

Assembly Guide

HOW TO MAKE A

Wood Go Kart V2

UPLOADED ON SEPTEMBER 17, 2023

MORE INFORMATION ABOUT THIS PROJECT CAN BE FOUND AT WOODWORKINGNUT.COM

Shopping List Page 1 of 2 (Excluding Go Kart Parts)

Lumber

- 5- 2x4's at 8' Long
- 1- 4'x8' Sheet of 3/4" Plywood

Metal

- 1" Wide Steel Flat Bar (1/8" Thick)**
- 1- 4" Long

- 1 1/2" Wide Steel Flat Bar (1/4" Thick)**
- 2- 5" Long
- 1- 19 1/4" Long
- 2- 33 1/2" Long

- 3"x2" Steel Angle Iron (1/4" Thick)**
- 2- 8" Long

Miscellaneous:

- 1- 1/8" Stainless Cotter Pin (1 1/2" Long)
- 2- 2"x2" Stainless Steel Brackets
- 1- Box of 2" Exterior Screws (You only need 2 screws)
- 1- Box of 3" Exterior Screws
- 1- Box of 3/8" Wood Plugs
- 1- Bottle of Wood Glue (Titebond II)
- 1- Can of Black Enamel Spray Paint
- 1- Can of Wipe-On Polyurethane
- 1- Large Zip Tie

Note: I bought the metal from metalsdepot.com and had all the metal precut to size.

Shopping List Page 2 of 2 (Excluding Go Kart Parts)

1/4" Hardware:

2-1" Bolts
2-1 3/4" Round Head Bolts
4- 3 1/2" Bolts
7- 4 1/2" Bolts
4- SAE Washers
26- USS Washers
2- Nuts
11- Lock Nuts

5/16" Hardware:

6- 1 1/2" Bolts
2- 2" Bolts
4- 2 1/2" Bolts
3- 3 1/2" Bolts (Fully Threaded)
4- 4" Bolts (Fully Threaded)
2- 4 1/2" Bolts (Fully Threaded)
13- SAE Washers
32- USS Washers
1- Nuts
24- Lock Nuts
2- 1" Spacers
2- 5/16" ID to 3/8" OD Bushings
(1/2" Long)*

3/8" Hardware

2- 1 1/4" Bolts
4- 3" Bolts
1- 2" Universal Clevis Pin
10- SAE Washers
5- USS Washers
6- Lock Nuts
2- 1/4" Spacers

1/2" Hardware:

4- 2" Bolts
6- 3" Bolts
5- 5" Bolts
32- SAE Washers
18- USS Washers
15- Lock Nuts

5/8" Hardware:

2- Lock Nuts*
2- 1 1/2" Spacers

1" Hardware:

2- Lock Nuts

12mm Hardware:

4- 70mm Bolts
8- Washers
4- Lock Nuts

Note 1: (*) Annotates there is a link for the item on woodworkingnut.com.

Note 2: I bought a majority of the hardware from boltdepot.com and got the rest from my local hardware store.

Lumber and Metal Cut List

Lumber Cut List:

2x4's:

- 1- 7 11/16" (Front Steering Support - One End Cut to 65 Degrees)
- 1- 15 3/8" (Aft Steering Support - One End Cut to 65 Degrees)
- 1- 16 9/16" (Lower Steering Column - Both Ends Cut to 65 Degrees)
- 1- 18" (Upper Steering Column)
- 6- 21" (Back Frame, Seat/Steering Supports)
- 2- 24" (Engine Supports)
- 1- 28" (Front Frame)
- 2- 80" (Side Frame)

3/4" Plywood:

- 1- 21"x49 1/2"

Metal Cut List:

1" Wide Steel Flat Bar (1/8" Thick)

- 1- 4" Long (Brake Caliper Extension Arm)

1 1/2" Wide Steel Flat Bar (1/4" Thick)

- 2- 5" Long (Pedal Guides)
- 1- 19 1/4" Long (Brake Mounting Bar)
- 2- 33 1/2" Long (Metal Rails for Spindle Brackets)

3"x2" Steel Angle Iron (1/4" Thick)

- 2- 8" Long (Live Axle Brackets)

Note 1: Refer to the 3D SketchUp Model for drilling the holes in the wood and metal. The pedal guides and brake caliper extension arm templates can be found on page 6 and 9 of the assembly guide.

