

DRI-EAZ

OWNER'S MANUAL

**SAFETY • OPERATING INSTRUCTIONS
MAINTENANCE • SPECIFICATIONS • TROUBLESHOOTING**



VORTEX™

Axial Fan

PURCHASE DATE: _____ **SERIAL NO:** _____

DISTRIBUTOR: _____

**THIS MANUAL CONTAINS IMPORTANT SAFETY WARNINGS.
PLEASE READ THESE AND SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.**

DRI-EAZ PRODUCTS, INC. • 15180 Josh Wilson Road, Burlington, WA 98233 • www.dri-eaz.com • (360) 757-7776

TABLE OF CONTENTS

SAFETY INFORMATION.....	2
OPERATING INSTRUCTIONS.....	3
MAINTENANCE	3
SPECIFICATIONS	4
TROUBLESHOOTING	4

Congratulations on your purchase of a Vortex axial fan from Dri-Eaz Products. It is our goal to offer you the best high performance airmover available. Your Vortex axial fan is durable and simple to operate. It can provide years of trouble free service when you follow the recommendations listed in this manual.

We strongly advise that you read this manual before operating the unit. Please pay particular attention to the safety information. We invite your written comments and suggestions for improvements. If you do not understand something in this manual or if you have a question about your Vortex axial fan, call Dri-Eaz Products at (360) 757-7776.

SAFETY INFORMATION

SAVE THESE WARNINGS

Dri-Eaz is concerned about the safety of everyone who uses or comes in contact with the Vortex. The unit is designed to be operated in compliance with the safety warnings and instructions provided in this manual.

Like other electrical devices, the Vortex can become dangerous if abused, damaged or misused. Failure to observe the following warnings can result in injury to persons, fire damage, or damage to the unit. To reduce the risk of electrical shock, fire, or personal injury, read and follow each of the warnings below before using the Vortex.

Keep the Unit Grounded: Always operate the Vortex with the three pronged grounding plug and a grounded electrical outlet. Never remove the three pronged plug. Do not use an ungrounded extension cord or an ungrounded adapter. The grounding prong on the unit's plug is an essential safety feature that helps reduce the risk of shock or fire in the event of an electrical hazard.

DANGER

Removal or alteration of the grounding plug, or use of an adapter that defeats the unit's electrical grounding, can create risk of serious personal injury or fire in the event of damage to or malfunction of this product. Do not use the unit for any reason if it cannot be properly grounded. If you are unsure whether a receptacle is grounded, test the outlet with a receptacle tester or consult an electrician.

Extension Cords: Extension cords must be grounded and be able to deliver the appropriate voltage to the unit. Extension cords up to 25 feet long should use 14 AWG wire. Cords up to 50 feet long should use 12 AWG wire.

CAUTION

When operating the unit outdoors, do not use an extension cord.

Protect the Power Cord From Damage: Never operate units with cut, nicked, abraded, frayed or otherwise damaged power cords or extension cords as this may lead to electrical or fire hazards. Never unplug the unit by pulling the cord. Grasp

the plug firmly and pull straight out. Take precautions not to use the cord in a way where damage may occur. Keep cords away from heated surfaces. Inspect cords before each use and replace cords that show signs of damage.

CAUTION - OUTDOOR USE

When using the unit outside **do not** use an extension cord and use **only with a GFCI** protected receptacle.

Storage: Store units in a clean dry environment. Do not store units outdoors.

Keep Motor Dry: Never allow water inside the unit's motor. If the motor becomes wet for any reason, thoroughly dry it before use.

CAUTION

Never operate units in pooled or standing water, as this may create a risk of serious injury from electrical shock.

Keep Children Away: Do not allow children to play with or around the unit. Be sure the unit is inaccessible to children when unattended. Children can hurt themselves by playing with or around units. Secure all areas in which units are left unattended while running.

Handle With Care: Do not drop or throw units for any reason. Rough treatment can damage the motor, wiring, motor mount or safety screens, creating a hazardous condition.

Run on Stable Surface: Always operate units on a stable flat surface such as the floor. Do not operate units from places where they can fall or be pulled down causing injury. Beware that units may vibrate or be pulled from smooth surfaces such as counter tops and cause an injury, fire or electrical hazard.

WARNING

To reduce the risk of fire or electric shock, do not use units with a solid-state speed control device.

Air Intakes Must Be Clear: Operate units away from fabrics, plastics, and other materials that may come in contact with the air intakes. Do not allow any material to clog or block air intakes, as this may cause units to overheat and result in a fire or electrical hazard.

Keep Foreign Matter Out: Do not allow oil, grease, solvents or other matter (including sawdust and drywall dust) to be drawn into the air intakes of units. Never direct fogged or liquid chemicals of any kind into the air intakes of units.

Don't Operate Without Safety Screens: Never operate units without the factory installed safety screens on the air inlet and exhaust as the rapidly revolving fan can cause serious injury.

Keep Away From Heaters: Do not use units for circulating hot air by placing the intakes close to a heater. The housing could melt or the motor could overheat and cause a fire or electrical hazard.

Keep Away From Combustible Gas: Do not operate units in an area containing combustible gas. This could cause a danger of fire or explosion. Ventilate environments that may be explosive.

Don't Modify Unit: Never modify the motor, wiring or casing of units for any reason. Modifications to units can lead to fire or electrical hazards.

