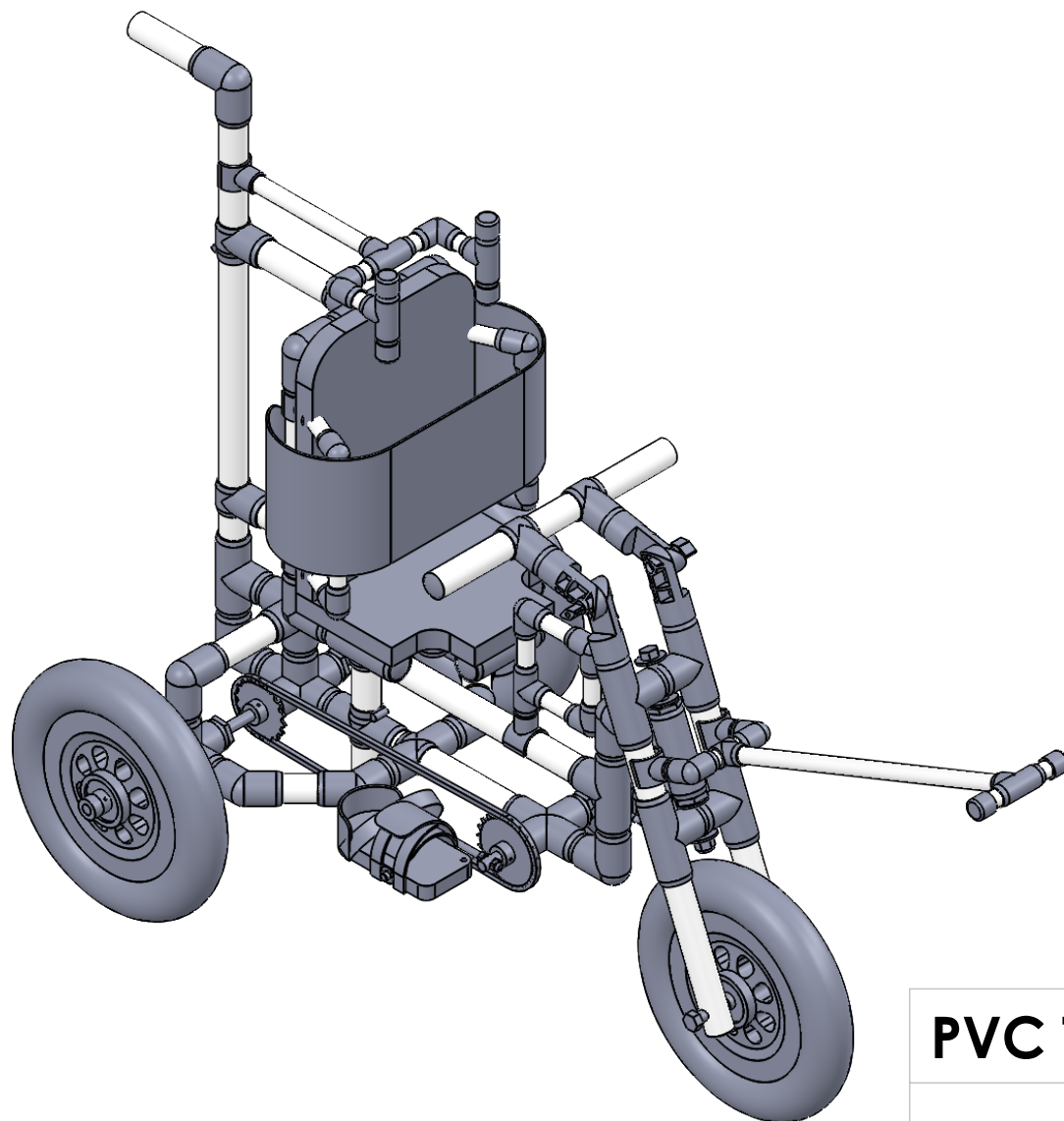


B



B

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## PVC Therapy Trike

Notes	Rough Material Costs	
Age and weight range guide:  2-5 yrs old  0-50lbs	PVC Trike	\$400
	Pull Handle	\$5
	Knee Guard	\$5
	Laterals	\$5
	Head Rest	\$5

2

1

2

1

B

B

## **PVC Trike Table of Contents**

Material Lists

Part 1 - Preparation

Part 2 - Pedel

Part 3 - Fork

Part 4 - Seat

Part 5 - Frame

Part 6 - Rear Handle

Part 7 - Assembly

Part 8 - Finishing Touches

Accessory - Head Rest

Accessory - Knee Guard

Accessory - Laterals

Accessory - PullHandle

Licensing

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# Hardware List

To build the PVC Therapy Trike, purchase all of the hardware listed in Table 1 and 2. The sources listed are optional and not required. They are however the ones used in this design and modifications may need to be made to the design if alternative resources are used. Materials in Table 2 are also offered for purchase as a kit from UATP ([www.uatpat.org](http://www.uatpat.org)). This kit was created because some of the parts can be difficult to fabricate or purchase in correct quantities.

Table 1		
Number of Pieces needed per Trike	Description	Example Source
1	Wheelchair Seat Belt Medical Restraints Straps Patients Cares Safety Harness	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
1	LEVOIT Yoga Knee Pad Cushion, 1 inch Thickness, Comfort Cushion	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
10	XiKe 10 Pack Flanged Ball Bearing ID 1/2" x OD 1-1/8"	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
3	Small Tires and Wheels 12 Inch Foam Wheel	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
1 pair	2 Pair Bicycle Pedal Straps	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
1	ZHIQIU FSC F410 1-Speed Bicycle Chain Single (1/2 x 1/8-Inch, 104L) (May need to also purchase tool)	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
about 100	Steel Sheet Metal Screw, #6-20 Thread Size, 3/8" Length (Pack of 100)	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
2	Hillman 2-Count 5/16-in Zinc-Plated Axle Cap Nuts	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
2	1/2 inner diameter x 3/8in length-nylon spacers (2 pack)	<a href="https://www.lowes.com/pd">https://www.lowes.com/pd</a>
4	1/2 in Zinc-Plated Standard (SAE) Flat Washer	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
1	1/2 x 7 hex bolt (cut to 6.5)	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
1	1/2 x 10 hex bolt (cut to 9 1/2)	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
2	1/2 nylon hex lock nuts	<a href="https://www.lowes.com/pd">https://www.lowes.com/pd</a>

Note: When ordering parts from Amazon, please log into your smile.amazon account and put 'Utah Assistive Technology Program' as the benefactor. This will add no additional cost to the buyer, but will send a fraction of the purchase price to UATP.

<b>Table 2</b>		
<b>Number of Pieces needed per Trike</b>	<b>Description</b>	<b>Example Source</b>
7	1/2" Bore Solid Steel Zinc Plated Shaft Collars Set Screw Style (10 PCS)	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
1	1/4 x 1 1/2 pull pin	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
18	#8 x 3/4" Phillips Modified Truss Head Self-Drilling Tek Screw-Box of 100	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
2	DimcoGray Black Wingnut Knob Female, Thru Hole: 1/4-20" Thread x 5/8" Depth, (Pack of 10)	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
32 inches	Monoprice Hook & Loop, 0.75-inch	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
2-4.5in x 2in pieces	plastic sheet 12 x 24	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
36 inches	Para cord	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
2	1-1/2 Inch Key Hose Clamp   Stainless Steel 1.5" Thumb Screw – 5 Pack	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
2	5/16-18 x 8 Hex Head Bolts, Steel Grade 5 Partially Threaded Coarse Thread	<a href="https://smile.amazon.com/">https://smile.amazon.com/</a>
2	Hillman 5/16-in Zinc-Plated Standard (SAE) Nylon Insert Lock Nut	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
2	Hillman 50-Count 5/16-in Zinc-Plated Standard (SAE) Flat Washer	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
2	Hillman 4-Count 5/16-in Zinc-Plated Standard (SAE) Hex Nuts	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
length: 12 inches	Royal Mouldings Limited (Actual: 0.75-in x 3.5-in x 8-ft) Common PVC Board	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
1	18 tooth sprocket and 22 tooth sprocket Plasma cut out of 14 guage steel	Use Tap file provided or 1:1 stencil provided in drawings
1	Hillman 3-ft x 1/2-in Plated Steel Metal Round	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
1	2" Fender Washer	<a href="https://www.lowes.com/">https://www.lowes.com/</a>
7	Hillman #8 x 1-1/2-in Phillips-Drive Sheet Metal Screws (50-Count)	<a href="https://www.lowes.com/">https://www.lowes.com/</a>



# PVC Fittings List

Purchase the PVC fittings in the amounts shown below for the corresponding device. Furniture Grade PVC was used in this design and can be purchased online. This design was made using PVC from Circo Innovations (<https://www.circoinnovations.com/circo-fittings>). **Circo Innovations has also provided a coupon code: UATPTRIKE that can be used at checkout to receive 10% off.**

Trike		
Size (in)	Type	Amount
1	45 degree	4
1	Tee (one extra)	12
1	Slip-T	4
1	Ell (90)	8
1	Cross	1
1	Cross Slip	3
1	3 way L	2
1	4 way L/T	2
1	5 way X	4
1	Internal Cap	10
1	Adjustable Ell	2
1" x 3/4"	Reducer	10

Pull Handle		
Size (in)	Type	Amount
0.5	Tee	1
0.5	Slip T	1
0.5	Ell (90)	2
1" x 1/2"	Clip T	2

Side Laterals		
Size (in)	Type	Amount
0.5	Ell (90)	4
1" x 1/2"	Clip T	4

Knee Guard		
Size (in)	Type	Amount
0.5	Tee	1
0.5	Ell (90)	3
1" x 1/2"	Clip T	1

Head Rest		
Size (in)	Type	Amount
0.5	Tee	3
0.5	External Cap	4
0.5	Ell (90)	2
1" x 1/2"	Clip T	1

# PVC Pipe List

Purchase the PVC Pipe and cut to the lengths shown below for the corresponding device. Furniture Grade PVC was used in this design and can be purchased online. This design was made using PVC from Circo Innovations (<https://www.circoinnovations.com/circo-direct/Furniture-Pipe-c18549013>).

**Circo Innovations has also provided a coupon code: UATPTRIKE to be used at checkout to receive 10% off.**

Totals for Purchasing		
Device	Size (in)	Total
Trike	1	25 feet
Pull Handle	1/2	28 in.
Side Laterals	1/2	26 in.
Knee Guard	1/2	13.5 in.
Head Rest	1/2	22 in.

Pull Handle		
Size (in)	Length (in)	Amount
0.5	18	1
0.5	3	1
0.5	2	2
0.5	1 1/2	2

Side Laterals		
Size (in)	Length (in)	Amount
0.5	3	4
0.5	7	2

Knee Guard		
Size (in)	Length (in)	Amount
0.5	3	4
0.5	1 1/2	1

Trike		
Size (in)	Length (in)	Amount
1	24	1
1	14	1
1	13 5/16	1
1	12	2
1	10	1
1	9 5/16	1
1	8 1/4	2
1	6 1/2	2
1	5 1/2	2
1	5	1
1	4 7/8	2
1	3 3/4	2
1	2 1/2	26
1	2 3/8	4
1	2 1/4	4
1	1 1/4	5

Head Rest		
Size (in)	Length (in)	Amount
0.5	2	4
0.5	1 1/2	4
0.5	8	1

# General Instructions

Cutting all the pipes to length to start with can be helpful. Have a sharpie handy to write the length of the pipe on the pipe near one end. Remove any burrs after cutting with a piece of sand paper as these will be an annoyance during the assembly.

The PVC frame is held together with #6-20 pan head 3/8" length sheet metal screws, rather than glue. This allows the frame to be adjusted as the child grows. To fix a pipe to a connector, insert the pipe into the connector, and drill a 0.1 inch hole using a #38 or 7/64" drill bit centered on the pipe 1/4 inch (6mm) from the edge of the connector. Make sure that piping and connectors are secured tightly in place before drilling and screwing them.

After drilling holes avoid twisting the pipe so that the holes stay aligned. Screws should be inserted on the bottom or facing inside where possible so that they are out of sight. Once every few steps, the pipe should be screwed together.

Parts are listed on each page in the following format:

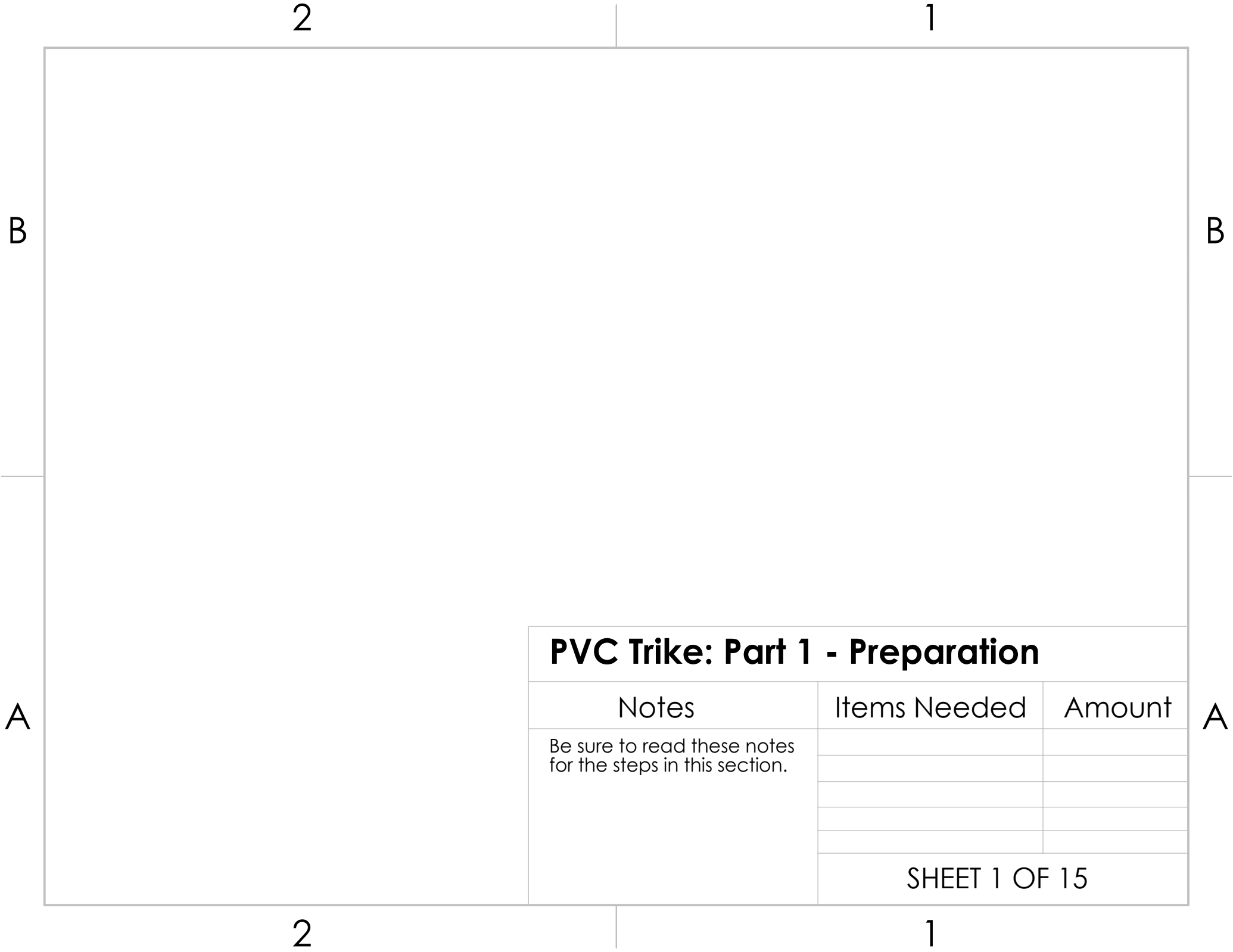
[Diameter] x [Length] – [Type]

Examples:

1 in x 8.25 in - pipe

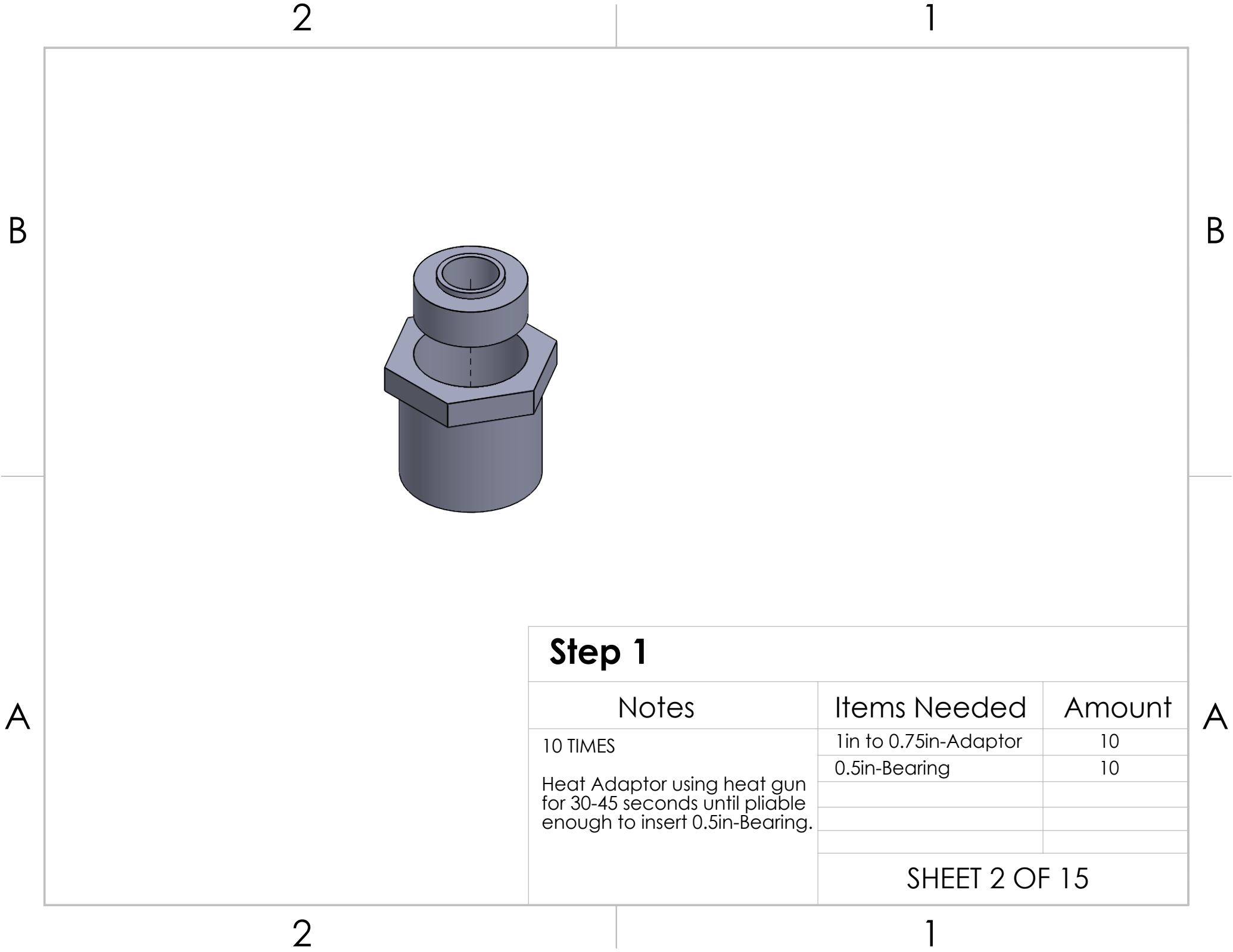
0.25 in x 3 in - bolt

1 in - Tee



## PVC Trike: Part 1 - Preparation

Notes	Items Needed	Amount
Be sure to read these notes for the steps in this section.		
SHEET 1 OF 15		



**Step 1**

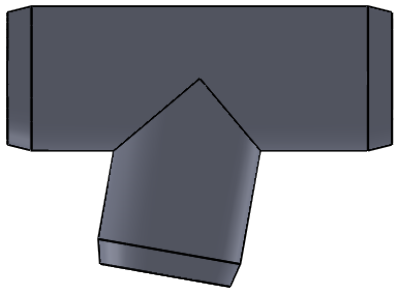
Notes	Items Needed	Amount
10 TIMES  Heat Adaptor using heat gun for 30-45 seconds until pliable enough to insert 0.5in-Bearing.	1in to 0.75in-Adaptor	10
	0.5in-Bearing	10
	SHEET 2 OF 15	

2

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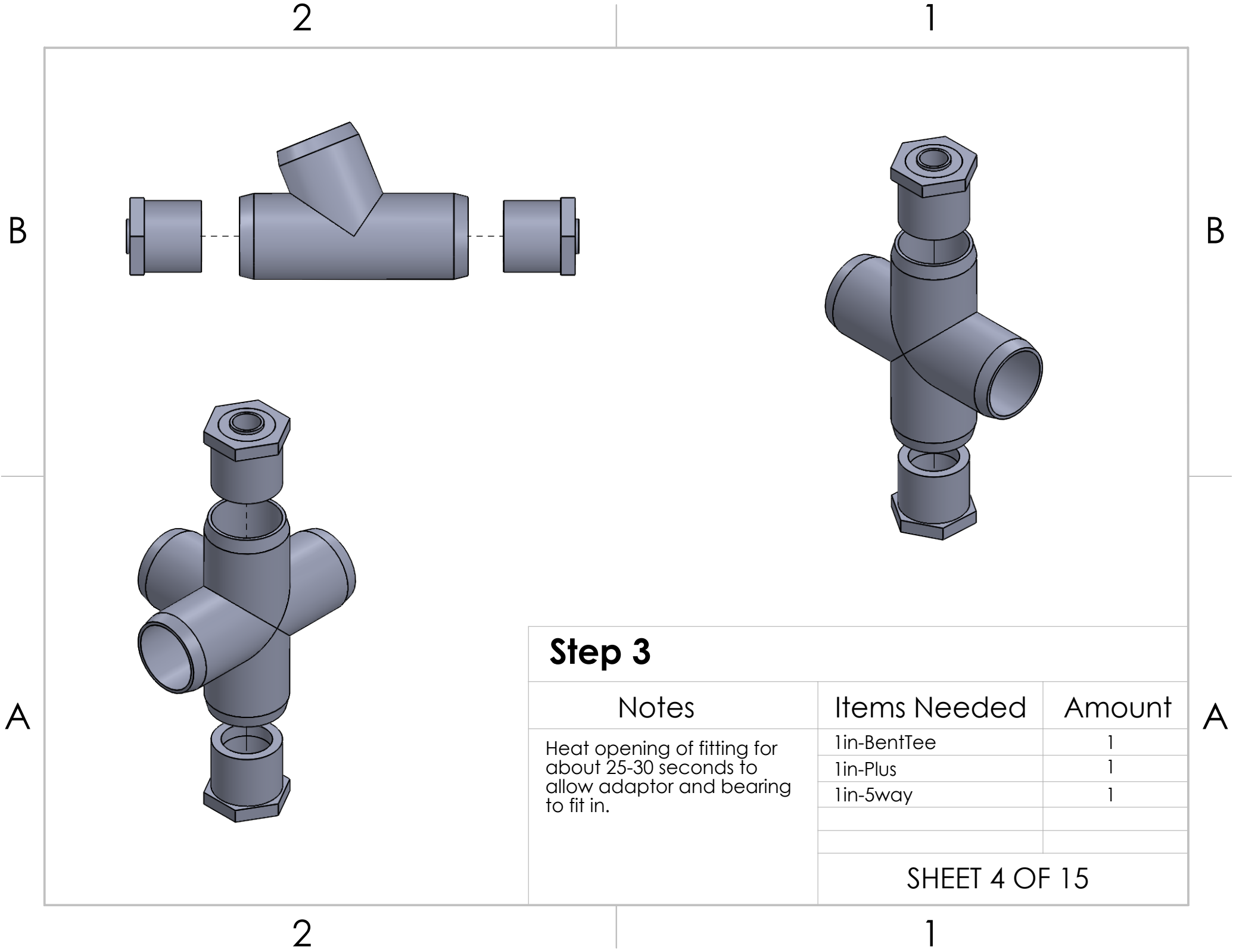
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## Step 2

Notes	Items Needed	Amount
<p>Heat 1in-Tee at joint using heat gun with more focus on the side to be stretched.</p> <p>Once pliable, insert 1in pipe in all openings to maintain shape. Use the pipe to bend the 1in-Tee 22 degrees.</p>	1in-Tee	1
	Bill of Materials includes 1 extra Tee in case of mistake here.	
	SHEET 3 OF 15	

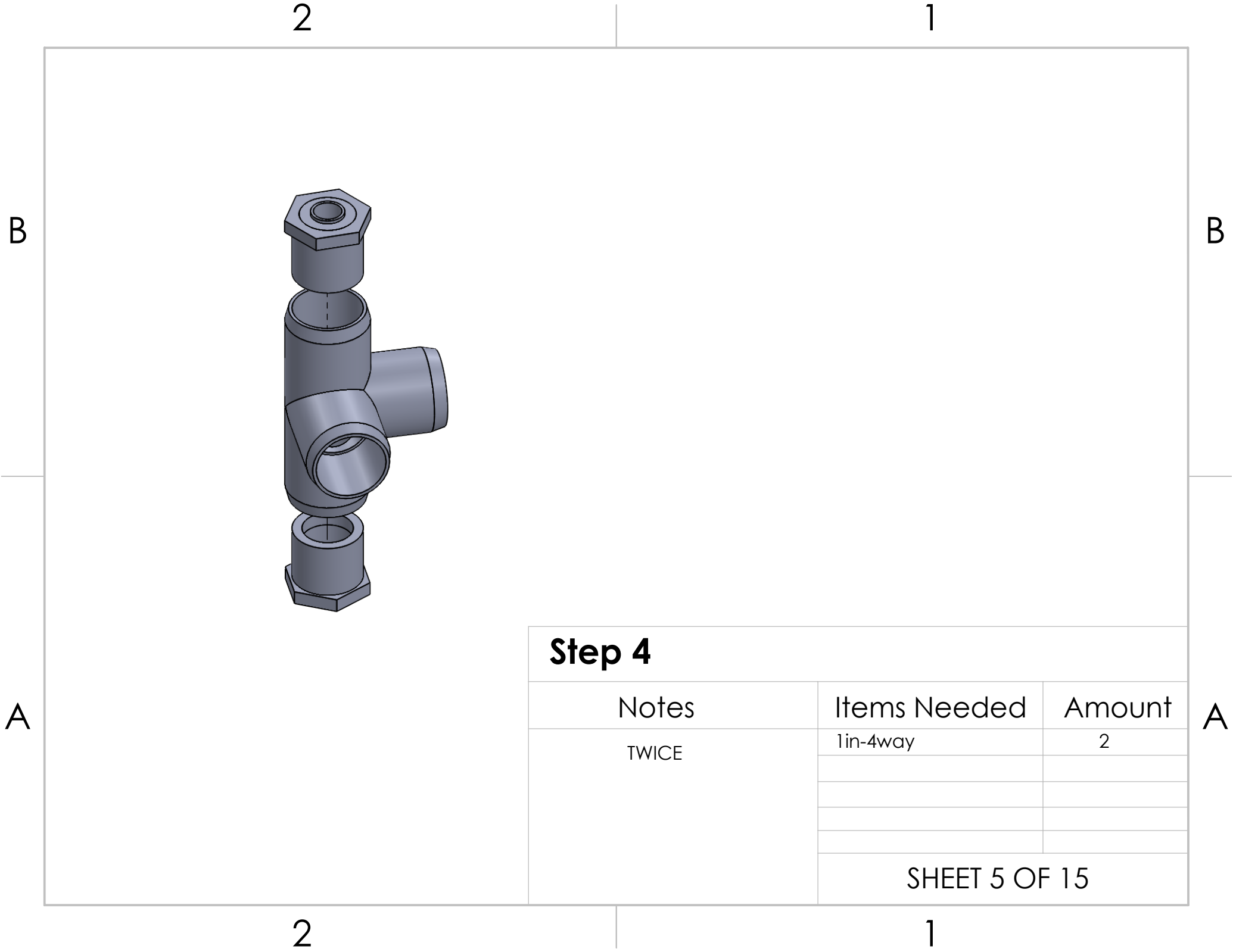
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### Step 3

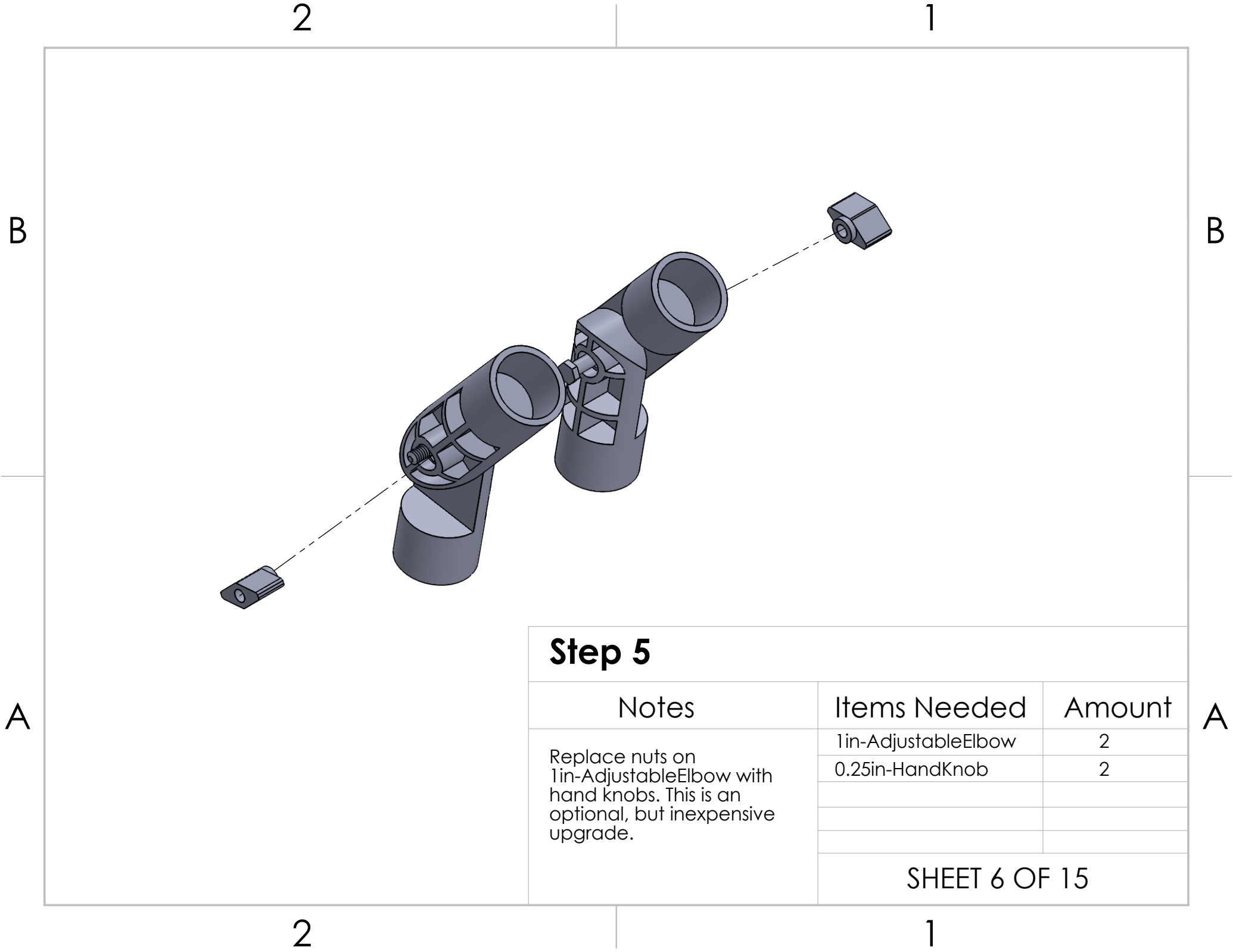
Notes	Items Needed	Amount
Heat opening of fitting for about 25-30 seconds to allow adaptor and bearing to fit in.	1in-BentTee	1
	1in-Plus	1
	1in-5way	1



### Step 4

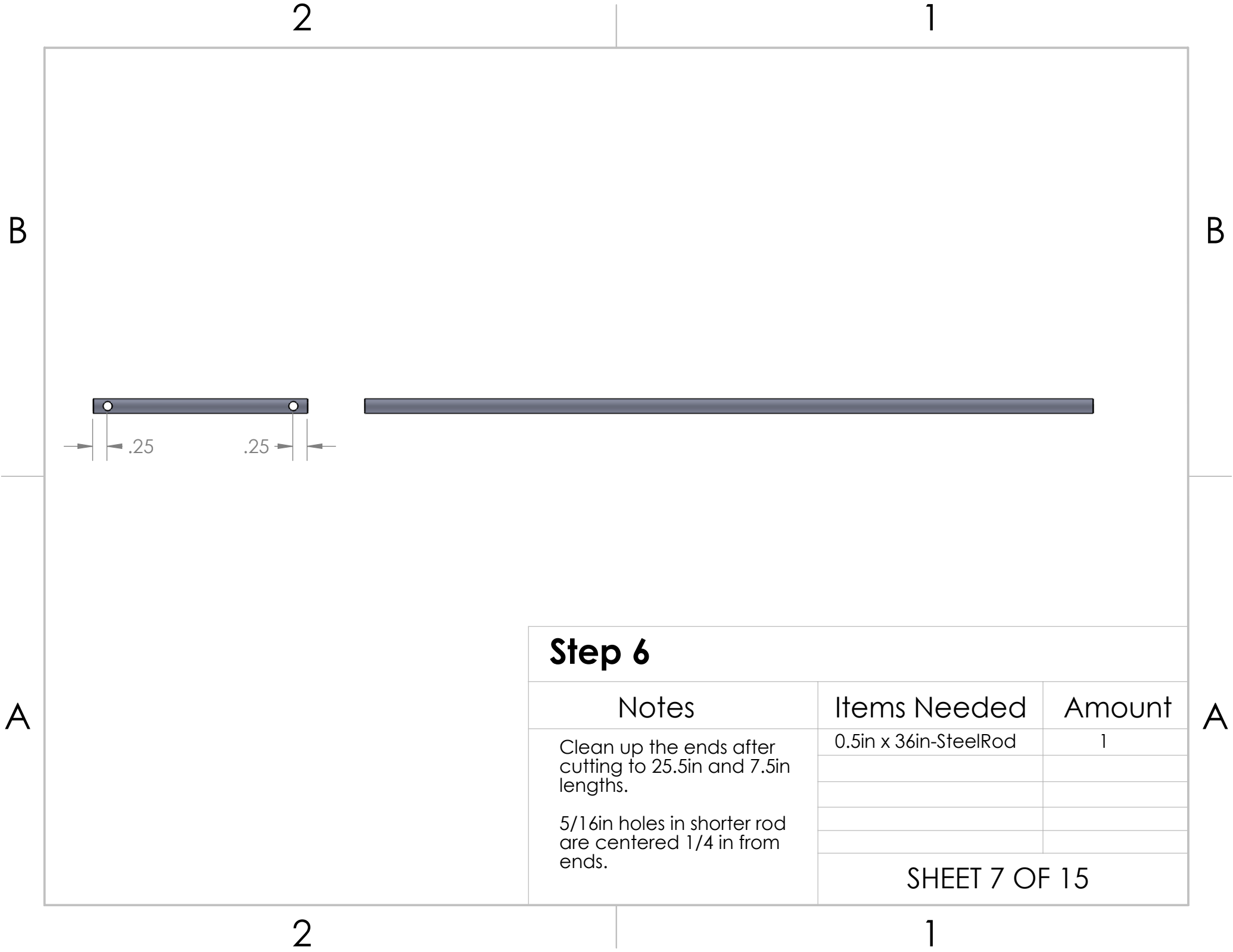
Notes	Items Needed	Amount
TWICE	1in-4way	2
	SHEET 5 OF 15	