Note 2: If you buy the metal from metalsdepot.com, you can do a custom order and have the metal cut for you.

Hardware Location Guide Page 1 of 2

Note: The total quantity of bolts are listed first and then the stack up for each bolt is in parenthesis.

1/4" Hardware:

- 2- 1" Bolts (Brake Caliper Extension Arm - 1 SAE Washer on Both Sides and 1 Lock Nut)
- 2- 1 3/4" Round Head Bolts (Pedal to Clevis - 4 USS Washers, 1 Nut and 1 Lock Nut)
- 4- 3 1/2" Bolts (Seat to Frame - 1 USS Washer on the Bottom of Each)
- 6- 4 1/2" Bolts (Metal Rails for Spindle Brackets to the Front of the Frame - 1 USS Washer on Both Sides and 1 Lock Nut)
- 1- 4 1/2" Bolt (Brake Mounting Bar to Back Frame - 1 USS Washer on Both Sides and 1 Lock Nut)

5/16" Hardware:

- 2- 1 1/2" Bolts (Brake Mounting Bar to Disc Brake Bracket - 1 USS Washer on Both Sides and 1 Lock Nut)
- 4- 1 1/2" Bolts (Engine to Riser Plate - 1 USS Washer on Both Sides and 1 Lock Nut)
- 2- 2" Bolts (Engine Support to Metal Brake Bar - 1 USS Washer on Both Sides and 1 Lock Nut)
- 4- 2 1/2" Bolts (Riser Plate to Engine Supports - 1 USS Washer on Both Sides and 1 Lock Nut)
- 1- 3 1/2" Bolt (Steering Shaft to Tie Rods - 1 SAE Washer, 1 Nut, 2 Lock Nuts and 2 Bushings (5/16" ID to 3/8" OD at a 1/2" Long))
- 2- 3 1/2" Bolts (Throttle/Brake Cable Support - 2 USS Washers and 1 Lock Nut)
- 2- 4" Bolts (Full Travel Pedal Stop/Spring Hold - 2 USS Washers and 1 Lock Nut)
- 2- 4" Bolts (Forward Pedal Stop - 2 SAE Washers and 1 Lock Nut)
- 2- 4 1/2" Bolts (Pedal Pivot Bolt - 4 SAE Washers, 1 Spacer that is 1" Long and 2 Lock Nuts)

3/8" Hardware:

- 2- 1 1/4" Bolts (Spindle to Tie Rods - 1 Spacer that is a 1/4" Long, 1 SAE Washer and 1 Lock Nut on the Bottom)
- 1- 2" Universal Clevis Pin (Brake Caliper Extension Arm to Cable - 2 USS Washers on Head Side and 3 USS Washers and a 1/8" Stainless Cotter Pin (1 1/2" Long) on the Other Side)
- 4- 3" Bolts (Plywood to Seat Supports - 1 SAE Washer on Both Sides and 1 Lock Nut)

1/2" Hardware:

4- 2" Bolts (Live Axle Brackets to Pillow Blocks - 1 SAE Washer on Both Sides and 1 Lock Nut)

6- 3" Bolts (Live Axle Brackets to Frame - 1 USS Washer on Both Sides and 1 Lock Nut)

3- 5" Bolts (Steering Column to Frame - 1 USS Washer on Both Sides and 1 Lock Nut)

2- 5" Bolts (Spindle Brackets to Spindle - 1 SAE Washer on Both Sides, 8 SAE Washers on the Top of the Spindle, 1 SAE Washer on the Bottom of the Spindle and 1 Lock Nut)

5/8" Hardware:

2- 1 1/2" Spacers (Front Spindles - 1 on Each Spindle)

2- Lock Nuts (Front Spindles - 1 on Each Spindle)

1" Hardware:

2- Lock Nuts (Live Axle - 1 on Each End)

