



“Miniature Steam”

Refillable Gas Tanks

Filling and Maintenance instructions

Filling Instructions.

Place the supply tank on a clean horizontal surface and screw the Refill Adapter (P/N 5357) into the tank. Do not apply any pressure to the end of the refill adapter at this stage (This will cause unwanted gas to discharge into the atmosphere). Place the refillable gas tank on a clean horizontal surface with the refill valve at the top.

Open the operating valve to allow venting during refilling. Turn the supply tank upside down ensuring that the gas refill tank, the adaptor and the filling valve form a vertical straight line. Apply a vertical force to the supply tank (excessive pressure could cause damage to the tank filler valve and refill adapter). If liquid gas is expelled to atmosphere between the refill adapter and filler valve this indicates that the adaptor has not been correctly located on the refill valve. Filling must be stopped immediately until correct alignment has been achieved. When correct alignment has been achieved and liquid gas has been correctly transferred to the refillable gas tank, gas vapour will be expelled from the operating valve. When the tank has been filled, liquid gas will replace the vapour and the supply tank can then be removed. Turn off the operating valve and the refillable gas tank is ready for use.

The refillable gas tank is designed to accept approximately 75% of its volume as a full charge. This is done for safety reasons. In high ambient temperatures it prevents excessive pressure build up in the tank and also prevent liquid gas from reaching the burner.

SAFETY:

We make the following recommendations in the strongest terms:

1. **NEVER** use a gas Propane/Butane mixture containing more than 30% Propane. Propane, Isobutane & Butane mixtures are also acceptable. Propane/Butane mixtures are sold under a variety of trade names and a wide range of mix ratios. You may have to search around to find a suitable product in your area. The tank's working capacity is approximately 120 cc.
2. **NEVER** attempt to modify the tank connections. The design of each item of equipment is integrated to provide a reliable and safe product and refilling system.
3. **NEVER** conduct a tank refill close to naked lights or glowing items such as a cigarette.
4. **NEVER** conduct a tank refill in an enclosed space. The gases used are heavier than air and will collect at the lowest level of the area. You may not be able to see it but the gas that is discharged during the filling process WILL be present at the bottom of that enclosed space. When filling a tank that is fixed inside a model space, such as in a model boat,

either use an air blower to displace the gas after the filling operation is complete, or turn the model upside-down to drain the gas into the atmosphere outside the model.

Additional Advice:

5. Whenever you open a threaded connection please use an appropriate thread sealant on reconnection. Even the smallest leak can result in problems as outlined in 4 above.
6. As the gas flows out of the tank during use, the tank will chill and condensate may form on the outside of the tank. This is normal. However, the lowered gas temperature can interfere with the efficient delivery of gas to the burner. The amount of condensate can be reduced, or even eliminated, by providing some warming for the tank. Excessive heating should be avoided. Human body temperature is a safe measure.
7. When refilling a tank, insert the refill adaptor attached to the master tank into the refillable tank with the refillable tank underneath. The recharge of the tank involves transferring liquid gas that would otherwise remain at the bottom of the master tank.
8. During refilling some gas vapor is exhausted to make room for the new liquid. This is normal. The refilling process is complete when liquid gas is expelled.
9. All moving parts in the system should be lightly oiled periodically. Once again this will help to maintain efficient sealing and free operation of the taps and connections in the system.
10. If you are concerned about the possibility of a system leak, simply immerse the tank in tepid water to identify the source – if any.