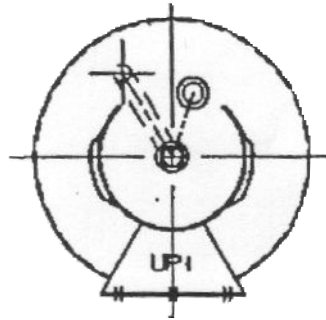
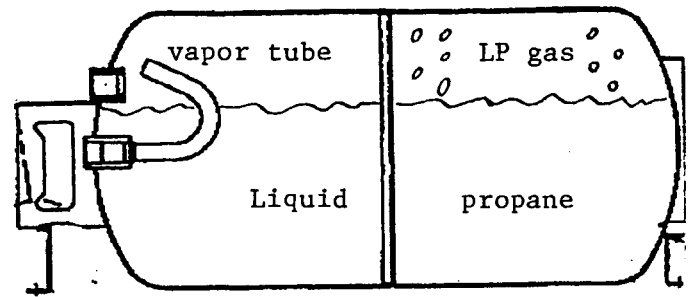


# REP MAGICKITCHEN LP TANK



## TIP



## FILLING TANKS

- 1) Tanks must be purged of air when being filled by a qualified propane dealer. (This prevents a lean burn or popping sound during operation.)
- 2) Tanks when full are filled to the “tare weight” (TW) stamped on the collar of the tank.  $TW = TW \text{ on tank} + \text{lbs of propane put in tank}$ . Newer tanks have an overfill protection valve.

## LIGHTING & SHUTTING OFF

- 1) All knobs must be off before opening the valve on the tank. (manifold, runner tubes & main burner)
- 2) Open the valve on the tank “slowly”! If the valve is opened too fast it may result in the flame being very small or no flame at all. If this should happen, shut off all burners and tanks. Remove and reattach the tank connectors to reset the valve. (The valve has a tiny device in it called an excess flow valve & is a safety.)
- 3) When shutting down, close the gas valve to allow all the gas in the line to be used up. The burners may “pop” on extinction of the flame. This is called “noise of extinction” and is OK.

## FREEZING TANKS & REGULATORS

- 1) Over filling the tanks will freeze the regulators. You are drawing in liquid propane and not gas through your valve.
- 2) The propane you filled your tanks with has **excess** moisture in it.
- 3) Outside **ambient** air temperature is below 50 degrees Fahrenheit.
- 4) Regulator is frozen after a short operation time. Your tanks got bounced around in transit and you have filled up the vapor tube with liquid propane. (Horizontal tanks) To fix, run the tanks in a vertical position for short period of time. (TANKS MUST BE SECURE.) Return tanks to normal horizontal position.
- 5) Always start with the propane tanks full (tare weight) on warm days. Liquid propane needs a certain amount of surface area contact (wetting area) to the tank to boil & become gas. As the liquid propane gets lower & lower you have less area contact. At some point you will notice a pressure drop and the grills performance is affected. It is time to change to a full tank.

### **White and Red Label on Top of Fill Valve**

**"NOTICE - This is a new cylinder that should be purged by an authorized LP Gas Filler before it is filled for the first time. The filler will remove this label after purging and filler. DO NOT OVERFILL!"**

### **White and Black Label on Top Rim of Tank**

**"WARNING - THIS CYLINDER IS EQUIPPED WITH AN OVERFILL PREVENTION DEVICE**

- Only qualified persons are permitted to fill this cylinder.
  - Read and understand the cylinder warning label before attempting to fill.
  - This cylinder may only be filled in the VERTICAL POSITION.
  - The Overfill Prevention Device (OPD) will only operate if the cylinder is overfilled (greater than 80% level). Do not attempt to calibrate or tamper with the Overfill Protection Device (OPD).
  - Before filling, inspect the cylinder in accordance with CGA C-6 or CGA c-6.3.
  - This cylinder must be filled in accordance with U.S. DOT, NFPA-58, State and Local Regulations.
  - Fill the cylinder through the fill valve only.
  - Do not attempt to fill the cylinder through the service valve! The service valve contains a check valve for vapor withdrawal only.
  - Failure to properly fill the cylinder can result in injury or death.
- DO NOT REMOVE, DEFACE OR OBLITERATE THIS LABEL.**

Danger tag at OPD

**DANGER - TOTAL WEIGHT OF TANK WHEN FILLED MUST NOT EXCEED 68 LBS.**

**OVERFILLING OF TANK WILL RESULT IN A FIRE HAZARD.**

White Tag on Body of unit (1st from top - bottom)

