

BC2003BM

DOLPHIN BEHIND MIRROR HIGH SPEED HAND DRYER

USER MANUAL



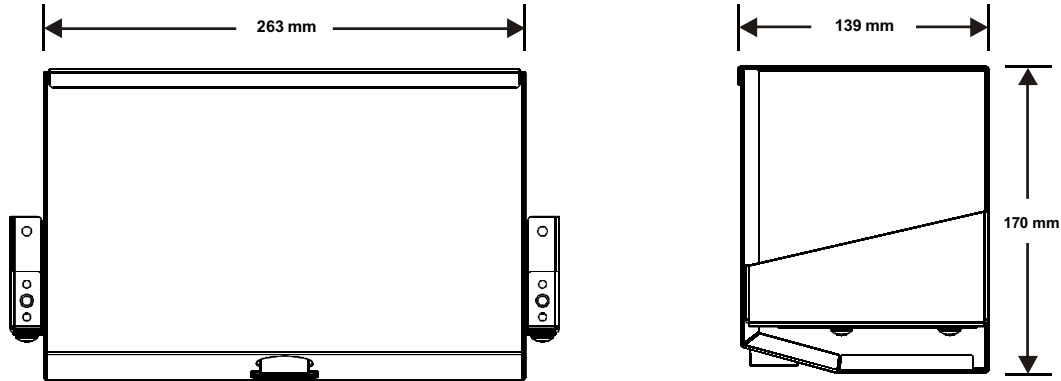


High-Speed Hand drier

BC2003BM

Operating Instructions and Parts Manual (Automatic)

Surface Mount



TECHNICAL SPECIFICATIONS

ITEM CATEGORY

PERFORMANCE DATA

Operating Voltage	220-240Vac, 50/60Hz, 0.84-1.0kW
Warm Air Speed Output	90m/s, adjustable
Motor Type	250-500W, 29000r.p.m., Adjustable; Brush Type, Dual Ball Bearings
Motor Thermal Protection	Auto Resetting Thermostat turns unit off at 95°C {203°F}
Heater Element	500W, 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	IP14
Isolation	CLASS 1
Net Weight	4.5kg
Shipping Weight	5.2kg
Unit Size	263mm (W) x 170mm(H) x 139mm (D)

COVER TYPE/ COVER FINISH

BC2003BM- Stainless steel; #4 satin finished. (AISI 304 t:1.2 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 that this dryer is installed above a basin. If you are installing this dryer above a basin you need to satisfy yourself that reflection won't occur.

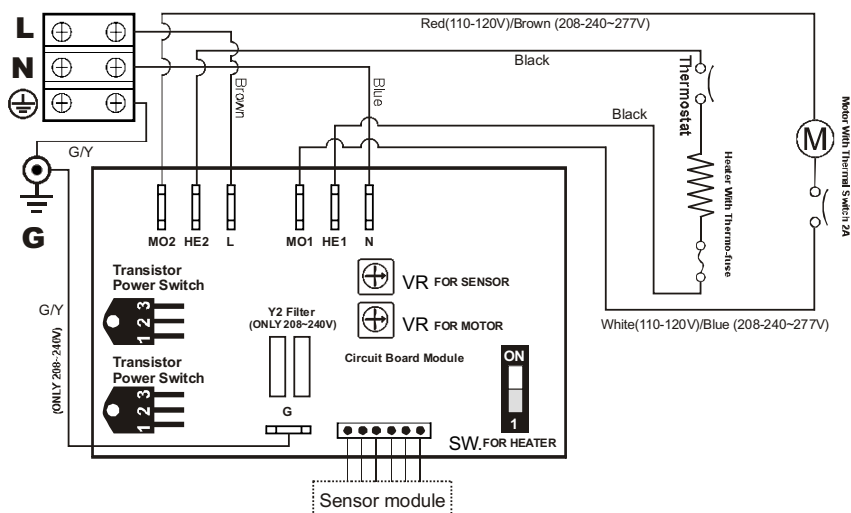
【Type Y attachment】

If the power supply cord is damaged, it must be replaced by the manufacturer or its service agent or a similar qualified person in order to avoid a hazard. Means for disconnection must be incorporated in the fixed wiring 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.

