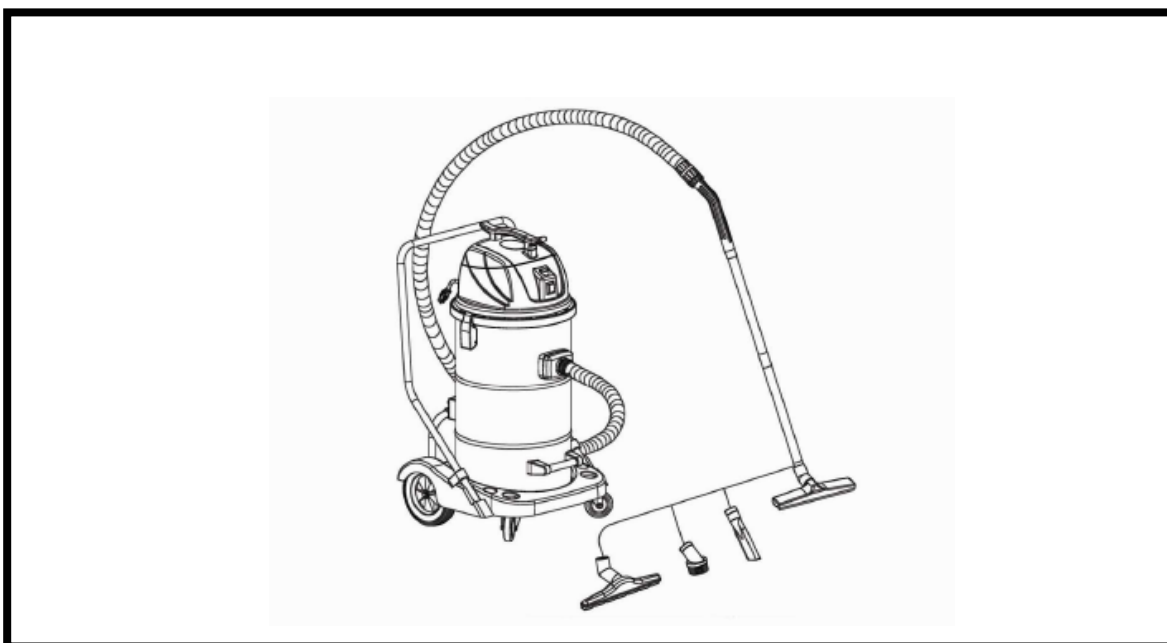


TORNADO INDUSTRIES
7401 W. LAWRENCE AVENUE
CHICAGO, IL 60706
(708) 867-5100 FAX (708) 867-6968
www.tornadovac.com



Operation & Maintenance Manual

For Commercial Use Only



WET/DRY VACUUM MODEL S15

MODELS
94232 & 94233

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Tornado® Standard Warranty Program *	
<p>Warranties do not cover components subject to normal wear or abuse and misuse, and have other limitations not specified here. For full details, contact your Authorized Tornado Distributor, Service Center, or the Tornado Technical Service Department.</p> <p>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.</p>	<p>10 Years: <i>All plastic tanks and rotationally-molded bodies</i> ^{1) 5)}</p>
	<p>2 Year: <i>Parts on all Tornado and Tornado/Karcher cleaning equipment</i> ^{1) 2) 3) 5)}</p>
	<p>1 Year: <i>Labor on all Tornado and Tornado/Karcher cleaning equipment</i> ^{2) 5)}</p>
	<p>1 Year: <i>Warranty on batteries and chargers, one year.</i> All battery warranties are handled by the battery manufacturer, please call customer service for information.</p>

* Effective January 1st, 2005. Terms are subject to change without notice.

1. Windshear™ Blower-Dryer, Insulation Blowers, CK LW 13/1, CK 14/1, CV 30, CV 38, T191, T201, CV 30, CV 38, CW 50, CW 100, Pro PAC Vacs, Duo-Upright Carpetkeepers™, and all chargers are warranted for 1 (one) year for both parts and labor.
2. Warranties on the EB30 are 90 days (batteries, chargers, parts, accessories).
3. Warranties on all riding sweepers including the ICC1, KM 100/100 R, KMR 1250, and KMR 1700 are 24 months parts/6 months labor OR 1000 hours of operation, whichever comes first. Warranties on the 75/140 & 90/140 are 24 months parts/12 months' labor OR 1,000 hours of operation whichever comes first.
4. All-non wear item parts purchased after warranty expiration are warranted for 90 days.
5. Warranty starts from the date of sale to the consumer 6 months after dealer purchased the unit from Tornado, whichever comes first.

Note: Tornado, The Latest Dirt, Floorkeeper, Carpetkeeper, Carpetrinser, Carpetrinser/Dryer, Headmaster, Taskforce, PAC-VAC, T-Lite, Glazer, Windshear, Max-Vac, CV 30, CV 38, and Trot-Mop are trademarks of Tornado Industries.

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

*When using a wet/dry vacuum, basic precautions should be followed.

*Read all instructions before using your vacuum.

