

The Warden® AST Overfill Limiter Installation Instructions

The Warden AST Overfill Limiter is designed for use on Aboveground Storage Tanks (AST). Where the product is pumped from the transport truck to the AST, the auto limiter will stop the flow when the level in the tank reaches a predetermined point.

Note: New York City Fire Department Certification #4958

For N.Y.C. applications, this valve must be installed with a N.Y.C. Fire Department approved spill container. There are additional installation requirements including, but not limited to, product identification and color coding of fills. Installation must comply with applicable codes at the time of installation.

Important: check to make sure all parts have been provided before installation has begun, and do not substitute parts other than those supplied.

Warning: Failure to follow instructions or substitution of parts other than EBW supplied, may cause failure of the device which may create a hazardous condition and/or environmental damage.

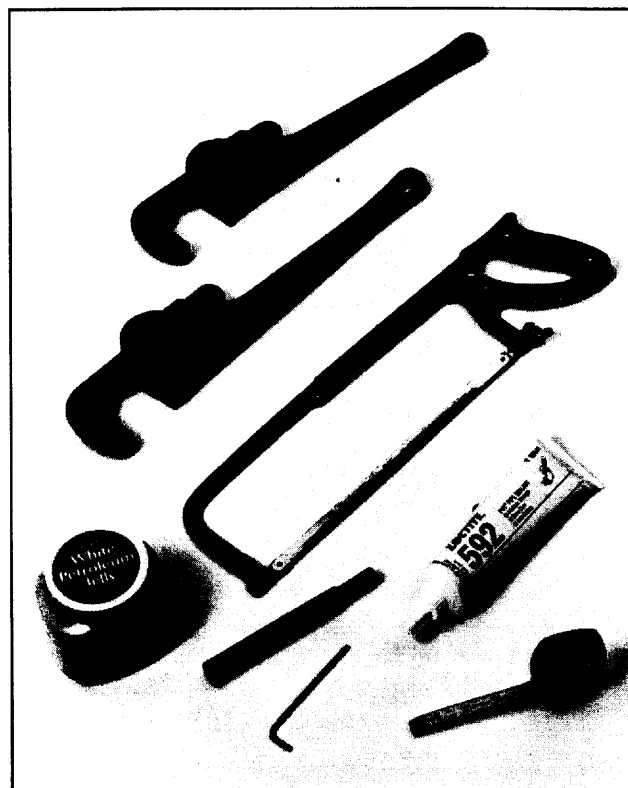
Warning: EBW products should be used in compliance with applicable federal, state, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with environmental and material to be handled. EBW makes no warranty or fitness for a particular use.

Warning: in order to prevent product spillage from the aboveground storage tank (AST), properly maintained delivery equipment and a proper tight fill connection are essential. Failure to properly connect the delivery hose or disconnecting a pressurized line will cause a hazardous spill which may result in personal injury, property damage, fire, explosion, or environmental contamination.

Product Warranty: All EBW, Inc. equipment is thoroughly tested before shipment and guaranteed to the extent of replacing only goods found to be defective in manufacture. EBW cannot allow claims for labor or consequential damage resulting from purchase, installation, or misapplication of our products.

Packing List

- One (1) Screw Clamp
- One (1) Cam Lock Adapter
- One (1) Valve to riser adapter assembly
- One (1) Warning plate



Picture 1

- One (1) Valve assembly
- One (1) Instruction manual form no. 6274

Tools needed for installation and assembly. (Picture 1)

