

TORNADO INDUSTRIES, LLC
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FORT WORTH, TX 76140
PHONE: 800-VACUUMS
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WWW.TORNADOVAC.COM





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
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Address 3101 Wichita Court
Fort Worth, TX 76140



IMPORTANT SAFETY INSTRUCTIONS

When using an electrical appliance, basic precautions should always be followed, including the following:

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.

IMPORANT: The manufacturer cannot accept responsibility for damage caused when the appliance is not used according to the instructions, or for uses other than those for which it was intended.

WARNING: To reduce the risk of fire, electric shock, damage or injury:

- Fully assemble vacuum before operating.
- Use and store in a dry location.
- Do not use outdoors or on wet surfaces.
- Do not allow to be used as a toy. Close attention is necessary when used by or near children.
- Use only as described in this manual.
- Do not use charger with damaged cord or plug. If appliance or charger is not working as it should, has been dropped, damaged, left outdoors, or dropped into water, contact an Authorized Tornado service center for service.
- Do not pull or carry charger by cord, use cord as a handle, close a door on the cord, or pull cord around sharp edges or corners.
- Do not run appliance over cord.
- Keep cord away from heated surfaces.
- Do not unplug charger by pulling on cord. To unplug charger, grasp the plug, not the cord.
- Do not handle charger, including charger plug, and charger terminals with wet hands.
- 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.
- Keep hair, loose clothing, fingers and all parts of the body away from openings and moving parts.
- Do not pick up anything that is burning or smoking, such as cigarettes, matches or hot ashes.
- Do not use without vacuum bag in place.
- Use extra care when cleaning on stairs.
- Do not use to pick up flammable or combustible liquids such as gasoline or use in areas where they may be present.
- Do not attempt to service the unit while charger is plugged in.
- Do not charge the unit outdoors.
- Only charge in temperatures between 0-45°C (32-113°F).
- Do not open, crush, expose to heat above 100°C (212°F) or incinerate the battery even if it is severely damaged. The battery can explode in a fire.
- Use only with the Cordless Battery Vacuum Charger supplied - P/N 99131
- The battery and charger have no user serviceable parts.
- Batteries must be disposed of responsibly.
- Remove the battery before removing the bottom plate.

SAVE THESE INSTRUCTIONS.

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.

The model and serial number of this product may be found on the back side of the unit. You should note the model and serial number of your unit in the spaces provided below, and retain this book as a permanent record of your purchase.

Date of purchase

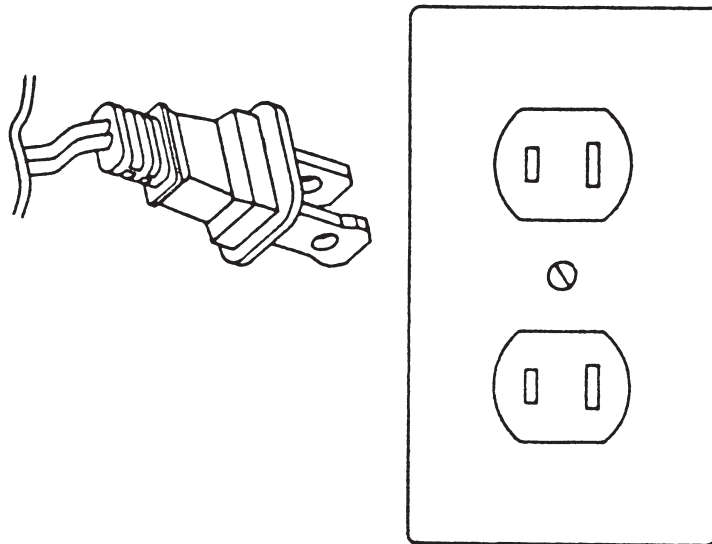
Serial number

Model number

POLARIZATION INSTRUCTIONS

Power Cord, 2-Wire Polarized Cord

This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug fits into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact an electrician to replace the obsolete outlet. Do not defeat the safety purpose of the polarized plug.