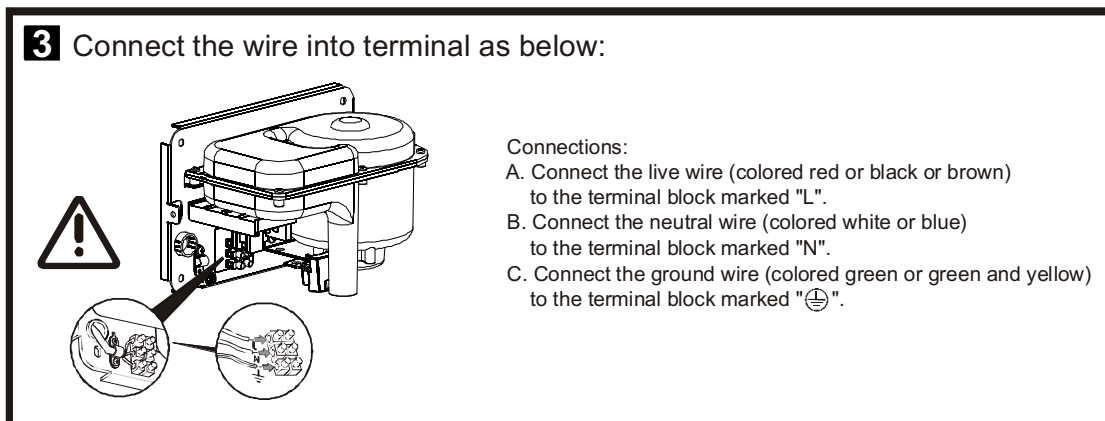
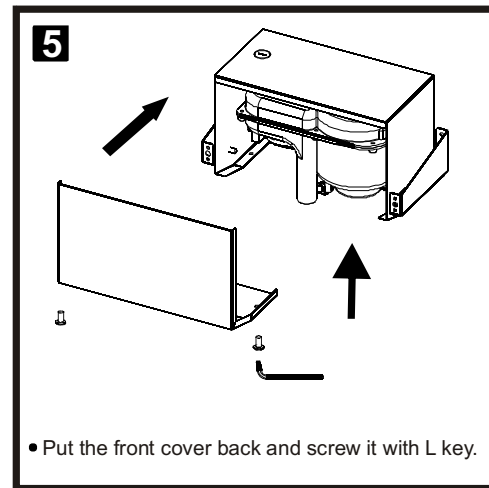
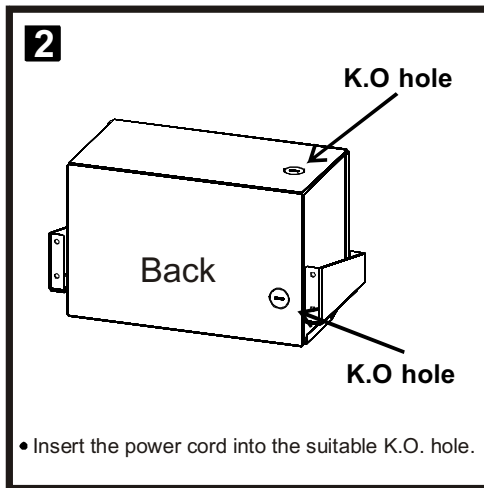
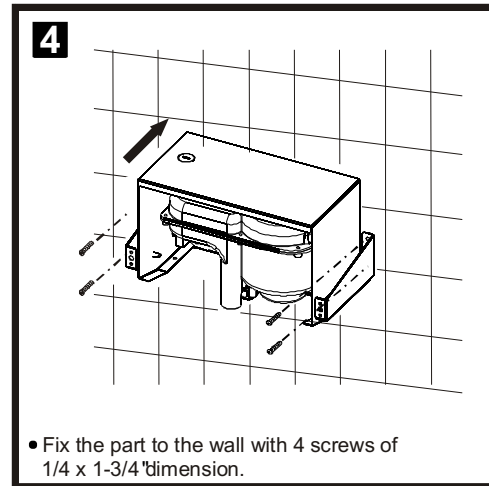
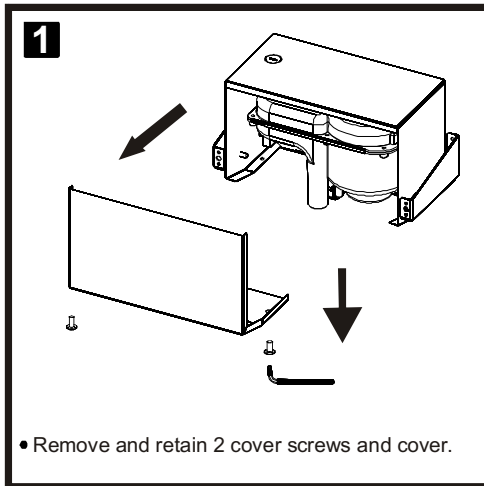
Children should be supervised to ensure that they do not play with the appliance.