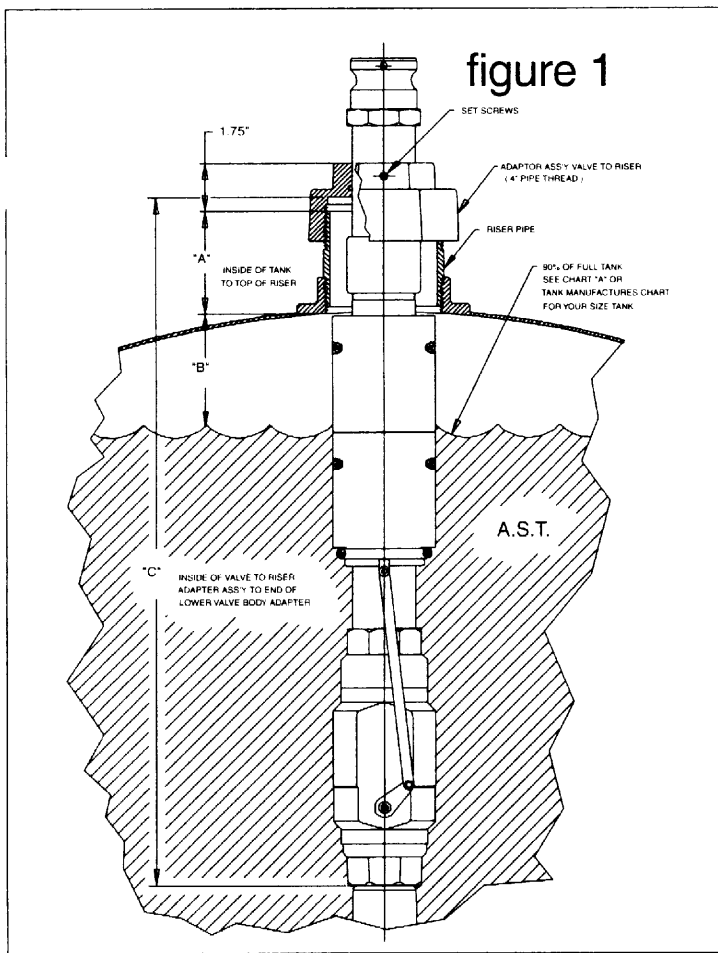
1. Tape measure.
2. Two Pipe wrenches.
3. 1/8" Hex key.
4. Fuel resistant thread sealant.
5. Permanent marker.
6. Hack saw
7. Petroleum jelly

To Be supplied by installer

1. Upper pipe nipple (black Iron) of proper length (per the following instructions) 2" threaded on both ends.
2. Drop tube of proper length for tank that the valve is being installed in. 2" NPT threaded one end (black iron.)

Installation

The Warden is packaged with the valve assembly, a male cam-lock adapter, and valve to riser assembly. The upper pipe nipple and lower drop tube will be supplied by the installer for specific size tank. (2" schedule 40, black iron)



3. Add "A" to "B" + 1.75" to obtain the proper position of the valve assembly in relation to the shut off point in the tank.

$$\frac{\quad}{A} + \frac{\quad}{B} + 1.75" = \text{shut-off point}$$

4. To determine the length of the upper pipe nipple, subtract 5.00" from the shut-off dimension.

$$\text{Shut-off point} - 5.00 = \text{Length of nipple}$$

Obtain a pipe of the above noted length, thread both ends, apply fuel resistant pipe sealant to one end and assemble to upper pipe coupling.

5. Move the float assembly to the full up position. Measure from the center joint on the floats and mark the shut-off point on the upper pipe nipple with a permanent marker. (Picture 2) (The mark will set the valve assembly in position for shutoff at 90% of tank capacity.)

6. Apply a generous amount of grease (petroleum jelly) to the O-ring in the adapter assembly (picture #3) and slide the assembly onto the upper nipple, with its 4" threads towards the top of the valve assembly.

7. Move the top edge of the adapter assembly -valve to riser. Align with the shut-off mark, and secure in place by tightening the (3) 1/4-20 set screws, with 1/8" hex key. (Picture 4)

8. Apply fuel resistant pipe sealant to the threads of the upper nipple, and assemble the cam-lock adapter.

9. Determine dimension "D" the distance from the bottom of the tank to the top of the riser pipe, using a tank stick. (see figure 2)

