

# ShopRelief<sup>tm</sup>

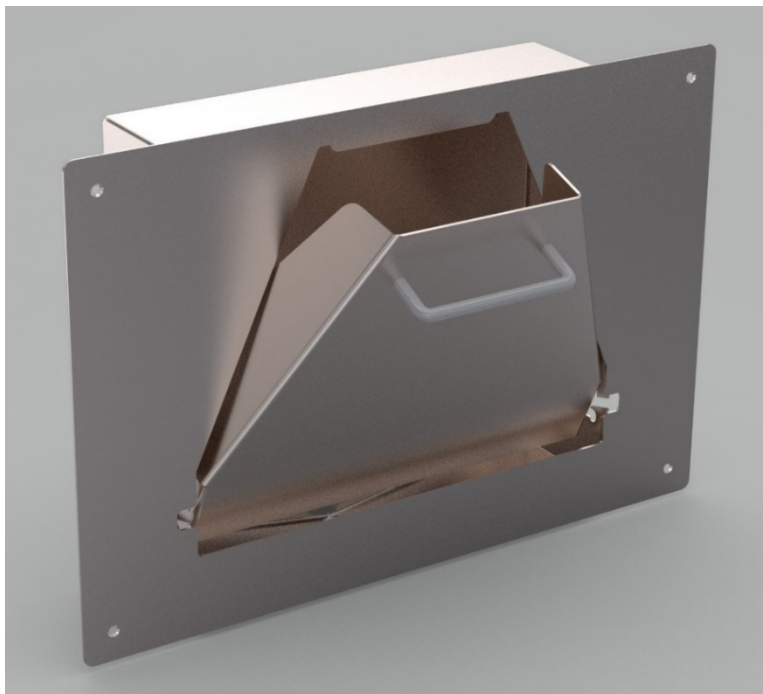
## Instruction and Installation Manual

### Overview

Thank you for your purchase of a TechnoVersions LLC ShopRelief. This manual gives you information about installation and use. Please read the entire document prior to installation.



ShopRelief is a hidden waterless urinal for your shop. Installed between standard 16" on-center 2x4 studs, it appears as a flush stainless-steel panel against the wall. To use it, fold out the chute. When done, simply close the chute.



It drains through a hose that goes inside your wall space, and then outside to a buried drain pit or holding container. It doesn't require any plumbing or use any floor space. It is made in the USA, with high-quality stainless-steel construction which will last you many years.

Odor control is accomplished through a design that closes, entirely drains, and with a deodorizer block in the bottom. The chute can be easily removed for any cleaning that you wish to do. Or, if you wish the occasional flush, keep a jug of water nearby and pour it in.

## Installation Instructions

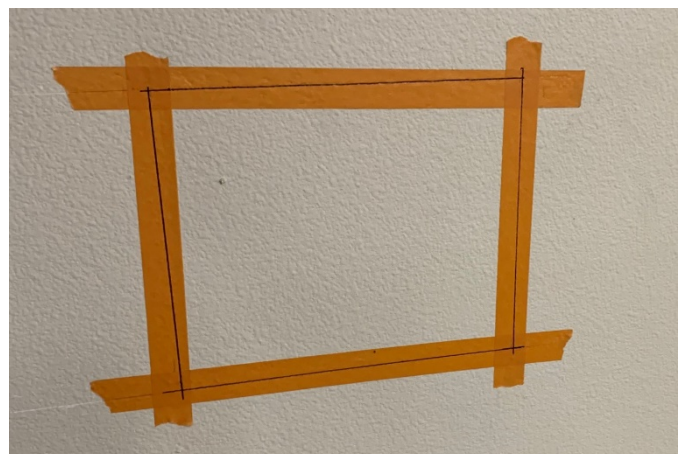
Tools necessary: (1) drywall cutting equipment such as an oscillating or rotary cut-out tool, (2)  $\frac{3}{4}$ " wrench, (3) electric drill with  $\frac{11}{16}$ " and  $\frac{5}{32}$ " bits, and (4) Phillips screw-driver.

