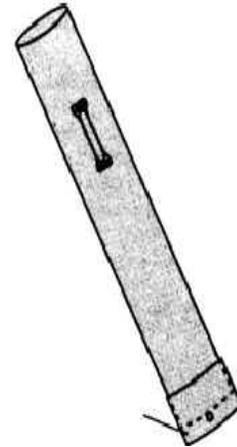


HOW TO MAKE A VIEWSCOPE

MATERIALS:

- 2 foot section of 4" PVC or ABS pipe *with black interior*
- PVC glue
- 4" PVC coupler
- Plexiglass cut in a circle (this will require you to start with a square that is at least 4"x 4")
- Clear silicone rubber sealant
- One 5 ½" pull handle
- 2 screws (if not supplied with handle)
- Foam pipe insulation or weatherstripping (for face protection)
- Drill and Screwdriver



INSTRUCTIONS:

1. Cut the PVC pipe to a length of approximately 24" if its not already.
2. Glue the PVC pipe onto the coupler.
3. Size the plexiglass to fit into the coupler (make it slightly smaller than the outside diameter of the pipe).
4. Cut and file the plexiglass into a circle. This can be tricky. A saber saw or a jigsaw with a fine-toothed blade is recommended. Make sure that the plexiglass is well secured when cutting it. It may be necessary to use a grinding wheel and/or file to get it to the proper size and shape.
5. Lay a fine, continuous bead of clear silicone on the inside "shelf" of the coupler.
6. Place clean plexiglass onto the sealant and press in, making sure not to squeeze out all of the silicone.
7. Lay another continuous bead around the plexiglass edge to seal from both sides.
8. Wet your finger and push/drag lightly on the silicone going around the outside edge circle to seal the plexiglass against the PVC pipe.
9. Drill two small (1/8") holes in the side of the coupler so that air will not be trapped in the open end of the coupling when the viewscope is put into the water.
10. Mount the handle approximately 4" from the end of the scope that you will be looking into. Use two screws (stainless steel sheet metal screws are best). Pre-drill holes that are smaller than the screw size with a drill bit. Put a small amount of PVC glue in the pilot holes and on the screws. Be sure not to over tighten the screws.
11. Cut the pipe foam or weatherstripping and glue it to fit around the end that you look into.
12. Allow the viewscope 24 hours to dry before using.