

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