



Cone Filter Tank Instructions



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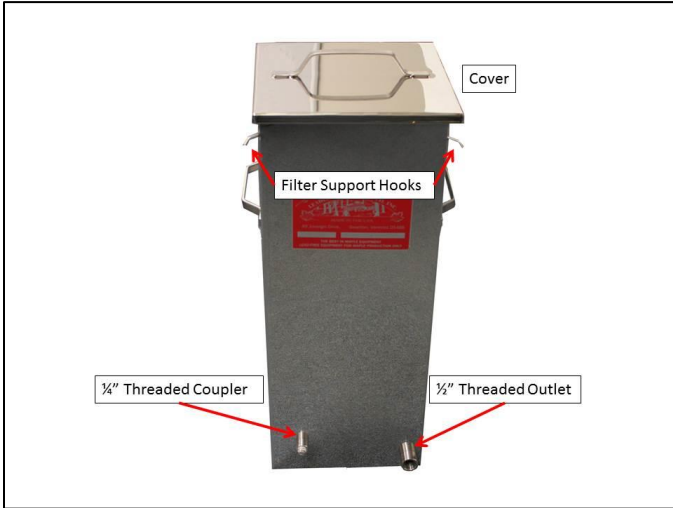
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INTRODUCTION

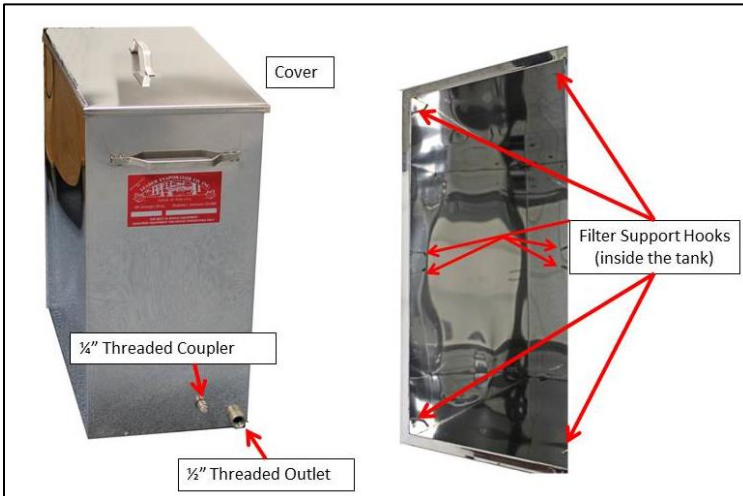
Filtering is performed to clarify the maple syrup. When maple syrup is boiled it concentrates both the sugars and the unwanted materials called niter and sugar sand. Filtering removes the unwanted materials and improves the quality and flavor of the maple syrup.

A cone filter tank is designed to gravity filter maple syrup. The tank is constructed of stainless steel and comes with a cover. Each tank has hooks welded to the sides to allow the mounting of Leader Evaporator cone filters. Each tank has a ½” threaded outlet to be used for accessories such as the stainless steel faucet assembly. Each tank also features a ¼” threaded coupler to allow for mounting a thermometer.

EQUIPMENT DESCRIPTION



ONE CONE FILTER TANK
LEADER EVAPORATOR Order #: 55068



TWO CONE FILTER TANK
LEADER EVAPORATOR Order #: 55069

OPTIONAL SETUP EQUIPMENT/OPERATIONAL SUPPLIES

Item Description	Leader Order #	Further Information
5 Quart Synthetic Cone Filter	64022	
8 Quart Synthetic Cone Filter	64025	
Cone Prefilters (12 per pack)	64013	
½" Stainless Steel Valve with nozzle	61139	
Dial Thermometer 3X6 (0 - 250°)	61019	

SETUP AND USE OF CONE FILTER TANKS

CAUTION: When handling syrup for filtering it will be HOT. Take proper precautions.

