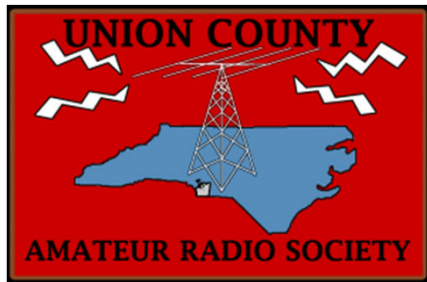


**UNION COUNTY**



2017 Antenna Launcher

**AMATEUR RADIO SOCIETY**

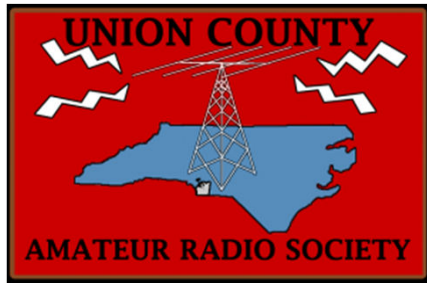


# Antenna Launcher

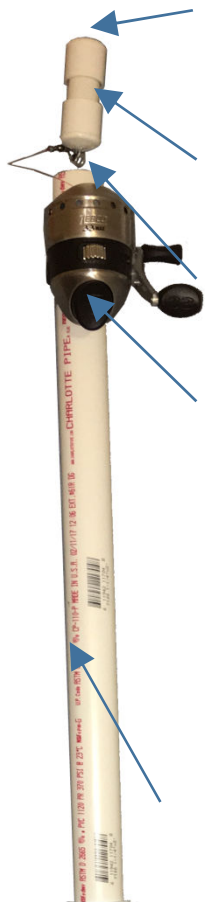


- Quick assembly of schedule 40 pressure rated PVC pipe.
- Easily launches a line over tall trees with 30 lbs of pressure (80 lbs of pressure puts it in orbit! ;-)
- Uses air alone – no dangerous flammable gases needed!
- Can be used with a bicycle hand pump – no battery or compressor needed.
- 17lb or 20lb red fishing line for pulling over limbs.
- Can be disassembled for easier transport to field day.
- Adult use only - be careful.