State of California

Proposition 65 Warnings:

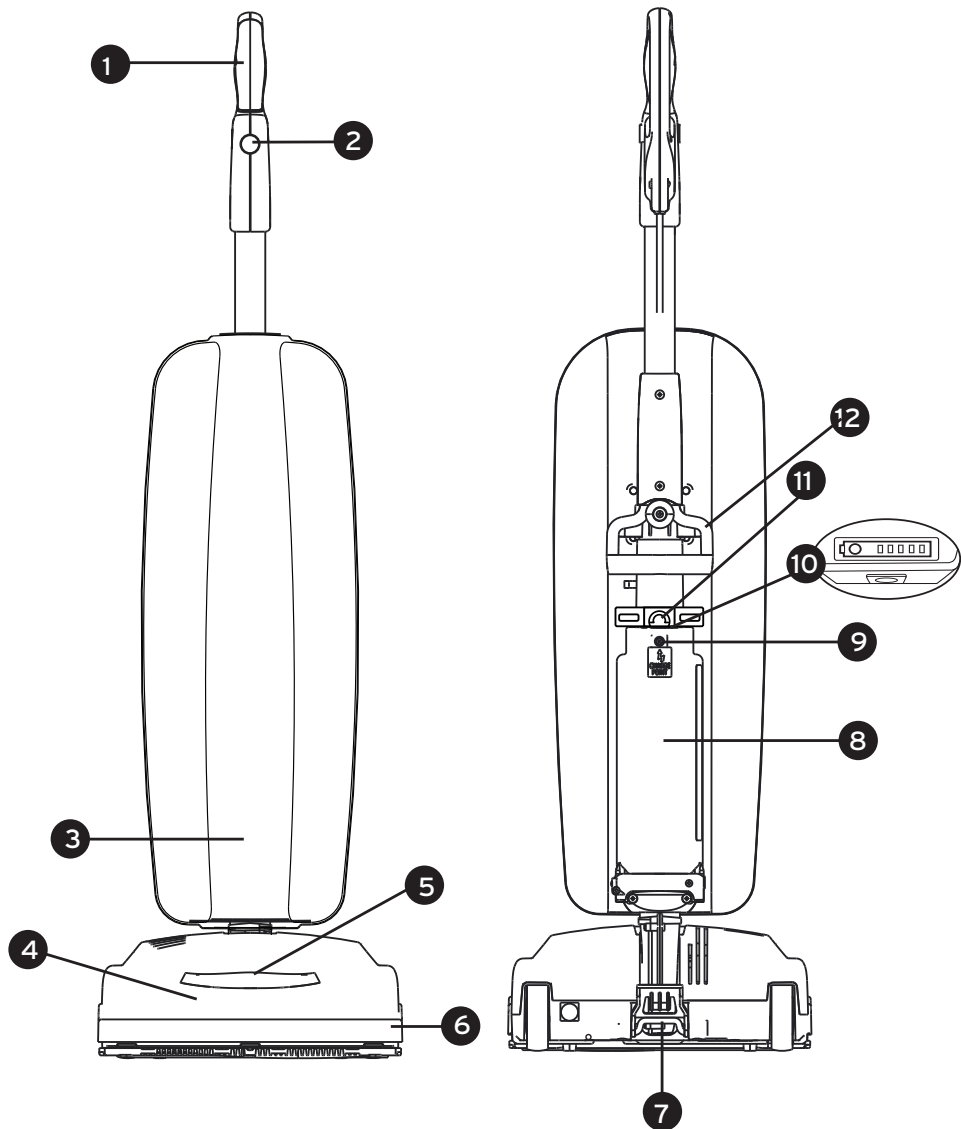
WARNING: This product contains one or more chemicals known to the State of California to cause cancer.

WARNING: This product contains one or more chemicals known to the State of California to cause birth defects or other reproductive harm.

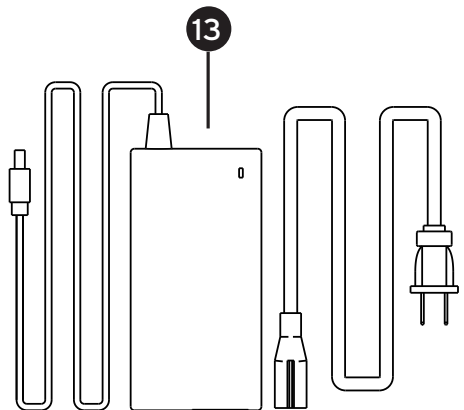
For Best Performance

- Keep your vacuum clean and in good operating condition.
- Change vacuum bags when the bags are 2/3 full to maximize cleaning performance.
- Always use genuine vacuum bags and replacement parts. Use of other products may result in poor cleaning performance, potential vacuum cleaner damage and may void vacuum warranty. Genuine products are designed for maximum cleaning performance.
- Store your machine carefully in a dry area.
- For optimum cleaning performance and safety, follow your owner's manual instructions.