HORIZONTAL CYLINDER - THIS SIDE MUST FACE UP

**WARNING! DANGER! EXTREMELY FLAMMABLE GAS "FOR OUTDOOR USE ONLY"**

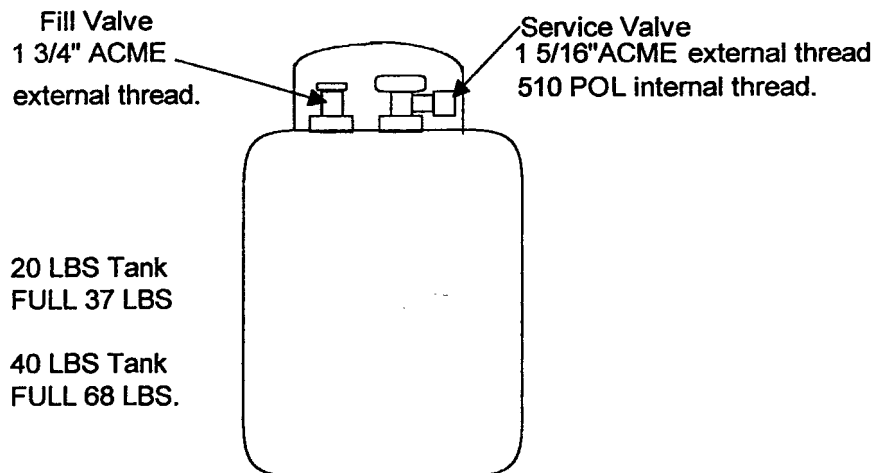
**DO NOT STORE OR USE THIS CYLINDER IN A BUILDING, GARGAGE OR ENCLOSED AREA**

- 1) **EXTREMELY FLAMMABLE PRODUCT (LP GAS) UNDER PRESSURE is meant to be stored in the cylinder. A SERIOUS FIRE OR EXPLOSION could result from misuse, leaks, mishandling, overfilling or tampering with valve or cylinder.**
  - 2) **AVOID SERIOUS INJURY AND PROPERTY DAMAGE, IF YOU SEE, SMELL, OR HEAR THE HISS OF ESCAPING GAS.... IMMEDIATELY GET AWAY FROM THIS CYLINDER! CALL YOUR FIRE DEPT!**
  - 3) **KEEP OUT OF REACH OF CHILDREN.**
  - 4) **DO NOT expose to fire or heat above 120' F. (49'C). Doing so could cause the Pressure Relief Valve to function, thus expelling a large volume of flammable gas.**
  - 5) **DO NOT TAMPER with or attempt repairs on the valve or cylinder. Allow only QUALIFIED LP GAS DEALERS to fill or repair.**
  - 6) **ALWAYS transport and store this cylinder in an UPRIGHT position.**
  - 7) **THIS CYLINDER MUST BE FILLED IN THE VERTICAL POSITION. horizontal filling may cause overfill which may lead to dangerous or explosive conditions.**
  - 8) **This cylinder must be installed to manufacturers specifications. INCORRECT INSTALLATION MAY RESULT IN SERIOUS INJURY, PROPERTY DAMAGE OR OTHER DANGEROUS CONDITIONS.**
  - 9) **All gas connections must be checked for leaks with a liquid soapy solution, once pressure is on the system.**
  - 10) **CLOSE cylinder valve when NOT IN USE.**
  - 11) **When cylinder is stored, moved or transported by vehicle, install dust dap to protect valve from foreign material. DO NOT USE P.O.L. PLUG. Installation of a P.O.L. plug could cause a flow of flammable gas.**
  - 12) **Do not use without reading the OWNER'S MANUAL and warning information for the specific Appliance with which the cylinder will be used.**
  - 13) **BE CERTAIN that this cylinder is purged of trapped air prior to first filling.**
- THIS CYLINDER MUST BE PERIODICALLY REQUALIFIED BY YOUR GAS SUPPLIER.**

# MAGIKITCH'N

## Filling Tanks

- 1) The tank must be purged prior to filling it with liquid propane. The purging operation consists of opening the service valve or other relief valve/port for several minutes to allow any air pressure within the tank to be relieved. After this the tank is re-pressurized with LP gas vapor and again the service valve or other relief valve/port is opened to expel any air/vapor pressure. This second step is repeated three or four times. **Do not attempt to purge the tank yourself! Purging must be done only by a qualified propane dealer.**
- 2) Newer tanks are equipped with an overfill protection device that prevents propane distributors from filling the tanks to more than the recommended weight/level. Newer vertical tanks can be identified by the triangular shaped knob on the tank valve (older tanks had a 4 spoke or other style knob). On 40# horizontal tanks the newer style tanks can be recognized by a large externally threaded 1 3/4" ACME fitting located next to the service valve. These tanks are filled through this fitting rather than through the service valve. If the tank is older and does not have an overfill protection device, it should be filled to no more than the TARE WEIGHT (TW) stamped on the collar of the tank plus the weight of liquid propane the tank is designed for. This means that the final weight of the filled tank will be the TARE WEIGHT plus the weight of the liquid propane. As an example, a 20# vertical tank which normally has a tare weight of approximately 17 pounds would be full when the total weight of the tank and gas is 37 pounds.



