## TERRA UNIVERSAL.COM Critical Environment Solutions

## Motorized Shoe Cleaner Quick-Start Operating Guide Doc. 1788-54

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## IMPORTANT SAFETY INSTRUCTIONS READ AND SAVE THESE INSTRUCTIONS

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this manual contains or for any damages that result from its use.	WARNING	failure to observe instructions or precautions could result in injury or death.
The information presented here is subject to change without notice.		

## 1.0 Introduction

This manual provides information on installing and operating Terra Universal's Motorized Shoe Cleaner. By studying this document carefully, you can be assured of a long, efficient service life from the unit.

## 2.0 Specifications

Dimensions	18" W x 27.75" L x 10.5"H
Overall Height (with handle)	34.5" to 37.5"
Weight	75 lbs
Shipping Weight	83 lbs
Voltage	110-120V AC
Amperage – No Load	0.3A
Amperage – Full Load	5A
Electrical Connection	NEMA 5-15P, 10A, 125V, 18/3 AWG, 10'

### 3.0 Installation

## WARNING: Prior to installation, ensure the unit is disconnected from power supply.

The motorized shoe cleaner is designed to ensure fast, effective shoe cleaning. Operation must be preceded by installation of:

 Tubular handle bar. To install the handle, insert it into the tube sockets located on top of the shoe cleaner housing. A set of screws and nuts is provided to secure the handle inside the housing. Mounting location is varied depending on the desired handle height (see section below for handle height adjustment).

To open the housing, unlatch the draw latches located at the back of the unit. Hold onto the handle and swing the housing open at a  $90^{\circ}$  angle. Once housing is opened, other components can be installed.



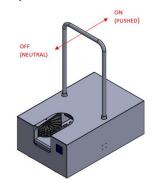
 HEPA cloth dust bag. The dust bag is included with the cleaner. To install the dust bag, slide it on the flanged tube inside the vacuum compartment. The flanged tube prevents the dust bag from falling off during operation.



- Vacuum motor pre-filter. Connect it to the vacuum motor inside the vacuum compartment, as shown in above image. The pre-filter cap should snugly wrap around the motor to ensure stable HEPA operation.
- 4. External HEPA filter (See section below for HEPA filter replacement).

## 4.0 Operation

The unit consists of spinning brushes, vacuum system with integrated HEPA filtration, and variable speed controller, all housed in powder-coated steel encasing. The brushes consist of 2 spinning side brushes, 2 spinning bottom brushes, 1 stationary top brush, To activate the shoe cleaner, gently push the handle forward while resting footwear in between the brushes. Release the handle to turn off the system.



To achieve the best performance and maintain safety:

- 1. Read the entire manual before unpacking, handling, installing, or using the cleaner.
- 2. Tightly and securely tie shoes. Loose laces may interfere with use.
- Ensure that footwear is appropriate. Open toed shoes, high heels, sneakers, or any shoes with external accessories should not be cleaned in this cleaner.
- 4. Cleaner must be unplugged prior to removing the cover or replacing parts.
- 5. This shoe cleaner is intended for indoor use only.
- 6. Placing a sticky mat in front of the unit can assist with catching particles.

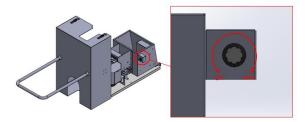


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#### **Brush Speed Adjustment**

Inside the unit, the speed controller is located on the side of the vacuum compartment. This controller adjusts the speed of the motor that spins the brushes. The brush RPM increases as the dial is turned clockwise. Turning the dial fully counterclockwise will stop the brushes from moving.



#### Belt Tension Adjustment

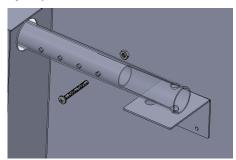
The rubber v-belts are attached to pulleys that connect the motor to the brushes. Pulley belt tension can be adjusted by tightening or loosening the nuts on the screw/spring assembly, circled below and located across from the vacuum motor.

Use a 7/16" wrench to tighten or loosen the nuts on the extended screws. Tighten nut to increase belt tension. Loosen nut to decrease belt tension.

The spring tension is too loose if the brushes frequently stop rotating during operation (rubber v-belt not gripping pulley firmly enough). Spring tension may be too tight if the motor creates loud noises and/or strong vibrations.



#### Handle Height Adjustment



The handle can be configured at 4 different heights in 1-inch increments. Adjust the handle height to a comfortable easy-to-reach position.

#### Status Indicator Light

The TUI LED indicator light will light up when the shoe cleaner is plugged to a power source. A lit TUI light indicates that the unit is properly powered even when it is not actively running. Maintenance may be required if TUI logo is not lit when the unit is plugged in.



