

ND7J LAUNCHER PLANS

PARTS LIST

- 50 - INCHES OF 1-1/4" SCHEDULE 40 PVC
(40 inches for the barrel + 5 pcs about 2" Long)
- 2 - 90 DEGREE ELBOW / 1-1/4" SCHEDULE 40
- PVC Reducers 3 inches to 1 -1/4 (Slip Fit)
- 12 to 14 - INCHES OF 3 INCH SCHEDULE 40 (Tank)
- 2 Pieces 1-1/4 (Slip) to 1" (Thread) reducer
- 1 - 3 INCH SCHEDULE 40 COUPLER
- 1 - 3 INCH SCHEDULE 40 CAP
- 1 pc pvc coupler 1-1/4" + 2 pieces 1-1/4" hose clamp
to attach fishing reel
- 1 piece 3/4 inch pvc 3 inches long / 2 - 3/4 pvc caps 1
small eye screw with 2 nuts to fit. (Per projectile)

- 1 – 1 inch Sprinkler Valve -
- <http://www.globalindustrial.com/p/outdoor-grounds-maintenance/irrigation/manifolds-and-valves/irrigation-34-fnpt-inline-sprinkler-valve?infoParam.campaignId=T9F&g>



- **1 - Air Gauge / 1/4 Inch Inlet, 200 PSI**

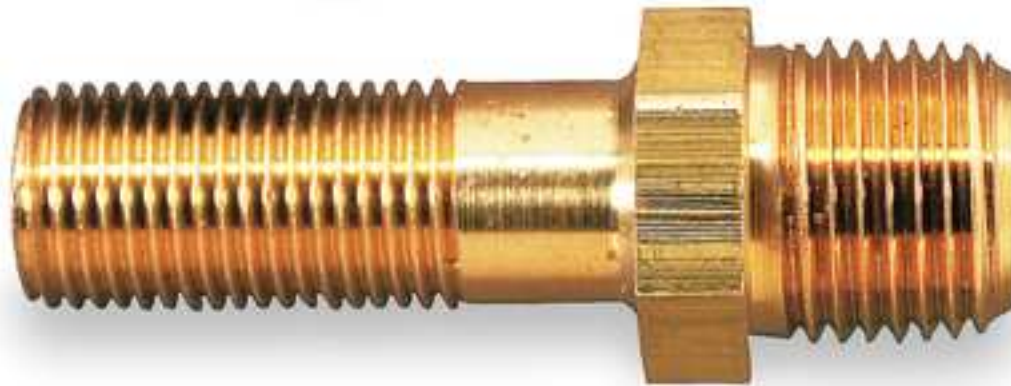
- https://www.google.com/shopping/product/5397279517010275525?lsf=seller:8049,store:5232804570888698261&prds=oid:16217008190620094129&q=compressor+air+gauge&hl=en&ei=79W0V_bLHoOBmQH7xJnADg&lsft=lsf:seller:8049,store:5232804570888698261,prds:oid:16217008190620094129,q:Air+Pressure+Gauge+-+1/4+Inch+Inlet,+200+PSI,+Northern+Industrial+Tools,lsfq:AA316eownPpYBHoJdTWqriZTZNm3w6En_7RBzQLCeEsx4TEI2WZzvbc2sZGmoUP1KjIPyPAzuKgg6_5qj7KHOjxpRtBA8oE01A,hl:en,ei:79W0V_bLHoOBmQH7xJnADg,,gclid:COM4iq-xyc4CFUg6gQodYrsOUA&lsft=gclid:COM4iq-xyc4CFUg6gQodYrsOUA



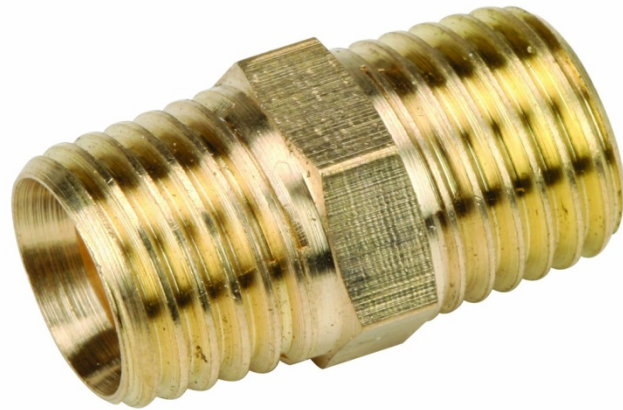
- 1 - Tire Fill Valve -

- <https://www.zoro.com/cdi-control-devices-valve-air-tank-filler-tv12/i/G3225826/?gclid=CN7D9NWxyc4CF>

