

Read and understand this entire manual carefully before assembling or using this water filter. Keep this manual for future reference. If you do not understand this manual or have any questions, please call Cascade Designs at 1-800-531-9531.

IMPORTANT

READ, UNDERSTAND, AND FOLLOW ALL INSTRUCTIONS AND WARNINGS in this manual before using this filter. Failure to follow warnings and instructions may result in gastrointestinal illness.

Keep the hoses and other potentially contaminated parts away from filtered water to prevent cross contamination.

Never use the AutoFlow to filter seawater or chemically contaminated water, such as water from mining tailing ponds or near large agricultural operations. The AutoFlow does not make drinkable water from these sources and does not remove all viruses, chemicals and radioactive materials, or particles smaller than 0.2 microns.

YOU ARE RESPONSIBLE FOR YOUR OWN SAFETY AND THE SAFETY OF THOSE IN YOUR GROUP. PLEASE USE GOOD JUDGMENT.

There are hazards associated with backcountry travel and the use of water filters. Drinking untreated water may expose you to harmful microorganisms and increase your risk of gastrointestinal illness. Using this filter improperly increases your risk of exposure to harmful microorganisms and increases your risk of gastrointestinal illness. Reduce your chances of becoming sick by following the warnings and instructions in this manual and educating yourself on backcountry water safety.

BIOLOGICAL HAZARD

WARNING

INSTRUCTION MANUAL



ENG

AUTOFLOW™ GRAVITY FILTER

TROUBLESHOOTING

MOUNTAIN SAFETY RESEARCH®

Problem	Cause	Solution
Leaking Female Quick Disconnect	Disconnected	Rinse Female Quick Disconnect
Trapped air in Filter Cartridge	Trapped air in Filter Cartridge	Filter 1/4 L water into clean container and then fill it above Dirty Collection Reservoir to purge air (see <i>Trps</i>)
Clogged Pre-Filter Screen	Clogged Pre-Filter Screen	Clean Pre-Filter Screen
Clogged filter	Clogged filter	Backflush Filter Cartridge (see <i>Step 4</i>)
Kinked hose	Kinked hose	Straighten hose
Disconnected Male Quick Disconnect	Disconnected	Push Male Quick Disconnect into fitting completely
Closed Shut-off Clamp	Closed Shut-off Clamp	Open Shut-off Clamp

MOUNTAIN SAFETY RESEARCH®

For product information and service contact

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TIPS

Filter Cartridge

Clean the cartridge by backflushing it every 8 liters (1x/day of use) to prevent silt build-up and extend the filter's lifespan. (See **Step 4**, instruction manual.) If backflushing fails to restore water flow, replace cartridge.

On extended trips, bring along a spare cartridge, which can be purchased from a local or online MSR dealer.

Water Collection and Preparation

Use the cleanest, clearest water available.

Avoid filtering silty, cloudy, muddy, or glacial stream water or tea-colored water that contains visible tannins because these sources will quickly clog the filter.

If clear water is not available, then let particles settle before filtering. Fill the Dirty Collection Reservoir with water and let the water stand until particles have settled to the bottom. Clear the Pre-Filter Screen behind the Female Quick Disconnect as needed.

To treat water with suspected waterborne viruses, use an approved disinfectant. Follow the manufacturer's recommendation for its use. Information on disinfectant use can be found on the Centers for Disease Control Web site: www.CDC.gov.

Operation

To maximize water flow, hang the Dirty Collection Reservoir as high as possible without putting tension on the hoses or pulling the clean container off the ground.

Trapped air in the top of the Filter Cartridge may reduce water flow. Purge the trapped air by first filtering some water (1/4 L) into the clean container and then lifting it (without kinking the hoses) above the Dirty Collection Reservoir to reverse the water flow. Once the air bubbles are purged, place the clean container on the ground and allow the system to resume filtering water.

MSR® Universal Bottle Adapter - Threaded (MSR® Dromedary™ Bag, Nalgene® bottles, and other similar products)

Remove Clean Side Cover. Thread Universal Bottle Adapter onto the bag or bottle spout. Follow **Steps 1-3** (instruction manual). After the water is filtered and collected, replace bag or bottle cap. Reattach Clean Side Cover and store.

MSR® Universal Bottle Adapter - Pressed (Platyus® Hoser™, Sig® bottles, and other similar products)

Remove Clean Side Cover. Press Universal Bottle Adapter onto bottle spout. Follow **Steps 1-3** (instruction manual). After water is filtered and collected, replace bottle cap. Reattach Clean Side Cover and store.