DESCRIPTION OF THE VACUUM



- 1 Ergonomic Handle
- 2 On/Off Power Switch
- 3 Bag Compartment
- 4 Vacuum Nozzle
- 5 Headlight
- 6 Furniture Guard
- 7 Handle Release Pedal
- 8 Battery Pack
- 9 Charge Point
- 10 Battery Life Display
- 11 Battery Release Button
- 12 Carry Handle



Key Replacement Parts

- Cleanbreeze disposable collection bags: 90039
- Belt: B014-0814B
- Battery: 98311
- Battery Charger: 99131

ASSEMBLING THE VACUUM

Attaching the Handle to the Vacuum

- **NOTE:** Do not turn on the vacuum until it is completely assembled.
- The vacuum cleaner and the handle are packed separately and require assembly.
- Remove the handle bracket by removing the two screws (Fig. 1).
- Place handle onto the back of the vacuum, aligning holes with pegs (Fig. 2).
- Place the handle bracket back into position (Fig. 3).
- Secure with two screws removed in Fig. 1. Tuck the cord into the space to the left of the handle.
- Open the bag compartment to ensure a vacuum bag is in place.
- Your vacuum is now ready for use.

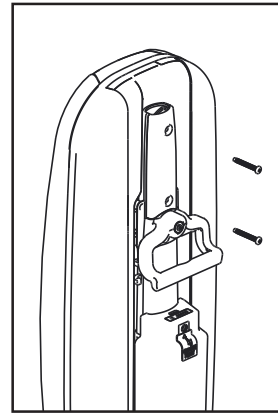


Fig. 1

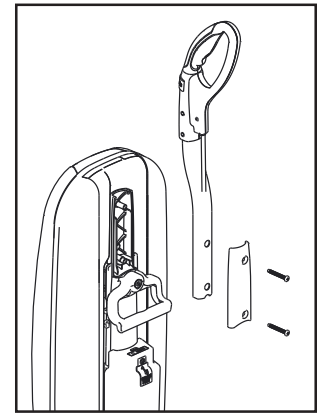


Fig. 2

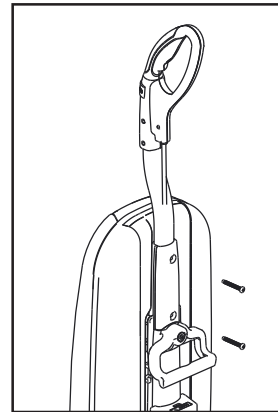


Fig. 3

Charging Battery

- When you receive your unit the battery is partially charged and will run for a short time. To fully charge the battery see Battery Charging section.
- The battery is located on the back of the vacuum. It can be charged while installed on the vacuum, or the battery can be removed from the vacuum and charged independently (see removing and reinstalling the battery (page 14).
- Plug the AC cable into the charger and into a wall socket (Fig. 1).
- Plug the charger DC cable into the Charge Point on the battery. (Fig. 2).
- The Charger LED light will be red during charging and will turn green when the battery pack is fully charged.

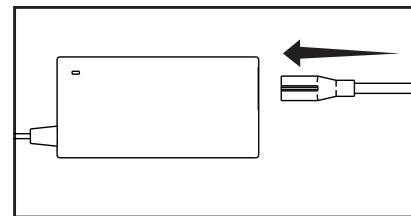


Fig. 1

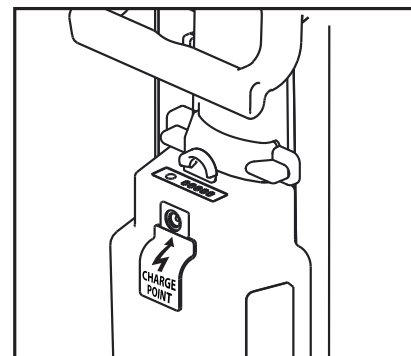


Fig. 2

Battery Life Display

- Press the button on the battery to illuminate the LED lights.
- When the battery is fully charged there will be four (4) green lights and one (1) red light showing (Fig. 3).
- As the battery is discharged, during use, the number of green lights showing will reduce from four (4) to none (0).
- When all of the green lights are off and only the red light is showing, there is a small amount of time remaining before the battery will be fully discharged and will require recharging.