**Step 5**

Notes	Items Needed	Amount
Replace nuts on 1in-AdjustableElbow with hand knobs. This is an optional, but inexpensive upgrade.	1in-AdjustableElbow	2
	0.25in-HandKnob	2
SHEET 6 OF 15		



2

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B

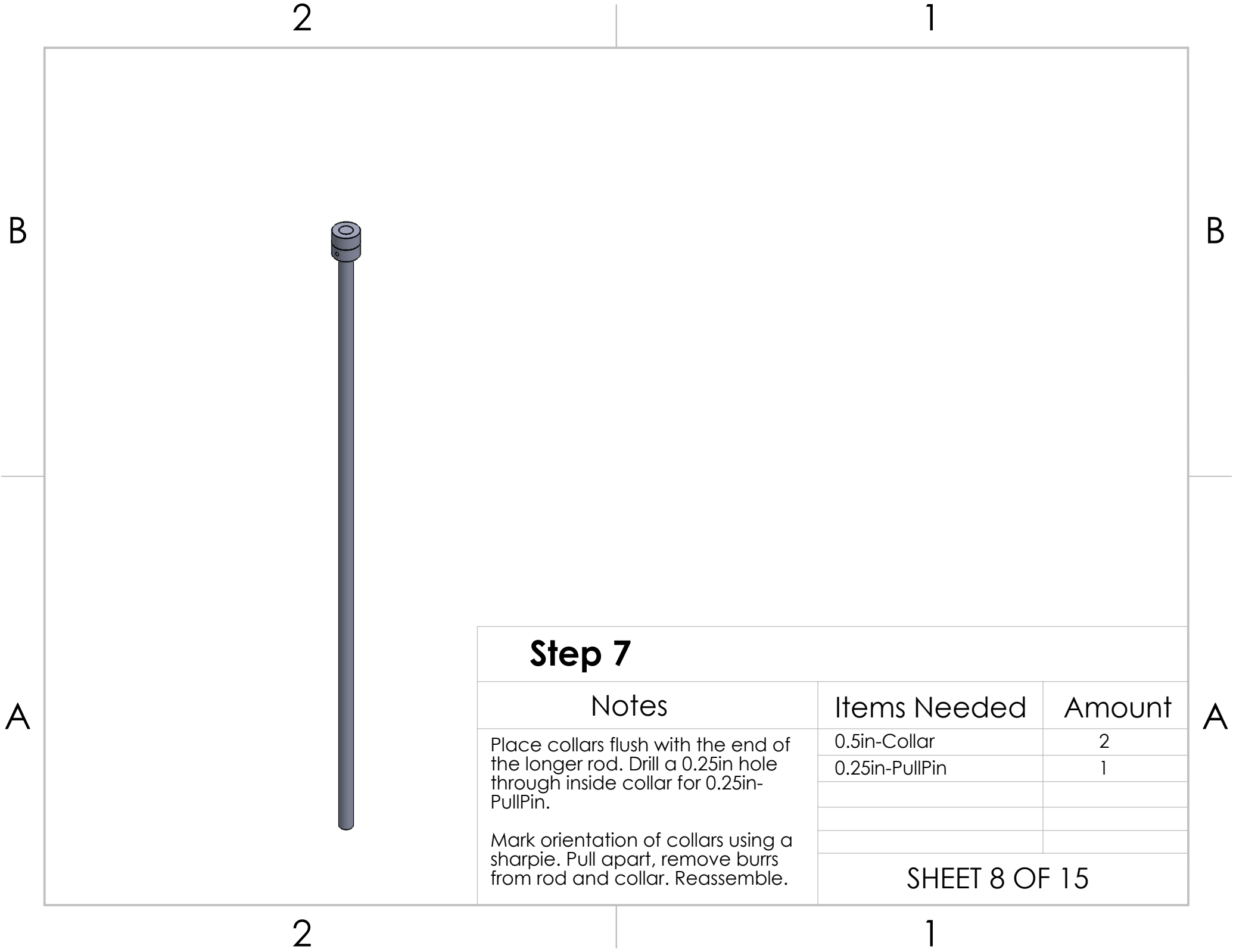
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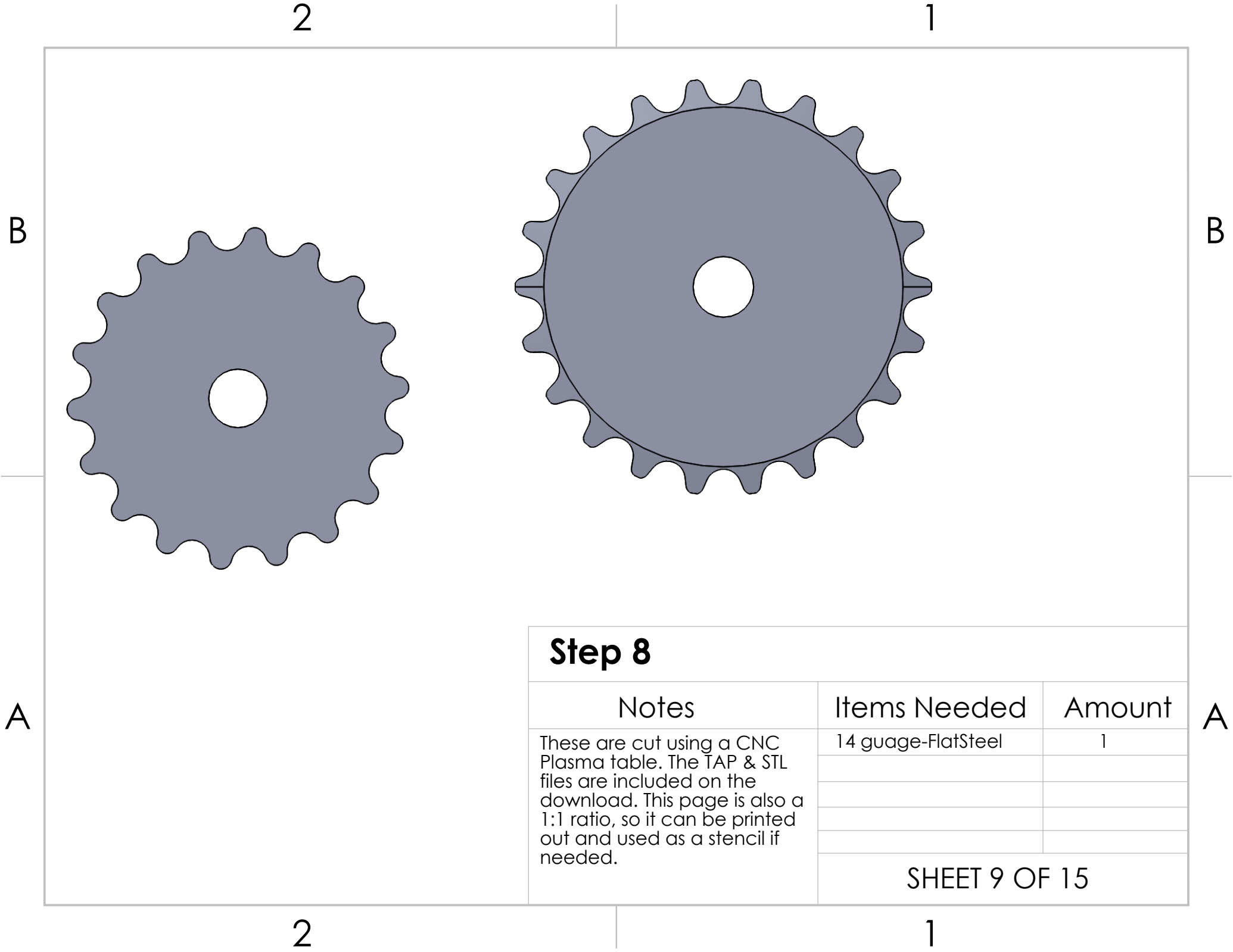
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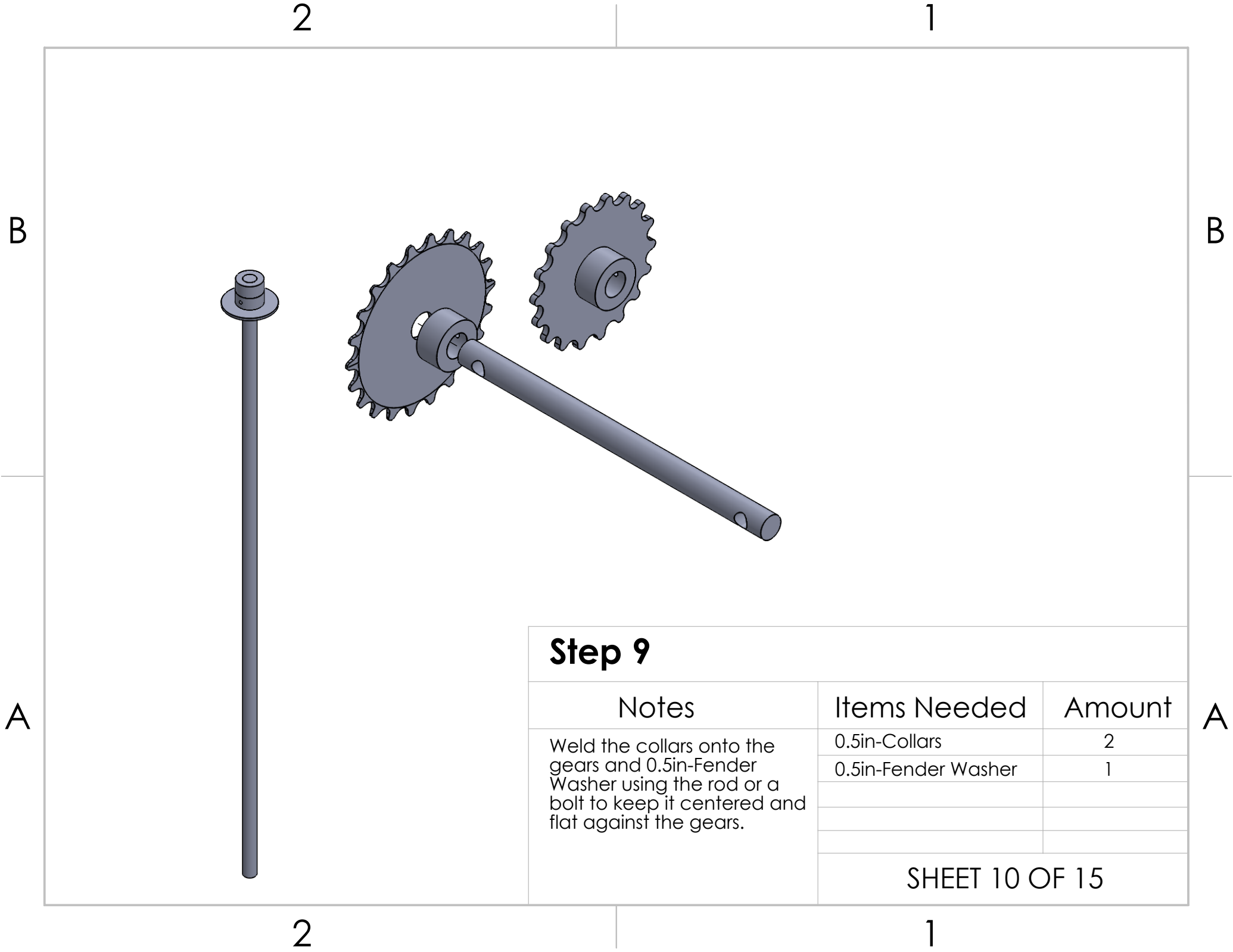
**Step 7**

Notes	Items Needed	Amount
<p>Place collars flush with the end of the longer rod. Drill a 0.25in hole through inside collar for 0.25in-PullPin.</p> <p>Mark orientation of collars using a sharpie. Pull apart, remove burrs from rod and collar. Reassemble.</p>	0.5in-Collar	2
	0.25in-PullPin	1
SHEET 8 OF 15		



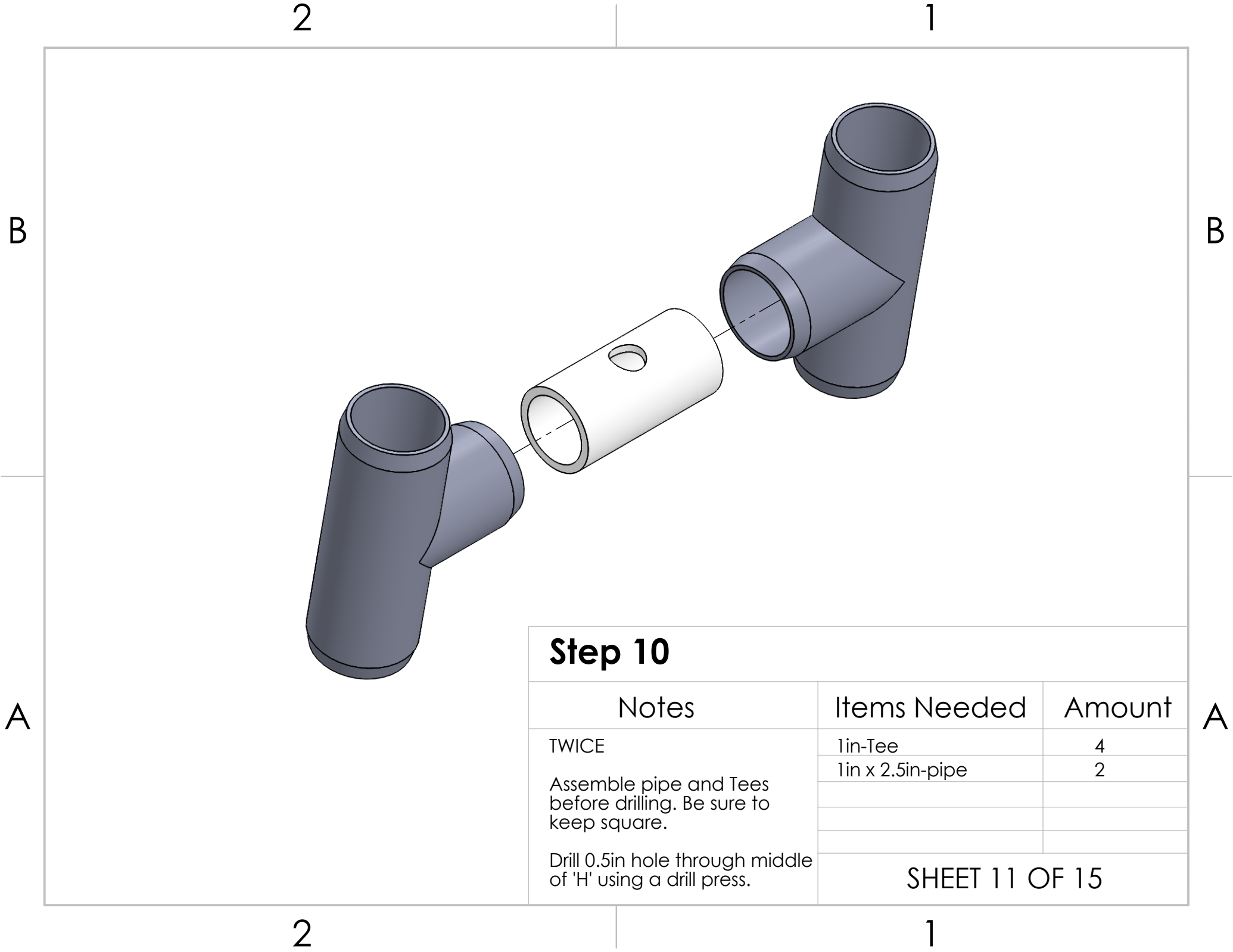
## Step 8

Notes	Items Needed	Amount
These are cut using a CNC Plasma table. The TAP & STL files are included on the download. This page is also a 1:1 ratio, so it can be printed out and used as a stencil if needed.	14 guage-FlatSteel	1
	SHEET 9 OF 15	



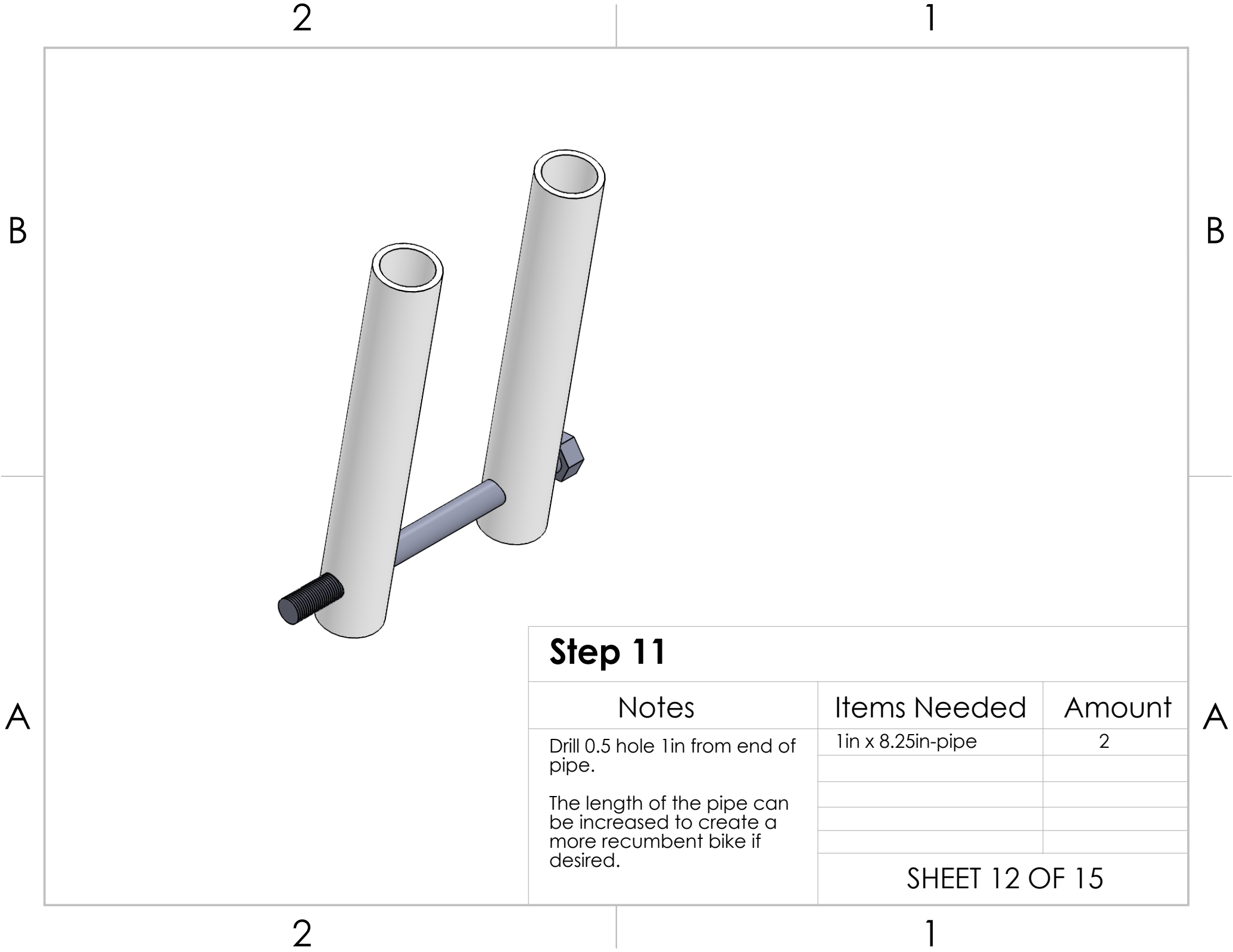
### Step 9

Notes	Items Needed	Amount
Weld the collars onto the gears and 0.5in-Fender Washer using the rod or a bolt to keep it centered and flat against the gears.	0.5in-Collars	2
	0.5in-Fender Washer	1
	SHEET 10 OF 15	



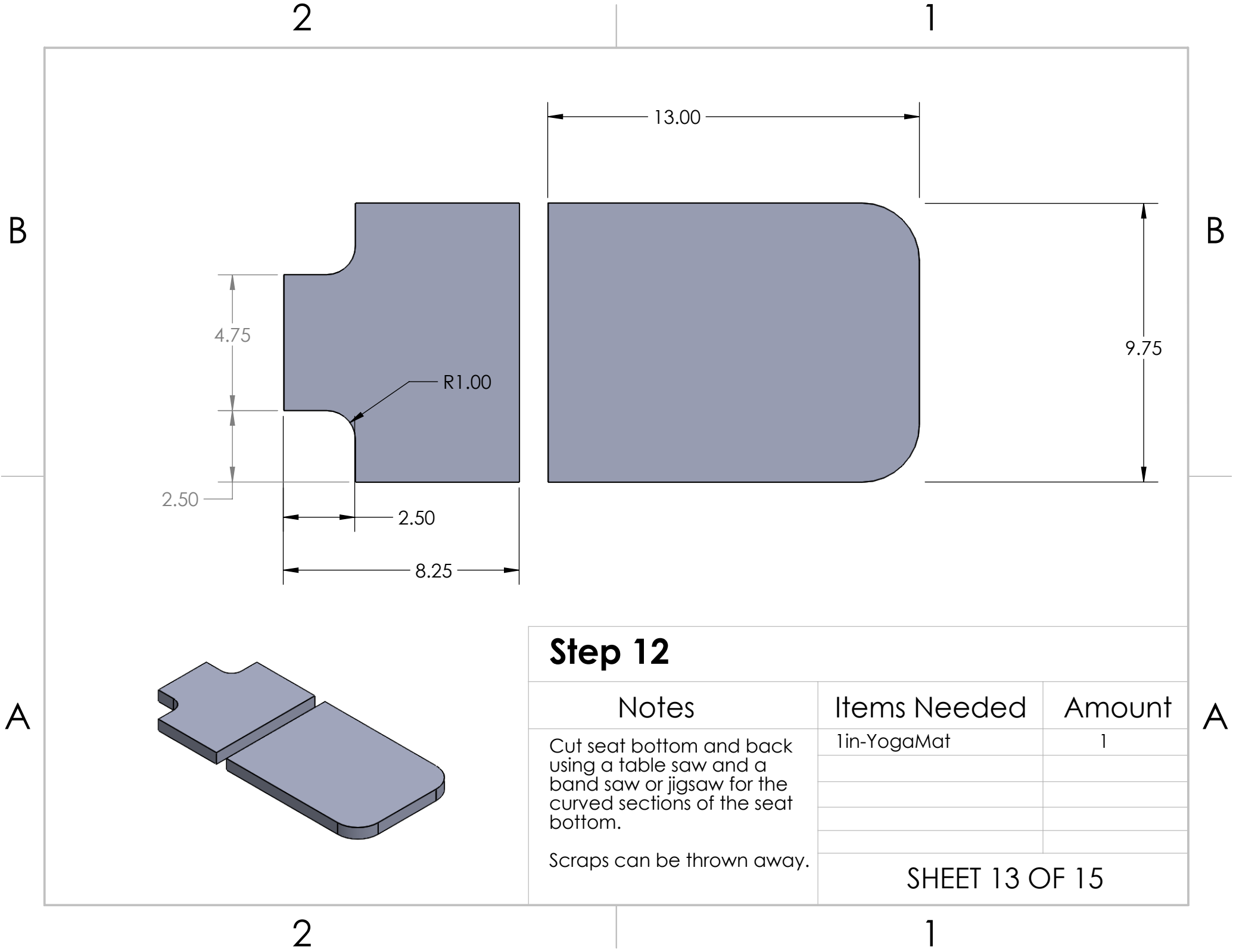
### Step 10

Notes	Items Needed	Amount
TWICE  Assemble pipe and Tees before drilling. Be sure to keep square.  Drill 0.5in hole through middle of 'H' using a drill press.	1in-Tee	4
	1in x 2.5in-pipe	2



## Step 11

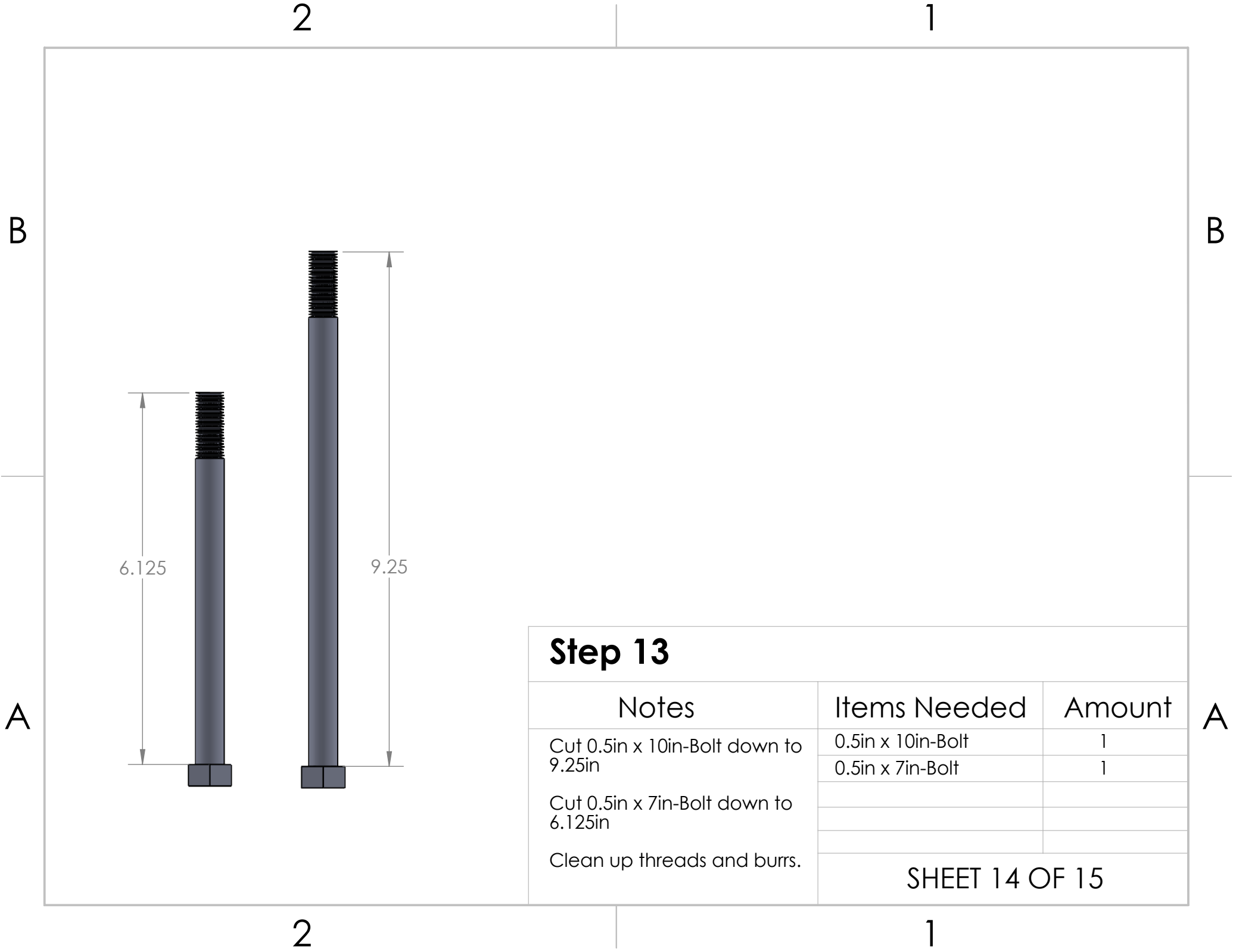
Notes	Items Needed	Amount
Drill 0.5 hole 1in from end of pipe.  The length of the pipe can be increased to create a more recumbent bike if desired.	1in x 8.25in-pipe	2
SHEET 12 OF 15		



**Step 12**

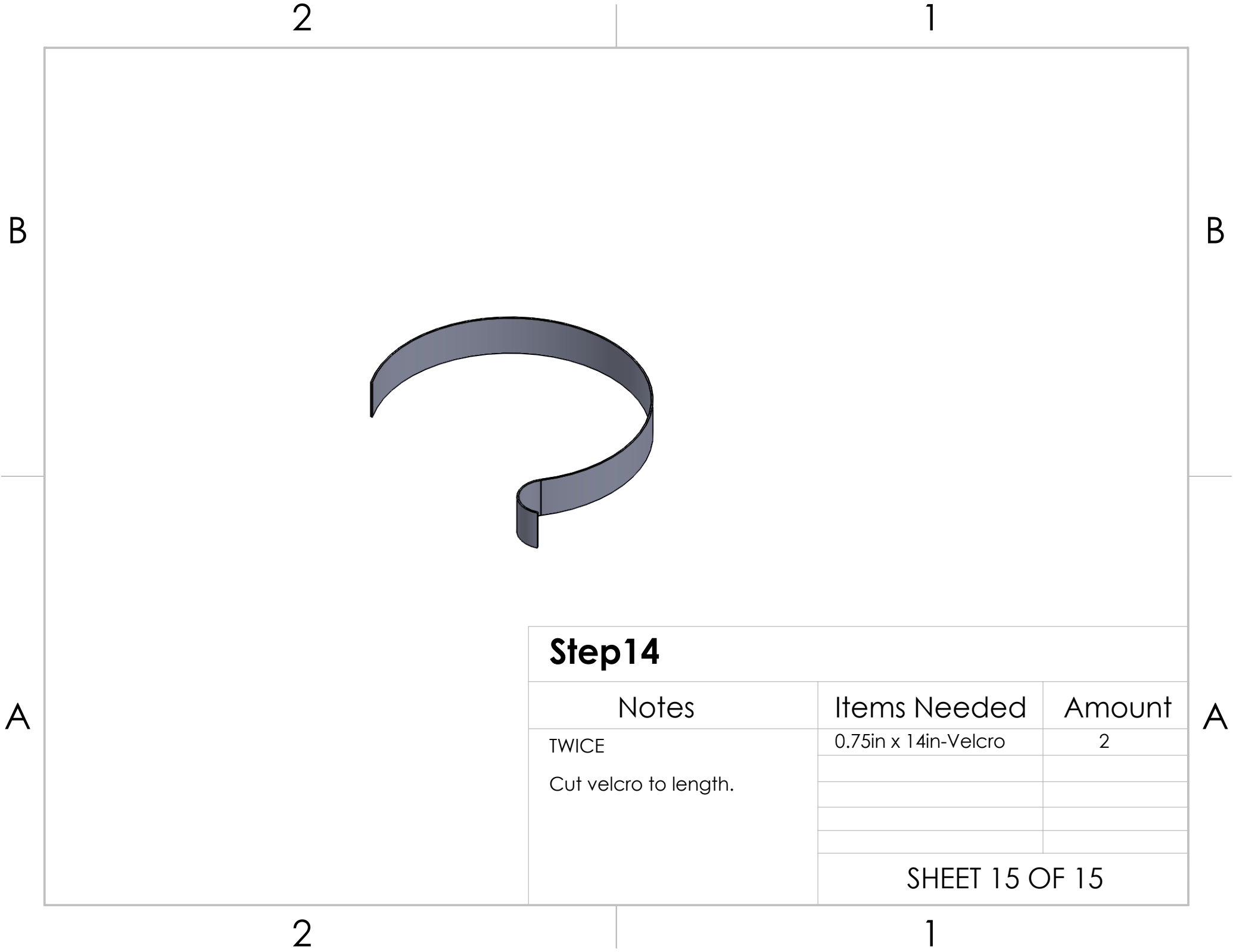
Notes	Items Needed	Amount
Cut seat bottom and back using a table saw and a band saw or jigsaw for the curved sections of the seat bottom.  Scraps can be thrown away.	1in-YogaMat	1
SHEET 13 OF 15		





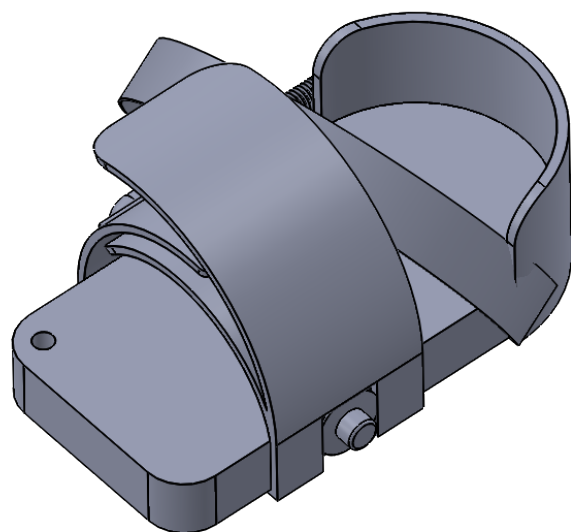
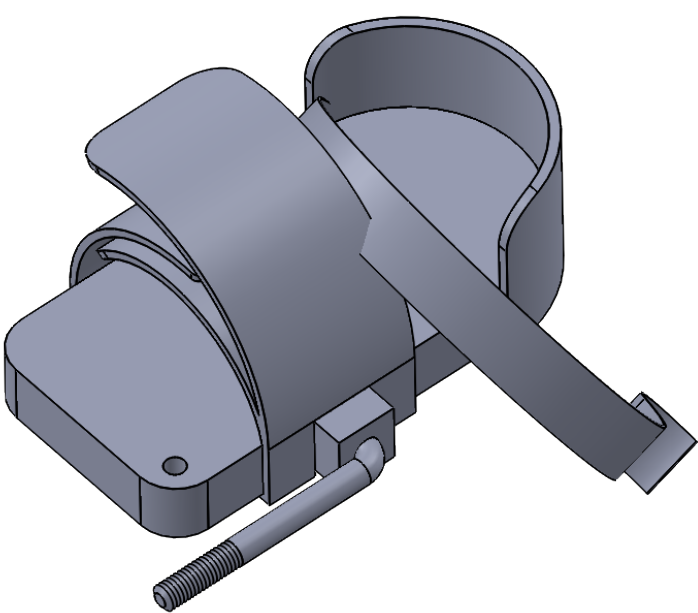
Step 13

Notes	Items Needed	Amount
Cut 0.5in x 10in-Bolt down to 9.25in  Cut 0.5in x 7in-Bolt down to 6.125in  Clean up threads and burrs.	0.5in x 10in-Bolt	1
	0.5in x 7in-Bolt	1