# Parts Description



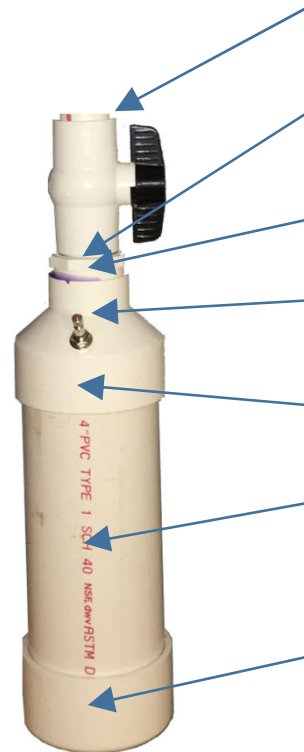
1/2" Schedule 40  
PVC Cap

1/2" Schedule 40  
Pipe 3" long

BH Screw Eye  
212x15/16 40

Zebco 33 Max  
Reel with 20lb line

1 1/4" Schedule 40 Pipe 2' long  
Pressure Rated to 370 PSI



1 1/4" PVC Ball Valve

1 1/4" Sched 40 Pipe 2" long  
Pressure Rated

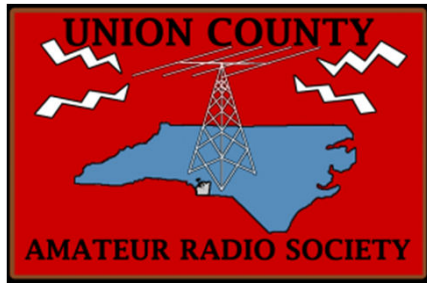
2" x 1 1/4" Bushing

Tire Valve Stem,  
Bolt-In Metal Valve

4" x 2" PVC Coupling

4" Schedule 40 Pipe 12" long  
Pressure Rated to 250 PSI

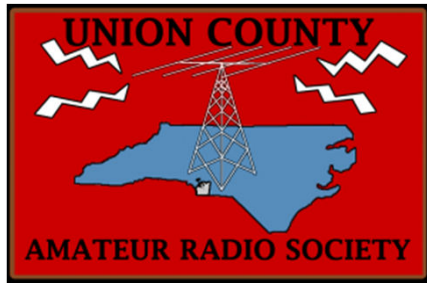
4" PVC Cap



# Parts List



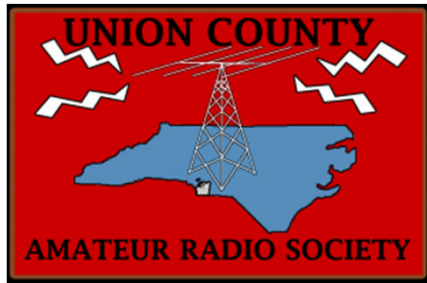
Part Description	LOWE'S	THE HOME DEPOT	Other
½" Sched 40 PVC Cap			
½" Sched 40 PVC Pipe			
1 ¼" Sched 40 PVC Pipe			
1 ¼" PVC Ball Valve			
2" x 1 ¼" Bushing			
4" x 2" PVC Coupling			
4" Sched 40 Pipe (1 foot)	<b>Buy this pipe at Indian Trail Hardware! Part No: PVC410</b>		
4" PVC Cap			
#24 Clamps (2)			
BH Screw Eye 212x15/16 (40)			
Tire Valve Stem (NAPA)			
Zebco 33 Max Reel with 20lb line (Walmart)			



# Assembly Instructions

1. Drill a hole  $\frac{3}{4}$  of the way "up" the 4" to 2" PVC Coupling and tightly install the Valve Stem.
2. Cut the 4" Schedule 40 pipe to a length of 12 inches for the air tank.
3. Sand and glue the Coupling and the Cap on the air tank.
4. Sand and glue the bushing into the Coupling.





# Assembly Instructions

5. Cut, sand and glue a 2" long piece of 1 ¼" Pipe into the bushing
6. Sand and glue the PVC Ball Valve before gluing it to the 2" long PVC pipe you glued to the bushing in the step above.
7. DO NOT GLUE the "barrel" into the valve. This makes the launcher more portable.

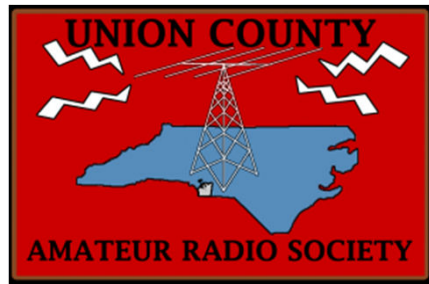




# Assembly Instructions

8. Using the #24 clamps, thread the clamp through the Zebco reel and tighten.
9. Using a center finder tool, mark the center of the  $\frac{1}{2}$ " cap. Drill a hole and screw in the BH Screw Eye 212x15/16.
10. Cut a piece of  $\frac{1}{2}$ " pipe 3 inches long.
11. Optional: add sand to the  $\frac{1}{2}$ " pipe.
12. Sand and glue the caps onto the  $\frac{1}{2}$ " pipe.
13. Tie the fishing line to the metal eye.





# Tips for Use

- DO NOT EVER point the launcher at anyone.
- Keep your hand off the valve until ready to fire.
- Take note of wind direction and make adjustments as necessary for wind drift. In some cases the “pill” may not drift but the string might
- Use only the amount of pressure needed. “All things in moderation!”. Start with 30lbs.
- Look to see what is on the other side of the tree (cars, houses, people, animals, etc...?)
- Twist the valve as quickly as possible when firing in order to get the best height and range.
- Don’t forget to press the release button on the reel BEFORE twisting the valve!
- After getting the “pill” over the tree, allow it to come to the ground and then remove the pill before attaching a rope to the line.