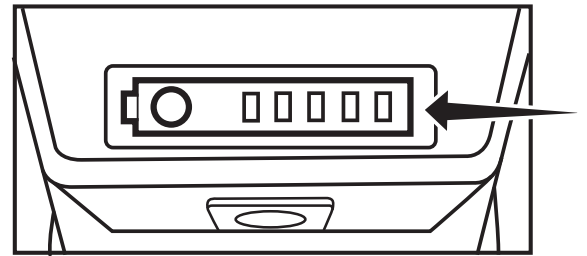


Fig. 3

Reclining the Handle

- Press the Handle Release Pedal located on the back of the vacuum with your foot to recline the handle (Fig. 4).

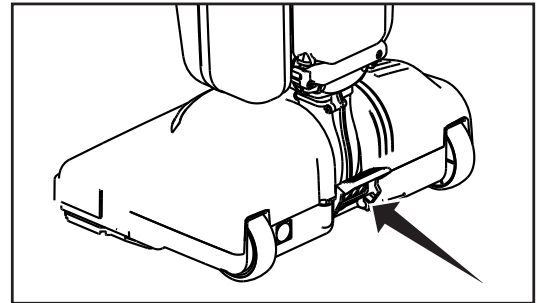


Fig. 4

OPERATION

On/Off Switch

- Turn the switch On to use the vacuum. If the vacuum doesn't turn on, check that the battery is charged (see page 10).
- Always unplug the charger from the Charge Point before use.

Edge Cleaning

The edge cleaning feature provides improved cleaning near walls and stationary furniture. For maximum edge cleaning, place the left side of the nozzle, from the user's perspective, against the wall or stationary furniture (Fig. 2).

Automatic Carpet Height Adjustment

Your vacuum is designed with an automatic self-adjusting nozzle. No manual adjustments are required. The height of the nozzle automatically adjusts to the flooring surface. This self-adjusting feature allows the nozzle to float evenly over all flooring surfaces.

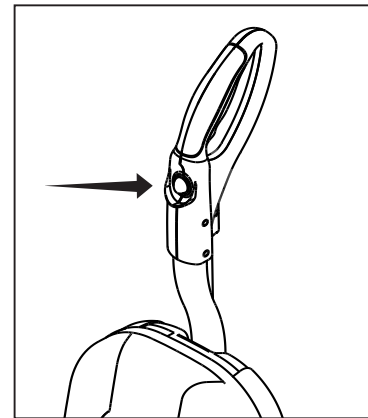


Fig. 1

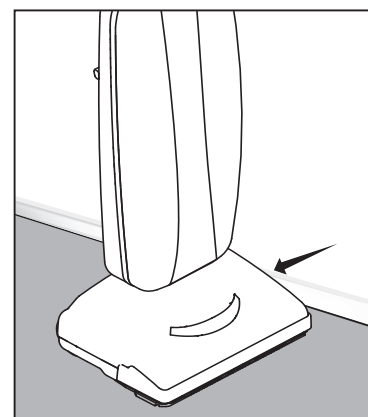


Fig. 2

OPERATION

Bare Floor Cleaning

Your vacuum is equipped with a squeegee to improve its effectiveness in cleaning bare floors (Fig. 1).

Vacuuming Under Furniture

Your vacuum will lay flat on the floor for effective cleaning under beds and tables.

- Press the Handle Release Pedal once for routine vacuuming cleaning (Fig. 2).
- Continue to lower the handle to enable the vacuum to lay flat on the floor for cleaning under furniture (Fig. 3).

