

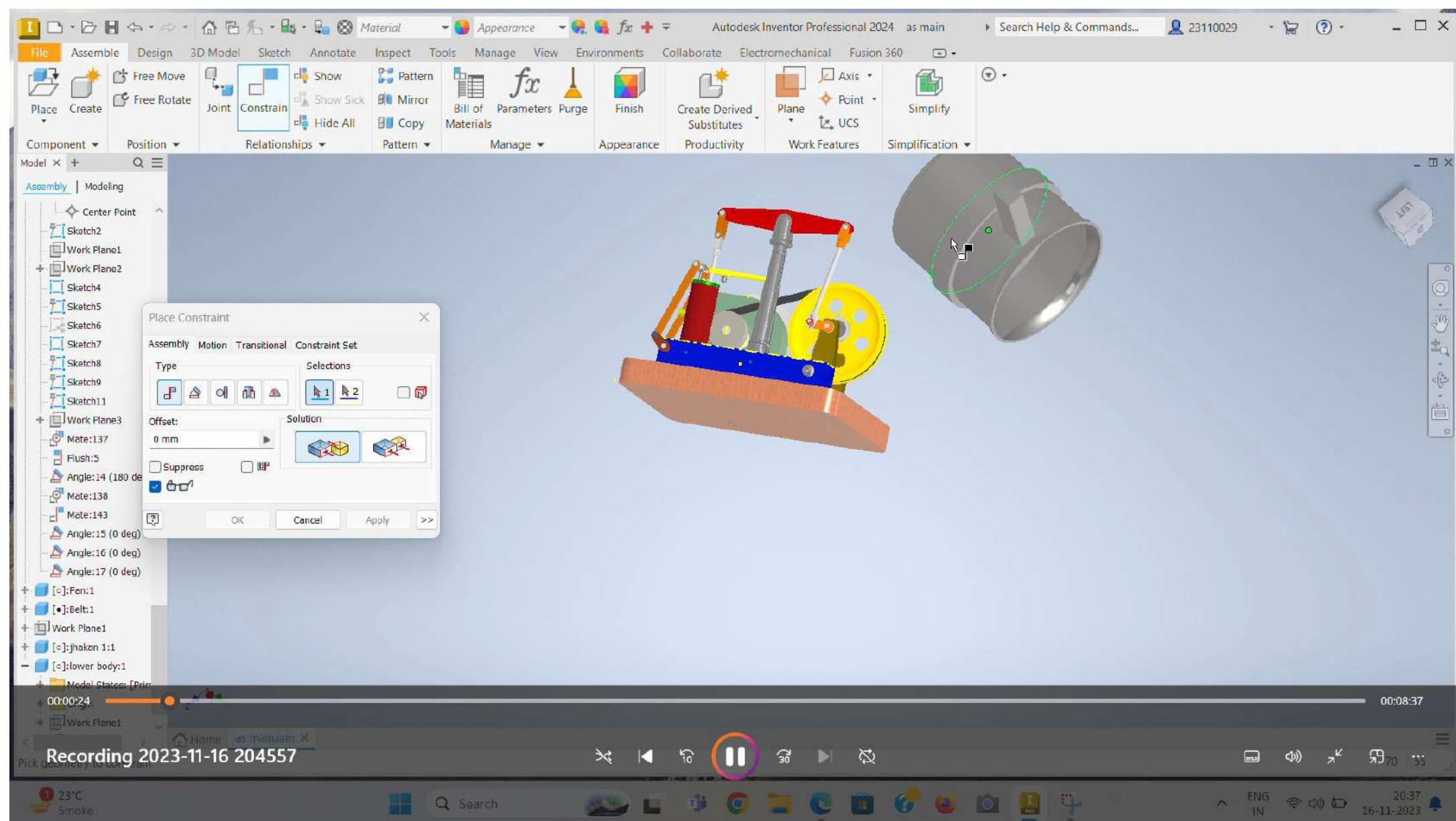
Assembly Report

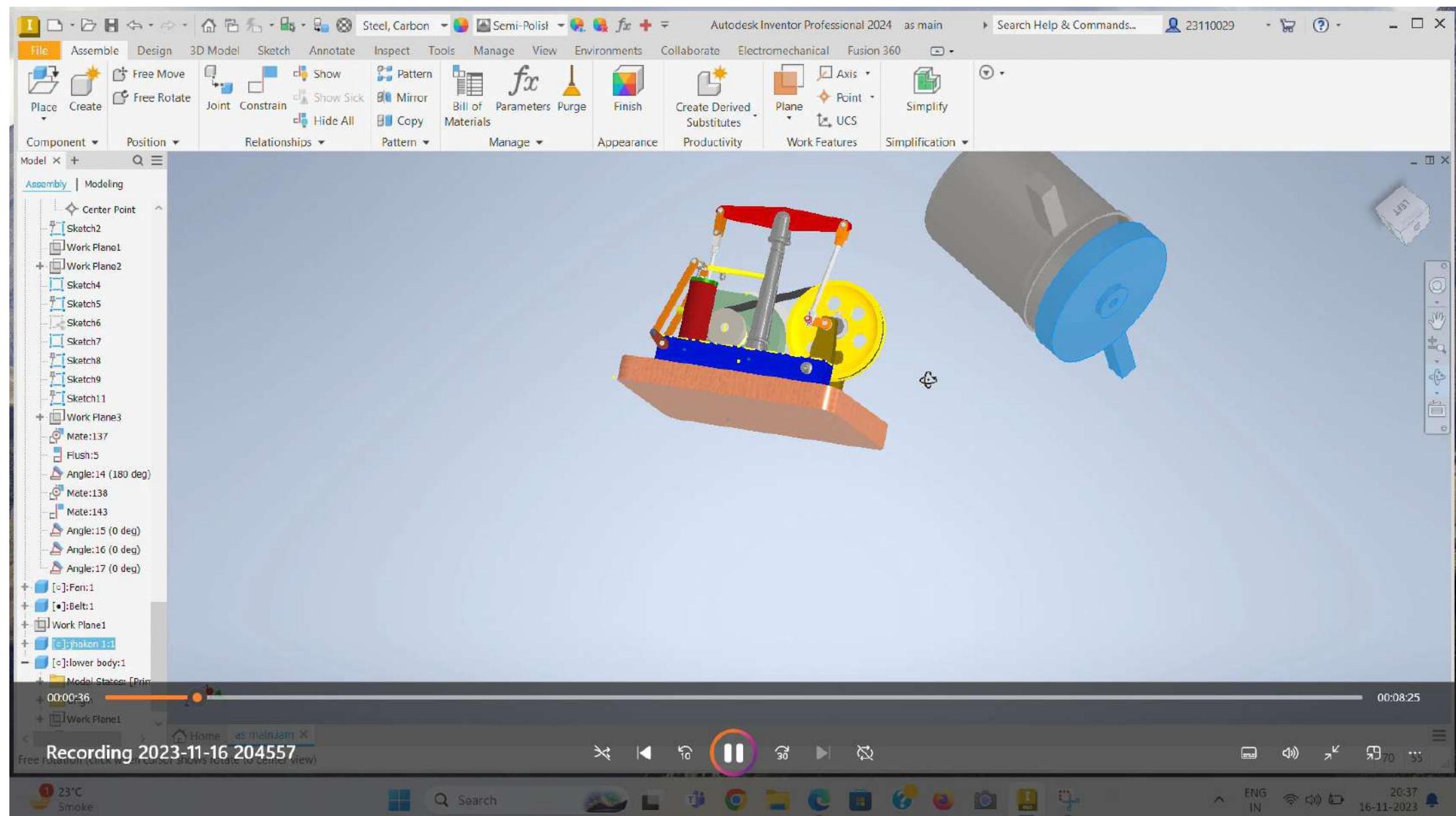
Group 3

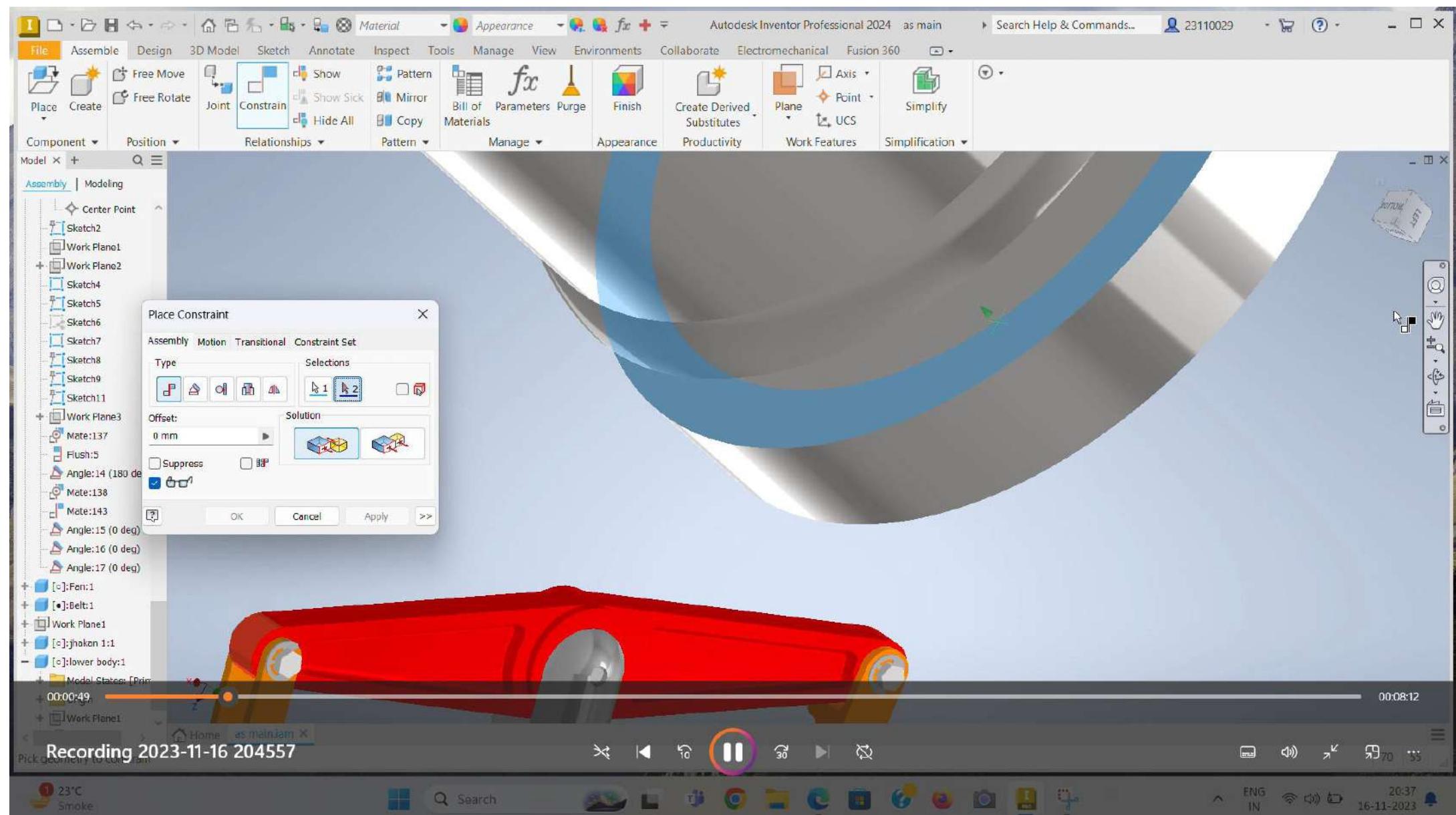
Our group assembly includes:

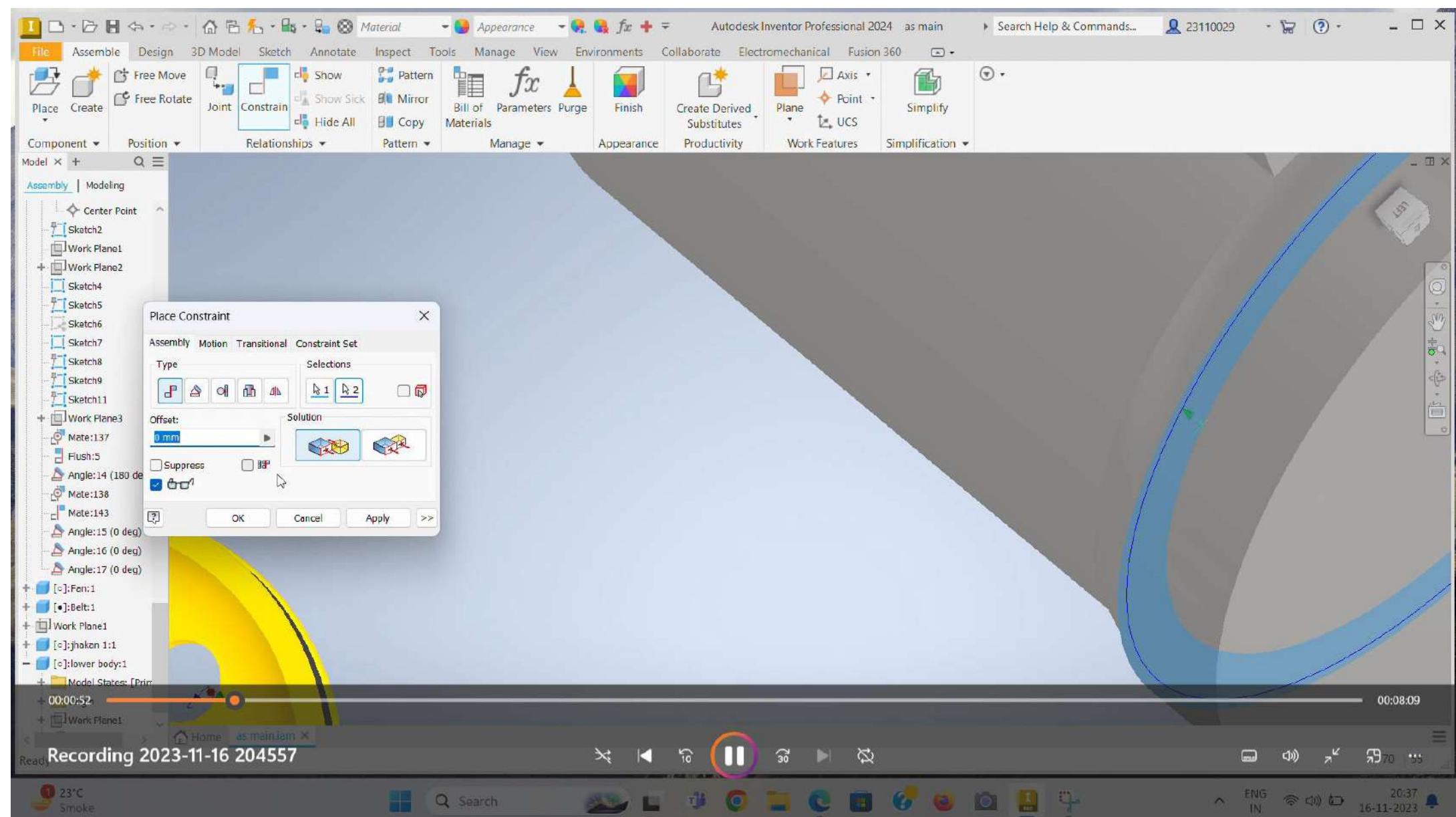
- Parts are assigned to all the group members made in Autodesk.
- Several other components assigned to the group members are called as sub-parts, which are not included in their central part list, such as specified nuts, bolts and rockers.
- Other components imported from the Autodesk Inventor design library.

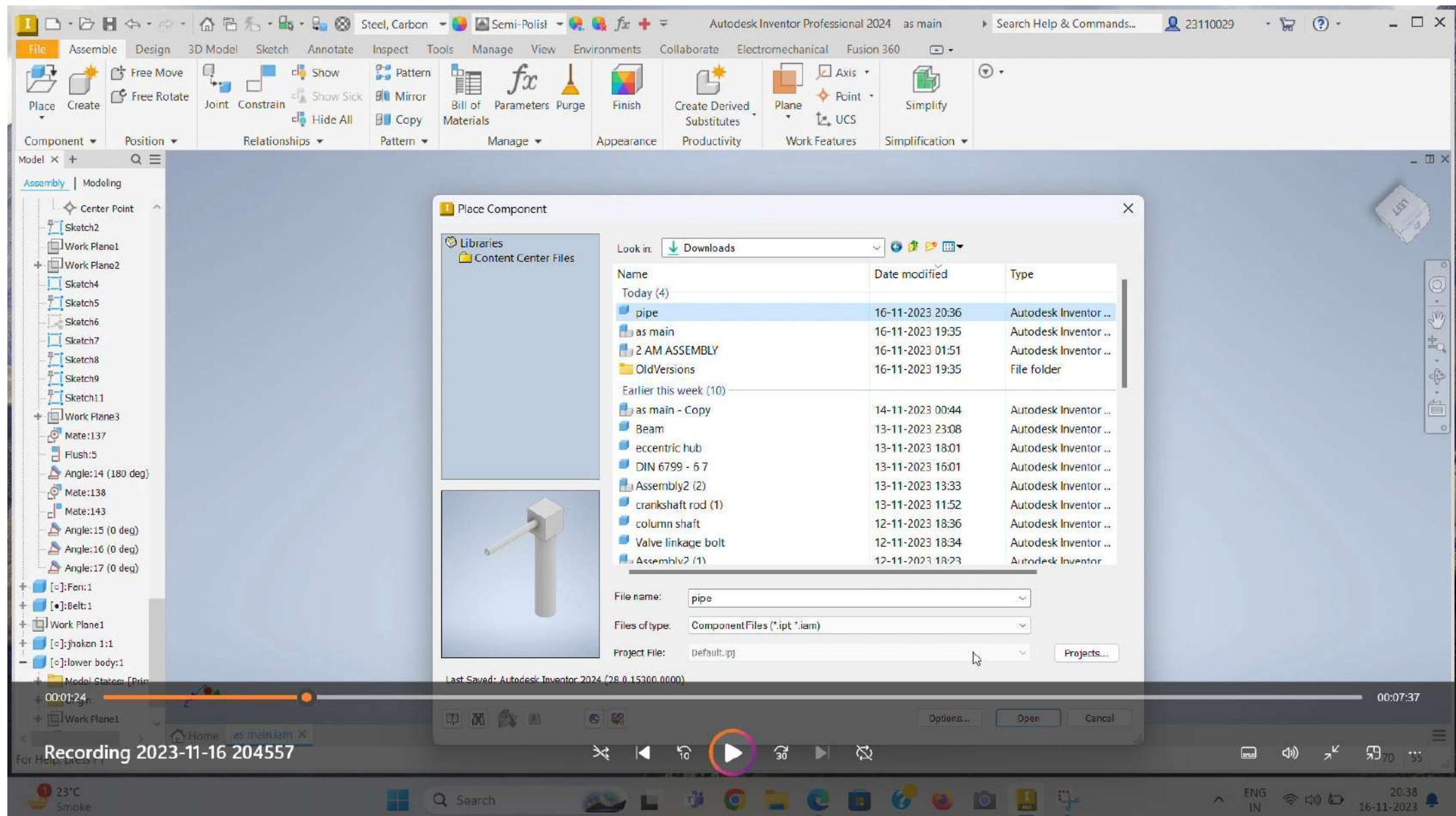
Screenshots depicting our group assembly work on Autodesk Inventor 2024 are shown below:

