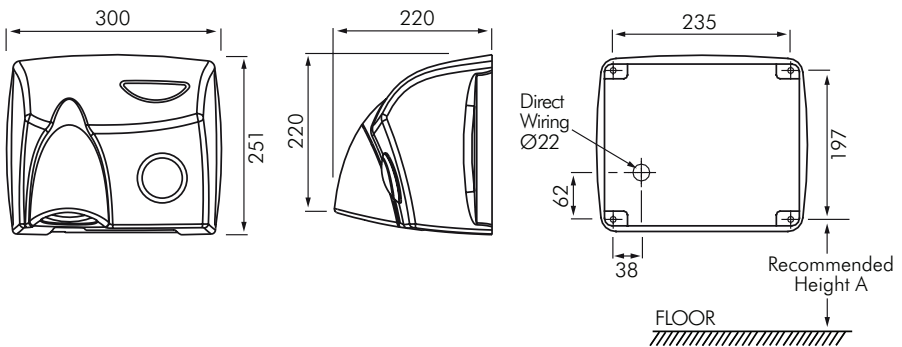


**JDM - MDHDT**  
TOUCHDRY HOT AIR HAND DRYER



PLEASE CAREFULLY READ THROUGH THIS MANUAL BEFORE USING THE PRODUCT. OBSERVING ALL SAFETY INFORMATION, WARNINGS AND CAUTIONS WILL PROTECT YOURSELF AND OTHERS. PLEASE KEEP INSTRUCTIONS FOR FUTURE REFERENCE.

# MACDONALD INDUSTRIES LIMITED

## INSTALLATION INSTRUCTIONS

### TECHNICAL SPECIFICATIONS

ITEM CATEGORY	PERFORMANCE DATA
Operating Voltage	220-240 VAC, 50/60 Hz, 10A, 2.4kW
Output Warm Air Volume	200 m <sup>3</sup> /h {118 CFM}
Output Warm Air Temp	60 °C {140 °F} at ambient T = 25 °C {77 °F}
Output Air Speed	21 m/s [75.6 km/hr] {69 ft/s {47 mi/hr}}
Motor Type	1/4 HP, 5.5 krpm, Brush Type, Dual Ball Bearings
Motor Thermal Protection	Auto Resetting Thermostat turns unit off at 105 °C, {221 °F}
Heater Element	2200W @ 220-240 VAC, Nichrome 27.2
Heater Thermal Protection	Auto Resetting Thermostat turns unit off at 65 °C, {149 °F}, Resets at 50 °C {122 °F}
Drying Time	Less than 20 seconds
Circuit Operation	Push Button Actuation, preset for 30 seconds
Output Air Nozzle	Heavy-Duty Chrome plated Zinc die casting
Sound Level	70±3dB-A
Cover Type	Formed Steel, 1.6 mm, [1/16"] thick
Cover Finish	Epoxy Enamel white baked-on coating
Net Weight	6.2 kg [13.7 lbs]
Shipping Weight	7.0 kg [15.4 lbs]
Unit Size	300mm W x 251mm H x 219mm D [11-13/16" x 9-7/8" x 8-5/8"]

Input	Motor			Heater		Total	
	Vac	Inrush A(W)	Operating A (W)	Vac	Inrush/Operating A(W)	Inrush A(W)	Operating A(W)
220	220	1.6 (353)	1.07 (235)	220	8.09 (1781)	9.69(2134)	9.16(2016)
230	230	1.68 (386)	1.12 (258)	230	8.46 (1947)	10.14 (2333)	9.58 (2204)
240	240	1.75 (420)	1.16 (280)	240	8.83 (2120)	10.58 (2540)	10.0 (2400)

**GENERAL SAFETY INFORMATION:**

**! WARNING:** This product is intended for installation by a qualified service person.

**! WARNING:** Disconnect power at the source 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**

**INSTALLATION**

1. Make sure the power source 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 (610 mm) on center.
3. Remove and retain 2 cover screws and cover.
4. **For in-wall (concealed) power supply** - Provide supply wire to KO location according to local code and attach securely to chassis at KO with appropriate strain relief connector (not supplied).
5. Attach dryer to wall. For wood wall/studs use 1/4 inch (M6) screws at length that will ensure 1 inch (25 mm) min. stud penetration. For masonry walls use expansion bolts or anchors for 1/4 inch (M6) screws to ensure penetration 1/4 inch (6 mm) deeper than anchor. Shim if necessary to ensure base plate is flat against wall.
6. Connect supply and ground wires to terminal block where indicated or 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 Brown or Black) to the terminal block marked "L1". B. Connect the neutral wire (colored White or Grey) or connect the second live wire (colored Red or Orange) to the terminal block marked "N/L2". C. Connect the ground wire (colored green or green and yellow or bare conductor) to the terminal block marked "GND" or to the green screw marked "GND"). Colors of live and neutral wires depend on voltage of supply service and requirements of Building and Electrical Code having jurisdiction.
7. Replace cover. Do not over-tighten screws.

