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			Authorized	Robert Dicken		
		Grand Daddy				

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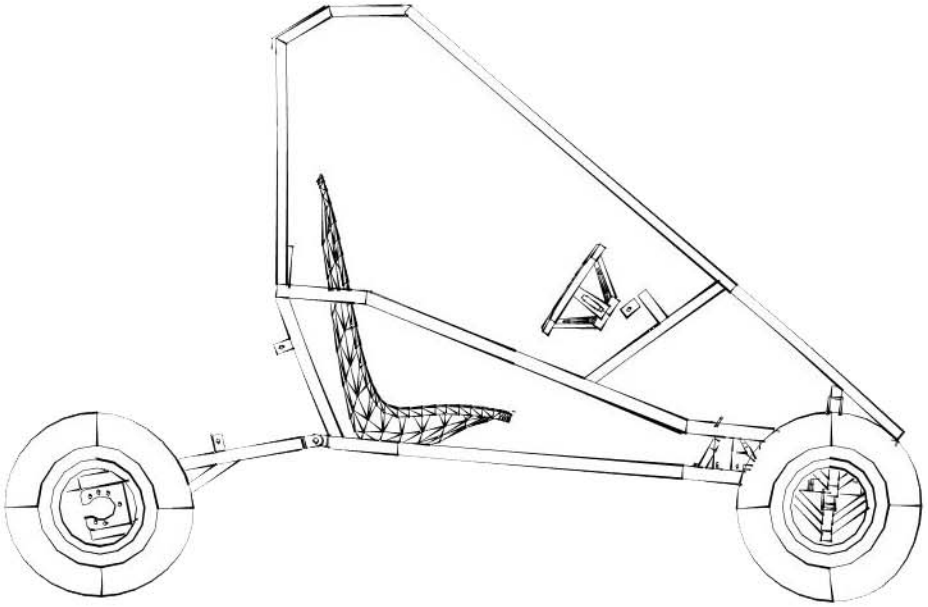

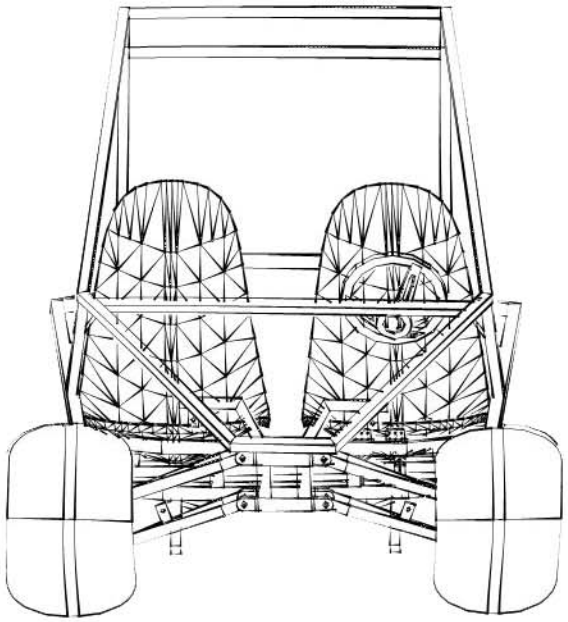

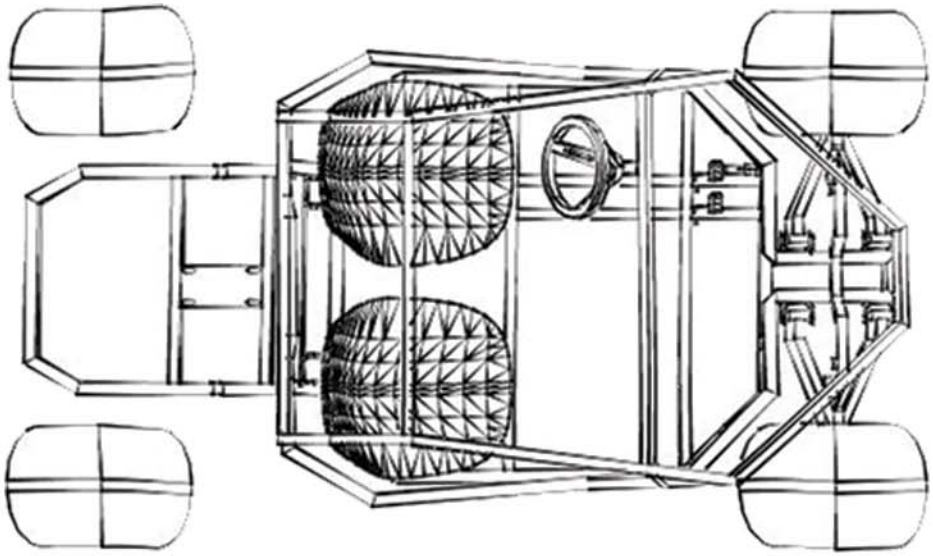

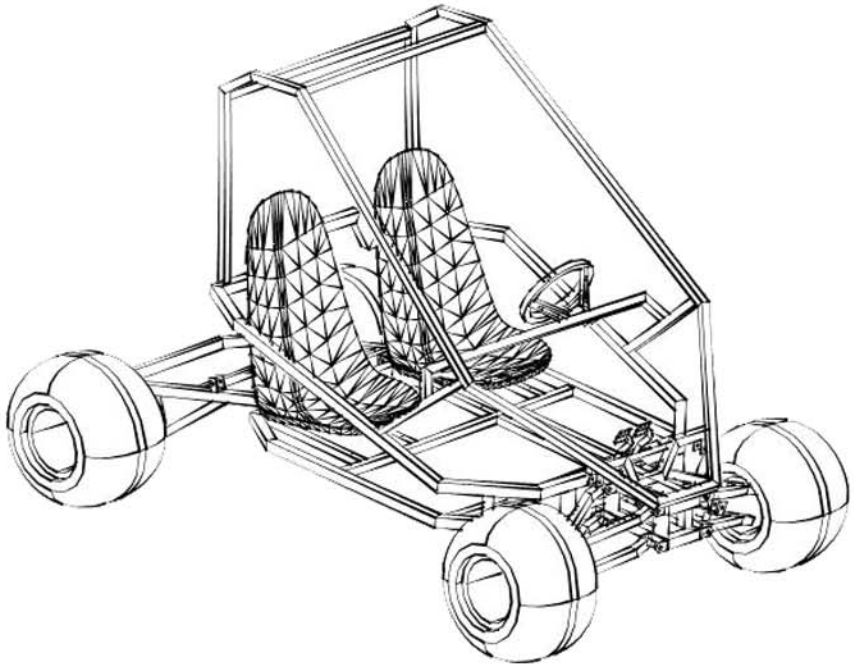

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		GrandDaddy				

Thank you and welcome to your new Grand Daddy Go Kart Plans.

As you can see these plans are easy, fun and full of great information to walk you through completing your Grand Daddy Go Kart.

Our special feature in this eBook is the "Exploded View". Exploded view is a brand new concept we have implemented and we think you will love it. Use this like a webpage with links. You just click on the part you need to build or get info on and it will take you right to it. So use the bookmarks and the exploded view to quickly navigate the eBook. Give it a whirl!

Tools section will just give you brief overview of tools you could use to build the Recluse. Of course use what you have or find fits your needs.

Materials section will give you a shopping list for the raw metal you will need to finish your kart.

Step by Step will walk you through the correct order of the build.

Diagrams detail every part and section of the kart.

Parts List is a list of all the hardware needed to finish off the kart after you are done welding.

Revisions will be a work in progress. Sometimes we will get feedback on our designs and people tell us what might make the kart better. If we think they are good ideas they end up in the Revisions page. So feel free to let us know of anything we could improve on and we will post it.

Resources are just some of the internet sites we have found to be helpful.

Well that's it for now! Have fun and be careful.

SPIDERCARTS	03		Ver.	0.1.2.6		
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		Introduction				

Here is a list of tools that we used on our first karts.
This list is probably a minimum and any other tools that make your kart building easier would be that much better.

- A truck or trailer. Most of the metal houses carry steel in 20- 24 foot lengths. They will sometimes cut them in half for you for a small charge but even a 12 foot piece of tubing can be hard to get home in moms minivan.
- We are going to need to measure and mark this new metal, so a tape measure and some good soap stone or a silver sharpie will be needed.
- Cutting the metal can be done in a wide variety of ways. I would suggest a chop saw. They are not to expensive and very easy to use. Most of them have a angle guard so you can set it for different degrees when cutting.
- After cutting the metal there is usually very sharp edges. Now you can get a grinder and grind them all smooth or just be very careful with the cut metal till you weld it all together. The welding will melt the rough edges and you wont have to worry about them any longer. Your Choice!
- Some Vice grip clamps are handy to use as extra hands if you are tackling this project solo. Sometimes its nice to have another hand.
- We must hook all this metal together somehow, so a welder is a must. Now using 14 gauge metal it doesn't have to be anything to big but more power is always better than not enough. If you don't weld or have a welder handy, you can always take it to your local welder and have him put it together for you. They might charge a bit but its good work!
- Protective gear is a must! Get some good gloves. Get some good eye protection. Always think safety first. There is no fun in getting hurt.
- Well the rest of the tools should be hanging out around the shop or garage. Socket sets, hammers, pliers, drills and drill bits, wire brush, hand grinder and maybe some painting supplies.
  Well that should get us started. Lets get to work.

SPIDERCARTS	04		Ver.	0.1.2.6		
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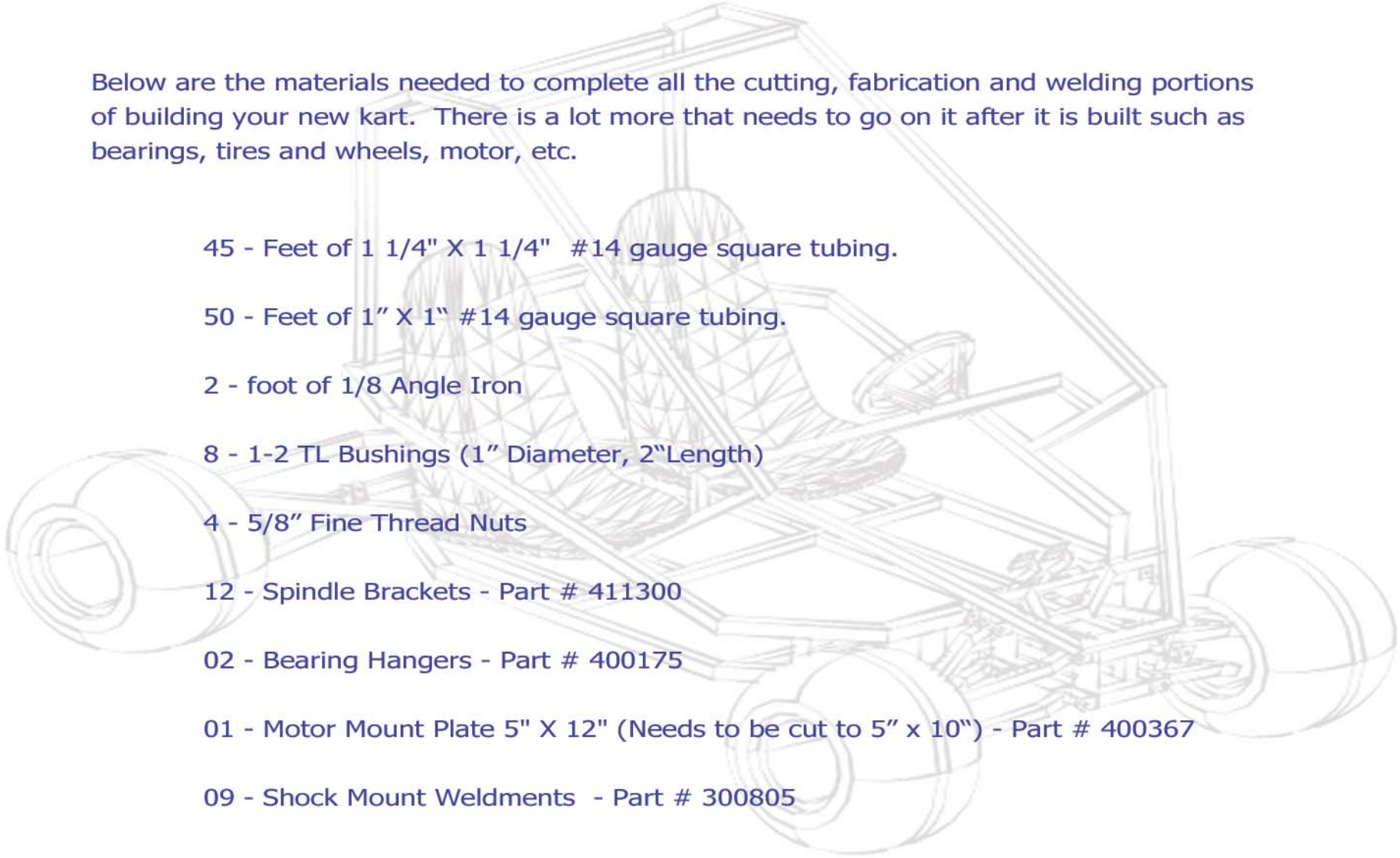
		Tools				

Materials Needed

Below are the materials needed to complete all the cutting, fabrication and welding portions of building your new kart. There is a lot more that needs to go on it after it is built such as bearings, tires and wheels, motor, etc.



45 - Feet of 1 1/4" X 1 1/4" #14 gauge square tubing.

50 - Feet of 1" X 1" #14 gauge square tubing.

2 - foot of 1/8 Angle Iron

8 - 1-2 TL Bushings (1" Diameter, 2"Length)

4 - 5/8" Fine Thread Nuts

12 - Spindle Brackets - Part # 411300

02 - Bearing Hangers - Part # 400175

01 - Motor Mount Plate 5" X 12" (Needs to be cut to 5" x 10") - Part # 400367

09 - Shock Mount Weldments - Part # 300805

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		Materials				

Suggested Steps

The order you decide to build these parts is up to you but I would like to give a simple step by step guidline.

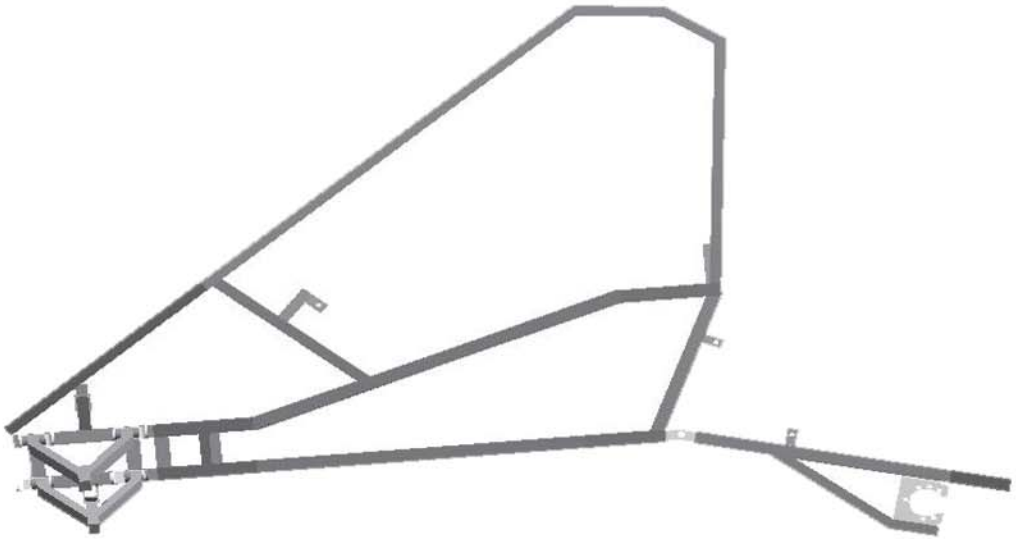
1. First start with the MainFrame. Cut and layout all the parts for the main frame. Spend some time making sure they are straight and flat. Be sure to measure "Criss-Cross" to double check all your cuts.

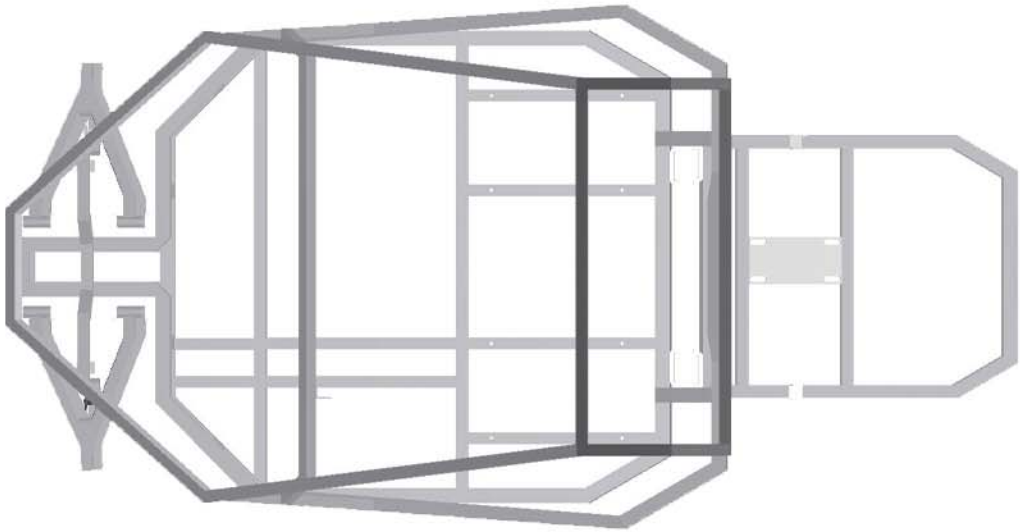
2. Then start in on the second layer of the main frame. Welding in the risers and rails. Be sure to pre-drill any parts that need hole as you might not be able to get the drill in once you have welded. Then move on to the front suspension. This is a bit tricky but once its done it looks great! I would do the roll bar next. Weld it flat, then weld all the parts together and to the main frame. Then onto the back or subframe. Its super easy after all that front end work!

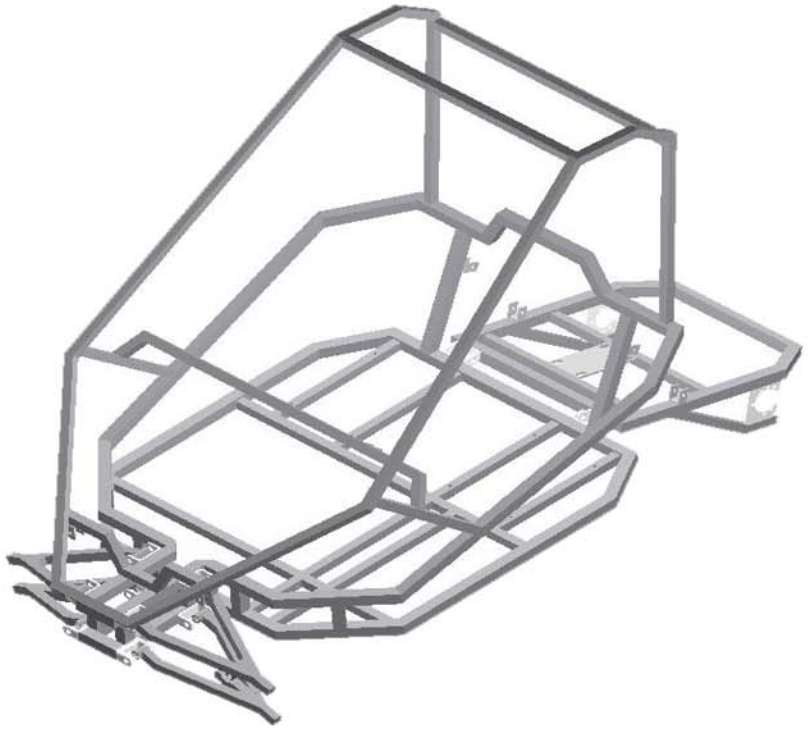
3. Weld on the weldments next in the given locations. Steering brackets, shock mount tabs, Bearing hangers, and all the spindle brackets. Once again make sure it is all straight. Make changes needed for your specific hardware or custom thing you may want to add.

4. Finally Put on all your hardware and remember this is a project and "Plans" only for a kart concept... This is your project so you can change anything! Might want bigger shocks or a different seat or no shocks at all? Just take the time to make it the kart you want... put on all the hardware to make sure it all fits then take it all back off and get it ready to paint. I use Hammered Finish spray paint if I am painting it myself. Have fun!

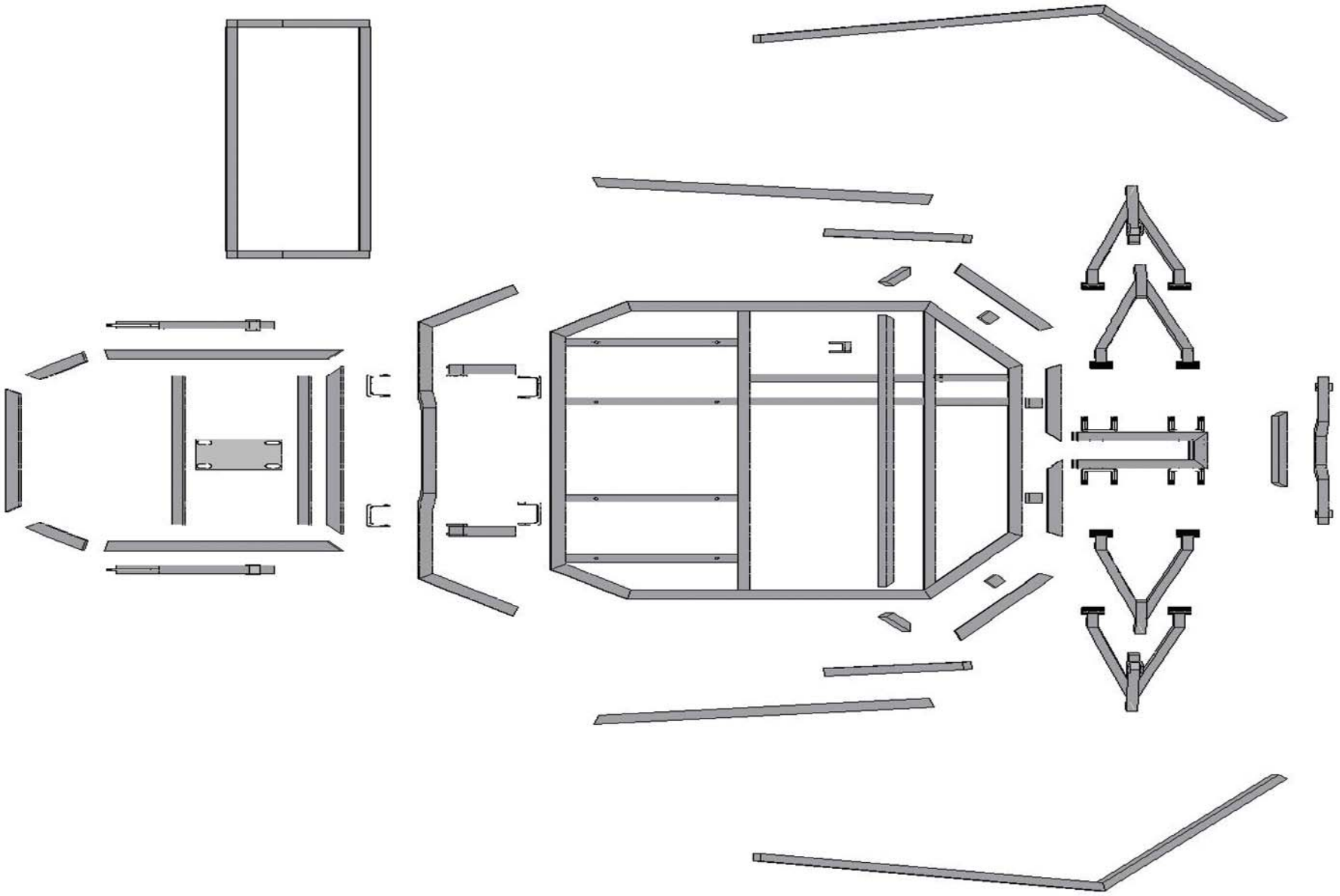
SPIDERCARTS	06		Ver.	0.1.2.6		
			Authorized	Robert Dicken		
		Steps				







SPIDERCARTS	12		Ver.	0.1.2.6		
			Authorized	Robert Dicken		
		Total Weld				



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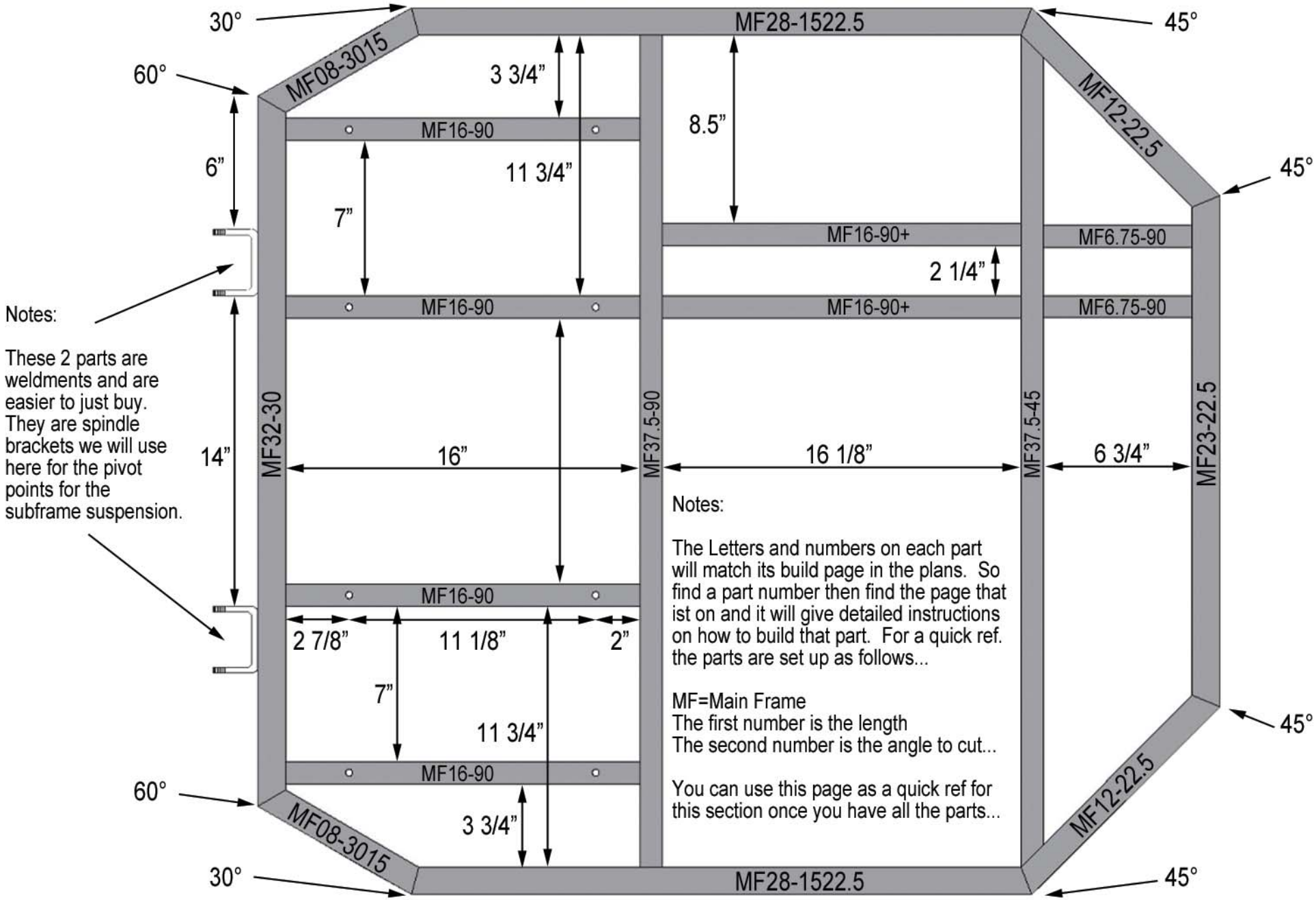
		Exploded View				



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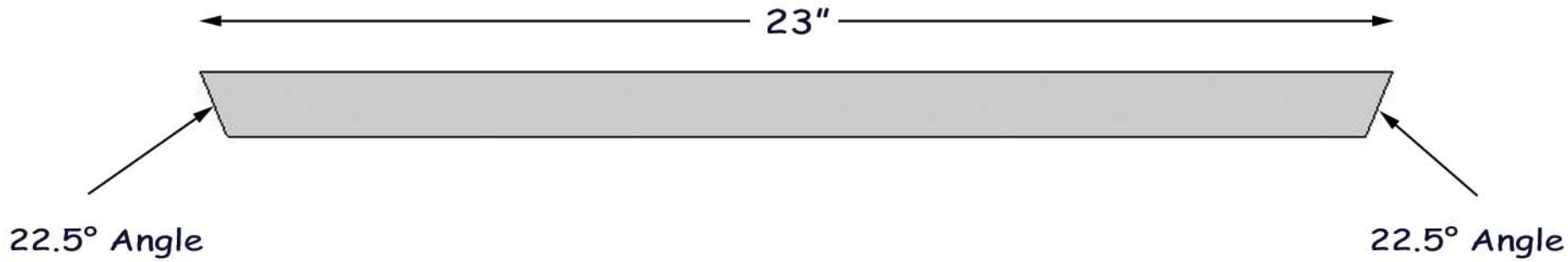
		Main Frame				

Top View

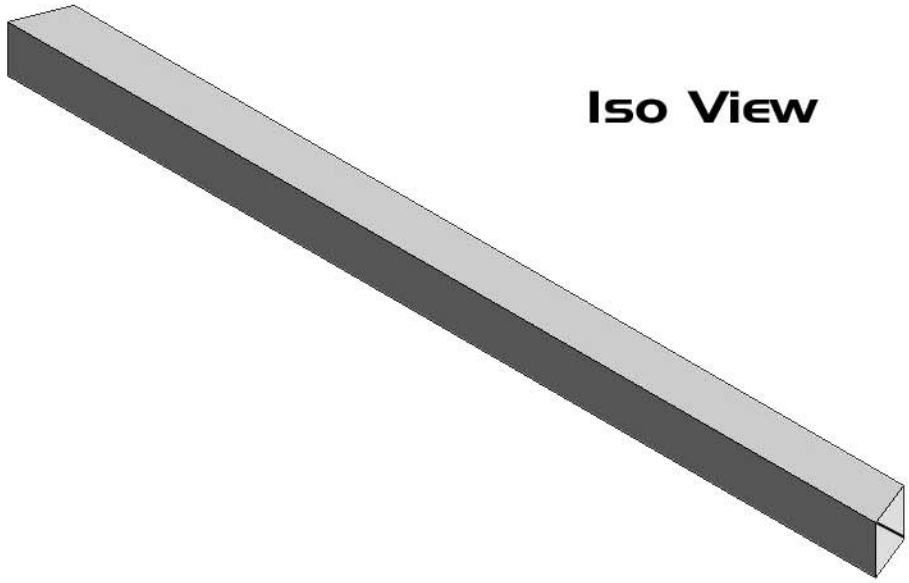


Notes

This part is very easy to make!
Use the 1 1/4" Square tubing, make a 22.5° cut then measure 23" and cut another 22.5°. Make sure they mirror each other.
Thats it!
Also dont get crazy with the .5, if you get it cut to 22° or 23° I think it will be fine...

