

Model A

Heavy Duty Hand Dryer

Secamanos Resistente . Sèche-mains robuste
Heavy-Duty-Händetrockner . Asciugamano elettrico per uso intensivo



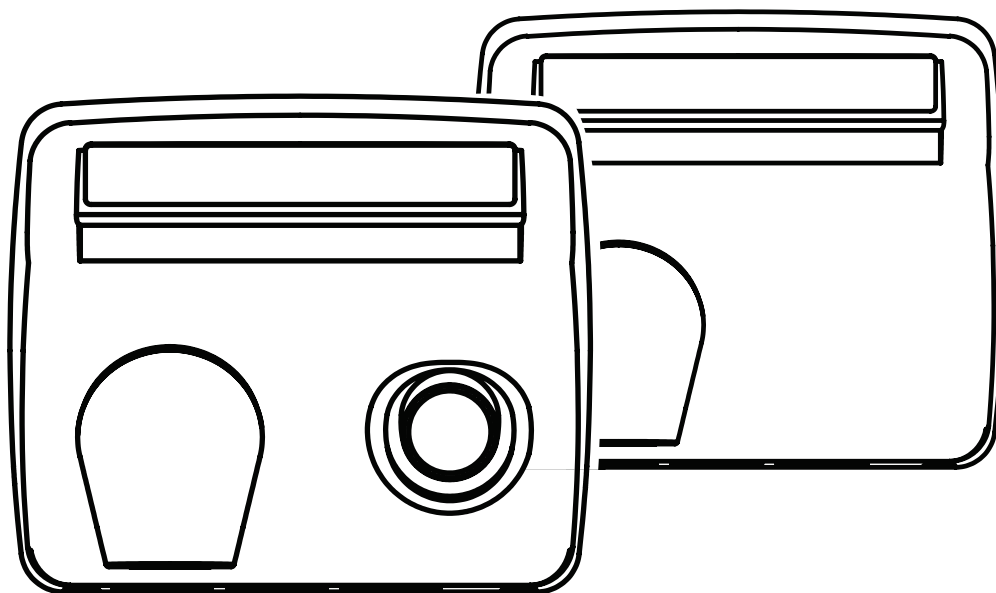
All (D)XA, (D)A Series

Todos los Modelos de las Series (D)XA y (D)A

Toutes les modèles de série (D)XA et (D)A

Alle Modelle der Serien (D)XA und (D)A

Tutti i modelli delle serie (D)XA e (D)A



Please read and save these instructions. Read carefully before attempting to assemble, install, operate or service the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage. Retain instructions for future reference.

Por favor lea y guarde estas instrucciones. Léelas cuidadosamente antes de tratar de montar, instalar, operar o dar mantenimiento al producto aquí descrito. Protéjase usted mismo y a los demás observando toda la información de seguridad. No seguir las instrucciones puede ocasionar daños, tanto personales como materiales. Guarde estas instrucciones para referencia en el futuro.

Lire et conserver ces instructions. Les lire attentivement avant de commencer à assembler, installer, faire fonctionner, réparer ou entretenir l'appareil décrit. Pour se protéger et protéger autrui, observer toutes les consignes de sécurité. Le fait de négliger d'appliquer ces instructions peut entraîner des blessures et/ou des dommages matériels. Conserver ces instructions pour consultation ultérieure.

Bitte lesen Sie diese Anweisungen und bewahren Sie sie auf. Lesen Sie diese Anweisungen sorgfältig durch, bevor Sie das beschriebene Produkt zusammenbauen, montieren, betreiben bzw. warten. Beachten Sie für Ihren persönlichen Schutz und zum Schutz anderer sämtliche Sicherheitsinformationen. Eine Nichtbeachtung dieser Anweisungen kann zu Verletzungen und/oder Sachschäden führen. Bewahren Sie die Anweisungen für spätere Bezugnahme auf.

Leggere e conservare queste istruzioni. Leggere con attenzione prima di montare, installare, azionare o riparare il prodotto descritto. Proteggere sé stessi e terzi attenendosi alle istruzioni sulla sicurezza. La mancata conformità alle istruzioni potrebbe comportare lesioni a persone e/o danni a cose. Conservare le istruzioni nel caso occorra consultarle.



Description

World Dryer warm air hand dryer, powered by a high speed universal motor, delivering 2300 Watts of drying power. This hand dryer runs on 115 Volts AC, 208/220-240 Volts AC, or 277 volts AC electrical supply, depending on model. Automatic and push-button models are represented in this product group. This appliance is intended for use in hand drying, contributing to hygienic and cost effective hand sanitation. This hand dryer may be used in commercial, industrial, office and public facility environments.