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.



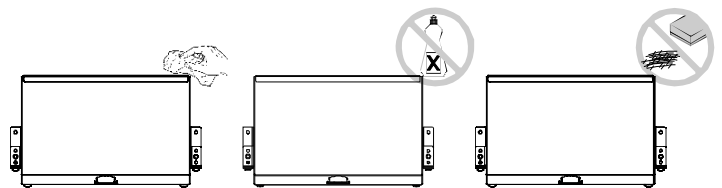
Operation

- 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.

Cleaning and Maintenance

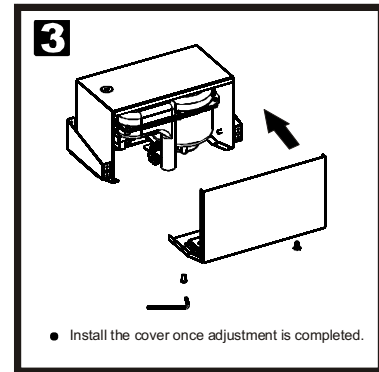
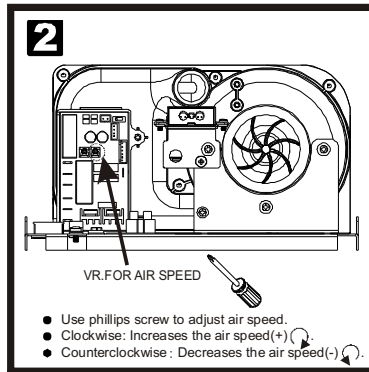
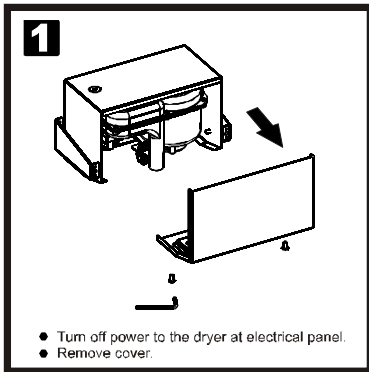
Periodic cleaning of the unit is recommended to ensure optimum performance.

- 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.



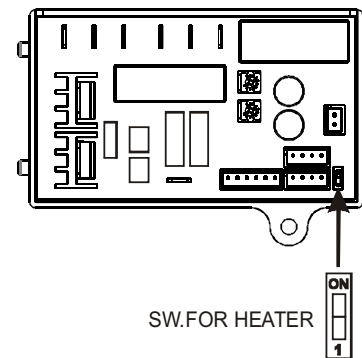
Setting Adjustment

A. Warm air speed adjustment



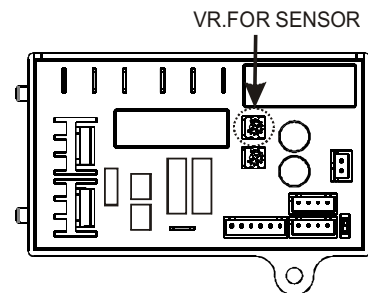
B. Heater Element Switch ON/OFF

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".



