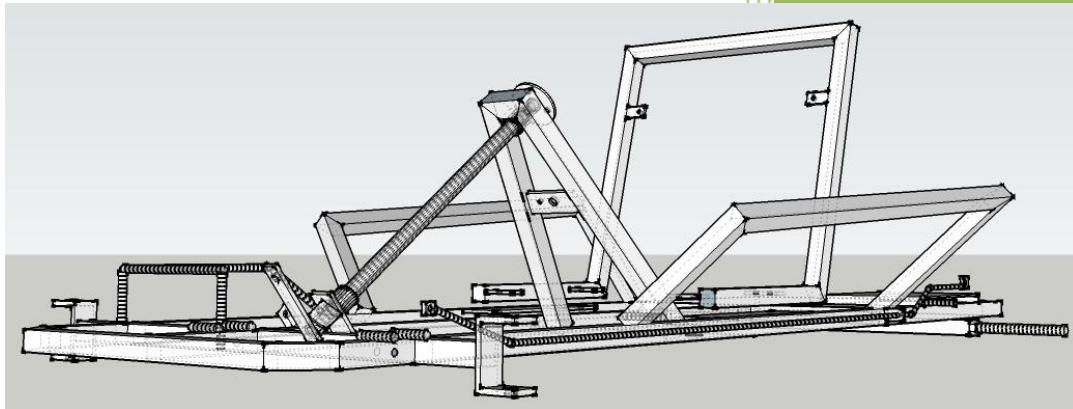


KartFab
.com

Go Kart Plans - Two Seat Go Kart



<http://KartFab.com/go-kart-plans>

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Get the exact parts kit needed to build this go kart.

Go Kart Parts Kit Link-> <http://kartfab.com/go-kart-plans> <-Click then "buy fixed axle go kart parts kit"



Go Kart Plans Overview

<http://kartfab.com/go-kart-plans>

How to Build The Go Kart:

YouTube Video Playlist

<https://www.youtube.com/playlist?list=PLzJ0LQjPgipfr9mDUN1PEpkcigEcKjuxK>



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SAFETY

SAFETY WHEN BUILDING: Wear proper PPE and use appropriate work practices when performing hot work. Ear protection, leather gloves, welding helmet, face shield, welding clothes, and safety glasses are the minimum amount of PPE you should wear when making the kart.

SAFETY WHEN RIDING: Go karts are not full size automobiles, and should not be driven on public roads. Automobiles may not see you, and run you over. Always wear a helmet. Inspect and test the brakes, kill switch, and all nuts and bolts prior to riding. Familiarize yourself with the kart before driving faster. Knowing the difference between the brakes and the gas is a huge deal. Accidents can occur from running into things because you didn't brake, weren't familiar with the go kart, or lost traction around a corner. You can throw a rider off of the kart by swerving or even turning unexpectedly. It is best for the passenger to put his or her left arm on the backrest, and right hand on the side rail to avoid slipping off around corners. While the center of gravity of the go kart is very low, the possibility of flipping when turning exists. Slowly turn the wheel while driving at a significantly reduced speed when turning. The engine, especially muffler, is hot. Avoid touching it. Loose clothing (e.g. scarves), long hair, and fingers can get caught in chain, sprockets, and axles. Use common sense. It is up to YOU to be safe.



Video: Go Kart Build (Free PDF Plans)

<https://youtu.be/YPdat-4tsOc>

Shows an overview of the go kart driving.

Webpage

<http://kartfab.com/go-kart-plans>

Parts, Tools, and Materials Needed



Video: Go Kart Materials

<https://youtu.be/VRYZr0223vk>

Materials and tools used in the build.

Webpage

<http://kartfab.com/go-kart-plans/go-kart-materials>

Bulk Steel Materials -buy at steel yard	Quantity
3/16" plate (12"x12" section)	1
11ga 1"x1" sq tubing (10 ft section)	5
16 ga sheet metal (26"x20" section)	1
11ga 3/4" round tubing (18" section)	1
1"x1"x1/8" angle iron (1" section)	1
3/8" round bar (36" section)	1
1/4" round bar (72" section)	1

Tools Needed - buy at hardware store

welder
angle grinder
drill
tape measure
protractor/square
angle finder
level
razor blade
hammer

Go Kart Parts Kit click here	Quantity
140/70-6 knobby tires	4
6" rims	3
6" drive wheel with hub	1
5/8" ID 1 3/8" OD sealed bearings	8
60T drive wheel sprocket 420P	1
3/4" bore 10T centrifugal clutch 420p	1
4" brake drum	1
3/16" x 1/2" keystock	1
4" brake band	1
throttle cable (manco)	1
manco throttle return spring	1
manco brake return spring	1
heavy duty gas/brake pedals (L+R pair)	1
kill switch (1/2")	1
steering wheel	1
3/8 x 8" tie rod w/ tie rod ends	1
3/8 x 18" tie rod w/tie rod ends	1
spindle (L+R pair) 4" center to center	1
3" spindle bracket w 1/2" kingpin holes	2
seat slider (8" mounting pattern)	1
motor mount plate	1
420p chain	1
420p master link chain connector	1
bench seat	1

Nuts and Bolts	Quantity	Goes Where?
5/8-11 x6" bolt	1	driver side dead axle
5/8-11 x4" bolt	1	passenger side dead axle
5/8-11 nut	4	front spindles, dead axle
1/2-13 x 3 1/2" bolt	2	spindle brackets
1/2-13 nut	2	spindle brackets
3/8-16 x 2" bolt	1	pitman arm
3/8-16 x 1" bolt	2	L+R spindles
3/8-16 nut	3	pitman arm, L+R spindles
5/16-24 (fine thread)x 1 1/4" bolt	1	motor shaft
5/16-18 serrated flange nut	4	motor mount
5/16-18 x 2" bolt	2	brake and throttle pivot
5/16-18 nut	18	brake and throttle bolts (2), seat slider (8), drive wheel (8)
5/16-18 x 1 1/2" bolt	8	motor mount(4), drive wheel assembly (4)
1/4-20 nut	10	steering wheel (3), kill switch ground (1), brake pedal (3) throttle pedal (3)
1/4-20x1 1/2" bolt	4	seat bottom
1/4-20 x 1 1/4" bolt	1	throttle pedal (top hole)
1/4-20 x1" bolt	5	brake pedal (2), throttle pedal (1), seat back (2)
1/4-20 x 1/2" bolt	3	steering wheel (3), kill switch ground (1),

Misc materials	Quantity	Goes Where?
5/8 machine bushing	4	front spindles, dead axle
5/8 x 1" spacer	2	front spindles
1/8" cotter pin	1	brake band clevis pin
5/32" cotter pin	1	brake band welded stub
3/8 x 1 1/4" clevis pin (or universal)	1	brake band
2 1/2" OD Flat Washer	1	steering wheel
5/16" washer	4	under seat slider
5/16" fender washer	1	motor shaft
1/4 ID 3/8"OD x1/2" steel spacer	1	throttle cable eyelet
male bullet connector	1	kill switch
thread locker (blue)	1	all nuts
black paint	1	wheels
frame paint	4	3 for frame, 1 for wheels and seat back
primer	2	frame/wheels, seat back
3/4" ID x 1" spacer	2	steering shaft
4 1/2" angle grinder wheels	7	4 cut off, 1 sanding, 1 grinding, 1 wire wheel



Video: How To Cut Steel

<https://youtu.be/Ob-IVdh3Qm0>

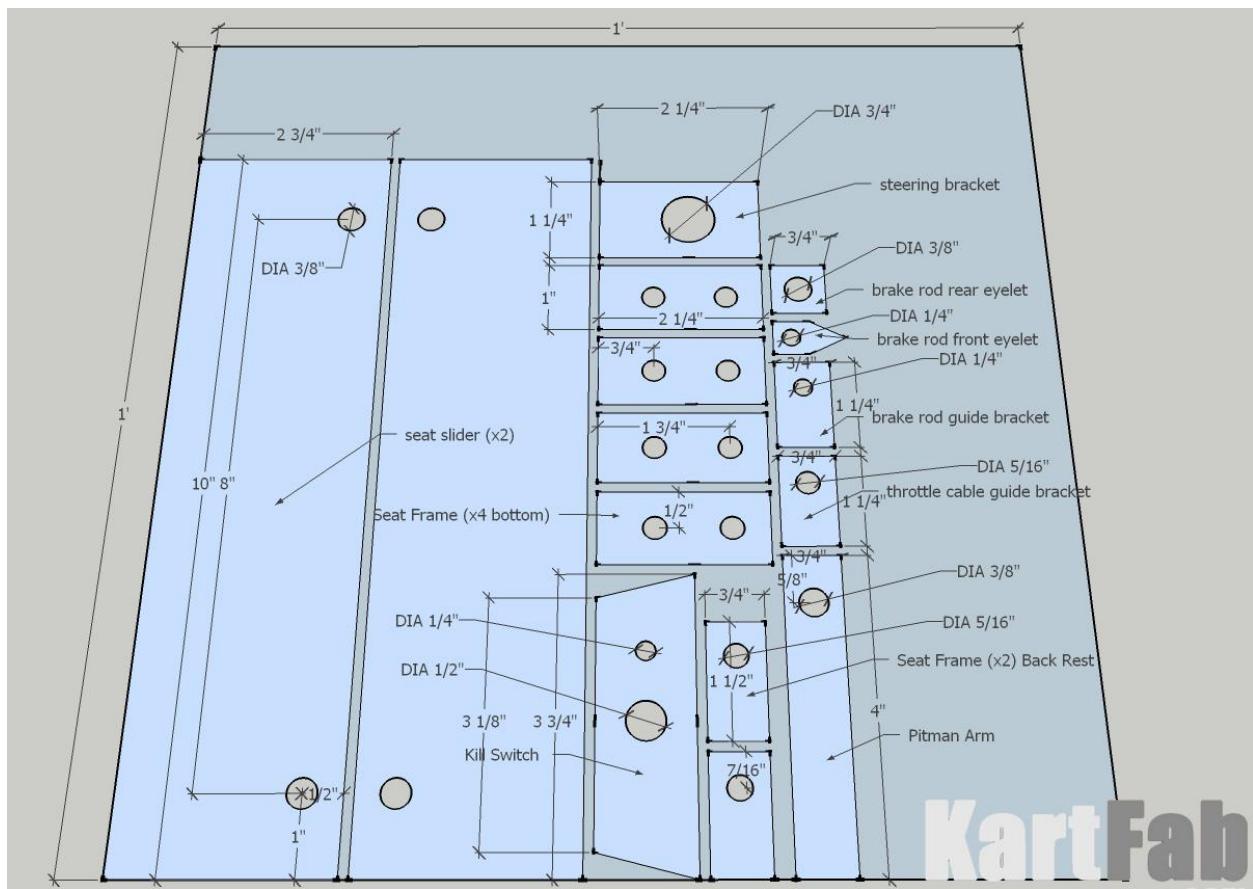
Shows how to measure and cut steel.

Webpage

<http://kartfab.com/go-kart-plans/4-ways-cut-steel-go-kart-frame>

Plate Cuts

Below is a diagram of the 1' x 1' x 3/16" piece of steel you will use to make all of your plate cuts. This is just an example of how to arrange everything to be cut. I left a 1/8" gap between parts. You can trace out the dimensions on a piece of steel with a razor blade and a straight edge. Holes can be started with a center punch and drilled out. Exact dimensions and orientation of each part are found where the part is needed in the plans.

