

Adhesive Felt			\$	3.00	Anything resting on top lip of URC tank may vibrate and cause noise. A layer of felt in between the part and the tank prevents this.
Distilled or Deionized (DI) Water		grocery store			Limit IPA concentrations to <5% due to flammability with Ultrasonic transducers. My current mixture is:
Photo Flo 16 oz	Kodak	photo supply store	\$	8.00	150 oz. water, 3.0 oz IPA, 0.10 oz Photo Flo (1500 to 1)
Isopropyl Alcohol (IPA)		local			

#### PUMP & FILTER SYSTEM:

1-AA-OM inline pump	LITTLE GIANT	Surplus Center	\$	14.95	Fan cooled motor and centrifugal pump. No housing included. Need to use a case of some sort. Nylon pump head, max liquid temp 120°F
4x4x4 electrical junction box	Cantex	Home Depot	\$	9.50	Drill holes for pump intake and outlet, and vent for motor fan
HF2 White/White Flat Cap Housing (for 5" x 2.5" filters) Part No. HF2-5WHWH14	Hydronix	<a href="http://www.allfilters.com">www.allfilters.com</a>	\$	13.00	Standard filter housing. Many manufacturers. 1/4" inlet and outlet.
SDC-25-0501 1 micron polypropylene filter 2.5"x5"	Hydronix	<a href="http://www.allfilters.com">www.allfilters.com</a>	\$	3.00	
Nylon Hose Barb 3/8"ID X 1/4" MIP Part No. PL-326	Watts	Hardware store	\$	2.00	For pump inlet
Hose Barb Adapter 1/4" Barb X 1/4" FIP	Watts	Hardware store	\$	2.00	For pump Outlet. I had a brass barb, nylon is fine.
2-Nylon Hose Barbs: 1/4"ID X 1/4" MIP Part No. PL-236	Watts	Hardware store	\$	2.00	each. For Filter housing. Either brass or nylon barbs will work
1/4" ID flexible tubing and 3/8" ID flexible tubing		Hardware store	\$	0.15 to \$0.25	per foot
In-Sure Push-In Wire Connectors, 12 AWG 2-port		Hardware store	\$	2.00	per pack of 10. Same connectors used for connecting spindle motor to power cord
115 VAC Power cord of your choice		Hardware store	\$	2.00	
Locking PCB Support, Adhesive Base 561-LAD250	Eagle Plastic Devices	<a href="http://www.mouser.com">www.mouser.com</a>	\$	0.49	each. Used 3 to mount pump on inside surface of pump box.

#### Tools / Equipment

Metalworking lathe  
Bandsaw  
Drill Press  
screwdrivers  
wire strippers  
Power Hand drill  
Drill bits, taps

Arbor Press (or vice would work too) to press bronze bushing into bearing housing  
Pop Rivet Tool