

9095DS AST OPV

Installation & Maintenance Instructions

The 9095DS AST Overfill Prevention Valve is installed at the fill port of a top loading aboveground storage tank. Used in a tight fill application, the valve restricts flow of product to 2.5 gallons (@ 100 PSI max pressure) when the liquid level reaches a pre-set warning level (90-95% full). The valve is installed through a 2" threaded opening. The valve also contains an integral test mechanism. This valve is intended for use in gasoline and diesel, for any other applications please contact Morrison Bros. Co. customer service. When installed to the manufacturer's requirements, the Morrison Fig. 9095DS Overfill Prevention Valve can eliminate product loss.



Failure to follow any or all of the warnings may render the valve nonfunctional and could result in a hazardous product spill, which may result in property damage, environmental contamination, fire, explosion, injury or death.

Installation



Warnings

- **Fire Hazard**—Death or serious injury could result from spilled liquids.
- Any modification to this valve other than stated in these installation instructions will void the product warranty.
- This device is intended to be used only as a secondary shutoff and should not be the only system in place to prevent a tank from overfilling. It is the sole responsibility of the operator to continuously prevent any spillage regardless of the situation or status of the valve.
- The valve must be used with clean product. Contamination from products such as used oil may cause the valve to function improperly. Line strainers or filters should be used in the fill piping or delivery vehicle to insure clean product.
- Minimum requirements for valve operation: 5 GPM inlet flow at 10 PSI inlet pressure.
- Maximum allowable viscosity is 150 centistokes.
- A tight fill is required for the valve to operate. Do not substitute any other fill adaptors for the special adaptor supplied.
- All by-pass and or limit valves of the delivery system must be functional and properly set prior to filling.
- For your safety, it is important to follow local, state, federal and/or OSHA rules that apply to working inside, above, or around the storage tank and piping area. Use all personal protective equipment required for working in the specific environment.
- Tanks could be under pressure. Vapors could be expelled from tank vents, piping, valves or fittings while performing installation. Vapors could catch fire or cause an explosion. Avoid sparks, open flame, or hot tools when working on vents.

Steps

Install in accordance with all applicable local, state, and federal laws. Valve must be installed in the tank while still having access to the test mechanism, if a spill container is required it will need to go above the top of the valve removing the tight-fill connector from the valve and placing it in the spill container.

1. Remove the valve from box and remove all packaging material. Check the valve for any shipping damage. Remove the tight-fill adapter from the overfill valve. Check for freedom of plunger movement (hold the float in place) by turning unit upside-down, and looking through the body opening at the plunger. The plunger should slide freely to contact the seal surface of the body and drop back down into the dashpot when turned back to the upright position. With the valve upright move the float first and then the test mechanism through their full range to make sure no parts are binding. The float should return to an angle similar to illustration "A".
2. If an additional length of drop tube is required it can be attached to the 1 ½ " NPS threads at the bottom of the valve.

3. Use care with float assembly during installation. Apply a non-hardening fuel resistant sealant sparingly to all threads. Warning: Excessive use of thread sealant may cause valve to function improperly. To install the valve depress the test mechanism and thread the valve into the storage tank. Make sure the float can fully actuate by pulling up the test mechanism after the valve has been installed. Note: the test mechanism's position should be used to determine the location of the float to insure it will not interfere with an obstruction (ex. tank side wall).

Important: Install the included warning tag where it will be visible to the operator filling the tank through this valve.

Filling Procedure

1. Make sure the fill nozzle is equipped with the appropriate coupler to form a secure connection with the tight fill adaptor.
2. Attach the nozzle to the tight fill adaptor making sure the connection is secure.
3. Switch on the pumping system.
4. Open the fill nozzle and begin product transfer.
5. Continuously monitor tank filling process.
6. Watch for a slight movement of the fill hose or listen for pump bypass activation which indicates overflow shut-off.

Overflow Disconnect Procedure

1. Once shut-off has occurred, close the fill nozzle immediately.
2. Turn off the pumping system.
3. Slowly release one arm of the quick coupler. This will allow product between nozzle and valve to drain. Wait a minimum of (1) minute for product to drain.
4. Completely uncouple and remove the nozzle after the pressure in the line has decreased and the product has drained below the connection point.



Failure to follow any or all of the warnings and instructions in this document could result in a hazardous liquid spill, which could result in property damage, environmental contamination, fire, explosion, serious injury or death.

Maintenance

This valve should be maintained according to local codes or to API Recommended Practice 2350.



Warnings

- **Fire Hazard** – Death or serious injury could result from spilled liquids.
- You must be trained to maintain this valve. Stop now if you have not been trained.
- For your safety, it is important to follow local, state, federal and/or OSHA rules that apply to working inside, above, or around the storage tank and piping area. Use all personal protective equipment required for working in the specific environment.
- Tanks could be under pressure. Vapors could be expelled from tank vents, piping, valves or fittings while performing maintenance. Vapors could catch fire or cause an explosion. Avoid sparks, open flame, or hot tools when working on vents.

The valve will simulate a high product level if the test mechanism lever is actuated (lifted) during a fill. If the valve does not prevent product transfer please do the following:

1. Remove valve from the tank.
2. Inspect the float and float tube for any damage and make sure the float can move up and down freely. If the float tube or the float has been damaged, or the float cannot move up and down freely, the valve must be sent back to the factory for evaluation.

3. Look down into the top of the valve to inspect for any debris of foreign objects that may have entered the valve. If you can see any debris or foreign objects, the valve must be returned to the factory for evaluation.
4. While holding the valve body in one hand and valve float in the other hand, turn the valve upside down and right side up, listening for a clunking/clicking sound. The presence of this sound indicates that the valve plunger is moving up and down freely. If this clunking/click sound is not present, it may indicate that the valve plunger is stuck and the valve must be returned to the factory for evaluation.
5. Inspect the vent warning tag located near the tank fill point. If the tag is damaged or difficult to read, contact Morrison Bros. Co. at (800) 553-4840 for a free replacement tag.

Illustration A

