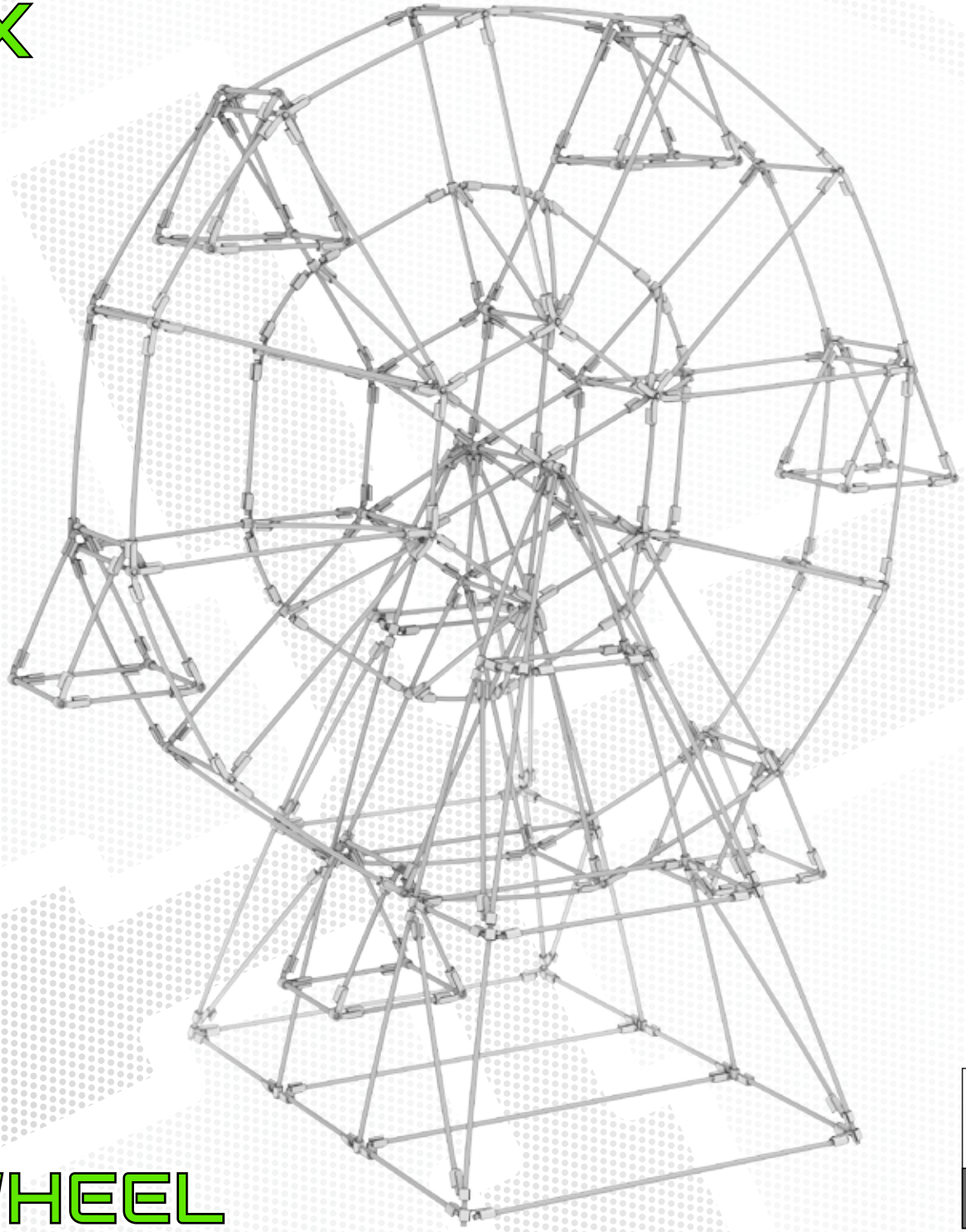
PasTEX



FERRIS WHEEL

Designer

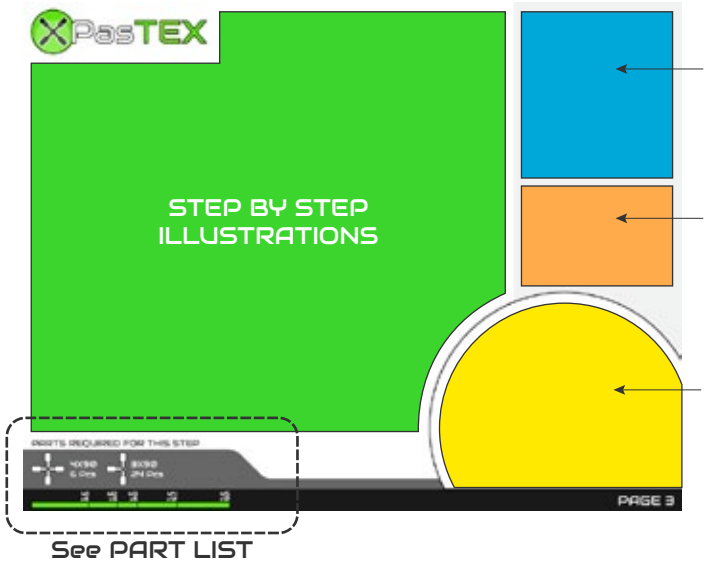
Tinkerer — Engineer

SKILL LEVEL
RECOMMENDED FOR AGES 12+

ASSEMBLY INSTRUCTIONS

HOW IT WORKS

INSTRUCTION PAGE LAYOUT



Number and description for the page's steps.

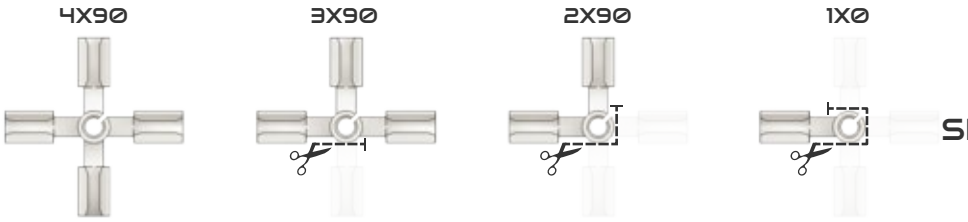
Useful tips and tricks to help with building.

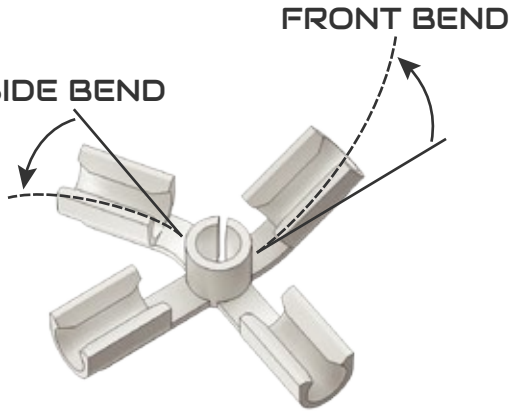
View of model after the page's steps have been completed.

