



## Mobile Water Fill Station for Events Construction Instructions

The supplies and instructions below will build one (1) mobile water bar. Assembly estimated at 4 hours per unit for first build. You must search out lead free components for this cart.



These instructions are provided freely as an open source instructional worksheet. TWSA assumes no liability for final products built with these instructions.

Questions/Information: Tahoe Water Suppliers Association /775-832-1284 / [wastenot@ivgid.org](mailto:wastenot@ivgid.org)

1. Purchase the parts and gather tools. Use Teflon tape at all metal-to-metal connections.
  - a. Parts list (see last page for vendor sources and process)
2. Follow the instructions included with the Carlisle utility cart to complete assembly properly.

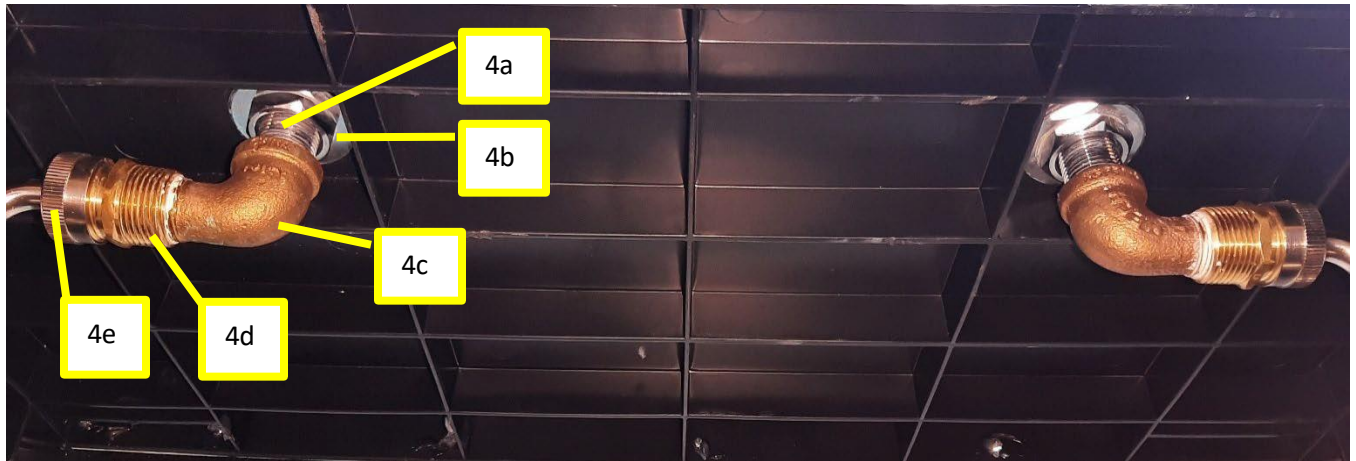


3. Top Shelf
  - a. Drill 7/8" holes in the top level of the Carlisle utility cart while centering the mounted fillers in the middle of the cart while also making sure that the mounts are about one foot apart.

- b. Take into account the plastic cross-support bars on the underside of the shelves in order to leave enough room for the mounted filler washers and tightening the nuts. One way to avoid cutting the ribs is to drill the holes from the bottom side of the cart top.