General Specifications

Basic Models	Nozzle	Drying Cycle	Dimensions (WxDxH)	Weight	Cover Material
(D)XA	Fixed	Automatic	11.38" x 9.62" x 8.12"	18 / 29 lbs	Steel/Cast Iron
(D)A	Fixed*	30/40 Seconds	11.38" x 9.62" x 8.12"	18 / 29 lbs	Steel/Cast Iron

(*) Rotating Nozzle Field Convertible Option

Electrical Specifications

Models	Type	Electrical Input	Amperage	Watts
(D) XA5	Automatic	115 VAC, 60 Hz	20	2300
(D) A5	Push-button	115 VAC, 60 Hz	20	2300
(D) XA52	Automatic	115 VAC, 60 Hz	15	1725
(D)A52	Push-button	115 VAC, 60 Hz	15	1725
(D) XA54	Automatic	208-230 VAC, 60 Hz	10	2300
(D)A54	Push-button	208-230 VAC, 60 Hz	10	2300
(D) XA548	Automatic	220-240 VAC, 50 Hz	10	2300
(D)A548	Push-button	220-240 VAC, 50 Hz	10	2300
(D) XA57	Automatic	277 VAC, 60 Hz	8.5	2300
(D)A57	Push-button	277 VAC, 60 Hz	8.5	2300

(cULus Listed, E19860, CE TUV-GS)

General Safety Information



DANGER

Failure to disconnect the power source before installation or servicing can result in serious injury or death from electric shock.

- Always disconnect the power source before servicing or installing the hand dryer.



DANGER

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

- This hand dryer must be properly grounded (Earthed) for safe operation. An identified ground connection point is supplied on the hand dryer's wall base.
- We recommend GFCI protection in wet or damp locations or as required by local code.



WARNING

Risk of fire, personal injury or property damage are possible if local codes, NEC codes or safety recommendations are not followed.

- Use only the electrical power (voltage and frequency) specified for the model hand dryer being installed.
- Connect the hand dryer to the nearest suitable distribution panel.
- To limit a voltage drop, and insure efficient operation, use wire gauge as required by local or National Electrical Code.
- Do not connect to a branch circuit with CB or fuse protection over 20 Amps. This is in compliance with The National Electrical Code for intermittent use appliances.
- All automatic model hand dryers must have a dedicated 20 Amp circuit as required by Underwriters Laboratories, Inc. (UL).
- Route all field wiring away from any moving parts within the hand dryer.



CAUTION

Improper mounting could result in personal injury or property damage.



WARNING

Cancer and Reproductive Harm - www.p65warnings.ca.gov

Unpacking

1. Remove all packing material. Recycling is recommended.
2. Carefully remove the hand dryer from the shipping carton, using care not to drop the appliance.
3. Inspect carefully for any damage that may have occurred during transit. Check for any loose, missing or damaged parts. If the hand dryer is damaged, promptly inform the shipper or dealer where you purchased it.



Installation

IMPORTANT: Consult local and general regulations before performing dryer installation. Make certain that the electrical network is not overloaded. Do not connect to a branch circuit with a circuit breaker or fuse rated over 20 Amps. This is a UL recommendation and complies with NEC for intermittent use appliances.

FOR MODELS (D)A5, 52, 54, 548, 57

1. Disconnect the power source.
2. Use the security Allen wrench supplied to remove the (2) cover mounting screws. Remove the cover from the dryer.
3. Place the hand dryer base on the wall at the desired location using Table 1 to determine the recommended mounting height. With the base so located, use it as a template to mark locations of the 4 mounting bolt holes on the wall. When two or more dryers are installed, they should be spaced 24" (61 cm) minimum from center to center.
4. Fasten the base to the wall, using the type of bolts suggested in Table 2.
5. Connect the dryer to the nearest suitable distribution panel.
6. Replace cover, making certain not to over-tighten cover bolts.

Table 1

Recommended Mounting Heights from Floor to Dryer Bottom Edge	in. (cm.)
Men's washrooms	46 (117)
Women's washrooms	44 (112)
Children's washrooms, ages 4-7	32 (81)
Children's washrooms, ages 7-10	36 (91)
Children's washrooms, ages 10-13	40 (102)
Children's washrooms, ages 13-17	44 (112)
Handicap Mounting Height	37 (94)

FOR AUTOMATIC DRYER MODELS (D)XA5, 52, 54, 548, 57

1. Disconnect the power source.
2. Use the security Allen wrench supplied to remove the (2) cover mounting screws. Remove the cover from the dryer.
3. Place the hand dryer base on the wall at the desired location using Table 1 to determine the recommended mounting height. With the base so located, use it as a template to mark locations of the 4 mounting bolt holes on the wall. When two or more dryers are installed, they should be spaced 24" (61 cm) minimum from center to center. Applies only to the Automatic models: ensure that no reflective object (such as a hand basin) is located directly under the infra-red sensor eye; the minimum distance is 18 inches.
4. All automatic dryers must have their own dedicated 20 amp circuit. This is a UL-suggested requirement.

