

Activity 8

Assembling the axles

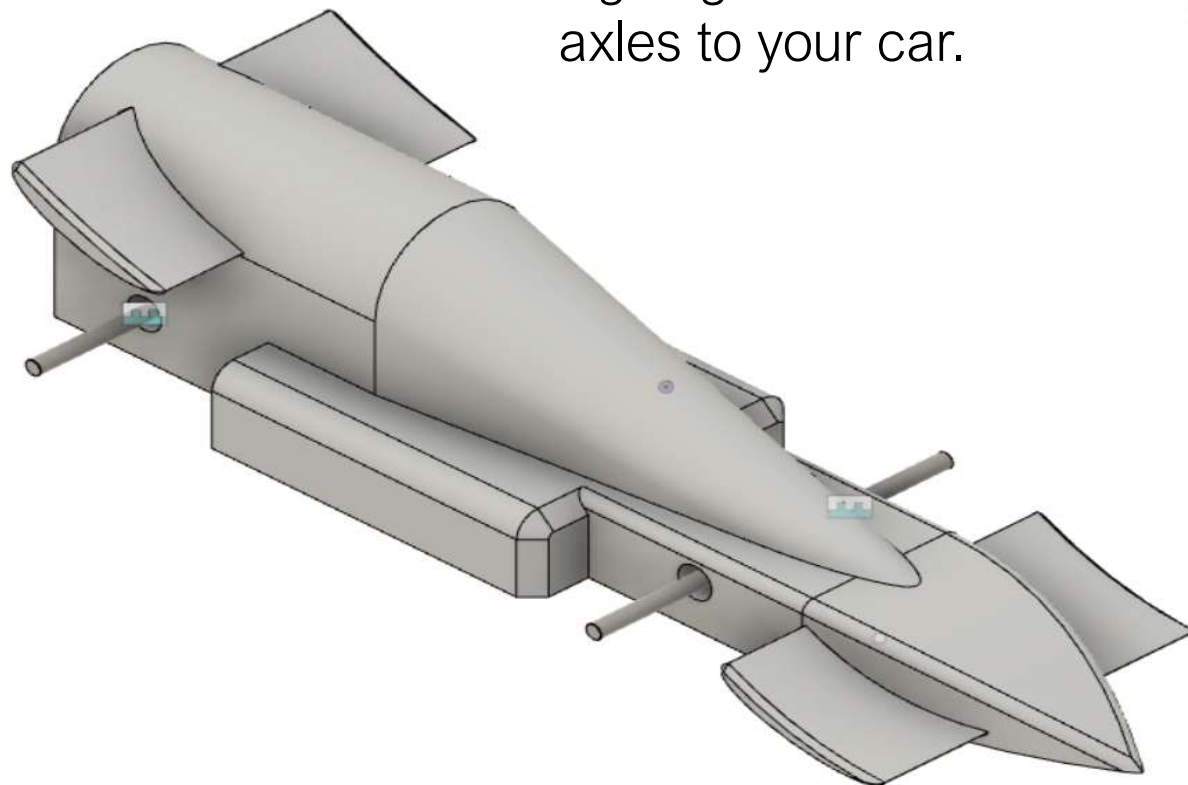
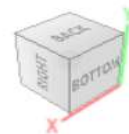




BROWSER

- no_go_zone_2019_2020_ent...
- Document Settings
- Named Views
- Origin
 - O
 - X
 - Y
 - Z
 - XY
 - XZ
 - YZ
- Joints
- Bodies
- Sketches
- Construction
- f1_axle v1:1
- f1_axle v1:2

You are going to assemble the axles to your car.



COMMENTS



1. Search F1 in Schools.

All Images News Videos Shopping More Settings Tools

About 59,100,000 results (0.48 seconds)

www.f1inschools.co.uk

F1 in Schools UK - Home

F1 in Schools Ltd is a not-for-profit company established with committed partners to provide an exciting yet challenging educational experience through the ...

Rules & Regs

The F1 in Schools competition is split into 3 classes: Entry ...

Events / Calendar

STAY UPDATED WITH ALL OUR EVENTS. Please see below the ...

[More results from f1inschools.co.uk »](#)

The Challenge

The F1 Logo, F1, FORMULA 1, GRAND PRIX, F1 IN SCHOOLS ...

About

Spanning age ranges of 9 to 19 our main objective is to help ...

www.f1inschools.com

F1 in schools Global - Home

World Finals. Teams from all round the world compete for the chance to be crowned the **F1 in Schools™** world champions.

Videos



A promotional banner for F1 in Schools. It features the 'in Schools UNITED KINGDOM' logo, a white F1 model car, a purple and white F1 model car, and a group of people standing with a trophy. Below the banner is the text 'F1 in Schools' and a description: 'F1 in Schools is an international STEM competition for school children, in which groups of 3–6 students have to design and manufacture a miniature car out of the official F1 Model Block using CAD/CAM design tools. The cars are powered by CO2 cartridges and are attached to a track by a nylon wire. Wikipedia'. There is also a 'More images' button and a share icon.

Feedback

1. Hover over 'THE CHALLENGE'
2. Select 'DOWNLOADS'

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- RULES & REGS
- DOWNLOADS
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- EVENTS / CALENDAR
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Welcome to F1 in Schools UK

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 **Lenovo**

 **AUTODESK.**


F1 Model Block


 Model Block (Inventor .ipt)
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 Model Block (Universal .igs)
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 Model Block (Universal .stp)
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Axle


 Axle (Inventor .ipt)
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 Axle (Universal .igs)
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 Axle (Universal .stp)
Download File

Wheel

 Wheel (Inventor .ipt)
Download File

 Wheel (Universal .igs)
Download File

 Wheels (Universal .stp)
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DOWNLOAD

Axle Bush


 Axle Bush (Inventor .ipt)
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 Axle Bush (Universal .igs)
Download File