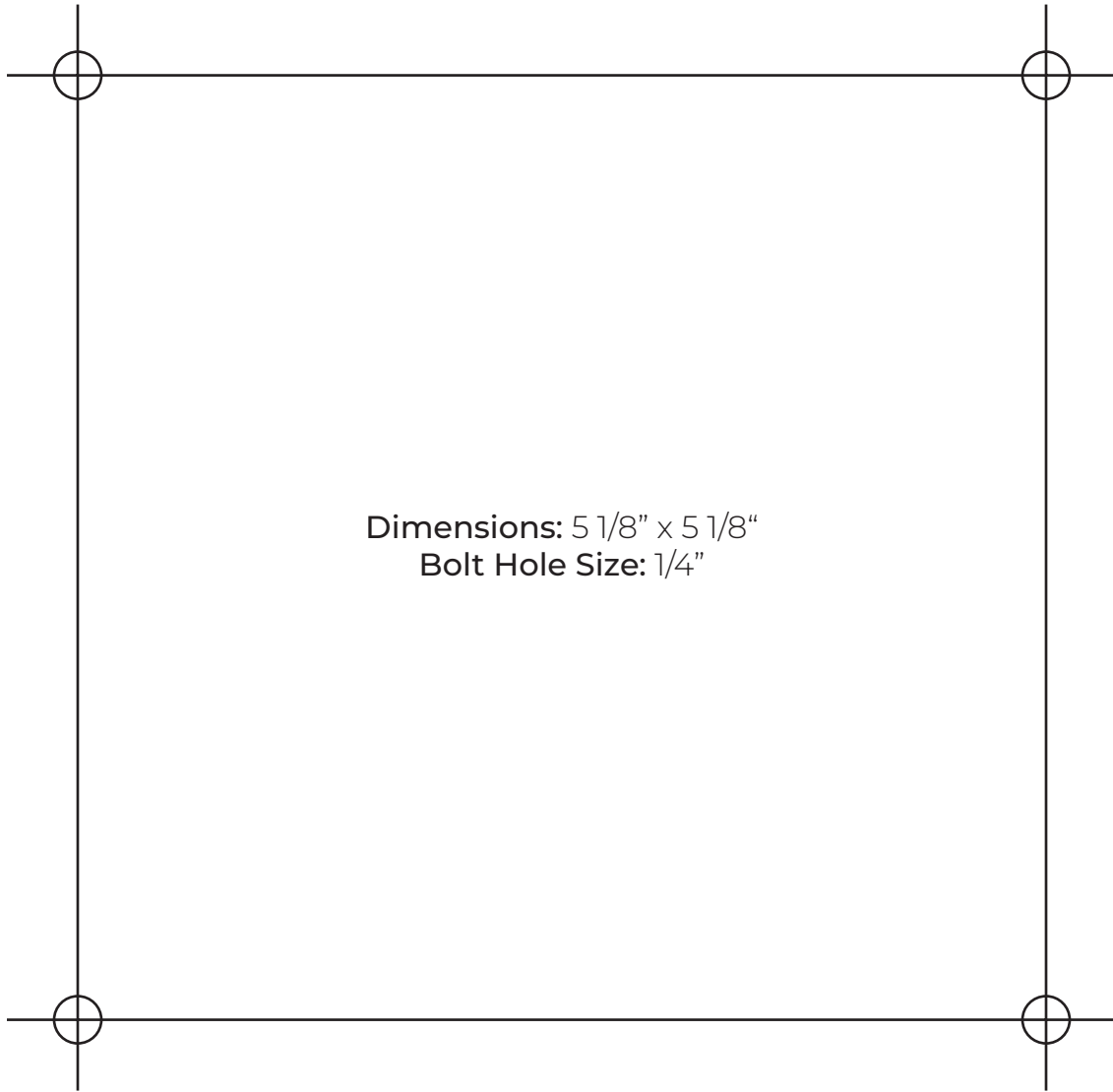
12mm Hardware:

4- 70mm Bolts (Pillow Blocks to Steering Column - 1 Washer on Both Sides and 1 Lock Nut)