**CAUTION:** *When locating, cutting and drilling, be careful to avoid hitting any wiring or plumbing that may be inside the wall.*

1. Open the shipping container and remove ShopRelief from its packaging. Next remove the blue protective film, and remove the bag of included accessories. You will find four #10 wood screws, two number #10 toggle bolts, handle with screws, a  $\frac{3}{8}$  NPT nipple, a  $\frac{3}{32}$ " hex wrench, and a starter deodorant block. The hose is packed inside the ShopRelief.
2. Lay ShopRelief face-down on a padded surface to prevent scratching, and then assemble the nipple to the drain hole of the enclosure and tighten it with a  $\frac{3}{4}$ " wrench.
3. Install the handle on the chute. To open the chute without the handle installed, you can either tilt the entire unit towards the front until it starts to open, or press in at the very bottom (wider part) of the chute until it starts to open. Install the handle to the chute with the two 8-32 x  $\frac{3}{8}$ " button-head fasteners and tighten with the included  $\frac{3}{32}$ " hex key tool. Remove the chute from the main unit until installation is complete.
4. Find the location where you will install it. It's best to have at least one end attached to a stud or post, but that's not absolutely necessary. You can hold the unit at different heights, with the chute open, to find what height works for you. Setting the top of the front plate at 24"-34" above the floor is a typical height range. Ensure that there is a spot in the stud-space that goes to the outside wall near the bottom.

**CAUTION:** *Take care that there is no wiring or plumbing in the wall. Some stud-finders and non-contact electrical "sniffers" can help find wiring in some cases. Note that many of the "sniffers" aren't active at this distance. When cutting, keep the cutting depth to a minimum, just in case there is hidden wiring or plumbing.*

5. Mark the cut-out on the wall. It's helpful to put some masking tape on the wall in the approximate location, then mark the cut accurately on the tape. The tape will also help keep the drywall intact while cutting. Mark a rectangular opening in the drywall, centered between studs, that is  $11\frac{1}{2}$ " high, and 14" wide. If you wish to check your layout, the diagonal



measurement from corner to corner should be about 18 1/8". If you choose to mark the preliminary screw-hole locations at the same time, measure from the cut-out corners: the screws are 1" horizontally out, and 1/2" vertically towards the center. Now you can cut the opening. One way to make an accurate cut is to use an oscillating cutting tool for the edges, and a hacksaw blade to finish the corners, but many methods will work. Be careful with the top and bottom cuts, there is only 1/4" of flange that will be covering your cutout at the top and bottom.



6. From the outside, at the bottom of the stud-space, drill an 11/16" diameter hole for the hose. The actual outside dimension of the hose is 5/8". If you drill it at an angle with the outside part being lower, the hose will route closer to the foundation on its way to the outlet, requiring less of a bend. If you decide to drain into a holding container outside, you will want to drill the outlet hose hole higher in the wall, but make sure it is at least a few inches below the ShopRelief nipple to prevent the hose from kinking. It's a good idea to first drive in a nail from the outside at the proposed hole location, then check it on the inside to ensure that it's in a good spot.
7. From the outside, insert the hose through the hole into the stud-space. Then, from the inside, reach down and pull it up into the cut-out area. While holding ShopRelief near the opening, press the hose onto the nipple. Because of the barbed-style nipple, no hose clamp is necessary.
8. To install ShopRelief into the opening, place the bottom side in first, then tilt it into place at the top. Using a level, place the unit into position and install with the mounting screws provided. Before drilling holes for the mounting screws, ensure that you are fully covering the cut-out top and bottom. A typical hole size for the #10 screws is 5/32". If you will be installing it in a place that is more than 16" on-center studs, use toggle bolts on one end. The toggle bolts included require a 5/8" diameter hole. The toggles have heads that match the wood screws.
9. From the outside, pull the hose until light resistance is met, but not so tight that it kinks. You can check by blowing into the hose to ensuring that there is good flow.
10. Finally, run the hose into a storage container, or into a small hole. You will probably need to cut the hose to the correct length. Fill the hole with gravel



(round river-rock is best since it doesn't compact) that is ½" or larger to keep from plugging the hose exit. For an extra touch, you can add some landscape fabric to prevent dirt infiltration, then cover with dirt to finish the job.



Reinstall the chute, put in the deodorizer block, that's it! It is now ready for use.

