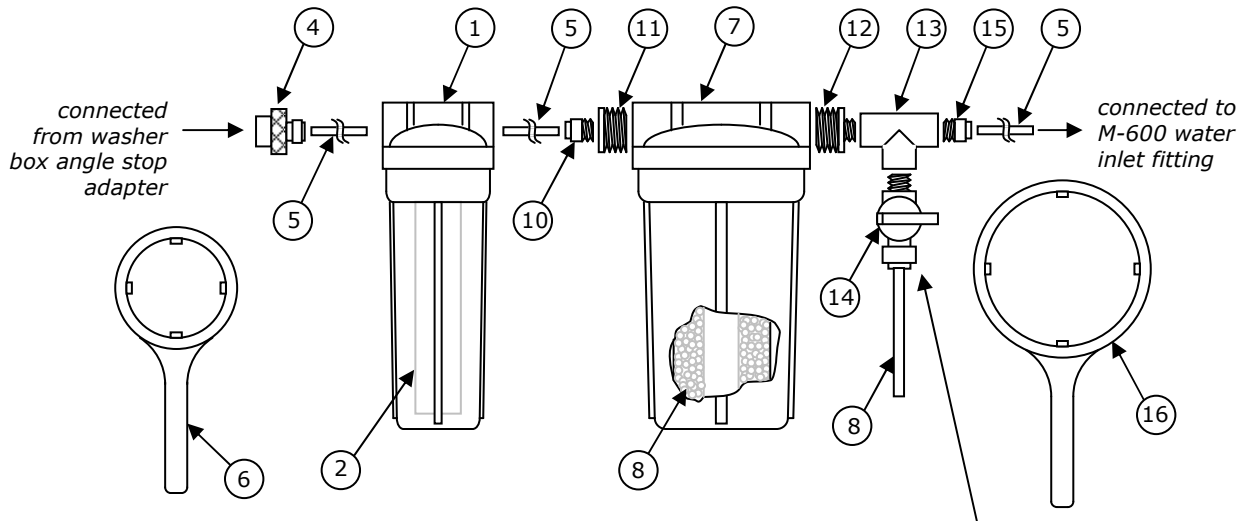


For installations where there is no whole-house water softener, the sediment filter and the softening cartridge in this pre-treatment kit will protect the M-600 from the harmful effects of sediment and hard water minerals in the household water supply. Note: in order to maintain the Sylvan Source warranty, softening cartridges must be changed according to the schedules shown on the following pages.



Note: Valve assembly #14 is used to relieve system pressure when opening cartridge housings. It is also used to flush the first two gallons of water through new softening cartridges.

Pre-Treatment Kit Parts List

1.	Sediment Filter Housing, 10 inch, 3/8" Quick Connect, Clear/Blue	
2.	Sediment Filter, Melt Blown, 20 or 25 micron, 2½" x 10"	
3.	Sediment Filter Housing Bracket with screws (item not shown)	
4.	3/4" Hose to 1/4" Quick-Connect	<i>Note: Sylvan Source has selected and tested the pre-treatment components specified here with the M-600 to insure results that provide optimum performance and taste.</i>
5.	Tubing, 1/4" OD Linear Low Density Polyethylene	
6.	Sediment Filter Housing Spanner Wrench	<i>Be sure to follow the manufacturer's instructions and recommendations for changing all cartridges and filters.</i>
7.	Softener Housing, 10" (or 20")	
8.	Softening Cartridge, 10" (or 20")	
9.	Softening Housing Bracket with screws (item not shown)	
10.	Male Connector, 3/8" Quick Connect to 3/8" NPTF	
11.	3/4" Male NPT to 3/8" Female NPT Hex Reducing Bushing, Nylon	
12.	3/4" Male NPT to 3/8" Male NPT Hex Reducing Nipple, Nylon	
13.	T-fitting, Threaded, 3/8" PVC	
14.	Shutoff Valve, 3/8" Quick Connect x 3/8" Male NPTF	
15.	Male Connector, 1/4" Quick Connect to 3/8" NPTF	
16.	Softener Housing Spanner Wrench	
17.	Tubing, 3/8" OD Linear Low Density Polyethylene	
18.	Water hardness test strips (not shown)	