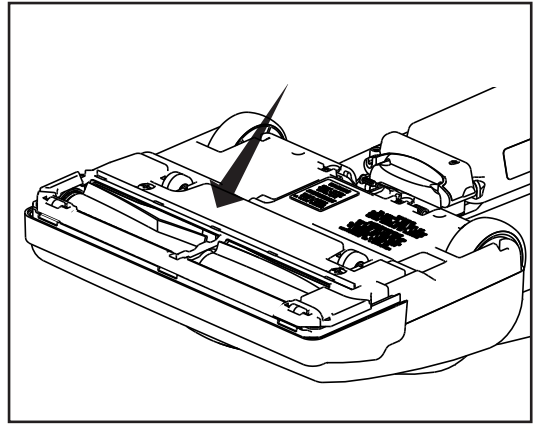


Fig. 1

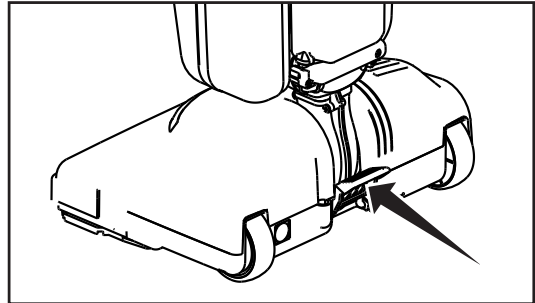


Fig. 2

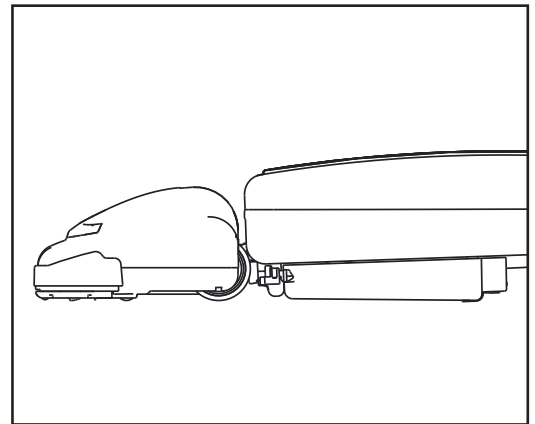


Fig. 3

MAINTENANCE AND CARE

Replacing the Vacuum Bag

NOTE: Turn the vacuum off and remove the battery.

- Unzip the bag compartment.
- Remove the used vacuum bag by pulling the green bag collar tab away from the vacuum (Fig. 1). Slide the used bag out of the bag holder which automatically seals the bag opening (Fig. 2). Discard the used bag.
- To install a new bag, slide the bottom of the green bag collar into the bag holder until it “snaps” into place (Fig. 3).
- Push the top of the bag collar upward until the collar “snaps” into place on the vacuum (Fig. 4).
- Tuck the bag corners into the bag compartment, then zip the bag compartment closed.