IMPORTANT SAFETY ADVICE

READ ALL INSTRUCTIONS BEFORE USING THIS APPLIANCE

When using an electrical appliance, basic precautions should always be followed.

⚠️ WARNING

To reduce the risk of fire, electric shock of injury; only use dryer as described in this manual.

You must have training in the operation of this machine before using it. Read all instructions carefully before use.

- Keep children and unauthorized persons away from the machine when in use.
- Do not leave the machine plugged in when not in use.
- Switch the machine off before removing the plug from the outlet.
- When unplugging, pull the plug, not the cord.
- The machine must be unplugged prior to cleaning or servicing the machine.
- Keep the power cord clear of moving parts.
- Do not run the machine over the power cord.
- Do not operate the machine with a damaged power cord or plug, or if the machine malfunctions or is damaged in any way.
- Do not use where hazardous dust is present.
- Do not use in an explosive atmosphere.
- Do not use where flammable liquids or gasses are present.
- Do not use or pick up flammable chemicals or liquids with this machine.
- Take care when using the machine near the top of stairs to avoid overbalancing.
- Maintenance and repair must be done by authorized personnel only.
- Wear suitable footwear to avoid slipping.
- Do not operate this machine in bare feet or with open-toed shoes or sandals.
- Do not smoke when using the machine.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches, or hot ashes.
- Do not use without dust bag and/or filters in place.
- Do not pull or carry by cord, use cord as a handle, close door on cord, or pull cord around sharp edges or corners. Keep cord away from heated surfaces. Store cord properly when not in use.

STORAGE INSTRUCTIONS

Store appliance on floor, indoors, away from heated surfaces. Do not pull or carry by cord, use cord as a handle, close door on cord, or pull cord around sharp edges or corners. Keep cord away from heated surfaces. Store cord properly when not in use.

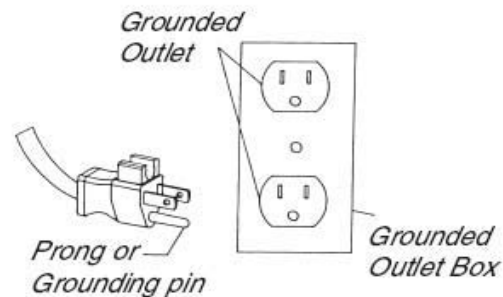
GROUNDING INSTRUCTIONS

This appliance must be grounded. If it should malfunction or break down, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having an equipment-grounding conductor and grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

This appliance is for use on a nominal 120 volt circuit and has a ground plug (see illustration, right). Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adaptor should be used with this appliance.

⚠️ WARNING

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet, have a proper outlet installed by a qualified electrician.



DRY OPERATION OF VACUUM

The wet/dry vacuums are equipped with bypass motors. Install the cloth filter, place the motor head on the canister and snap down the hold-down clamps.

WET OPERATION OF VACUUM

The wet/dry vacuums are equipped with a bypass motor so that the working vacuum is separated from the cooling air flow. To pick up water, the dry filter must be removed and the float cage assembly must be in place, the motor head placed on the canister and the hold down clamps locked down. The safety float located in the protective wire frame in the tank stops the vacuum action of the motor head when the maximum recovery of liquids is reached.

WAND AND ATTACHMENT INSTRUCTIONS

To assemble the two piece wand:

1. Match the alignment ridges of the upper and lower wand sections.
2. Push the upper wand into the lower wand.

To assemble tools:

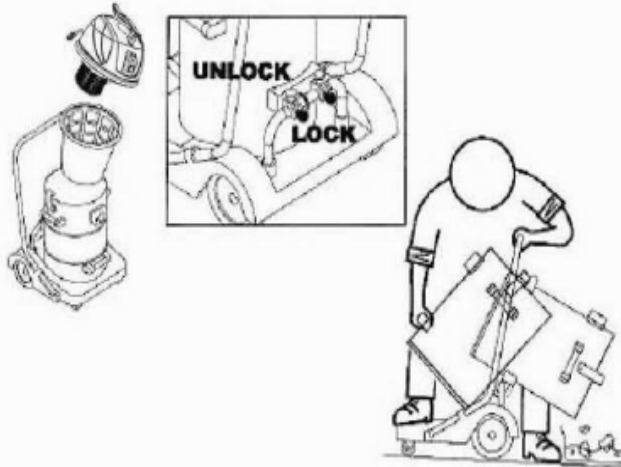
1. Slide the swivel cuff of the tool onto the tapered lower wand.
2. Turn swivel cuff 1/4 turn to tighten.

DRAINING

When the tank is full, using the overturning mechanism to empty the tank.

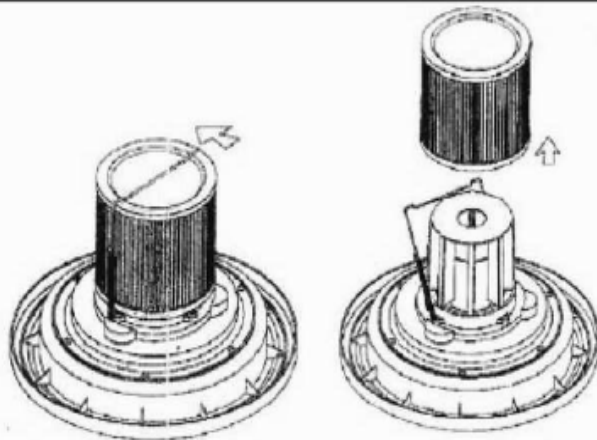
1. Remove the top head.
2. Take out the filter with frame.
3. Unlock the knob.
4. Grip the handle with one hand, use one foot to brace the dolly and lift the handle by the other hand to empty the tank.