IMPORTANT: Consult local and general regulations before performing dryer installation. Ensure that the electrical network is not overloaded. Do not connect to a branch circuit over 20 amps.

Table 2

Type of Wall	Type of Bolt	Minimum Bolt Length
Hollow Tile, Lath, Wall Board or Metal	1/4" (M6) Screw Type or Wing Type Toggle Bolts	Dependent on wall thickness
Cement, Brick, or Tile Covered Cement or Brick	1/4" (M6) Stud Type Expansion Bolts	3" (76 mm)
Stud Wall with Wood Backing	No.16 (M8) Wood Screws	23/4" (70 mm)

NOTE: When using surface mount wiring, an optional, available offset fitting #100BR must be ordered to adapt the wiring to 1/2" EMT.

Maintenance

NOTE: Disconnect The Power Before Performing Any Of The Following

CLEANING INSTRUCTIONS:

Read complete Instructions before proceeding. Under normal use, cleaning the Dryer once a year will keep it in good operating condition. If the washroom traffic is heavier than normal, the cleaning should be done every 6 months. Lint and dust build up inside the dryer can result in damage to motor and heating element as well as hot emissions that could injure the user.

1. Remove two cover mounting screws from dryer cover using security Allen wrench provided. Support cover while removing screws.
2. Remove three (3) side screws holding blower housing together. Note position of heating element and protective screen. The lead wires are directed through the clearance hole in the blower housing halves. Carefully remove the heating element however, do not disconnect the wires.
3. Clean blower wheel halves using a 1/2" diameter radial bristle brush. Insert brush through space between individual blades and dislodge dirt. Do not bend or damage blades.
4. Vacuum out dirt from blower and housing, reposition heating element, protective screen and housing half and replace three (3) side screws. Tighten gently making sure that mica heating element pieces are positioned in housing slots with connecting wires passing through blower housing hole.
5. Use soft-medium bristle 1/2" paint brush to clean dust and dirt from motor and switch timer. Do not bend switch blade when cleaning.
6. Use a stiff brush to clean dirt from inside of nozzle grill and inlet grill. Water may be necessary to flush dirt from inlet grill. Dry inside of cover before replacing if water is used.
7. Inspect motor brushes. To inspect brushes insert tooth pick in hole in end of brush assembly. If tooth pick is inserted more than one inch, replace brushes. (See replacement instructions.)
8. Replace cover. Place cover squarely over base and push flush to wall. Insert 2 cover mounting screws and tighten until snug. Do not over-tighten.

REPLACEMENT OF MOTOR BRUSHES

1. Remove locking spring clip securing brush holder.
2. Draw brush cap out of motor slowly until wire connector appears.
3. Detach wire connector and remove brush and holder assembly.

NOTE: When unpacking brush assembly from carton it is important to hold carbon brush in brush holder securely. P/N206NL

4. Insert new assembly to point where wire quick connect connection can be made.
5. Push brush quick-connects on motor and brush sleeve together.
6. Push brush assembly back in place and insert locking spring clip.

REPLACEMENT OF HEATING ELEMENT

1. Remove three screws holding blower housing (#211P and #112P) together, and remove #112P side of housing.
2. Disconnect the white wires of the heating element at the terminal block and switch terminal. Replace with the new heating element of proper voltage and wattage, being careful to connect it identically to the old one.
3. Hold element in position on stationary side of blower housing and slip removable side in place, making sure element frames fit into grooves in blower housing and both wires run through notch at top of air outlet. Reinstall the protective screen and replace three screws fastening blower housing together.
4. Reconnect wires to terminal block and switch. Make certain all wires are properly reconnected and match the wiring diagram.

REPLACEMENT OF SWITCH TIMER ON PUSH-BUTTON MODELS

1. Remove screws from each of the two terminals on switch timer, marking wires for correct reconnection to switch terminals.
2. Replace defective timer with new one. (Specify Dryer Model when ordering Timer.)
3. Reconnect wires to terminals.
4. Replace cover (be sure cover fits squarely over base unit) and push in until cover is flush with wall and insert two cover mounting screws. Do not over-tighten the mounting screws.
5. Turn on power to dryer.