 Axle Bush (Universal .stp)
Download File

- Axle Bush- Universal .igs
- Axle- Universal .igs
- Wheel Universal .igs


Entry Class NO-GO-ZONE


 NO_GO_ZONE_2020_2021_ENTRY_CLASS.ipt
Download File


 NO_GO_ZONE_2020_2021_ENTRY_CLASS.igs
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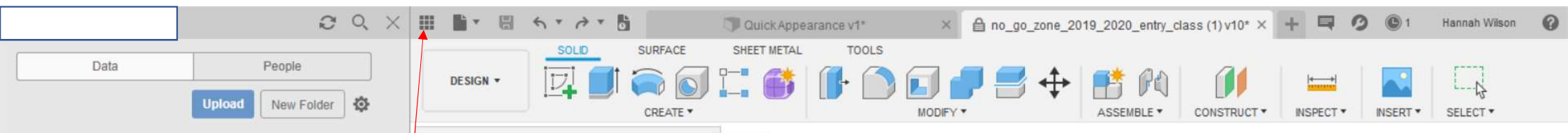
 NO_GO_ZONE_2020_2021_ENTRY_CLASS.stp
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Development Class NO-GO-ZONE

 NO_GO_ZONE_2020_2021_DEVELOPMENT_CLASS.ipt
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 NO_GO_ZONE_2020_2021_DEVELOPMENT_CLASS.igs
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 NO_GO_ZONE_2020_2021_DEVELOPMENT_CLASS.stp
Download File



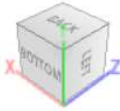
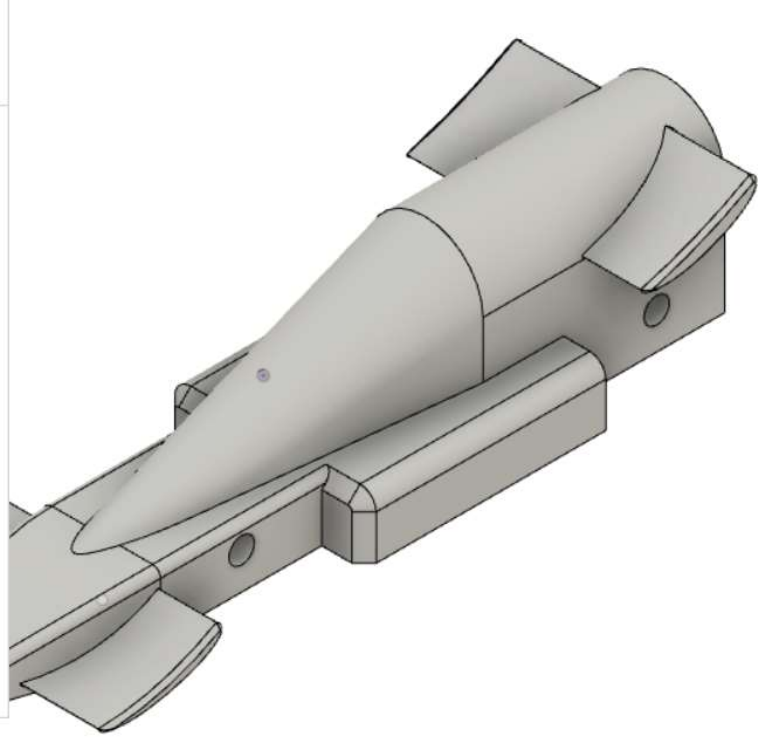
Upload

ON FUSION-

1. Click the 9 little square icon.
2. Drag and drop the 3 files you have downloaded.

Select Files or  Drag and Drop Here

Location: [Change Location](#)





Select:

- Axle
- Axle Bush
- Wheel

Drag the file to Fusion 360

Upload

1. Click 'Upload'

Select Files

or



NAME	TYPE	SIZE	REMOVE
f1_axle	IGS	14 kB	×
f1_axle_bush	IGS	28 kB	×
f1_wheel	IPT	156 kB	×

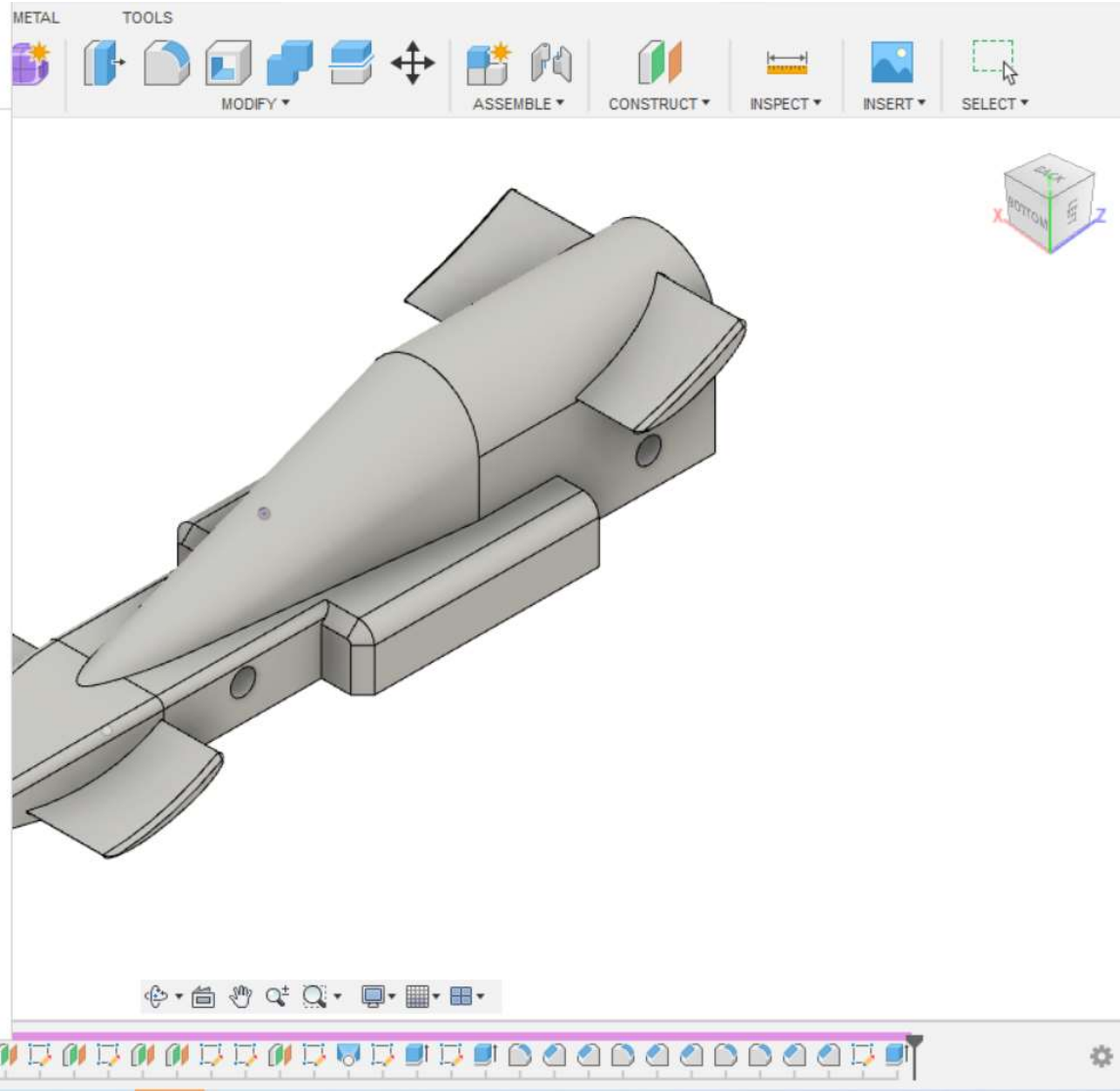
Location:

