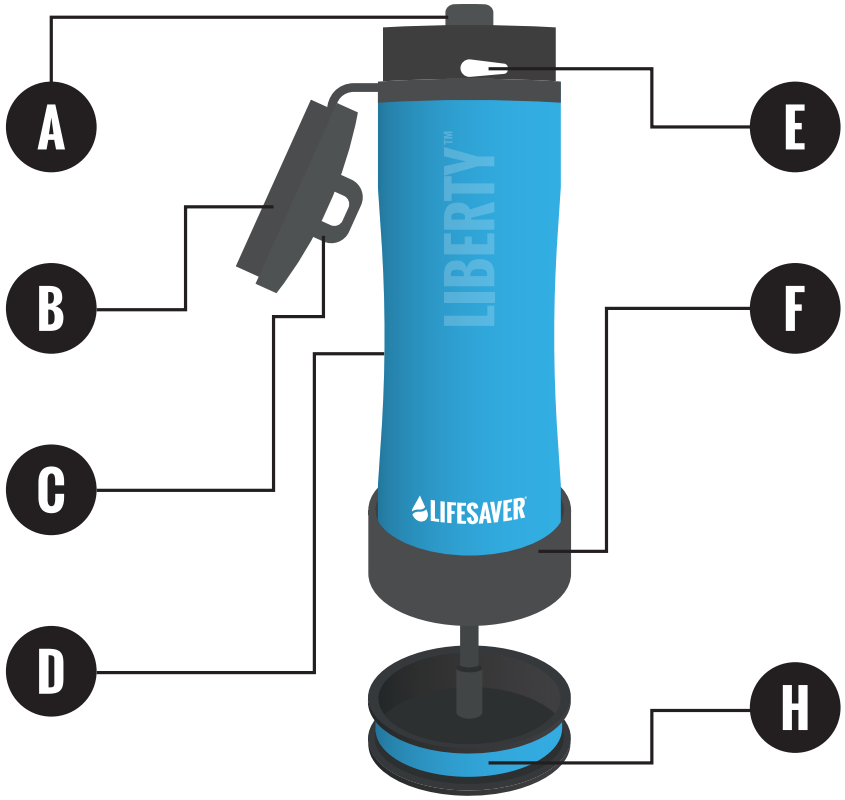
ESSENTIAL FOR SURVIVAL

LIFESAVER LIBERTY™ USER MANUAL

SLI0033

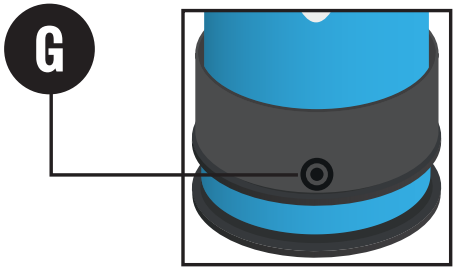
LIFESAVER®

YOUR LIFESAVER LIBERTY™ BOTTLE



A Drinking spout
B Water-tight screw lid
C Carabiner clip
D Window
E Water flow valve
F Removable base
G Scavenger Hose spigot
H Twist lock pump handle

