

Toilet Paper Air Cannon Plans: TP Launcher



The TP Toilet Paper Cannon is more reliable and powerful than the standard combustion tp air cannon that you may have seen. It's much easier to aim and shoot due to the shape of the combustion chamber. The igniter is right by the hand hold for easy firing. It uses a new ignition system that sends a spark between two bolts located in the center of the combustion chamber.

TP is very fun to launch. You can launch a whole roll of toilet paper and watch it un-roll through the air. This works well for TPing someone's house, yard, trees, the whole block!

Any launcher can be used to shoot toilet paper. It just requires the cannon to have a 14" long 4" wide barrel. You will also need wadding when shooting TP. Below are instructions for making the perfect wadding. This particular launcher can shoot toilet paper about 150 feet.

TP Wadding: To make this work you might want a drawing compass to help you cut the circles. If you don't have one you can take a piece of cardboard and put it up against the barrel and trace around it. So which ever you choose to do make the circles 4" in diameter. You can use scissors to cut them out. Keep them close in size. Make 2 or 4 of these. Tape or hot glue them together. Sand the edges smooth for better performance. Another simple way to make wadding is to use a soda bottle. Push the soda bottle into the barrel and cut off the excess bottle. After the wad is cut remove and turn upside down (open end goes in the barrel first). Push the wad all the way to the bottom of the barrel and then insert the TP.

NOTE: There is enough information here in our plans to build this launcher on your own but this can be a great project for freinds to take on. Materials are available for this cannon at your local hardware store or home depot to help you build this TP Cannon for neighborhood fun.



The picture above is of the TP Cannon with 4" toilet-paper barrel.

Parts List and Assembly:

All parts are ABS Plastic:

- *1- 14 inch long 4 inch ABS pipe for a toilet paper (barrel)
- 1- 2" long of 2 inch ABS pipe (connects reducer to male adapter)
- 1- 4" x 4" x 1.5" 45° "Wye" coupling (looks like a lower case y (see pictures)
- 1- 4" to 2" bell reducer (looks like a funnel)
- 1- 4" Cleanout and cap (screw it in)
- 1- 1.5" cleanout and cap (screw it in)
- 1- 2" male adapter (attaches to reducer)
- 1- 4" to 2" bell reducer (attaches to barrel)
- 1- About 8" of 4" ABS (this connects the reducer to the chamber and chamber to the 4" cleanout)
- 1- About 3" of 1.5" ABS (this connects the chamber to the 1.5" cleanout)
- 1- One Electronic Barbaque Igniter (see below).

1 = Can ABS primer if required for cement.

1- Can ABS joint Cement (small).

Assemble all parts to look like the picture above (the picture has a 4" barrel on it to fit toilet paper). Cut the ABS to length. Now take the ABS cement and put it on one joint at a time. Meaning you put it on the joint then assemble it right away. Then go on to the next one. Make sure you don't get any glue on the threads of the cleanouts. Make sure all parts are fully pushed together.

Ignition Method

The best and most reliable ignition system seems to be a BBQ grill igniter coupled to two opposing sharpened bolts that almost meet inside the chamber (picture below). The gap can be as large as a 1/4".

The bolts were sharpened to help the spark make it across the gap.

The BBQ igniters were available at both Orchard Supply Hardware and Home Depot in my area for around \$10.00. The igniter comes with a nut and washer, so it is just a matter of drilling the appropriate sized hole in the handle, inserting igniter and bolting it securely in place.



Mount the igniter on the 1.5" section of the "Y" for easy firing. Go here to find out more on the ignition system used.

The spark jumps across the two bolts as shown.