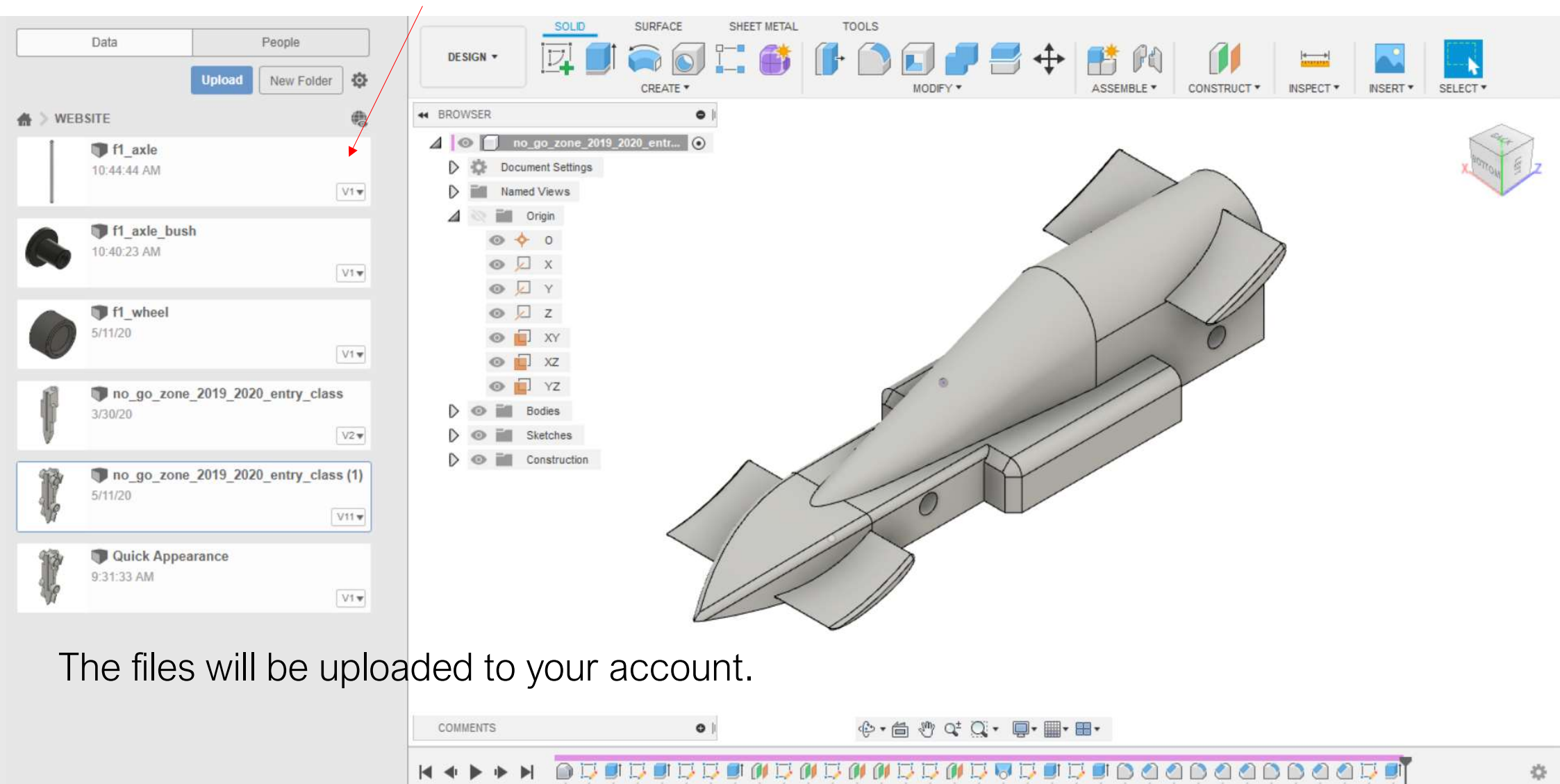
WEBSITE

Change Location

Cancel

Upload





The files will be uploaded to your account.