10. Measure from the inside surface of the adapter assembly -valve to riser, to the bottom edge

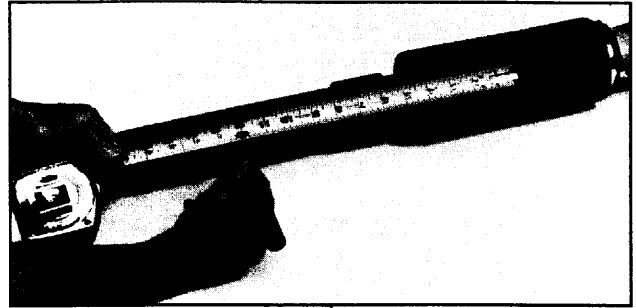
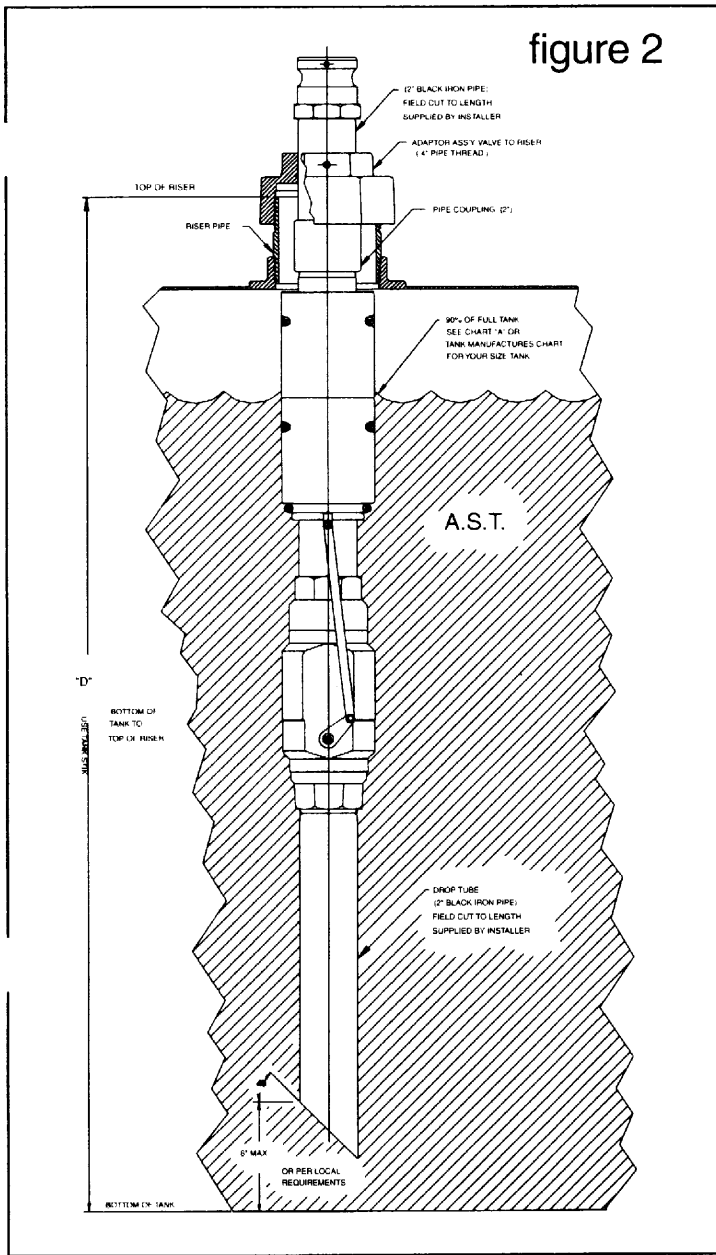
1. Determine the length of the riser pipe. Measure from the inside top of the tank to the top of the riser pipe. (See dimension "A" Fig. 1)
2. Determine the shut-off point for the aboveground storage tank. Using chart "A" below, obtain dimension "B" Fig. 1.

Chart A

Tank Diameter	Approx Dimension "B" for 90% shut-off
4	8
5	9 1/4
6	11 1/2
7	13 1/2
8	15
9	15 1/2
10	19
12	22

Feet
Inches

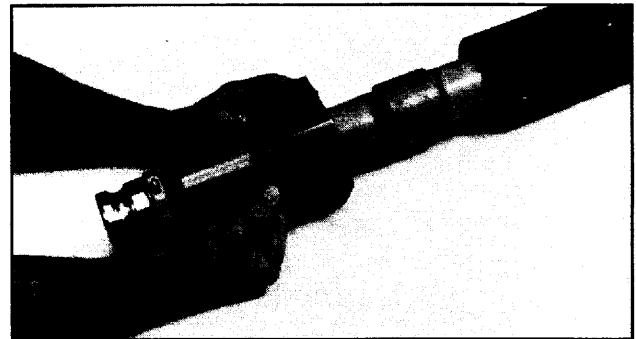
ote: The chart at above is an approximate shut-off point for 90% capacity of round tanks. Use of any other shape of tank requires contacting the manufacturer's chart to obtain dimension "B".



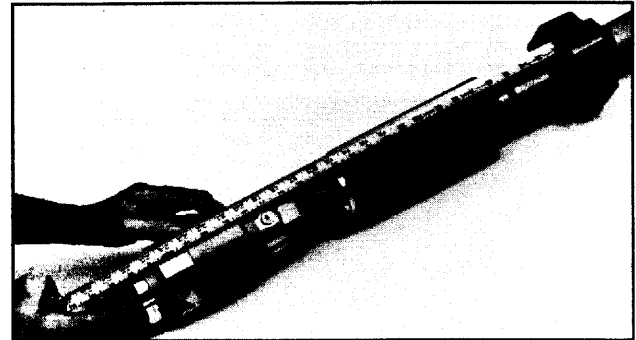
Picture 2



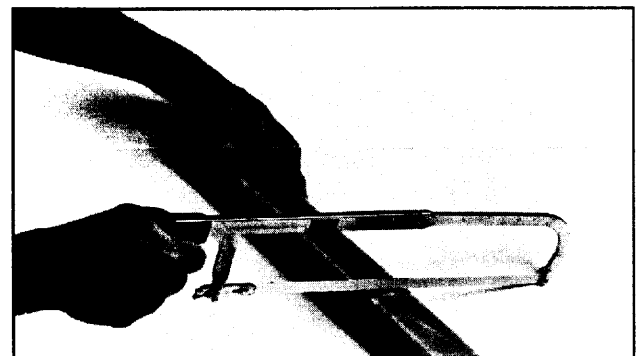
Picture 3



Picture 4



Picture 5



Picture 6

of the lower valve body adaptor. (Picture 5) (Dimension "C" Figure 1.) Add 6" (or per local codes or requirements) to Dimension "C" and subtract from Dimension "D" to get the length of the lower drop tube.

