



16" X 16" Filter and Canning Unit Instructions



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INTRODUCTION

Filtering is performed to clarify the maple syrup. When maple syrup is boiled it concentrates both the sugars and the unwanted materials called niter and sugar sand. Filtering removes the unwanted materials and improves the quality and flavor of the maple syrup.

A filtering & canning unit is designed to gravity filter and provide the heat source needed to can maple syrup. The tank is constructed of stainless steel and comes with a filter rack, cover, and gas fired arch. The tank has a ½" threaded outlet to be used for accessories such as the stainless steel faucet assembly or fill stop automatic valve. Each tank

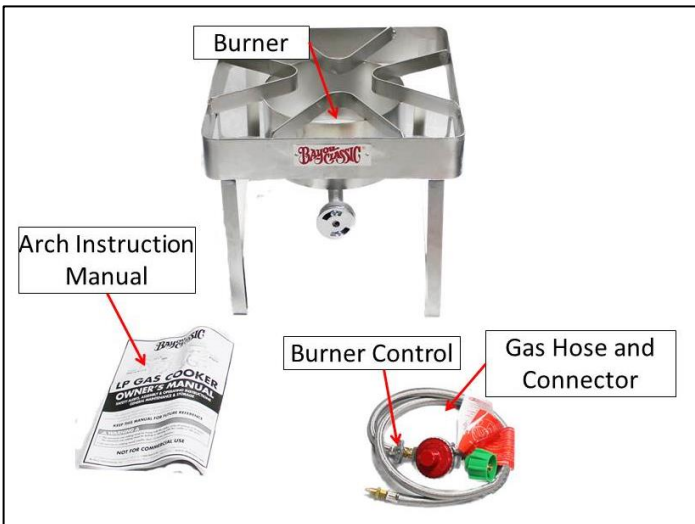
also features a ¼” threaded coupler to allow for mounting a thermometer.

A 16” X 16” canning unit is provided with a tank that is 16” wide, 16” long and 11” deep. It has a filtering capacity of 8 gallons. Capacity is stated with the filter rack in place.

EQUIPMENT DESCRIPTION








16” X 16” Filtering and Canning Unit





Arch for 16" X 16" Unit Shown

16" X 16" Canning & Filter Unit Parts

ITEM	LEADER ORDER #	DESCRIPTION/PHOTO
16" X 16" Tank, Filter Rack and Cover	55042	
16" X 16" Filter Rack (Part of complete unit)	55045	
Arch of 16" X 16" (Part of Complete Unit)	55046	
16" X 16" Tank (Part of complete unit)	55043	
16" X 16" Cover (Part of complete unit)		

Optional Setup Equipment and Supplies

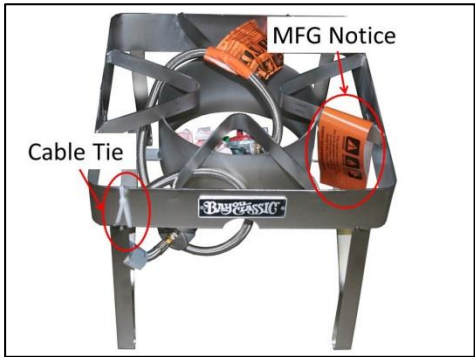
ITEM	LEADER ORDER #	DESCRIPTION/PHOTO
AC Powered Fill Stop Dispenser Valve	61110	
DC Powered Fill Stop Dispenser Valve	61112	

ITEM	LEADER ORDER #	DESCRIPTION/PHOTO
½" Stainless Steel Valve With Nozzle	61139	
Synthetic Filter 24" X 30"	64016	
Rayon Prefilters/Dozen 24" X 30"	64001	
Dial Thermometer 3X6 (0 - 250°)	61019	
½" Stainless Steel Street Elbow (2 needed for Fill Stop Installation)	72116	
½" Stainless Steel Close Nipple	72101	

SETUP AND USE OF FILTER & CANNING UNITS

CAUTION: When handling syrup and equipment for filtering & canning it will be HOT. Take proper precautions.

1. Prior to use, wash the tank, filter rack and cover with clean unsoftened, non-chlorinated well or spring water.
2. Prior to setup of the burner, remove the cable tie securing the burner. Remove and read the manufacturer's information attached to the burner stand.



3. Turn the burner so the end is outside of the frame of the arch and are approximately 90 degrees to the frame. Tighten the 10MM fastener bolt located under the burner to secure the burner in place. Failure to remove the cable tie and properly position the burner will result in damage to the unit.



4. Reference the manual enclosed with the gas burner for setup and use instructions, safety notices and cautions. If a manual was not enclosed with the unit it can be obtained from the www.thebayou.com or contact Leader Evaporator Customer Service.
5. Set the arch into the position to be used. A secure, stable surface at a comfortable working height will be needed. Level the arch. The arch can be leveled with metal shims. Remember the arch is a heat source when selecting a surface to place the unit on.
6. Place the tank on the arch. Center the tank on the arch. Check and adjust so the tank is level.
7. Install the draw off equipment to be used. The following directions are for a canning faucet (Leader Order # 61139). If you are going to use a LEADER fill stop valve (AC Model Order # 61110 or DC Model Order # 61112) refer to the installation instructions for that unit ([AC Model](#) or [DC Model](#)).
 - a. Teflon tape the exposed end of the ½" nipple of the faucet.