Data People

Upload New Folder

WEBSITE

- f1_axle 10:44:44 AM
- f1_ax 10:40:23 /
- f1_wl 5/11/20
- no_g 3/30/20
- no_go_zone_2019_2020_entry_class (1) 5/11/20
- Quick Appearance 9:31:33 AM

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

DESIGN

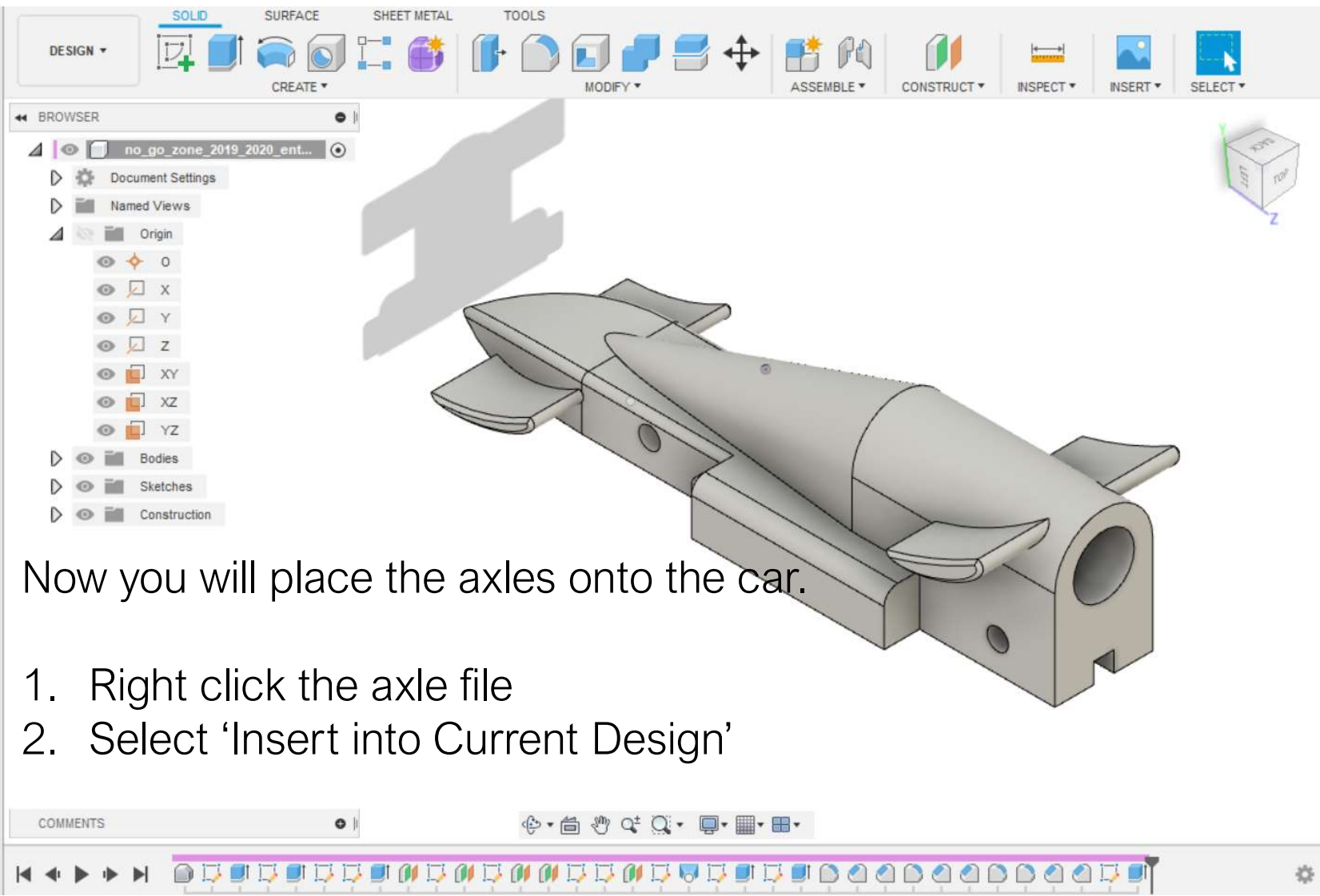
SOLID SURFACE SHEET METAL TOOLS

CREATE MODIFY ASSEMBLE CONSTRUCT INSPECT INSERT SELECT

BROWSER

- no_go_zone_2019_2020_ent...
- Document Settings
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COMMENTS



Now you will place the axles onto the car.

1. Right click the axle file
2. Select 'Insert into Current Design'

Data People

Upload New Folder

WEBSITE

- f1_axle
10:44:44 AM
- f1_axle_bush
10:40:23 AM
- f1_wheel
5/11/20
- no_go_zone_2019_2020_entry_class
3/30/20
- no_go_zone_2019_2020_entry_class (1)
5/11/20
- Quick Appearance
9:31:33 AM

MOVE/COPY

Move Object Components

Selection 1 selected

Move Type

Set Pivot

X Distance 0.00 mm

Y Distance 0.00 mm

Z Distance -160.00 mm

X Angle 0.0 deg

Y Angle 0.0 deg

Z Angle 0.0 deg

Create Copy

OK Cancel

SHEET METAL TOOLS

MODIFY ASSEMBLE CONSTRUCT INSPECT INSERT SELECT

Select ungrounded components to move

-160.00 mm

160.00

COMMENTS

f1_axle v1:1

Now your axle is in the car file.

1. Using the arrows, move your axle towards the front of the car.

Data People

Upload New Folder

WEBSITE

- f1_axle
10:44:44 AM
V1
- f1_axle_bush
10:40:23 AM
V1
- f1_wheel
5/11/20
V1
- no_go_zone_2019_2020_entry_class
3/30/20
V2
- no_go_zone_2019_2020_entry_class (1)
5/11/20
V11
- Quick Appearance
9:31:33 AM
V1

