

9095A 2" Overfill Prevention Valve With 4" Tank Adaptor

Installation & Maintenance Instructions

The 9095A Overfill Prevention Valve is installed at the fill port of a storage tank. Used in a pressurized tight fill application, the valve terminates flow of product when the liquid level reaches a pre-set warning level (90-95% full). The valve also has a built-in bleed hold that provides anti-syphoning protection. The valve is installed on a standard 4" NPT male connection. The valve can be used in conjunction with Morrison AST Spill Containers for added spill protection. When installed to manufacturers requirements, the Morrison Fig. 9095A Overfill Prevention Valve can eliminate hazardous liquid spills.

This valve is ULC listed and complies with the following codes: NFPA 30, 30A, UFC, IFC, and PEI RP2000.



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 & Operation



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 overflowing. 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 5 PSI inlet pressure.
- Maximum pressure is 100 PSI.
- 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.
- Once closed the valve will allow up to 1.5 GPM to pass through 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.
- 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 valves.

Filling Procedure

1. Make sure the fill nozzle is equipped with the appropriate mating 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. Continually monitor the liquid level measurement device during the fill.
6. If the liquid level reaches the preset level of the 9095A 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 9095A shuts off during the tank fill, perform the overfill disconnect procedure.

Overfill Disconnect Procedure

1. If 9095A 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 nozzle and valve to drain (wait a minimum of (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.

Installation Instructions

1. Take the valve out of the box and remove all packaging material. Check the valve for any shipping damage. Remove the adaptor and nipple from the valve. Check for freedom of plunger movement by securing float, 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 to the upright position. Set the valve upright and move the float up and down to insure there is no binding.
2. Determine the SHUTOFF HEIGHT at 90 or 95% full. (See Fig. 1 below & Mfg. tank ullage chart).
3. Find the SHUTOFF HEIGHT in Table 1. Use Table 1 to determine RISER PIPE HEIGHT FROM TOP OF THE TANK and proper NIPPLE LENGTH (for applicable stored fluid) required to adapt the unit to your application. Note: A 4" long nipple is provided with the valve. (See Nipple (C) on Figure 2).
4. If your existing riser pipe height is different from the RISER PIPE HEIGHT required, see step 6. If the RISER PIPE HEIGHT is applicable to your tank configuration then go to step 7. **IMPORTANT: THE TANK MUST HAVE A RISER PIPE WITH 4"-8 NPT MALE THREADS TO FIT THE TIGHT FILL ADAPTOR.**
5. Two rules apply when adjusting the riser pipe height; 1) the RISER PIPE HEIGHT must not be less than 3 inches and, 2) the NIPPLE LENGTH must not be less than 2 inches. For every 1 inch adjustment to the RISER PIPE HEIGHT, the NIPPLE LENGTH must be adjusted 1 inch in the same direction. See example and proceed to step 7.
6. Use care with floats and linkage during installation. Apply a non-hardening gasoline resistant sealant sparingly to all male threads. Attach the drop tube to the bottom of the valve. Assemble piping and install valve in the tank at distance determined in steps above.
Caution: Excessive use of thread sealant may cause the valve to function improperly, application of thread sealant should be to male threaded members of the system only (to reduce the possibility of sealant being forced inside the system).
7. Attach warning tag at fill point, with supplied cable tie, in location visible to operator filling the tank.