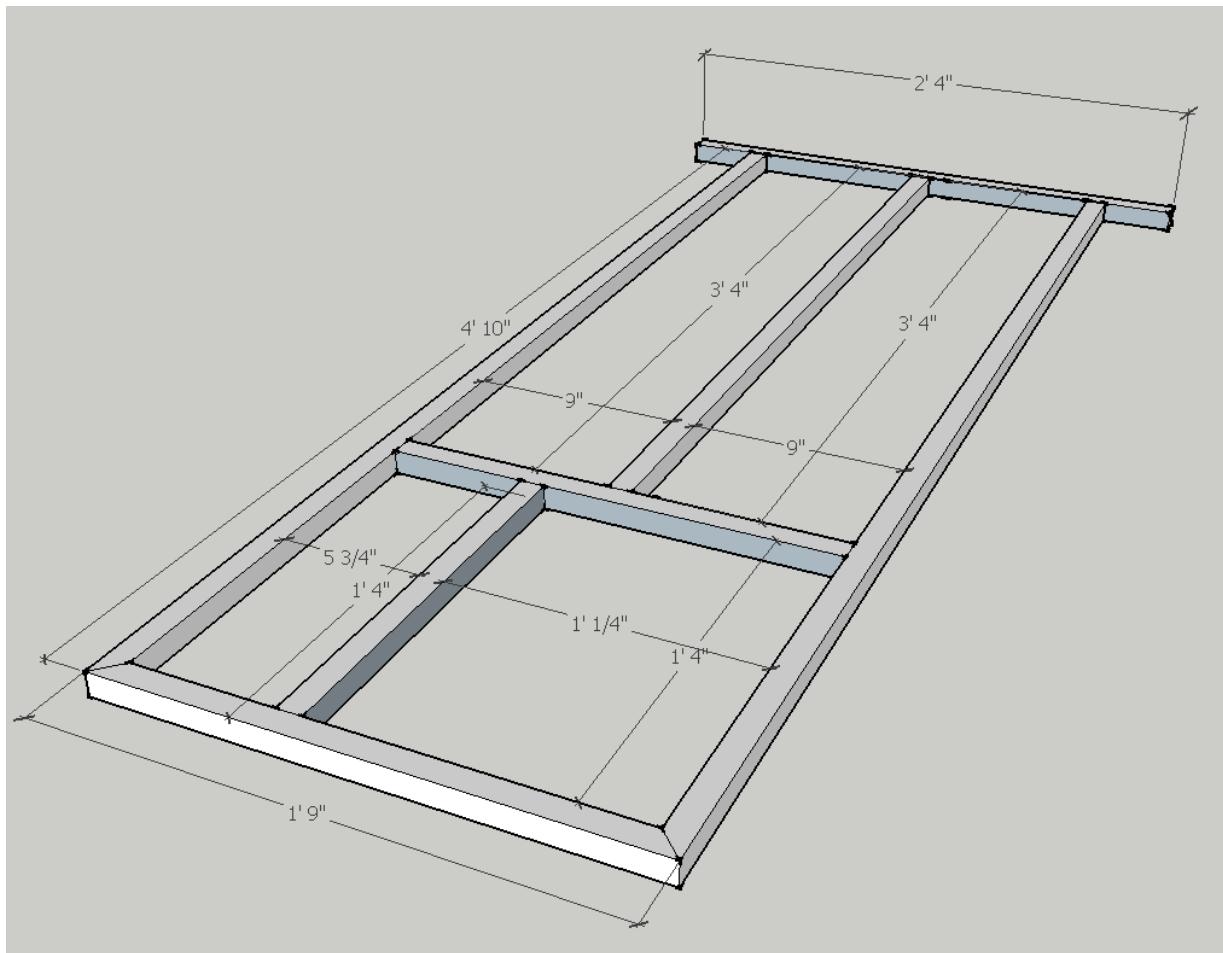


Note: Seat sliders may come in 11" bolt to bolt, or 8" bolt to bolt patterns. The above diagram assumes 8" sliders will be used.

Note: Chop saws measure 0 degrees at 90 degrees actual (a flat end cut), and protractors measure actual angles of cuts. Both chop saw degree and protractor degree measurements are included in plans.

Go Kart Base Frame

Cut out your 1"x1" steel tubing into the base frame, and weld it together. The bottom corners are cut on 45 degree angles.





Video: Weld Go Kart Frame

<https://youtu.be/rRUFsNbzNQ>

Shows how to weld frame and bumper together.

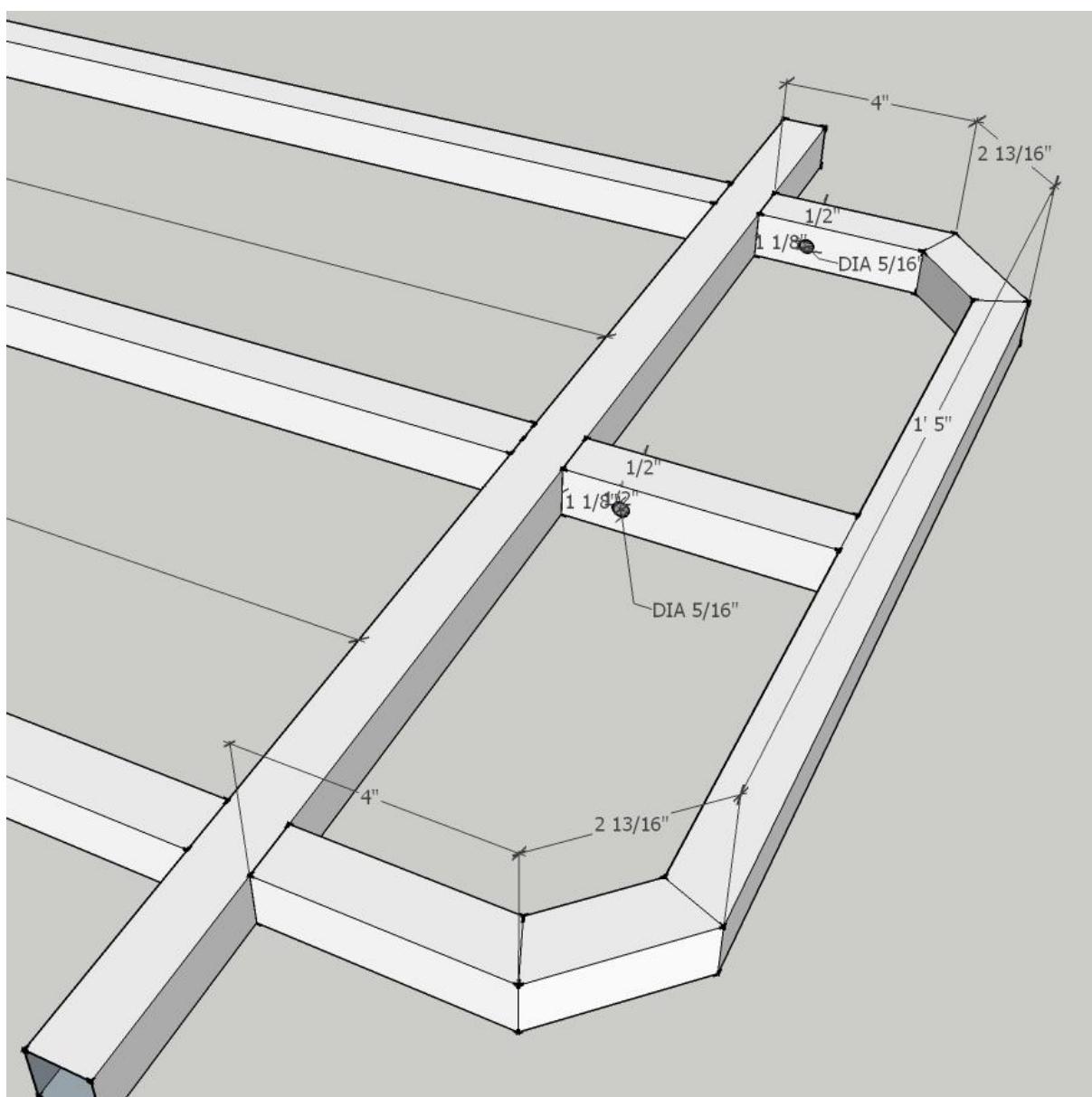
Webpage

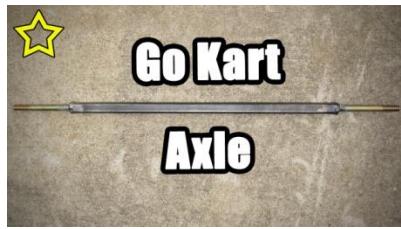
<http://kartfab.com/go-kart-plans/go-kart-frame>

Bumper

Cut out pieces for the bumper, the 'rounded edges' are cut on 22.5 degree angles (chop saw measurement) or 67.5 degrees measured from a protractor.

Drill 5/16" centered holes through the tubing at 1 1/8" from the end of the tubing for brake/gas pedals.





Video: Go Kart Axle

<https://youtu.be/iyzcepB8Kh4>

Shows how to fabricate the axle and weld it to the kart.

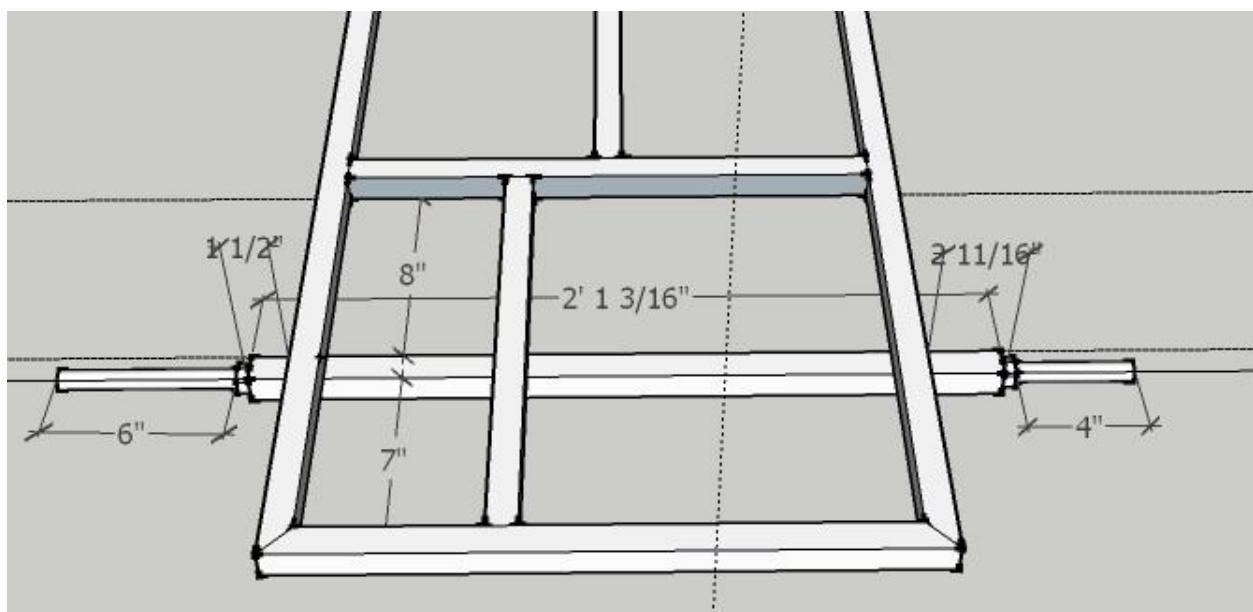
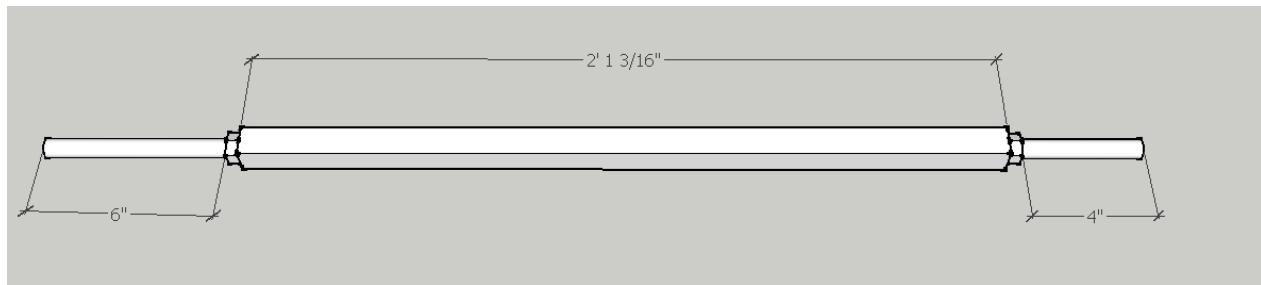
Website

<http://kartfab.com/go-kart-plans/homemade-go-kart-axle>

Go Kart Axe

Cut out a 25 3/16" section of 1"x 1" square tubing, and weld 5/8" bolts to each end. The 6" bolt goes on the driver side of the kart, and the 4" bolt goes on the passenger side of the kart.

