

TrueClean ToteTilter™

Installation, Operation, and Maintenance Manual



TrueClean ToteTilter

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Safety

Important Safety Information

Read this manual before installing, operating, and maintaining this equipment. Failure to read the manual can result in personal injury and/or equipment damage.

Do not attempt to remove and/or modify any TrueClean products or programming. Doing so can create unsafe conditions for the operator(s) and/or surrounding persons. Any change to TrueClean products or programming will void any and all warranties.

Do not place any TrueClean product in an application where general product service ratings are exceeded. Doing so puts the operator(s) and/or surrounding persons at risk of personal injury and/or result in equipment damage.

The words **DANGER**, **WARNING**, and **CAUTION** and their meanings, as used within these instructions, are listed below:



DANGER

Indicates an imminently hazardous situation, which if not avoided, has a high likelihood of resulting in death or serious injury. This symbol is used in only the most extreme at-risk cases and warrants immediate action.



WARNING

Indicates a potentially hazardous situation, which if not avoided, could result in death or serious injury. This symbol is used for moderately at-risk cases and warrants immediate action.

CAUTION

Indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. This symbol may also be used to alert against an unsafe operating or maintenance practice.

If, at any point during operation a Danger, Warning, or Caution indication is present, the operator should immediately take steps to resolve the problem and/or seek assistance from a supervisor.

Do not remove labeling on any TrueClean product. The customer should replace any missing labels right away.

Disclaimer of Liability

TrueClean does not assume responsibility and expressly disclaims liability for loss, damage, or expenses that arise in any way from the installation, operation, use, or maintenance performed in accordance with this manual. TrueClean assumes no responsibility for any infringement of patents or other rights of third parties that may result from use of the module. No license is granted by implication or otherwise under any patent or patent rights.

TrueClean reserves the right to make changes to the product, specifications, or this manual without prior notice.

Introduction

Thank you for purchasing a TrueClean Product.

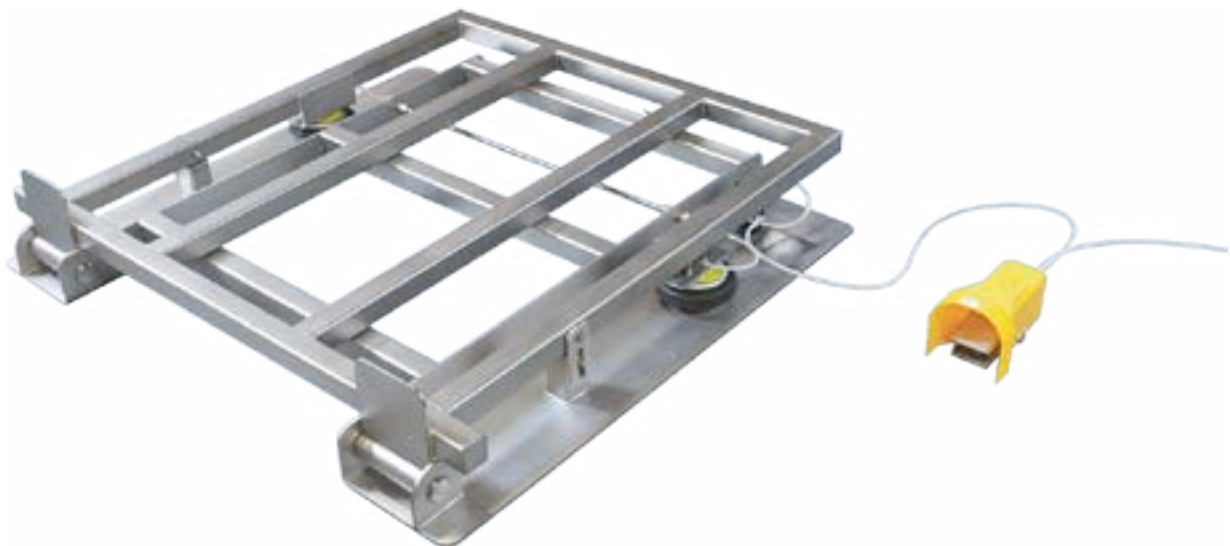
This manual contains installation, operation, and maintenance instructions for TrueClean's ToteTilter.