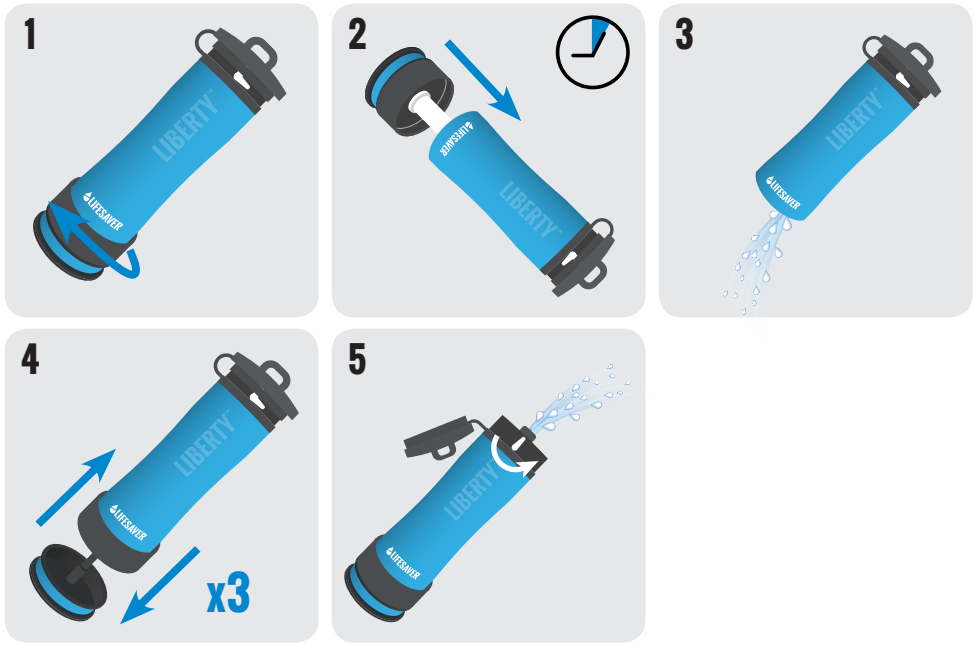
Side of bottle



PRIMING

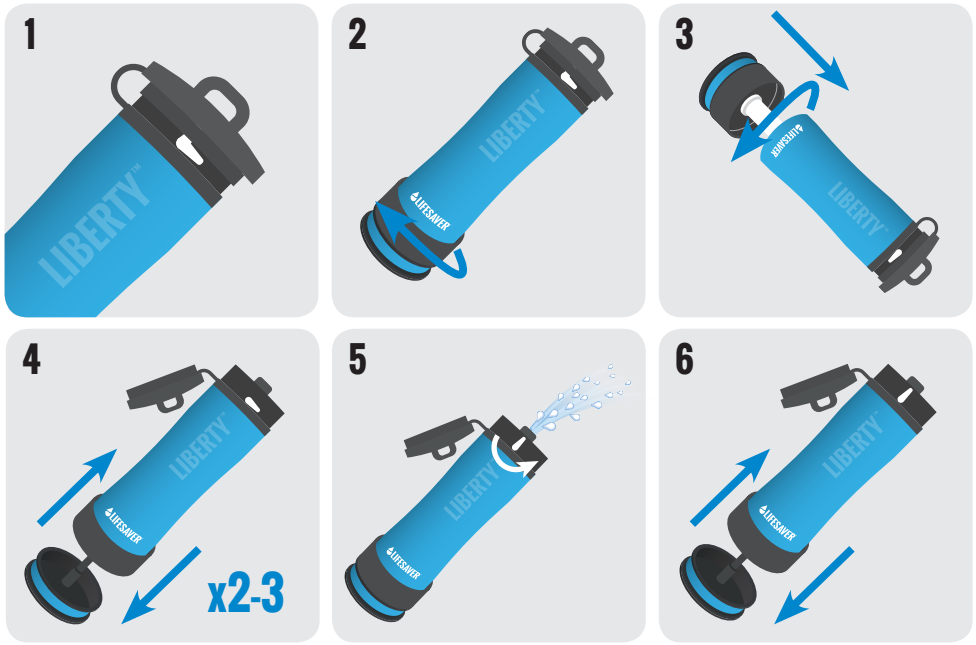
Priming is an essential step that must be performed before you start to use the bottle to drink from.

Correct priming will accelerate the flow rate during use.