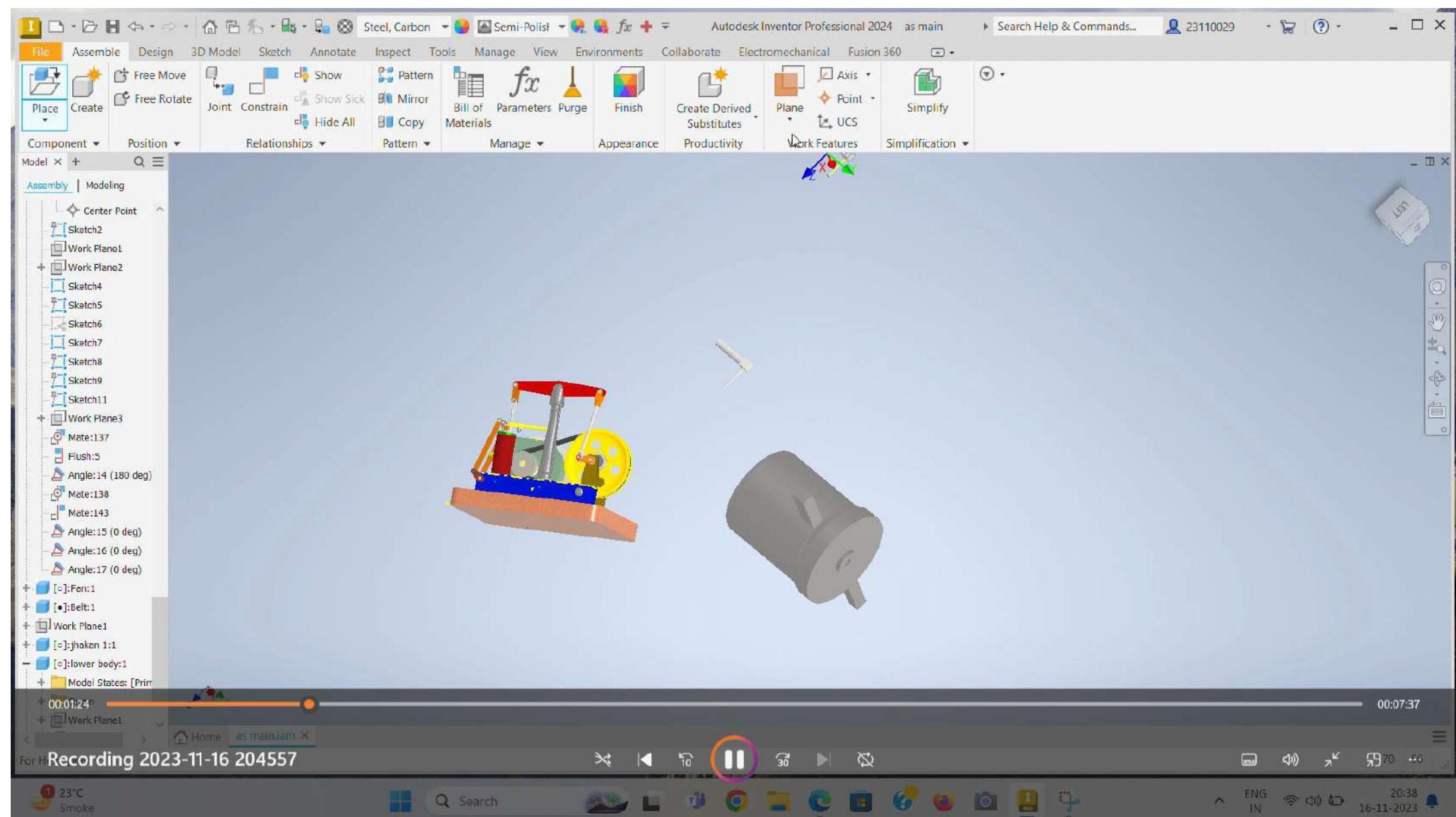


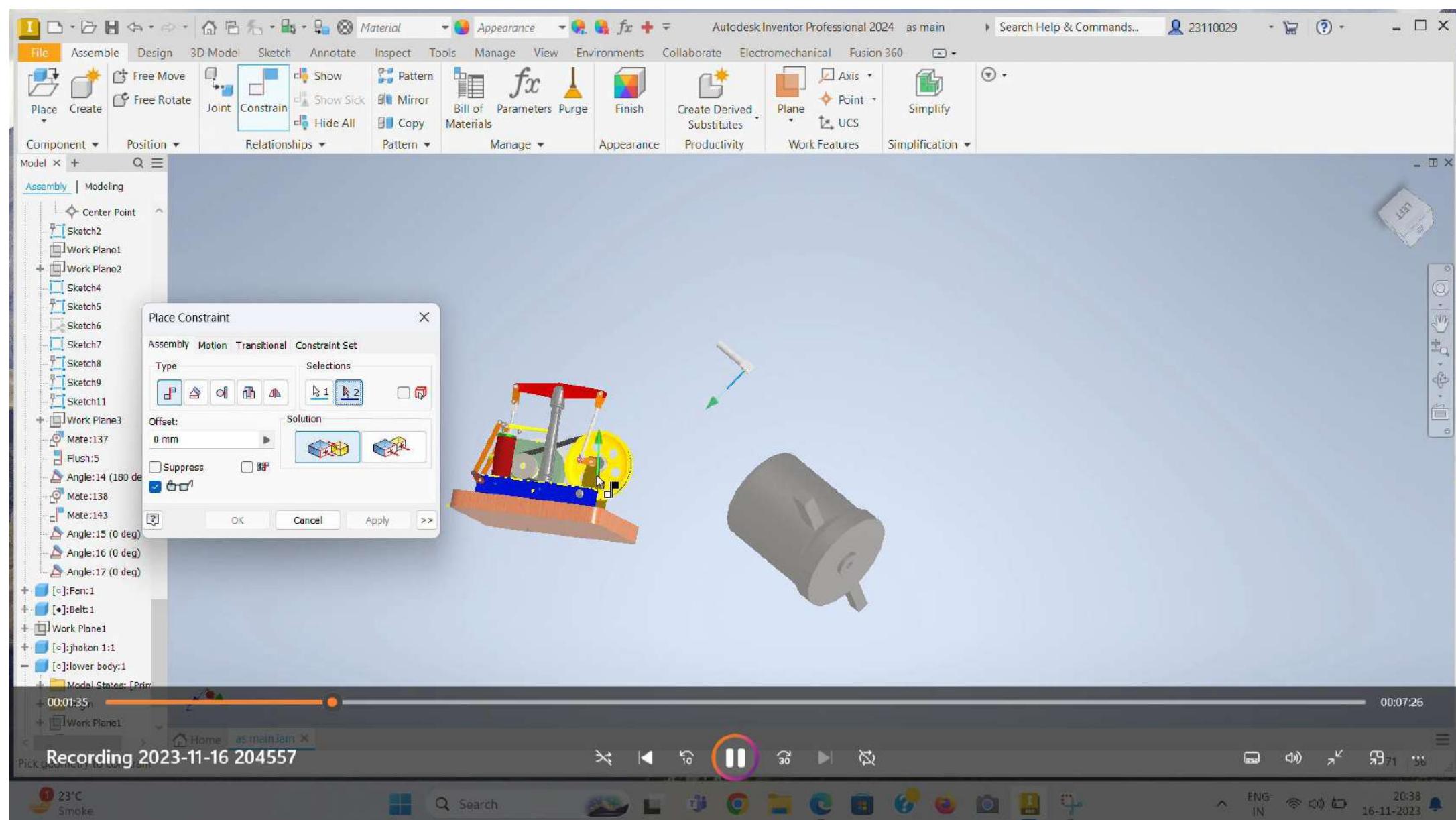


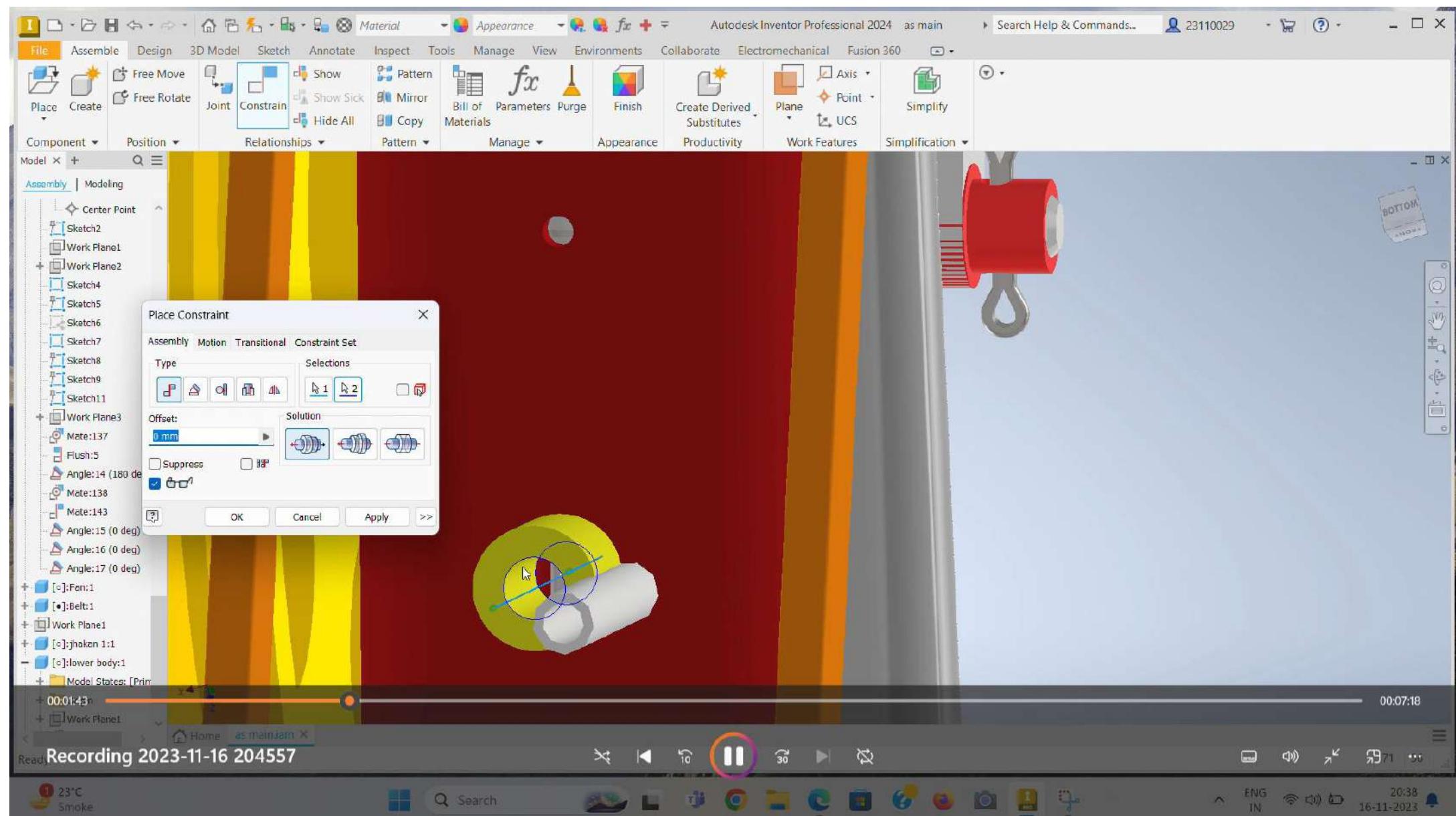


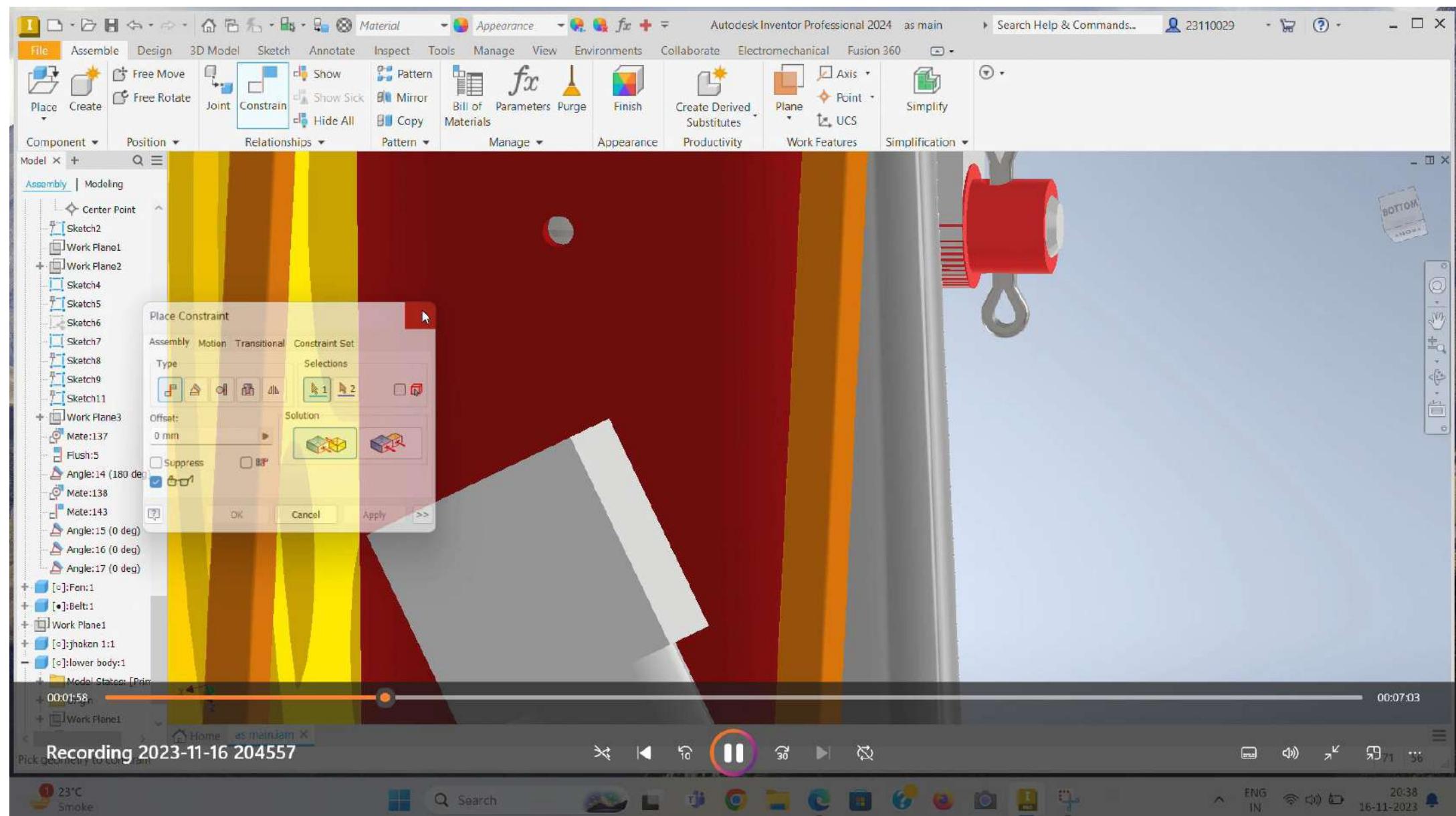


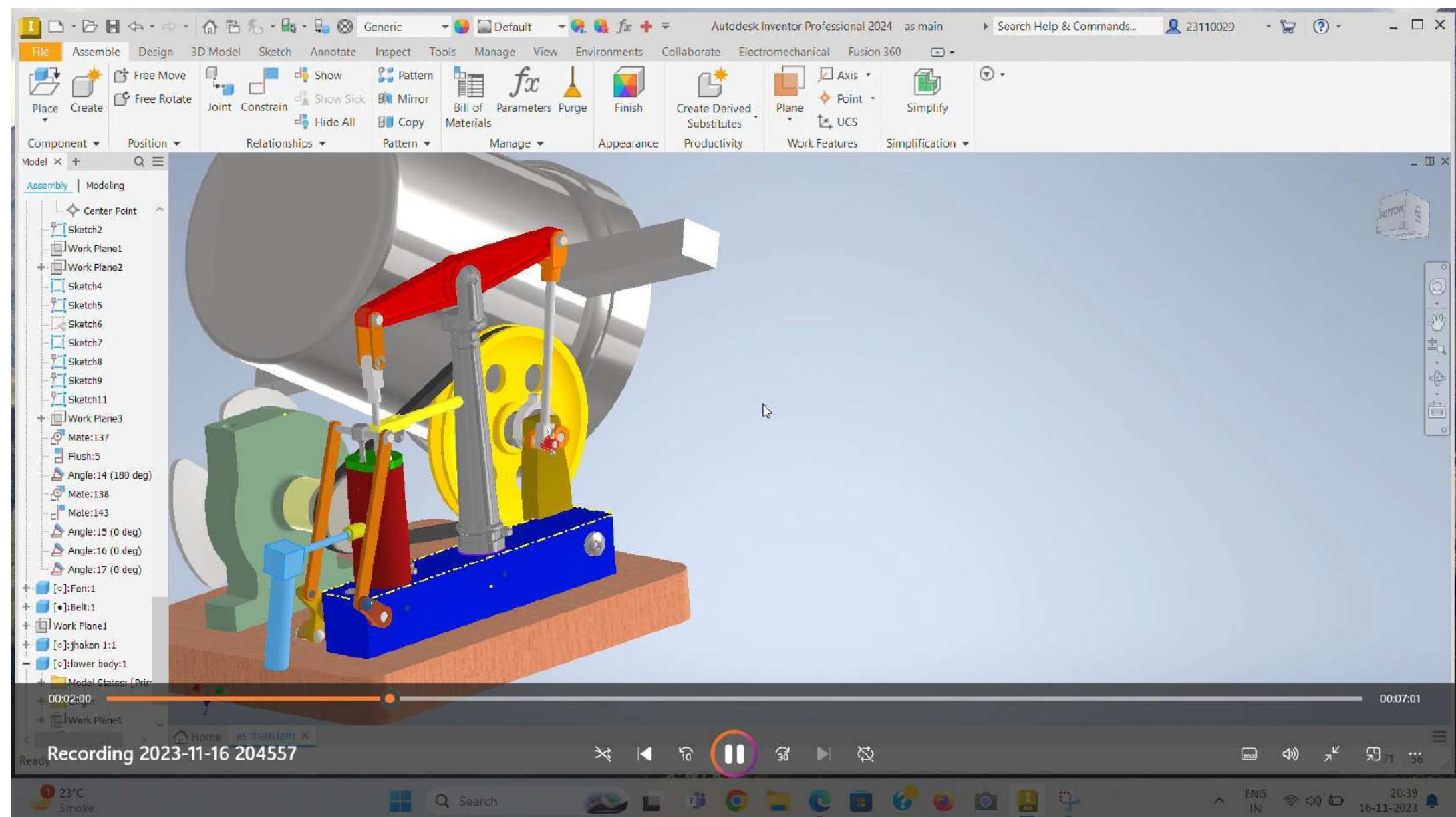


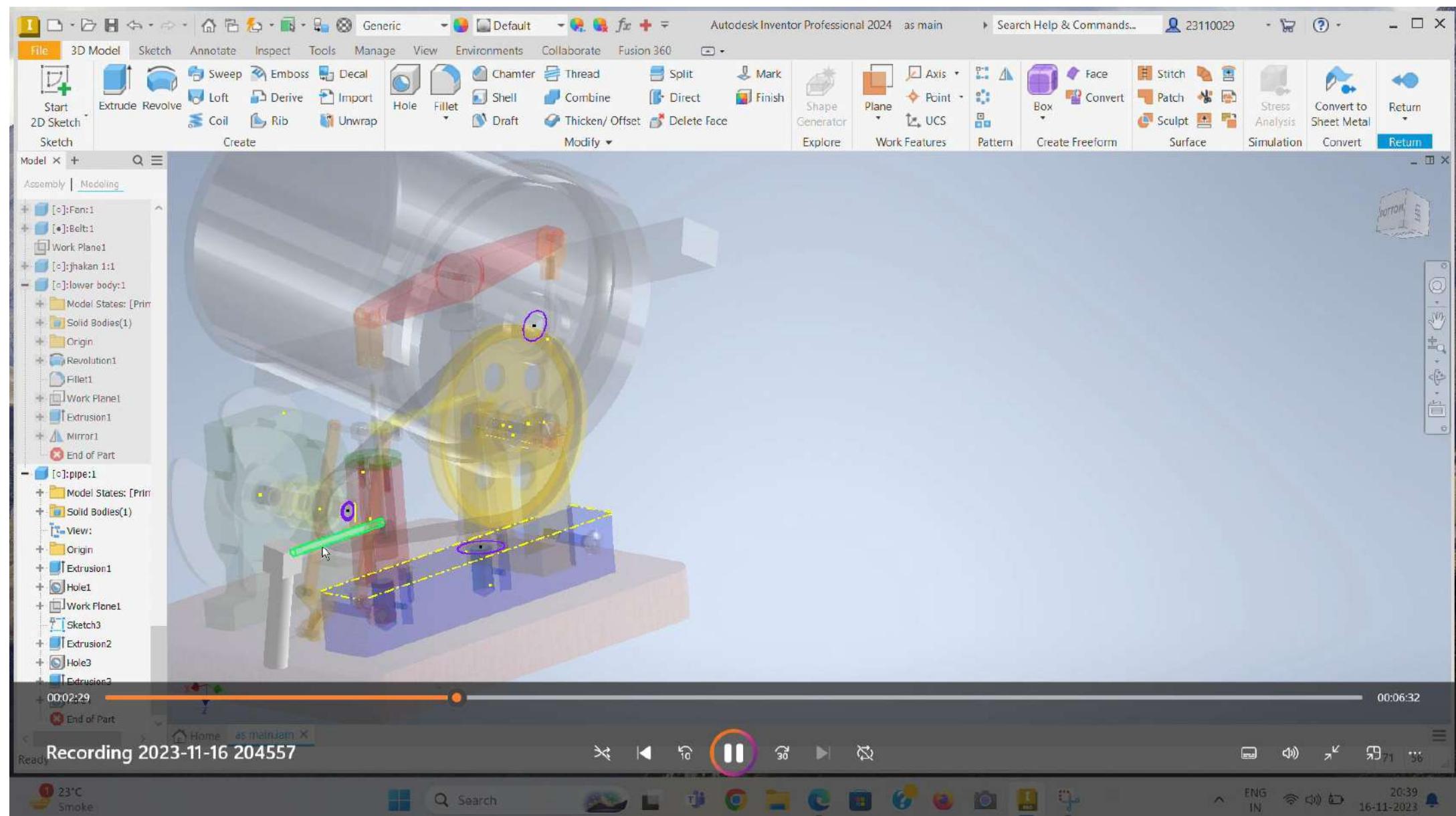


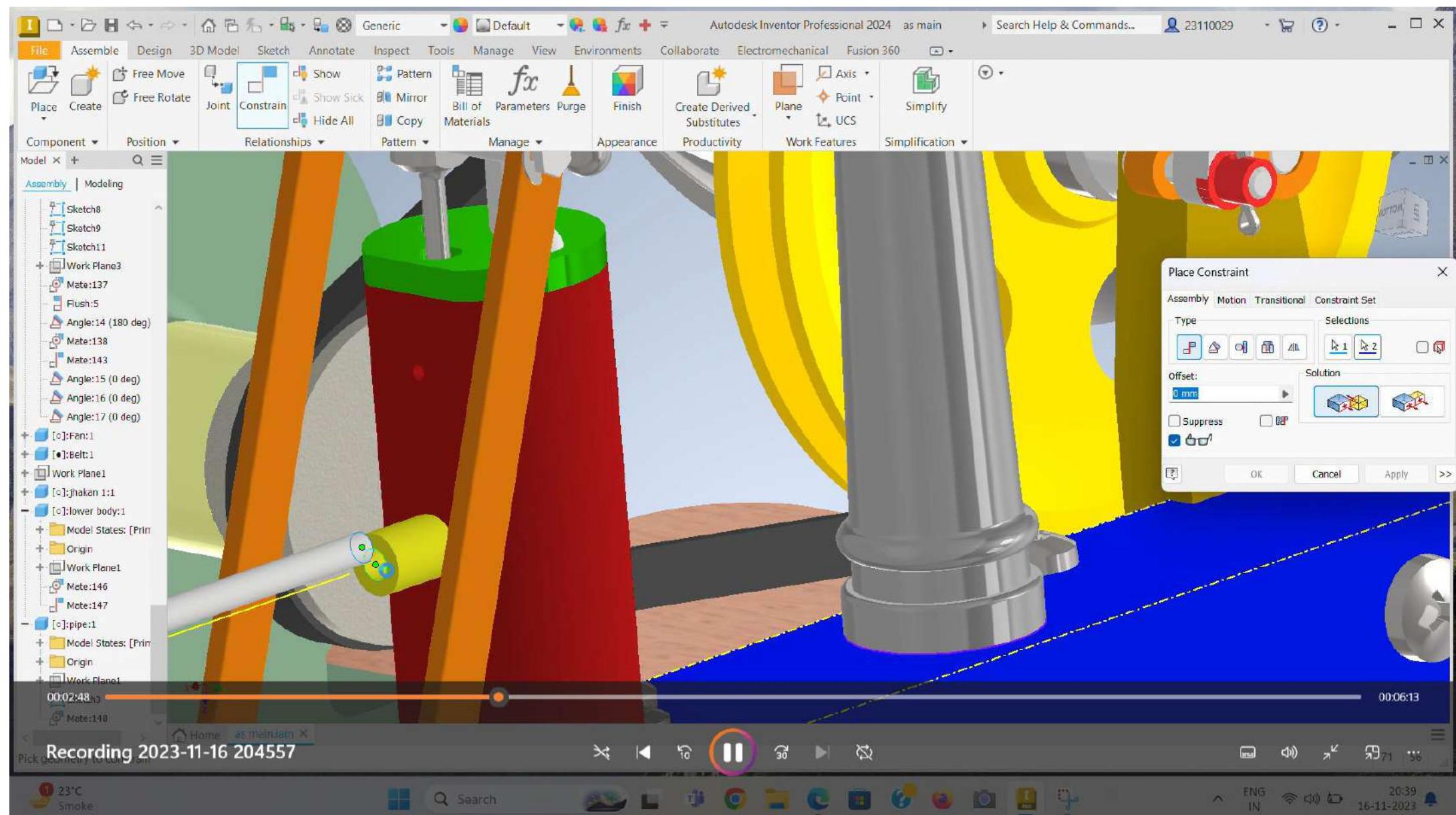


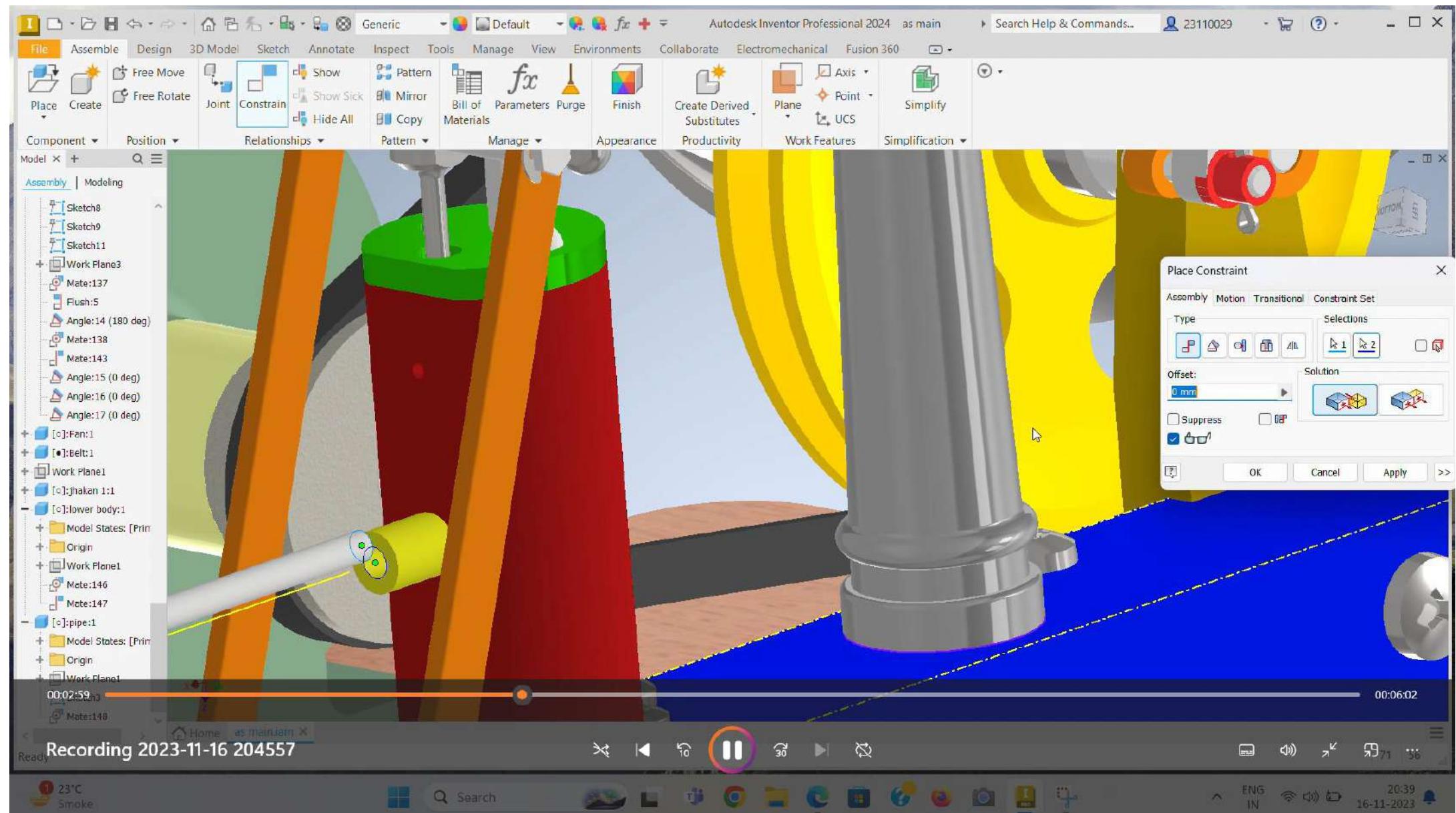


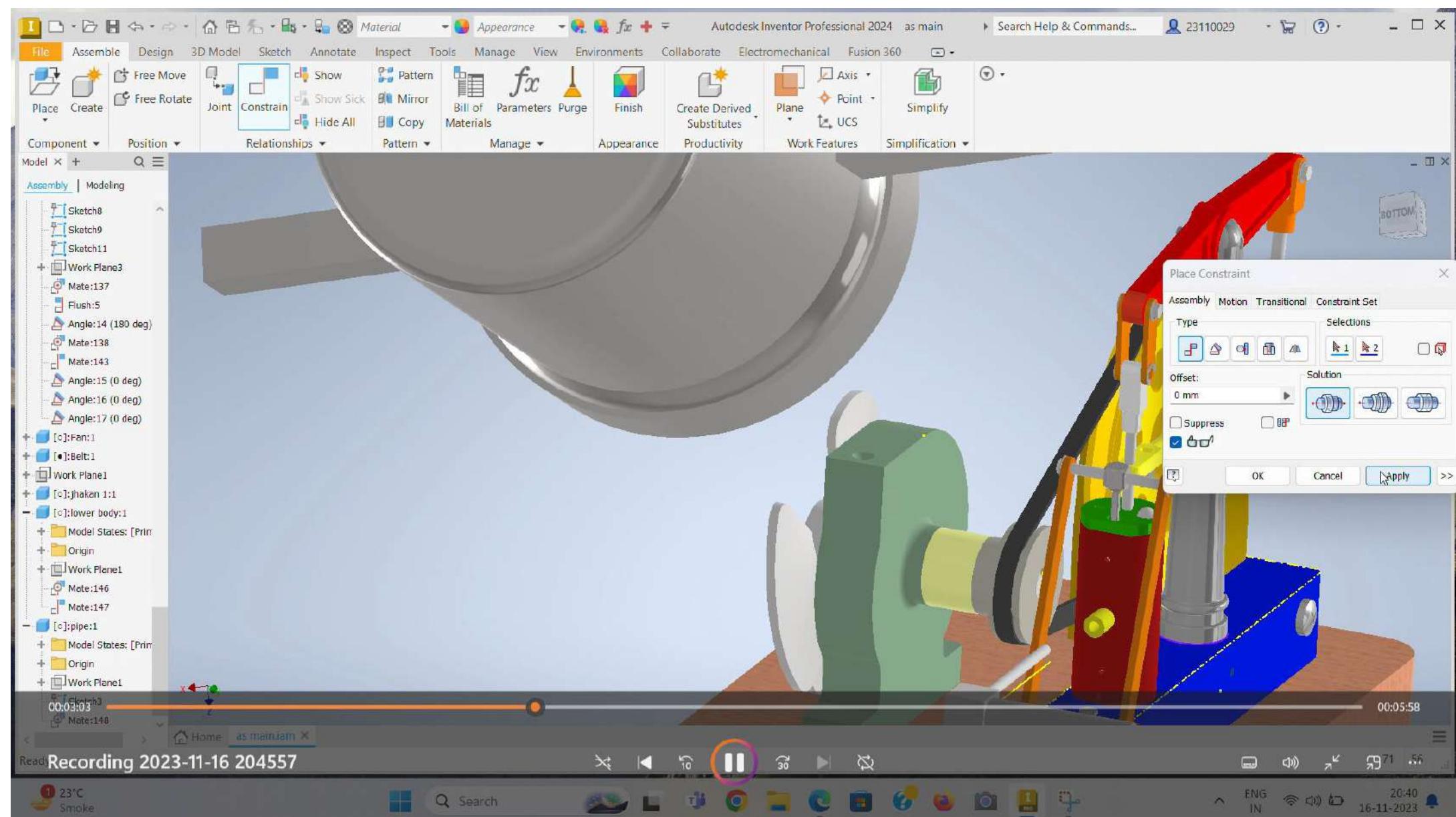


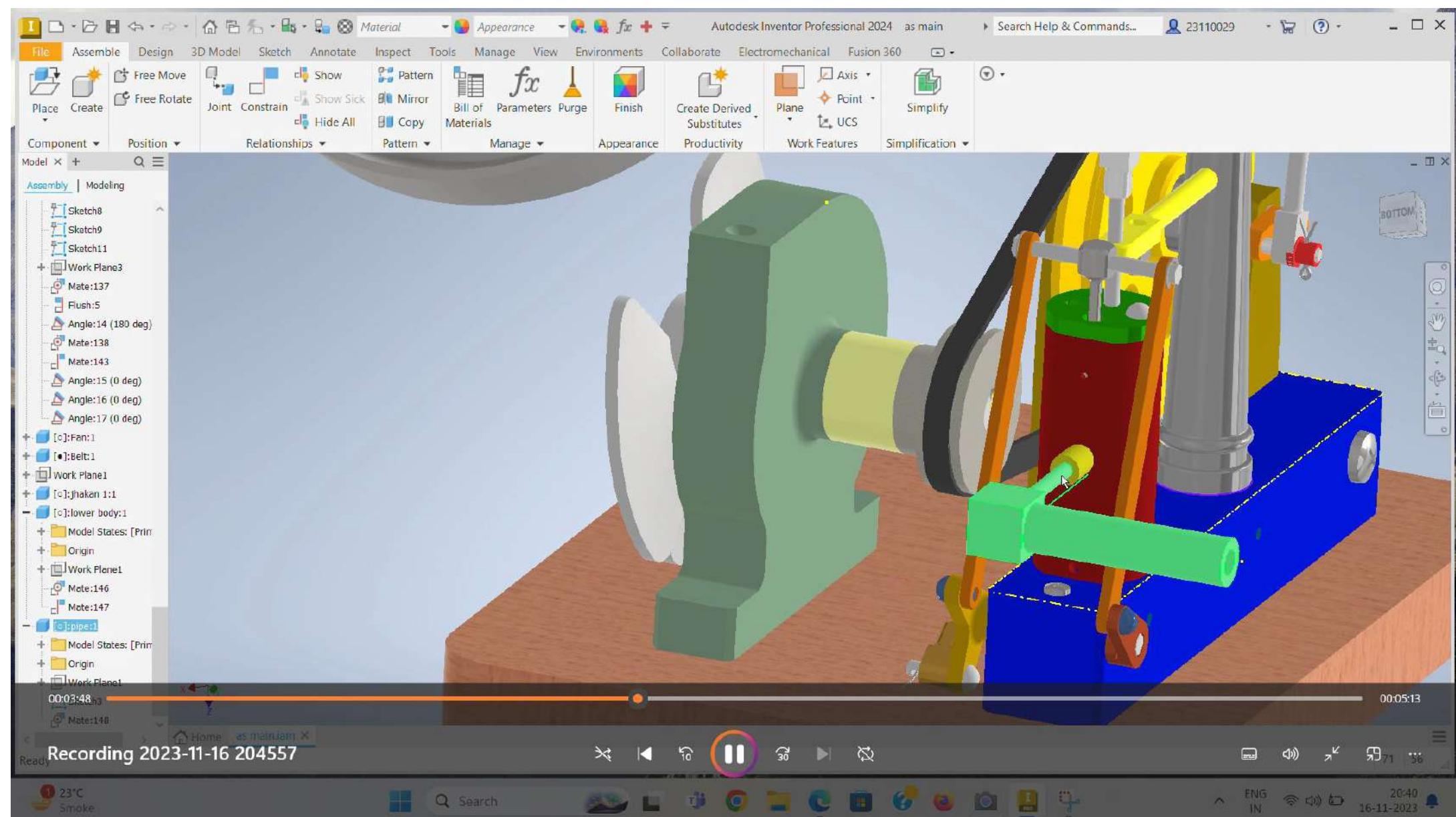


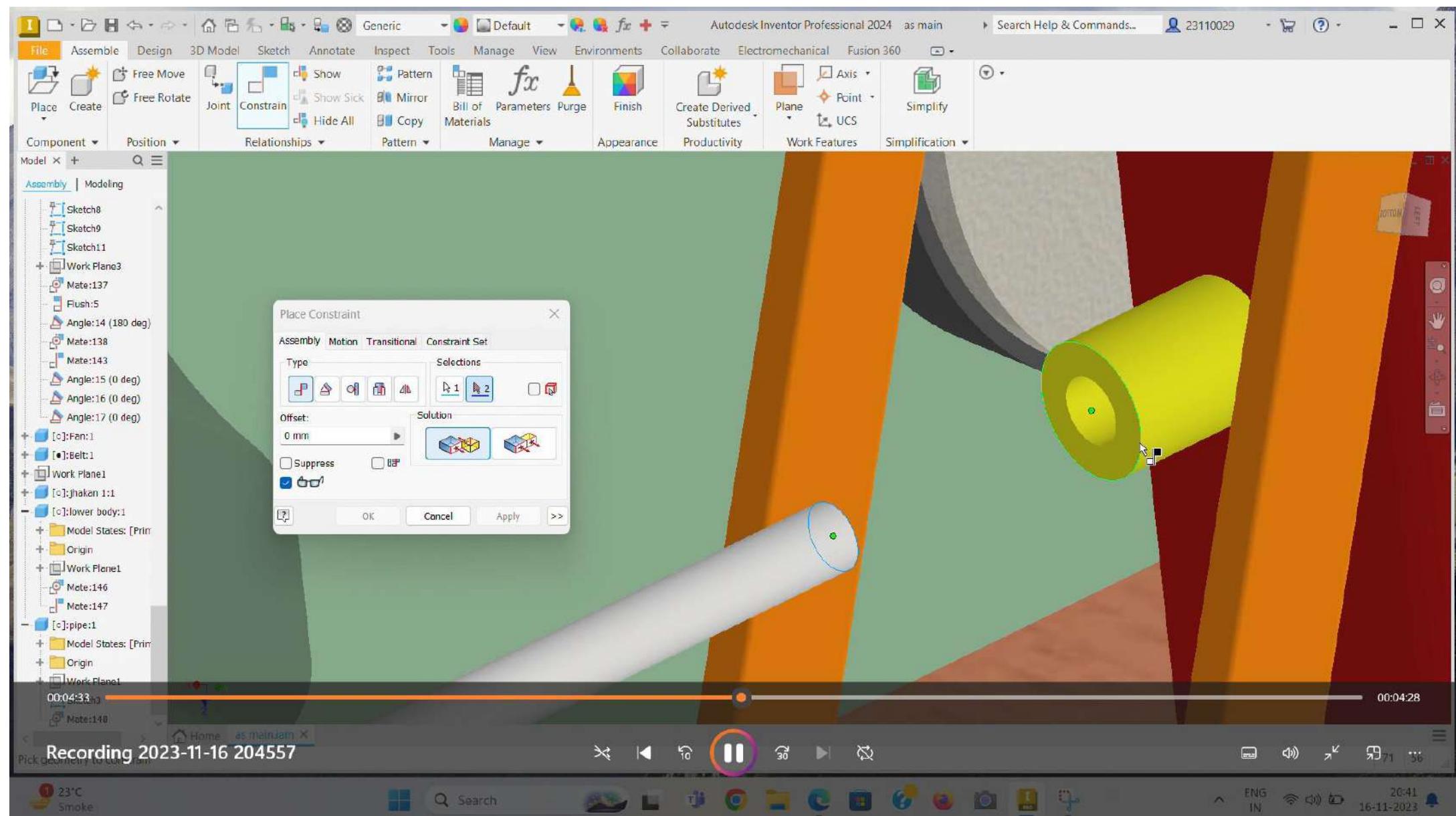


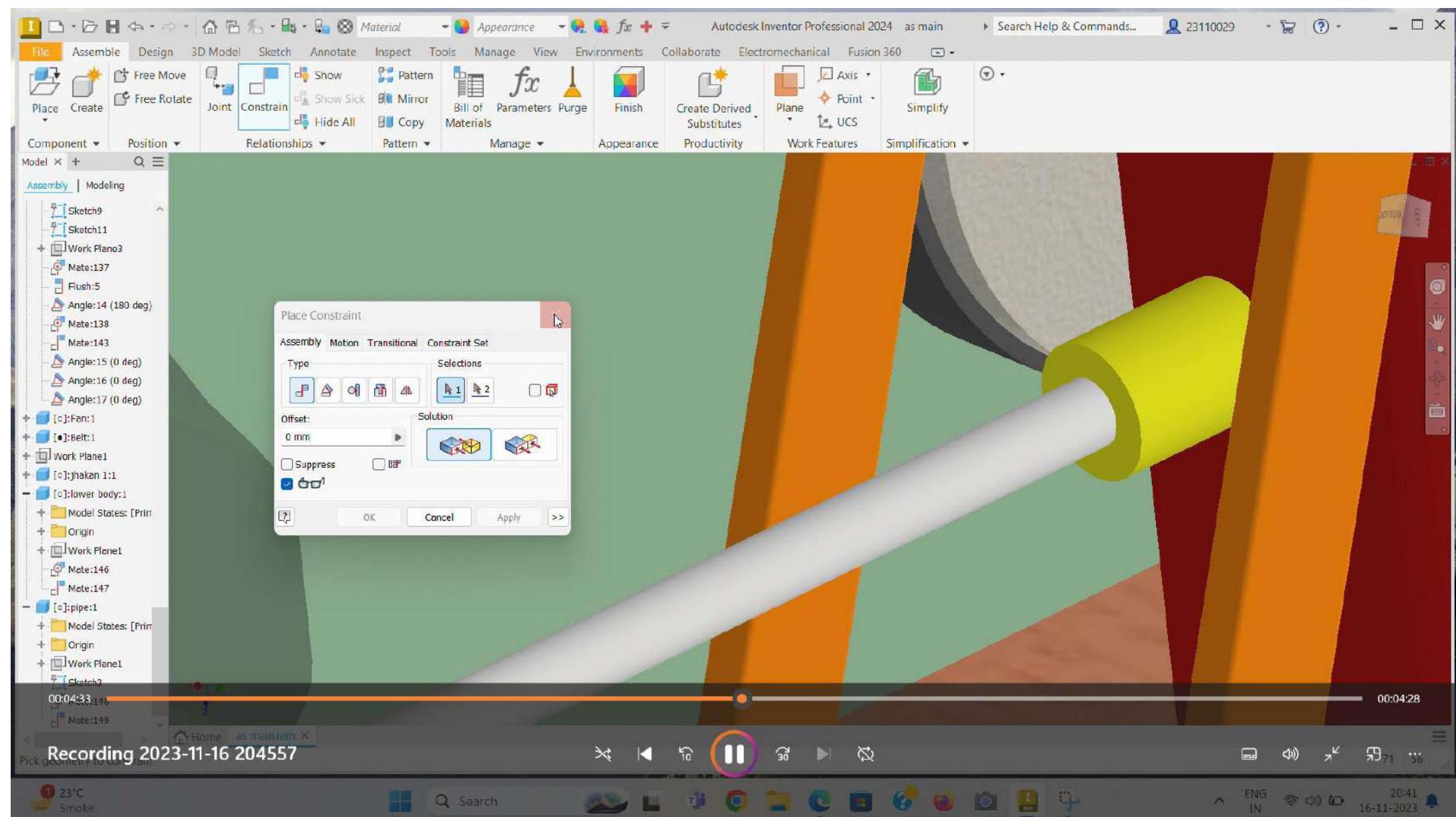


