

9095SA AST Overfill Prevention Valve

Installation & Maintenance Instructions

Tank Mounted Fill Applications

The 9095SA AST Overfill Prevention Valve is installed at the fill port of a storage tank. Used in a pressurized tight fill application, the valve helps prevent tank overfills by closing when the liquid level reaches a pre-set warning level (90-95% full). The valve is installed on a standard 2" NPT male connection and has a built-in bleed hole that allows the fill hose pressure to be relieved after the valve closes. This bleed hole also provides anti-siphon protection for the valve. When installed to manufacturer requirements, the Morrison Fig. 9095SA Overfill Prevention Valve can eliminate hazardous liquid spills.



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.



Le fait de ne pas se conformer à l'un ou l'autre des avertissements ou à l'une ou l'autre des directives apparaissant dans ce document pourrait donner lieu à des déversements de liquides dangereux, lesquels pourraient engendrer des dommages matériels, des risques de contamination environnementale, d'incendie ou d'explosion, des blessures graves ou la mort.

Installation



WARNINGS

- **Fire Hazard** – Death or serious injury could result from spilled liquids.
- Any modification to this valve other than those stated in these installation instructions will void the product warranty.
- This device should not be the only means in place to prevent a tank from overfilling. It is the sole responsibility of the operator to continuously monitor operations to 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 on the fill piping or delivery vehicle to insure clean product.
- Minimum requirements for valve operation: 5 GPM inlet flow and 5 PSI inlet pressure.
- Maximum allowable pressure is 100psi.
- Maximum allowable viscosity is 150 centistokes.
- A tight fill is required for the valve to operate. Do not substitute any other fill adapters for the special adapter supplied.
- Once closed the valve will allow flow of less than 2% of max flow to relieve fill line pressure.
- All by-pass and or limit valves of the delivery system must be functional and properly set prior to filling.
- This valve does not work with a drop tube. Fuels requiring the use of a drop tube should not be used with this valve.
- Install in accordance with all applicable local, state, and federal laws.
- 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.
- Fill points should be labeled to identify product being transferred, according to all applicable codes.



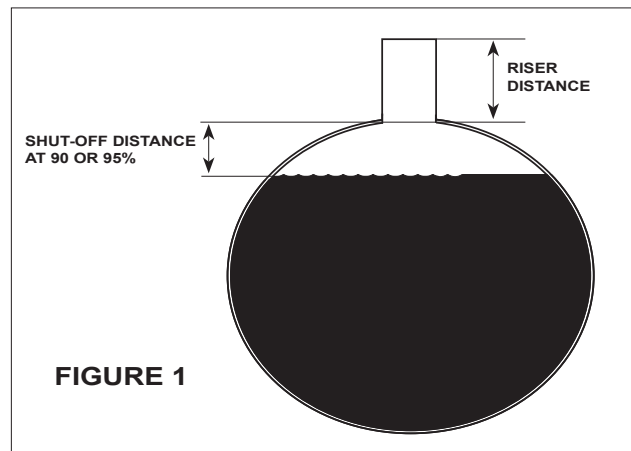
AVERTISSEMENTS

- **Risque d'incendie** – Un déversement de liquide pourrait entraîner des blessures graves ou la mort.
- Toutes les modifications apportées à cette soupape autres que celles indiquées dans ces directives d'installation engendreront l'annulation de la garantie du produit.
- Ce dispositif ne doit pas être le seul moyen en place pour empêcher le débordement d'un réservoir. Il est de la seule responsabilité de l'opérateur de surveiller en permanence les opérations pour éviter tout débordement, quelle que soit la situation ou l'état de la vanne.
- La soupape doit être utilisée avec des produits propres. La contamination découlant de produits tels de l'huile de rebut pourrait empêcher la soupape de fonctionner convenablement. Des tamis de circuit ou des filtres devraient être utilisés sur les canalisations de remplissage ou le véhicule de livraison afin d'assurer la propreté des produits.
- Exigences minimales pour le fonctionnement des soupapes : Débit d'entrée de 5 gpm et pression d'entrée de 5 psi.
- La pression permise maximale est de 100 psi.
- La viscosité permise maximale est de 150 centistokes.
- La soupape ne peut fonctionner que si le remplissage s'effectue avec un raccord hermétique. Évitez de remplacer l'adaptateur spécial fourni à cet effet par un autre adaptateur ou raccord de remplissage.
- Une fois fermée, la soupape permettra une circulation de moins de 2 % de la circulation maximale afin d'atténuer la pression de la canalisation de remplissage.
- Toutes les soupapes de dérivation ou de restriction du système de distribution doivent être fonctionnelles et configurées adéquatement avant le remplissage.
- Cette soupape ne fonctionne pas avec un tube d'alimentation descendant. Les carburants exigeant d'avoir recours à un tube d'alimentation descendant ne devraient pas être utilisés avec cette soupape.
- Lors de l'installation, conformez-vous à toutes les lois locales, d'État et fédérales applicables.
- Pour assurer votre sécurité, il est important de vous conformer à la réglementation locale, d'État, fédérale ou OSHA régissant les travaux à l'intérieur, au-dessus ou autour du réservoir de stockage et de la zone de canalisation. Utilisez tout l'équipement de protection individuelle exigé pour travailler dans l'environnement spécifique.
- Les réservoirs pourraient être sous pression. Des vapeurs pourraient être expulsées des conduits d'aération du réservoir, des canalisations, des soupapes ou des raccords durant l'installation. Les vapeurs pourraient s'enflammer ou engendrer une explosion. Évitez les étincelles, les flammes nues ou les outils chauds lors de travaux menés dans les conduits d'aération.
- Les points de remplissage devraient être étiquetés selon tous les codes applicables afin d'identifier les produits transférés.