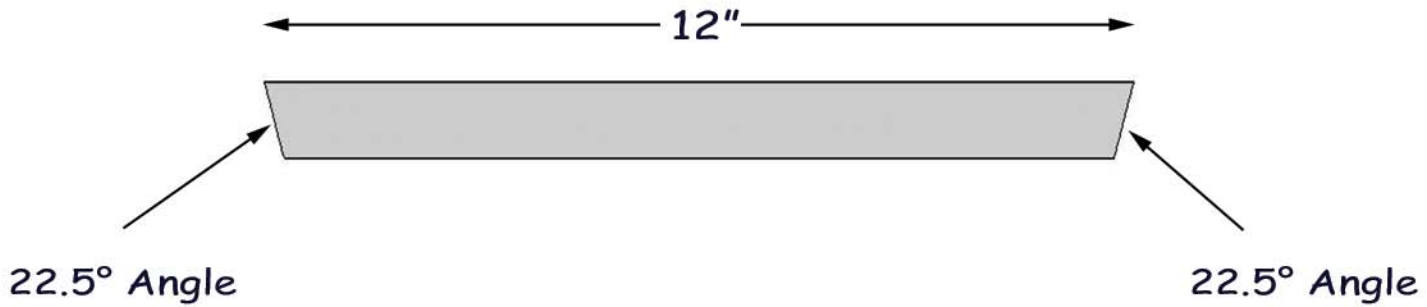
This is Part Number MF23-22.5
You will need 1 of these.

Iso View



SPIDERCARTS	10		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF23-22.5			Qty-1	

Top View

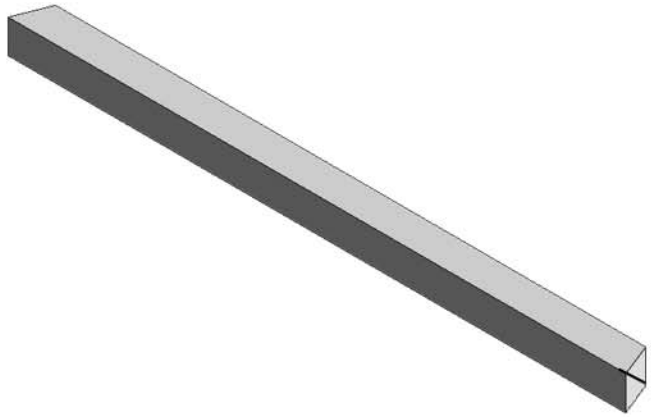


Notes

Use the 1 1/4" Square tubing, make a 22.5° cut then measure 12" and cut another 22.5°. Make sure they mirror each other.
Thats it!
Also dont get crazy with the .5, if you get it cut to 22° or 23° I think it will be fine...

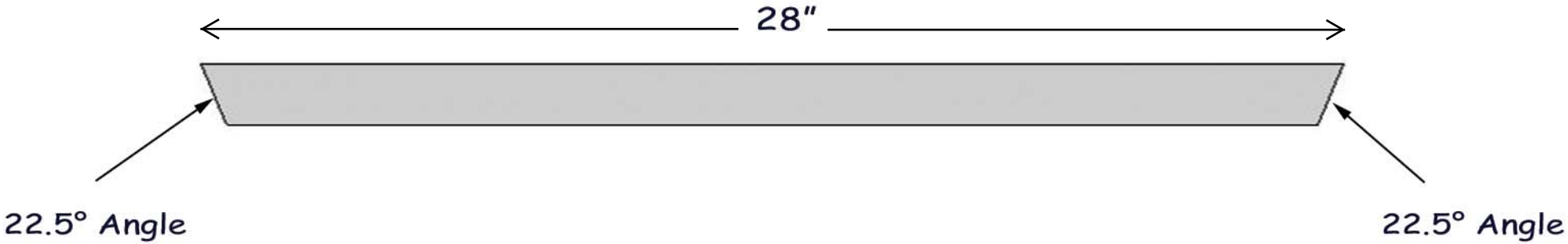
This is Part Number MF12-22.5
You will need 4 of these.

Iso View



SPIDERCARTS	11		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF12-22.5			Qty-4	

Top View



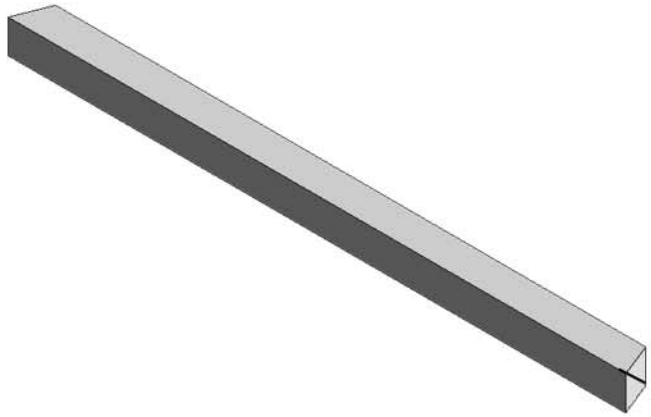
Notes

Use the 1 1/4" Square tubing, make a 15° cut then measure 28" and cut another 22.5°. Make sure they mirror each other. Thats it!

Also dont get crazy with the .5, if you get it cut to 22° or 23° I think it will be fine...

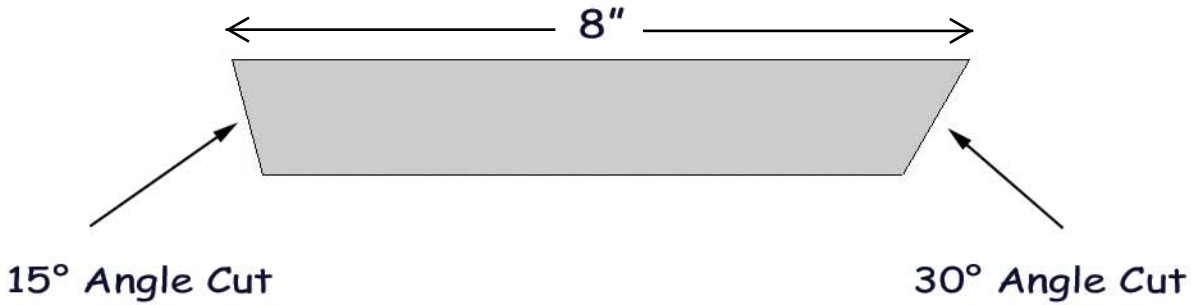
This is Part Number MF28-1522.5
You will need 2 of these.

Iso View



SPIDERCARTS	12		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF28-1522.5			Qty-2	

Top View

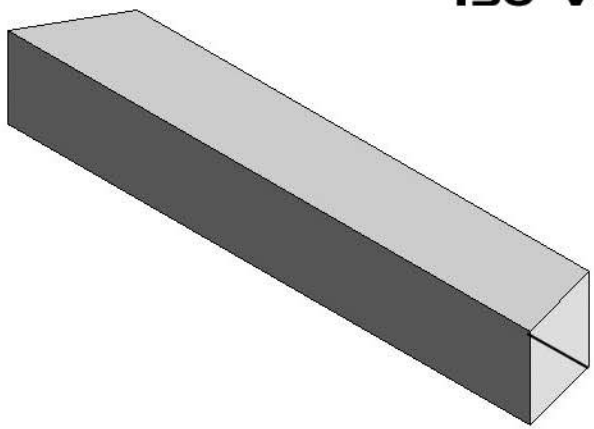


Notes

Use the 1 1/4" Square tubing, make a 15° cut then measure 8" and cut a 30°. Make sure they mirror each other. Thats it!

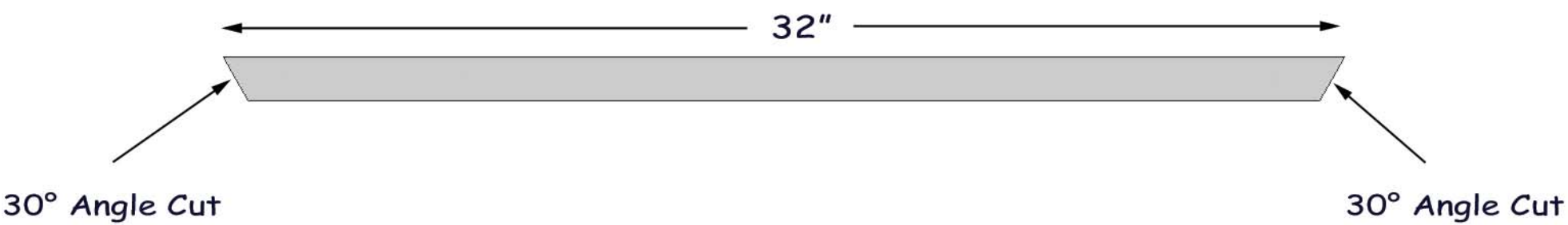
This is Part Number MF08-3015
You will need 2 of these.

Iso View



SPIDERCARTS	13		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF08-3015			Qty-2	

Top View

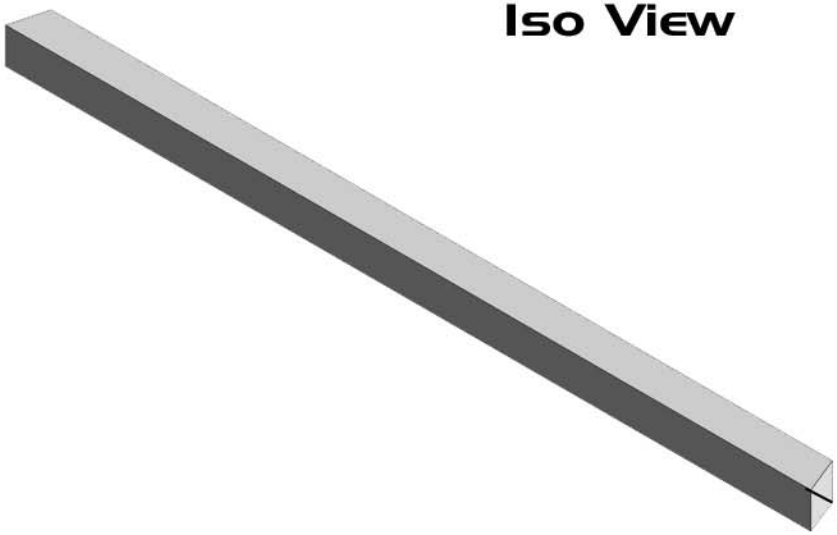


Notes

Use the 1 1/4" Square tubing, make a 30° cut then measure 32" and cut a 30°. Make sure they mirror each other. Thats it!

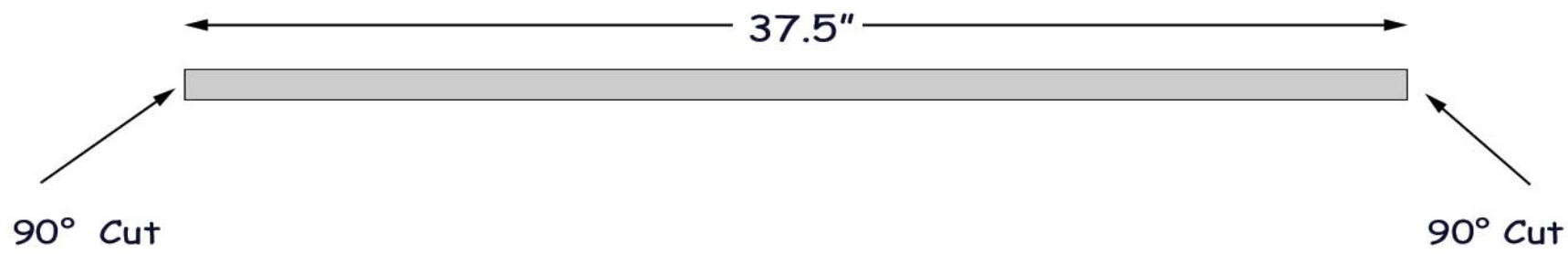
This is Part Number MF32-30
You will need 1 of these.

Iso View



SPIDERCARTS	14		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF32-30			Qty-1	

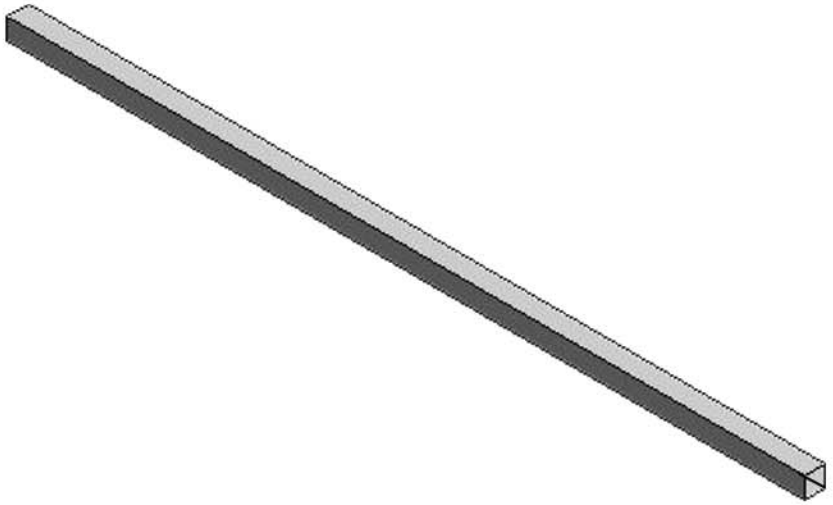
Top View



Notes

Use the 1" Square tubing, make a 90° cut
then measure 37.5" and cut another 90°.
Make sure they mirror each other. Thats it!

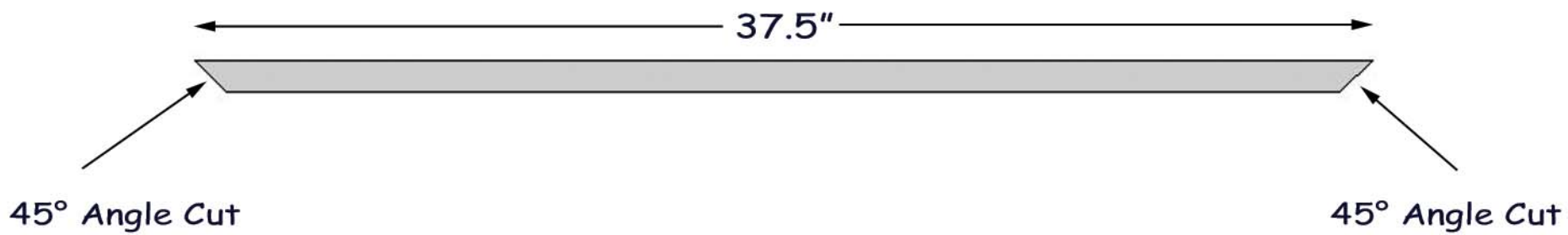
Iso View



This is Part Number MF37.5-90
You will need 1 of these.

SPIDERCARTS	15		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / MF37.5-90			Qty-1	

Top View

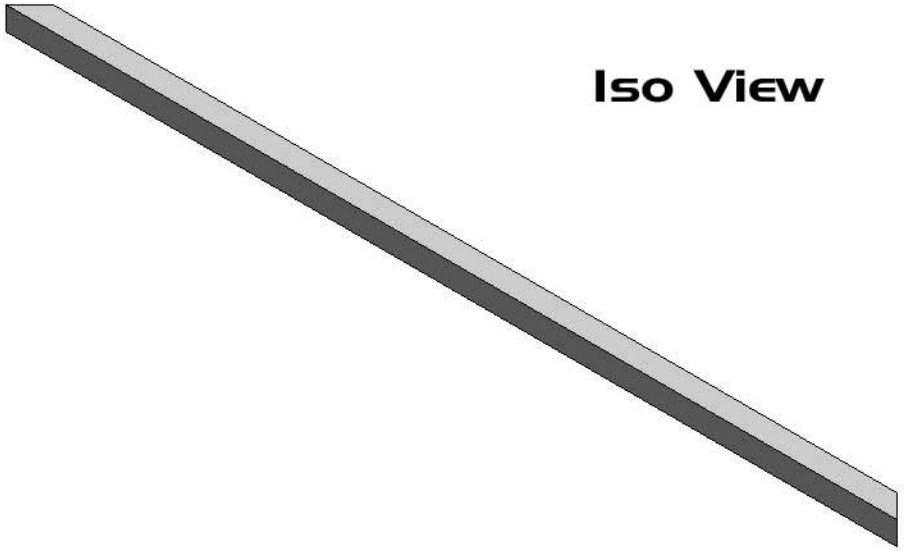


Notes

Use the 1" Square tubing, make a 45° cut then measure 37.5" and cut another 45°. Make sure they mirror each other. Thats it!

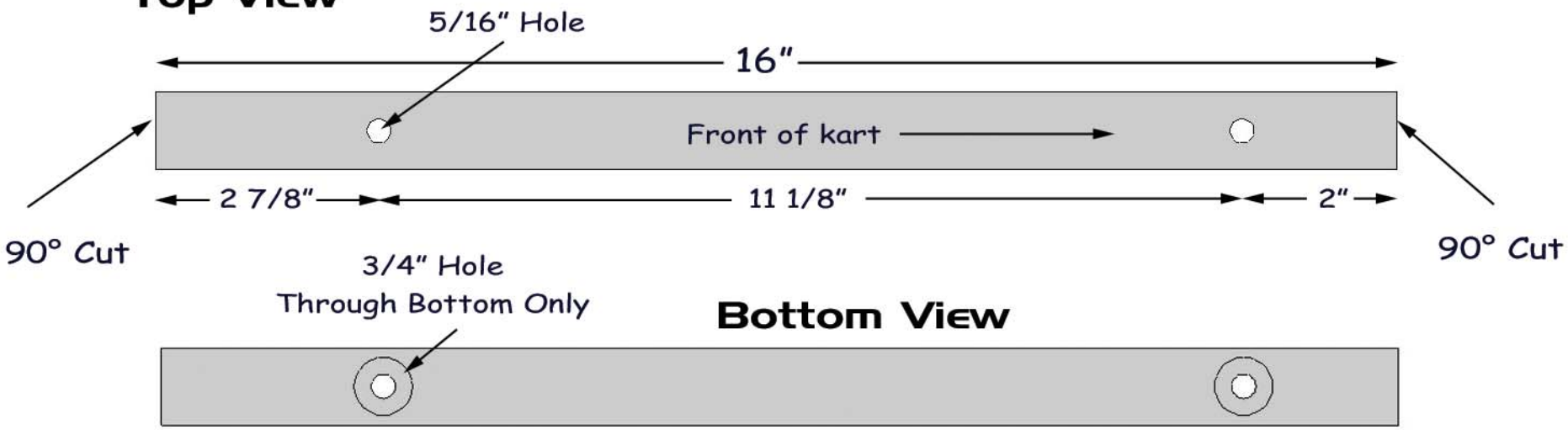
This is Part Number MF37.5-45
You will need 1 of these.

Iso View



SPIDERCARTS	16		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / MF37.5-45			Qty-1	

Top View



Bottom View

Notes

Use the 1" Square tubing, make a 90° cut then measure 16" and cut a 90°. You need to drill 2 5/16" holes as shown all the way through, then flip it over and drill a 3/4" hole only through the bottom. This will allow you to put the nut on the seat bracket and tighten it with a socket from the bottom.

These are the rails that the seats are going to be bolted to, so if you are using the seats we suggested here in the plans then these holes are correct. If you are using some other seats then make the holes you need for your seat mounts.

This is Part Number MF16-90
You will need 4 of these.

Iso View

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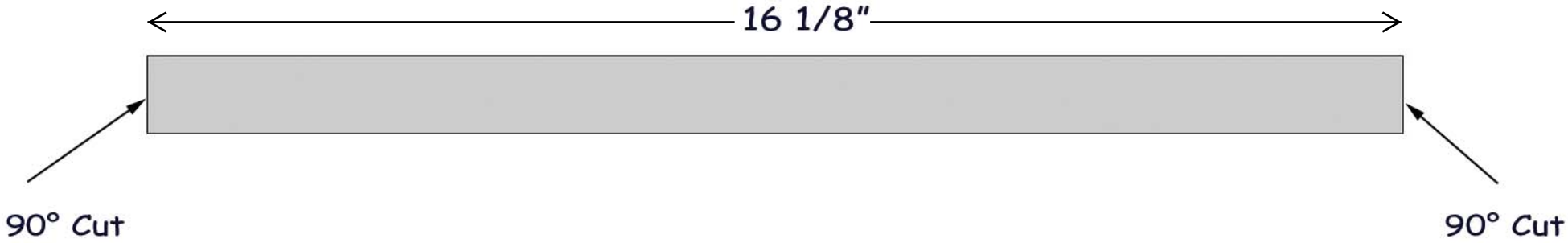
			Authorized	Robert Dicken	1" Square Tubing	
		Part / MF16-90			Qty-4	

Top View

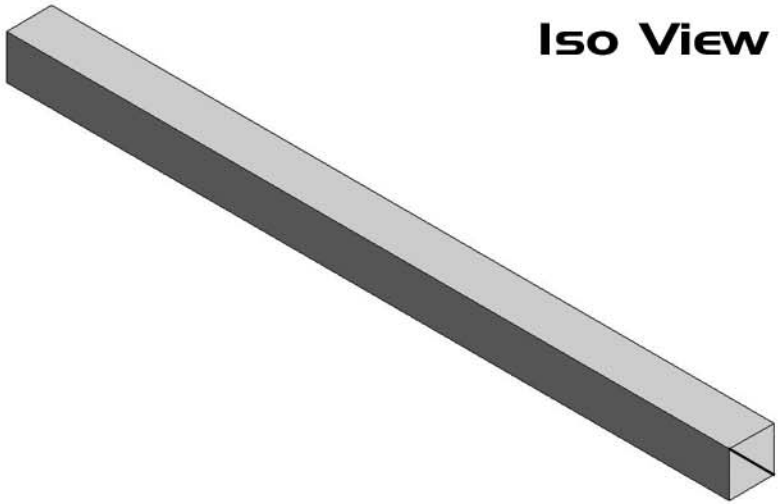


Notes

Use the 1" Square tubing, make a 90° cut then measure 16 1/8" and cut another 90°. These are just like the MF16-90 but no holes and just a bit longer...

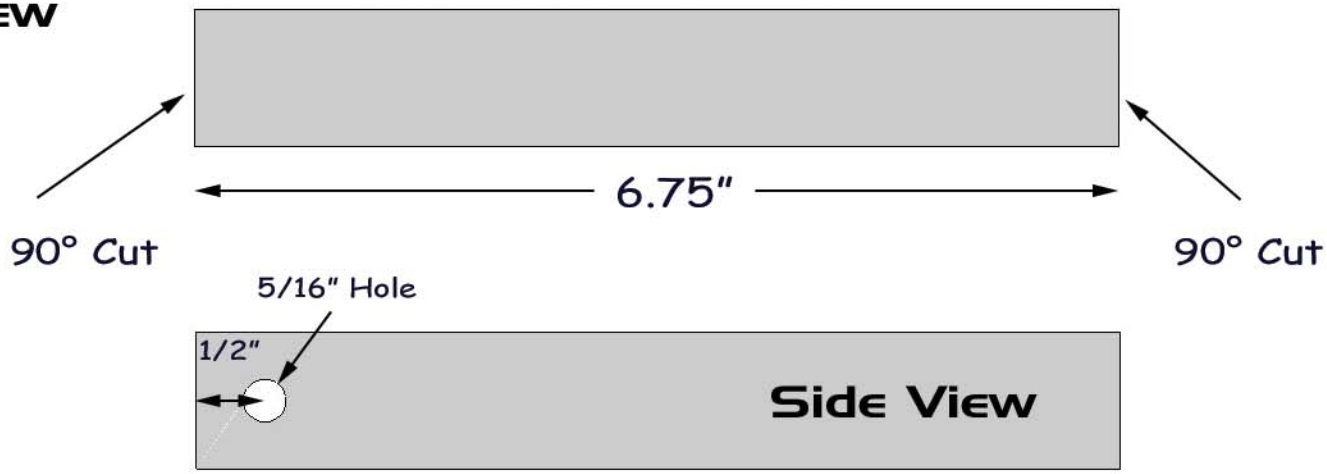
This is Part Number MF16-90+
You will need 2 of these.