### **In Case of Wiring Interference**

If you have the misfortune of finding wiring in your cut-out, you will need to hire a licensed electrician to extend the wiring over the top of the unit. The electrician may use commonly available non-metallic splice kits which are small enough so that they can reside between your ShopRelief unit and the studs, such as in this installation where two wires were rerouted:



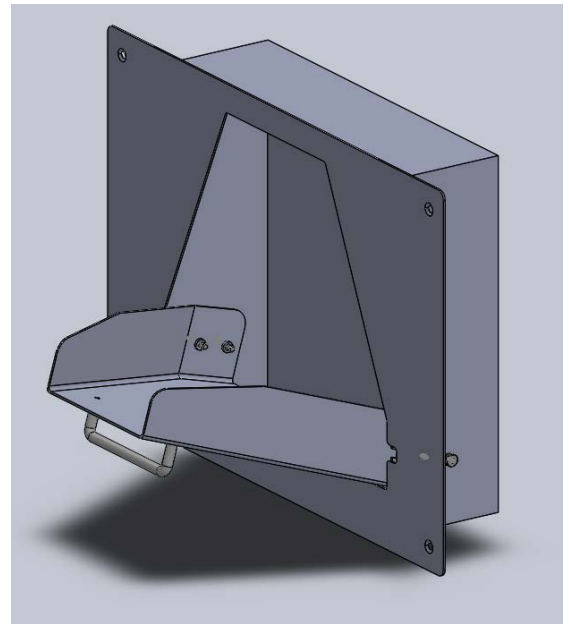
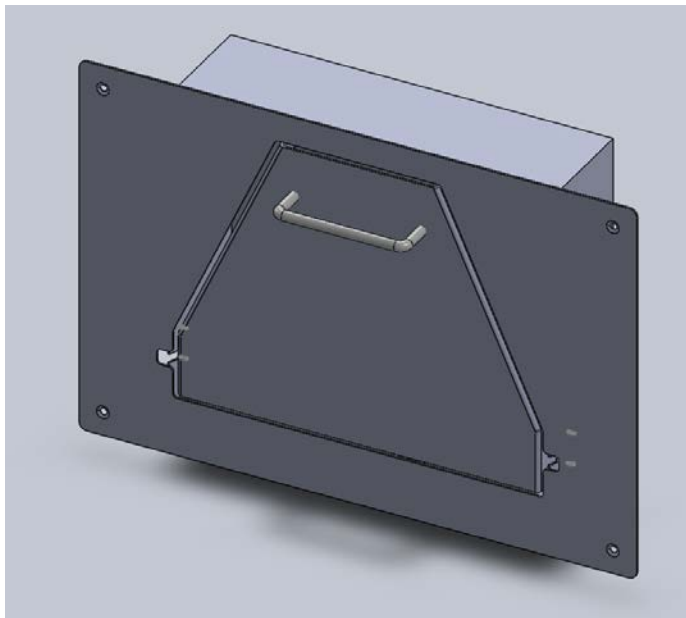
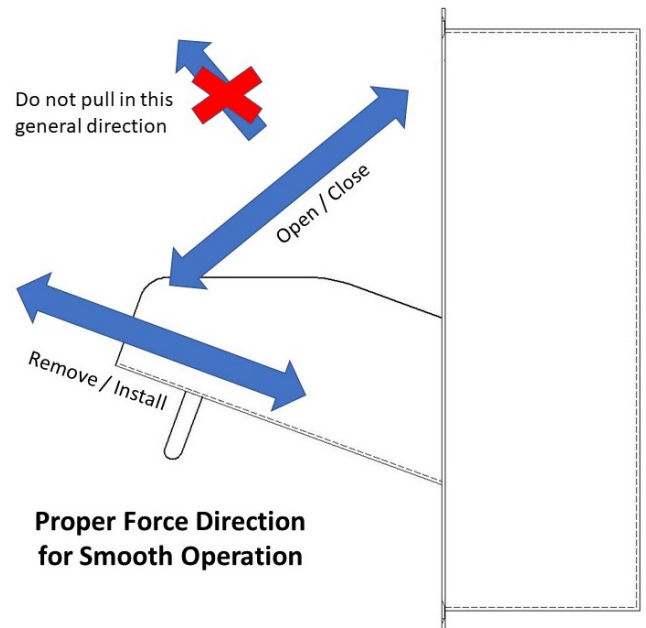
## Operating Instructions

The unit is designed to allow the chute to be open, closed, or removed.

