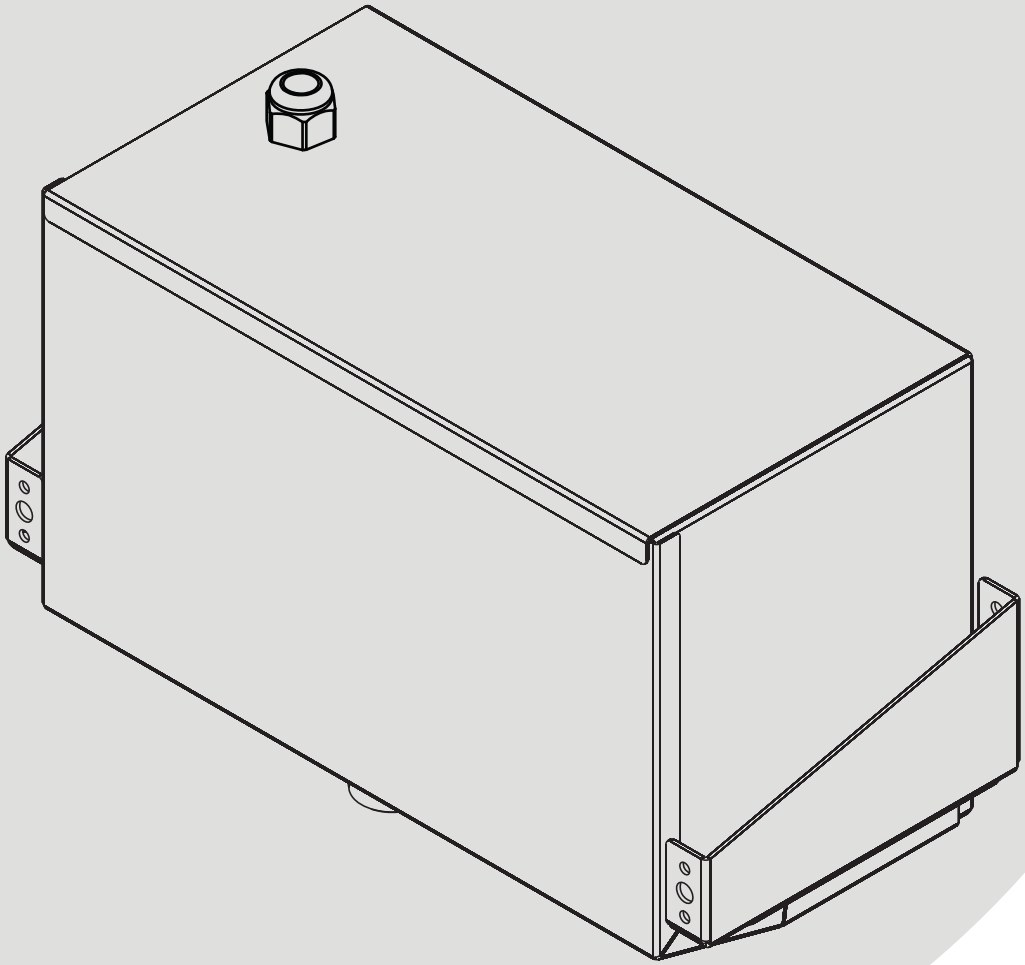
DOLPHIN

High-Speed Behind Mirror

Hand Dryer

BC2003BM
BCZ1218



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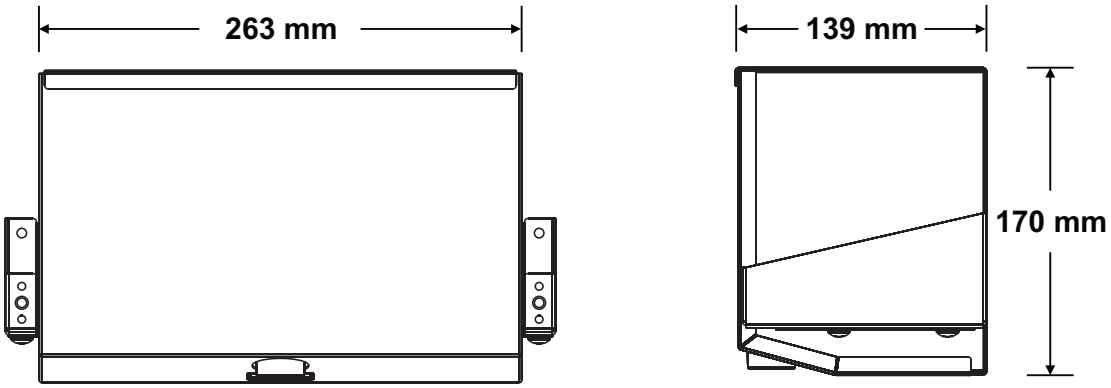
Installation and Operating Instructions



TECHNICAL SPECIFICATIONS

ITEM CATEGORY	PERFORMANCE DATA
Operating Voltage	110-120 Vac, 50/60 Hz, 0.84-1.0 kW----BCZ1218 220-240 Vac, 50/60 Hz, 0.84-1.0 kW----BC2003BM
Warm Air Speed Output	Standard [90±2 m/s], Adjustable, The range is [52-90 m/s]
Motor Type	325-500 W, 22000-29000 r.p.m., Adjustable; Brush Type, Dual Ball Bearings
Motor Thermal Protection	Auto Resetting Thermostat turns unit off at 95 °C [203 °F]
Heater Element On	Standard [500±50 W]. Range [325-500 W] controlled by air speed adjustment
Heater Element Off	0 W
Heater Thermal Protection	Auto Resetting Thermostat turns unit off at 85 °C [185 °F] Resets at 75 °C [167 °F], Thermal cut-off at 142 °C [288 °F]
Drying Time	Less than 15 seconds
Stand-by Power	Less than 0.5 W
Circuit Operation	Infrared Automatic, self adjusting
Sensor Range	Standard [170±20 mm], Adjustable, The range is [100-230 mm]
Timing Protection	60 seconds auto shut off
Sound Level	MIN 67.4 dB to 71.2 dB MAX @ 1m
Drip proof	IP14
Isolation	CLASS 1
Net Weight	4.5 kg
Shipping Weight	5.2 kg
Unit Size	263 mm (W) x 170 mm (H) x 139 mm (D)

COVER TYPE/ COVER FINISH

BC2003BM- Stainless steel; #4 satin finished. (AISI 304 t:1.2 mm)

BCZ1218- Stainless steel; #4 satin finished. (AISI 304 t:1.2 mm)

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General safety information

⚠ WARNING **This product is intended for installation by a qualified service person. Use 2.0 mm² (120V) and 1.2 mm² (240V) solid conductor for wiring.**

⚠ WARNING **Disconnect power at the service breaker before installing or servicing. Full pole disconnection device must be incorporated in the fixed wiring in accordance with the wiring rules.**

