



CONNECT TO BETTER

**Installation Instructions**  
RV Plumbing Applications

# Hep<sub>v</sub>O

## Sanitary Waste Valve



# Installation Instructions

# Hep<sub>v</sub>O Sanitary Waste Valve

## Installation on Recreational Vehicles

The purpose of this document is to provide instructions for the installation and use of the Hep<sub>v</sub>O Sanitary Waste Valve on Recreational Vehicles.

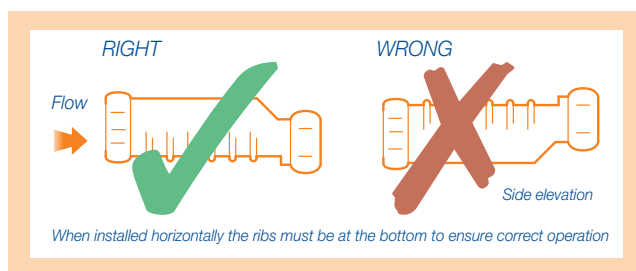
### 1. General

- ⦿ Hep<sub>v</sub>O is used instead of a P-Trap to protect the living space from foul odors from the grey water tank, black water tank or campground sewer system
- ⦿ Each Hep<sub>v</sub>O is approved to protect one sanitary fixture, which can be a Lavatory, Shower, Bathtub, Single or Double sink, Washing Machine, Dishwasher or Bidet. A single Hep<sub>v</sub>O may only be used to protect multiple fixtures under strictly defined conditions - see Section 5
- ⦿ Hep<sub>v</sub>O eliminates the need to have the fixture it is installed on individually vented (through the roof or anti-siphon venting)

**Note:** all other system and tank venting requirements still apply.

### 2. Installation (Orientation/Location)

- ⦿ Hep<sub>v</sub>O can be installed vertically or 'horizontally', or any angle in-between. When installing 'horizontally' a minimum allowable slope of 1/8" (3.175mm) per foot (30.48cm) must be maintained to ensure good drainage. This can be achieved by using the Hep<sub>v</sub>O Angled Adapter ref CV11/U
- ⦿ When installed at any angle other than vertically, the Hep<sub>v</sub>O must have 'ribs down' to ensure correct drainage



- ⦿ Hep<sub>v</sub>O valves must be installed in the correct direction of flow which is clearly marked on the body of the product
- ⦿ Hep<sub>v</sub>O must be installed either immediately at the exit of each Fixture, or in-line up to a maximum distance of 6ft from the exit of the Fixture. Note that when used to protect a single fixture Hep<sub>v</sub>O must always be installed upstream of any tees or branch connections to other waste pipes
- ⦿ If a Cleanout Fitting would normally be installed within 6ft of the Fixture Outlet then Hep<sub>v</sub>O may be installed instead at that same location to perform the dual function of a Trap

and a Cleanout point, provided all other Hep<sub>v</sub>O installation instructions contained in this document are met

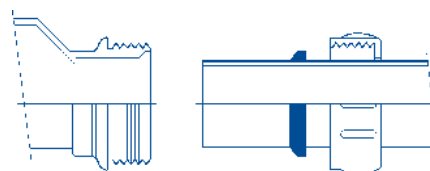
- ⦿ Hep<sub>v</sub>O must be installed in an accessible location

### 3. Installation Method

- ⦿ At the inlet side Hep<sub>v</sub>O can be installed using a 1 1/2" Threaded Connection or via a slip joint connection onto Tubular pipe using In-Line Adapters CV7A/U (1 1/4") or CV7B/U (1 1/2")
- ⦿ At the outlet side Hep<sub>v</sub>O can be installed using a 1 1/2" Threaded Connection or via a slip joint connection onto 1 1/2" Tubular pipe
- ⦿ Do not use jointing compounds or chemical sealants on any Hep<sub>v</sub>O connections