About This Manual

This manual is for TrueClean's ToteTilter assembly. All ToteTilters are available with an optional ToteStand that can provide additional functionality. Refer to the ToteStand service manual for more information.

The ToteTilter is designed to need little routine maintenance, but care and attention should be given to the instructions provided in this manual.

If, at any point, you have questions or concerns regarding your ToteTilter, Please call **800.654.5635**, **417.831.1411** or find us online at **www.trueclean.us**.



Introduction

Warranty

Seller warrants its products to be free from defect in materials and workmanship for a period of one (1) year from the date of shipment. This warranty shall not apply to products which require repair or replacement due to normal wear and tear or to products which are subjected to accident, misuse, or improper maintenance. This warranty extends only to the original Buyer. Products manufactured by others, but furnished by Seller, are exempted from this warranty and are limited to the original manufacturer's warranty.

Seller's sole obligation under this warranty shall be to repair or replace any products that Seller determines, in its discretion, to be defective. Seller reserves the right either to inspect the products in the field or to request their prepaid return to Seller.

Seller shall not be responsible for any transportation charges, duty, taxes, freight, labor, or other costs. The cost of removing and/or installing products which have been repaired or replaced shall be at Buyer's expense.

Seller expressly disclaims all other warranties, express or implied, including, without limitation, any warranty of merchantability of fitness for a particular purpose. The foregoing sets forth Seller's entire and exclusive liability and Buyer's exclusive and sole remedy for any claim of damages in connection with the sale of products. In no event, shall Seller be liable for any special consequential incidental or indirect damages (including without limitation attorney's fees and expenses), nor shall Seller be liable for any loss of profit or material arising out of or relating to the sale or operation of the products based on contract, tort (including negligence), strict liability, or otherwise.

Installation

TrueClean is providing the most common or general installation instructions. In cases where needs deviate from the methods described below, please contact us for additional technical support.

ToteTilter

1. Place the ToteTilter on a level surface leaving sufficient room for forklift travel.

Note: Shims, grout, etc. can be used to level the ToteTilter.

2. The ToteTilter should be set into place using a forklift or other equipment-moving machine.

3. Connect the plant-provided airline to the ¼" NPT connection on the regulator (150 psig maximum inlet pressure).

Note: The pressure regulator should be verified at the stated pressure for the specific unit. This information can be found on the equipment tag.

CAUTION

Pneumatic connections should be made in accordance with local, state, and federal codes and standards.

CAUTION

Care should be taken when loading and unloading ToteTilter to prevent the unit from sliding out.



WARNING

Operating ToteTilter with pressure regulator in excess of 30 psi can result in unsafe conditions.



WARNING

Never attempt to move the ToteTilter or ToteStand with a tote, intermediate bulk container, or other container placed on top.

Installation

Fixed ToteTilter

It is advised not to affix the ToteTilter to the floor. If the ToteTilter is affixed to the floor, a potential entrapment area may be formed that is not easily cleaned.

1. Place the ToteTilter on a level surface, leaving sufficient room for forklift travel.

Note: Shims, grout, etc. can be used to level the ToteTilter.

2. The ToteTilter can be set into place using a forklift or other equipment-moving machine.

3. Mounting holes may have been requested at the time of purchase or may be drilled by the owner in the available space of the ToteTilter's stationary base.

- Care should be taken when drilling holes in the stationary base to avoid damaging additional components.
- The owner is responsible for determining the most appropriate fastener to be used when mounting a ToteTilter.
- At no point should holes be drilled or modifications made to the articulating frame of ToteTilter as it is a structural member. Altering the frame in any way can result in personal injury or death.
- It is not necessary to affix the ToteTilter to a permanent structure, assuming it is operated properly.