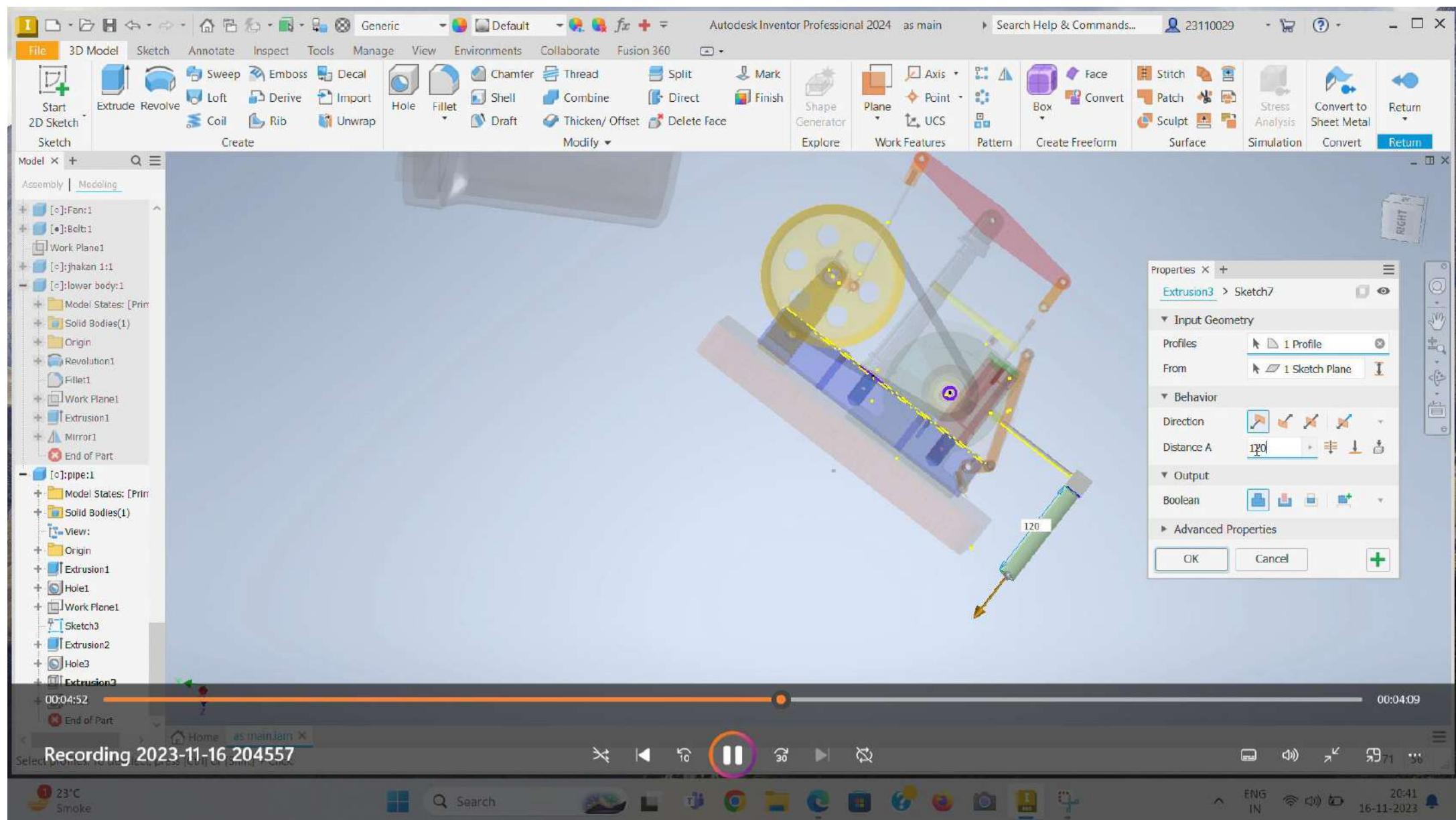


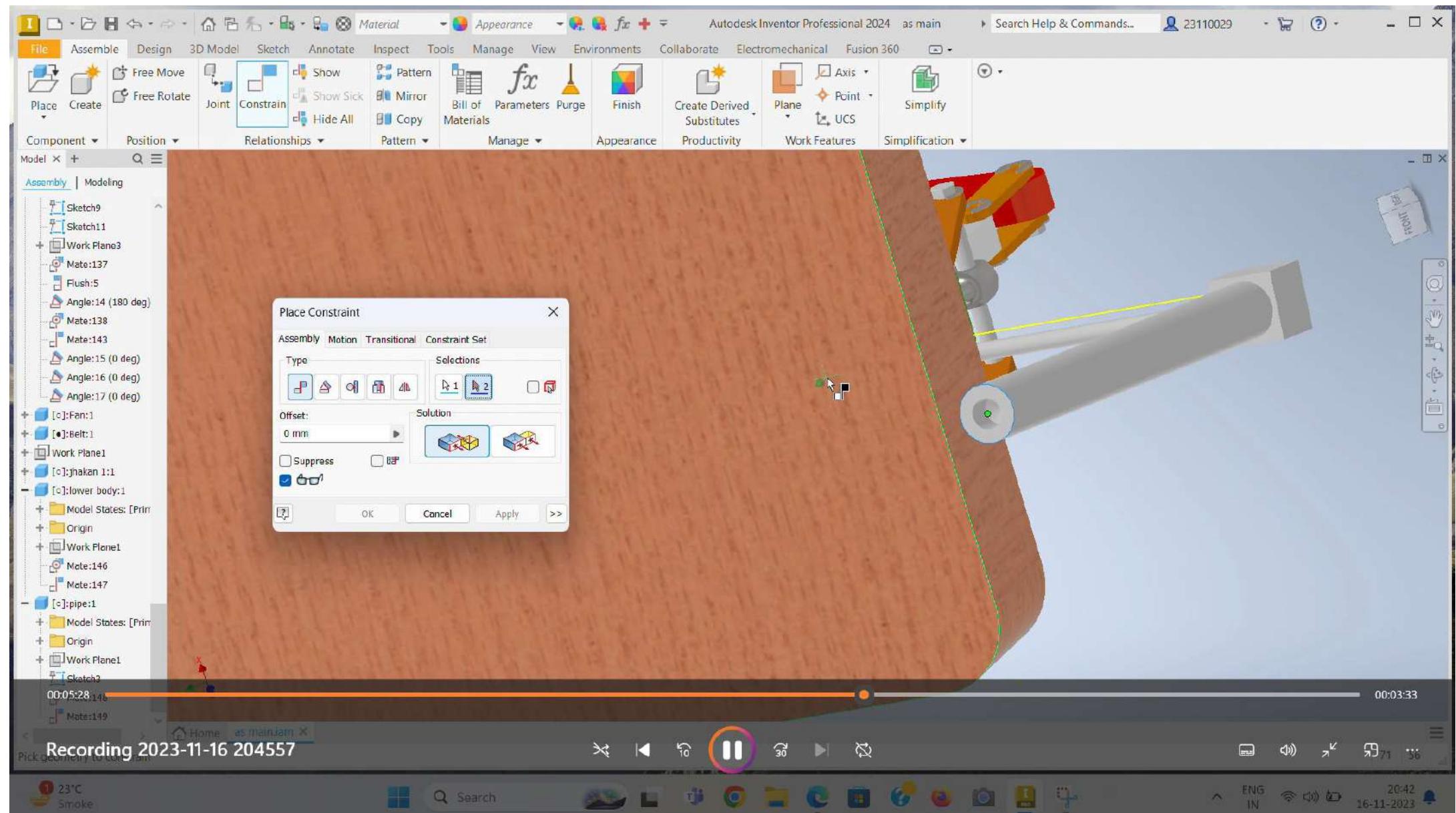


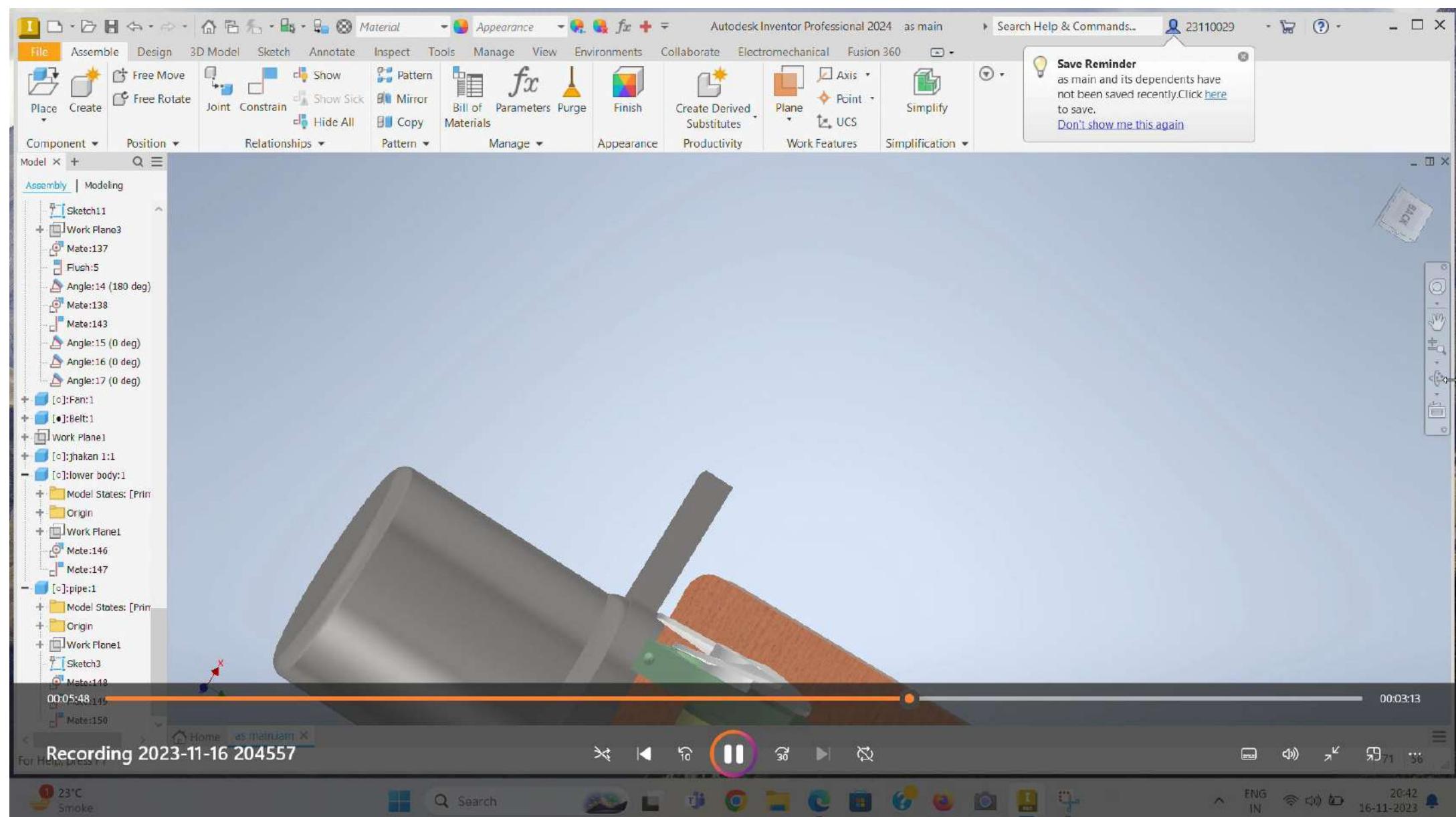


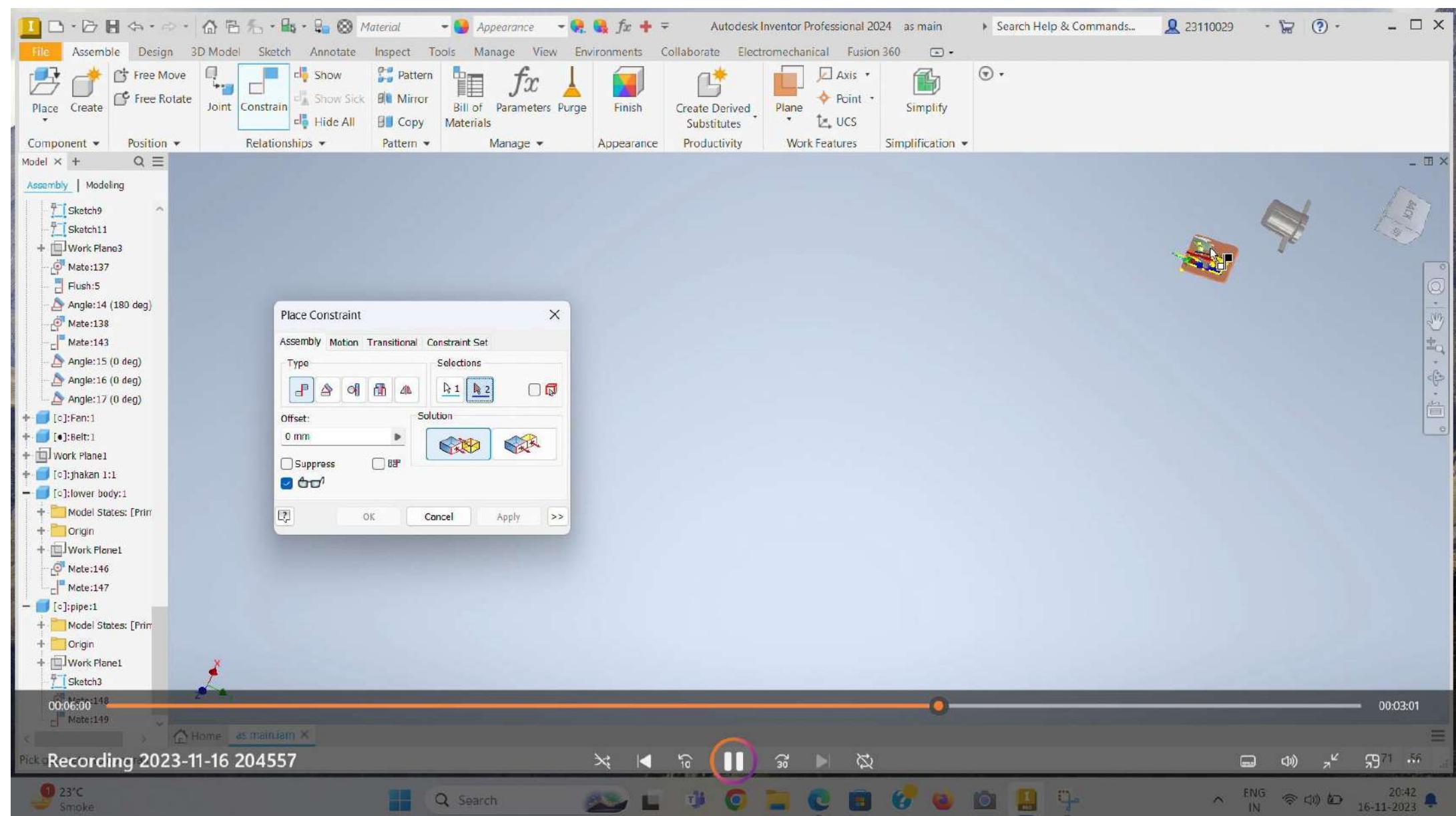


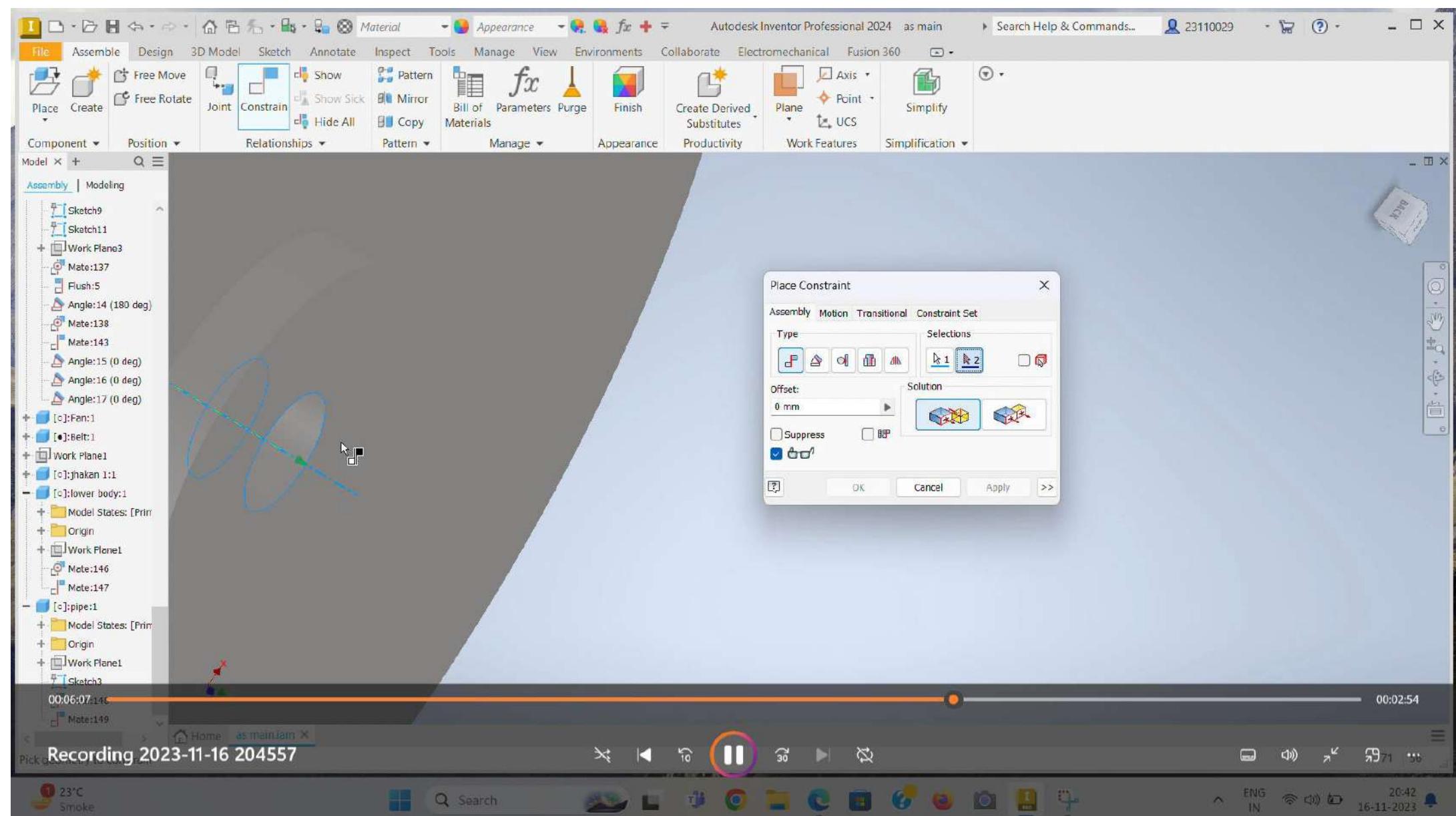


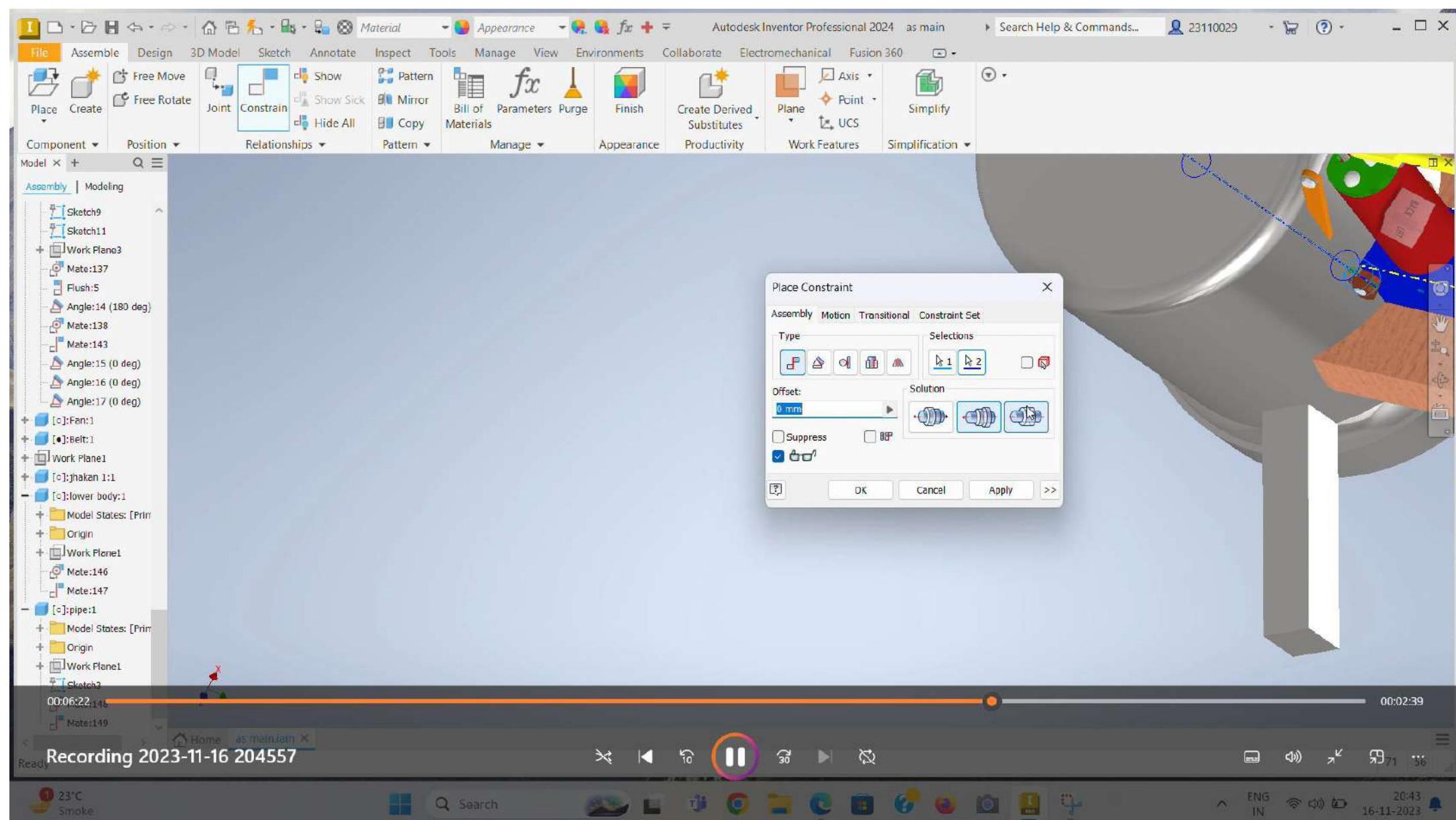


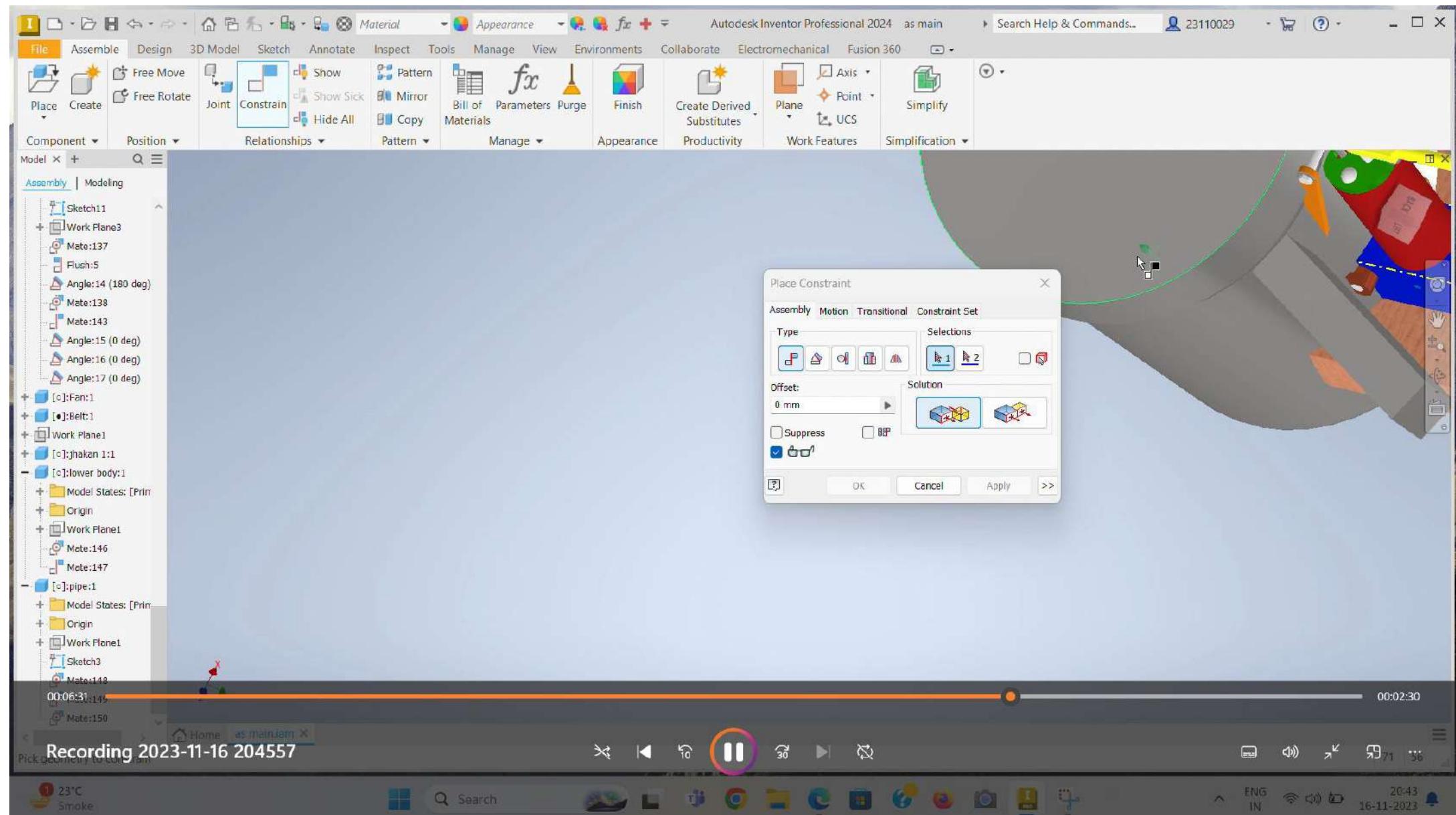


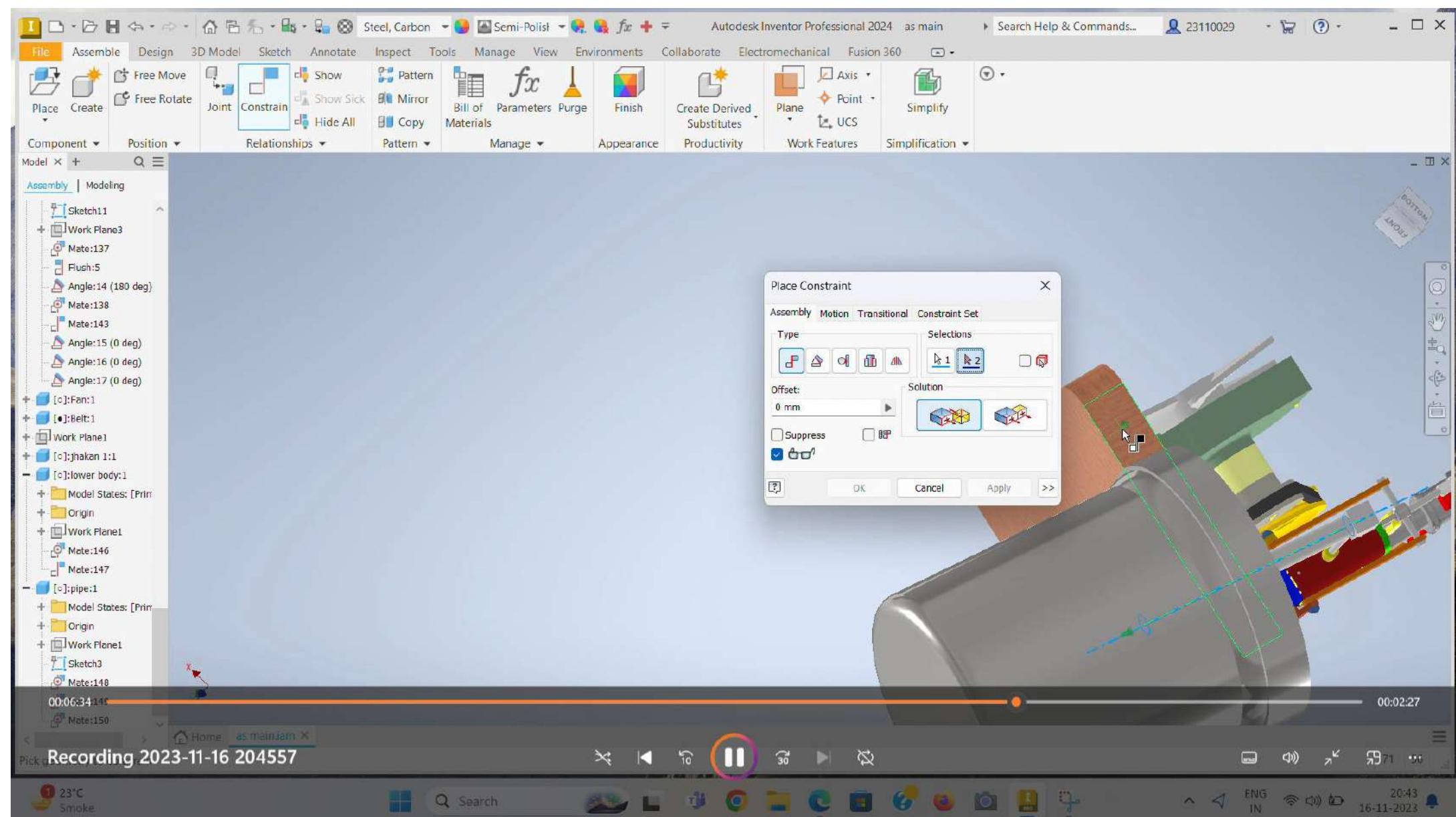


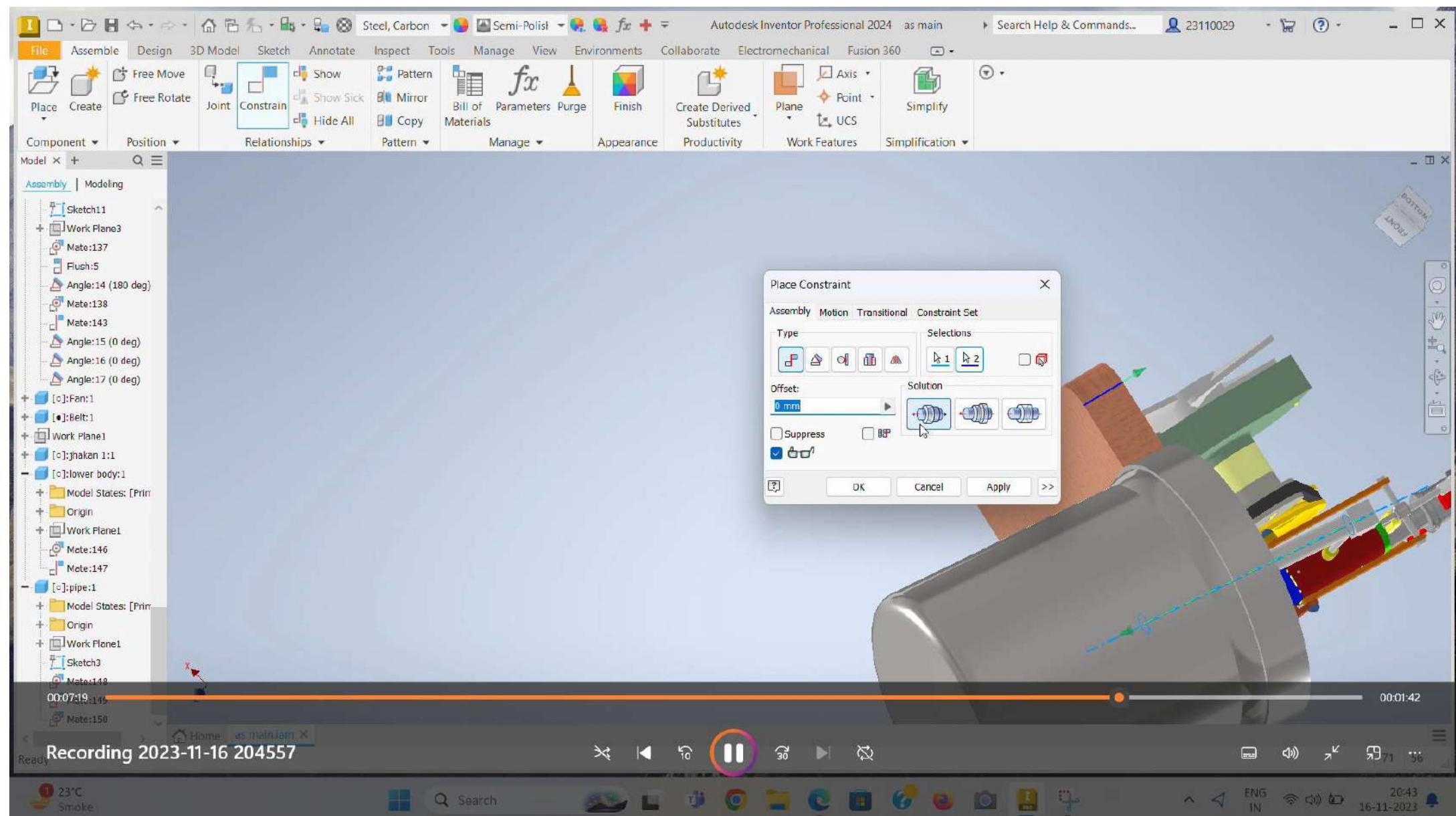


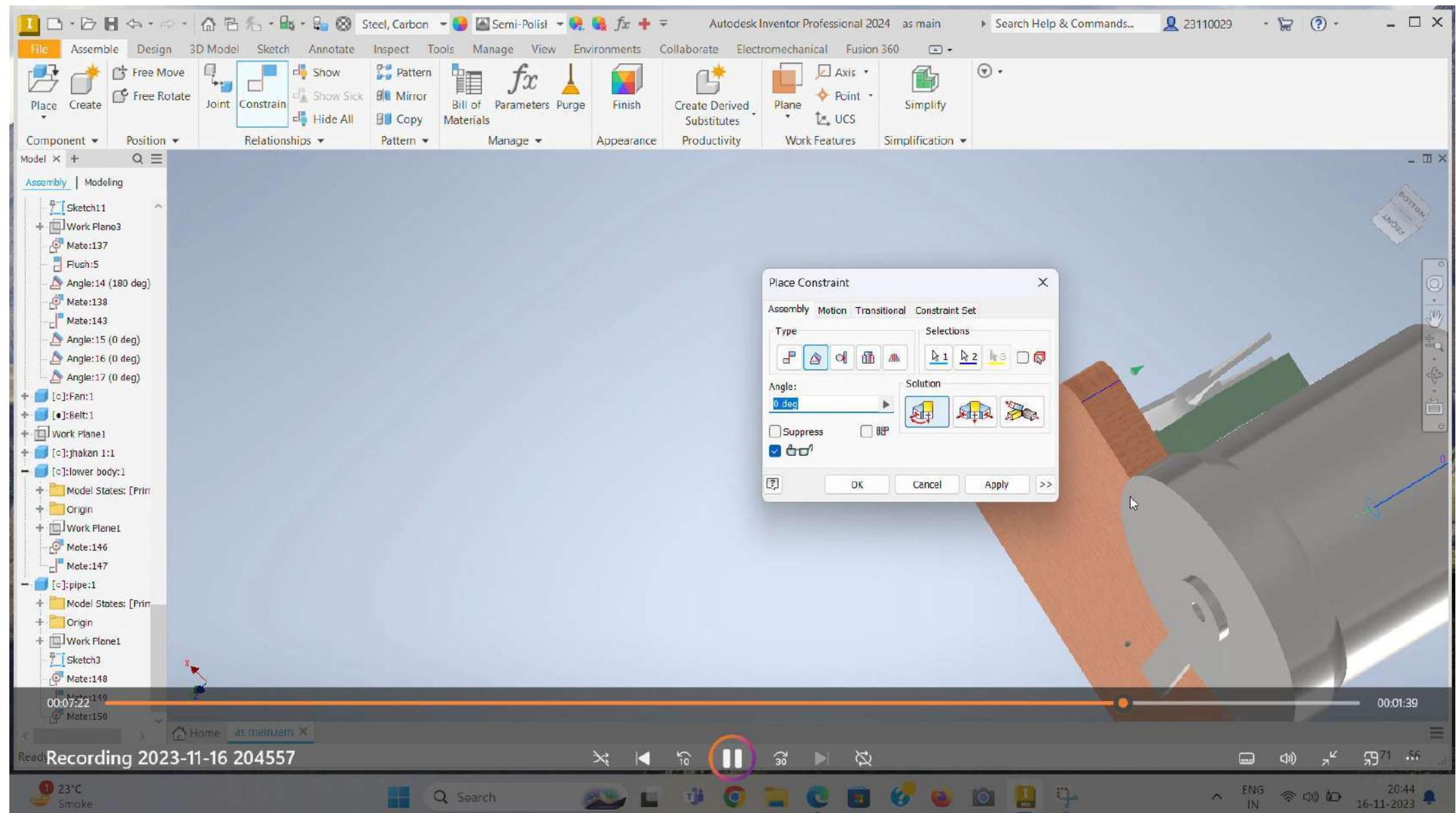


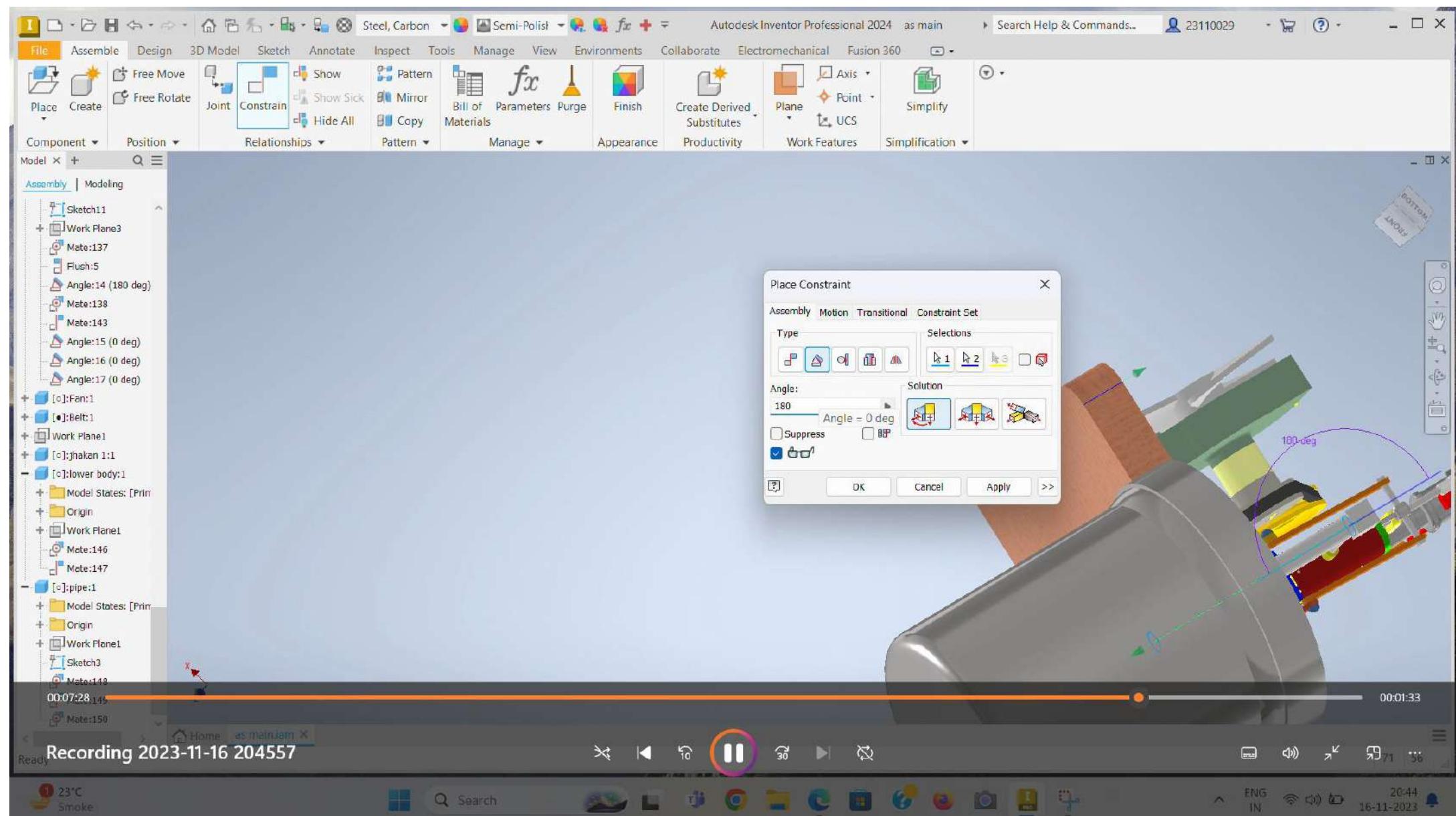


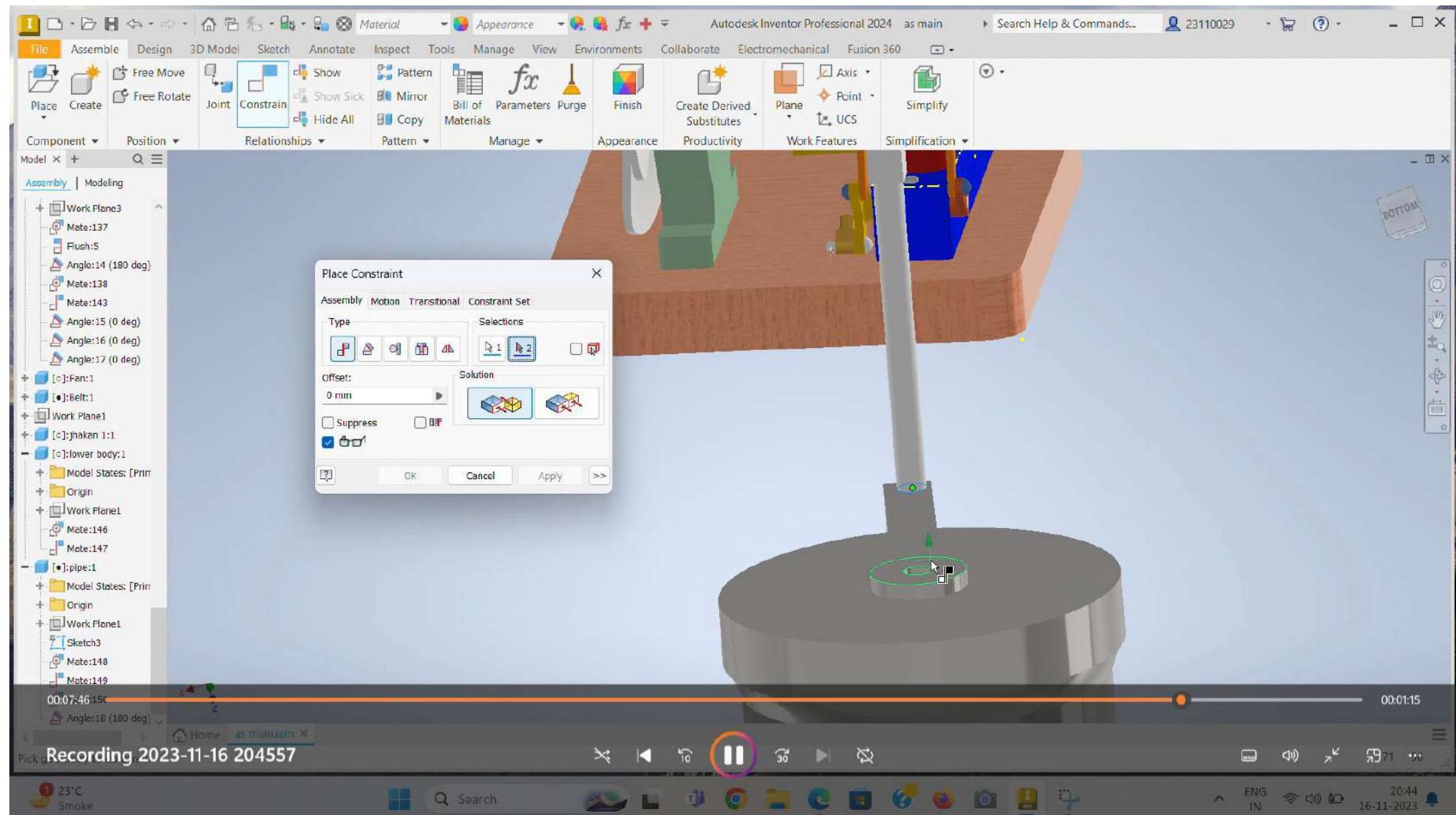


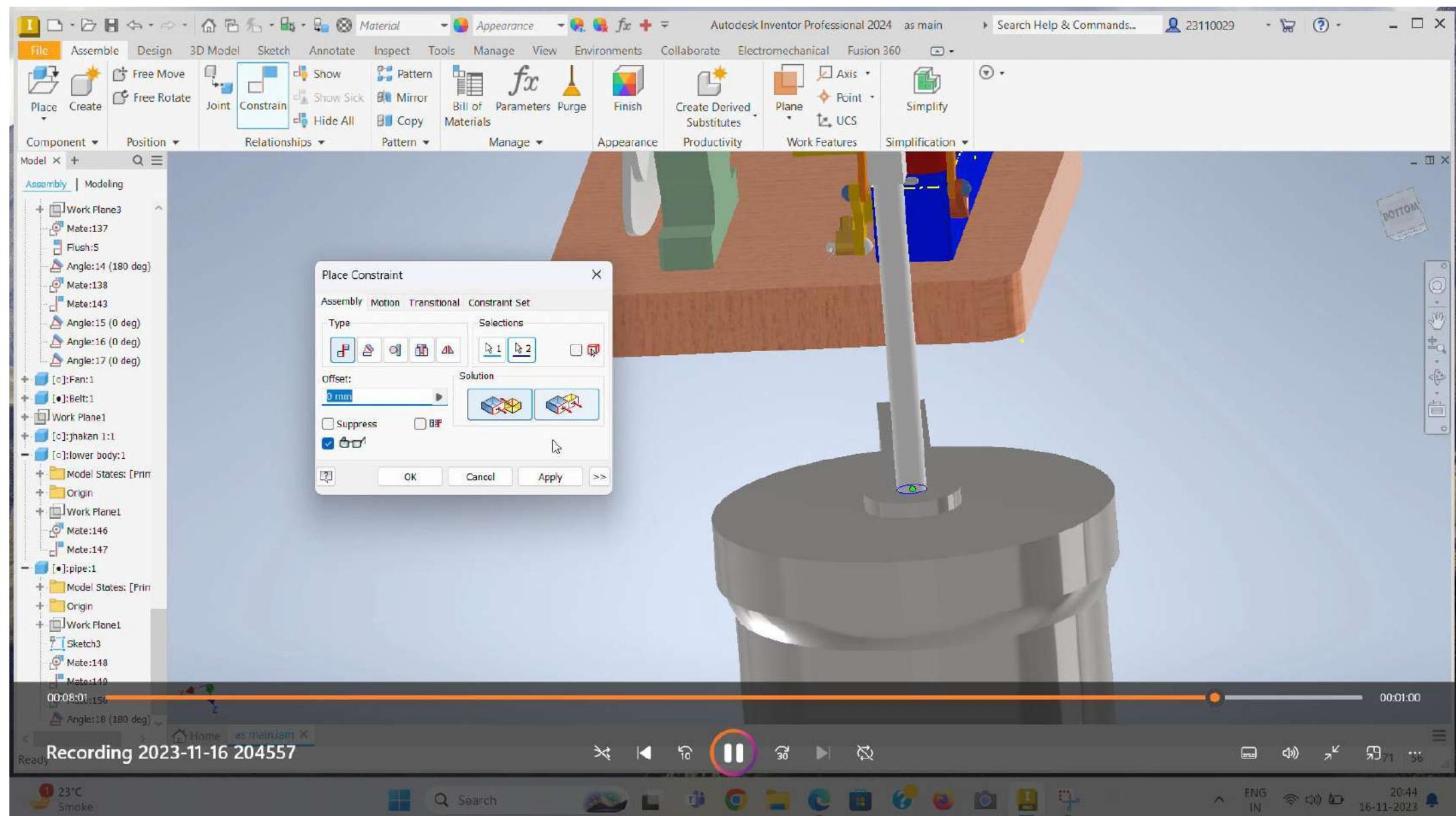


