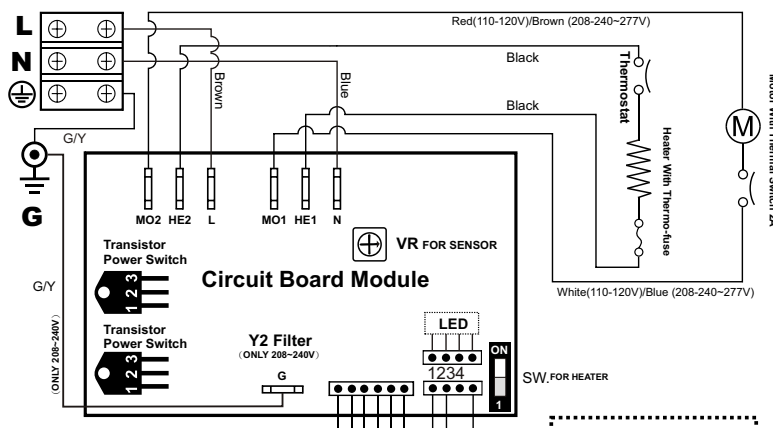
[Type Y attachment]

If the power supply cord is damaged, it must be replaced by the manufacturer or its service agent or a qualified person in order to avoid a hazard. Disconnect the fixed wiring only in accordance with the wiring rules.

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 they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

Circuit Diagram



Installation

1. Make sure power supply breaker is switched off. Installation must be carried out in accordance with the current edition of the local wiring regulations code having jurisdiction. Installation should be performed only by a qualified electrician.
2. Place template against wall at desired height (see mounting height recommendations) and mark locations of 4 mounting holes and wire service entry at knockout (KO) location.
Note: For two or more dryers, dryers should be no closer than 24 inches (610mm) on center.
3. Remove and retain 2 cover screws and cover.
4. Connect supply wires to terminal block where indicated and connect ground wire to base plate with ground screw.

Connections:

- A. Connect the live wire (colored red or black or brown) 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 terminal block marked "⊕".

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

5. Replace cover. Do not over-tighten screws.

Recommended mounting heights

- from bottom edge of dryer above finished floor (AFF)

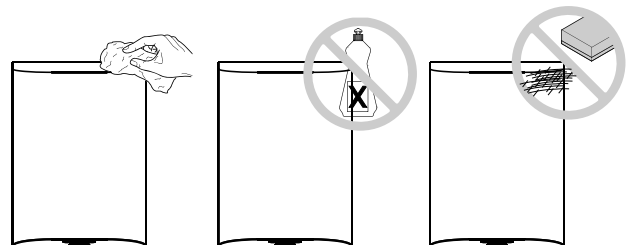
Men	1000mm
Women	960mm
Children 4-7 years	812mm
Children 8-10 years	860mm
Children 11-13 years	910mm
Children 14-16 years	960mm
Handicaped	860mm

'Unit should be mounted to give no less than 300mm clearance from the bottom of the unit to the nearest surface below'

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.

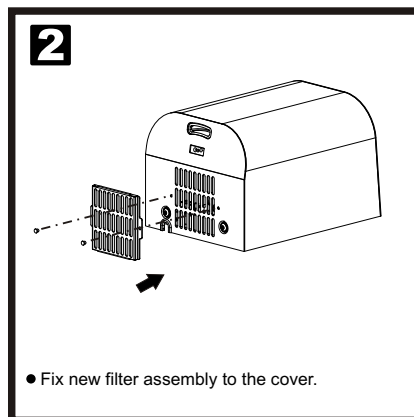
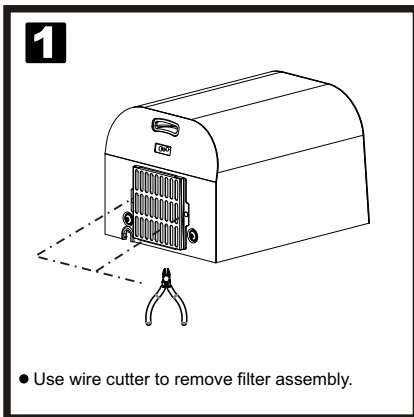


Operation

- No-touch operation.
- Shake excess water from hands.
- Place hands under the outlet to start operation.
- Rub hands lightly and rapidly.
- Stops automatically after hands are removed.

