FILTER CARTRIDGE CLEANING AND MAINTENANCE

The HyperFlow Microfilter requires regular cleaning and maintenance to function properly. Cleaning and maintenance depends on frequency of use and water quality. The filter will gradually clog during use, especially when filtering water from glacial streams and cloudy or tea-colored water. For optimal long-term performance, backflush the Filter Cartridge every 8 liters (1x/day of use) to prevent silt build-up and extend the filter’s lifespan. If flow rates stay below 1 liter/min. after backflushing, replace Filter Cartridge to restore flow rates. Replacement parts can be found in the MSR® HyperFlow® Maintenance Kit, purchased separately from a local or online MSR dealer.

BACKFLUSHING THE FILTER CARTRIDGE
Always perform backflushing in a controlled area to prevent the loss of small parts.
1. Collect 1/2 liter of filtered water into a clean MSR recommended container. (See Tips.)
2. Remove Inlet Hose and unscrew Pump Inlet from Pump Cylinder. DO NOT PUMP because trapped air will hamper operation. (See Troubleshooting.)
3. Reverse the Large Check Valve and reinstall it inside Pump Inlet.
4. Pull Pump Cylinder to end of stroke and turn until Piston locks.
5. Reverse the Small Check Valve and reinstall it inside Piston.
6. Thread Pump Cylinder (with Piston and reversed valve) carefully onto the Filter Cartridge.
7. Thread Pump Inlet onto the Pump Cylinder. AGAIN, DO NOT PUMP AIR INTO PUMP. (See Troubleshooting.)
8. Connect container with filtered water to Outlet Adapter (or Outlet Nipple).
9. Press the filter to purge it of any remaining water. (See Tips.)
10. Pump 10–15 full strokes of filtered water to flush Filter Cartridge. Wait for Pump Cylinder to fill with water during each stroke. When backflushing is completed, disassemble pump and reinstall the Large and small Check Valves in their original, forward flow positions. Dry pump assembly and then reassemble. CAUTION: Protect Filter Cartridge from accidental drops, which may damage the filters.

CLEANING THE CHECK VALVES
1. Unscrew Pump Inlet.
2. Gently pull the Small Check Valve to remove it.
3. Gently pull the Large Check Valve to remove it.
4. Press both Check Valves firmly back into place and reassemble. For forward flow, both valve tips should point towards the Pump Inlet. For backflushing, both valve tips should point towards the Pump Inlet.

CLEANING THE FILTER
Rinse Prefilter in clean water and air-dry.

LUBRICATING THE PISTON O-RING
1. Unscrew Pump Inlet from Pump Cylinder.
2. Slide Pump Cylinder toward Pump Outlet to expose Piston O-ring.
3. Lubricate Piston O-ring and reusable pump. Use MSR Water Filter Silicone Lubricant (available in the MSR® HyperFlow® Maintenance Kit), lip balm or petroleum jelly.

PREPARE FILTER
1. Connect open end of Inlet Hose to Inlet Barb.
2. Un螺丝 Clean Side Cover from the Pump Outlet. Install Clean Side Cover onto Bottle Adapter Plug to prevent cross contamination when filtering. (See Step 2 illustration.)
3. Place Prefilter (screen side down) in water.
4. Pull Pump Cylinder to end of stroke to prime pump assembly; flush Outlet Nipple, and wait Prefilter.
5. Place pump assembly in storage sack. If possible, avoid fast currents to prevent accidental loss of Prefilter.
6. Thread Pump Cylinder (with Piston and reversed valve) carefully onto the Filter Cartridge.
7. Thread Pump Inlet onto the Pump Cylinder. AGAIN, DO NOT PUMP AIR INTO PUMP. (See Troubleshooting.)
8. Connect container with filtered water to Outlet Adapter (or Outlet Nipple).
9. Press the filter to purge it of any remaining water. (See Tips.)
10. Pump 10–15 full strokes of filtered water to flush Filter Cartridge. Wait for Pump Cylinder to fill with water during each stroke. When backflushing is completed, disassemble pump and reinstall the Large and small Check Valves in their original, forward flow positions. Dry pump assembly and then reassemble. CAUTION: Protect Filter Cartridge from accidental drops, which may damage the filters.

FILTER WATER
The HyperFlow Microfilter is sold with a Quick Connect® Bottle Adapter, which can be used with a variety of containers. To avoid cross contamination when filtering water, MSR recommends a few safe collection methods. (See Tips.)
1. Attach a clean container to Outlet Adapter or Outlet Nipple. (See Tips.)
2. Gently pull the Small Check Valve to remove it.
3. Gently pull the Large Check Valve to remove it.
4. Pull Pump Cylinder to end of stroke to prime pump assembly; flush Outlet Nipple, and wait Prefilter.
5. Place pump assembly in storage sack. If possible, avoid fast currents to prevent accidental loss of Prefilter.
6. Thread Pump Cylinder (with Piston and reversed valve) carefully onto the Filter Cartridge.
7. Thread Pump Inlet onto the Pump Cylinder. AGAIN, DO NOT PUMP AIR INTO PUMP. (See Troubleshooting.)
8. Connect container with filtered water to Outlet Adapter (or Outlet Nipple).
9. Press the filter to purge it of any remaining water. (See Tips.)
10. Pump 10–15 full strokes of filtered water to flush Filter Cartridge. Wait for Pump Cylinder to fill with water during each stroke. When backflushing is completed, disassemble pump and reinstall the Large and small Check Valves in their original, forward flow positions. Dry pump assembly and then reassemble. CAUTION: Protect Filter Cartridge from accidental drops, which may damage the filters.

PACK AND STORE PUMP ASSEMBLY
1. Remove Prefilter from water.
2. Pump filter to purge it of any remaining water.
3. Attach Clean Side Cover to the Outlet Adapter. (MsR® HyperFlow® Maintenance Kit, purchased separately from a local or online MsR dealer.)
4. Wind Inlet Hose around Pump Cylinder. Wrap Prefilter Closure Strap around Prefilter and Inlet Hose to secure pump assembly.
5. Place pump assembly in storage sack.

NOTE: Both tips of Large and small Check Valves should point toward the Pump Inlet.

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.