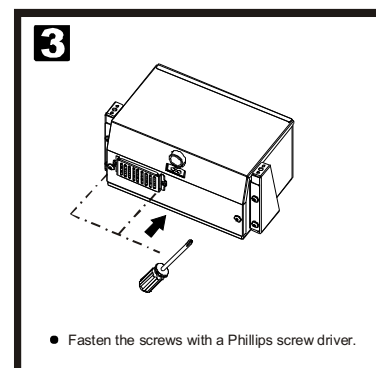
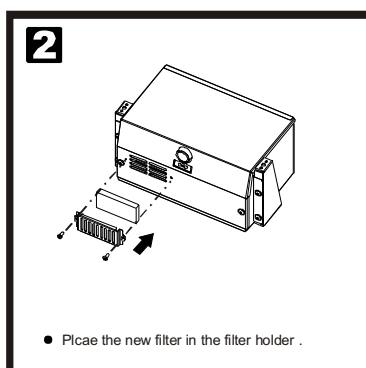
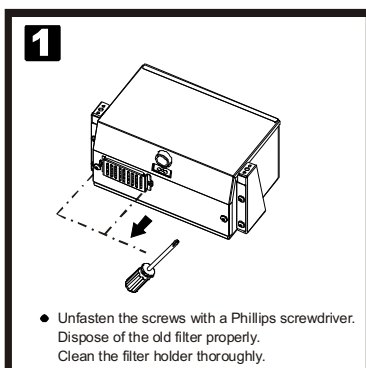
C. Sensor range adjustment

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!

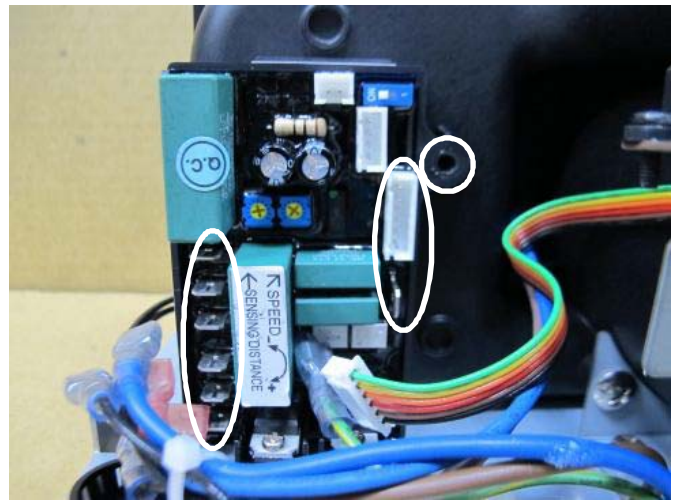


Change filter assembly

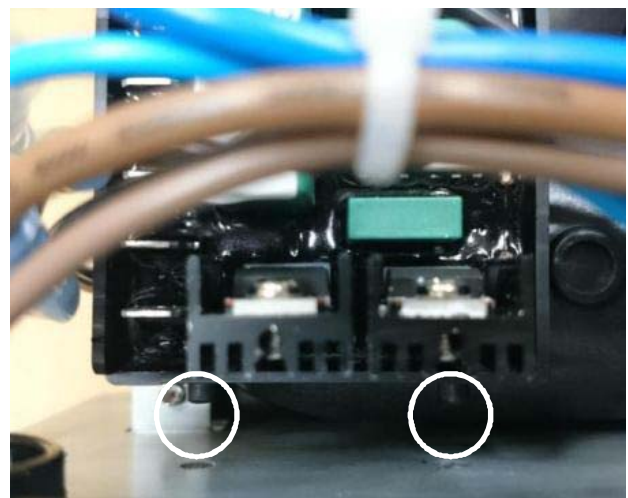
It is recommended to change the filter every six months.