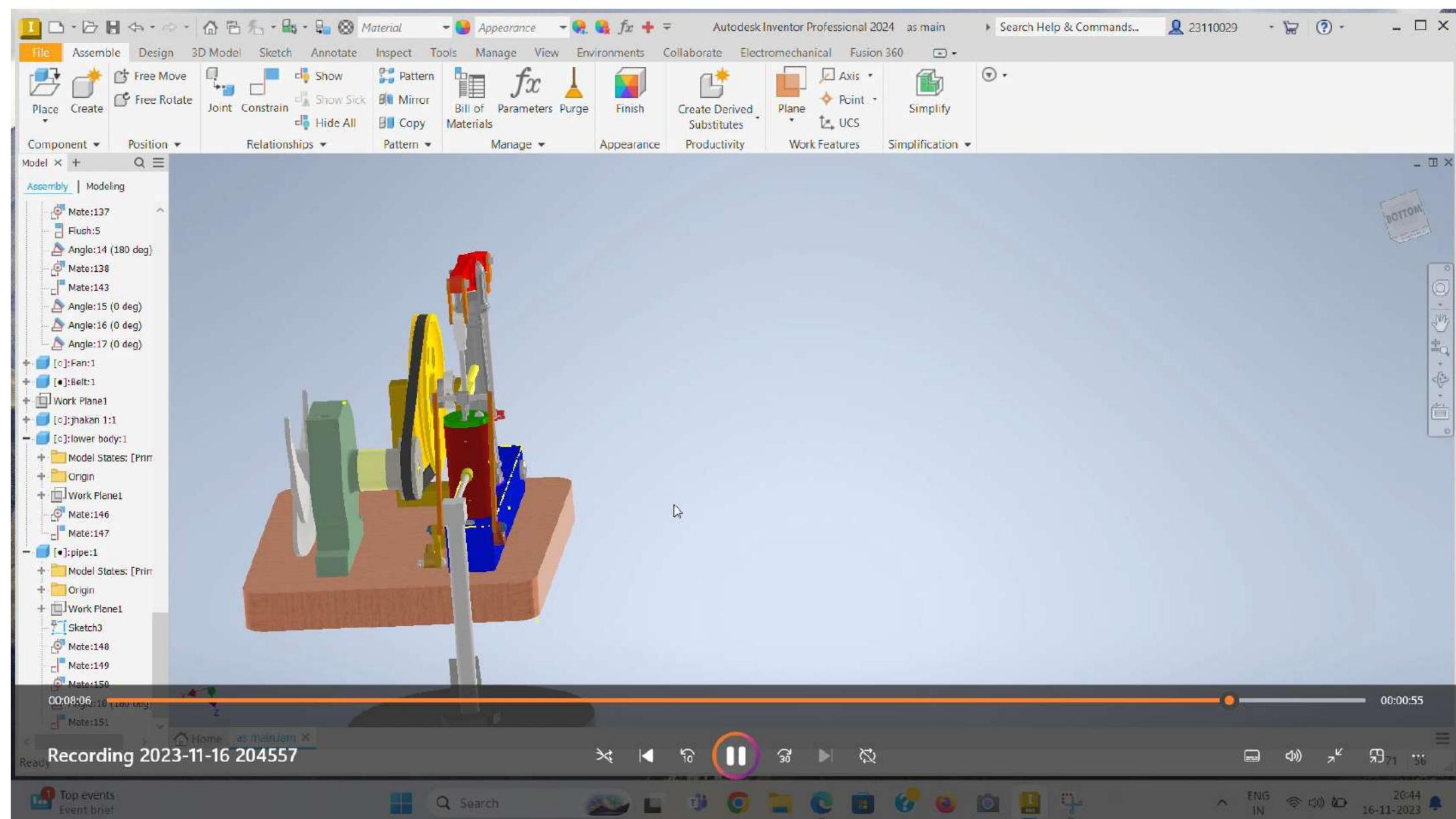


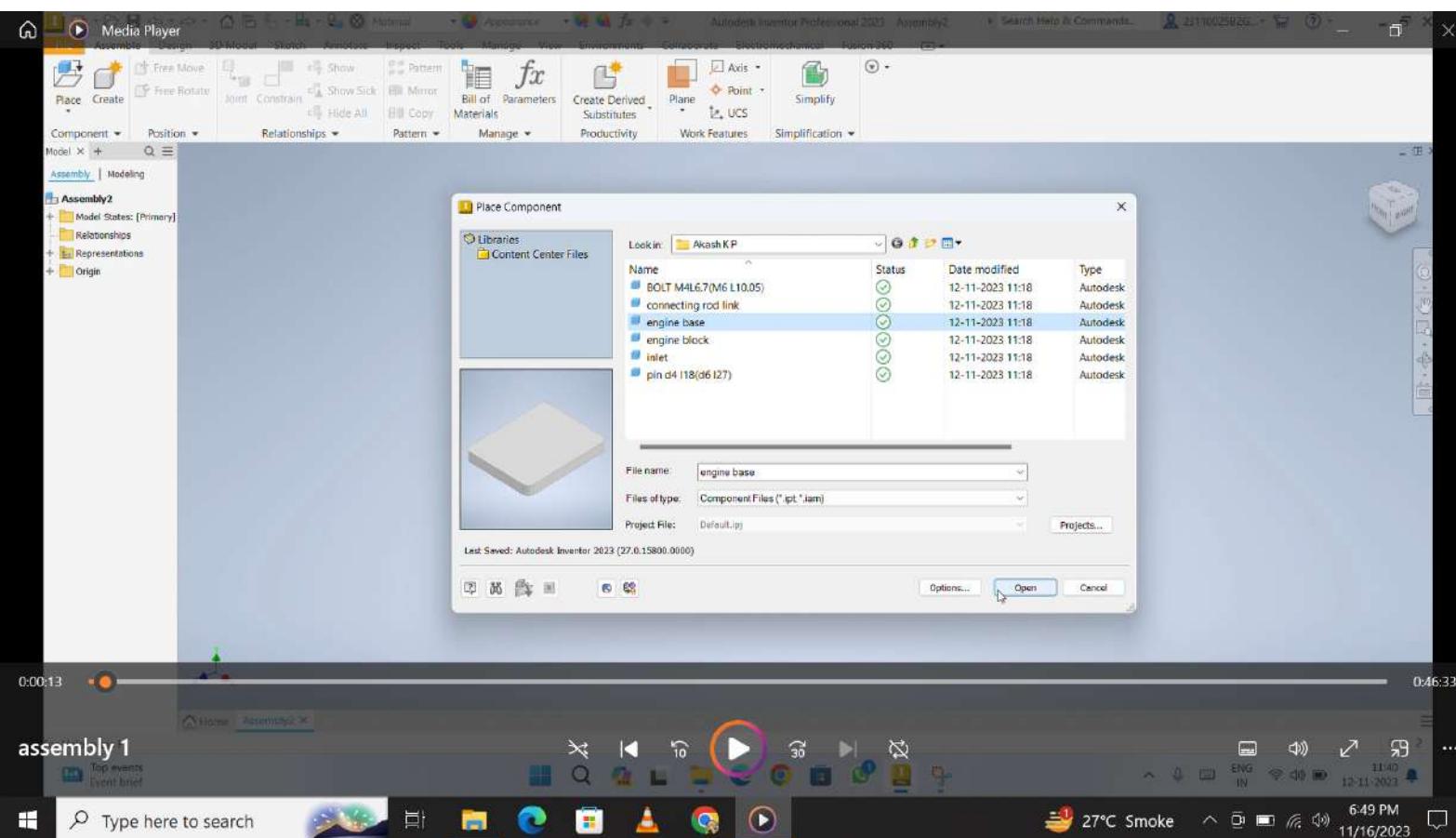


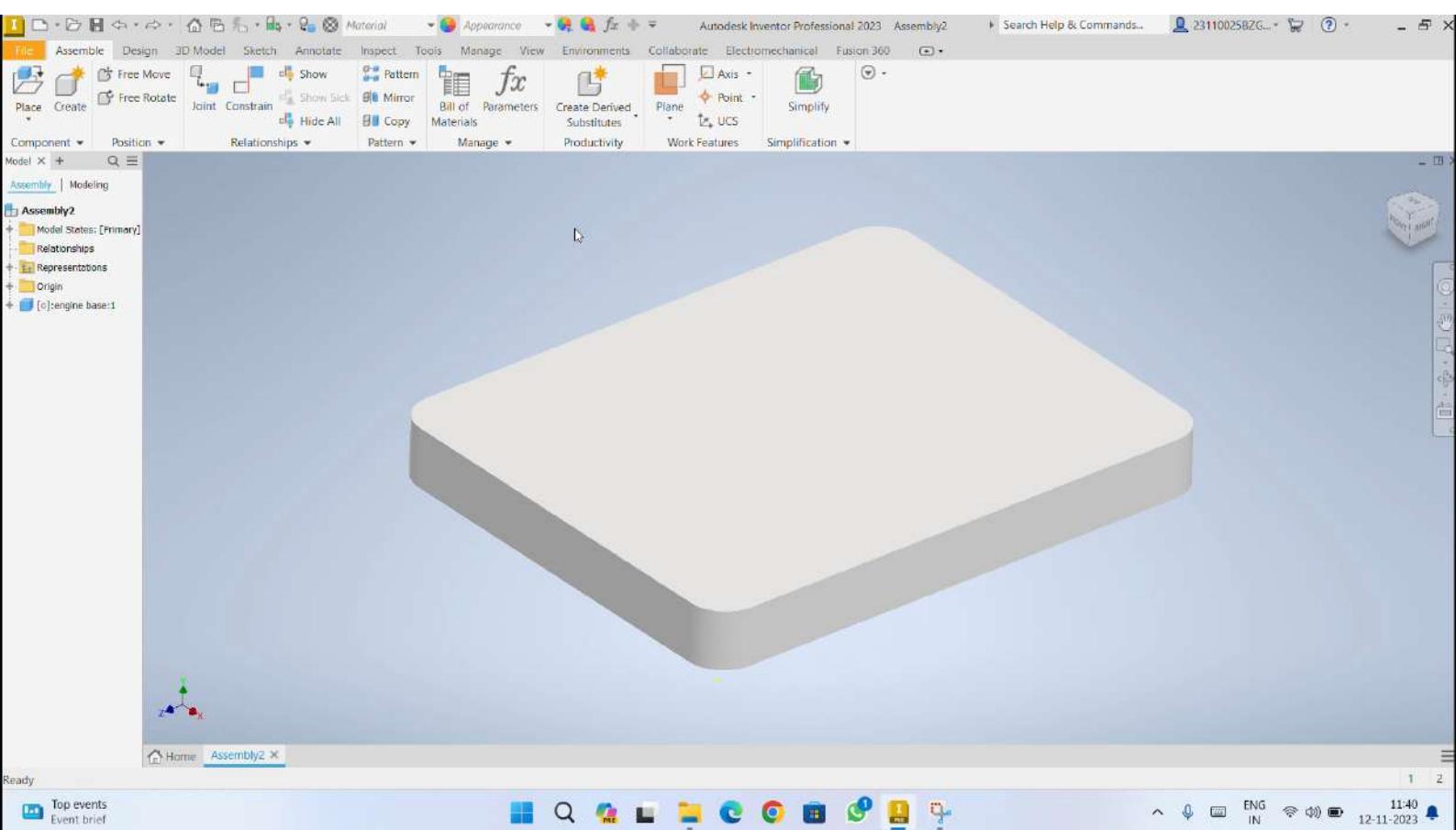


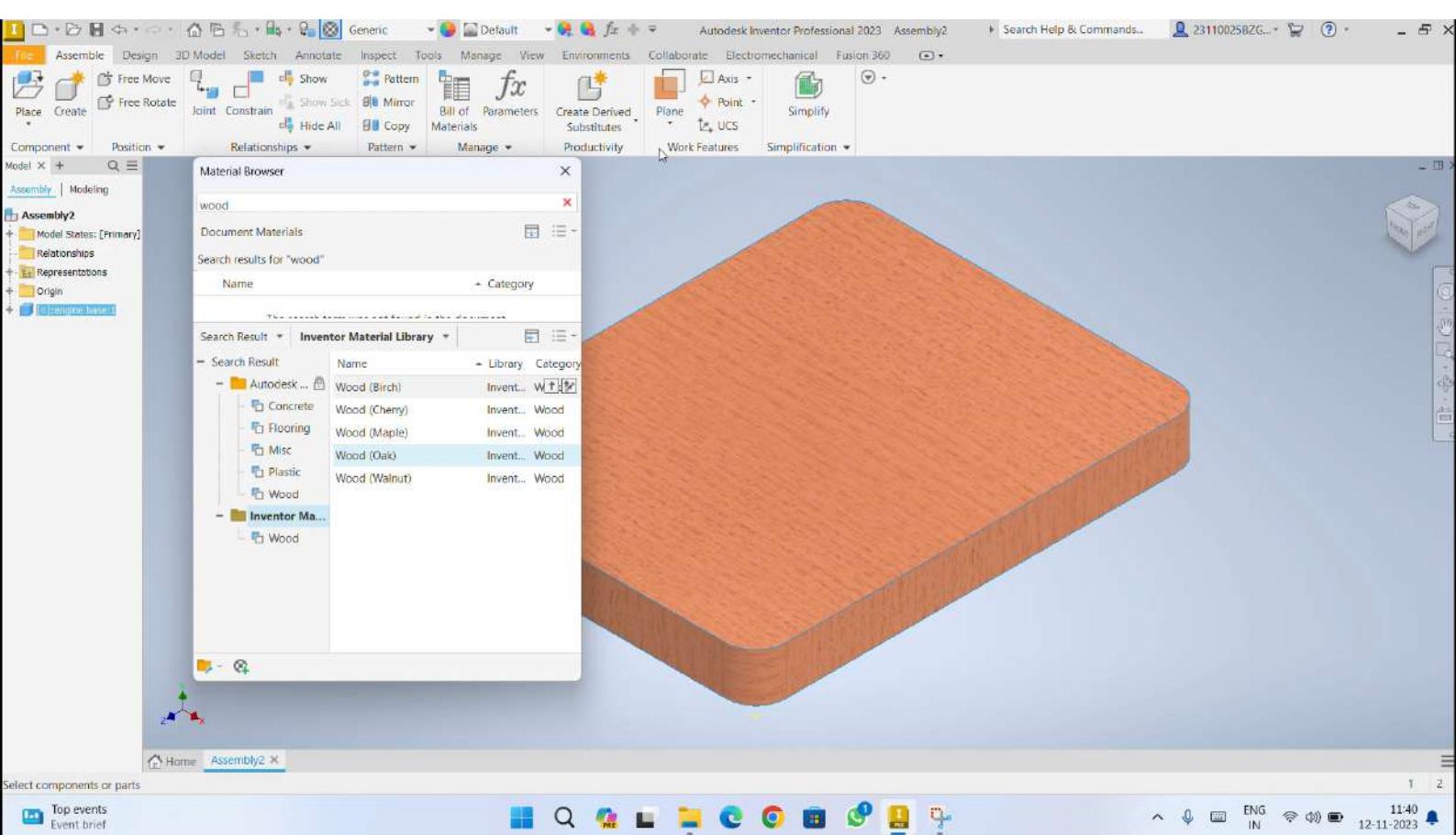


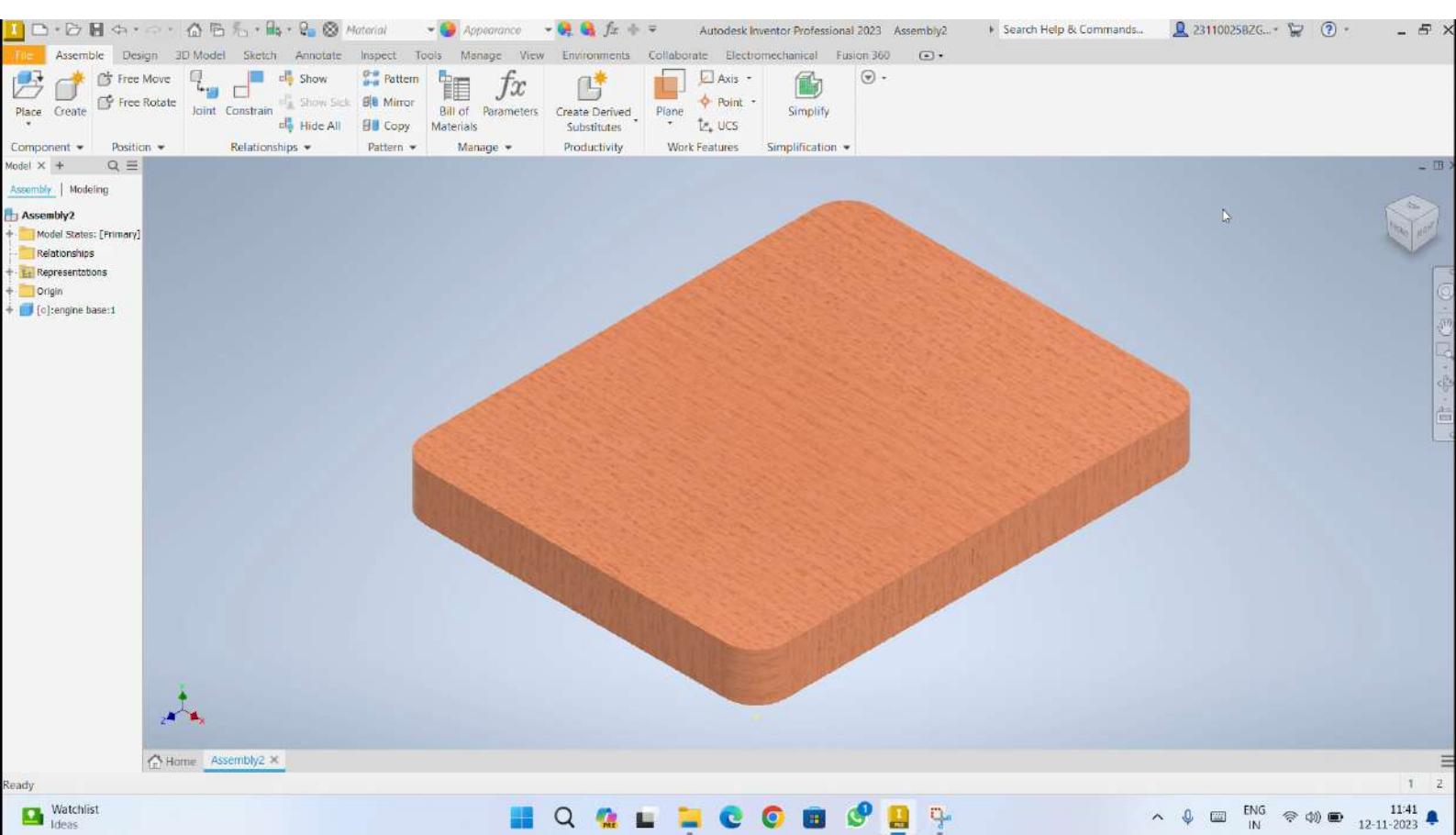


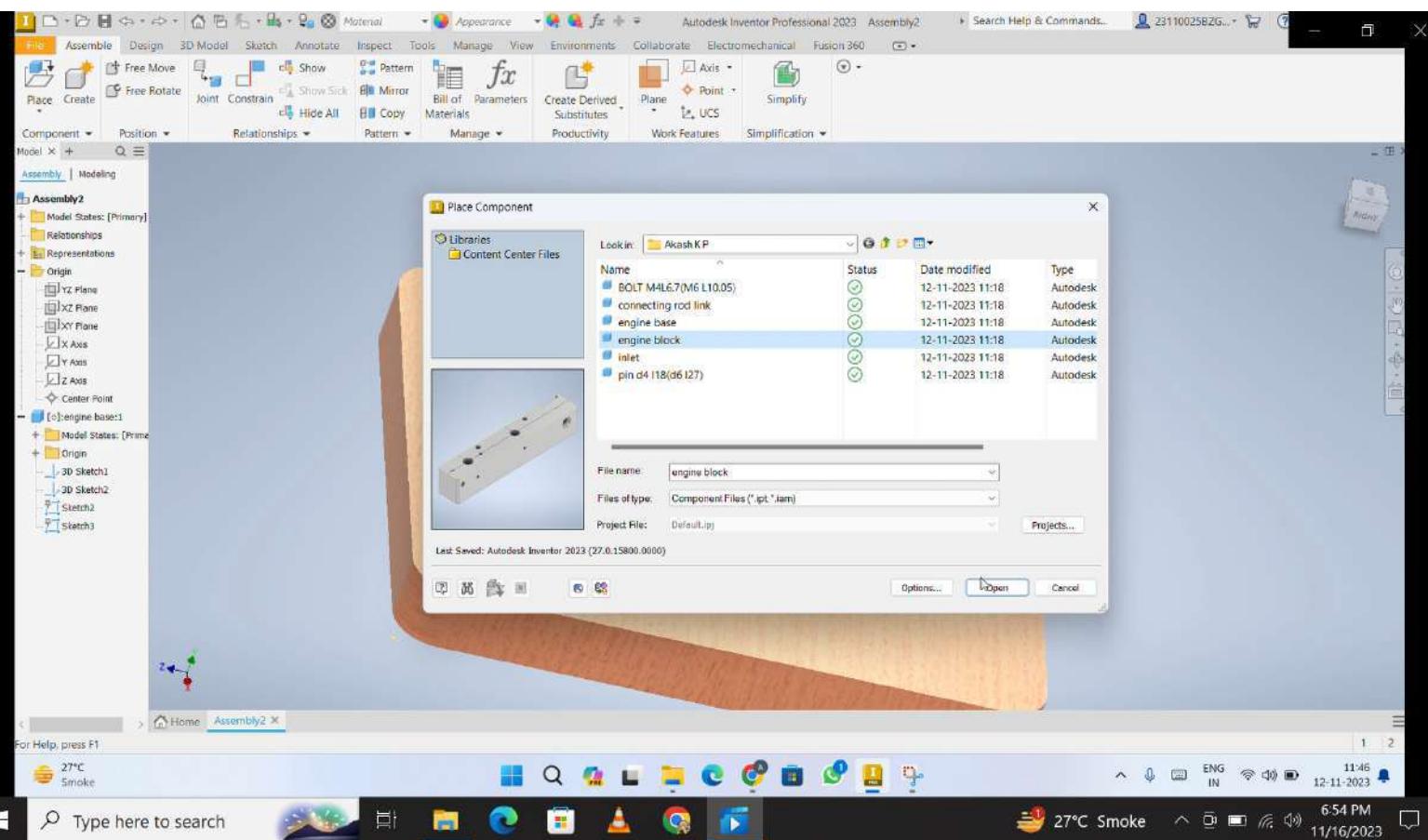


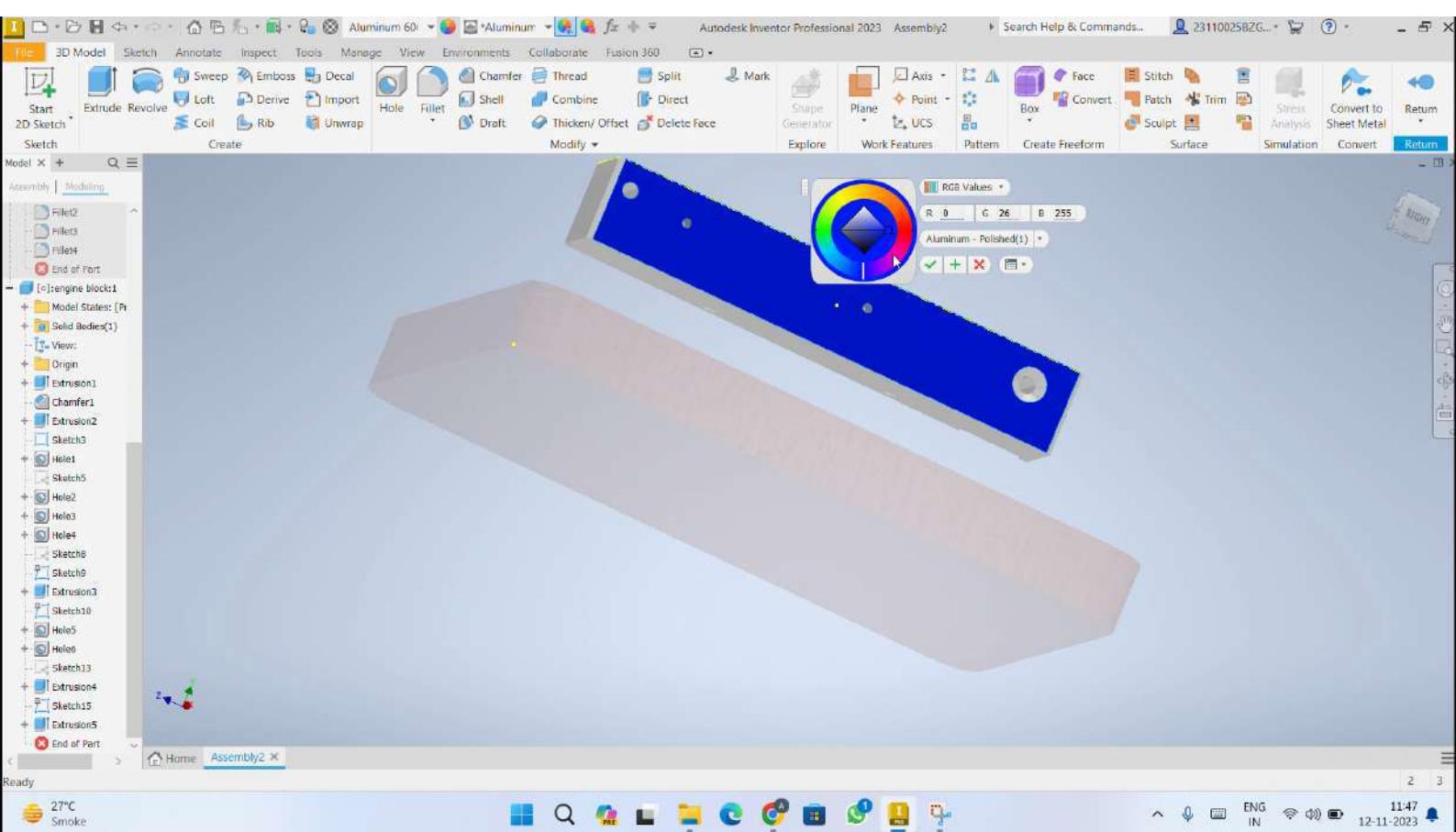


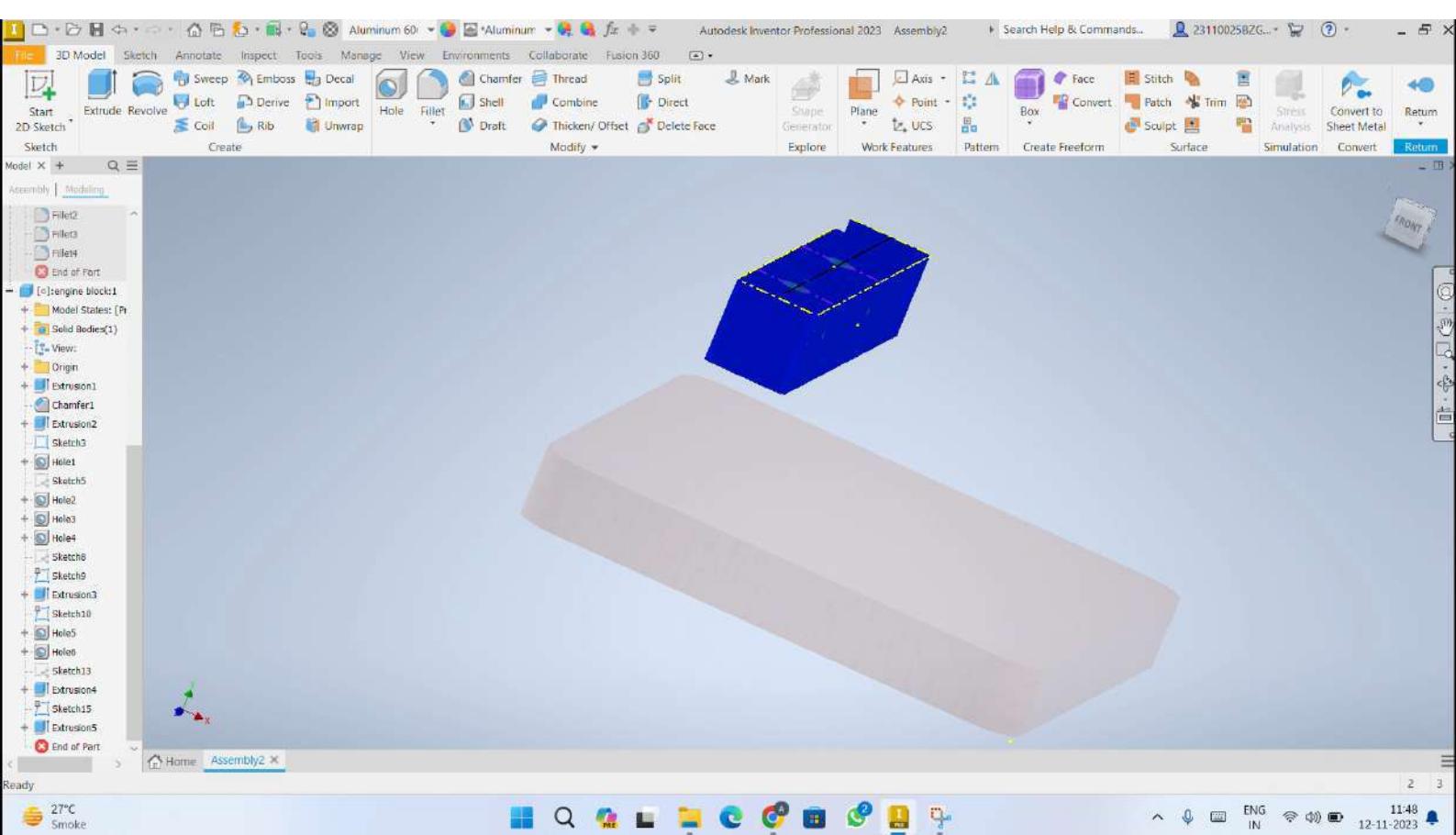


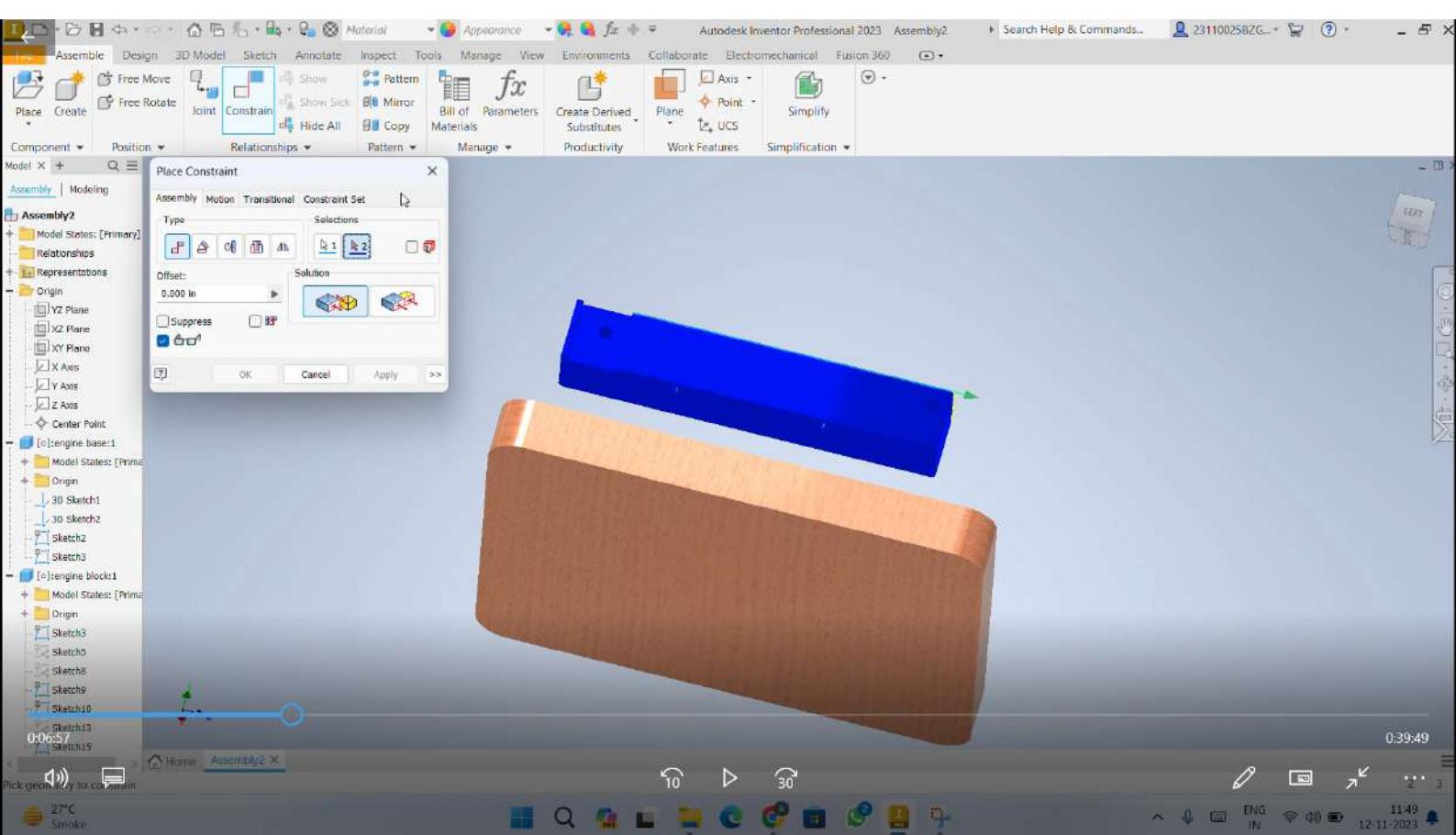


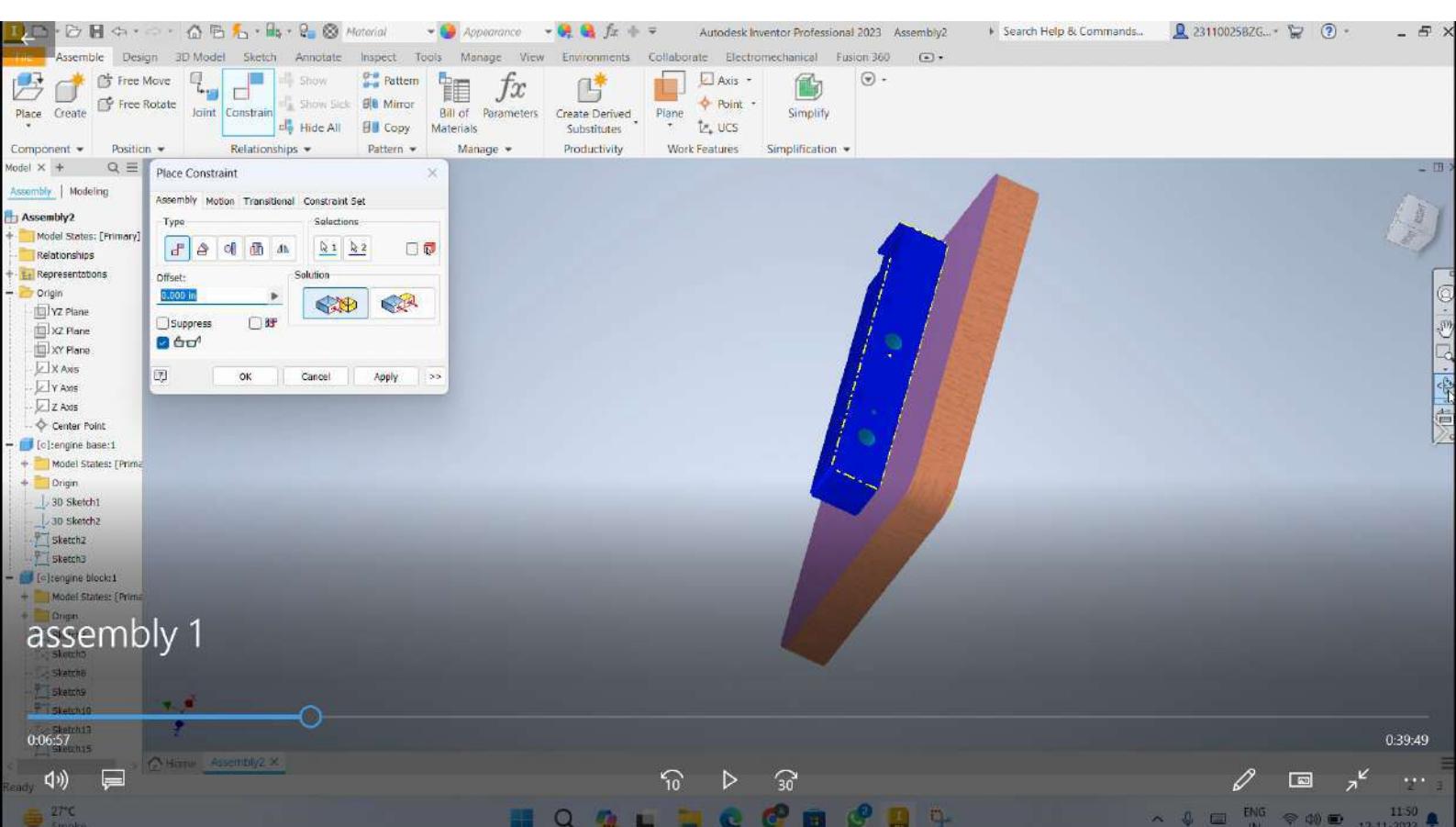


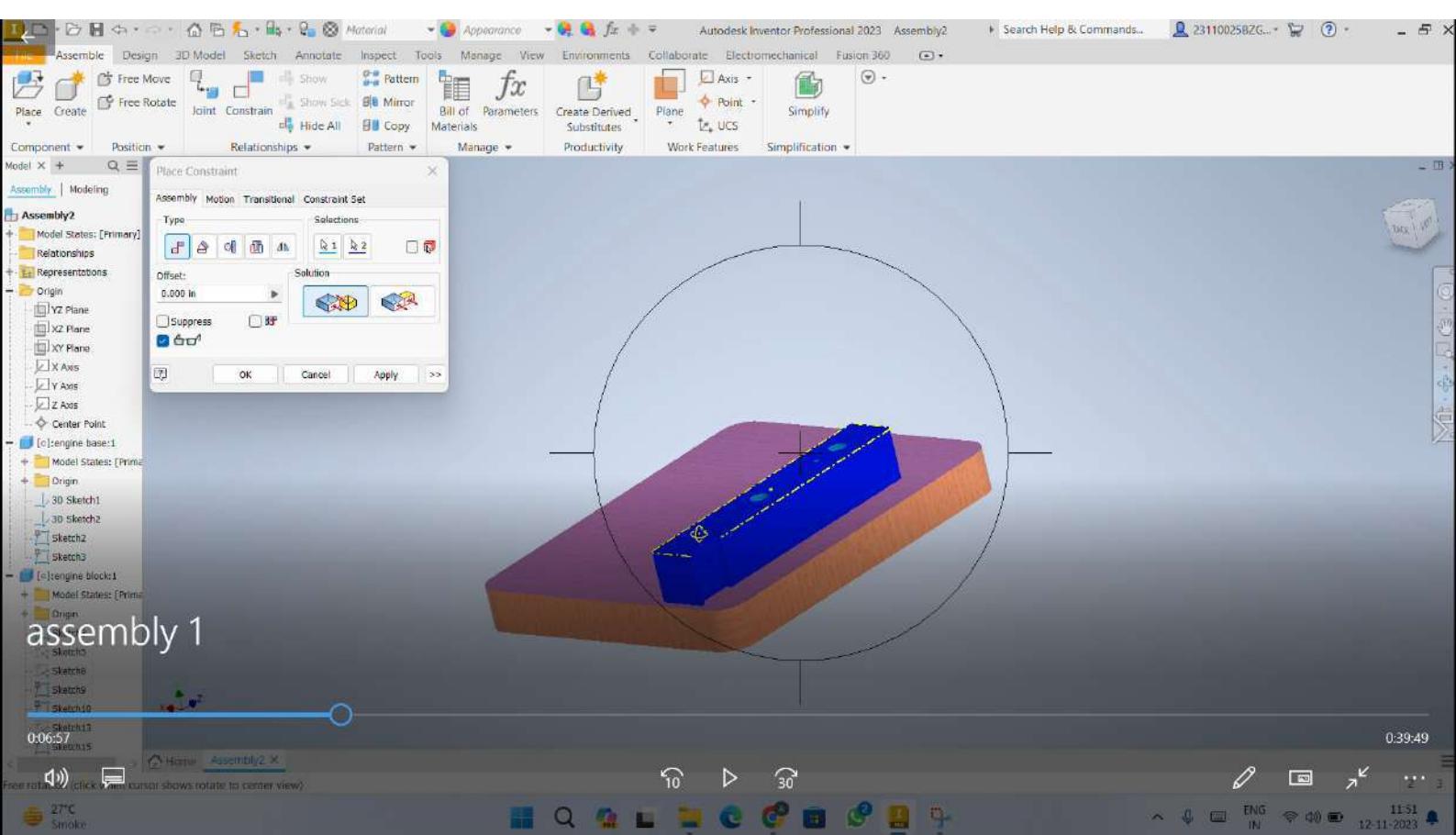


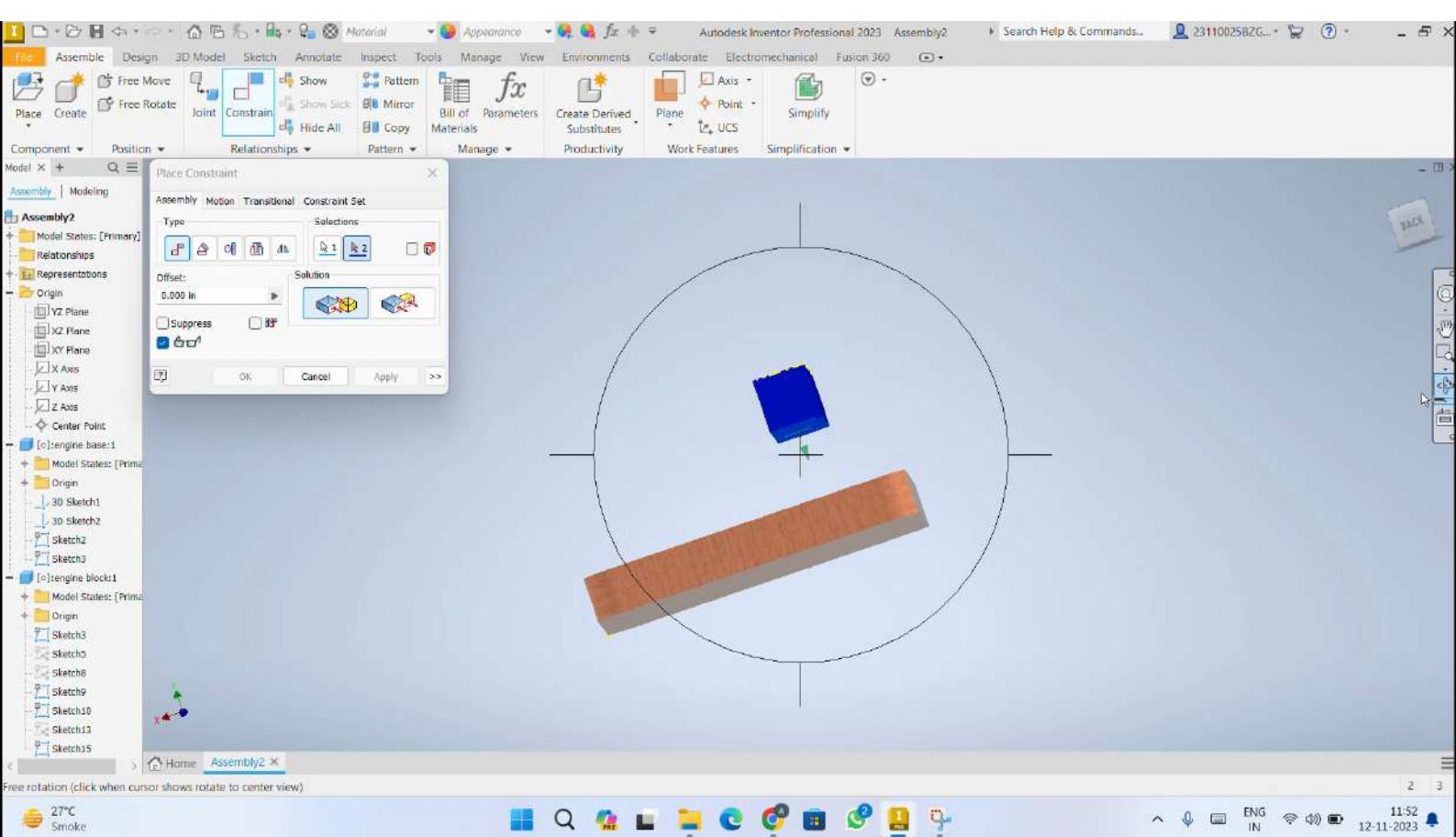