See PART LIST

CUTTING CONNECTORZ

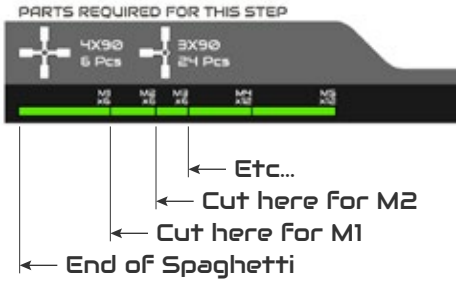
During construction you will need various types of connectors. You can create all of the required connectors by clipping off the unneseccary sides of a standard 4X90 or 3X120 connector (for best results, use a pair of cuticle clippers). See the images below to learn how to create each of the various part marks that will be required throughout these instructions.





PART LIST

Use the part tool at the bottom of each page to find the number of connectors and spaghetti lengths required for each step. Use a pair of cuticle clippers for easy cutting.



WARNING!

- Parental supervision required while using any kind of sharp tool for cutting PasTEX Connectorz.
- Please do not put PasTEX Connectorz in your mouth.
- When breaking or cutting spaghetti, small pieces can fly into the air. Please use caution and protect eyes during this process.

PasTEX

A BRIEF HISTORY OF THE FERRIS WHEEL

The original Ferris Wheel was designed and constructed by George Washington Ferris as a landmark for the 1893 World's Fair in Chicago, Illinois. The Ferris wheel stood 25 stories high and held over 1,400 passengers. From the top of the ride, passengers could see 50 miles.

The name Ferris Wheel is now commonly used for this type of structure, which has become the most common type of amusement ride at fairs throughout the United States.

Currently, the tallest Ferris Wheel is the 167 meter (550 ft) High Roller in Las Vegas, Nevada, which opened to the public in March 2014.

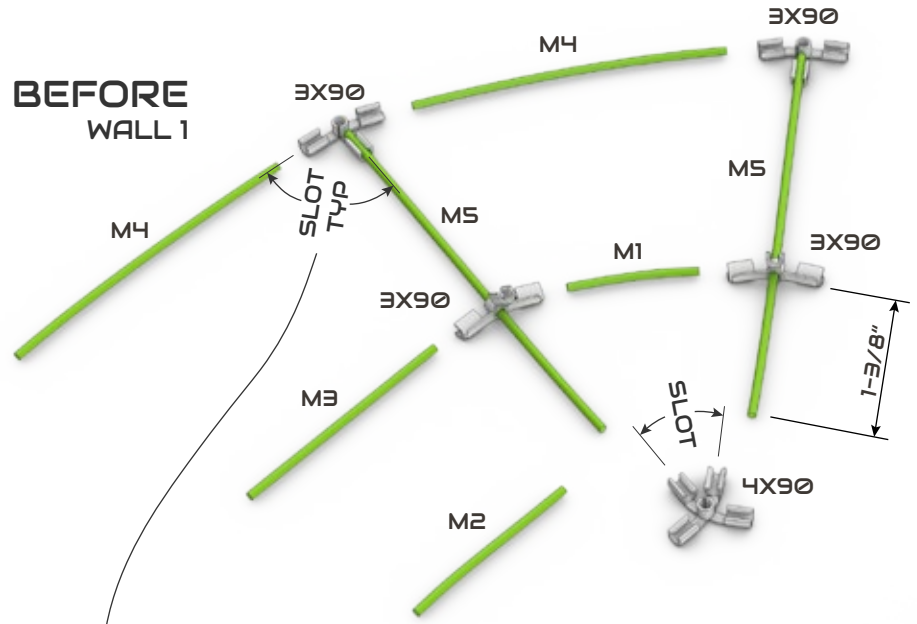
STEP 1
Building the Wheel

The wheel will be constructed in 6 identical sections. Each section is called an Assembly. Refer to the image below to see what the final assembly (A1) will look like. These 6 assemblies will be joined together in Step 4 to complete the wheel.

In this step you will build the first wall (Wall 1) of the wheel assemblies as shown.

TIP

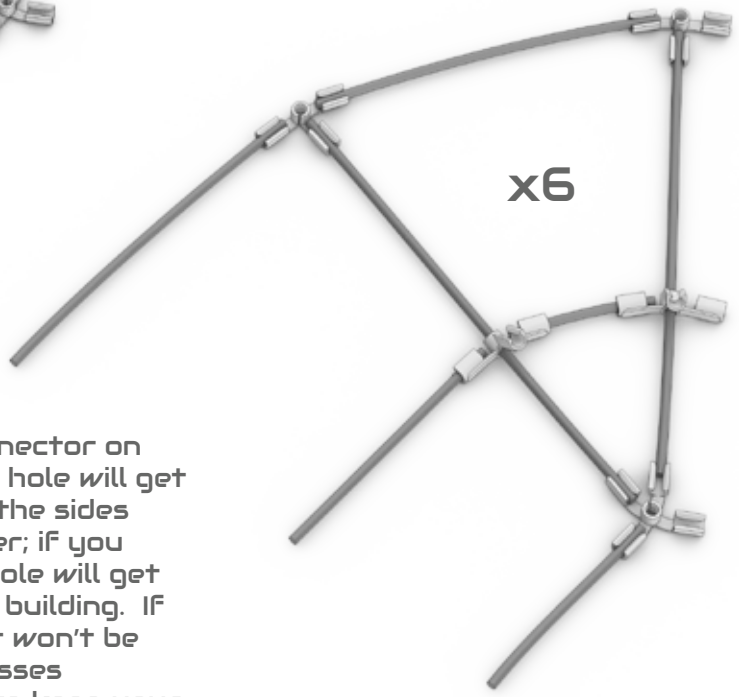
Keep a clean workspace and create an assembly line to increase efficiency and reduce mistakes.