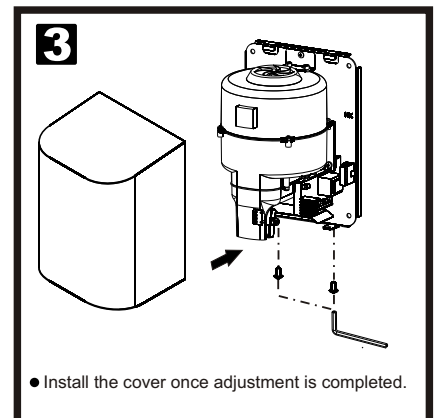
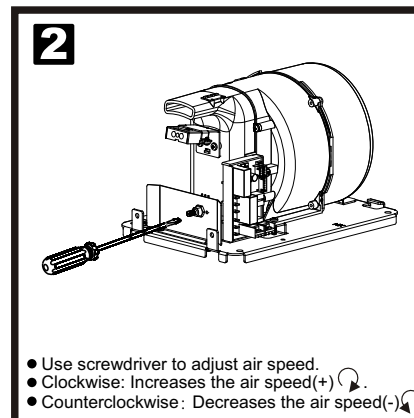
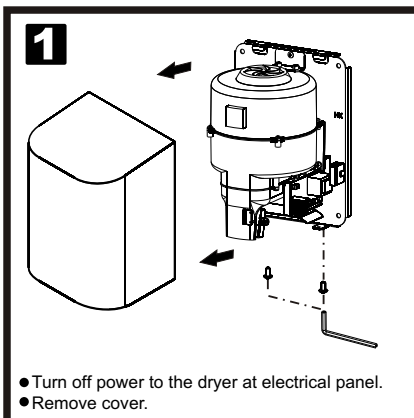
Change filter assembly

It is recommended to change the filter every six months.



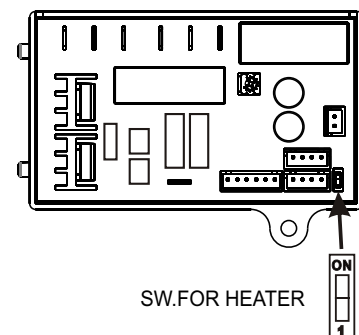
Setting Adjustment

A. Warm air speed adjustment



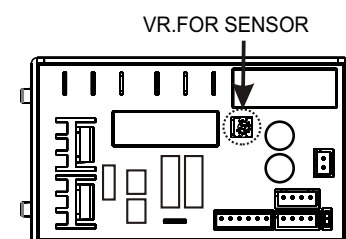
B. Heater Element Switch ON/OFF

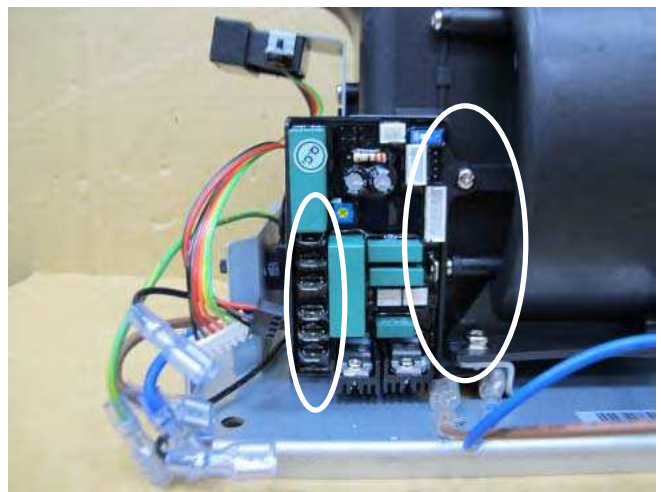
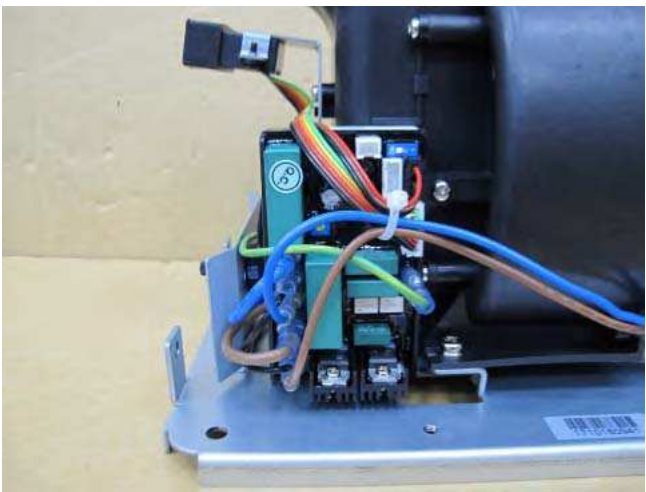
1. Switch off the power, loosen the cover screws and remove the cover.
2. Adjust the heater switch on the PCB with a small plastic or wood flat blade probe.
 - 2-1. Heater ON: Slide the switch to "ON".
 - 2-2. Heater OFF: Slide the switch to "1".