#### 5.0 Maintenance

Regular maintenance will keep your shoe cleaner performing at its best, ensure safety, and save you money in the long term. It is recommended to develop a maintenance schedule that fits the frequency of operation. Below is an example:

- Every week: clean the unit to keep it properly maintained. After disconnecting from power and lifting the housing, vacuum the interior and clean stainless steel components.
- Every two weeks: replace disposable dust bag should be replaced and the unit should be dusted and cleaned. Once a month, the brushes should be inspected and replaced if necessary.
- Every 6 months: inspect the internal pre-filter and external HEPA filter.

## 6.0 Filter Replacement



WARNING: Disconnect the power supply before servicing or cleaning unit.



CAUTION: Put on a breathing mask and rubber gloves before changing filters and dust bag.

## **HEPA Filter Replacement**

The external HEPA filter should be replaced periodically, depending on the environment and materials that the filter is exposed to during daily operations.

If the external HEPA filter is heavily soiled, it should be replaced; otherwise, it should be changed on 6-12 month intervals.

Alternatively, the smell test may indicate that it is time to replace the filter. If you are noticing a musty smell when the shoe cleaner is running, there is a good chance the HEPA filter is no longer working effectively and now needs to be changed.



# **Motorized Shoe Cleaner**

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To remove the filter, press the top filter tab down, the top of the filter should release allowing the filter to be pulled out.

To install the replacement HEPA filter, hook the bottom of the filter in first, then gently push the top half of the replacement filter until the tab snaps into the top bracket. You should hear a click, and the filter should have a tight seal with no exposed openings around the filter perimeter.

#### **Dust Bag Replacement**

To install the dust bag, slide it on the flanged tube inside the vacuum compartment. The flanged tube prevents the dust bag from falling off during operation.

## Internal pre-filter replacement

The pre-filter is located in the same compartment as the dust bag. The pre-filter cap should snugly wrap around the motor. The pre-filter catches larger particles that would otherwise quickly clog the external HEPA filter.

Make sure the pre-filter is cleaned regularly and not covered as this will obstruct airflow and effective operation of the vacuum system.

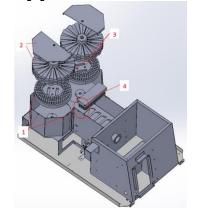
#### 7.0 Removing Brushes and Motor

#### **Removing Brushes**



WARNING: Disconnect the power supply before removing brushes

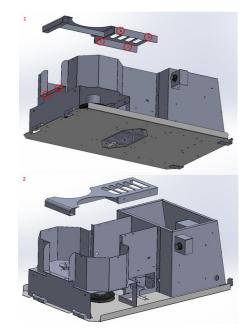
CAUTION: Put on a breathing mask and rubber gloves before changing brushes.



- Remove the retainers first by unscrewing the screws (x6 total) on the sides of the brush compartments.
- Once the retainers are removed, lightly pull the cylindrical brushes upward.

- Each bottom disc brush is secured by 2 screws facing upward. Unscrew those screws to remove the brushes.
- Remove the static brush by unscrewing the screws (x4 total) on the side of the cleaning compartment

## Removing the Foot Rest for Cleaning



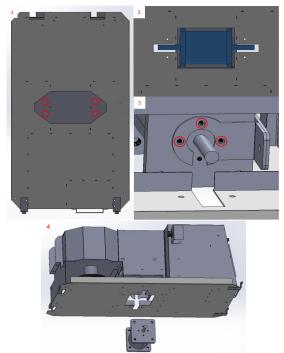
- 1. Remove brushes as outlined in the above section.
- 2. With brushes completely removed, unscrew the screws (x6 total) located on the sides and underneath the front of the footrest.
- 3. Once all screws are removed, lift the footrest upward and out of the unit.



## Removing the Motor



WARNING: Disconnect the power supply before removing the motor.



- 1. Remove the access panel at the bottom first by unscrewing the highlighted screws (x4 total).
- 2. Loosen the motor (ref: Part 3), then align the motor with the cutout profile.
- Unscrew the screw (x6 totals) that secure the motor to the bracket. Remove the pulleys and vbelts from both sides of the the motor shaft.
- 4. Once everything is removed, the motor can be pulled out from under the unit.

## 8.0 Replacement Parts

It is suggested to use factory replacement parts to ensure optimal performance. Failure to use the suggested parts may compromise the machine's performance.

1784-01A	HEPA Cloth Dust Bags	
1784-13	External HEPA Filter	
1784-02	Internal Pre-Filter	
1784-18	V-belt (pair)	
1884-06	Rotary Side Brushes (pair)	
1884-07	Rotary Bottom Brushes (pair)	
1884-03	Stationary Top Brush	

## 9.0 Warranty

https://www.terrauniversal.com/warranty