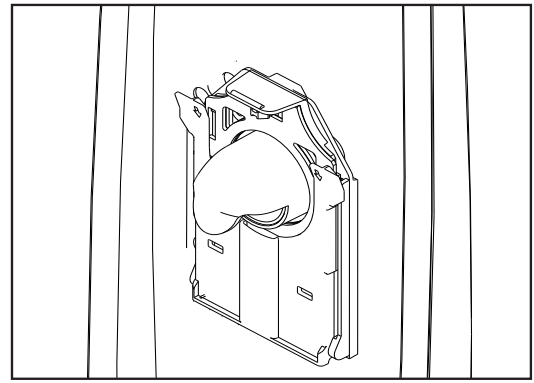


Fig. 1

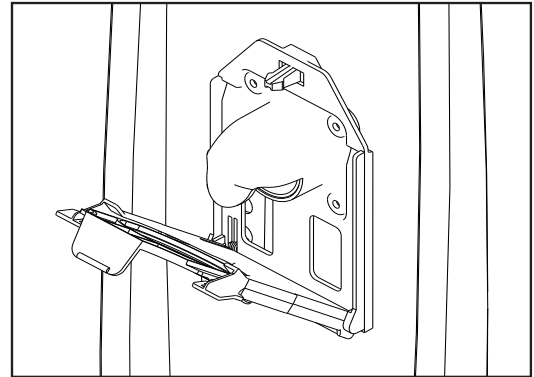


Fig. 2

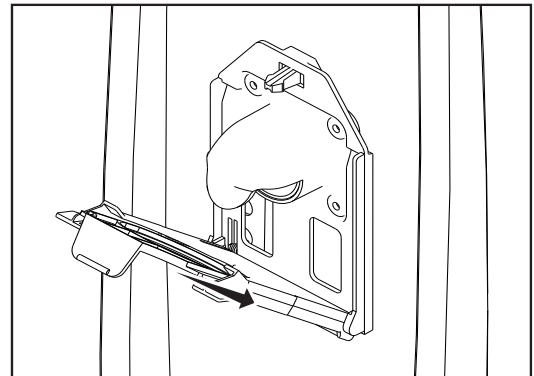


Fig. 3

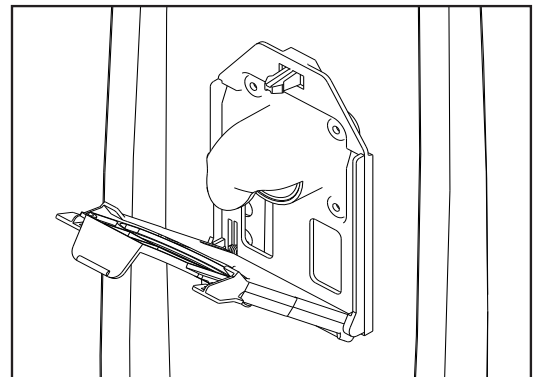


Fig. 4

MAINTENANCE AND CARE

Removing and Reinstalling the Battery

NOTE: Turn the vacuum off. If the battery charger is plugged into the charge point on the vacuum, remove the charger from the charge point before removing the battery.

The battery can be removed and charged independently from the vacuum.

- To remove the battery push up on the release button and lift the battery off (Fig. 1).
- To replace the battery, line up the bottom of the battery with the posts at the base of the coupling. Push the battery in until it clicks (Fig. 2).

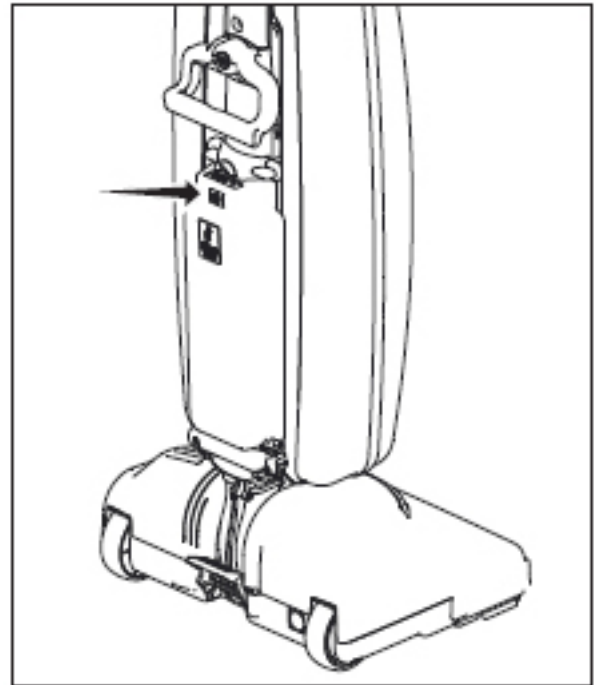


Fig. 1

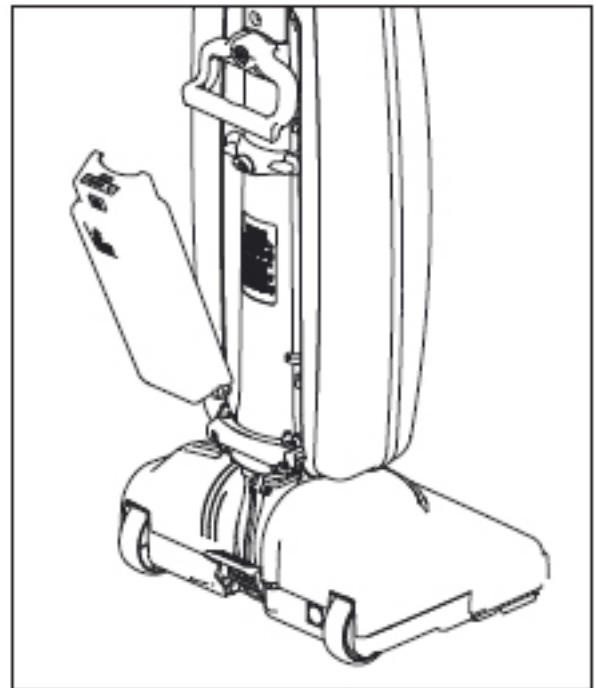


Fig. 2

MAINTENANCE AND CARE

Removing and Reinstalling the Bottom Plate

WARNING! To Reduce the Risk of Electrical Shock or Injury from Moving Parts, Turn the Vacuum Off and Remove the Battery Before Servicing or Cleaning the Vacuum.