#### A. Connections to Tubular Pipe

1. Cut the tube to length, allowing for the full compression socket depth, (preferably using an appropriate tube cutter).
2. If using plastic tube remove any loose material from the inside and the outside of the end of the tube. If using metallic tube remove any burrs or sharp edges from the inside or the outside of the tube and file if necessary. Mark the socket depth on the tube, and check that the tube section to be joined is free of any damage which may affect the joint seal.
3. Unscrew the Hep<sub>v</sub>O slip-nut from the outlet/inlet adaptor and slide the slip-nut, slip washer and rubber seal onto the tube.
4. Insert the tube end fully into the socket.
5. Slide the rubber seal, slip washer and screw slip-nut against the face of the socket, and tighten the slip-nut by hand, (check that the slip-nut is square to the body and does not 'cross-thread'), hand tight should be adequate to form a proper seal.



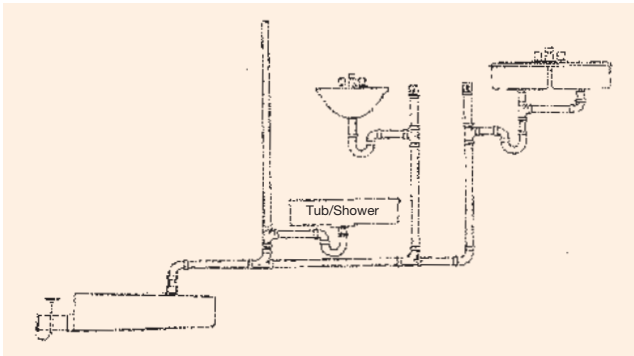
Slip-nut and sealing cone on tube end ready for insertion of tube into compression socket.

#### B. Threaded Connections

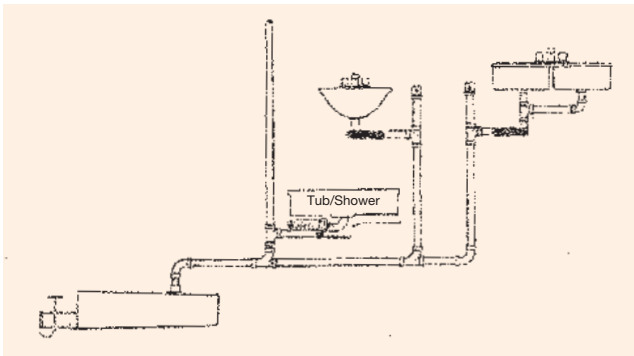
Threaded connections can be made to the inlet or outlet of the Hep<sub>v</sub>O valve. At the outlet (for Valve type BV1B/U) it is first necessary to remove the cap and rubber seal. If making connections to threaded components that do not have an integral seal (for example connections to DWV adaptors) PTFE/TEFLON tape should be applied to the thread prior to assembly.

#### 4. Illustrations / Examples

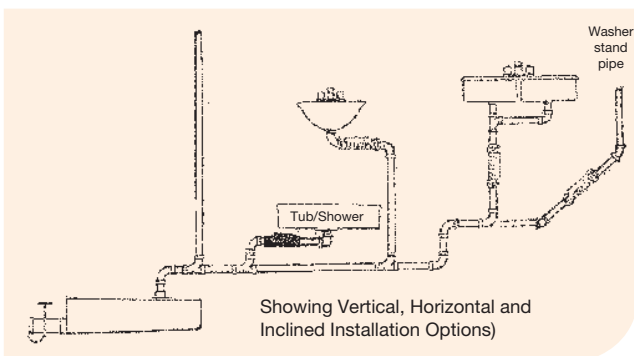
##### A. Typical RV Plumbing – Previous Practice



##### B. Potential Aftermarket upgrade with HepvO



##### C Typical New RV Plumbing Design using HepvO



#### 5. Multiple Fixture Installations

A single HepvO can be used to protect two fixtures but only under the following strict conditions:

- ⦿ No more than two fixtures should be connected to a single HepvO valve which must remain accessible for service if required
- ⦿ Installations for a Washing Machine, Dishwasher or Double Sink must each be protected by their own individual HepvO - these must NOT be included in any two fixture installation

- ⦿ The maximum distance from any fixture outlet to the inlet of the HepvO valve should be no more than 6ft
- ⦿ The HepvO should be installed as far upstream as possible ie as close as possible to the Y or T piece where the waste lines from the two fixtures converge. HepvO must always be installed with its outlet located more than 12" from the holding tank
- ⦿ It is important to ensure that the holding tank(s) still have their required vent(s). All such vent connections must be located down stream of the HepvO valve

#### 6. Maintenance

No routine or seasonal maintenance is required. However, should you blow-out your drainage lines do not exceed 80-100 psi.

