

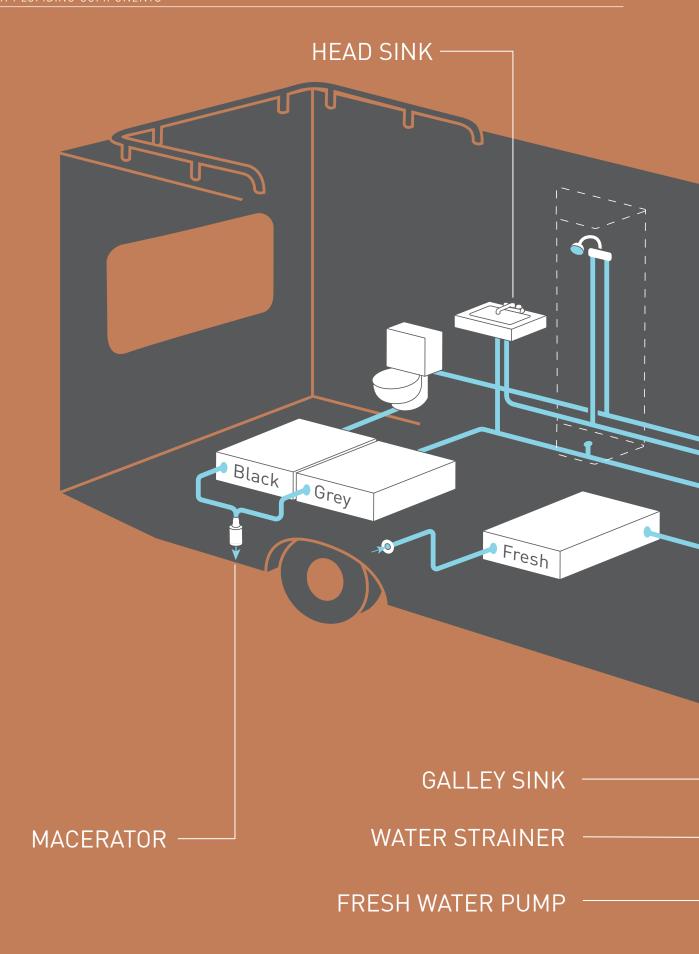


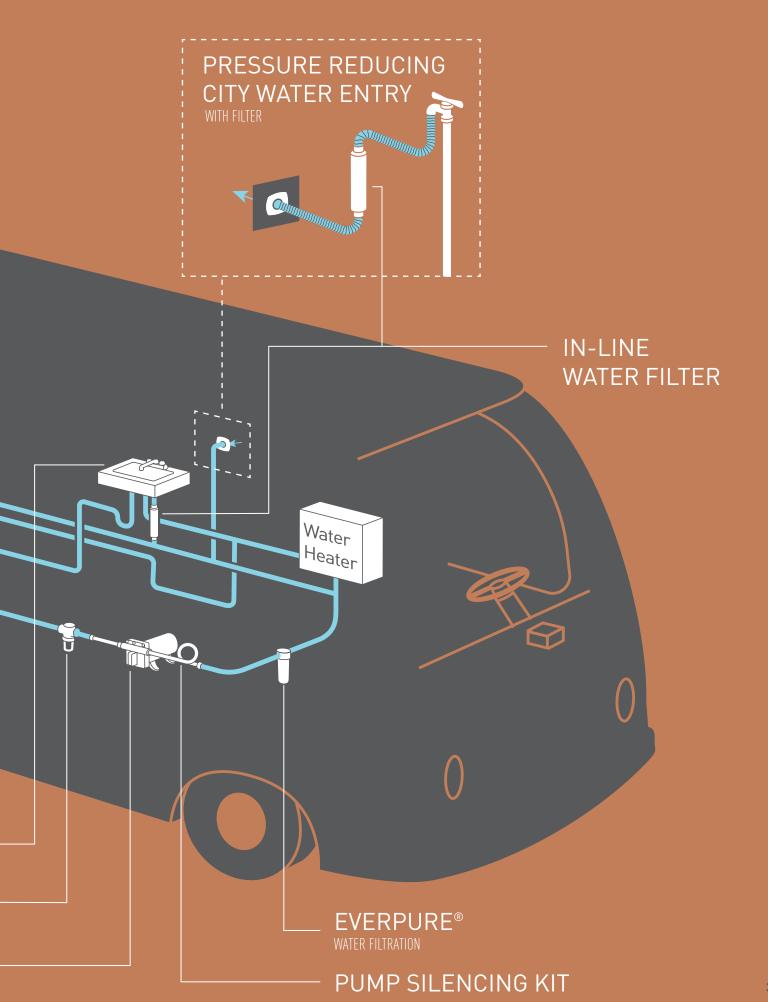
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SHURFLO® RV PLUMBING SYSTEM

ALL MAJOR PLUMBING COMPONENTS





FRESH WATER PUMPS

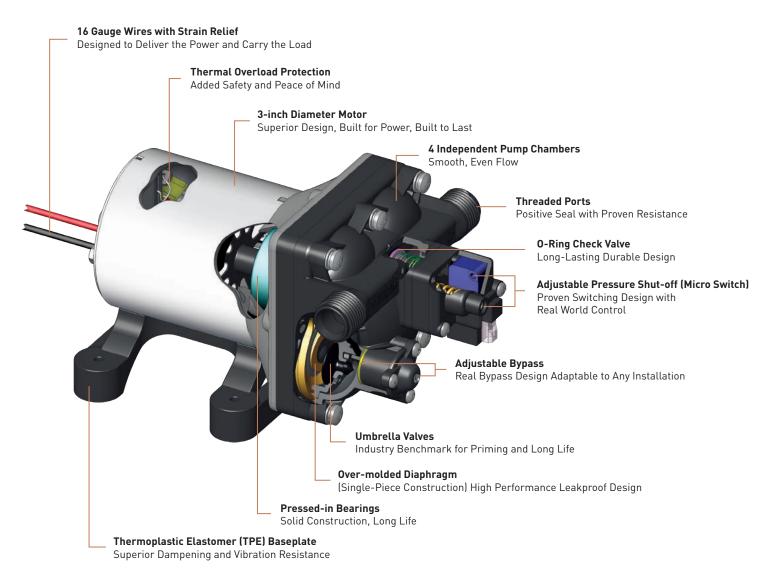






Name	Model # OEM/Aftermarket	Voltage	Dimension	Flow Rate	Amps (Max.)	Shut-Off Pressure
Shurflo Revolution™ Pump (A)	4008-101-A65 (4008-101-E65)	12 VDC	8.1" x 4.9" x 4.3" [206 x 125 x 110mm]	3 GPM [11.4 LPM]	7.5	55 PSI [3.7 BAR]
Shurflo Revolution™ Pump (A)	4008-131-A65 (4008-131-E65)	24 VDC	8.1" x 4.9" x 4.3" [206 x 125 x 110mm]	3 GPM [11.4 LPM]	4	55 PSI [3.7 BAR]
Shurflo Revolution™ Pump (A)	4028-100-A54 (4028-100-E54)	12 VDC	8.1" x 4.9" x 4.3" [206 x 125 x 110mm]	2.3 GPM [8.7 LPM]	5	50 PSI [3.4 BAR]
Shurflo Revolution™ Pump (B)	4008-171-A65 (4008-171-E65)	115 VAC	8.9" x 4.9" x 4.2" [225 x 125 x 106mm]	3 GPM [11.4 LPM]	1	55 PSI [3.7 BAR]