Share Owners Manual: Be sure to include a copy of the Owners Manual whenever you loan, rent, or otherwise allow

someone else to use the Vortex. They need the same safety information that you require for safe efficient operation. Make sure that all technicians and operators have read and understand the owners manual.

Maintenance or Repair: Do not attempt to disassemble or repair units if you are not qualified to do so. If the unit is not working as it should, return it to Dri-Eaz or an authorized dealer or distributor for servicing. Note: For information about authorized repair and maintenance call Dri-Eaz Products, Inc. at (360) 757-7776.

DANGER

Do not attempt to service or clean the unit while it is plugged in or while the fan is turning, as this may lead to risk of electrical shock or injury. It is dangerous for an unqualified individual to attempt to disassemble or repair the unit.

OPERATING INSTRUCTIONS

The Vortex Axial Fan is designed for air ventilation, circulation, and extraction, and for drying of wet materials and structures with airflow.

When operating the Vortex, note the airflow arrow on the housing, indicating which way the air moves. The Vortex can be used with or without attached ducting. It is useful for either positive or negative airflow, that is, blowing air into or extracting air from spaces.

Inspect the inlet and outlet screens before plugging in the unit, and remove any debris that may restrict airflow.

When Used with Ducting

Do not install ducting when the Vortex is operating.

To install ducting, first note the direction of airflow. Place end of ducting over the duct ring and attach securely.

Ducting to fit the Vortex is available from Dri-Eaz Products at (800) 932-3030. Ducting has quick connect straps plus a snap-in ring used to fasten two sections of ducting together.

Confined Space Ventilation

Position the Vortex at least five feet away from the entry to the confined space. Place it upwind so that purged gases do not re-enter the unit. Make sure the the inlet is not blocked by a wall or other obstruction.

Place the other end of the ducting in the confined space, angled so it points at an end wall. Keep it pointed at an end wall to prevent pockets of unmoving air, and to keep fresh air circulating to all locations.

MAINTENANCE

Always turn off the power before performing inspection procedures.

CAUTION

Internal repair procedures should be performed by a qualified technician from an authorized service center.

Cord Inspection: Inspect the electrical cord for damage. Units with damaged cords must be removed from service and repaired before use. Failure to do so may lead to electrical shock or a fire hazard.

Exterior Inspection: Evaluate exterior components and make sure that all are in proper operating condition. Repair or replace components as required. Run the unit briefly; listen for abnormal sounds and repair as needed.

Clean Exterior: Clean the exterior plastic housing with mild detergent and water.

Motor Bearings: The bearings on the Dri-Eaz Vortex are permanently lubricated. No oiling is necessary.

VORTEX™ SPECIFICATIONS

Fan Speed:	3450 RPM
Max. Static Pressure:	3.2"
Motor Rating:	1.0 hp
Power:	115 Volts, 60 Hz
Current:	7.4 amps
Cord Length:	20 feet (6.1 m)

Switch:	1 Speed Toggle
Height:	19" 48 cm
Width:	15" 38 cm
Depth:	18" 46 cm
Weight:	33 lb 15 kg
Housing	High-Density Polyethylene Plastic

Specifications are subject to change without notice.

VORTEX TROUBLESHOOTING

CAUTION

Troubleshooting solutions fall into two categories in the third column. Field Solutions (FS) can be handled by the technician in the field. Others solutions listed as Authorized Service Technician (AST) should be handled only by a repair technician.

WARNING: ALL THE SERVICE PROCEDURES BELOW SHOULD BE EXECUTED WITH POWER OFF I.E. UNPLUGGED.

PROBLEM	CAUSE	SOLUTION
Unit does not run.	1. Switch not turned on.	FS 1. Turn on switch.
	2. No power at outlet.	FS 2. Check panel circuit breaker and check outlet with receptacle tester.
	3. Circuit is overloaded and panel circuit breaker tripped.	FS 3. Unload circuit and reset circuit breakers.
	4. Loose wiring.	AST 4. Check wiring and tighten as needed.
	5. Switch is broken.	AST 5. Replace switch.
Unit runs briefly, then shuts off on overload.	1. Intake and/or exhaust grill(s) obstructed.	FS 1. Clean grill(s).
	2. Excessive duct length.	FS 2. Shorten duct length.
	3. Motor bearing or internal motor wiring is faulty.	AST 3. Replace motor.
Unit runs but vibrates excessively.	1. Dirt has built up on fan blade.	FS 1. Clean fan blade
	2. Severe jolt has bent motor shaft so unit is out of balance.	AST 2. Replace motor. Replace fan blade if necessary.
	3. Fan blade is damaged.	AST 3. Replace fan blade.
Unit runs but makes a scraping noise.	1. Severe jolt has deformed motor mount so fan rubs.	AST 1. Repair or replace the motor as necessary.
	2. Severe jolt has deformed the housing.	AST 2. Replace the housing or entire unit as necessary.
Motor makes noise but fan does not turn.	1. Severe jolt has deformed motor mount so fan rubs.	AST 1. Repair or replace the motor as necessary.
	2. Severe jolt has deformed the housing.	AST 2. Replace the housing or entire unit as necessary.
	3. Capacitor wire is broken or loose, or capacitor has failed.	AST 3. Repair or replace the wires and/or the capacitor as necessary.
	4. Roll pin locking fan to motor shaft is faulty.	AST 4. Replace the roll pin.

**FOR PARTS AND SERVICE CALL YOUR LOCAL DISTRIBUTOR,
OR THE DRI-EAZ SERVICE DEPARTMENT AT (360) 757-7776**