To Remove the Bottom Plate:

- Make sure the vacuum is turned Off.
- Remove the battery (see Removing and Reinstalling the Battery, page 10).
- Press the handle release pedal to place the vacuum cleaner in the flat position.
- Turn the vacuum cleaner over, exposing the bottom plate.
- Turn the two screws a quarter turn to release the bottom plate (Fig. 1). Remove the bottom plate.
- To reinstall the bottom plate: Align the front edge of the bottom plate into the notches inside the nozzle (Fig. 2).
- Press the bottom plate into position until the plate “clicks” on both sides. Tighten the two screws a quarter turn to secure the bottom plate.
- Replace the Battery (see Removing and Reinstalling the Battery, page 10).

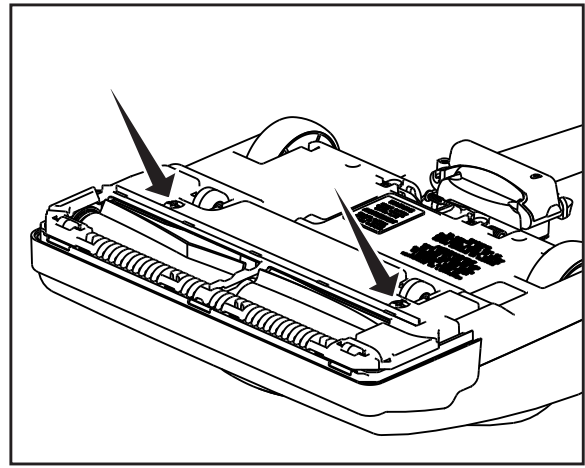


Fig. 1

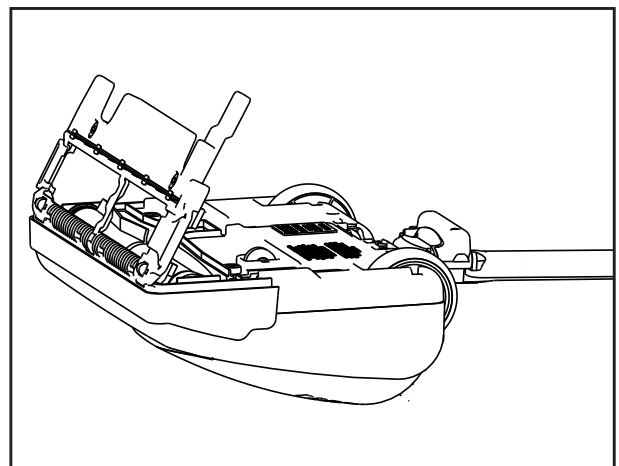


Fig. 2

MAINTENANCE AND CARE

Replacing the Vacuum Belt

WARNING! To Reduce the Risk of Electrical Shock or Injury from Moving Parts, Turn the Vacuum Off and Remove the Battery Before Servicing or Cleaning the Vacuum.

NOTE: To ensure maximum cleaning efficiency, the belt should be checked regularly to be sure it is in good condition. Check to see if the belt is stretched, cracked, or if excessive slipping is occurring. Replace if needed.

- Turn the vacuum off and unplug the charger from the Charge Point.
- Remove the battery (see Removing and Reinstalling the Battery, page 10).
- Remove the bottom plate (see Removing and Reinstalling the Bottom Plate, page 11).
- Remove the brushroll and the worn or broken belt from the brushroll pulley and the motor drive shaft.
- Loop the new belt around the motor drive shaft and the brushroll (Fig. 1).
- Reinstall the brushroll into the nozzle. Turn the brushroll by hand, making sure the belt is not twisted and all rotating parts move smoothly (Fig. 2).
- Reinstall the bottom plate (see Removing and Reinstalling the Bottom Plate, page 11).
- Replace the battery (see Removing and Reinstalling the Battery, page 10).