MSR® Universal Bottle Adapter - Drink Tube (Platyus®, CamelBak® hands-free hydration systems)

Remove the Bite Valve and store in a clean place. Attach Hydration Drink Tube to Universal Bottle Adapter. Follow **Steps 1-3** (instruction manual). After the water is filtered and collected, reinstall Bite Valve. Reattach Clean Side Cover and store.

Alternate Collection Methods

LIMITED WARRANTY/LIMITATIONS OF REMEDIES AND LIABILITY USA and Canada

Limited Warranty. Cascade Designs, Inc. ("Cascade"), to the original owner ("Owner"), under intended use and maintenance, warrants the enclosed product ("Product") to be free from defects in materials and workmanship for the life of the Product. No warranty against defects in materials and workmanship will apply if Product is (i) altered in any way, (ii) used for purposes inconsistent with Product's intended purpose or design, or (iii) improperly maintained. Warranty will furthermore be voided where Owner/user (i) failed to follow Product instructions or warnings or (ii) subjected Product to misuse, abuse, or neglect.

During the warranty period, original Product parts determined by Cascade to be defective in materials or workmanship will be repaired or replaced as Owner's sole remedy. Cascade reserves the right to replace any discontinued product with a new product of comparable value and function. A returned product deemed irreparable becomes the property of Cascade and will not be returned.

EXCLUDING THE LIMITED WARRANTY PROVIDED ABOVE, CASCADE, ITS AFFILIATES AND THEIR SUPPLIERS, TO THE MAXIMUM EXTENT PERMITTED BY LAW, MAKE NO WARRANTIES, EXPRESSED OR IMPLIED, AND DISCLAIM ALL WARRANTIES, DUTIES AND CONDITIONS, WHETHER EXPRESSED, IMPLIED OR STATUTORY, WITH RESPECT TO THE PRODUCT, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY, AGAINST LATENT DEFECTS, FITNESS FOR A PARTICULAR PURPOSE, OR CORRESPONDENCE TO DESCRIPTION.

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This limited warranty gives Owner specific legal rights; Owner may have additional rights, which may vary state to state. Always completely follow safety, use, operation, and maintenance instructions for this or any other Cascade product.

European Union customer statutory rights are not affected.

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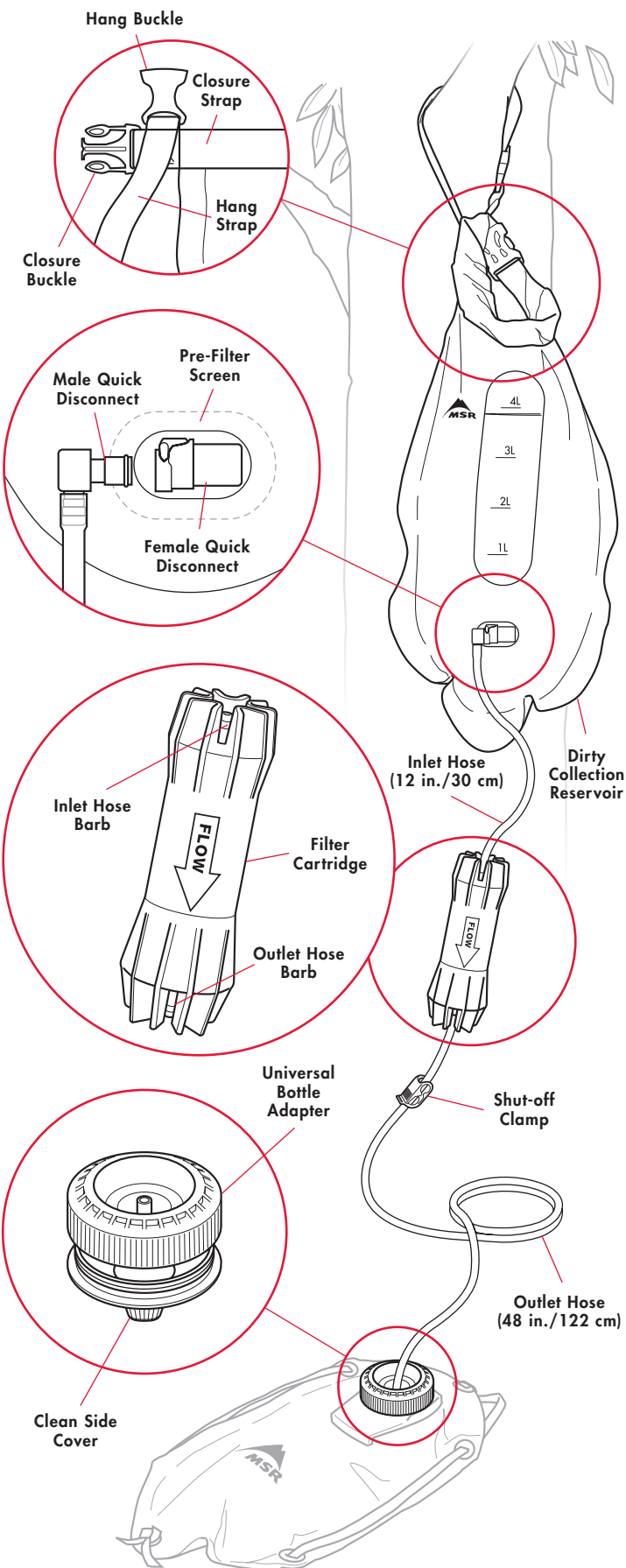
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SPECIFICATIONS