Packing List	Quantity
Self-Threading Screws	4
Plastic Expansion anchor	4
Dryer	1
Security hex driver	1
Manual	1
Mounting template	1
Power cord	1

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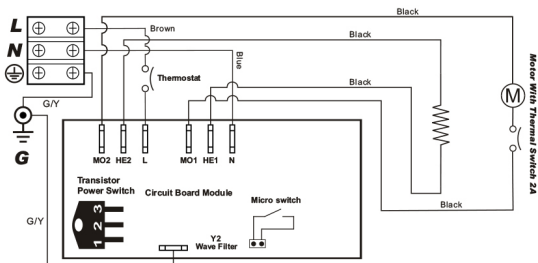
**RECOMMENDED MOUNTING HEIGHTS** - from bottom edge of dryer above finished floor (AFF)

Men	1270mm	(50")
Women	1194mm	(47")
Children 4-7 years	889 mm	(35")
Children 8-10 years	991 mm	(39")
Children 11-13 years	1092 mm	(43")
Children 14-16 years	1194 mm	(47")
Handicapped	1016 mm	(40")

## OPERATION

- Single button push operation.
  - Shake excess water from hands.
  - Place hands under the nozzle and push button to start operation.
  - Run hands lightly and rapidly.
  - Stops automatically after preset time elapses.
- Owner may adjust timing duration.

## CIRCUIT DIAGRAM



## **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.



## **WARRANTY**

This dryer is designed and manufactured to provide years of dependable performance. Component parts are guaranteed to be free of defects in material and workmanship for a period of five years. This guarantee will be honoured provided that the dryer is installed and maintained in accordance with the instructions. Parts damaged during the Installation are the purchaser's responsibility. MacDonald Industries warranty covers defects exclusively, and only liability for the replacement of defective parts will be accepted. This warranty does not cover wear and tear, or misuse and abuse. Transportation, freight costs and labour are also excluded after the first 12 months.

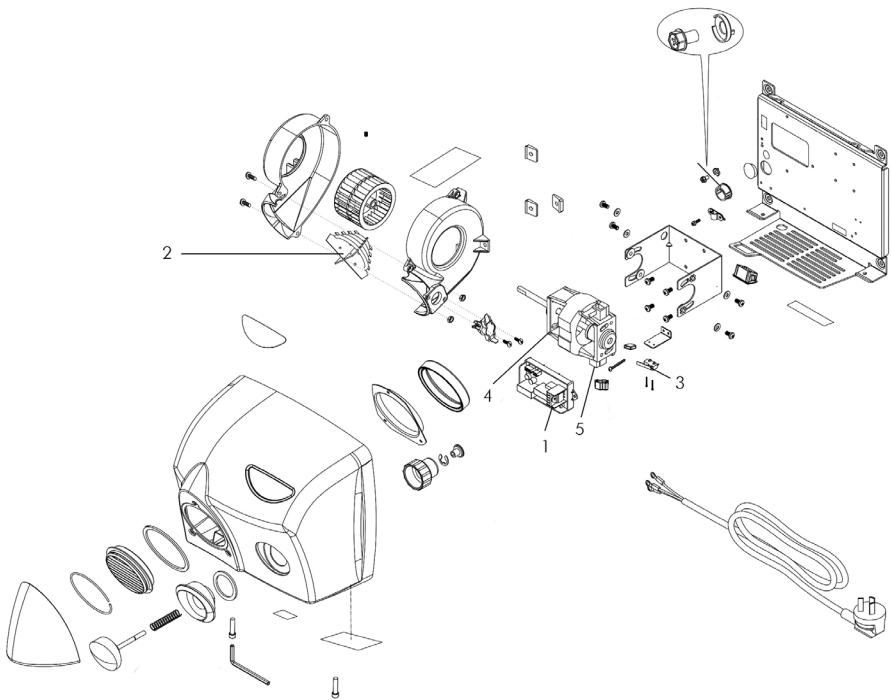
## TROUBLESHOOTING

Symptom	Corrective Action
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. Check for obstructions blocking the rotation of the blower and clear any found. If it spins freely, check the motor, manual push-button switch and thermostat for proper operation out of the unit. Replace any failed items. Taking suitable precautions to avoid shock hazard, reconnect the power and check for voltage at the terminal block. If there is power and the dryer will not run, replace the timer assembly.
If the dryer cycles by itself, runs all the time, or will not run for complete cycle	Replace the timer assembly.
If the element gets hot but the fan motor does not turn	Disconnect the power. Remove the dryer cover and check for obstructions in the fan housing. Damaged fans must be replaced. If there are no obstructions, replace the motor.
If the unit runs but makes a buzz noise	Disconnect the power. Remove the dryer cover and check the fan for obstructions and/or rubbing on the housing as it rotates. Remove any obstructions and replace fan if the rubbing condition exists.
If the fan motor runs but the element does not get hot (Dryer blows cold air)	Disconnect the power and remove the dryer cover. Check for loose or damaged wires. Remove the blower housing. Check the element for signs of burning or breakage. Damaged element must be replaced. If the element does not appear damaged, disconnect it at the timer assembly and check element wire continuity (see tech spec). An open circuit indicates damage to the element wire and to the integral temperature limit control (TLC). Separate the TLC and test for open circuit. If this is the case, replace the element and/or the thermostat.
If the motor makes ticking/winding noise when it runs	Disconnect the power. Remove the dryer cover and check the brushes for worn condition (less than 25/64" (10mm) graphite remains) and replace them, if necessary. Purchase rebuild kit to perform repair.

# MACDONALD INDUSTRIES LIMITED INSTALLATION INSTRUCTIONS

## SPARE PARTS

Key	Description	Part
1	Control Card (PC BD)	Post 2015 MD-HD418-SP
2	Element	MDJ3
3	Sensor	N/A
4	Motor	MDJ1
5	Brushes	MDJ4/B





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