MOVE/COPY

Move Object Components

Selection 1 selected

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 -90.0 deg

Z Angle 0.0 deg

Create Copy

OK Cancel

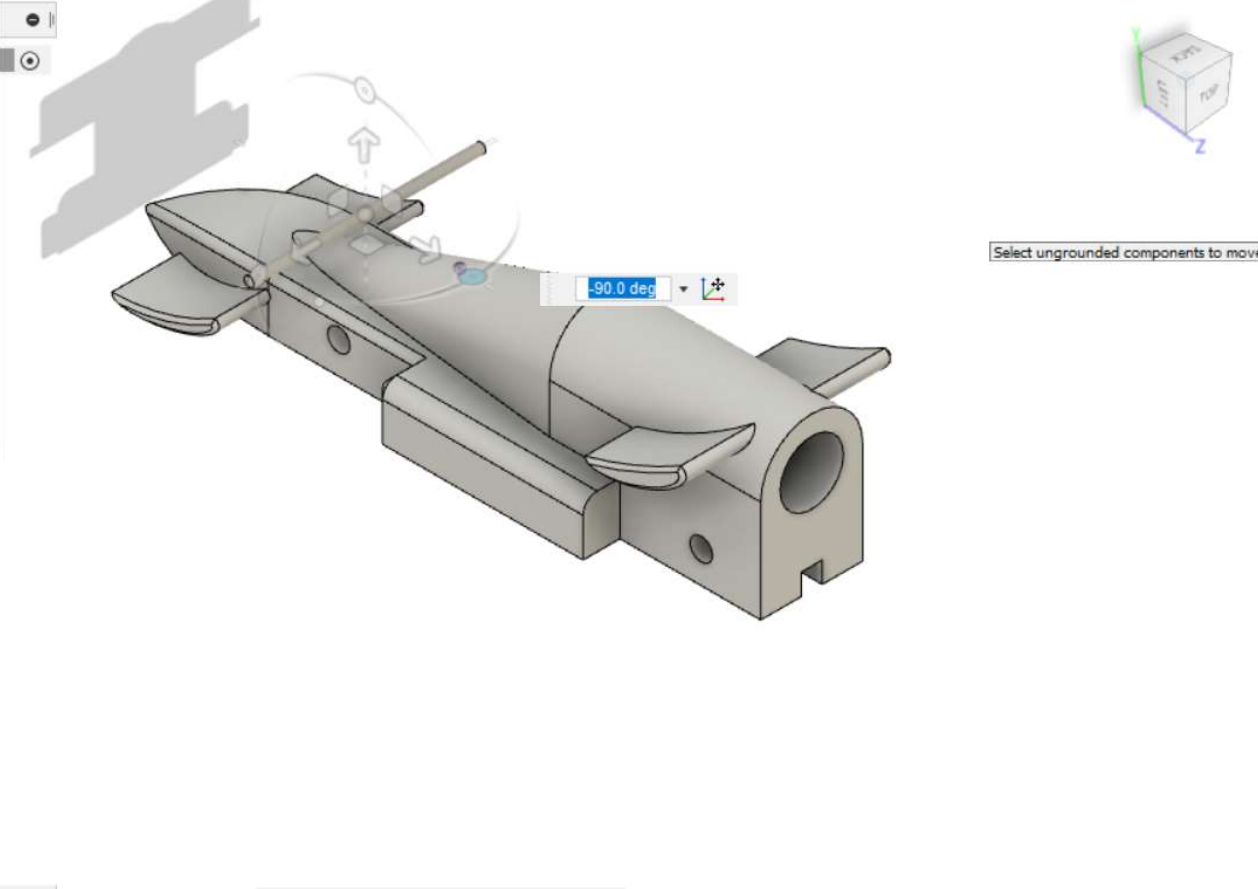
Sketches

Construction

f1_axle v1:1

SHEET METAL TOOLS

MODIFY ASSEMBLE CONSTRUCT INSPECT INSERT SELECT



COMMENTS

Navigation icons: Home, Back, Forward, Refresh, Search, etc.

f1_axle v1:1

Data People

Upload New Folder

WEBSITE

- f1_axle 10:44:44 AM V1
- f1_axle_bush 10:40:23 AM V1
- f1_wheel 5/11/20 V1
- no_go_zone_2019_2020_entry_class 3/30/20 V2
- no_go_zone_2019_2020_entry_class (1) 5/11/20 V11
- Quick Appearance 9:31:33 AM V1

MOVE/COPY

Move Object Components

Selection 1 selected

Move Type

Set Pivot

X Distance 0.00 mm

Y Distance 20.00 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

SHEET METAL TOOLS

MODIFY ASSEMBLE CONSTRUCT INSPECT INSERT SELECT

Select ungrounded components to move

20.00

20.00 mm

COMMENTS

f1_axle v1:1

1. Using the rotation tool, rotate the axle horizontally.

Data People

Upload New Folder

WEBSITE

- f1_axle 10:44:44 AM V1
- f1_axle_bush 10:40:23 AM V1
- f1_wheel 5/11/20 V1
- no_go_zone_2019_2020_entry_class 3/30/20 V2
- no_go_zone_2019_2020_entry_class (1) 5/11/20 V11
- Quick Appearance 9:31:33 AM V1

DESIGN SOLID SURFACE SHEET METAL TOOLS

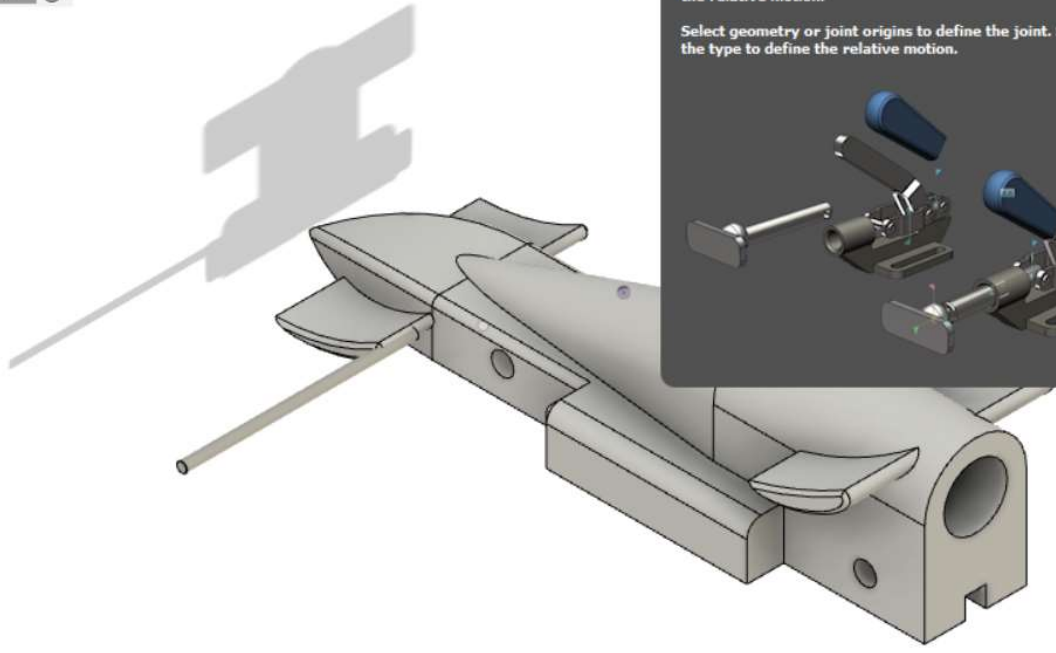
CREATE MODIFY ASSEMBLE CONSTRUCT INSPECT INSERT SELECT

BROWSER

no_go_zone_2019_2020_ent...

