

Instructions on how to make a Go Kart

This gives you all the instructions and plans you need to make a simple go kart and it is pretty inexpensive. You might be able to find most of the parts without a trip to the home improvement store. There is a plan and parts list provided but you can modify your kart if you wish to customise it, depending on what materials you can find.

The picture below shows you the completed Go Kart, it took a home handyman about three hours to make it. It may take the girls longer depending on how good they are with tools.

Making a Go Kart is an opportunity for bringing some dads in to help; they would probably love to get the opportunity to make a Go Kart with their daughter.



Features of this Go Kart:

It is cheap and easy to make, it just requires a little bit of wood. The biggest expense is the wheels but maybe you can scrounge some up. It is steered by one of two ways. The girl's sit on the seat on the right and put their feet on the front cross piece and steer by pushing either their left or right foot. That front piece pivots on a big bolt. It can also be steered by pulling on the rope which is a nice addition for dragging the go Kart back up the hill. This Kart also has a nice braking system which is important. Don't just mount one brake, as they may slide to one side when stopping. Having two brakes will allow the kart to stop better and stay straighter.



Some Safety Notes:



When Building this Go Kart - ensure there is adequate adult supervision when making something like this. If power tools are being used, make sure they are used safely and encourage the girls to wear safety glasses.

Use strong wood and very oversized bolts and screws they are listed below. You need to use this size as you do not want any part of the Go Kart to fall apart while it is being driven.



When Riding It: Again have adequate adult supervision, the girls should wear a bicycle helmet when riding the Kart. Ride down smaller hills first to ensure that the girls know how to drive the Kart and also how to stop it.

Materials needed to make the Go Kart:



It takes just a few tools, a few pieces of wood and a bunch of nuts, bolts and screws.

Tools used:

- Circular saw or hand saw is fine
- Power Drill
- Drill Bits: variety of sizes
- Crescent wrench with sockets
- Open end wrenches
- Tape Measure
- Sand Paper
- Safety Goggles
- Duct Tape

Wood

- 1 piece of 2x6 that is 8 feet long. You cut this in half. then cut one of the halves in half. You end up with a piece that is 48 inches long and two pieces that are each 24 inches long.
- 2 pieces of wood about 20 inches long and around 2 inches wide and 1 inch thick. These are the brakes. In the picture these pieces of wood are reddish in colour.

Major Components:

- **4, 5, or 6 inch casters that do not swivel - quantity 4.** It is recommend if you can afford it to get 5 inch or even 6 inch casters. They will perform better and wear better. They can be purchased at a local hardware or home improvement store. Make sure you get the type of caster that **does not** swivel.



Miscellaneous Items:

- Required for the seat foam, a seat cushion or towel
- Rope for steering

Bolt, Screw and Hardware List. This list is for the picture at left.

Each one is in order shown from top to bottom

- 1 1/2 inch threaded hex head bolt that is 4 1/2 inches long, including four washers for it and 2 nuts. The picture below shows only two washers but you need four. This is the steering bolt for the front of the GoKart.
- 18 heavy duty screws that are hex head and 1/4 inch by 1 inch long, including 18 washers. 16 of these screws are used for the wheels and 2 are used as stops for the brake handles.
- 2 Hex head screws that are 3/8 by 3 inches long. These are used for mounting the brakes.
- 2 Heavy Duty Eye Hooks - For the steering Rope
- 4 - 1/4 x 3 inch bolts with two washers for each and a nut for each. These are the bolts that secure the back of the go Kart.

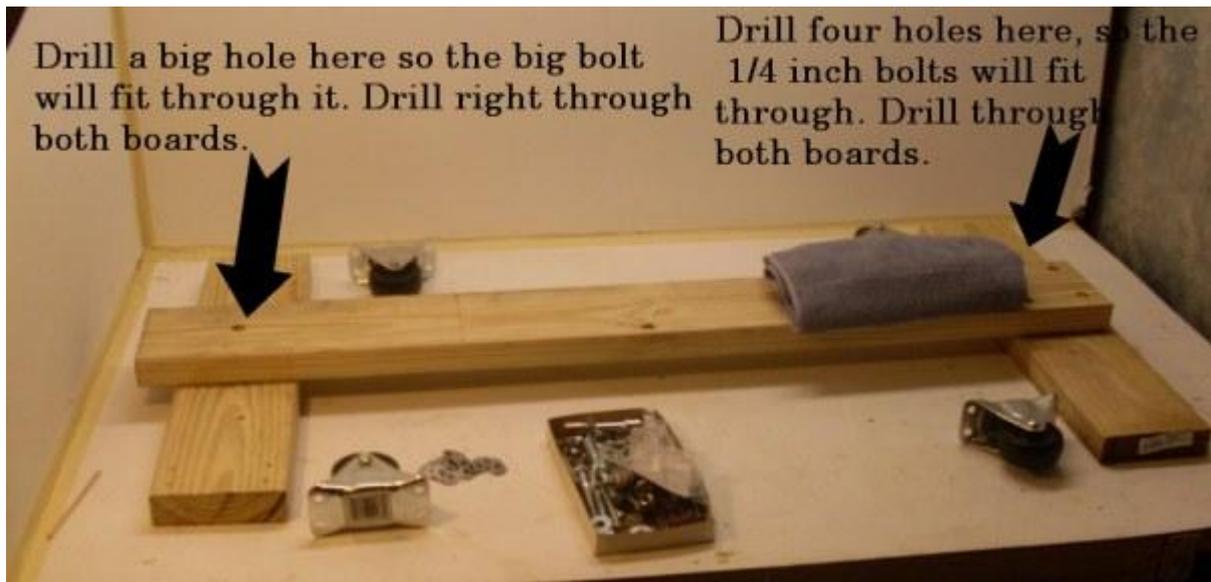


The basic idea of the go Kart is easy to understand. You can improvise but remember to use big bolts and screws for safety. Nothing should be skimpy or shaky. Everything needs to be built nice and solid.