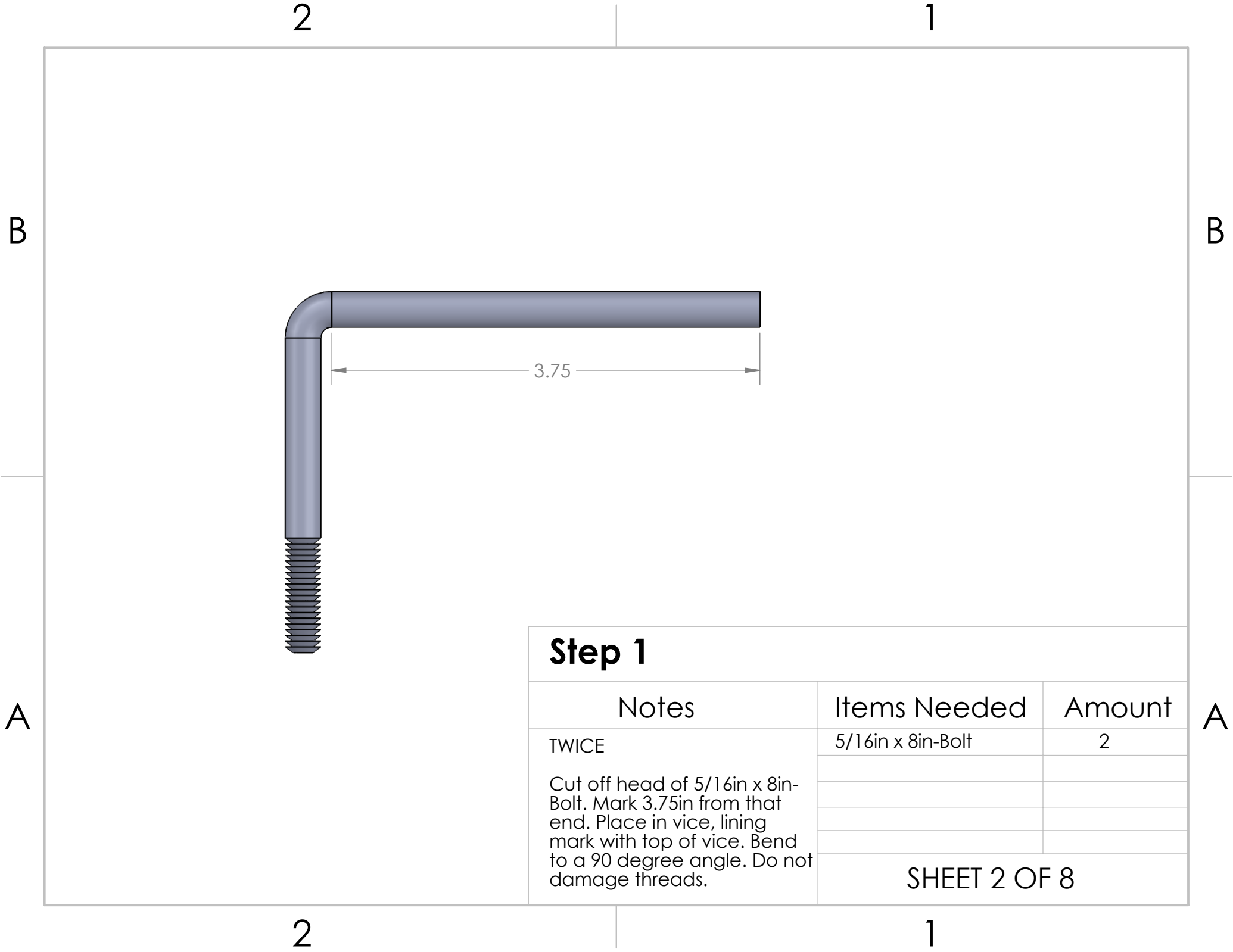


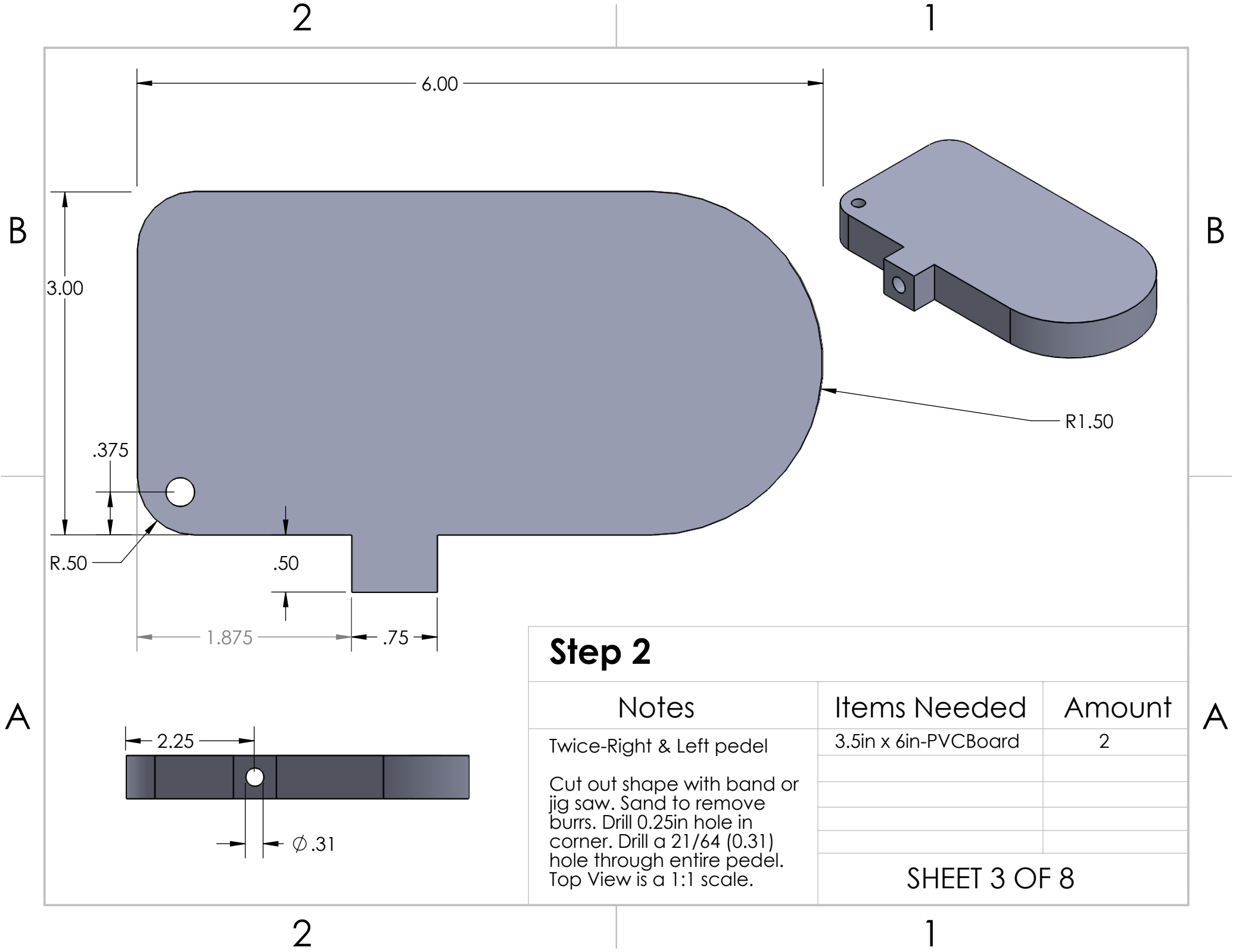
## Step14

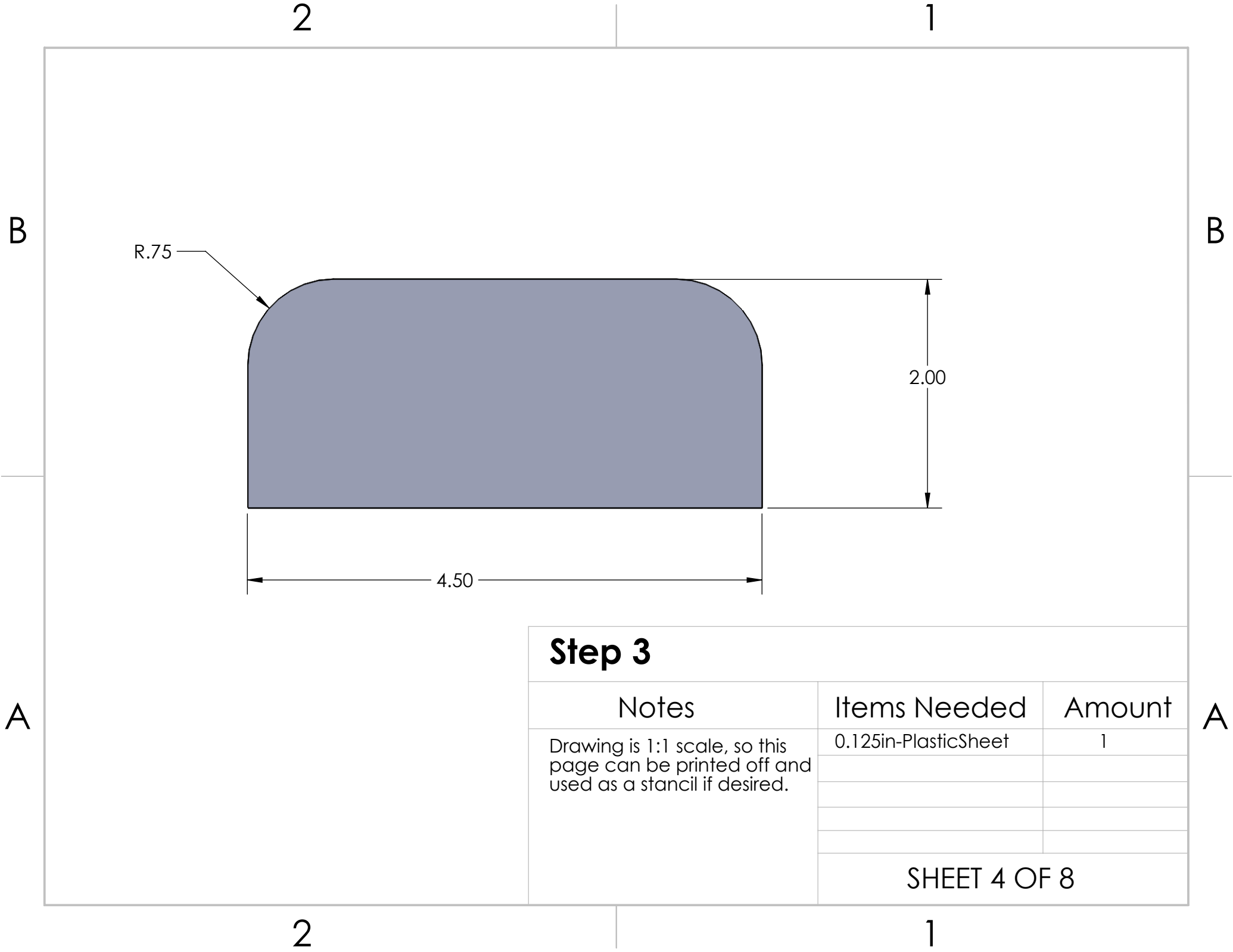
Notes	Items Needed	Amount
TWICE Cut velcro to length.	0.75in x 14in-Velcro	2
SHEET 15 OF 15		

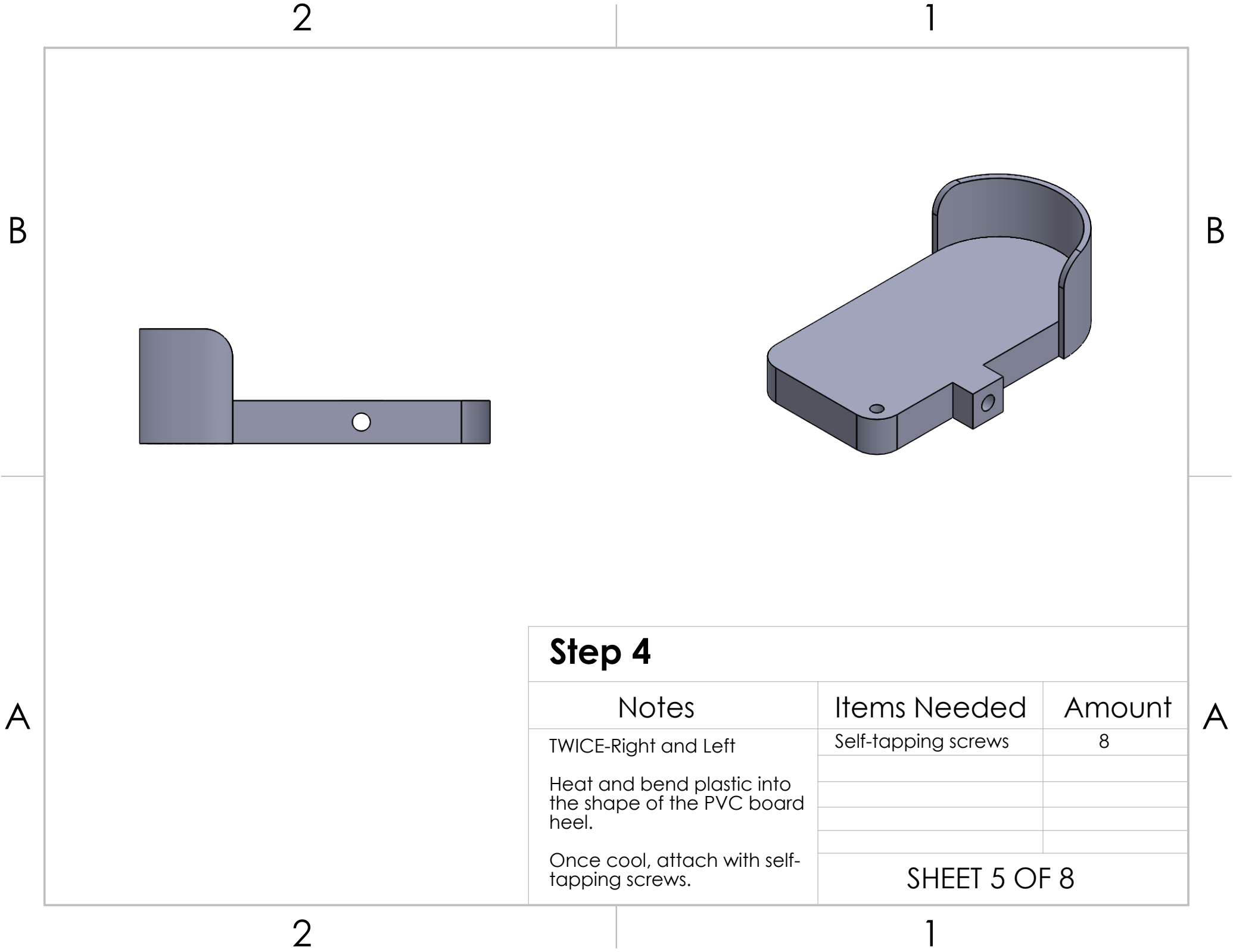


PVC Trike: Part 2 - Pedels		
Notes	Items Needed	Amount
	SHEET 1 OF 8	









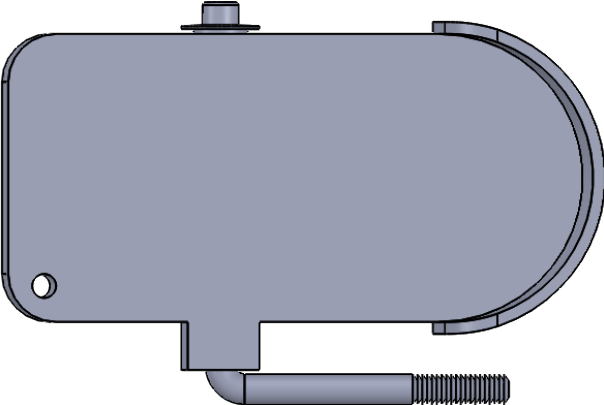
### Step 4

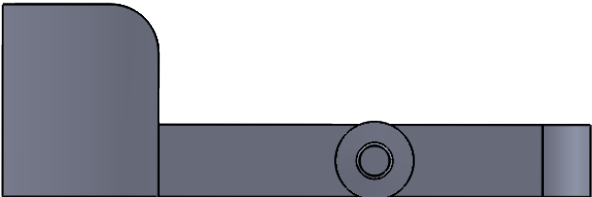
Notes	Items Needed	Amount
TWICE-Right and Left  Heat and bend plastic into the shape of the PVC board heel.  Once cool, attach with self-tapping screws.	Self-tapping screws	8
	SHEET 5 OF 8	

2

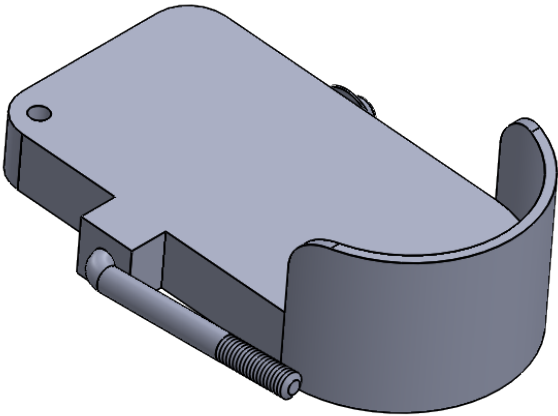
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### Step 5

Notes	Items Needed	Amount
TWICE- Right and Left  Washer goes inbetween PVC board pedel and axle cap.  Do not tap on the top of the 5/16-AxleCap. Instead use a socket to tap on the brim.	5/16in-Washer	2
	5/16in-AxleCap	2

SHEET 6 OF 8

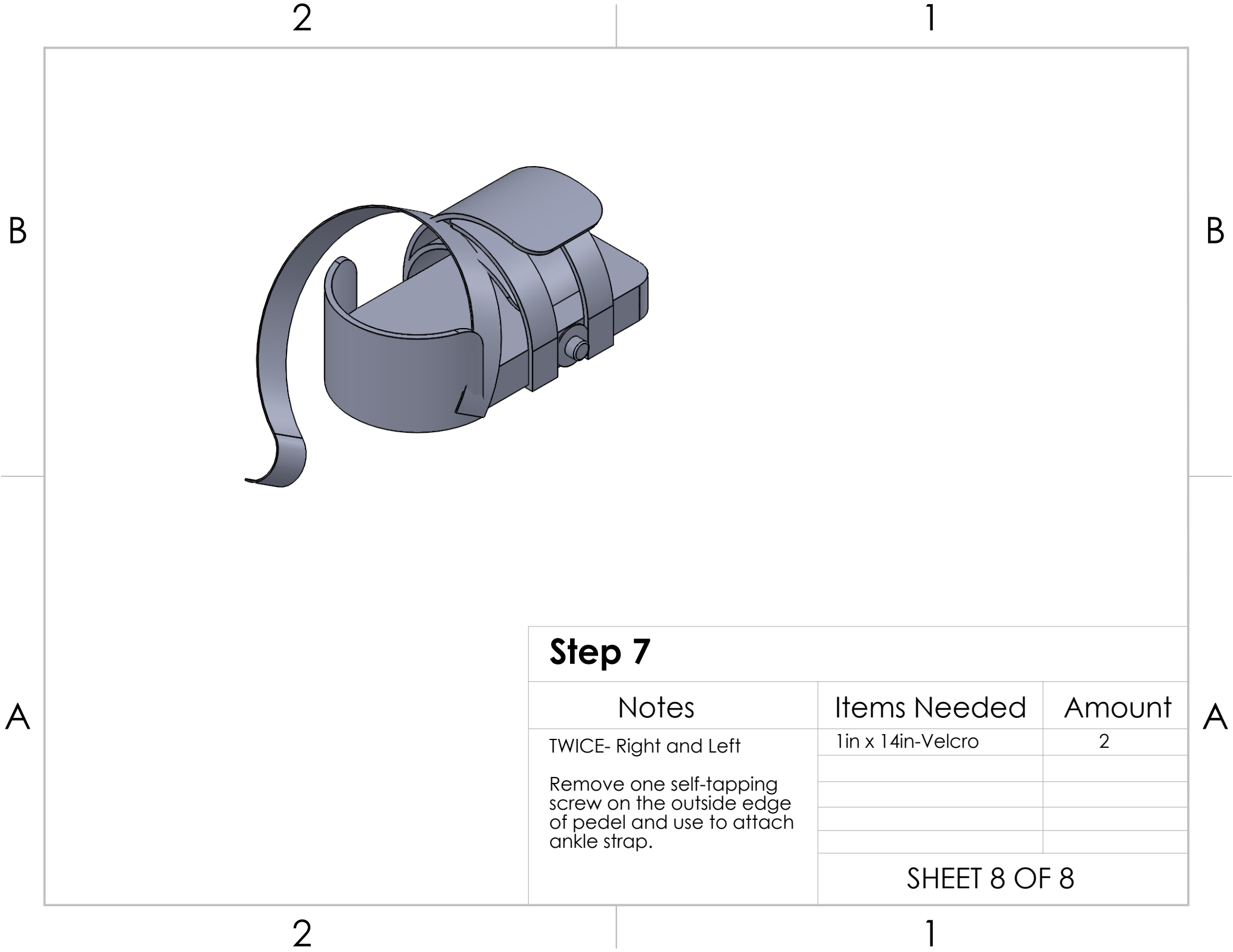
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**Step 6**

Notes	Items Needed	Amount
Twice-Right and Left  Screw Strap in on the sides of the PVC board pedal using self tapping screws	PedelToeStrap	2
	self-tapping screws	8
SHEET 7 OF 8		



**Step 7**

Notes	Items Needed	Amount
TWICE- Right and Left  Remove one self-tapping screw on the outside edge of pedal and use to attach ankle strap.	1in x 14in-Velcro	2
	SHEET 8 OF 8	



**PVC Trike: Part 3 - Fork**

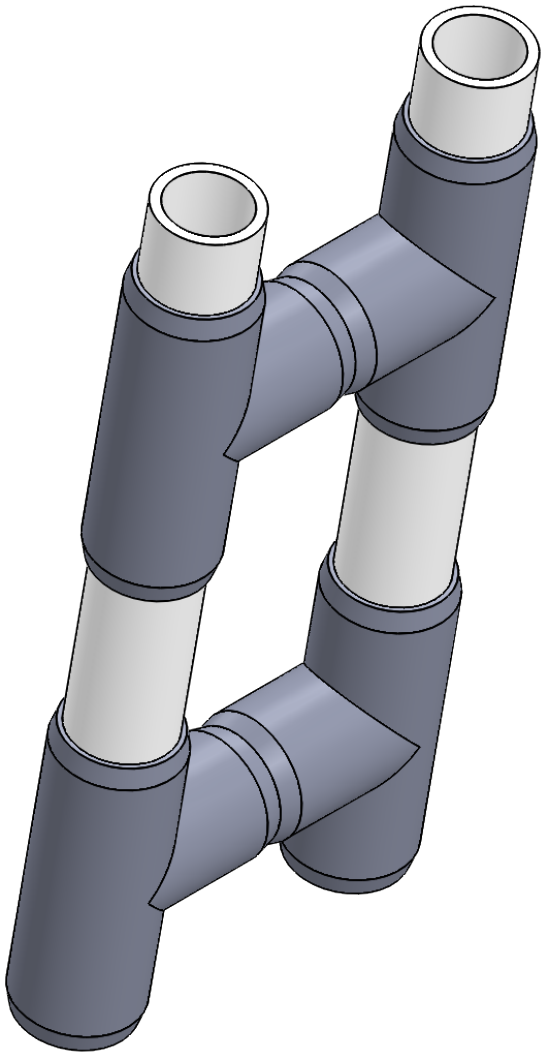
Notes	Items Needed	Amount
	SHEET 1 OF 6	

B

B

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**Step 1**

Notes	Items Needed	Amount
Use 'H' s made during Part 1 - Preparation.  Screw each pipe to each fitting using #6 x 3/8 in screws.	1in x 4.875in-pipe	2
	1in x 2.25in-pipe	2
SHEET 2 OF 6		

2

1

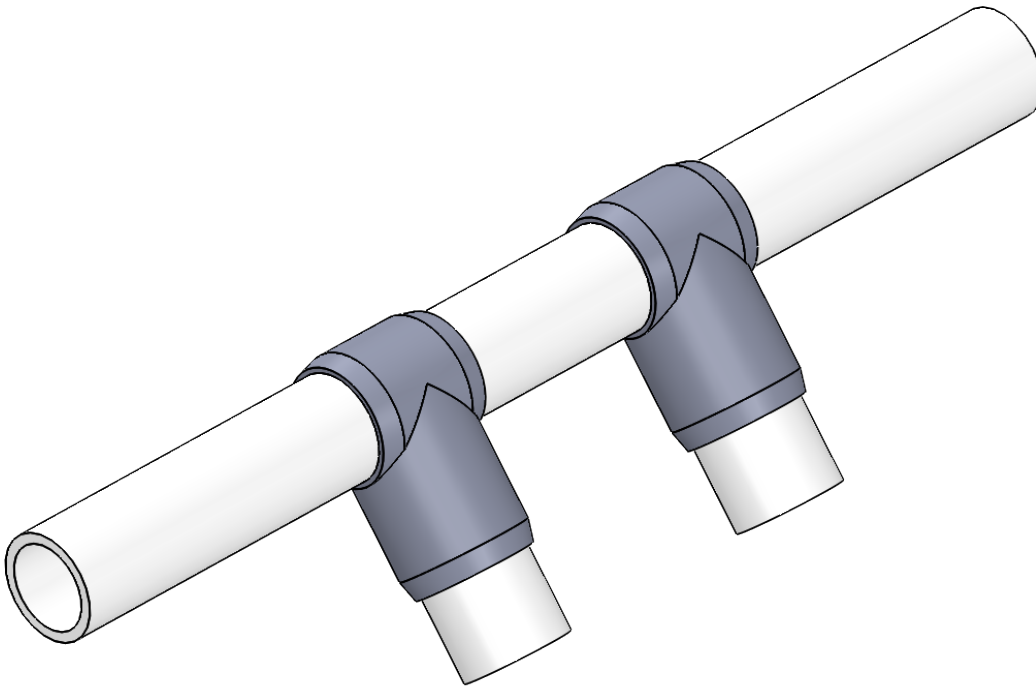
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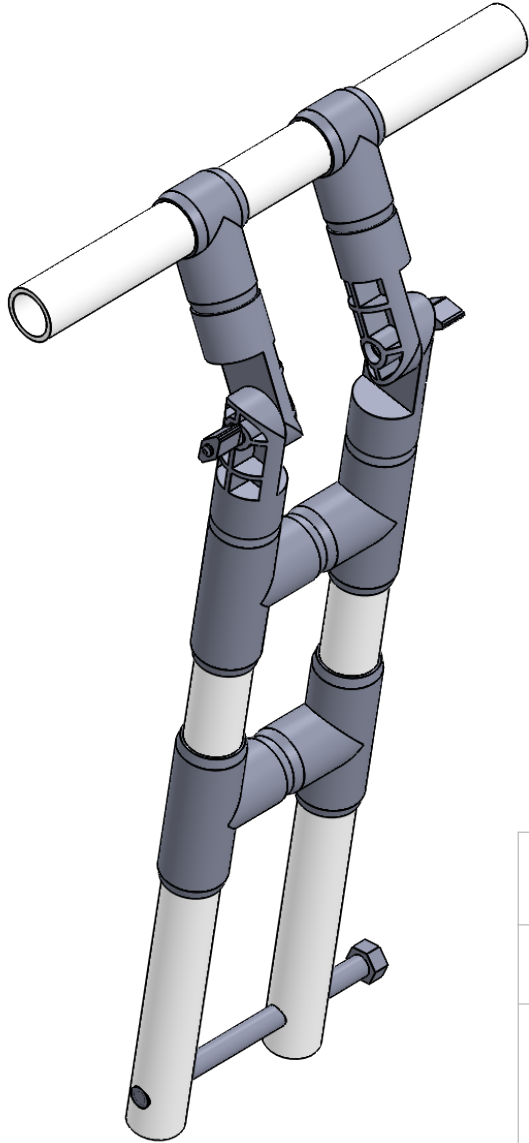
## Step 2

Notes	Items Needed	Amount
Use 1in x 8.25in-pipe from preparation steps. 0.5in bolt to keep pipes aligned.  Screw each pipe to each fitting using #6 x 3/8 in screws.		
	SHEET 3 OF 6	



**Step 3**

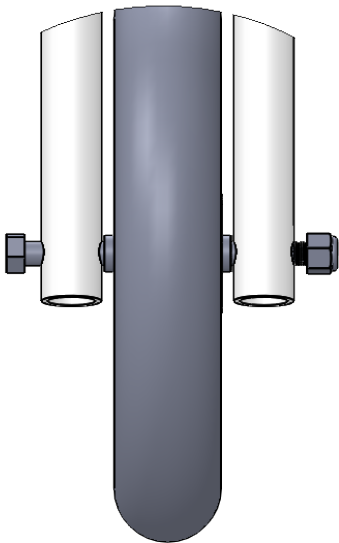
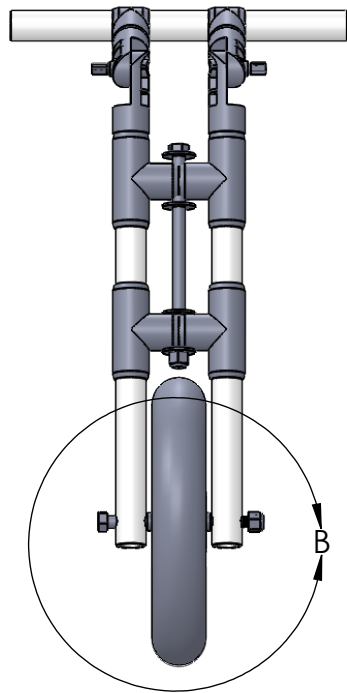
Notes	Items Needed	Amount
Do not screw the 1in-SlipTees to the 1in x 14in-pipe until attaching to the rest of the framework.	1in x 14in-pipe	1
	1in-SlipTee	2
	1in x 2.25in-pipe	2



### Step 4

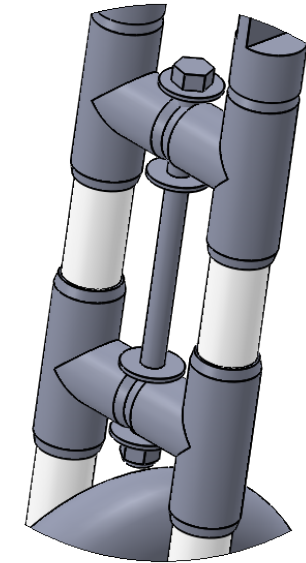
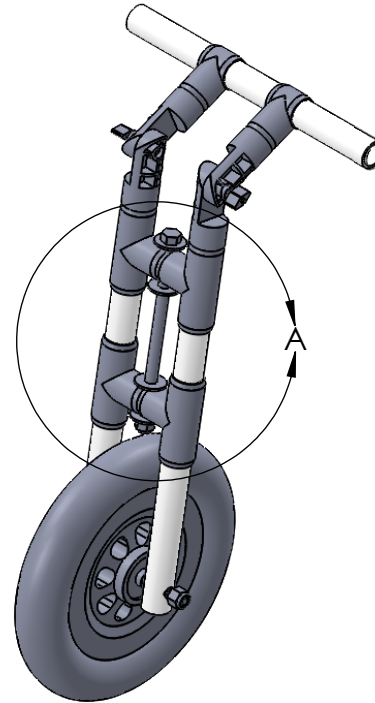
Notes	Items Needed	Amount
<p>Dry assemble and work 1 in-Adjustable Tee back and forth to ensure good alignment.</p> <p>Screw each pipe to each fitting using #6 x 3/8 in screws.</p>		
SHEET 5 OF 6		

B



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1



B

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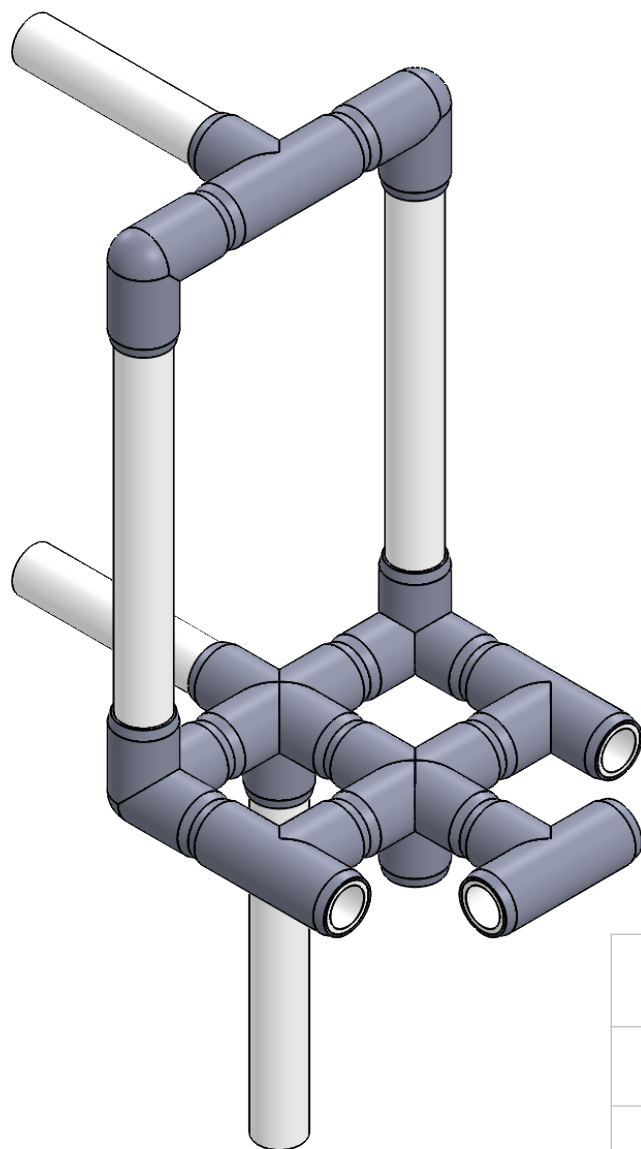
## Step 5

Notes	Items Needed	Amount
<p>Using a pencil or smaller bolt can help with aligning the bushing inside the wheel with the 0.5in x 6.125in-Bolt.</p> <p>The 0.5in x 0.375in-Bushings keep the wheel centered and avoid rubbing on the pvc pipe.</p>	0.5in x 6.125in-Bolt (B)	1
	0.5in x 0.375in-Bushing	2
	0.5in x 9.25in-Bolt (A)	1
	0.5in-LockNut	2
	12in-Wheel	1
	0.5in-Washer	4
	SHEET 6 OF 6	

