

Hand dryer

Automatic

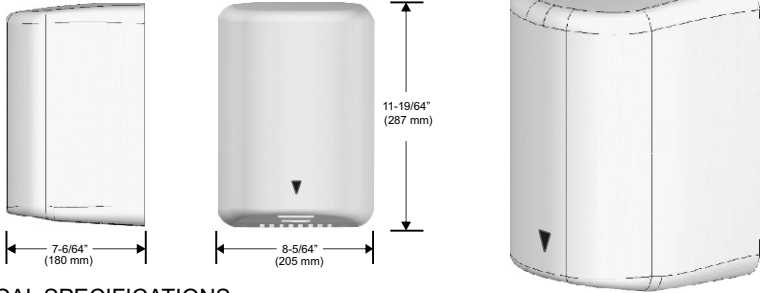


HIGH SPEED

HIGHSPEED HAND DRYER

Operating Instructions and Parts Manual (Automatic)

Surface Mount



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
Circuit Operation	Infrared Automatic, self adjusting
Sensor Range	2" to 13" [51 mm to 330 mm], adjustable; standard 7" [18 cm±2 cm]
Timing Protection	60 seconds auto shut off
Drip proof	IPX1 ◆
Isolation	CLASS 1
Net Weight	12.8 lbs (5.8 kg)
Shipping Weight	14.6 lbs (6.6 kg)
Unit Size	205 mm (W) x 287 mm (H) x 180 mm (D) [8-5/64" (W) x 11-19/64" (H) x 7-3/32" (D)]

COVER TYPE/ COVER FINISH

- HK-JA01 - Steel; White porcelain enameled coating. (t:1.6 mm)
- HK-JA02 - Steel; Bright chrome. (t:1.6 mm)
- HK-JA03 - Steel; Satin chrome. (t:1.6 mm)
- HK-JA04 - Stainless Steel; Bright finished. (t:1.5mm)
- HK-JA05 - Stainless Steel; Satin finished. (t:1.5mm)

General safety information:

▲ WARNING This product is intended for installation by a qualified service person. Use AWG No. 16 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. "IMPROPRE A L'USAGE DOMESTIQUE - PUEUT OCCASIONNER."

▲ 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 --

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.

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 (610 mm) 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) 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 green screw 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's	43"	109 cm
Ladies	41"	104 cm
Children, ages 11-17	39"	99 cm
Children, ages 3-10	33"	84 cm
Handicapped	35"	89 cm

Cleaning and Maintenance

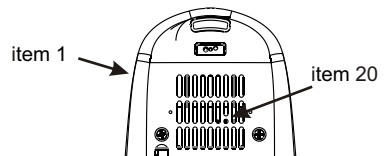
Periodic cleaning of the unit is recommended to ensure optimum performance.

- 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.



Warm air speed adjustment

Use flat blade screwdriver small enough to fit through access hole {Ø4,8mm [Ø3/16"]}; in bottom grille of cover (item 1). The adjustment potentiometer (item 20) is visible through the slots of the grille. With respect to axis of screwdriver viewed from handle end, gently turn adjustment potentiometer shaft clock-wise [CW] to increase power to maximum (shaft will hard stop; DO NOT OVERTURN!). Turn tool gently CCW to reduce power as required (shaft will hard stop; DO NOT OVERTURN!). Note that at minimum power the unit may not start if low line Voltage condition exists.



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.