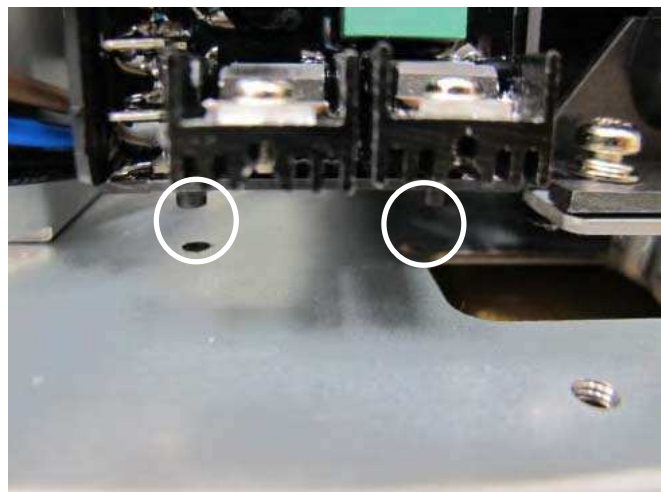
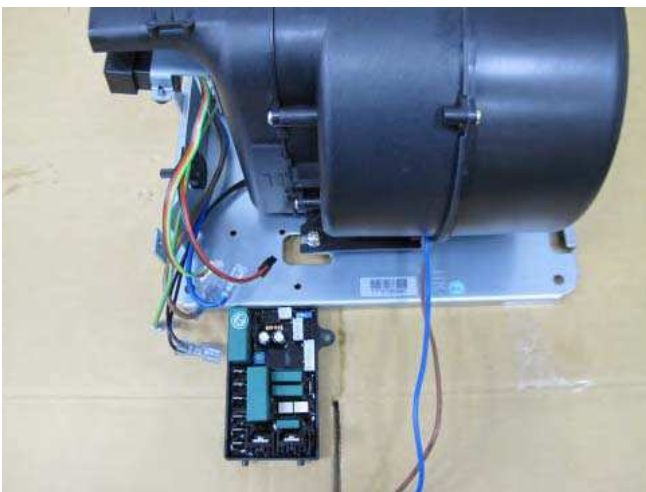
C. Sensor range adjustment

1. The recommended unit sensor range is 150mm. This can be adjusted from 120mm to 220mm.
2. Clockwise: Increases the sensing range(+)
3. Counterclockwise: Decreases the sensing range(-)
4. **DO NOT OVERTURN!**



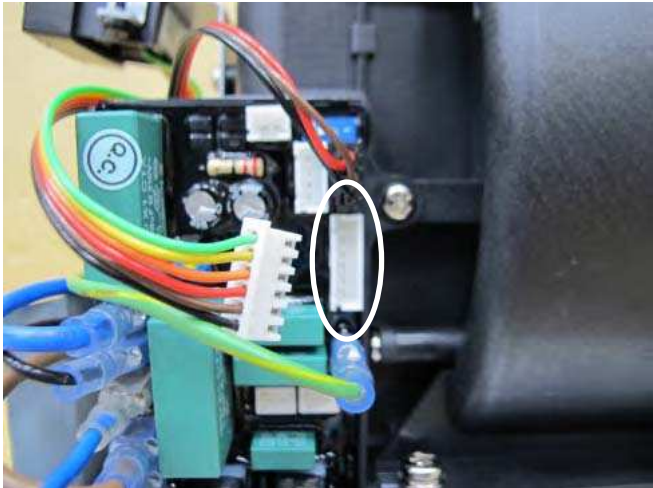


1. Pull off the six wires and remove the fixing screws of the timer.

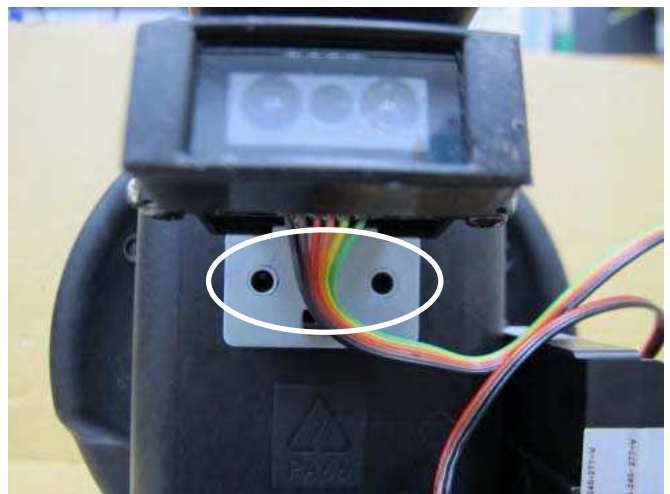


**2. Ensure that the two flanges on the timer to be wedged in the two holes are on the base plate.
3. Fix the timer to the blower and connect the four wires to the timer as the photos of procedure 1.**