⚠ 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.**

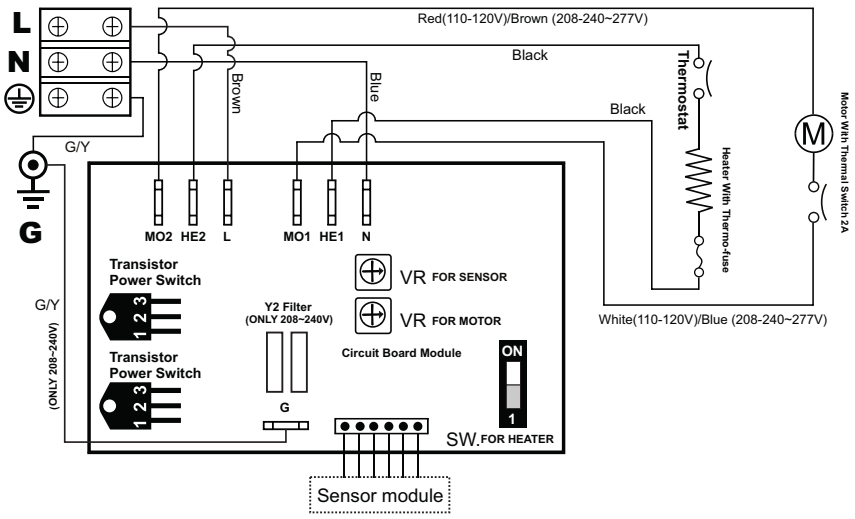
【Type Y attachment】

If the wiring is damaged, it must be 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.

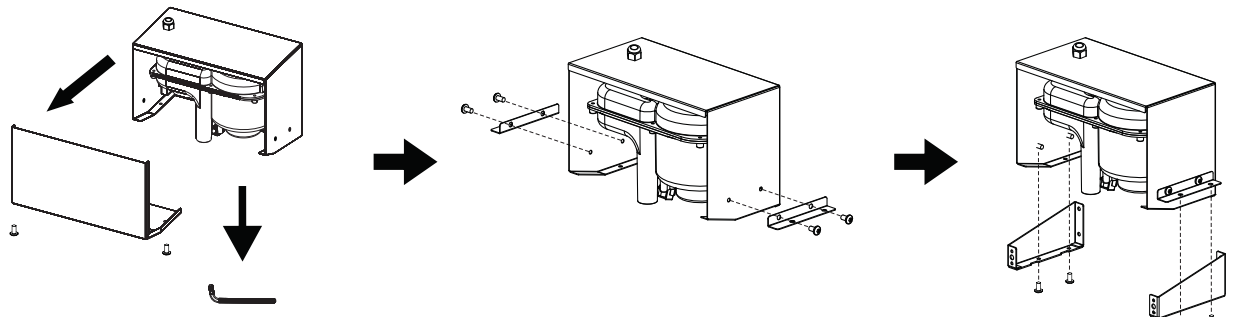
Circuit Diagram

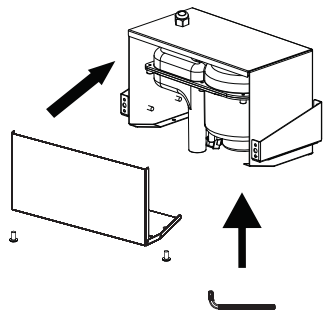


Behind Mirror high speed hand dryer

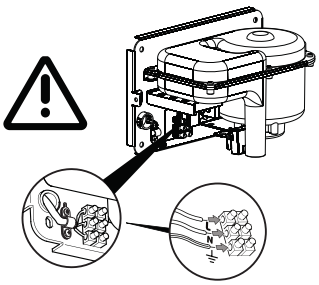
Installation

1. IMPORTANT: Infrared sensor requires 300 mm space above a non-reflective surface to operate correctly.
2. Check all parts are included as shown in the parts list.
3. Attach the L-shaped brackets to the dryer using screws provided observing the left/right handing.
4. Attach the wall brackets to the L-shaped brackets using screws provided (brackets are threaded). IMPORTANT: Ensure the wall brackets are fixed to the top side of the L-shaped brackets to allow easy removal of the dryer from behind the mirror after it has been fixed in place.
5. Place the dryer in the desired location inside the mirror cupboard and secure in place with the wall brackets.
6. Make sure power supply is isolated then connect pre-wired cable into a fused spur in accordance with the current edition of the local wiring regulations.
   IMPORTANT: Allow sufficient cable length for the dryer to be removed and placed on a flat surface for maintenance.





Connect the wire into terminal as below:



Connections:
A. Connect the live wire (colored black, brown or dark) to the terminal block marked "L".
B. Connect the neutral wire (colored white, blue or light) to the terminal block marked "N".
C. Connect the ground wire (colored green or green and yellow) to the terminal block marked "⏚".