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1. Select Joint



Joint (j)

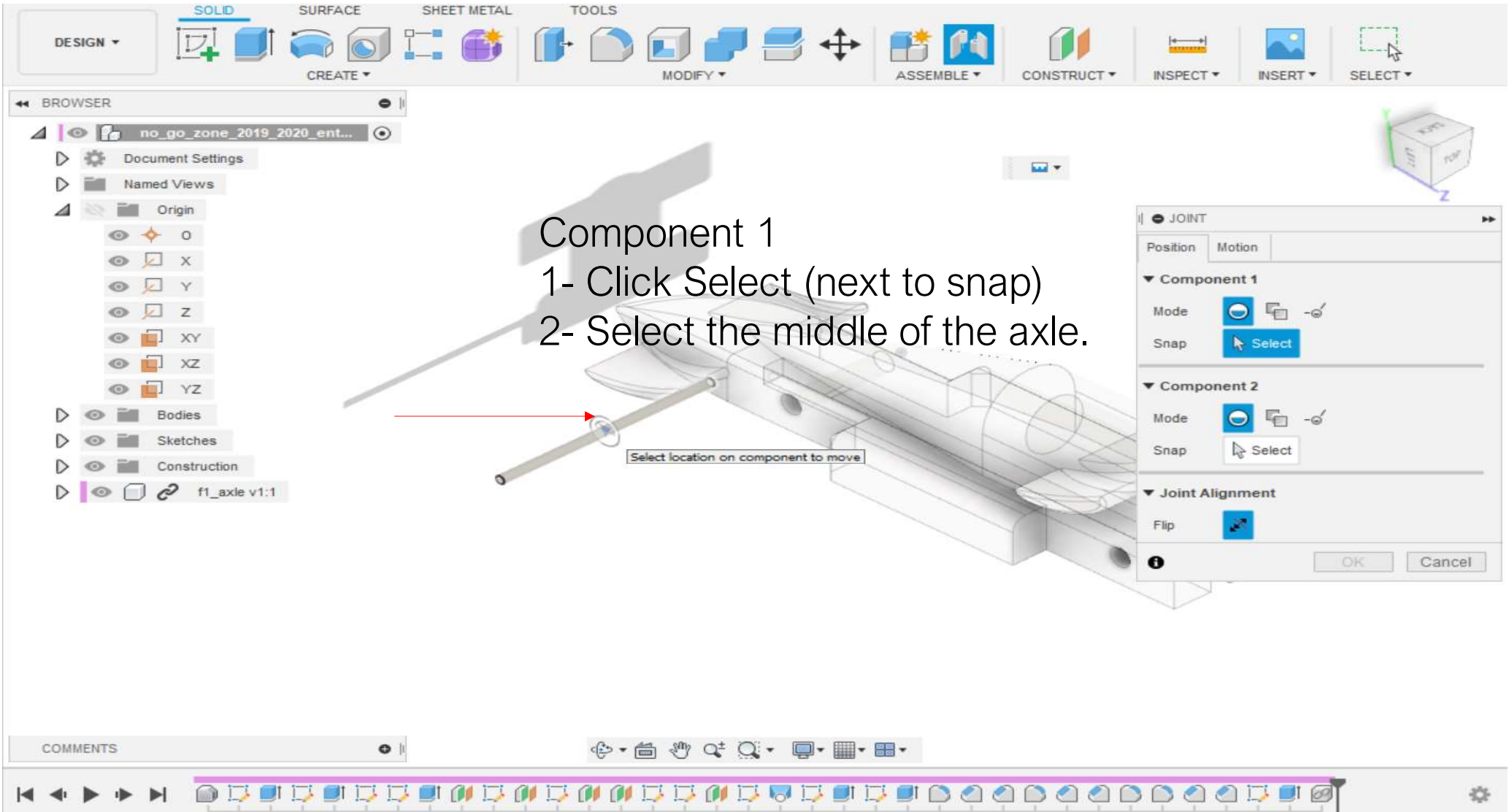
Positions components relative to one another and defines the relative motion.