AFTER
WALL 1

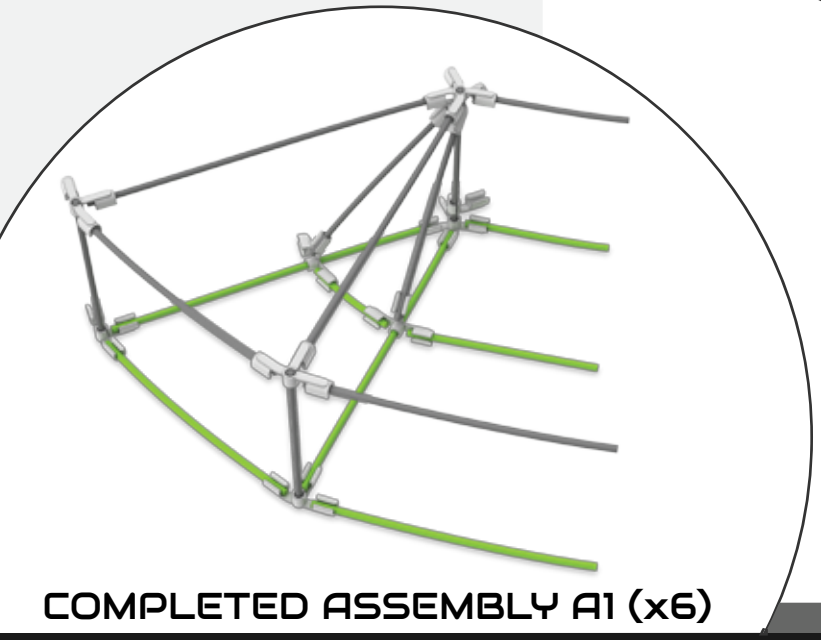
TIP

Build all 6 of these walls at the same time and set aside until they are required in Step 3.



TIP

Mind the gap!
If you bend the sides of a connector on each side of a slot, the center hole will get bigger or smaller. If you bend the sides inward, the hole will get smaller; if you bend the sides outward, the hole will get bigger. Keep this in mind while building. If the center hole gets too big it won't be able to grip spaghetti that passes through the center hole. Try to keep your slots between the sides that are being bent inward to be sure your Connectorz will grip well.



COMPLETED ASSEMBLY A1 (x6)

PARTS REQUIRED FOR THIS STEP

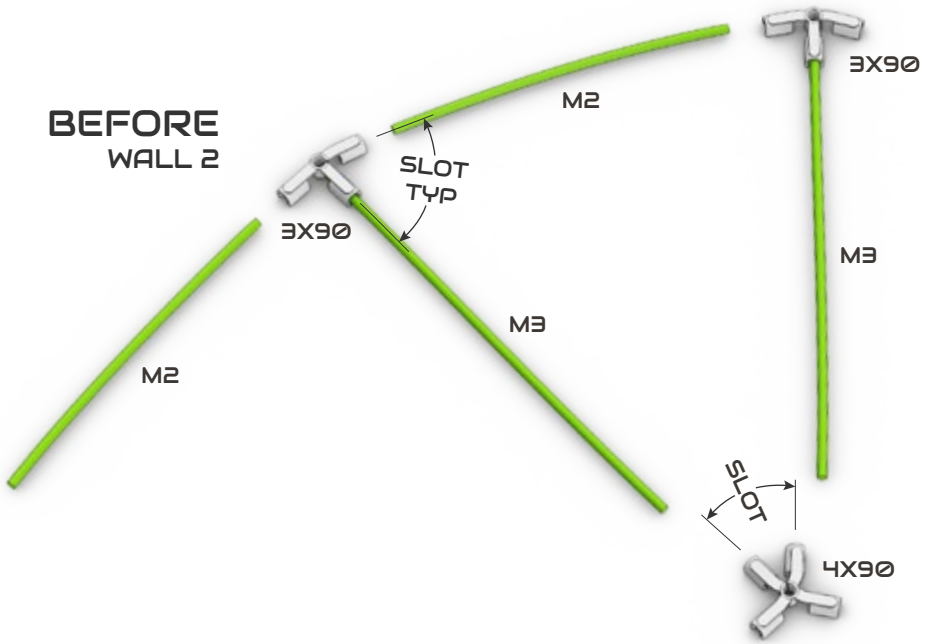
4X90
6 Pcs

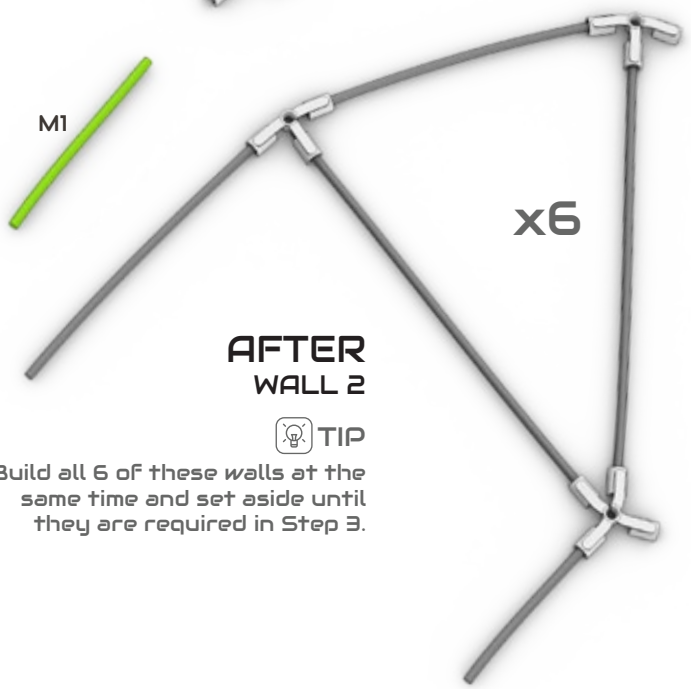
3X90
24 Pcs

M1	M2	M3	M4	M5
x6	x6	x6	x12	x12

STEP 2
Building the Wheel

In this step you will build the second wall (Wall 2) of the wheel assemblies as shown.

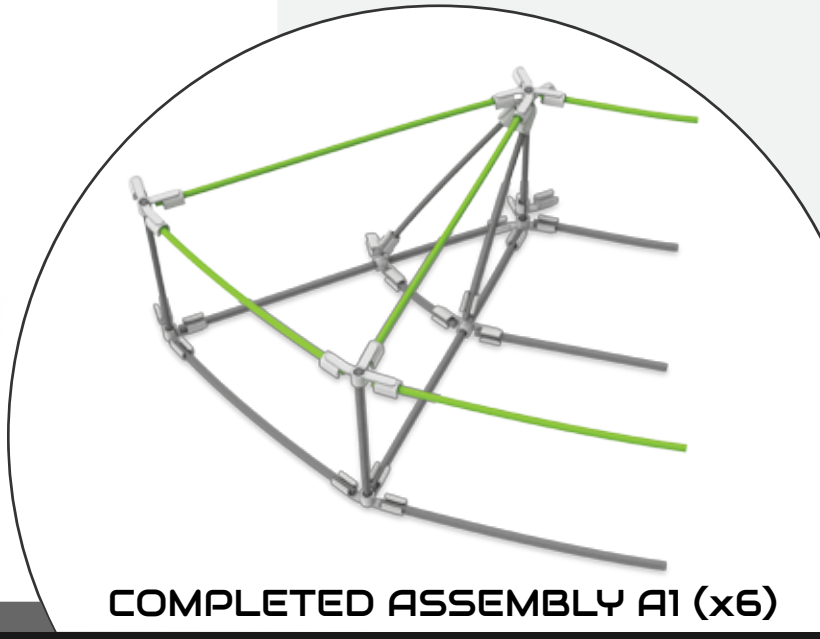




AFTER
WALL 2

TIP

Build all 6 of these walls at the same time and set aside until they are required in Step 3.