Iso View



SPIDERCARTS	18		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / MF16-90+			Qty-2	

Top View

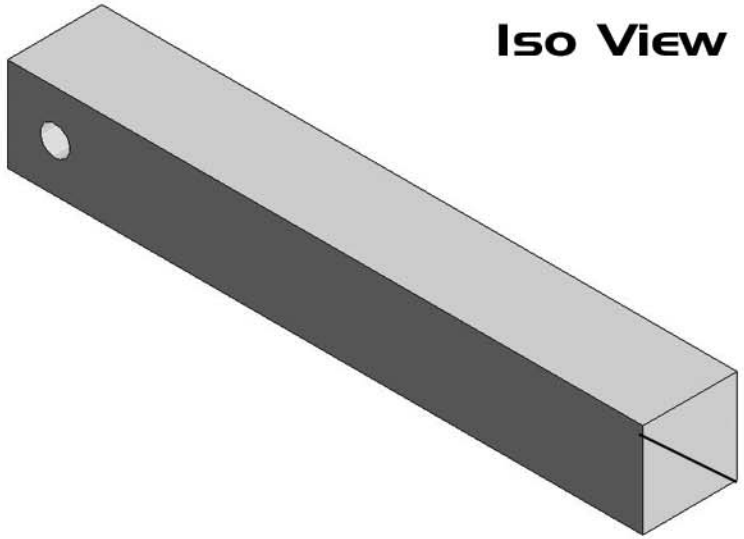


Notes

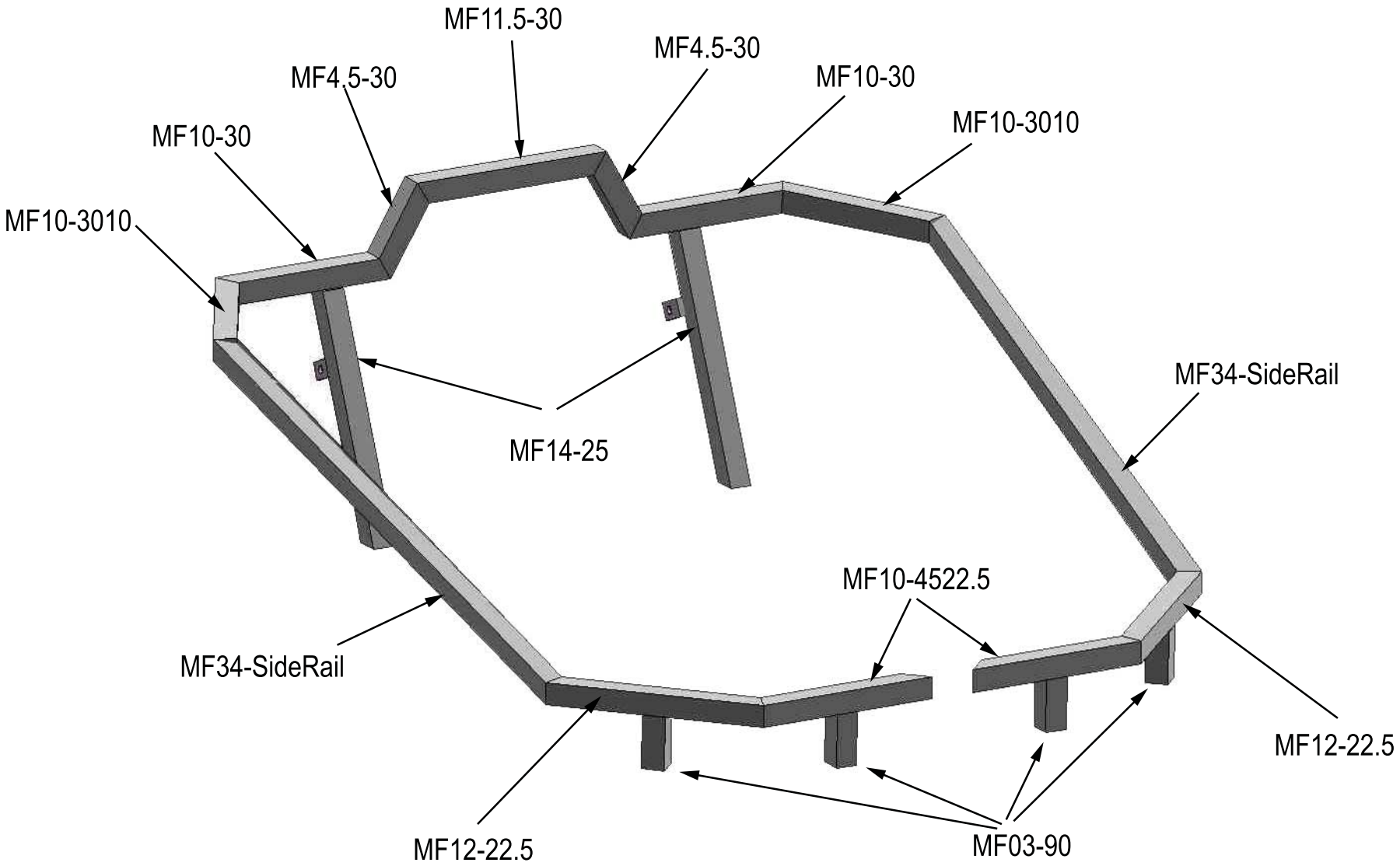
Use the 1" Square tubing, make a 90° cut then measure 6 3/4" and cut a 90°.
Drill a 5/16" hole all the way through 1/2" in from one end. This will be the hole for our pedals and will go toward the back of the kart and be through the sidewalls of the part when welding it in place.

This is Part Number MF6.75-90
You will need 2 of these.

Iso View



SPIDERCARTS	19		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / MF6.75-90			Qty-2	



SPIDERCARTS	20		Ver.	0.1.2.6		Copyright is the property of Spidercarts and shall not be reproduced.
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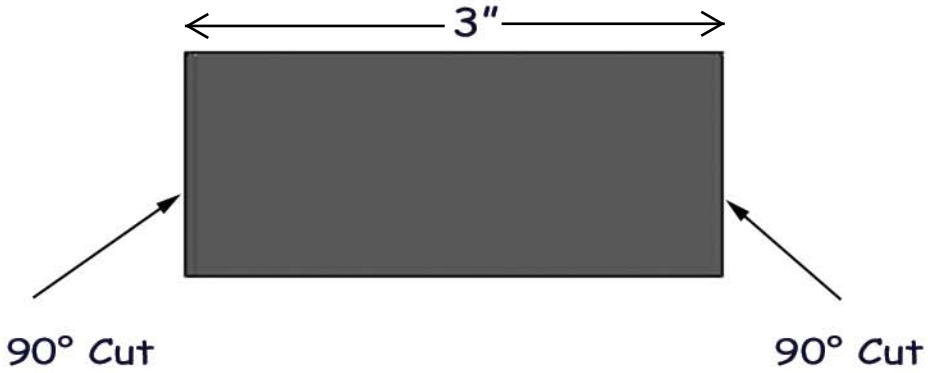
		Main Frame Rails				

Top View

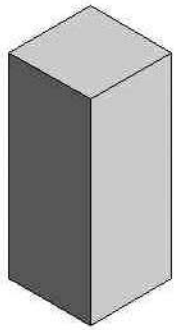


Notes

These will be used as riser blocks on the main frame and the suspension block.
Use the 1 1/4" Square tubing, make a 90° cut then measure 3" and cut a 90°.

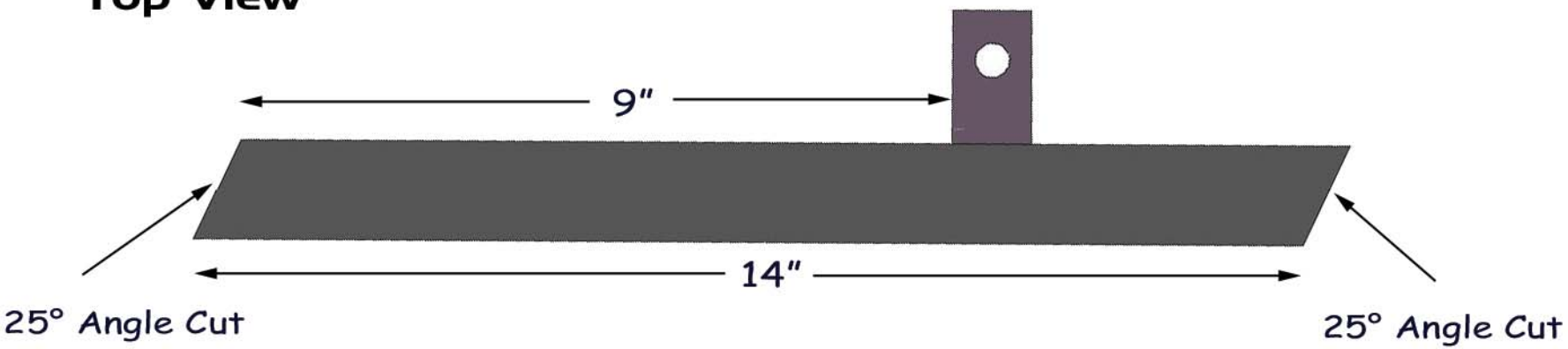
This is Part Number MF03-90
You will need 8 of these.

Iso View



SPIDERCARTS	21		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF03-90			Qty-8	

Top View



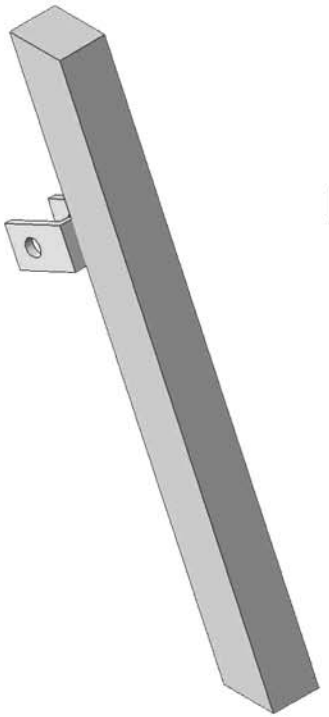
Notes

These are the rear uprights to connect the Main Frame with the Main Frame Rails. Also the Rear shock will mount to the weldment bracket you weld on as shown.

Use the 1 1/4" Square tubing, make a 25° cut then measure 14" and cut another 25°. Make sure they do not mirror each other.

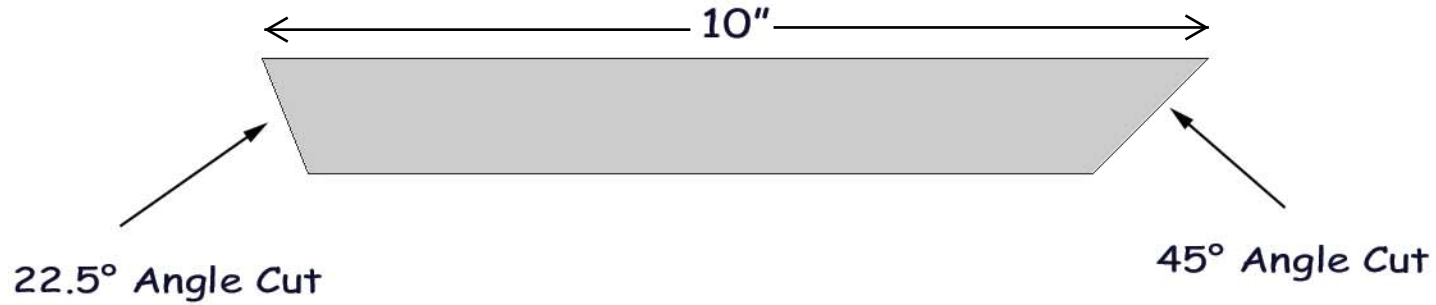
This is Part Number MF14-25
You will need 2 of these.

Iso View



SPIDERCARTS	22		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF14-25			Qty-2	

Top View



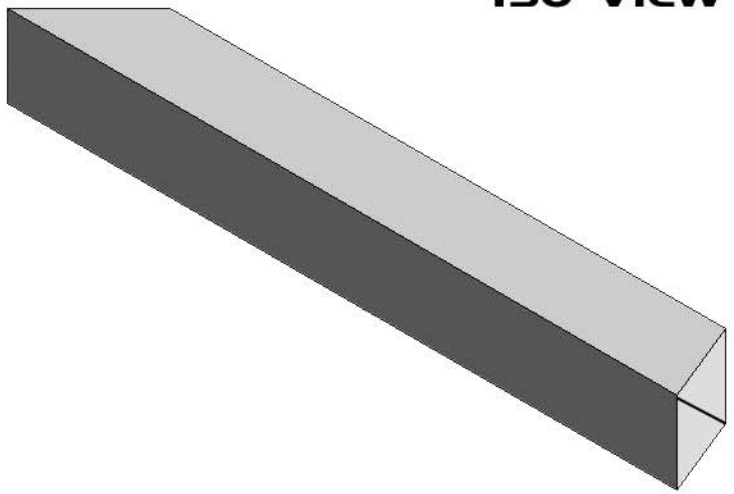
Notes

Use the 1 1/4" Square tubing, make a 22.5° cut then measure 10" and cut a 45°. Make sure they mirror each other.

Also dont get crazy with the .5, if you get it cut to 22° or 23° I think it will be fine...

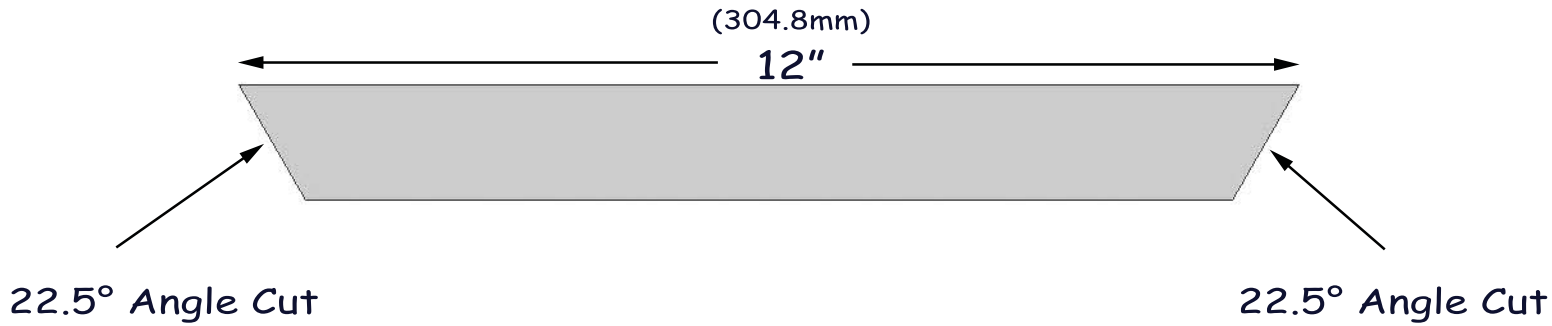
This is Part Number MF10-4522.5
You will need 2 of these.

Iso View



SPIDERCARTS	23		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF10-4522.5			Qty-2	

Top View

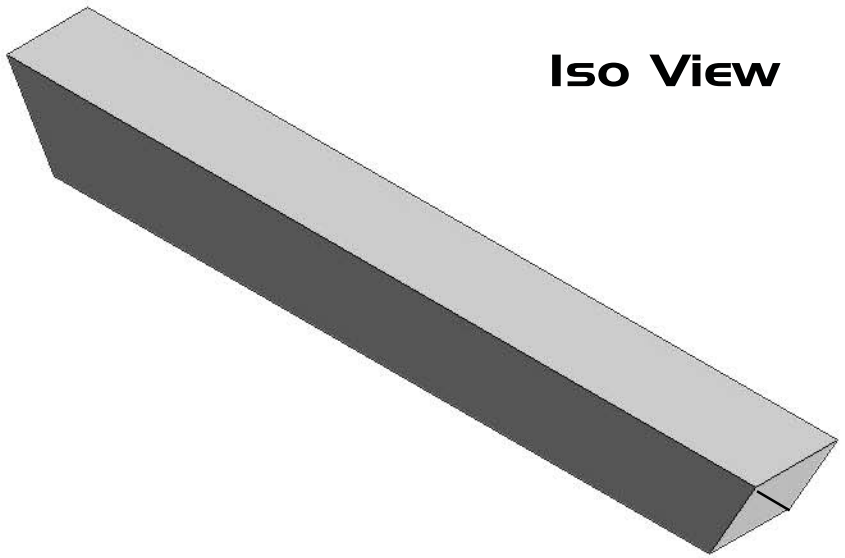


Notes

This one is the corner of the front rails...
Use the 1 1/4" (31.8mm) Square tubing, make a 22.5° cut then measure 12" (304.8mm) and cut a 22.5°. Make sure they mirror each other.

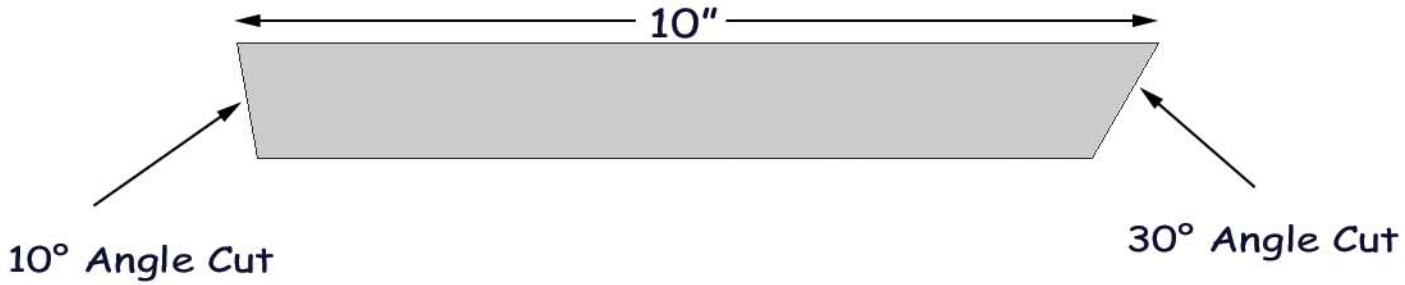
This is Part Number MF12-22.5
You will need 2 of these.

Iso View



SPIDERCARTS	23.5		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF12-22.5			Qty-1	

Top View

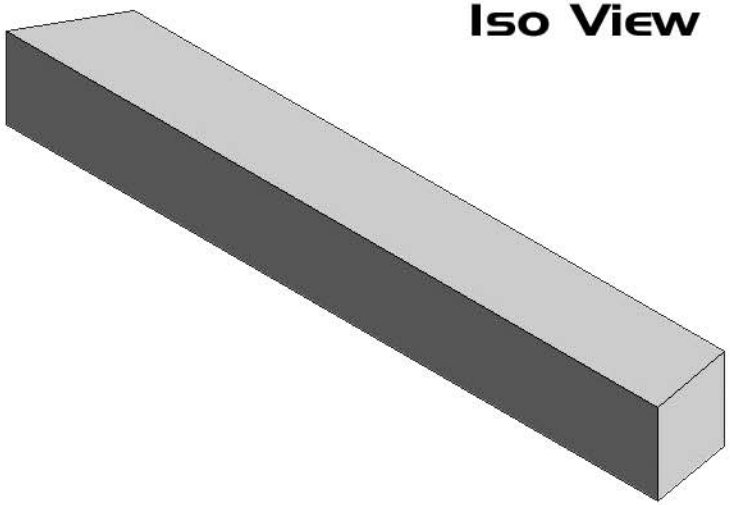


Notes

Use the 1 1/4" Square tubing, make a 10° cut then measure 10" and cut a 30°. Make sure they mirror each other. Thats it!

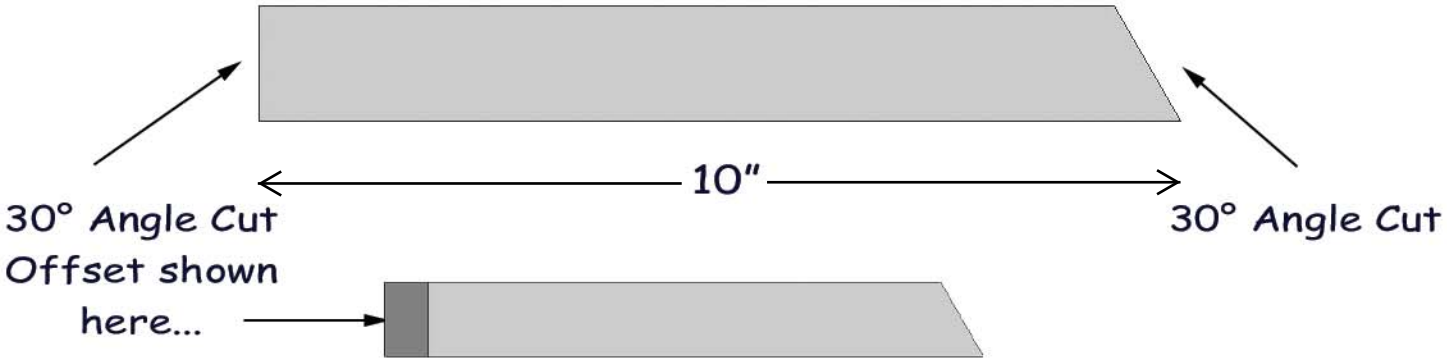
This is Part Number MF10-3010
You will need 2 of these.

Iso View



SPIDERCARTS	24		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF10-3010			Qty-2	

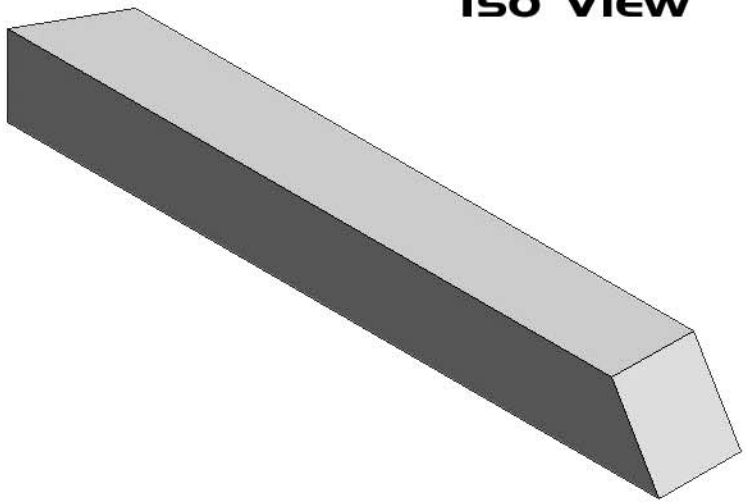
Top View



Notes

Use the 1 1/4" Square tubing, make a 30° cut then rotate the tube 90° measure 10" from the longest point and cut another 30°. So looking at the part as shown above there will be one straight edge with a 30° undercut and one 90° offset from it on the other side.

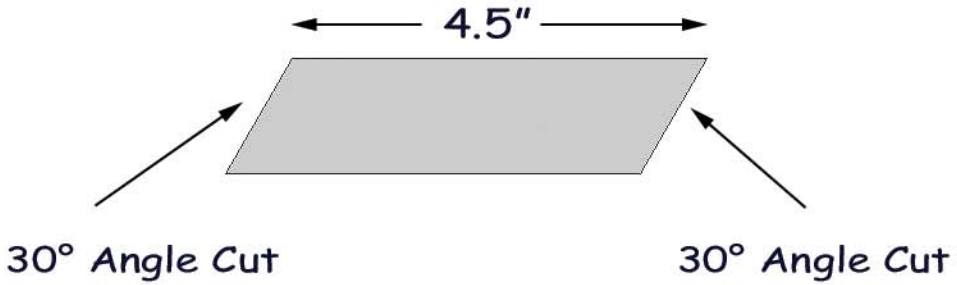
Iso View



This is Part Number MF10-30
You will need 2 of these.

SPIDERCARTS	25		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF10-30			Qty-2	

Top View

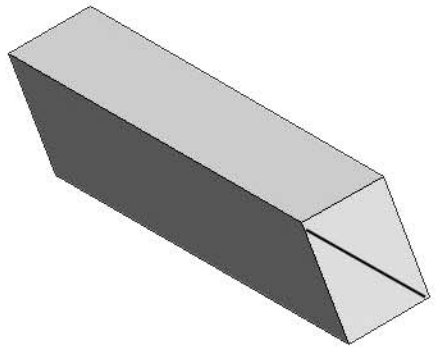


Notes

Use the 1 1/4" Square tubing, make a 30° cut then measure 4.5" and cut a 30°. Make sure they do not mirror each other. Thats it!

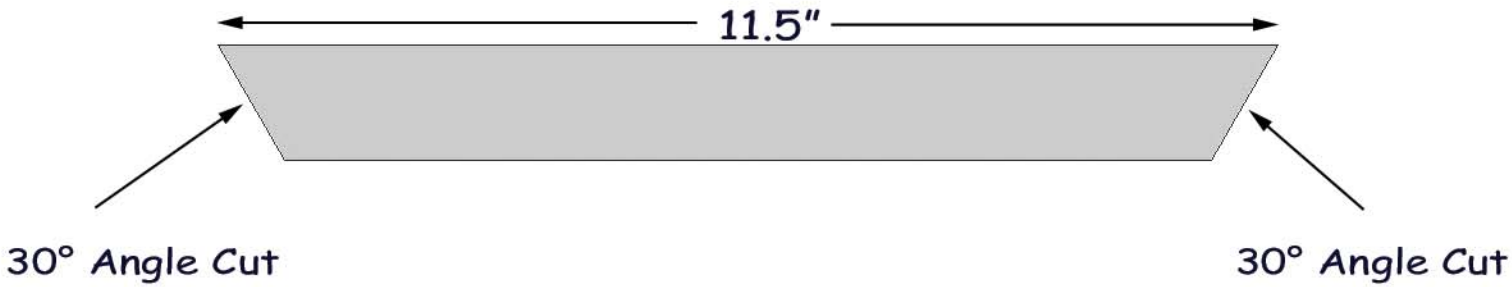
This is Part Number MF4.5-30
You will need 2 of these.

Iso View



SPIDERCARTS	26		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF4.5-30			Qty-2	

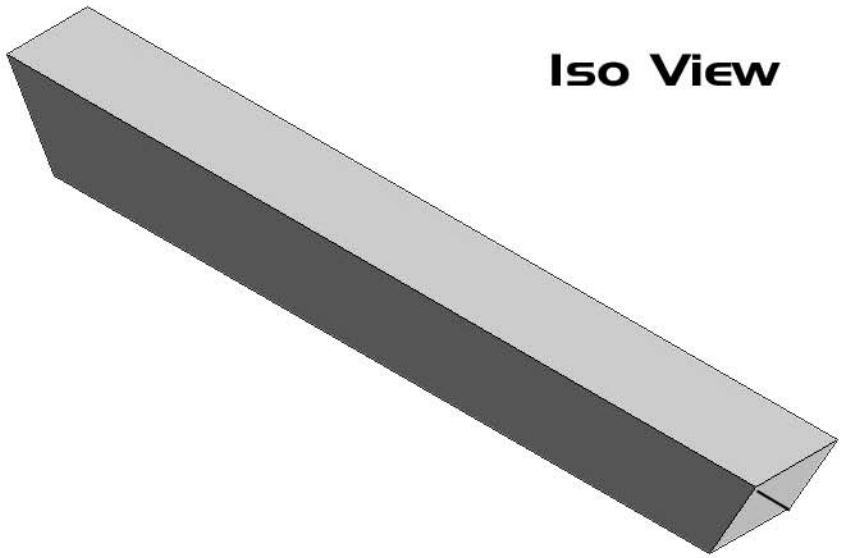
Top View



Notes

This one is the top of the back rail...
Use the 1 1/4" Square tubing, make a 30° cut then measure 11.5" and cut a 30°.
Make sure they mirror each other.

