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Operations & Maintenance Manual  
For Commercial Use Only



WINDSHEAR™ SIDEDRAFT  
MODEL NO: 98782 (115V & 98783 (230V)



# Long Term Buyer Protection Limited Warranty

Tornado Industries, LLC. (Tornado) warrants to the end/user customer that the Tornado product(s) will be free from defects in material and workmanship for the duration(s) described below. This limited warranty DOES NOT cover machines and/or components subject to normal wear and tear, damage that occurs in shipping, failures resulting from modification, accident, unsuitable operating environment, misuse, abuse, neglect, or improper maintenance by you. For full details, contact your Authorized Tornado Distributor, Service Center, or the Tornado Technical Service Department. Tornado sales and service representatives are not authorized to waive or alter the terms of this warranty, or to increase the obligations of Tornado under the warranty.

**10 Years\***

**Plastic water tanks and Rotationally-molded bodies**

**2 Years\***

**Parts on all Tornado cleaning equipment**

**1 Year\***

**Labor on all Tornado cleaning equipment**

**1 Year\***

**Warranty on batteries, one year prorated**

All battery warranties are handled directly by the battery manufacturer, on a one year prorated basis

### Terms subject to change without notice

1. Except all Windshears™ Blowers, Storm, TV2SS, Side and Downdraft, Insulation Blowers, CV 30, CV 38, CK14/1 PRO, CK 14/2 PRO, SWM 31/9, CK LW13/1, CK LW 13/1 ROAM, CV 38/48 Dual, PV6, PV10, PV6 ROAM, Wall Mount Vacuum and all chargers are warranted for 1 (one) year for both parts and labor.
2. All non-wear item parts purchased after warranty expiration are warranted for 90 days.
3. Warranty starts from the date of sale to the consumer or, at Tornado's discretion, 6 months after the dealer purchased the unit from Tornado, whichever comes first.
4. The EB 30 is warranted for a period of 90 days for both parts and labor.
5. The warranty on engines used on propane powered equipment is limited to motor manufacturer's warranty.
6. Ride-on Scrubbers are warranted for 24 months, parts, 6 months labor or 1,000 hours, whichever occurs first.

**Note:** Tornado, The Latest Dirt, Floorkeeper, Carpetkeeper, Carpetrinser, Carpetrinser/Dryer, Headmaster, Taskforce, PAC-VAC, T-Lite, Glazer, Windshear, Max-Vac and Trot-Mop are trademarks of Tornado Industries

**Website:** [www.tornadovac.com](http://www.tornadovac.com)  
Phone 1-800-VACUUMS  
Fax 817-551-0719  
Address 3101 Wichita Court  
Fort Worth, TX 76140



## NOTES



Your new Tornado unit is a high quality, precision-made product. All parts used in the manufacturing of this unit have passed rigid quality control standards prior to assembly. Please safeguard the original receipt / invoice. If you experience any problems with your unit during the warranty period, the original receipt / invoice will act as proof of purchase. Contact Tornado for any warranty inquiries.

## **IMPORTANT SAFETY INSTRUCTIONS**

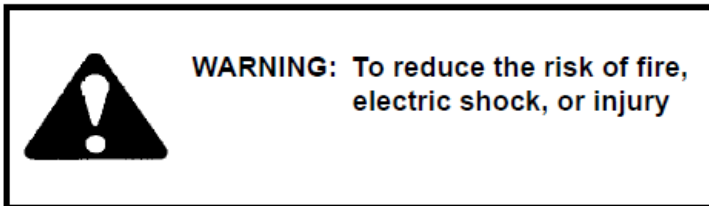
### **READ AND UNDERSTAND ALL INSTRUCTIONS BEFORE USING THIS UNIT**

Read and understand this owner's manual and all labels on the unit before operating. Safety is a combination of common sense, staying alert and knowing how your unit works. Use this unit only as described in this manual. Use only manufacturer's recommended attachments. To reduce the risk of personal injury or damage to your unit use only Tornado recommended accessories.

### **IMPORTANT SAFETY INSTRUCTIONS FOR COMMERCIAL USE ONLY**

**WHEN USING AN ELECTRICAL APPLIANCE, BASIC PRECAUTIONS SHOULD ALWAYS BE FOLLOWED INCLUDING THE FOLLOWING:**

### **READ ALL INSTRUCTIONS BEFORE USING THIS MACHINE**



1. Do not leave machine when plugged in. Unplug from outlet when not in use and before servicing.
2. Use indoors only. Do not use outdoors, do not expose to rain.
3. Do not allow to be used as a toy. Use caution when operating near children.
4. Use only as described in this manual. Use only manufacturer's recommended attachments.
5. Do not use with damaged cord or plug. If machine is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, return it to a Tornado Service Center.
6. Do not pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges or corners. Do not run machine over cord. Keep cord away from heated surfaces.
7. Do not unplug by pulling on cord. To unplug, grasp the plug not the cord.
8. Do not handle plug or machine with wet hands.
9. Do not put any object into openings. Do not use with any opening blocked; keep free of dust, lint, hair, and anything that may reduce air flow.
10. Keep hair, loose clothing, fingers, and all parts of body away from openings and moving parts.
11. Turn off all controls before unplugging.
12. Use extra care when cleaning on stairs.
13. Do not use to pick up flammable or combustible liquids, such as gasoline or use in areas where they may be present.
14. Connect to a properly grounded outlet only. See Grounding Instructions.

**Save These Instructions**

## Operating Instructions

1. Plug in to a standard outlet with the correct voltage and amperage for the unit.
  2. Place the dryer in the desired operating position.
  3. Set the switch at the desired speed: low or high.
  4. Check for proper operation before leaving the unit unattended.
- Do not move or carry the dryer when it is running.