Weld the axle underneath the base frame 7" from the inside edge of the rear of the kart frame.





Video: Go Kart Floor Pan

https://youtu.be/D43W7X_3B4E

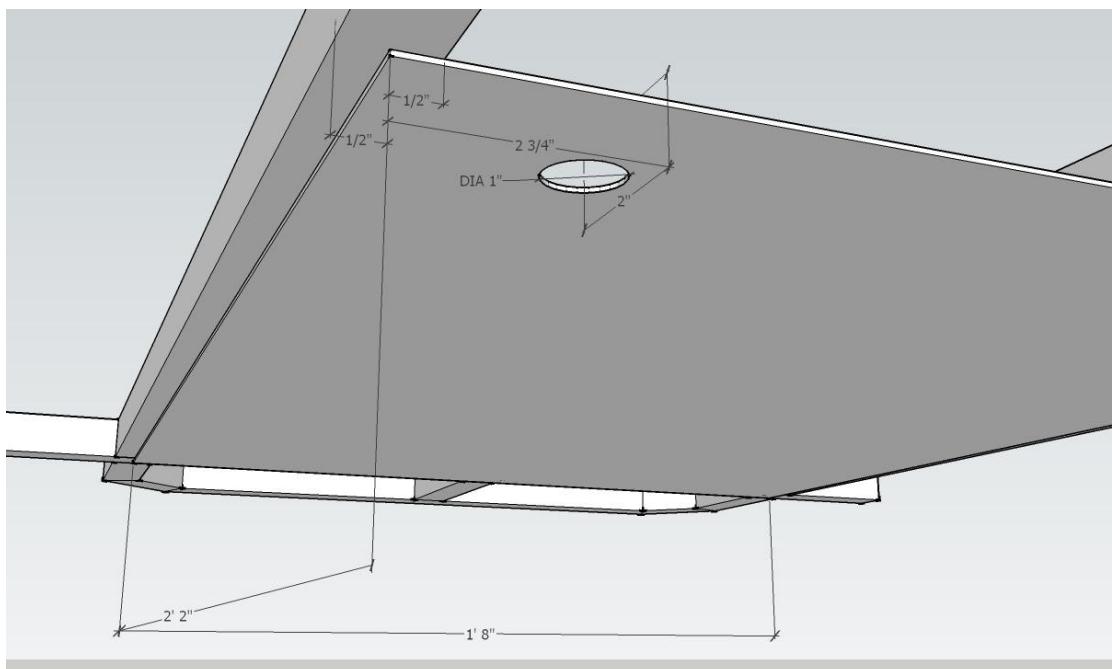
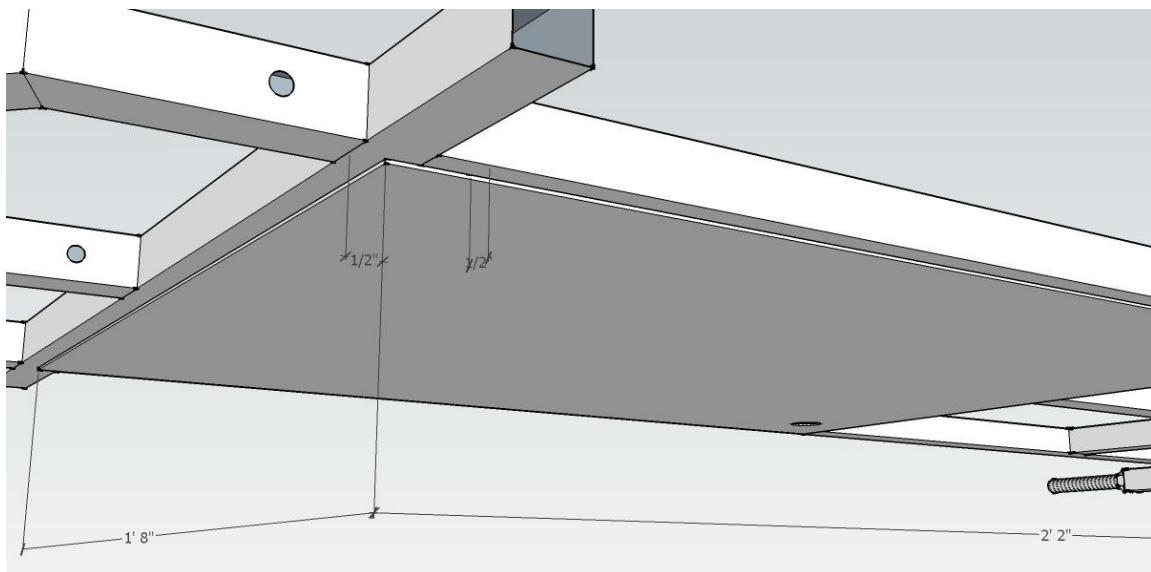
Shows the welding of the floor pan to the go kart frame.

Webpage

<http://kartfab.com/go-kart-plans/go-kart-floor-pan>

Floor Pan

Weld the 16 ga sheet metal underneath the base frame, drilling two holes through which a bolt will be inserted to a seat slider. Floor pan dimensions are 26"x 20".





Video: Go Kart Engine Mount

<https://youtu.be/66mZYIWiinA>

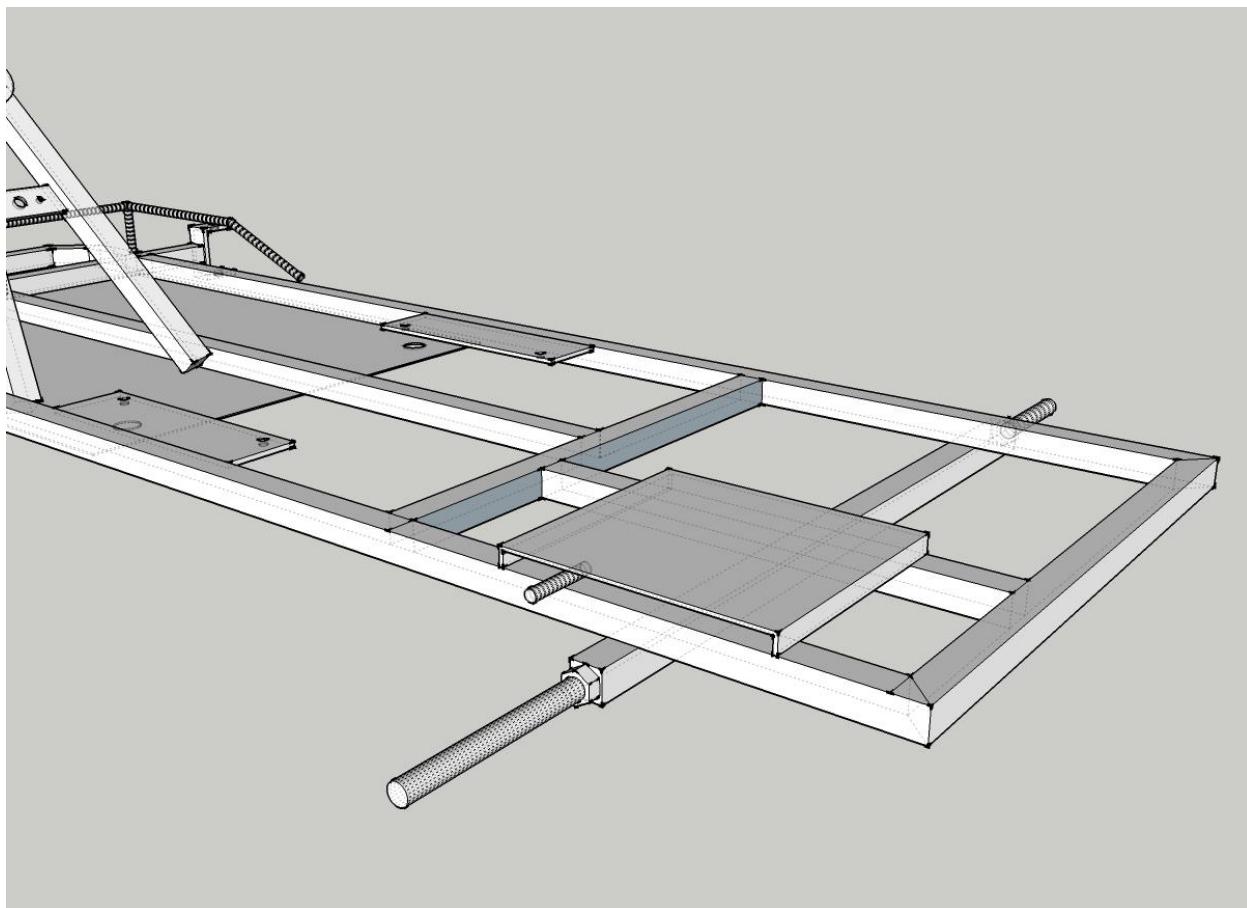
Shows how to properly line up the clutch, sprocket, and engine.

Webpage

<http://kartfab.com/go-kart-plans/go-kart-engine-mount>

Motor Mount

Weld the motor mount to the frame as the last step to ensure the engine clears the seat frame. No dimensions are included deliberately as you will need to line up the engine with sprocket and clutch installed. Add the clutch to the engine shaft, and assembled drive wheel to the axle stud. Line up the clutch teeth to the sprocket teeth with chain installed. Make sure the motor mount slots allow for the engine to slide forward, then tack the mount into place. Final welding of the motor mount should be performed as the final step of the kart build. 5/8" and 3/4" washers or spacers may be used to fine tune the alignment on either the engine shaft for the clutch, and/or the dead axle stud for the wheel assembly.





Video: Go Kart Seat Install

<https://youtu.be/hNJgy8tpCc0>

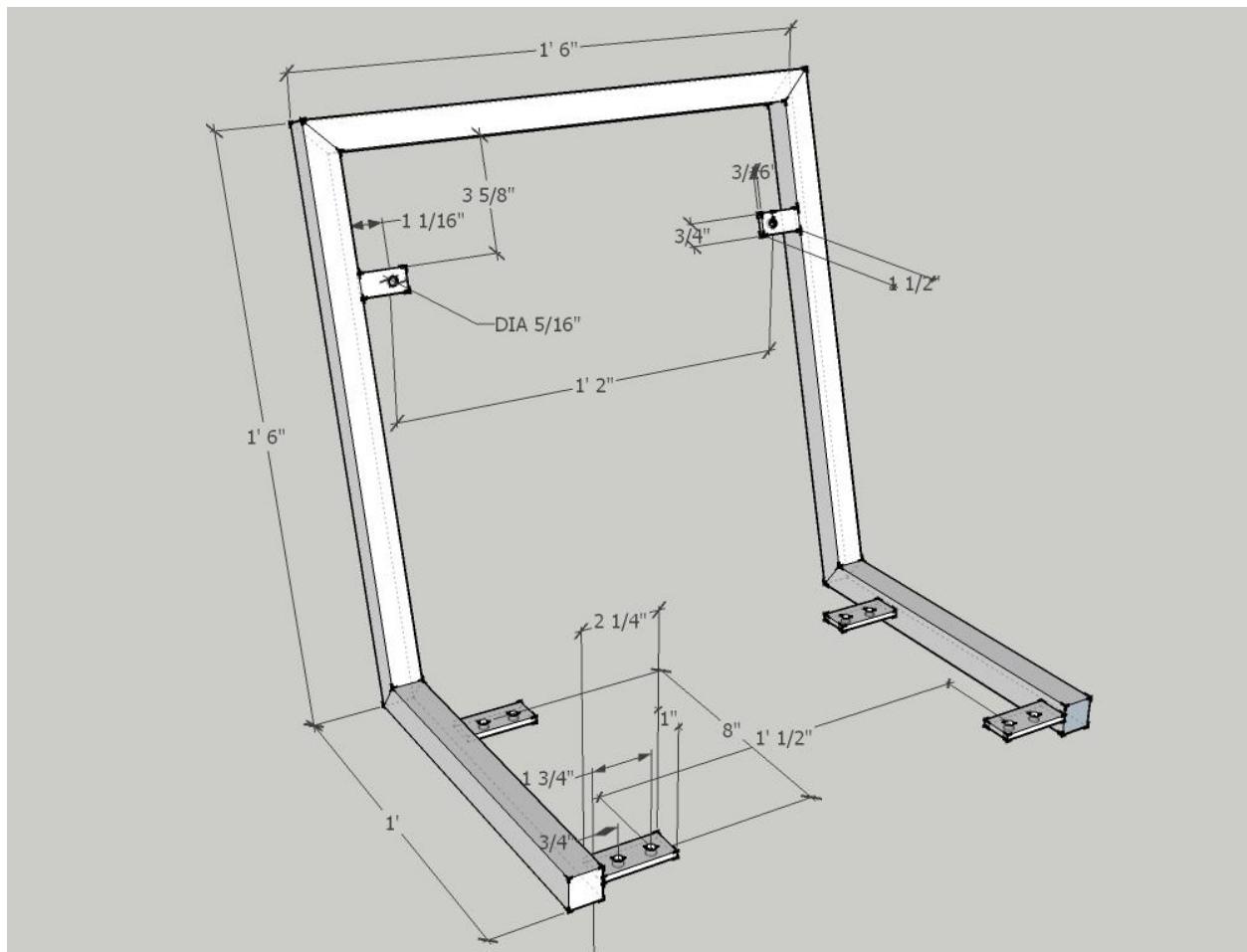
Shows how to build the seat frame for the seat and sliders.