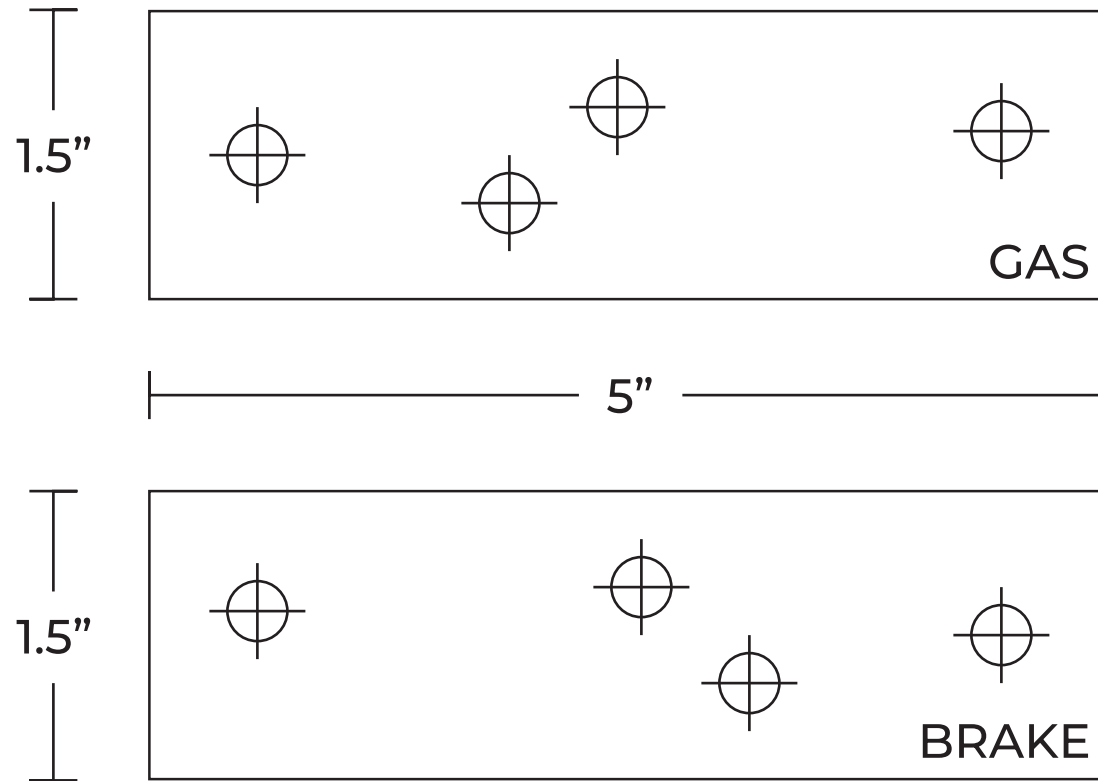
Predator 212cc Engine Bolt Mounting Pattern



Fishing Boat Seat Bolt Mounting Pattern

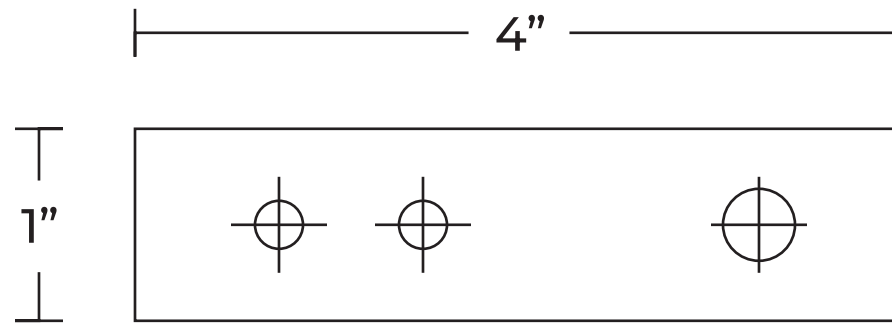


Pedal Guide Template for NOS Manco Pedals (P/N: 8009/8011)



Dimensions: 1.5" X 5" (1/4" Thick Metal)
Bolt Hole Size: 5/16"

Brake Caliper Extension Arm Template



Dimensions: 1" x 4" (1/8" Thick Metal)
Bolt Hole Size: 1/4" and 3/8"