$$\frac{\text{"D"}}{\text{"D"}} - (6" + \frac{\text{"C"}}{\text{"C}}) = \text{Lower drop tube length.}$$

11. Cut lower drop tube to length, and thread one end. (2" NPT thread, black iron pipe). Cut the lower end of the pipe at a 45° angle. (Picture 6)

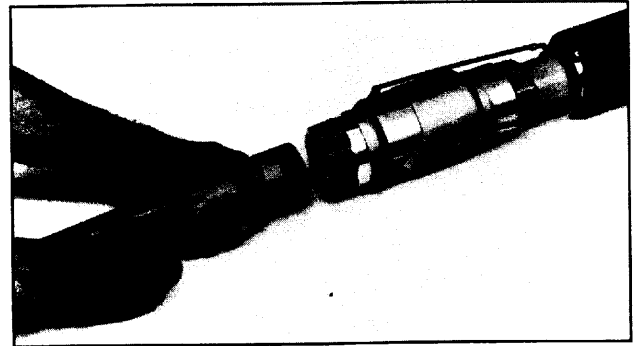
12. Apply fuel resistant pipe sealant to the threads of the lower drop tube, and assemble to the lower valve body adaptor. (picture 7)

13. Check the tank riser pipe inside diameter for any burrs, improper reaming, or foreign material. Failure to do so may damage or prevent the valve from functioning. Properly apply resistant pipe sealant to the riser pipe threads.

14. Stand the valve assembly upright and operate the float assembly to make sure that no damage was caused during assembly.

15. Carefully lower the complete valve assembly down the riser pipe. (Picture 8) **Hold the assembly by the adaptor assembly. Do not force the valve down the riser pipe.** If the valve does not fit, the riser pipe will have to be cleaned or deburred before insertion of the valve.

16. Thread the adapter and valve assembly to the riser pipe and secure.



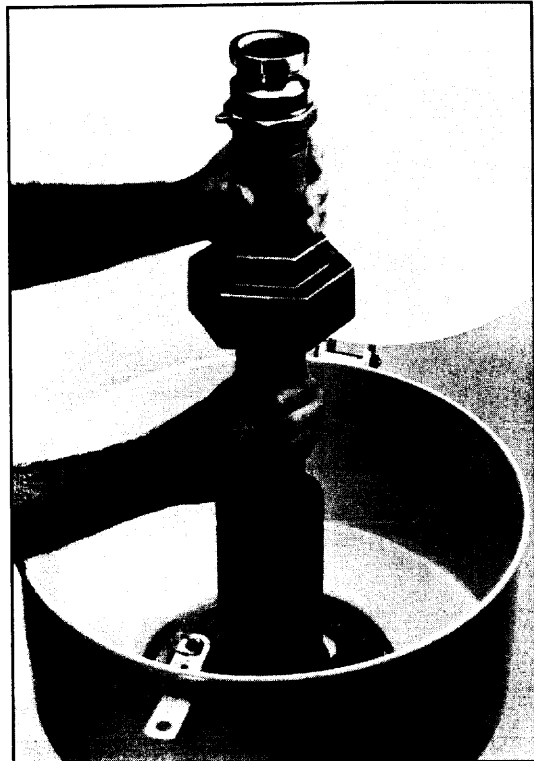
Picture 7

Filling Procedure

1. The nozzle must be equipped with a cam lock coupler to provide a tight fill connection to the Auto Limiter.
2. Attach the coupler to the fill adapter and place in place.
3. Turn on the pump.
4. Slowly open the nozzle.
5. A quick jump in the delivery hose indicates that the valve has shutoff.

Disconnecting Procedures

1. After the Warden has shut-off, close the nozzle.
2. Turn off the pump.
3. Re-open the nozzle and wait approximately two minutes which will allow the pressure in the hose to dissipate.
4. Close the nozzle and slowly unlock the coupler.
5. Remove the nozzle and replace the dust cap.



Picture 8

WARNING!

Warning: If the nozzle is disconnected with a pressurized hose, it will cause a hazardous spill.



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