NOTE: When the water level in the tank exceeds the safety level, the safety device will automatically block the inlet and motor turning sound will be changed, but power will remain ON. The power must be turned OFF before emptying the tank.



REMOVE THE PAPER FILTER

The paper filter must be removed for wet recovery. Push the metal ping counterclockwise to release the filter. Remove the paper filter.



HOSE ATTACHMENT INSTRUCTIONS

The hose and swivel connector are pre-assembled at the factory. To attach the swivel connector to the intake fitting of the canister:

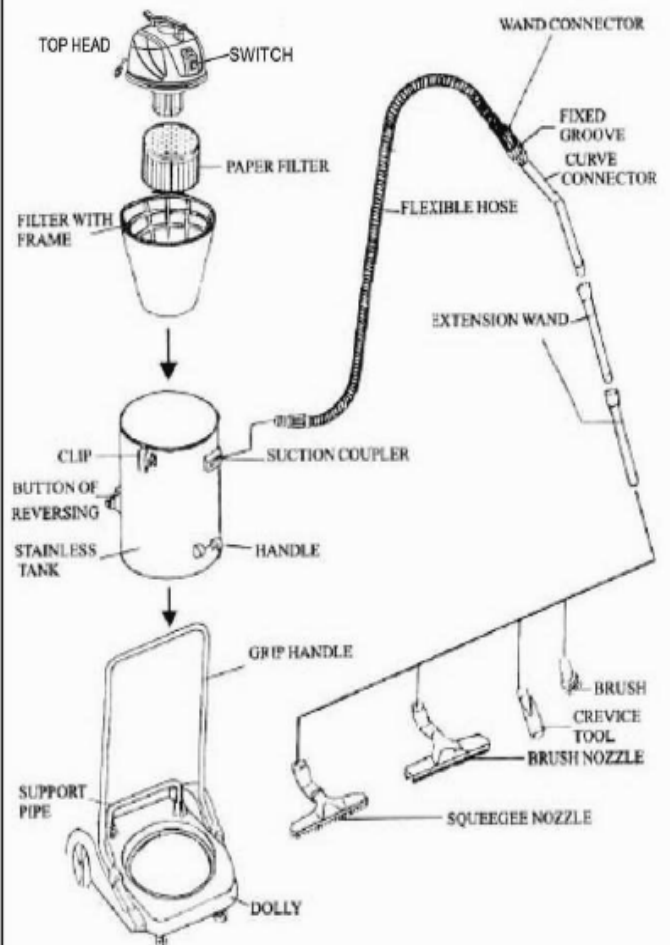
1. Push the grooved cuff straight into the intake fitting.
2. To remove, press the release button on top of the intake fitting while pulling the grooved cuff out.

MAINTENANCE AND SERVICING

1. To dismantle, unclip both latches and remove top housing and filter with frame.
2. Wash the filter with water and allow it to dry.
3. After washing, remove excess water with a gentle squeegee.
4. Replace the filter and top housing and fasten the latches.

NOTE: This cleaner is designed with a powerful suction. Do not be alarmed if the motor noise increases when performing tougher cleaning work.

PARTS NAME



TROUBLE SHOOTING GUIDE

Loss of Suction

CAUSE:

- 1) Tank full.
- 2) Dry filter assembly clogged.
- 3) Clogged hose or wand.
- 4) Tank rim is dented.
- 5) Loose or broken fan.
- 6) Motor not working.
- 7) Float not functioning.
- 8) Seal worn.

SOLUTION:

- 1) Empty Tank
- 2) Clean cloth filter.
- 3) Remove obstruction.
- 4) Replace tank.
- 5) Contact manufacturer of service center.
- 6) Contact manufacturer of service center.
- 7) Check to see if float moves freely or tank is full.
- 8) Replace seal.

Motor is not running

CAUSE:

- 1) Broken switch.
- 2) Defective power cord.
- 3) Defective motor.

SOLUTION:

- 1) Contact manufacturer or service center.
- 2) Contact manufacturer or service center.
- 3) Contact manufacturer or service center.

Dust blowing from unit when running

CAUSE:

- 1) Cloth filter dirty.
- 2) Cloth filter is torn.
- 3) Cloth filter is not installed.
chimney soot or sheet rock.

SOLUTION:

- 1) Clean cloth filter.
- 2) Replace filter.
- 3) Install cloth filter, when vacuuming very fine dust,

Water blowing from unit when running

CAUSE:

- 1) Tank is full of liquid.
- 2) Sudsy or foamy liquid is being picked up.

SOLUTION:

- 1) Empty tank.
- 2) Add defoamer to tank.