Diagnostics and Remedies

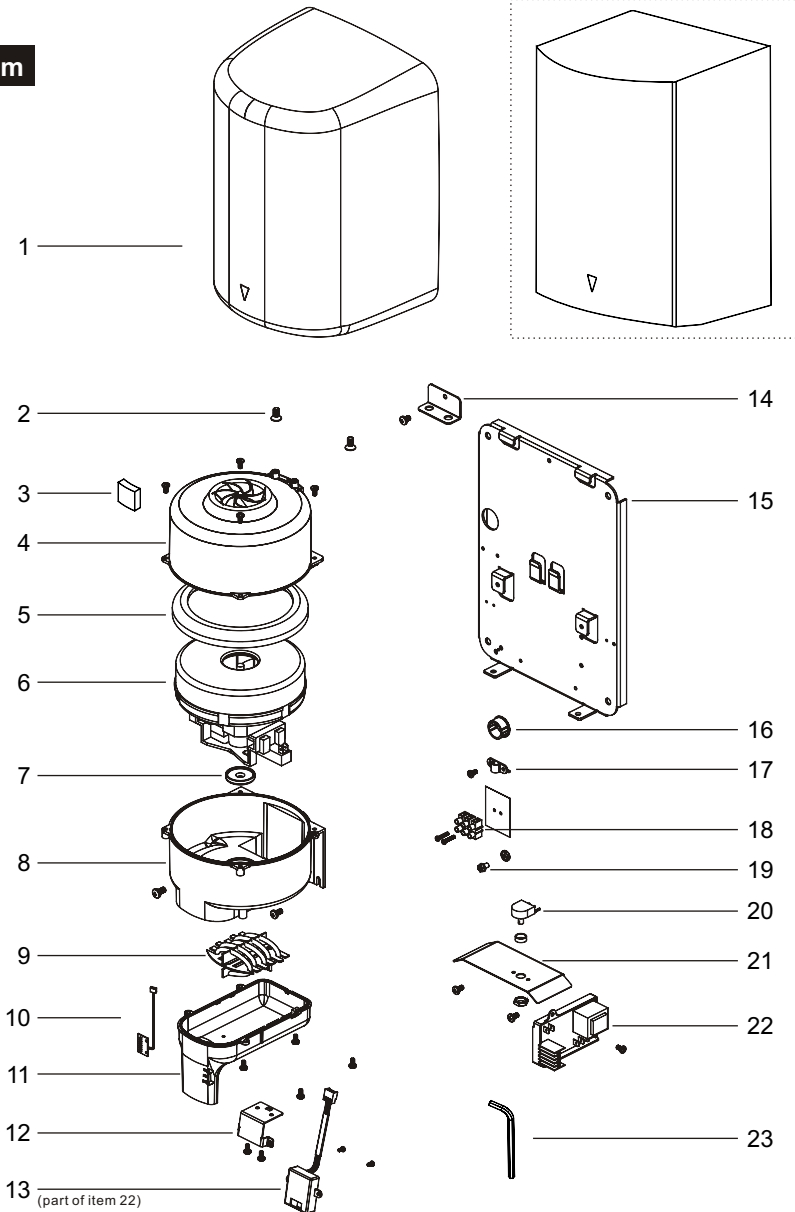
Symptom
If the dryer will not run
The dryer cycles by itself or runs constantly
The dryer makes a loud noise and does not run for a complete cycle
The dryer runs but air stream is low pressure and/or low velocity

Corrective Actions for Initial Installation Failures
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.
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.
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.
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
If the dryer will not run
The IR sensor only "sees" close range objects
The heater gets hot but no air stream is produced
The dryer only blows cold air during a full cycle
The air stream is low pressure and velocity

Corrective Actions for In-Service Failures
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.
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, disconnect the power and remove the dryer cover. Taking suitable precautions to avoid shock hazard, reconnect the power and try carefully adjusting the sensitivity control (yellow shaft in blue box on CBM) to increase the sensing range. If problem persists, replace sensor.
Disconnect the power. Remove the dryer cover and disassemble the blower-motor/fan housing. Replace the fan motor.
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.
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.

Diagram



Repair parts list

Key	Part #	Description
1	C0109-3005	Steel - White porcelain enameled
	C0109-2001	Steel - Bright chrome
	C0109-2011	Steel - Satin chrome
	C0309-5003	Stainless Steel - Bright finish
	C0309-5004	Stainless Steel - Satin finish
	C0309-0019	Stainless Steel - Bright finish
	C0309-0020	Stainless Steel - Satin finish
2	D0101-0015	Security hex screw (2 reqd.)
3	G0309-0005	Shock absorber
4	A0110-0001	Blower housing - Top
5	G0109-0002	Motor rubber - Large
6	E0109-0001	Motor 110-120Vac 700W (US-Spec)
	E0109-0003	Motor 220-240Vac 700W (US-Spec)
	E0109-0002	Motor 220-240Vac 700W (EURO-Spec)
	G0109-0004	Motor rubber - Small
8	A0110-0002	Blower housing - Bottom
9	T0209-0016	Heater element 120Vac 900W
	T0209-0017	Heater element 240Vac 900W
10	F0209-0007	LED assembly
11	A0110-0003	Air outlet
12	C0109-0013	Sensor bracket
13	F0301-0006	Sensor module
14	C0110-0001	Blower housing bracket
15	C0109-0026	Base plate
16	A0101-0022	Nylon hole bushing
17	A0101-0020	Cable clamp
18	F0801-0003	Terminal block
19	D0101-0008	Grounding screw
20	F0509-0002	VR (variable resistance) 50K - 110-120Vac
	F0509-0001	VR (variable resistance) 100K - 220-240Vac
21	C0109-0018	VR bracket
22	F0209-0012	Circuit Board Module - 110-120Vac
	F0209-0011	Circuit Board Module - 220-240Vac
23	C0101-0031	Security hex wrench