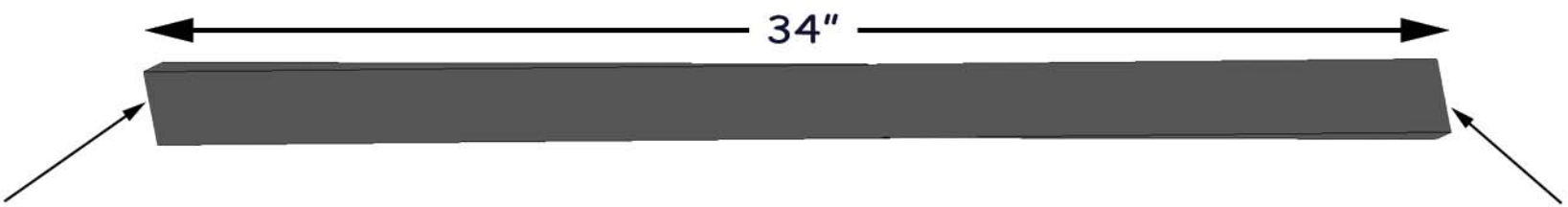
Iso View



This is Part Number MF11.5-30
You will need 1 of these.

SPIDERCARTS	27		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF11.5-30			Qty-1	

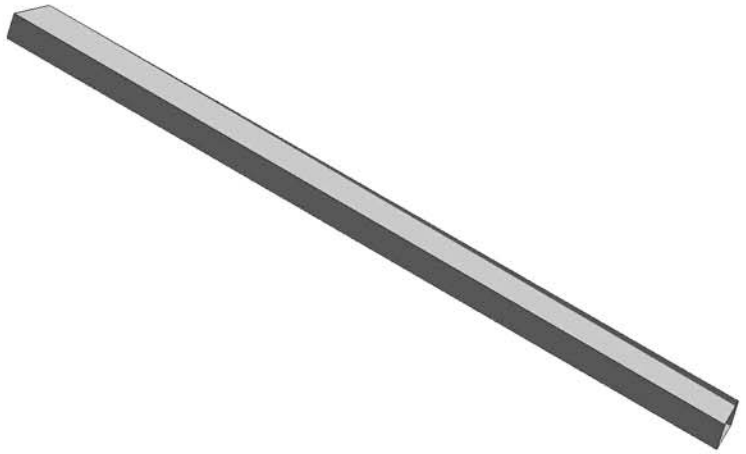
Top View



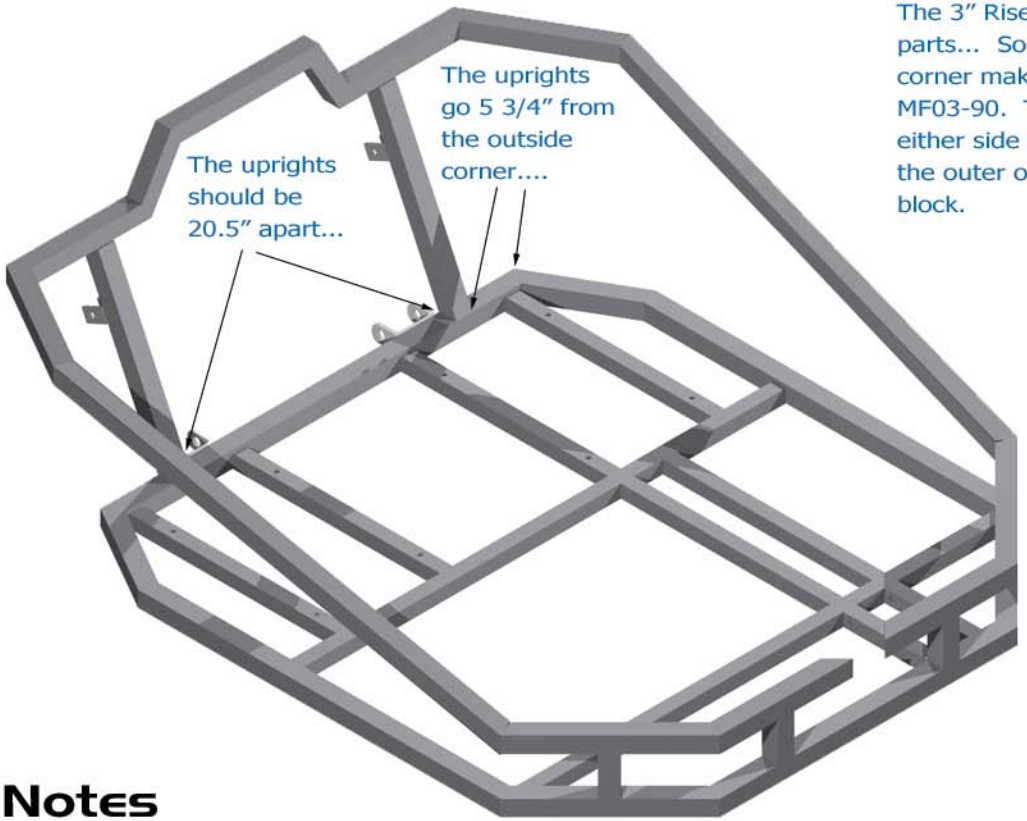
Notes

This is probably the trickiest cut on the frame. I would save this for last on the MainFrame. Weld everything else into place then start with a 35" piece of 1 1/4" and hold it up to the rails already welded into place. Then mark on the piece the angles and length you need. Make sure you take your time here and start with a longer piece so you can work your way down to the proper length.

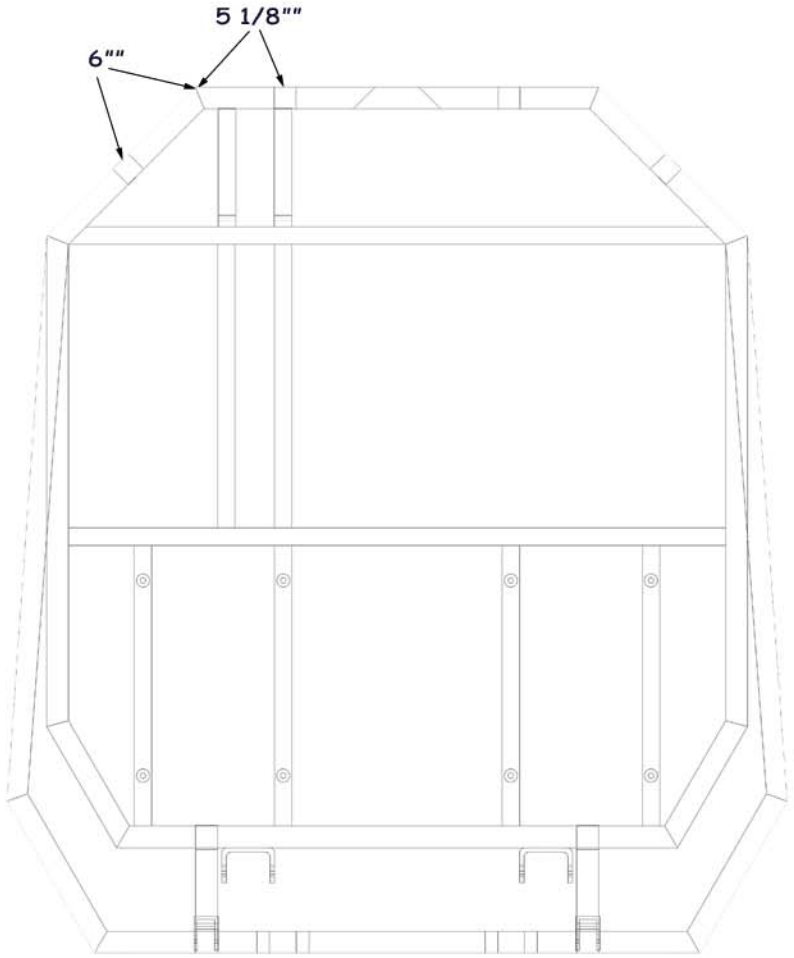
Iso View



SPIDERCARTS	28		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / MF34-SideRail			Qty-2	



The 3" Risers MF03-90 are placed at the centers of the top rail parts... So for the front ones measure 5 1/8" from the outside corner make a mark and that will be your center for your MF03-90. Then for the MF12-22.5, just measure 6" from either side make a mark and that will be the center point for the outer ones. the other 4 will be used for the suspension block.



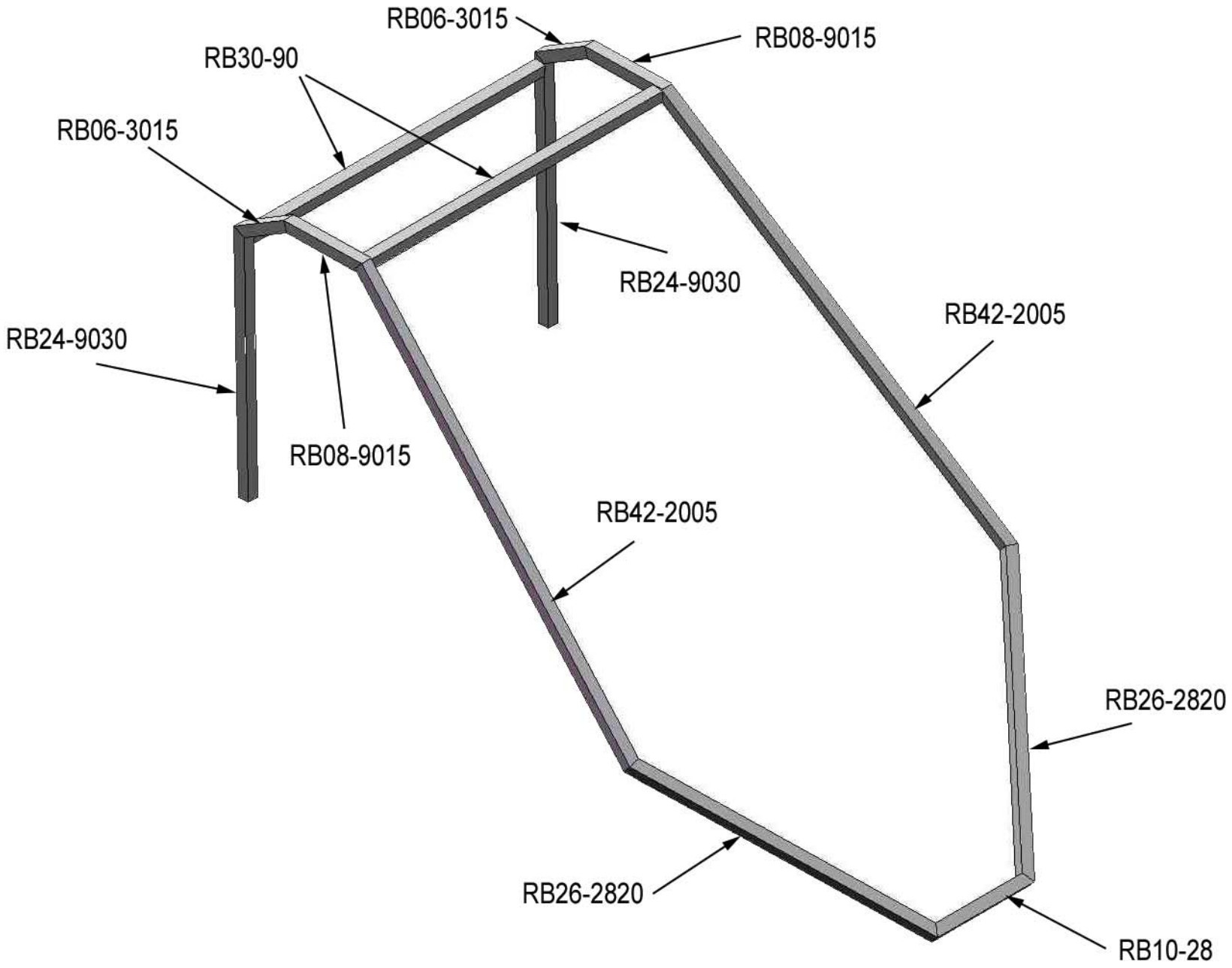
Notes

OK well here is the MainFrame and Rails all welded together. I would cut out all the parts first then lay it all out to make sure you have cut everything right and I have given you the right measurements...LOL then weld it all to gether. start with the flat stuff on the bottom then the risers and uprights, then the rails...

Weld all the 1" tubing flush with the bottom of the 1 1/4" so that when you put on any flooring it will mount up a lot better. Remember to weld on the Shock mount weldments at 9" up on the uprights in the back...The MF14-25's.

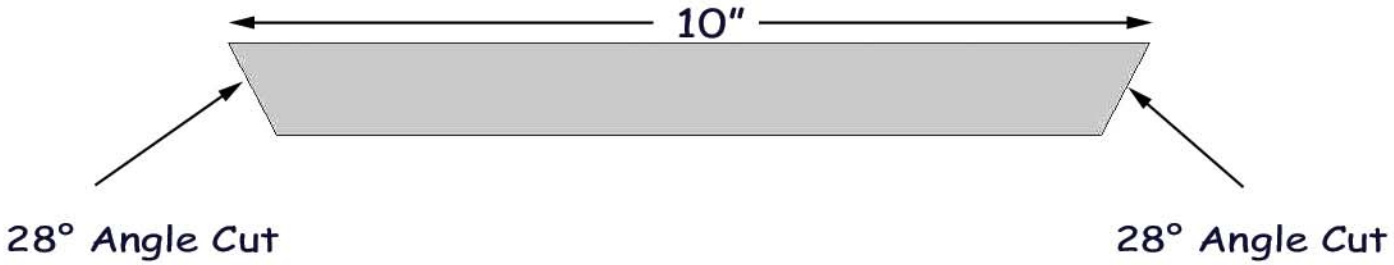
Thats about it! Not so hard huh?

SPIDERCARTS	29		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken		
		Full Weld MainFrame				



SPIDERCARTS	30		Ver.	0.1.2.6		Copyright is the property of Spidercarts and shall not be reproduced.
			Authorized	Robert Dicken		
		Roll Bar				

Top View

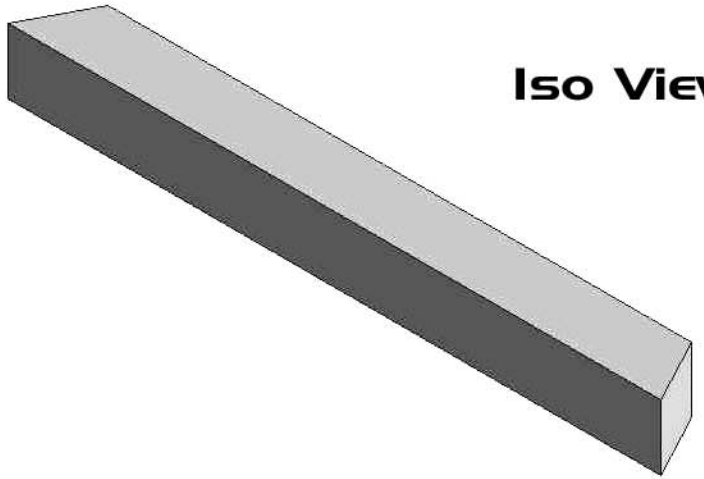


Notes

Use the 1" Square tubing, make a 28° cut then measure 10" and cut a 28°. Make sure they mirror each other. Thats it!

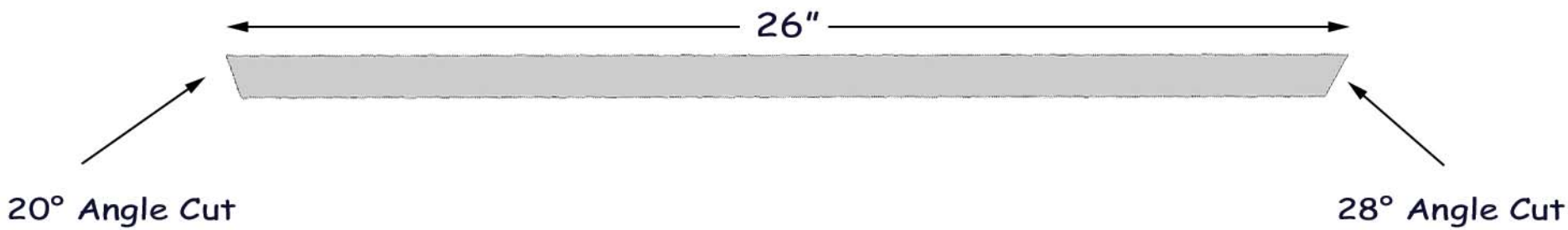
This is Part Number RB10-28
You will need 1 of these.

Iso View



SPIDERCARTS	31		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / RB10-28			Qty-1	

Top View



Notes

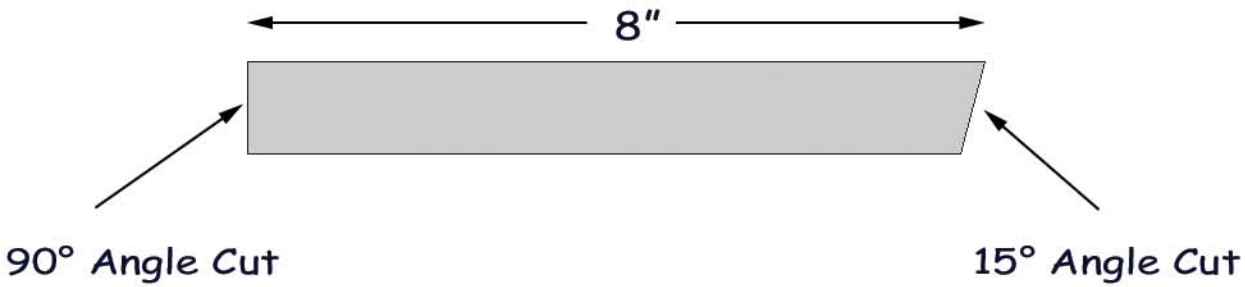
Use the 1" Square tubing, make a 20° cut then measure 26" and cut a 28°. Make sure they mirror each other.

This is Part Number RB26-2820
You will need 2 of these.

Iso View

SPIDERCARTS	32		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / RB26-2820			Qty-2	

Top View

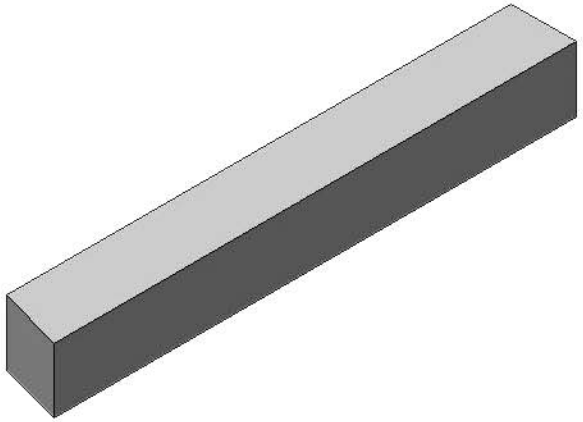


Notes

Use the 1" Square tubing, make a 90° cut then measure 8" and cut a 15°.

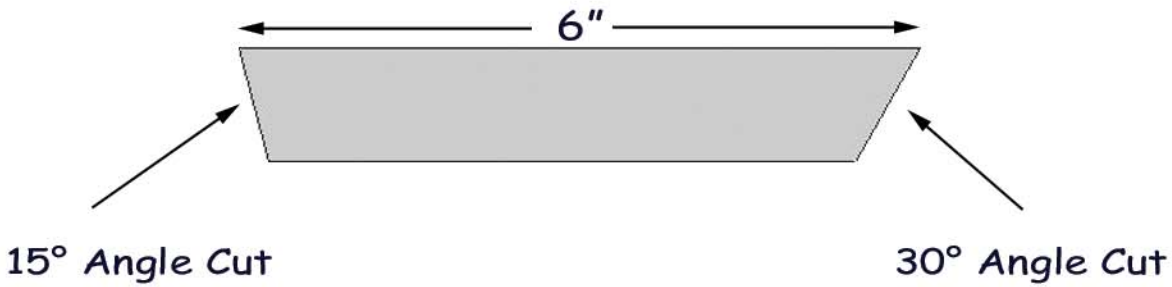
This is Part Number RB08-9015
You will need 2 of these.

Iso View



SPIDERCARTS	33		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / RB08-9015			Qty-2	

Top View

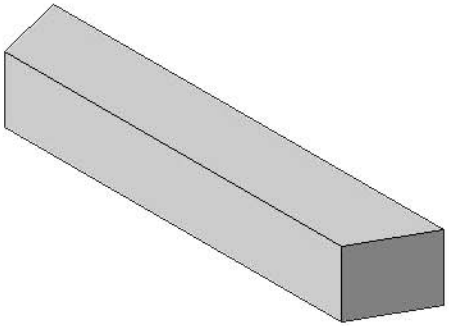


Notes

Use the 1" Square tubing, make a 15° cut then measure 6" and cut a 30°. Make sure they mirror each other.

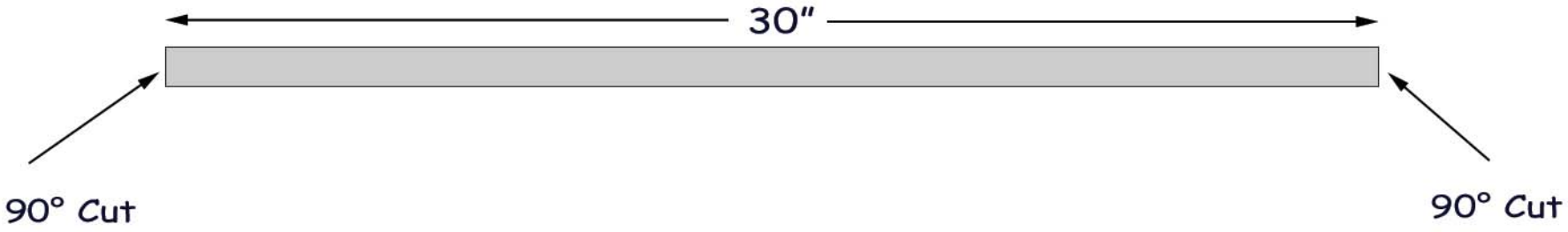
This is Part Number RB06-3015
You will need 2 of these.

Iso View



SPIDERCARTS	34		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / RB06-3015			Qty-2	

Top View



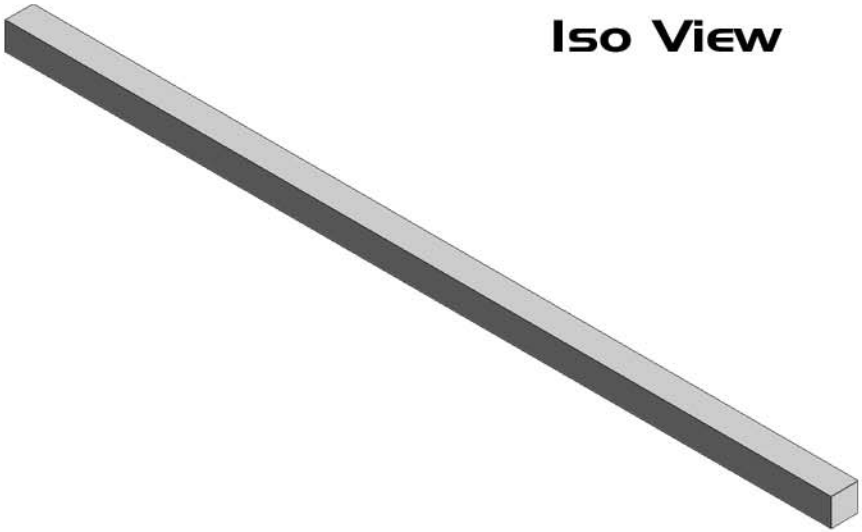
Notes

Use the 1" Square tubing, make a 90° cut then measure 30" and cut another 90°.

Real easy!

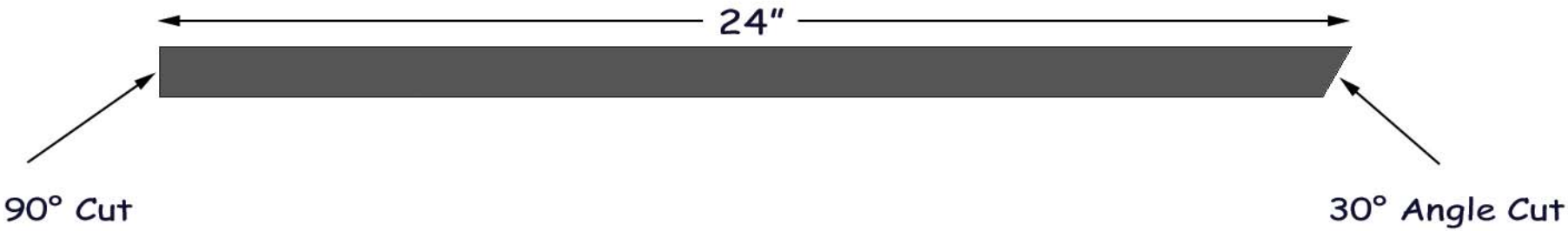
This is Part Number RB30-90
You will need 2 of these.

Iso View



SPIDERCARTS	35		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / RB30-90			Qty-2	

Top View

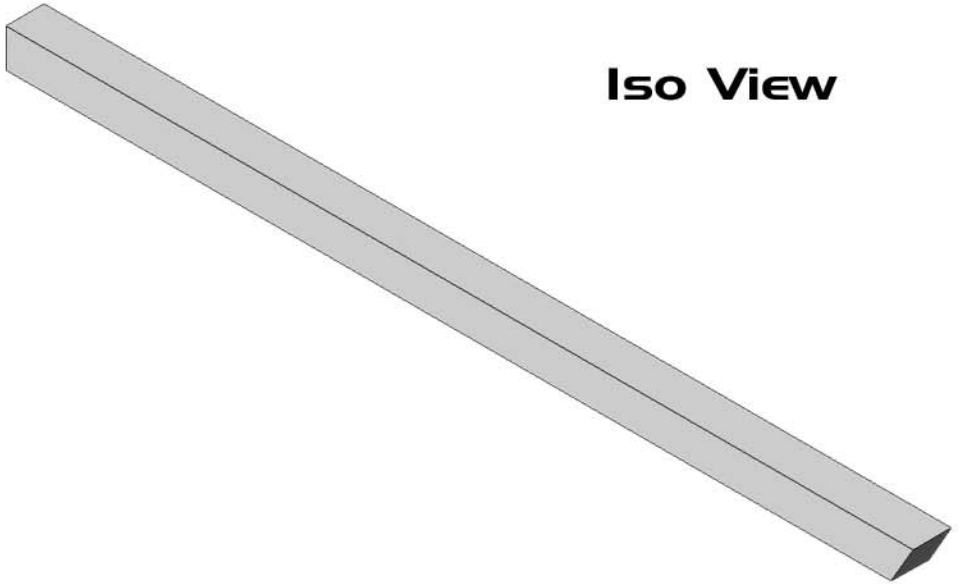


Notes

Use the 1" Square tubing, make a 90° cut then measure 24" and cut a 30°.

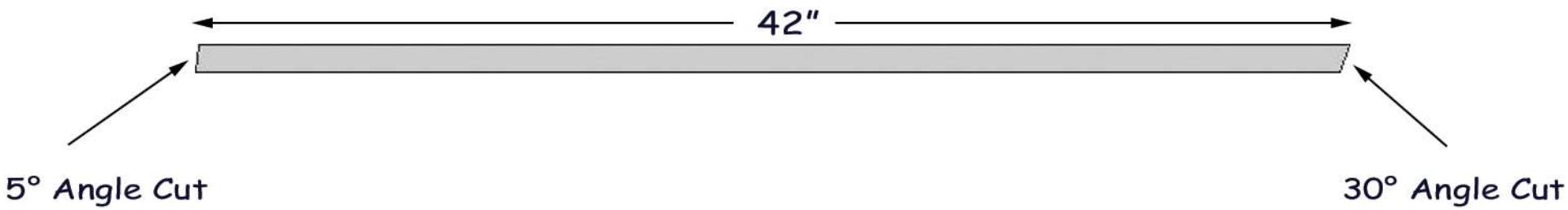
This is Part Number RB324-9030
You will need 2 of these.