Timer replacement



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



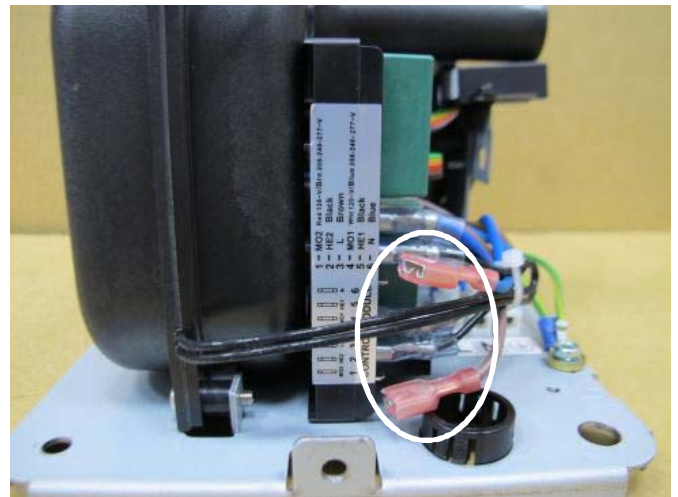
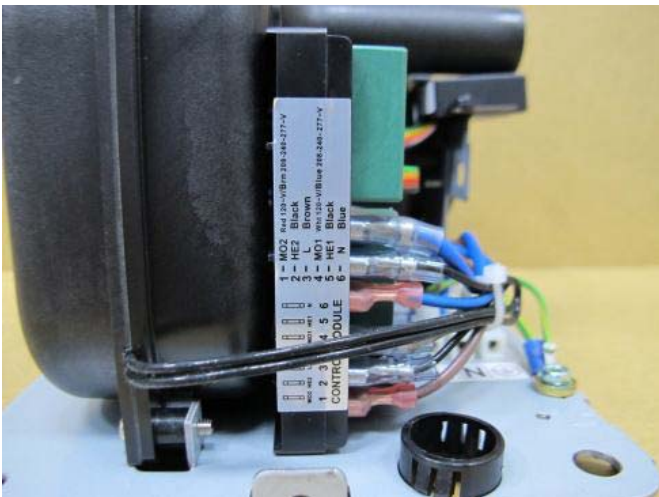
2. Ensure that the two flanges on the timer to be wedged in the two holes are on the base plate.
3. Fix the timer to the blower and connect the six wires to the timer as the photos of procedure 1.

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 timer.