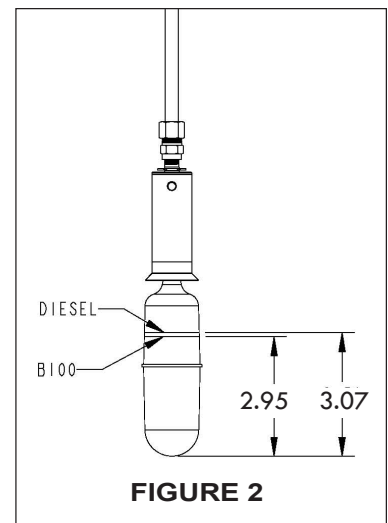
Steps

Important: Valve does not work with drop tube. Fuels requiring the use of a drop tube should not be used with this valve.

1. Remove valve from box and remove all packaging material. Check valve for any shipping damage. Do NOT use valve if any damage is found. Remove the tight-fill adapter and nipple from the top of the valve (if applicable). Check for freedom of plunger movement by turning the 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. Set valve upright and move the float up and down to insure there are no binding parts.
2. Determine the desired SHUT-OFF DISTANCE AT 90 or 95% full (See Fig. 1 & Mfg. tank ullage chart). Record this distance as you will need it later when installing the valve.



3. Refer to Fig. 2. Select the measurement for the fuel you will be storing.
Using a ruler, measure up from the bottom of the float and mark a line on your float at that measurement. Use a permanent marker to mark the line.
4. Measure from the top of the tank up to the point where the valve is to be attached, this is the Riser Distance shown in Fig. 1. Record this length.
Note: this distance needs to include all pipe fittings, spill containers, etc. all the way up to the point where the valve is to be attached.
5. Loosely attach the float assembly onto the bottom of the valve tube. **DO NOT** tighten the nut on the top of the float assembly at this time. Move the float into the UP position. The line that you made on your float is now at the point where the valve will shut-off during the filling process. Measure from the line on the float all the way up to the point where the valve will thread onto the piping. We will call this Length X (See Fig. 3).
6. Now you can make adjustments to the valve tube, or your tank riser pipe, to insure that the line on your float is in the tank at the point where you want the valve to shut-off. The valve tube is adjusted by slipping off the float assembly and cutting the tube to the desired length. The tank riser pipe can be adjusted by adding or replacing pipe fittings.

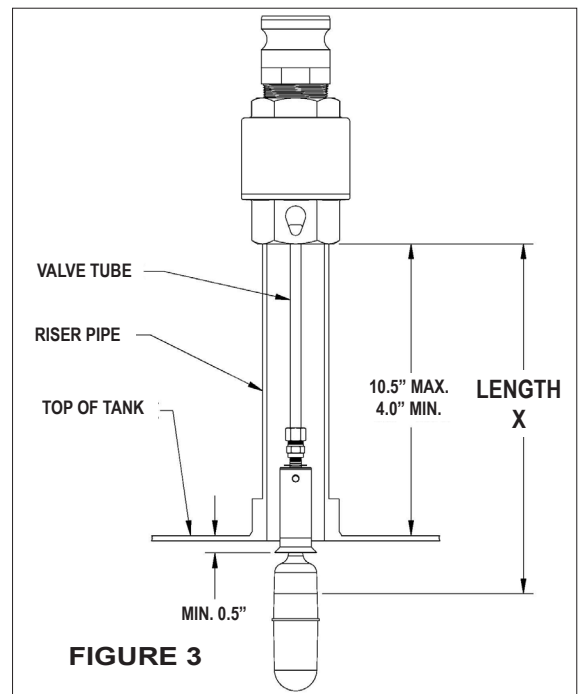


Warning: The flared end of the float assembly, located directly above the float, **MUST** be at least ½” down inside the top of the tank. It cannot be up inside the tank riser pipe or the valve will **NOT** shut off. (See Fig. 3)