The Shurflo Revolution™ fresh water pump design was created with a unique one-piece diaphragm and internal by-pass, assuring long life and top performance in all plumbing systems. The quality reputation of Shurflo is built on the reliability and dependability of every pump we build. The Revolution™ fresh water automatic demand pump is quiet, thermally protected and can run dry without damage. Mounts in any position.

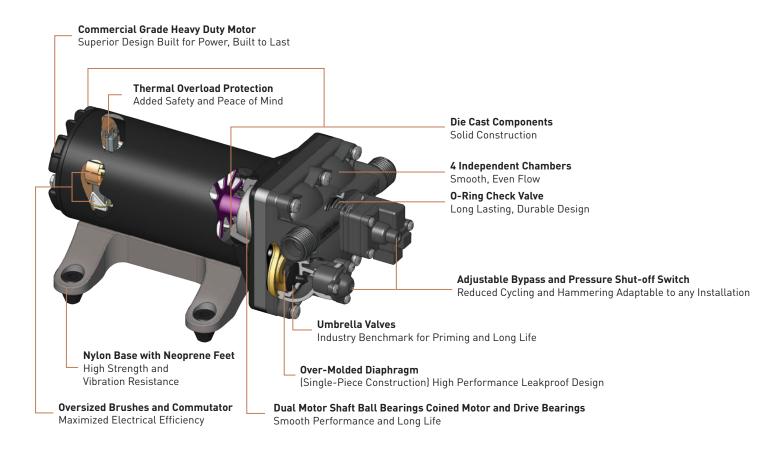


4048 HIGH FLOW PUMP

Name	Model # OEM/Aftermarket	Voltage	Dimension	Flow Rate	Amps (Max.)	Shut-Off Pressure
4048	4048-153-A75 (4048-153-E75)	12 VDC	10.3" x 4.9" x 4.8" [260 x 125 x 122 mm]	4 GPM [15 LPM]	10	55 PSI [3.8 BAR]



With flow reaction technology, the Shurflo High Flow fresh water pump has a unique one-piece diaphragm and internal by-pass to assure smooth flow, long life and top performance in any plumbing system. Designed and built for high flow, low noise, smooth flow with no rapid cycling and Shurflo reliability, this fresh water demand pump is quiet and can run dry without damage. Mounts in any position. This pump is designed to replace both the 4900 and 5900 smart sensor series products.



SLV SINGLE FIXTURE AUTOMATIC DEMAND PUMP

Name	Model # OEM/Aftermarket	Voltage	Dimension	Flow Rate	Amps (Max.)	Shut-Off Pressure
SLV	105-003 (105-013)	12 VDC	6.8" x 3.9" x 2.5" [170 x 100 x 60mm]	1 GPM [3.8 LPM]	2.5	30 PSI [2.0 BAR]



This compact automatic demand fresh water pump offers durability and dependability making it ideal for low volume, intermittent duty applications. The SLV pump self-primes up to 2.5 vertical feet while delivering 1.0 GPM at open flow. The 12 volt low power consumption motor, equipped with thermal protection and a long life pressure switch rated to 30 PSI, provides high pump performance and reliability.

MACERATOR PUMPS



MACERATOR PUMPS

Name	Model # OEM/(Aftermarket)	Voltage	Dimension	Flow Rate	Amps (Max.)	Port Size
Macerator	3200-200 (3200-201)	12 VDC	10.6" x 4.9" x 3.8" [269 x 125 x 97mm]	10 GPM [37 LPM]	15	Inlet 1-1/2" Barb/1-1/2" NPT Outlet 1" Barb
Macerator	3200-001	12 VDC	10.6" x 4.9" x 3.8" [269 x 125 x 97mm]	13 GPM [49 LPM]	17	Inlet 1-1/2" Barb/1-1/2" NPT Outlet 1" Barb

Shurflo's Macerator pumps are designed to accommodate the need for a reliable, high performance waste evacuation pump. These pumps incorporate a high quality motor with a seamless shell design that is thermally protected. The unique features of the Macerator pump include a premium impeller design with run dry capability, a dual blade and housing construction for trouble-free operation.

GENERAL PURPOSE PUMPS





STANDARD & PREMIUM GENERAL PURPOSE PUMPS

Name	Model # OEM/(Aftermarket)	Voltage	Dimension	Flow Rate	Amps (Max.)	Port Size
Standard General Purpose Pump (A)	8050-305-526 [8050-305-526]	12 VDC	6.5" x 4.5" x4.3" [165 x 114 x 108mm]	1.5 GPM [5.6 LPM]	4	3/8" NPT-F
Premium General Purpose Pump (B)	8050-305-626 [8050-305-626]	12 VDC	7.8" x 4.5" x 4.3" [198 x 114 x 108mm]	1.5 GPM [5.6 LPM]	4	3/8" NPT-F

Incorporating Shurflo's advanced motor technology that includes thermal overload protection, these standard general purpose pumps are self-priming, easy to install and extremely versatile; perfect for a variety of uses including winterizing, oil changing and liquid transfer. Premium model includes 8' (2.44m) cable with battery clips.





Name	Model # OEM/(Aftermarket)	Voltage	Dimension	Flow Rate	Amps (Max.)	Port Size
Oil Change System	8050-305-426 [8050-305-426]	12 VDC	16" H x 12.5" D [406 x 318mm]	1.5 GPM [5.6 LPM]	4	3/8" NPT-F

Incorporating Shurflo's advanced motor technology that includes thermal overload protection, this Oil Change/Winterizing System is self-priming, easy to install and extremely versatile; perfect for a variety of uses including winterizing, oil changing and liquid transfer. System includes premium pump with 8' [2.44m] cables, battery clips, hose kit and 3.5 gallon (13.25 l) storage bucket.