COMPLETED ASSEMBLY A1 (x6)

PARTS REQUIRED FOR THIS STEP

4X90
6 Pcs

3X90
12 Pcs

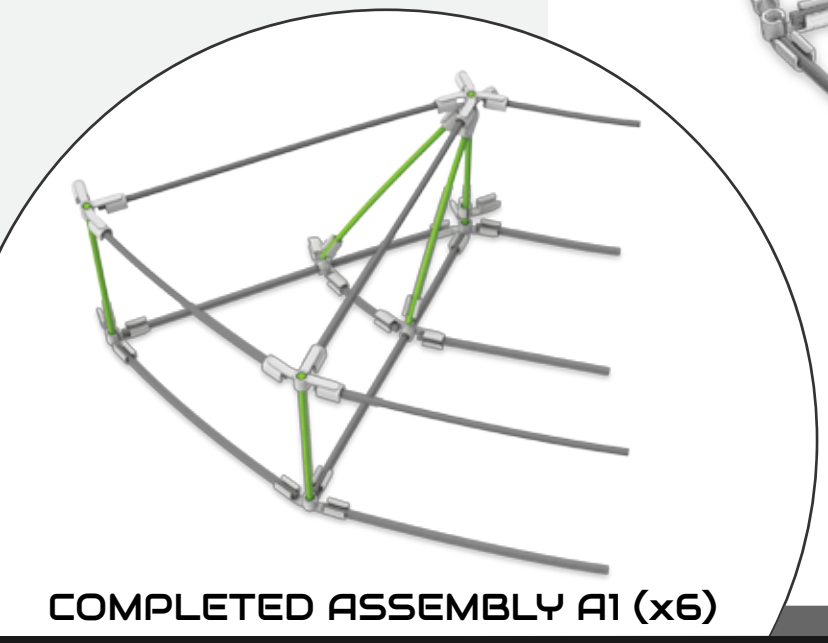
M1 x6 | M2 x12 | M3 x12

STEP 3
Building the Wheel

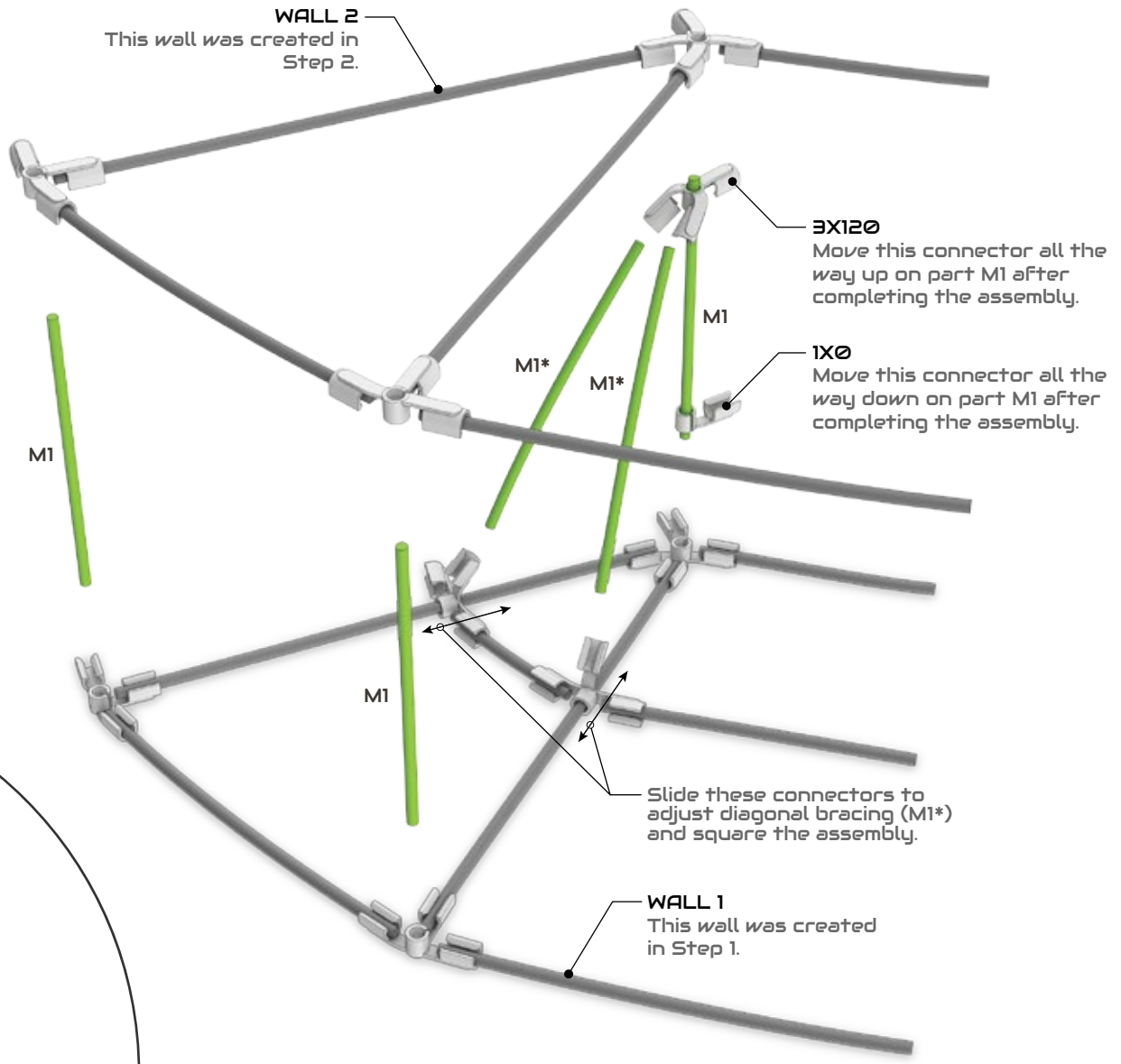
Now you're ready to complete the wheel assemblies. Connect Wall 1 and Wall 2 using the cross members and diagonal braces shown to complete each assembly.

TIP

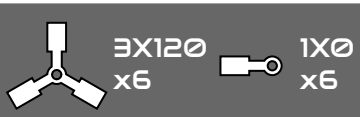
The diagonal bracing (M1*) is the key to keeping the wheel straight so it can spin freely. You can adjust the squareness of each assembly by sliding the end attached to Wall 1 up or down. Make sure all 6 assemblies are square before moving on to Step 4.