1. Install the faucet to be used ex. Leader Order # 61139.
 - a. Teflon tape the exposed end of the ½” nipple of the faucet.
 - b. Remove the ½” plug from the coupler welded to the tank.
 - c. Thread the taped end of the faucet into the ½” threaded outlet in the cone tank.
 - d. Tighten until the ball valve handle is positioned for ease of use. Check to ensure the nozzle is positioned so it will not drip when the ball valve is closed.
2. Install a thermometer, if desired ex. Leader Order # 61019.
 - a. Remove the stainless steel plug from the ¼” threaded coupler.
 - b. Tape the threads of the thermometer.
 - c. Remove the ¼” plug from the coupler welded to the tank.
 - d. Thread the thermometer into the ¼” threaded coupler on the cone tank and tighten. Remember to position the dial of the thermometer so it can be read easily.
3. Place the filter tank on a stable level surface. Select a surface with a height allowing you to easily pour into the top of the tank and work with the filters. Ensure the tank is not resting on either the faucet or the thermometer, if installed.
4. Prewash the filters to be used. See the section – USE AND CARE OF FILTERS.
5. Install the filters and prefilters. Filters and prefilters should be pre-moistened with warm non chlorinated water. If filters are too wet press out excess water.

One Cone Filter Tank

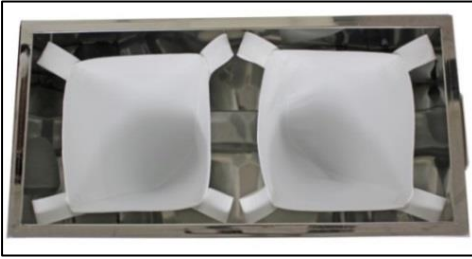


- a. Place a 5 quart synthetic filter inside the filter tank.
- b. The filter support hooks are located on the outside corner of the tank. Slip one loop of the filter over the underside of each of the support hooks.

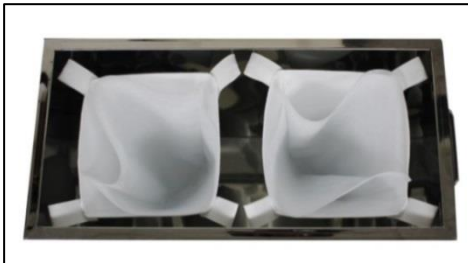


- c. Insert 3 cone prefilters inside the synthetic cone filter.

TWO CONE FILTER TANK



- a. Place an 8 quart synthetic filter inside each side of the filter tank.
- b. The filter support hooks are located on the inside of each corner and in the inside middle of the tank. Slip one top loop of the filter over the top of each of the support hooks.



- c. Insert three (3) cone prefilters inside each of the synthetic cone filters.

6. Begin by slowly pouring hot maple syrup into the filter(s) allowing the filter loops to seat securely onto the tank support hooks.
7. Fill the cone filter(s) until the synthetic filter is approximately $\frac{3}{4}$ full. As the syrup filters continue adding syrup keeping the filtered syrup level below the bottom of the filter. As the syrup filters it can be drawn into containers using the ball valve faucet. Keep the cover in place between additions of syrup.
8. If the syrup is to be canned after filtering it must be kept at of 185°F to 190°F. If necessary to re-heat the syrup, the unit (after it contains syrup) can be placed on a burner. Use low heat to minimize the generation of additional sugar sand and niter.
9. As the filtering slows due to an accumulation of material in the prefilters, remove a prefilter from inside the synthetic cone filter and pour the syrup from the dirty prefilter into the next layer of prefilter. Do not twist the filter media to force the syrup through. When the last of the 3 prefilters needs to be

changed, remove it from the synthetic cone filter then place 3 clean prefilters into the cone filter. Pour the syrup from the used prefilter into the clean top layer prefilter.

10. When the filtering rate slows and it is noted the synthetic cone filter has accumulated material, carefully change the prefilters and the synthetic filter.
11. Clean filter media as described in the USE AND CARE OF FILTERS section.

MAINTENANCE

Daily Maintenance

1. Allow the syrup to complete filtering then remove the synthetic cone filters and prefilters from the tank.
2. Wash or replace the filters as needed. See 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 faucet.

End Of Season

1. Drain the filter tank.
2. Clean and inspect the filter media – see USE AND CARE OF FILTERS
3. Thoroughly wash the filter tank and cover, inside and out. Make sure the ball valve faucet is clean.
4. Place the tank with cover in a clean area. Cover with clean plastic or cloth.

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.

FEEDBACK

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(feedback@leaderevaporator.com) to suggest improvements or enter comments on this document. Reference the document title in your note. You may also contact LEADER Customer Service.