Kit Contents	Dirty Collection Reservoir (with built-in Female Quick Disconnect fitting) Male Quick Disconnect fitting Filter Cartridge Inlet Hose (12 in./30 cm) Outlet Hose (48 in./122 cm) Universal Bottle Adapter Clean Side Cover Shut-off Clamp Instruction Manual Filter Test Guide Storage Sack
Weight	14.2 oz. / 402 g
Dimensions	10 x 3.5 in. / 25 x 9 cm
Flow Rate	~ 1.75 liters per min. (depends on filter condition, water quality)
Filter Life	~ 1500 liters (depends on water conditions)
Filter Media	Hollow Fiber Membrane (HFM)*
Storage Temperature	Above 32 F / 0 C (Do Not Freeze)
Patents	Patents pending

*The Hollow Fiber Membrane (HFM) is a collection of small, porous tubes that can be damaged by dropping or freezing. This damage cannot be seen. Follow Filter Test Guide to inspect filter and detect possible damage.

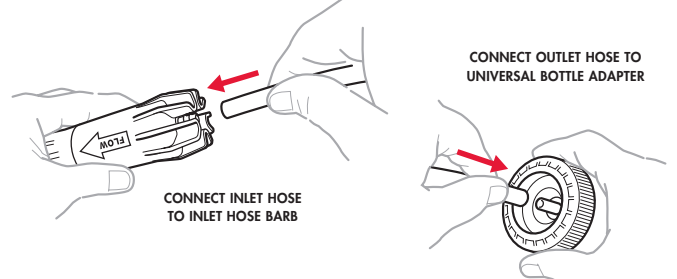
KNOW YOUR MSR® AUTOFLOW™ GRAVITY FILTER



MSR® AUTOFLOW™ GRAVITY FILTER OPERATING INSTRUCTIONS

1 PREPARE AUTOFLOW SYSTEM

1. Connect open end of Inlet Hose to black Inlet Hose Barb.
NOTE: Arrow (water flow direction) on Filter Cartridge should point toward clean container.
2. Connect Outlet Hose to white Outlet Hose Barb.
3. Connect open end of Outlet Hose to Universal Bottle Adapter.
4. Remove Clean Side Cover and attach a clean container to the Universal Bottle Adapter. (See *Tips*.)
5. Close Shut-off Clamp on Outlet Hose.



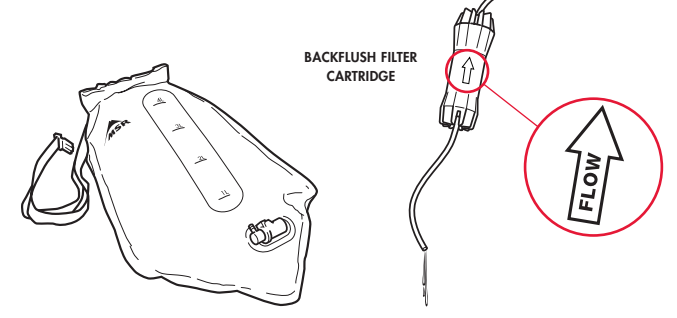
⚠ WARNING

Handle Filter Cartridge carefully because a damaged filter cannot prevent exposure to harmful microorganisms. Test filter for damage if dropped 5 feet (1.5 meters) or greater onto a hard surface. (See Filter Test Guide.) If filter is damaged, discontinue use and replace cartridge.