4. Connect the plant-provided airline to the 1/4" NPT connection on the regulator (150 psig maximum inlet pressure).

Note: The pressure regulator should be verified at the stated pressure for the specific unit. This information can be found on the equipment tag.

CAUTION

Pneumatic connections should be made in accordance with local, state, and federal codes and standards.

CAUTION

Care should be taken when loading and unloading ToteTilter to prevent the unit from sliding out.



WARNING

Operating ToteTilter with pressure regulator in excess of 30 psi can result in unsafe conditions.



WARNING

Never attempt to move the ToteTilter or ToteStand with a tote, intermediate bulk container, or other container placed on top.

Operation

Operation

CAUTION

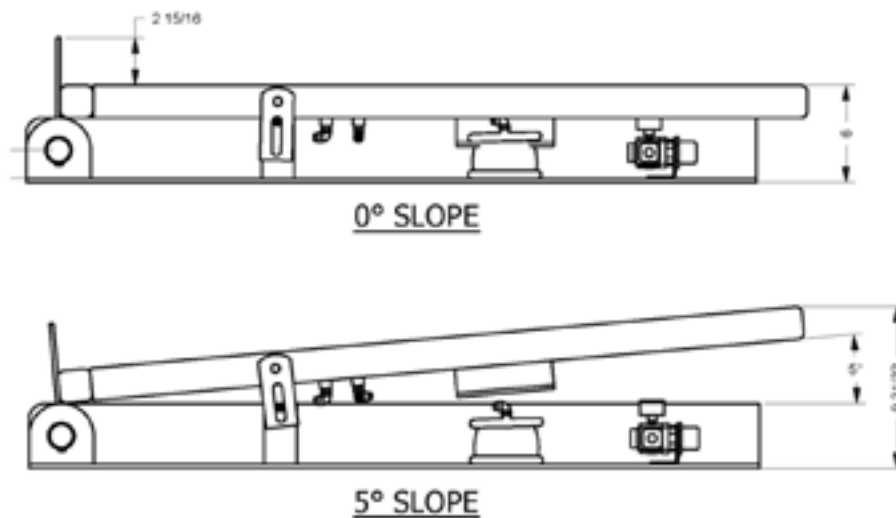
Operators should refrain from making contact or interfering with a ToteTilter while it is raising or lowering as pinch points may exist.

CAUTION

Operators should not attempt to load or unload a ToteTilter while it is raising or fully raised.

Raising Sequence

1. Ensure the plant airline is connected to the pressure regulator.
2. Verify the pressure regulator is set for the recommended pressure, as indicated on the equipment tag.
3. Press the foot pedal to begin filling sequence. A fully loaded tote may prevent it from tipping immediately, but as the tote weight decreases during unloading, the ToteTilter will gradually begin to raise stopping at its maximum angle.



Lowering Sequence

1. Press foot pedal again to begin the lowering sequence. With an empty tote, it may not be immediately obvious the ToteTilter is releasing but you should begin to see the frame lowering within a few seconds.

Maintenance

Maintenance



WARNING

Before maintenance is began remove the inbound air supply from the pressure regulator. The ToteTilter should be in the 0° tilt position prior to maintenance.

General cleanliness will extend the life of the ToteTilter and its mechanical components. Where possible, the area should be kept free of spills and loose debris.

Monthly Checklist

- Check airlines for cracks and leaks.
- Check actuators for cracks, leaks, or signs of dry rot.
- Check for loose thread connections.
- Grease pivot points.

If any issues are found during the monthly check, cease use of the ToteTilter until they are resolved.