1

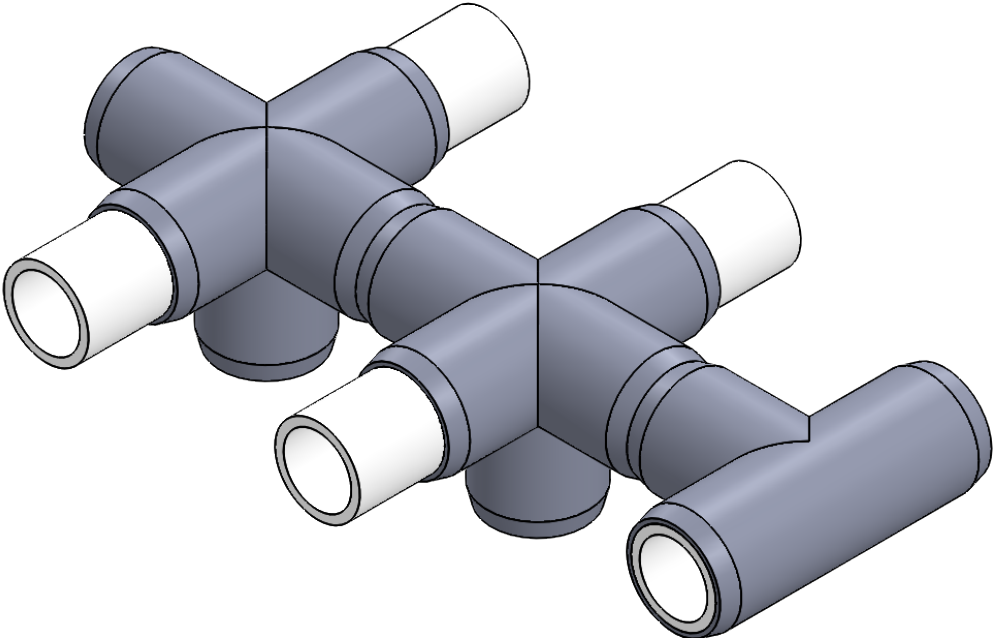
2





## PVC Trike: Part 4 - Seat

Notes	Items Needed	Amount
Adjust seat back as the user grows by replacing 1in x 6.5in-pipe sticking out back with 1in x 2.5in-pipe and move seat post to other hole.		
	SHEET 1 OF 6	



**Step 1**

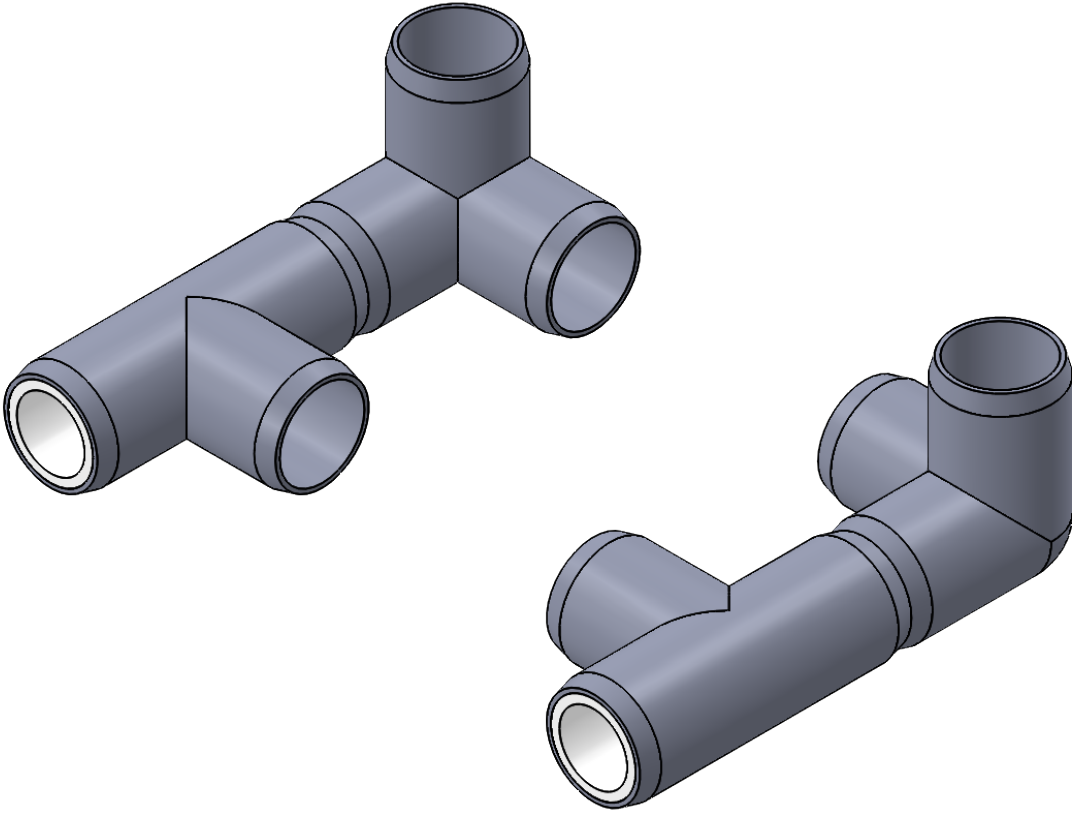
Notes	Items Needed	Amount
Use a flat surface to keep level while assembling.  Screw each pipe to each fitting using # 6 x 3/8 in screws.	1 in-5way	2
	1 in x 2.5in-pipe	6
	1 in-Tee	1
	1 in x 1.25in-pipe	2
SHEET 2 OF 6		

2

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Step 2

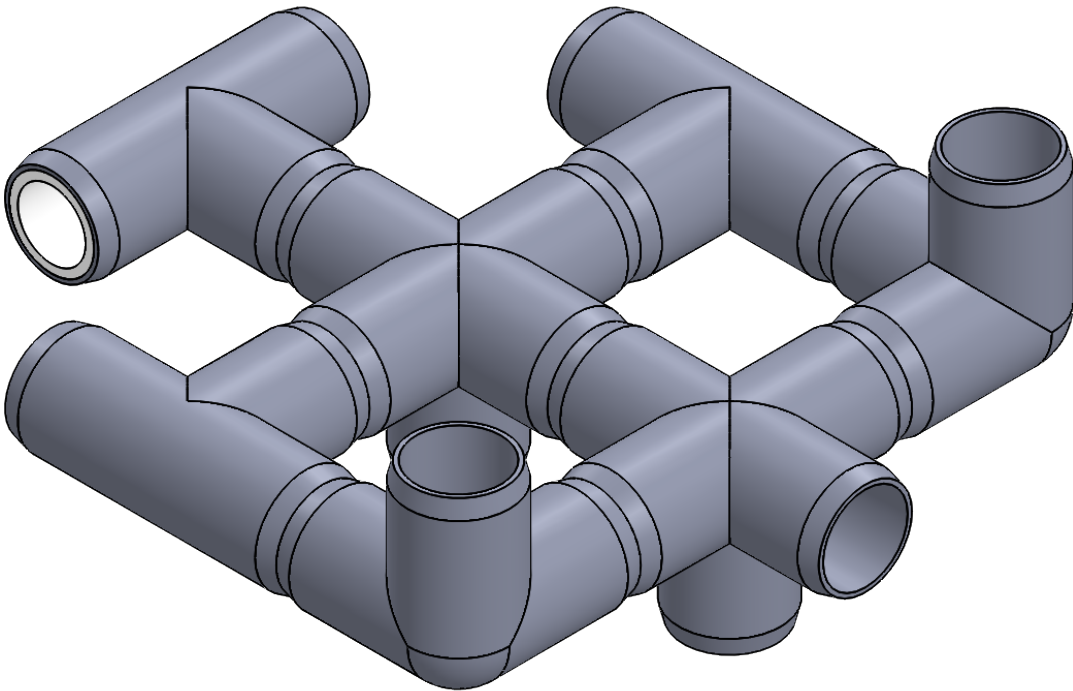
Notes	Items Needed	Amount
	1in-Tee	2
	1in-3way	2
	1in x 2.5in-pipe	2
	1in x 1.25in-pipe	2
SHEET 3 OF 6		

2

1

B

B



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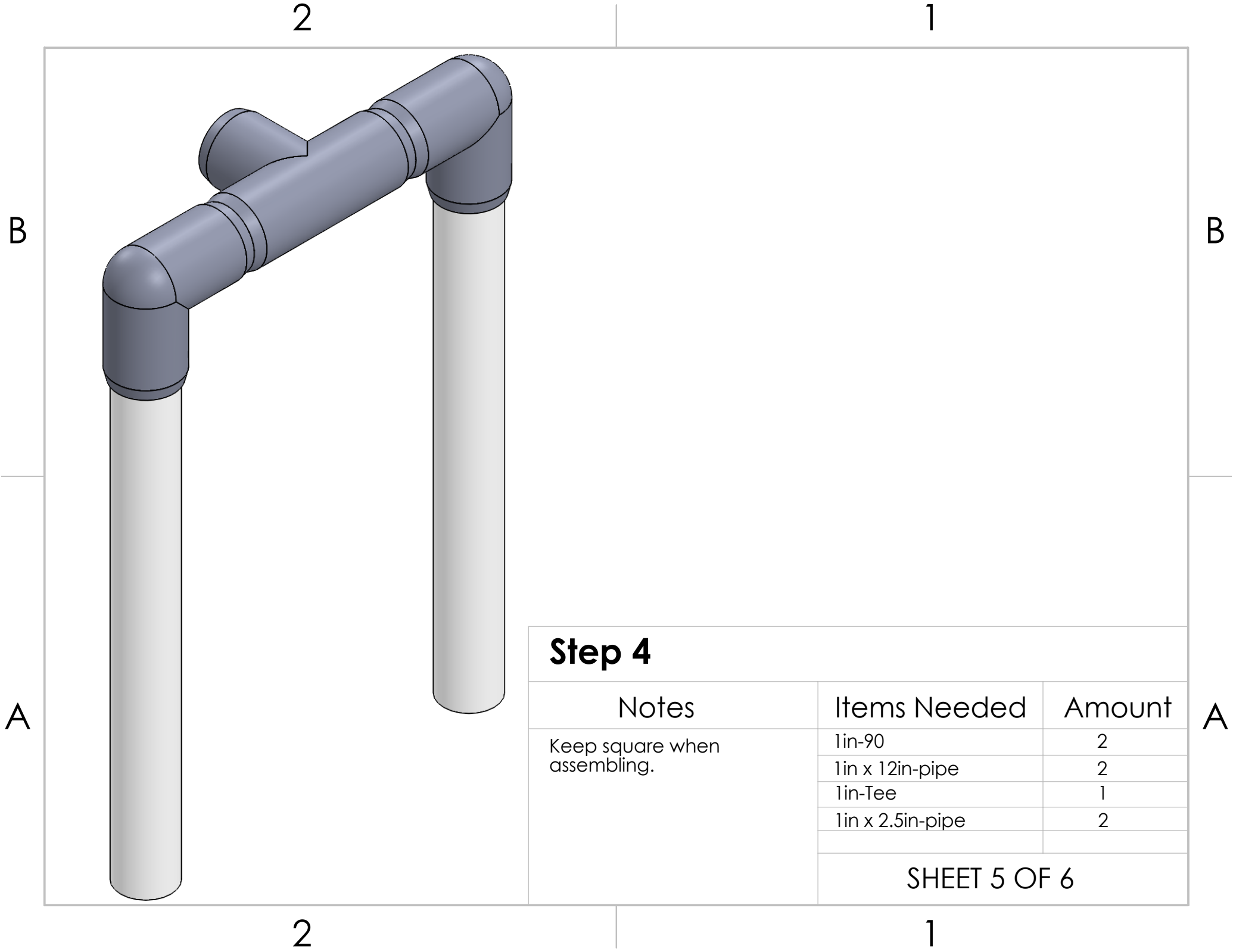
A

**Step 3**

Notes	Items Needed	Amount
Use a flat surface to keep level while assembling.  Screw each pipe to each fitting using # 6 x 3/8 in screws.		
	SHEET 4 OF 6	

2

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**Step 4**

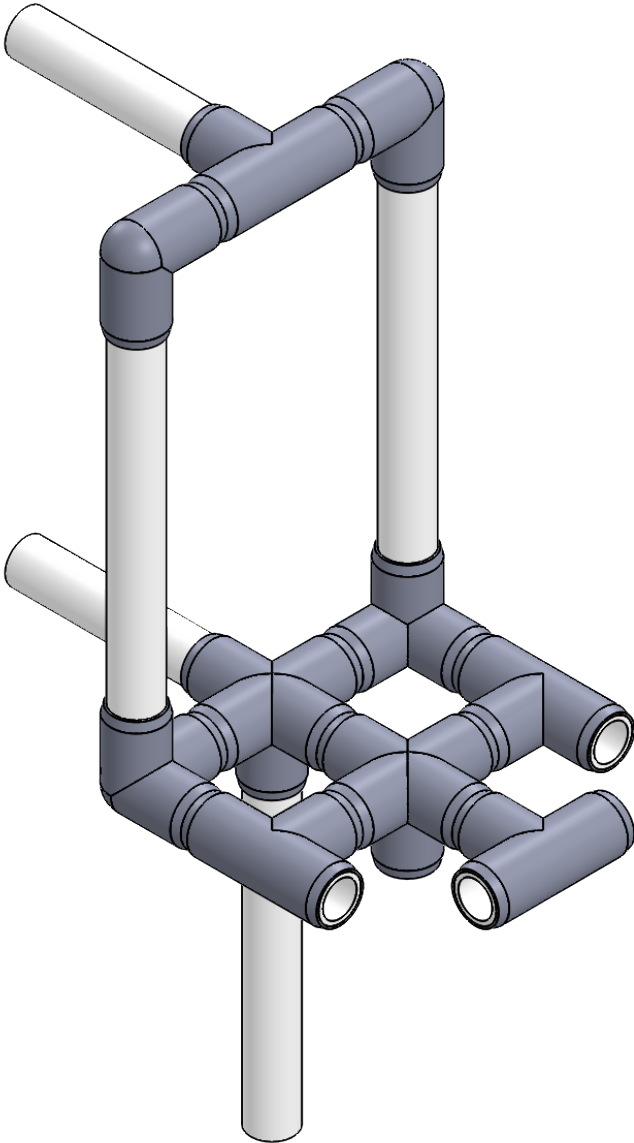
Notes	Items Needed	Amount
Keep square when assembling.	1in-90	2
	1in x 12in-pipe	2
	1in-Tee	1
	1in x 2.5in-pipe	2
SHEET 5 OF 6		

2

1

B

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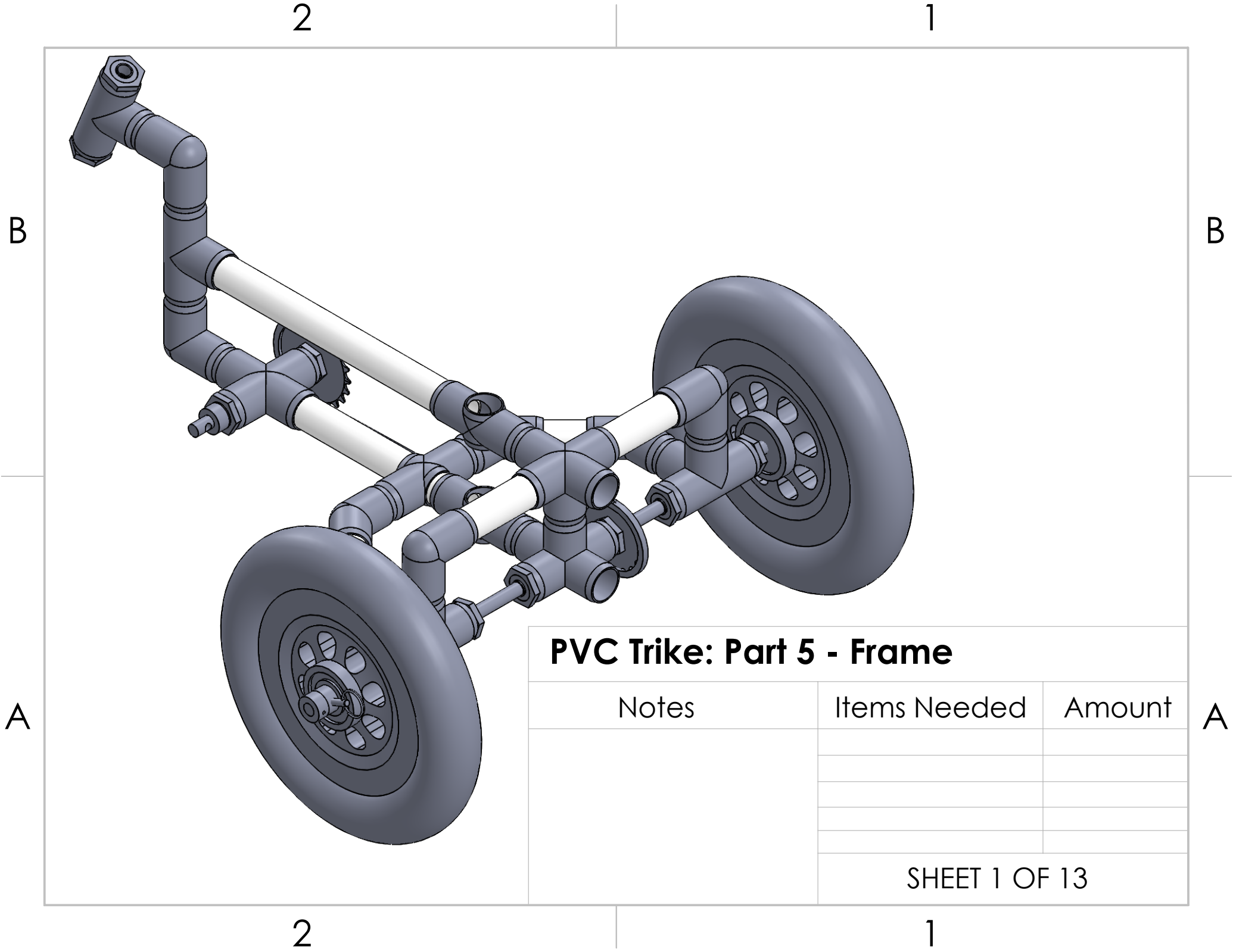


Step 5

Notes	Items Needed	Amount
Put the 1in x 1.25in-pipe in the hole on the bottom not being used by the seat post.  Screw each pipe to each fitting using #6 x 3/8 in screws.	1in x 6.5in-pipe	2
	1in x 10in-pipe	1
	1in x 1.25in-pipe	1
SHEET 6 OF 6		

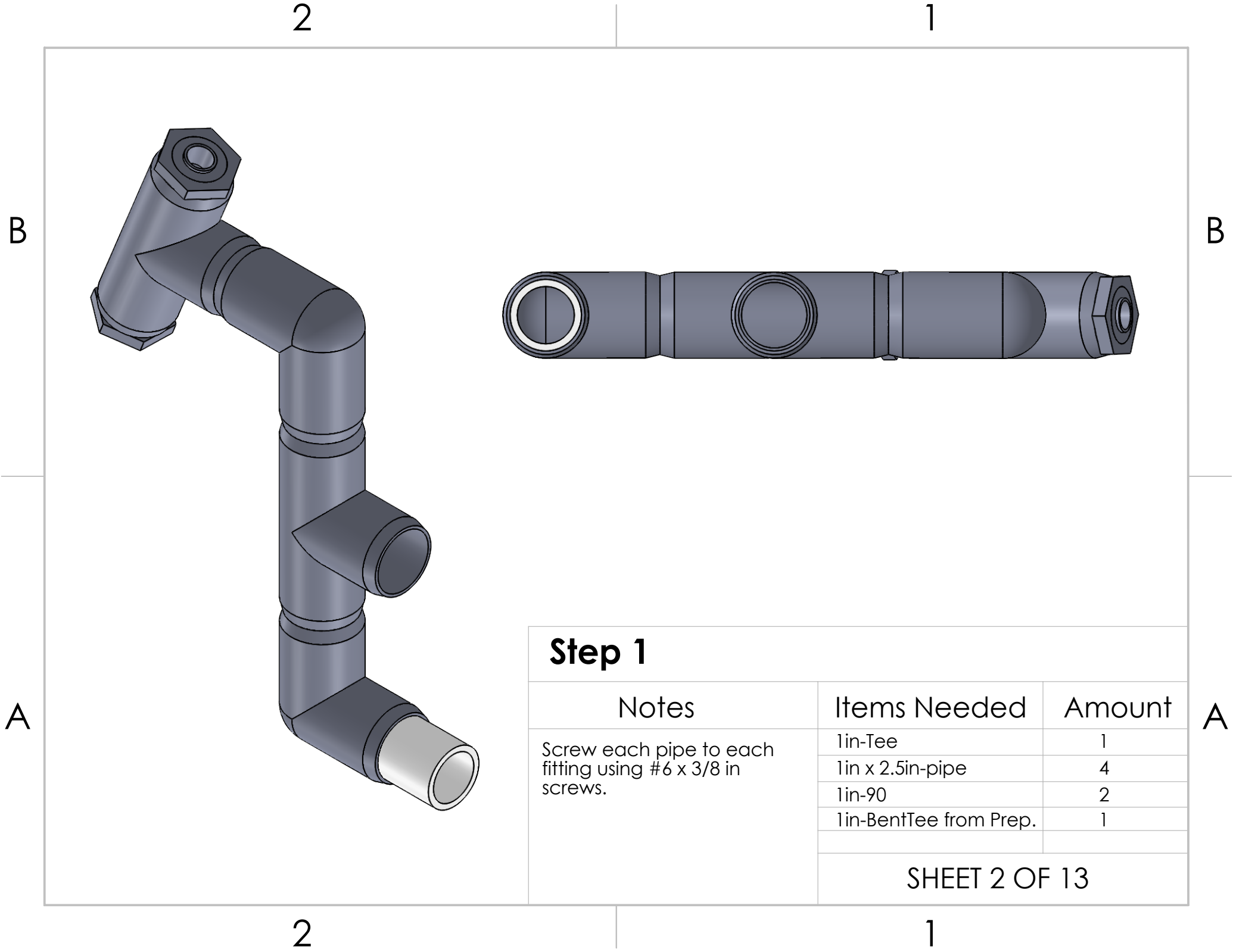
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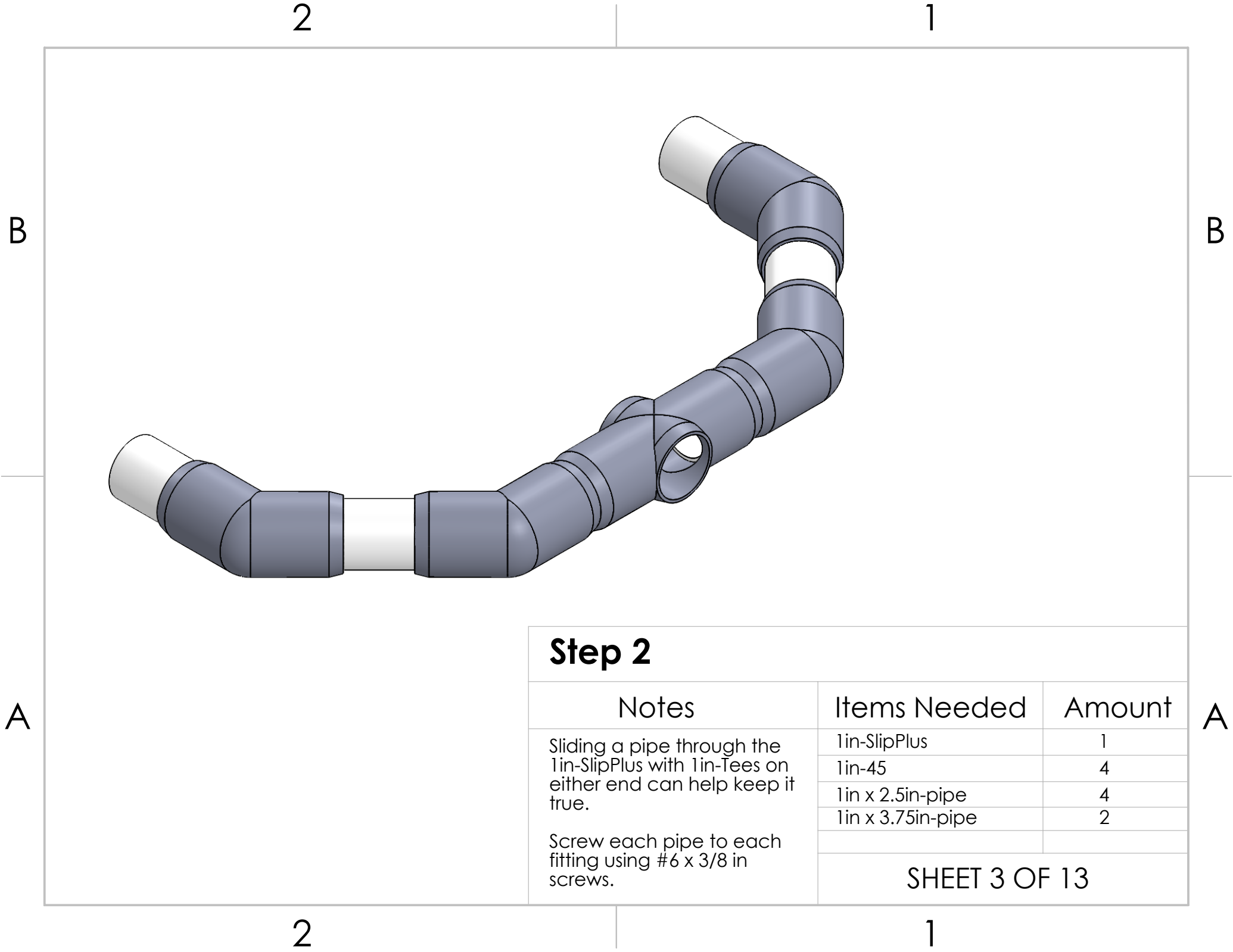


**PVC Trike: Part 5 - Frame**

Notes	Items Needed	Amount

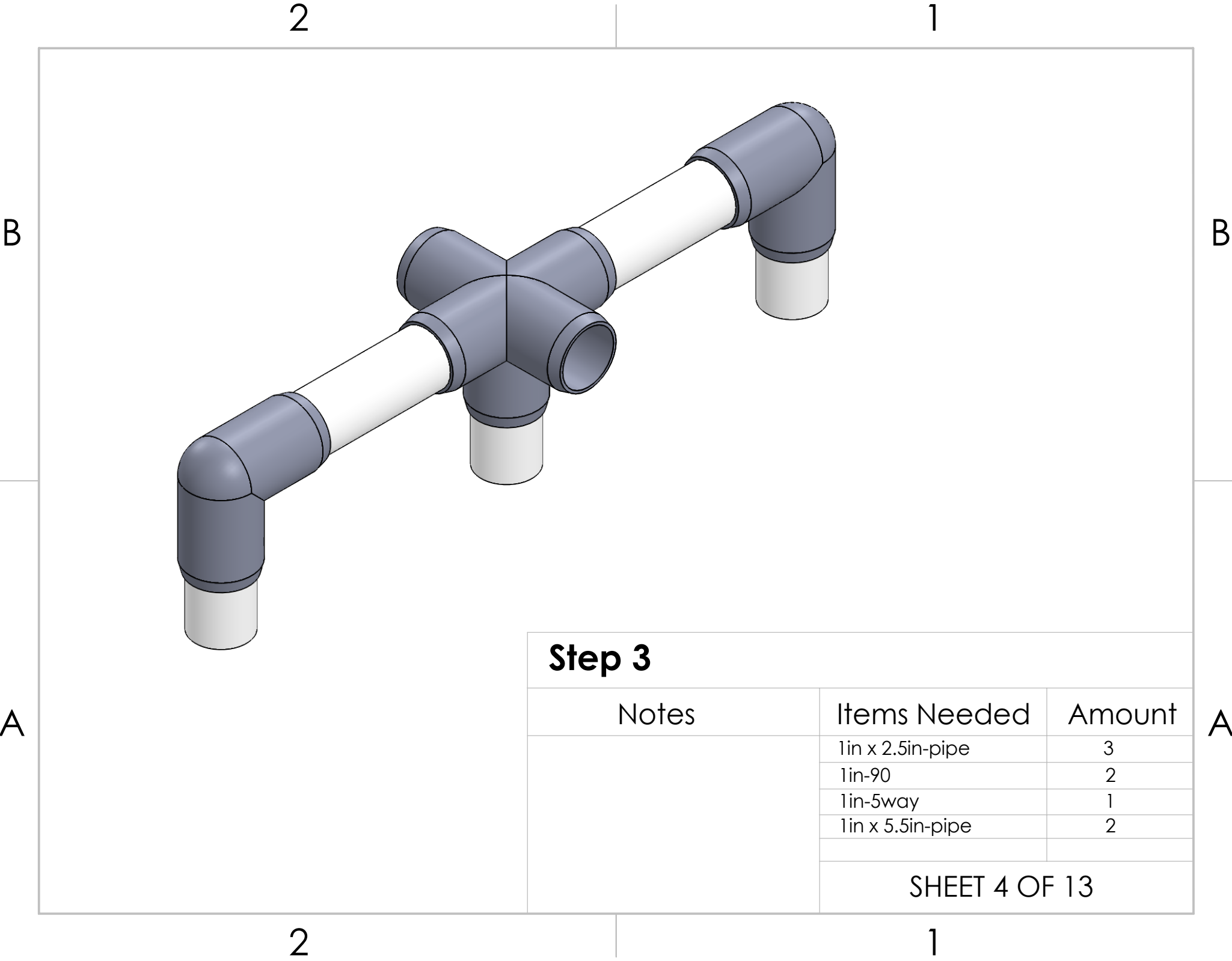






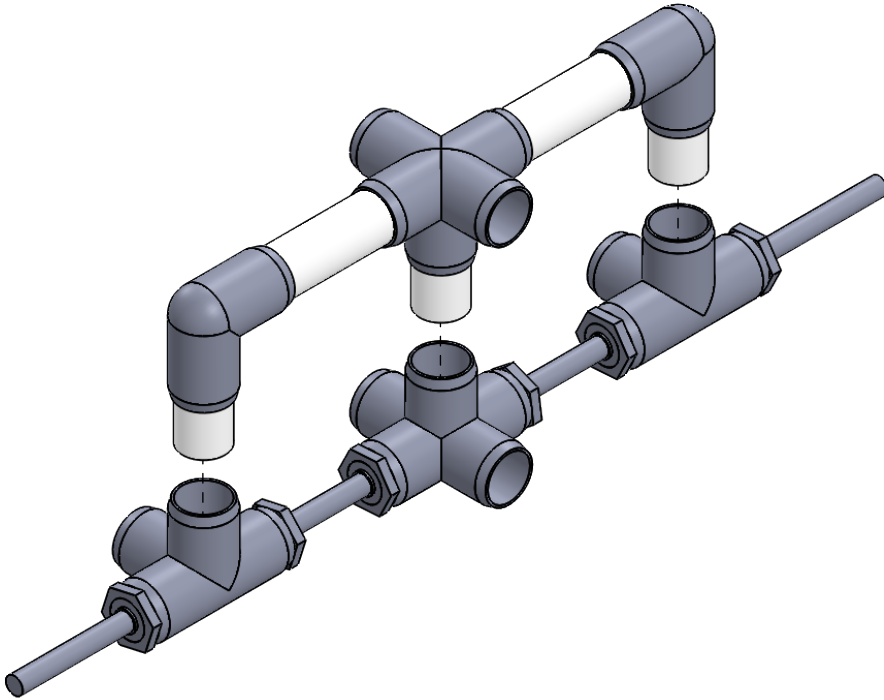
**Step 2**

Notes	Items Needed	Amount
Sliding a pipe through the 1in-SlipPlus with 1in-Tees on either end can help keep it true.  Screw each pipe to each fitting using #6 x 3/8 in screws.	1in-SlipPlus	1
	1in-45	4
	1in x 2.5in-pipe	4
	1in x 3.75in-pipe	2
	SHEET 3 OF 13	



**Step 3**

Notes	Items Needed	Amount
	1in x 2.5in-pipe	3
	1in-90	2
	1in-5way	1
	1in x 5.5in-pipe	2



**Step 4**

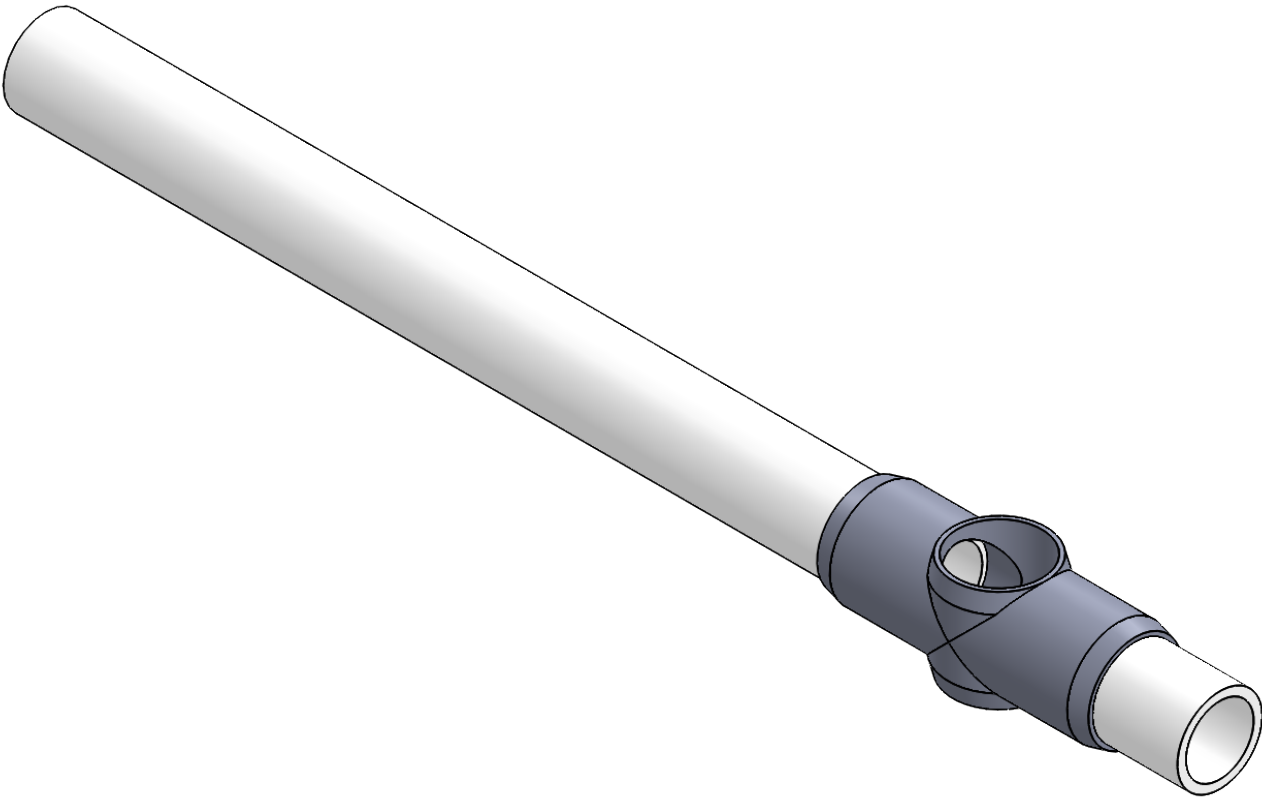
Notes

Items Needed

Amount

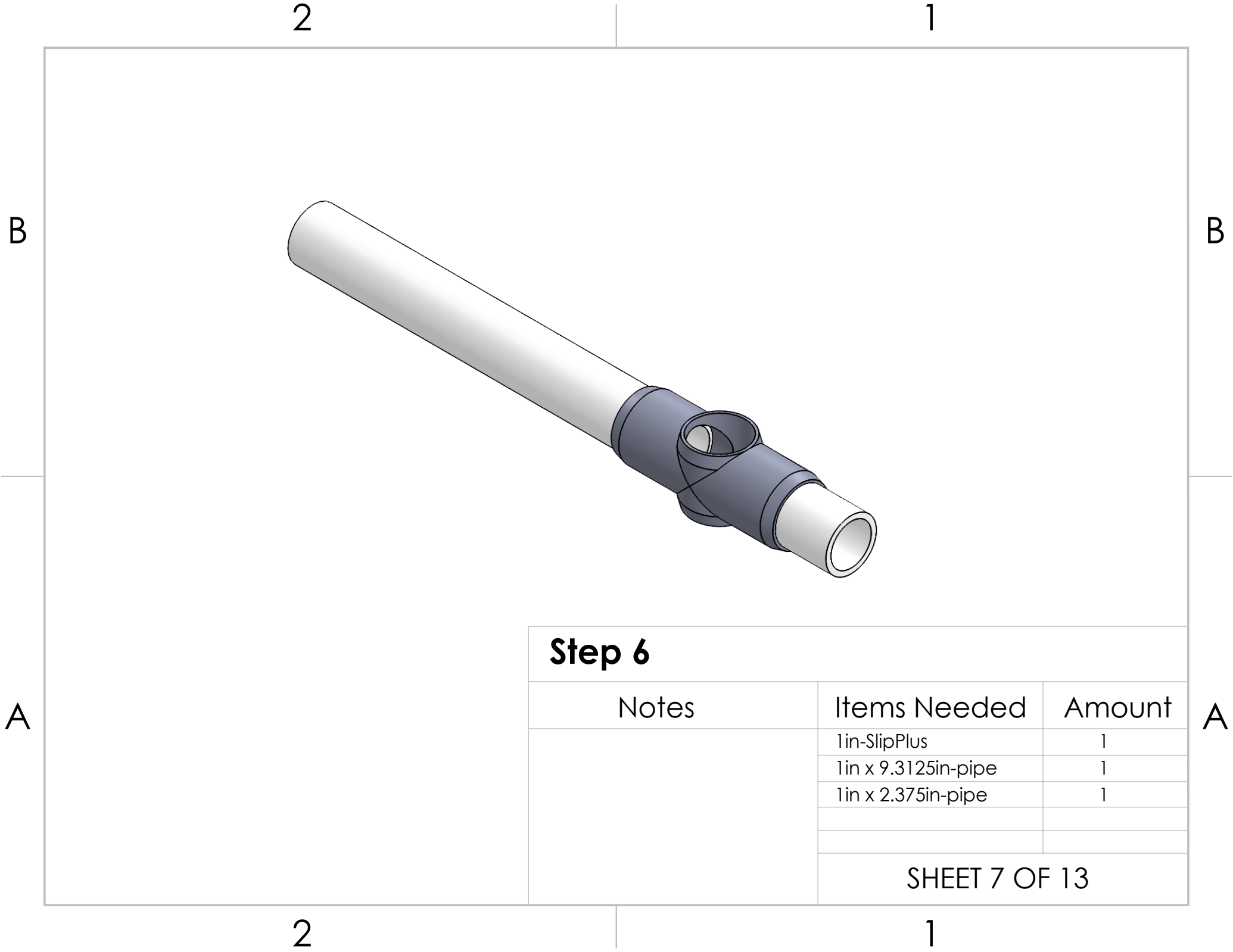
Use the rear axle to maintain bearing alignment.