Iso View



SPIDERCARTS	36		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / RB24-9030			Qty-2	

Top View

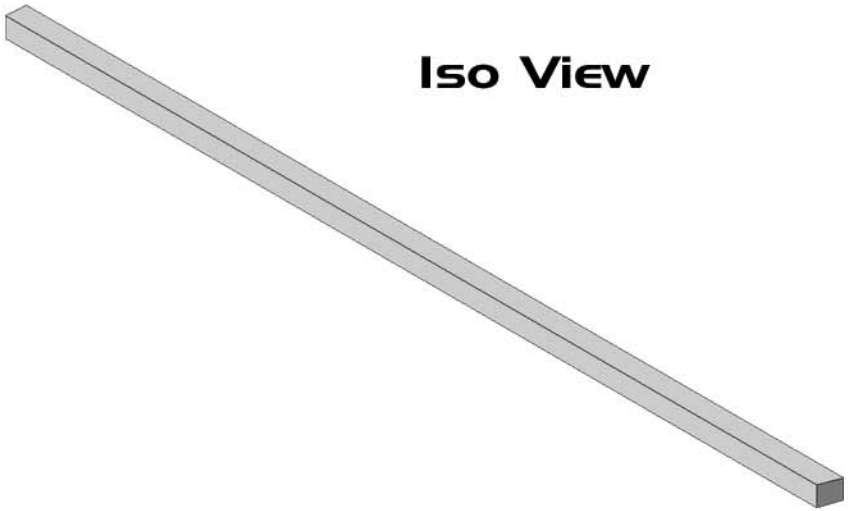


Notes

This one is one of the 2 real tricky parts to cut... The reason is that it has a compound angle. Which means you have to cut two angles on one of the ends. So to be safe this is how I would do it... Use the 1" Square tubing, make a 20° cut then measure 43" and cut a 90°. Now the end with the 20° will weld to the RB26-2820. So weld the RB26-2820's,RB10-28 & the RB42-2005 all together flat on the floor. Then just mark the cut you need for the top of the RB42-2005...

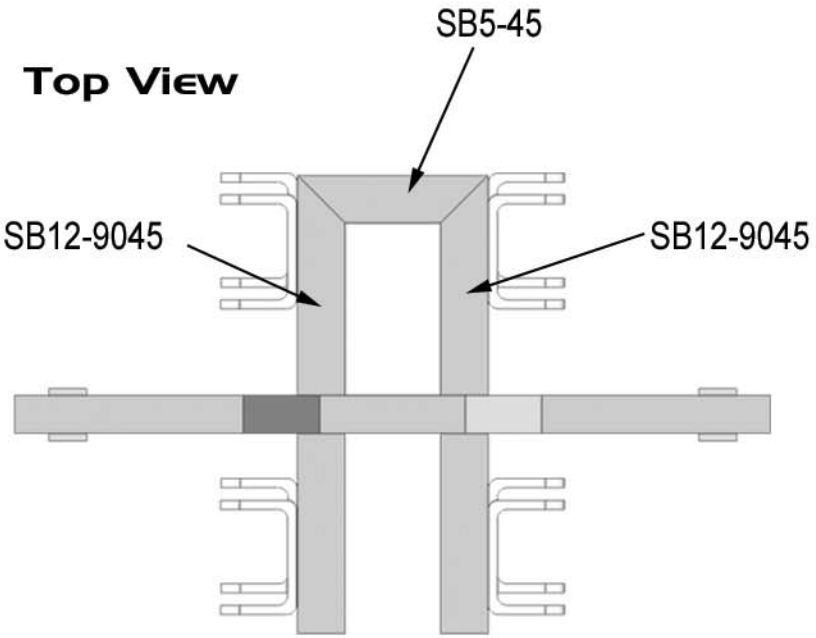
This is Part Number RB42-2005
You will need 2 of these.

Iso View

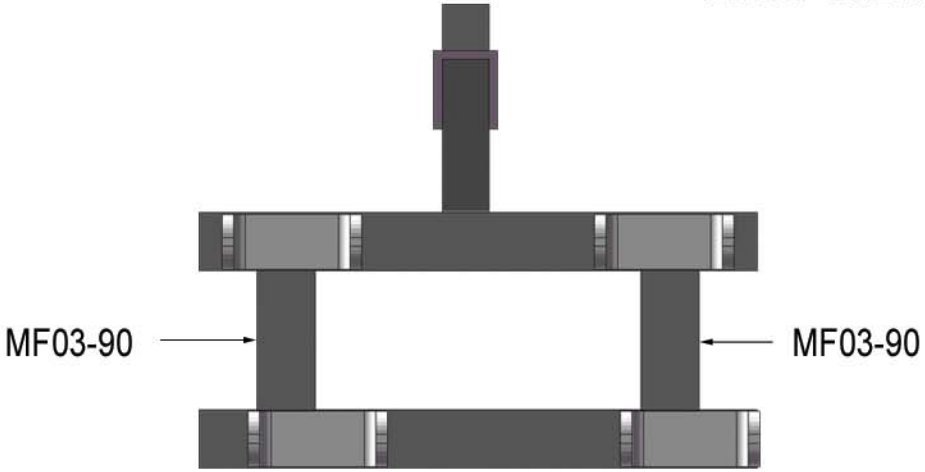


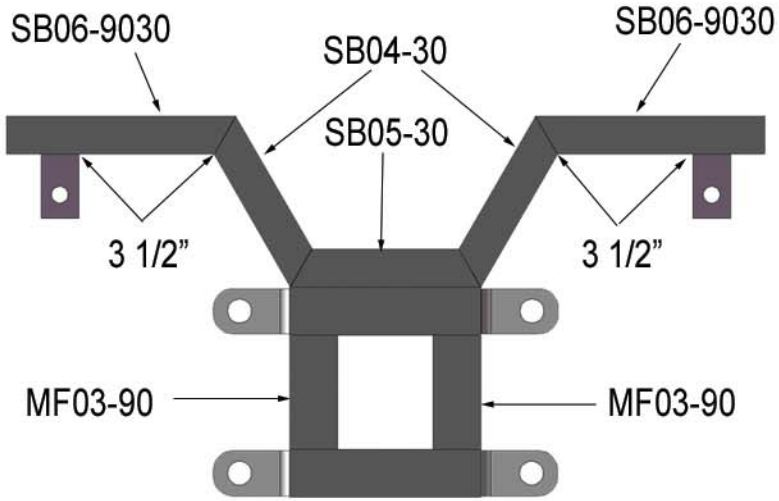
SPIDERCARTS	37		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / RB42-2005			Qty-2	

Top View



Side View



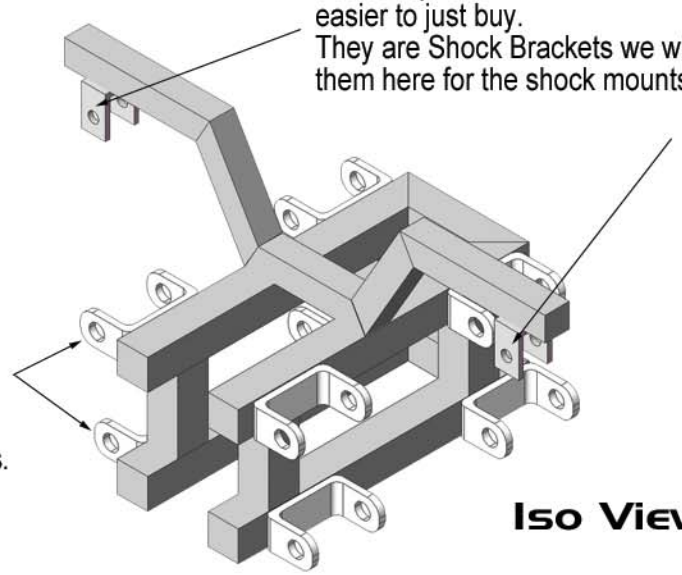


Front View

These 2 parts are weldments and are easier to just buy.
They are Shock Brackets we will use them here for the shock mounts...

These 8 parts are weldments and are easier to just buy.

They are spindle brackets we will use here for the pivot points for the A-Arms.



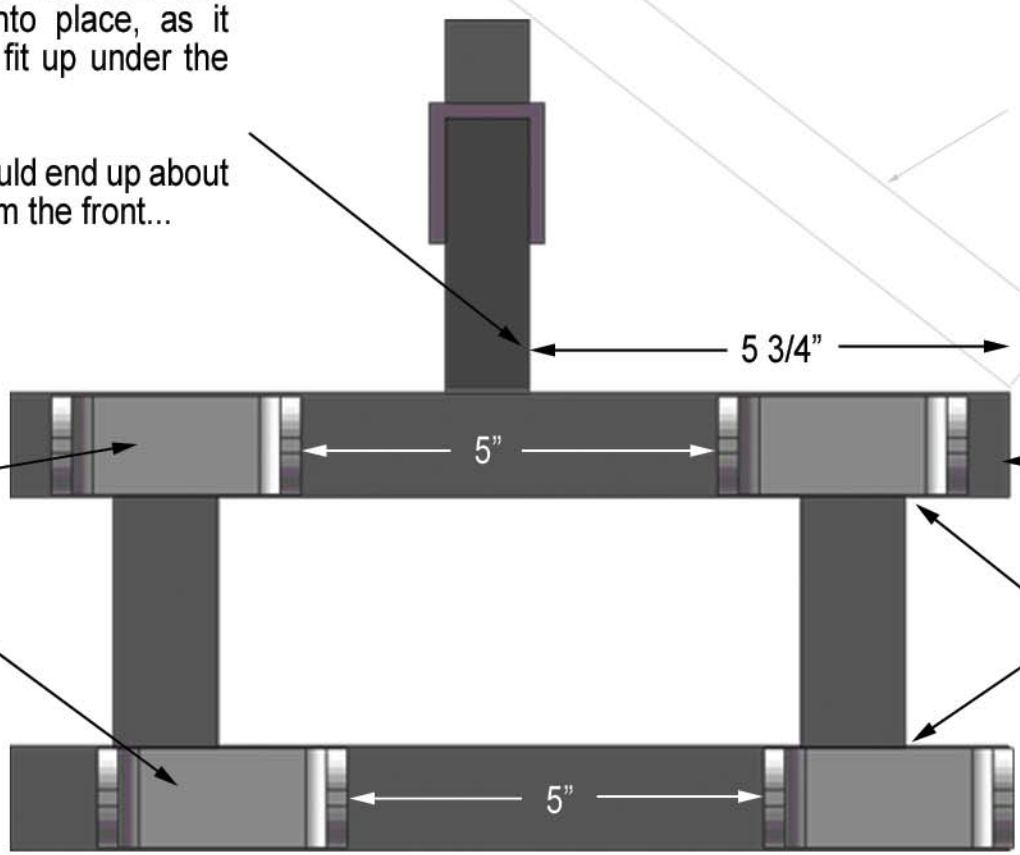
Iso View

SPIDERCARTS	38		Ver.	0.1.2.6		Copyright is the property of Spidercarts and shall not be reproduced.
			Authorized	Robert Dicken		
		Front Suspension Block				

Wait to weld this on the suspension block untill you have the Roll Bar welded into place, as it needs to fit up under the Roll Bar.

But it should end up about 5 3/4" from the front...

SB



Notes:

These 8 parts are weldments and are easier to just buy.

They are spindle brackets we will use here for the pivot points for the A-Arms.

Offset the top by 1/2"

OK, this distance should be the same as whatever you are using as spindles...

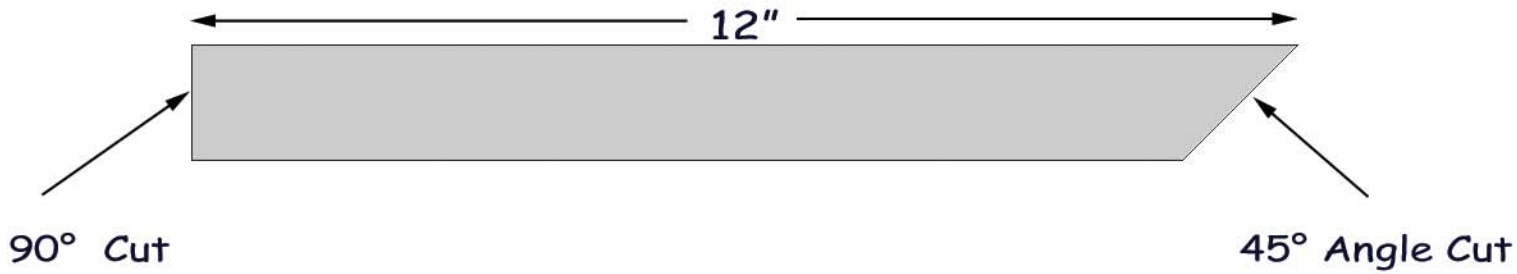
So if yours is different then move the top set up or down to match the height of your spindle. Your spindle should fit between these...

You are looking at the right side (Passenger Side) of the suspension block. Make sure to do all this on the Left side as well. Just mirror it! You also might want to put a 5/8 rod through the sets as you weld to make sure they line up with each other...

Weld with these right up to the front of the bottom.

SPIDERCARTS	39		Ver.	0.1.2.6		
			Authorized	Robert Dicken		
		Suspension Block Measurements				

Top View

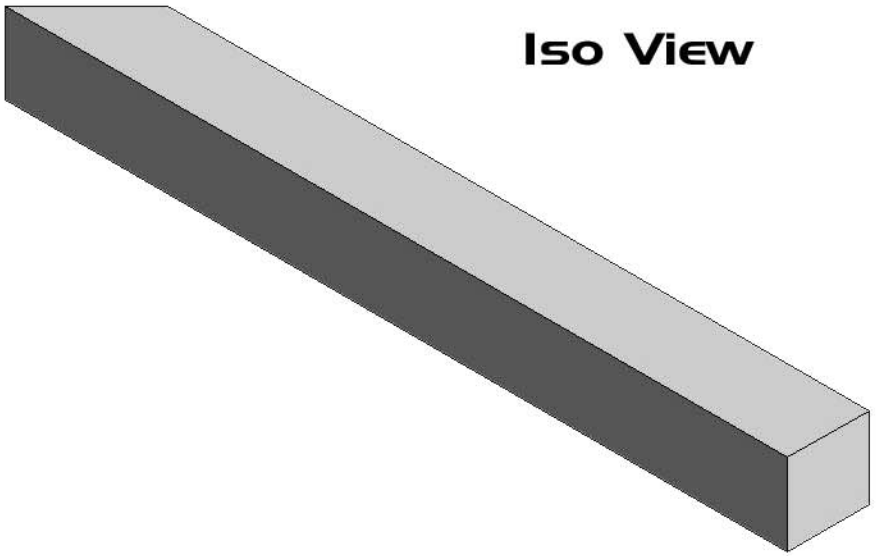


Notes

Use the 1 1/4" Square tubing, make a 90° cut then measure 12" and cut a 45°. Make sure you cut back into your measuerment so when you are done you still have a long side of 12" as shown above.

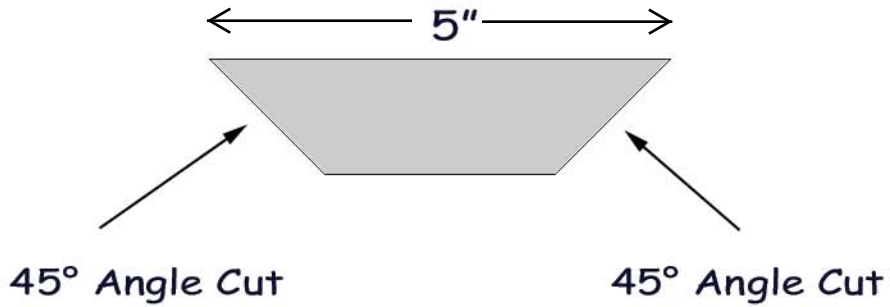
This is Part Number SB12-9045
You will need 4 of these.

Iso View



SPIDERCARTS	40		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / SB12-9045			Qty-4	

Top View



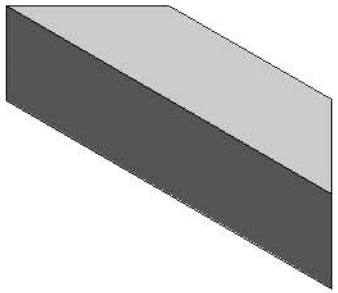
Notes

These are the front pieces for the Suspension Block

Use the 1 1/4" Square tubing, make a 45° cut then measure 5" and cut another 45°. Make sure they mirror each other. Thats it!

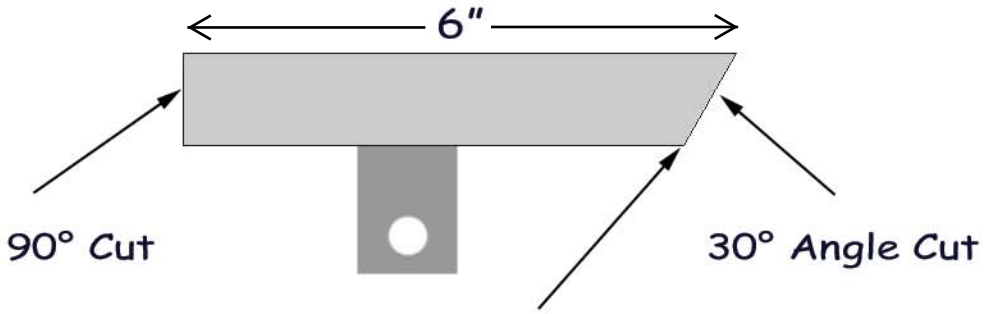
This is Part Number SB05-45
You will need 2 of these.

Iso View



SPIDERCARTS	41		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / SB05-45			Qty-2	

Top View



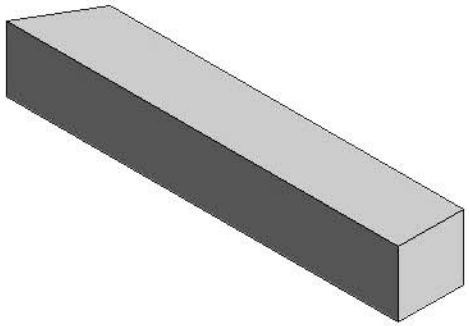
Notes

This is the outer piece of the upper front shock bracket. You will need to weld one of the Shock Bracket weldments, 3" from the short side of the 30° cut.

Use the 1" Square tubing, make a 90° cut then measure 6" and cut a 30°. Make sure you end up with 6" on your lond side as shown above.

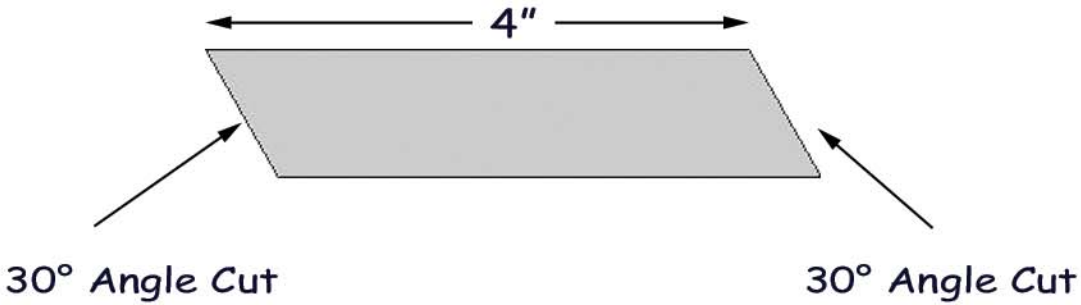
This is Part Number SB06-9030
You will need 2 of these.

Iso View



SPIDERCARTS	42		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / SB06-9030			Qty-2	

Top View

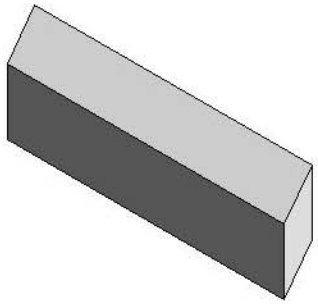


Notes

Use the 1" Square tubing, make a 30° cut then measure 4" and cut a 30°. Make sure they do not mirror each other.

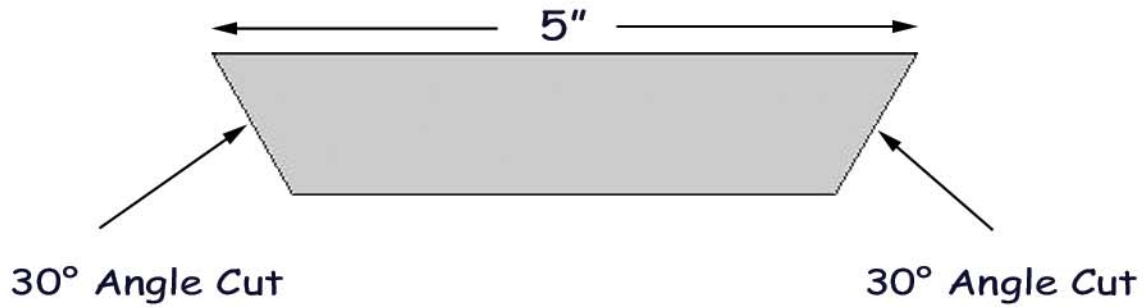
This is Part Number SB04-30
You will need 2 of these.

Iso View



SPIDERCARTS	43		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / SB04-30			Qty-2	

Top View

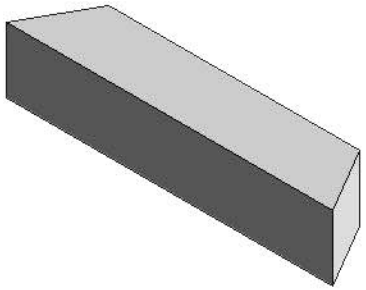


Notes

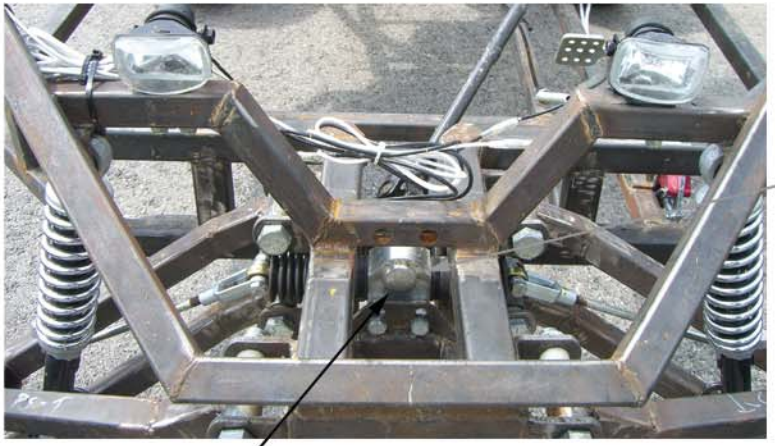
Use the 1" Square tubing, make a 30° cut then measure 5" and cut a 30°. Make sure they mirror each other.

This is Part Number SB05-30
You will need 1 of these.

Iso View



SPIDERCARTS	44		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / SB05-30			Qty-1	



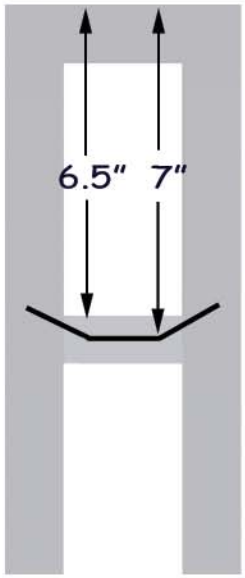
8" Rack & Pinion part from Desertkart.com with two 6" splines and two universal joints... To mount this Rack & Pinion I welded 2 1/2" piece of 1x1" tubing at 6 1/2" from the very front of the suspension block, then welded the bracket that I purchased for that Rack & Pinion at 7" from the very front of the Suspension Block.

When you buy the 6" splines from DesertKart.com you will have 2 of the which is a total of 12" but the steering shaft needs to be 18.5-19" in length so you will need to weld in a 7" piece of 5/8 steering shaft to weld in between the 6" splines...

Notes

OK now on to the Suspension Block... Sorry about the rust in the pictures but you have about 3 days here in the south before you start getting rust... But anyway! Notice in this picture that there is a rack and pinion with boots setting down in the bottom of the suspension block. This is a part that I decided to buy so I could put the steering components at center and then have my steering wheel over in the drivers area. You may decide to go a different route but what ever you decide to do here make sure you weld on any brackets before you box this in or you may not be able to after it is all welded together.

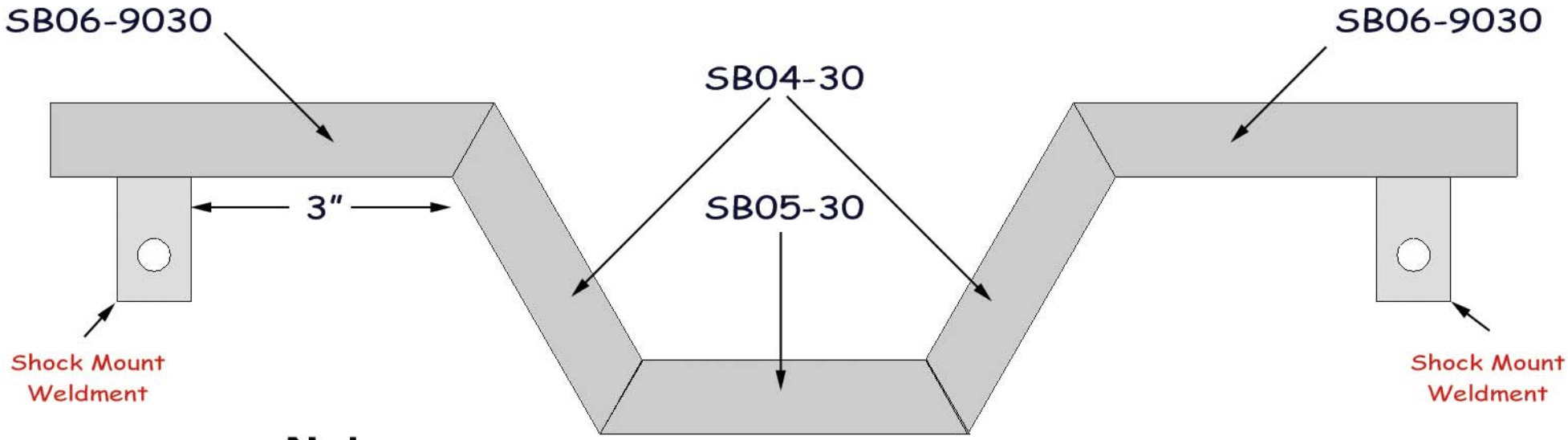
Top View



2 1/2" Support @ 6 1/2" from the front.