- ZEvgQodiC8BeQ&gclid=aw.ds



- 1 pc ¼ x ¼ brass nipple NPT



- 1 Air Gun Nozzle



- 1/4 npt TAP
- 1 can pvc cleaner
- 1 can pvc glue
- 1 tube 5 minute epoxy
- 1 roll Teflon tape.
- Fishing reel of your choice



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- PVC pipe
- Ceramic
- Plumery
- Rubber
- Carpet
- Elastic
- Fabric
- Wood
- Paper
- Shoes
- China
- Glass
- Tents
- Vinyl
- Brick
- Steel
- Cork

ONE GUN THAT DOES IT ALL!

NET WT 2.14 OZ (61g)

- Finished product



ASSEMBLY

- Watch the first part of this presentation, and follow the “Build The Valve Video”. Set the valve aside and let dry 24 hours.
- From the 50 inches of 1-1/4 pvc cut a piece to 40 inches and set aside. (Barrel) The remaining 10 inches will be cut into 5 pcs 2 inches long each.
- DO NOT GLUE ANYTHING YET!
- Fit a 1-1/4 coupler on one end of the barrel.
- Insert one of the 2 inch pvc x 1-1/4 into the coupler. Set this aside.

- Take the 2 - 90 degree elbows, and use another 2 inch piece of 1-1/4 pvc and connect the 2 elbows, keeping them straight and to form a “U”. Do Not Glue. Place a 2 inch x 1-1/4 piece of pvc into each end of each elbow. 1 reducer (1-1/4 slip by 1 inch threaded into one elbow, then Fit the barrel onto the other 90 degree elbow. The Completed valve will screw onto the reducer. Again do not glue anything until the very end. Do Not add valve assembly yet. Set the barrel aside.

Air Tank

- Take your 3 inch x 24 inch piece of pvc and fit together the 3 inch coupler and the remaining reducers. The final piece is the last threaded reducer which will screw into the valve.
- Drill a 7/16 inch hole and use the ¼ NPT tap and tap it on the side of the 3 inch pvc. (For the air gauge).
- Drill another 7/16 inch hole, and tap it as well in the 3 inch cap. This is for the fill valve.
- Be very careful when drilling and tapping. Do not make it too big, as these need to be a tight fit.
- Use Teflon tape on both the gauge and fill valve, several wraps in a left hand turn. This will prevent it from coming unwrapped when you screw it into the tapped holes. Screw both items into the pvc. These should screw in almost all the way and be VERY tight.
- Use the reference photo to see what this should be looking like.

- You should have made 2 pieces here.
- The barrel and the 2 elbows up to the first threaded piece.
- The tank.
- Let all pvc dry 24 hours
- Use Teflon tape to do final assembly
- Left turn the Teflon tape on the 2 threaded reducers. Screw the completed valve onto the barrel section 1st.
- Screw on the Air tank to the other end. These need to be tight but do not over tighten.

- Pressure up the launcher.
- Start with only 10 to 20 lbs.
- Hit the release valve, and you should hear a whoosh. Use a 10 to 20 lb for 4 or 5 times. Keep clear of the gauge when pressurizing.
- After 4 or 5 times go up to 30 lbs. Do a few at 30, and move up to 40 lbs / 50 / 60. I have never had to go higher than 60 lbs, and I do not recommend it.

- Use the 2 hose clamps to attach your fishing reel to the last 1-1/4 inch coupler. It will fit over the end of the barrel when shooting. Reference photo. It should look close to this.



Projectiles

- Use 3 inches of $\frac{3}{4}$ pvc for each one.
- A cap on the bottom end. Glue it on.
- Fill with pennies.
- Drill a $\frac{1}{8}$ inch hole in the 2nd cap.
- Put the eye screw through with a nut on it, through the cap and a 2nd nut. Tighten against each other very well. Make 3 or 4 of these as you will lose them. Glue the top on as well.
- When launching be sure to use a good fishing knot to tying the projectile on the fishing line.
- Use a good 50 lb test line. I use bright green to see it.
- I Also paint the projectiles bright orange to be able to see and find them.
- Last but not least BE SURE TO OPEN THE BAIL BEFORE FIRING OR YOU WILL LOOSE IT!!!!