- ⦿ HepvO is resistant to standard caustic-based drain cleaners. It is also resistant to acid-based cleaners with concentrations up to 10%. When flushing with higher concentrations of acid based cleaner, the valve must be removed before the operation
- ⦿ If mechanical drain cleaning devices are to be used it is necessary to first remove HepvO from the Waste System. This provides a useful access point for servicing downstream pipework
- ⦿ It is good practice to rinse the HepvO valve with clean water after any maintenance procedure

#### 7. Parts List

##### A. New Build

- BV1B/U = HepvO Waste Valve – 1½" Tubular Slip Joint Outlet
- BV1B/U1 = HepvO Waste Valve – 1½" Threaded Outlet
- CV11/U\* = 87.5° Angled Adapter for Horizontal Installation
- CV7A/U\* = In-Line Adapter for 1¼" Slip Joint Connection at Inlet
- CV7B/U\* = In-Line Adapter for 1½" Slip Joint Connection at Inlet

\* Installation Adapters CV11/U, CV7A/U and CV7B/U are solely designed to be used to ensure correct installation of the HepvO Sanitary Waste Valve and must not be used for any other purpose.

##### B. Aftermarket

- BV1B/UA = 1¼" Kit comprising BV1B/U, CV11/U and CV7A/U
- BV1B/UB = 1½" Kit comprising BV1B/U, CV11/U and CV7B/U

#### 8. Technical Support

Toll free Helpline 800-241-5236 or  
e-mail [hepvO@sunbeltmarketing.com](mailto:hepvO@sunbeltmarketing.com)

# Hep<sub>v</sub>O

## Waterless RV Trap

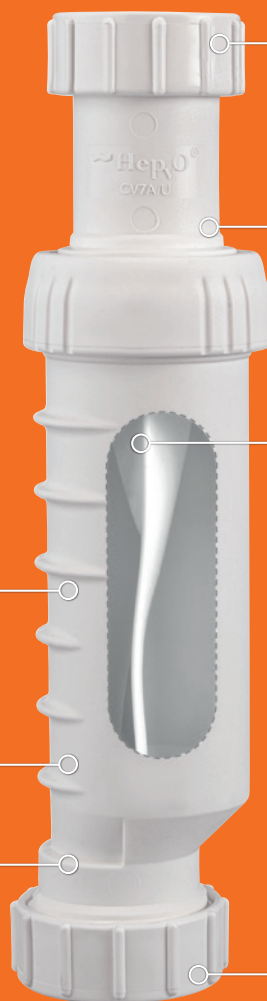
Stop foul odors  
from entering RVs.



Compact design means Hep<sub>v</sub>O is ideal for installation in confined areas.

Silent operation - no gurgling.

Eliminates need for water seal. Therefore no evaporation or siphonage of trap.



### BV1B/UB - 1 1/2"

1 1/4" or 1 1/2" In Line or Angled Adaptor with slip joint connection.

1 1/2" Threaded Connection to Fixture or Adaptors Supplied With Kit.

Prevents the escape of foul sewer air from waste discharge systems.

Actively maintains a pressure equilibrium in soil and waste installations.

Prevents waste water back-up into appliance.

**Hep<sub>v</sub>O Outlet**  
The outlet is provided with a universal slip joint connection which is designed for use with 1 1/2" plastic or metallic tube.

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US Patent No. 7509978

UK Design Reg. No. 2061474

European Patent No. 0941433



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