WATER SYSTEM ACCESSORIES

WATER STRAINERS

Name	Model # OEM/(Aftermarket)	Description	Designation
Twist-on Water Strainer (A)	255-213 (255-313)	Easy Assembly. Keeps Debris Out of Pump Easy to See When Strainer Needs Cleaning. 50 Mesh Stainless Steel Screen	1/2" [13mm] Pipe Inlet
Twist-on Water Strainer (B)	255-223 (255-323)	Easy Assembly. Keeps Debris Out of Pump. Easy to See When Strainer Needs Cleaning. 50 Mesh Stainless Steel Screen	1/2" [13mm] Barb Inlet
Swivel Nut Water Strainer (C)	255-215 (255-315)	Easy Assembly. Keeps Debris Out of Pump. Easy to See When Strainer Needs Cleaning. 50 Mesh Stainless Steel Screen	1/2" [13mm] Pipe Inlet
Swivel Nut Water Strainer (D)	255-225 (255-325)	Easy Assembly. Keeps Debris Out of Pump. Easy to See When Strainer Needs Cleaning. 50 Mesh Stainless Steel Screen	1/2" [13mm] Barb Inlet



The Shurflo strainers eliminate unnecessary repairs by keeping debris and other particles out of the pump. Screws directly onto the pump head. Transparent design shows when it is time to clean the bowl. Easy disassembly, cleaning and reassembly.

PUMP SILENCING KIT

Name	Model # OEM/(Aftermarket)	Description
Pump Silencing Kit (A)	(94-591-01)	Includes 2 of 411-030-00 and 2-1/2" (13mm) male pipe couplers
18" Riser	411-010-00	Single 18" riser with 1/2" (13mm) female swivel fittings
30" Riser	411-020-00	Single 30" riser with 1/2" (13mm) female swivel fittings
36" Riser	411-030-00	Single 36" riser with 1/2" (13mm) female swivel fittings



Easy to install high-pressure flexible hoses are designed to fit between the pump and the plumbing system to reduce unwanted rattling and plumbing vibration noises. Kit comes with two $\frac{1}{2}$ " NPT-M pipe nipples for added convenience for a variety of systems.

IN-LINE CHECK VALVE

Name	Model # OEM/(Aftermarket)	Description	Designation
In-Line Check Valve	340-000 (340-001)	Allows Flow in One Direction Only to Safeguard Against Backsurge up to 100 PSI [6.8 BAR]	3/4" [19.1mm] Barb



This check valve allows water to flow in only one direction helping to safeguard against back surge pressure up to 100 PSI (6.89 BAR).

HOSE SPRAY NOZZLE

Name	Model #	Description	DesignationA
Hose Spray Nozzle	(94-010-00)	High Impact Plastic for Long Life. Use with Shurflo Pumps or Garden Hose. Adjusts From Fine Mist to Full Stream. Lock Clip for Continuous Spray	3/4" (F) Garden Hose Thread



This check valve allows water to flow in only one direction helping to safeguard against back surge pressure up to 100 PSI (6.89 BAR).

WATER SYSTEM ACCESSORIES CONTINUED





PRE-PRESSURIZED ACCUMULATOR TANKS

Name	Model #0EM/ (Aftermarket)	Ports	Dimensions	Total Volume	Max. PSI
24 oz. Nylon Tank (A)	182-100 (182-200)	1/2" NPSM-Male	9.1" x 4.8" x 3.8" [232 x 121 x 97 mm]	24 oz. [710 ml]	125 PSI [8.8 BAR]
2 Gallon Stainless Steel Tank [B]	3400-002 (3400-002)	1/2" NPT-Female	12" H x 9" D [23cm H x 10cm D]	2 Gal. [8 L]	100 PSI [7 BAR]

Reduce cycling pulsation and pressure spikes, increase the life of your pump—and even save battery power. Easily handles pressure requirements from 20 PSI to 125 PSI.



PRESSURE REDUCING WATER CITY ENTRIES

Name	Model # OEM/(Aftermarket)	Model # 0EM/(Aftermarket)	Color
	50 PSI MODEL	65 PSI Model	
Wall Mount (A)	_	183-020-14 (183-029-14)	Chrome
Wall Mount (B)	_	183-020-16 (183-029-16)	Black
Wall Mount (C)	_	183-020-18 (183-029-18)	Gel White
In-Line (D)	(183-039-08)	N/A	Gel White

The Shurflo exclusive diaphragm design prevents high-pressure damage often caused by city water. These high performance water entries limit water pressure and include a check valve. 3/4" (19.1 mm) GHT - Female Swivel Inlet. 1/2" (13mm) NPSM - Male Outlet.





Name	Model # OEM/(Aftermarket)	Voltage	Ports	Amps (Max.)	Operation	Spout Rotation	Color
Electric Faucet with Switch (A)	94-009-00 (94-009-10)	12 VDC	3/8" Barb	3	Single	360°	White
Electric Faucet with Switch	94-009-01 N/A	12 VDC	3/8" Barb	3	Single	360°	Gray
Single Touch Faucet (B)	15-045-02 (15-045-02)	N/A	1/4"	N/A	Single	Twist	Chrome
Faucet without Switch	94-009-32 (94-009-12)	N/A	3/8" Barb	N/A	Single	360°	White

The Shurflo faucets offer smooth, easy flow with a washerless ceramic disc design. Versatile 360 degree spout rotation. Easy to use with city water system. 15-045-02 single touch faucet has a 1/4" (6.35 mm) port and works perfectly with filtration systems.

FILTRATION

PENTAIR® GAC 5" CARTRIDGE

Name	Model #	Cartridge Media	Taste & Chlorine	Lead	Cyst	THM's VOC's	Pesticides	Micron Rating
5" Cartridge	155110-43	Granular Activated Carbon	•			•	•	20



PENTAIR C-2 5" CARTRIDGE

Name	Model #	Cartridge Media	Taste & Chlorine	Lead	Cyst	THM's VOC's	Pesticides	Micron Rating
5" Cartridge	155022-43	Carbon Wrapper Paper	•			•	•	5



PENTAIR P5 10" CARTRIDGE

Name	Model #	Cartridge Media	Taste & Chlorine	Lead	Cyst	THM's VOC's	Pesticides	Micron Rating
10" Cartridge	155014-43	Spun Polypropylene		Sediment Filter Only				

This check valve allows water to flow in only one direction helping to safeguard against back surge pressure up to 100 PSI (6.89 BAR).