Screw each pipe to each fitting using #6 x 3/8 in screws.



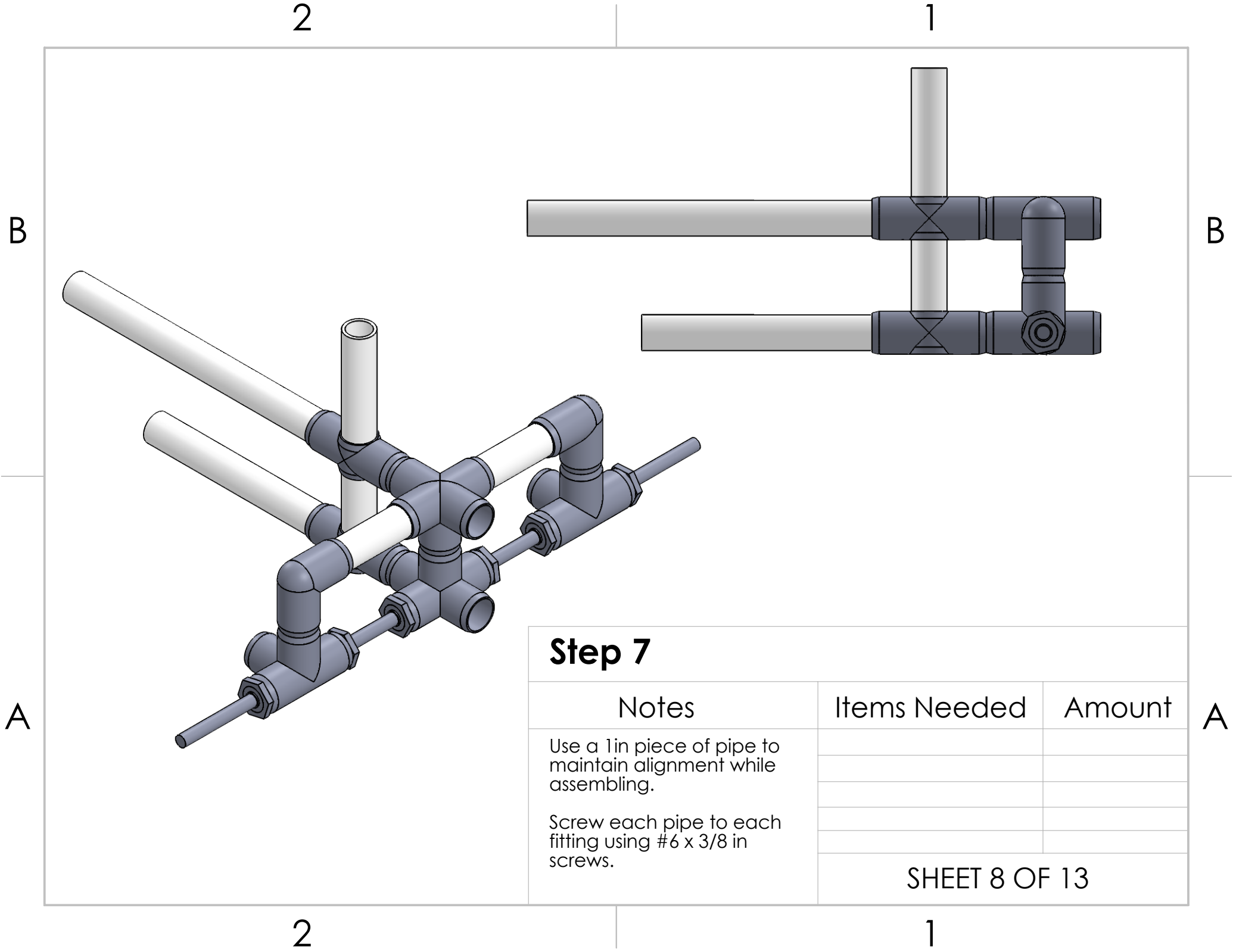
**Step 5**

Notes	Items Needed	Amount
	1in-SlipPlus	1
	1in x 13.3125in-pipe	1
	1in x 2.375in-pipe	1



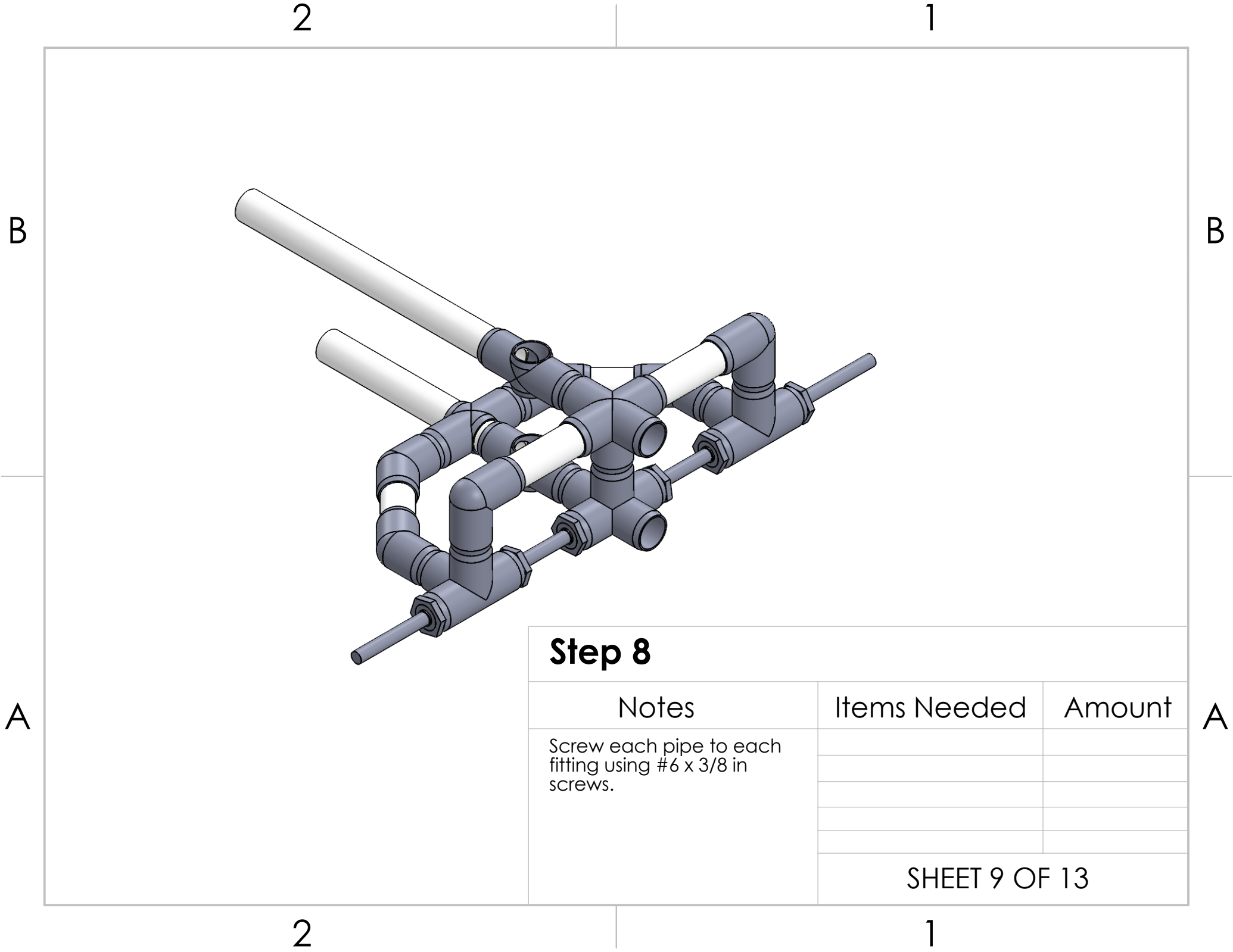
**Step 6**

Notes	Items Needed	Amount
	1in-SlipPlus	1
	1in x 9.3125in-pipe	1
	1in x 2.375in-pipe	1



**Step 7**

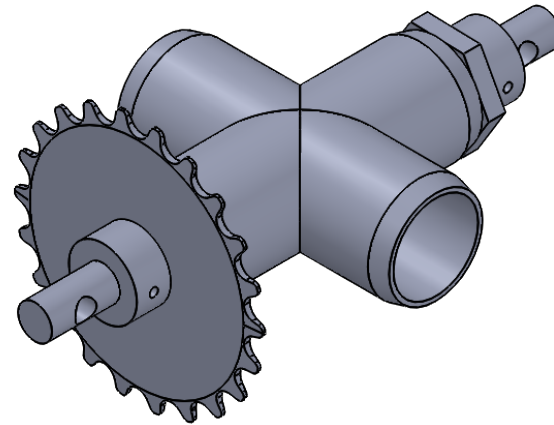
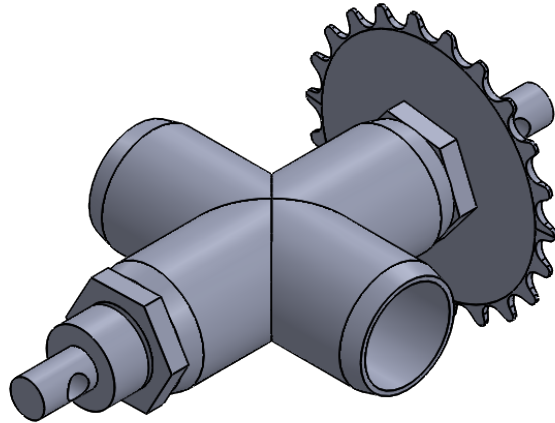
Notes	Items Needed	Amount
Use a 1in piece of pipe to maintain alignment while assembling.		
Screw each pipe to each fitting using #6 x 3/8 in screws.	SHEET 8 OF 13	



**Step 8**

Notes	Items Needed	Amount
Screw each pipe to each fitting using #6 x 3/8 in screws.		
SHEET 9 OF 13		

B



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### Step 9

Notes	Items Needed	Amount
	0.5in-Collar	1
	22-Tooth-Gear	1
SHEET 10 OF 13		

A

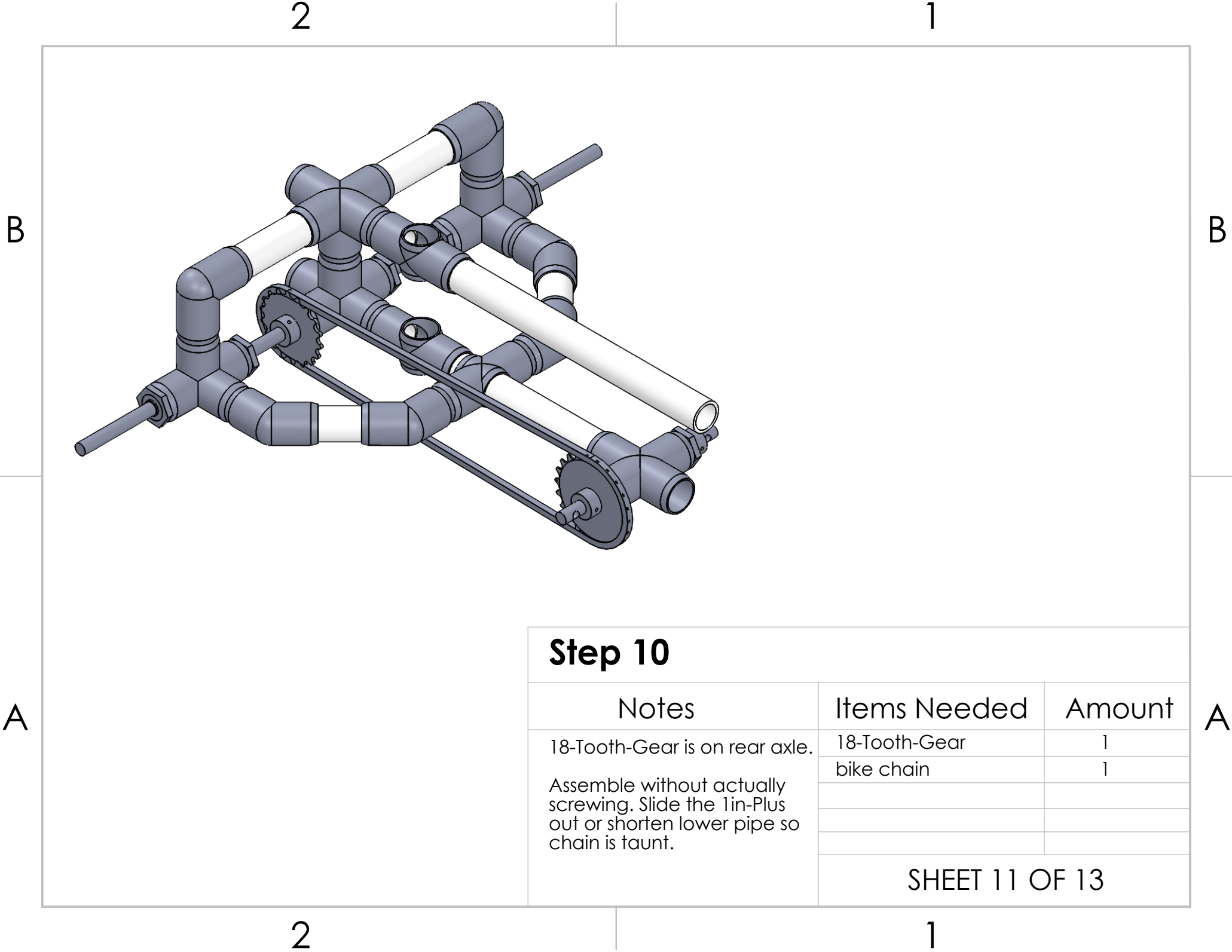
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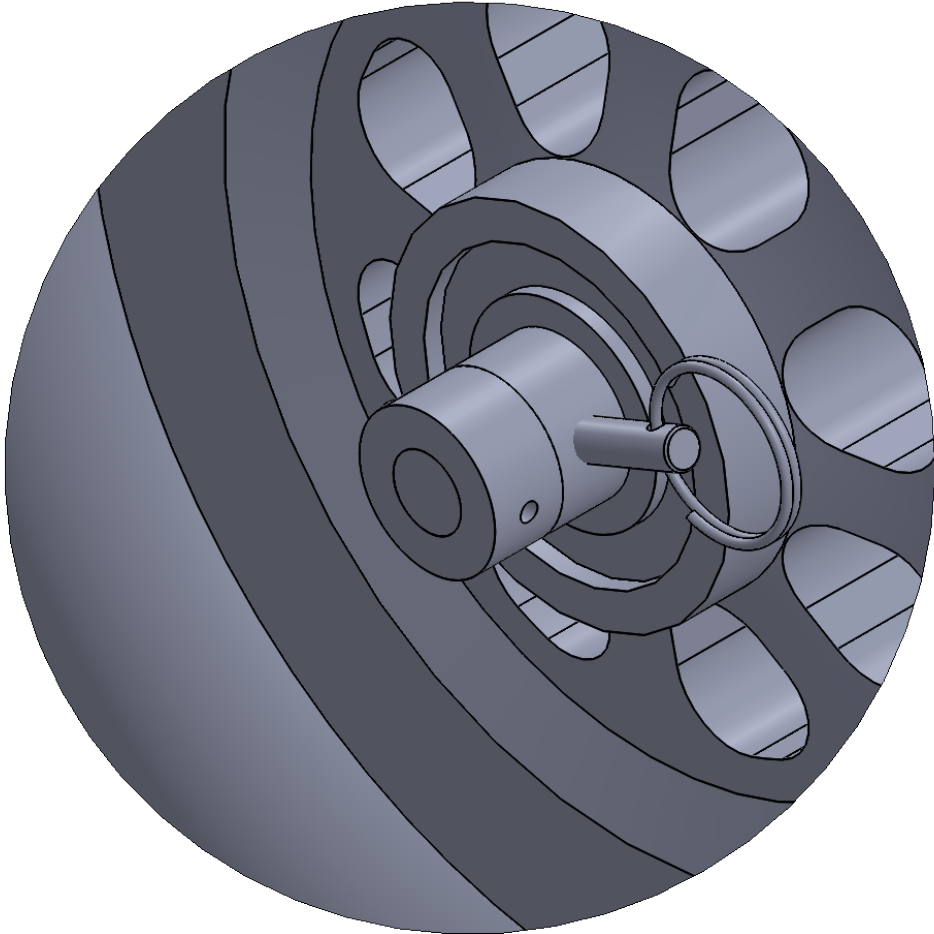
Step 10

Notes	Items Needed	Amount
18-Tooth-Gear is on rear axle.  Assemble without actually screwing. Slide the 1in-Plus out or shorten lower pipe so chain is taunt.	18-Tooth-Gear	1
	bike chain	1
SHEET 11 OF 13		

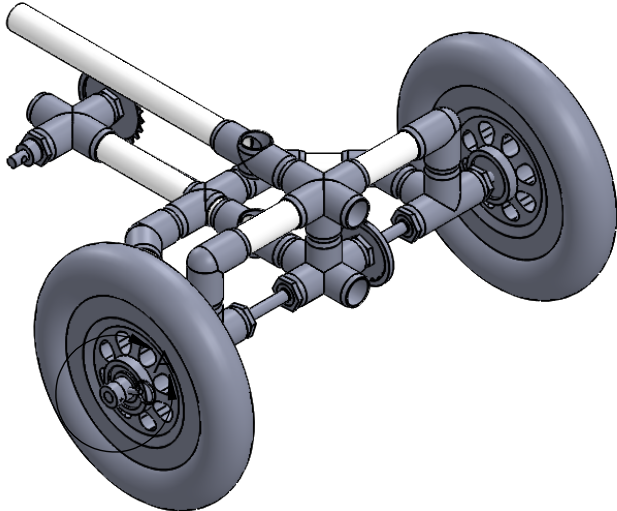
2

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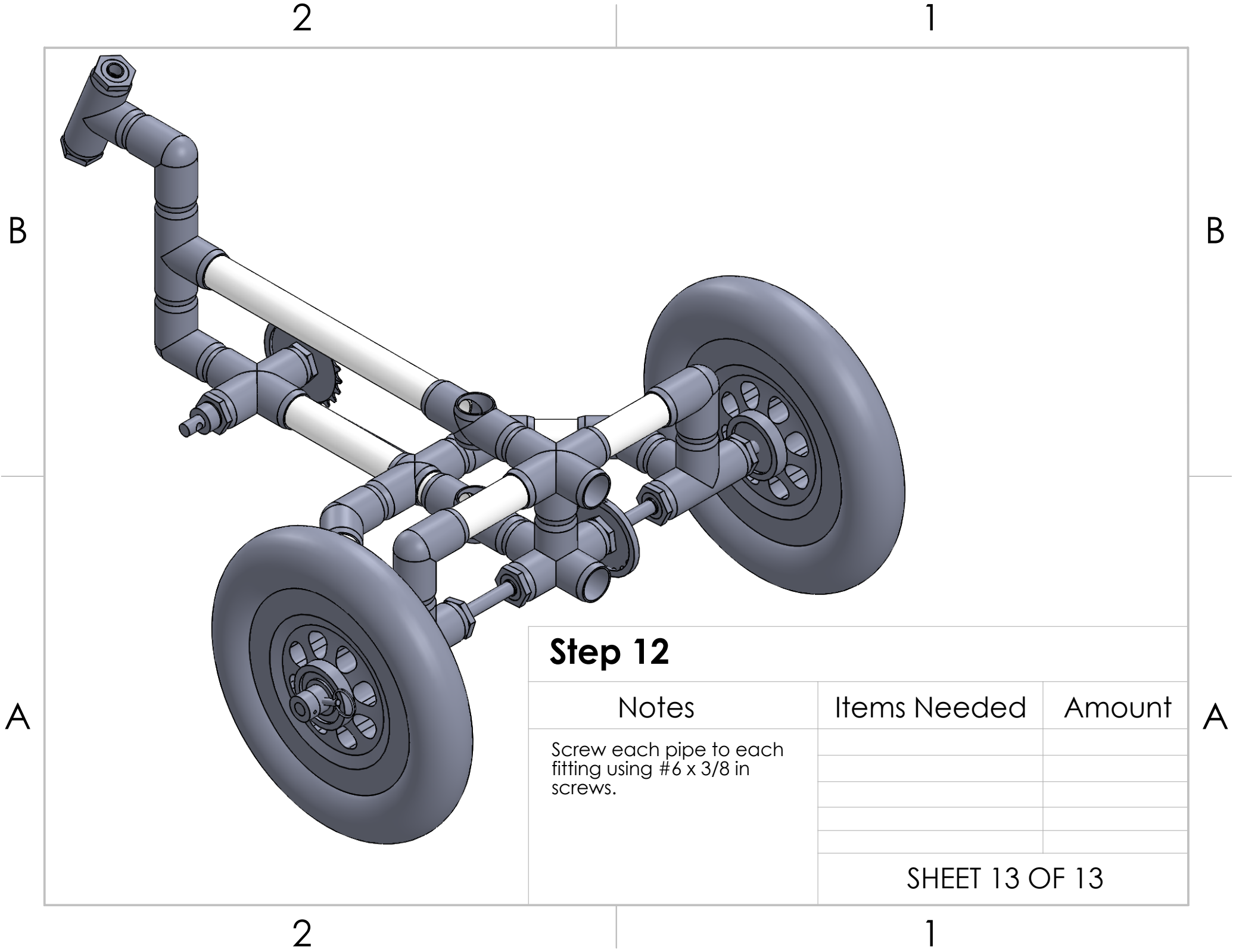
### Step 11

Notes	Items Needed	Amount
Place both 12in-Wheels on. Put 0.5in-Collars on and 0.25in-PullPin in hole. Put other 2 collars on far side and tighten all set screws to remove slack with locktite. Mark on 0.5in-FenderWasher where to screw Self-tapping Screws. Insert Self-Tapping Screws.	0.5in-Collar	2
	Self-tapping Screws	2
	12in-Wheel	2
SHEET 12 OF 13		

A

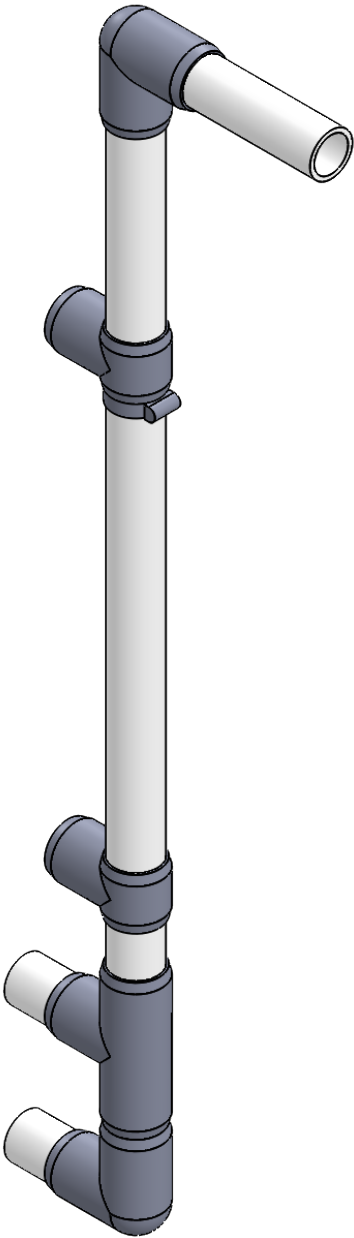
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**Step 12**

Notes	Items Needed	Amount
Screw each pipe to each fitting using #6 x 3/8 in screws.		



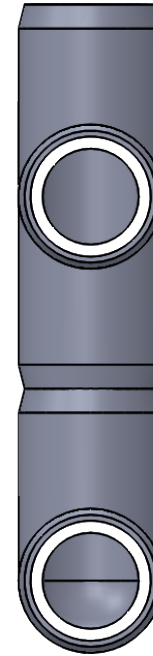
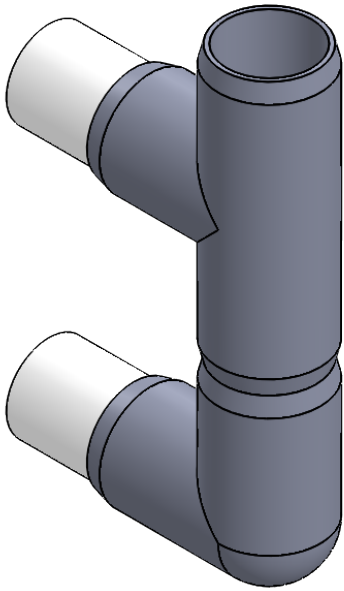
**PVC Trike: Part 6 - Rear Handle**

Notes	Items Needed	Amount



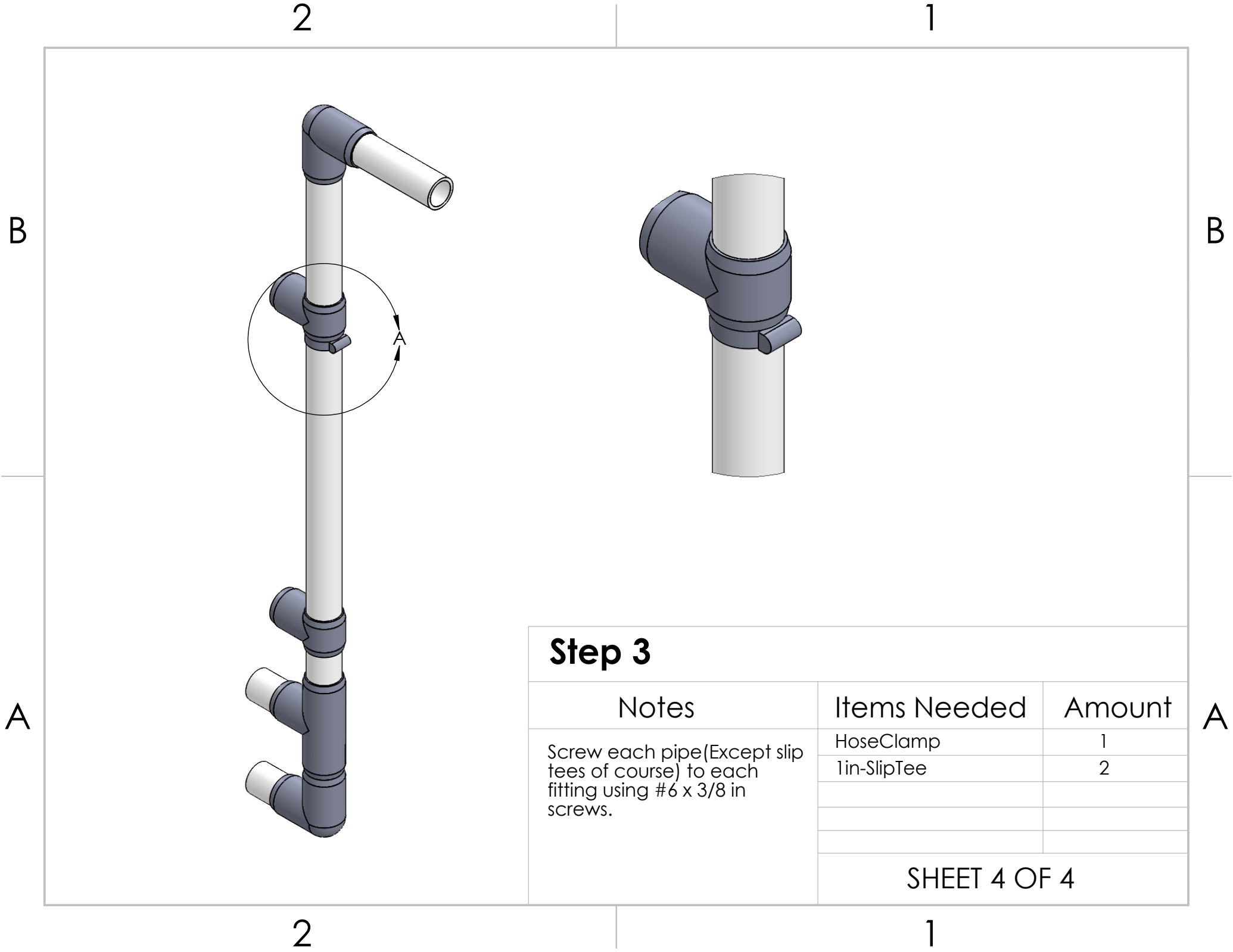
## Step 1

Notes	Items Needed	Amount
Screw each pipe to each fitting using #6 x 3/8 in screws.	1in-90	1
	1in x 5in-pipe	1
	1in x 24in-pipe	1
SHEET 2 OF 4		



## Step 2

Notes	Items Needed	Amount
Screw each pipe to each fitting using #6 x 3/8 in screws.	1in-90	1
	1in-Tee	1
	1in x 2.5in-pipe	3
SHEET 3 OF 4		

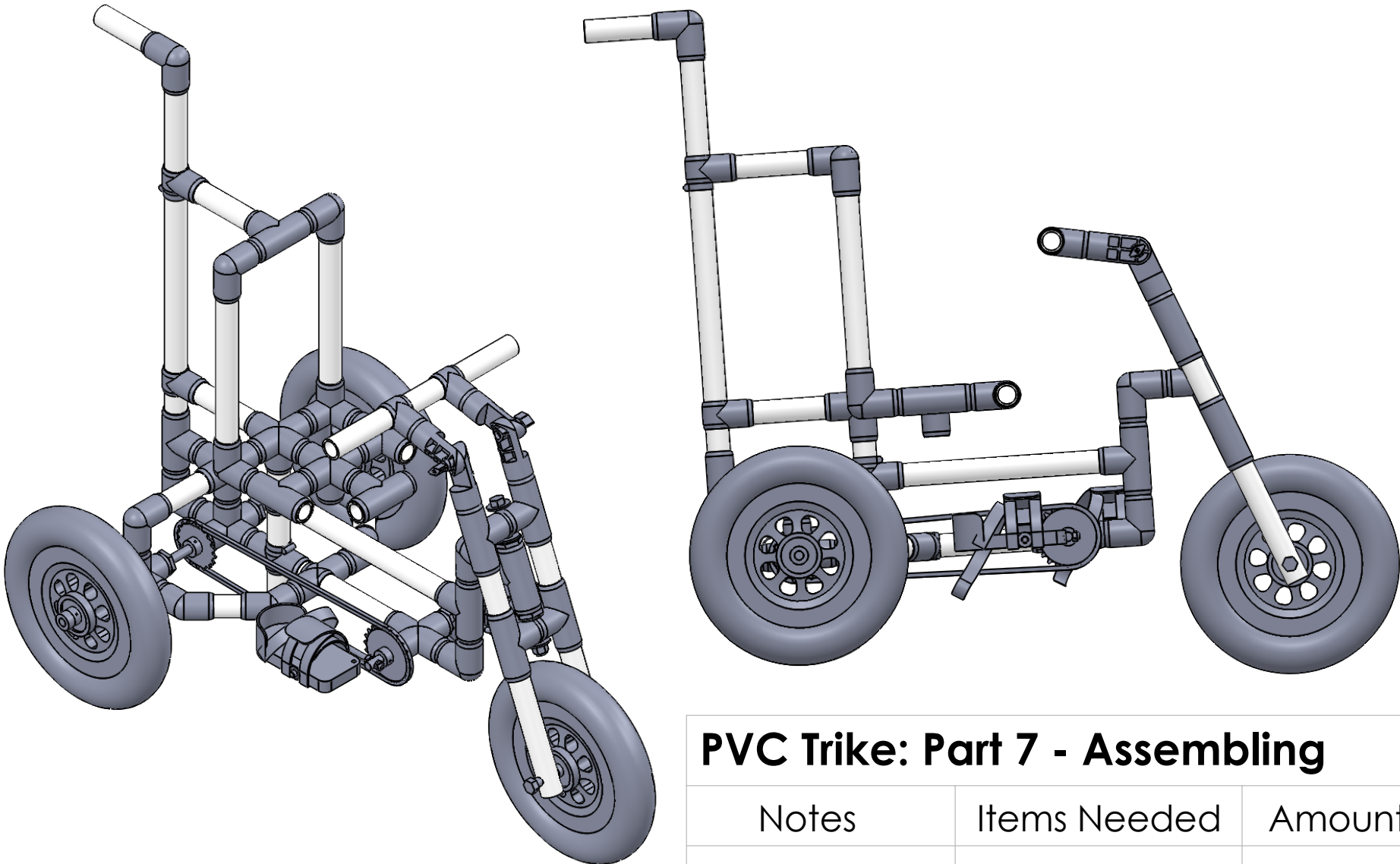


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The image contains two detailed diagrams of a trike constructed from PVC pipes and fittings. The trike on the left is shown from a rear three-quarter perspective, highlighting the rear wheel, the drive mechanism with a motor and gears, and the rear frame. The trike on the right is shown from a side profile, displaying the front wheel, the handlebars, the seat area, and the front suspension. Both diagrams use white lines to represent the PVC pipes and grey/blue components for the fittings, wheels, and motor.