COMPLETED ASSEMBLY A1 (x6)



PARTS REQUIRED FOR THIS STEP



STEP 4
Complete the Wheel

Great work! Now it's time to put all those assemblies together to create the final wheel assembly (W1). Just snap all of the assemblies (A1) together as shown. Then create the center hub assembly (H1) so you can connect the wheel to the supports you will create in Step 5.

TIP

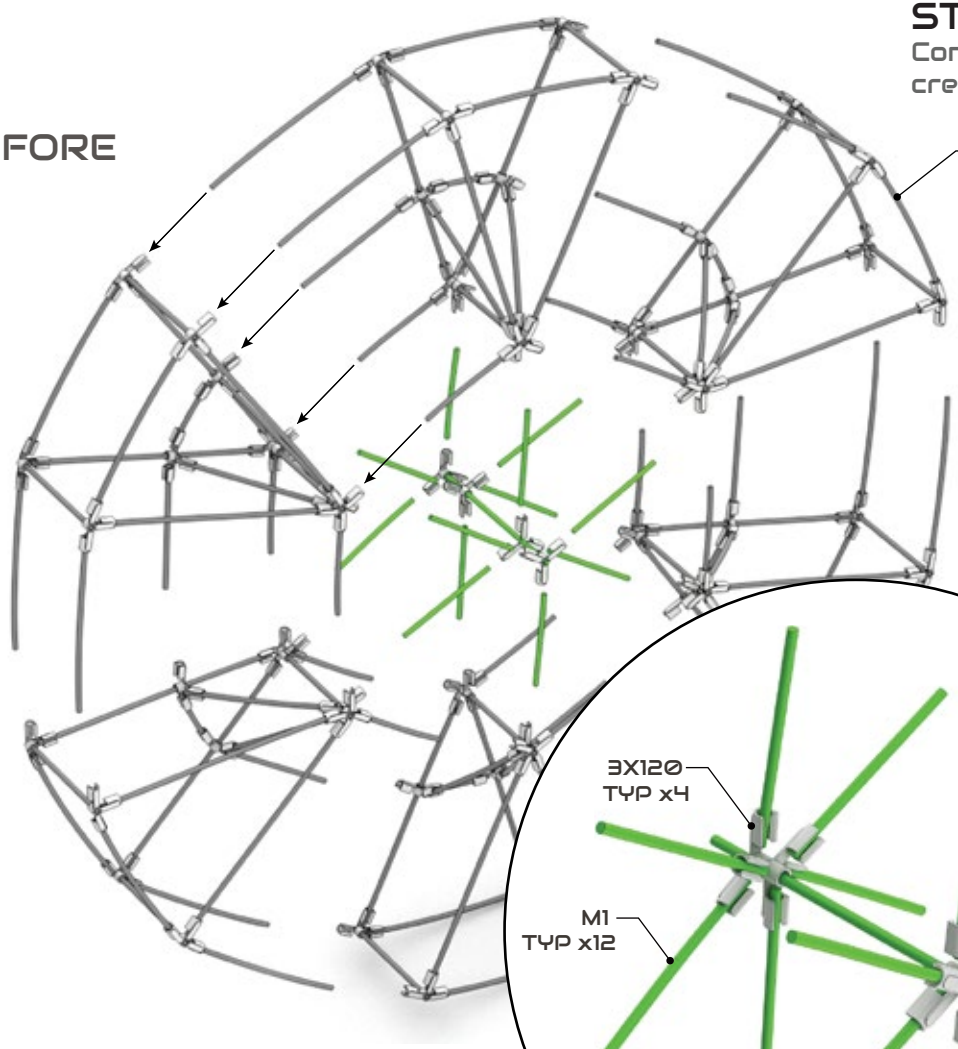
You can use tweezers to finish any "hard to reach" connections.

DEFINITION

TYP (TYPICAL)

Term used to show that all identical objects are named or interpreted the same way. This is often used to reduce the amount of duplicate text on a drawing.

BEFORE

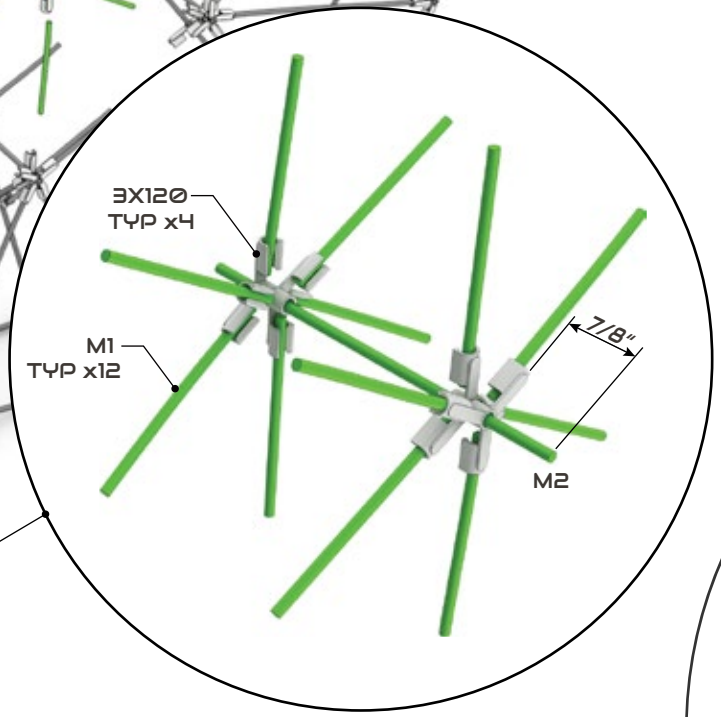


STEP 4.1

Connect sub assemblies (A1) to create wheel assembly W1.

ASSEMBY A1

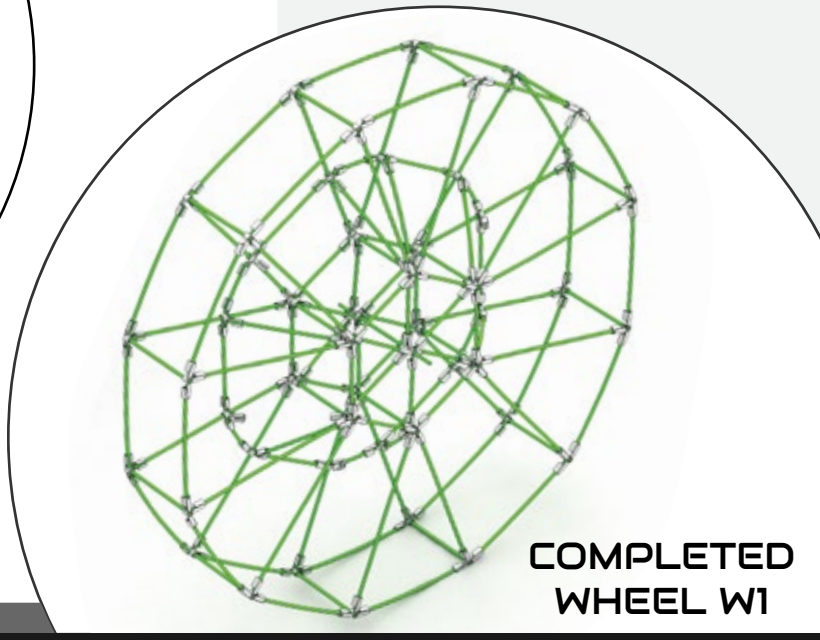
These assemblies were created previously in Steps 1-3



STEP 4.2

Create center hub assembly (H1) before connecting to wheel assembly W1.

