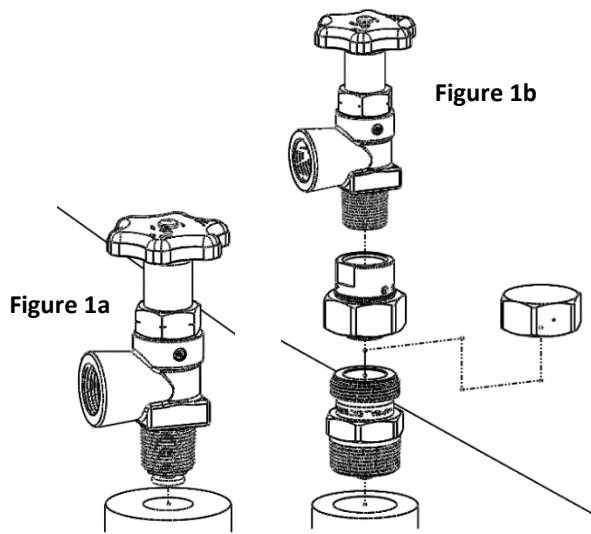


**LIQUID TRANSFER VALVES
 INSTRUCTION MANUAL
 (ALL VARIATIONS OF THE
 VALVES LISTED BELOW,
 ME449, ME449EXS, ME458,
 ME460 & ME462)**

Designed to provide a safe means to transfer liquid or vapor from a storage container. ME449 Series valves can be directly installed for full time use in the liquid or vapor port of the storage container when configured with an integral excess flow check (ME449EXS Series, ME449X/19.5) (Figure 1a), or when utilized in conjunction with a Liquid Withdrawal Tank Valve with integral excess flow protection (ME460 or ME462 Series) and the appropriate Liquid Withdrawal Adapter (ME458 Series) (Figure 1b).

These valves can also be used for temporary liquid withdrawal applications such as emergency evacuations or container relocation, when utilized in conjunction with a Liquid Withdrawal Tank Valve featuring integral excess flow protection (ME460 or ME462 Series) installed directly into a container liquid withdrawal port and the appropriate Liquid Withdrawal Adapter (ME458 Series) installed onto the ME449 Series Liquid Withdrawal Transfer Valve connected to the delivery truck or service truck transfer hose.



!!!WARNING!!!

Contact with, or inhalation of liquid propane, anhydrous ammonia, and their vapors can cause serious injury and death! NH3 and LPG must be released outdoors in air currents that will ensure dispersion to prevent exposure to people and livestock and in accordance with local regulations. LPG must be kept far enough from open flame or other sources of ignition to prevent fire or explosion! LPG vapor is heavier than air and will not disperse or evaporate rapidly if released in still air! An abundant supply of clean water must be readily available and easily accessible as a means of providing IMMEDIATE First Aid treatment for exposure to anhydrous ammonia.

Failure to follow these instructions or to properly install and maintain this equipment could result in an explosion and/or fire causing property damage and personal injury or death.

Install, operate and maintain Marshall Excelsior Co. equipment in accordance with federal, state, and local

codes and these instructions. The installation in most states must also comply with NFPA standards 58 and 59.

For installation in the European Union, the equipment must also comply with PED/TPED and EN ISO standards. Periodic inspections, intermediate inspections and exceptional checks of transportable pressure equipment should be carried out in accordance with the Annexes of Directive 2008/68/EC and with 2010/35/EU Directive (TPED) to ensure continued compliance with their safety requirements.

Only personnel trained in the proper procedures, codes, standards and regulations of the LP-Gas Industry should install, maintain and service this equipment.

Be sure all instructions are read and understood before installation, operation and maintenance. These instructions must be passed along to the end user of the product.

!GENERAL WARNING!

Marshall Excelsior products are mechanical devices that are subject to wear, contaminants, corrosion, and aging of components made of materials such as rubber and metal. Over time these devices will eventually become inoperative. The safe service life of these products will reflect the environment and conditions of use that they are subjected to. Regular inspection and maintenance is essential. Marshall Excelsior products have a long record of quality and service, so LP-Gas dealers may forget hazards that can arise from using aging devices that have outlived their safe service life.

Opening Liquid Withdrawal Tank Valve

1. Slowly loosen cap to release any trapped LP-Gas thru relief hole. Remove the cap when venting stops. In case of a leak and venting does not stop, retighten the cap and use another approved method to

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withdraw the liquid. When loosening the cap make sure the valve is not unthreading from the tank. Use two wrenches, if necessary, to secure the valve to the tank. (Figure 2)

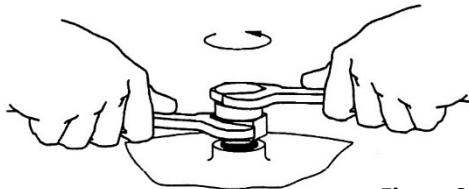


Figure 2

2. The Liquid Transfer Shutoff Valve must be in the open position and securely attached to the Liquid Transfer Adapter before connecting to the Liquid Withdrawal Tank Valve (Figure 3)

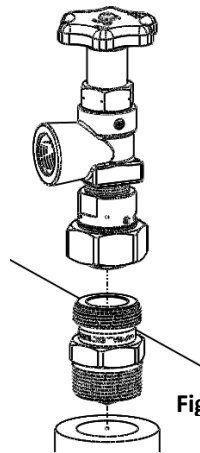


Figure 3

3. Once the Shutoff Valve Assembly is tightly attached to the Tank Valve (Figure 4), close the Shutoff Valve Assembly. A popping sound actuating the Tank Valve will occur while closing the Shutoff Valve Assembly, allowing the flow to be controlled by the Shutoff Assembly. *If the Tank Valve does not open after following steps 1-3, increase pressure downstream (Shutoff Valve side) to equalize pressure in the Tank Valve.*

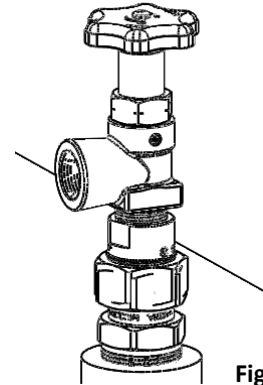


Figure 4

4. Use Marshall Excelsior Leak Detector to check for leaks between each connection.

Closing Liquid Withdrawal Tank Valve

1. To shut the Tank Valve pressure in the tank must exceed 35 psig. Close the Shutoff Valve Assembly and disconnect the hose or piping.

2. Slowly open the Shutoff Valve Assembly to release any LP-Gas in the valve. If the tank pressure exceeds 35 psig the LP-Gas released to the air will cause the excess flow feature to close on the Tank Valve. If the Tank Valve does not completely shut, close the Shutoff Valve Assembly immediately. The Shutoff Valve Assembly must remain connected until all the LP-Gas can be removed and the container repaired.

3. After the Tank Valve excess flow feature has closed remove the Shutoff Valve Assembly. When disconnecting the assembly make sure the Tank Valve is not unthreading from the tank. Use two wrenches, if necessary, to secure the valve to the tank. Note: A small amount of bypass may occur through the excess flow check. Use caution when removing the Shutoff Valve Assembly.

4. Clean the top surface of the Tank Valve and place Tank Valve Cap back onto Tank Valve ensuring cap gasket is in place. Make sure the Tank Cap is placed tightly onto the Tank Valve.

NOTE:

Extreme care must be used whenever liquid transfer of LP-Gas is in progress. Only persons trained in the proper method of transfer should attempt this type of operation. Reference NFPA #58 Liquefied Petroleum Gas Code Chapter 7, LP-Gas Liquid Transfer for additional information.