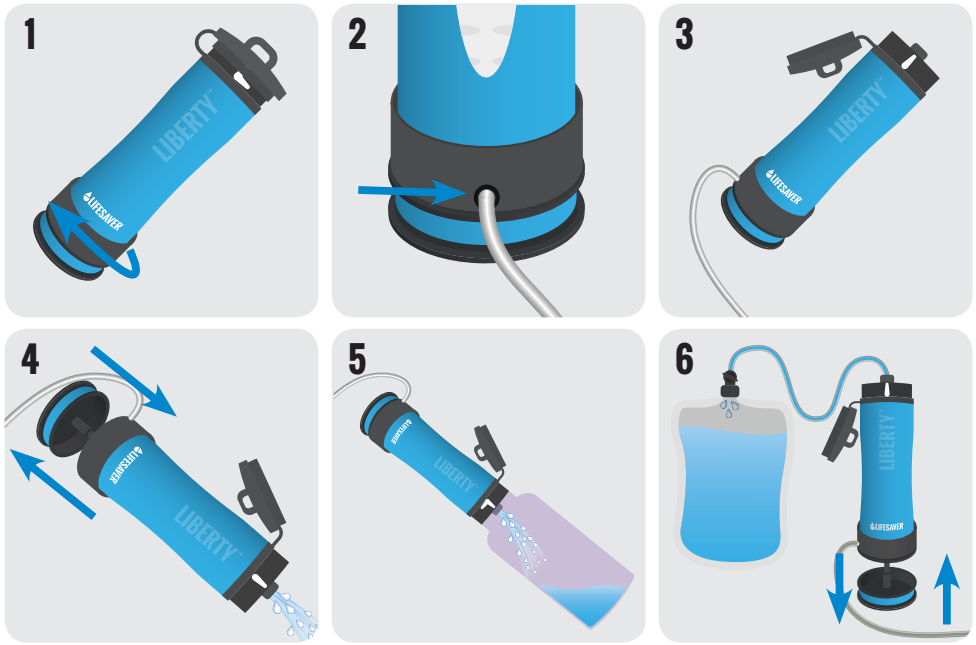
1. Remove base **F** and fill with clean water.
2. Replace base **F** and leave full for 5 minutes.
3. Remove base **F** and discard water.
4. Fill with clean water, replace base **F** and pump **H** three times.
5. Open lid **B** and turn water flow valve **E** to release water from drinking spout **A**. Water will have a slow flow rate initially.
6. Pump **H** to sustain flow rate until bottle is empty.
7. Repeat steps 4, 5 and 6.
8. Your LifeSaver® Liberty™ bottle is now ready to use.

NORMAL USE
BOTTLE MODE



1. Ensure lid (B) is fully closed to avoid contaminating drinking spout.
2. Remove base (F) and scoop/pour water in, filling to around ½ inch of the brim.
3. Replace base (F), ensure it's on tight.
4. Open lid (B) and pump (H) two or three times.
5. Turn water flow valve (E) to open position to start flow of clean water.
6. Pump (H) gently to sustain flow rate as required.

NORMAL USE
INLINE PUMP MODE



1. Fill bottle (not essential but helps achieve a better flow, faster).
2. Attach scavenger hose to bottle pump inlet (G) and insert float valve end in to water source.
3. Open top cap (B) and turn water flow valve (E) 90 degrees to ON.
4. Pump (H) continuously to achieve flow.
5. Standard wide mouthed bottles can be connected directly into the top of your bottle as pictured for additional water storage.
6. Using a LifeSaver Hydration Bladder Connector (sold separately) connected to the drinking spout, you can fill an external hydration bladder such as a CamelBak®.

CAUTION THIS IS A PRESSURE VESSEL

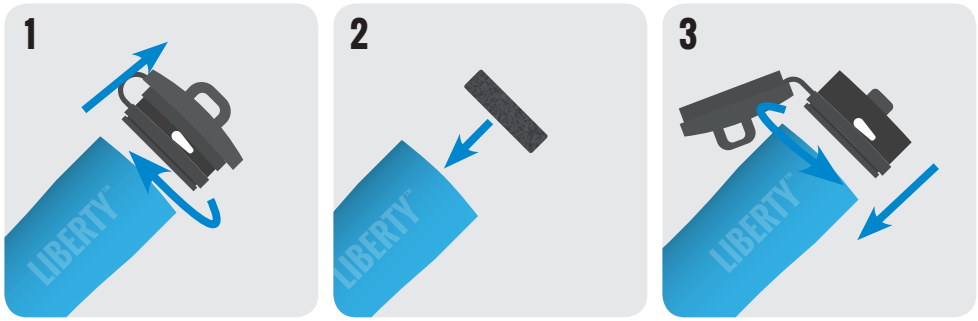
The bottle should not require more than 5 pumps to work effectively. If you need to pump more to induce water flow, always do so with the water flow valve turned to open to gauge whether you need to re-pump the bottle. If the bottle requires more pumping than expected, the bottle may need to be cleaned. Alternatively the cartridge may be reaching the end of its service life.

