



# TORNADO®

## Pro Spotter

Operations and Maintenance Manual  
For Commercial Use Only



Model No. TE010-G03-U



Getting Started

Introduction.....1

Warranty.....2

Grounding Instructions.....3

Important Safety Instructions.....4

Cleaning Agents.....6

Technical Specifications.....7

Operating Instructions

Key Features.....7

Controls.....8

Operation.....9

Transport and Storage.....10

Maintenance.....11

Fault Diagnosis.....12

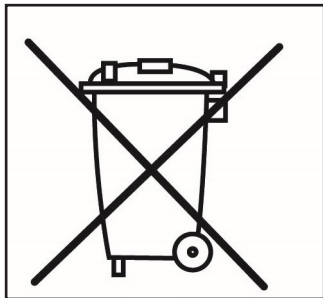
# INTRODUCTION

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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 given at the time of purchase. If you experience any problems with your unit during the warranty period, the original receipt/invoice will act as proof of purchase.

**Upon receipt, inspect outer box for exterior damage. Unpack all internal parts, ensure no hidden damage is found.**

Each unit is tested and thoroughly inspected prior to shipping. If damage is discovered, immediately notify the transportation company that delivered your machine and request an inspection. As a manufacturer, we are unable to act upon any claim for concealed damage and you must originate the claim. Be sure to keep the carton, packing inserts, and carrier's receipt until the inspector has verified your claim.



**Protect the environment**  
Please dispose of packaging materials in an environmentally safe way according to local waste disposal regulations.



**Always remember to recycle.**



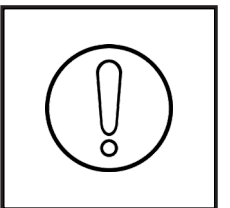
## Warranty

Within 30 days of purchase, to activate product warranty, go to:  
<https://tornadovac.com/services/warranty-registration-form.aspx>  
For warranty information go to [www.tornadovac.com](http://www.tornadovac.com).



## Warning Labels

Prior to operating the unit, read and understand completely this owner's manual paying special attention to warning labels. These labels indicate a potentially hazardous situation that could result in death or serious injury if not avoided. Use only as described in this manual.



## Important

There are no owner serviceable parts inside this machine. Removal of screws to access internal components will void all warranty claims.



## Flammability Warning

NEVER fill unit with flammable chemicals. Do NOT use in an area where flammable fumes are present.

# GROUNDING INSTRUCTION

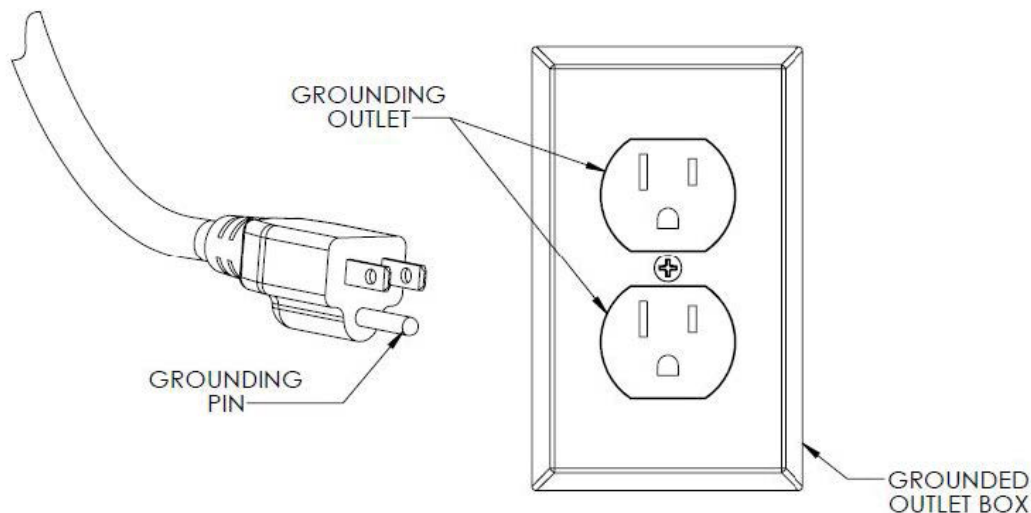
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This appliance must be grounded. If it should electrically malfunction, grounding provides a path of least resistance for the current to reduce the risk of electric shock. This machine is equipped with a cord having an equipment grounding conductor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



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 the plug will not fit the outlet, have the proper outlet installed by a qualified electrician. **DO NOT REMOVE THE GROUNDING PIN FOR ANY REASON.**

This appliance is for use on a nominal 115-volt circuit and has a grounding plug that appears as shown below.