PENTAIR C1 10" CARTRIDGE

Name	Model #	Cartridge Media	Taste & Chlorine	Lead	Cyst	THM's VOC's	Pesticides	Micron Rating
10" Cartridge	155002-43	Carbon Wrapper Paper	•			•	•	5

Economic solution for basic chlorine, taste and odor reduction. Low pressure drop and high flow.



PENTAIR CC-10 10" CARTRIDGE

Name	Model #	Cartridge Media	Taste & Chlorine	Lead	Cyst	THM's VOC's	Pesticides	Micron Rating
10" Cartridge	155155-43	Granular Activated Carbon (GAC)	•			•	•	20

Low pressure drop in a high flow, long life coconut shell carbon design.



PENTAIR® CFBC-10 10" CARTRIDGE

Name	Model #	Cartridge Media	Taste & Chlorine	Lead	Cyst †	THM's VOC's	Pesticides	Micron Rating ‡
10" Cartridge	255679-43	Modified Carbon Block	•		•	•	•	0.5

Low pressure drop in a long life cellulose-free synthetic fiber matrix.



^{*}Based on Manufacturer's internal testing.

[†] Reduces cysts such as Cryptosporidium and Giardia by mechanical means.

 $[\]ddagger$ Reduces particles as small as 0.5 micron in size by mechanical means.

FILTRATION CONTINUED



PENTAIR CFB-PB10 10" CARTRIDGE

Name	Model #	Cartridge Media	Taste & Chlorine	Lead	Cyst †	THM's VOC's	Pesticides	Micron Rating ‡
10" Cartridge	255681-43	Modified Carbon Block	•	•	•	•	•	0.5

Added lead reduction in a low pressure drop, high flow, long life cellulose-free synthetic fiber matrix.

- † Reduces cysts such as Cryptosporidium and Giardia by mechanical means. ‡ Reduces particles as small as 0.5 micron in size by mechanical means.



PENTAIR UDS-10EX1 10" CARTRIDGE

Name	Model #	Cartridge Media	Taste & Chlorine	Lead	Cyst	THM's V0C's	Pesticides	Micron Rating
10" Cartridge	255800-43	KDF/Carbon	•	•		•	•	5

Superior long life, quad-stage bacteriostatic KDF/carbon filter with excellent heavy metal removal.

PENTAIR IN-LINE WATER FILTERS

Model #	Cartridge Media	Description	Taste & Chlorine	Heavy Metals	THM's VOC's	Pesticides	Micron Rating	Fittings/Port Size and Accessories
255521-43 10" In-Line Filter (A)	Granular Activated Carbon (GAC)	Long life triple-stage carbon in-line city water entry filter with ¼" NPT-Female ends	•	•	•		5	1/4" NPT-Female Ports
255525-43 10" In-Line Filter	Granular Activated Carbon (GAC)	Long life triple-stage carbon in-line city water entry filter with ¼" Quick Connect ends	•	•	•		5	1/4" Quick Connect Ports
RV-210GH-A City Water Entry In-Line Filter (C)	Activated Carbon	Long life, triple-stage carbon in-line city water entry filter with garden hose ends	•		•	•	5	3/4" Garden Hose Ports
RV-210GH-KDF-A City Water Entry In-Line Filter	KDF/Carbon	Long life, high quality quad-stage bacteriostatic KDF/carbon in-line city water entry filter with garden hose ends	•	•	•	•	5	3/4" Garden Hose Ports
94-009-50 10" In-Line Interior Filter (B)	KDF/Carbon	Long-life, high quality quad-stage bacteriostatic KDF/carbon in-line filter with fittings for every interior need	•	•	•	•	5	1/4" NPT-F Both Ends, fittings included: 2 ea. 1/2" MPT, 2 ea. Quick Connect & 2 ea. Colder Fittings







^{*}Based on Manufacturer's internal testing.

IN-LINE WATER FILTER ACCESSORY

Name	Model # OEM/(Aftermarket)	Description
In-Line Filter Bracket	244454	For use with all 10" [254mm] In-Line Filter Housings

EVERPURE® FILTERS

Model # / Name	Cartridge Media	Description	Taste & Chlorine	Heavy Metals	Cyst †	THM's VOC's	Pesticides	Micron Rating ‡
EV959206 Everpure® Full-Timer (A)	Micro-Pure Pleated	Exclusive technology reduces 99.9% of all particles 0.5 micron in size	•		•	•		0.5
EV959207 Everpure® Part-Timer (B)	Carbon Block	Exclusive technology reduces 99.9% of all particles 0.5 micron in size, Twin-pack	•		•	•		0.5



- † Reduces cysts such as Cryptosporidium and Giardia by mechanical means.
- ‡ Reduces particles as small as 0.5 micron in size by mechanical means.

COMPLETE AFTERMARKET FILTER SYSTEM COMPONENTS

Name	e Model# Includes		Description † ‡		
Filter Housing (A)	RV-10UC-A	C1 Filter, Housing, Wrench, Bracket Kit, Fittings, Garden Hose	Complete 10" Filter housing with filter and garden hose fittings for use inside under the counter, as a whole-house filter, or outside as a city water or tank fill filter		
Everpure® EV925200 EV925205 Syste with POP Disp		2 Complete EV925205 Systems with POP Display Carton (Not Shown)	Protects against bacteria, viruses and cysts down to		
Everpure® Complete Kit (B)	EV925205	EV959206 Filter, Housing, By-Pass, Installation Kit	Exclusive EVERPURE® filtration system, include installation kit and super chlorination disinfection kit. Protects against bacteria, viruses and cysts down to 0.5 micron in size		



- † Reduces cysts such as Cryptosporidium and Giardia by mechanical means.
- ‡ Reduces particles as small as 0.5 micron in size by mechanical means.
- † Reduces cysts such as Cryptosporidium and Giardia by mechanical means.
- ‡ Reduces particles as small as 0.5 micron in size by mechanical means.

