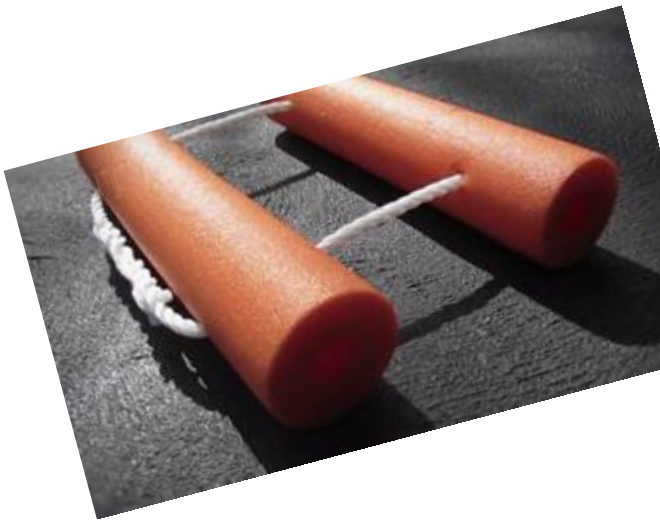


How to
build a

Single scuba tank rack



Designed around a 12L steel tank;
it also restrains 10L & 15L tanks.

Simple and cheap!

Stop that tank rolling around in
your car boot or on the boat,
build yourself a tank rack.



While I did not invent the original tank rack, I do believe I have come
up with a simple construction method using a Pool Noodle and rope.

The Pool Noodle



Grab yourself a standard Pool
Noodle (approx 70mm diameter).

*available from most department stores
(Big W, Kmart, BCF, sporting stores and
pool shops)*

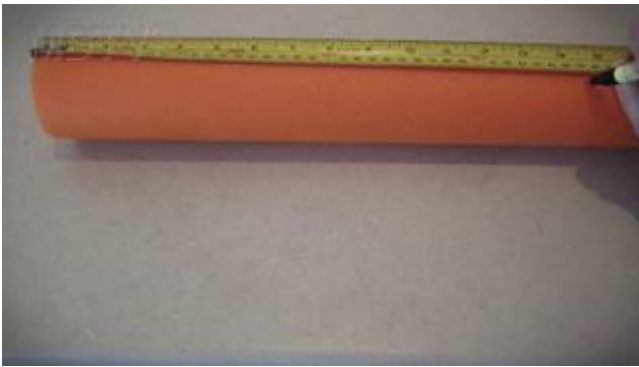


From a single Pool Noodle you
can construct 2 tank racks.

Each tank rack has 2 sections of
Pool Noodle.

1500mm divided into 4 sections
= 375mm





Mark out the cut points 375mm long for the 4 sections along the Pool Noodle



Cut the pool noodle 3 times on the markings, you can use an electric carving knife, razor blade or a hot wire.

[See the end of this document for more information on the hot wire shown here](#)



Mark out the positions of the holes, 70mm in from each end on all 4 sections



To make sure the holes are in the same line you can place the sections against a wall and measure out the same distance from the wall.



I'm using approx 8mm rope.

[you can use any size rope you have available](#)





Use a drill bigger than the rope diameter; I'm using an 8.5mm drill.



Drill a hole through both ends of all Pool Noodle sections



Drill the holes through the Pool Noodle as straight as possible, so that when they break through on the other side they will be in the same line.

The Rope



Cut 2 pieces of rope approx 1200mm long

any excess will be cut off later





Push the rope through the hole in one end of the 1st section of the Pool Noodle

to make it easier to push the rope through the holes tape the end tight



Continue pushing the rope through a 2nd section of the Pool Noodle as shown

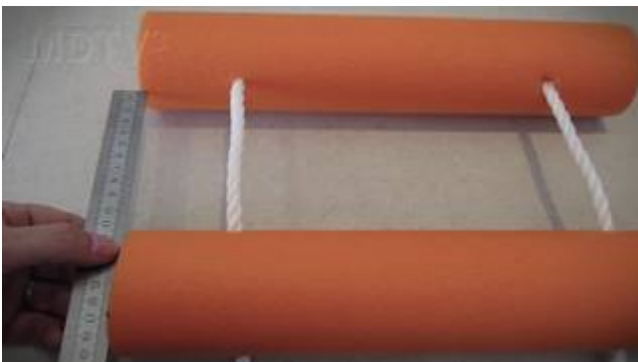


Push the rope through the remaining hole in the Pool Noodle you have just threaded



Then push the rope through the remaining hole in the 1st section of the Pool Noodle.

Pull the rope tight against the back of the 2nd section of the Pool Noodle and make each free end approx the same length



Position the Pool Noodles so that they are approx 120mm apart.

when the tank rack is complete and the rope is bedded in, the gap will be approx 130mm wide





Bend the ropes at right angles where they exit the Pool Noodle, this will show you where the 2 ropes will meet & overlap.



If the ends of the rope are melted together, you will need to cut the strands loose on both ends



Untwist a section of each rope, back to the point where the ropes met (as determined 2 steps ago)



Push the ropes together so that the strands on the right alternate between the strands on the left.

imagine the 3 strands form a triangle, have one rope with the triangle pointing up and the other pointing down



Hold one side of the strands and the rope together and tape off the other side of rope and strands





Take one of the free strands and place it over the adjacent restricted strand and under the next restricted strand, repeat this process for all free strands.

Check YouTube for more detailed information on splicing
www.youtube.com/watch?v=bPaayLAS-IA



Check your progress, there should be a free strand coming out between every restricted strand



Continue the splicing process until you run out of free strands



Remove the tape holding the other side and repeat the splicing process



Roll the spliced rope between your hands a few times to fully seat it into position.





Cut the excess off with a hot knife or heated blade for best results.

you can just cut the strands off and melt the ends using a match if you do not have a hot knife



Pull each section of the Pool Noodle out to the extremities of the rope and you have finished making your first tank rack.

you can now make the 2nd tank rack with the remaining material

The video tutorial for this project is available on my YouTube site
www.youtube.com/mdtv3

D.I.Y. HOT WIRE



For anyone interested in making a hot wire it's pretty easy.

all you need is an electric guitar string (steel) and a 12v car battery charger. (I've used the thinnest E string)



Attach the car charger leads to each end of the guitar string.

I've used weights to keep the guitar string under constant tension (because the guitar string grows as it's heated up)