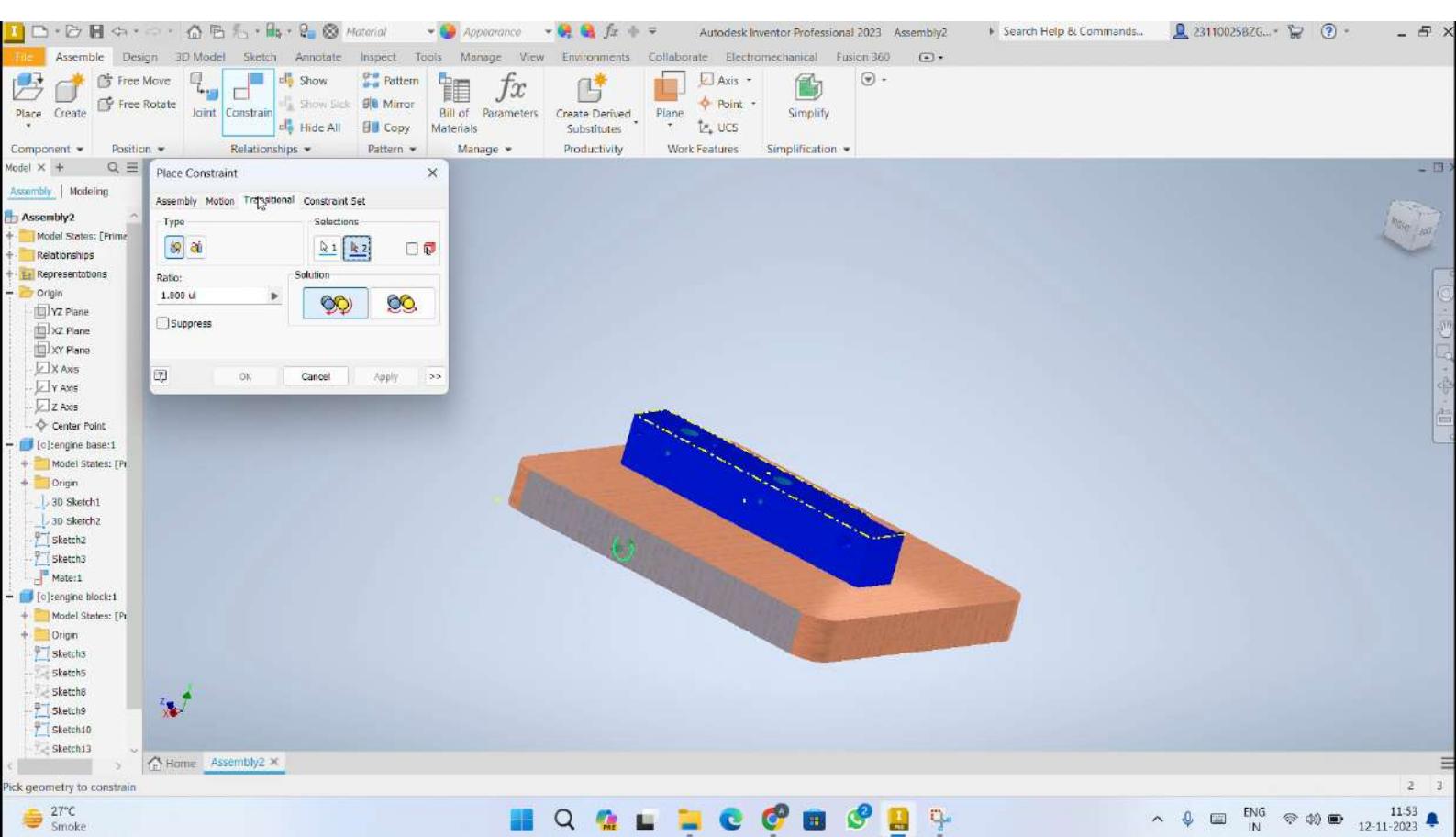


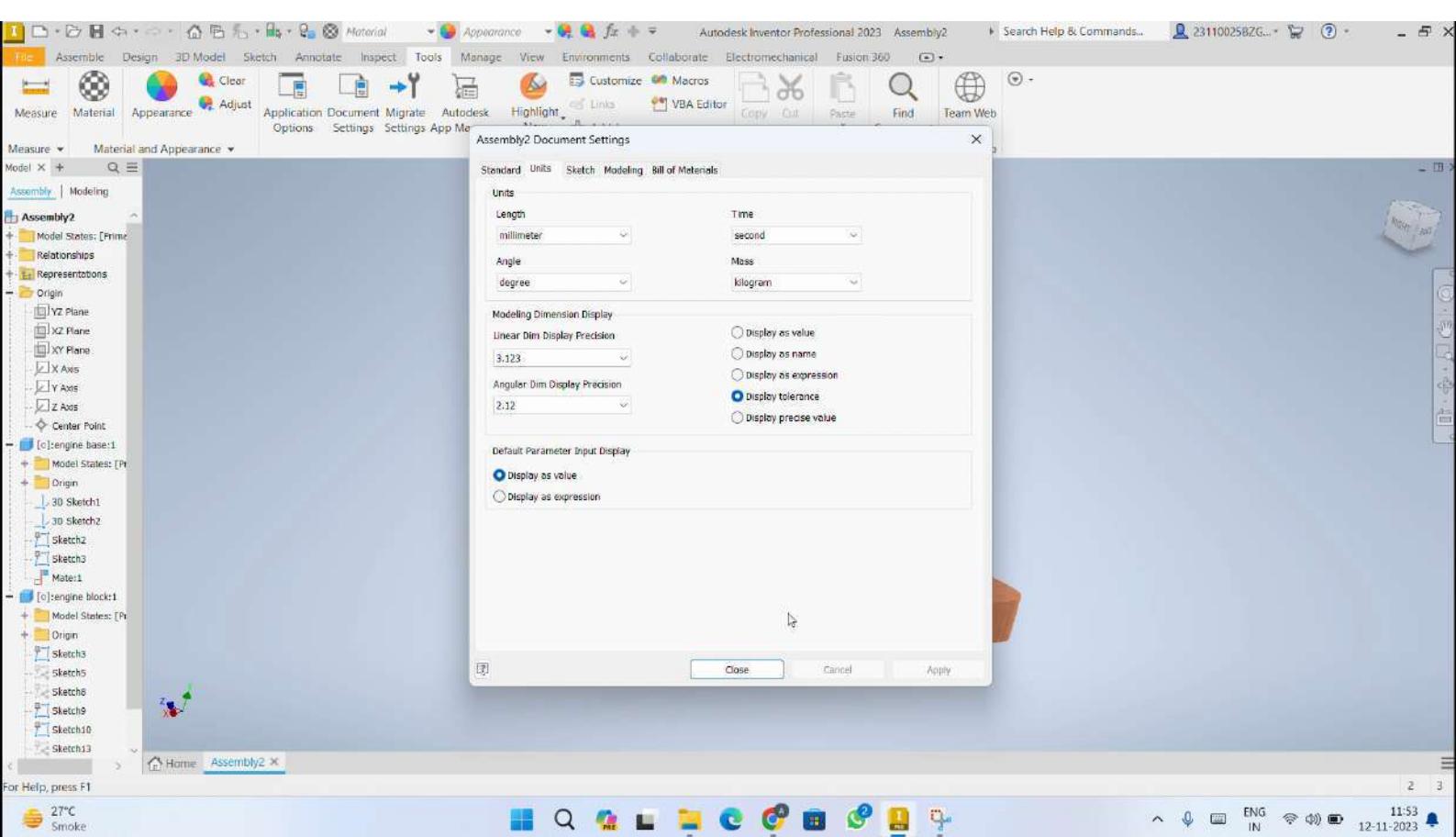


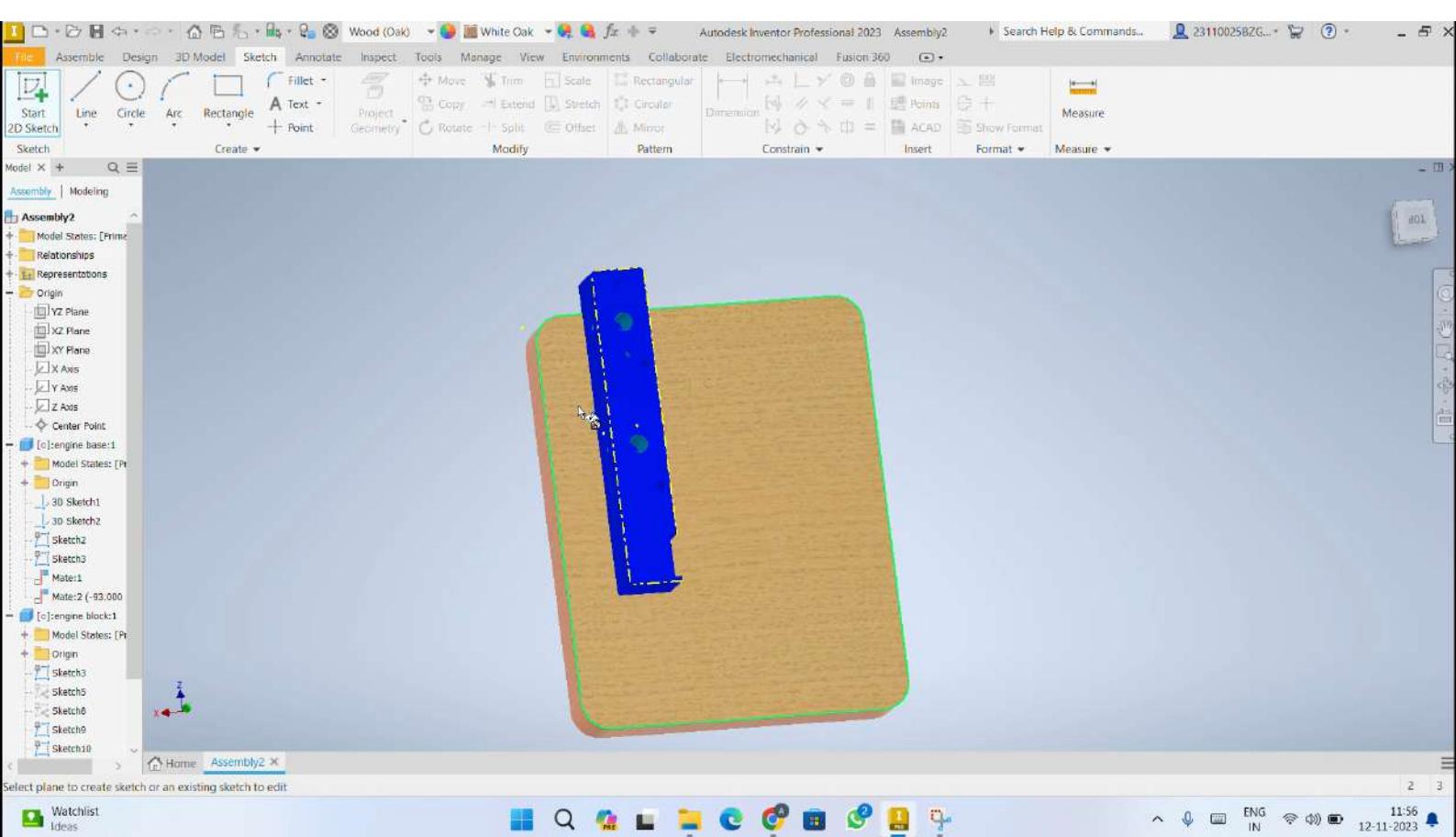


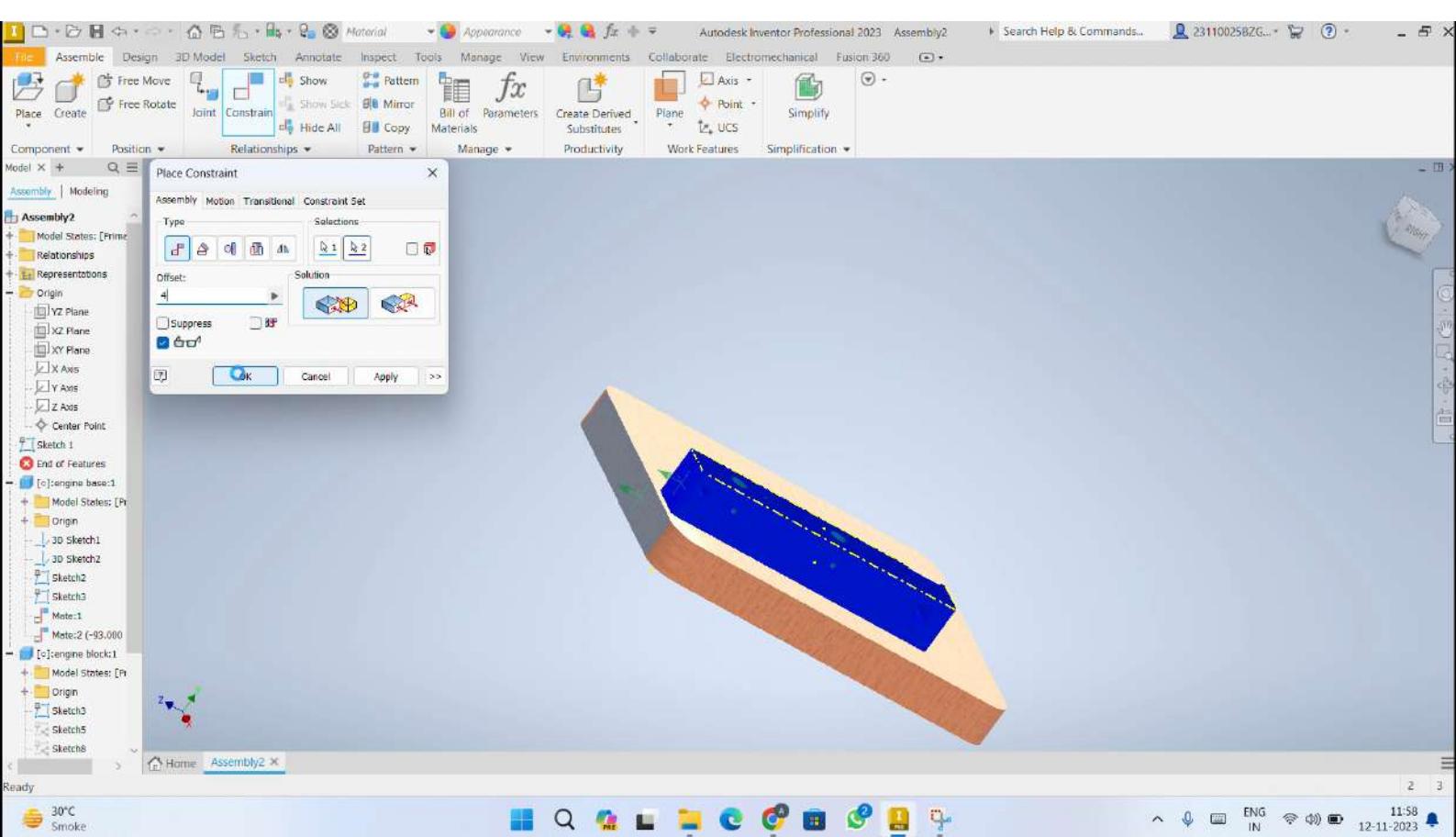


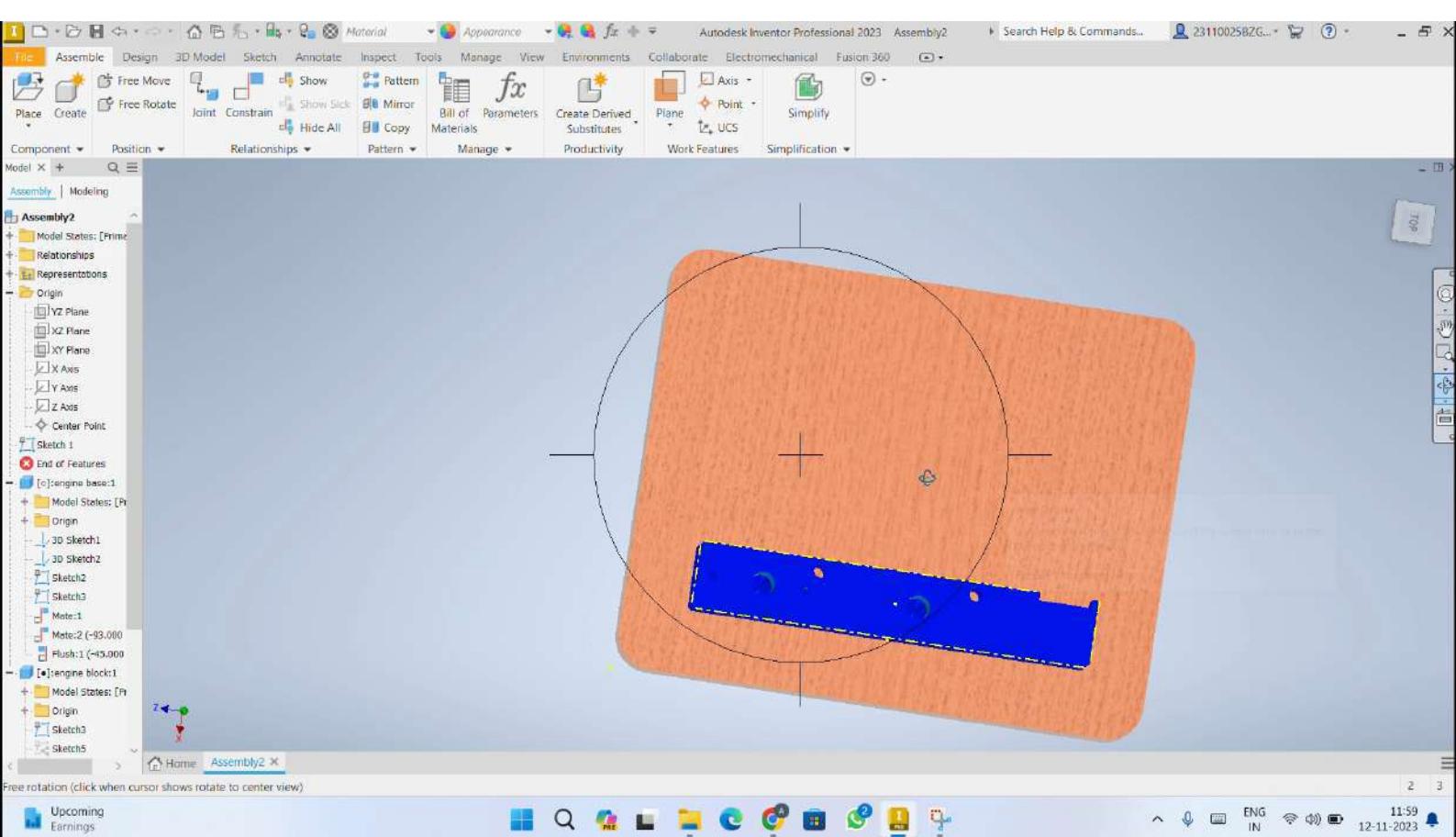


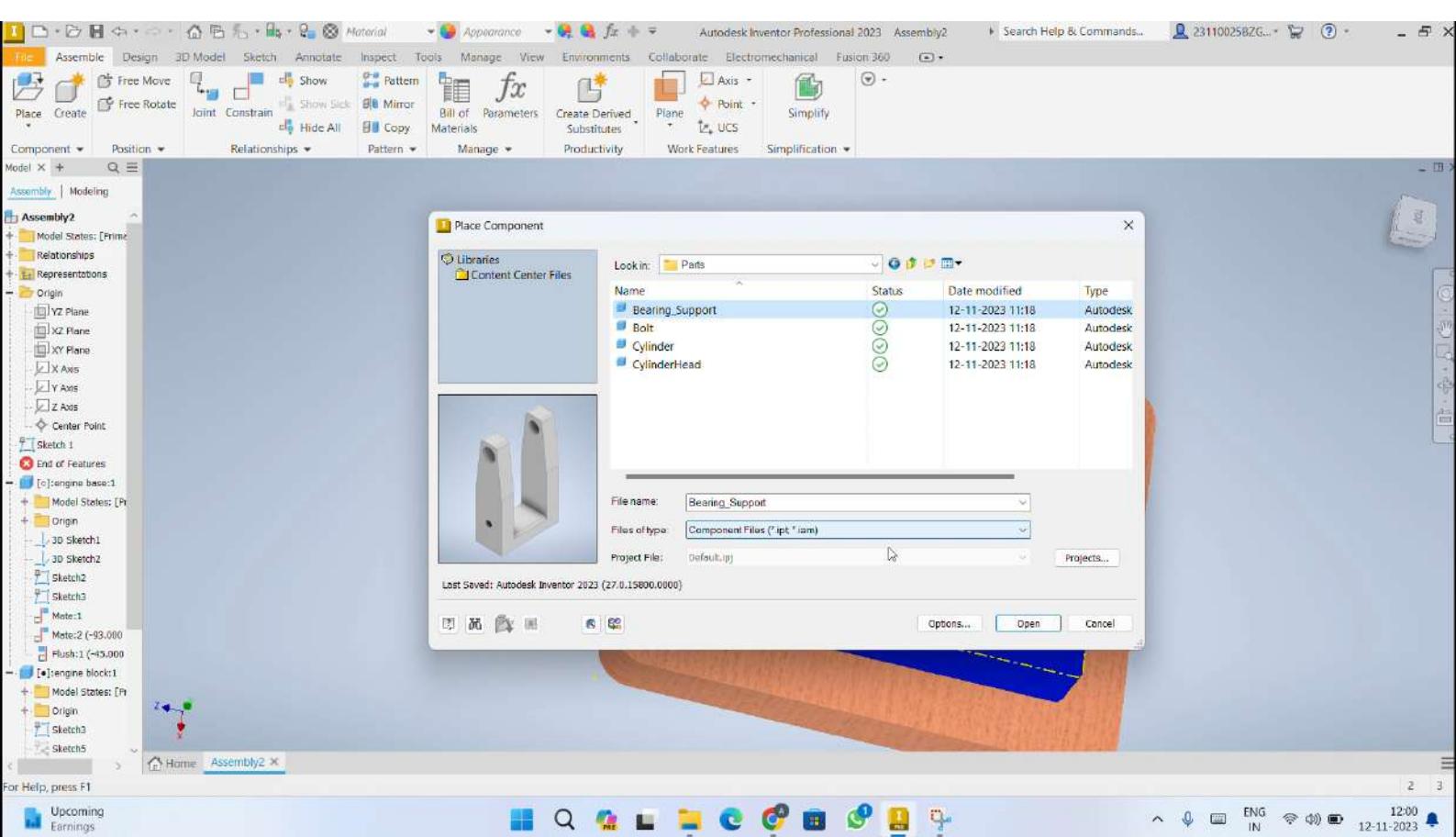


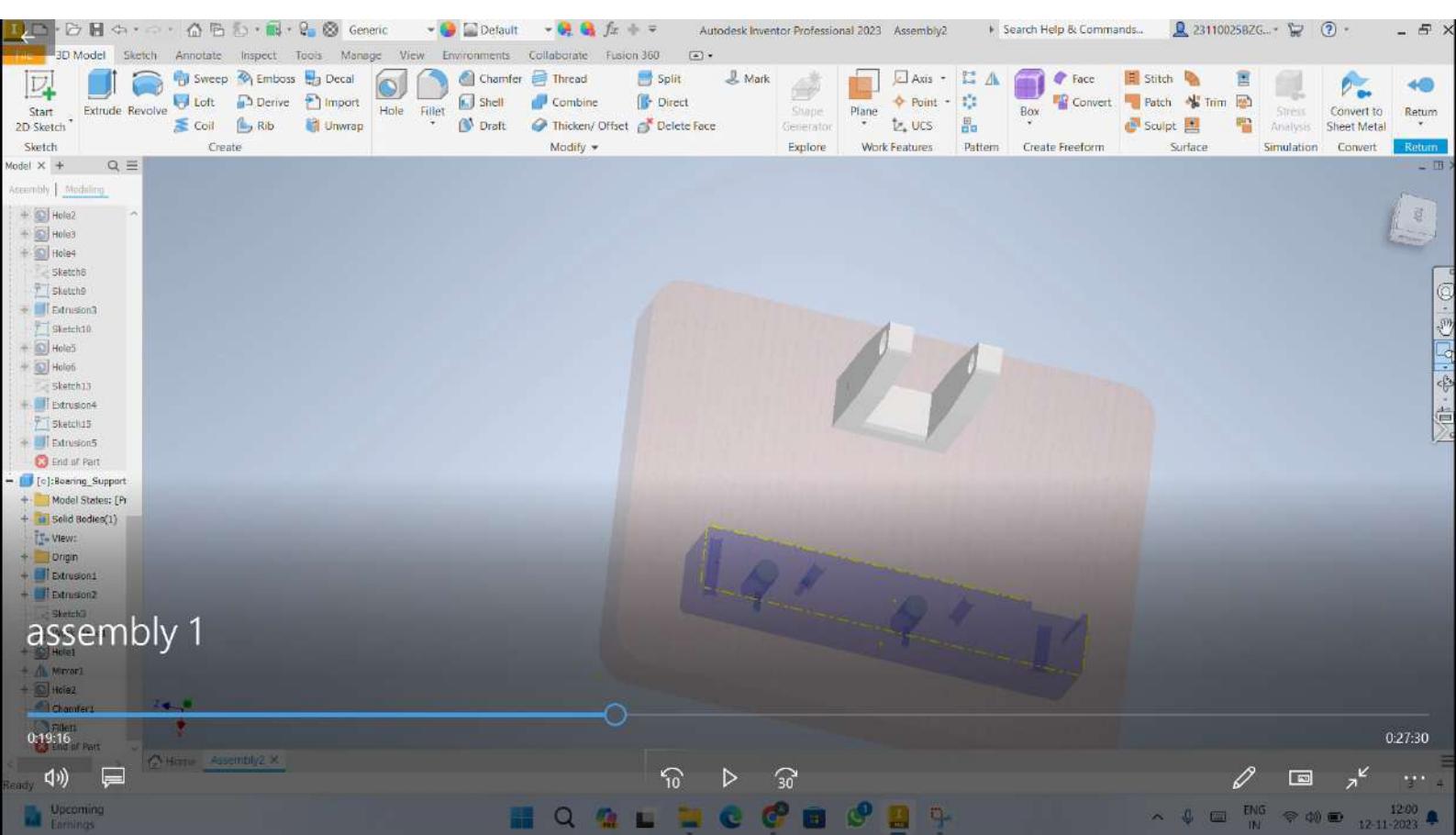


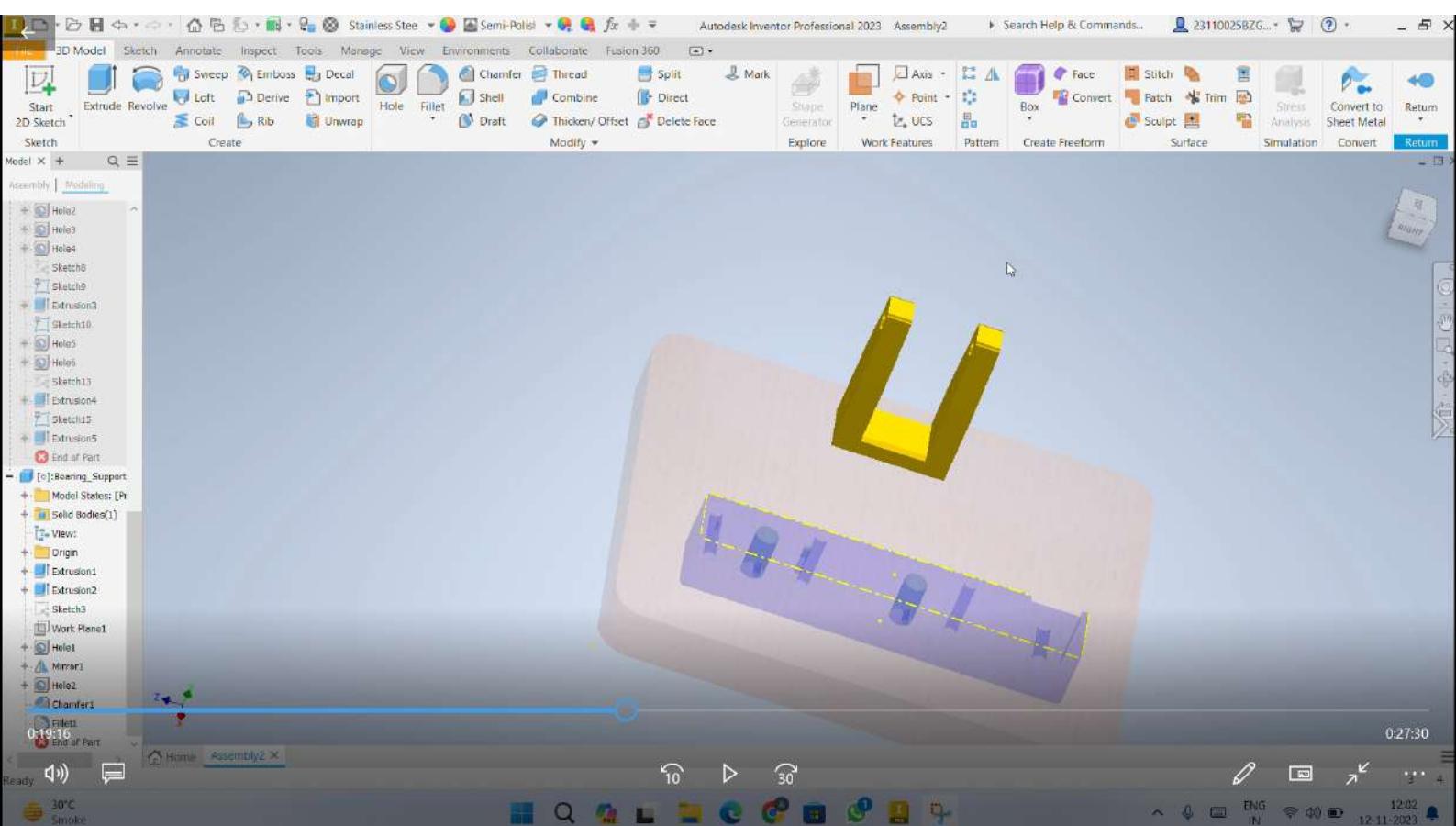


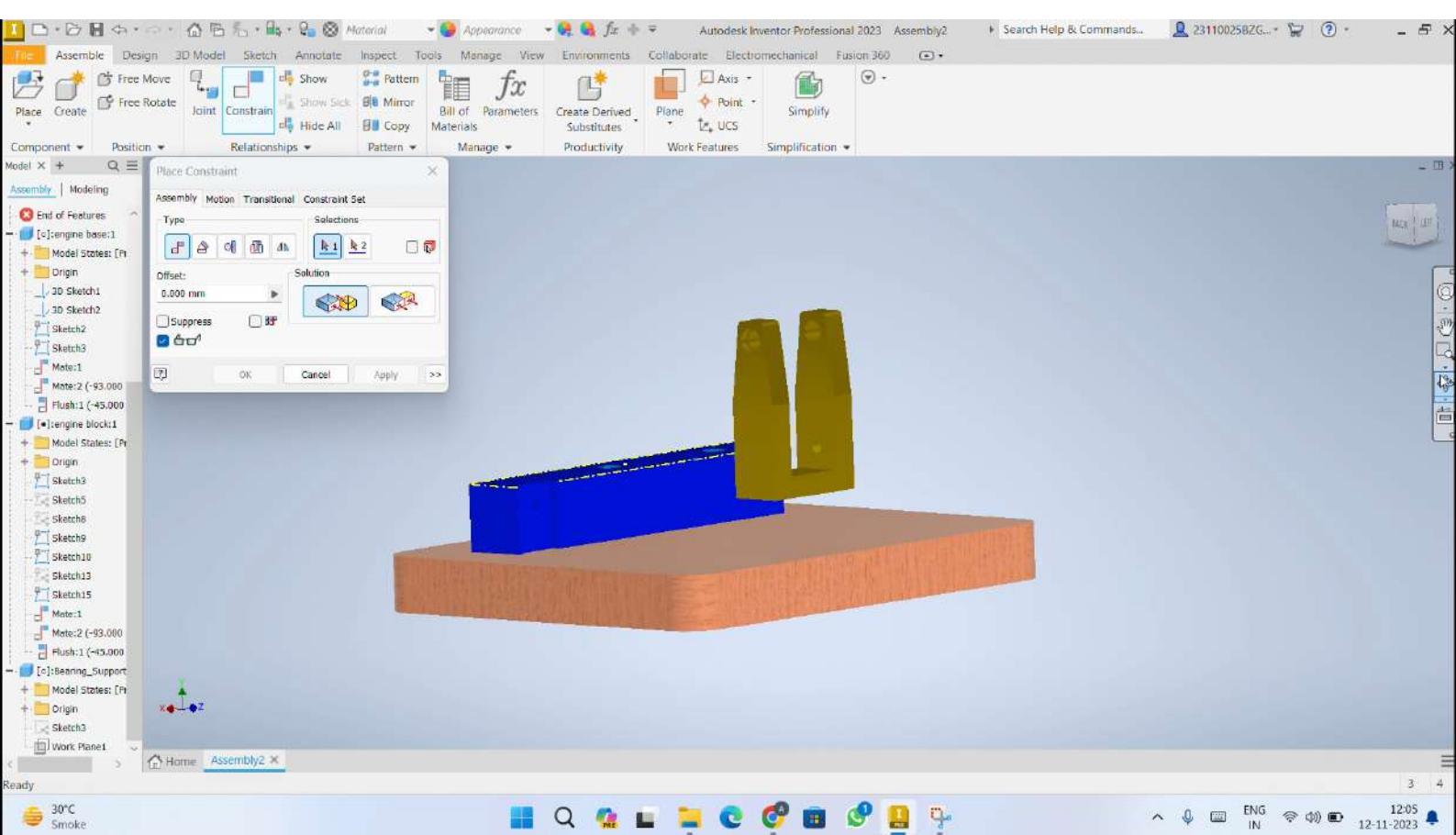


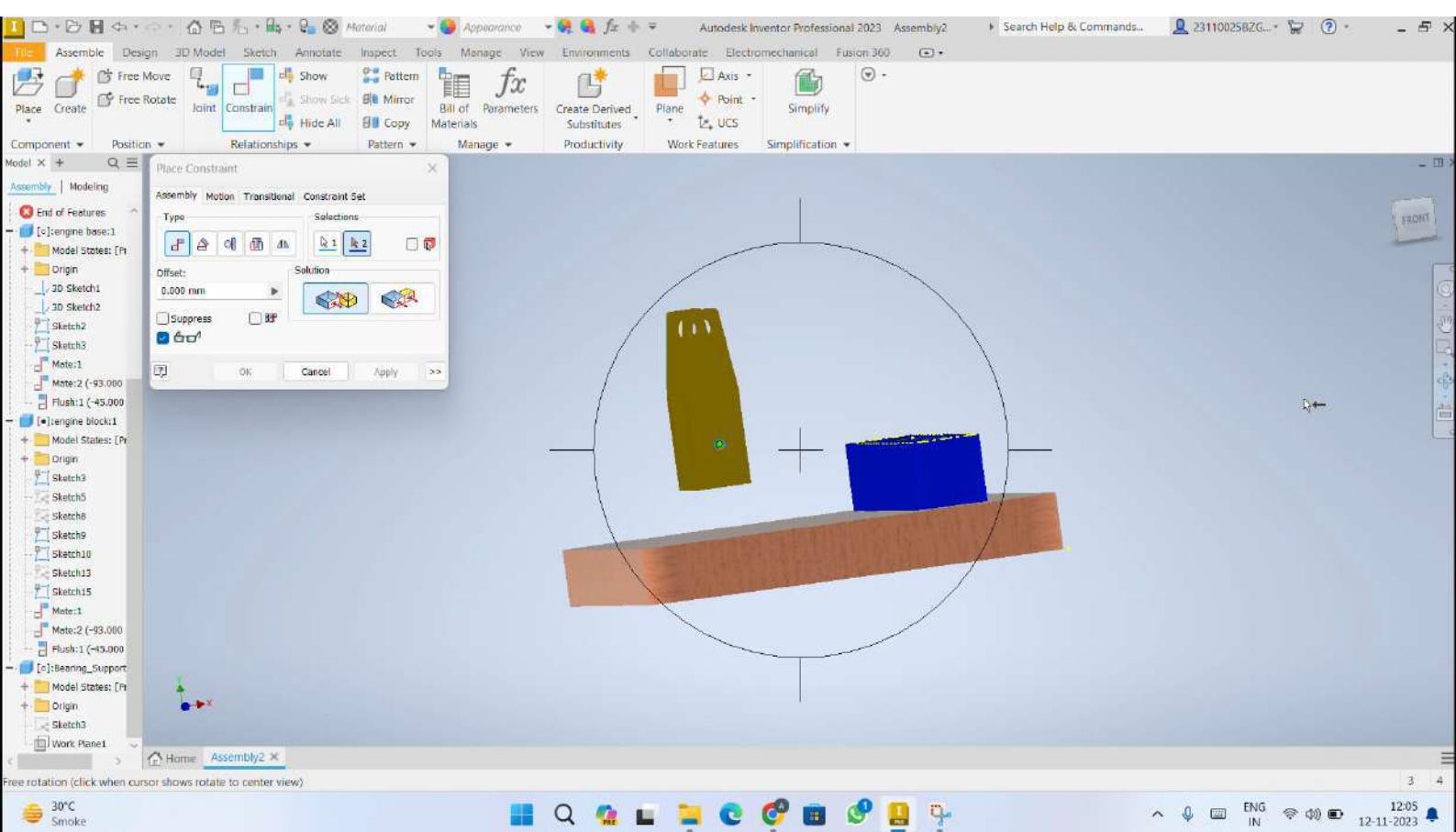


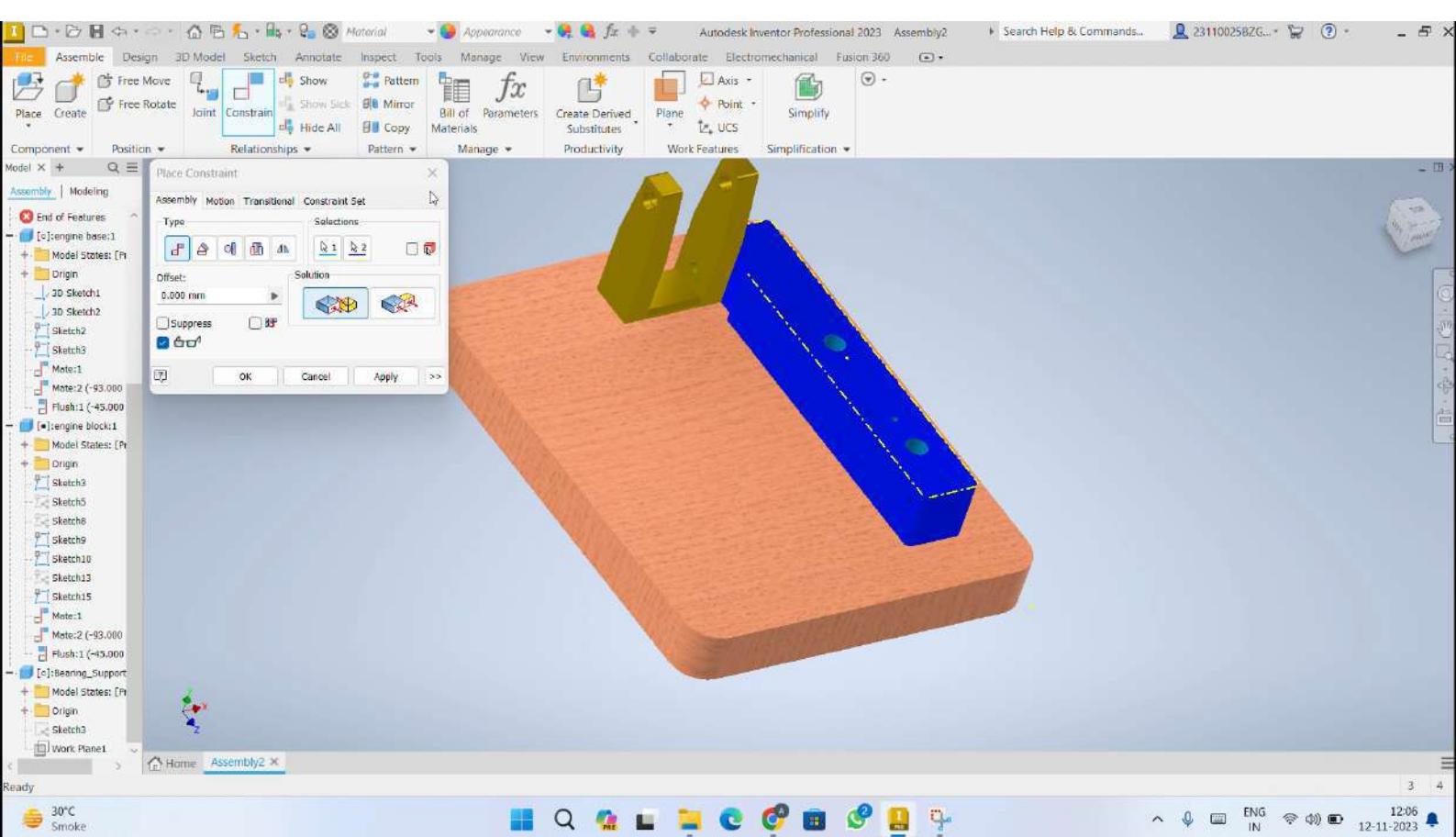


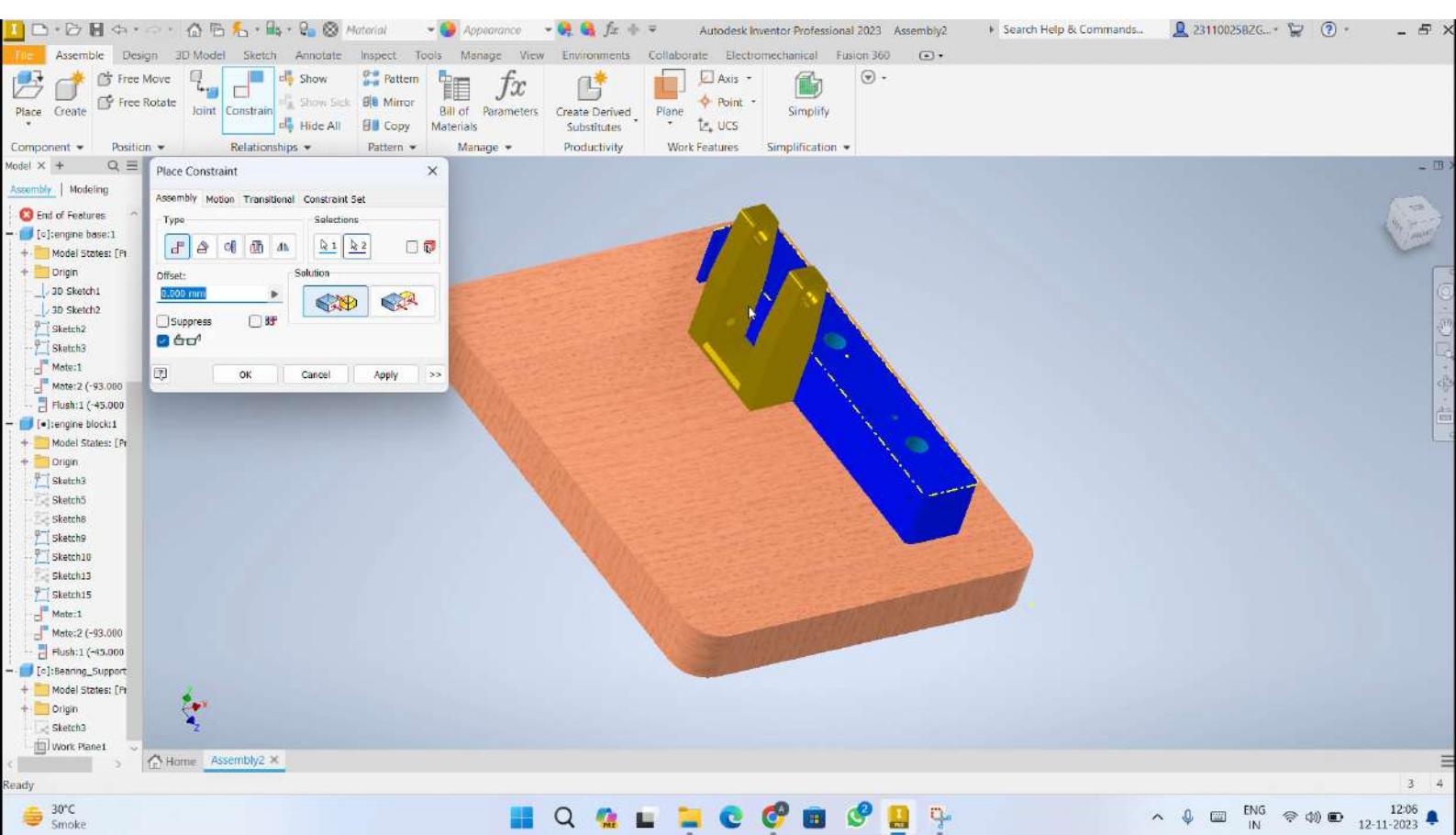