# IMPORTANT SAFETY INSTRUCTIONS

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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. To reduce the risk of personal injury or damage to your unit, use only as indicated in this manual.



## **FOR COMMERCIAL USE ONLY**

To reduce the risk of fire, electrical shock, or injury, the instructions below must be read and understood completely prior to machine operation.

1. This machine must only be used for the manufacturer's approved application as described in this manual.
2. The machine must be unpacked and assembled in accordance with these instructions before connecting to the electrical supply
3. Only genuine accessories and spare parts provided with the machine or those approved by the manufacturer should be used. The use of other accessories may impair the safety of the machine. All repairs must be performed by a qualified service agent.
4. DO NOT modify the machine from its original design.
5. Operators must be fully trained in the use of the machine in accordance with these instructions and be able to perform regular user maintenance as outlined in this manual.
6. Operators should be physically capable to maneuver, transport and operate the machine.
7. Operators should be able to recognize unusual operation of the machine and report any problems.
8. This machine is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge unless they have been given instruction concerning use of the machine and are under supervision by a person responsible for their safety.
9. Keep children and unauthorized persons away from the machine when in use. DO NOT use the machine as a toy.
10. DO NOT use with a damaged cord or plug. If it has been damaged, left outdoors or dropped in water, return it to a service center for inspection and/or repair.
11. DO NOT use where hazardous dust is present.
12. DO NOT use in an explosive environment.
13. DO NOT pick up or use near flammable or combustible fluids, hazardous dusts or vapors.

# IMPORTANT SAFETY INSTRUCTIONS

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14. CAUTION –If it is suspected that there is hazardous dust or flammable/corrosive material, stop cleaning the area immediately and consult your supervisor.
15. DO NOT use to clean up any burning or lighted materials such as cigarettes, matches, ashes, or other combustible objects.
16. Only use the machine on firm, level surfaces. DO NOT use the machine on gradient or slope of more than 2%.
17. CAUTION –This machine is for dry, indoor use only and should not be used or stored outdoors or in wet conditions. Protect from rain.
18. Take care when using this machine near the top of stairs to avoid loss of balance.
19. DO NOT cover the machine when in use.
20. DO NOT run the machine dry as this could damage the pump.
21. DO NOT leave the machine running unattended.
22. Keep hair, loose clothing, hands, feet, and all other parts of the body away from openings and moving parts. Do not put hands under base as rotating parts can cause injury.
23. DO NOT put any object into openings. DO NOT use with any opening blocked. Keep free of dust, debris and anything that may reduce airflow.
24. DO NOT use volatile or combustible solvents (e.g., diesel, petrol, PA, trichloromethane) nor any corrosive, toxic, or highly irritant substance to wash floors, even if diluted. In the event of accidental contact with any such substances (e.g., due to spills) follow the decontamination procedures in force at the user site. If in any doubt about the condition of the machine, contact Tornado or the dealer/agent who supplied the machine.
25. DO NOT leave the machine unattended when plugged in. Unplug from outlet when not in use and before attempting any maintenance or adjustment.
26. DO NOT fill the machine with water hotter than 140°F (62°C).
27. When used on escalators, ensure the machine is positioned at the bottom of the escalator with the escalator moving towards the operator.
28. DO NOT pull or carry by cord, use cord as a handle, close a door on cord, or pull cord around sharp edges on corners.
29. DO NOT run machine over cord. Keep cord away from heated surfaces.
30. DO NOT unplug by pulling on cord. To unplug, grasp the plug, not the cord. Do not handle plug or machine with wet hands. Turn off all controls before unplugging.
31. Connect only to a properly grounded outlet. See grounding instructions.
32. Use care to keep electrical supply cable from contacting moving parts.
33. Make sure voltage and frequency at the wall receptacle correspond with that indicated on nameplate before plugging in machine.
34. The machine must be kept clean and in good condition with regular inspections of the power cord and plug for signs of any damage. If any parts are damaged, they shall only be replaced by an approved part by the manufacturer, its service agent or a similar qualified person in order to avoid a hazard.
35. Only replace the power cord with original OEM equipment.
36. Do not use the machine for totally dry vacuuming. This machine is not fitted with a fine dust filter.

# CLEANING AGENTS

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- When using cleaning and care agents, the manufacturer's danger warnings must be followed, and proper PPE must be worn per manufacturer's instruction.
- Only use low-foaming, non-combustible cleaning agents which DO NOT contain generally health-hazardous substances.
- Use defoamer at all times to prevent damaging the vacuum motor.
- Do not use citrus-based cleaners in this machine.
- Please ensure that after each use, any chemical residue is rinsed out with clean water.