**Daisy-chained:** Up to 6 units may be plugged into on a single 15 amp circuit and up to 9 on a 20 amp circuit. The axial fan is equipped with dual power outlets that will allow you to “daisy chain” up to 5 units units. Do not “daisy chain” more than 5 units. The axial fan system has a 12 amp circuit breaker built in that will trip if more than 5 units are “daisy chained” from a single machine.

### 12 AMP Resettable Circuit Breaker

The axial fan features a 12 amp circuit breaker that will “trip” if more than 12 amps of electrical current is drawn through the cord.

### GFCI Protection and Outlet

The axial fan provides a standard duplex GFCI outlet for daisy-chaining multiple units together. The GFCI protection promotes operator safety and will “trip” is an electrical ground fault is sensed. To test the GFCI protection, press the TEST button. If operating properly, the RESET button on the GFCI outlet will pop out.

### Operating Positions

The axial fan is designed to operate in multiple positions for any type of drying.

1. **Tilt Back** – Tilt the axial fan backward on the four curved molded legs at an angle to direct air for elevated drying.
2. **Upright** – Set the axial fan square with the handle on the top to direct air across a room.
3. **Tilt Forward** – Tilt the axial fan forward on the “standing legs at an angle to direct airflow along the flow in front of the dryer.
4. **Face Down** – Set the axial fan on the four curved molded legs with the “standing legs” facing up to direct air straight down.
5. **Power Pitch** – Model PDaxial fan is equipped with a 3° down angle leg.
6. **Stack for Storage** – the axial fan interlock and stack for easy storage and transport.



2 position switch and daisy-chained outlets



Cord wrap



## **Maintenance**

### **Periodic Maintenance**

1. Check power cord for any breaks, separations or cuts.
2. Make sure the ground pin or grounding prong is intact or the machine will be unsafe to operate.

### **Trouble Shooting**

#### **If the dryer will not run**

1. Check electrical cord; is it firmly seated in wall outlet
2. Check if dryer circuit breaker is tripped, reset if necessary.
3. Check to see if building circuit breaker is tripped. If circuit is overloaded, move cord to a different outlet.
4. If using an extension cord, make sure it is in good condition, proper gauge and firmly connected.

**WARNING** Do not stack dryers more than 4 (four) units high for transport, or 5 (five) units high for storage.

SAVE THESE INSTRUCTIONS

# Warranty Registration Form

Please provide additional information on  
Tornado equipment: (Check choices below)

- |   |   |
|---|---|
| <input type="checkbox"/> Automatic Scrubbers          | <input type="checkbox"/> Sweepers             |
| <input type="checkbox"/> Propane Floor Machines       | <input type="checkbox"/> Rotary Floor Machine |
| <input type="checkbox"/> High Speed Burnishers        | <input type="checkbox"/> Carpet Vacuums       |
| <input type="checkbox"/> Carpet Extractors & Spotters | <input type="checkbox"/> Wet/Dry Vacs         |
| <input type="checkbox"/> Steam Cleaners               | <input type="checkbox"/> Jumbo Vacs           |
| <input type="checkbox"/> Ride-On Equipment            | <input type="checkbox"/> Pressure Washers     |

See complete product info at [www.tornadovac.com](http://www.tornadovac.com)

Selling Dealer: (Required) \_\_\_\_\_

Please Print Clearly

Company/Institution	
Contact Name	Title
Address	City/State/Zip Code
Phone	Fax
Date of Purchase	Email

See white metal plate or sticker on unit for this information.

MACHINE TYPE/MODEL NUMBER:	MACHINE SERIAL NUMBER:
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____

Facility Description (please circle all that apply)

1. School	9. Hospital	17. U.S. Govt.
2. Retail Store	10. Nursing Home	18. Other Govt.
3. Restaurant	11. Religious Institution	19. Auto Service
4. Office Building	12. Airport	20. Airport
5. Contract Cleaning	13. Warehouse	21. Non-Profit
6. Light Manufacturing	14. Apartment/Condo	22. Other (specify)
7. Heavy Manufacturing	15. Warehouse	
8. College/University	16. Supermarket	

How did you first learn about Tornado cleaning and maintenance equipment?	In square feet ( <i>meters</i> )	
	Total Hard Floor Area	Total Carpeted Area Square feet (square meters)
<input type="checkbox"/> Contacted by local dealer <input type="checkbox"/> Previous experience with Tornado products <input type="checkbox"/> Reputation/ Recommendation <input type="checkbox"/> Advertising <input type="checkbox"/> Direct mail <input type="checkbox"/> Internet <input type="checkbox"/> Other	<input type="checkbox"/> 0-10,000 (0-930) <input type="checkbox"/> 10-50,000 (930-4,650) <input type="checkbox"/> 50-250,000 (4,650-23,250) <input type="checkbox"/> Over 250,000 (over 23,260)	<input type="checkbox"/> 0-10,000 (0-930) <input type="checkbox"/> 10-50,000 (930-4,650) <input type="checkbox"/> 50-250,000 (4,650-23,250) <input type="checkbox"/> Over 250,000 (over 23,260)

Damage or defect arising from abuse, neglect or other misuse is excluded from this warranty. Other items may or may not apply based on your specific machine. If any defect occurs, the warranty is voided if service is attempted by non-Authorized Tornado Service Centers.



Return to :  
Tornado Industries  
3101 Wichita Court  
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Fax: 817-551-0719  
or online at  
[www.tornadovac.com](http://www.tornadovac.com)