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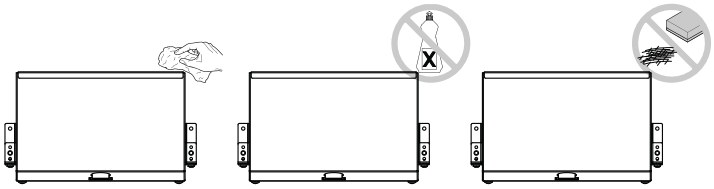
Operation

- **N**o-touch operation.
- **S**hake excess water from hands.
- **P**lace hands under the outlet to start operation.
- **R**ub hands lightly and rapidly.
- **S**tops automatically after hands are removed.

Cleaning and Maintenance

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

- Disconnect the electrical supply.
- Remove dryer from behind mirror.
- 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.



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

Men	1270 mm
Women	1194 mm
Children 4-7 years	889 mm
Children 8-10 years	991 mm
Children 11-13 years	1092 mm
Children 14-16 years	1194 mm
Wheelchair	1016 mm

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

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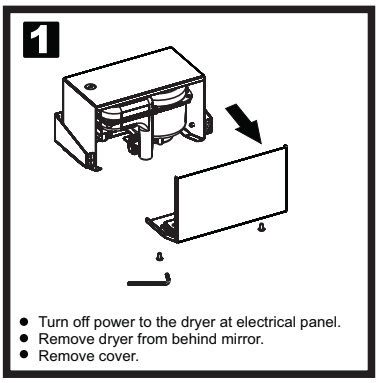
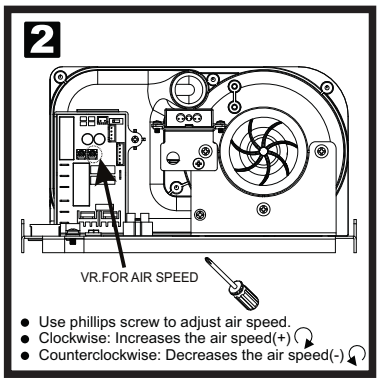
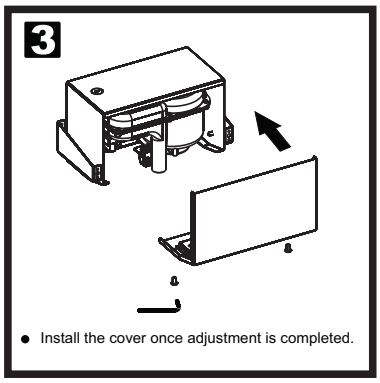
Setting Adjustment

A. Warm air speed adjustment

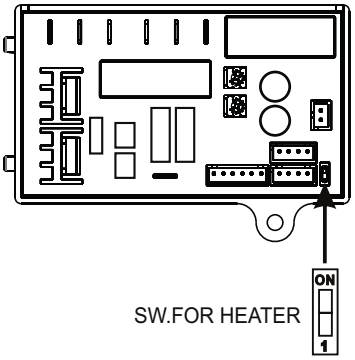






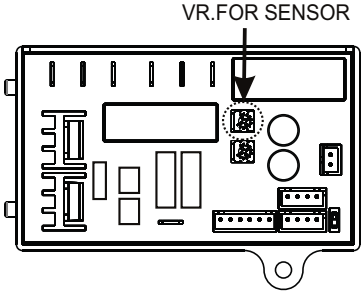
B. Heater Element Switch ON/OFF

1.Switch off the power, remove dryer from behind mirror, loosen the cover screws and remove the cover.
2.Adjust the heater switch on the CBM 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".