O-RING KIT

Name	Model #	Description
O-Ring Kit	94-178-09	10-Pack O-Ring Kit for 10" Waterguard Filter Housing (RV-10UC-A)

SLIM-LINE FILTRATION SYSTEM COMPONENTS

Name	Model #	Description
Housing (A)	158196	10" Housing with 1/2" Female Ports
Housing	158195	10" Housing with 1/2" Female Ports with Pressure Relief
SW-1A Wrench (B)	150539	Slim-Line Filter Housing Wrench
Bracket Kit (C)	244047	Slim-Line Filter Housing Mounting Bracket with Screws
Single Pack O-Ring Kit	151121	Single-Pack O-Ring Kit for 10" Slim-Line Filter Housing



PUMP FITTINGS



STRAIGHT FITTINGS

Model # Straight Fittings	Style	Material	Description
244-2916	Wingnut Swivel	Nylon	1/2"-15 NPT (F) x 3/8" Barb
244-2926 (A)	Wingnut Swivel	Nylon	1/2"-14 NPT (F) x 1/2" Barb
244-2936	Wingnut Swivel	Nylon	1/2"-14 NPT (F) x 5/8" Barb
244-2946	Wingnut Swivel	Nylon	1/2"-14 NPT (F) x 3/4" Barb
244-5146	Adapter	Nylon	1/2" NPT (M) x 3/4" Barb

ELBOW FITTINGS



Model # Straight Fittings	Style	Material	Description
244-3366	Wingnut Swivel	Nylon	1/2"-14 NPT (F) x 1/2"-14 NPT (M)
244-3916	Wingnut Swivel	Nylon	1/2"-14 NPT (F) x 3/8" Barb
244-3926 (A)	Wingnut Swivel	Nylon	1/2"-14 NPT (F) x 1/2" Barb
244-3936	Wingnut Swivel	Nylon	1/2"-14 NPT (F) x 5/8" Barb
244-3946	Wingnut Swivel	Nylon	1/2"-14 NPT (F) x 3/4" Barb

GARDEN HOSE WINGNUT FITTING

Model # Straight Fittings	Style	Material	Description	
244-2356	Wingnut Swivel	Nylon	3/4" GHT (M) x 1/2" NPT (F)	



SWIVEL STRAIGHT FITTING ADAPTER

Model # Straight Fittings	Style	Material	Description	
244-2866	Wingnut Swivel (Pump/Accumulator Fitting)	Nylon	1/2" NPT (F) x 1/2" NPT (F)	



TEE FITTING

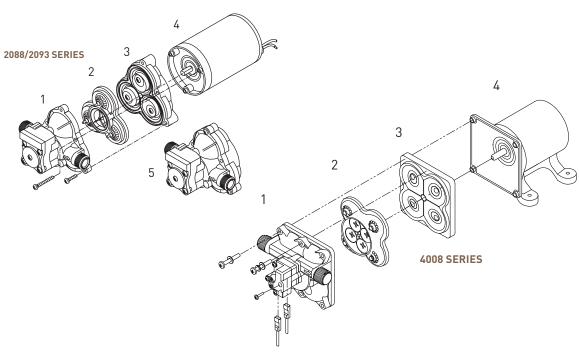
Model # Straight Fittings	Style	Material	Description
244-4522	Barb Tee	Polypropolene	1/2" Barb x 1/2" Barb x 1/2" Barb

PUMP REPAIR AND REBUILD KITS

Shurflo pumps have set the standard for RV performance and reliability. To keep that performance and reliability at its peak, Shurflo offers a wide range of kits for bench and field repair of its products. For detailed listings of individual part numbers, refer to Shurflo pricing guides and repair manuals. This overview indicates the type of kits available.

2088 / 2093 SERIES

Name	Model # OEM/(Aftermarket)	Upper Housing	Valve Assembly	Drive Assembly	Motor	Pump Head Kit	Check Valve
			2	3		5	Not Shown
Premium Plus Pump	2008-453-144 (2088-453-444)	94-231-20	94-232-06	94-238-04	94-11-173-01	94-236-08	94-237-00
Classic™ Pump	2088-422-144 (2088-422-444)	94-231-20	94-232-06	94-238-03	94-11-261-00	94-236-21	94-237-00
Whisper King™ Classic Pump	2093-204-113 (2093-204-413)	94-231-24	94-232-06	94-238-05	94-11-192-00	94-236-05	94-237-00
Standard Pump	2088-473-143 (2088-473-443)	94-231-24	94-232-03	94-238-04	94-11-142-10	94-236-08	94-237-00
Park Model	2088-492-144 (2088-492-444)	94-231-20	94-232-04	94-238-03	94-11-150-10	94-236-21	94-237-00



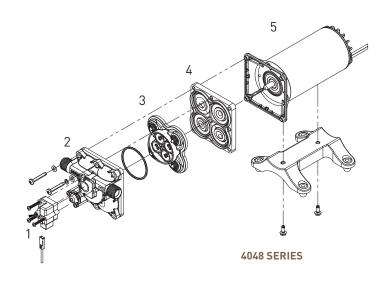
4008/4028 SERIES

Name	Model # OEM/(Aftermarket)	Upper Housing	Valve Assembly	Drive Assembly	Motor	Pump Head	Pump Head Kit	Switch
				3	4		Not Shown	Not Shown
Revolution™ 12 VDC	4008-101-A65 (4008-101-E65)	94-800-00	94-800-01	94-800-02	94-11-302-00	94-800-04	94-800-03	94-800-05
Revolution™ 24 VDC	4008-131-A65 (4008-131-E65)	94-800-00	94-800-01	94-800-02	94-11-303-00	94-800-04	94-800-03	94-800-05
Revolution™ 12 VDC	4028-100-A54 (4028-100-E54)	94-802-00	94-800-01	94-802-02	94-11-302-00	94-800-14	94-800-03	94-802-06
Revolution™ 115 VAC	4008-171-A65 (4008-171-E65)	94-800-00	94-800-01	94-800-02	94-11-306-00	94-800-04	94-800-03	94-800-05

PUMP REPAIR AND REBUILD KITS

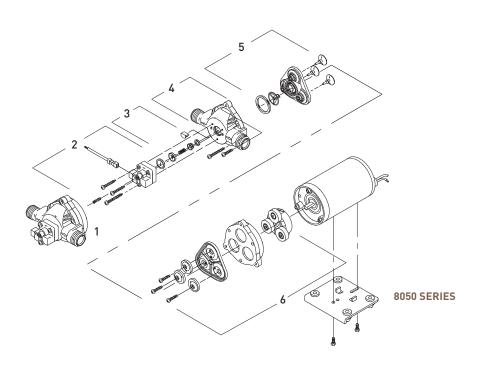
4048 SERIES

Name	Model # OEM/(Aftermarket)	Switch	Upper Housing	Valve Assembly	Drive Assembly	Motor	Pump Head Kit	Check Valve
								Not Shown
4048 - 12 VDC	4048-153-A75 (4048-153-E75)	94-801-05	94-801-01	94-800-01	94-801-02	94-71-001-07	94-801-04	94-800-03