- b. Thread the taped end of the faucet into the $\frac{1}{2}$ " threaded outlet in the tank.
- c. Tighten until the ball valve handle is positioned for ease of use.

8. Install a thermometer, if desired.



- a. Remove the stainless steel plug from the $\frac{1}{4}$ " threaded coupler.



- b. Tape the threads of the thermometer.



- c. Thread the thermometer into the $\frac{1}{4}$ " threaded coupler on the filter tank and tighten. Remember to position the dial of the thermometer so it can be read easily.

9. Place the filter rack into the filter tank. The screen side goes in first with the lips of the rack resting on the upper edges of the tank.
10. Prewash the filter media (24" X 30" filters and prefilters) to be used. Filter media should be washed in boiling non-chlorinated hot water then rinsed in non-chlorinated hot water and dried. Do NOT twist the filters to wring out the water. Allow the filters to air dry or press flat.

11. Install the filters and prefilters. Filters and prefilters should be pre-moistened with warm non-chlorinated water.



- a. Synthetic filter and prefilters to be used should be 24" X 30
- b. Lay a layer of synthetic filter into the filter rack. Position it toward one end, when it becomes "plugged" it can be slid to the other end and filtering can continue.
- c. Lay 3 layers of prefilter onto the synthetic filter.
- d. Keep the filter media away from the bottom of the filter tank where there is heat. Fold the excess filter material over the top of the tank. The cover will aid in holding the filter media in place.

12. Begin by slowly pouring hot syrup into the filters to seat into the rack.
13. Fill the filters until they have approximately 1 – ½" of syrup. Add syrup to keep the same level. Keep the cover in place between additions of syrup.
14. If the syrup is to be canned after filtering it must be kept at a minimum of 185°F to 190°F. Use low heat to minimize the generation of additional sugar sand and niter. To heat the syrup to the canning temperature light the arch (after there is syrup in the tank) using the instruction booklet provided with the arch.

NOTE: Be sure to check the maple syrup for proper density prior to canning. Heating can change the density of the syrup.



13. As the filtering slows due to an accumulation of material in the prefilter, slide the prefilter to expose clean surface for filtering. If the prefilter is “plugged” remove it and allow the next layer of prefilter to work.

NOTE: When using over length filter media, fold the used end of the filter media back over the top of the filter tank to prevent dripping. The cover will help hold it in place.

14. When the filtering rate slows and it is noted the synthetic filter has accumulated material, carefully change the prefilters and the synthetic filter.
15. The filters can be cleaned as described in the USE AND CARE OF FILTERS section.
16. To shut off the burner, close the LP tank valve and allow the burner to use up the gas in the lines. Turn off the burner control valve when the flame goes out.

MAINTENANCE

Daily Maintenance

Startup

1. Prior to startup, reconnect the LP gas tank as directed in the Instruction manual that accompanied the arch. Follow all precautions, safety checks, warnings, etc.
2. Install clean filter media.

Shutdown

1. Allow the syrup to complete filtering then remove the synthetic filters and prefilters from the tank.
2. Clean the filters as described in the USE AND CARE OF FILTERS section.
3. Drain the syrup from the tank to finish containers.

4. Use hot water and wash out the tank and the draw off equipment used. Rinse the equipment with unsoftened, non-chlorinated well or spring water.
5. Disconnect the LP gas tank. Make sure to shut the LP tank off first and allow the gas to burn through the burner before disconnecting.

End Of Season

1. Drain the filter tank.
2. Clean and store the filters as described in the USE AND CARE OF FILTERS section..
3. Thoroughly wash the filter tank, rack cover and shelf, inside and out.
4. Place the parts and tank under cover in a clean area. Cover with clean plastic or cloth.
5. Disconnect and store the LP gas tank. See the Instruction manual that accompanied the arch.

Use and Care of Filters

Filter Use

- Filters should be used damp.
- Syrup being filtered should be hot (185°F to 190°F for canning).
- If filters are found not to filter as well as new filters or have an odor, replace them.

Cleaning of Filters

- Wash filters in hot water only. Do NOT use any chemicals to clean filters.
- Water used in cleaning should be non-chlorinated well or spring water.
- Do NOT use a washing machine to clean filters.
- Filters may be pressed to help them dry (ex. using the wringer from an old wringer washing machine) but do NOT twist (wring) the filter.
- Cleaning:
 - a. Fold the ends of the filter together to form a “bag” with the clean side of the filter as the outside of the bag.

- b. Hold the filter over the flue pan or syrup pan (if no hood) and scoop hot sap onto the outside of the filter.
- c. Dip the filter through two (2) buckets of water. The water can be dumped into the flue pan.
- d. Turn the filter inside out and dip into a third bucket of water. The water from this bucket should be discarded.

Storage and Reuse

- At the end of the season, clean the filter thoroughly.
- Dry the filter completely.
- Place the filter in a sealed container.
- Before re-using the filter, remove it from the sealed container and do a “deep sniff” test. If there is any odor, discard the filter.
- Hold the filter up to the light and if thin spots are noted, replace the filter.
- If the filter does not filter as good as a new one, replace the filter.