To open the unit, simply pull out on the handle and allow it to hinge down to the open position.

To close the unit, lift up on the handle. Note that you should pull straight up or up and slightly towards the wall on the handle, with no force in the outward direction. Otherwise the hinging mechanism will think you are trying to remove the chute, and will not open smoothly.

To remove the chute, open it, then pull it out at the same angle of tilt. Re-install it at the same angle.



## Maintenance

Keep a deodorizer block in the unit to reduce odors. Replacement blocks are available from TechnoVersions, or from a variety of sources. A common size for these is about 2-5/8" in diameter and 15/16" thick. If using other sources, make sure that they aren't larger, or you may have interference with the chute as it opens and closes. When replacing the deodorizer block, place it in the center and towards the rear wall of the unit to prevent interference.

Cleaning the stainless-steel panels can be done with readily-available commercial cleaners as used on standard stainless-steel kitchen appliances and fixtures. We have found Weiman products, such as their *Stainless Steel Cleaner and Polish* to work very well with ShopRelief to maintain and enhance its appearance.

For cleaning, it is easy to remove the chute, see the Operating Instructions section.

If you decide to give an occasional flush by pouring in some water, do not use more than about a quart at one time to prevent possible overflow at the bottom of the opening.

If you are using a holding tank, you can minimize odors by pouring in commercially available waterless urinal sealing liquid or equivalent into your holding tank. This will rise to the top of the liquid to minimize odor.

## **Limited Warranty, Terms and Conditions**

TechnoVersions LLC provides a limited warranty for ShopRelief. If a unit should fail within 180 days from time of shipment from TechnoVersions due to material or manufacturing defects, it can be returned for repair or replacement at TechnoVersions discretion. Products subjected to abuse (as determined by TechnoVersions) are excluded from this limited warranty. TechnoVersions LLC makes no other claims as to suitability and excludes any indirect or consequential damages.

Exclusive remedy is limited to product replacement or repair. Cost of shipping the product to TechnoVersions is at the customer's expense, but the replacement/repaired ShopRelief will be shipped to the customer at TechnoVersions expense, except for shipments out of the USA, in which case TechnoVersions shipping cost is limited to the cost of domestic shipments.

Risk of loss and shipping damage become the responsibility of the customer once delivered to a common carrier by TechnoVersions LLC.

You are responsible for ensuring that your installation meets any local code requirements.

## Specifications

<b>ShopRelief Specifications</b>	
Face-plate size	12" H x 17.5" W
Rear enclosure size	11 1/8" H (front), 12" H (rear) x 12" W x 3 3/4" deep
Mounting Hole size	#10 fasteners (.201" diameter hole size)
Materials used	<ul style="list-style-type: none"> <li>• 304 Stainless panels, .062" thick (16 gauge)</li> <li>• Stainless hardware</li> <li>• Nylon hose nipple (3/8" NPT to 3/8" ID hose)</li> <li>• Drain Hose: 48" long, 3/8" ID, 5/8" OD, black, Nitrile Rubber/Neoprene material</li> </ul>
Chute angle, open	16 degrees from horizontal
Weight	10.4 Lbs.
Shipping Dimensions	19" x 13.5" x 5", 11.7 Lbs.
Included	<ul style="list-style-type: none"> <li>• Main unit with chute, face-plate and rear enclosure</li> <li>• 3/8" NPT nipple for drain hose</li> <li>• Drain hose</li> <li>• Mounting wood screws (4) #10 stainless</li> <li>• Mounting screws (2) #10-24 stainless with toggles (heads match wood screw style)</li> <li>• Instruction Manual</li> <li>• Deodorant cake</li> <li>• Hex wrench 3/32"</li> <li>• Handle with 8-32 x 3/8" button-head screws (2)</li> </ul>
Assembly	<ul style="list-style-type: none"> <li>• Install front handle,</li> <li>• Install nipple and hose</li> </ul>