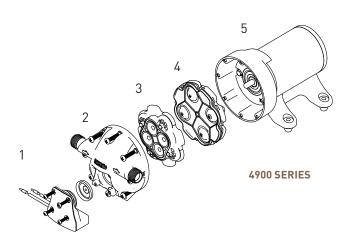
8050 SERIES

Name	Model # OEM/(Aftermarket)	Pump Head	Switch	Check Valve	Upper Housing	Valve Assembly	Drive Assembly
						5	6
Utility Pumps	8050-305-XXX	N/A	N/A	N/A	N/A	94-391-12	94-385-42



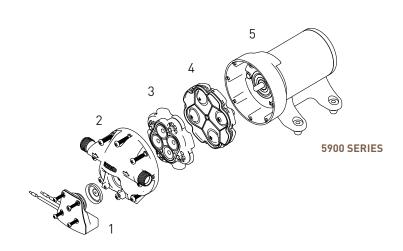
4900 SERIES

Name	Model # OEM/(Aftermarket)	Switch	Upper Housing	Valve Assembly	Drive Assembly	Motor	
						5	
Extreme™ Series Smart Sensor™ 4.0 12 VDC	4900-0201 (4900-0211)	N/A	94-670-01	94-669-00	94-670-00	N/A	



5900 SERIES

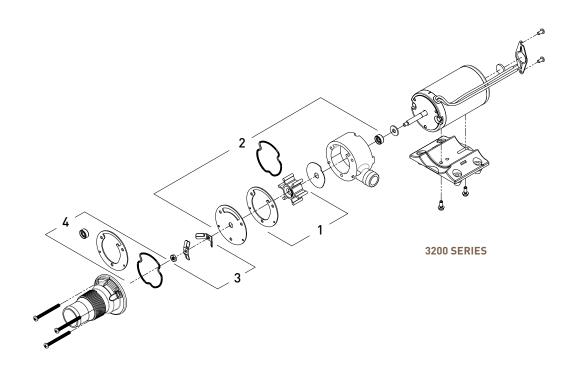
Name	Model # OEM/(Aftermarket)	Switch	Switch Upper Housing		Drive Assembly	Motor	
		1		3		5	
Extreme™ Series Smart Sensor™ 5.7 12 VDC	5900-0201 (5900-0211)	N/A	94-670-02	94-030-01	94-030-02	N/A	



PUMP REPAIR AND REBUILD KITS

3200 SERIES

Name	Model # OEM/(Aftermarket)	Impeller Kit	Impeller Housing Kit	Blade Kit	Lip Seal Kit
					4
Macerator 12 VDC	3200-200 [3200-201]	94-571-00	94-570-00	94-570-02	94-570-04
Macerator 12 VDC	3200-001	94-571-00	94-570-00	94-570-02	94-570-04



INSTALLATION GUIDELINES

PUMP MOUNTING

SOLID SURFACES are required to lessen vibration and noise. A thin surface can amplify noise.

EASY ACCESS for strainer and pump maintenance is needed, as well as space around the pump to keep it cool.

POSITIONING the pump horizontal is best, but most pumps can be mounted in any position.

Pumps will push water better than pull, so mount the pump within 6 feet of the water tank for best performance.

ANCHOR the pump snug, but don't flatten the feet to keep vibration from transmitting to the system.

INLET SIDE OF PUMP

FLEX LINES help reduce normal vibration of the pump being transmitted through the system. The lines should be rated to not collapse under pump vacuum. Collapsing inlet lines cause pump starvation, cavitation and noise. Route lines so they don't kink.

STRAINERS with adequate screen size are required to keep debris out of the pump and minimize vacuum and circulation.

VALVES for tank shut-off or winterizing should be full-port style, or as open as possible to reduce vacuum and cavitation, which cause system noise.

PUMP FITTINGS on both inlet and outlet must seal on the internal taper of the threaded pump ports. For quick-connect fittings, make sure the O-rings are lubricated and the fittings are pushed in straight. Minimize side-to-side stresses on all plumbing system fittings.

OUTLET SIDE OF PUMP

FLEX LINES should be anchored where the flex meets the hard tubing and throughout the coach. Make sure plumbing does not rattle behind walls, showers and where it goes through walls and shelves. Valves should be full-flow with minimum back pressure. Check Valves on the water heater inlet keep hot water from pressurizing the cold water side of the system.

ACCUMULATORS should be charged to the restart [On] pressure of the pump to provide the best system flow, low pump cycling and smooth performance. The Revolution™ High Flow series pumps do not require an accumulator.

PUMP ELECTRICAL

WIRE SIZE is very important to keep proper voltage at the pump. See the chart for wire sizing.

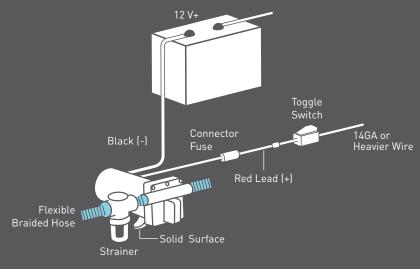
FUSING & SWITCHING are very important, as they allow shutting the pump off separately for service and providing an extra layer of safety in case of problems.

12 VDC 15 AMP CIRCUIT

Total Wire Length*	Minimum Wire Size					
FEET [METERS]	3% Drop	10 % Drop				
1-10 [.3-3]	#12	#16				
11-20 [3.3-6]	#10	#14				
21-30 [6.4-9.1]	#8	#14				
31-40 [9.1-12.2]	#6	#12				
41-60 [12.2-18.3]	#6	#10				

^{*}Length from power source to motor and back to ground. Red wire (+) positive. Black wire (-) negative

TYPICAL PUMP INSTALLATION



MAINTENANCE TIPS

FILTRATION

Your choice of filtration products will depend on your RV Lifestyle. From part-time to full-time, from pop-up to Class A's and beyond, Shurflo water filters will meet your needs.

IN-LINE FILTERS are great for under-the-sink installation, separate single-tap faucets and ice makers. They are sized to meet many flow and life requirements, and can even be used to filter the water coming in through the city water entry. Be sure to make clean tubing cuts, and handle tubing carefully to avoid scratches, kinks and damage.

HOUSING & CARTRIDGE FILTERS combine the ease and convenience of a permanent installation with a variety of filter media choices to meet your needs. If the housing is installed for "Full-House Filtration", make sure the filters meet your needs. A high flow of water through a filter reduces its ability to clean the water and can create significant back pressure on the pump, creating low system pressure and flow. Most filters are only designed to filter at a low flow rate.

If you want to use REVERSE OSMOSIS, the standard RV pumps are not designed for the high pressures and continuous-duty cycles that are needed. Contact Shurflo for help here. Do not use filters with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the unit. Some state and local laws and regulations may pertain to the installation of any plumbed in components. Check for compliance in your area. Do not install filters near a heat source. Do not allow filters to freeze. Do not expose filters to direct sunlight or Ultra Violet radiation [UV]. Do not use filters beyond stated capacity. Do not attach filters to hot water lines. Do not over pressurize filters.

