# **How to- Assorted Air guns**

by minerug on May 3, 2009

#### **Table of Contents**

License: Attribution Non-commercial Share Alike (by-nc-sa)	2
Intro: How to- Assorted Air guns	2
step 1: Materials + Method	2
step 2: Breech Loader	2
step 3: Breech Loader v2.1	3
Related Instructables	6
Advertisements	6
Comments	6

# License: Attribution Non-commercial Share Alike (by-nc-sa) (BY:



#### Intro: How to- Assorted Air guns

For those people who have little money to spare, or if you just can't be stuffed modding sprinkler valves and such, this Instructable (more like a completable) will show you the easy way around such troubles.





## step 1: Materials + Method

Materials-

PVC Pipe (your choice of size) Assorted PVC fittings (they work best if they are the same size as the pipe...) PVC ball valve- the cheapest solution, and available just about everywhere PVC cement (primer optional) Tire valve

Drill + Drill bits Hack saw or pipe cutter

Optionals-Spray paint Cheap Scope String (for budget ghillie covering)

Until I start a new gun there won't be pictures for this, but it's pretty much self explanatory

- 1- Design your gun, with details where the tire and ball valves will go.
- 2- Lay out the appropriate fittings on the ground, and measure and cut the PVC pipe, and fit everything together (don't glue yet)
- 3- If everything fits, glue everything together (but not the bit that will hold the tire valve!), following the directions on the glue container.
- 4- Drill a hole in the fitting (preferably an end cap) that will hold the tire valve, that is a slightly smaller diameter than the valve, poke the valve through the hole and pull it until it is secure.
- 5- Glue the prepared fitting from 4 onto the predetermined place, and your done.

Note- The means of loading your gun will be explained in the following steps

#### step 2: Breech Loader

A breech-loading weapon is a gun in which the ammo is loaded at the rear or side(top) of the barrel. This is the most common loading system in Instructables.

All this requires is a half-depth section of the barrel cut out, and a cover which slides over it to 'seal' the barrel in preparation to fire.

The gun in the picture was the first I made, and therefore the simplest.

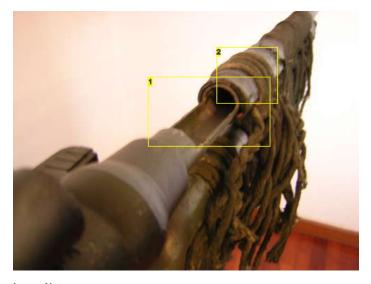




Image Notes
1. Half depth cut-out
2. Sliding cover



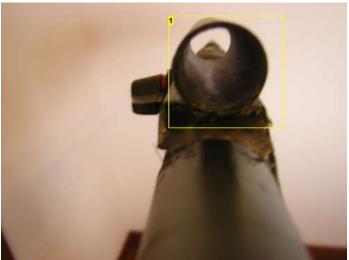


Image Notes
1. Spare bit of pipe for 'scope'. (completely unrelated to the loading system)

## step 3: Breech Loader v2.1

Using the same principle as the Breech loader, I filed out much of the insides of a T joint, so it slipped over the barrel an attached length of pipe holds the ammo (ammo must be spherical). I then drilled a hole in the side of the barrel.

### How it works-

As the T joint is rotated from left to right, the ammo tube lines up with the hole in the barrel and drops a (marble for example) in. When the T joint is then moved back to the original position, it 'seals'.

For clarification, see attached pictures and videos.

Additional Info about this gun-I based this gun on the sten , and made it in such a way so the barrel (but not the loader) and the ammo tube are detachable for 'transport'.



Image Notes
1. 'Modified' T joint
2. 'Magazine'



Image Notes
1. Open (right side of barrel)





Image Notes
1. Sealed (left side of barrel)







# Related Instructables

barrel size.

Shot over

**100yrds!** by

Hasersys



My Marble Rifle (slideshow) by Mattrox



**Piston Valve Air** Gun (slideshow) clemsonguy1125



Launch it: Cheap, Super powerful air gun. by 9732246250



The \$6

Airsoft/Paintball Bazooka by DWordDtour



Air powered **PVC** water bottle launcher

Whitedude0728



Nerf Gun **Modification** by modmaster

# Comments

14 comments

**Add Comment** 



#### samdaman says:

can you only add an air trigger if you have a modded sprinkler valve?

Aug 8, 2009. 2:42 PM REPLY



#### minerug says:

I think so, But I can't get sprinkler valves where I live

Aug 8, 2009. 8:19 PM REPLY



#### qeodez says:

i am going to mod this mechanism to bolt action.

Jun 25, 2009. 12:28 PM REPLY



#### mineruq says:

Jul 7, 2009. 3:27 AM REPLY My next gun, which will have a proper 'ible, will be a semi-auto bolt action one. Don't expect the gun anytime soon, because I'm trying to find some bits for it that I can't get where I live



### bombmaker2 says:

awwsum

Jul 3, 2009, 7:16 PM REPLY



# geodez says:

Jul 3, 2009. 7:17 PM REPLY



### bombmaker2 says:

lol

Jul 4, 2009. 7:13 PM REPLY



### MrAngryPants says:

No props? that camo string looks alot like my camo string hehehehe :D Anyway, i like the gun. its cool.

Jun 19, 2009, 12:19 AM REPLY



#### FunnyHacker45 says:

I like the gun its pretty cool im trying to find much stronger tubes though do u have any ideas wat to use i want to push the gun to the max.



#### minerug says:

Jun 18, 2009. 4:48 AM REPLY

Jun 16, 2009. 3:38 PM REPLY

I am currently designing \*another\* gun that will hopefully make the most of the air pumped into it, and look awesome at the same time. Since I can't get some of the fitting where I live, it will be some time before my brother (who lives elsewhere) posts the required bits here, thus delaying the instructable.



#### minerug says:

Jun 18, 2009. 4:44 AM REPLY

Stronger tubes, strong PVC cement and primer, and as few 90 degree bends as possible (they create stress points)

A few weeks ago when I was using the squarer of guns, I had pumped it to only 40PSI, I dropped it accidentally and it went \*BANG\* into two halves.



### Rozarius says:

Aug 18, 2009. 10:24 PM REPLY

PVC isn't especially good when it comes to impact, compounded by the fact it was under pressure. I might not be 100% correct about this, but your paint might also cause the PVC to break down quicker than normal. I install Irrigation systems for a living and use this stuff all the time and we will sometimes paint PVC 'risers' with spray paint to disguise them amongst bushes and the like; these painted pieces of PVC become very brittle after a year or two.



cowscankill says:

May 29, 2009. 12:37 PM REPLY

magazine is very smart idea. I like the function of it. Maybe add a spring inside the mag? If you are upside down, the gun won't load:P



minerug says:

Yea, that's why I don't go marauding pigeons walking on my head ;)

May 30, 2009. 10:46 PM REPLY