

HalloweenAddiction.com How-to

Air (Water) Cannon

Event:

As a guest is passing by or above, a burst of water sprays up into the air from a pool of water.



Materials:

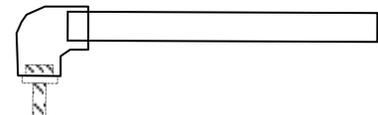
- ~1-2' of 1" (inside diameter) electrical Schedule 40 PVC (Gray) (Larger sizes and lengths could be used for high volume of water if air pressure suffices.)
- 1 – 1" to 1/2" threaded 90 degree reducing elbow (end of Pipe to air hose fitting)
- 1 – 1/2" brass / plastic hose fitting (barbed in will vary based upon the air hose you are using in your haunt)
- 1 – 1" 90 degree Elbow
 - Optional reducing elbow to 1/2" (may need a reduction fitting). (This forces the water through a smaller hole, increasing the pressure to send it higher.)
- PVC Primer and Cement
- Optional:
 - Small piece of 1/2" PVC pipe to extend from Pipe, sitting at bottom of water to just below the water surface. (needs to be below water so the Pipe will refill with water when air is turned off)

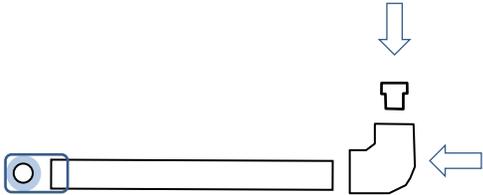
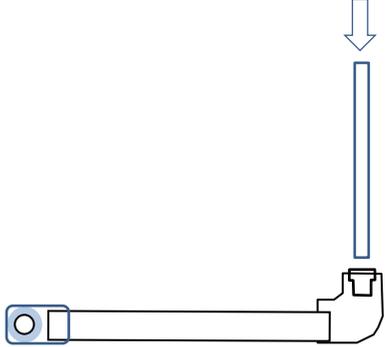
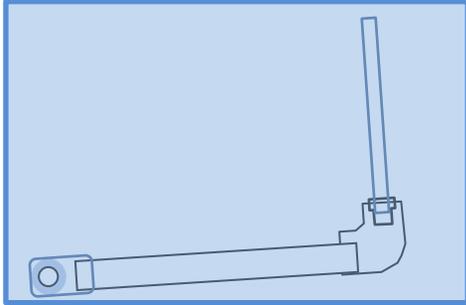
PVC Pipes - Schedule 40

Nominal Pipe Size (inches)	Outside Diameter (inches)	Minimum Wall Thickness (inches)	Nominal Inside Diameter (inches)
1/2	0.840	0.109	0.622
3/4	1.050	0.113	0.824
1	1.315	0.133	1.049
1 1/4	1.660	0.140	1.380
1 1/2	1.900	0.145	1.610

Instructions:

- 1) Cut the 1" pipe to a desired length, the longer it is the more water it will hold when submerged.
- 2) Cement the 1" to 1/2" threaded PVC Elbow onto one end
- 3) The threaded barb can be screwed into this fitting (the air hose will connect to this)



<p>4) Cement the 1" Elbow to the opposite end, if you want to reduce this opening, use a reducing elbow, or cement a reducing adapter into a standard 1" Elbow instead. (This is where the water is forced out, the smaller opening will make it go higher but restrict the volume). This Elbow should be positioned facing 90 degrees off the other end (so the air hose comes in the side, and the water is forced out the top).</p>	
<p>5) Optionally add a pipe to the Elbow/Reducer so that the pipe will extend to 'just' below the water level when placed in the haunt. This may not require cementing as you may want to vary it from year to year. Alternatively, you can place the whole assembly just below the water surface.</p> <p>6) Connect an air hose to the barbed fitting... which should be connected to a valve, and an air compressor. When switched on, the air will force any water inside the tube out of the exit side.</p>	
<p>7) Place in your haunt. The Pipe / assembly should be placed below water, with the exit side just below the water surface, but slightly elevated from the air inlet side... this way, when the air is turned off, the air left in the pipe it will naturally escape and allow water to re-fill the reservoir ... readying the cannon for the next burst of water when pressure is re-applied.</p>	

Disclaimer

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