

# Syringe (Skunk) Pole

## Materials

1) 10', 3/4", 200PSI, PVC-1120 pipe. Cut to 2) 4'8" pieces & 2) 4" pieces.	<b>\$1.25</b>
1) 10', 1/2", 600PSI, PVC-1120 pipe. Cut to 2) 4'8" pieces. Save 8" section. *Make sure that the 1/2" pipe will fit inside the 3/4" pipe, some types of PVC won't fit inside each other.	<b>\$1.62</b>
1) 1/2" Tee, SCH40, for Handle.	<b>\$0.23</b>
1) 3/4" pipe fit to 3/4" External Threaded Adapter, SxMPT, and SCH40.	<b>\$0.33</b>
1) 3/4" pipe fit to 3/4" Internal Threaded Adapter, SxFPT, and SCH40.	<b>\$0.39</b>
1) 3/4" PVC Cap	<b>\$0.35</b>
1) Wire Lock Pin, Round, 5/16 x 2-3/4	<b>\$2.27</b>
1) 12cc Syringe, pack of 3, bought at Atwood's.	<b>\$2.19</b>
1) Screw, Metal, #6 x 3/8", Pan Head, 16pcs	<b>\$0.98</b>
1) Bolt, Machine, #8-32 x 1 1/2", Round Head, 6pcs	<b>\$0.98</b>
1) Washer, #8	?
1) Can of PVC Cement	?



All items except syringe were bought at Home Depot.

Cost of 1) Pole = \$10.59 minus taxes or if you double up on items 3-7, you can make 2 for \$14.16 minus taxes.

## Instructions – Refer to below photo

- 1) Cut 1/2" & 3/4" PVC pipes to lengths indicated above or to your spec's
- 2) Cut 2 4 1/2" slits on opposite sides of the 3/4" pipe, lengthwise.
- 3) With approx. 3/4" of syringe extending out from the end of the 3/4" pipe, mark the positions of the finger holds on each side of the pipe. These should be positioned between the lengthwise cuts made on the previous step.

- 4) Cut out finger hold notches at approx. 5/8" by 1/8" crossways to the length of pipe. Insert syringe to insure fit. Remove syringe for next steps.
- 5) 1/4" behind and even with the finger hold on one side make a 5/8" by 3" lengthwise slot.
- 6) Measure the distance for 10cc and make indicator notch to allow consistent syringe fills.
- 7) Insert syringe into pipe and fully seat.
- 8) From excess 8" section of 1/2" pipe, cut 3) 1/4" wide x 1/2" length pieces.
- 9) Place a very small amount of cement on the outer edge of 3 wedge pieces and place between the 3/4" pipe and the syringe, space evenly around syringe. Remember, you may need to remove wedges in the future.
- 10) Mark wedge positions 1" back from end of pipe.
  
- 11) Drill 3) 7/64 holes through 3/4" pipe fit to 3/4" External Threaded Adapter aligned with wedge spacing. Insert washers and metal screws onto adapter. Place adapter over syringe and pole. Tighten screws, but don't over tighten.



- 12) Affix 1/2" Tee to 1/2" pipe using PVC cement.
- 13) Insert 1/2" pipe into 3/4" pipe. Fully depress syringe plunger. Hold both pipes securely in the same position and approx. 2' down from handle end; drill an 11/64" hole through both pipes. About 5" lower, drill a 5/16" hole through both pipes.
- 14) Keeping handle orientation the same, pull handle back until the plunger end just pulls back out of the 5/8" by 3" slot. Hold both pipes securely in the same position and through existing hole drill an 11/64" hole through the 1/2" pipe. Through the existing hole drill a 5/16" hole through the 1/2" pipe.
- 15) Remove 1/2" pipe and using a Dremel tool, cut a slot between both 11/64" holes on both sides. Sand down cut areas. Reinsert 1/2" handle.
- 16) Insert 8-32 X 1-1/2" bolt through 11/64" holes.
- 17) Insert wire lock pin into 5/16" hole.
- 18) Affix 3/4" pipe fit to 3/4" Internal Threaded Adapter to 4" section of 3/4" pipe with PVC cement.
- 19) Affix PVC cap to other end of 4" pipe section with PVC cement.

You can attach the wire lock pin and/or paint the pole if desired.