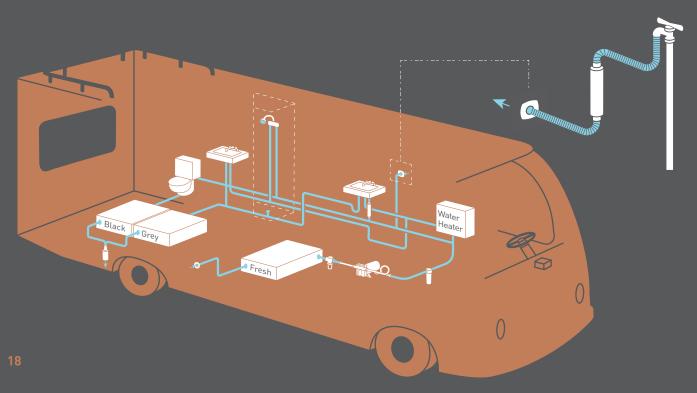
GENERAL SYSTEM CARE

Road vibration can loosen system components. Check all plumbing components, fittings and connections regularly. If something is loose, tighten it up. Don't store things on top of plumbing system components.

SANITIZING keeps your system clean. Make sure to follow your manufacturer and component manuals for recommendations and sanitize your system. It's easy to do and helps to extend component life. Many pump and valve failures can be attributed to scaling or other build-up that could easily be prevented with proper maintenance. Bypass or remove filters before sanitizing.

WINTERIZING Don't let plumbing system components freeze with water in them. Severe damage and flooding can result. Use winterizing procedures recommended by the coach manufacturer or your local dealer. There are many good ways to winterize systems for freezing weather and long storage.

CITY WATER WITH FILTER



PUMP TROUBLESHOOTING GUIDE

SYMPTOM	Noise	Pump Cycles On-Off-On	Pump Won't Start	Pump Won't Shut Off	Tank Fills on City Water	Pump Starts with Fixtures Closed	Pump Loses Prime	Pump Will Not Prime	Low Flow	Leaks
POSSIBLE CAUSE:										
KINKED INLET HOSE	•							•	•	
HARD PLUMBED PUMP		•								
ELBOWS AT PUMP	•								•	
PIPES HITTING	•							•	•	
CLOGGED TANK OUTLET	•							•		
CLOGGED TANK STAINER	•							•	•	
CLOGGED/SMALL I.D. WINTERIZING VALVE	•							•	•	
CLOGGED/SMALL I.D. SHUT-OFF VALVE	•							•	•	
SMALL I.D. HOSE AT PUMP INLET	•							•	•	
PUMP TOO FAR FROM TANK								•	•	
COLLAPSING/NON-VACUUM-RATED HOSE	•								•	
SMALL I.D.HOSE AT PUMP OUTLET		•						•		
INLET AIR LEAK	•			•	•	•				•
AIR IN SYSTEM	•			•		•				•
CRACKED STRAINER				•		•				
LOOSE PUMP FITTINGS				•						
PIPES BANGING IN SYSTEM	•									
KINKED OUTLET HOSE	•	•							•	
SMALL I.D. HOSE AT HEATER/TOILET	•	•							•	
BAD CITY WATER/TANK FILL 3-WAY VALVE	•	•		•	•		•	•	•	
CLOGGED FAUCET AERATORS	•	•							•	
FLOW RESTRICTORS	•	•							•	
DIRTY/WORN PUMP VALVES				•	•	•	•	•	•	
DIRT/WORN CHECK VALVE			•		•	•	•			
BAD DRIVE ASSEMBLY	•			•				•	•	•
PINCHED MAIN DIAPHRAGM										•
RUPTURED MAIN DIAPHRAGM									•	•
RUPTURED SWITCH DIAPHRAGM			•							•
BAD MICROSWITCH	•	•	•	•						
LOOSE WIRE AT SWITCH			•							
LOOSE PUMP SCREWS	•						•			•
LEAKING FIXTURES/FITTINGS						•	•			
FROZEN PUMP			•							•
MOTOR THERMAL OVERLOAD (HOT MOTOR)			•							
LOW VOLTAGE				•				•	•	
BAD MOTOR	•		•					•	•	
BAD PUMP MOUNT (THIN, LOOSE, ETC.)	•									

SHURFLO® FILTRATION OVERVIEW

CARTRIDGES/FILTERS

Model	155014-43 P5	155002-43 C1	155155-43 CC10	255681-43 CFB-PB10	255800-43 UDS-10EX1	255679-43 CFBC-10	94-009-50	RV- 210GH-A	RV-210GH- KDF-A	EV959206	255525-43 GS-10RO-G	255521-43 GS-10RO-B
Туре		10"	10"	10"	10"		In-Line		In-Line	10"	In-Line	In-Line
Image							NATION BURNES	NATTO QUARTE	NATZ Space	PENTAL P	Color and G	Oshi es o
Media			Granular Activated Carbon (GAC)	Lead Sorbent Carbon Block	GAC & KDF® 55	Carbon Block	GAC & KDF® 55		GAC & KDF® 55	Everpure® Filtration System	GAC Quick Connect	GAC 1/4"NPT-F
CONTAMINANT ¹												
Sediment	•	•	•	•	•	•	•	•	•	•	•	•
Aluminum					•		•		•			
Bacteriostat ^{2,3,6,8}					•		•		•	•		
Bad taste, Cholrine, Odor		•	•	•	•	•	•	•	•	•	•	•
Cryptospordium ^{2,3,6,8} Cysts ^{2,3,6,8} , Giarda ^{2,3,6,8}				•						•		
Heavy Metals ⁴					•		•		•			
Hydrogen Sulfide ^{5,6} Iron ^{5,6}			•	•	•	•	•	•	•	•	•	•
Lead				•	•		•		•			
Pesticides, Radon, Toxaphene		•	•	•	•	•	•	•	•	•	•	•
THMs ⁴ , VOCs ⁴		•	•	•	•	•	•	•	•	•	•	•
Viruses ^{2,3,6,8}										•		
MICRON RATING	5	5	20	0.59	5	0.59	5	5	5	0.59	5	5
FILTER LIFE AT	Replace as	2500	7500	5000	11000	20,000	3900	6000	11000	750	3300	3300
RECOMMENDED FLOW RATE (GAL)	needed for good flow	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	1 GPM @ 60 PSI	as needed for flow	.5GPM @ 60PSI	.5GPM @ 60PSI
REPLACEMENT			Carbo Repla	ce filters eve	ry 3-6 month	s, or after pe	riods of inact	ivity or non-	use. Consult	SHURFLO.		
CAUTIONS	Do not use filters with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the unit. 3 All filters are for cold water use only. Do not freeze any filters or cartridges. 125 PSI Maximum Pressure on all filters and cartridges. SHURFLO reserves the right to update specifications, prices or make substitutions.											