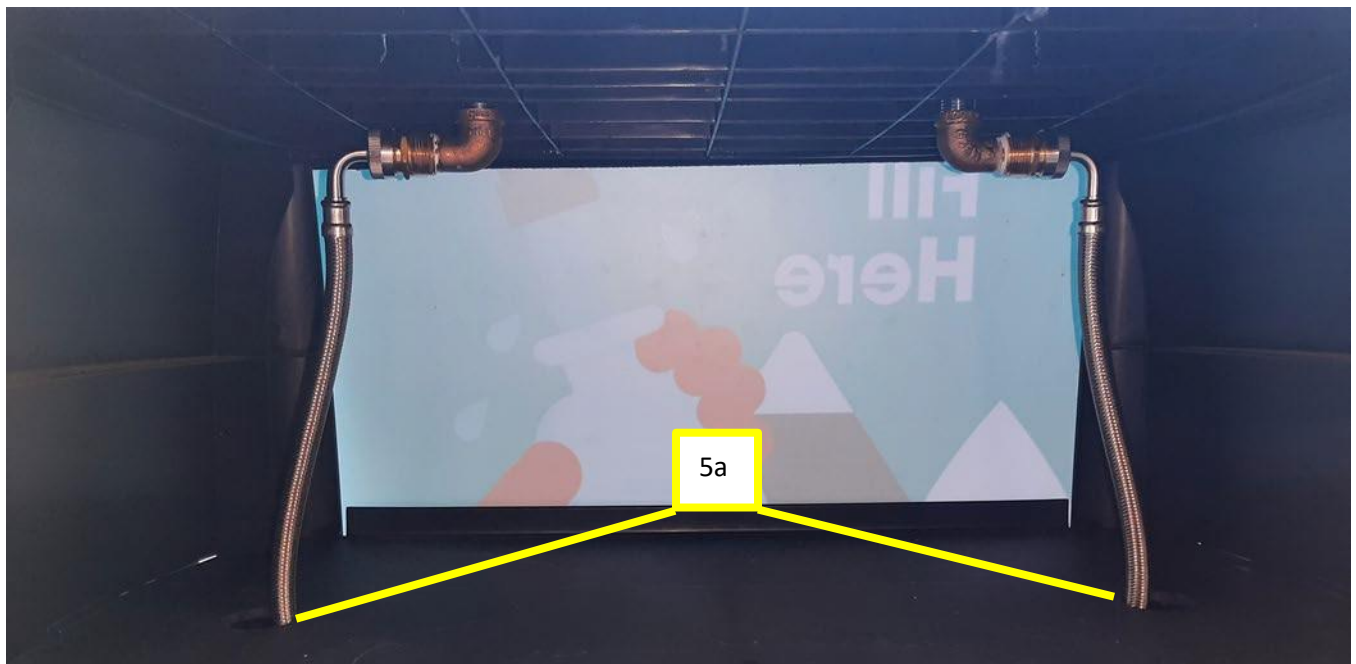
4. Mounting filler taps.

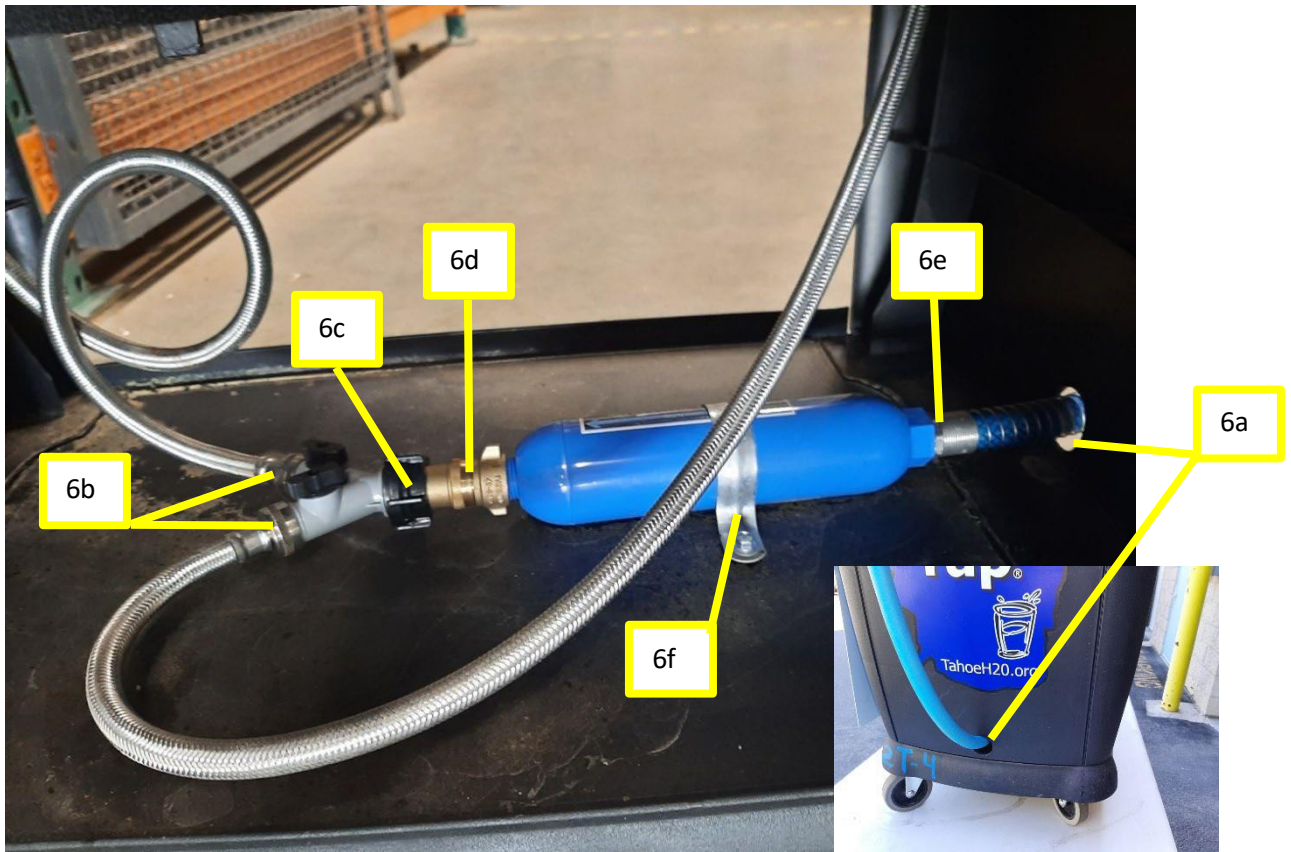
- a. Place bottom of filler through 7/8" hole in cart top.
- b. Place metal washer over threaded section, then screw on nut as tight as possible.
- c. Attach the brass street 90 (elbow) to the mounted filler using Teflon tape on the threads.
- d. Attach the 1/2" female to 3/4" male hose thread (adapter) to the 1/2" street 90 (elbow) using Teflon tape.
- e. Attach the braided stainless steel washing machine hose to the male hose thread