SPIDERCARTS	45		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken		
		Rack & Pinion				

Front View

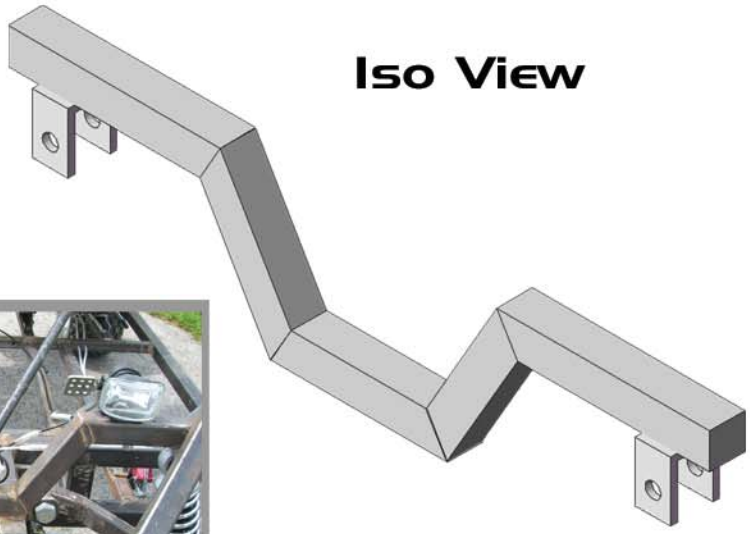


Notes

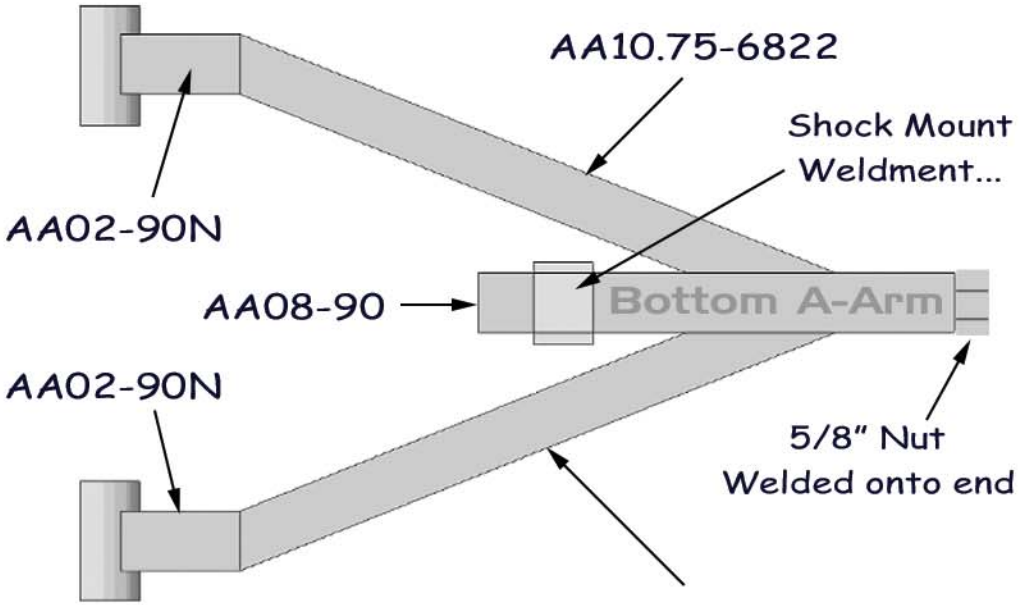
This is the upper support for the front shocks and a welding point for the front of the Roll Bar. Also on ours we pre-drilled holes for headlights on the top of the SB06-9030. I would suggest welding all of these parts together flat and then set it aside till you have the MainFrame, Suspension Block and the Roll Bar all welded together.

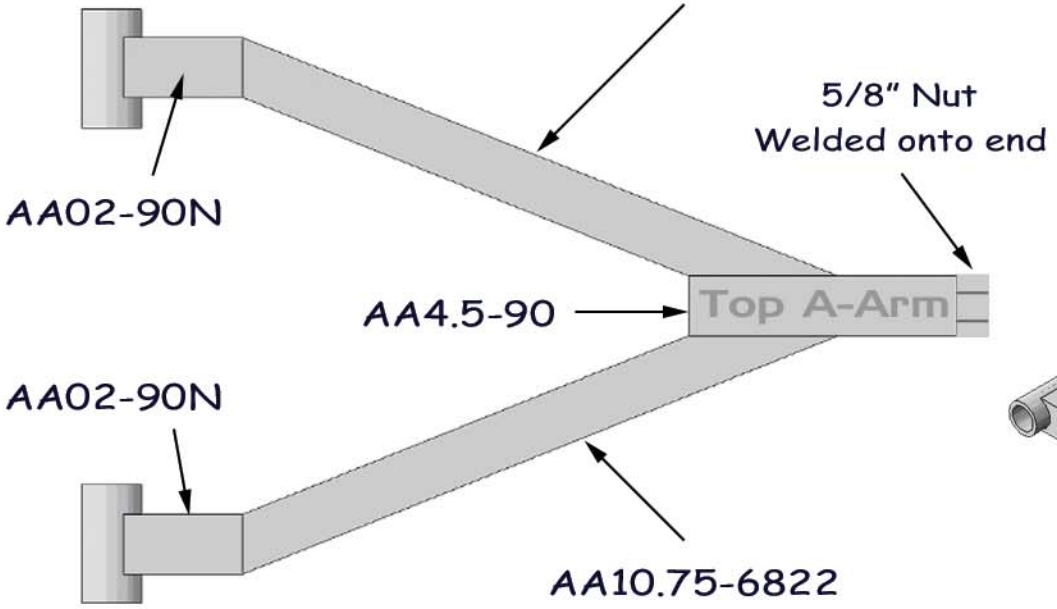
Remember all of the parts in this support are made out of the 1" square tubing.

Iso View



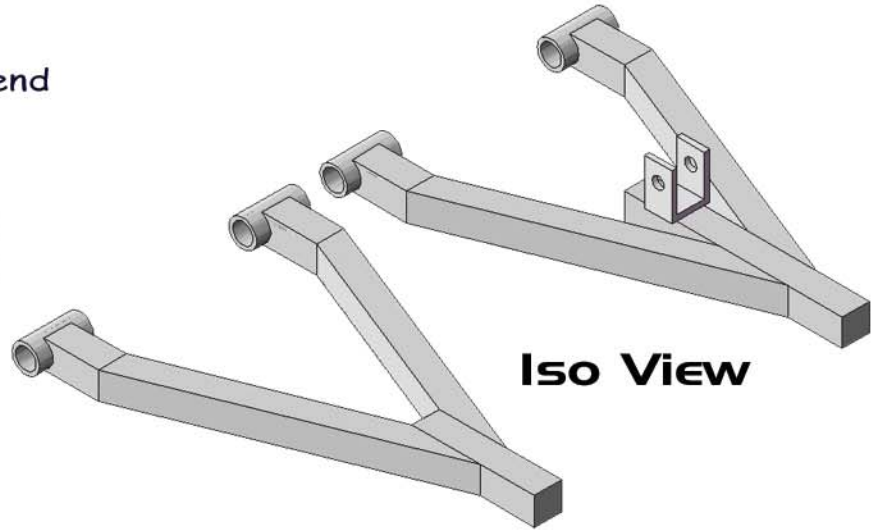
SPIDERCARTS	46		Ver.	0.1.2.6	Metal Type	Copyright is the property of Spidercarts and shall not be reproduced.
			Authorized	Robert Dicken	1" Square Tubing	
		Upper Shock Mount				





Notes

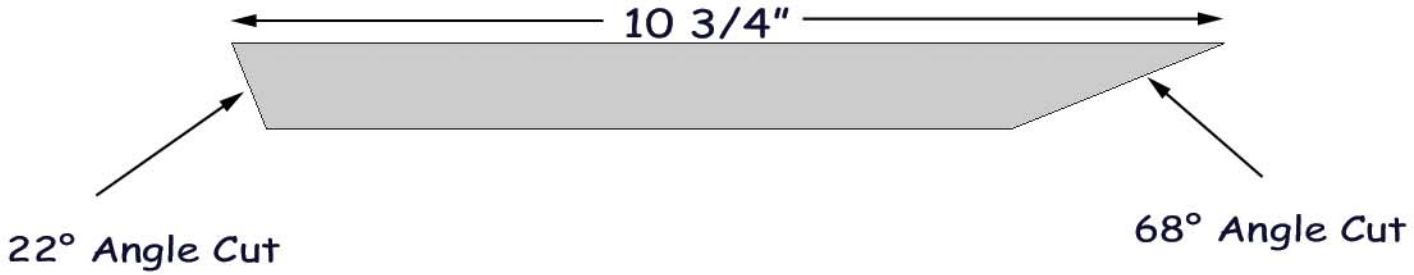
Use the 1" Square tubing to make your A-Arms. These are a bit tricky. And kind of hard to do so take your time and go slow. The important thing here is to make sure all of thes come out about the same! Try to make all of your parts the same and even creat some sort of welding jig for them if needed. The bottom A-Arm has a bit longer center piece and a Shock Mount weldment, but other than that they are the same. You will weld on 5/8" Fine thread nuts to the ends of these for your Rod Ends to thread into. Also we used bushings as the pivots at the other end...



Iso View

SPIDERCARTS	47		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Upper & Lower A-Arms			2-Each	

Top View



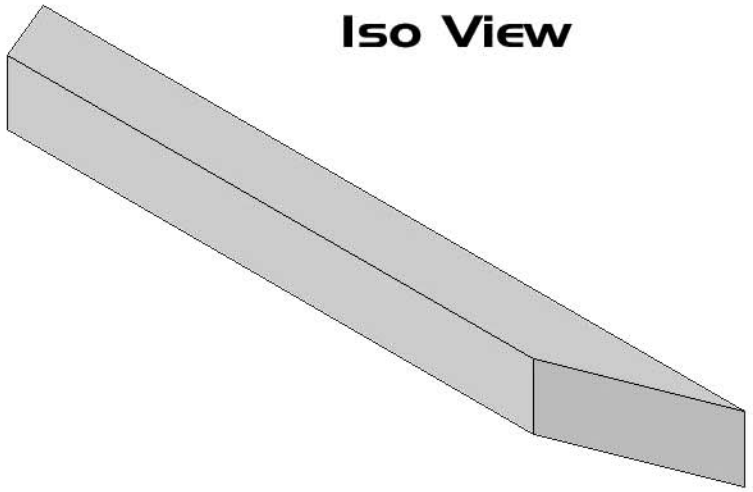
Notes

Use the 1" Square tubing, make a 22° cut then measure 10 3/4" and cut a 68°. Make sure they mirror each other. This is going to be a hard one for ya! Most chop saws will only go to a 45° with the gaurd. So you might have to cut this one with a hand saw or use a angle grinder with a cutting disc. Make these all as close to the same as possible!

Remember to be careful! Safety First!

This is Part Number AA10.75-6822
You will need 8 of these.

Iso View



SPIDERCARTS	48		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / AA10.75-6822			Qty-8	

Notes

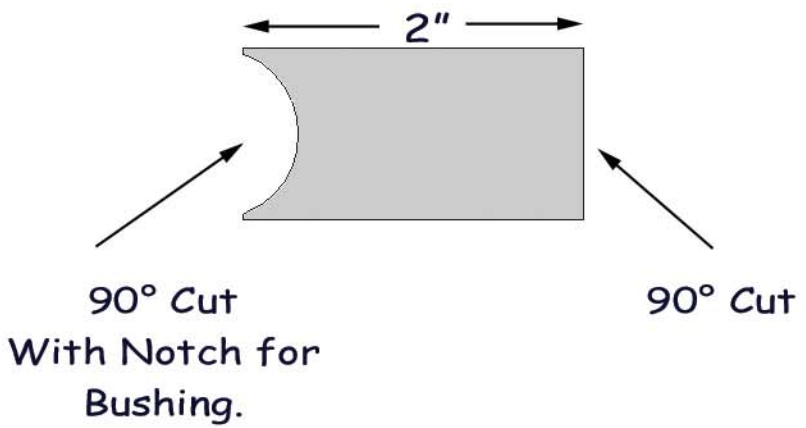
Use the 1" Square tubing, make a 90° cut then measure 2" and cut another 90°. You need to cut or grind a notch in one end for the 1-2 TL Bushings. The bushings are 1" in diameter so make your notch just under a 1/2" deep. You might want to weld it onto the AA10.75-6822 first so you have something to clamp or hold onto if you are using a grinder. Then center up the bushing and weld it into place. I like to save welding the bushings on untill I have the rest of the A-Arm welded to gether then you can run a 3/8" Rod through 2 of the bushings and line them both up and clamp them and weld. That way you know they will be straight when you go to put them on the Suspension Block.

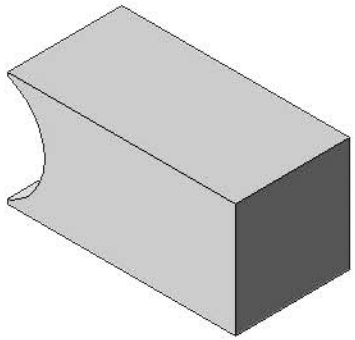
Make these all as close to the same as possible!

Remember to be careful! Safety First!

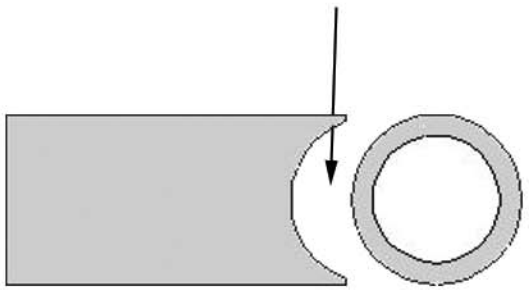
This is Part Number AA02-90N
You will need 8 of these.

Side View





Bushing gets welded into the notch...



SPIDERCARTS	49		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / AA02-90N			Qty-8	

Notes

Use the 1" Square tubing, make a 90° cut then measure 8" (or 4 1/2" for the AA4.5-90) and cut another 90°. on the AA08-90 you will need to weld on a Shock Mount Weldment as shown. Nothing to weld on to the AA4.5-90. Just cut yourself a 4 1/2" piece with 90° cuts and your done with those.

So you are making two different parts here. The AA08-90 which is 8" long with the Shock Mount and 5/8" Fine Thread Nut onto the opposite side.

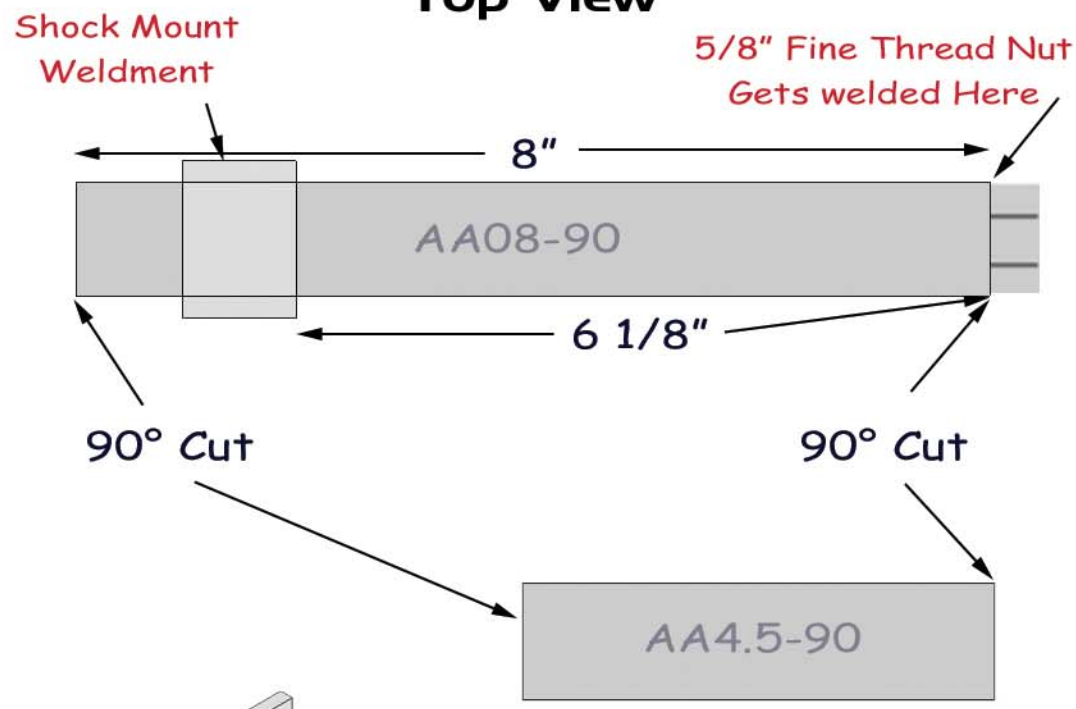
And the AA4.5-90 which is 4 1/2" Long with nothing else on it...

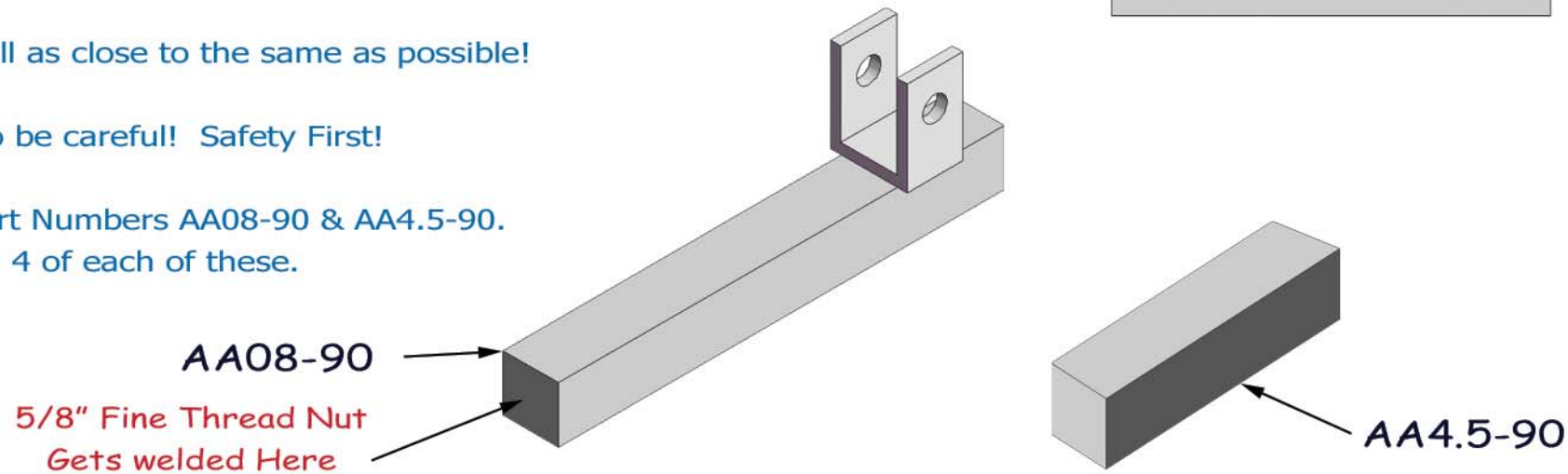
Make these all as close to the same as possible!

Remember to be careful! Safety First!

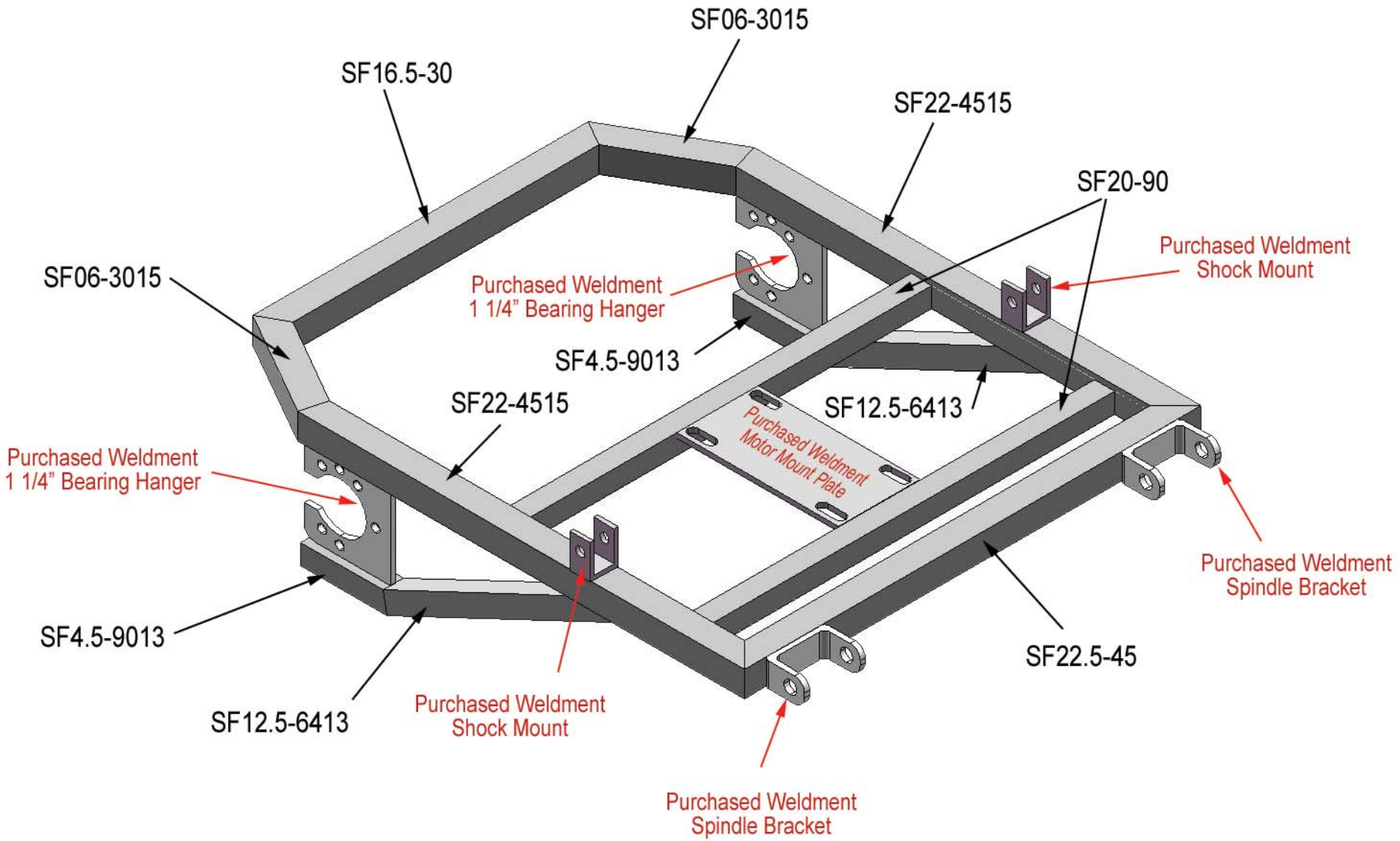
These are Part Numbers AA08-90 & AA4.5-90. You will need 4 of each of these.

Top View



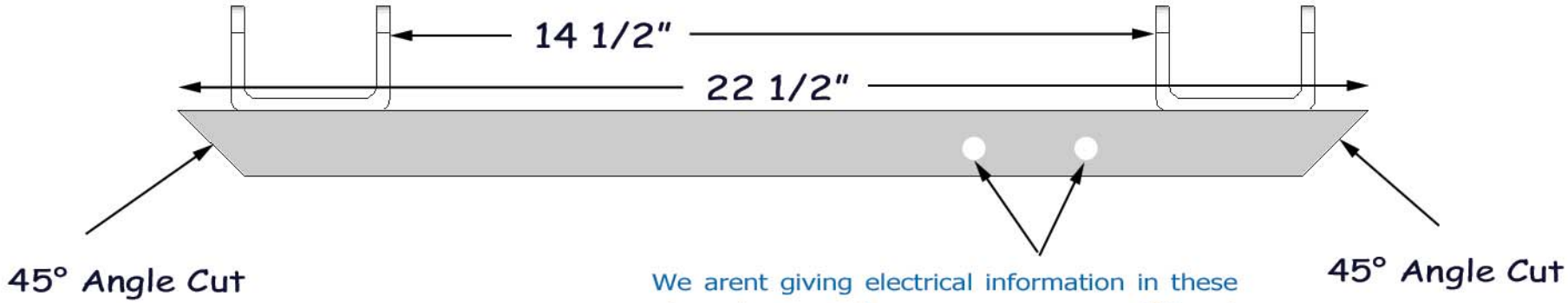


SPIDERCARTS	50		Ver.	0.1.2.6	Metal Type	Copyright is the property of Spidercarts and shall not be reproduced.
			Authorized	Robert Dicken	1" Square Tubing	
		Part / AA08/4.5-90			Qty-2/2	



SPIDERCARTS	51		Ver.	0.1.2.6		Copyright is the property of Spidercarts and shall not be reproduced.
			Authorized	Robert Dicken		
		Sub Frame				

Top View



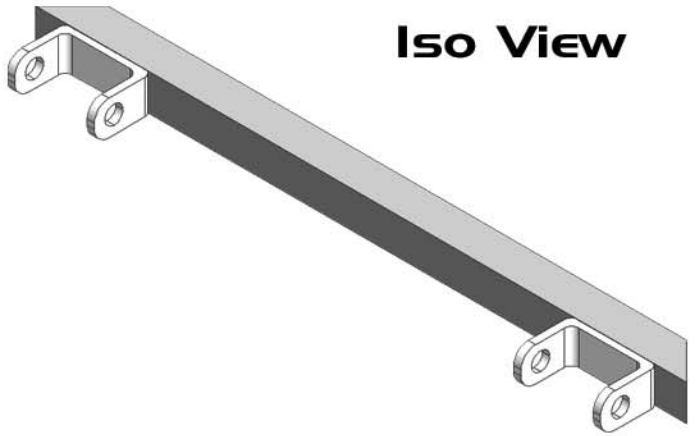
We arent giving electrical information in these plans because there are so many different set-ups, but I drilled two 5/16" holes here for my starter relay... Might want to look into that kind of stuff before welding.

Notes

This is the front piece of the back Sub Frame.
Use the 1 1/4" Square tubing, make a 45° cut then measure 22 1/2" and cut a nother 45°. Make sure they mirror each other.
You will weld the Spindle Bracket Weldment on this part. They are 14 1/2" apart, so measure 7 1/4" from center for your inside mark. That also makes it right at 1" from the end for the outside mark. Might want to run a rod through these as well to make sure you are lined up...

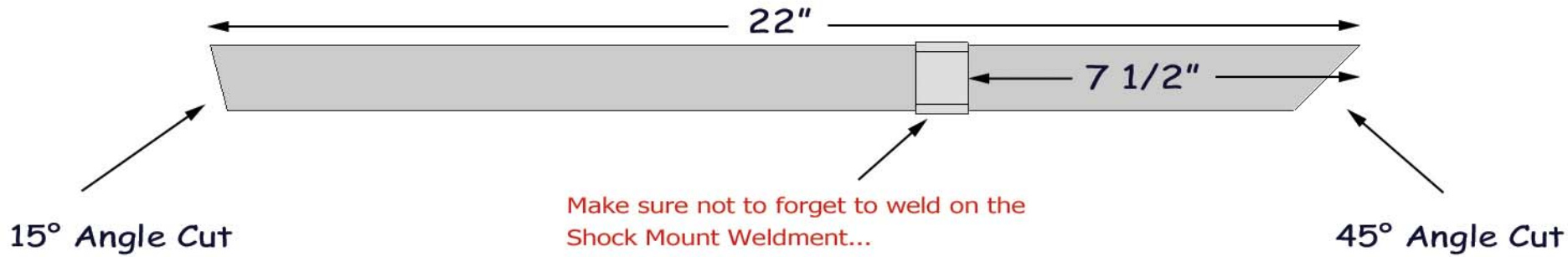
This is Part Number SF22.5-45
You will need 1 of these.

Iso View



SPIDERCARTS	52		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / SF22.5-45			Qty-1	

Top View

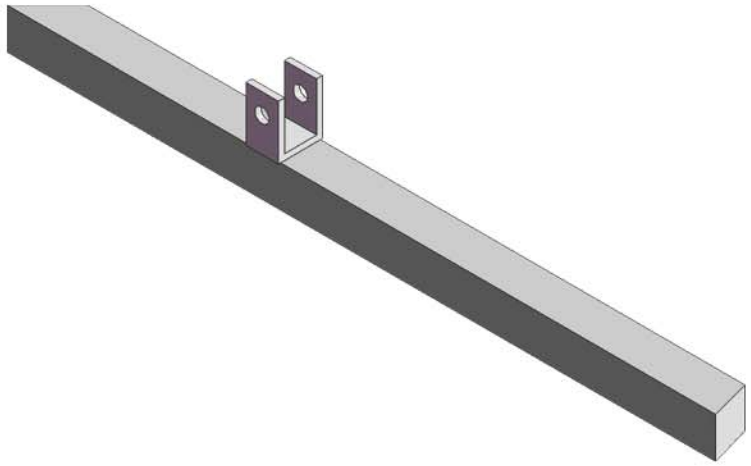


Notes

These are the sides of your Sub Frame.
Use the 1 1/4" Square tubing, make a 15° cut then measure 22" and cut a 45°. Make sure they mirror each other.
You will need to weld on the Shock Mount Weld-ments on both of these. 7 1/2" from the 45° end.