Sensor replacement



- 1. Pull off the wires that connect timer and remove the fixing screws of the timer.
- 2. Fix the sensor on the sensor bracket as in the photos of procedure 1, and plug the wires on the tim

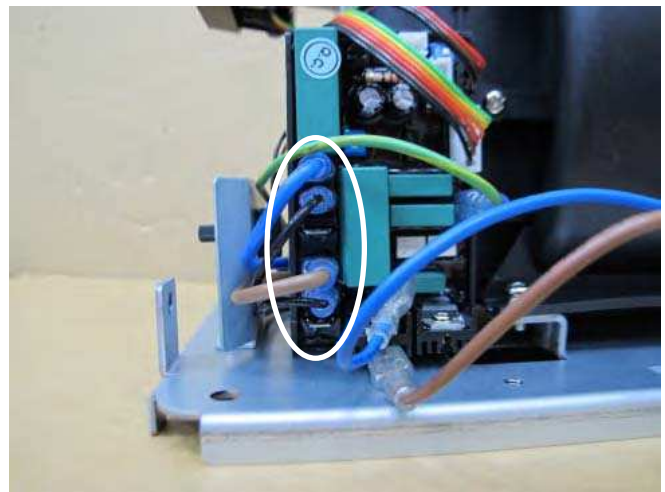
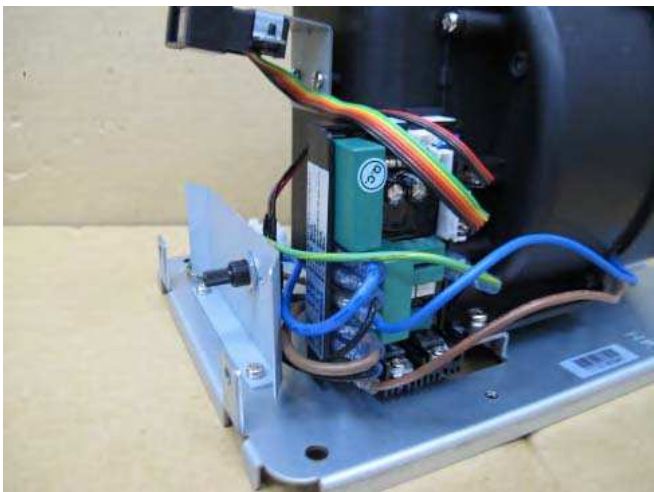


- 3. Remove the screws from the sensor bracket to take out the sensor.



4. Remove the black screws on the sensor. Install the new sensor and reverse Steps 1~3 to fasten the sensor.

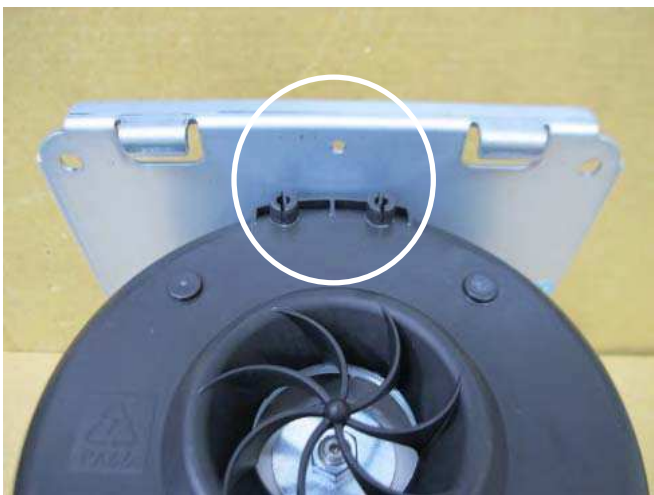
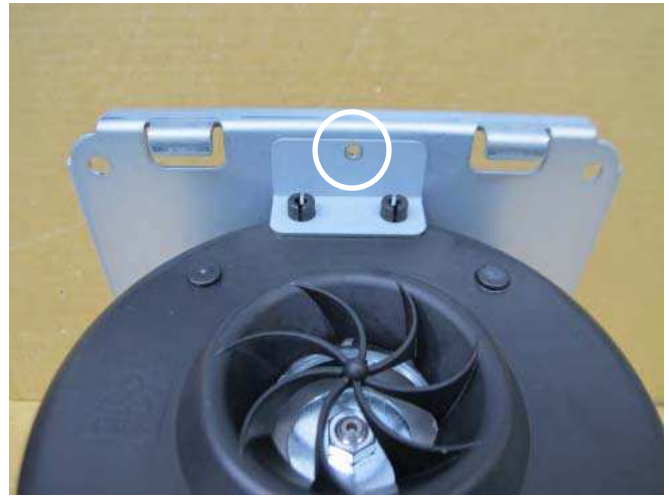
Motor replacement