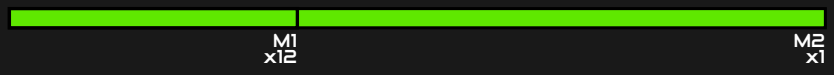
CENTER HUB (H1)
ZOOMED VIEW



COMPLETED
WHEEL W1

PARTS REQUIRED FOR THIS STEP

3X120
4 Pcs

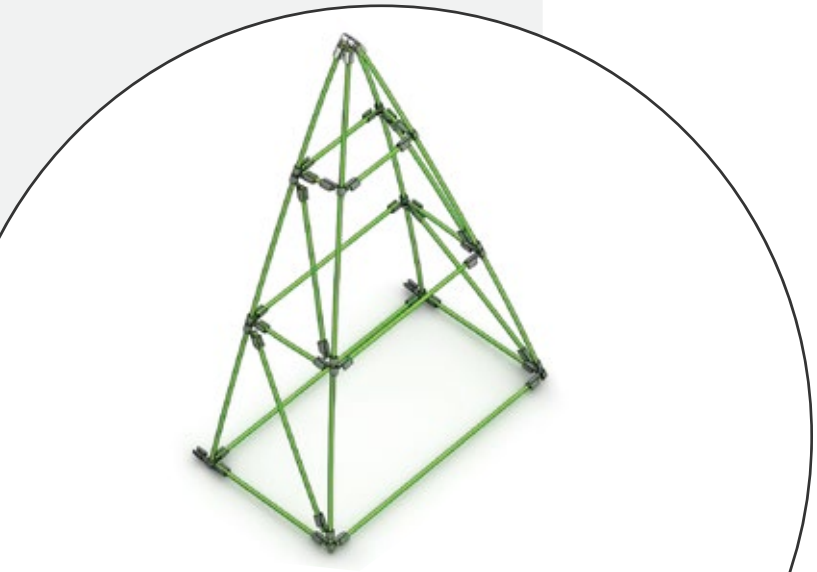


STEP 5
Build the Supports

Now it's time to make supports to hold up the wheel. In this step you will create two support assemblies (S1). Start by creating the two sides of the assembly S1 and then adding the cross members to join them together to complete the assembly.

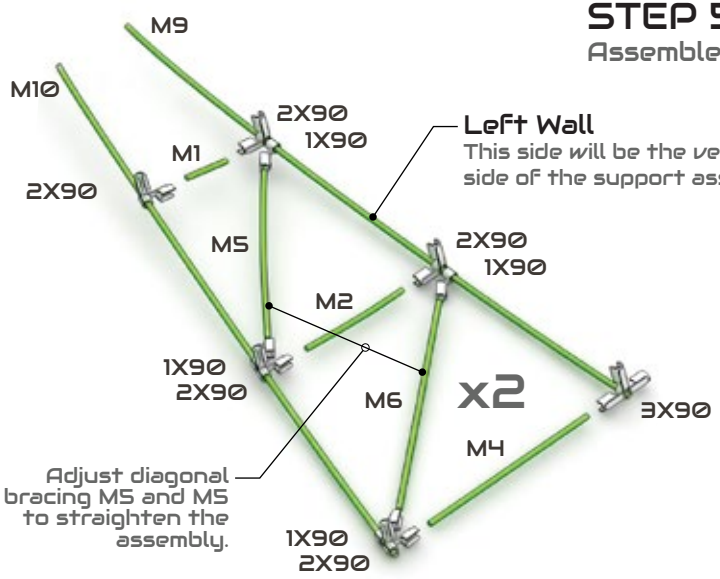
? DEFINITION

OPPOSITE HAND (MIRRORED)
The 2 walls need to be built "opposite hand." Hold both your hand out with your thumbs touching. Notice how one hand looks exactly like the other, just opposite, or "opposite hand." This is sometimes referred to as "mirrored" because the second object is built the way it would look in a mirror.

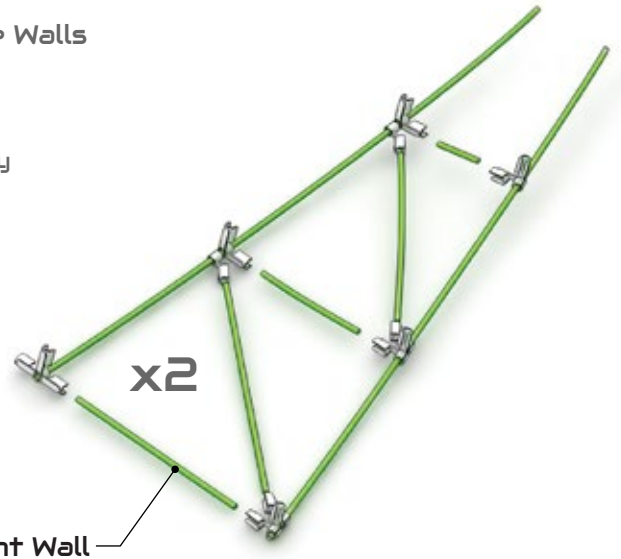


COMPLETED ASSEMBLY S1 (x2)