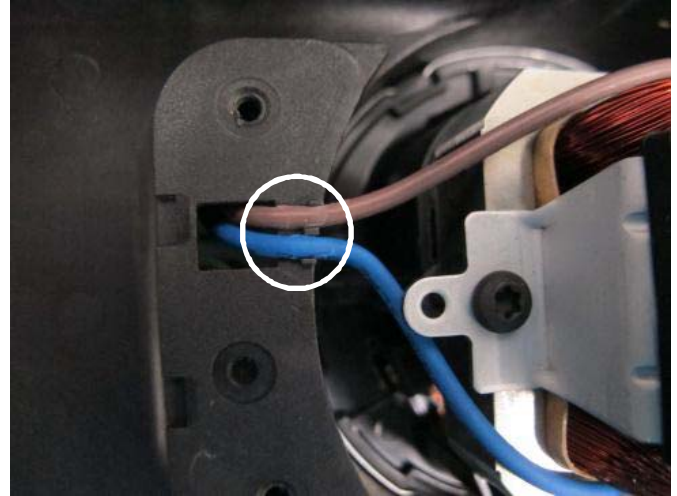
Motor replacement



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

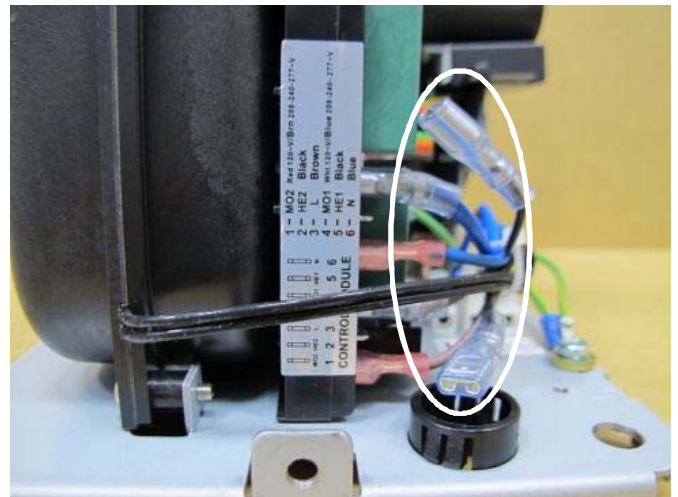


2. Loosen the fixing screws of the blower and remove the blower housing.

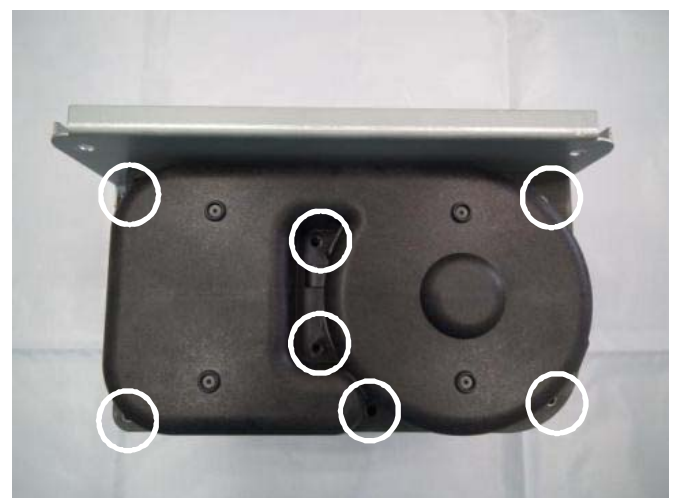


3. To replace the motor, install the motor rubber (large/small) on the motor, and place the motor under the fan blower. The wire set must be fixed to the ditch in the lower housing of the blower.

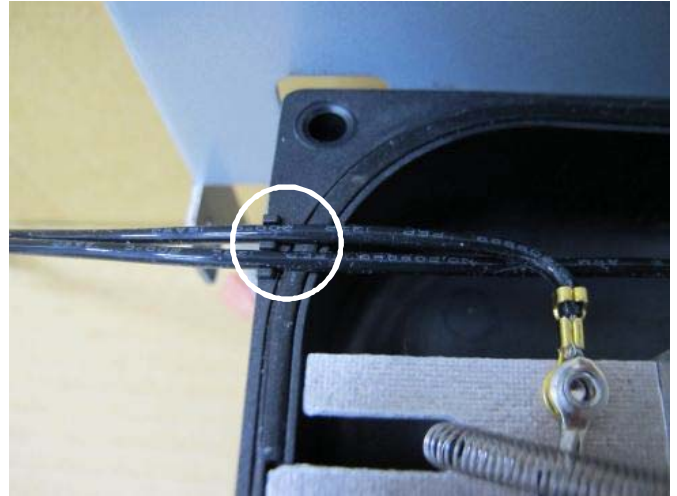
Heater replacement



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



2. Loosen the fixing screws of the blower and remove the blower housing.



3. To replace the heater, the wire set must be fixed to the ditch in the lower housing of the blower.

Tools



Philips Screwdriver
Slotted Screwdriver
Wire Cutter
Modular Crimping Cuts Tool

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.

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.
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.

