Fig. 636 Emergency Shut-off Valve

Installation & Maintenance Instructions

The 636 Series valve is designed to be installed on the fuel line directly under the dispenser. When properly installed it is intended to shut-off the flow of flammable liquids in the event of impact and/or fire involving the dispenser.

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.

Installation

Warnings

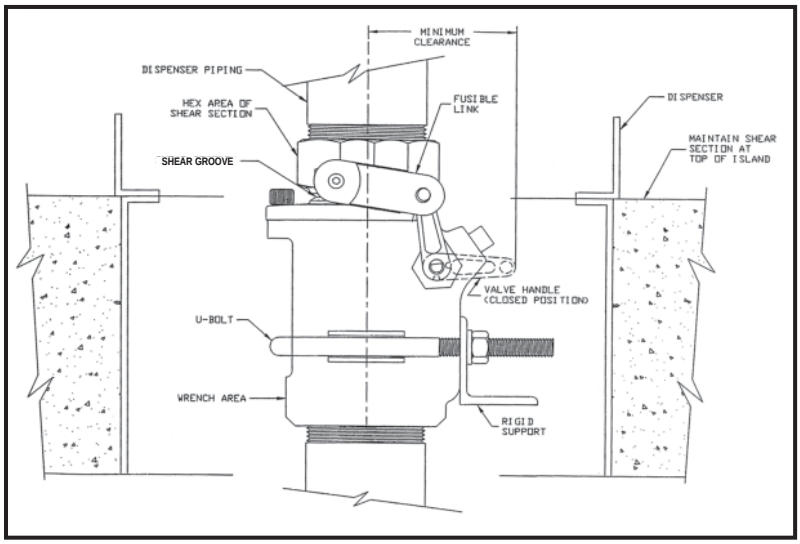
• **Fire Hazard** – Death or serious injury could result from spilled liquids.
• Install in accordance with all applicable local, state, and federal laws.
• For your safety, it is important to follow local, state, federal, and/or OSHA rules that apply to working inside, above, or around the storage tank and piping area. Use all personal protective equipment required for working in the specific environment.
• Piping could be under pressure. Liquid and vapors may be expelled from the piping, valves, or fittings while performing installation. Liquids and vapors could catch fire or cause an explosion. **Avoid** sparks, open flame, or hot tools when working on valves.

Steps

1. Inspect valve for shipping damage. Do not use if valve is damaged. Call Morrison Bros. Co. for assistance.
2. Inspect valve openings for foreign matter such as packaging material. Remove any that is found.
3. Apply a non-hardening, fuel resistant thread sealant to the male threads of the riser pipe onto which the Fig. 636 will be mounted. Morrison Bros. Co. does not recommend using Teflon® tape.
4. Carefully thread the Fig. 636 onto the riser pipe by hand. Once hand tight, use a pipe or strap wrench, on the inlet (bottom) end of the valve, to complete tightening the valve onto the pipe until a tight seal is made.

Caution: Do not over-tighten, and when tightening, do not wrench the valve near or above the shear section. If over-tightened or wrenched above shear section, the shear section may break or other damage may occur to the valve resulting in an improper installation and a hazardous condition.

5. Use the supplied U-Bolt, or the three (3) post mount holes, to rigidly mount the valve to the island form or the dispenser sump valve support brackets. When doing so you must make certain that the shear groove of the valve is at the same level, or a maximum of ½" above or below the level of the top of the island. You must also make certain that the valve handle has ample clearance to prevent striking against any obstruction as the valve closes.



Warning: This valve must be rigidly anchored to the island form or dispenser sump valve support brackets to insure breakage at the shear groove in the event of dispenser impact. Failure to provide rigid mounting may result in failure of the valve to shut off in the event of dispenser impact, resulting in a hazardous condition.

Warning: The valve shear groove must be located at the same level, or a maximum of ½" above or below the top of the level of the island. Failure to install the valve shear groove at this level may result in a failure of the valve to shut off in the event of dispenser impact, resulting in a hazardous condition.

Warning: The valve handle must have ample clearance to prevent striking against any obstruction as the valve closes. Failure to provide ample clearance for the handle may result in failure of the valve to completely shut off in the event of an emergency, resulting in a hazardous condition.