Avvertissement : Le bout évasé du dispositif de flotteur situé directement au-dessus du flotteur **DOIT** descendre d’au moins 1¼ cm (½ po) à l’intérieur du dessus du réservoir. La soupape ne fermera **PAS** s’il est debout à l’intérieur de la colonne montante du réservoir. (Consultez la figure 3)

7. Attach float assembly to the valve tube and tighten compression fitting. Place the Float assembly’s tube fitting over the tube (Important: Do not unthread this fitting as it comes completely assembled.) and tighten 1/2 to 1 turn past finger tight. Make sure that the float assembly is securely attached.

Important: After making your adjustments in Step 6, and attaching the Float assembly in Step 7, the Riser Distance (Step 4) **plus** your Shut-off Distance (Step 2) should be **equal to** Length X (Step 5).



8. Use care with float assembly during installation. Apply non-hardening gasoline resistant sealant sparingly to all male threads. Assemble piping and install valve in the tank to distance determined in the steps above.

Caution: Excessive use of thread sealant may cause valve to function improperly, application of thread sealant should be made to the male threaded members of the system only (to reduce the possibility of sealant being forced inside the system).

Attention: Une utilisation excessive d’agent d’étanchéité de filet pourrait empêcher la soupape de fonctionner convenablement. L’agent d’étanchéité de filet ne devrait être appliqué qu’aux composantes filetéés mâles du système (afin de réduire la possibilité que l’agent d’étanchéité de filet soit forcé à l’intérieur du système).

Important: Install the included **warning tag** where it will be visible to the operator filling or unloading the tank.

Filling Procedure

1. Make sure the fill nozzle/hose is equipped with the appropriate coupler to form a secure connection with the tight fill adapter.
2. Attach the nozzle nozzle/hose to the tight fill adapter making sure the connection is secure.
3. Switch on the pumping system.
4. Gradually open the fill nozzle and begin product transfer.
5. Continuously monitor tank filling process.
6. If the liquid level reaches the preset level of the 9095SA valve, and the valve shuts off, the operator may see a slight movement of the fill hose and/or hear the pump by-pass activate.
7. If the 9095SA shuts off during the tank fill, perform the overfill disconnect procedure.

Overfill Disconnect Procedure

1. If 9095SA 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 introduce air into the fill line and allow product between the nozzle and valve to drain. Wait a minimum of one (1) minute for product to drain.
4. Completely uncouple and remove the nozzle after the line has drained. Attempting to disconnect the coupler from the tight fill adaptor with pressure in the hose will result in a product spill.



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Maintenance

This valve should be maintained per local codes or 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 valves.



AVERTISSEMENTS

- Risque d'incendie – Un déversement de liquide pourrait entraîner des blessures graves ou la mort.
- Vous devez avoir reçu une formation pour assurer la maintenance de cette soupape. Arrêtez-vous immédiatement si vous n'avez reçu aucune formation à cet effet.
- Pour assurer votre sécurité, il est important de vous conformer à la réglementation locale, d'État, fédérale ou OSHA régissant les travaux à l'intérieur, au-dessus ou autour du réservoir de stockage et de la zone de canalisation. Utilisez tout l'équipement de protection individuelle exigé pour travailler dans l'environnement spécifique.
- Les réservoirs pourraient être sous pression. Des vapeurs pourraient être expulsées des conduits d'aération du réservoir, des canalisations, des soupapes ou des raccords durant la maintenance. Les vapeurs pourraient s'enflammer ou engendrer une explosion. Évitez les étincelles, les flammes nues ou les outils chauds lors de travaux menés dans les soupapes.

Steps

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 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 or 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. Check for freedom of plunger movement by securing float, turning unit upside down, and looking through the body at the plunger. The plunger should slide freely to contact the seal surface of the body and drop back down into the dash pot when turned to the upright position. You may also hear a clunking/clicking sound when turning the valve upside down and right side up. If you cannot see the plunger move freely, or if this clunking/clicking 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 and offloading area. If the tag is damaged or difficult to read, contact Morrison Bros. Co. at (800) 553-4840 for a free replacement tag.



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