Webpage

<http://kartfab.com/go-kart-plans/go-kart-seats-how-to-make-vs-buy-cheap>

Seat Frame

The seat that comes in the go kart kit does not bolt onto the kart itself, rather a frame you will make. The frame is then bolted to seat sliders. The seat sliders are then bolted to the frame. For the seat frame, cuts are made at 37.5 degrees (chop saw measurement) or 52.5 degrees measured from a protractor for a 105 degree incline from bottom to backrest.

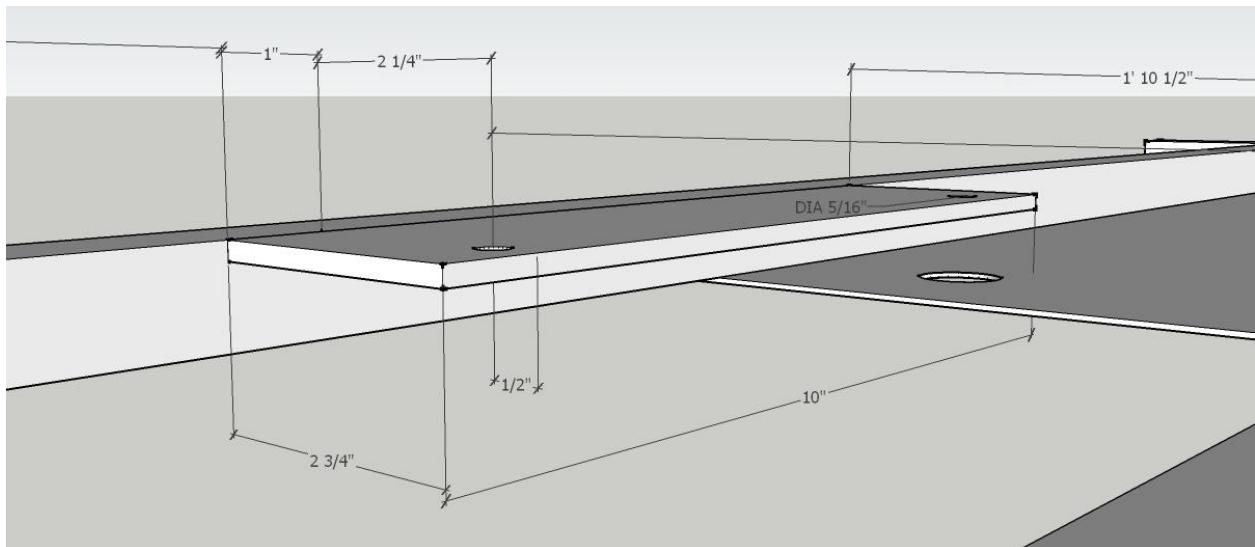
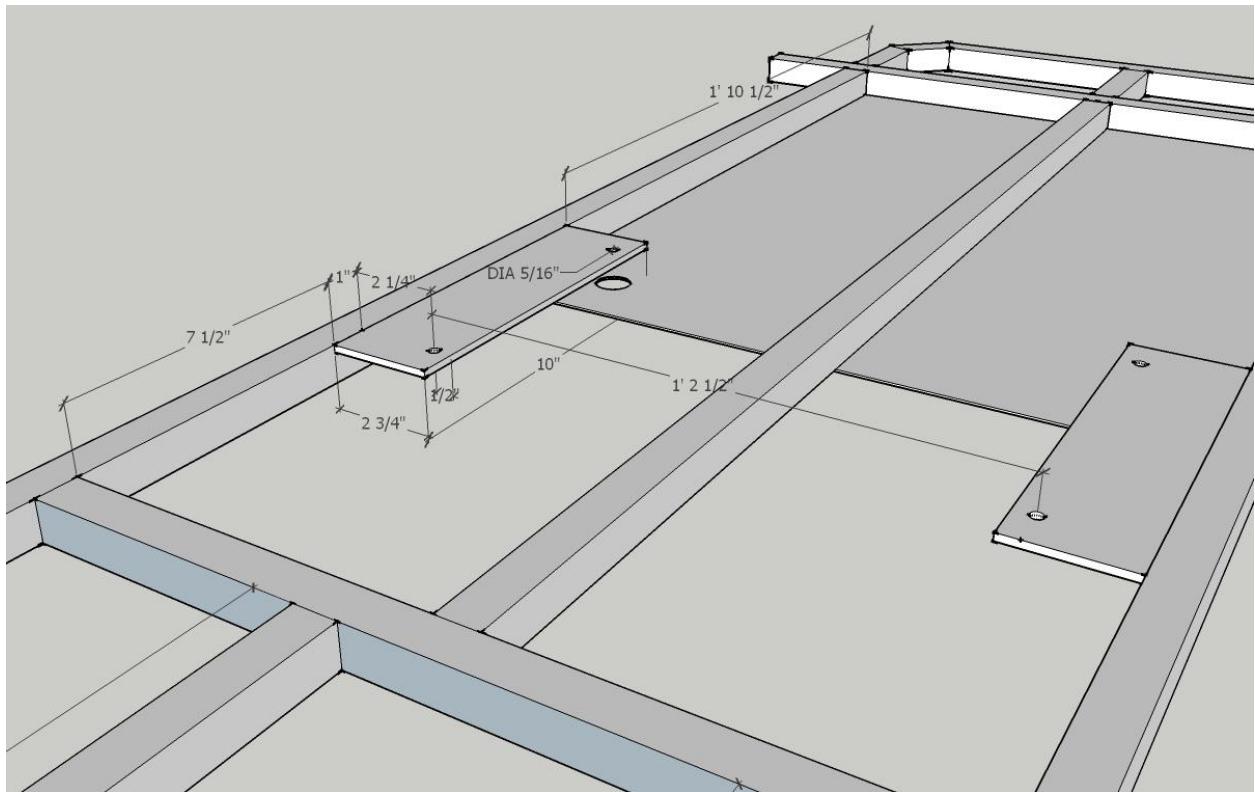


Note: If you have 8" bolt pattern seat sliders, use the above diagram. For 11" bolt pattern sliders, extend the seat frame bottom by 3", and add two additional mounting brackets to accommodate the longer slider.

Seat Slider Brace

Weld two braces to the sides of the go kart frame that will allow the seat slider to bolt to the frame.

Note: Seat slider plate should match seat slider bolt spacing (e.g. some seat sliders come in 8" or 11", extending brace is necessary for 11" sliders. For example; the brace for 8" sliders (pictured below) is 10"x 2 3/4"- 8" between holes. the brace for 11" sliders would be 12"x 2 3/4" -11" between holes.





Video: Go Kart Steering System

<https://youtu.be/7IxDPuaDyw4>

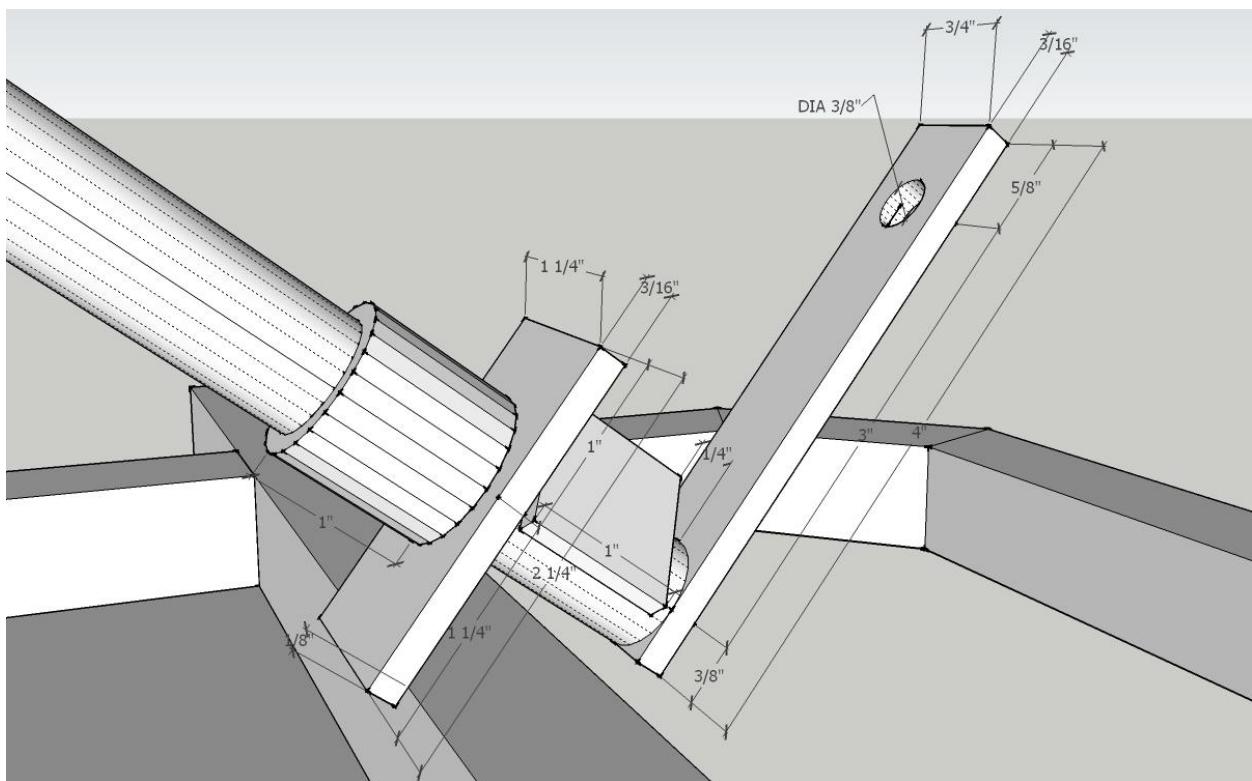
Shows how to assemble the go kart steering system.