1. Remove the wires that connect motor to the timer.



2. Loosen the fixing screws of the blower.



3. Remove the screw on base plate and fan blower, and then remove the bracket of fan blower.

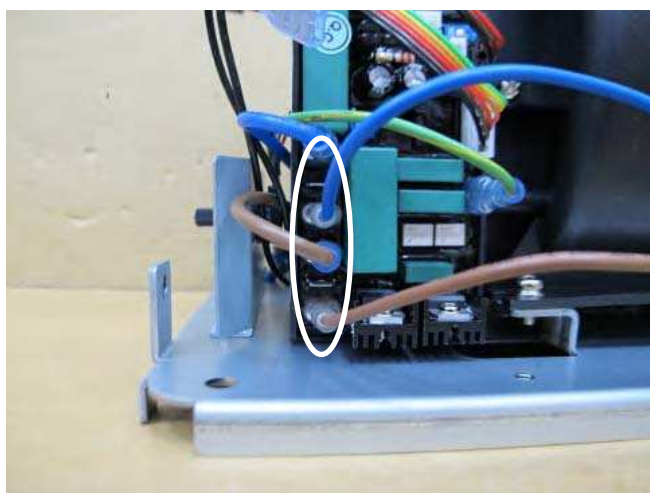


4. Remove upper fan blower, motor rubber (big) and motor in order, and then replace the motor with a new one.

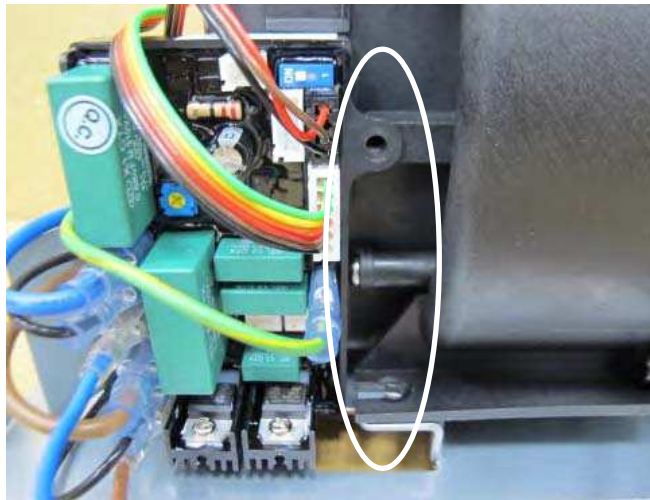
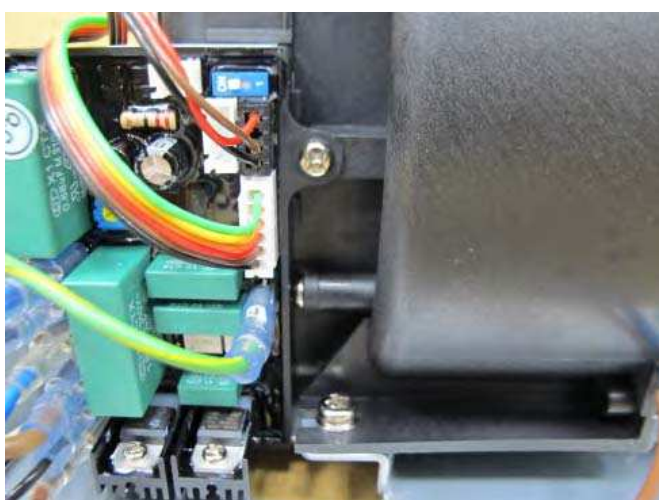


5. To replace the Motor, the wire set must be fixed to the ditch in the lower housing of the blower. Reverse Steps 1~4 to fasten the motor.