Replacing Airlines

1. Confirm that the ToteTilter is in the 0° tilt position then disconnect the inbound airline at the pressure regulator.
2. Remove a leaking airline by pressing the outer ring of the ¼" pneumatic fitting and pulling the airline outward.
3. Repeat the same procedure for the other end of the airline.
4. Use cracked or leaking airline as a guide for the length of the new airline.
5. Trim new section of airline to the appropriate length.
6. Install airlines by pressing each end into ¼" pneumatic fittings.

Note: Give each end a slight pull to ensure the airlines are secured in place.



Maintenance

Replacing Actuators

If one actuator needs to be replaced it is recommended to replace the other, even if it is not leaking.

1. Confirm that the ToteTilter is in the 0° tilt position then disconnect the inbound airline at the pressure regulator.

2. Remove the pneumatic fitting from the actuator, and confirm that it can be reused.

3. Loosen and remove retaining bolts. Once the retaining bolts are free, remove the actuator.

Note: Keep the retaining bolts as the new actuators are not shipped with this hardware.

- 3/8"-16 UNC thread

- Actuator bolt hole depth is 5/8"

4. Place the new actuator where the previous actuator was located.

5. Install and tighten using the retaining bolts from step 3.

- 3/8"-16 UNC thread

- Actuator bolt hole depth is 5/8"

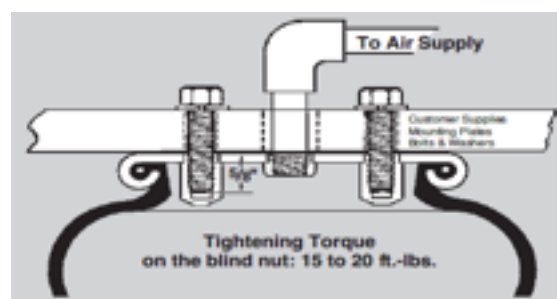
- Tightening torque on the blind nut is 15-20 ft-lbs

6. Install the pneumatic fitting on the new actuator.

- Use a small amount of Teflon or similar sealing tape on threads.

- Use caution avoid cross-threading the pneumatic fitting.