Webpage

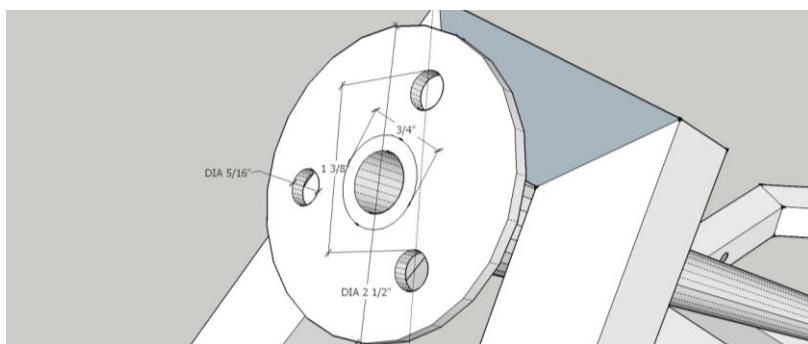
<http://kartfab.com/go-kart-plans/go-kart-steering>

Steering

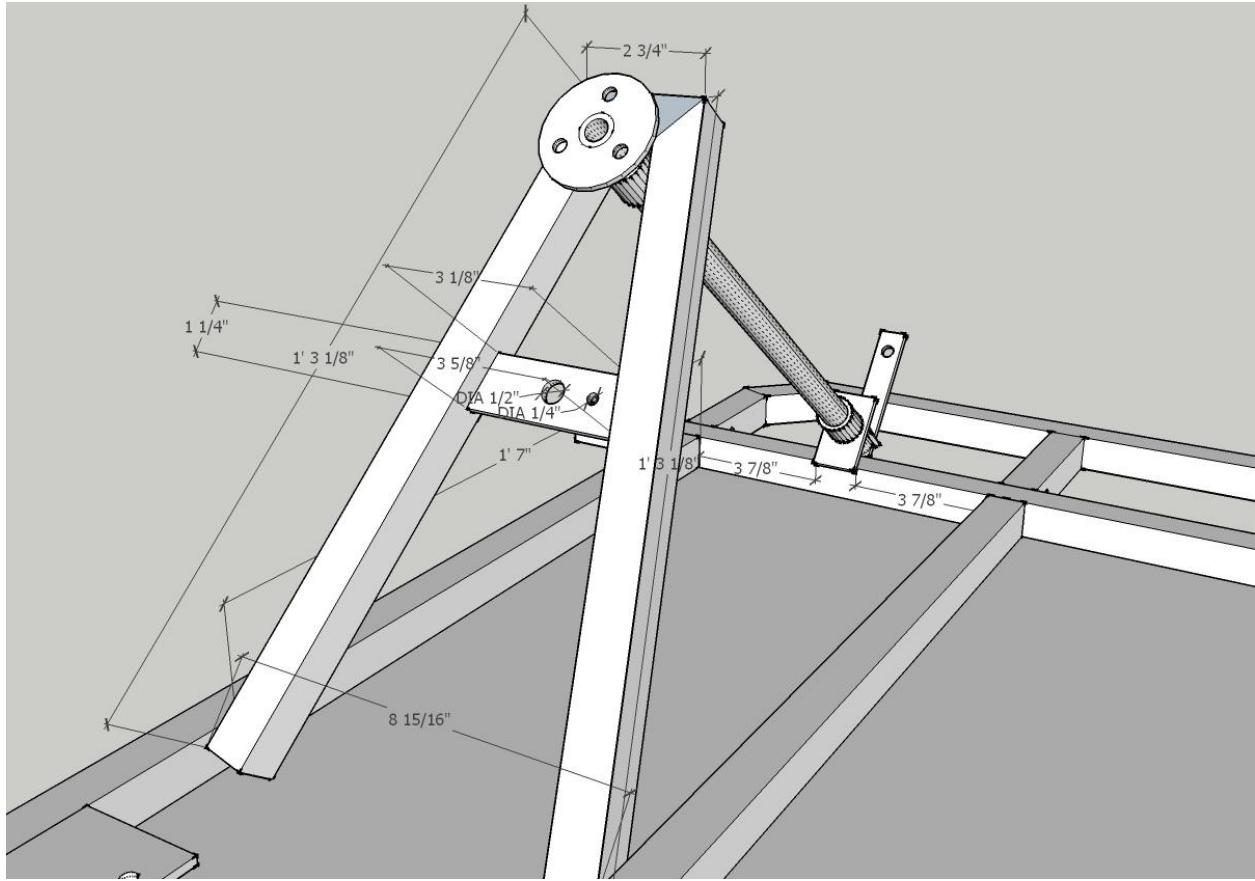
Cut out an 18" section of 3/4"x11ga tubing and weld together the steering tabs. The pitman arm, 1"x1"x1/8" angle iron, tab that will hold the shaft to the frame, and spacer are picture below.



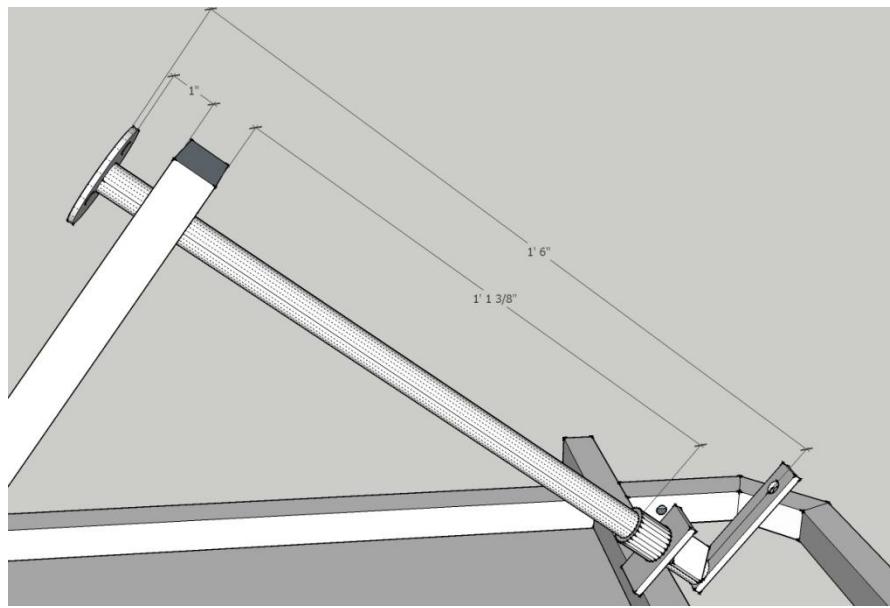
Next, insert the additional 1" spacer (you may need to grind the shaft near the steering hoop for a loose fit). Drill a 3 hole pattern onto the flat washer (the one that fits your specific steering wheel), and weld the washer to the end of the shaft.



Next, create the steering hoop and kill switch brace. Cuts are made at a 39 degree angle (chop saw) or 51 degree angle (protractor) for the hoop.

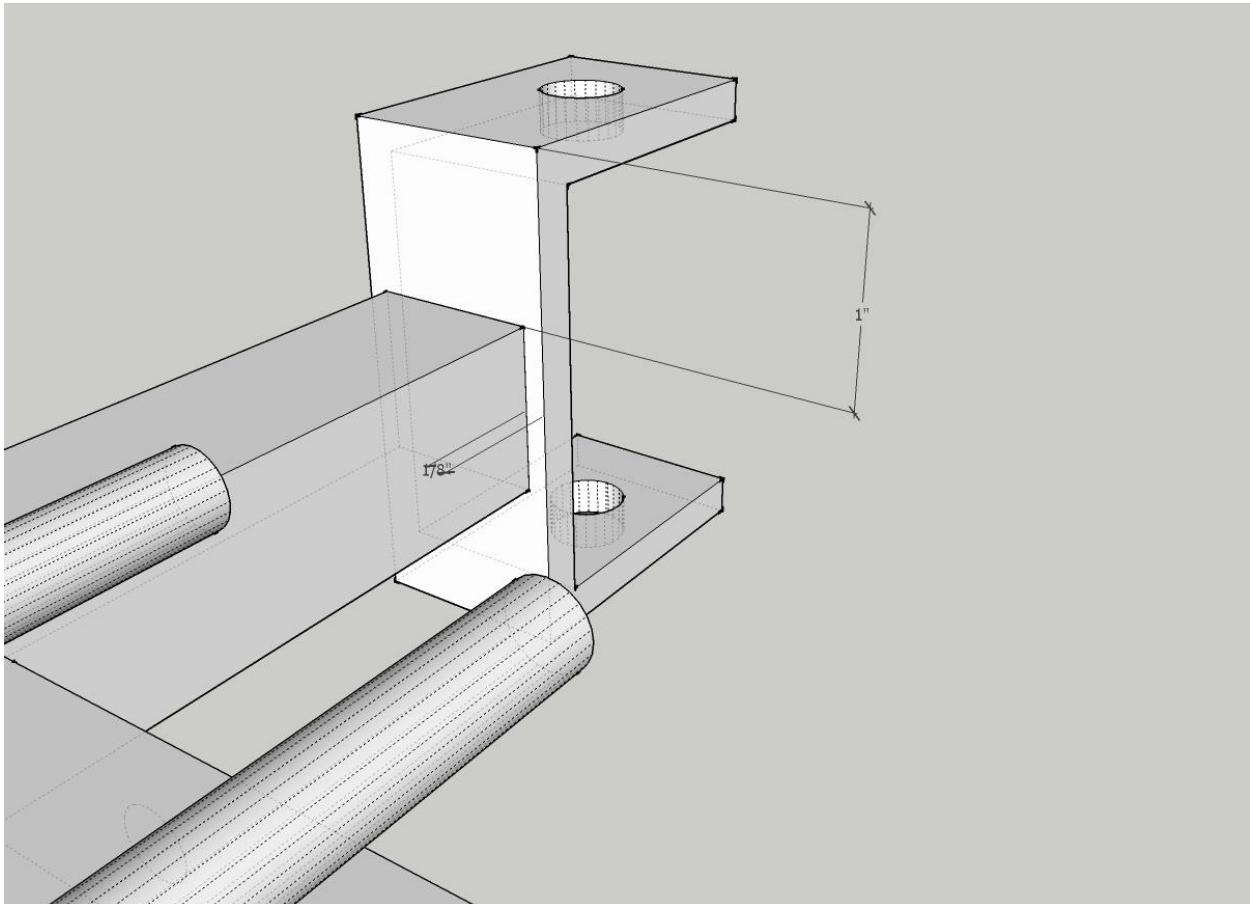


Next, verify all measurements are correct. The hoop and shaft should be at a 90 degrees to each other.