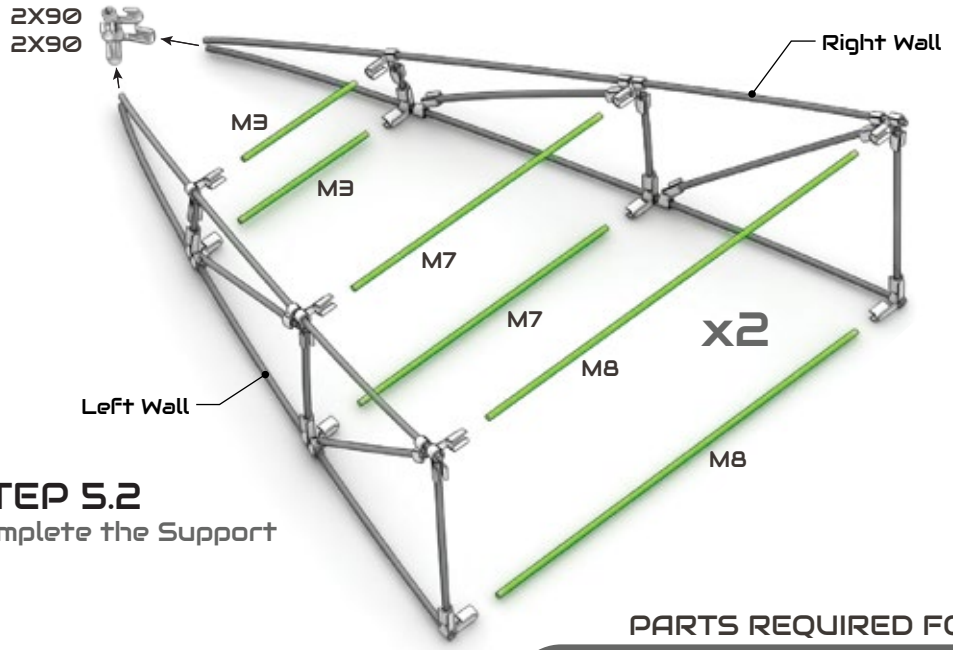
STEP 5.1
Assemble Side Walls



Left Wall
This side will be the vertical side of the support assembly



Right Wall
Make Opposite Hand of Left Wall
See definition in right sidebar



STEP 5.2
Complete the Support

PARTS REQUIRED FOR THIS STEP

M1 x4 | M2 x4 | M3 x4 | M4 x4 | M5 x4 | M6 x4 | M7 x4 | M8 x4 | M9 x4 | M10 x4

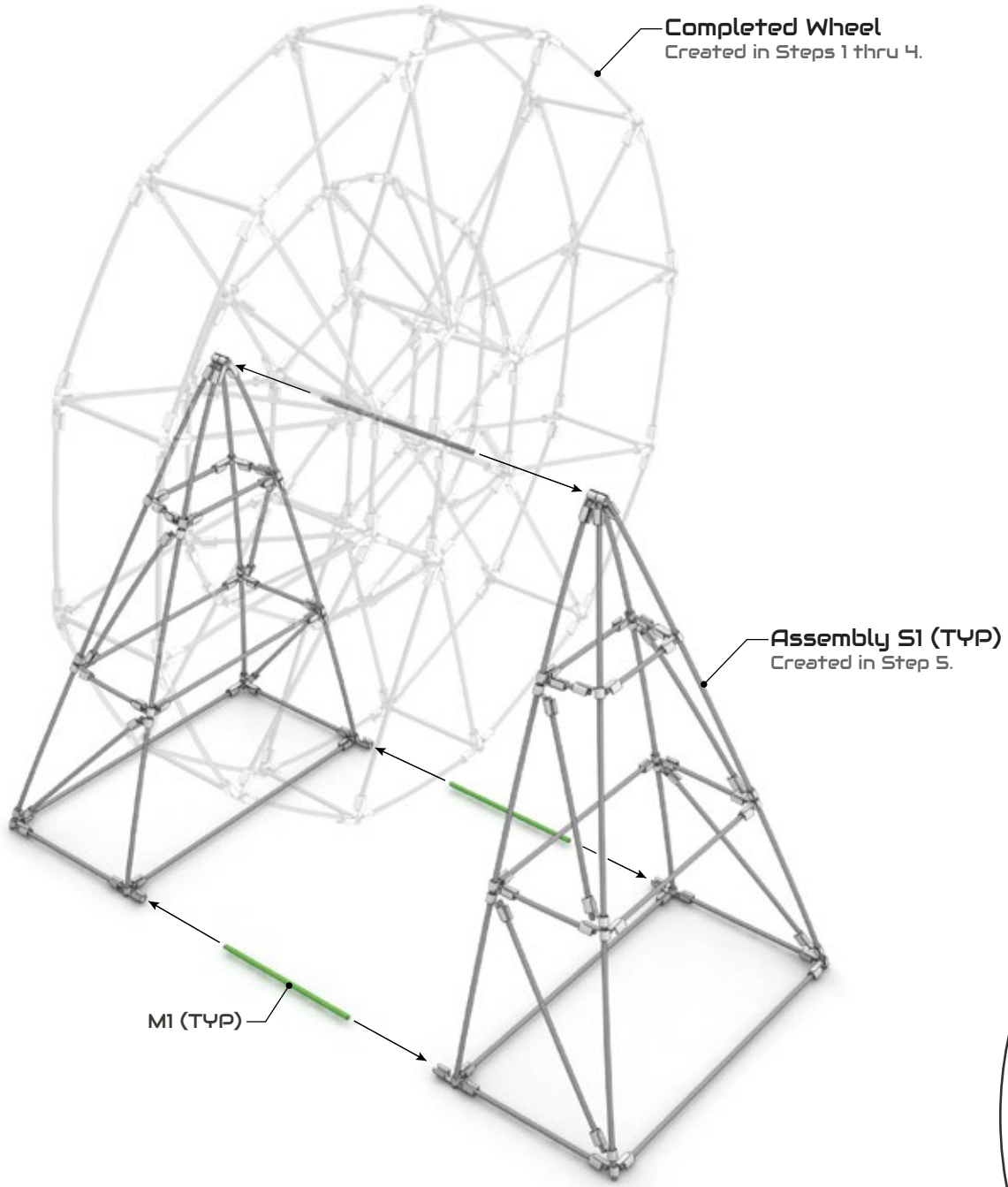
STEP 6

Connect the Wheel to the Supports

You're on a roll! Let's attach the wheel to the supports. Do this by connecting the center cross member in the wheel's hub to the top of both support assemblies (S1)

! NOTE

Double check the wheel assembly (W1) to make sure it is still straight so it can spin freely when attached to the supports. Adjust the diagonal bracing in the wheel to straighten the wheel.