The manufacturer cannot accept responsibility for damage caused when the appliance is not used in accordance with the instructions provided or for uses other than those for which it was intended.

## OPERATOR GUIDELINES

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- Wear suitable footwear to avoid slipping.
- Wear suitable clothing to keep dry.
- Do not smoke when using the machine.
- Do not use excessively foaming or highly corrosive cleaning solutions. If operating on a flooded floor, ensure that water depth does not exceed 6mm (1/4 inch).



This machine is heavy. Do not attempt to lift the machine without assistance. Incorrect lifting techniques may result in personal injury.

# TECHNICAL SPECIFICATIONS

| Specification     | Value                                |
|-------------------|--------------------------------------|
| Model             | TE010-G003-U                         |
| Input Voltage     | 115 VAC                              |
| Hertz             | 60                                   |
| Plug Type         | US                                   |
| Solution Tank     | 3.5 Gal/13.2 l                       |
| Recovery Tank     | 2.5 Gal/9.5 l                        |
| Dimensions        | 24" x 14" x 23"/61cm x 36 cm x 58 cm |
| Weight            | 35 lbs./16kg                         |
| Waterlift         | 89"/226 cm                           |
| CFM/CMM           | 104/3                                |
| Solution Pressure | 55 p.s.i./3.8 BAR                    |

## KEY FEATURES



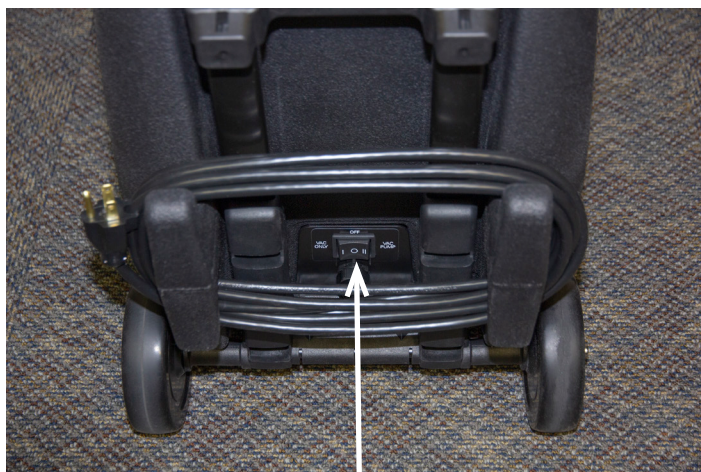
## KEY FEATURES

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Solution Hose Connection



## CONTROLS



3-Way Switch

## **Filling the Pro Spotter**

- Unplug the unit.
- Disconnect the solution and recovery tanks.
- Remove the upper recovery tank.
- Add water and/or chemicals to the lower solution tank. Fill only to the fill line indicated on the label on the inside of the solution tank. The tank will hold up to 3.5 gallons.

## **Operating the Pro Spotter**

- Attach the solution hose to the quick disconnect in the pocket at the front of the machine.
- Attach the vacuum hose to the vacuum inlet (handle) above the recovery tank lid.
- Turn the 3-way switch to use either the pump and vacuum or the vacuum alone. (Allow approximately 30 seconds for the pump to prime).
- Use the hand tool to spray and recover the solution.
- The float shut-off will disable the suction of the unit when the recovery tank is full. The operator will notice a distinctive change in the sound of the vacuum motor when the float shut-off is activated. Empty the recovery tank, and then fill the solution tank, to resume cleaning.

## **Emptying the Recovery Tank**

- Unplug the unit.
- Disconnect the solution line and vacuum hose.
- Unlatch the recovery tank from the base of the unit and remove.
- Remove the drain plug.
- Drain the tank over a suitable outlet for wastewater.
- Rinse the tanks after each use.
- Store the unit with the lid off of the recovery and allow it to air dry.

## Transport:

1. Take extreme care when moving the machine up or down steps or stairs.
2. Incorrect lifting techniques may result in personal injury.
3. As stated earlier in this manual, this machine is heavy. Do not attempt to lift the machine without assistance.
4. Carefully wrap the power cord and store in a dry, indoor location.
5. DO NOT expose the machine to rain or moisture.
6. When transporting the machine, ensure that all components, tanks and removable parts are securely fastened and that the power cord and plug are not trailing.
7. DO NOT lift or transport the machine while it contains liquid as this will add considerable weight to the unit.

## Storage:

1. Wrap the power cord around the power cord wrap hooks ensuring that the plug is not trailing on the floor.
2. Always unplug, empty, wipe down and dry the machine after use.
3. Both the solution and recovery tanks should be emptied and flushed out with clean water to ensure the seals and pumps are free from any cleaning detergents.