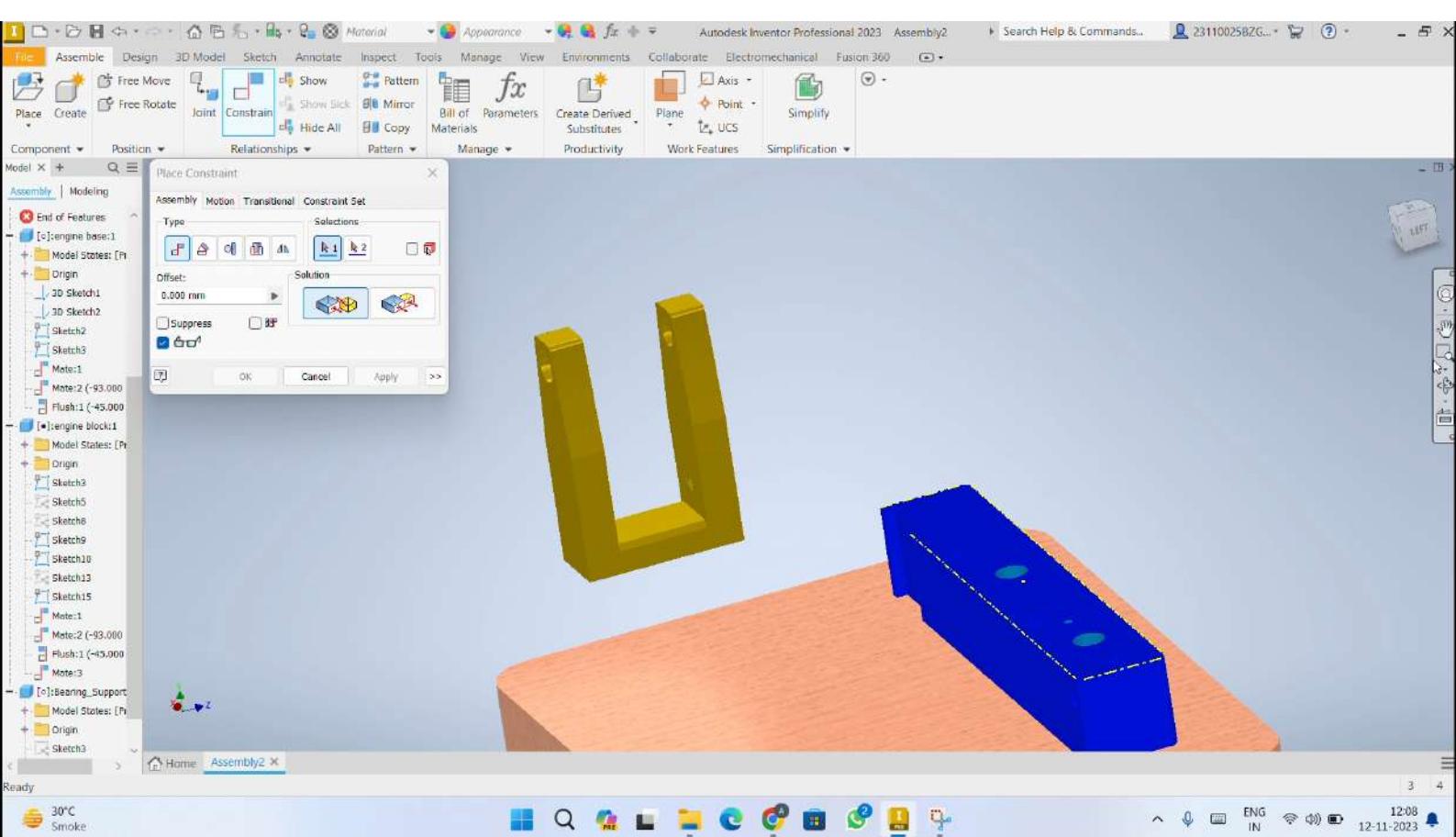


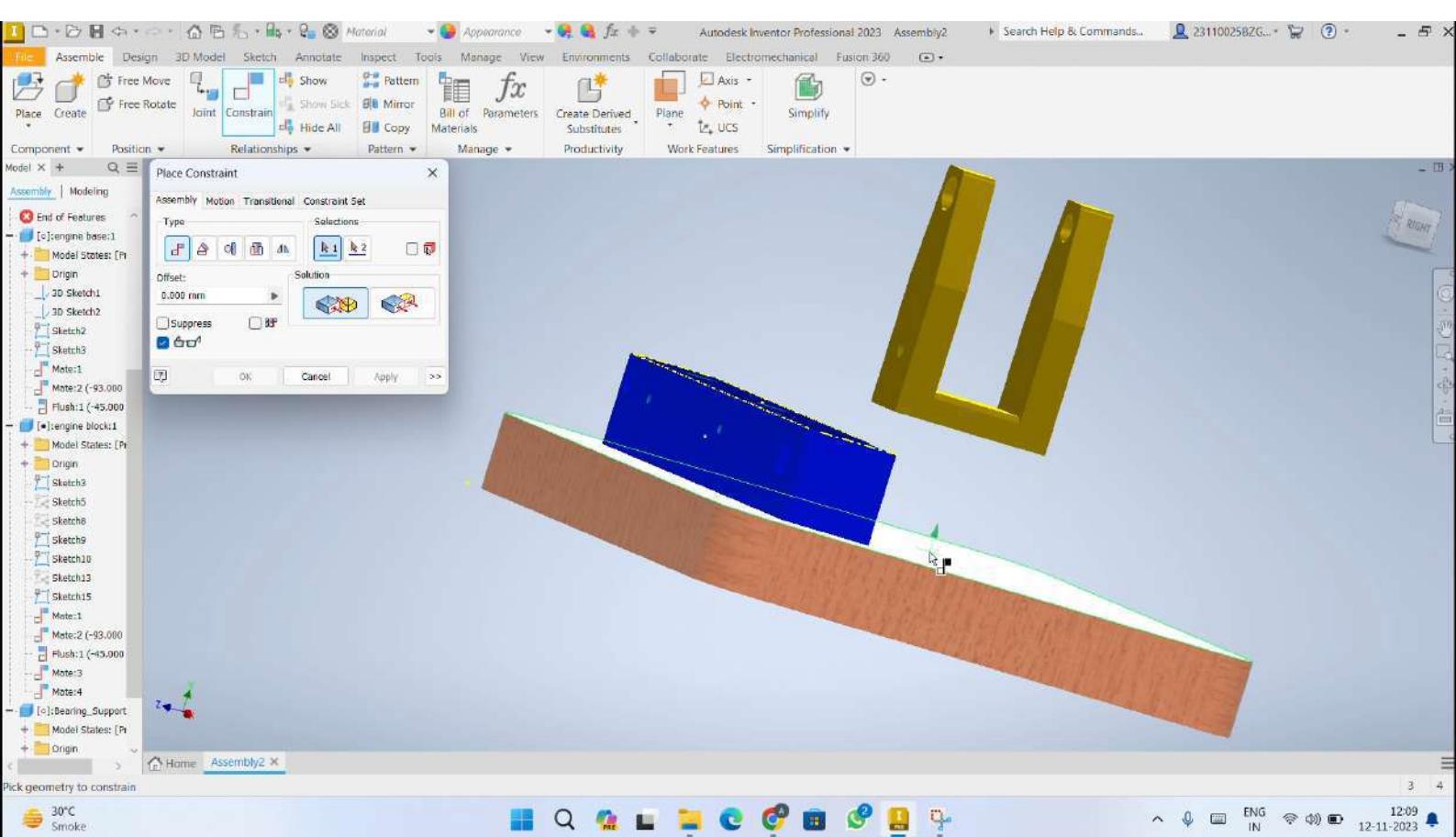


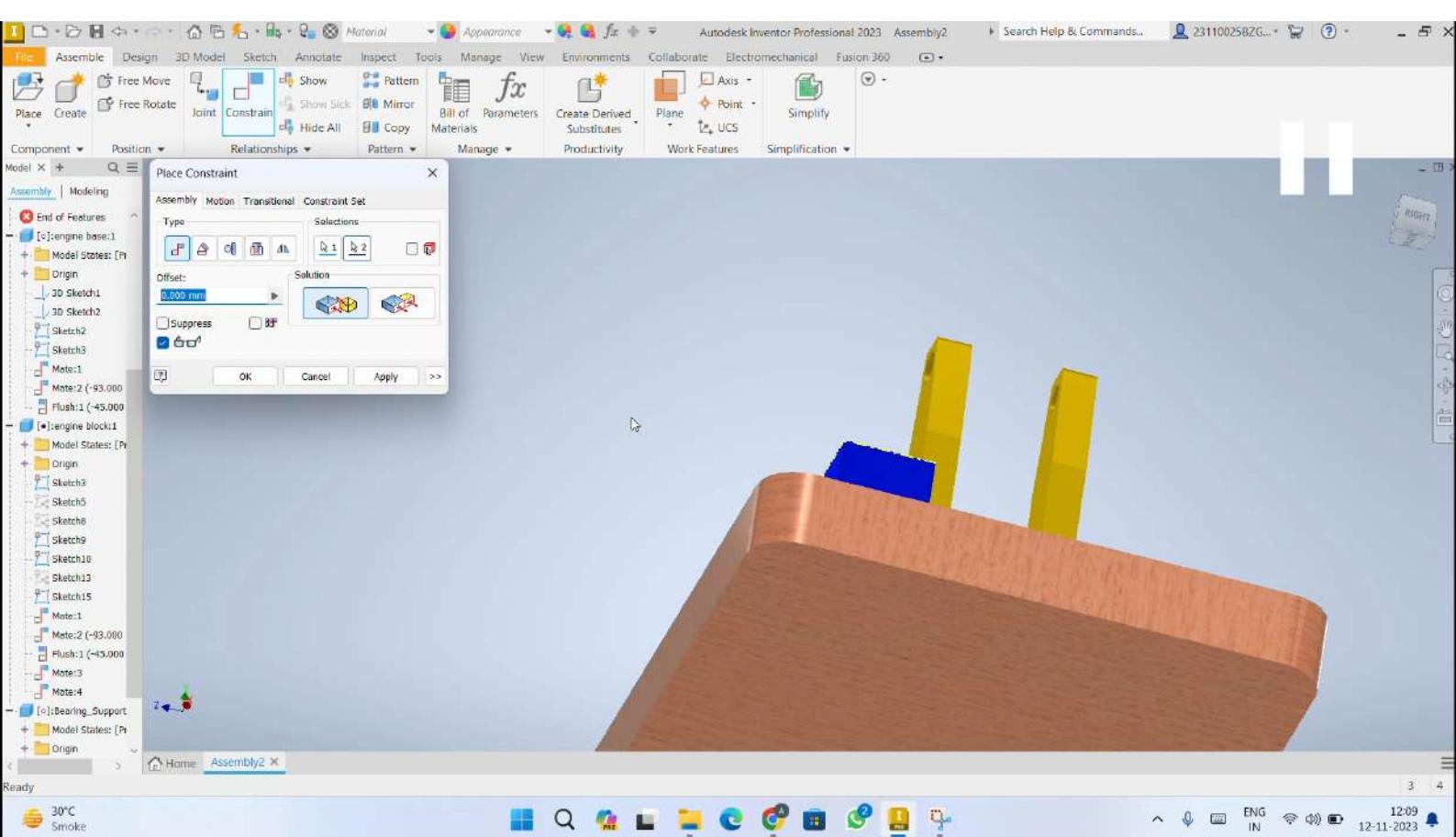


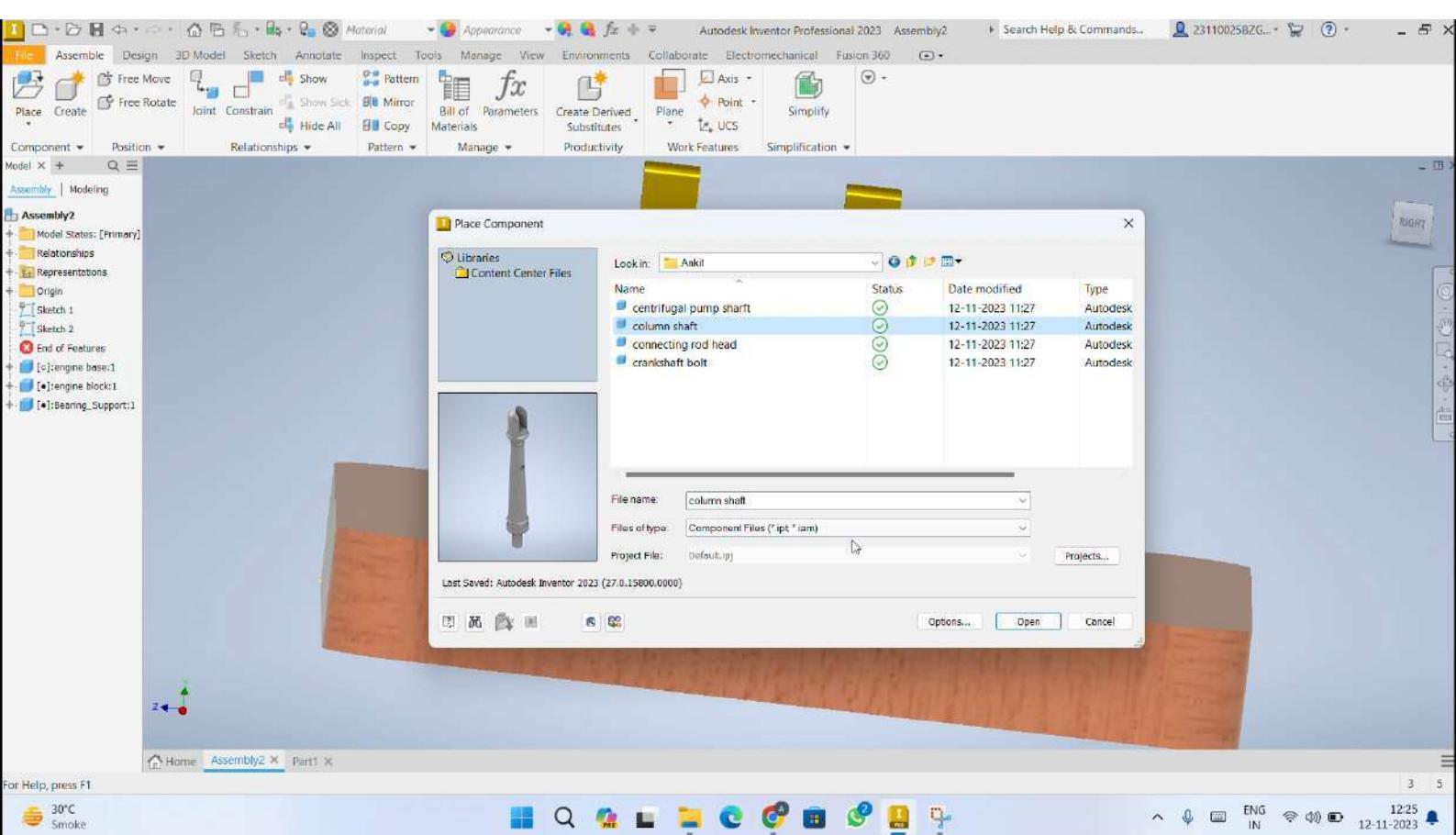


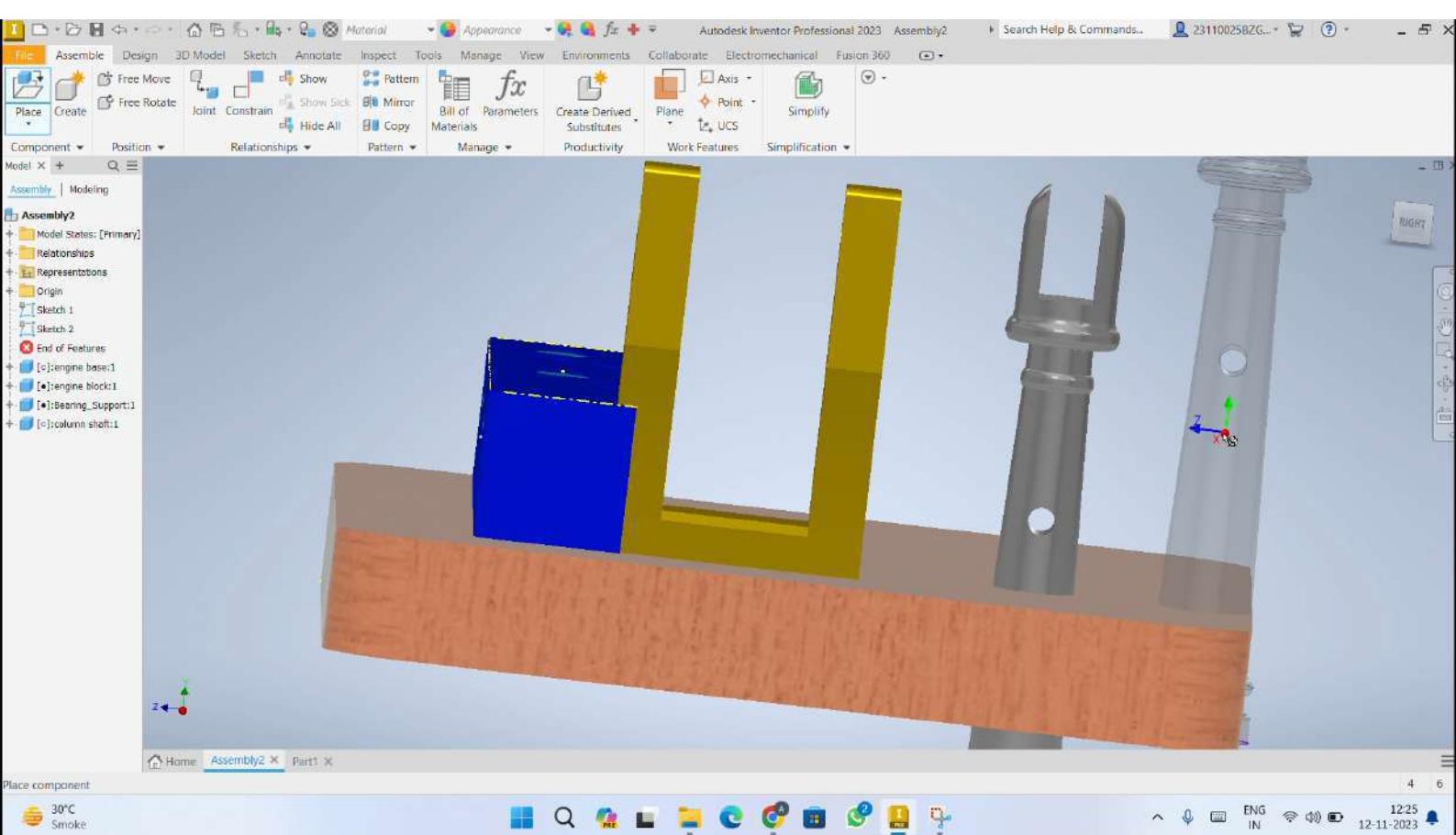


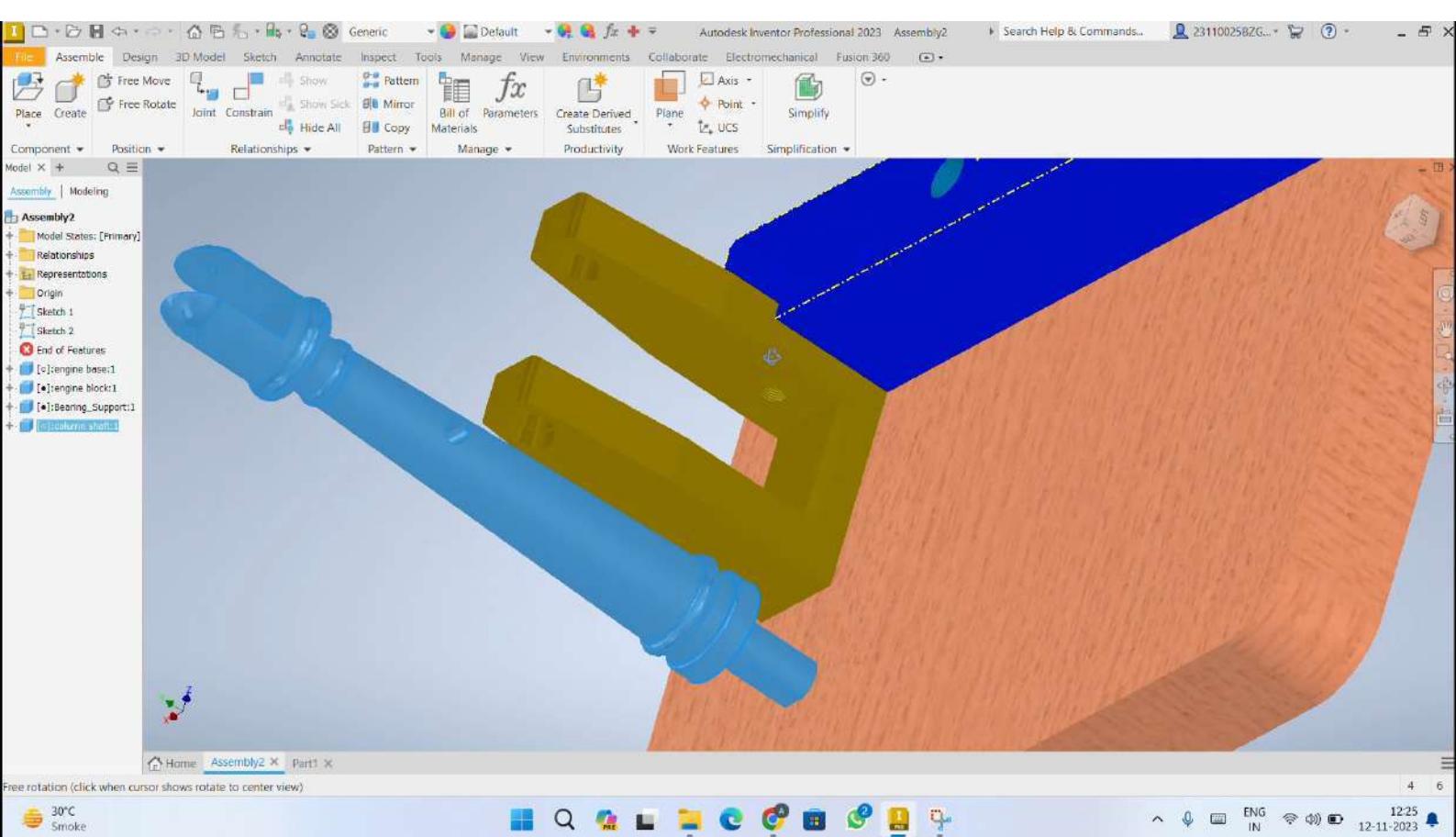


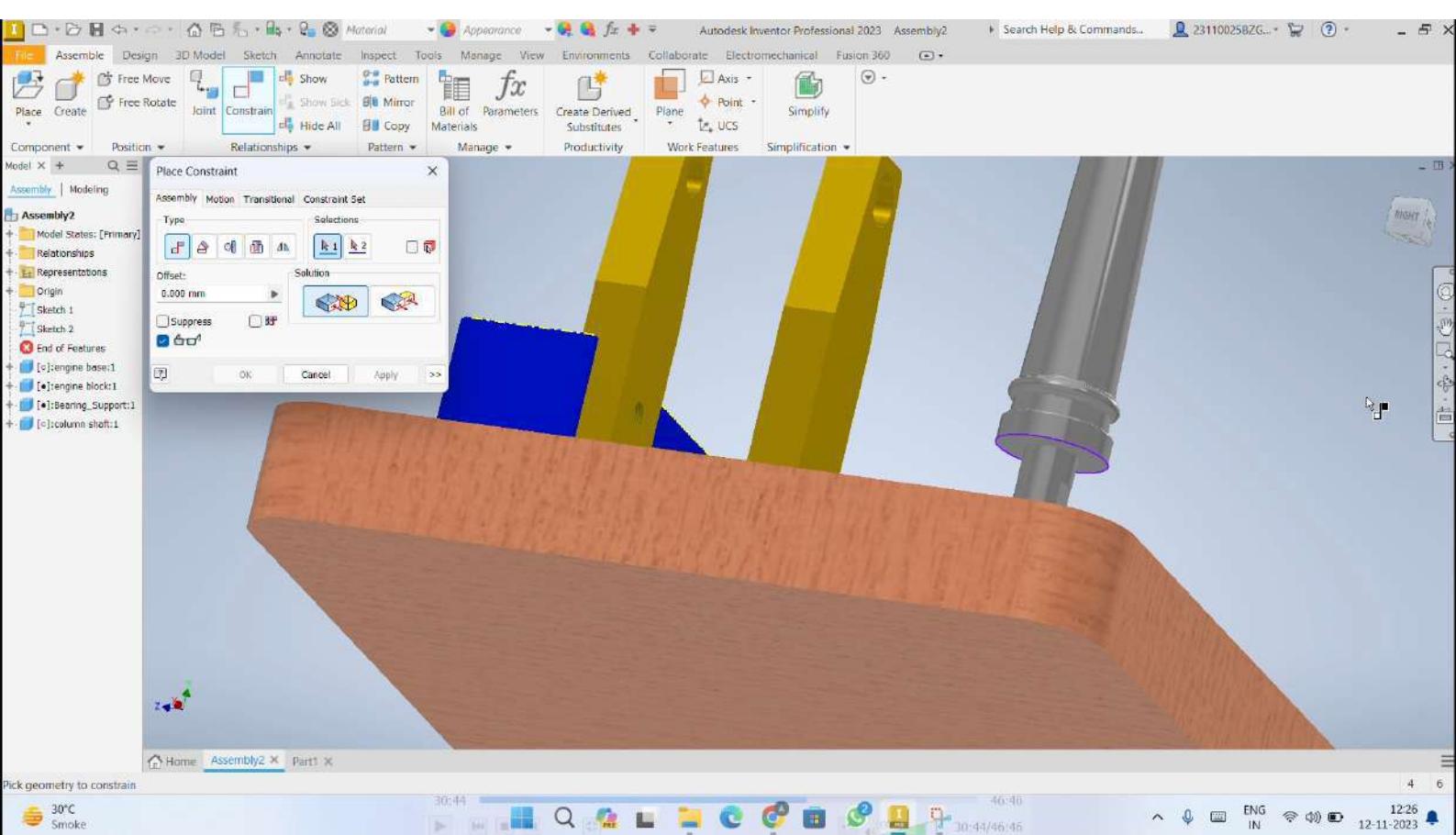


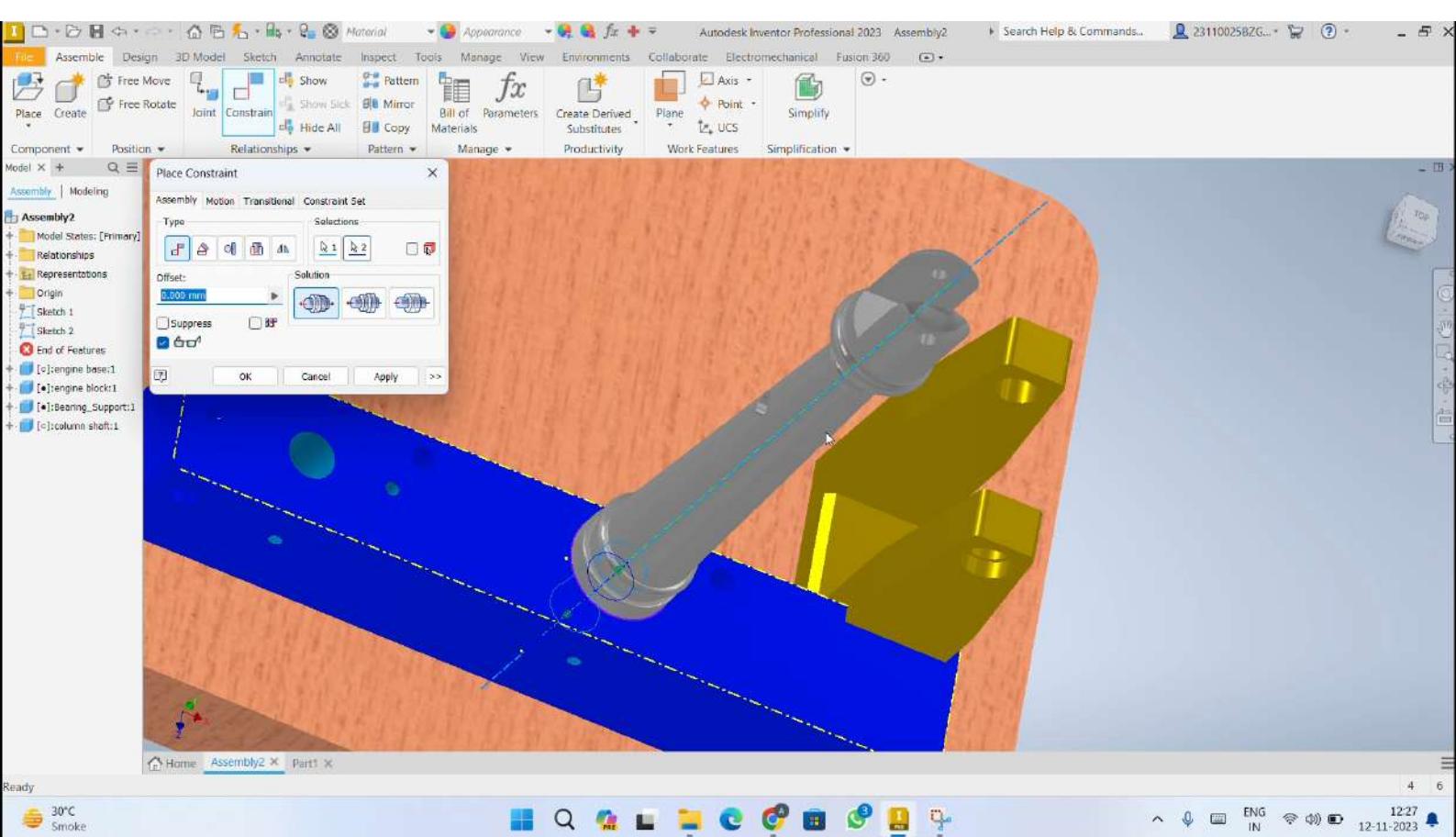


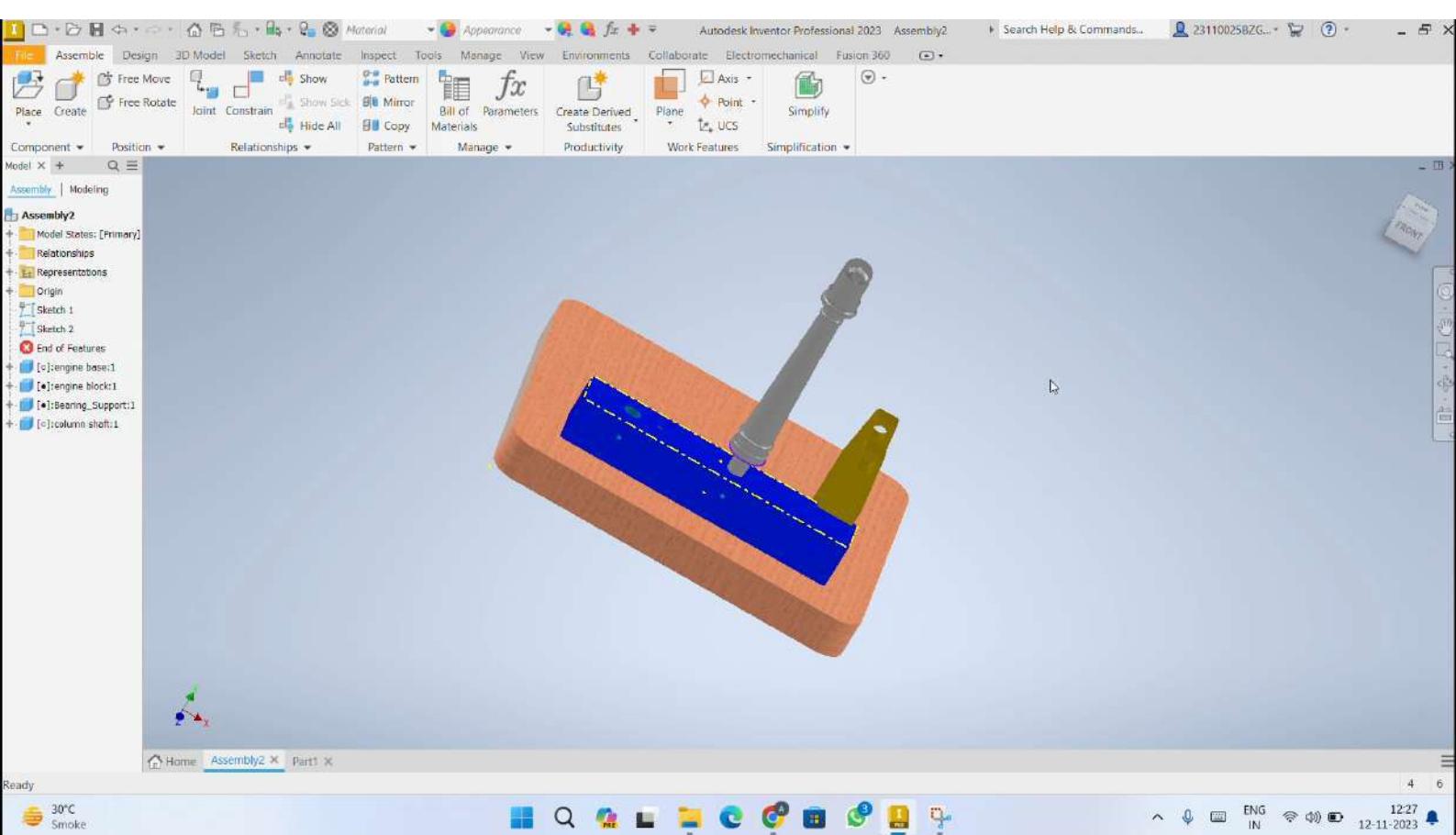


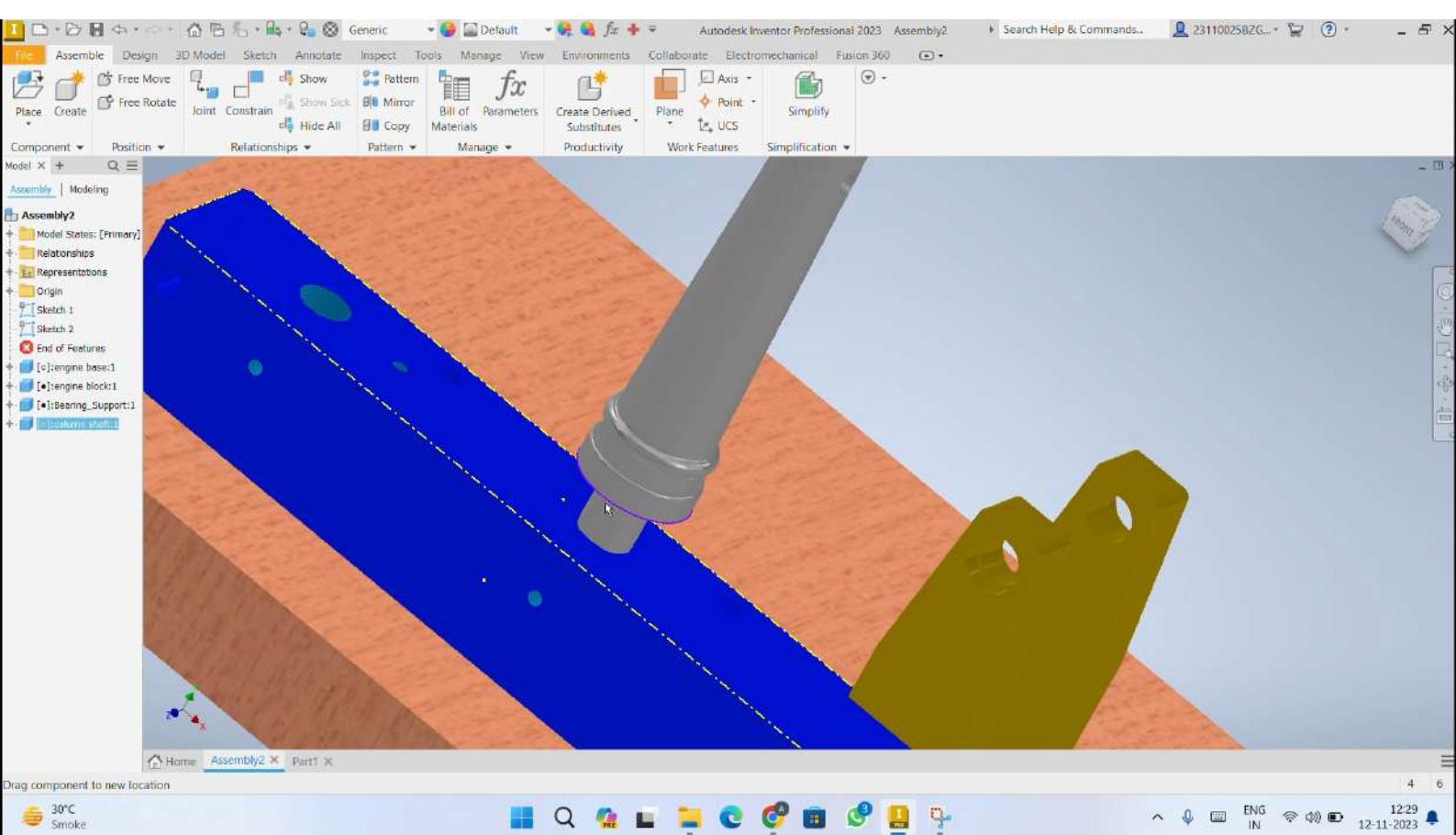


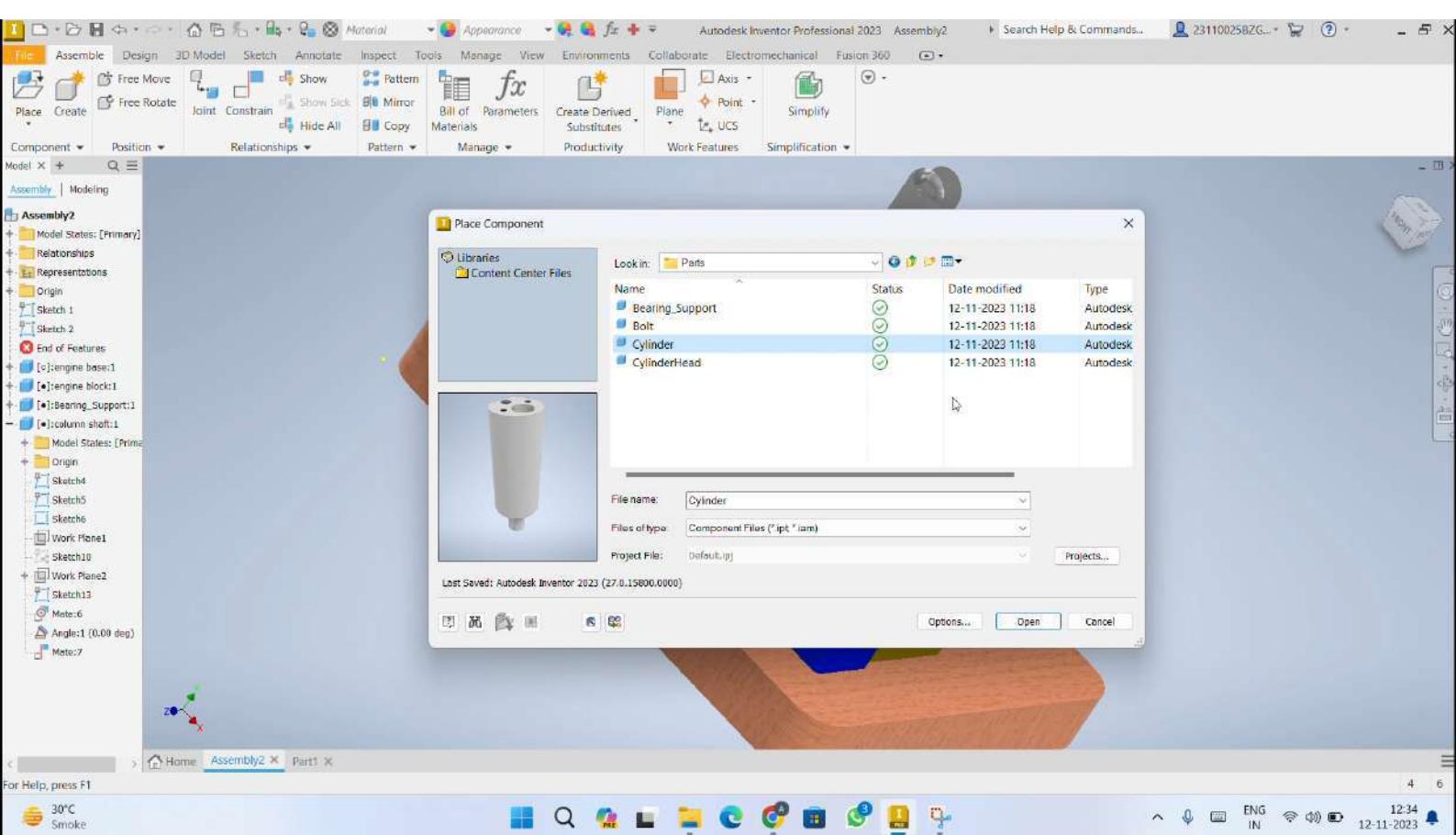


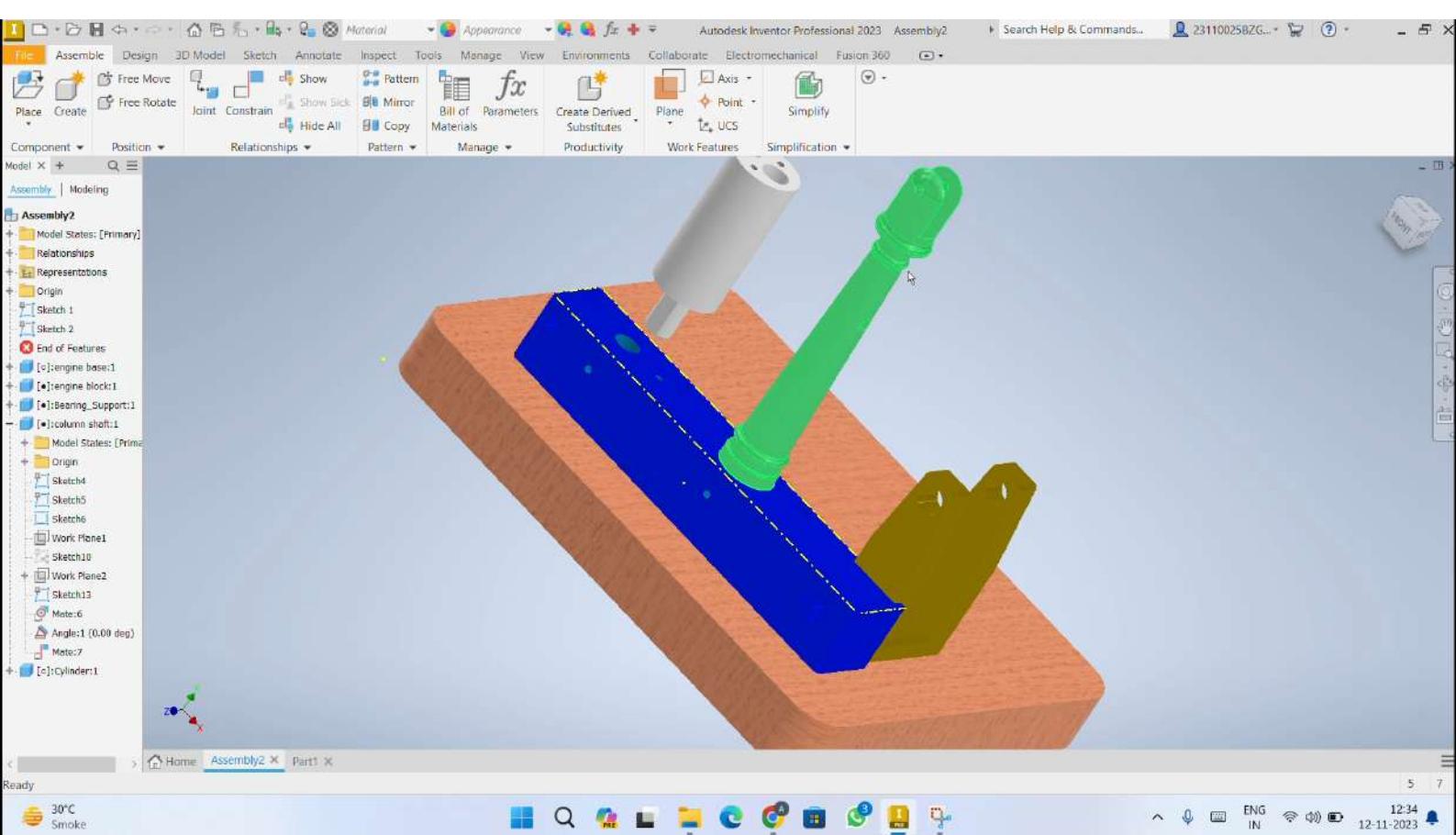