Parts List

For Repair Parts, visit
www.WorldDryer.com.

Please provide following information:
 Model number
 Serial number
 Part description and number shown in parts list

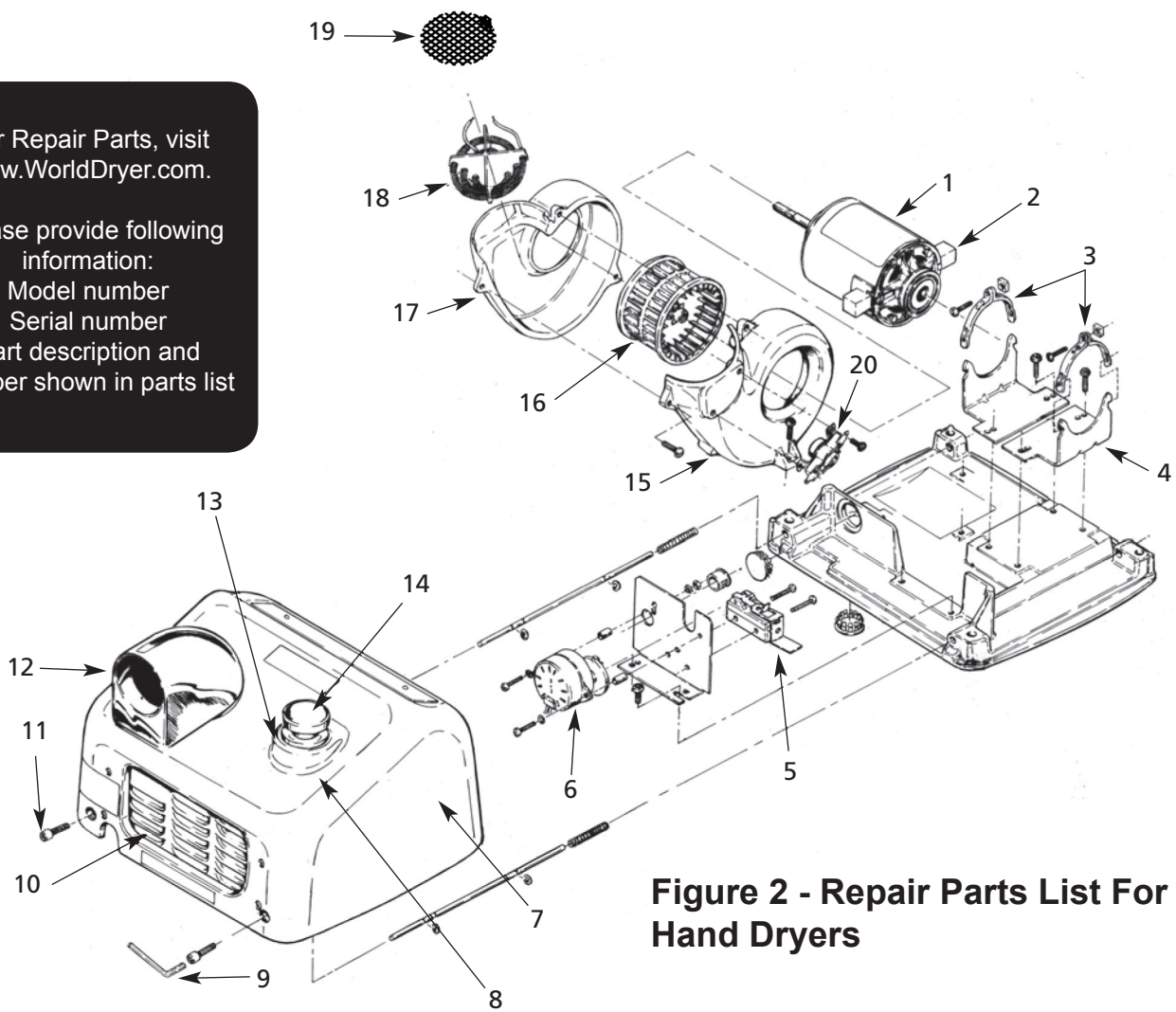


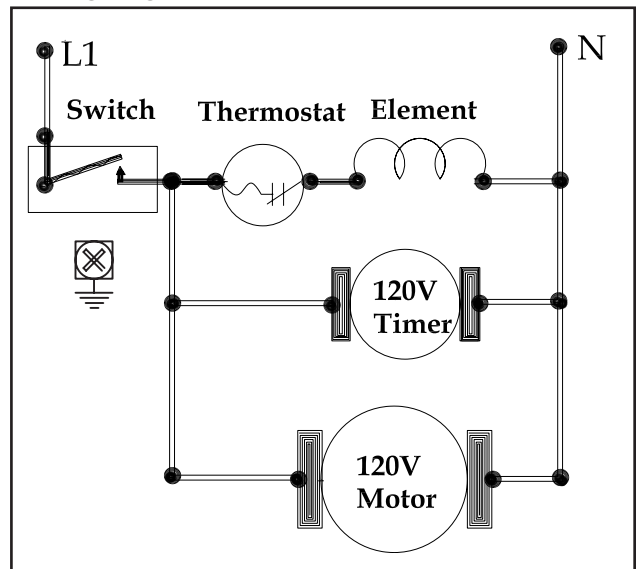
Figure 2 - Repair Parts List For Hand Dryers

#	Description	Part Number	Qty.
1	Motor - 115 V (D)A5, (D)XA5, (D)A52, (D)XA52	210K	1
	Motor - 208/220-240 V (D)A54, (D)XA54, (D)A548, (D)XA548, †(D)A57, †(D)XA57	210AK	1
2	Motor Brush (All)	206NL	2 Req'd
3	Motor Mounting Strap	110-4A	2 sets
4	Motor Mounting Brackets	110-4	2
5	Micro Switch Only (D)A(All)	143F	1
6	Switch Timer Unit - 115 V, 30 Seconds (D)A5, (D)A52	225	1
	Switch Timer Unit - 208-230 V, 30 Seconds (D)A54	225A	1
	Switch Timer Unit - 220-240 V, 50 Hz, 30 Seconds (D)A548	225M	1
	Switch Timer Unit - 277 V, 30 Seconds (D)A57	225A7	1
7	Cover Complete, Cast Iron, Automatic, White XA(All)*	70XA5-974AK	1
	Cover Complete, Cast Iron, Pushbutton, White A(All)*	70A5-974AK	1
	Cover Complete, Steel, Automatic, White DXA(All)*	72DXA5-974K	1
	Cover Complete, Steel, Pushbutton, White DA(All)*	72DA5-974K	1
	Cover Complete, Stainless Steel, Auto/Pushbutton*	Call to order	1
8	Pushbutton Retaining Ring, Insulated Push Rod Tip, and Spring Kit (D)A(All)	193K	1
