## DRIEAZ

# Owner's Manual - Dri-Eaz TurboDryers

Vortex, Rebel EX, Santana SX, Sahara, Sahara Pro, Sahara Pro-HP

#### DRI-EAZ PRODUCTS, INC.

15180 Josh Wilson Road, Burlington, WA USA 98233 Fax: (360) 757-7950 Phone US: (360) 757-7776 www.dri-eaz.com

TurboDryers are high-performance airmovers for speed-drying of building structures and contents. They are designed for a balance of static pressure and airflow, as well as durability and ease of use.

## Read And Save These Instructions



## Safety Information

**Keep Children Away:** Do not allow children to play with or around the unit, which could result in injury. Be sure the unit is inaccessible to children when not attended.

**Keep Unit Grounded**: Always operate the unit with a grounding plug and a grounded electrical outlet. A grounding plug is an essential safety feature that helps reduce the risk of shock or fire.

Protect Power Cord from Damage: Never operate a unit with a damaged power cord, as this may lead to electrical or fire hazards. If the power supply cord is damaged, it must be replaced by a cord of the same type and amperage rating.

**Extension Cords:** Extension cords must be grounded and able to deliver the appropriate voltage to the unit.

When Using Outdoors: When using outdoors, connect only to an outlet provided with a Ground Fault Interrupting (GFI) device, and do not use an extension cord, to reduce the risk of electrical shock. Do not expose to rain.

Do Not Use Speed Control Device: To reduce the risk of fire or electric shock, do not use TurboDryers with a solid-state speed control device.

Handle With Care: Do not drop or throw the unit. Rough treatment can damage the components or wiring and create a hazardous condition.

Run on Stable Surface: Always operate the unit on a stable, level surface, like the floor or a strong counter, so it cannot fall and cause injury.

Secure During Transport: When transporting in a vehicle, secure the unit to prevent sliding and possible injury to vehicle occupants.

**Keep Out of Water:** Never operate the unit in pooled or standing water, as this may create a risk of injury from electrical shock. Do not store or operate outdoors. If electrical wiring or components become wet, thoroughly dry them before using the unit.

**Keep Air Intakes Clear:** Do not clog or block air intakes, as may occur if operated to close to draperies or similar materials. This may cause the unit to overheat and result in a fire or electrical hazard.

Keep Out Dust and Dirt: Do not allow dust, dirt, or other particles to be drawn into the air intakes. Dirt in the motor can cause it to overheat, resulting in a fire or electrical hazard. If the motor gets dirty, clean it using an air hose.

Allow Repair Only by Qualified Person: Do not attempt to disassemble or repair the unit if you are not qualified to do so. You may handle some maintenance and troubleshooting, but make sure that more complex problems are handled by an authorized service technician. For information about authorized repair, call Dri-Eaz at (360) 757-7776.

## **HOW TO USE TURBODRYERS**

TurboDryer airmovers are designed to blow air across wet surfaces for speed drying. They are especially good for drying floors because they create a flat ribbon of air. High-volume airflow will increase the rate of evaporation, help prevent mould growth, and reduce the risk of additional moisture damage. Moving air will improve evaporation by removing a boundary layer of saturated air that hangs near wet surfaces. TurboDryers whisk away this moist air and replace it with dryer air.

#### Positioning TurboDryers

When drying in a building, place at least one TurboDryer per room, or one for every 200 square feet. Place as many as needed for maximum airflow across all wet areas of the floor.

Ensure that all wet surfaces receive good airflow. Open interior doors to maintain good air circulation. Doors may need to be braced to prevent them from blowing shut.

#### **Control the Humidity**

Using TurboDryers to speed the rate of evaporation in a building usually causes the humidity to rise immediately. When this occurs, the air movement becomes less effective and the rate of drying slows. It is vital that TurboDryers be used with adequate dehumidification. To help control mould

growth, keep indoor humidity below 60% Rh. If possible, maintain indoor humidity below 45% Rh. This may require the use of DrizAir Refrigerant Dehumidifiers. Even lower humidity (25-40% Rh) will speed the drying of dense materials such as lumber, and is possible with Dri-Eaz Desiccant Dehumidifiers.

To improve drying, close off the area being dried from the rest of structure. Regulate the heating or air conditioning system at 68-80°F (20-27°C). When dehumidifiers are not available, run exhaust fans in the attic, kitchen and bathroom to remove some humidity. If outdoor air is very dry, open some windows or doors at least slightly. Use a thermohygrometer such as the DHT200 or DHT600 to determine the relative humidity.

#### Check if Materials are Dry

Monitor the moisture condition of wet materials with moisture meters like the HydroSensor, Moisture Counter, and Moisture Pro. To check how completely materials have dried out, compare your readings to readings you take on similar materials you know are dry.

#### Cooling & Ventilation

Over-heated rooms can be cooled with high-volume airflow from a TurboDryer. Place the airmover on the floor or other flat surface and direct the air from cooler areas or the outdoors. Use the kickstand or the 45-90 degree tilt feature to elevate the snout and circulate cool air throughout the room.

### **OPERATING INSTRUCTIONS**

- Plug in to a standard outlet with the correct voltage and amperage for the unit. Set the switch at the desired speed. Check for proper operation before leaving the unit unattended.
- 2. Do not move or carry the TurboDryer when it is running.

### **ELECTRICAL CONNECTIONS**

TurboDryers are designed to operate on a 230V/50 Hz electrical connection. Make sure that the electrical outlet is

grounded and that all safety precautions are taken.