Assembly of Components

1. Assemble the filter and softener housings per the sketch on the previous page.
2. Insert new sediment filter and softening cartridge into their housings. Make sure that the softener cartridge is right side up and that it slips properly over the standpipe at the bottom of the housing.
3. Screw housing onto cap and hand tighten. **DO NOT OVER-TIGHTEN.** Make sure the cartridge slips into cap standpipe.
4. Turn on water supply slowly to allow housings to fill with water. Check for leaks.
5. Open flushing valve attached to outlet side of cartridge housing and run two gallons of water through the new cartridge. The water will have a slight color at first but should run clear by the end of two gallons.
6. Close valve. The new cartridge is ready for use. Turn on the M-600 and enjoy Sylvan Source ultra-clean water.

WARNING: Do not use with water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

CAUTION: To prevent costly repairs or possible water damage, the plastic housing must be replaced periodically: every **five years** for clear housings and every **ten years** for opaque housings. If your housing is older than the recommended age, replace it immediately. Be sure to date any new housings for future reference.

CAUTION: Protect against freezing to prevent cracking of the filter and water leakage.

NOTE: Make certain that the installation complies with all state and local laws and regulations.

NOTE: After prolonged periods of non-use (such as during a vacation) it is recommended that the system be flushed using the flush valve mounted to the outlet of the cartridge housing. Flush 2 – 4 gallons of water through the system prior to use.

IMPORTANT: This replacement softening cartridge has a finite service life. It must be replaced per the schedule shown in the following section in order to maintain the warranty of your M-600.

Pre-Treatment Cartridge Change Schedule

Included with the Pre-Treatment Kit is a sticker that can be used to determine when the softening cartridge will need to be changed. Using the enclosed sticker...

1. Find the current hour reading by looking at the hour meter on the front panel of the M-600. Write this number on the first line of the “Time for Replacement” section of the sticker.
2. Determine the maximum hardness of the water that comes to the M-600 during the year. This information is available from your local water district.
3. Find the Cartridge Lifetime from the chart on the sticker based on the maximum water hardness. Enter the number on line 2 of the sticker.
4. Add the number of hours of Cartridge Lifetime to the current M-600 hour meter reading. Write that number on line three of the sticker.
THIS IS WHEN A NEW CARTRIDGE MUST BE INSTALLED.
5. Attach the “Time for Replacement” sticker to the outside of the cartridge housing or somewhere where it will be conveniently in sight.

Sticker Example: 10" Cartridge

For the purposes of this example, assume that the maximum water hardness, as determined from a conversation with the local water district, is 5 grains. From the chart on the sticker, (see example below for the 10" cartridge sticker), the cartridge lifetime for 5 grain water is 850 hours.

Also for this example, assume the current reading on the hour meter on the front panel of the M-600 is 2,800 hours. **Thus the softener cartridge in this example must be replaced at 2,800 + 850 = 3,650 hours.**

For replacement call:
CHESTER PAUL COMPANY
 (800) 227-2093
 chesterpaul.com

4" x 10" Water Softening
 Reorder: Kit #1003019

"Time for Replacement" Calculation

1. Current hour meter reading: 2,800 hrs
 2. Cartridge life from chart, based on water hardness: + 850 hrs
 3. Replacement needed at: = 3,650 hrs

Water Hardness	Cartridge Lifetime
3 grains or less (50 ppm)	1,400 hrs
5 grains (90 ppm)	850 hrs
7 grains (120 ppm)	600 hrs
11 grains (190 ppm)	375 hrs
15 grains (260 ppm)	250 hrs

Sylvan Source, Inc.
 www.sylvansource.com

Annotations:
 - Current M-600 hour meter reading: 2,800 hrs
 - Cartridge lifetime in hours: 850 hrs
 - Hour Meter reading when cartridge needs to be replaced: 3,650 hrs

Note: the process for the 20" cartridge is identical except that the "Cartridge Lifetime" values on the chart will be approximately twice as long.

Replacement Cartridge Supplier Information:

Each replacement kit consists of 2 sediment filters and two softener cartridges. Replacement cartridge kits can be purchased from:

Chester Paul Company - (800) 227-2093

1. 10" Softener Cartridge Kit: Part # SYS1003019
2. 20" Softener Cartridge Kit: Part # SYS1003029