NOTES:

- 1. All filters have varying degrees of contaminant removal dependent on flow, micron ratings and influent water quality.
- 2. Superchlorination in combination with Ultrafiltration, nanofiltation and reverse osmosis are considered better options for removal of these contaminants.
- 3. Shurflo recommends superchlorination to effectively kill bacteria and other micro-organisms.
- 4. For a complete list of Heavy Metals, THMs (Trihalomethanes) and VOCs (Volatile Organic Compounds) in your water, please consult your local water distributor.
- 5. Hydrogen Sulfide and Iron can be greatly reduced with the use of superchlorination and proper carbon filtration.
- 6. Superchlorination is a minimum of 6.7 ppm residual chlorine. For more information, please read "What Every RV & Boat Owner Should Know about Water," from Everpure and Shurflo, and Everpure's Filtration System Installation and Operation Manual for QL2-WPS & QL3-WPS.
- 7. Please be sure to follow all installation, operation and maintenance instructions that are supplied with your filter.
- 8. Reduces cysts such as cryptospordium and giardia by mechanical means. EPA Est. No. 086074-NH-001
- 9. Reduces particles as small as 0.5 micron in size by mechanical means.

HOUSINGS

Model	RV-10UC-A	158195	158196		
lmage	Complete 10" Filter housing with filter and fittings for use inside under the counter, as a whole-house filter, or outside as a city water or tank fill filter. Includes C1 Filter, Housing, Wrench, Bracket Kit, Fittings, Garden Hose.	10" Housing with 1/2" Female Ports with Pressure Relief.	10" Housing with 1/2" Female Ports.		

This chart is an overview of possible filter choices. For more information, contact SHURFLO directly

WHAT YOU NEED TO KNOW ABOUT YOUR RV POTABLE WATER SYSTEM

PROPER RV WATER SYSTEM SANITATION & MAINTENANCE

Proper system maintenance is required to prevent sickness and disease with the use of your RV water system. It's important to remember that chlorine protection in your city water can dissipate in as little as 72 hours. If the system is already dirty and slimy, or has foul odors coming from it, you should clean and flush it. Be sure to remove any in-line filters and filter cartridges from their housings before performing any cleaning, flushing, disinfection and sanitizing. Filter housings should be removed and cleaned with a bleach solution when changing filter cartridges.

CLEAN & FLUSH

Add 4 teaspoons of household detergent for every 10 gallons of tank water capacity. Fill the tank and slosh it around to coat all sides and the top of your tank. Run each fixture full force to drive the soapy water through the system and dislodge slime and debris. Fill the tank with clean water and repeat the process to rinse the system clean. You may have to remove and clean your faucets aerators if the flow has caused any debris to be lodged in the screens and reduced the faucet flow. Repeat the flush procedure as needed.

SYSTEM DISINFECTION

Next you want to disinfect your system with chlorine. This can be accomplished by introducing up to 200 ppm (parts per million) of chlorine into the system. Add 2/3 cup [6 ounces] of standard household bleach for every 10 gallons of tank capacity and fill the tank. Slosh the tank around to coat the top and all sides of the tank. Open each faucet separately and run water until the smell of bleach is evident. Don't forget the water heater. Let the system sit for an hour and open each faucet again. Run the water until the bleach smell is strong again. Repeat this procedure every hour until the smell is immediately noticeable. Let the system sit for another hour and drain the system. Fill the tank with clean water and flush.

PERIODIC SANITATION

The plumbing system should be sanitized after sitting for periods of non-use, or any time the system is opened for maintenance or repair. The system should be sanitized yearly regardless of use. To sanitize the system, add ¼ cup (2 ounces) of bleach per 10 gallons of tank capac-ity. Fill the tank and slosh it around to coat the top and all sides. Run each faucet until the smell of bleach is evident at every faucet. Don't forget to run water through the water heater. Let the system sit for 4 hours, drain and flush. Doubling the concentration reduces the wait time to one hour.

WHOLE-HOUSE FILTRATION

If all of the water in your RV tank gets pumped through a canister-type filter using carbon or KDF, it is removing the chlorine that protects the water from microorganisms. It is important to use anti-bacterial soaps and detergents with this type of system and this system should be flushed and sanitized before every use after sitting for any extended period of time.

POINT-OF-USE FILTRATION

If your system has a separate tap for drinking water, there is an in-line or housing-style filter under the sink so the water can stay chlori-nated in the lines for added protection. This separate filter will remove chlorine and impurities right before the faucet and

CITY WATER

When hooked up to chlorinated city water at a campground, your system is protected for up to 72 hours of sitting idle. Using all of the fix-tures daily should be sufficient to keep chlorine levels up to safe levels.

WELL WATER

If the campground uses well water of an unknown quality, it is best to use a sediment filter and a carbon filter, or a two stage sediment-car-bon filter to fill the tank and then superchlorinating the water in the tank to protect against any problems associated with removing the chlorine with your carbon filter.

SUPERCHLORINATION

This is just a highlight of superchlorination. For complete instructions see "What Every RV and Boat Owner Should Know About Water" and Everpure Filtration System Installation & Operation Instructions for QL2-WPS and QL3-WPS. The surest way to guarantee safe water is accomplished by adding a teaspoon (1/6 ounce) of household bleach per 10 gallons of clean water in your tank. This will raise the chlorine level to 6.7 ppm of free chlorine. The chlorine and any other impurities can be filtered out at the filter before the faucet used for drinking or cooking water, and the ice-maker.

Shurflo reserves the right to update specifications, or make substitutions



USA

3545 Harbor Gateway South, Suite 103 Costa Mesa, CA, 92626, USA 800-854-3218 www.shurflo.com

Pentair® Water Belgium B.V.B.A.Industriepark Wolstee, Toekomstlaan 30 2200 Herentals, Belgium Tel: +32 14 259 911 Fax: +32 14 259 975 shurflo.service@pentair.com

CENTRAL & SOUTH AMERICA

Pentair Water do Brasil LTDA Av. Marginal Norte da Via Anhanguera, 53.700 Jundiai/SP - Brasil CEP 13206-245 [11] 3378-5400 vendas.pwdb@pentair.com

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