Do not keep pumping if water is not flowing from the bottle; this will over pressurize the bottle, which will result in the product becoming over stressed. To release pressure from the bottle unscrew the pump base slowly by ¼ turn until you hear a hiss sound.

Always keep the membranes of the cartridge hydrated once primed by storing at least 1 cm / ½ inch of water in the bottle at all times while keeping the bottle sealed with the pump tightened, and water flow valve shut. Failure to do so will cause the membranes to dry out and the system to shut down. This is not covered under your warranty and you will need to purchase another cartridge.

Do not operate the pump while the bottle is empty.

CHANGING A CARBON FILTER



1. De-pressurize and empty. Keep the water tight screw lid fitted and use this to twist counter-clockwise, unscrewing the drinking nozzle outer cylinder.
2. Underneath will reveal the recess for the carbon filter. Pry out the existing carbon filter and replace with the new carbon filter by placing it into the empty recess, pushing slightly to seat the filter fully.
3. Re-screw the drinking nozzle outer cylinder onto the bottle body ensuring the hinge seal for the top cap is correctly seated in place.

Note: Leaving the activated carbon filter inside the bottle while in long term storage may cause microbiological growth to occur. This will not have come from the bottle but may come from the user's saliva. Always remove and discard the activated carbon filter when storing the LifeSaver Liberty™ bottle long term.

MAINTENANCE AND CARE

Do not allow grit, sand or other abrasive matter to enter the bottle. If this happens it should be removed by rinsing. Abrasive matter remaining in the bottle will cause the seals to prematurely wear which could cause the bottle to leak.

HOW TO CLEAN THE BOTTLE WHEN OUTDOORS

Remove the pump and half fill the bottle with the cleanest water available, re-screw the pump back into place. Gently shake and rotate the bottle to move the water around the surface of the filter, splashing the water against the walls. Unscrew and remove the pump base and empty the water from the pump end and repeat as necessary until the water being emptied out is clean.

HOW TO CLEAN THE BOTTLE WHEN AT HOME

Remove your filter from the bottle and fit your flush cap over the clean face of the filter. Soak the filter in a basin of tepid water for around ½ hour. We would recommend a small amount of sterilizing solution is added to kill any pathogens left on the filter surfaces or your basin. A dissolved chlorine tablet or liquid sterilizing solution will do the job (follow manufacturer's instructions for dilution). Rinse the filter off after with clean water, remove the flush cap and re-fit into the bottle. All plastics, excluding the filter, can be cleaned with normal washing up liquid and tepid water but ensure you rinse and dry all parts after cleaning.

HOW TO REMOVE AND RE-FIT THE FILTER CARTRIDGE

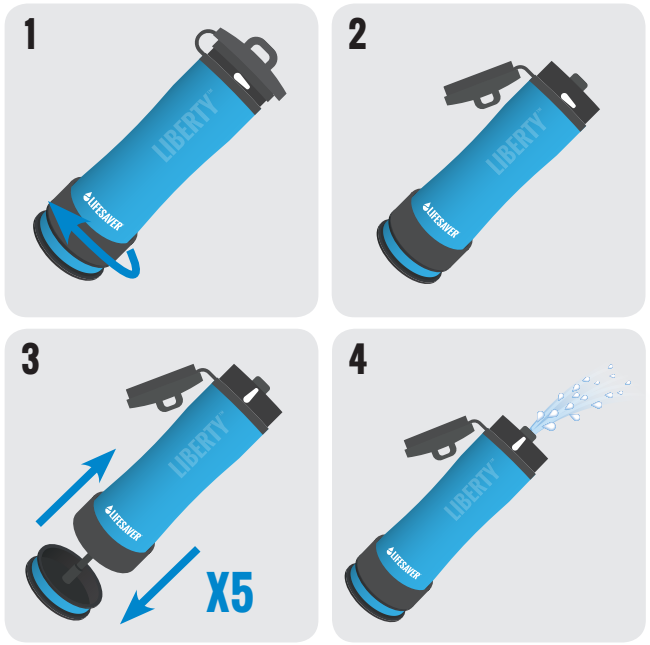
The filter cartridge simply screws into and out of the top of the bottle carcass. Use the small tabs on the bottom of the filter to leverage against and twist in and out of place. Clockwise to fit and counter-clockwise to remove.