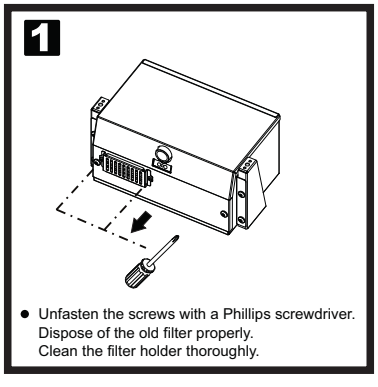
C. Sensor range adjustment

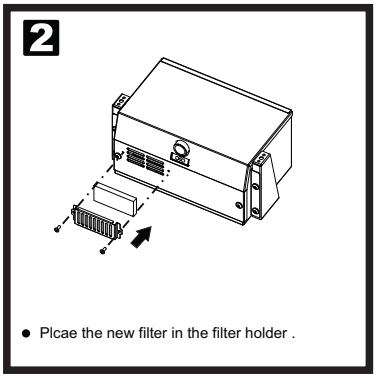
1.The recommended unit sensor range is 170 mm.
This can be adjusted from 100 mm to 230 mm.
2.Clockwise: Increases the sensing range(+) .
3.Counterclockwise: Decreases the sensing range(-) .
4.DO NOT OVERTURN!

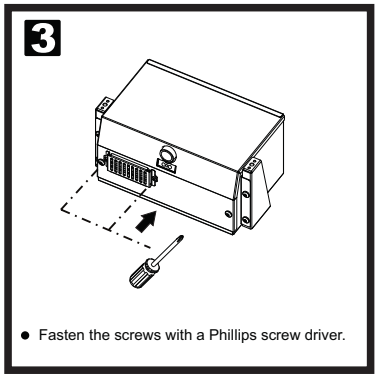


Change filter assembly

It is recommended to change the filter every six months.







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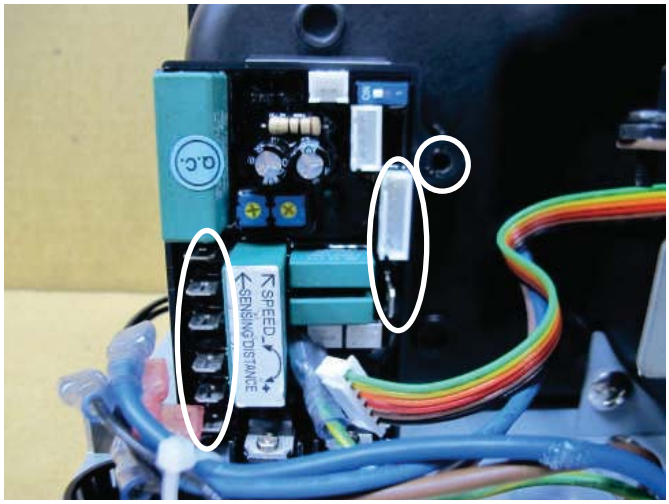
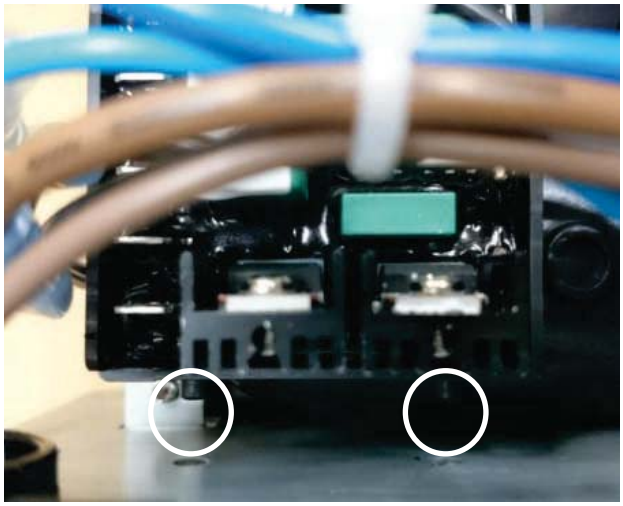
Timer replacement



1. Pull off the four 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.

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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.