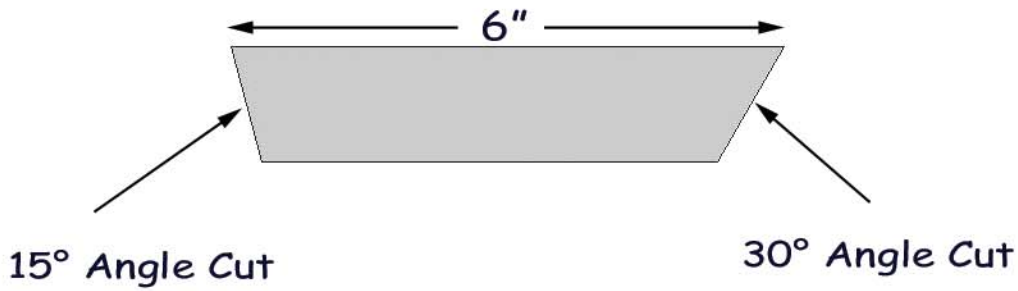
This is Part Number SF22-4515
You will need 2 of these.

Iso View



SPIDERCARTS	53		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / SF22-4515			Qty-2	

Top View

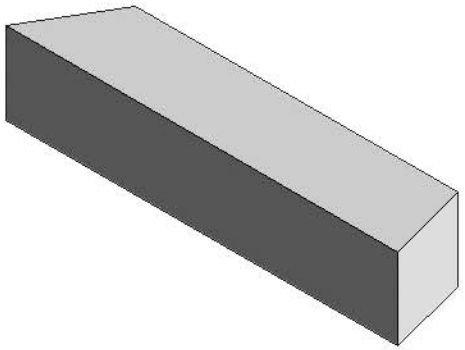


Notes

Use the 1 1/4" Square tubing, make a 15° cut then measure 6" and cut a 30°. Make sure they mirror each other. Thats it!

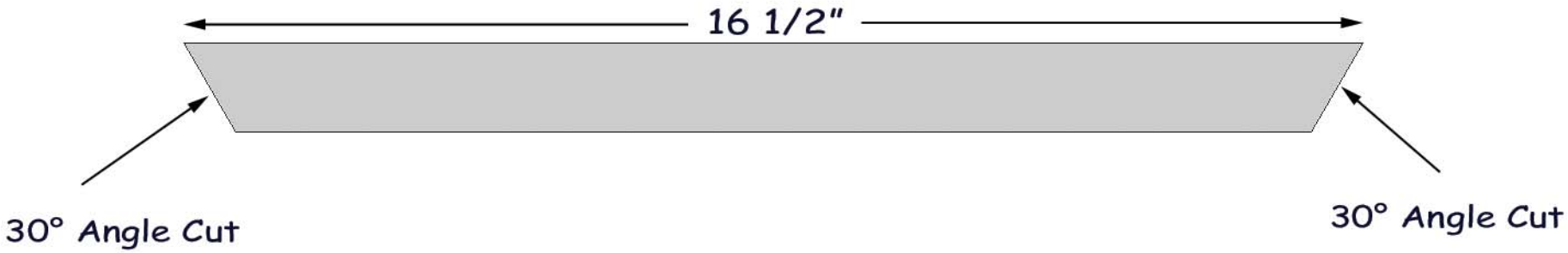
This is Part Number SF06-3015
You will need 2 of these.

Iso View



SPIDERCARTS	54		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / SF06-3015			Qty-2	

Top View



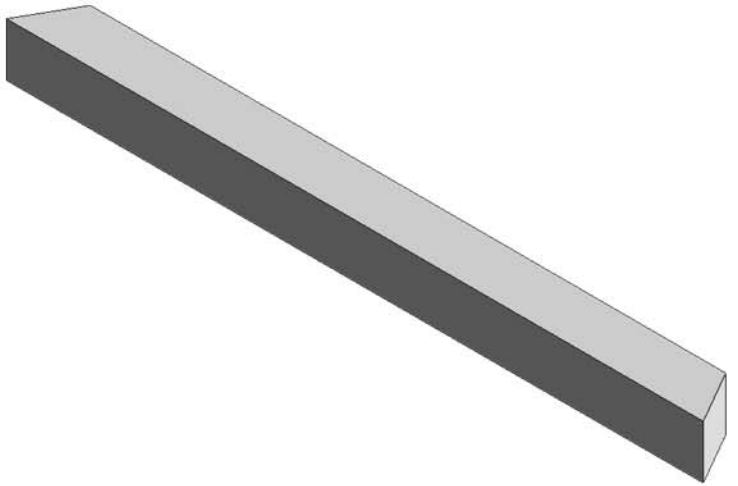
Notes

This is the back piece of the Sub Frame.
Really simple!

Use the 1 1/4" Square tubing, make a 30° cut then measure 16 1/2" and cut another 30°. Make sure they mirror each other.

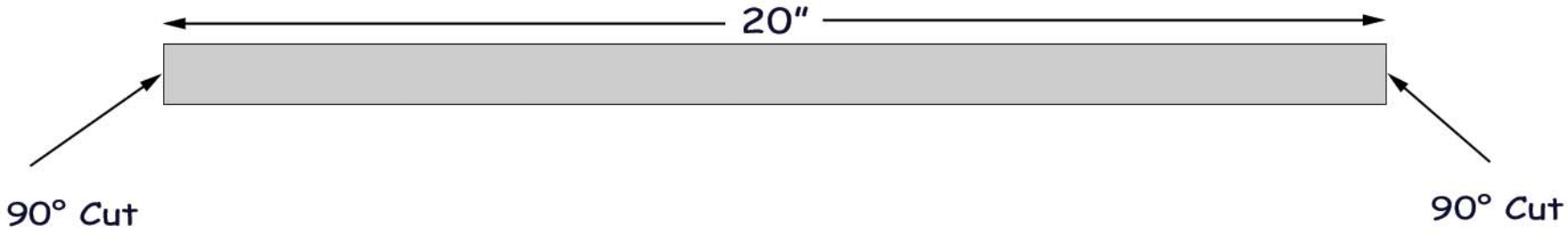
This is Part Number SF16.5-30
You will need 1 of these.

Iso View



SPIDERCARTS	55		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1 1/4" Square Tubing	
		Part / SF16.5-30			Qty-1	

Top View



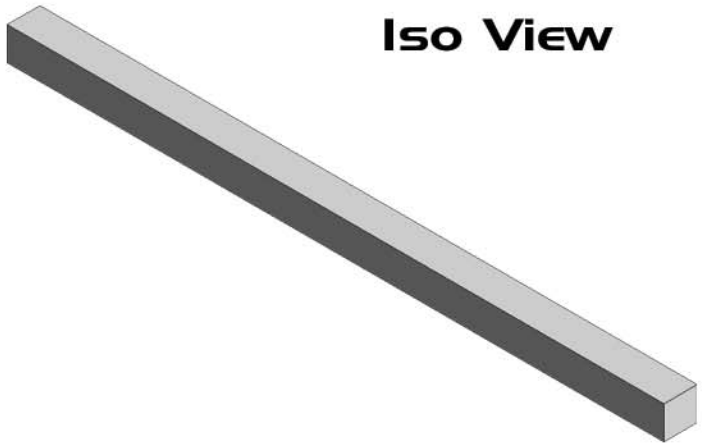
Notes

Use the 1" Square tubing, make a 90° cut then measure 20" and cut another 90°. These are the supports for the Motor Mount Plate Weldment.

Just make sure they are welded good and strong and straight.

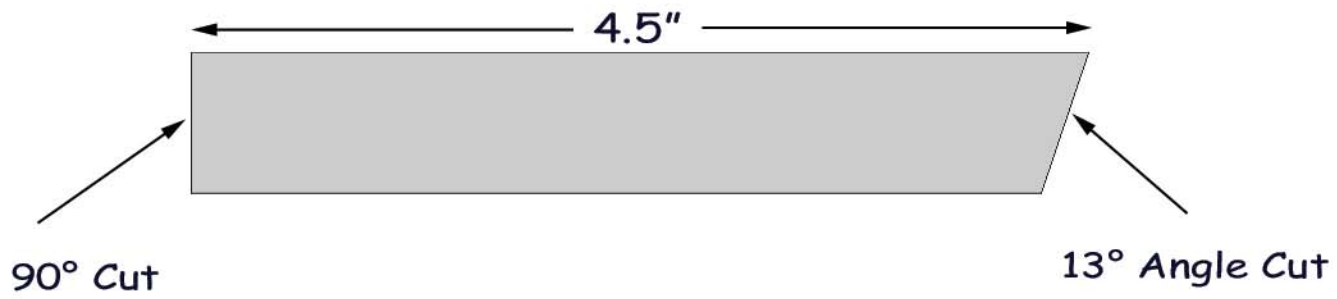
This is Part Number SF20-90
You will need 2 of these.

Iso View



SPIDERCARTS	56		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / SF20-90			Qty-2	

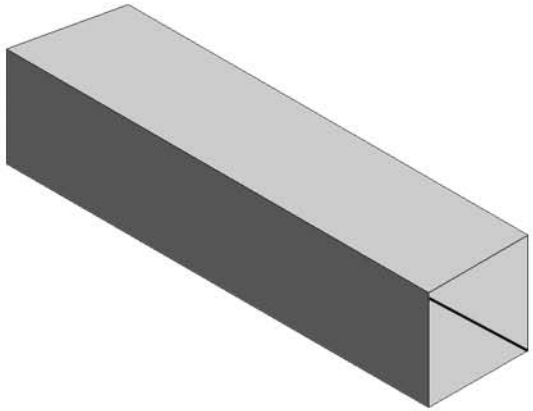
Top View



Notes

Use the 1" Square tubing, make a 90° cut
then measure 4 1/2" and cut a 13°.
You will be welding this piece to the Bearing
Hanger after you weld it to SF12.5-6413.

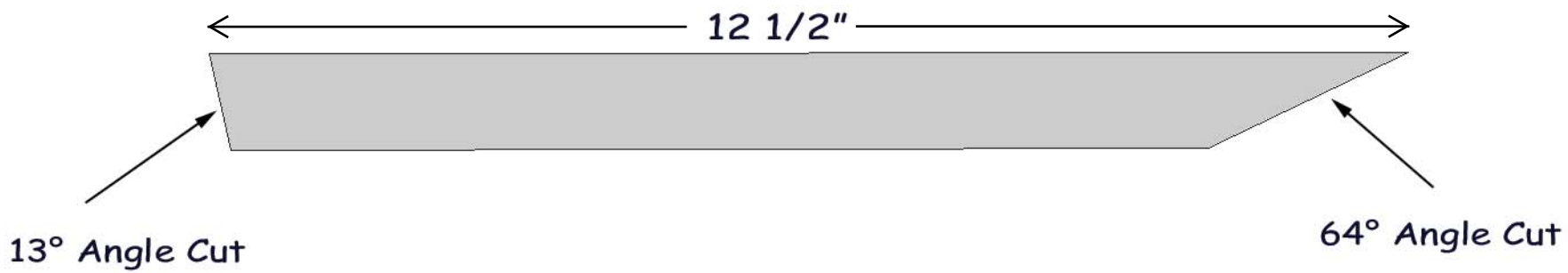
Iso View



This is Part Number SF4.5-9013
You will need 2 of these.

SPIDERCARTS	57		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / SF4.5-9013			Qty-2	

Top View

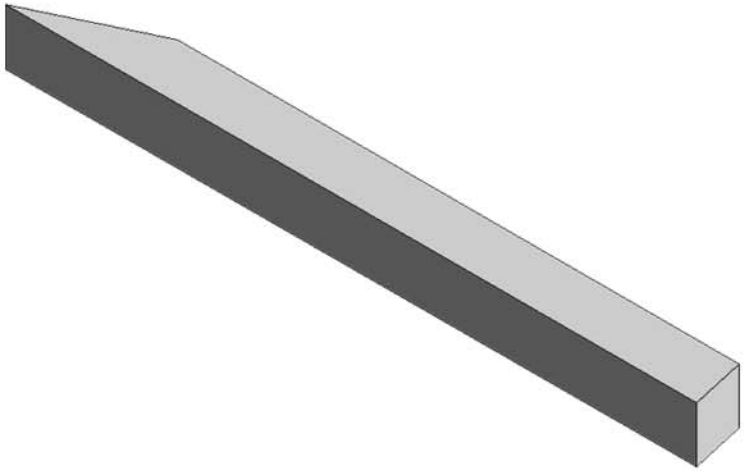


Notes

Use the 1" Square tubing, make a 13° cut then measure 12 1/2" and cut a 64°. Make sure they mirror each other.
This is another tricky cut so be careful!
This 64° cut will be steeper than you chop saw gaurd will go so you are back to a hand saw or a angle grinder with a cutting wheel again. Safety First!

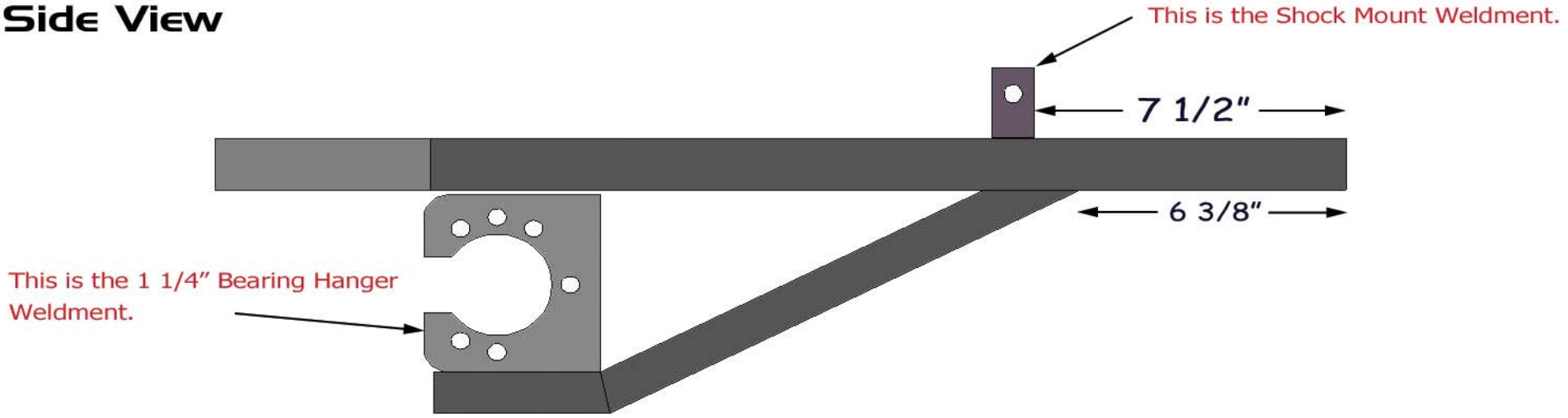
This is Part Number SF12.5-6413
You will need 2 of these.

Iso View



SPIDERCARTS	58		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / SF12.5-6413			Qty-2	

Side View



Notes

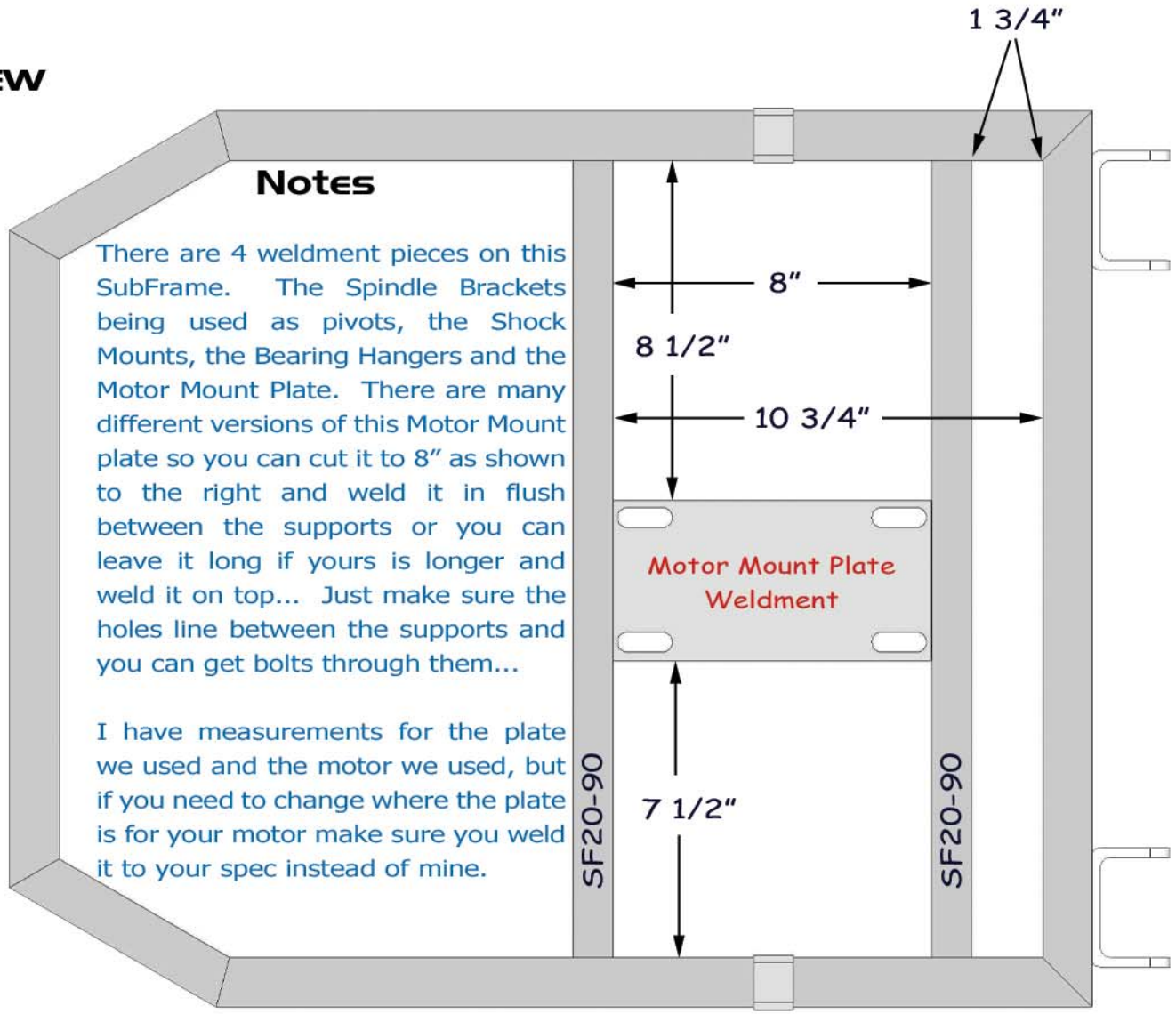
OK, here is one side of the Subframe....

The order I like to do this is... Weld the Hanger to the SF22-4515 first. Line it up to the very end with the opening facing the back. Make sure it is straight and centered on the part. Then weld the SF4.5-9013 & SF12.5-6413 together at the 13° cuts, then line up the end of that to the end of the Hanger and weld it to both the hanger and the SF224515. Make sense?

Iso View

SPIDERCARTS	59		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken		
		Sub Frame Weldments				

Top View



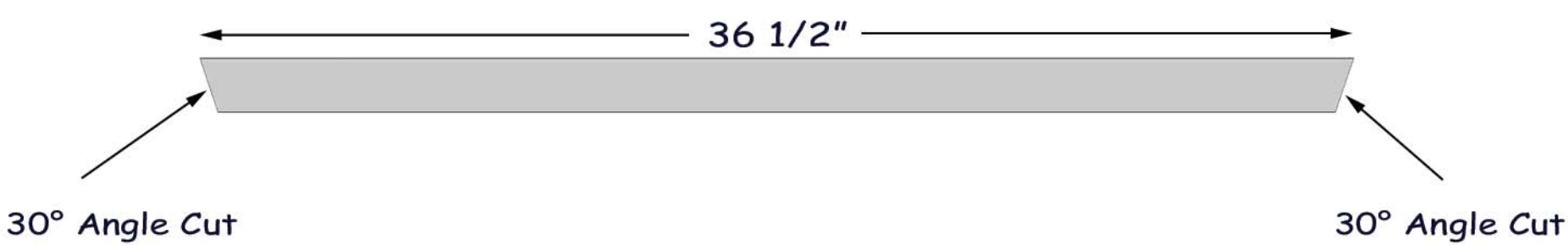
Notes

There are 4 weldment pieces on this SubFrame. The Spindle Brackets being used as pivots, the Shock Mounts, the Bearing Hangers and the Motor Mount Plate. There are many different versions of this Motor Mount plate so you can cut it to 8" as shown to the right and weld it in flush between the supports or you can leave it long if yours is longer and weld it on top... Just make sure the holes line between the supports and you can get bolts through them...

I have measurements for the plate we used and the motor we used, but if you need to change where the plate is for your motor make sure you weld it to your spec instead of mine.

SPIDERCARTS	60		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken		
		Motor Mount Info				

Top View



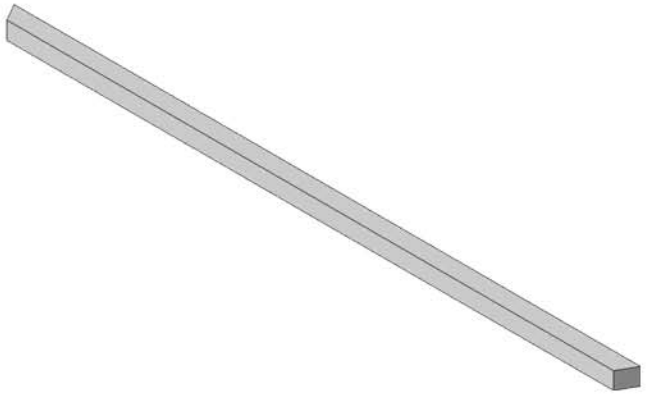
Notes

Use the 1" Square tubing, make a 30° cut then measure 36 1/2" and cut a 30°. Make sure they mirror each other. Thats it!

This is the main support for your steering and any electrical switches or DashBoard things you want. Maybe even a handle for the passenger...

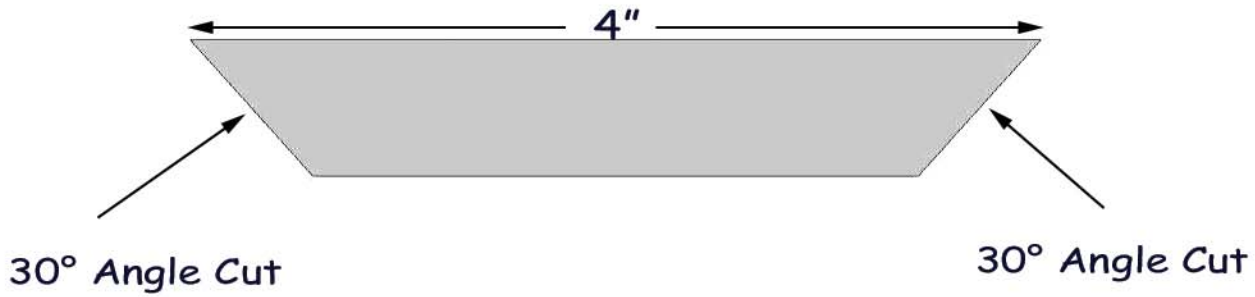
This is Part Number DB36.5-30
You will need 1 of these.

Iso View



SPIDERCARTS	61		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / DB36.5-30			Qty-1	

Top View

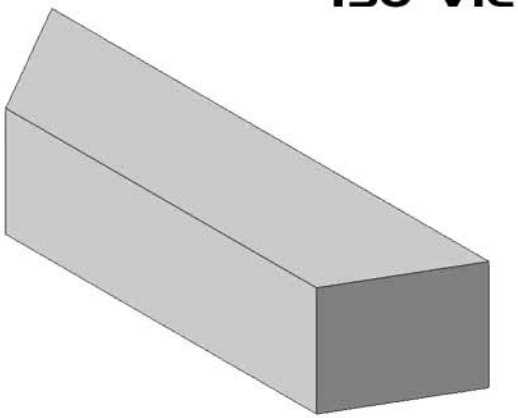


Notes

Use the 1" Square tubing, make a 30° cut then measure 4" and cut a 30°. Make sure they mirror each other.

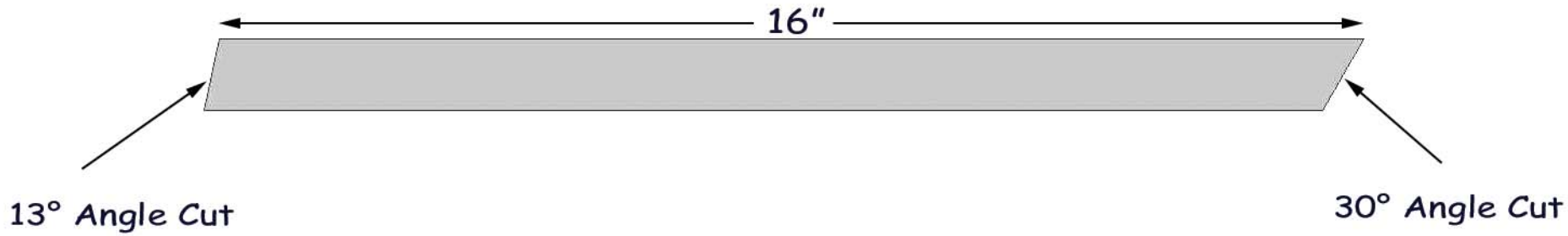
This is Part Number DB04-30
You will need 2 of these.

Iso View



SPIDERCARTS	62		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / DB04-30			Qty-2	

Top View



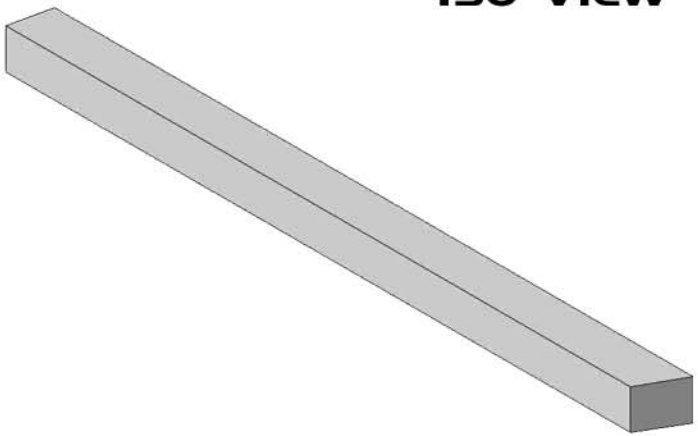
Notes

Use the 1" Square tubing, make a 13° cut then measure 16" and cut a 30°. Make sure they do not mirror each other.

This piece will connect the MainFrame top rail to the Roll Bar, then this Dash Board will weld onto it!