5. Middle Shelf

- a. Drill 2" hole on the left and right edges of the middle shelf, then slide hoses through to bottom shelf.





## 6. Bottom Shelf

- a. Drill 2" hole in bottom center of side panel for hose access.
- b. Connect the stainless hoses to the Y splitter making certain rubber gaskets are present in each.
- c. Thread the Y splitter to the pressure reducer.
- d. Thread the pressure reducer to the RV filter.
- e. Thread the RV filter to the hose end sticking through the hole in the end of the cart.
- f. Secure the RV filter to the bottom of the cart using the 2-inch conduit strap and screws.

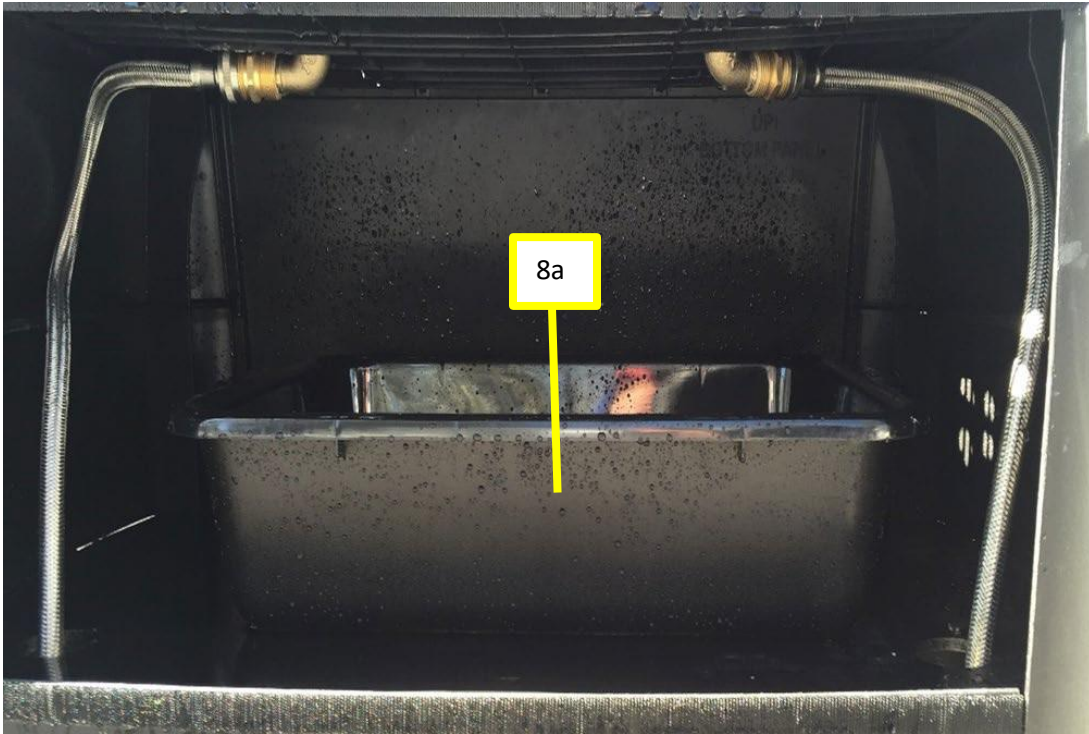
## 7. Top Shelf Drainage

- a. Drill 2" holes directly underneath each filler and then cover with the stainless steel drain covers.



8. Middle Shelf Drainage Tray

- a. Place optional drainage tray on the middle shelf.



9. Maintenance:

- a. Rinse the hoses and equipment by allowing the water bar to discharge for several minutes when connected to a water source (especially important before first use at each event).
- b. Use a light chlorine solution/disinfecting wipes to disinfecting the tap fillers and cart surface prior to each use.
- c. You may only use approved drinking water hoses (RV/Marine style) otherwise plastic and rubber contaminants can leach into the water from irrigation hoses.
- d. NEVER hook up the water bar to a water source that is past a backflow device (or use water source that is a part of an irrigation sprinkler system).
- ✓ A backflow is needed for all drinking systems to have protection against contaminants that could enter the potable water from the irrigation line.
- e. Make sure all hoses, the filter and drains are dry when putting in storage.
- f. The water filter should be replaced at least once per year.
- g. Do not allow to sit outside overnight when connected to a hose (filter can freeze and crack).

**Mobile water station parts list to build ONE 4 head water fill station. Use the best parts and joint compound, do not cut corners on parts. Buy LEAD FREE Parts only! 2023 approximate pricing**

<u># units needed</u>	<u>Part name</u>	<u>vendor</u>	<u>US \$ price per unit</u>	<u>part number</u>
1	Carlisle 3 shelf bus cart 300# Capacity	<a href="http://www.webstaurantstore.com">www.webstaurantstore.com</a>	174.47	CC203603
2	T&S 12" deck mounted push back double glass filler 2 heads 1/2" NPT male inlet = 4 spigots total per cart (OR)	<a href="http://www.webstaurantstore.com">www.webstaurantstore.com</a>	199.99	B 1215-12
2	T&S Deck Mount Push Back Glass Filler with 10" Pedestal single head 1/2" NPT male inlet = 2 spigots total per cart		145.47	<b>B-1210-01</b>
1	Clear2O RV and Marine Inline Water Filter	<a href="http://www.campingworld.com">www.campingworld.com</a>	31.17	122544
4	3/4"x3/4" brass garden hose fitting - 1/2 FIP Tap lead free	<a href="http://www.supplyhouse.com">www.supplyhouse.com</a>	2.99	GHHM075LF
2	1/2" Brass 90 degree (street 90) elbow lead free threaded	<a href="http://www.supplyhouse.com">www.supplyhouse.com</a>	5.10	BRES075
2	4' Braided stainless steel hoses (washing machine lines)	<a href="http://www.supplyhouse.com">www.supplyhouse.com</a>	8.29	B9WM48
1	4' drink water use approved hose (from filter to longer hoses)			
2	25' drinking water use approved hose			
1	Pressure regulator	<a href="http://www.campingworld.com">www.campingworld.com</a>	\$ 8.46	132201
1	Teflon tape			
2	7/8" washers			
1	2" Conduit Strap and screws			
4	flat drain hole covers			
1	Tupperware bin or bus tub for 2nd shelf drain (optional)			

Tool list:

- ✓ A rubber mallet
- ✓ A drill
- ✓ Small drill bit for zip tie holes
- ✓ A 7/8" hole saw
- ✓ A 2" hole saw
- ✓ A wrench and/or a set of channel locks