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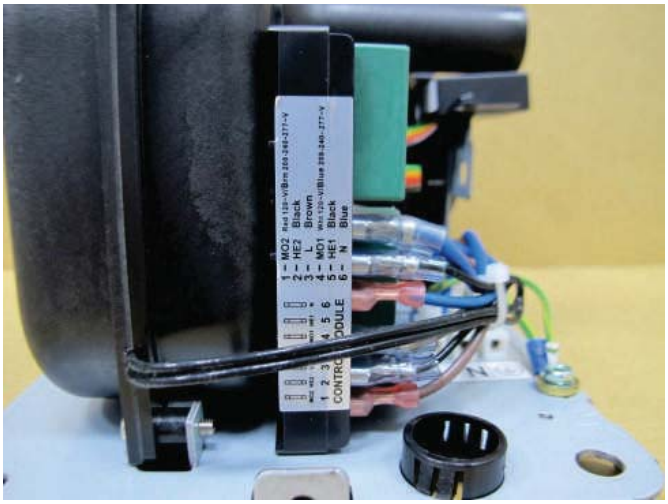
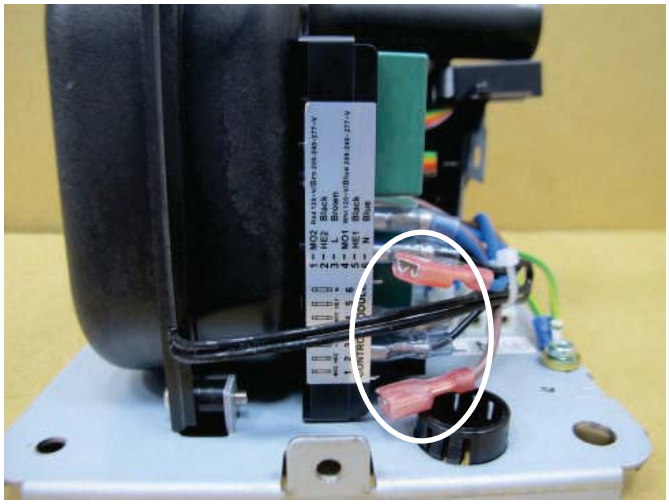
Motor replacement

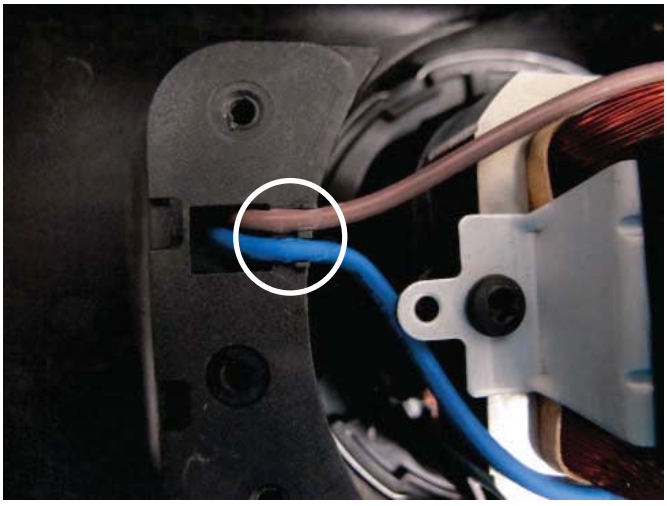




1. Remove the wires that connect motor to the timer.

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

Motor replacement



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.