4 BACKFLUSH FILTER CARTRIDGE

Regularly backflush Filter Cartridge every 8 liters (more frequently for cloudy or tea-colored water) to clean it, maintain optimal water flow, and extend the filter's lifespan.

1. Collect at least ½ liter of filtered water in clean MSR recommended container. (See *Tips*.)
2. Remove the Inlet Hose from the barb of the Male Quick Disconnect.
3. Hold or hang clean container above the Filter Cartridge and allow water to flow back through the filter and out of Male Quick Disconnect.
4. Allow at least ½ liter to flow through Filter Cartridge to remove debris collected in the fibers.
For long-term storage of the AutoFlow system, see Step 5.



2 FILTER WATER

1. Remove Male Quick Disconnect from the Female Quick Disconnect on the Dirty Collection Reservoir.
2. Fill the Dirty Collection Reservoir with unfiltered water.
3. Fold the Closure Strap on the Dirty Collection Reservoir 4+ times to seal.
↳ Connect the buckles of the Closure Strap to each other.
4. Suspend the Dirty Collection Reservoir by the Hang Strap.
NOTE: Hang the Dirty Collection Reservoir as high as possible without putting tension on the hoses or pulling the clean container off the ground.
5. Reinstall the Male Quick Disconnect.
6. Open Shut-off Clamp to start water flow.
Allow water to flow down from Dirty Collection Reservoir through Filter Cartridge into clean container.
NOTE: Trapped air in Filter Cartridge will affect water flow. Purge air by filtering some water (1/4 l) into the clean container and then lifting it above the Dirty Collection Reservoir.

⚠ WARNING

When filtering water, never splash dirty or unfiltered water into clean container to avoid contamination.

5 DISINFECT FILTER

To eliminate the growth of bacteria or mold, always disinfect the filter before or after long-term storage, or after long-term use (15+ consecutive days).

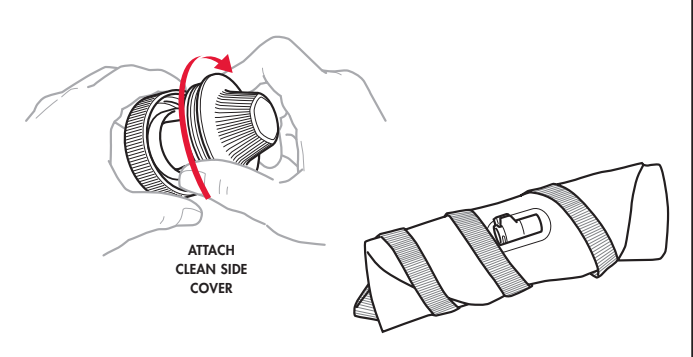
1. Remove Male Disconnect from Dirty Collection Reservoir.
2. Rinse Dirty Collection Reservoir with clean water.
↳ Remove any debris from the Pre-Filter Screen.
3. Mix a solution of 2 drops of household bleach to 1 liter of water in Dirty Collection Reservoir.
4. Assemble AutoFlow system.
↳ Close Shut-off Clamp to stop water flow.
↳ Place open end of Outlet Hose (or Universal Bottle Adapter) in sink.
↳ Hold or hang Dirty Collection Reservoir above sink.
5. Open Shut-off Clamp and let bleach solution filter through system into sink.
6. Air or towel dry AutoFlow system parts completely.
NOTE: The inside of the Filter Cartridge will not dry completely, but the bleach in the solution will prevent the growth of harmful microorganisms and biofilm.
7. Pack and store AutoFlow assembly in storage sack.

⚠ WARNING

Disinfect the filter thoroughly before long-term storage to prevent the growth of mold, mildew, and bacteria. Never use a dishwasher or microwave to disinfect parts because the high heat will damage or melt them.

3 PACK AND STORE AUTOFLOW SYSTEM

1. Empty all water from system.
2. Reattach Clean Side Cover to Universal Bottle Adapter.
3. Wind hoses around Filter Cartridge.
4. Roll Dirty Collection Reservoir around Filter Cartridge and hoses and place in the storage sack.
NOTE: All parts (reservoir, hoses, cartridge, adapter) should remain connected to avoid cross contamination during field storage.
Always disinfect the filter before or after long-term storage, or after long-term use (15+ consecutive days). See Step 5.



⚠ WARNING

Never store Filter Cartridge in cold temperatures (below 32 F/0 C) because freezing the filter will permanently damage the internal fibers. Always wash and dry filter parts.