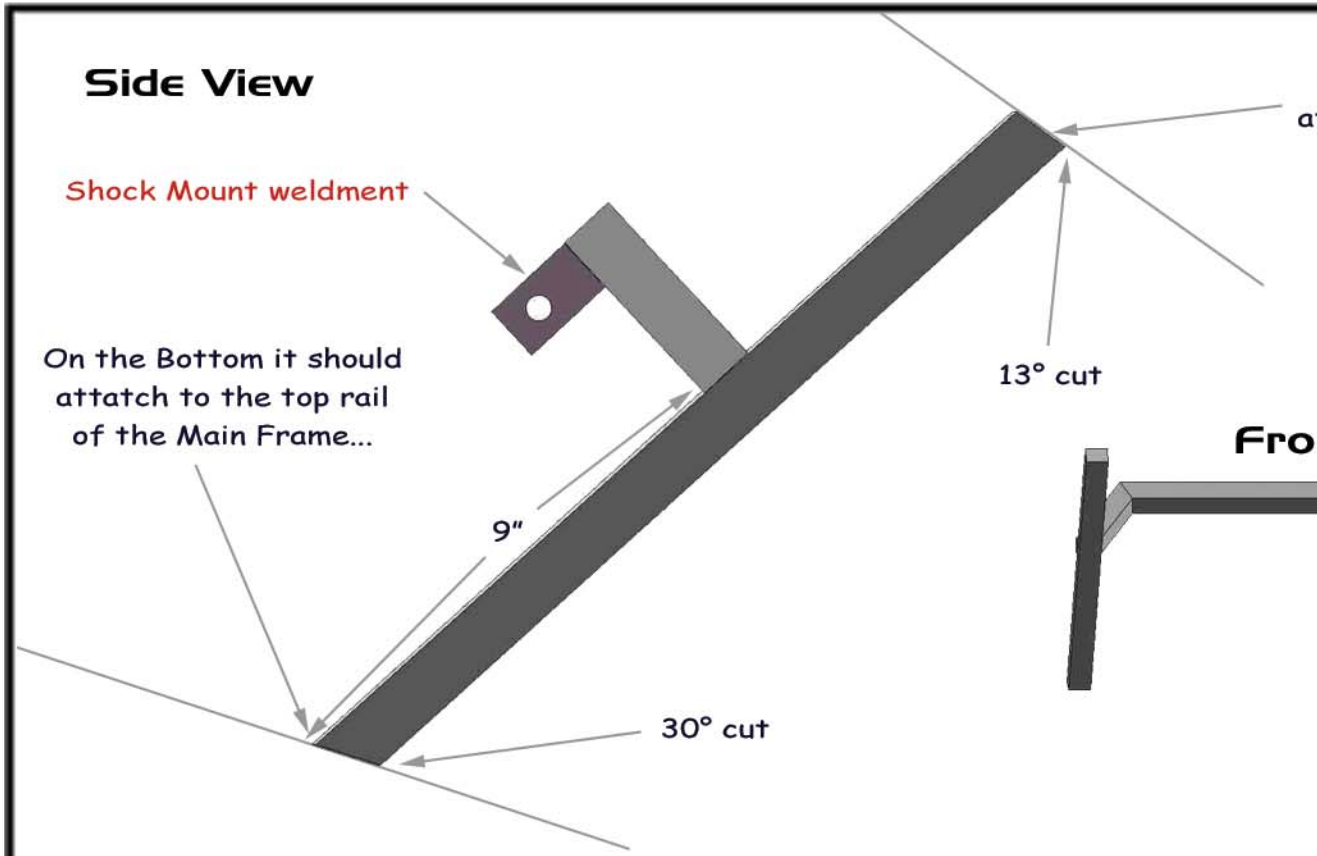
This is Part Number DB16-3013
You will need 2 of these.

Iso View

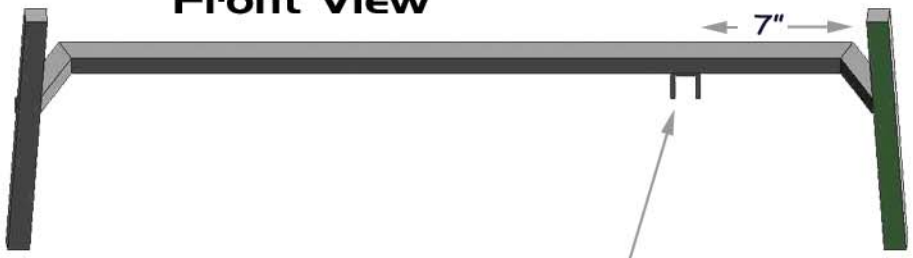


SPIDERCARTS	63		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Part / DB16-3013			Qty-2	

Side View



Front View



Shock Mount weldment

Notes

You can weld all of this together then weld it into place or you can weld the uprights in between the Roll Bar and the Top Rail of the Main Frame, then weld the DB04-30's & DB36.5-30 in after.

Also you will need to weld one of the Shock Mount Weldments on for your upper steering block... Weld it 7" from the end of your DB36.5-30. You also might want to weld on a small flat plate to mount any switches or buttons. (See Pictures)

ISO View

Shock Mount weldment

SPIDERCARTS	64		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1" Square Tubing	
		Dash Board				

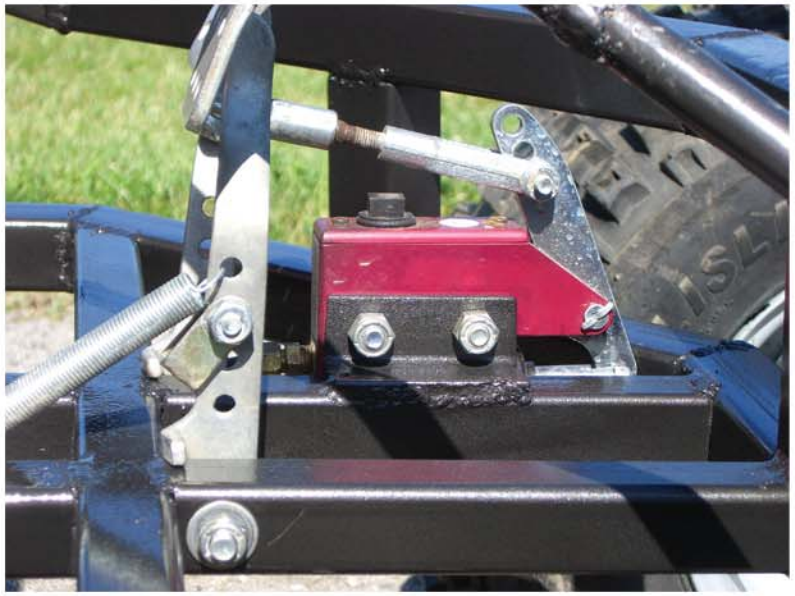
Clevis

Notes

I made my Tie-Rods with 1/4" steel rod and two 1/4" Clevis's.

Cut your 1/4" rod to 13 1/2". Cut two of these. Then use a 1/4" Fine Thread Die to cut threads on the rod. Cut about 2" of threads. Then screw on a Clevis to each side with about 1/2" coming through the inside and that will get you close for your alignment. you will have to adjust once you have everything put together.

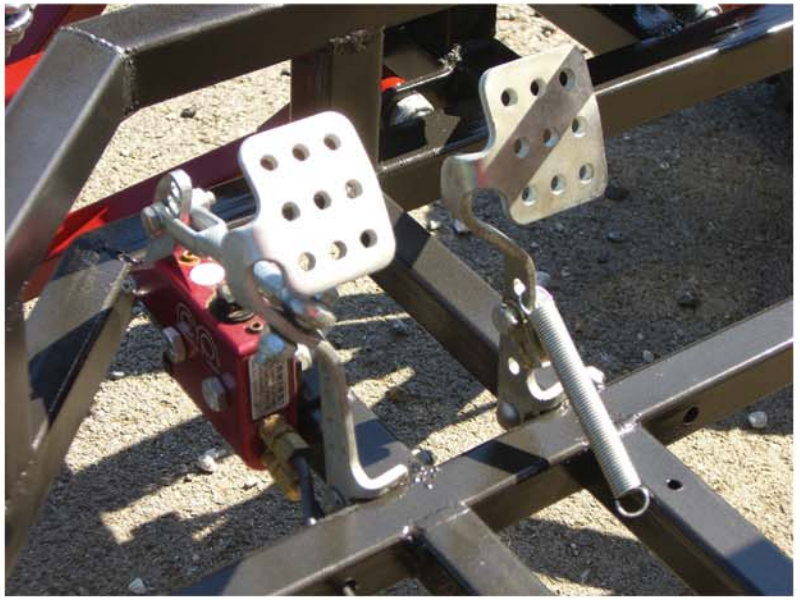
SPIDERCARTS	65		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1/4" Steel Rod	
		Tie-Rod Fabrication			Qty-2	



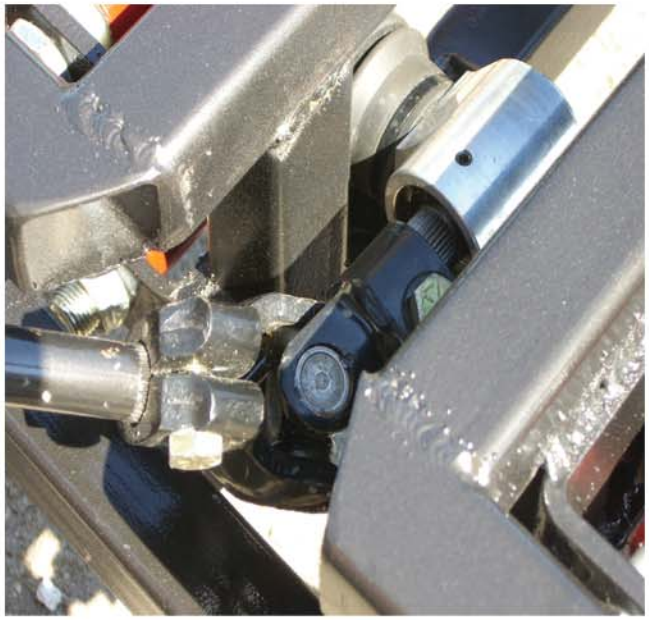
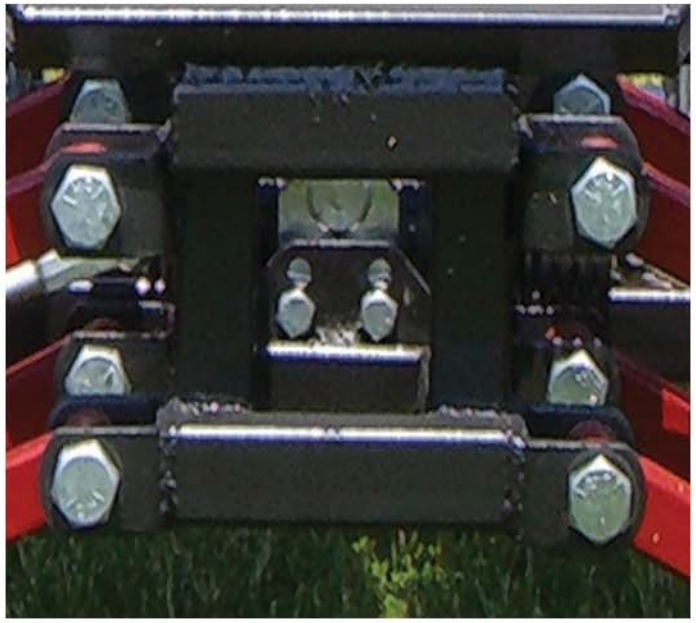
Notes

For the Master Cylinder and the Calipers I made a very simple bracket.

Use the 1’ (304.8mm) of 1” (25.4mm) angle iron I put in the materials list and simply cut a section the length of whatever kind of brake you are using and then drill holes to match your hardware and weld it onto the frame where it lines up with your disc. then on the front I welded the same type of bracket to the left MF6.75-90. Make sure you have enough room for the forward motion of the master cylinder to move without hitting the frame. Then I made my own part to connect the pedal to the Master Cylinder.



SPIDERCARTS	66		Ver.	0.1.2.6	Metal Type	
			Authorized	Robert Dicken	1/4” Steel Rod	
		Brake Brackets			Qty-2	



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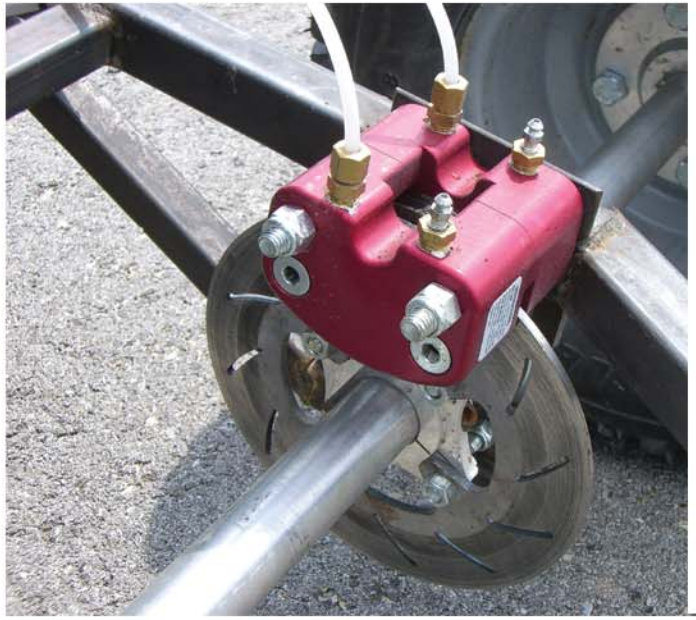
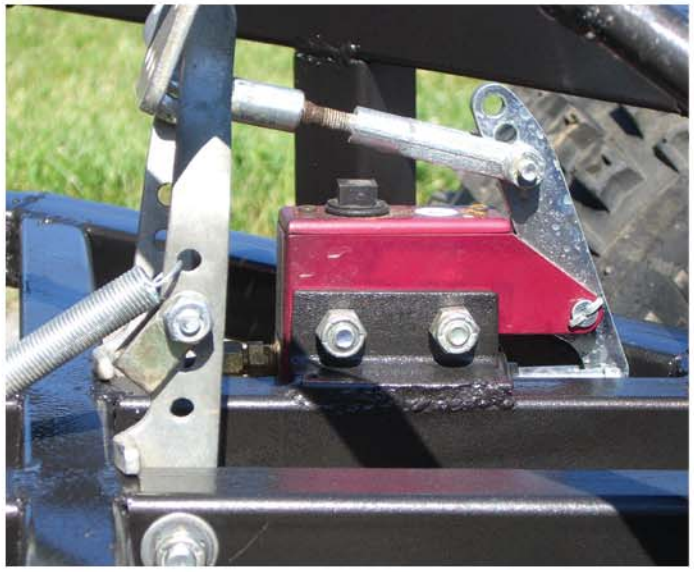
			Authorized	Robert Dicken		
		Rack & Pinion				

SPIDERCARTS	68		Ver.	0.1.2.6		Copyright is the property of Spidercarts and shall not be reproduced.
			Authorized	Robert Dicken		
		Spindle & Hub				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			Authorized	Robert Dicken		
		Brake Setup				

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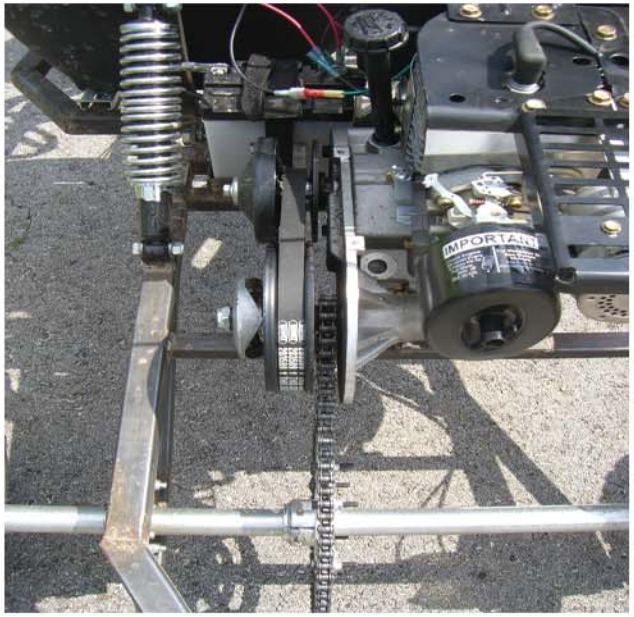
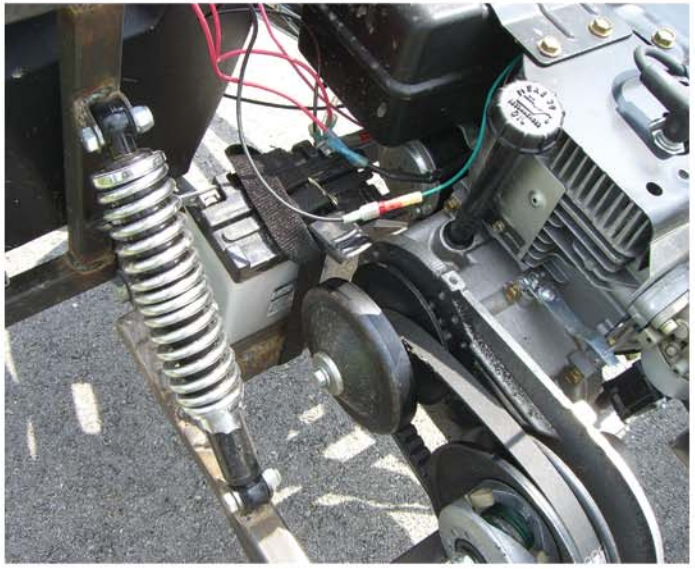
			Authorized	Robert Dicken		
		Misc Pics				





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			Authorized	Robert Dicken		
		Misc Pics				

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			Authorized	Robert Dicken		
		Completed I				

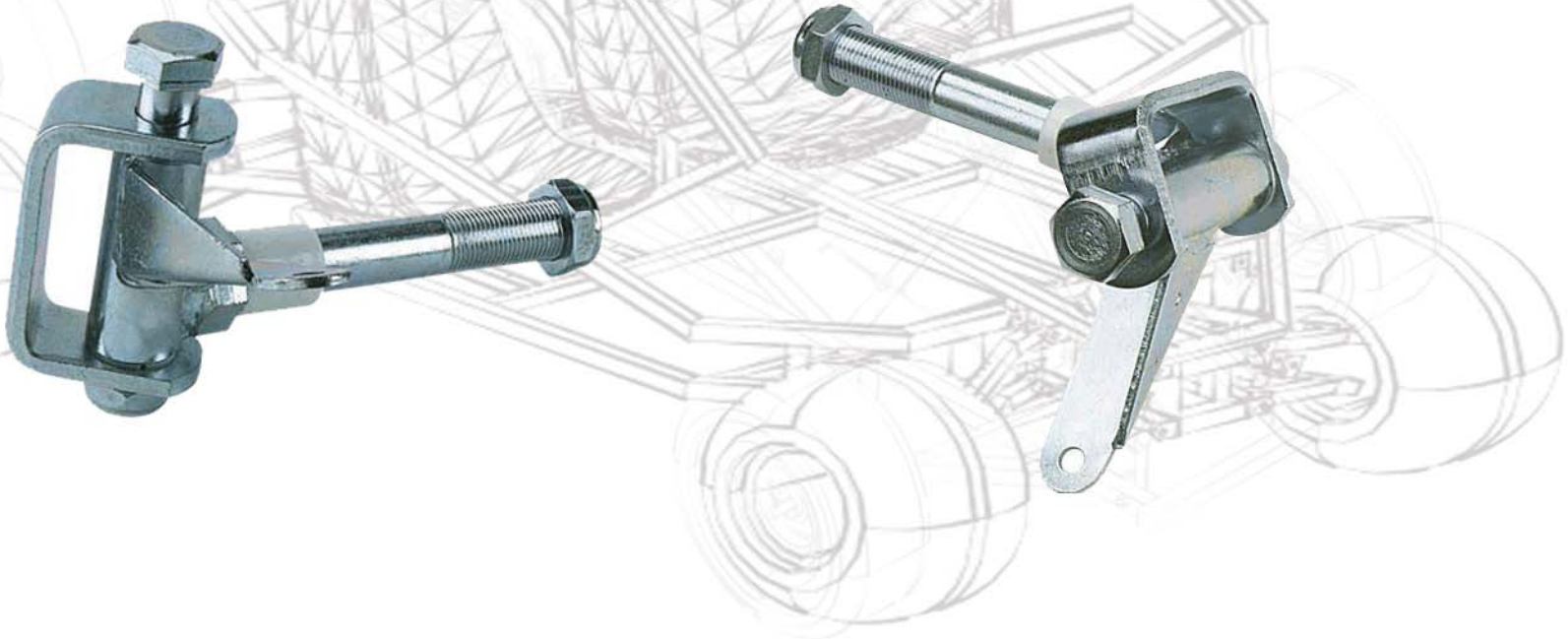
SPIDERCARTS	73		Ver.	0.1.2.6		Copyright is the property of Spidercarts and shall not be reproduced.
			Authorized	Robert Dicken		
		Completed 2				

SPIDERCARTS	74		Ver.	0.1.2.6		Copyright is the property of Spidercarts and shall not be reproduced.
			Authorized	Robert Dicken		
		Completed 3				

Spindle Brackets

This is another weldment. The spindles are what you attach your front wheels to and the spindle brackets hold the spindles. We use these brackets in this project for the A-Arms and for the Rear Pivot between the MainFrame and the SubFrame. You will need 12 of these Brackets for this project. If you decide to do a more simple version of the A-Arms and want to do only the lower A-Arm then you would need 14 of these brackets total...

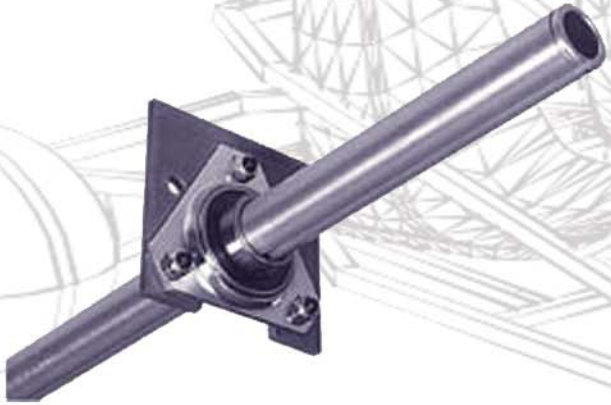
Make sure to buy one set of the spindles themselves as we do need one set of those.



SPIDERCARTS	50		Ver.	0.1.2.6		
			Authorized	Robert Dicken		
		Spindles / TA-411300			Qty - 12	

Bearing Hangers

The bearing hangers are so cheap I would suggest just buying them from a supplier. You can get the entire set with the bearings, hangers, and hardware for under $50.00. The hangers are what we call a weldment and get welded directly onto the frame. Then the bearings and hardware bolt right on to the hanger... For this project you will need to buy or make hangers to support 1"1/4 bearings.



SPIDERCARTS	51		Ver.	0.1.2.6		
			Authorized	Robert Dicken		
		Hangers / TA-400415			Qty - 2	

Notes

I would like to give some general notes about this project.

This project all together is generally a more advanced project. So please use your own creativity and add or adapt things you would like to see with your kart.

A note on the suspension... The suspension I show here in the plans is a bit advanced and you will have to set your alignment and toe just like you would have to with a car. So make sure to spend the time to do this after you are done with your kart. Also you have several different options with this suspension. You could do it as shown, or you could weld a spidle bracket onto the lower A-Arm and then do away with the top A-Arm all together, or you could even weld the lower A-Arms straight out from the frame and have no suspension at all... If you do the last method make sure to not weld on the bushings to the A-Arms or the spindle brackets to the Suspension Block. Just leave the notch out of the part and weld the A-Arms right on to the lower part of the Suspension Block.... Just Ideas!

Electrical...
We have provided no guidence on electrical systems in these plans. This is due to the fact that probably eveybody that builds this kart will put on a different style motor, with different electrical needs. Just remember to think out all of your needs with mounting batteries, relays, and wiring when you are building and welding things together. We show some picctures of some of the electrical on our kart so use this as a reference.

SPIDERCARTS	77		Ver.	0.1.2.6		
			Authorized	Robert Dicken		
		General Notes				

Online Resources

Here are some of the best places we have found to get the parts needed to finish your kart. All of the parts needed can be purchased from these locations...

www.bmikarts.com

www.jegs.com

www.cometkartsales.com

www.gokartsupply.com

www.mfgsupply.com

www.jackssmallengines.com

www.gokartnminibikeparts.com

GrandDaddy Parts List

These parts are listed as reference only!

Please make sure the parts you purchase are the ones you need to fit your project as parts and prices may have changed.

Qty	Item	Price	Total	Vendor
4	18" Balloon Tire/Rim Assembly	$49.95	$199.80	BMI Karts
2	4 x 4 Billet Aluminum Rear Hub - 1 1/4"	$30.00	$60.00	BMI Karts
2	4 X 4 Wheel Hub - 5/8" Bearings	$12.99	$25.98	BMI Karts
1	Aluminum Sprocket Hub - Star 1 1/4"	$23.95	$23.95	BMI Karts
1	Sprocket #41 60T	$17.95	$17.95	BMI Karts
1	Steering Wheel 10"	$21.99	$21.99	BMI Karts
3	6" Steering Spline	$7.00	$21.00	Desert Design
2	Steering U-Joint	$23.00	$46.00	Desert Design
1	Rack & Pinion Mounting Bracket	$6.00	$6.00	Desert Design
1	8" Kart Steering rack	$89.00	$89.00	Desert Design
1	Steering Block - Upper	$6.60	$6.60	www.tsracing.com
1	Steering Wheel Hub	$8.79	$8.79	BMI Karts
1	Steering Shaft 25"	$12.95	$12.95	BMI Karts
2	Seat Covers	$31.99	$63.98	www.jegs.com
2	Dual Lock Sliders	$26.99	$53.98	www.jegs.com
2	Pro high Back Seat Black	$34.99	$69.98	www.jegs.com
4	5/8" X 5/8" Male Rod Ends-Right Hand	$10.00	$40.00	www.cometkartsales.com
1	Kill Switch	$3.00	$3.00	BMI Karts
12	Spindle Bracket	$3.50	$42.00	BMI Karts
2	Foot Pedals	$5.95	$11.90	BMI Karts
2	Mechanical Adjustable Shock (Front) 9 3/4" Eye to Eye	$16.65	$33.30	BMI Karts
2	Mechanical Adjustable Shock (Rear) 12" Eye to Eye	$24.99	$49.98	BMI Karts
7	Shock Mounting Tab	$5.00	$35.00	BMI Karts
2	YerfDog Shock Mounting Brackets (3 Hole for adjustment) or add 2 to the above number of tabs...	$12.95	$25.90	BMI Karts
1	1 1/4" Hydraulic Brake Kit	$179.95	$179.95	BMI Karts
1	Hydraulic Brake Line - Plastic (5 Feet)	$9.75	$9.75	BMI Karts
1	Master Cylinder Frame Bracket	$9.95	$9.95	BMI Karts
4	1/4" Clevis	$4.00	$16.00	Hardware Store
1	Motor Mount 12" x 5"	$5.95	$5.95	BMI Karts
1	Keystock 1/4"	$1.45	$1.45	BMI Karts
1	Misc nuts and bolts....	$40.00	$40.00	Hardware Store
1	1 1/4" Billet Aluminum Live Axle 45”	$45.00	$45.00	BMI Karts
1	1 1/4" Bearing Kit	$24.95	$24.95	BMI Karts
5	Chain $2.00/ft. x 5ft.	$2.00	$10.00	BMI Karts
2	2 Piece Billet Aluminum Locking Collar 1 1/4"	$5.00	$10.00	BMI Karts
1	Comet Torque Converter 1" Bore #41 Sprocket	$169.95	$169.95	BMI Karts
1	Tecumseh 10hp Horizontal	$290.00	$290.00	Small Engine Warehouse
	Total		$1,781.98	

All parts are just suggestions... you can replace any of these parts with your own ideas...
All prices are estimates and are subject to change depending on who you buy them from...

Thank you for your business.

I hope you have found these plans to be helpful and complete.

Building go karts can be a very rewarding hobby.

As always please use caution when riding your new go kart and be safe.

Please check back with our website as we are always adding new products.

GrandDaddy LongLeg

SPIDERCARTS

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		Thank You			