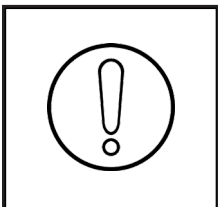
Store machine in a dry, indoor area only.



**Prior to performing any maintenance, ensure unit is OFF and disconnected from power supply.**

## **Recommended operator checks prior to use:**

1. **BODY OF MACHINE** – Wipe down with a clean, damp cloth.
2. **POWER CORD** – Regularly inspect sheath, plug, and cord anchorage for damage or loose connection. Only replace power cord with OEM specified replacement part.
3. **SOLUTION FEED FILTER** – The filter prevents clogging of the pump and spray nozzle and should be periodically cleaned.
4. **NOZZLE MAINTENANCE** – If the spray of the nozzle becomes blocked, wash the nozzle in clean water ensuring that the nozzle is clear prior to refitting.



**Besides those outlined above, all additional servicing and repairs should only be performed by an Authorized Tornado Servicing Agent.**

# TROUBLESHOOTING

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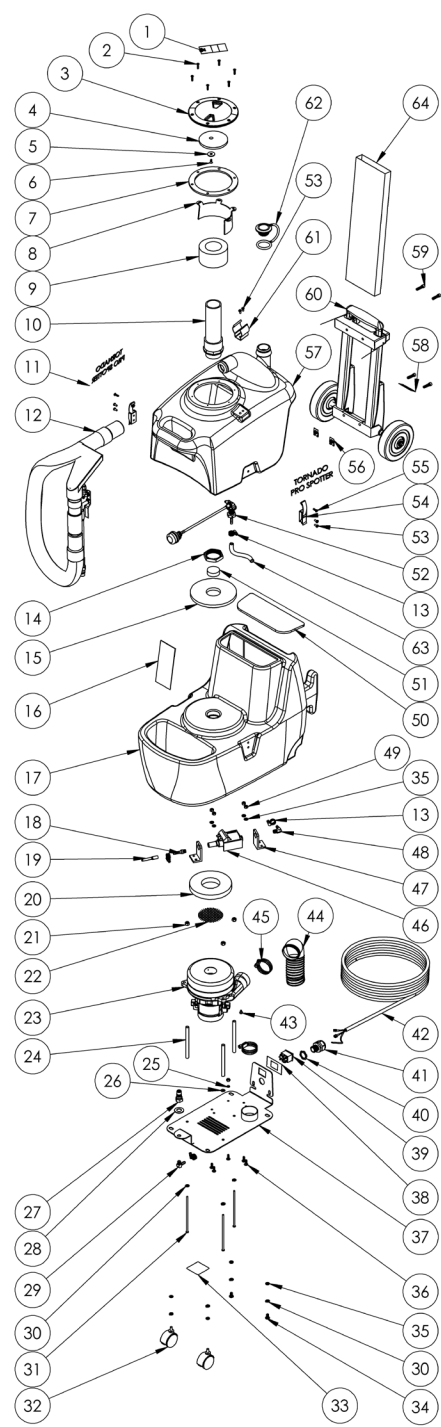
**The following checks may be performed by the operator. Any other service or attempt to service by the operator will void the warranty.**

## TROUBLESHOOTING

| Problem           | Possible Cause                                                           | Solution                                                                                                                     |
|-------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| No Spray          | Pump is not primed.                                                      | Depress lever on hand tool to release pressure.                                                                              |
| Low Solution Flow | Solution tank level is low.<br>Clogged filter.<br><br>Clogged Spray jet. | Refill Solution tank.*<br>Clean the screen filter on the hose in the solution tank.<br>Clean the spray jet in the hand tool. |
| Low Suction       | Recovery tank is full.<br>Clogged Hand Tool or hose.<br>Excessive foam.  | Empty recovery tank.<br>Clean Hand Tool and hose.<br>Add defoamer to recovery tank.                                          |

\*Before re-filling the solution tank, always empty the recovery tank.