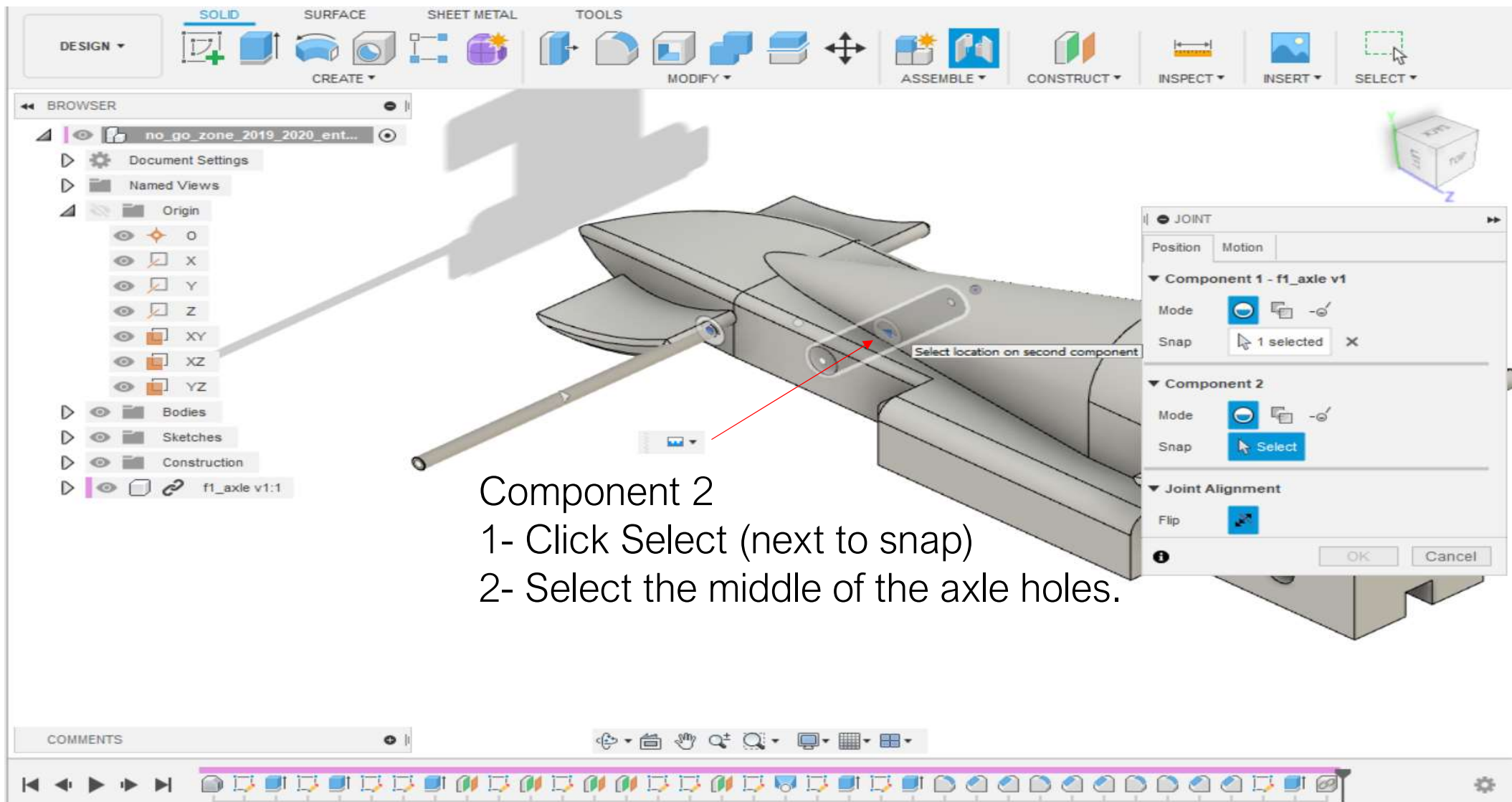
Select geometry or joint origins to define the joint. Specify the type to define the relative motion.

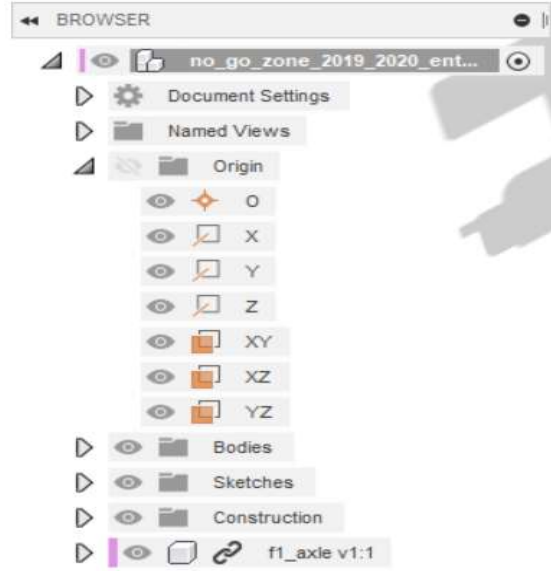
The diagram illustrates various joint types, including revolute, prismatic, and cylindrical joints, with blue arrows indicating the degrees of freedom. To the right, a 3D coordinate system is shown with axes labeled 'Left', 'Top', and 'Z'.

COMMENTS

The bottom section of the interface contains a 'COMMENTS' panel on the left and a series of navigation and tool icons on the right, including icons for undo, redo, and various view manipulation tools.

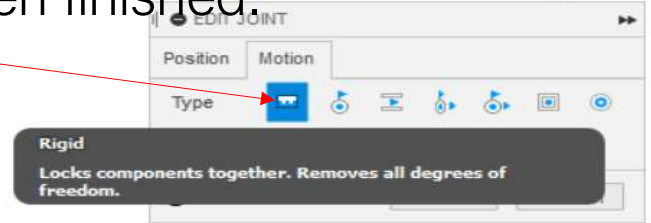
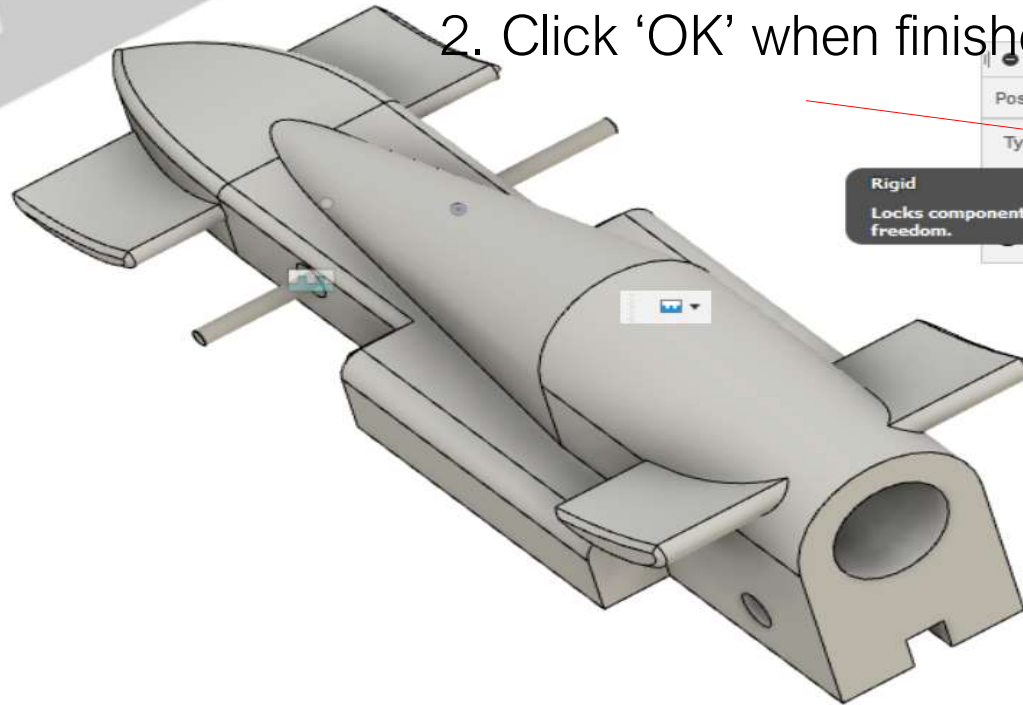