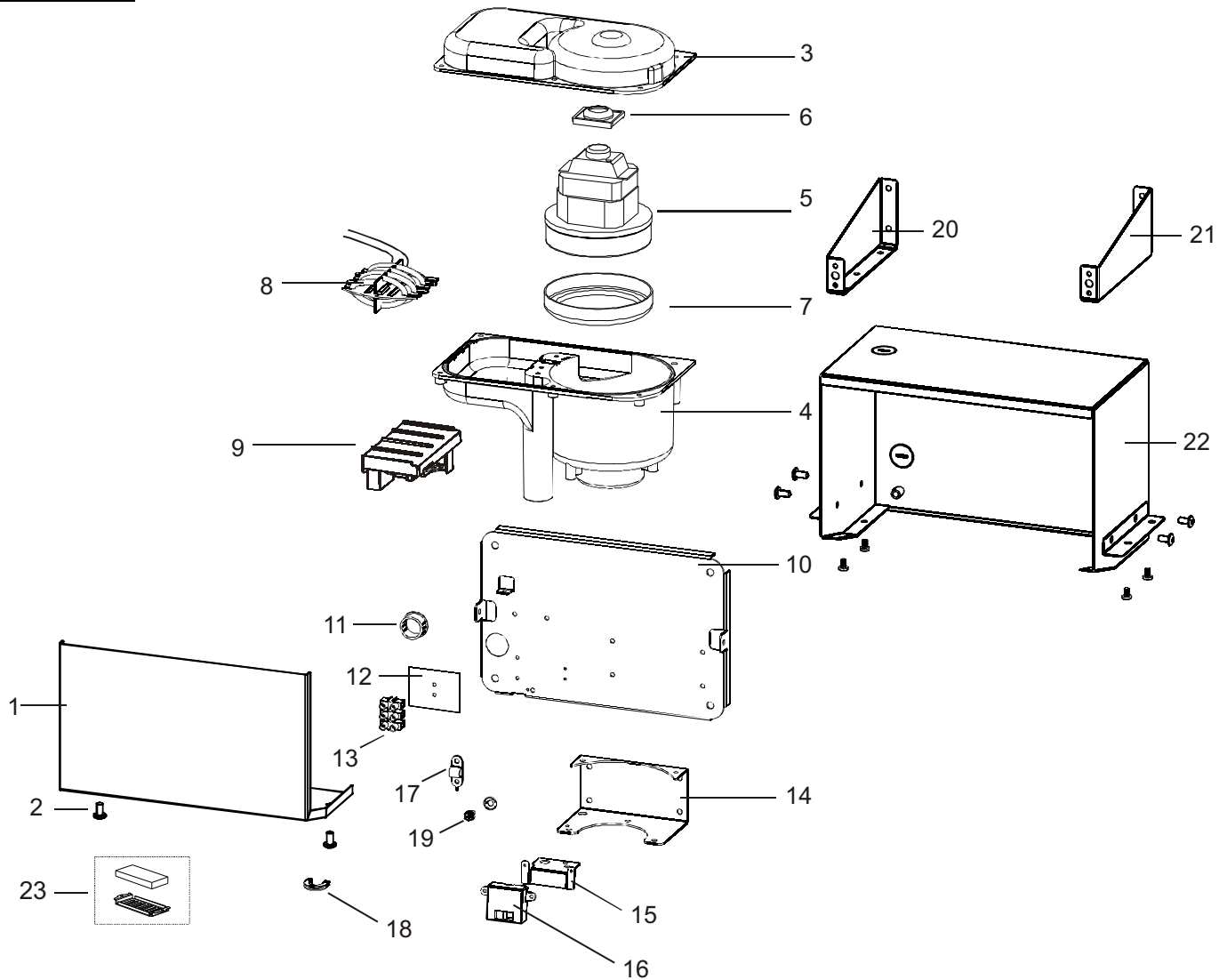
Symptom	Corrective Actions for In-Service Failures
If the dryer will not run	First ensure that the breaker supplying the dryer is operational. If it is, disconnect the power and remove the dryer cover. Replace the CBM and IR sensor module. Taking suitable precautions to avoid shock hazard, reconnect 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. Check VR for sensor range setting, If problem persists, disconnect the power and remove the dryer cover and replace CBM, IR sensor module.
The heater gets hot but no air stream is produced or the air stream is low pressure and velocity	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.

Warranty

LIMITED THREE-YEAR WARRANTY

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

Diagram



Repair parts list

Key	Description	Key	Description
1	Enclosure (Casing)	12	Insulation Mylar
2	Security hex screw (2 reqd.)	13	Terminal block
3	Blower housing - Upper	14	Blower mounting bracket
4	Blower housing - Below	15	Sensor bracket
5	Motor	16	Sensor
6	Motor rubber - Small	17	Cable clamp
7	Motor rubber - Large	18	Cable Protector
8	Heater assembly	19	Grounding Screw
9	Circuit Board Module	20	Left box bracket
10	Base plate	21	Right box bracket
11	Nylon hole bushing	22	Box
		23	Filter assembly

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