7. Connect the airline to the pneumatic fitting on the newly installed actuator.



Maintenance

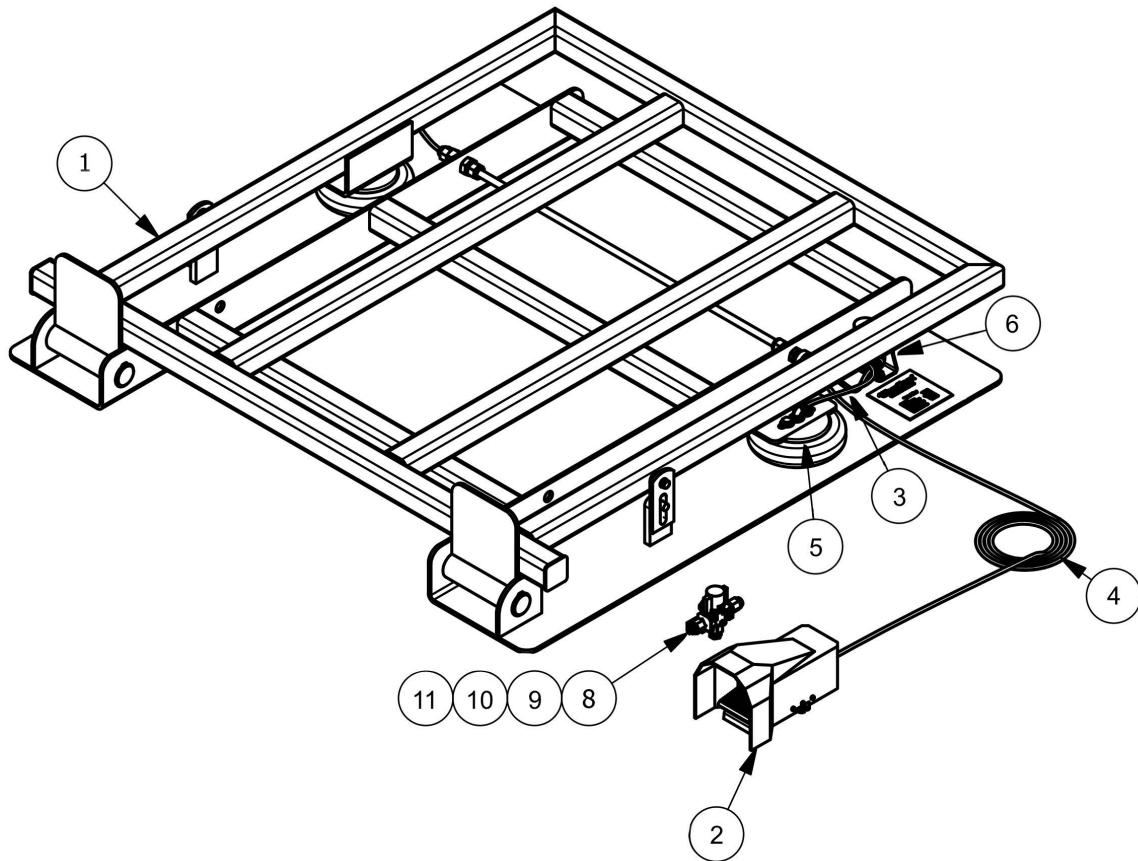
Grease Fittings

General-purpose bearing grease should be used, as approved by the facility manager, or in accordance with established manufacturing procedures.

If additional support is required, please contact us at **800.654.5635** or **417.831.1411**.

1. Before applying new grease, wipe as much foreign debris off of the dynamic hinges as possible.
2. Apply generous amount of facility-approved bearing grease to each of the dynamic hinges.

Parts List



PART LIST			
ITEM#	QTY	PART NUMBER	DESCRIPTION
1	1	5 degree model: TTT-05-304A 10 degree model: TTT-10-304A	Frame structure
2	1	M4F210-08LG	Foot activated w/lock
3	5	CS00964	1/4" Compressed air Inlet
4	1	41-6	Air line for actuator
5	2	5 degree model: W01-358-7731 10 degree model: W01-358-7325	Flexible actuator
6	1	R72G-2AK-RFG	Compressed air regulator
7	2	1293K11	Grease zerk
8	4	CS00409	Composite Body Connector
9	1	VHS30-N02B-Z	0.25" Relief Valve
10	1	VHS30PW-180AS	Mounting Bracket
11	1	CS00978	Breather Vent

Troubleshooting

Q. What should I do when the TrueClean ToteTilter System fails to lift?

A. Try the following solutions:

1. Verify incoming plant air pressure to the unit is greater than 30 PSIG, and less than the maximum 150 PSIG.
2. Verify the pressure regulator is at the stated pressure for the specific unit. This information can be found on the equipment tag and is generally 15-30 PSIG.
3. Check for air leaks at connection points, air lines, lifting air bags, air shutoff valve, and foot valve.
4. Check grease fittings and pivot points on the frame for binding.

Note: The system is not designed to lift a full tote. The system may remain flat with a full tote even when activated. The system is designed to tilt once the product level in the tote is reduced a sufficient level for the actuators to overcome the product weight, thus enabling the remaining product to gravity drain from the tote.

Q. What should I do when the TrueClean ToteTilter actuators or airlines are damaged or leaking air?

A. Try the following solutions:

1. Verify the airline or actuator or airline is damaged and not the result of a loose connection. If an airline or actuator needs replaced refer to the maintenance section of this manual to replace the faulty airline or actuator.

If you have additional questions or if additional support is required, please contact your TrueClean authorized distributor. You can also visit us at www.TrueClean.us and contact us at 800.654.5635 or 417.831.1411.

Customer Notes

A large, empty rectangular box with a thin grey border, intended for customer notes.