Select Motion

1. Select 'Rigid'
2. Click 'OK' when finished.



Data People

Upload New Folder

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10:44:44 AM
- f1_axle_bush
10:40:23 AM
- f1_wheel
5/11/20
- no_go_zone_2019_2020_entry_class (1)
5/11/20
- Quick Appearance
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Insert into Current Design
New Drawing from Design
Share Public Link
Import New Version
Rename
Move
Copy
Delete
Add to Offline Cache

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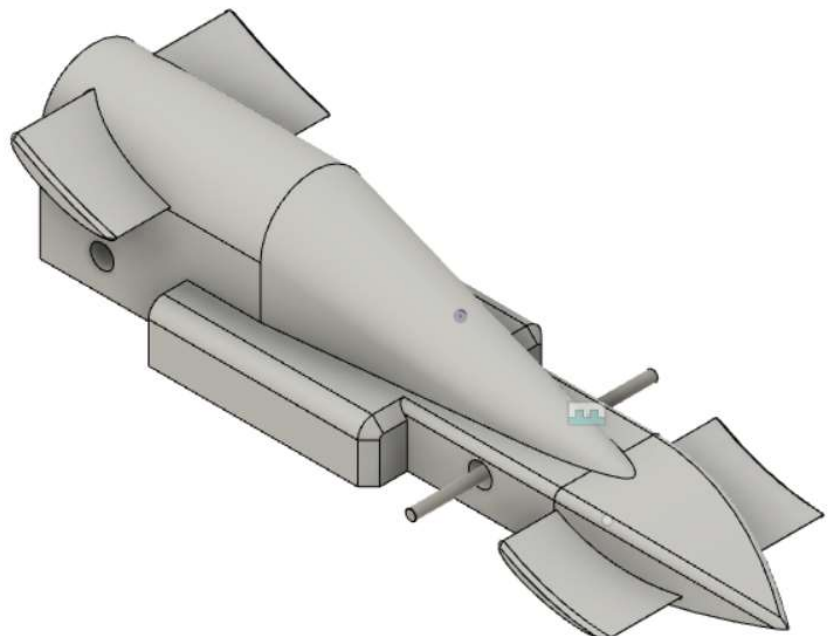
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COMMENTS

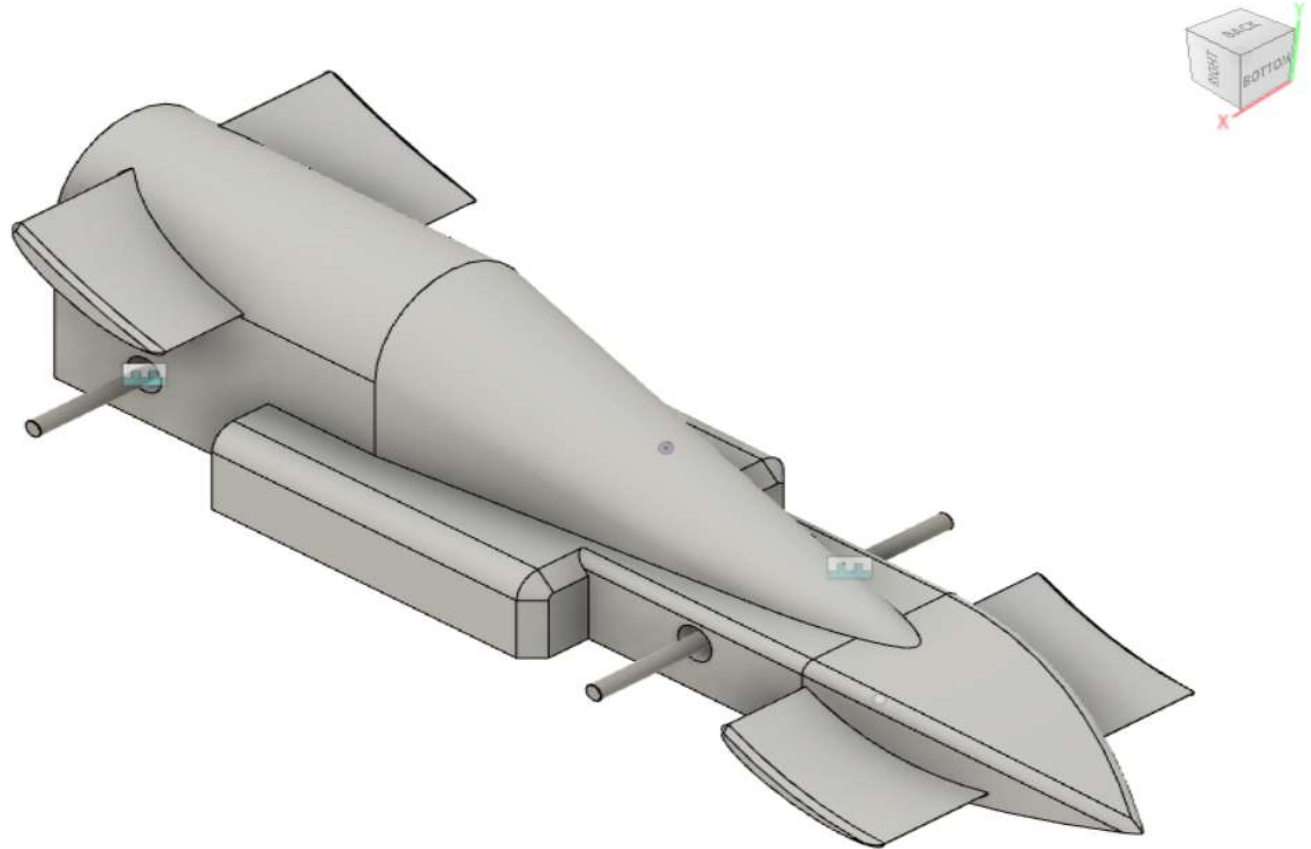


Now you have assembled the front axle, repeat for the back axle.



BROWSER

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- f1_axle v1:1
- f1_axle v1:2



COMMENTS