6. Apply a non-hardening, fuel resistant thread sealant to the threads of the dispenser pipe. Morrison Bros. Co. does not recommend using Teflon® tape.
7. Grip the valve, with a wrench, on the hex area of the shear section and hold steady. Use a second wrench to turn and tighten the dispenser pipe into the outlet (top) end of the valve, or to tighten the union ring on a union style connection.

Caution: Do not turn wrench that is gripped to the valve – use it only to steady the valve. If the wrench gripping the valve is turned, and force applied to valve, the shear section may break or other damage may occur to the valve resulting in an improper installation and a hazardous condition.

8. The product piping and the Fig. 636 valve should now be pressure tested. This test is only for the piping system so the tank must be isolated. There is a 3/8" NPT port on the side of the Fig. 636 that can be used to facilitate this testing and monitor pressure.

Warning: Verify that the line to be pressurized is isolated from the tank before testing.

Warning: Do NOT air test lines which have contained hazardous, flammable, or combustible liquids unless they have been purged and made safe beforehand.

Warning: Do NOT apply more than 50psi pressure during above test. Also consult the pipe manufacturer to verify proper test protocol for piping.

Warning: Never open a Fig. 636 valve that is in the closed position, while the valve is under pressure.

9. After testing is complete, and the system is ready for start-up, set the Fig. 636 to the open position. This is done by rotating the handle to the vertical position and inserting the button on the handle into the hole on the fusible link.

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.

Annual inspection, at a minimum, is required to verify valve condition.

WARNINGS

• **Fire Hazard –** Death or serious injury could result from spilled liquids.
• Follow your employer's instructions for inspecting valves.
• You must be trained to inspect these valves. **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.
• Valves and piping could be under pressure. Liquids and vapors could be expelled from tank piping, valves or fittings while performing maintenance. Liquids and vapors could catch fire or cause an explosion. **Avoid** sparks, open flame, or hot tools when working on valves.

Steps

1. Inspect the valve body for damage, leaks, or excessive corrosion. If any are found replace the valve.
2. Disengage the handle button from the fusible link and allow the handle to rotate back to the horizontal position, manually close and open the valve several times, by rotating the handle, to verify that the valve mechanism moves freely.

Warning: Never open a Fig. 636 valve that is in the closed position, while the valve is under pressure.

3. **If the top (shear) section of this valve is damaged**, and the damage was not caused by a fire or dispenser impact, and thorough testing and inspection shows that the damage does not extend beyond the top (shear) section, then the top (shear) section can be replaced by following steps 4 – 12 below.

Warning: If the valve has been subjected to a fire or dispenser impact, it is recommended that the valve be taken out of service and replaced with a new valve. The new valve should be installed and tested in accordance to these instructions prior to be placed into service.

4. Shut off the pumping system. Shut off electrical power to the dispenser. Make certain the Fig. 636 valve is in the closed position. Completely drain the fuel from the system.
5. Remove dispenser piping from the top of the Fig. 636 valve.
6. Remove the three (3) socket head cap screws and lift the top (shear) section off of the valve body.
7. Remove the seal gasket making certain that the gasket sealing surface, on the top of the valve, is completely clean and free of any scratches.
8. Install the new gasket seal, new top (shear) section, and replace the three (3) socket head cap screws. Torque these screws to 145 in-lbs.
9. Apply a non-hardening, fuel resistant thread sealant to the threads of the dispenser pipe. Morrison Bros. Co. does not recommend using Teflon® tape.
10. Grip the valve, with a wrench, on the hex area of the shear section and hold steady. Use a second wrench to turn and tighten the dispenser pipe into the outlet end (top) of the valve, or to tighten the union ring on a union style connection.

Caution: Do NOT turn wrench that is gripped to the valve – use it only to steady the valve. If the wrench gripping the valve is turned, and force applied to valve, the shear section may break or other damage may occur to the valve resulting in an improper installation and a hazardous condition.

11. Re-test the valve and piping as a new installation and in accordance to these instructions before putting back in service.
12. After testing is complete, and the system is ready for start-up, set the Fig. 636 to the open position. This is done by rotating the handle to the vertical position and inserting the button on the handle into the hole on the fusible link.

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