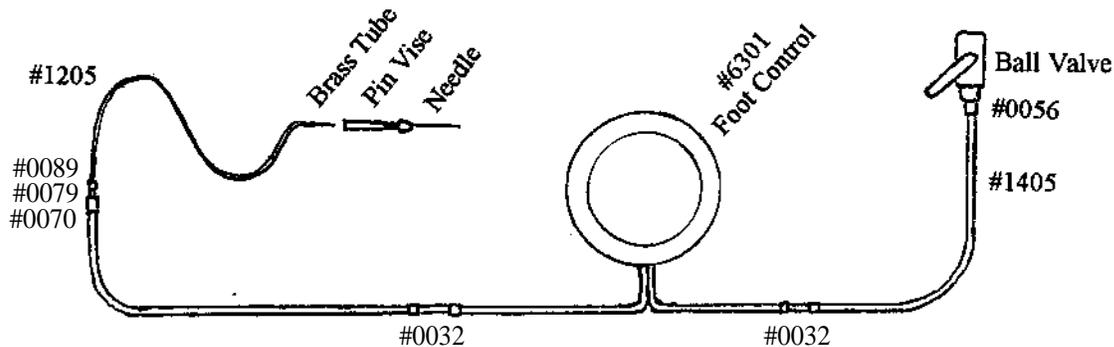


## A FOOT-CONTROLLED, CHIP BLOWING NEEDLE FOR MICROPREPARATION OF FOSSIL VERTEBRATES

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*A foot pedal of the type used by dentists is used to control a stream of compressed air. A small tube inserted into the back end of a hollow pin vise feeds the outflow from the pedal to the chuck, where it exhausts through the gaps between the jaws clamping the needle. Pedal inflow pressure is set with a ball valve off the main airline. Cost is under \$100.00.*



Order the following from DCI International. Call 1-800-624-2793 for local distributor.

#6301 Economy Disc-Type Foot Control (no signal relay) - comes with 1/4" (O.D.) in/out tubing \$66.00  
#1405 1/4" (O.D.) Polyflow Tubing \$0.55 per foot  
#1205 1/16" (I.D.) Polyflow Tubing \$0.30 per foot  
#0032 Poly Union (brass) - one will connect two 1/4" tubes \$1.55 each  
#0079 1/16" (I.D.) to 1/8" (I.D.) Barb - one connects two tubes of different sizes \$1.00 each  
#0070 1/4" (O.D.) Plastic Sleeve - clamps the larger barb connection \$0.20 each  
#0089 1/8" (O.D.) Uniclamp - clamps the smaller barb connection \$0.25 each  
#0056 1/4" Poly Connector X 1/4" Female Pipe Thread - connects 1/4" tubing with 1/4" pipe \$1.70 each

### OTHER PARTS & HELPFUL HINTS:

**Ball Valve** (plumbing supply) - Experiment to set the pressure. It doesn't take much.

**1/16" Brass Tube** (hobby supply) - Jam a short piece halfway into the 1/16" tubing with plumber's tape. This gets inserted into the back of the pin vise.

**Starrett Pin Vises** - (Small Parts Inc., 1-800-2204242) 4 sizes available.  
The smallest is too small to take 1/16" polyflow tubing. Try aquarium tubing.

**Needles** - Solid Carbide Rod - (MSC 1-800-645-7008) 12" long, 1/64" to 1/16"  
**Drill blanks** - (Main Tool 1-800-431-1040) 6" long, #41 & #52 high speed steel

**Connectine the Pedal** - The bottom barb takes air into the pedal. The top barb releases air from the pedal. If the pedal works but gushes and leaks air constantly, you have it backwards!

As with all pneumatic tools, make sure your air supply is filtered for particles, water and oil.