Heater replacement

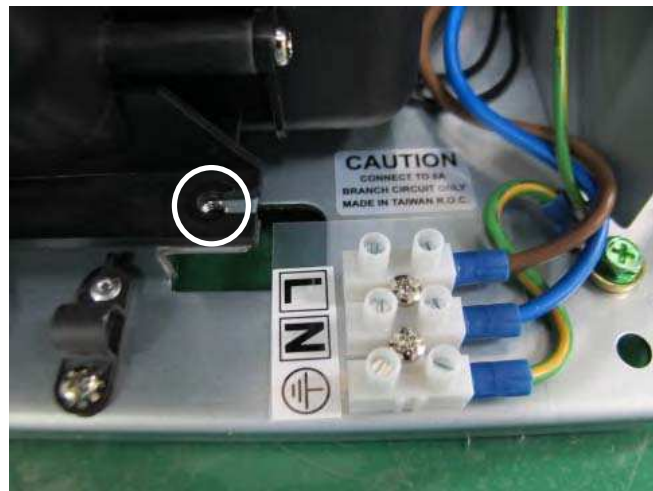


1. Remove the wires that connect heater to the timer.

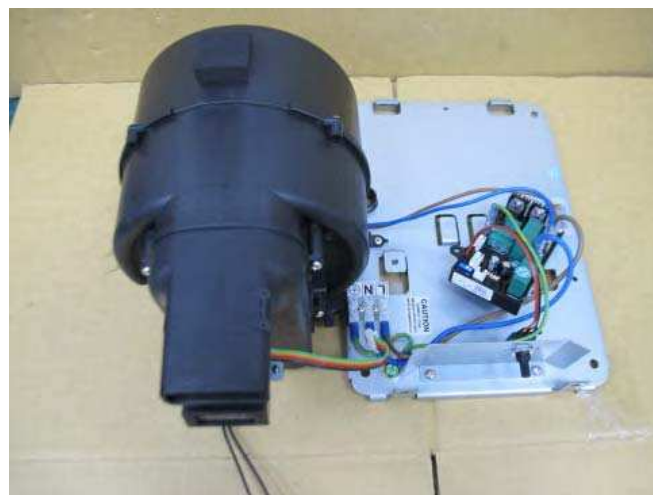
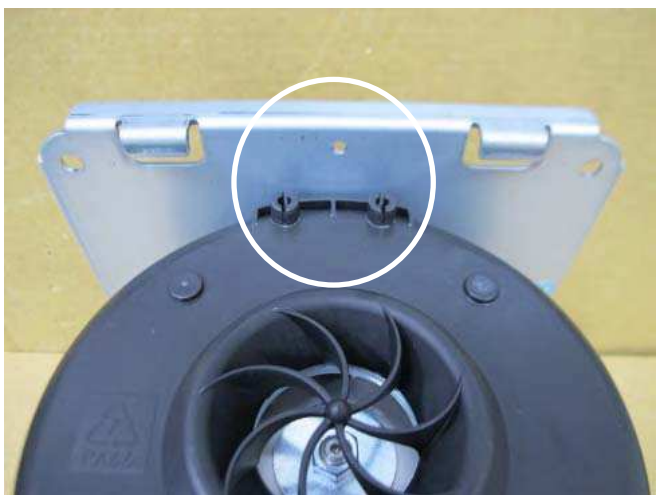
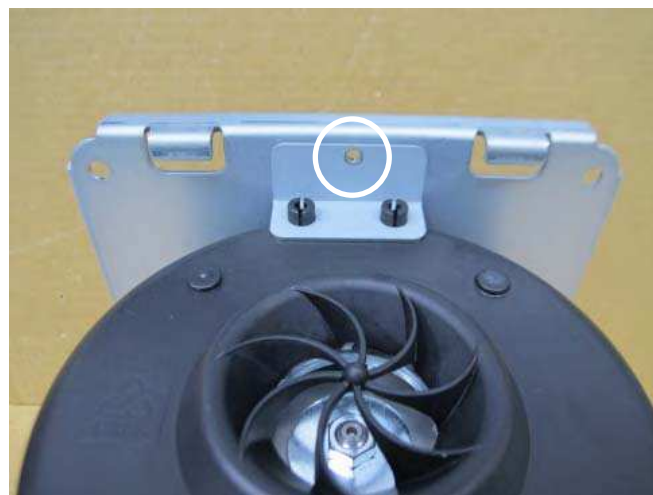


2. Loosen the fixing screws of the blower .

Heater replacement



3. Loosen the fixing screws of the blower .



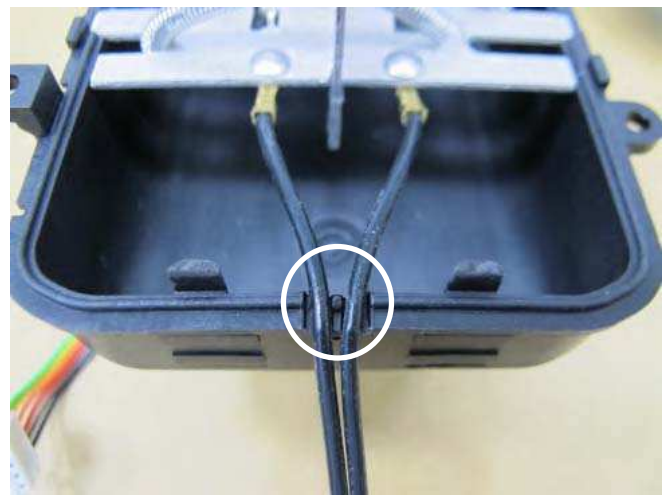
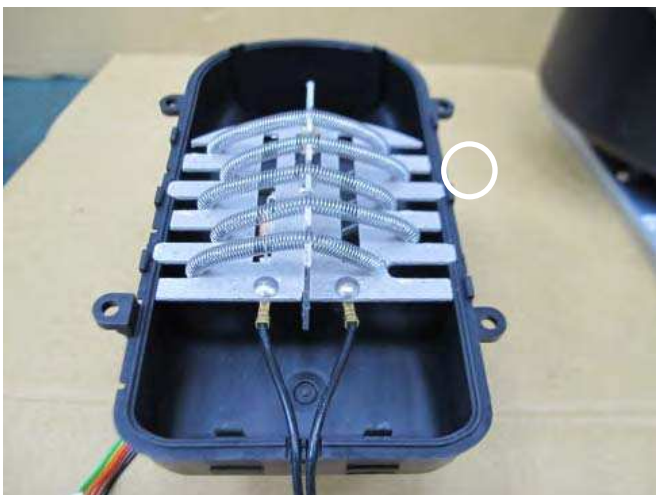
4. Remove the screws on base plate and fan blower bracket. Remove the fan blower bracket to separate the motor assembly and the base plate.