# PART DIAGRAM



# PART LIST

| No. | Part No.     | Description                                  | Qty |
|-----|--------------|----------------------------------------------|-----|
| 1   | X9003        | Defoamer Warning Label                       | 1   |
| 2   | X8295        | Screw, #8 x 3/4"                             | 6   |
| 3   | PX103A       | Screw-In Lid 4" w/Black Ring                 | 1   |
| 4   | X9061        | Shut Off Disk                                | 1   |
| 5   | X9087        | Washer                                       | 1   |
| 6   | X9088        | Screw 8-18 x 1/2"                            | 1   |
| 7   | PX103AG      | Lid Gasket                                   | 1   |
| 8   | X9518        | Deflector                                    | 1   |
| 9   | X9062        | Float                                        | 1   |
| 10  | X9082-KIT    | Stand Pipe Sub-Assembly                      | 1   |
| 11  | X2046-YEL    | Tornado Label                                | 2   |
| 12  | X9999        | Hose Assembly                                | 1   |
| 13  | 7DL003       | Hose Clamp                                   | 4   |
| 14  | PX46         | Lock Nut                                     | 1   |
| 15  | X9079        | Gasket                                       | 1   |
| 16  | X2045        | Fill Label                                   | 1   |
| 17  | X1920BLK     | Solution Tank                                | 1   |
| 18  | PC66         | Hose Barb 1/4"H x 1/8MPT                     | 1   |
| 19  | 71817A       | Hose, 1/4" 250 PSI                           | 8   |
| 20  | X9740        | Gasket                                       | 1   |
| 21  | X8237        | Nyloc Nut                                    | 3   |
| 22  | X9060        | Vacuum Motor Screen                          | 1   |
| 23  | 1942-B       | Vacuum Motor 2 Stage                         | 1   |
| 24  | X9045        | Spacer                                       | 3   |
| 25  | 7CY001       | Internal Tooth #10 Lock Washer               | 1   |
| 26  | X9214        | Ground Symbol Label                          | 1   |
| 27  | PC10         | QD Male 1/8" x 1/8" NPT                      | 1   |
| 28  | X9412        | Washer                                       | 1   |
| 29  | 7AT006       | Brass 90° Elbow Fitting 1/4" Barb x 1/8" MPT | 1   |
| 30  | X8212        | Lock Washer                                  | 7   |
| 31  | X8291        | Screw 1/4-20 x 5-1/2"                        | 3   |
| 32  | X9047        | Swivel Caster 45mm 1/4-20 x 3/4"             | 2   |
| 33  | X8459        | Serial Number Label                          | 1   |
| 34  | 7BS003       | Screw 1/4-20 x 1/2"                          | 2   |
| 35  | 00-0600-0503 | Washer                                       | 8   |
| 36  | 30676        | Screw 10-24 x 5/8"                           | 5   |
| 37  | X9046        | Base Plate Weldment                          | 1   |

# PART LIST

| No. | Part No. | Description                                        | Qty |
|-----|----------|----------------------------------------------------|-----|
| 38  | X8497B   | Switch Label                                       | 1   |
| 39  | X9048    | Rocker Switch                                      | 1   |
| 40  | X8008N   | Steel Conduit Lock Nut 1/2"                        | 1   |
| 41  | PD8      | Strain Relief                                      | 1   |
| 42  | X9719    | Power Cord 18 AWG 20'                              | 1   |
| 43  | 19565    | Screw #10 16 x 1/2"                                | 1   |
| 44  | 7CZ001   | Hose, Vacuum 2 In Dia Bulk Grey See<br>Cut Lengths | 8   |
| 45  | PX215    | Hose Clamp                                         | 2   |
| 46  | FJ5082   | Pump                                               | 1   |
| 47  | PX204    | Pump Mount                                         | 2   |
| 48  | PX214    | Nylon Fitting 90° 1/8" MPT x 1/4" Hose Barb        | 1   |
| 49  | X8271    | Nyloc Nut                                          | 5   |
| 50  | X9064    | Solution Tank Gasket                               | 1   |
| 51  | PX209    | Foam Filter                                        | 1   |
| 52  | PX30-KIT | Filter And Hose Sub-Assembly                       | 1   |
| 53  | X8262    | Screw 8-32 x 1/4"                                  | 6   |
| 54  | X9059    | Latch w/Keeper                                     | 2   |
| 55  | X8278    | Screw 8-32 x 1/2"                                  | 2   |
| 56  | X9106    | Nut J-Type                                         | 2   |
| 57  | X1921BLK | Recovery Tank                                      | 1   |
| 58  | X8976    | Warning Label                                      | 1   |
| 59  | X9065    | Screw 1/4-20 x 1"                                  | 4   |
| 60  | X8990    | Handle Assembly                                    | 1   |
| 61  | 72173A   | Spring Clip                                        | 1   |
| 62  | PAS36    | Drain Hose Plug w/Strap                            | 1   |
| 63  | 72697A   | Vinyl Hose 1/4"                                    | 8   |
| 64  | X2501    | Safety Sign Sleeve                                 | 1   |



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**Record of Purchase**

Serial Number: \_\_\_\_\_  
Purchase Date: \_\_\_\_\_  
Dealer: \_\_\_\_\_  
Phone Number: \_\_\_\_\_