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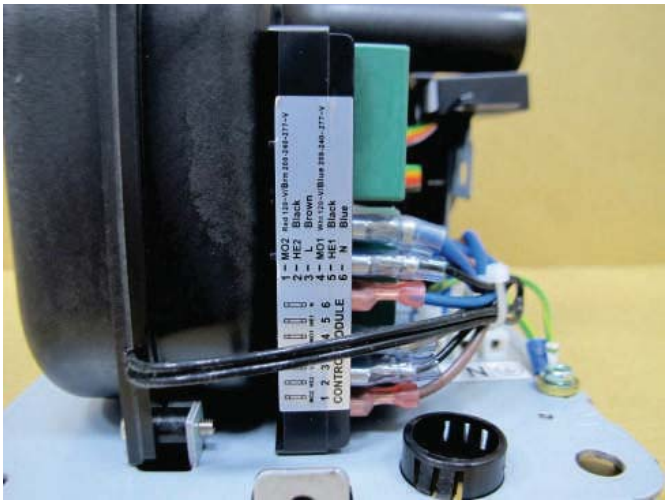
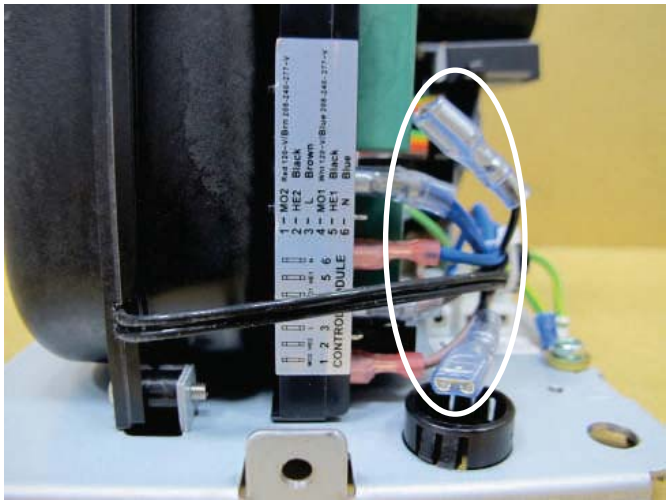
Heater replacement

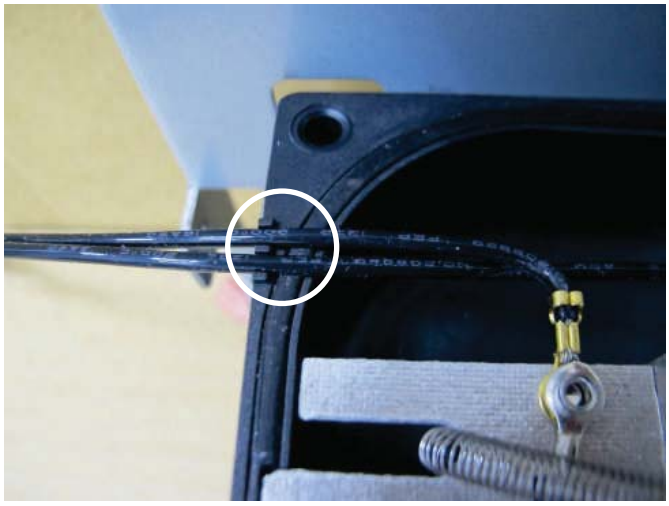




1. Remove the wires that connect heater to the timer.

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

Heater replacement



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

Behind Mirror high speed hand dryer

Tools Required

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 2012/19/EU. (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.

Troubleshooting

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 and CBM.
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 sensor and CBM.
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 3 year warranty

Please see our website or contact us on 01424 202224 for more details.