Spindle Brackets

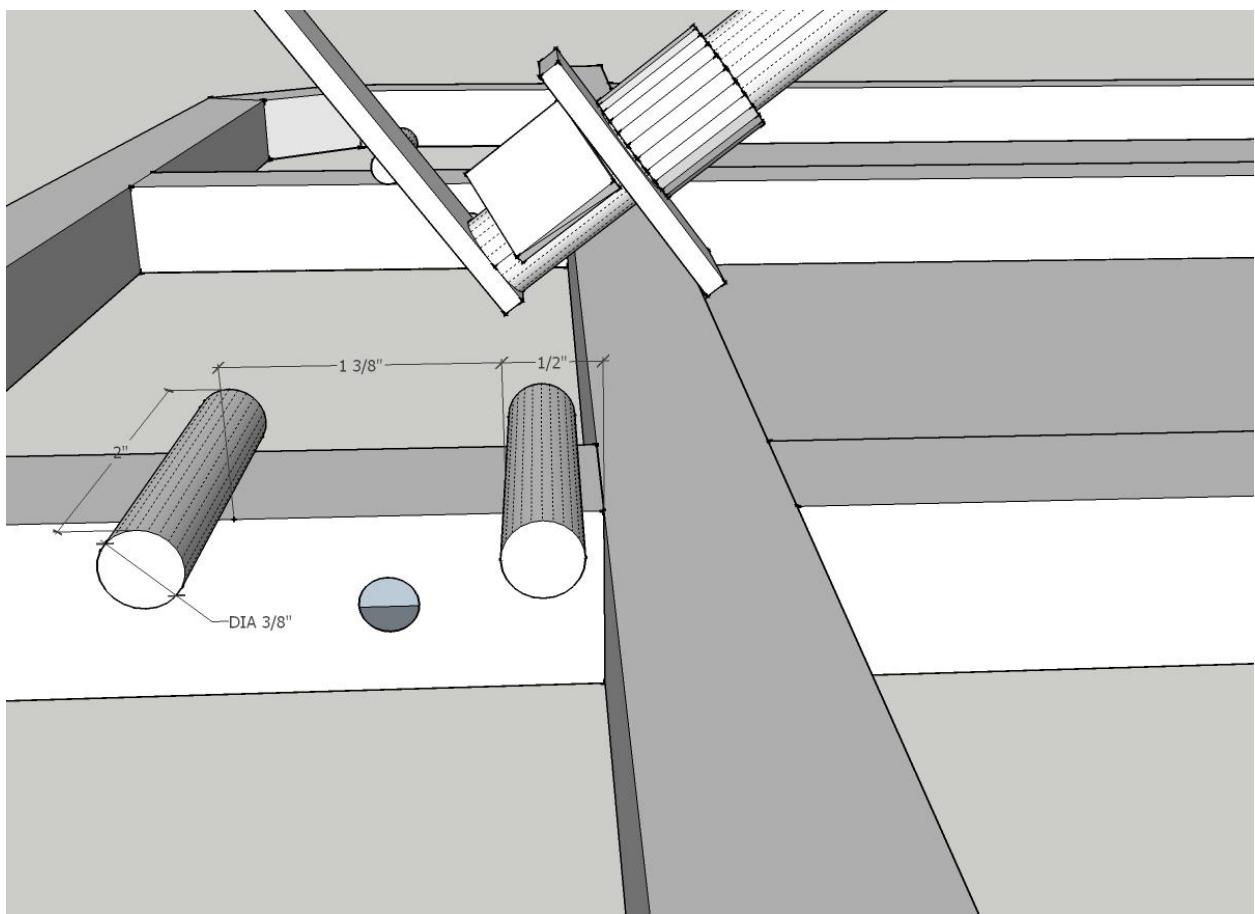
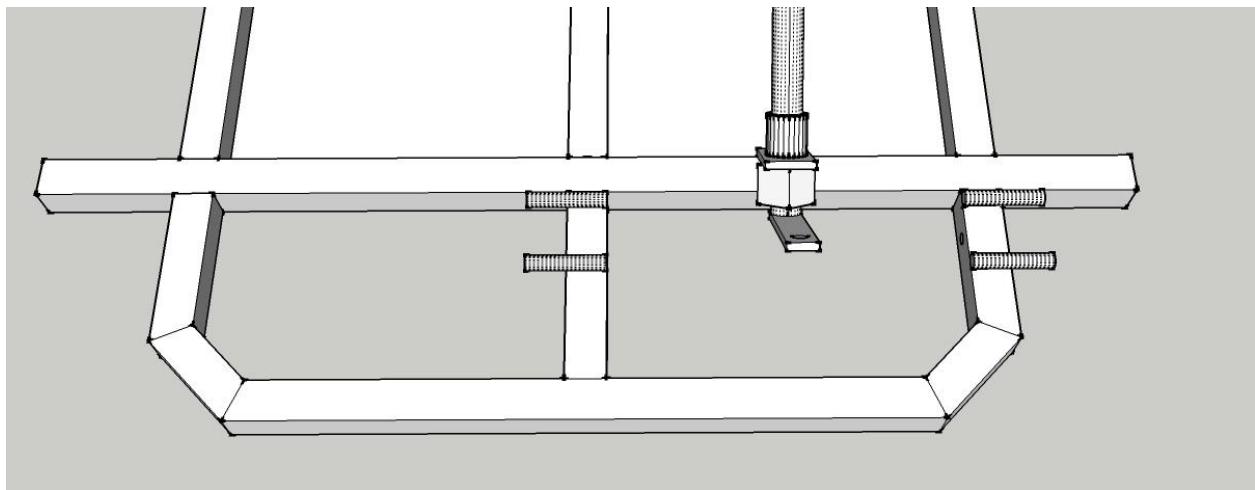
Center and weld the spindle brackets to the front axle. No camber or caster is built into this kart, and it steers well.



Note: If you upgraded to front spring suspension brackets (springer), you should center the bracket left to right. However, the longer bracket should not be centered up/down. 1" clearance from the bottom of the bracket to the bottom of the front axle is recommended.

Brake and Throttle Pedal Stop Tabs

These tabs are used to keep the brake and throttle pedals in their resting position, and full forward positions.





Video: Go Kart Brake System

<https://youtu.be/BhRFXiK2UYY>

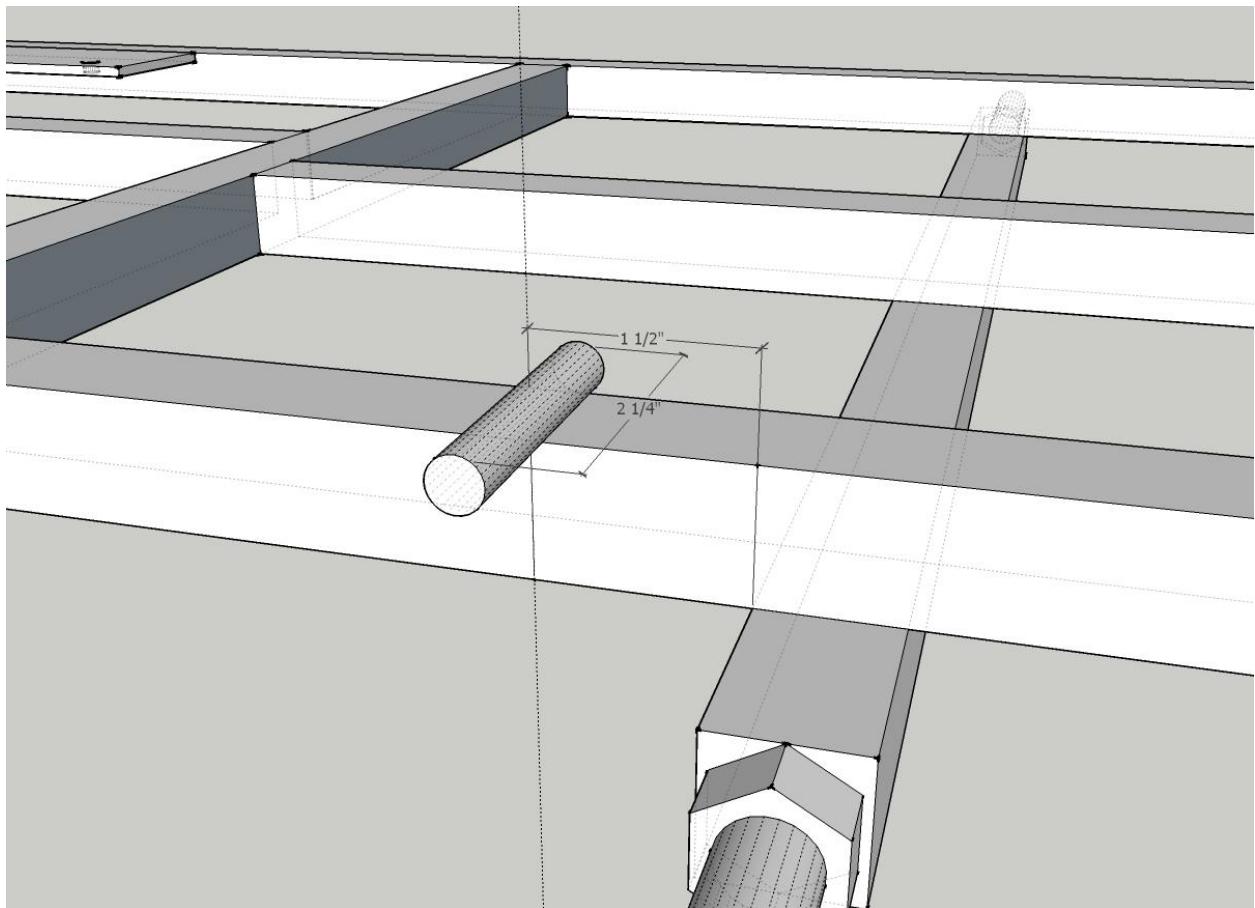
Shows how to install brake band, rod, return spring, and brake pedal.

Webpage

<http://kartfab.com/go-kart-plans/go-kart-brake-band>

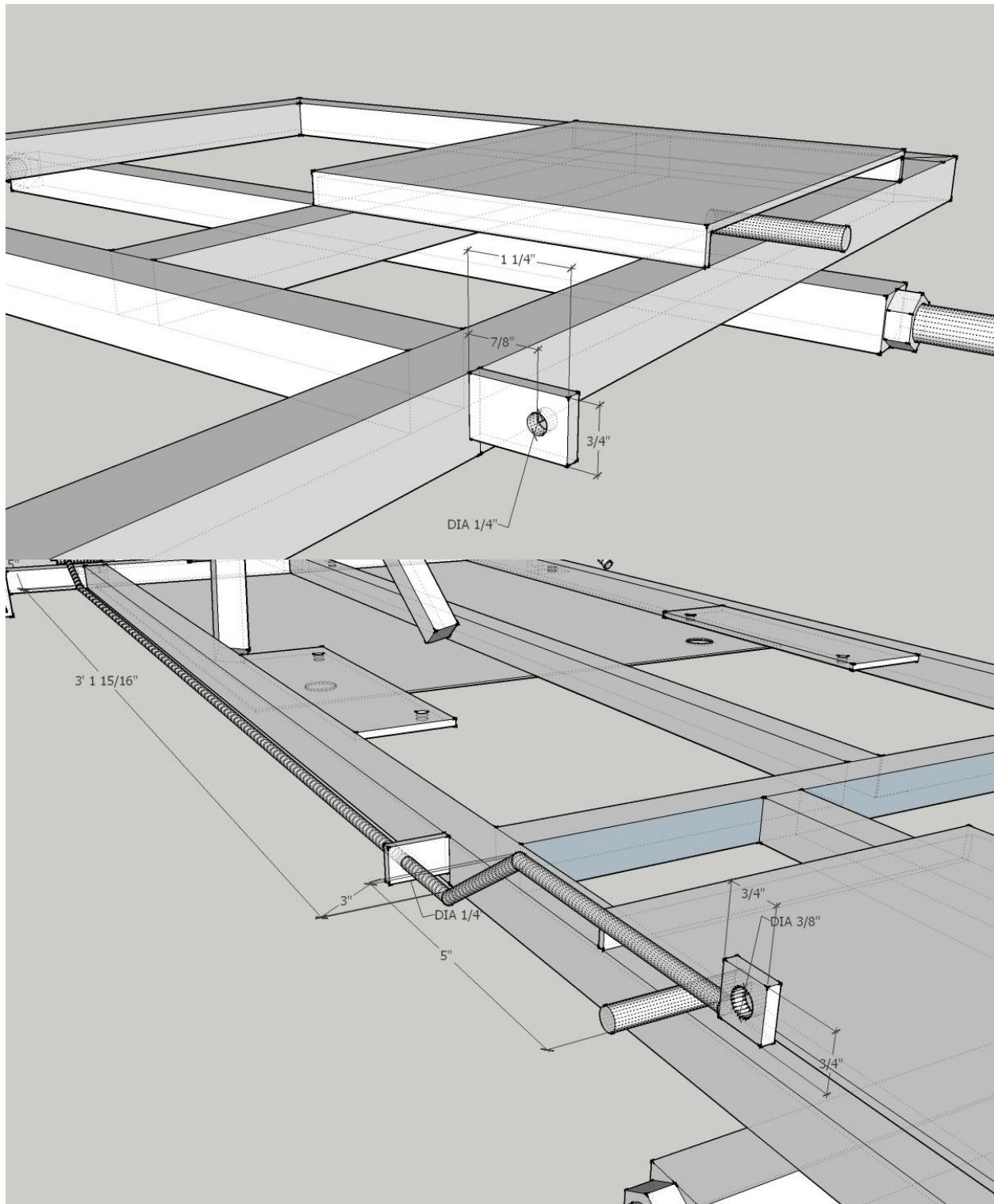
Brake Band Stud

Weld the 3/8" round bar to the frame. This stud will serve as the pivot for the brake band.