FIGURE 1

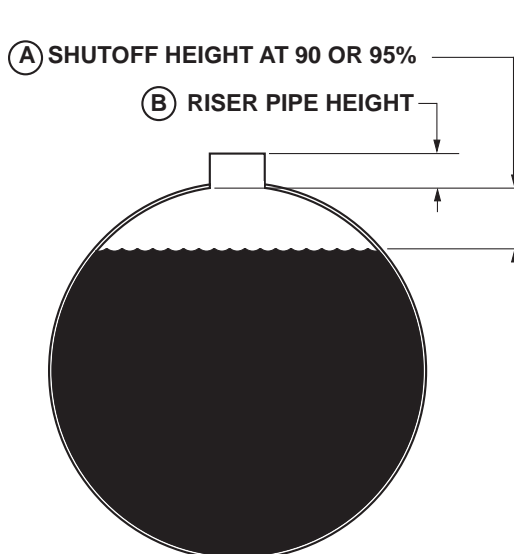


TABLE 1

Ⓐ Shutoff Height <small>Note: All lengths are in inches.</small>	Ⓑ Riser Pipe Height		Ⓒ Nipple Length	
	Gasoline	Diesel	Gasoline	Diesel
2"	11"	12"	4"	4"
3"	10"	11"	4"	4"
4"	9"	10"	4"	4"
5"	8"	9"	4"	4"
6"	7"	8"	4"	4"
7"	6"	7"	4"	4"
8"	3"	6"	2"	4"
9"	3"	3"	3"	2"
10"	3"	3"	4"	3"
11"	3"	3"	5"	4"
12"	3"	3"	6"	5"
13"	3"	3"	7"	6"
14"	3"	3"	8"	7"
15"	3"	3"	9"	8"
16"	3"	3"		9"
17"	3"	3"		
18"	3"	3"		
19"	3"	3"		
20"	3"	3"		
21"	3"	3"		
22"	3"	3"		
23"	3"	3"		
24"	3"	3"		
25"	3"	3"		



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 valves

If valve is fitted with the optional test mechanism you can simulate a high product level by pulling the test mechanism lever during a fill. If the valve does not prevent product transfer when the test mechanism is pulled, or the valve is not fitted with a test mechanism, please do the following:

1. Remove valve from the tank.
2. Inspect the float and float linkages for any damage and make sure the float can move up and down freely. If the float or the float linkages have 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. Check for freedom of plunger movement by securing float, 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 backdown into the dash pot when turned to the upright position. You may also hear a clunking/ clicking sound when turning valve upside down and right side up. If you cannot see the plunger move freely or 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.

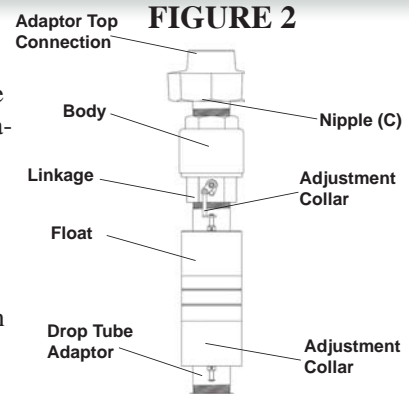


FIGURE 2

	CONNECTION	
	Adaptor Top-Female	Adaptor Bottom-Female
9095A-4200 AV	3"- 8 NPT	4"- 8 NPT
9095A-AV4200 AV	3"- 8 NPT	4"- 8 NPT
9095A-3200 AV	2"- 11.5 NPT	4"- 8 NPT
9095A-AV3200 AV	2"- 11.5 NPT	4"- 8 NPT

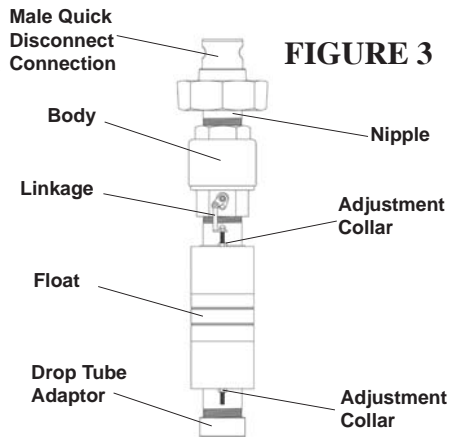


FIGURE 3

	CONNECTION	
	Male Quick Disconnect	Adaptor Bottom-Female
9095A-0200 AV	2"	4"- 8 NPT
9095A-AV0200 AV	2"	4"- 8 NPT
9095A-4000 AV	3"	4"- 8 NPT
9095A-AV4000 AV	3"	4"- 8 NPT