2

1

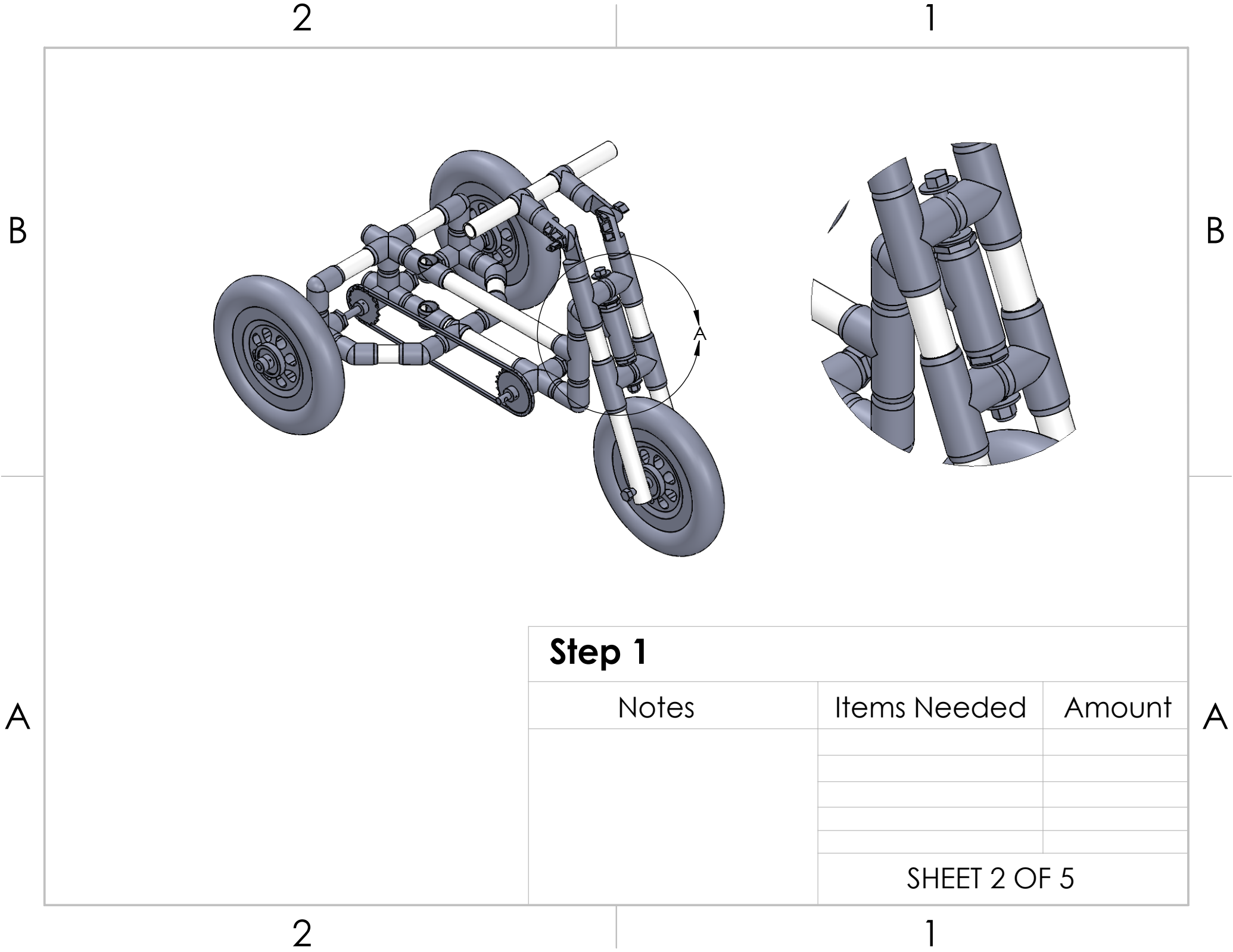
B

A

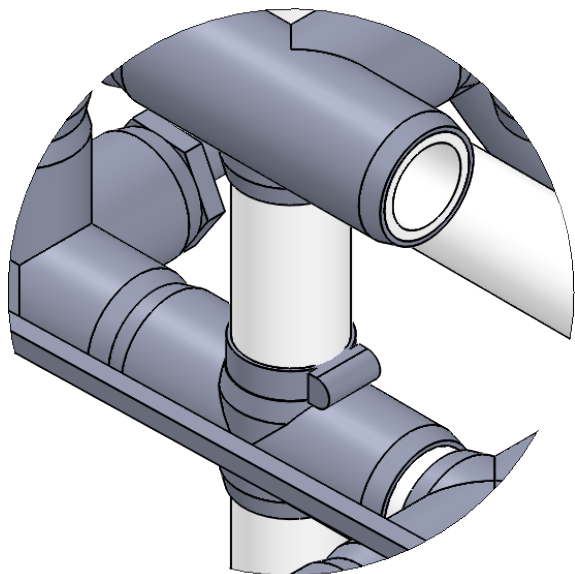
### PVC Trike: Part 7 - Assembling

Notes	Items Needed	Amount
SHEET 1 OF 5		

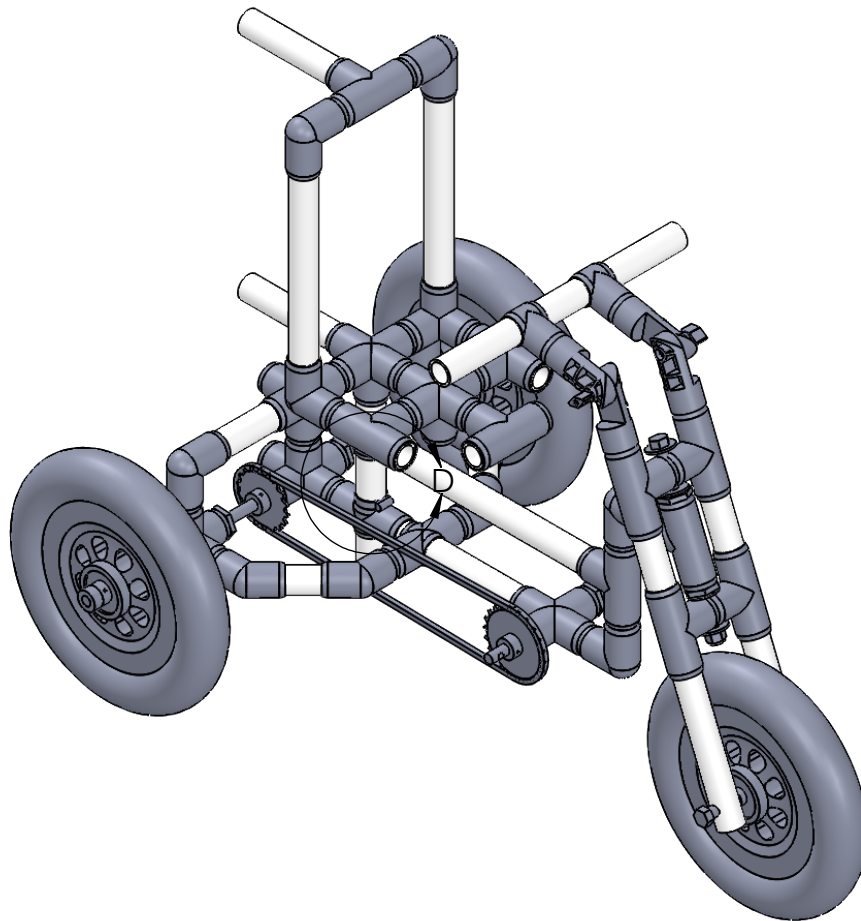




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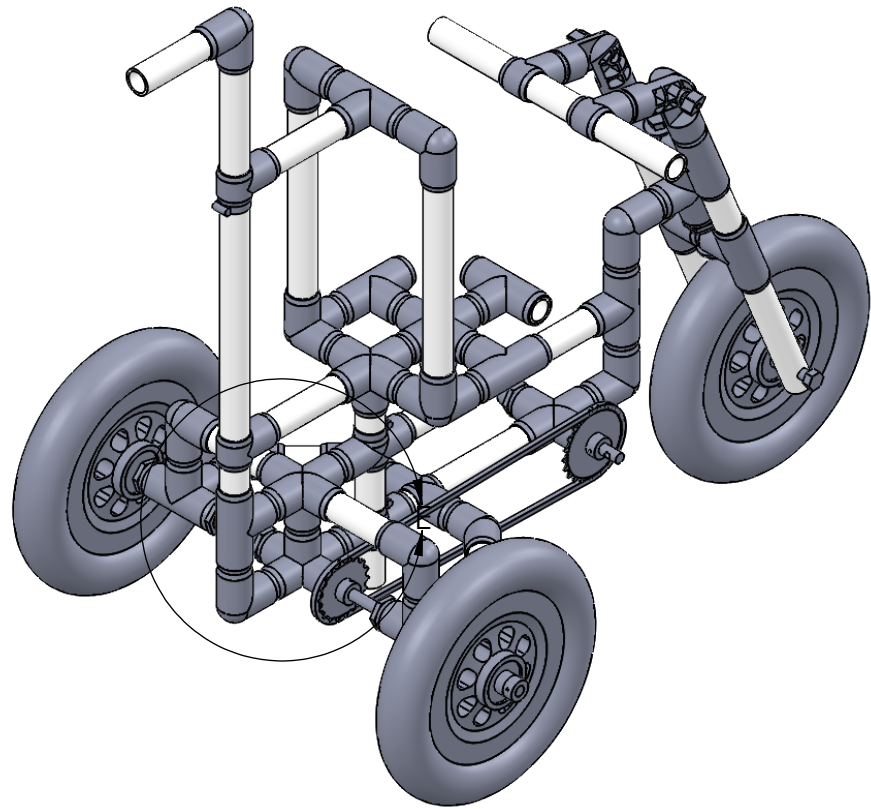
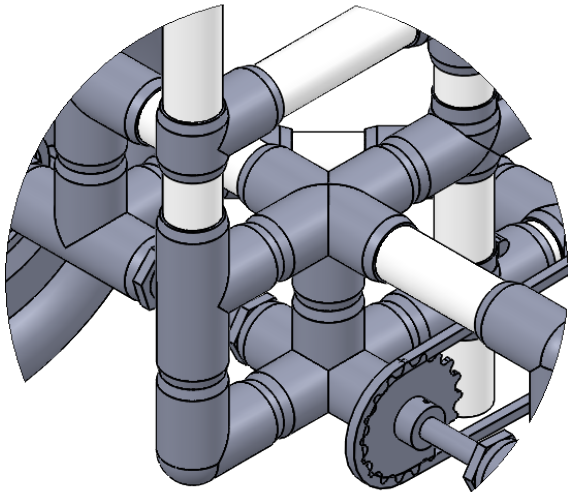


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## Step 2

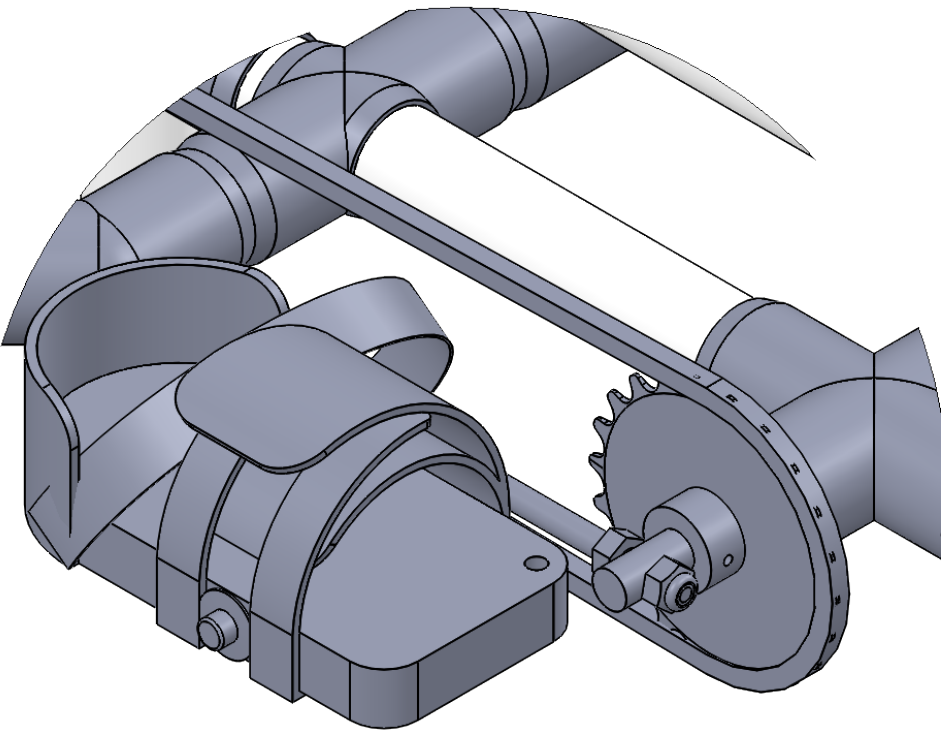
Notes	Items Needed	Amount
Add Pipe Clamps onto seat post above each 1in-SlipPlus.	Pipe Clamp	2
	SHEET 3 OF 5	



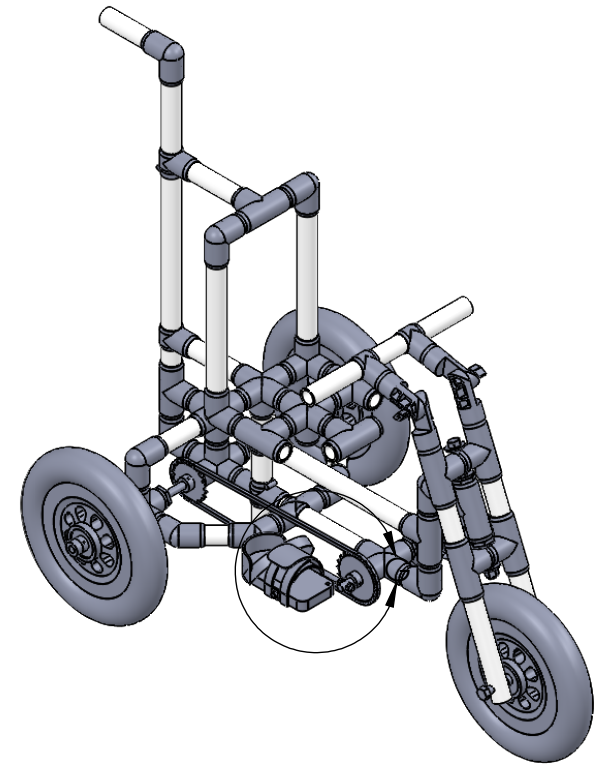
### Step 3

Notes	Items Needed	Amount
	SHEET 4 OF 5	

B



B

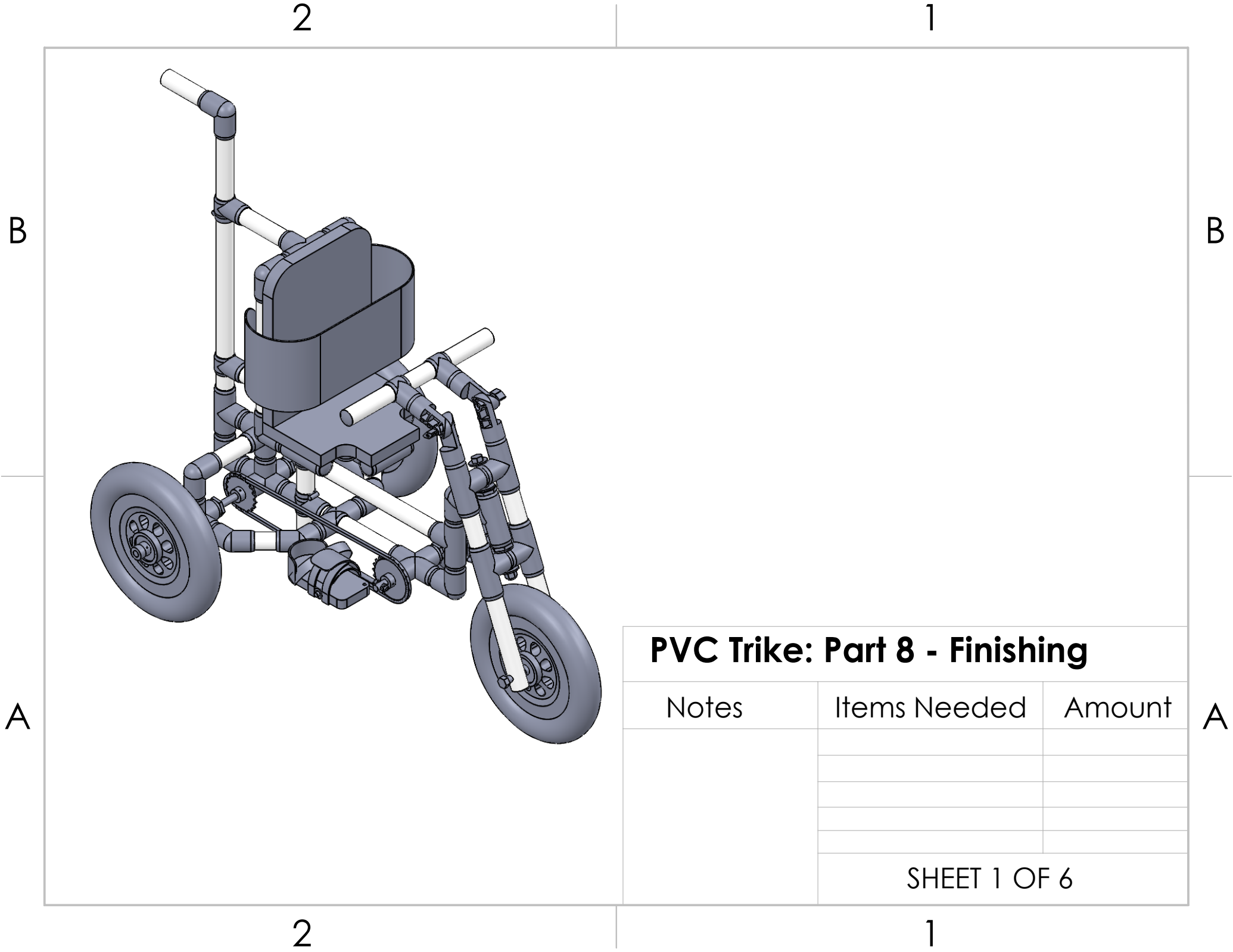


A

## Step 4

Notes	Items Needed	Amount
Thread 5/16in-Nut onto pedel arm. Insert pedel arm into hole on CrankAxle. Thread 5/16in-LockNut onto pedel arm until 1 or 2 threads are exposed. Back 5/16in-Nut down and tighten with a wrench, squeezing the CrankAxle between the 2 nuts. Check that pedels are level.	5/16in-Nut	2
	5/16in-LockNut	2
SHEET 5 OF 5		

A



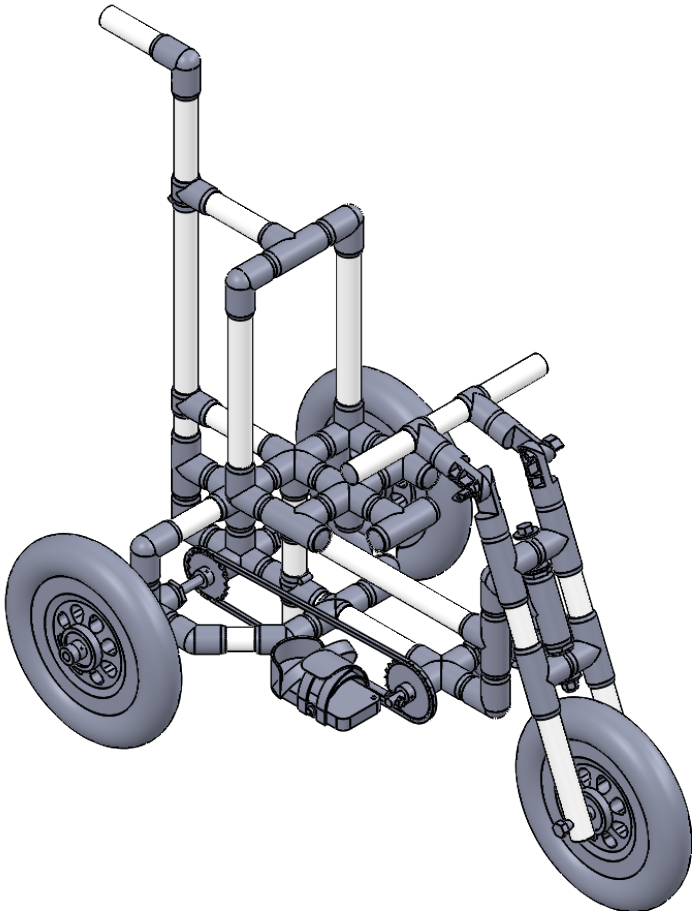
**PVC Trike: Part 8 - Finishing**

Notes	Items Needed	Amount
	SHEET 1 OF 6	

2

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B



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Step 1

Notes	Items Needed	Amount
2-Handle 2-Fork tips 6-Seat base and Post 1-Rear Handle	1in-Plug	11
	SHEET 2 OF 6	

2

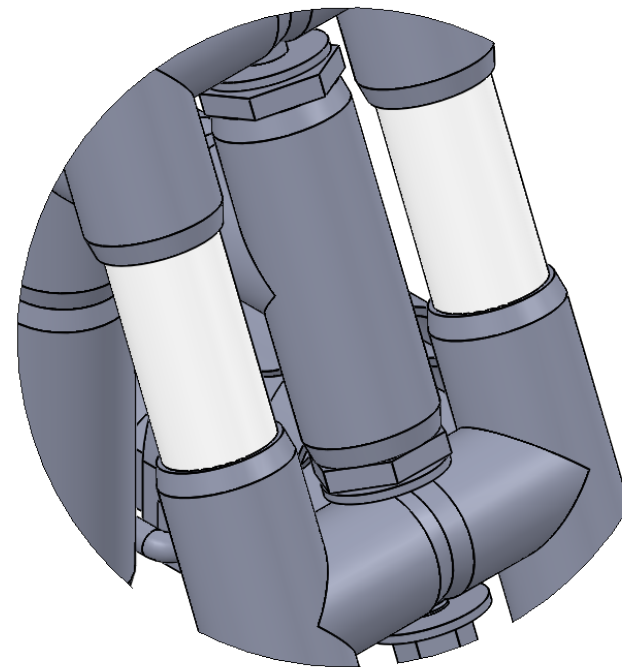
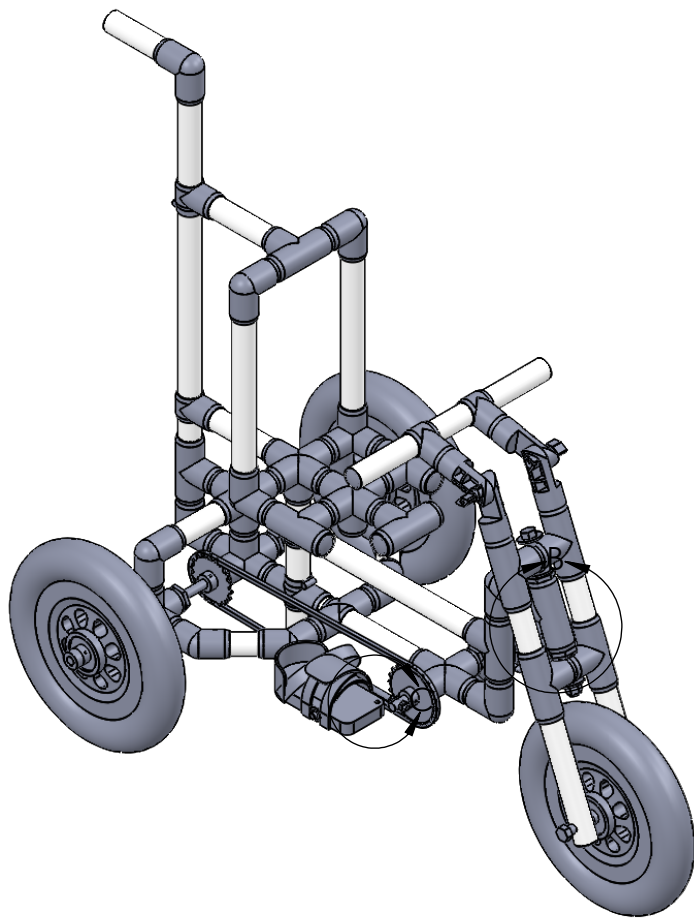
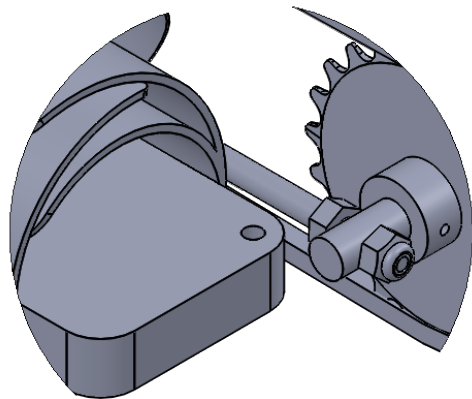
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B

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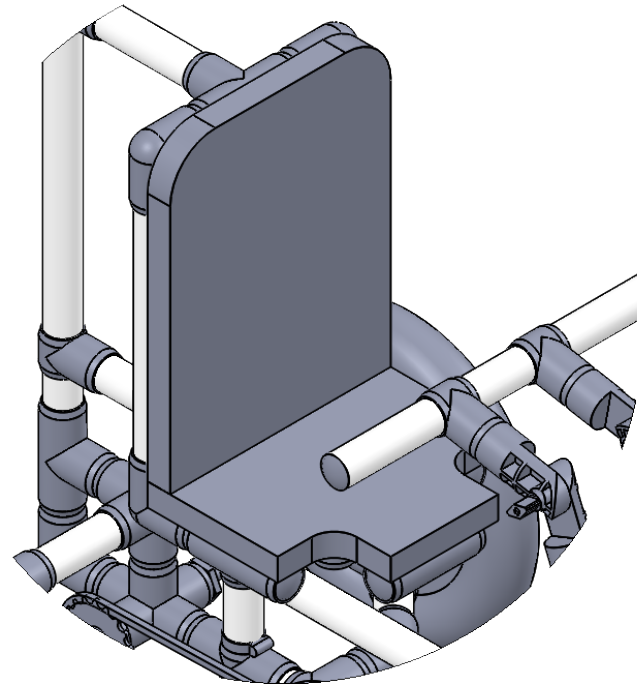
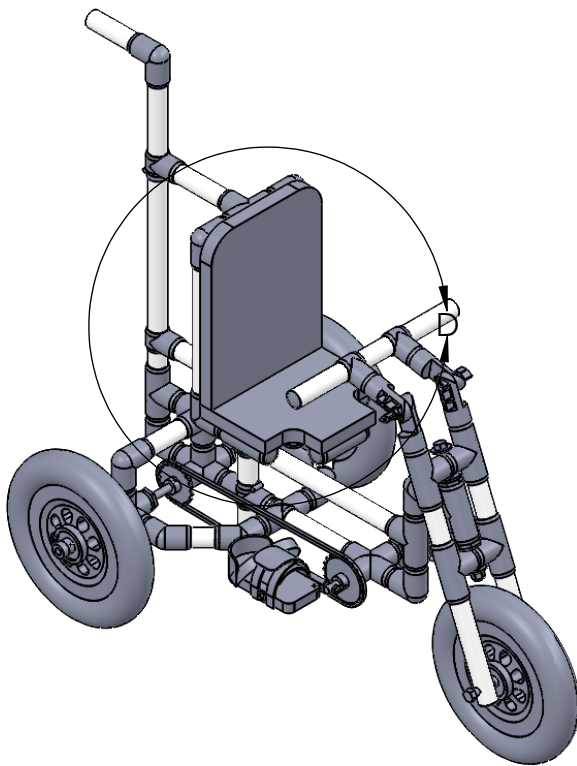
## Step 2

Notes	Items Needed	Amount
Loop 32in-ParaCord around the base of the 1in - bentTee. Insert 32in-ParaCord through 0.25in holes in pedels. Tie knots on the bottom side to prevent it from coming back through. Paracord is not shown in drawing.	32in-ParaCord	1
SHEET 3 OF 6		

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### Step 3

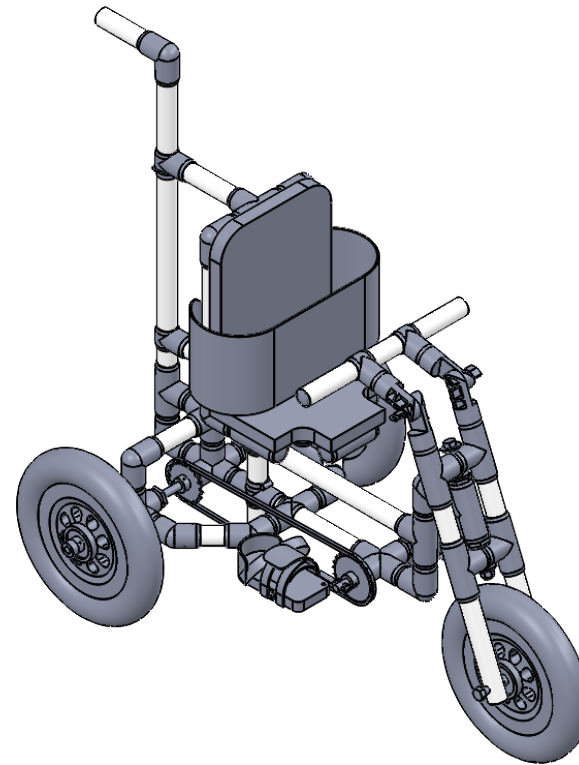
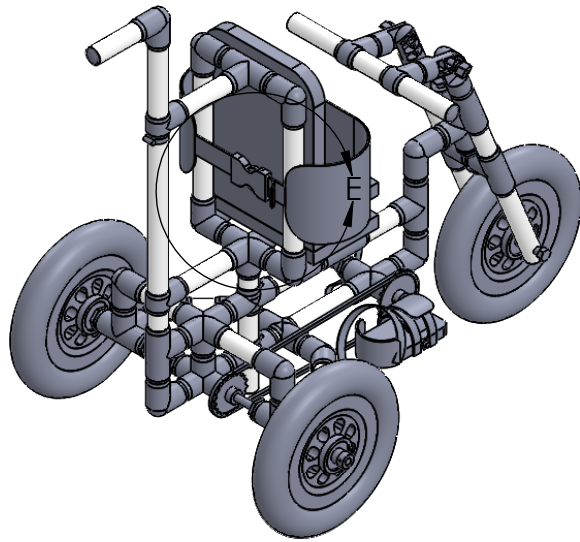
Notes	Items Needed	Amount
Put one in back corners of bottom. Put one in the front in the middle. Put one in each corner of seat back.  3 screws - seat bottom 4 screws - seat back	1.5in-Screws	7
SHEET 4 OF 6		

1

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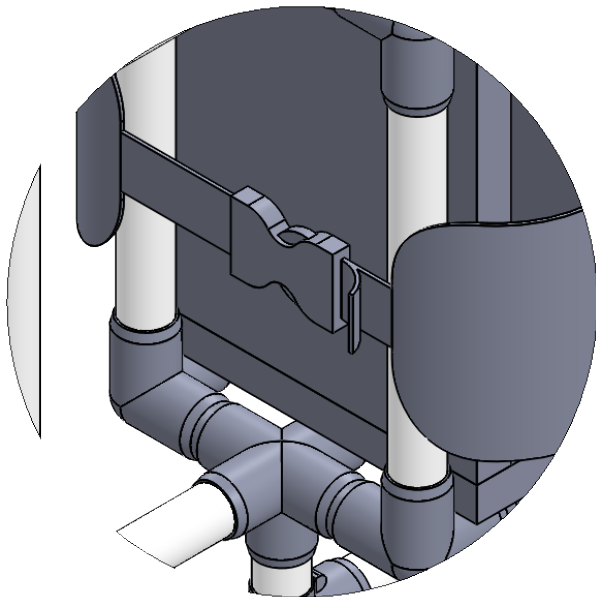


B



B

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## Step 4

### Notes

Put a screw in one side of strap to hold the belt from sliding down.

Extra belting can be cut off. Melt edge to stop from unraveling.