FINISHED WHEEL W/O CHAIRS

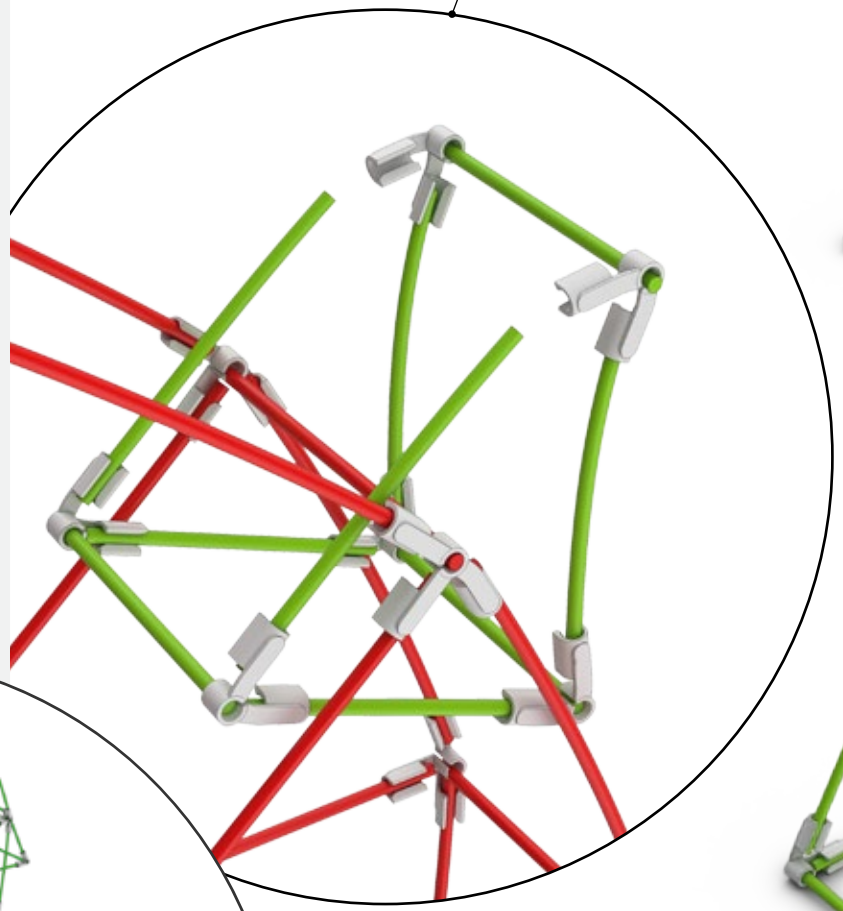
PARTS REQUIRED FOR THIS STEP

M1
x2

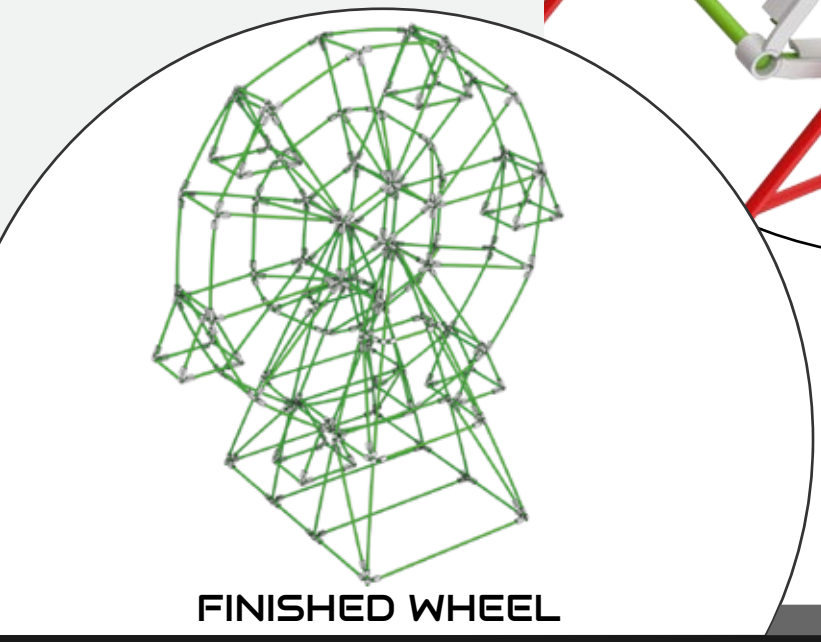
STEP 7

Build the Chairs and Finish the Wheel

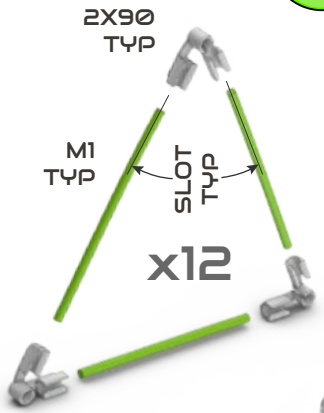
Amazing job! You are almost done. You just need to make a place for people to sit. Create 6 chair assemblies (C1) and attach them to the wheel as shown. Make 12 chairs if you really want to go the extra mile!

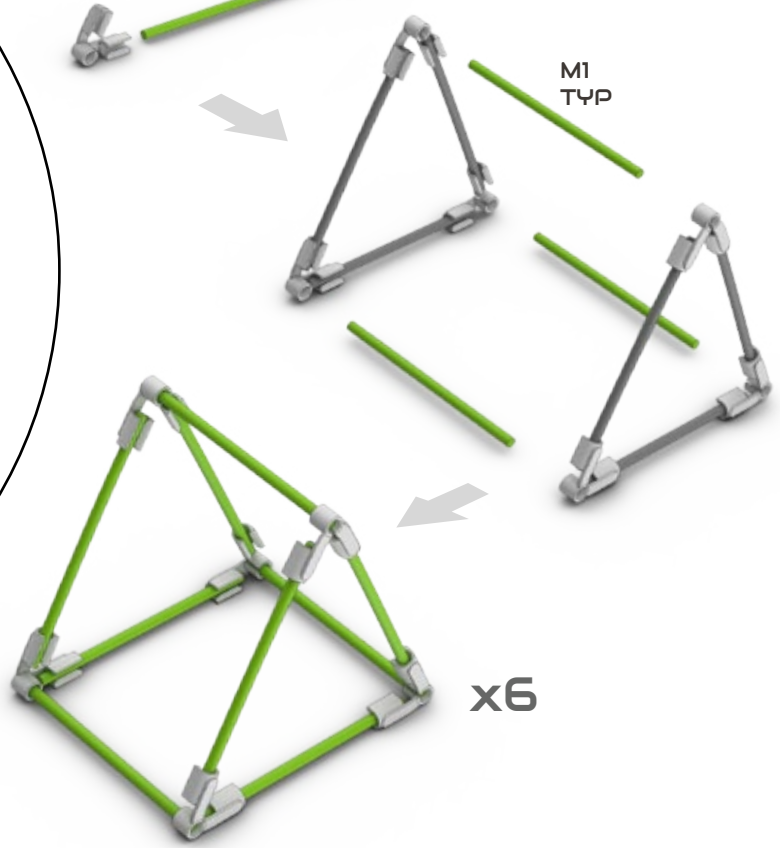


Chair Assembly (C1)
Leave top connectors open as shown to attach the chairs to the wheel.



FINISHED WHEEL





PARTS REQUIRED FOR THIS STEP

2X90
x36

M1
x54

PasTEX

www.pastexconnectorz.com | info@pastexconnectorz.com

PasTEX LLC, Saint Johns, Florida 32259