Instructions on building the Go Kart:

When building this GoKart to be safe use all recommended safety precautions and gear and wear safety goggles!

Cut your 2 x 6 piece of wood so you end up with one piece that is 48 inches long and you have two pieces that are each 24 inches long. Now arrange the three boards as shown in the picture and drill the holes as described.



Install the big bolt in the front of the goKart. Do it this way. Insert it from the bottom with a washer between it and the bottom of the bottom board. Then insert two washers between the boards then insert one washer on the top. Finally put a nut on it and tighten it so it is tight but the board still smoothly moves as you would push it with your feet. Now install a second bolt and tighten it very tight against the first bolt. This allows it to stay tight without moving. With the nuts on

top like this you can keep an eye on it to make sure it doesn't come loose as you ride. It is also recommended you put a product called loctite on the nuts and threads. This will hold everything in place.



Counterbore the back holes on the top board and on the bottom side of the bottom board. This way the bolts will sit inside the wood and not stick out. Insert the 1/4 inch by 3 inch bolts through each hole and put a washer both top and bottom. No washers go between the boards. Screw these down tight and use a lock washer against the nut, and apply loctite if you have some. Make sure this is nice and tight and there are no sharp bolt edges sticking out anywhere.



Now turn the Kart over and bolt down the wheels using the 1/4 inch by 1 inch screws. put a washer under each one. The picture shows a nice assembly tip. Do not put a screw in and tighten it. It makes it hard to get the other ones in. Put all four in and wind them down partially. Once the wheel is lined up nice and straight then tighten all four down.



Optionally, you can attach the wheels to the 24 inch boards before you attach the boards to the main board. You can see here everything has been pre-drilled ready to assemble.



Now install the seat. First get the girls to sit on the go Kart and see how it feels. They can put their feet on the front axle to make sure their knees are bent so they can turn the Kart with their legs and feet. Make a note of where they are sitting as this is where the seat needs to be mounted. Just put the foam, towel or other material down and tape it securely in place.



Again, with the girls sitting on the Go Kart pick up the two pieces of wood that will be used as brakes. Now place them, either inside or outside their legs, whichever is more comfortable, and find a good location where they can reach them nicely. Mark the wood, drill a hole in the brakes and then secure them to the body of the Go Kart using the big 3 inch hex head screws with a washer on the outside. Make sure that when they pull on the brakes they actually lift the Kart off the ground. You may need to vary how you mount the brakes because of the size of your wheels.

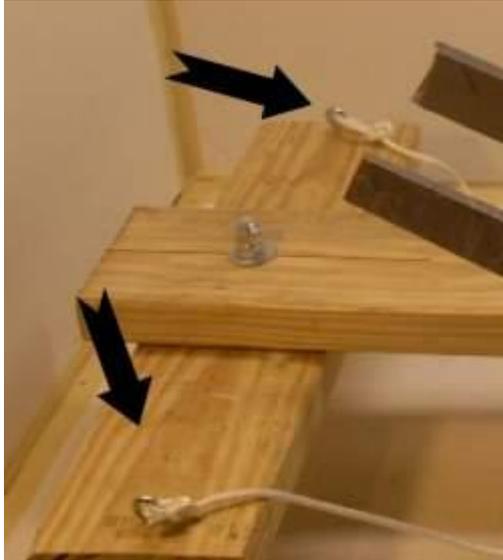


The brakes to lean forward as shown in the picture at left. This way they are easy to grab and they don't rub on the ground when you don't want them to. You do this by screwing a stop bolt near each brake. This is shown in the next picture



This picture shows the stop bolt in place. These are the two left over 1 inch screws you had after screwing down the wheels.

Make sure you put lots of duct tape at the top section of the brakes so the girls don't get splinters when you grab them. The brakes should rest naturally on the stop and everything is perfect. They are there when you need them and do not touch the ground during normal riding



The final step is to install the steering rope eye hooks. Tie a bowline knot in the rope so it doesn't come out. The Go Kart is now ready to be taken for a test ride. Get the girls to look over everything to make sure they haven't forgotten anything and check all the bolts and screws to make sure they are tight.

Some tips on making your Go Kart Faster and Better

It should be painted!! The girls would have fun painting their Go Kart and being creative with its colour.

If you want the Kart to go faster lubricate the wheels or get better quality wheels. The quality of the wheel makes a difference in the speed. Bigger wheels are preferable and will give you more speed.

Have Fun and don't forget to take photos.