5. Remove the screws on air outlet.

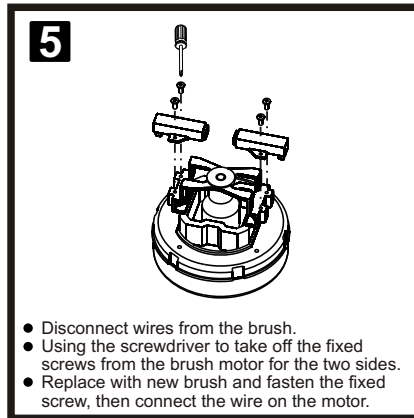
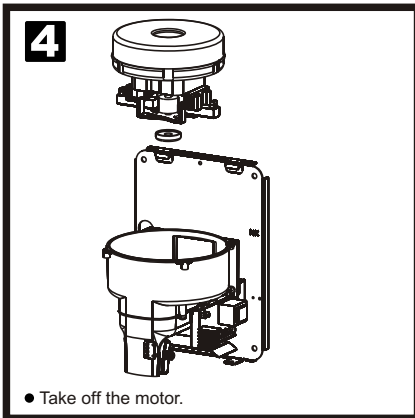
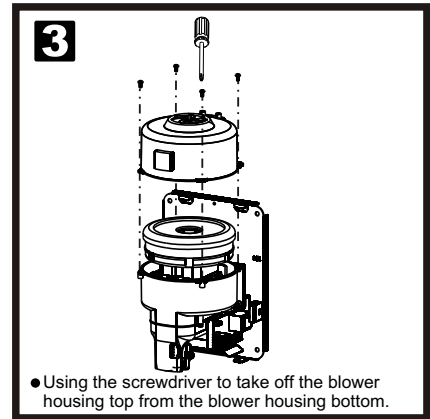
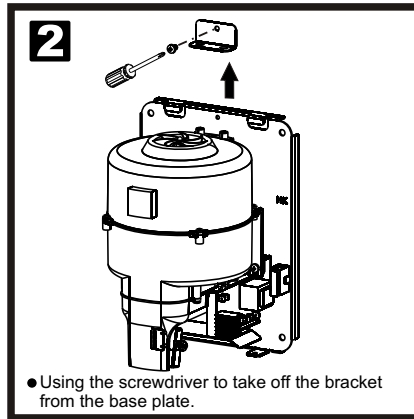
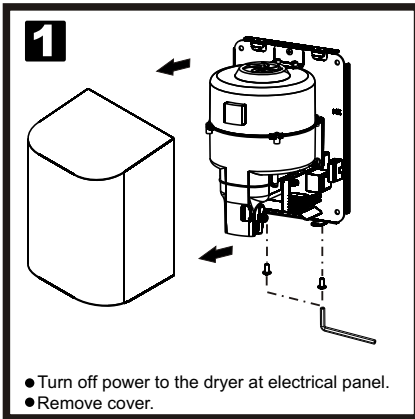


6. Replace the heating element with a new one.



7. To replace the Heater, the wire set must be fixed to the ditch in the lower housing of the blower. Reverse Steps 1~6 to fasten the heater.

Brushes replacement



THIS UNIT MUST BE FITTED AND SERVICED BY SUITABLY QUALIFIED PERSONNEL

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.

Diagnosics 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.