### **MAINTENANCE**

Always turn off the power before performing maintenance procedures. All the service procedures below are to be executed with the unit unplugged. Perform before each use or as needed.

INSPECT ELECTRICAL SYSTEM: Inspect the electrical cord for damage at regular intervals. Periodically, remove the housing and inspect internal wiring for bare wires, insecure fasteners, and discoloration. Remove and repair any damaged wiring as needed. Failure to do so may lead to electrical shock or a fire hazard.

CLEAN AIR INTAKES: Clean off any accumulated lint or other materials from the air inlet side-screens. A buildup will reduce the airflow and may cause the motor to overheat and become a fire hazard.

<u>CLEAN EXTERIOR</u>: Clean the housing with mild detergent and water. Bring back the original shine with a vinyl cleaner and polish like those used on automobile plastics.

<u>EXTERIOR INSPECTION</u>: Evaluate exterior components and make sure they are properly installed. Listen to the unit for abnormal sounds. Repair or replace components as needed.

#### Periodic Maintenance (as needed)

Make sure unit is unplugged and the wheel has stopped. Remove four screws to remove each side screen. This will permit access to motor and wheel for cleaning.

<u>CLEAN COMPONENTS</u>: Use compressed air or a vacuum to remove fint and dust from blower wheel, motor and side screens.

<u>DO NOT WET MOTOR OR WIRING</u>: To prevent damage to electrical components, do not use a hose or pressure washer to clean a TurboDryer. If electrical components do become wet, dry them immediately.

MOTOR BEARINGS: The bearings on all Dri-Eaz Turbo-Dryers are permanently lubricated. Do not oil.

## **SPECIFICATIONS**

Model	SAHARA	SAHARA PRO	SIROCCO	VODTEV
Switch	2-Speed Rocker	3-Speed Rotary	3-Speed Rotary	VORTEX
Actual CFM	900 - 1200 cfm	800 - 1000 - 1200 cfm	1,850 cfm (high)	1-Speed Rocker
	1530 - 2050 cmh	1350 - 1700 - 2050 cmh	3.140 cmh (high)	3,600 cmh
Rated CFM	2,700 cfm	2,700 cfm	4,900 cfm	2,120 cfm
'1	4,600 cmh	4,600 cmh	8,300 cmh	N/A
RPM	800 - 1,075 rpm	700 - 900 - 1,075 rpm	650 - 900 - 1,350 rpm	2,850 rpm
Static Pressure	3.8 cm, 1.5"	3.8 cm, 1.5"	5.8 cm, 2.3"	
Power, 230 Volts	4.7 amps	4.7 amps	4.2 amps	5.6 cm, 2.2 in
Carpet Clamp	Kit Available	Yes	No No	2.2 amps
Cickstand	Yes	Yes	Yes	N/A
Positions	3	1	105	N/A
Wheel	9.5" x 9.5"	9.5" x 9.5"		1
	24 x 24 cm	24 x 24 cm	10.5" x 10.5"	N/A
leight, Width, Length	20", 15", 20"	20", 15", 20"	27 x 27 cm 21 x 19 x 22 in.	(Axial fan-blade)
	50, 44, 50 cm	50, 44, 50 cm	1	19", 15",18"
Jse Weight	13 kg, 28 lb	13 kg, 28 lb	53 x 48 x 56 cm 19 kg, 42 lb	48, 38, 46 cm.
hip Weight	16 kg, 35 lb	16 kg, 35 lb		15 kg, 33 lb
lotor Rating	.4 hp	.4 hp	22 kg, 49 lb	19 kg, 41 lb
verheating Cutoffs	Dual Thermal Protectors	Dual Thermal Protectors	.75 hp	1.0 hp
afety Listings	CE	CE	Dual Thermal Protectors	Dual Thermal Protector
Varranty	1 Year Limited		CE	CE
	I rear Limited	1 Year Limited	1 Year Limited	1 Year Limited

Specifications are subject to change without notice. Some values are approximate.

## **TROUBLESHOOTING**

In COLUMN 3, the technician in the field can handle "FS" or Field Solutions. Others solutions should be handled by a repair technician — an "AST" or Authorized Service Technician.

WARNING: Execute all the service procedures below only with power turned off, i.e. unplugged.

PROBLEM	CAUSE	See above	SOLUTION
Motor won't run  Motor runs but wheel turns erratically or scrapes  Unit vibrates excessively	No power to machine Switch not turned on Blower wheel jammed Intake or exhaust blocked Switch is broken Loose wiring Severe jolt has caused motor mount to bend and wheel to rub Severe jolt caused motor to slip out of mount and wheel to rub	FS FS FS FS AST AST AST	Plug in the unit; check circuit breaker or fuse Turn on the switch Remove material jamming wheel Turn machine off and allow to cool, then remove blockage Call distributor or Dri-Eaz for replacement switch Check wiring and tighten as needed Remove motor from housing, then replace or repair bent motor mount Remove motor from housing, then install motor into mount correctly
	Accumulation of soil on wheel Blower wheel has lost balance Blower wheel has been bent Bent motor shaft	FS AST AST AST	Clean blower wheel Balance or replace blower wheel Replace blower wheel Replace motor

FOR PARTS AND SERVICE CALL YOUR LOCAL DISTRIBUTOR, or the Dri-Eaz Service Department at (360) 757-7776