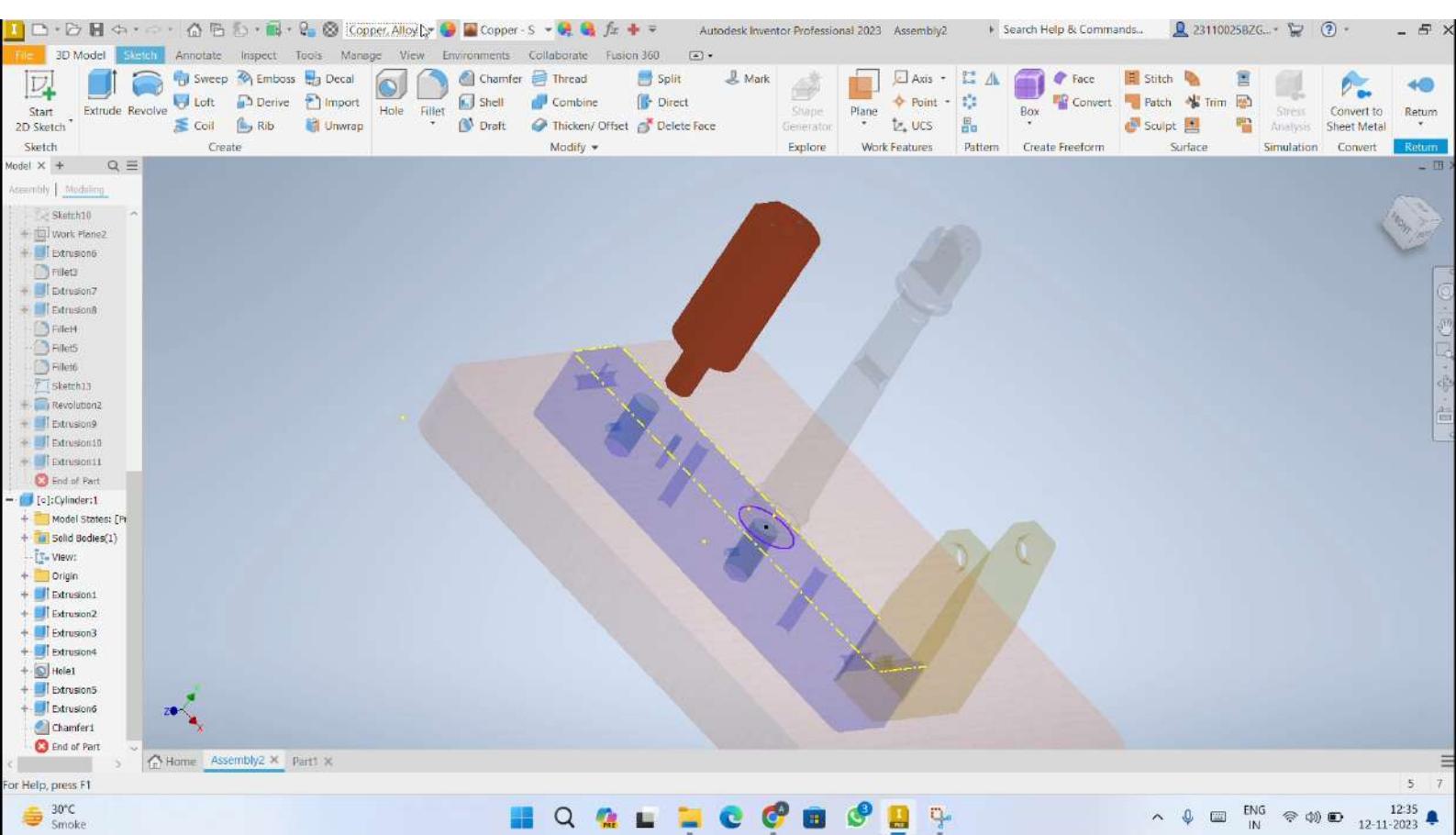


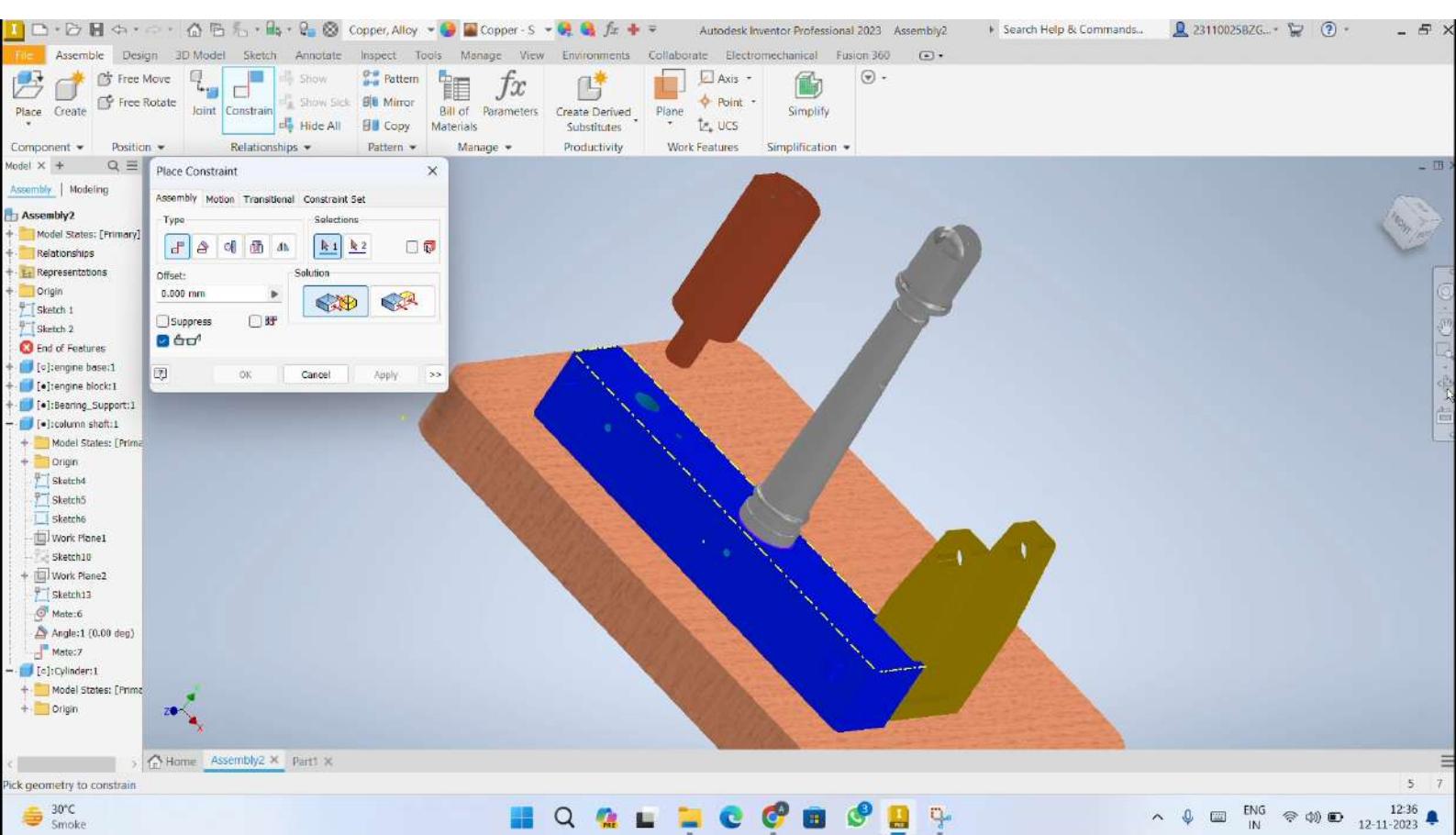


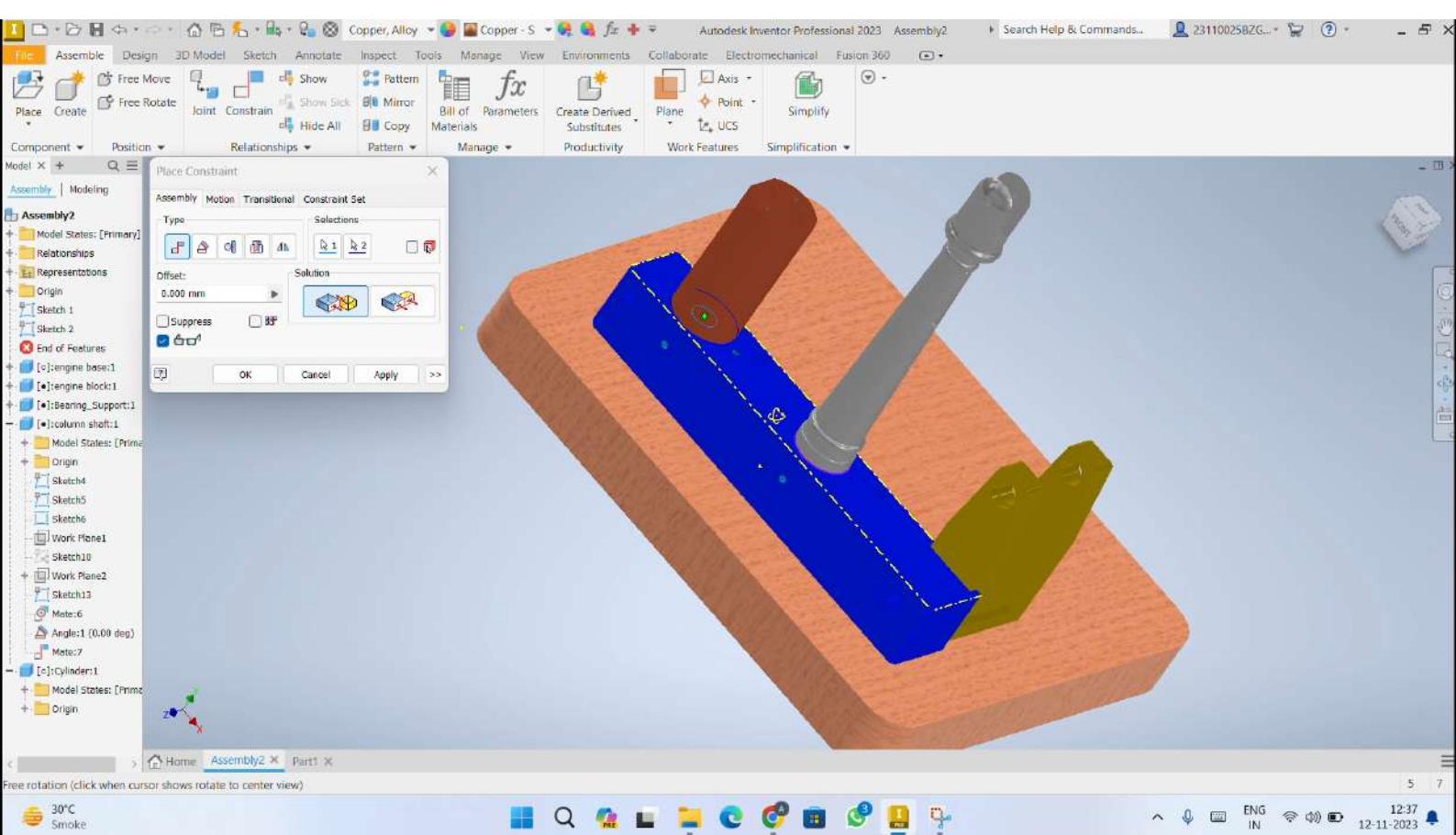


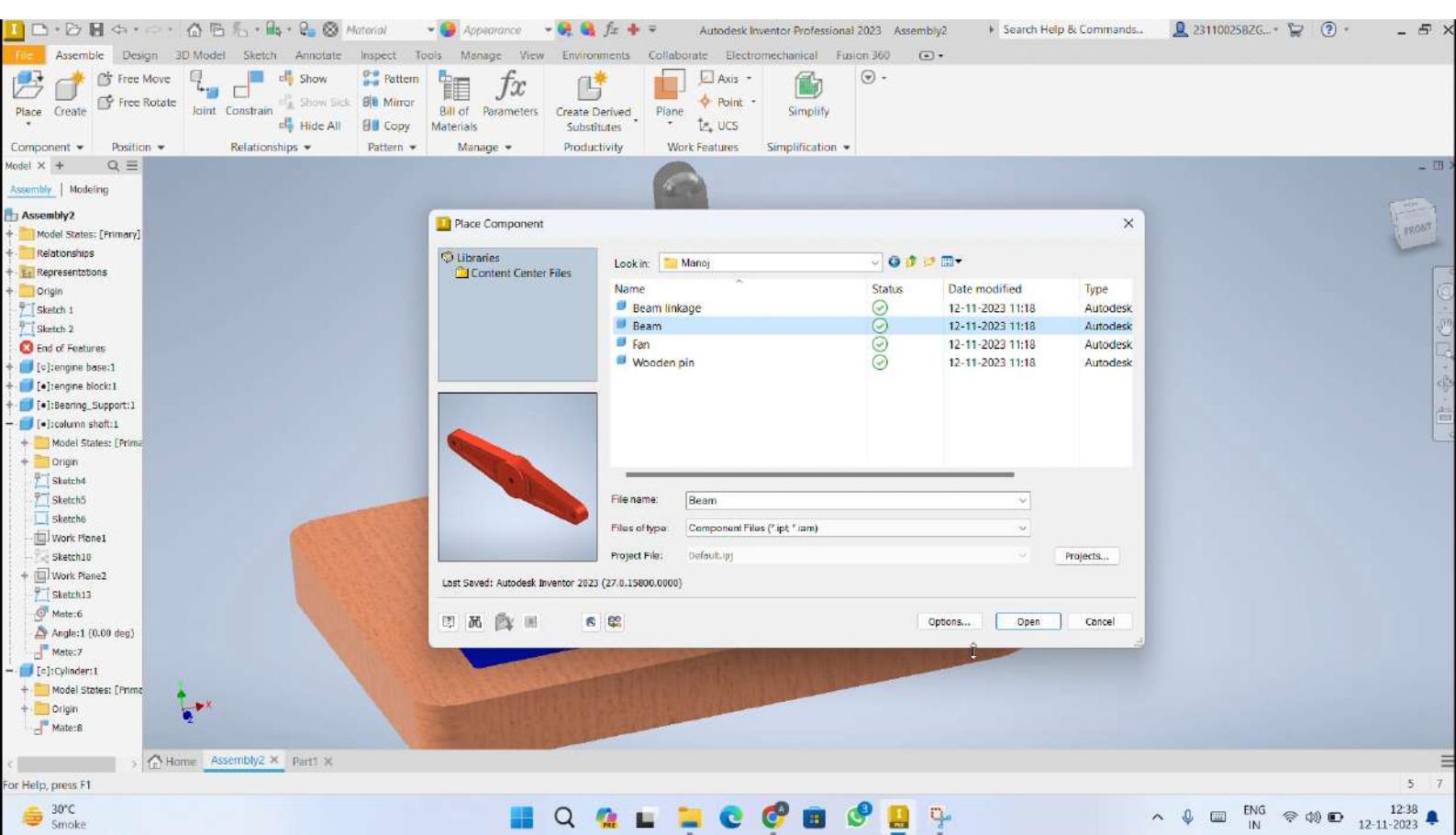


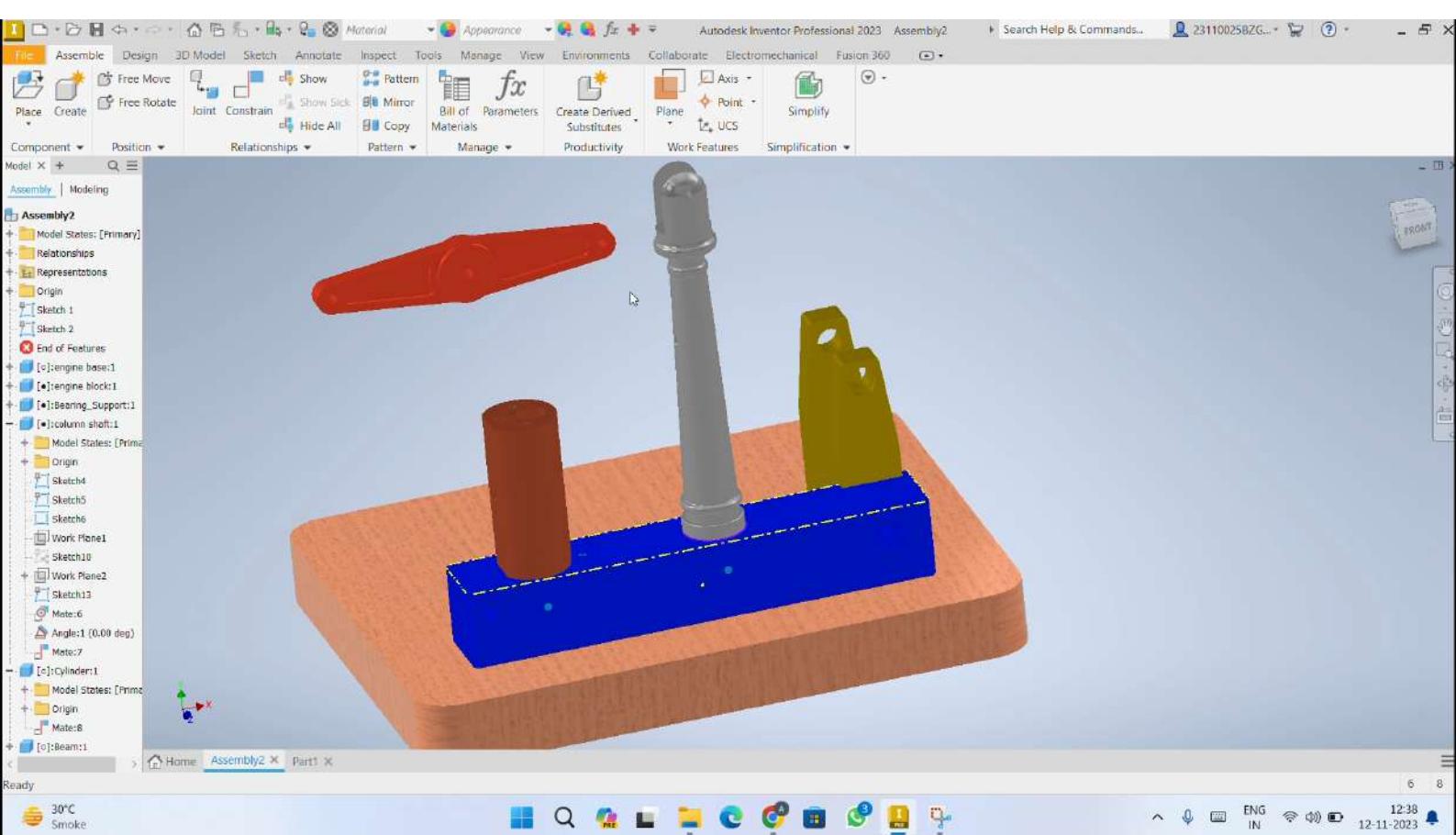


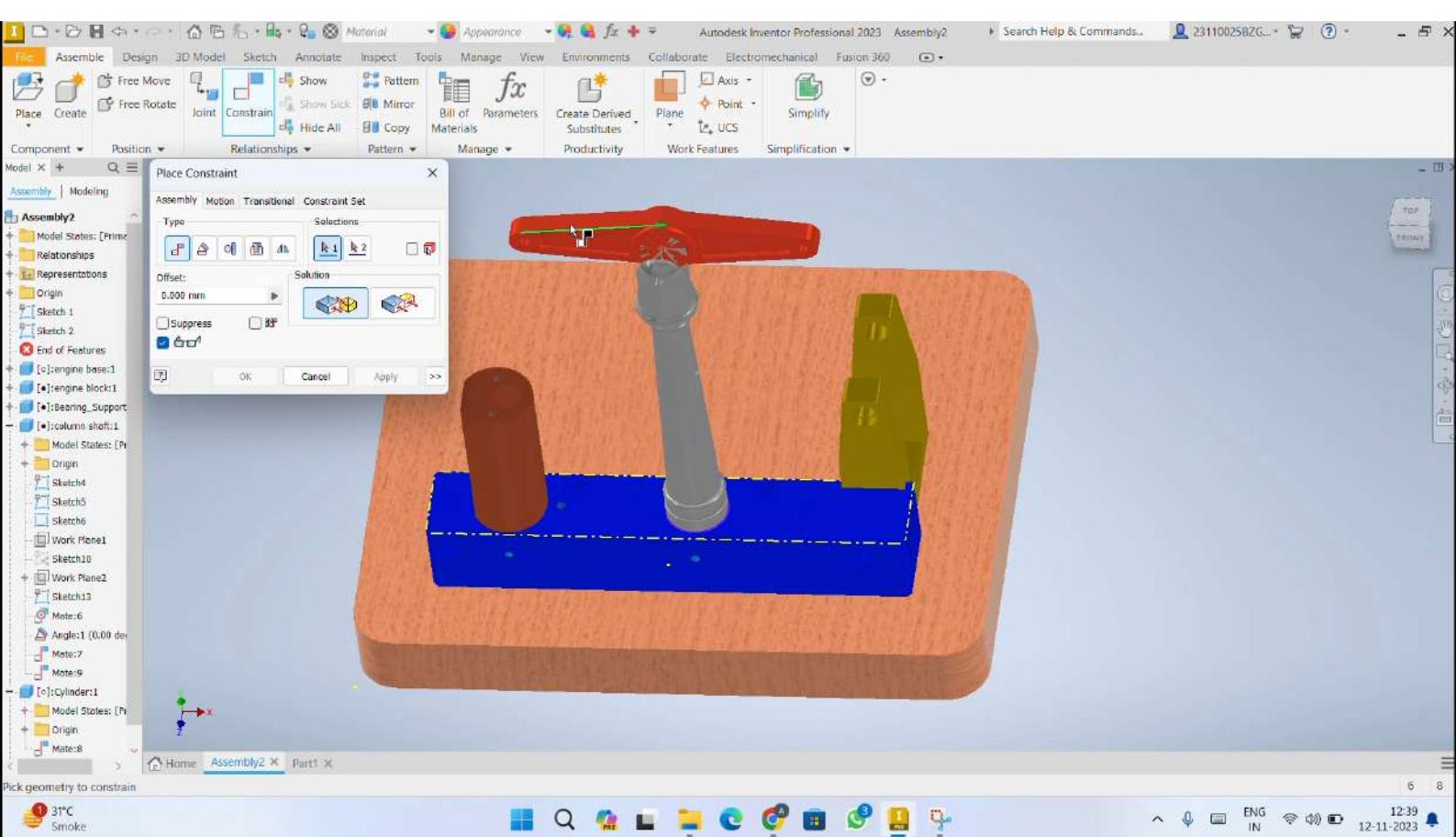


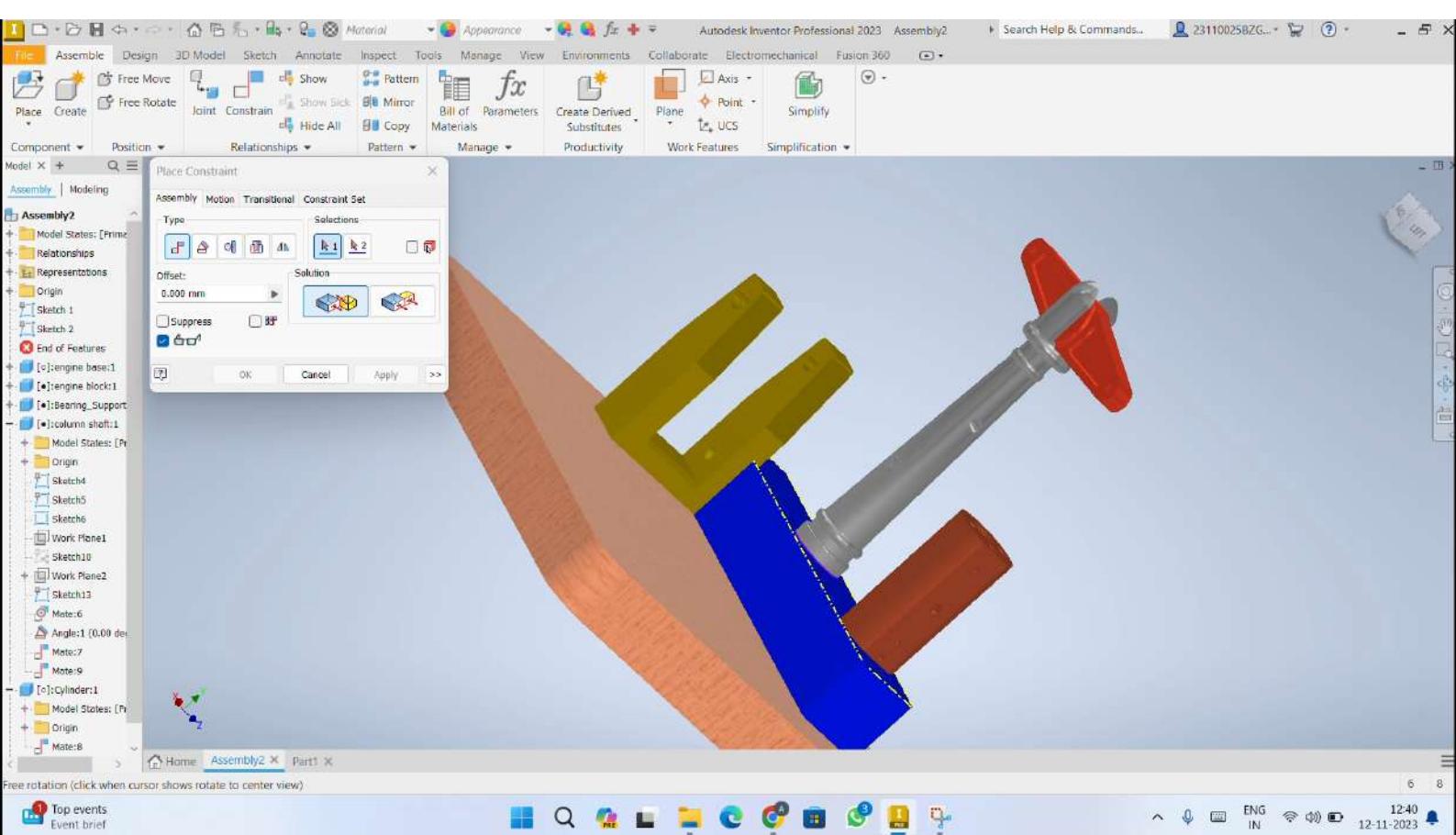


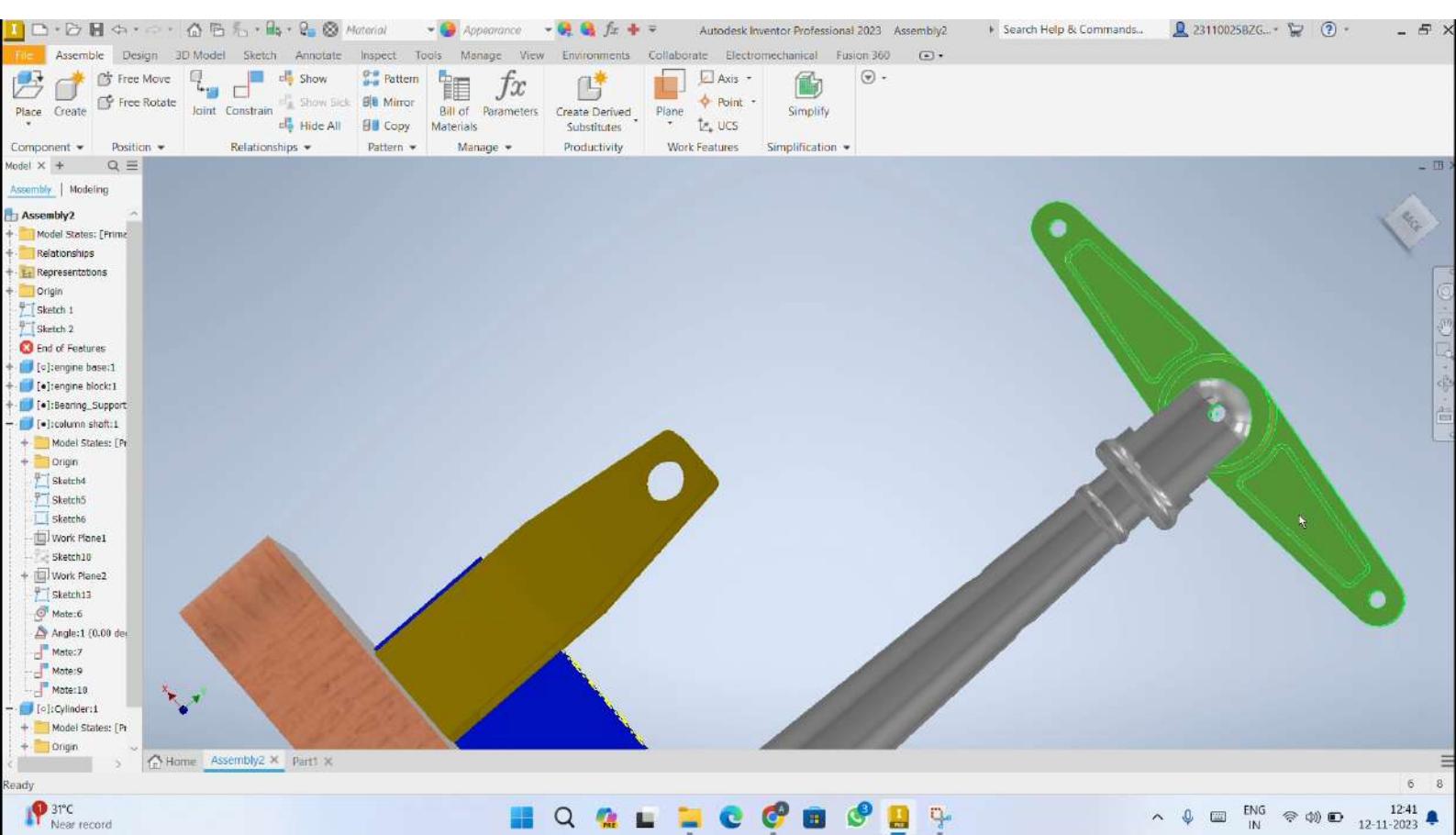


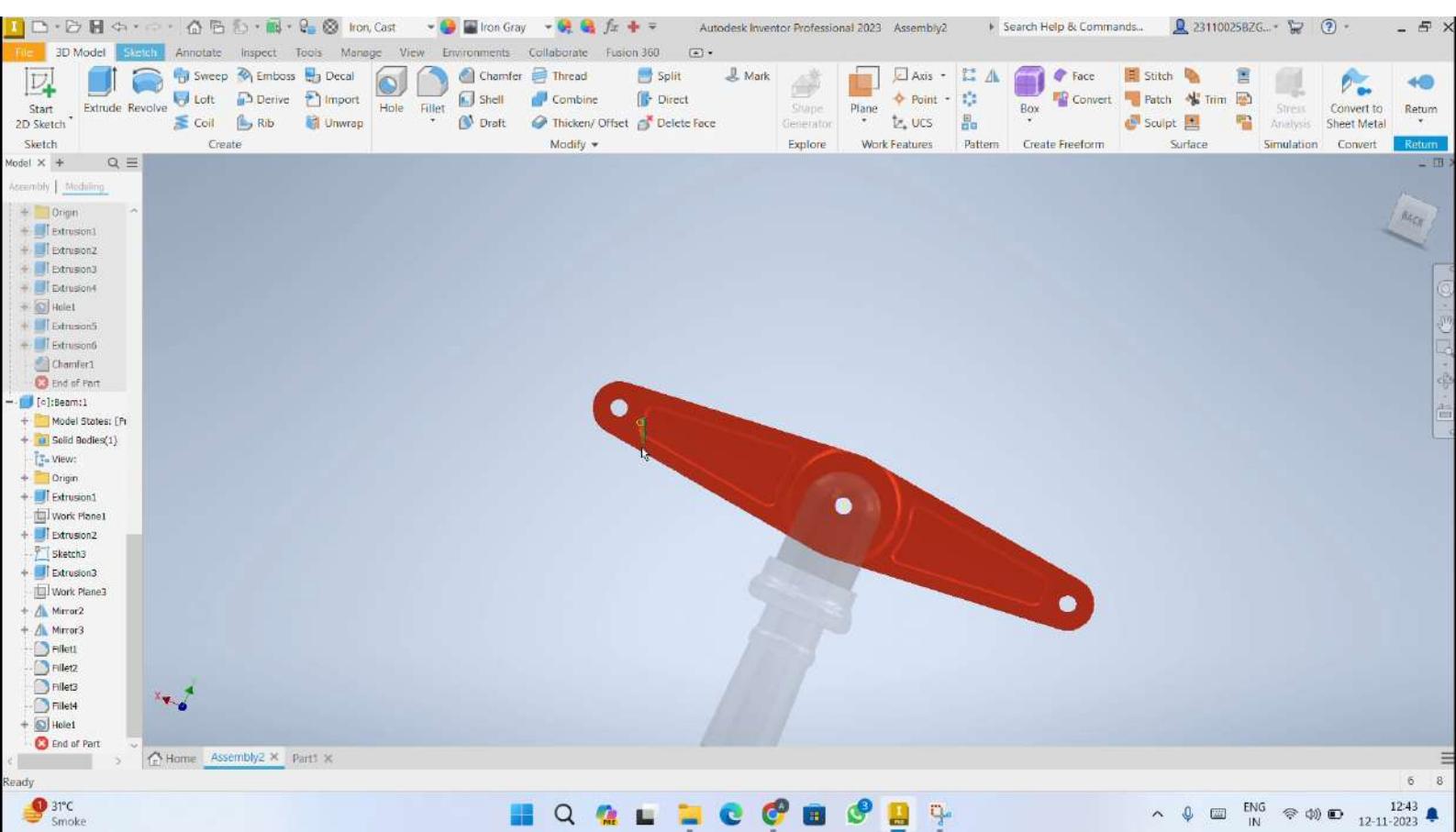


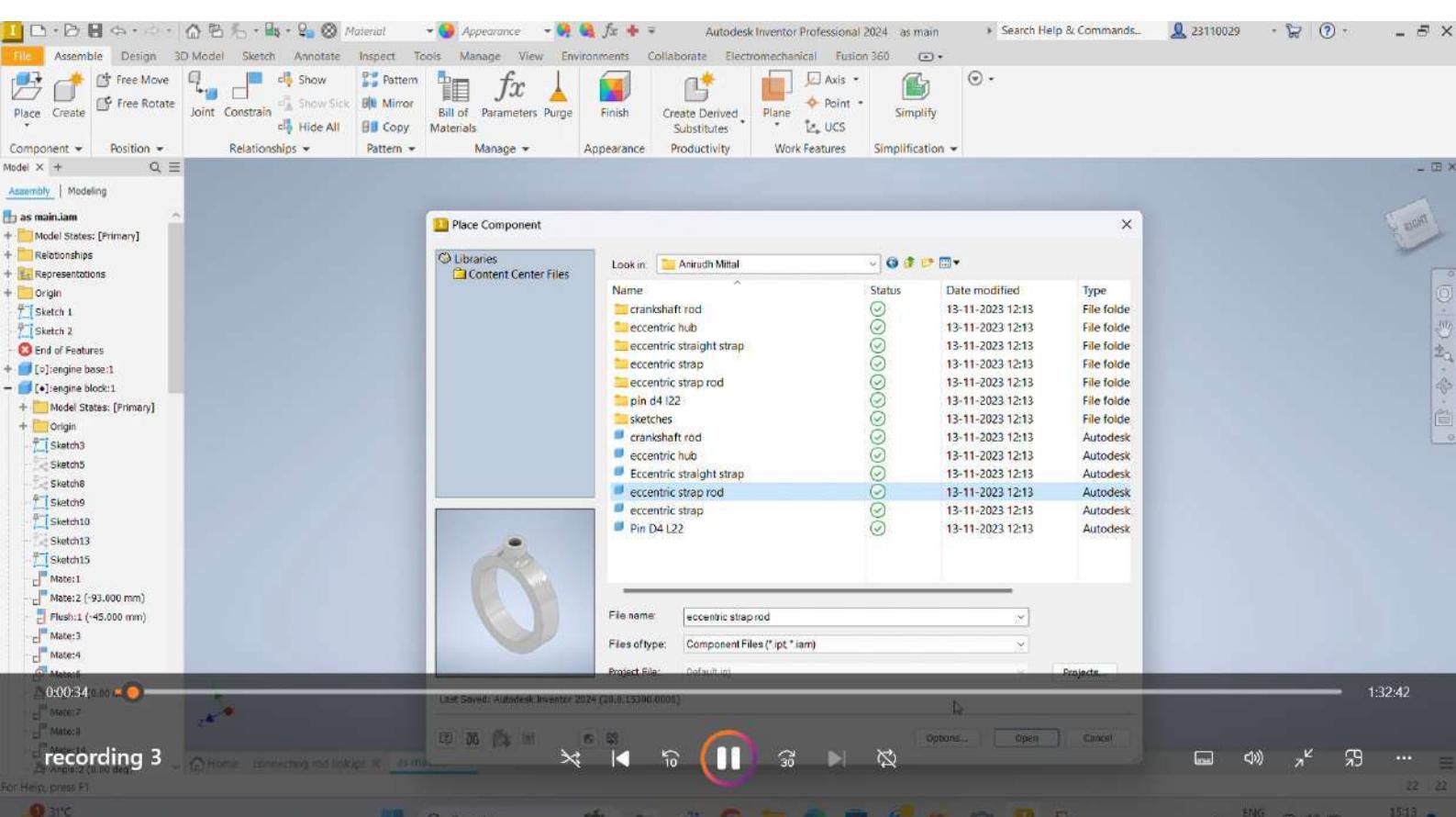


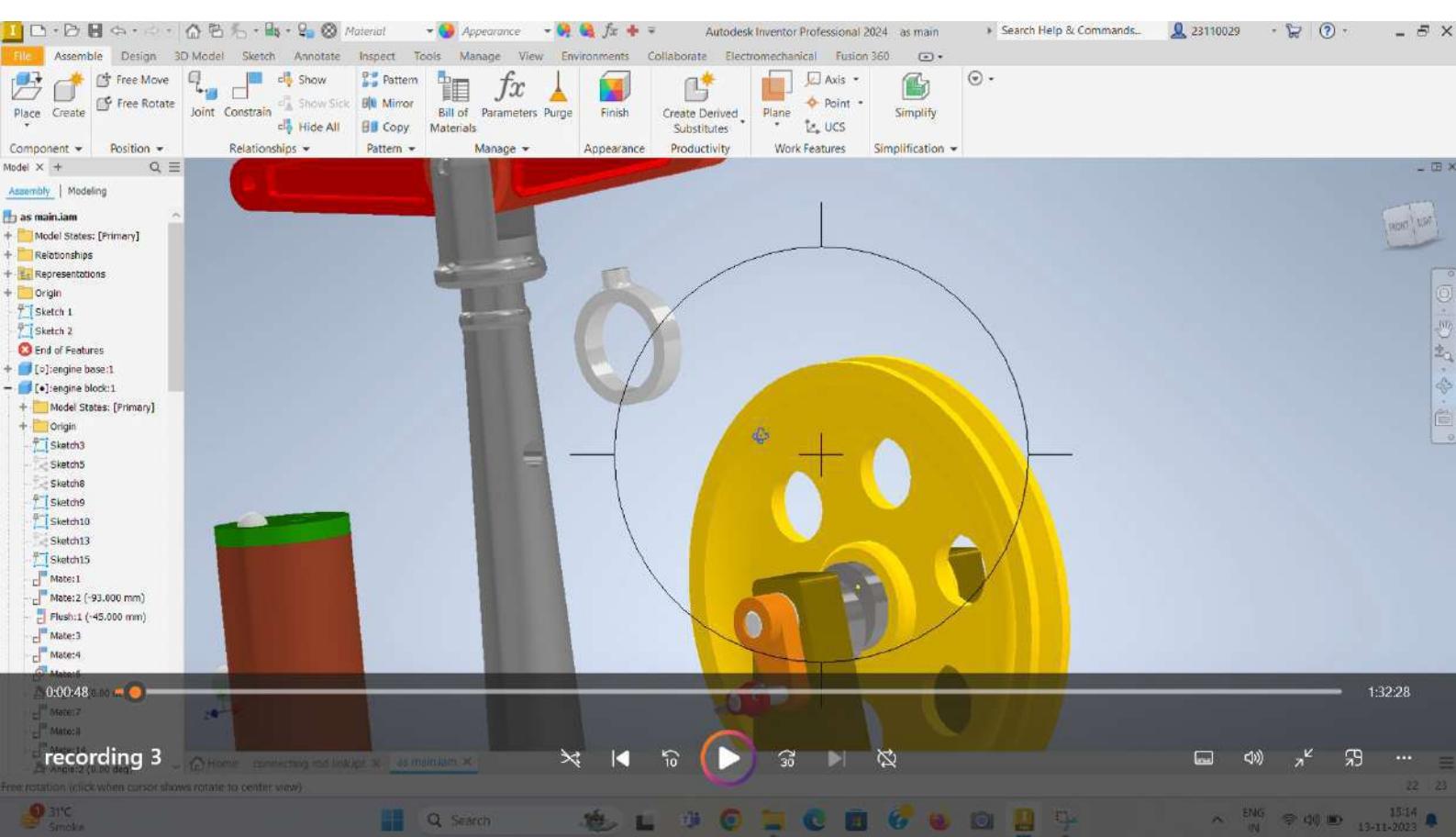


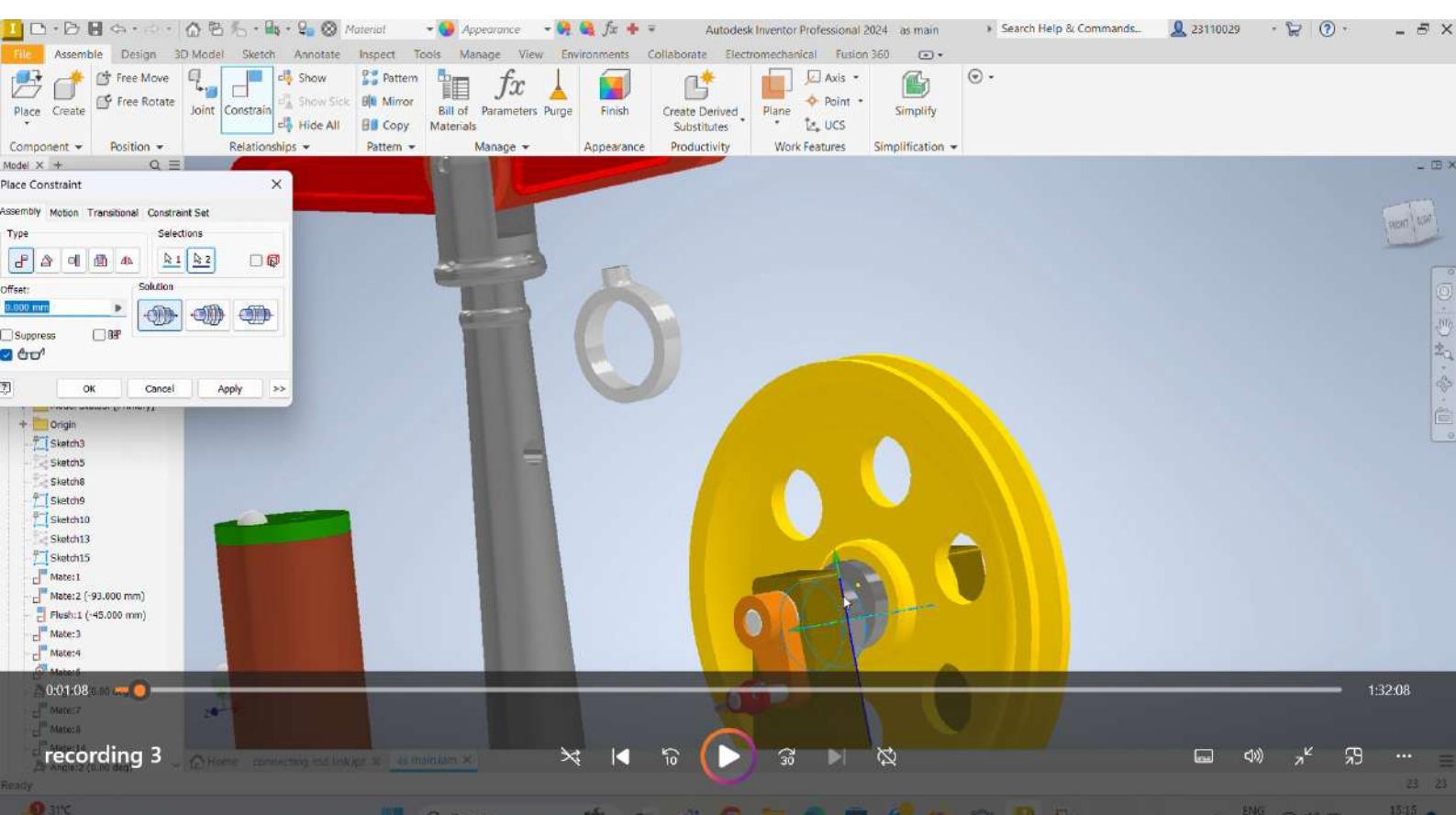


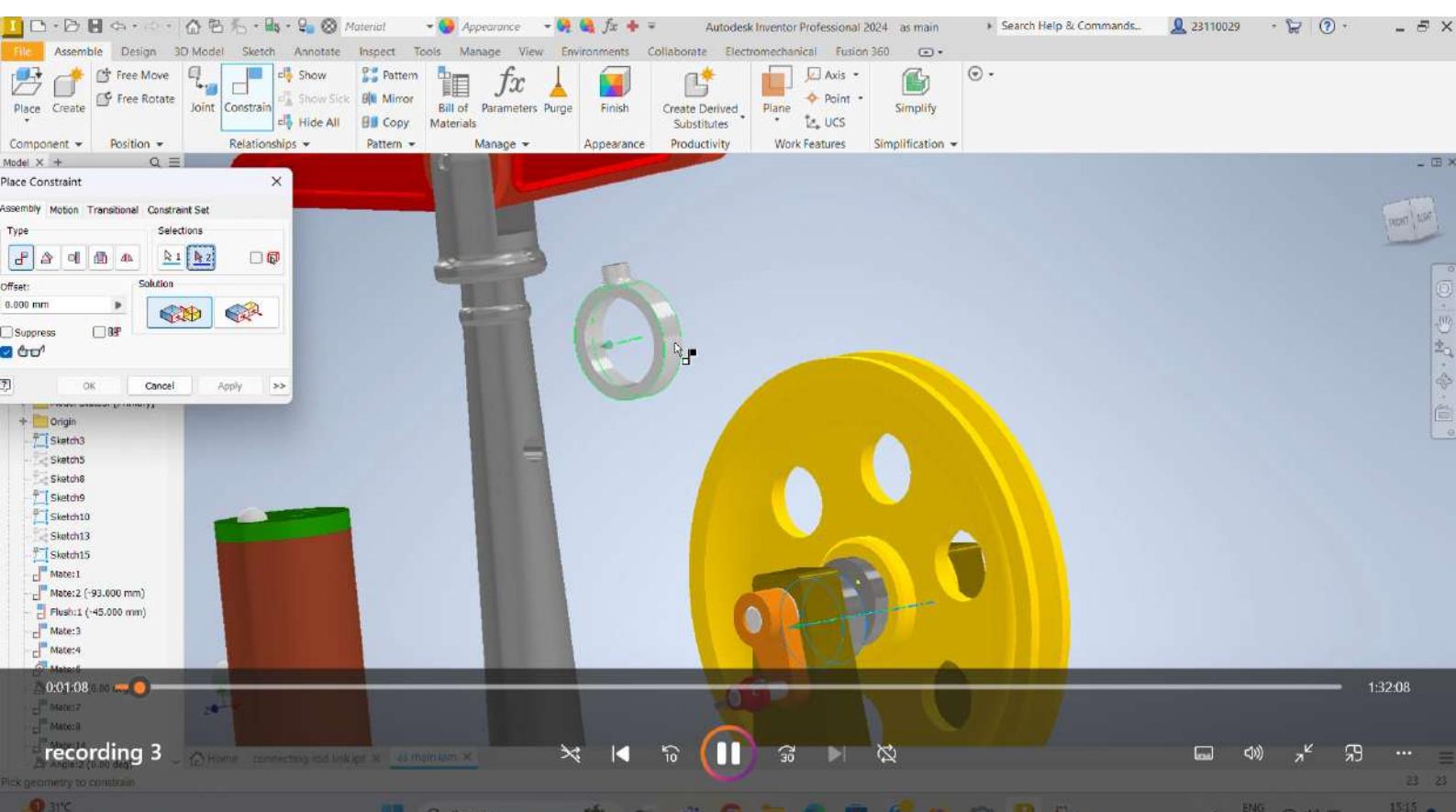