9	Security Allen Wrench	204TP	1
10	Inlet Grill, Cast Iron, Pushbutton, with Mtg. Hardware A(All)	194-1K	1
	Inlet Grill, Cast Iron, Automatic, with Mtg. Hardware XA(All)	194-1BK	1
11	Tamper Proof Cover Screw, Cast Iron Covers	100B2	2
	Tamper Proof Cover Screw, Steel Covers	46-330	2
	Lock Washer, Steel Covers	59-005028	2
12	Nozzle Assembly Kit	34-172K	1
13	Pushbutton Adapter, Gasket and Bushing Unit (D)A(All)	190K	1
14	Pushbutton Assembly Kit (Knob, Rod, Ring, Spring and Tip) (D)A(All)	185K	1
15	Blower Scroll Half with Base Mount and Thermostat	211PA	1
16	Fan, Replacement, Metal	101i	1
17	Blower Scroll Half with Terminal Block - Left Side	112P	1
18	Heating Element - 115 V, 20 AMP (D)A5, (D)XA5	213	1
	Heating Element - 115 V, 15 AMP (D)A52, (D)XA52	213B	1
	Heating Element - 208-240 V (D)A54, (D)XA54, (D)A548, (D)XA548	213A4	1
	Heating Element - 277 V, 8.5 AMP (D)A57, (D)XA57	213A7-2	1
19	Grid, Ground Assy (All)	12-001	1
20	Thermostat Only 3/4"	1111-03	1
△	Automatic Sensor Control - 115 V (D)XA	16-230-120 (D)A	1
△	Automatic Sensor Control - 208-230 V (D)XA54	16-240-208 (D)A	1
△	Automatic Sensor Control - 220-240 V, 50Hz CE Only (D)XA548	16-230-240 CE	1
△	Automatic Sensor Control - 277 V (D)XA57	16-240-277(D)A	1
△	Resistor, 277V, 50 Ohms, 90W	43-10152	1