NOTE: Some tanks are equipped with a single service valve with 510 POL threads.

### For early LPG/LPAGA models with a single manifold:

one 20# vertical tank	30 minutes
two 20# vertical tanks	2 hours
one 40# vertical tank	2 hours
two 40# vertical or horizontal tanks	6-7 hours

### For later LPG/LPAGA models with split manifolds

two 20# vertical tanks	2 hours
two 40# vertical or horizontal tanks	6-7 hours

It is normal for a light frost to develop on the outside surface of the tank depending surrounding air temperature and humidity.

### Lighting and Shutting off

Although there have been several design variations to the LPG/LPAGA model over the years, the same basic directions apply to all. All except the earliest models are equipped with an *excess flow valve*, a tiny device located in the nose of the POL fitting on the regulator. As its name implies, this valve closes when an excess flow of gas passes through it. If the gas hose or manifold was broken or ruptured and leaking more gas than the unit normally requires for operation of all burners on high, the valve would close and allow only a small amount of gas through the regulator. If only the runner tube and one or two burners support a flame when the unit is first lit it is likely that this valve has shut off the gas flow. If proper lighting procedures are not followed it is possible to create a "nuisance shut-off" of this valve.

### Lighting Procedure

- 1) Make sure all main burner, manifold supply, and runner tube supply valves are closed.
- 2) Connect the POL fitting to the tank valve. **SLOWLY** open the tank valve.  
If this valve is opened too quickly or if the main burner or runner tube supply valves are open a nuisance shut-off may result. If this happens, close the tank valve and open the main burner valves. This will relieve any pressure from the manifold and re-set the excess flow valve. Make sure to re-close the main burner valves before repeating the lighting procedure.

### Shut down Procedure

- 1) With *all* of the burners still lit, close the tank valve on the propane tank. This will allow all the gas in the manifold and burners to be burned off and will prevent any unburned gas from being expelled when the POL fitting is removed from the tank. You may hear a "popping" sound from one or two of the burners. This is known as "noise of extinction" and is normal as the fuel/air mixture changes as when the gas supply is shut off.
- 2) Disconnect the POL fitting from the tank. **Do not store the tanks indoors or in an enclosed area!**

### Possible Causes of Tank and Regulator Freezing

- 1) Water in liquid propane. It takes only a small amount of water in liquid propane to form ice crystals in the regulator and prevent it from functioning properly. The LPG/LPAGA models use a two stage regulator which reduces, but does not eliminate this as a problem.
- 2) On horizontal 40# tanks it is possible to draw liquid propane rather than gas from the tank. This can happen if the tank is overfilled or if the tank is bounced around during transportation. There is a short "J" shaped tube inside the tank called a "dip tube" (see figure A). If liquid propane fills this tube it will be drawn out first and will expand into gas in the regulator and gas hose. This will cause a frost and ice build up on the outside of the regulator and supply hose and will interfere with normal operation. It can also cause the excess flow valve to close. If you suspect an overfilled tank or liquid in the dip tube, it can be eliminated by running the unit with the tanks taken out place in the tank cart and set upright in the vertical position in front of the unit. In the vertical position only gas can exit the dip tube. **Make sure the tanks are secured in the upright position and can not be knocked over!** After the liquid that had filled the dip tube has been "burned off", the tanks can be returned to their normal position. Be careful not to "slosh" the liquid propane too much or it will be necessary to repeat the entire procedure.
- 3) Heat is required to turn liquid propane into a gas. Just as liquid water boils heated enough, so does liquid propane. Normally at temperatures above 50 degrees fahrenheit there is enough heat being transferred from the air surrounding the propane tank to "boil" the liquid propane into gas. However, as time goes on the temperature of the remaining liquid propane in the tank becomes lower and lower and the "wetted surface" of the propane and the tank becomes less and less allowing less transfer of heat from the surrounding air. At some point the temperature will drop to a point at which a pressure drop is noticeable and the unit's performance is affected. The normal run times with all burners on high for various units/tank configurations are shown below: