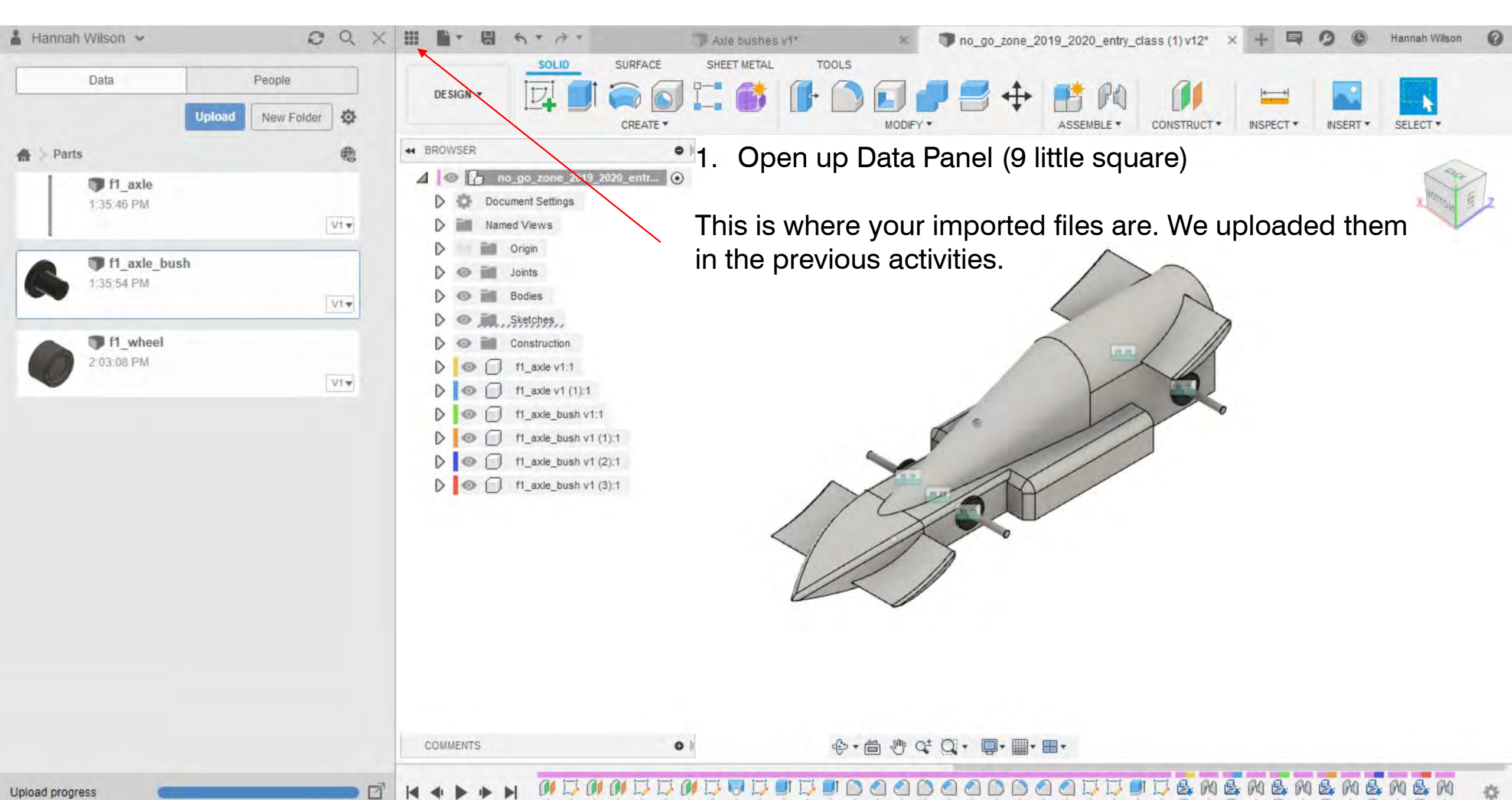


Activity 10

Assembling wheels

PDF Guide



1. Open up Data Panel (9 little square)

This is where your imported files are. We uploaded them in the previous activities.



Data People

Upload New Folder

Parts

- f1_axle 1:35:46 PM
- f1_axle_bush 1:35:54 PM
- f1_wheel 2:03:08 PM

Open
Insert into Current Design
New Drawing from Design
Share Public Link
Import New Version
Rename
Move
Copy
Delete
Add to Offline Cache

Upload progress

DESIGN


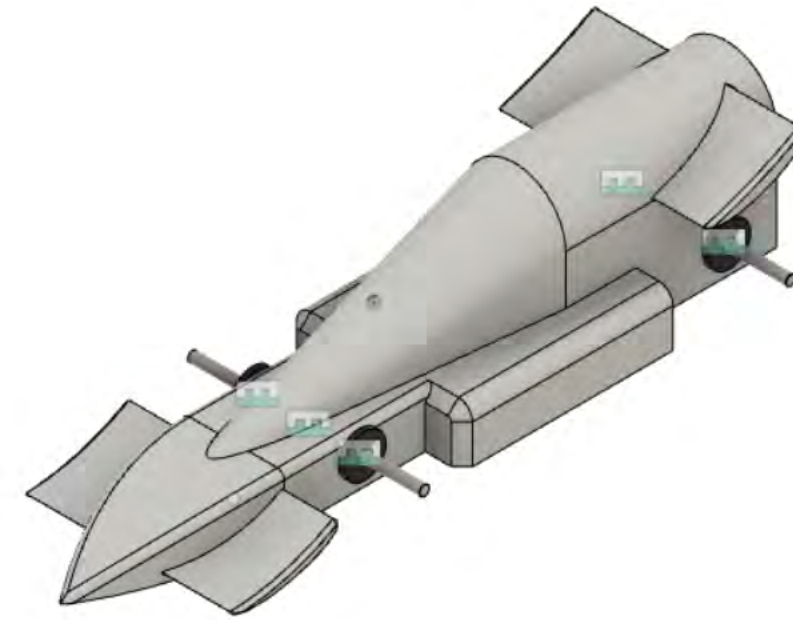
SOLID SURFACE SHEET METAL TOOLS

CREATE MODIFY ASSEMBLE CONSTRUCT INSPECT INSERT SELECT

BROWSER

- no_go_zone_2019_2020_entr...
- Document Settings
- Named Views
- Origin
- Joints
- Bodies
- Sketches
- Construction
- f1_axle v1:1
- f1_axle v1 (1):1
- f1_axle_bush v1:1
- f1_axle_bush v1 (1):1
- f1_axle_bush v1 (2):1
- f1_axle_bush v1 (3):1

COMMENTS



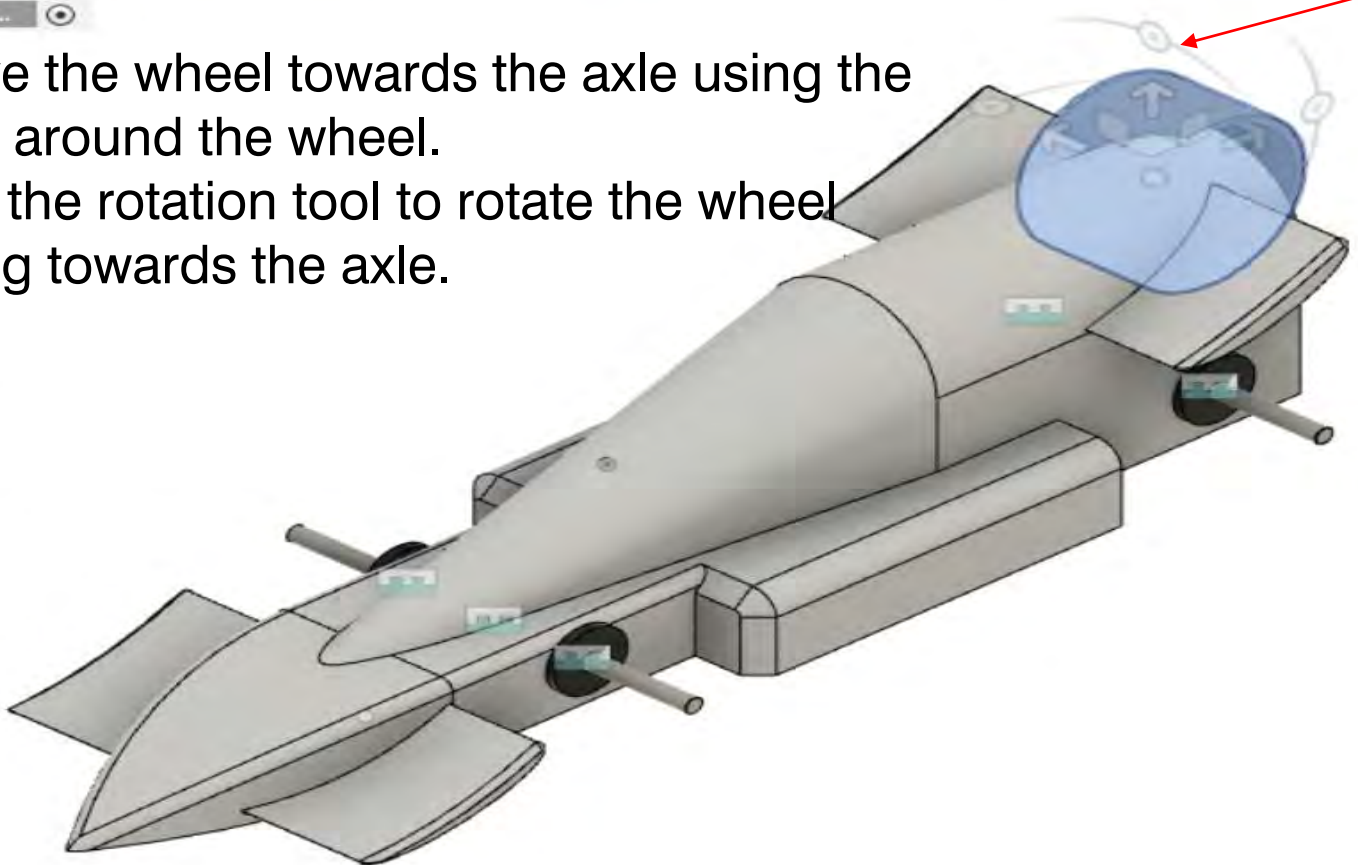
1. Right click on the wheel you have uploaded in the data panel.
2. Select 'Insert into Current Design'



BROWSER

- no_go_zone_2019_2020_ent...
- Document Settings
- Named Views
- Origin
- Joints
- Bodies
- Sketches
- Construction
- f1_axle v1:1
- f1_axle v1 (1):1
- f1_axle_bush v1:1
- f1_axle_bush v1 (1):1
- f1_axle_bush v1 (2):1
- f1_axle_bush v1 (3):1
- f1_wheel v1:1**

1- Move the wheel towards the axle using the arrows around the wheel.
2- Use the rotation tool to rotate the wheel pointing towards the axle.



MOVE/COPY

Move Object Components

Selection **1 selected** X

Move Type

Set Pivot

X Distance 0.00 mm

Y Distance 0.00 mm

Z Distance 0.00 mm

X Angle 0.0 deg

Y Angle 0.0 deg

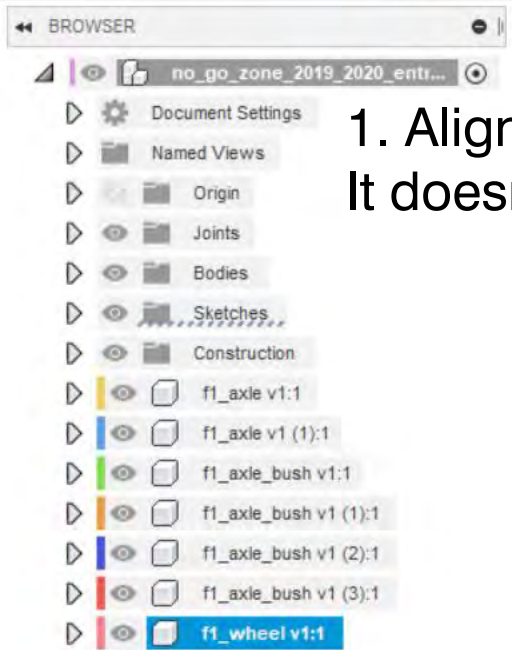
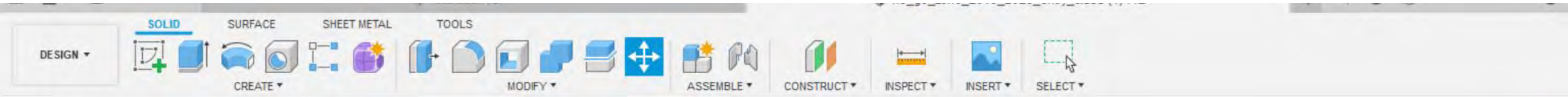
Z Angle 0.0 deg

Create Copy

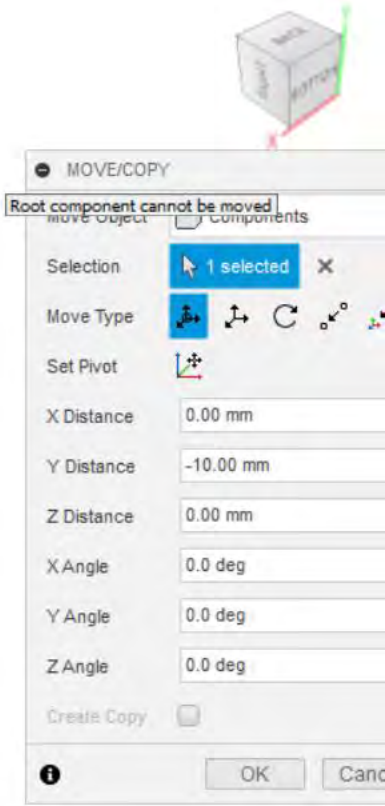
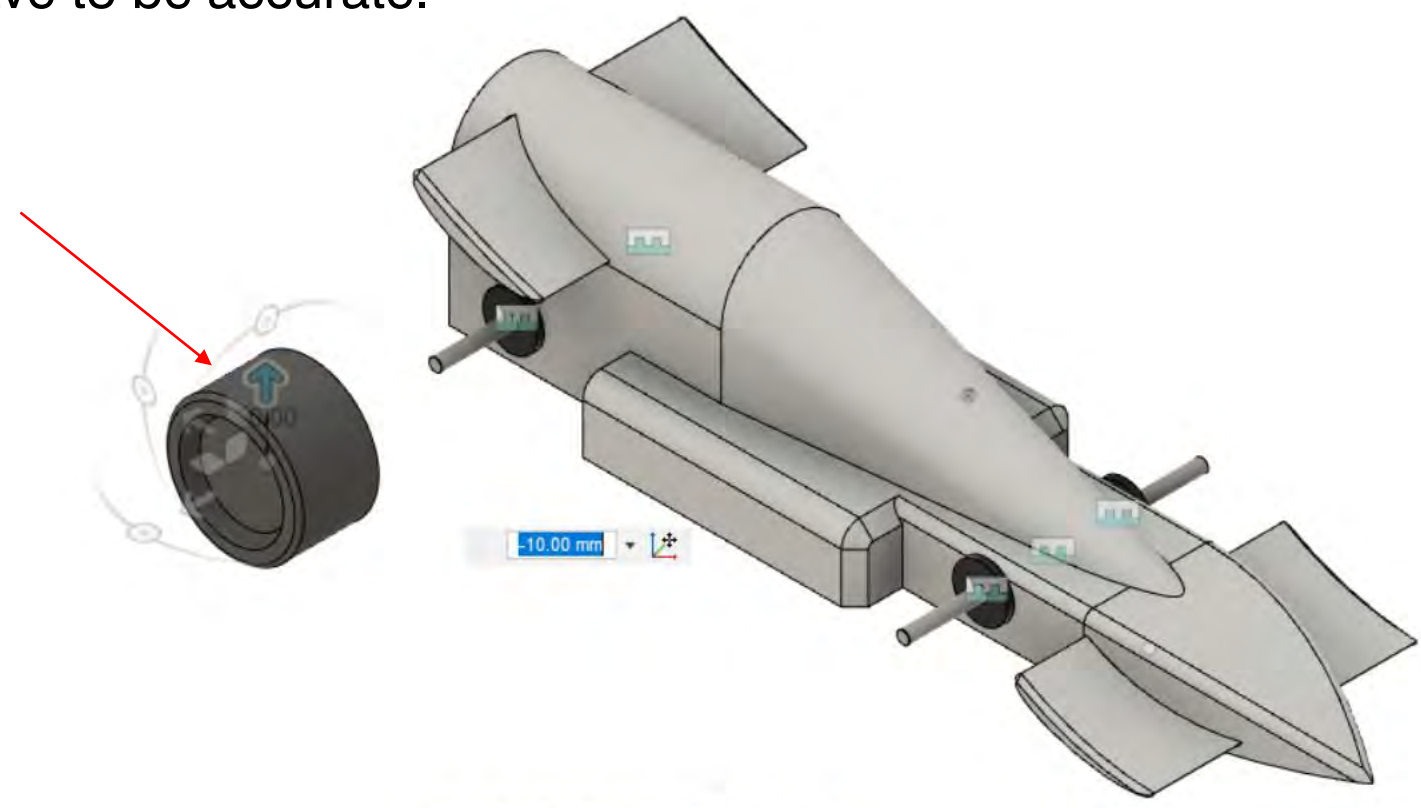
OK Cancel

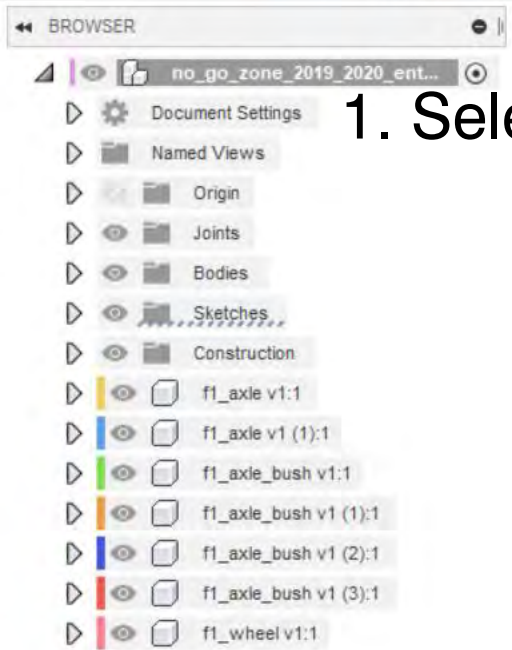
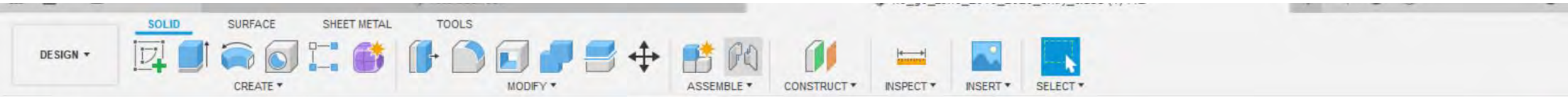
COMMENTS





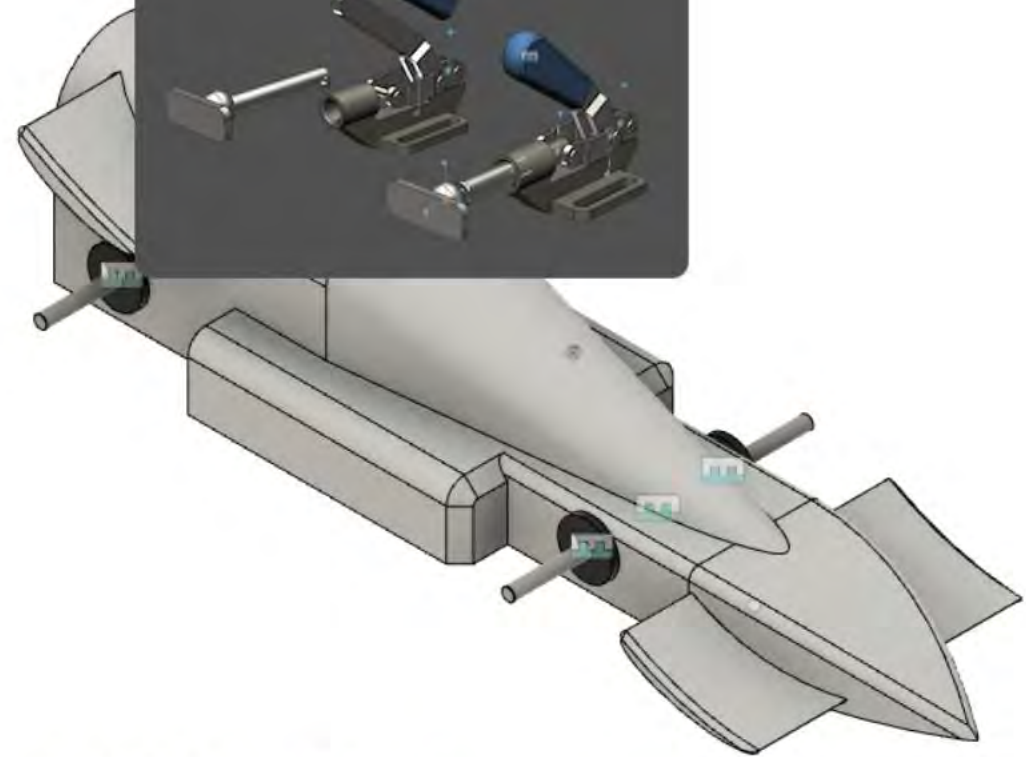
1. Align the wheel to the axle the best you can.
It doesn't have to be accurate.

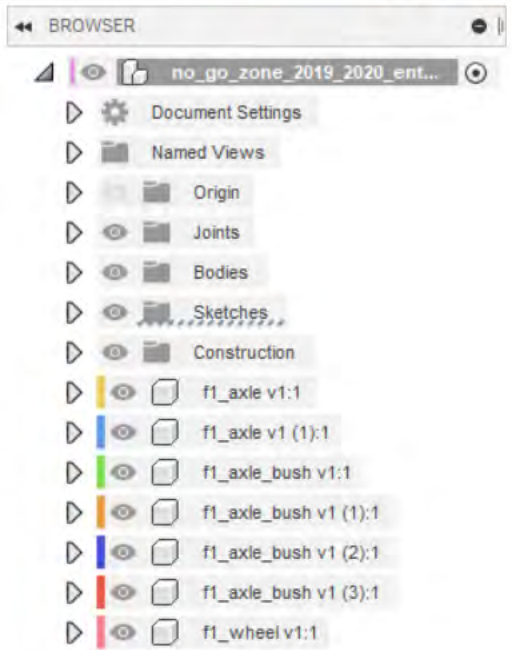
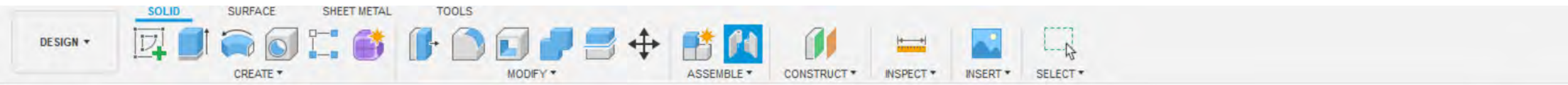




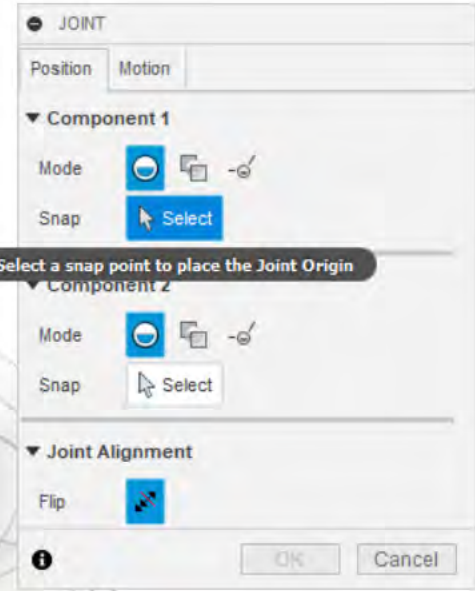
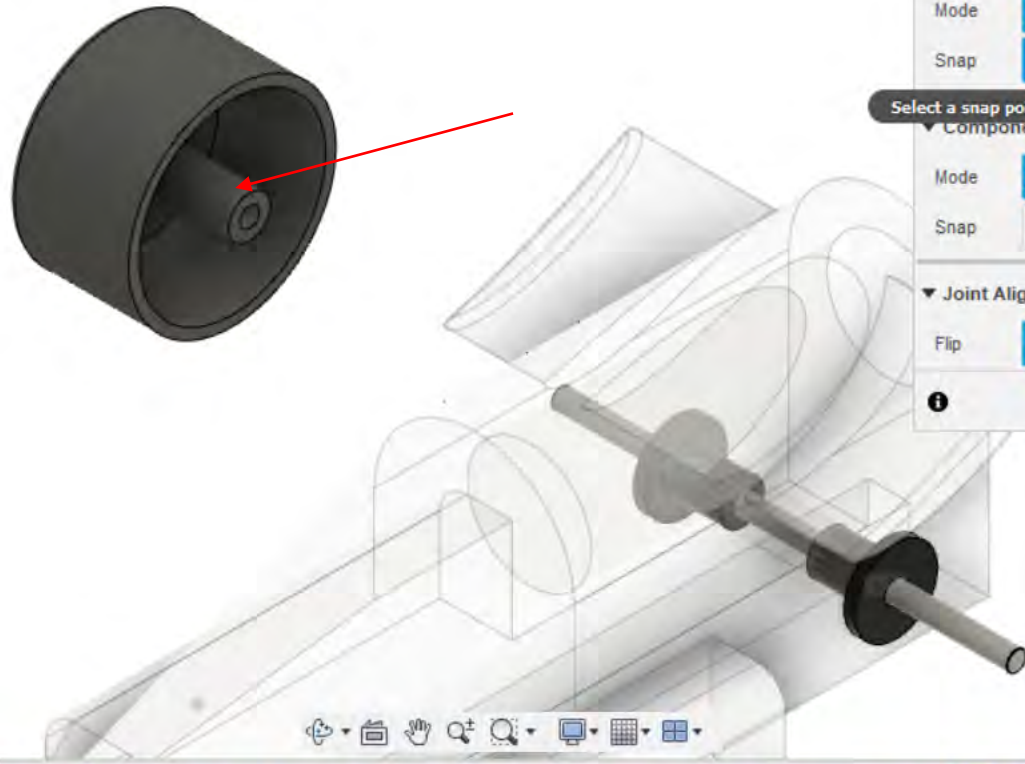
1. Select 'Joint' in Assemble.

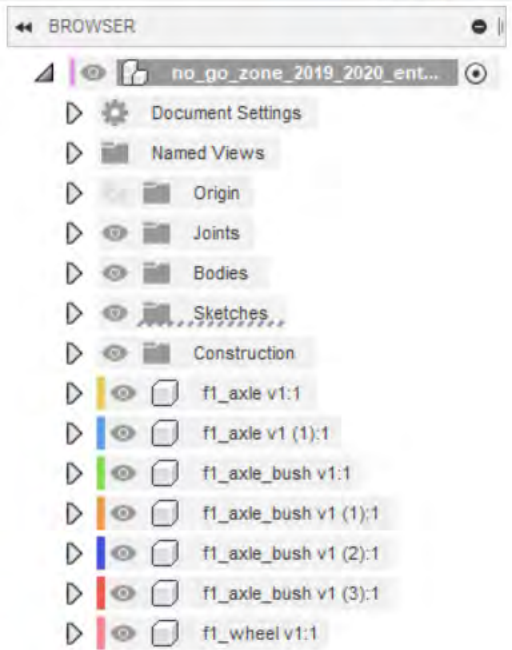
Joint (j)
Positions components relative to one another and defines the relative motion.
Select geometry or joint origins to define the joint. Specify the type to define the relative motion.



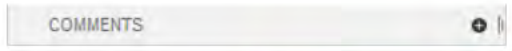
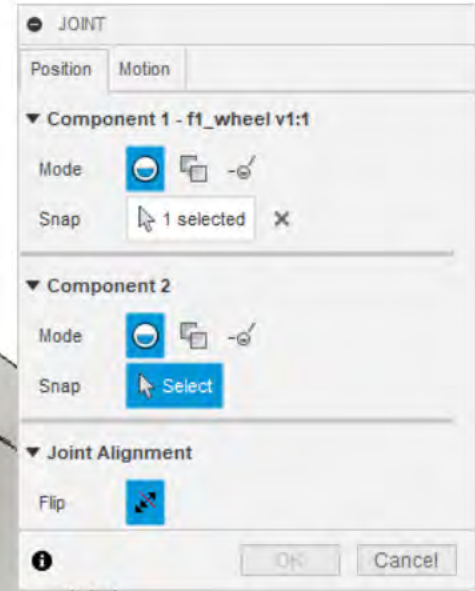
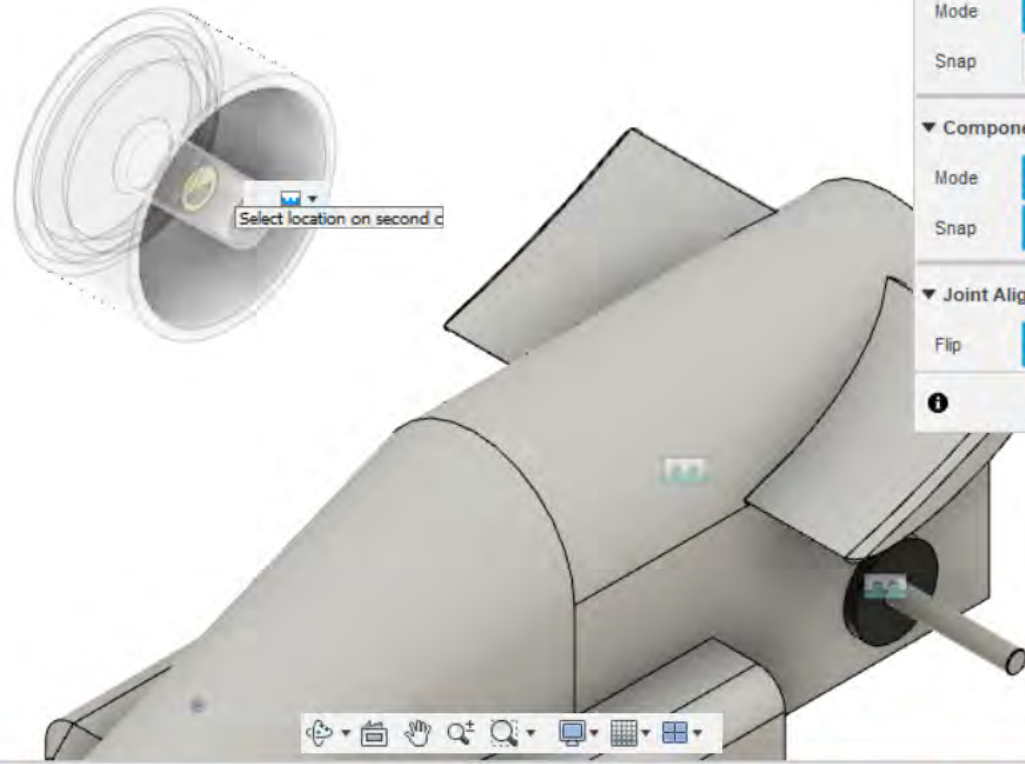


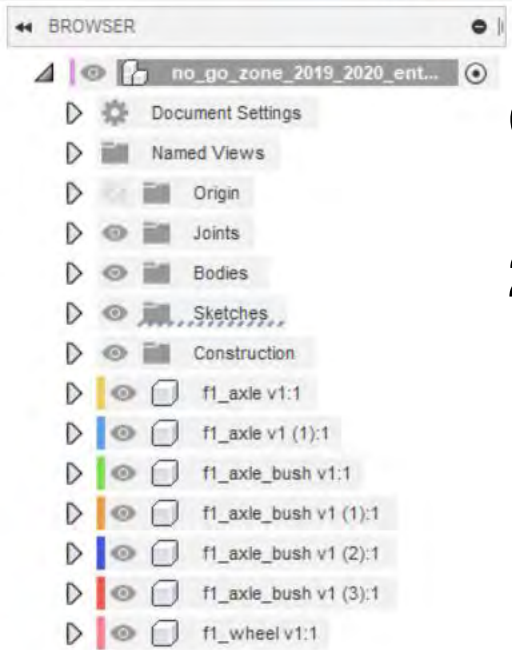
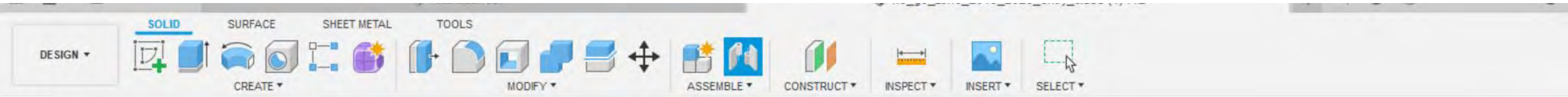
Component 1
1- Click Select (next to snap)
2- Select the inside of the wheel
(red arrow)





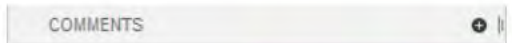
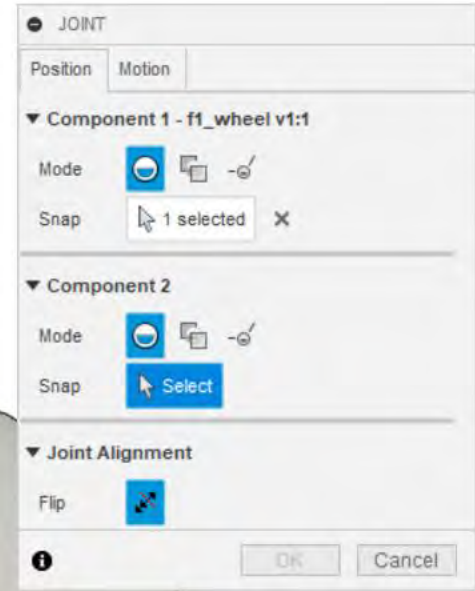
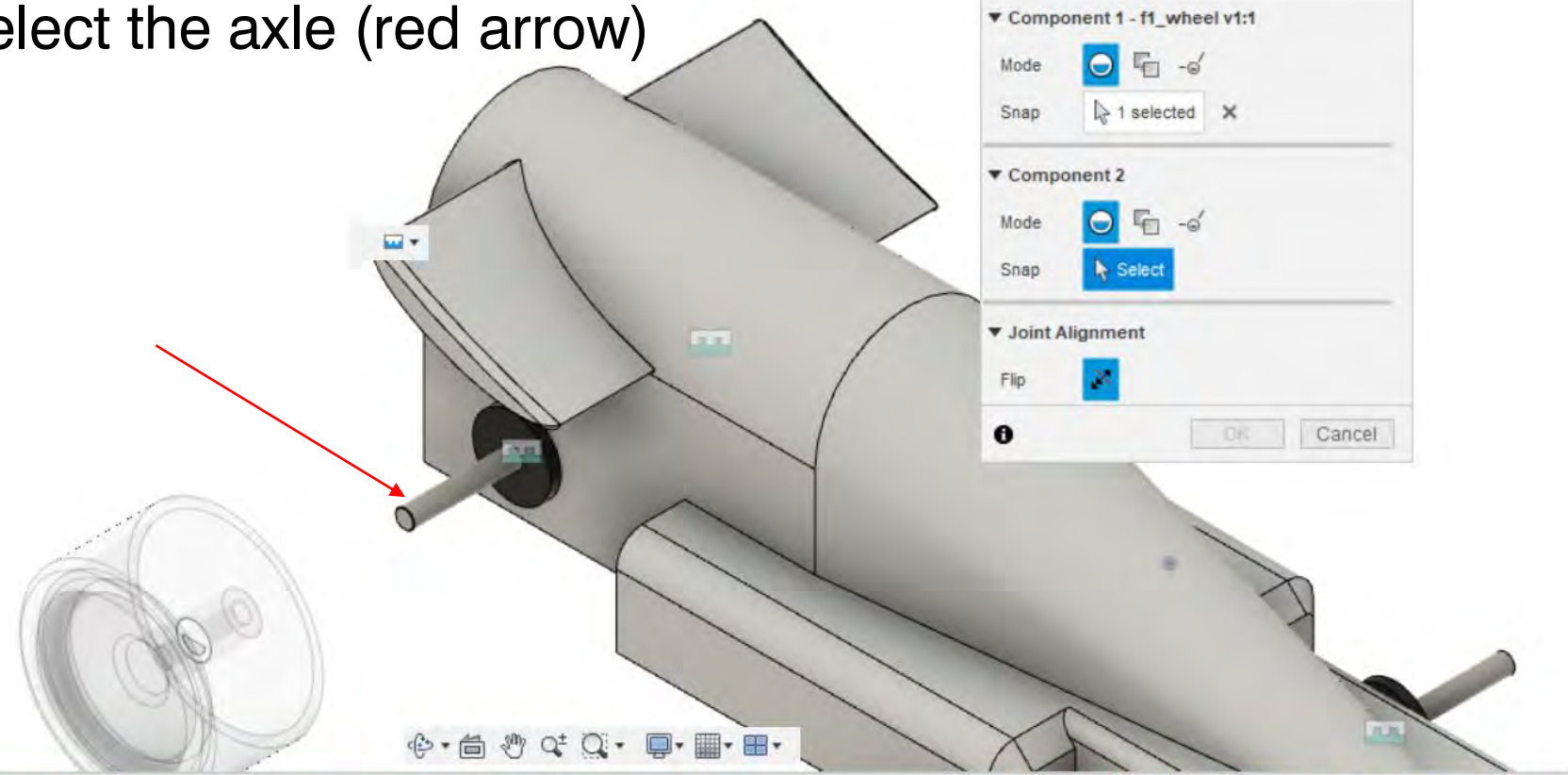
The wheel will turn transparent.

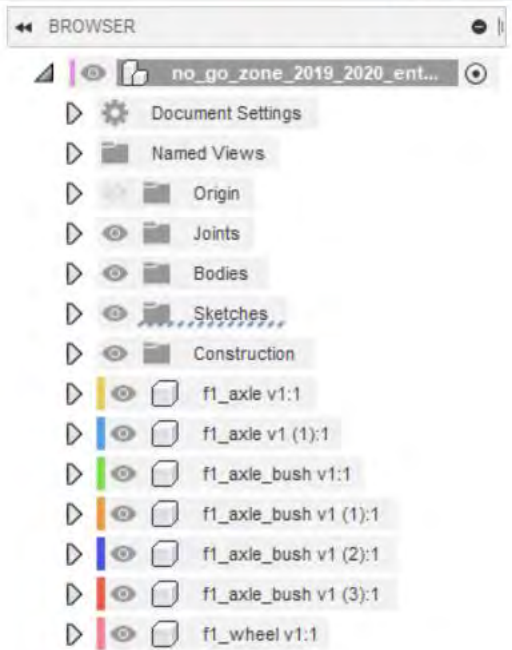
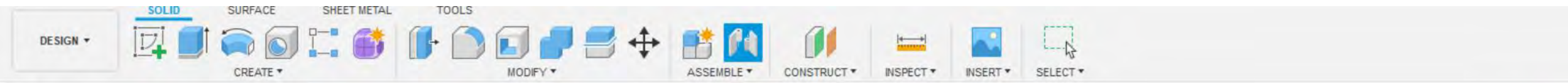




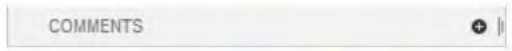
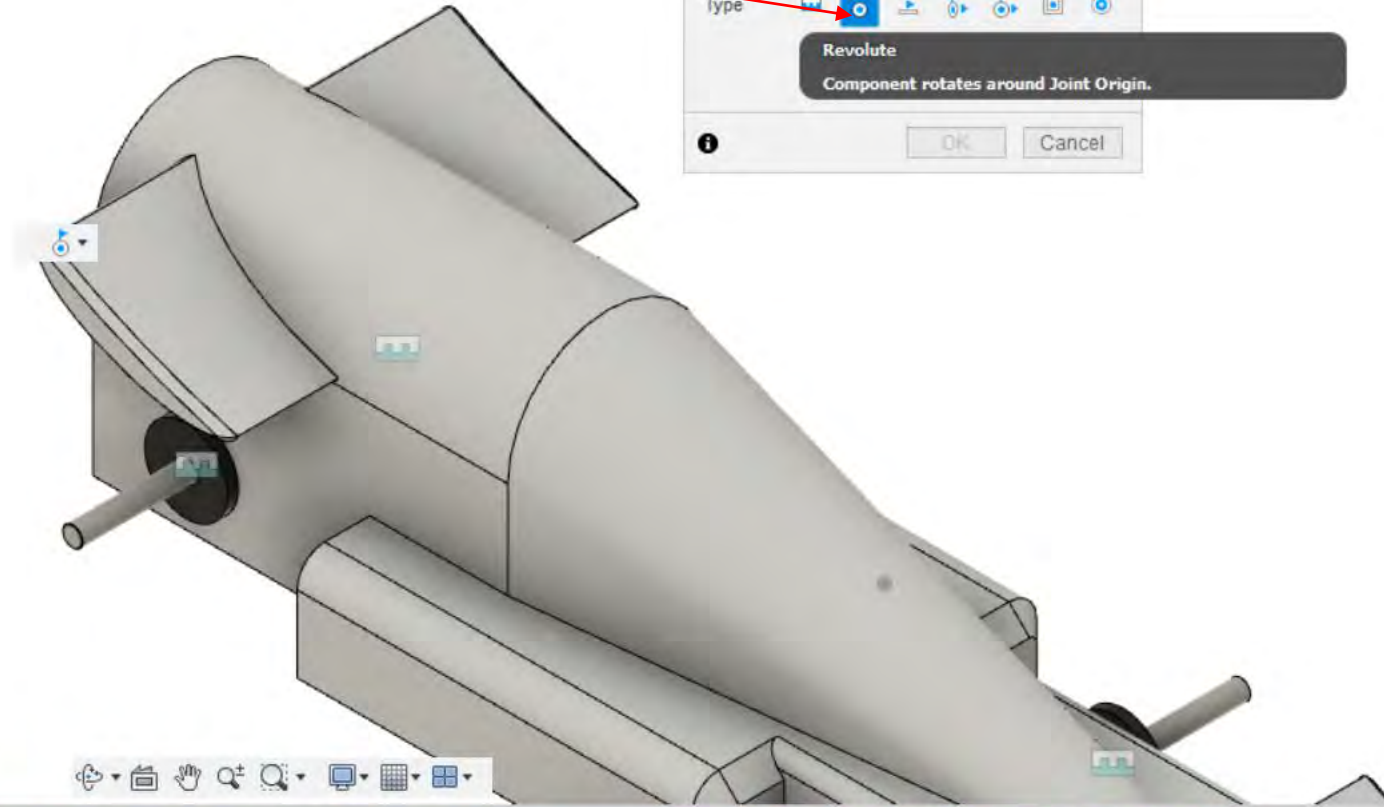
Component 2

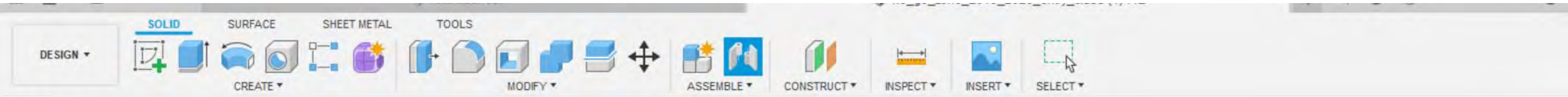
- 1- Click Select (next to snap)
- 2- Select the axle (red arrow)



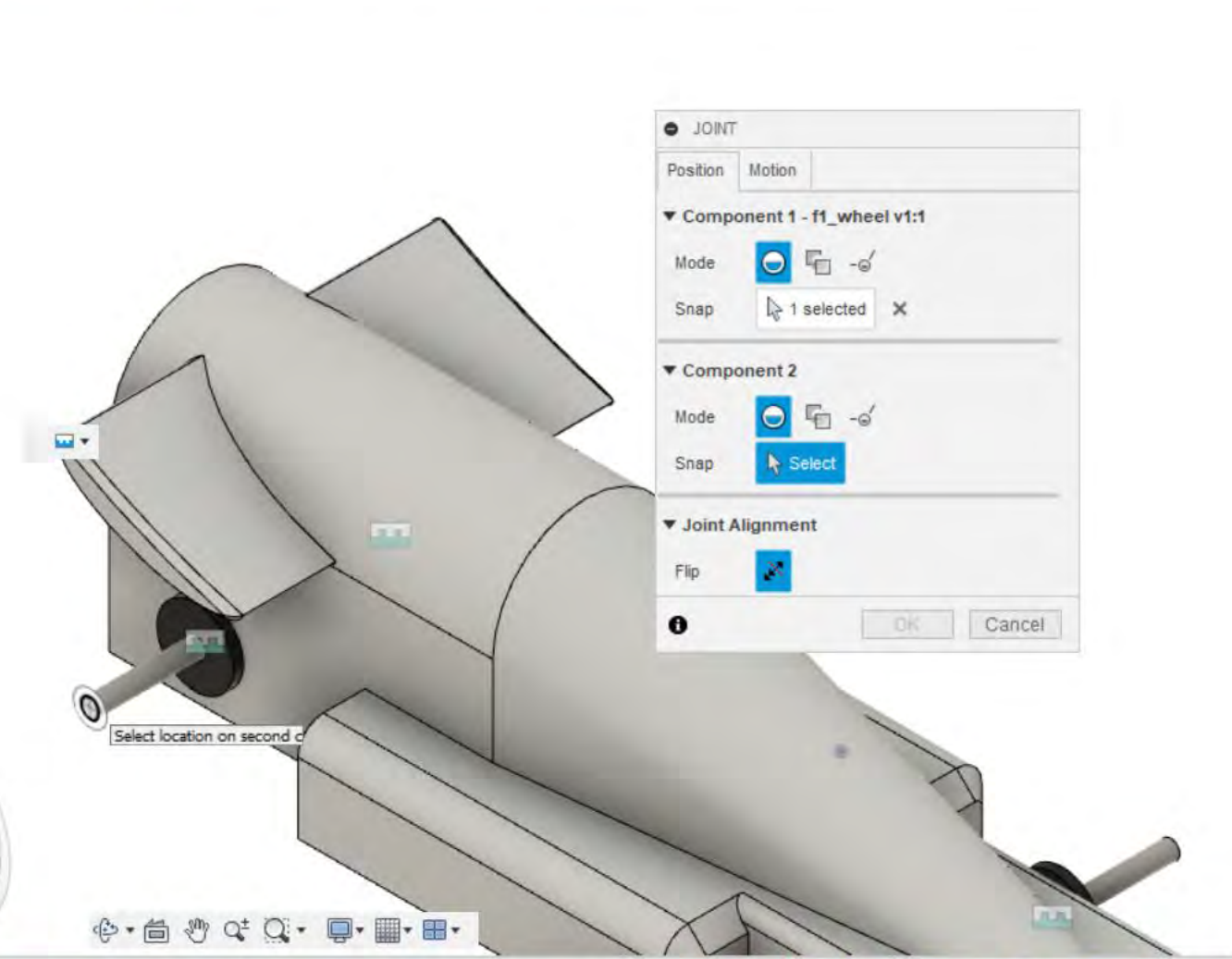


1. Select motion
2. Select 'Revolute'- This will make your wheels turn.





- BROWSER
- no_go_zone_2019_2020_ent...
 - Document Settings
 - Named Views
 - Origin
 - Joints
 - Bodies
 - Sketches
 - Construction
 - f1_axle v1:1
 - f1_axle v1 (1):1
 - f1_axle_bush v1:1
 - f1_axle_bush v1 (1):1
 - f1_axle_bush v1 (2):1
 - f1_axle_bush v1 (3):1
 - f1_wheel v1:1



JOINT

Position Motion

▼ Component 1 - f1_wheel v1:1

Mode

Snap 1 selected

▼ Component 2

Mode

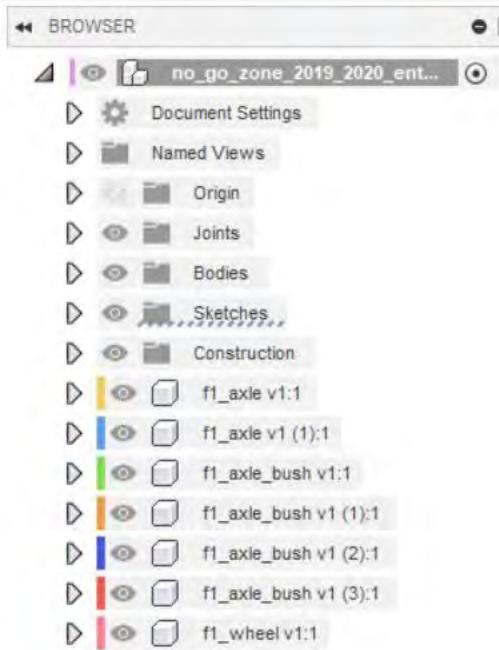
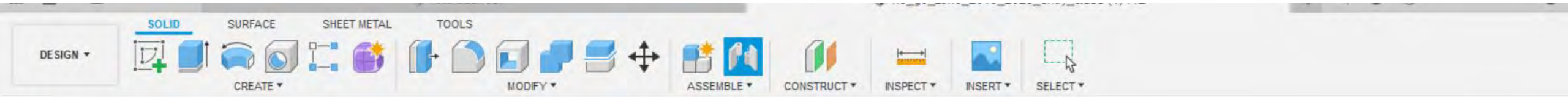
Snap Select

▼ Joint Alignment

Flip

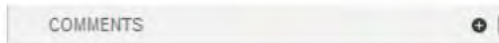
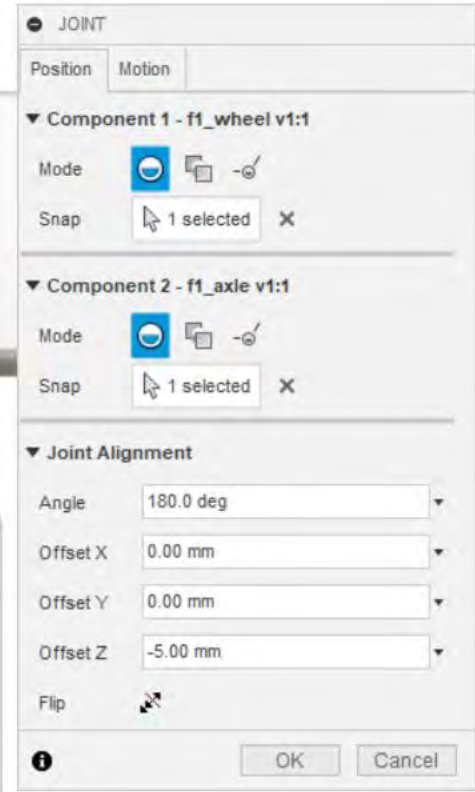
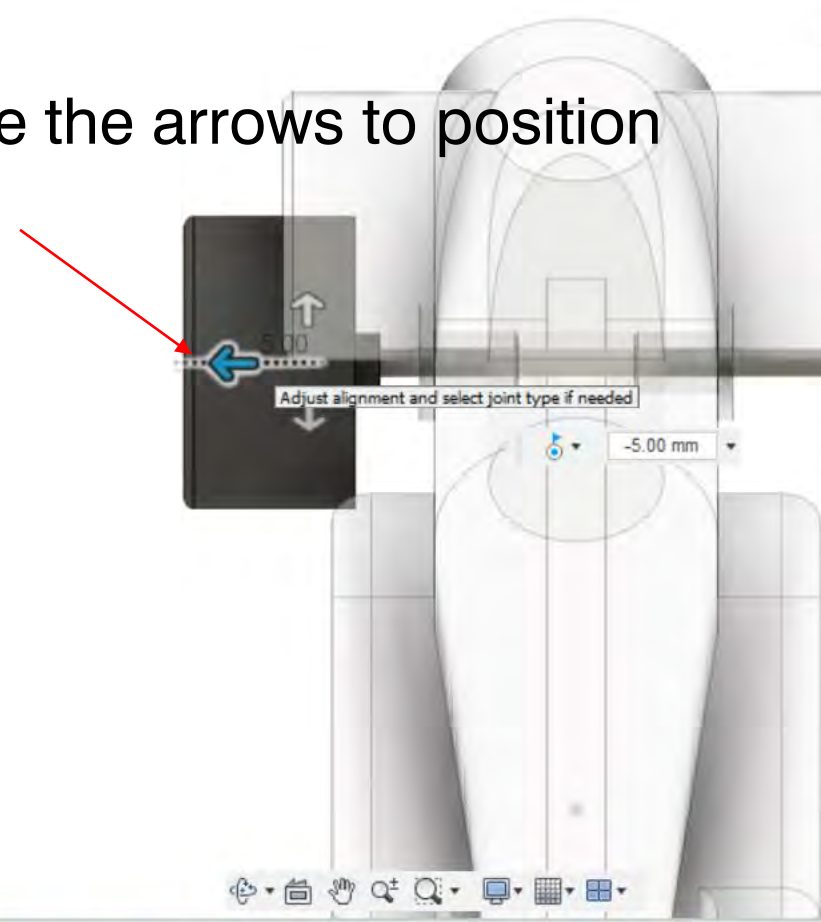
COMMENTS





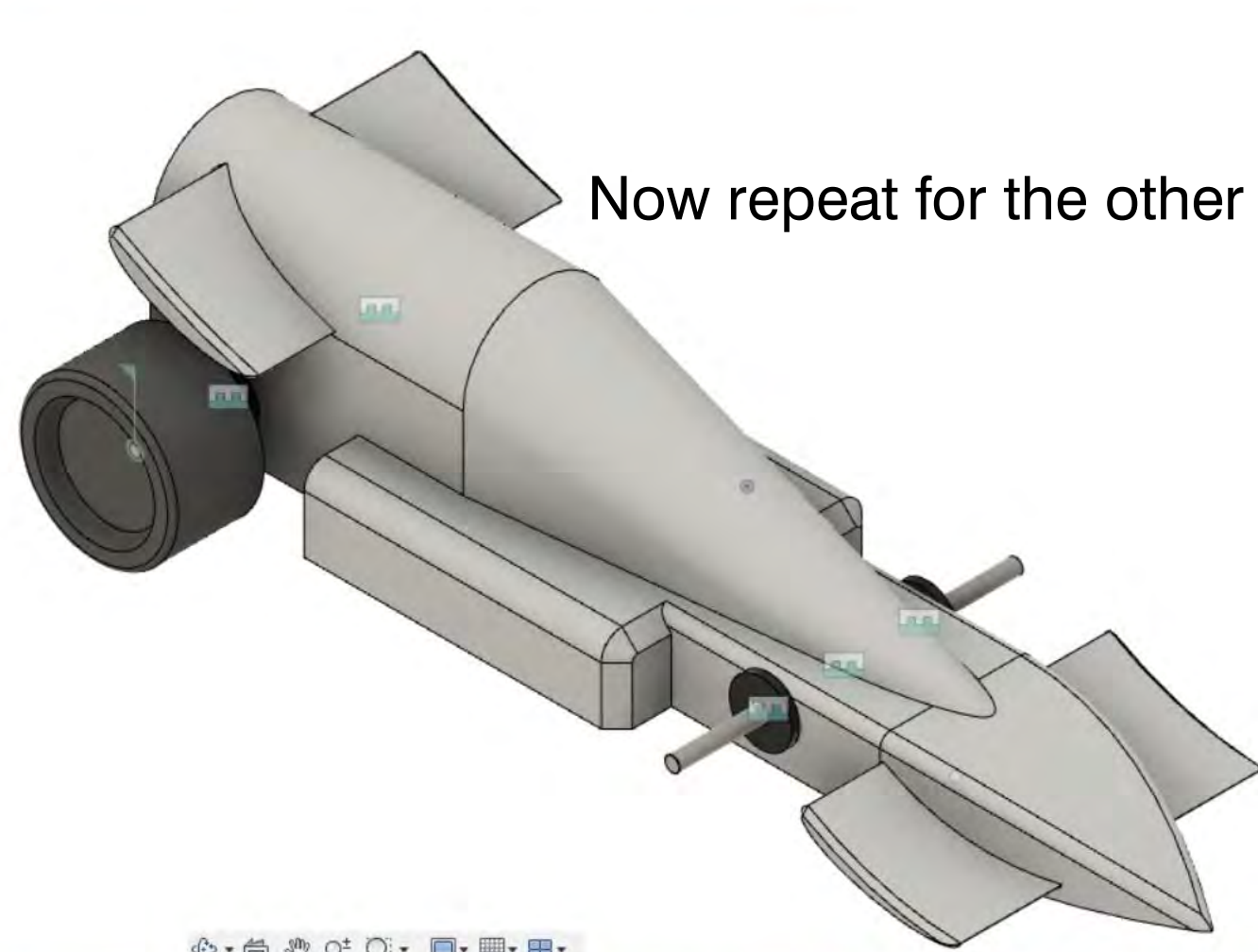
The wheel will automatically join the axle.

You can use the arrows to position the wheel.

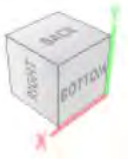




- BROWSER
- no_go_zone_2019_2020_ent...
 - Document Settings
 - Named Views
 - Origin
 - Joints
 - Bodies
 - Sketches
 - Construction
 - f1_axle v1:1
 - f1_axle v1 (1):1
 - f1_axle_bush v1:1
 - f1_axle_bush v1 (1):1
 - f1_axle_bush v1 (2):1
 - f1_axle_bush v1 (3):1
 - f1_wheel v1:1



Now repeat for the other 3 wheels.



Data

People

Upload

New Folder



Parts

f1_axle

1:35:46 PM

V1

f1_axle_bush

1:35:54 PM

V1

f1_wheel

2:03:08 PM

V1

DESIGN



CREATE

MODIFY

ASSEMBLE

CONSTRUCT

INSPECT

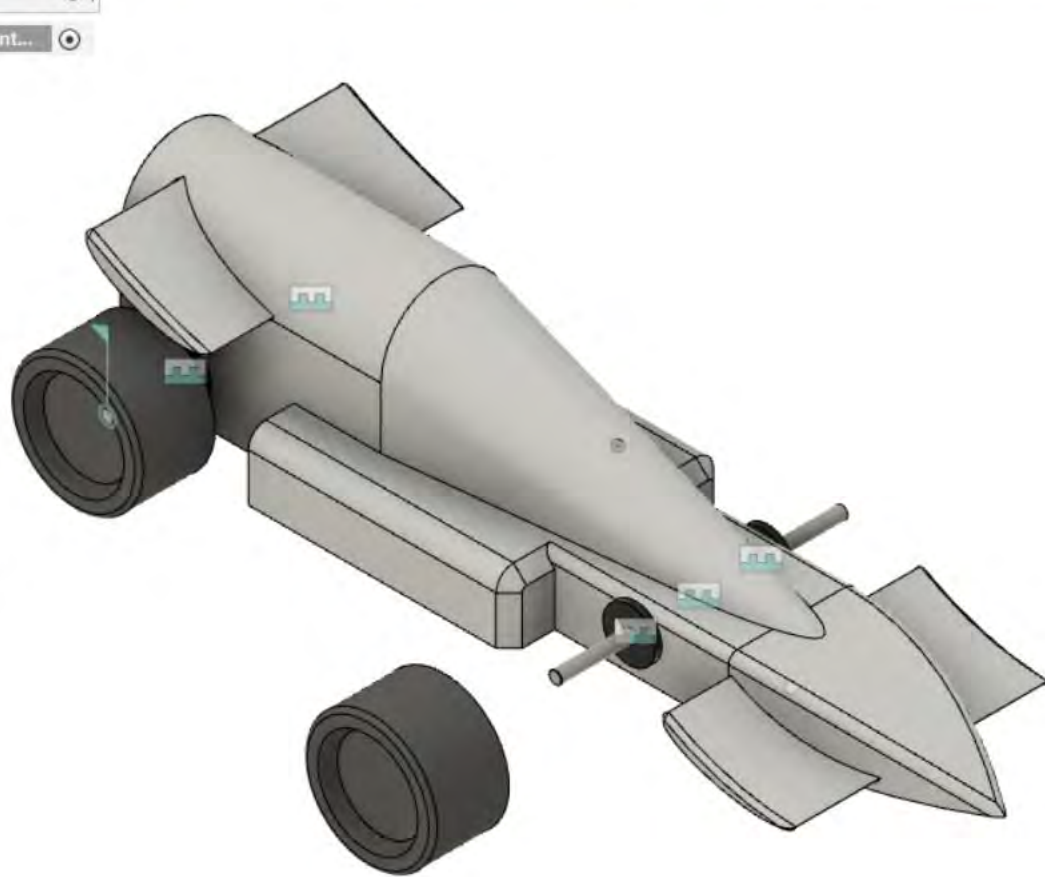
INSERT

SELECT

BROWSER

no_go_zone_2019_2020_ent...

- Document Settings
- Named Views
- Origin
- Joints
- Bodies
- Sketches
- Construction
- f1_axle v1:1
- f1_axle v1 (1):1
- f1_axle_bush v1:1
- f1_axle_bush v1 (1):1
- f1_axle_bush v1 (2):1
- f1_axle_bush v1 (3):1
- f1_wheel v1:1
- f1_wheel v1 (1):1

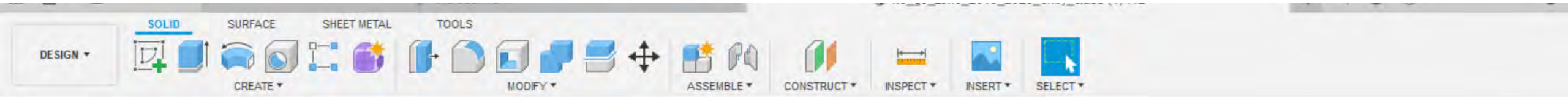


COMMENTS



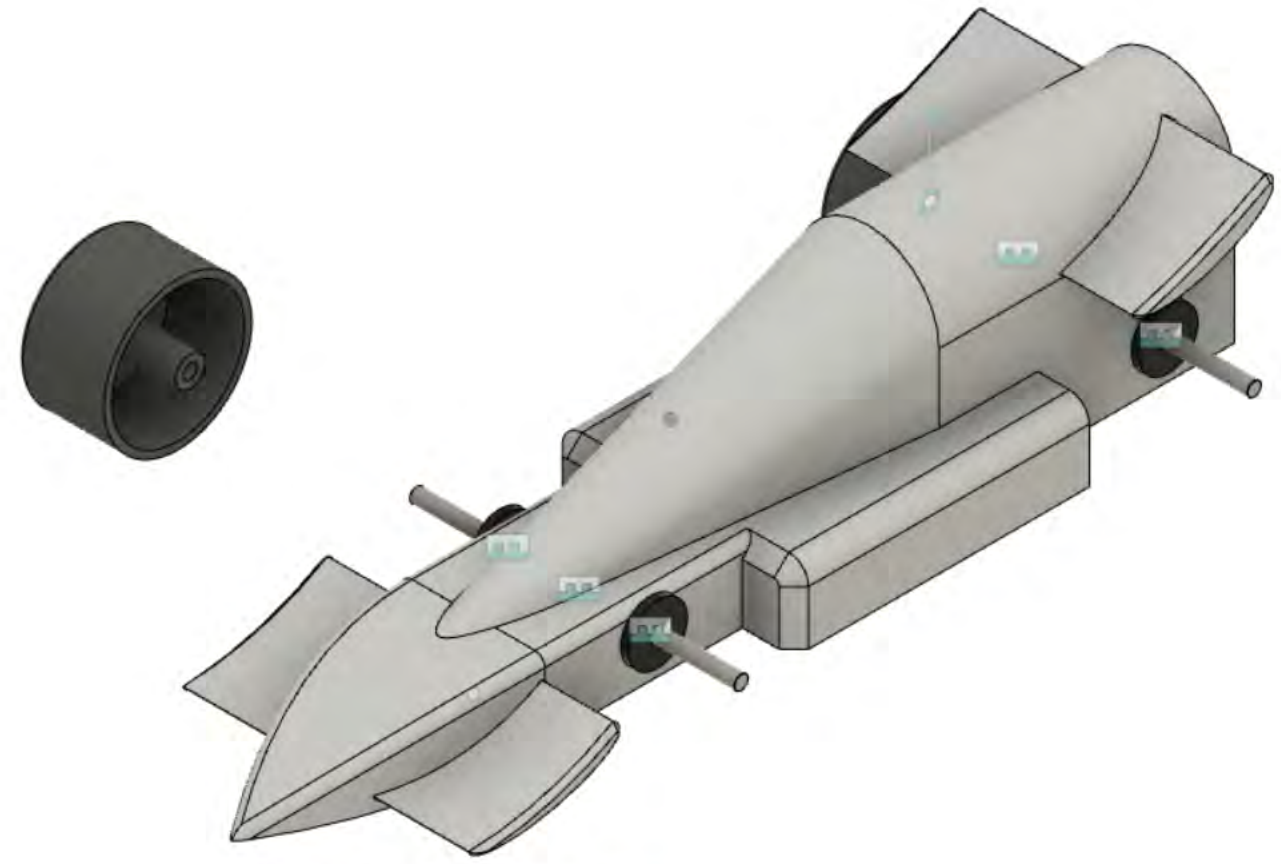
Upload progress





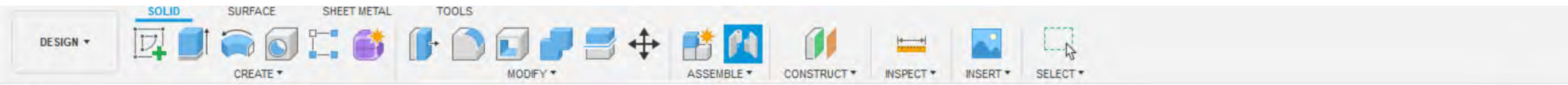
BROWSER

- no_go_zone_2019_2020_entr...
- Document Settings
- Named Views
- Origin
- Joints
- Bodies
- Sketches
- Construction
- f1_axle v1:1
- f1_axle v1 (1):1
- f1_axle_bush v1:1
- f1_axle_bush v1 (1):1
- f1_axle_bush v1 (2):1
- f1_axle_bush v1 (3):1
- f1_wheel v1:1
- f1_wheel v1 (1):1

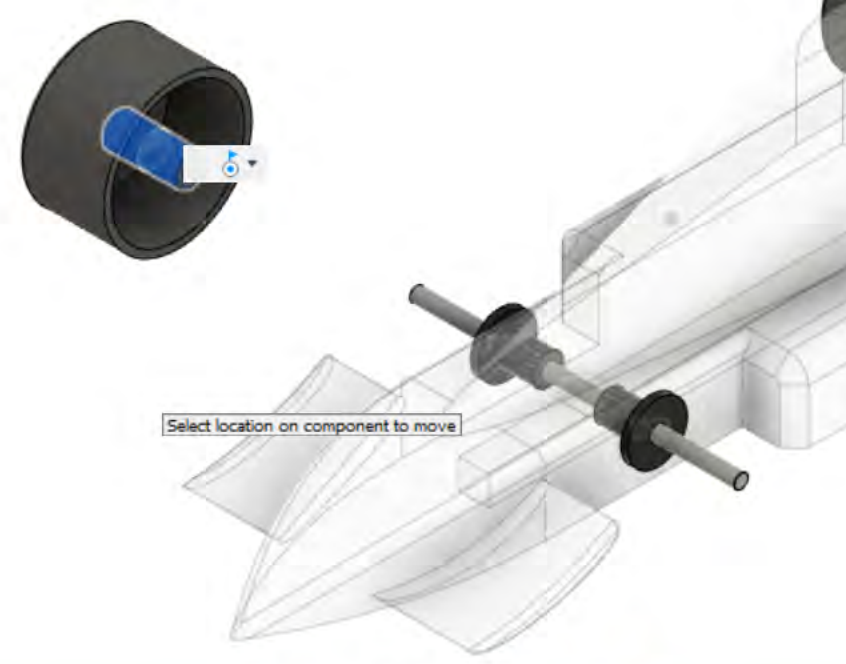


COMMENTS





- BROWSER
- no_go_zone_2019_2020_entr...
 - Document Settings
 - Named Views
 - Origin
 - Joints
 - Bodies
 - Sketches
 - Construction
 - f1_axle v1:1
 - f1_axle v1 (1):1
 - f1_axle_bush v1:1
 - f1_axle_bush v1 (1):1
 - f1_axle_bush v1 (2):1
 - f1_axle_bush v1 (3):1
 - f1_wheel v1:1
 - f1_wheel v1 (1):1



JOINT

Position Motion

▼ Component 1 - f1_wheel v1 (1):1

Mode

Snap 1 selected

▼ Component 2

Mode

Snap Select

▼ Joint Alignment

Flip



COMMENTS



1 Face | Area : 285.248 mm^2



DESIGN ▾

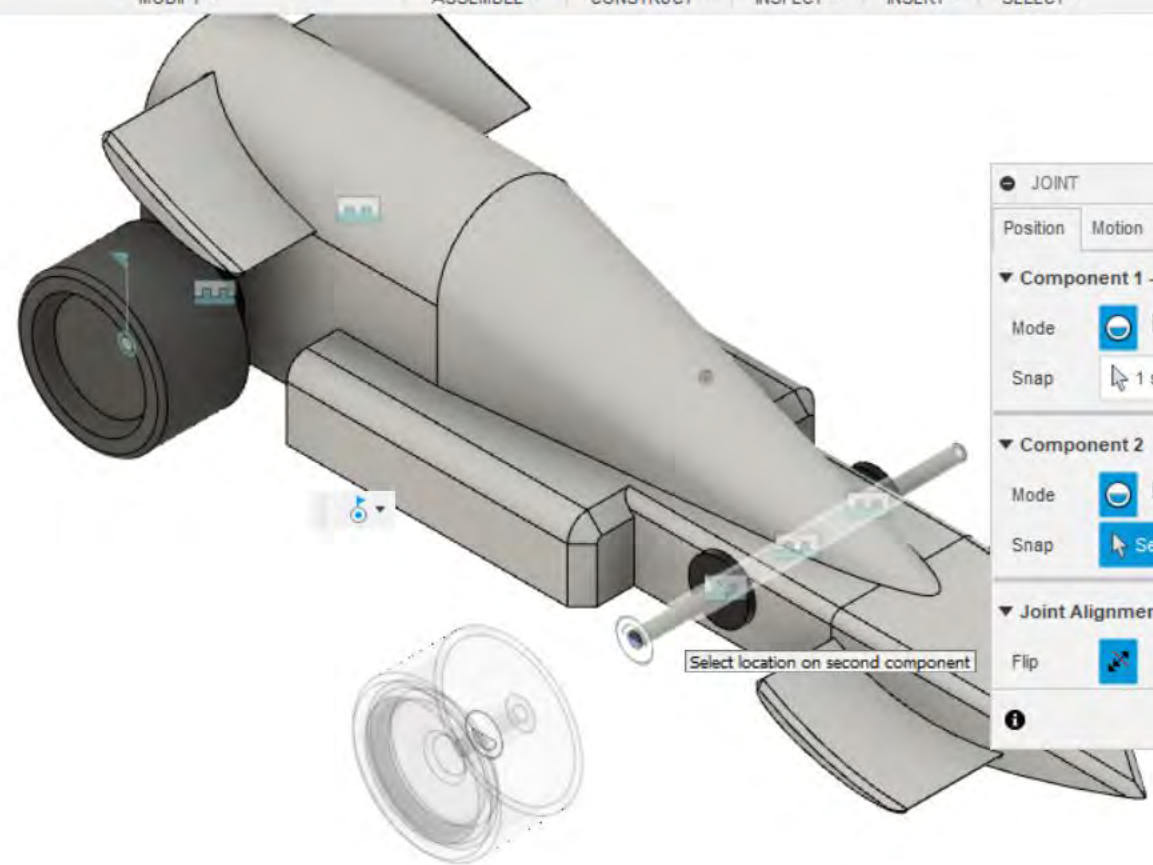
SOLID SURFACE SHEET METAL TOOLS

CREATE ▾ MODIFY ▾ ASSEMBLE ▾ CONSTRUCT ▾ INSPECT ▾ INSERT ▾ SELECT ▾

BROWSER

no_go_zone_2019_2020_entr...

- Document Settings
- Named Views
- Origin
- Joints
- Bodies
- Sketches
- Construction
- f1_axle v1:1
- f1_axle v1 (1):1
- f1_axle_bush v1:1
- f1_axle_bush v1 (1):1
- f1_axle_bush v1 (2):1
- f1_axle_bush v1 (3):1
- f1_wheel v1:1
- f1_wheel v1 (1):1



JOINT

Position Motion

Component 1 - f1_wheel v1 (1):1

Mode

Snap X

Component 2

Mode

Snap

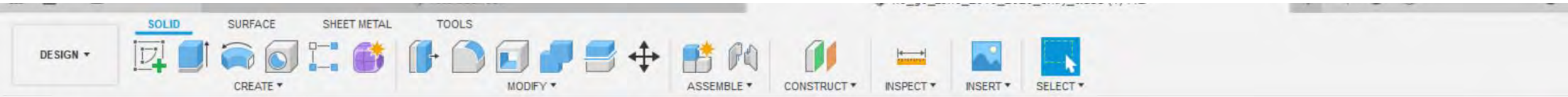
Joint Alignment

Flip

OK Cancel

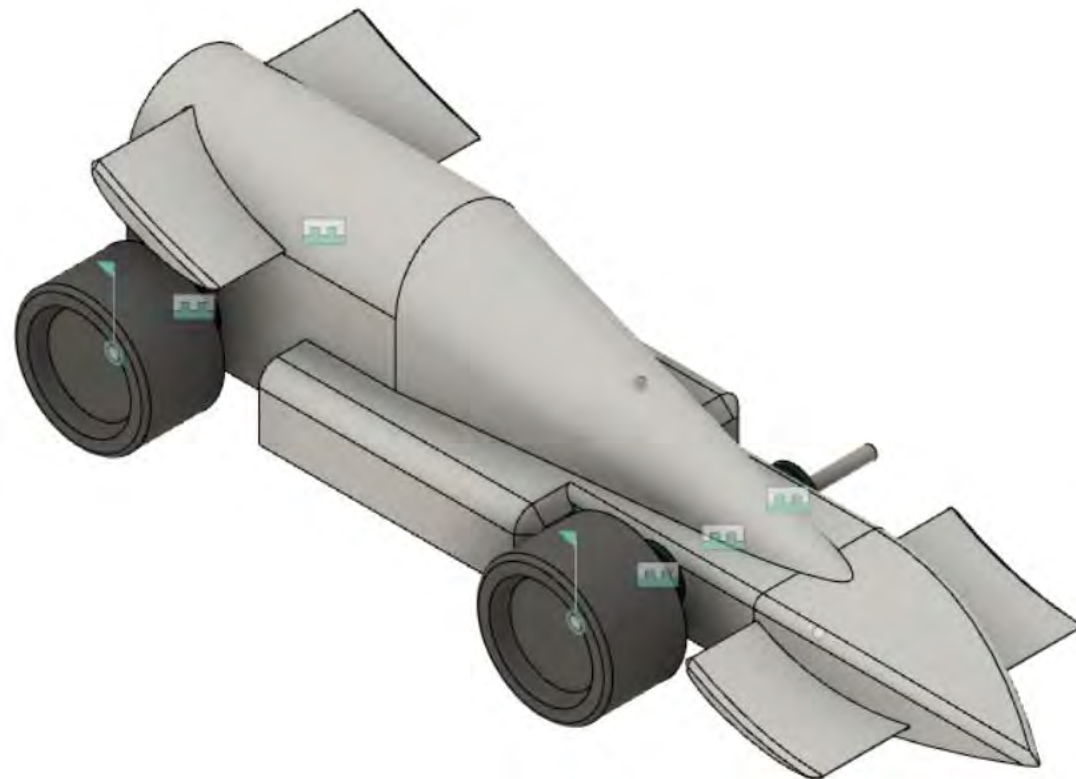
COMMENTS

Navigation icons: back, forward, search, zoom, etc.



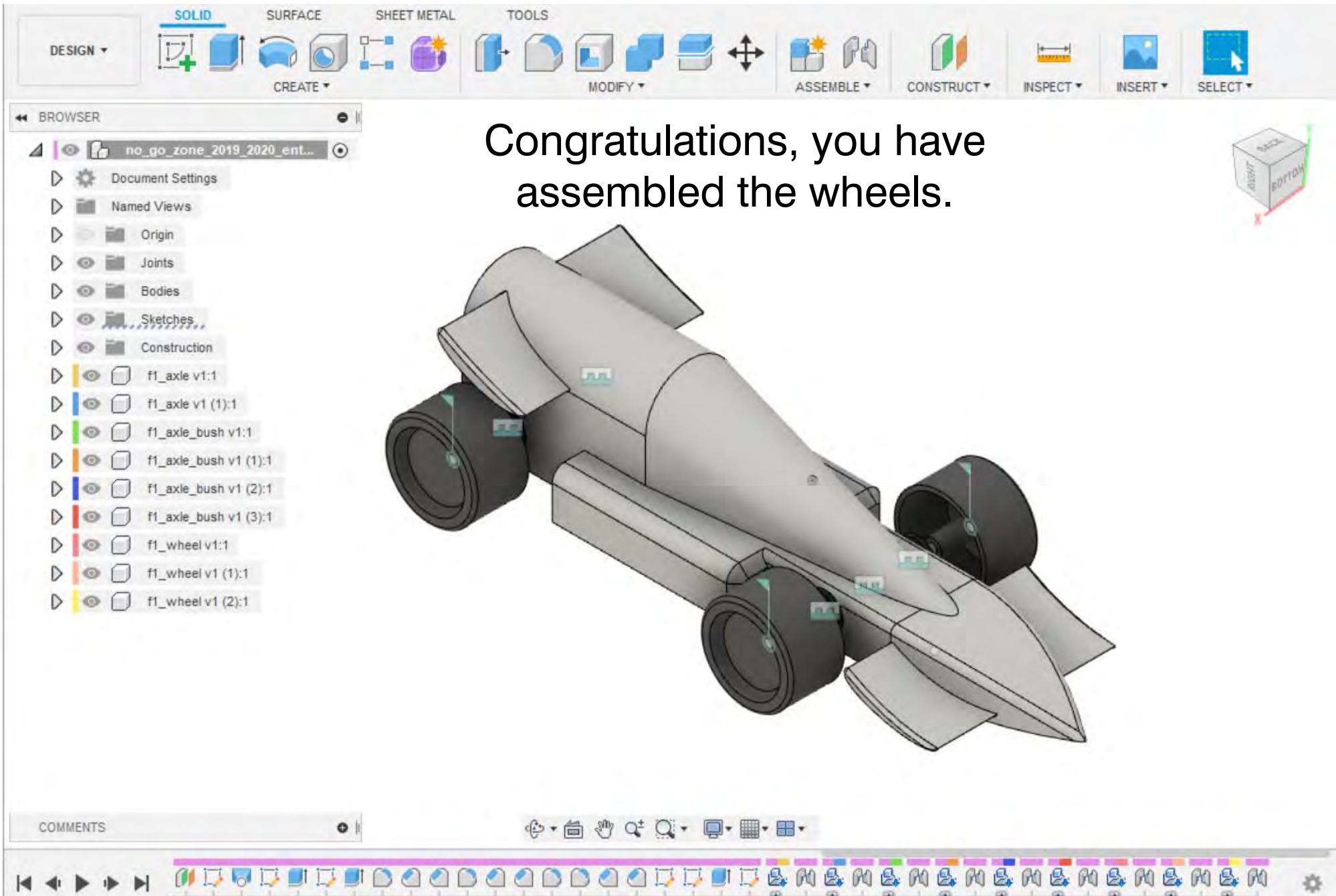
BROWSER

- no_go_zone_2019_2020_entr...
- Document Settings
- Named Views
- Origin
- Joints
- Bodies
- Sketches
- Construction
- f1_axle v1:1
- f1_axle v1 (1):1
- f1_axle_bush v1:1
- f1_axle_bush v1 (1):1
- f1_axle_bush v1 (2):1
- f1_axle_bush v1 (3):1
- f1_wheel v1:1
- f1_wheel v1 (1):1



COMMENTS





Congratulations, you have assembled the wheels.