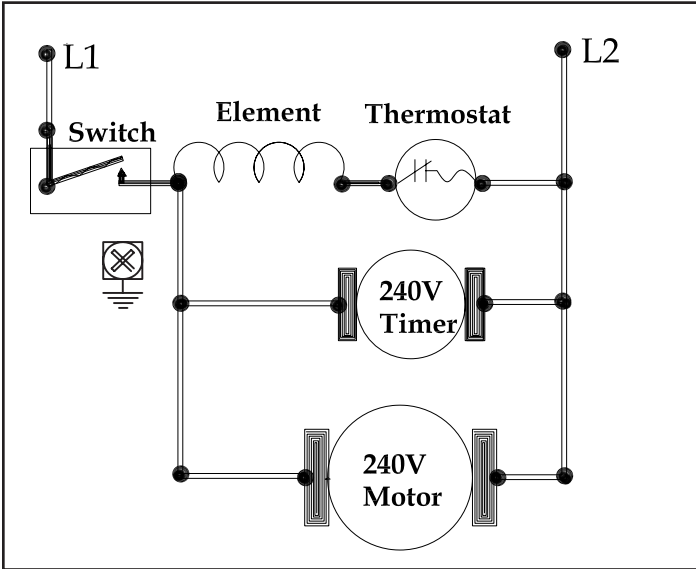
* Specify model when ordering.
 (†) 277 Volt Models Use 210AK Motor (230 V Power Tap).
 △ Not shown.