### Items Needed

ChestBelt

### Amount

1

SHEET 5 OF 6

A

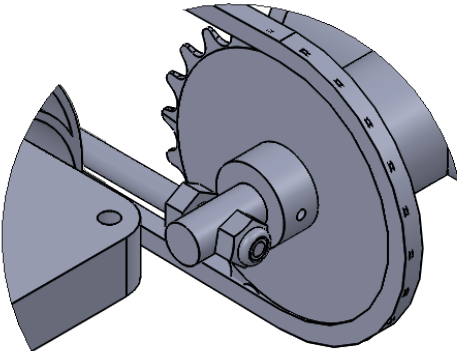
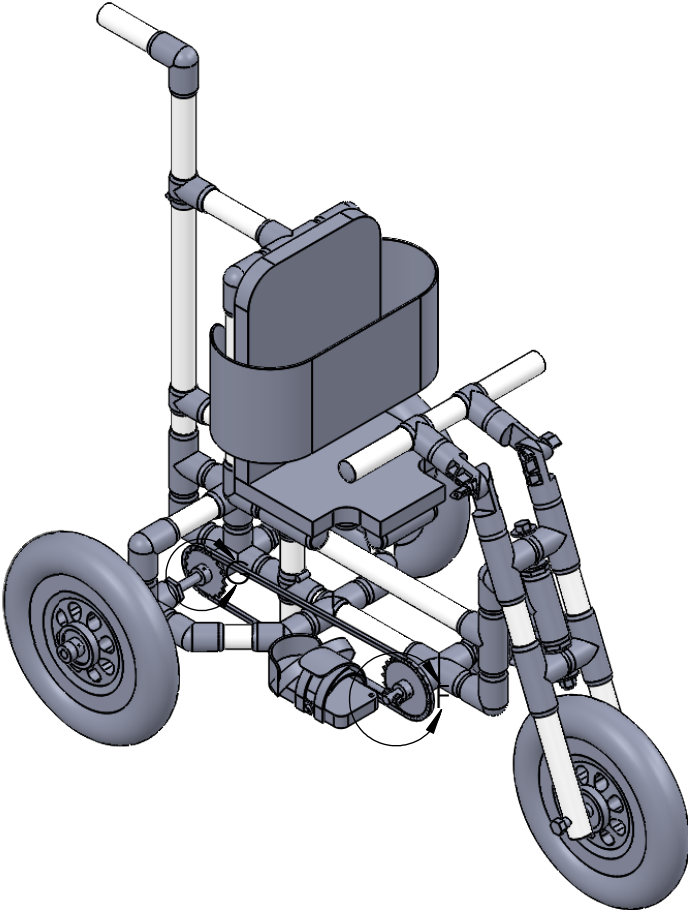
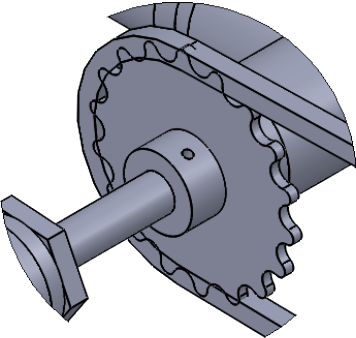
2

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### Step 5

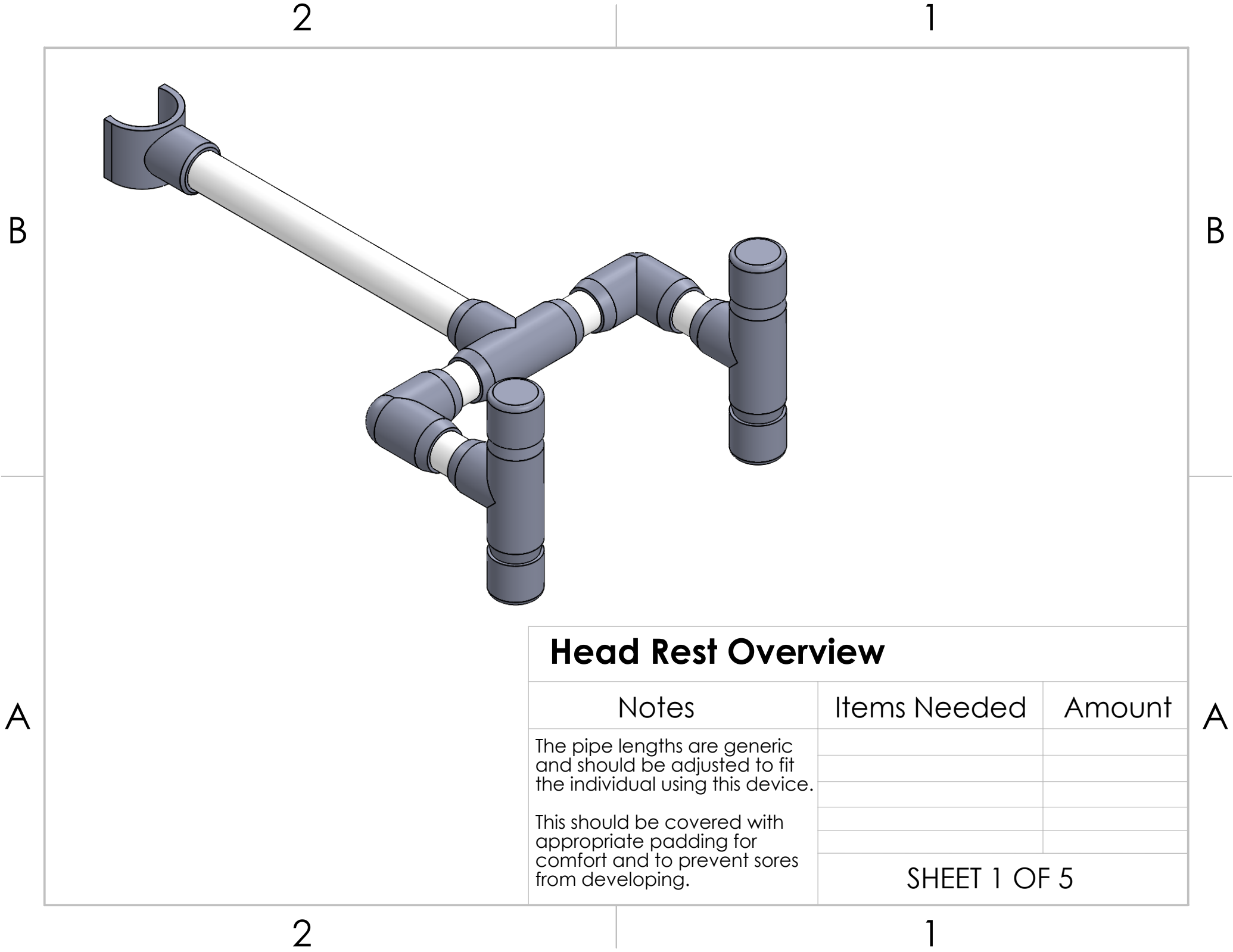
Notes	Items Needed	Amount
<p>Center the front crank axle and tighten set screws on collars until they leave a mark on shafts. Also tighten set screw in collar on rear gear. loosen and slide collars to the side until mark is visible. Use a 15/64in drill bit to drill a small divot in the axle for the set screw to sit in to prevent the collars welded to the gears from slipping on the axle. Use Lock-tite on the set screws when reassembling.</p>		

2

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SHEET 6 OF 6



# Head Rest Overview

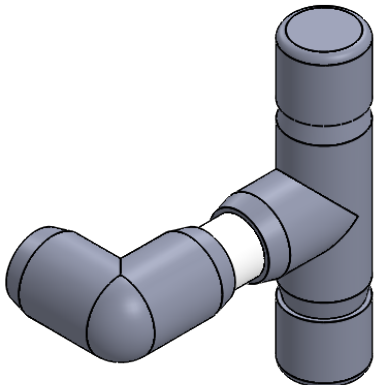
Notes	Items Needed	Amount
<p>The pipe lengths are generic and should be adjusted to fit the individual using this device.</p> <p>This should be covered with appropriate padding for comfort and to prevent sores from developing.</p>		
	SHEET 1 OF 5	

2

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B



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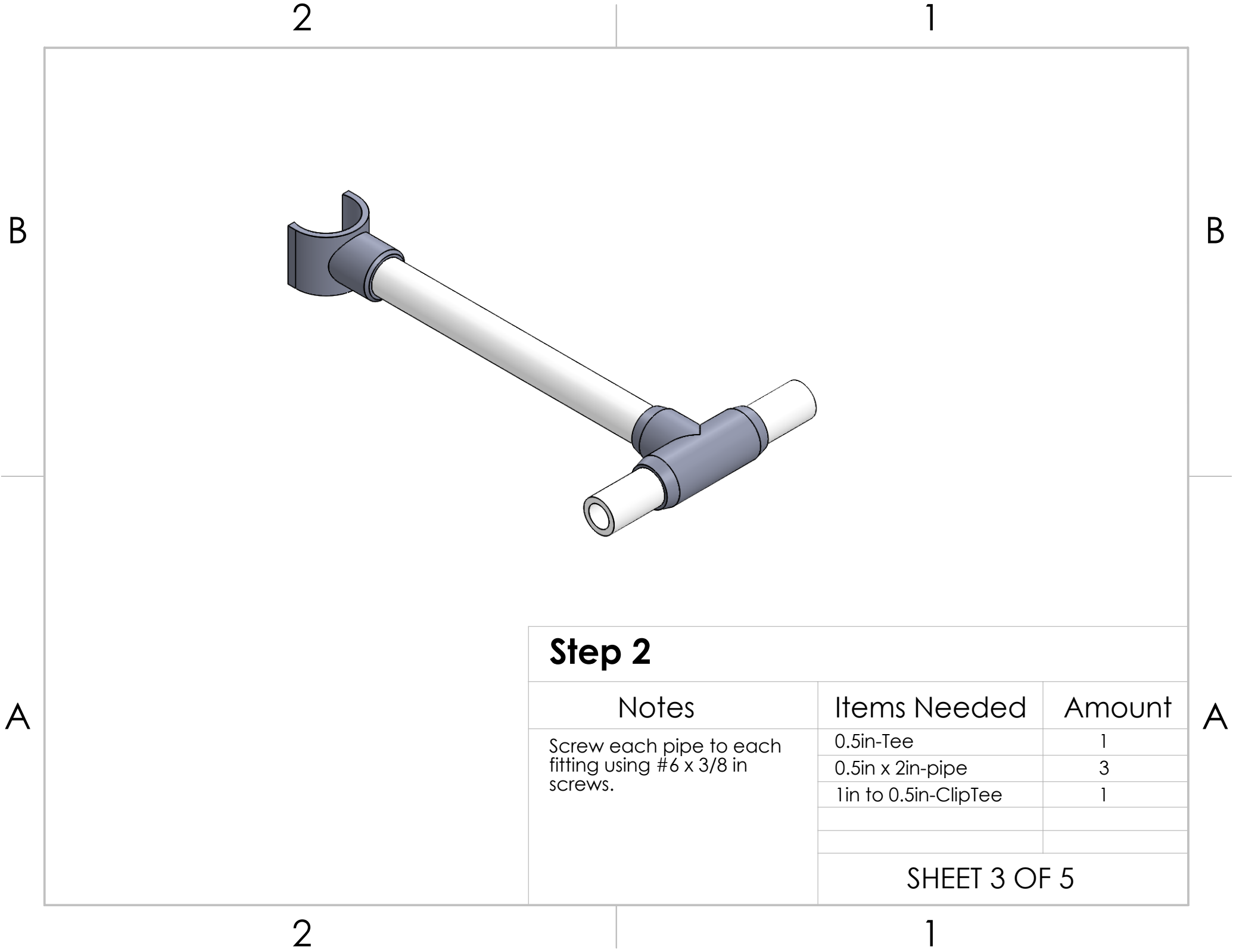
A

**Step 1**

Notes	Items Needed	Amount
TWICE  Screw each pipe to each fitting using #6 x 3/8 in screws.	0.5in-Tee	2
	0.5in-90	2
	0.5in x 2in-pipe	2
	0.5in x 1.25in-pipe	4
	0.5in-cap	4
SHEET 2 OF 5		

2

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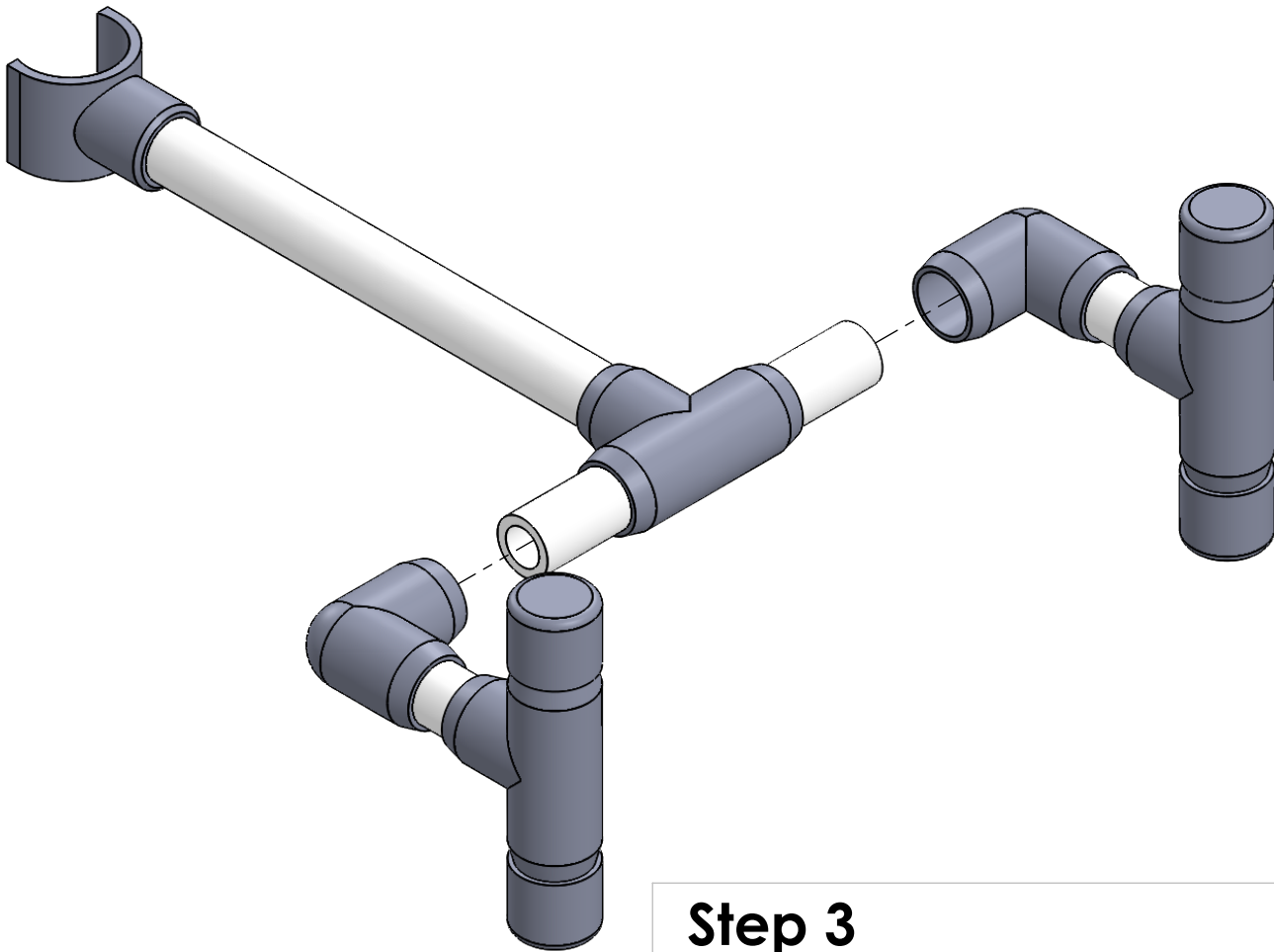
**Step 2**

Notes	Items Needed	Amount
Screw each pipe to each fitting using #6 x 3/8 in screws.	0.5in-Tee	1
	0.5in x 2in-pipe	3
	1in to 0.5in-ClipTee	1

2

1

B



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Step 3

Notes	Items Needed	Amount
This can be done flat or on an angle, depending on the needs and comfort of the user.		
Screw each pipe to each fitting using #6 x 3/8 in screws.	SHEET 4 OF 5	

2

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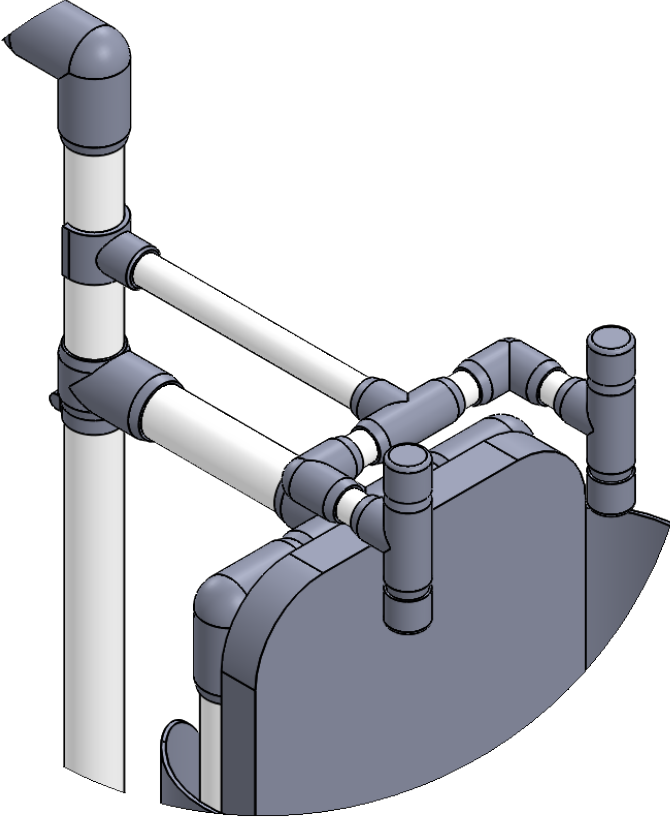
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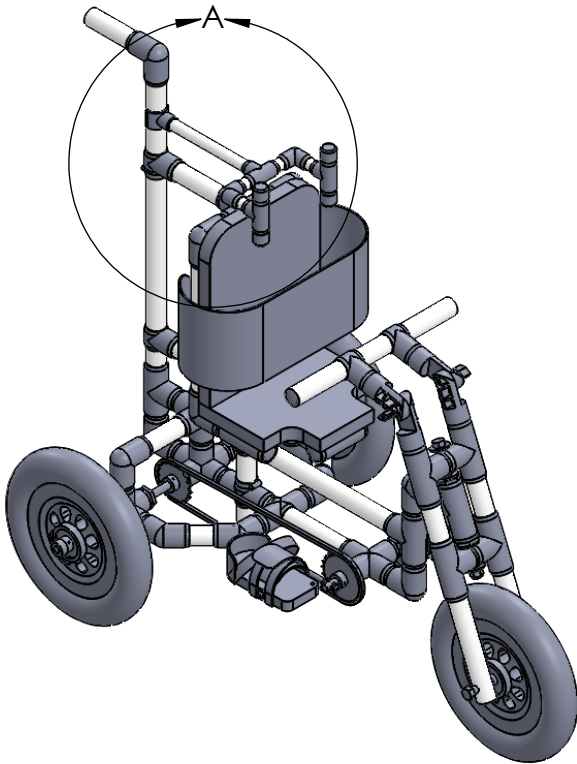
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Notes

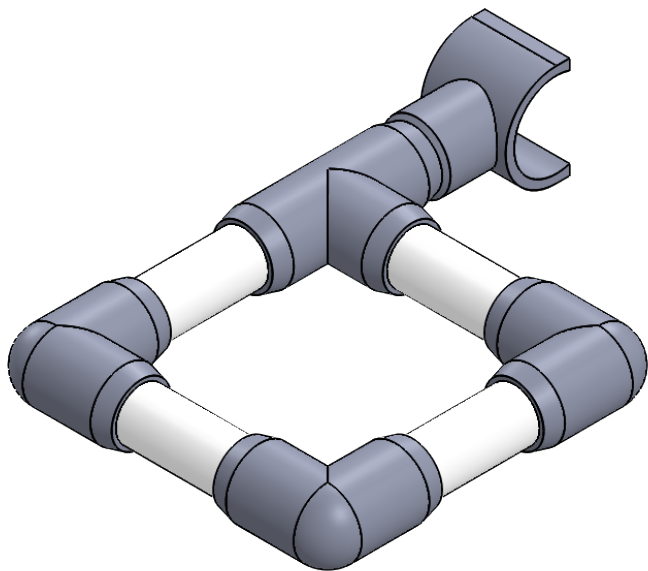
Items Needed

Amount

Screw each pipe to each fitting using #6 x 3/8 in screws.

SHEET 5 OF 5

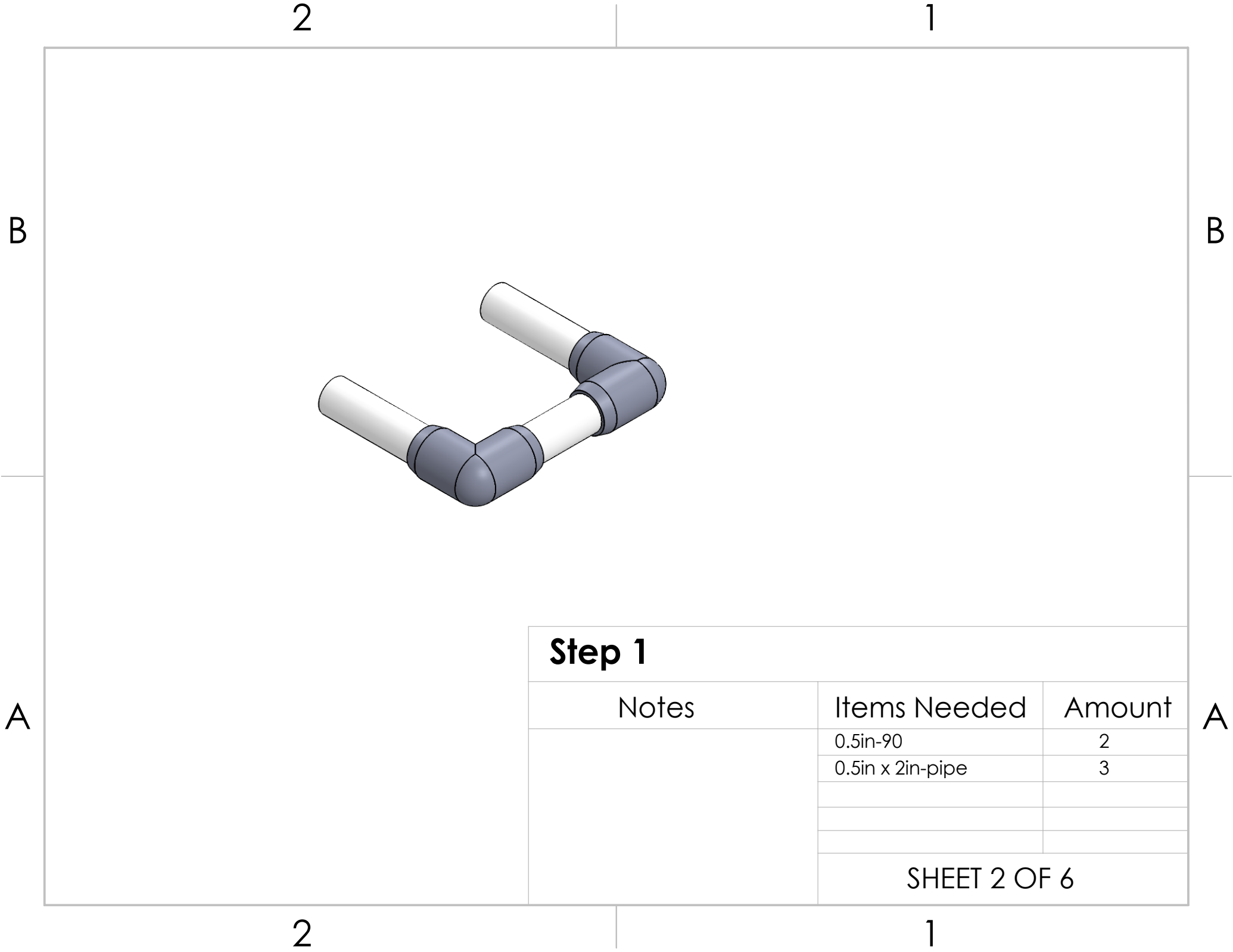
A



## Knee Guard Overview

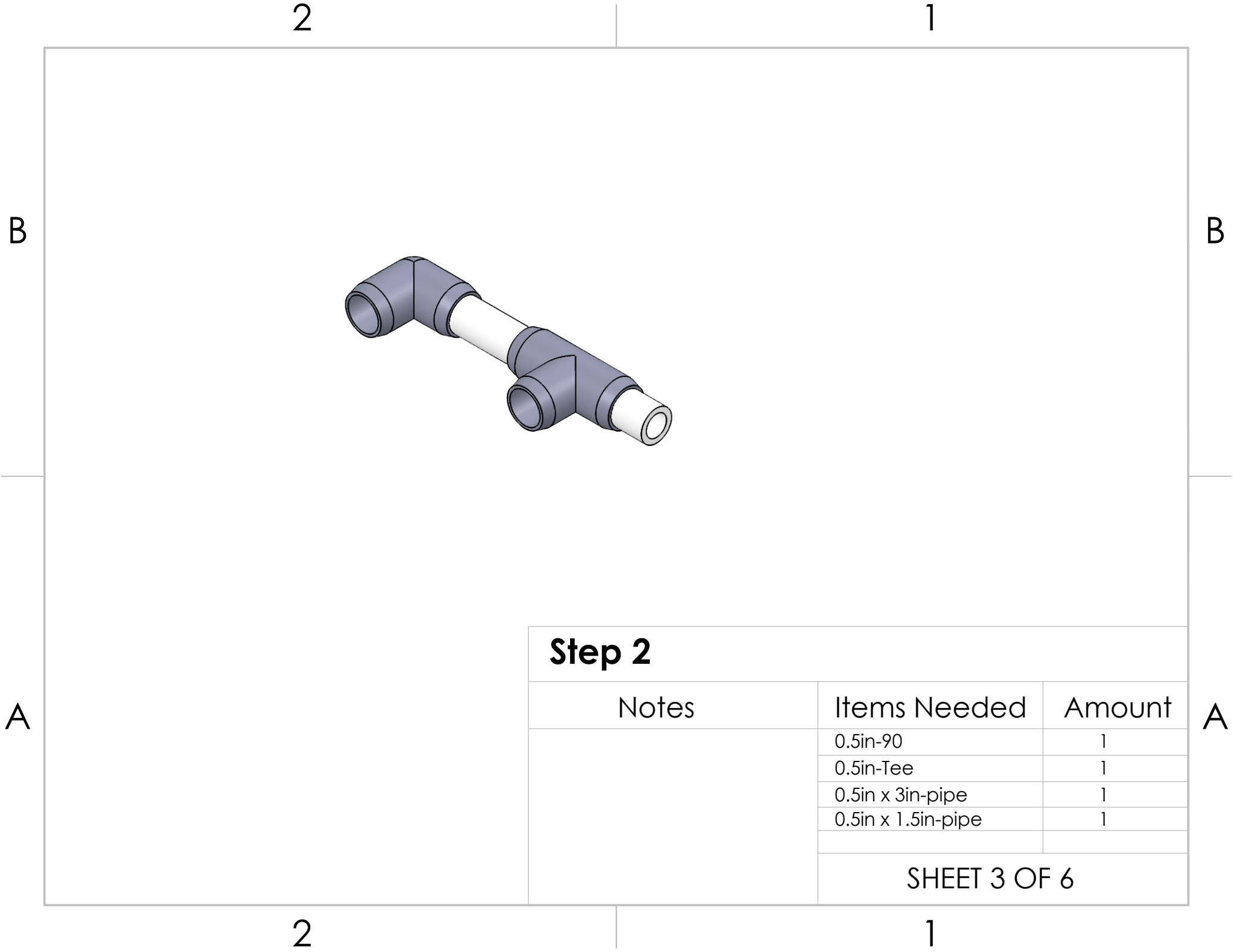
Notes	Items Needed	Amount
Padding should be provided to cover the pvc to avoid sores.		
	SHEET 1 OF 6	





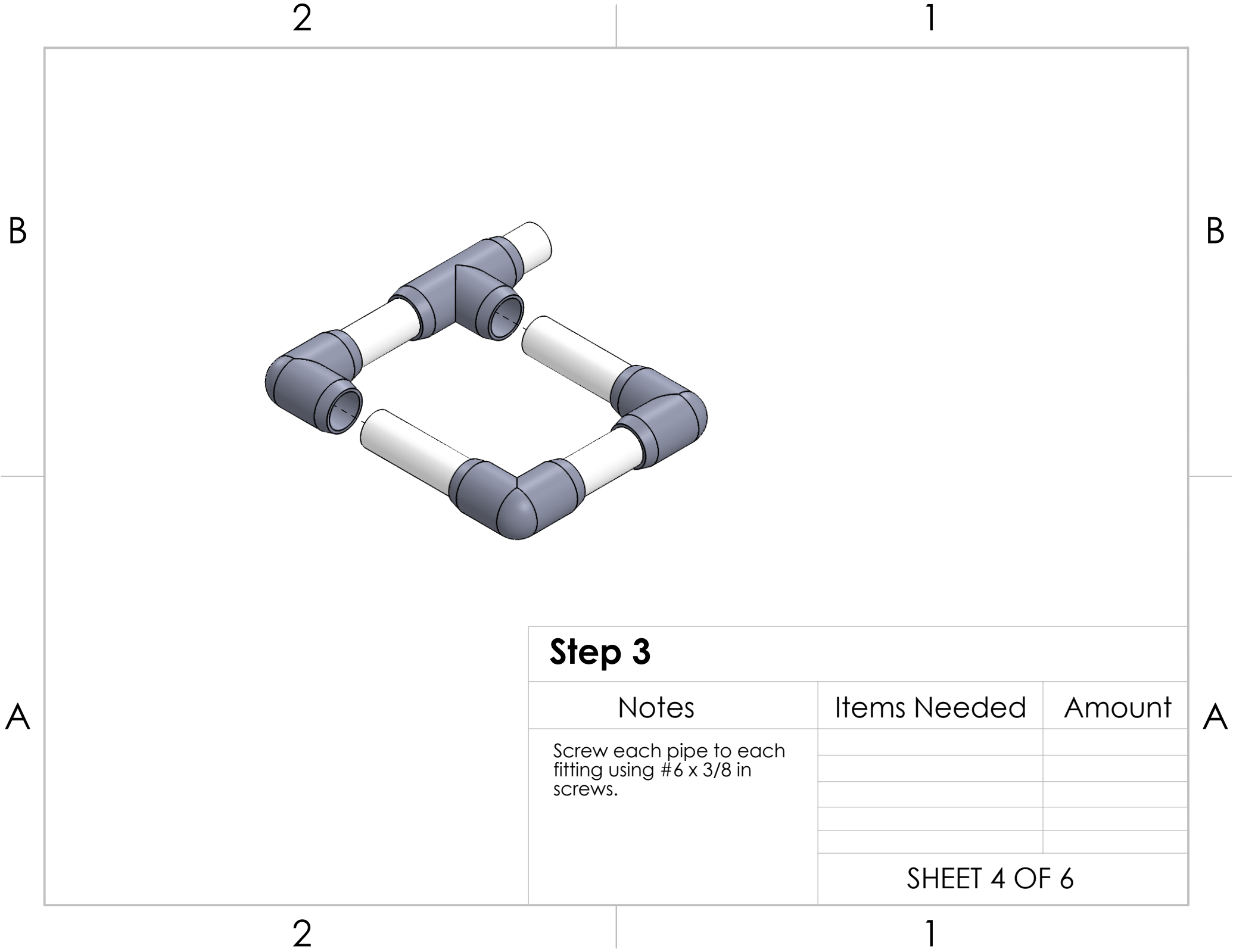
### Step 1

Notes	Items Needed	Amount
	0.5in-90	2
	0.5in x 2in-pipe	3
	SHEET 2 OF 6	



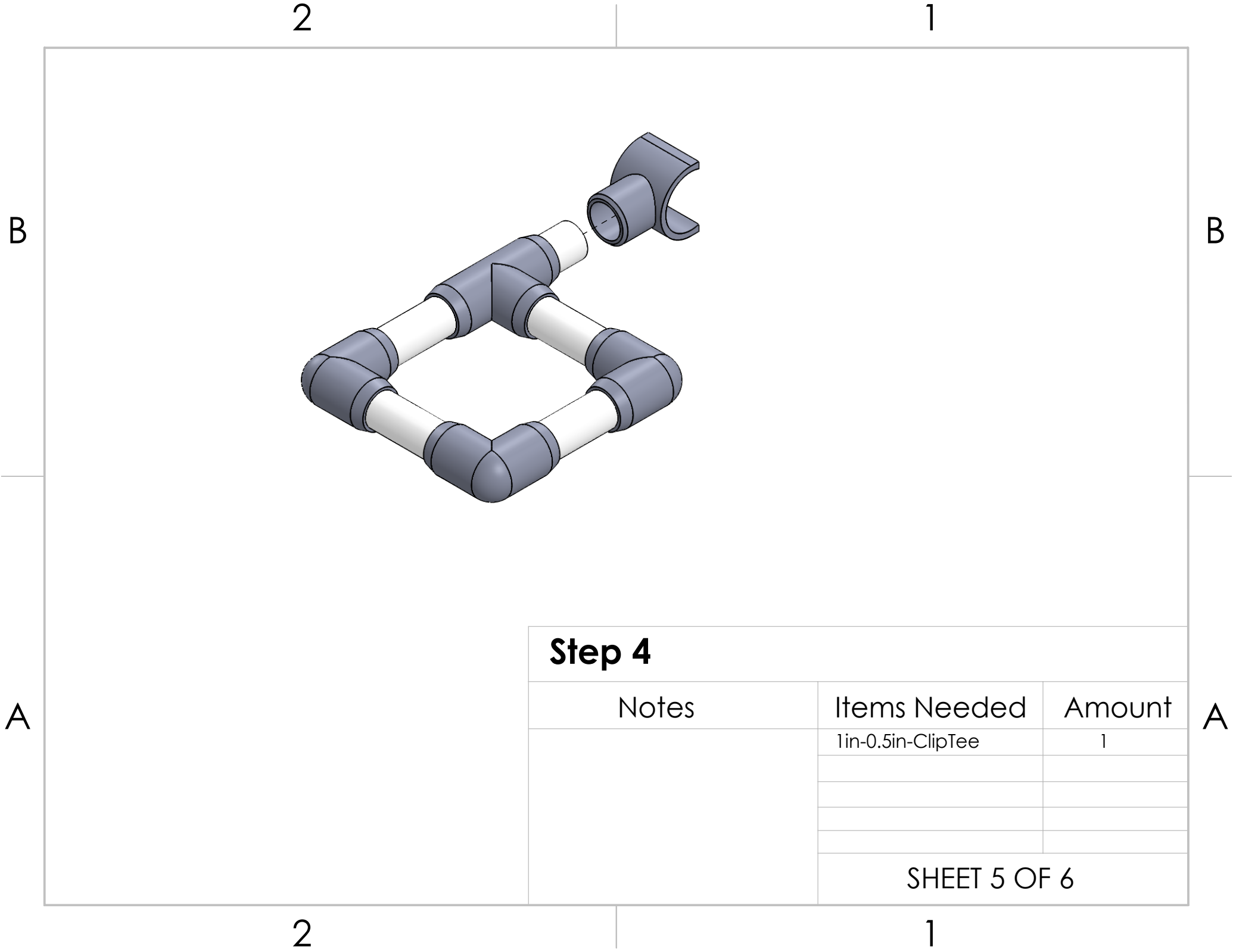
**Step 2**

Notes	Items Needed	Amount
	0.5in-90	1
	0.5in-Tee	1
	0.5in x 3in-pipe	1
	0.5in x 1.5in-pipe	1



**Step 3**

Notes	Items Needed	Amount
Screw each pipe to each fitting using #6 x 3/8 in screws.		
	SHEET 4 OF 6	



**Step 4**

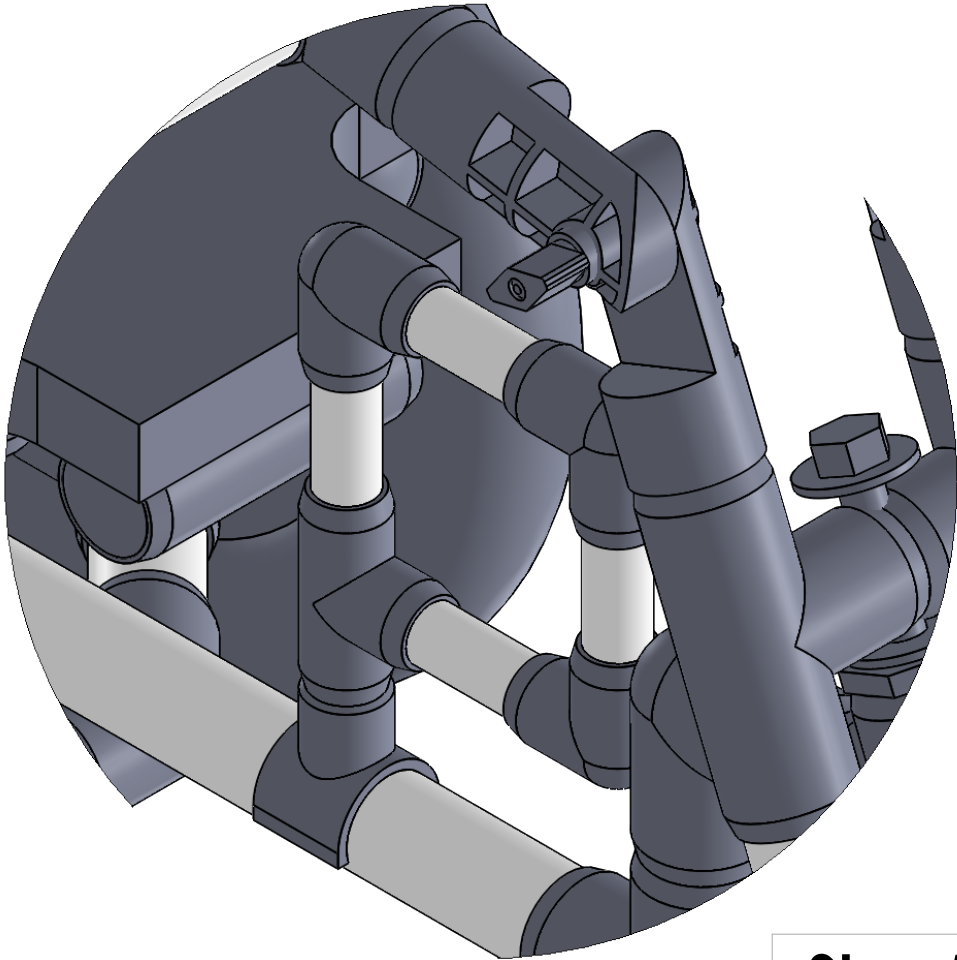
Notes	Items Needed	Amount
	1in-0.5in-ClipTee	1
	SHEET 5 OF 6	