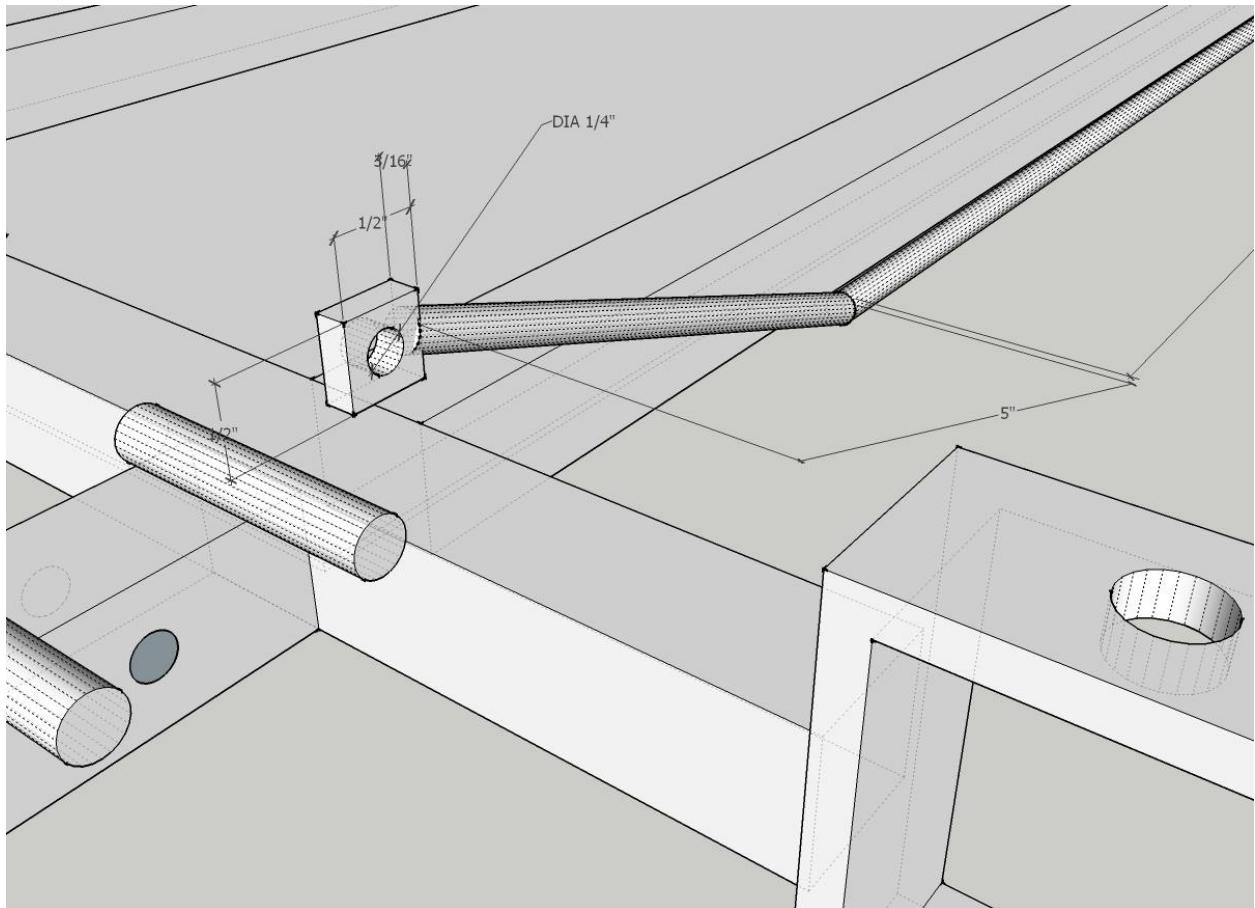
Brake Rod Guide Tab

Weld this tab to the kart with the brake rod already bent and inserted. Fine adjustments may be made with the brake band installed by bending the rod itself.



Brake Rod

Bend the 1/4" round rod leaving extra on both ends. Cut as needed and weld the eyelets to the rod with the brake pedal installed with return spring.





Video: Throttle Cable Installation

<https://youtu.be/6hsVWPG-Yfg>

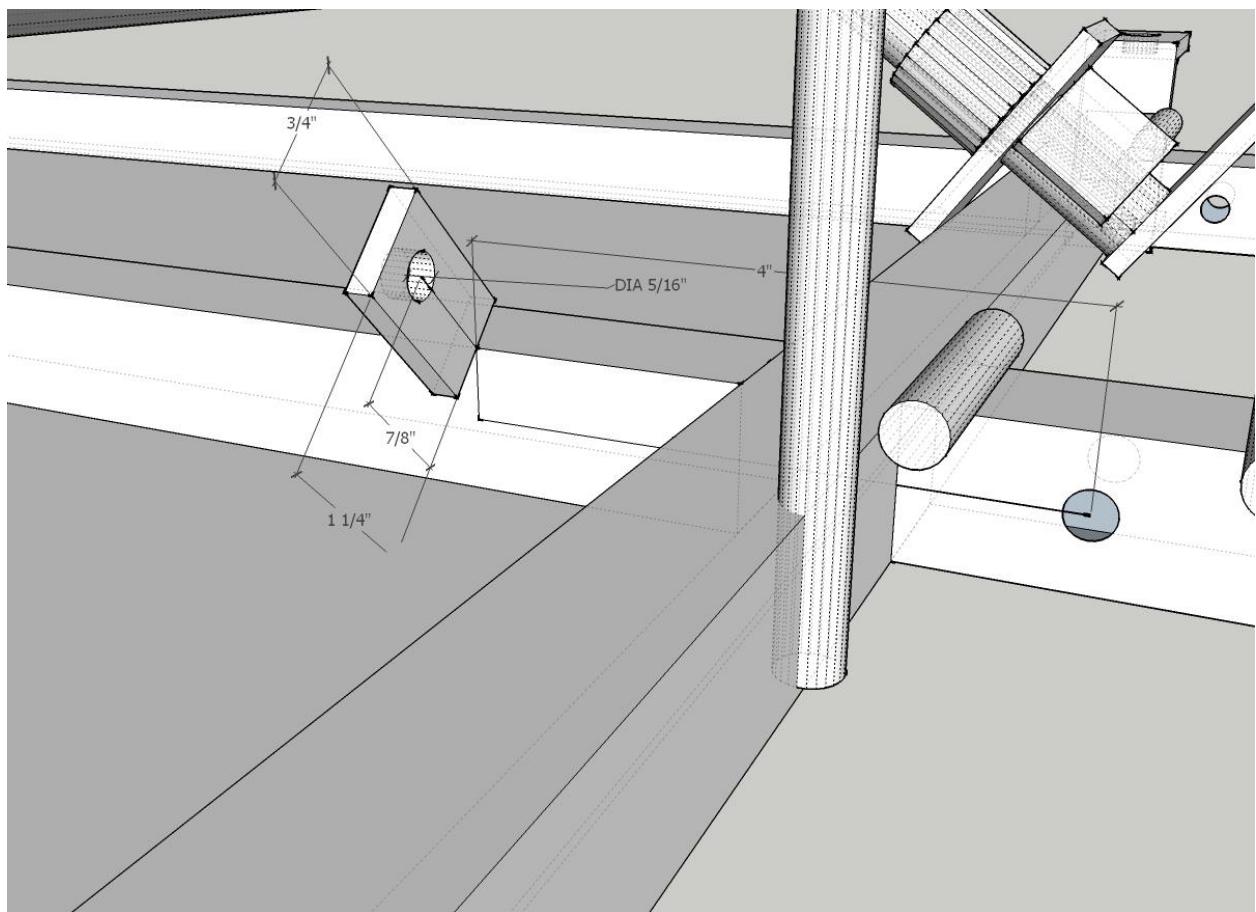
Throttle cable to engine, cable guide, and gas pedal.

Webpage

<http://kartfab.com/go-kart-plans/go-kart-throttle-cable>

Throttle Cable Guide Tab

Weld this tab to the kart, about 4" back from the center of the throttle pedal bolt hole, on a 45 degree angle.





Video: Side Rails and Foot Rest

<https://youtu.be/UAhbjnkpTKs>

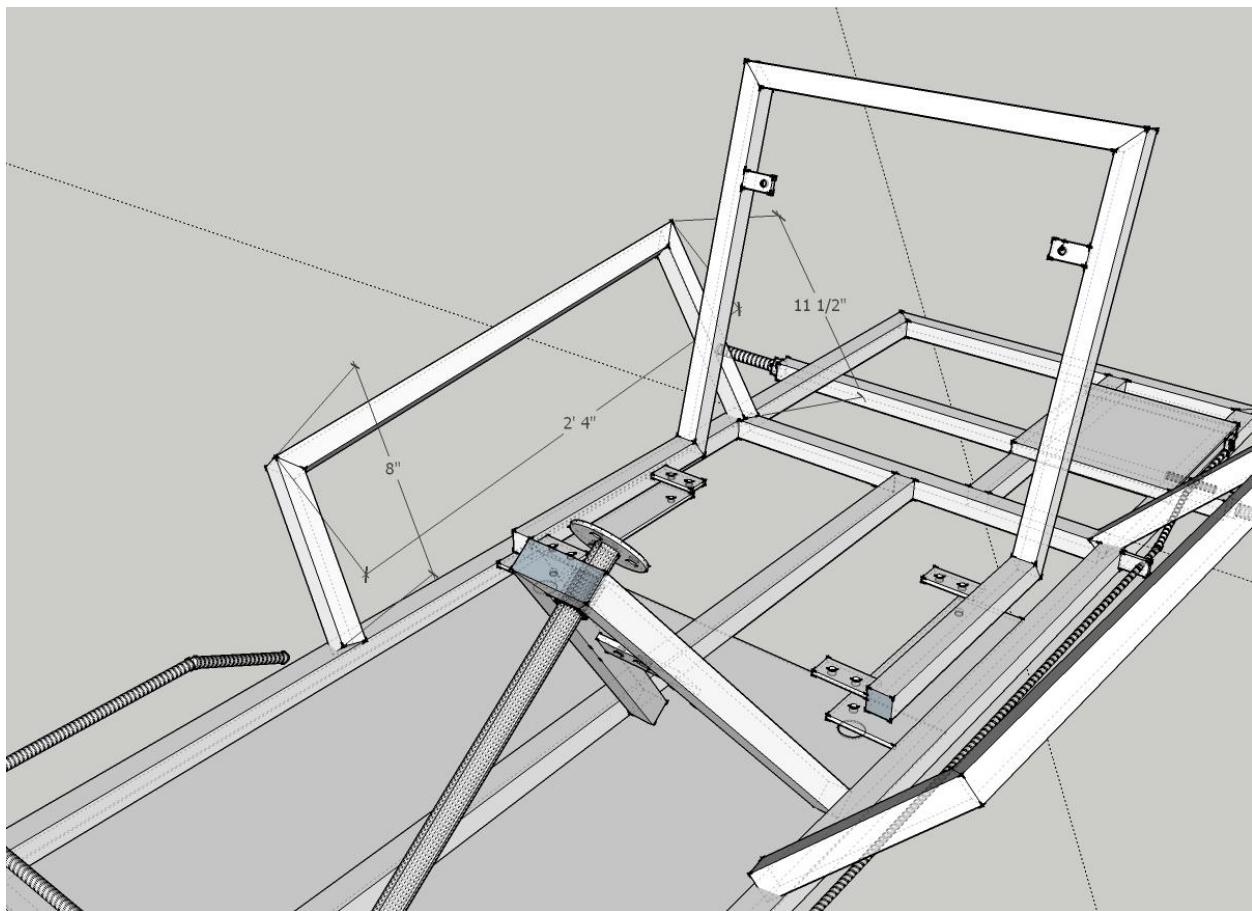
Side restraints and foot rest fabrication.