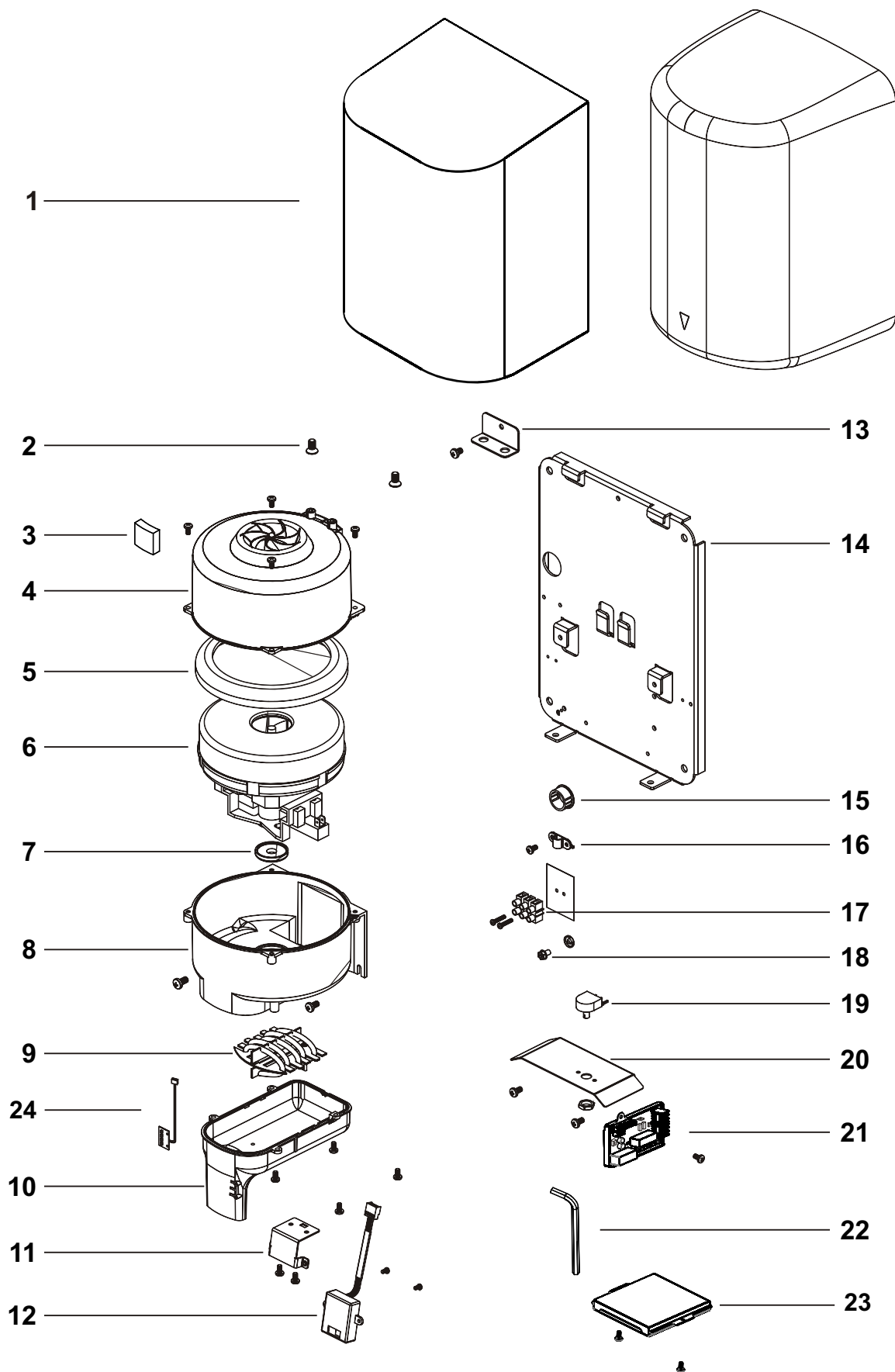
Symptom	Corrective Actions for In-Service Failures
If the dryer will not run	First ensure that the breaker supplying the dryer is operational. If it is, disconnect the power and remove the dryer cover. Replace the CBM and IR sensor module. Test the VR for open circuit (see Technical Specifications for 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.

Warranty

LIMITED THREE-YEAR WARRANTY

Please see our website by following this link: <http://www.dolphindispensers.co.uk/> or contact our customer service team on 01424 202224 for more details.

Diagram



Repair parts list

Key	Description
1	Stainless Steel - Bright finish (BC2001B) Stainless Steel - Satin finish (BC2001) Steel - White porcelain enameled coating (BC2001W)
2	Security hex screw (2 reqd.)
3	Shock absorber
4	Blower housing - Top
5	Motor rubber - Large
6	Motor
7	Motor rubber - Small
8	Blower housing - Bottom
9	Heater element
10	Air outlet
11	Sensor bracket
12	Sensor module
13	Blower housing bracket
14	Base plate
15	Nylon hole bushing
16	Cable clamp
17	Terminal block
18	Grounding screw
19	VR (variable resistance)
20	VR bracket
21	Circuit Board Module
22	Security hex wrench
23	Filter assembly
24	LED assembly (only for BC2001W)

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