Wiring Diagram

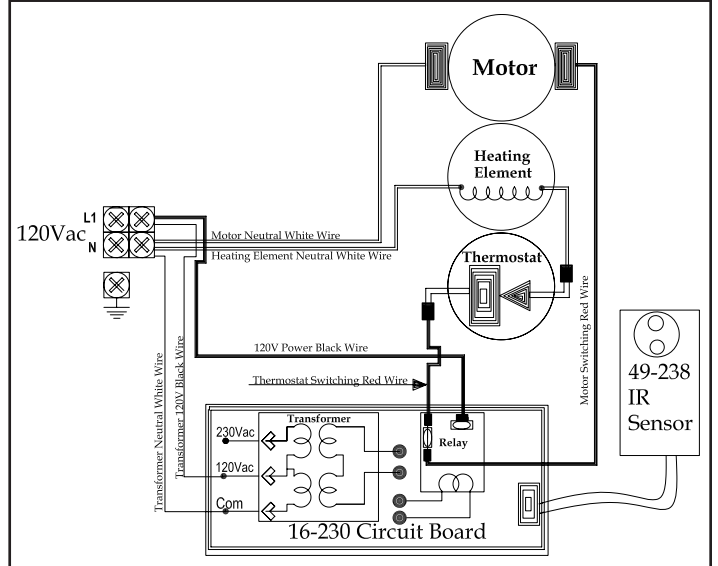
Wiring Diagram - Model (D)A5, A52



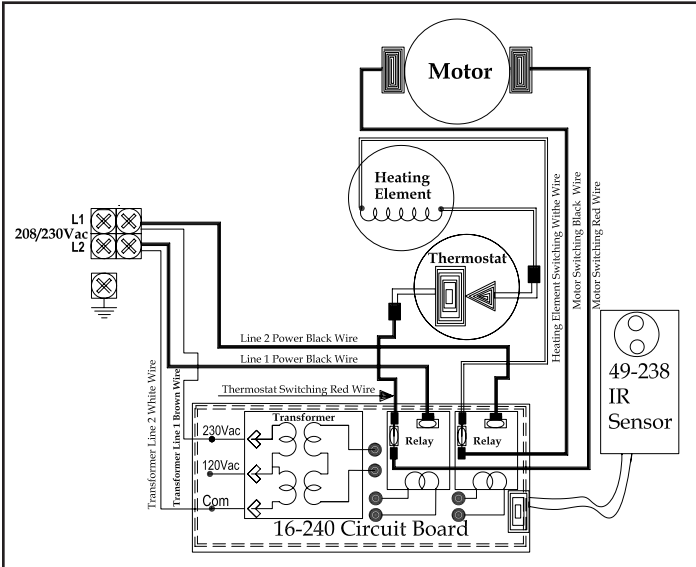
Wiring Diagram - Model (D)A54, A548



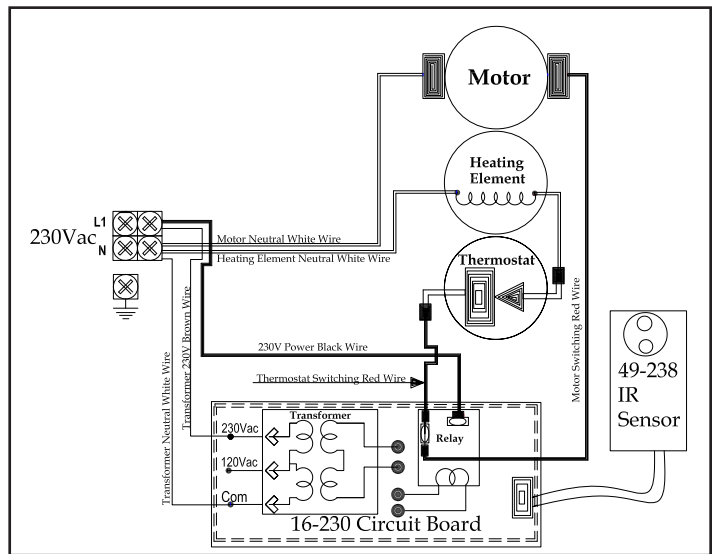
Wiring Diagram - Model (D) XA5, (D) XA52