HOW TO CHECK YOUR FILTER IS WORKING CORRECTLY

Do not subject the bottle to shock or insert objects into the filter.

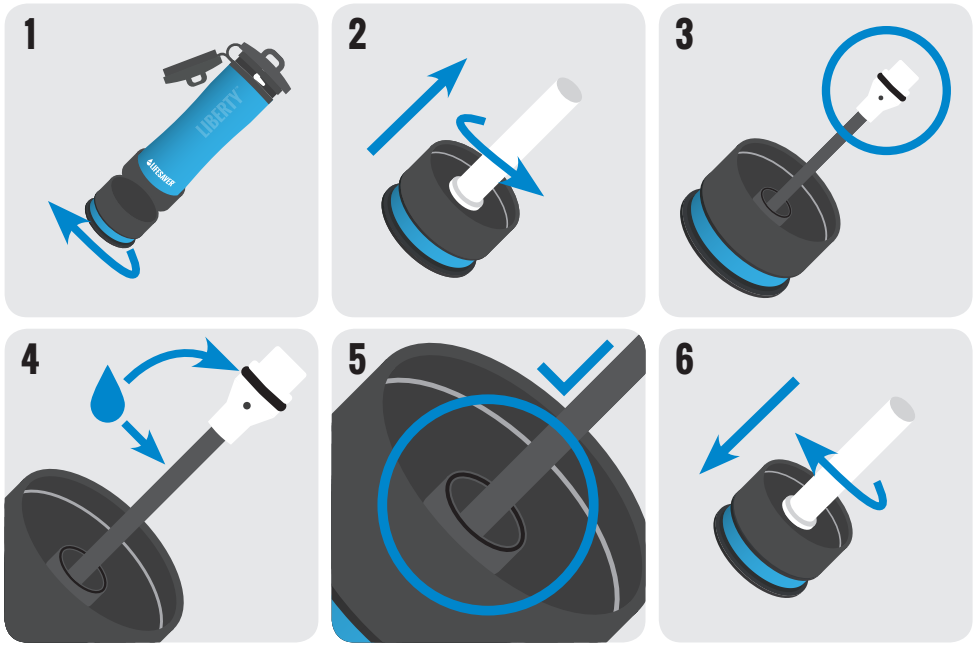
The ultra-filtration membranes are extremely robust and have been designed for a long service life. However, if exposed to higher than normal shock loads from being dropped or struck, the cartridge is susceptible to breakage. A membrane integrity check should be performed every time the bottle has been subjected to shock or when you suspect damage may have occurred to the bottle.

MEMBRANE INTEGRITY CHECK



1. Unscrew and remove the pump base (F) from the bottle. Half fill with water.
2. Hold the bottle over a sink or drain with the drinking nozzle facing up and the pump at the bottom.
3. Turn on the water flow valve (E) and pump 5 times max.
4. Water should flow freely rising from the mouth piece. Apply another 5 pumps when water flow slows down to drain the bottle of all of its water while remaining in the vertical orientation.
5. If the bottle spits water from the nozzle, hisses or bubbles then air is being expelled from the nozzle along with water. This means that the cartridge is damaged. Stop using the bottle and replace the cartridge.

MAINTAINING THE PATENTED HYBRID PUMP SYSTEM



Over time it is possible for the pumping action to become stiff.
To maintain the pump:

1. Unscrew and remove the pump base from the bottle and empty the bottle of any water.
2. Hold the pump tube in one hand and with the other hand unscrew the pump base, pull away and remove from the pump tube.
3. Clean away any debris or old grease from the pump shaft O-ring and pump tube. Check O-ring for signs of wear and replace as necessary.
4. Place a small amount of silicone grease around the black pump rod and the black O-ring, which sits on the top of the pump shaft.
5. Ensure that the pump tube base O-ring is correctly seated on the boss in the pump base.
6. Place the pump tube over the top of the pump shaft and re-screw into the pump base. Do not over tighten.

STORAGE

Before first use, the bottle should be kept in a dry place out of direct sunlight.