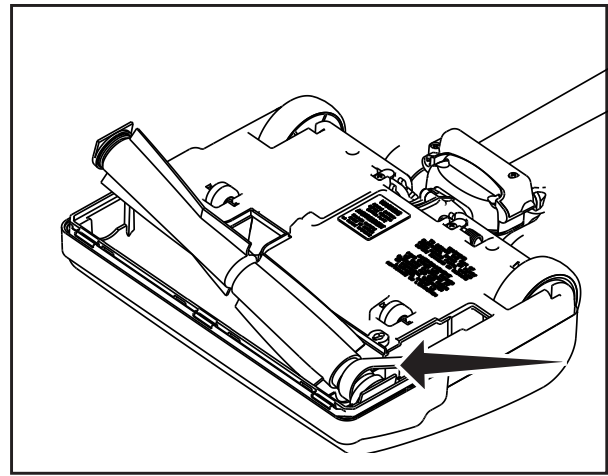


Fig. 1

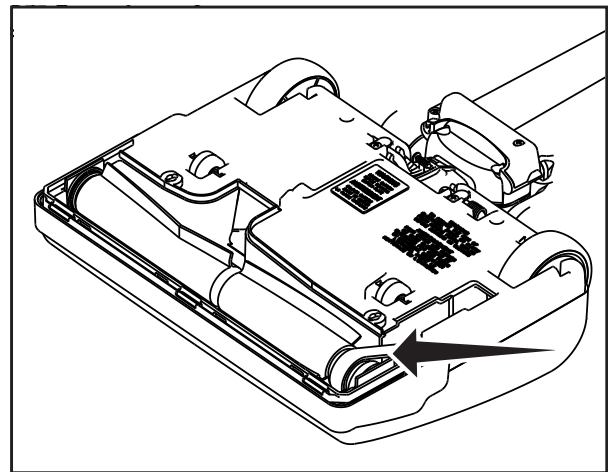
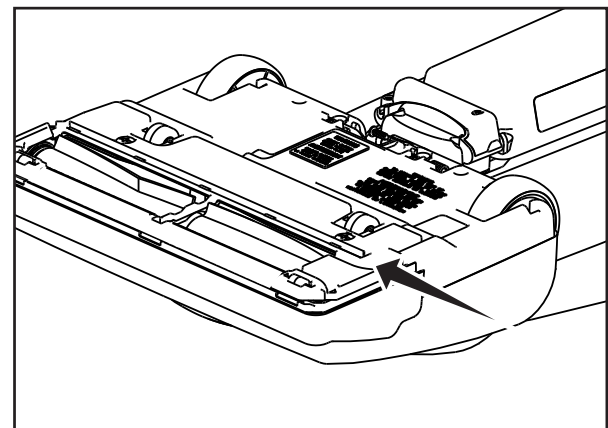


Fig. 2

Replacing the Squeegee

WARNING! To Reduce the Risk of Electrical Shock or Injury from Moving Parts, Turn the Vacuum Off and Remove the Battery Before Servicing or Cleaning the Vacuum.

If your squeegee splits or begins to look worn, simply slide the worn squeegee from its track and slide a new one into the track. If you have trouble installing the new squeegee, please contact an Authorized Tornado Service Center.



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

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 (meters)	
	Total Hard Floor Area	Total Carpeted Area Square feet (square meters)
<ul style="list-style-type: none"> <input type="radio"/> Contacted by local dealer <input type="radio"/> Previous experience with Tornado products <input type="radio"/> Reputation/ Recommendation <input type="radio"/> Advertising <input type="radio"/> Direct mail <input type="radio"/> Internet <input type="radio"/> Other 	<ul style="list-style-type: none"> <input type="radio"/> 0-10,000 (0-930) <input type="radio"/> 10-50,000 (930-4,650) <input type="radio"/> 50-250,000 (4,650-23,250) <input type="radio"/> Over 250,000 (over 23,260) 	<ul style="list-style-type: none"> <input type="radio"/> 0-10,000 (0-930) <input type="radio"/> 10-50,000 (930-4,650) <input type="radio"/> 50-250,000 (4,650-23,250) <input type="radio"/> 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 :
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or online at
www.tornadovac.com