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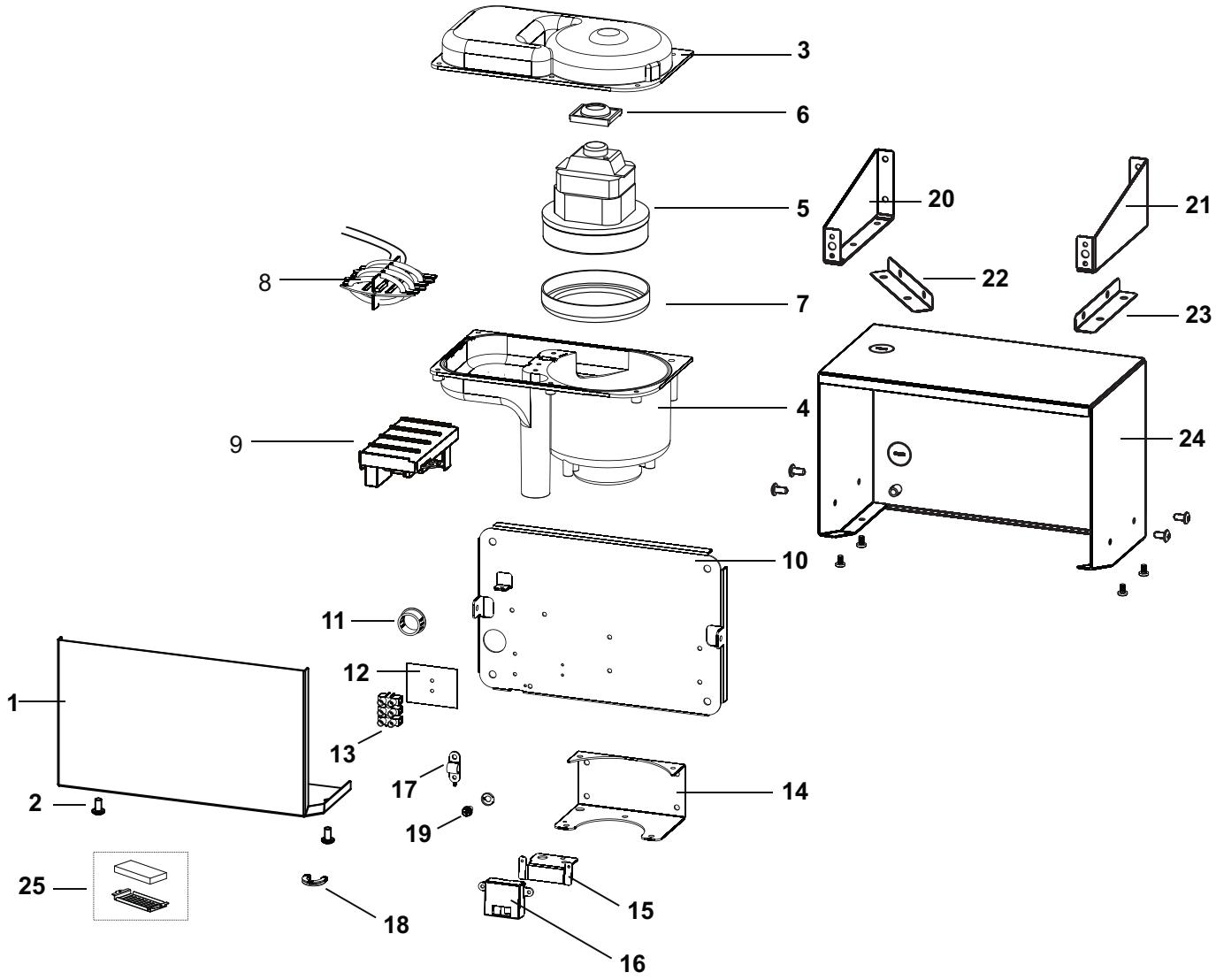
Parts Diagram



Parts list

Key	Description	Key	Description
1	Casing cover	14	Blower mounting bracket
2	Security hex screw (2 reqd.)	15	Sensor bracket
3	Blower housing - Upper	16	Sensor
4	Blower housing - Below	17	Cable clamp
5	Motor	18	Cable Protector
6	Motor rubber - Small	19	Grounding Screw
7	Motor rubber - Large	20	Left wall bracket
8	Heater assembly	21	Right wall bracket
9	Circuit Board Module	22	Left L-shaped bracket
10	Base plate	23	Right L-shaped bracket
11	Nylon hole bushing	24	Casing
12	Insulation Mylar	25	Filter assembly
13	Terminal block		