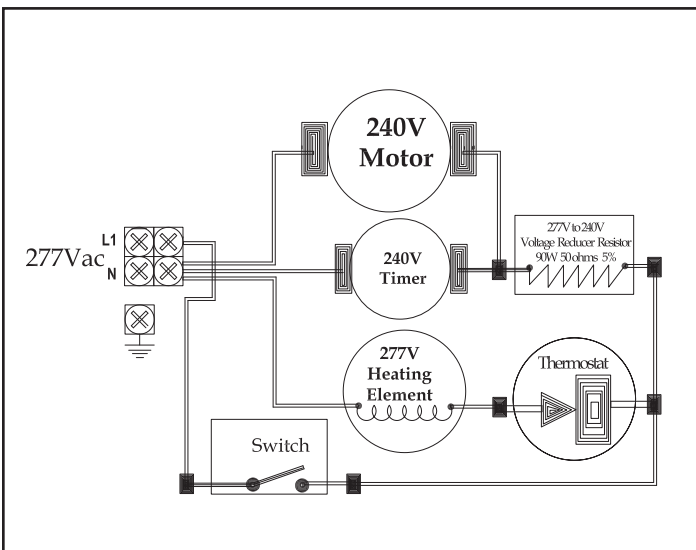
Wiring Diagram - Model (D) XA54



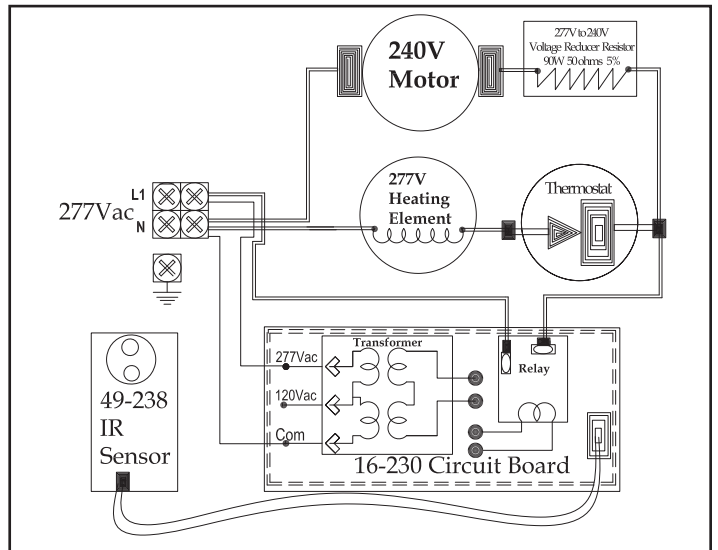
Wiring Diagram - Model (D) XA548



Wiring Diagram - Model (D) A57



Wiring Diagram - Model (D) XA57



Troubleshooting Chart

Symptom	Model	Possible Cause(s)	Corrective Action	Trouble shooting should only be conducted by a qualified electrician.
Dryer fails to start	XA	Sensor obstruction	1. Check Sensor Lens for foreign material or dirt. Clean Lens with soft damp cloth and mild cleaning agent. 2. If Lens is damaged or scratched, replace it.	
	All	No power to the unit	Check if power is "ON" Check electrical connections.	
	XA	Faulty Circuit Board (PCB) and Sensor	Place hands under Sensor. Listen for PCB . Relay "Click." If no "Click" is heard, replace the PCB and Sensor.	
	XA	Faulty Motor	If Relay "Click" is heard, heating element glows for 1-2 seconds, but unit does not start, replace the Motor.	
	A	Faulty Timer / Switch Faulty Motor	With Dryer Cover Removed, depress the Timer Switch Blade; a. Timer Motor should turn. b. With an Ohm Meter, check for continuity across the Switch Terminals. "No" in either test, replace Timer Assembly; "Yes" in both tests, replace Motor.	
Dryer runs for approx. 100 seconds, then will not re-start	XA	Sensor obstruction	1. Check Sensor Lens for foreign material or dirt. Clean Lens with soft damp cloth and mild cleaning agent. 2. If Lens is damaged or scratched, replace the sensor.	
Dryer runs continuous and will not shut-off.	A	Faulty Timer	With Dryer Cover Removed, depress the Timer Switch Blade; Timer Motor should turn. "No" replace Timer Assembly.	
Dryer "Ghosts" starts with no hands present.	XA	Sensor receiving false signal or reflection Or Fluctuating power supply	1. Hand Dryer should be mounted a minimum of 18" above a reflective surface. 2. Check if other Infrared operated appliance in the vicinity may be triggering the Dryer. 3. Multiple Hand Dryers on one circuit or Dryers sharing a lighting circuit. Automatic Hand Dryers must be on dedicated circuits. 4. Building wiring may be insufficient gauge or too long of a run from the supply. 5. Replace the PCB and Sensor.	
Dryer blows cold air.	All	Defective Heating Element Or Defective Thermostat	1. Check for break in Element Wire. 2. Check Heating Element and Thermostat for continuity. If open, replace as necessary.	
Dryer air too hot.	All	Machine is dirty	1. Inspect for foreign material. Using a soft brush and vacuum, clean fan and motor. 2. Replace motor if running slow or erratic.	
Dryer noisy or vibrates.	All	Fan not centered in housing	1. Fan may be rubbing against edge of Fan Housing. To center Fan; a. On plastic fan unit, carefully "tap" the Fan Hub with a screw driver & small hammer to center it until the Fan turns freely. b. On metal fans, loosen the set screw and adjust the fan until it turns freely.	
		<ul style="list-style-type: none"> ■ Foreign object in Fan. ■ Broken or bent Fan. ■ Bent Motor shaft. 	1. Inspect for foreign material. Using a soft brush and vacuum, clean fan and motor. 1. Replace Fan. 1. Replace Motor.	

Limited Warranty

WORLD DRYER LIMITED WARRANTY. World dryer™ warm air hand dryers, North American models covered in this manual, are warranted by world dryer corporation to the original owner against defects in workmanship or materials under normal use for ten years and five years for electronic controls after the date of purchase. Export models covered in this manual are warranted for five years from date of purchase. Normal wear or abuse of any component is excluded from this warranty. Any part which is determined to be defective in material or workmanship and returned, shipping costs prepaid, will be, as the exclusive remedy, repaired or replaced at world's option. For limited warranty claim procedures, see "PROMPT DISPOSITION" below. This limited warranty gives purchasers specific legal rights which vary from jurisdiction to jurisdiction.

LIMITATION OF LIABILITY. To the extent allowable under applicable law, World's liability for consequential and incidental damages is expressly disclaimed. World's liability in all events is limited to and shall not exceed the purchase price paid.

WARRANTY DISCLAIMER. World has made a diligent effort to provide product information and illustrate the products in this literature accurately; however, such information and illustrations are for the sole purpose of identification, and do not express or imply a warranty that the products are MERCHANTABLE, or FIT FOR A PARTICULAR PURPOSE, or that the products will necessary conform to the illustrations or descriptions. Except as provided below, no warranty or affirmation on fact, expressed or implied, other than as stated in the "LIMITED WARRANTY" above is made or authorized by World.

PRODUCT SUITABILITY. Many jurisdictions have codes and regulations governing sales, construction, installation, and/or use of products for certain purposes, which may vary from those in neighboring areas. While World attempts to assure that the products comply with such codes, it cannot guarantee compliance, and cannot be responsible for how the product is installed or used. Before purchase and use of a product, review the product application, and all applicable national and local codes and regulations, and be sure that the product, installation, and use will comply with them.

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Manufactured by World Dryer Corporation, Berkeley, Illinois 60163 U.S.A.

PROMPT DISPOSITION. World will make a good faith effort for prompt correction or other adjustment with respect to any product which proves to be defective within limited warranty. For any product believed to be defective within limited warranty, first write or call dealer from whom the product was purchased. Dealer will give additional directions. If unable to resolve satisfactorily, write to World, giving dealer's name, address, date, and number of dealer's invoice, and describing the nature of defect. Title and risk of loss pass to buyer on delivery to common carrier. If product was damaged in transit to you, file claim with carrier.