2

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B

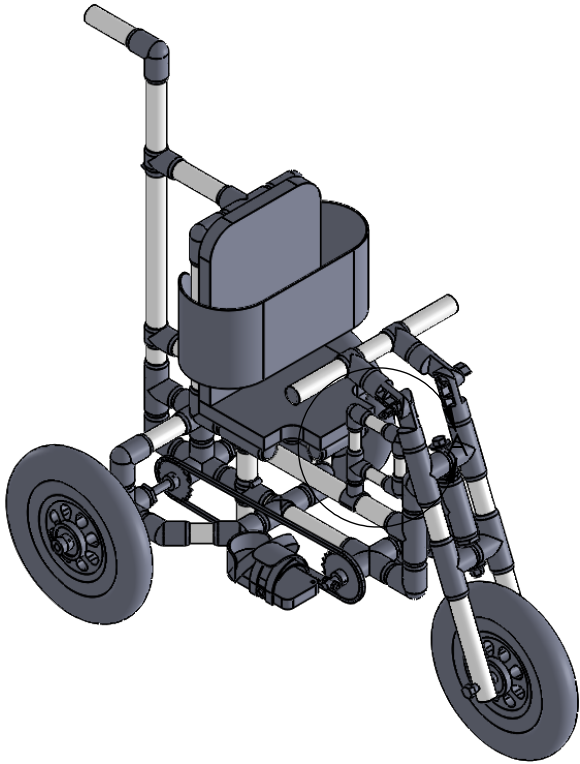
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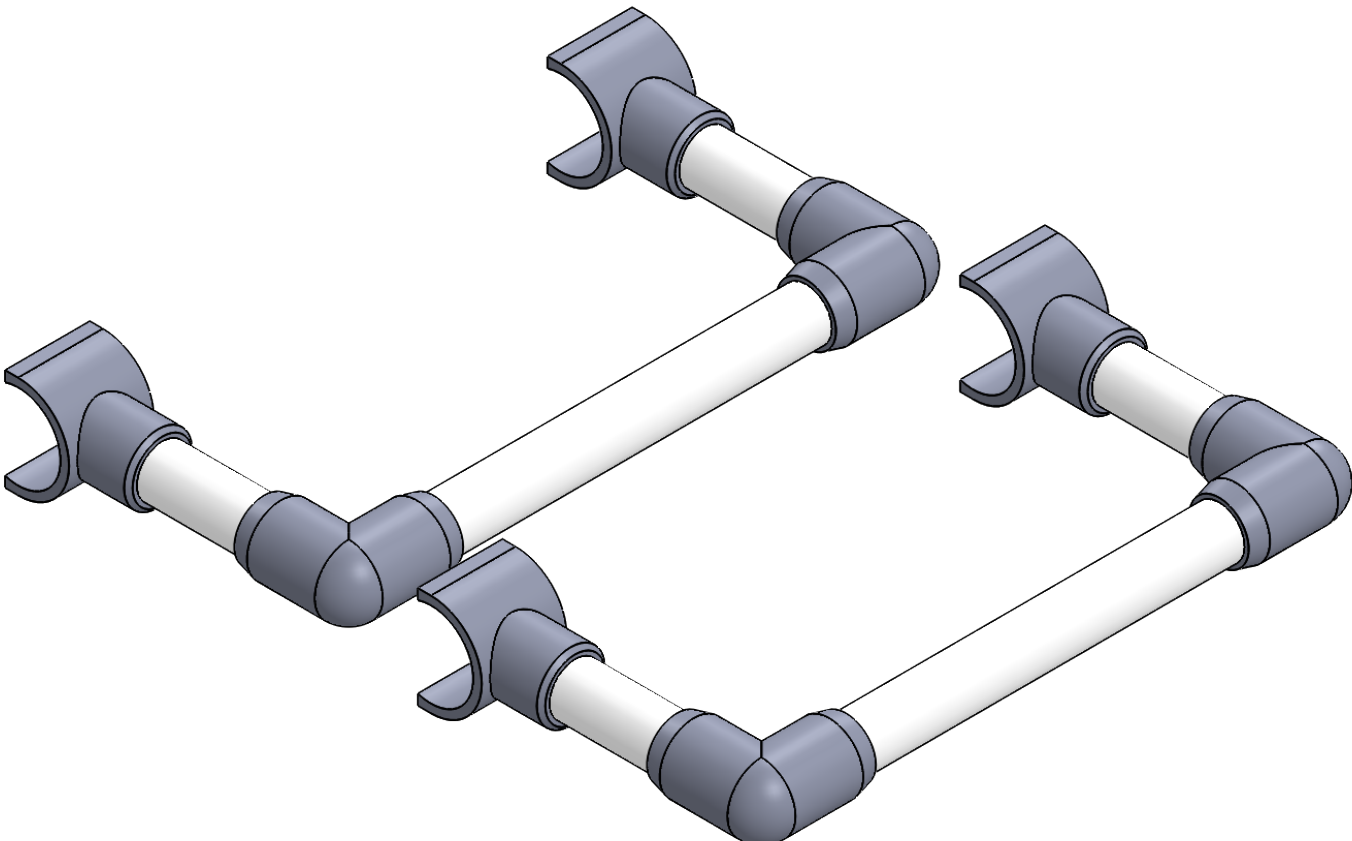
Step 5

Notes	Items Needed	Amount
Screw each pipe to each fitting using #6 x 3/8 in screws.		
	SHEET 6 OF 6	

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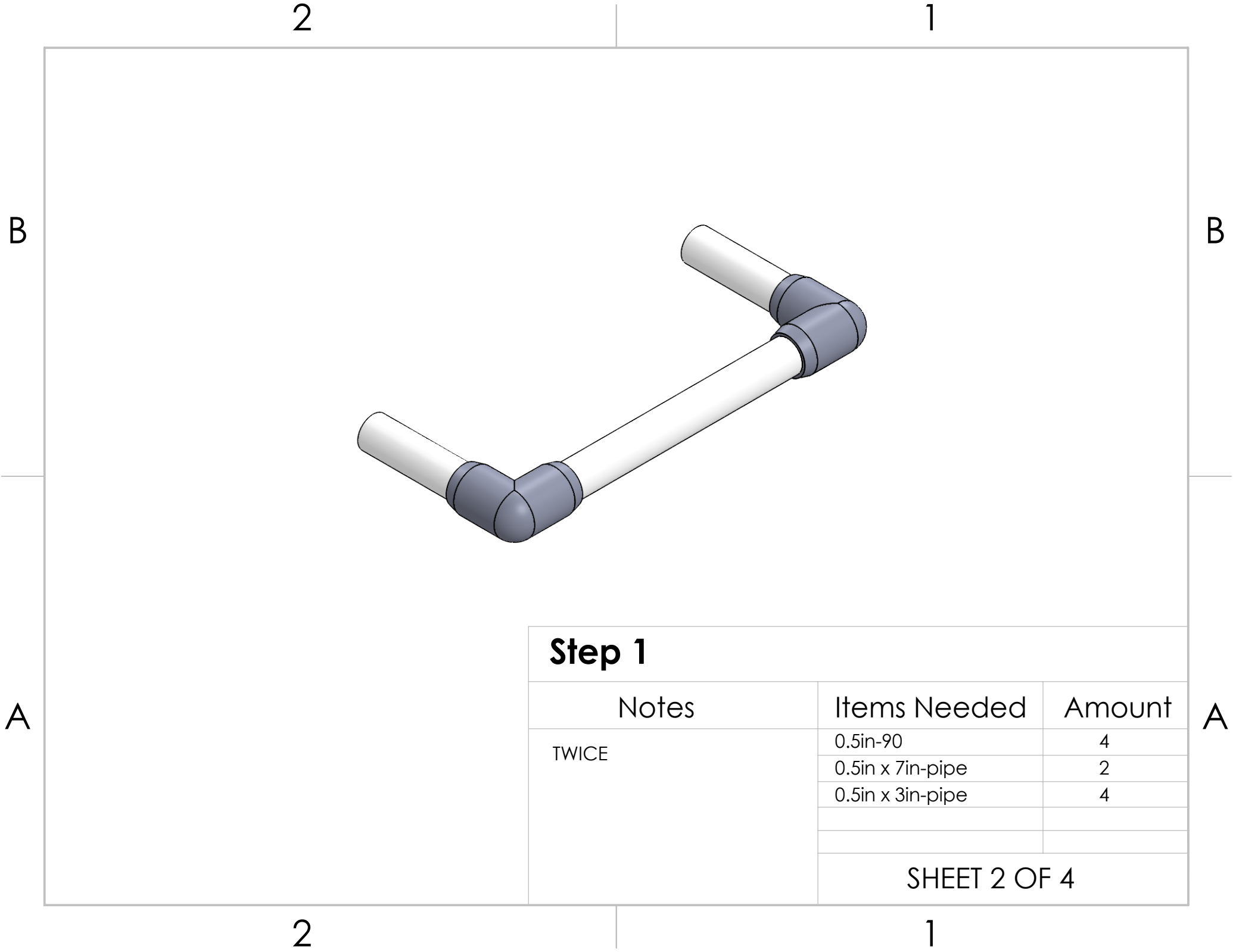
Laterals Overview

Notes	Items Needed	Amount
<p>The lengths of the pipe are generic and should be modified to meet the individuals needs.</p> <p>This should be covered with padding to avoid sores.</p>		
	SHEET 1 OF 4	

2

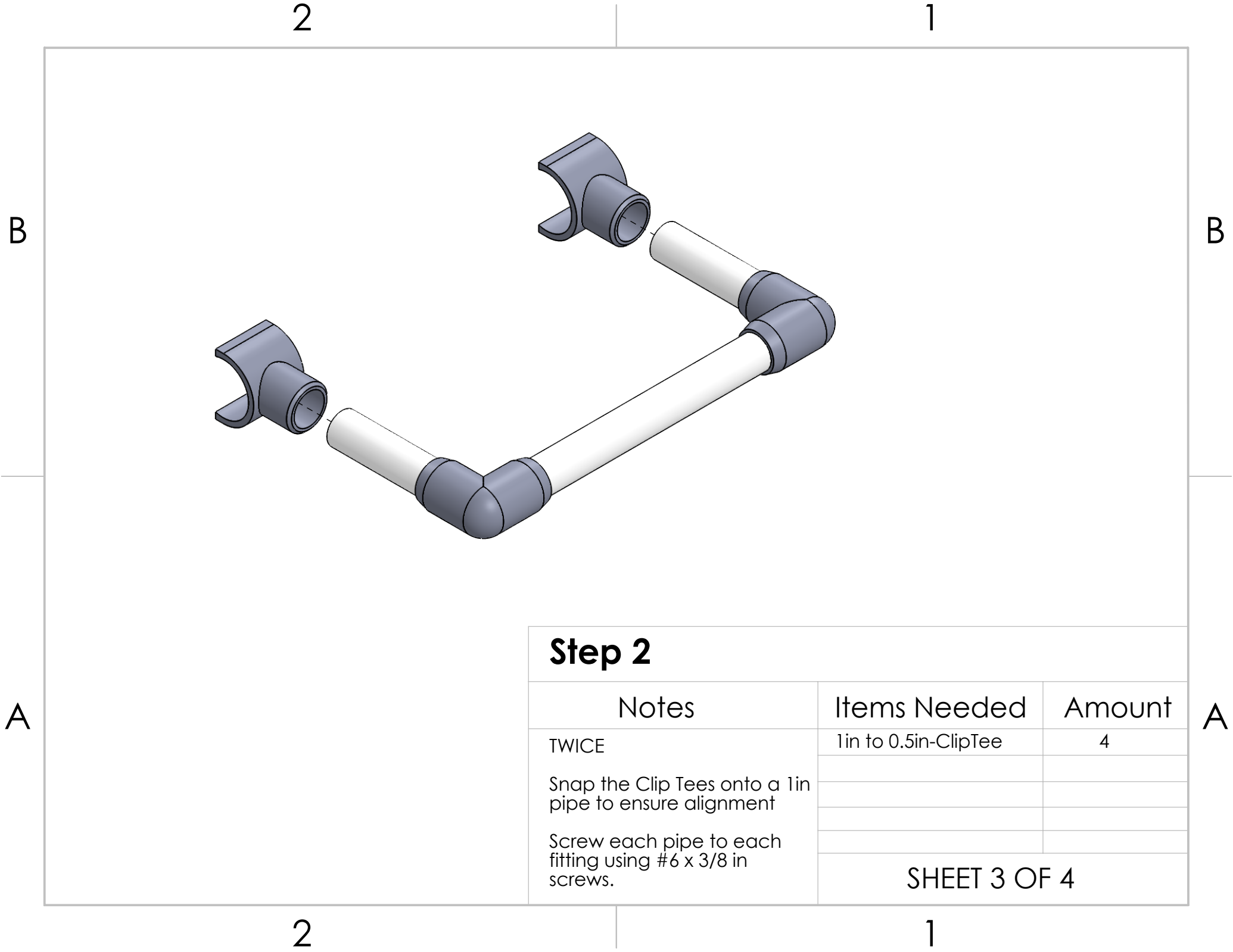
1

A



**Step 1**

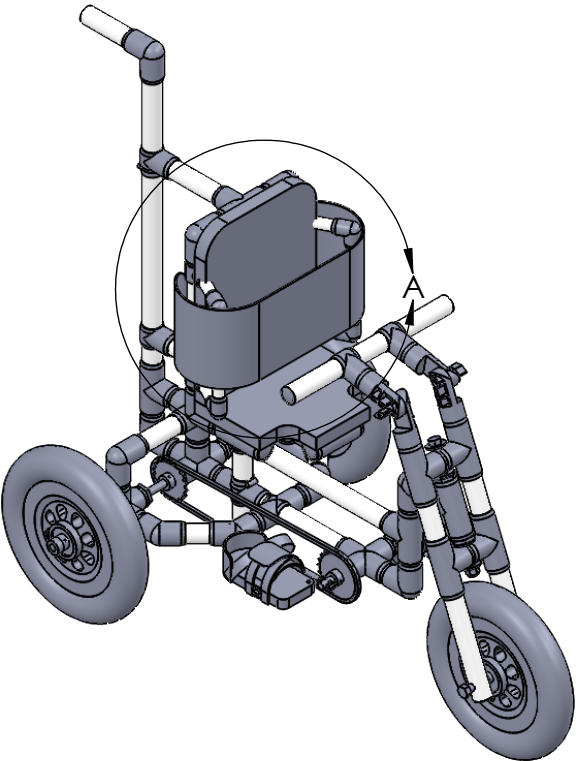
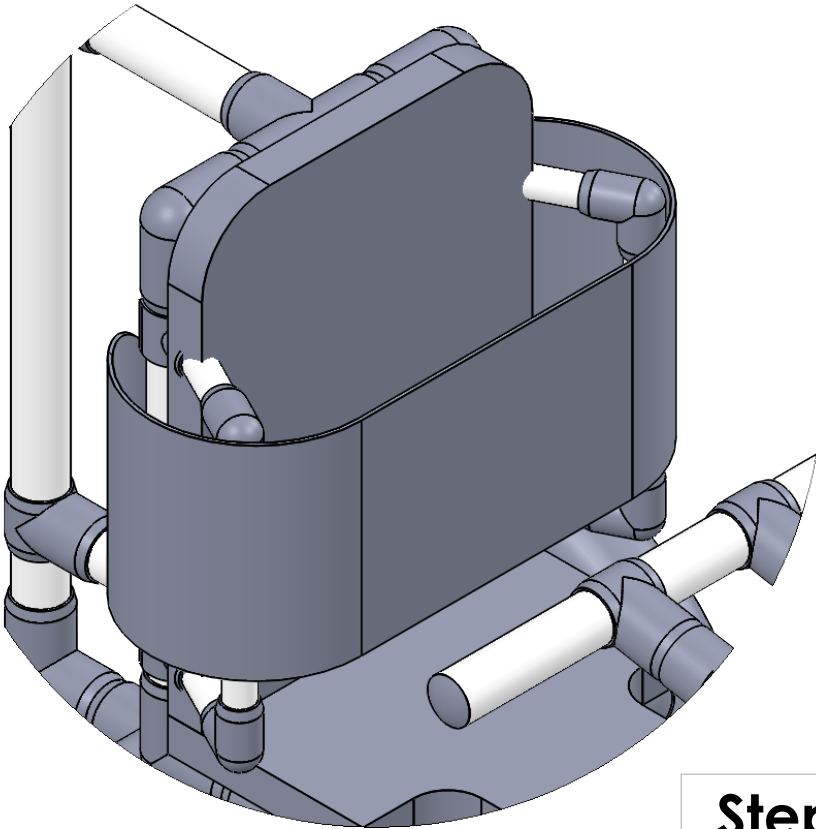
Notes	Items Needed	Amount
TWICE	0.5in-90	4
	0.5in x 7in-pipe	2
	0.5in x 3in-pipe	4
SHEET 2 OF 4		



**Step 2**

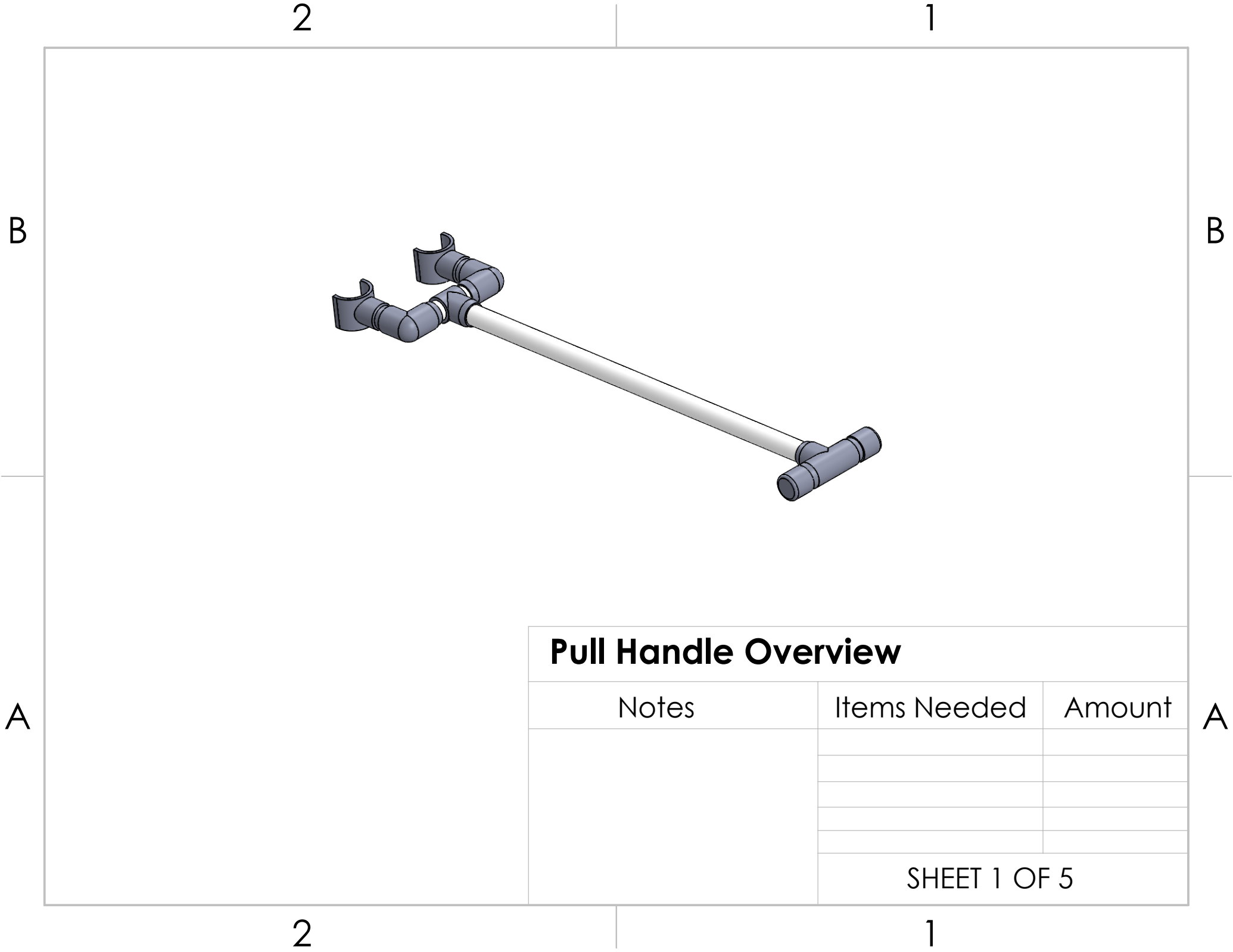
Notes	Items Needed	Amount
TWICE  Snap the Clip Tees onto a 1in pipe to ensure alignment  Screw each pipe to each fitting using #6 x 3/8 in screws.	1in to 0.5in-ClipTee	4
	SHEET 3 OF 4	





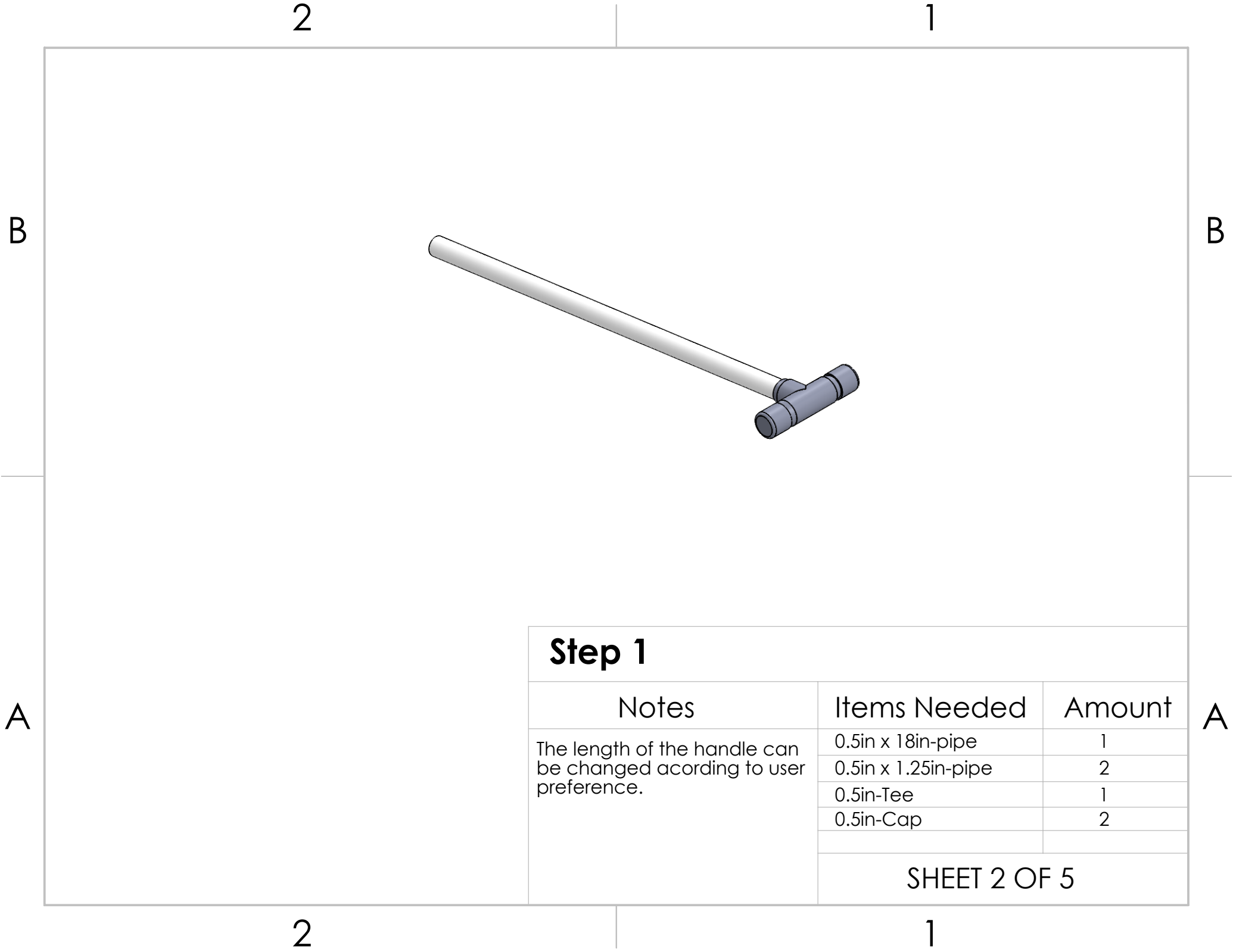
Step 3

Notes	Items Needed	Amount
Part of the foam of the seat back may need to be cut out. The chest belt can be run on the inside of the laterals if that is more comfortable for the client.		
SHEET 4 OF 4		



**Pull Handle Overview**

Notes	Items Needed	Amount



**Step 1**

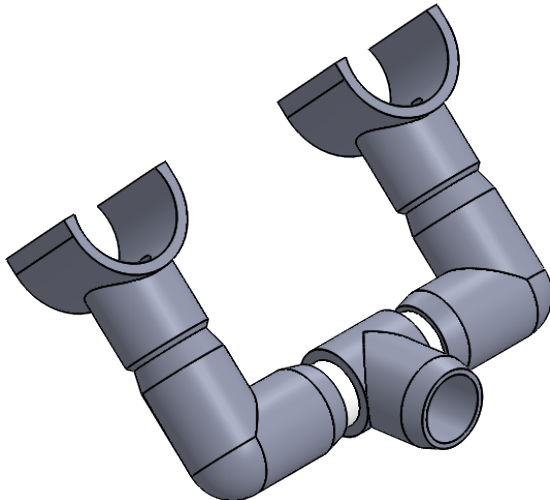
Notes	Items Needed	Amount
The length of the handle can be changed acording to user preference.	0.5in x 18in-pipe	1
	0.5in x 1.25in-pipe	2
	0.5in-Tee	1
	0.5in-Cap	2

2

1

B

B



A

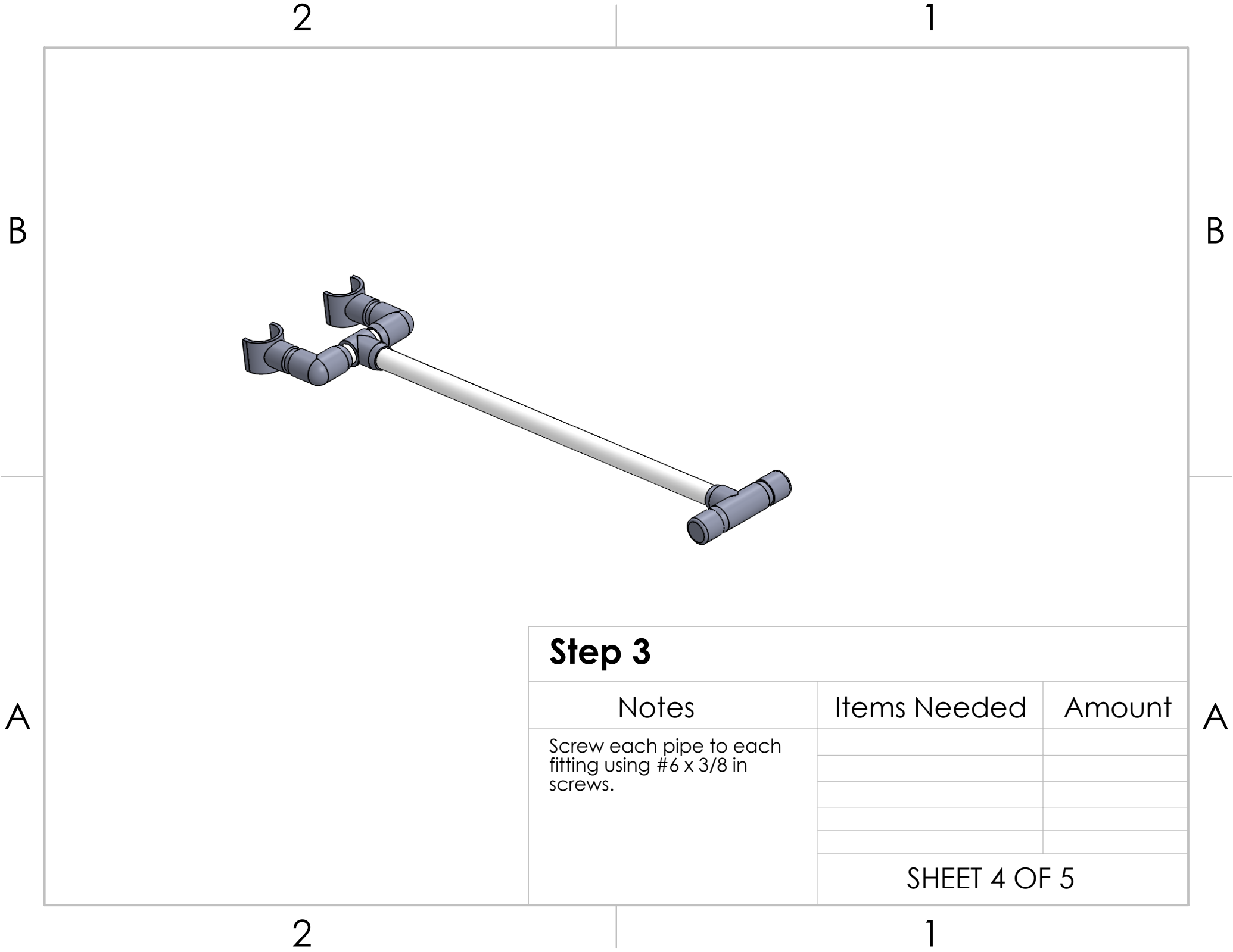
A

**Step 2**

Notes	Items Needed	Amount
	0.5in-SlipTee	1
	0.5in-90	2
	0.5in x 3.25in-pipe	1
	0.5in x 1.25in-pipe	2
SHEET 3 OF 5		

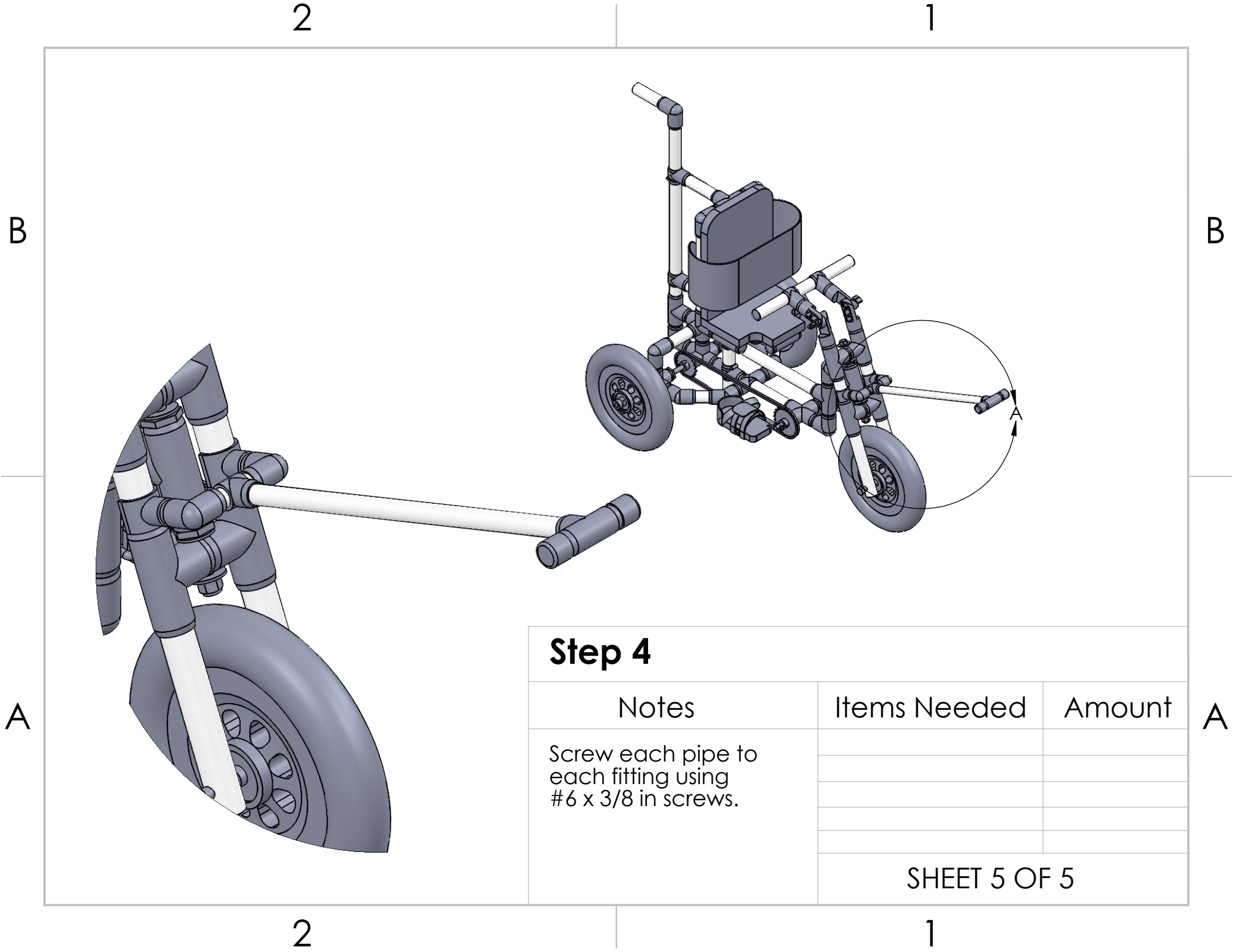
2

1



**Step 3**

Notes	Items Needed	Amount
Screw each pipe to each fitting using #6 x 3/8 in screws.		
	SHEET 4 OF 5	



**Step 4**

Notes	Items Needed	Amount
Screw each pipe to each fitting using #6 x 3/8 in screws.		
	SHEET 5 OF 5	

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