After first use, protect the bottle against extreme temperatures. Keep the membranes of the cartridge hydrated by storing at least 1 cm / ½ inch of water in the bottle at all times while keeping the bottle sealed with the pump, flow nozzle and top cap in place. Failure to do so will cause the membranes to dry out, and the filtration system to shut down. Refresh this water on a regular basis to avoid water stagnating. Always store the bottle in a cool dry place when not in use, ideally between 5–20°C (41–68°F).

ACTIVATED CARBON FILTERS

An activated carbon filter, if sealed in its original polyethylene wrapping, can be stored for approximately 3 years from the date of manufacture, subject to storage conditions. After opening a pack of activated carbon filters, ensure that you store the additional, spare activated carbon filters within sealed packaging. This will preserve their shelf life for up to 3 years. If left unsealed the activated carbon filter can be stored for up to 2 months before expiry. Carbon is a natural absorbent, so if left unsealed it will absorb pollutants in the air around it. When storing the bottle for a period of 1 month or more, the activated carbon filter should be removed and discarded. Replace with a new carbon filter before next use if desired.

SHELF LIFE

Standard packaged products:
Product can be stored as a minimum for 3 years from the point of purchase (from authorized resellers) further shelf life after the initial 3 years is dependent on storage conditions.

Aluminum barrier foil heat sealed product:
Heat sealed products provide the lowest moisture transition rate available and are ideal for long term storage. If still sealed in the condition it was purchased, the shelf life of the product will be up to 10 years from the date of manufacture.

TRANSPORTING YOUR LIFESAVER BOTTLE ON A PLANE

When taking the bottle on an airplane ensure that you release all pressure from the bottle by inverting and unscrewing the pump base slowly by ¼ turn. Hold on to the pump firmly while unscrewing.

Only retain the minimum amount of water (1 cm / ½ inch) in the bottle and make sure you pack securely in your hold luggage to protect against impact.

FAILSAFE

The bottle incorporates FailSafe technology — an automatic indicator of when the cartridge needs replacing or cleaning. When the service life of the cartridge has been fulfilled, the pores in the membranes will be blocked by contaminants. The filter stops passing water taking away the guess work of knowing whether your filter is still effective in filtering out contaminants. At this point you should replace or clean your cartridge.

As the cartridge reaches the end of its life a greater number of pumps are required to induce water flow. There will come a point at which despite the recommended maximum number of pumps, water does not flow. At this point you should replace the filter.

PERFORMANCE AND TECHNICAL DATA

Minimum operating / storage temperature	>0°C (32°F)
Maximum operating / storage temperature	50°C (122°F)
Initial flow rate**	1.2 L/min @ 1.0 Bar (g)
Cartridge service rating**	2000 liters (440 US gallons)

Dry weight of bottle inc. cartridge 425 grams (15 oz.)
Bottle storage capacity 400 ml (14 fl oz.)
Product materials and water effluent BPA and BPS free

MICROBIOLOGICAL FILTRATION EFFICACY

Exceeds EPA Guidelines for microbiological purifiers:

Bacteria retention***	>99.9999% (Log 6)
Virus retention***	>99.999% (Log 5)
Cyst reduction***	>99.99% (Log 4)

LIFESAVER COMPLIANCE

Testing is based on full NSF/ANSI P231 microbiological performance requirements.

These units are tested with two different types of water to push the filtration capability beyond the standard use, including Challenge Test Water — type 3 (simulated sewage).

Optional activated carbon filter improves taste and smell by reducing dissolved chlorine, taste and odor.

* After first use the product should be protected against freezing
** Flow rates and service rating are dependent on the composition and turbidity of the feed water

***Tested by BCS laboratories issued 20/05/17 Full performance requirements of NSF/ANSI P231 Protocol

DISCLAIMER

The information and data contained in this document are based on our general experience and are believed to be correct. They are given in good faith and are intended to provide a guideline for the selection and use of our products. Since the conditions under which our product may be used are beyond our control, this information does not imply any guarantee of final product performance and we cannot accept any liability with respect to the use of our products. The quality of our products is guaranteed under our conditions of sale. Existing industrial property rights must be observed.

All details given on and in this instruction manual are believed to be correct at the time of going to press. We reserve the right to make improvements and/or modifications to the equipment herein.

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