Webpage

<http://kartfab.com/go-kart-plans/go-kart-lights-flag-seat-belts>

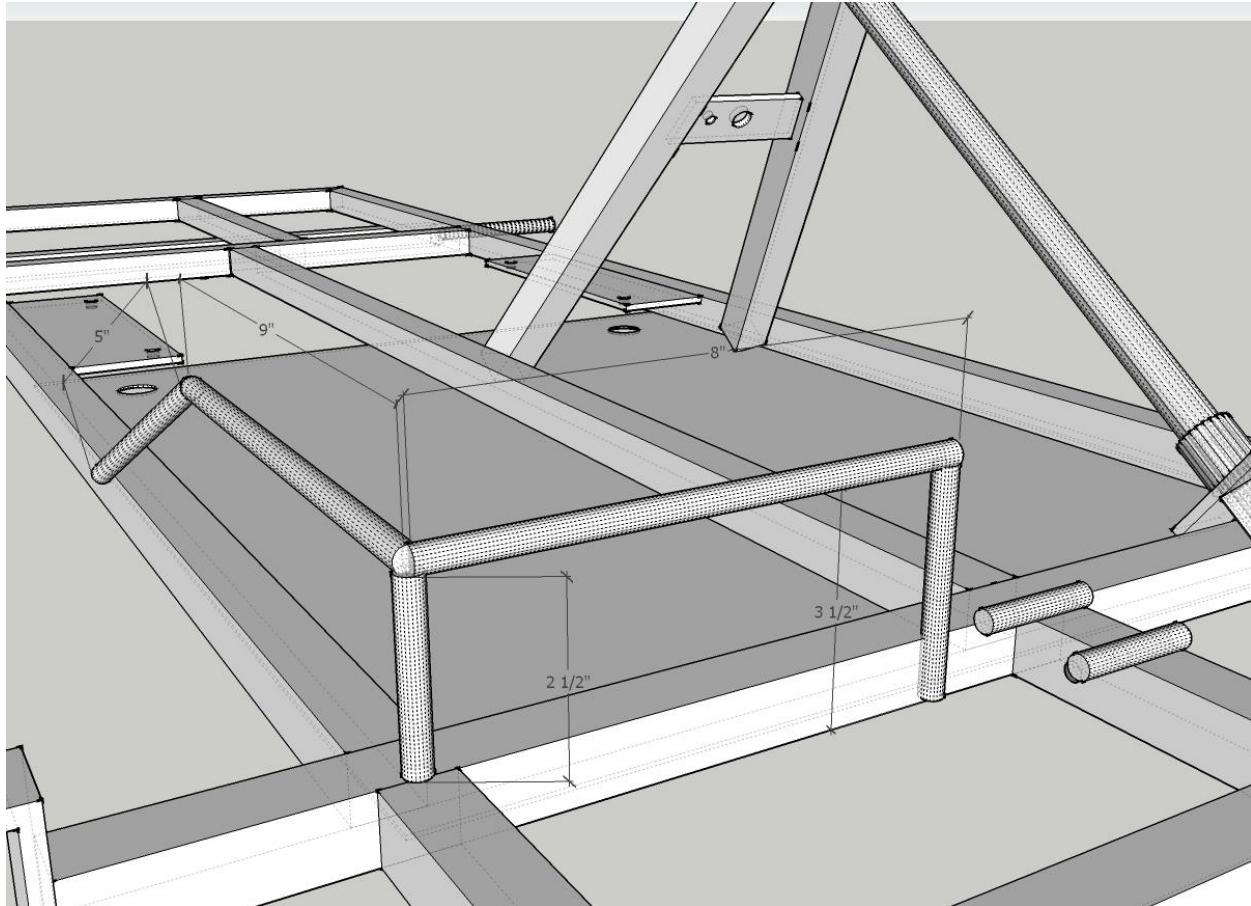
Side Rails

This is just an example of side rails. You can use it exactly, or make up your own design. This was used on the kart I built to fit both adults and kids. Side rails are a good idea (you can hold on to them while turning), but optional. Cuts were made on this one at 35 degrees (protractor measurement) for the rear/high end, and 55 degrees (protractor measurement) for the front/low end.



Foot Rest

Use 3/8" rod, and bend it in a vise with hammer to make a foot rest for the passenger. This keeps the feet from resting on the tie rods.



Paint



Video: Go Kart Paint

<https://youtu.be/pQHVATE0G3A>

Shows how to prep and paint the go kart.

Webpage

<http://kartfab.com/go-kart-plans/go-kart-paint>

Final Assembly



Video: Final Assembly. You're finished!!!

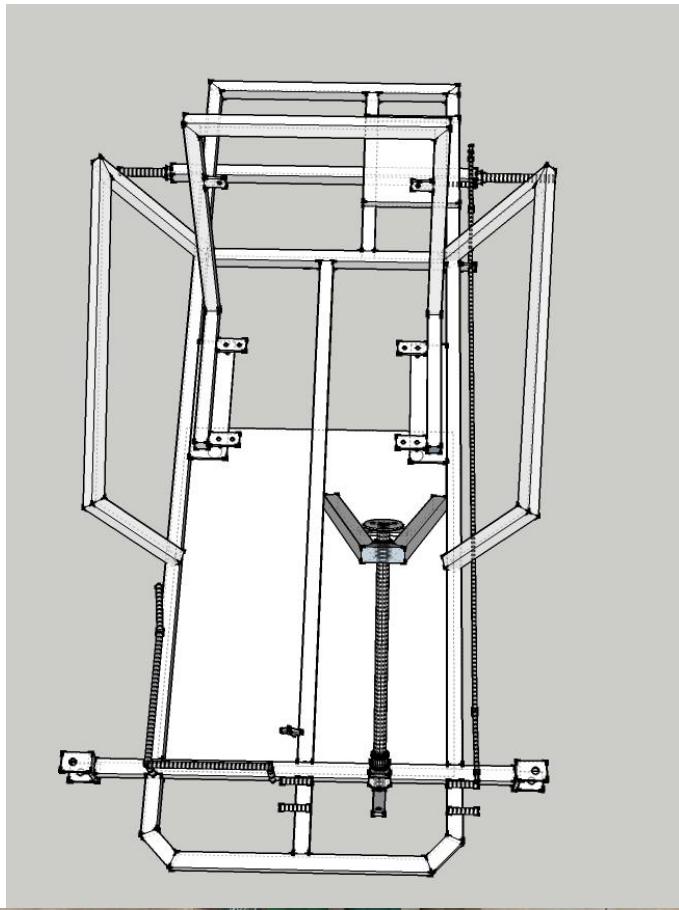
<https://youtu.be/0rO9H0KggsY>

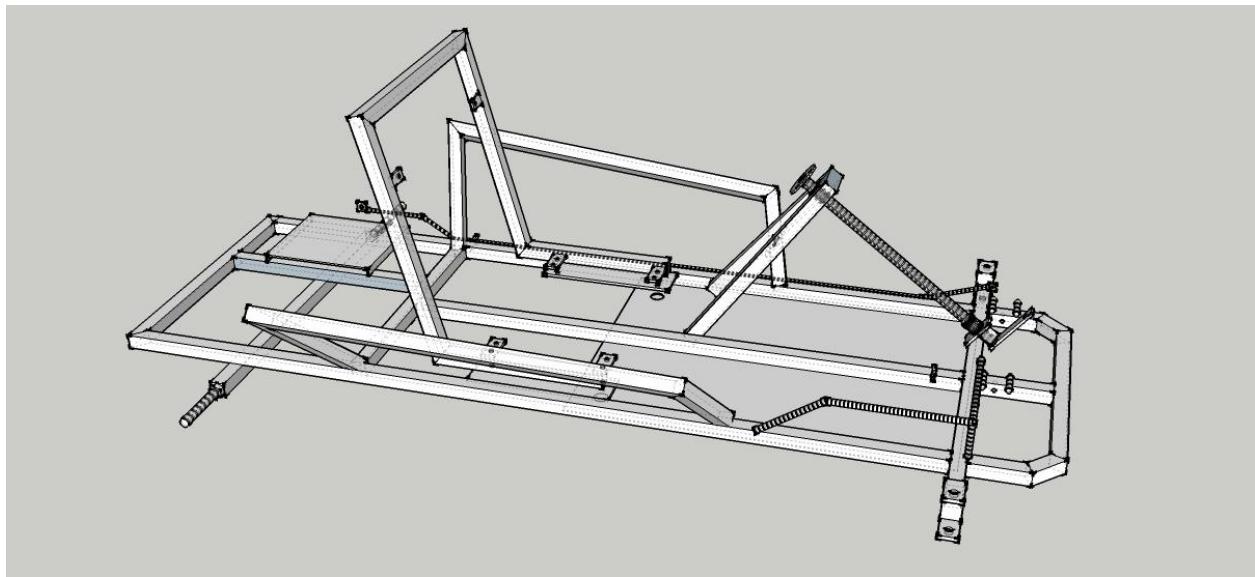
Shows where all the nuts and bolts go with final assembly.

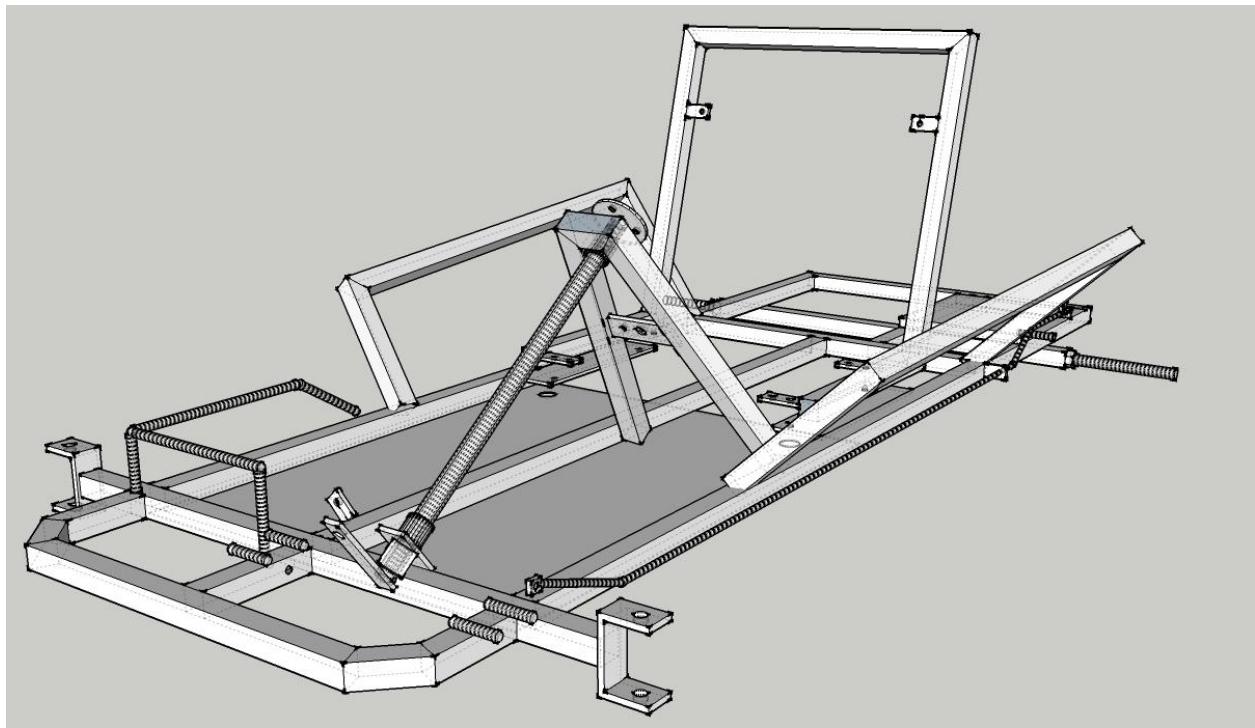
Webpage

<http://kartfab.com/go-kart-plans/go-kart-assembly-instructions>

Final Kart Additional Views







How to Build this Go Kart

- 1) Get the "fixed axle go kart parts kit" here -> <http://kartfab.com/go-kart-plans> (scroll down after click)
- 2) Follow the plans (links in plans show extra pictures on KartFab.com and step by step video guides).
- 3) Have fun!!!



The pictured (above) go kart is the final product of the **free go kart plan build**. It is a **one wheel drive kart**, and is the **most economical** go kart to build.

Due to high demand, I also offer a **solid axle (live axle)** go kart plan bundle that you may **purchase** for \$20 here -> <http://kartfab.com/live-axle-go-kart-plans>. A live axle go kart is a **better performing** go kart, but does cost more to build. Standard Live Axle and Deluxe Live Axle Kits are available too!

Thanks for downloading these free plans. Check out my facebook and instagram for pictures of go karts many others have built. Send pictures of your finished build to me through Facebook & Instagram!

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