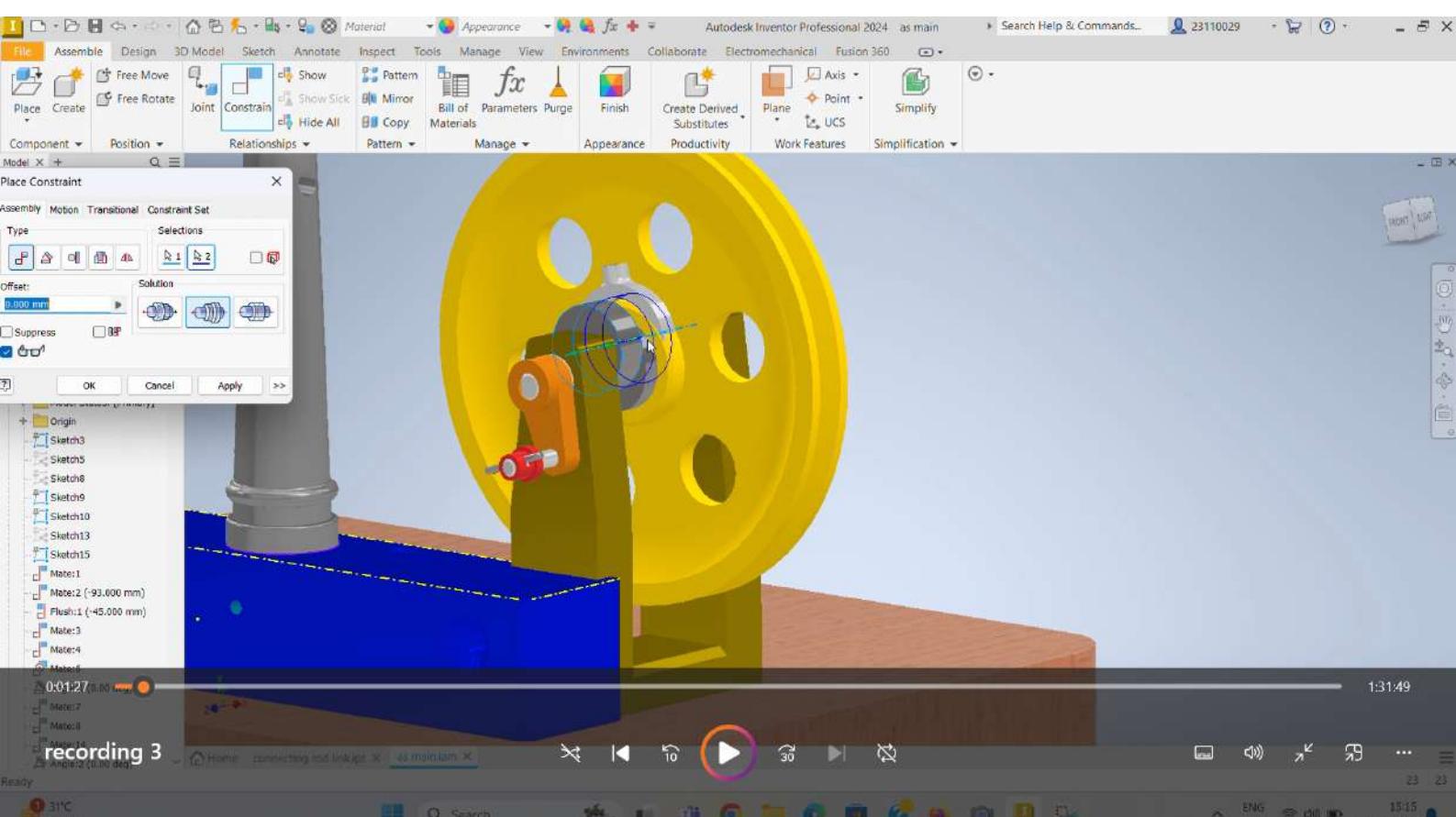


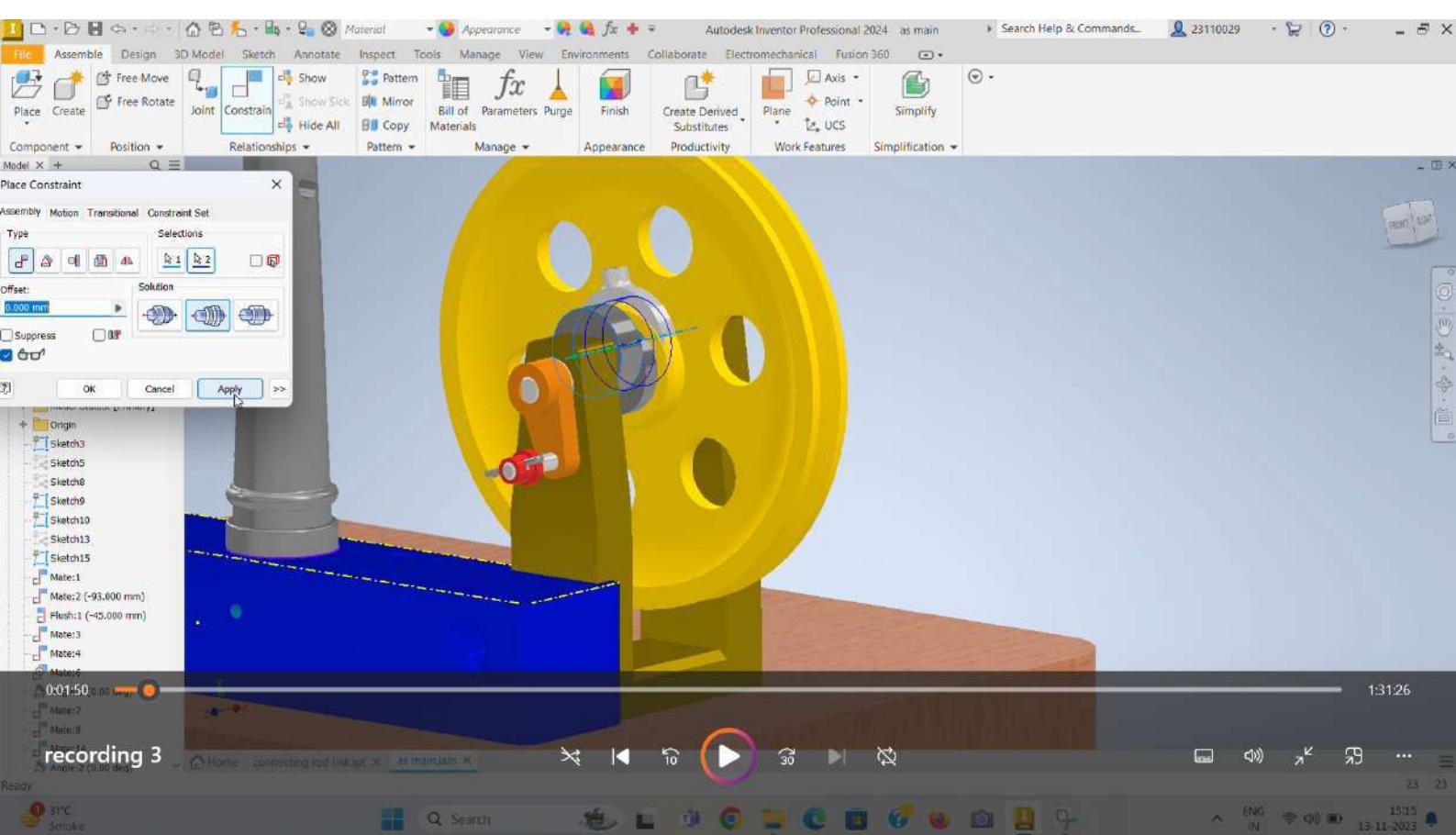


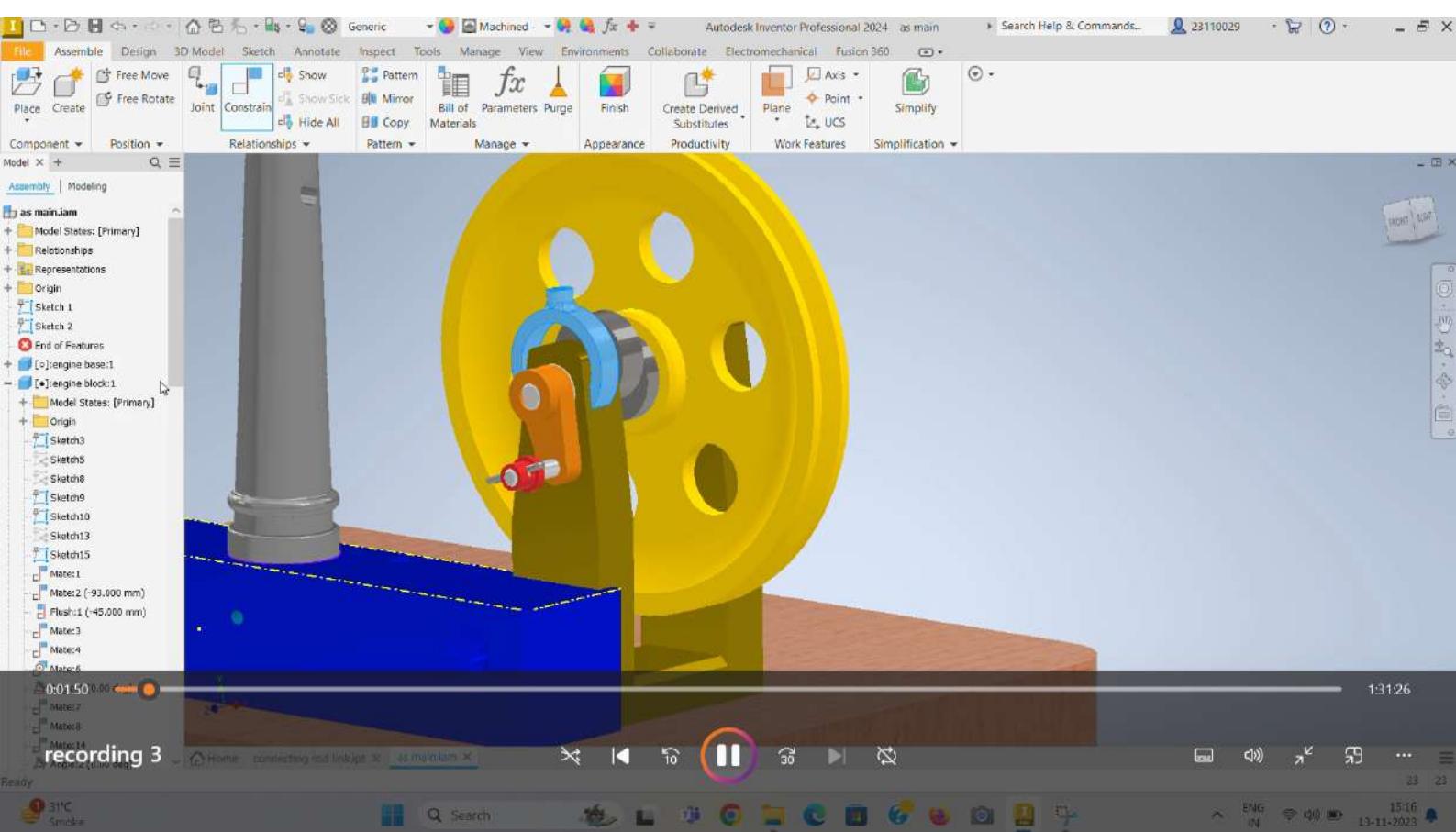


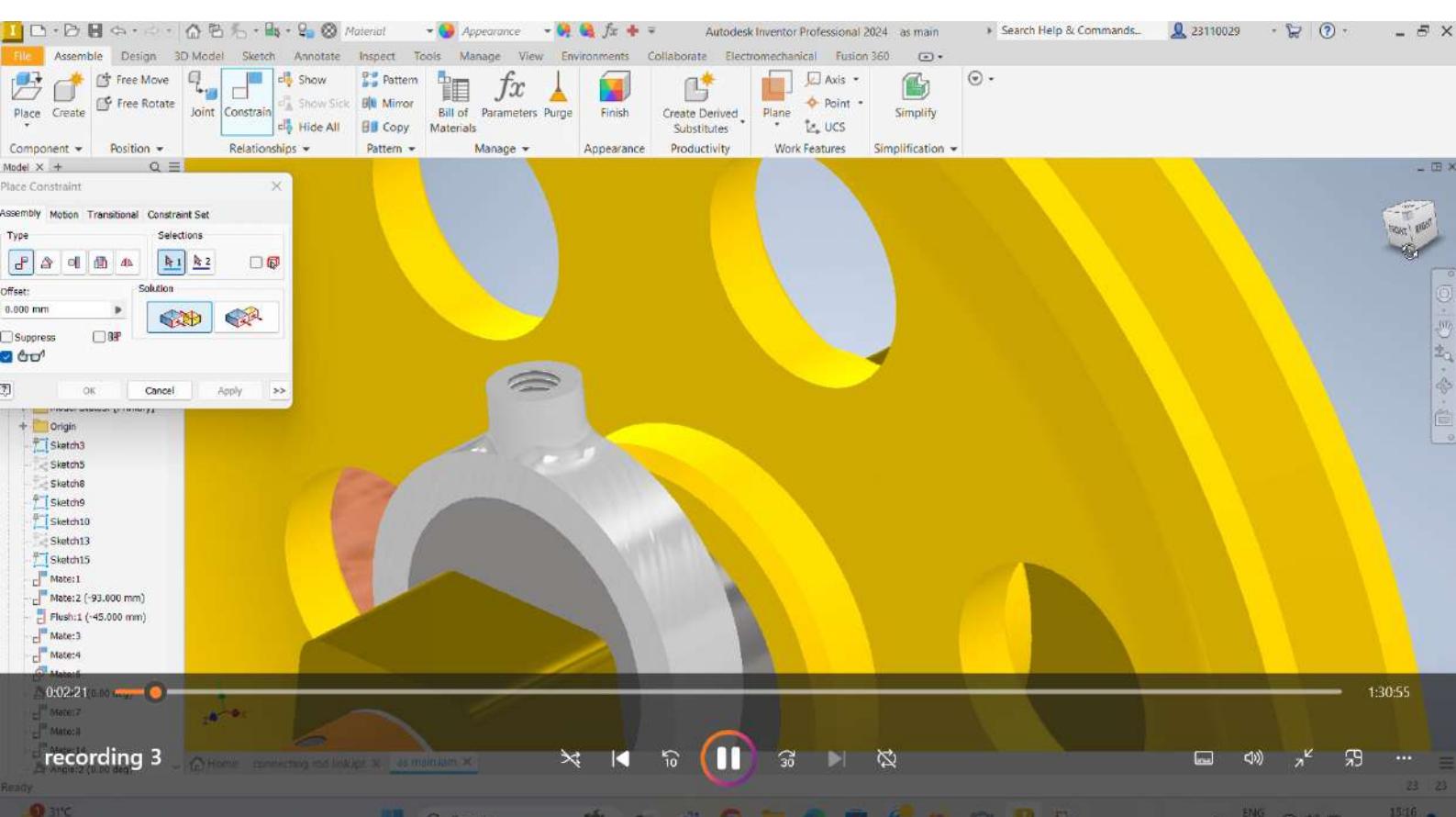


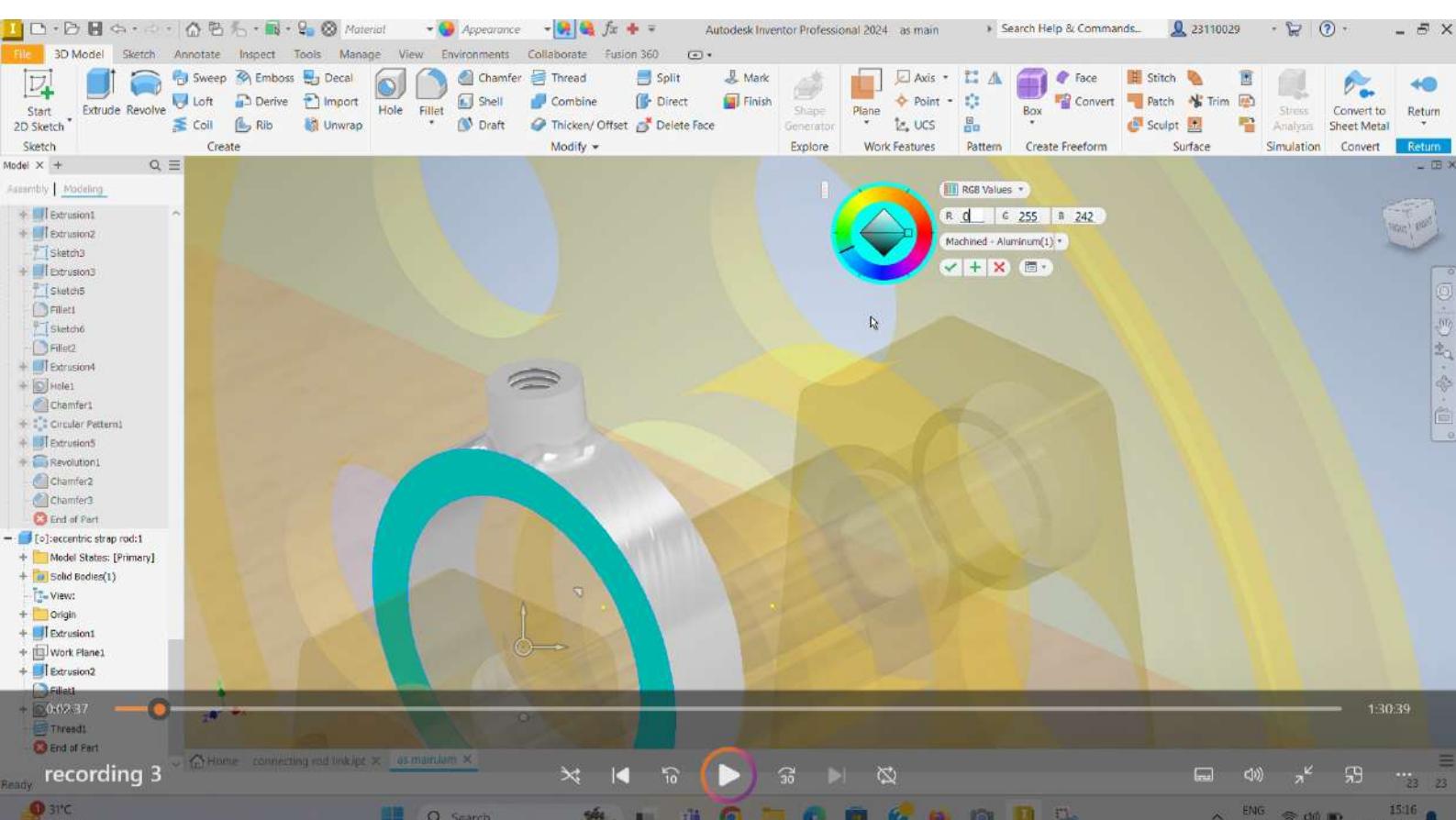


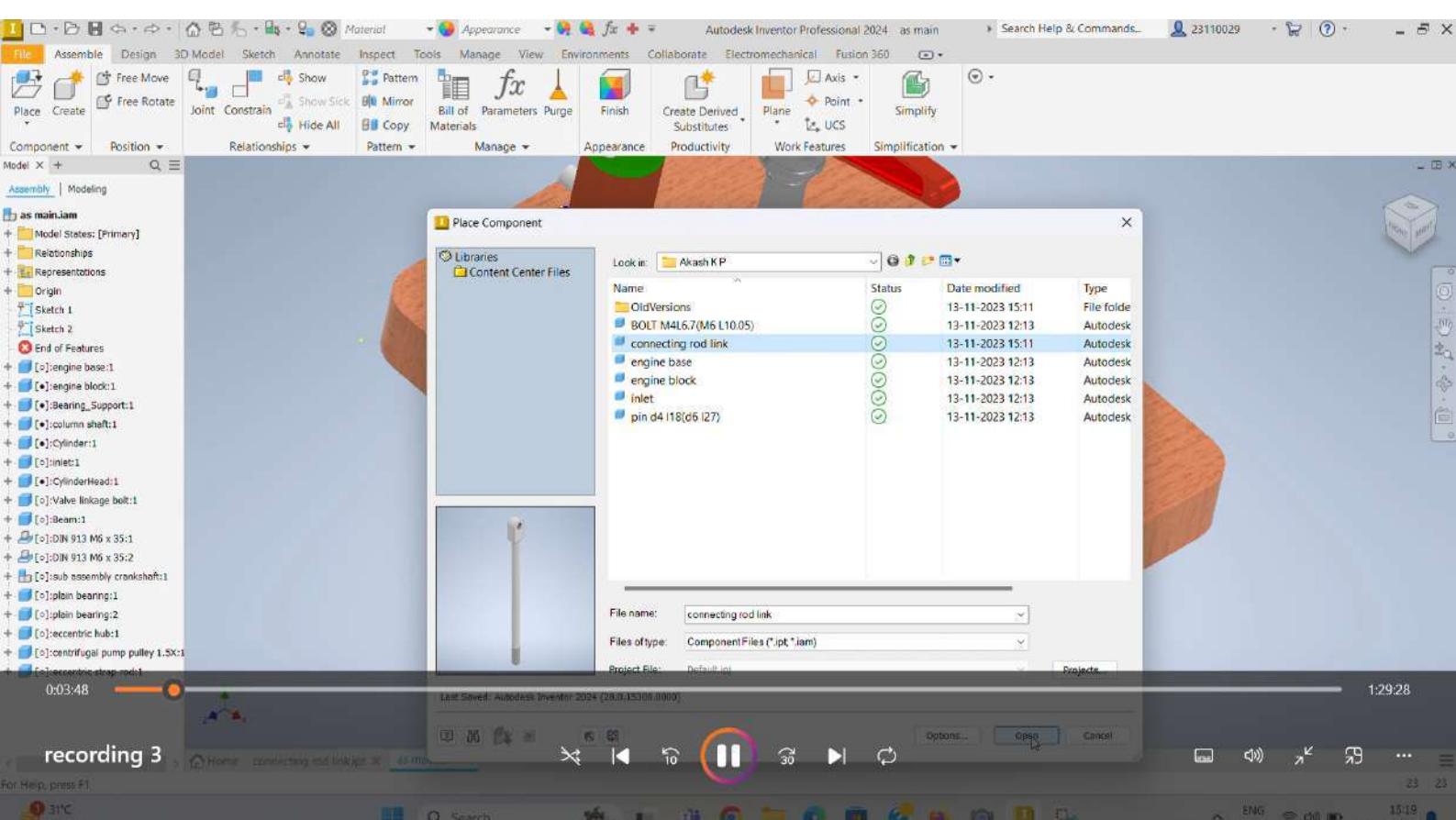


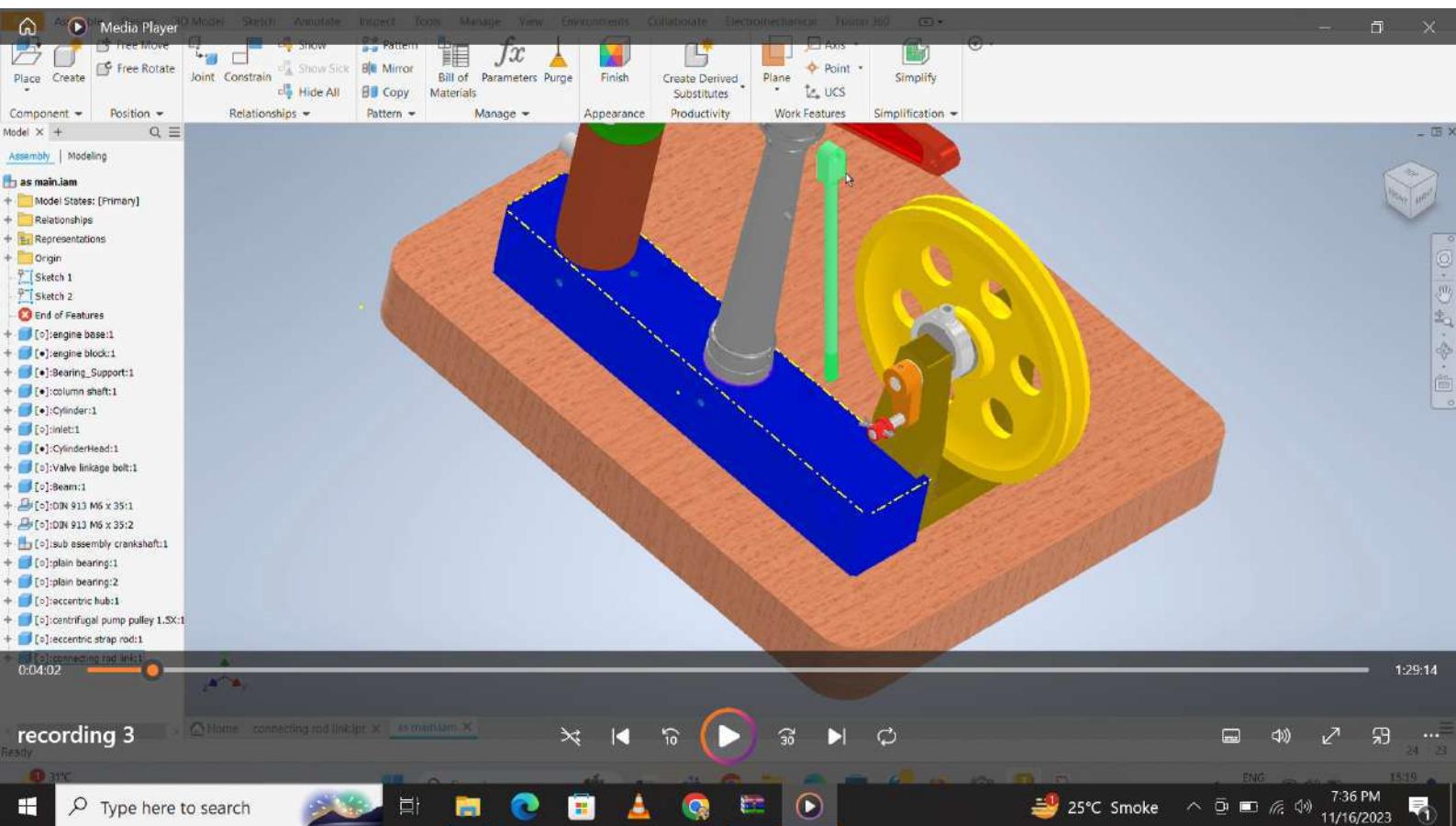


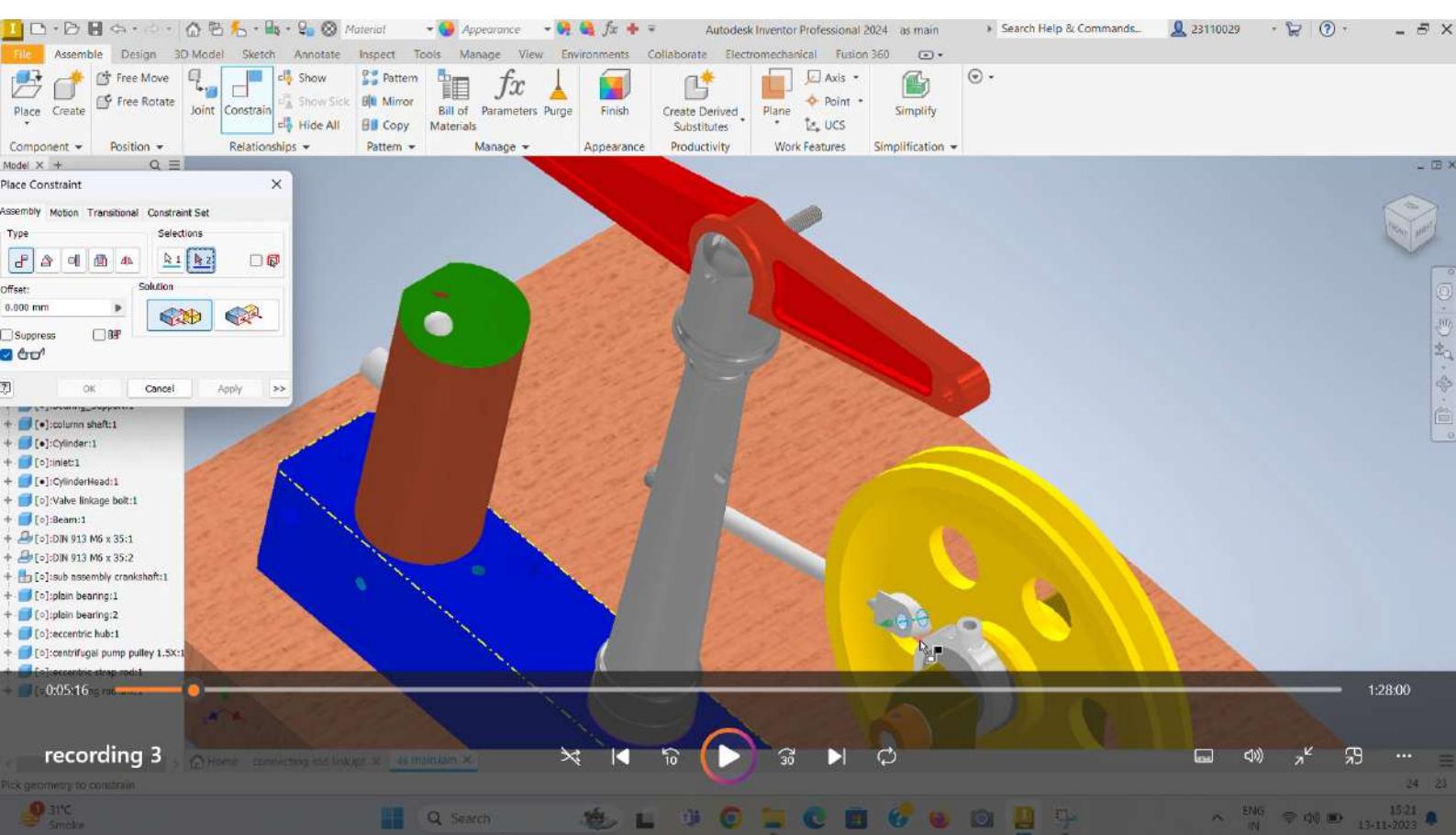


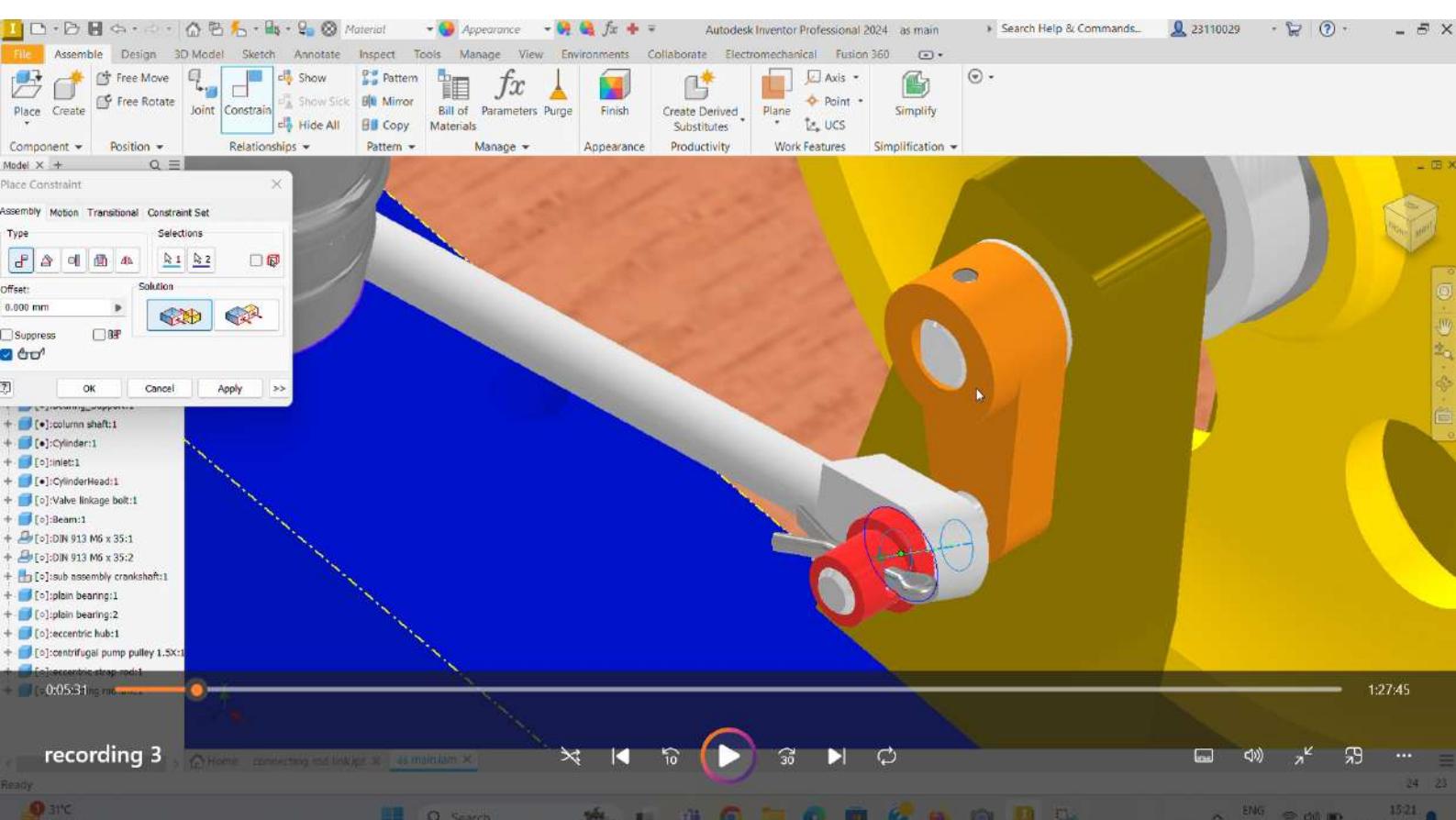


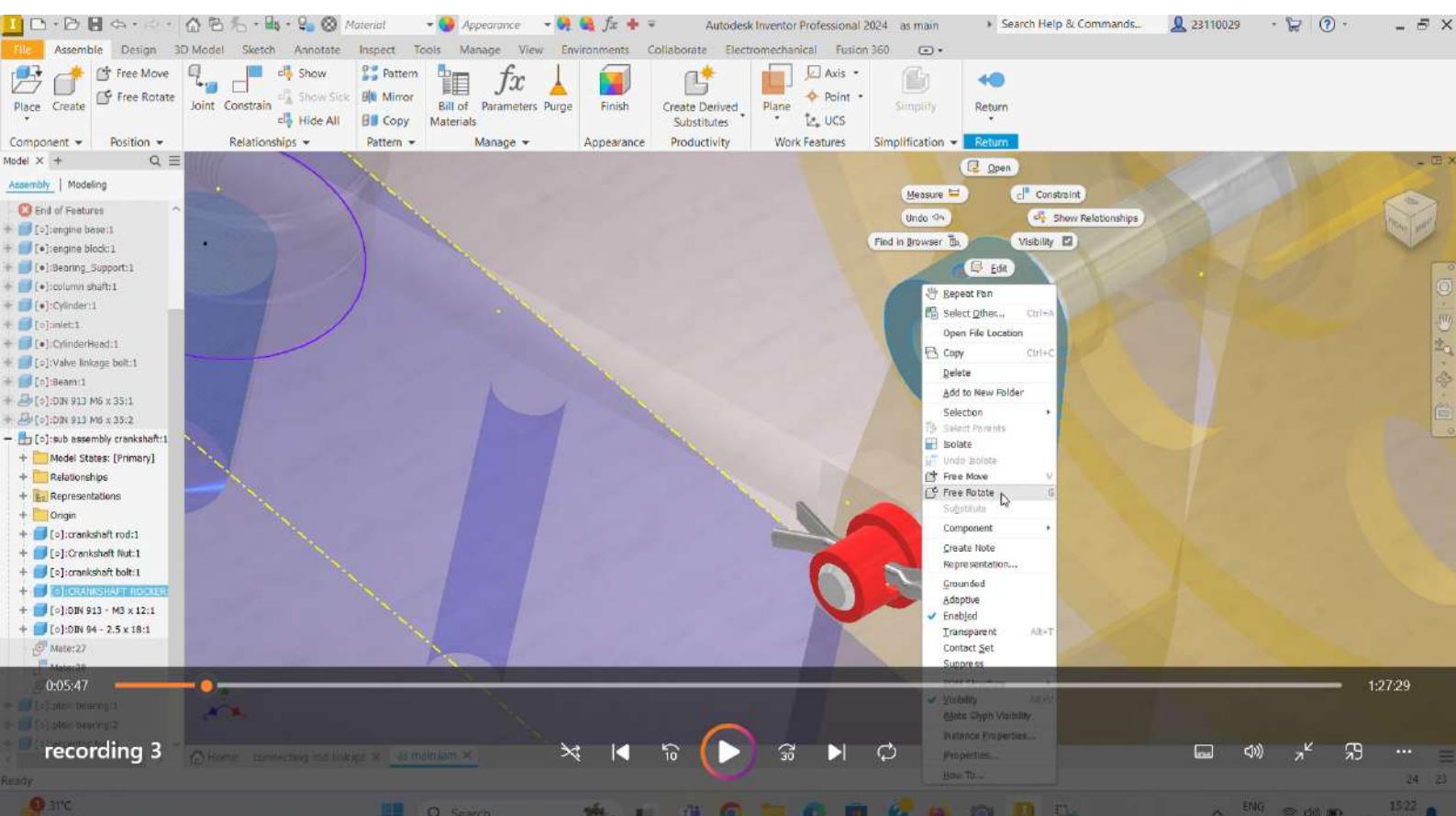


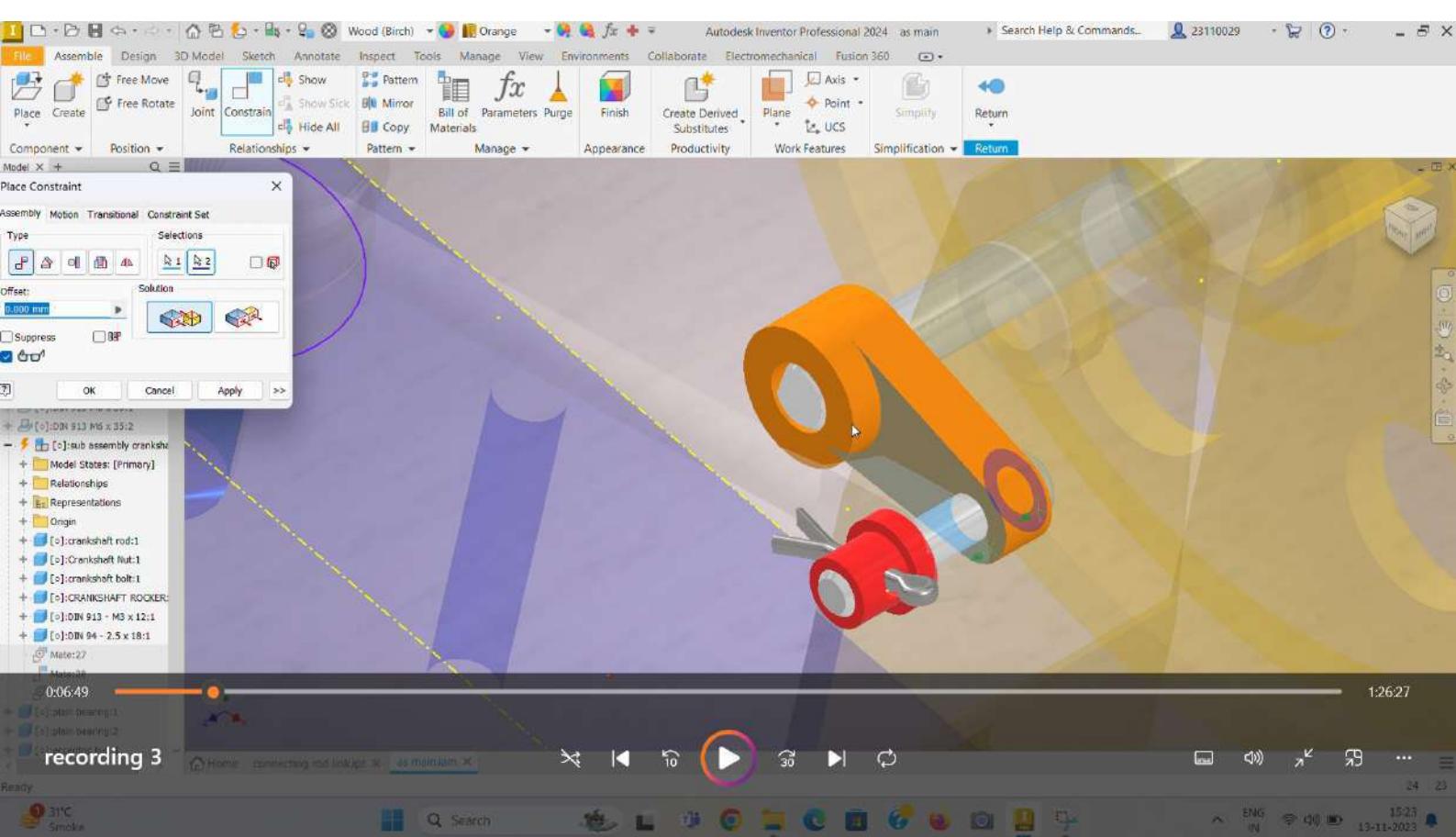


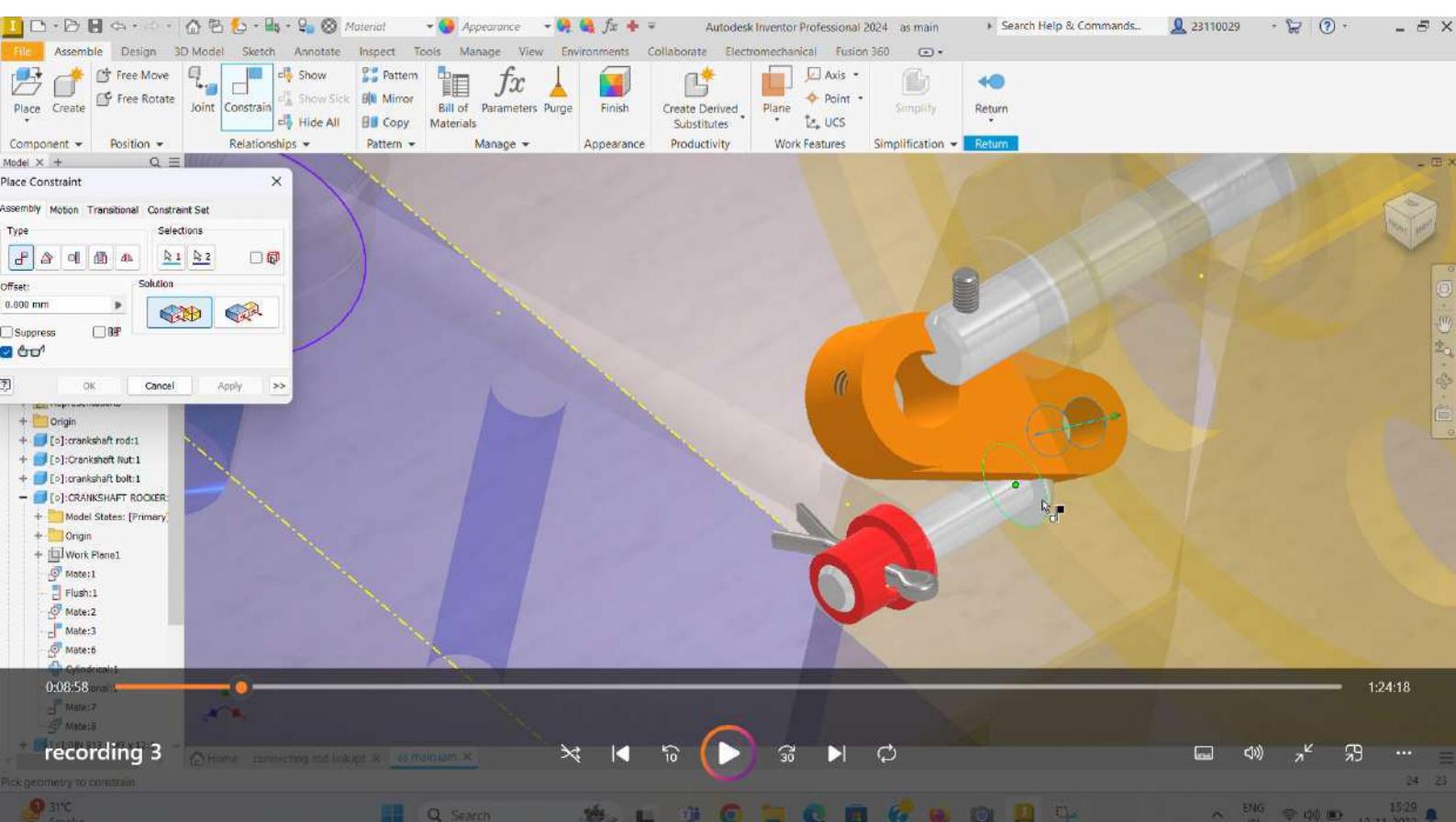


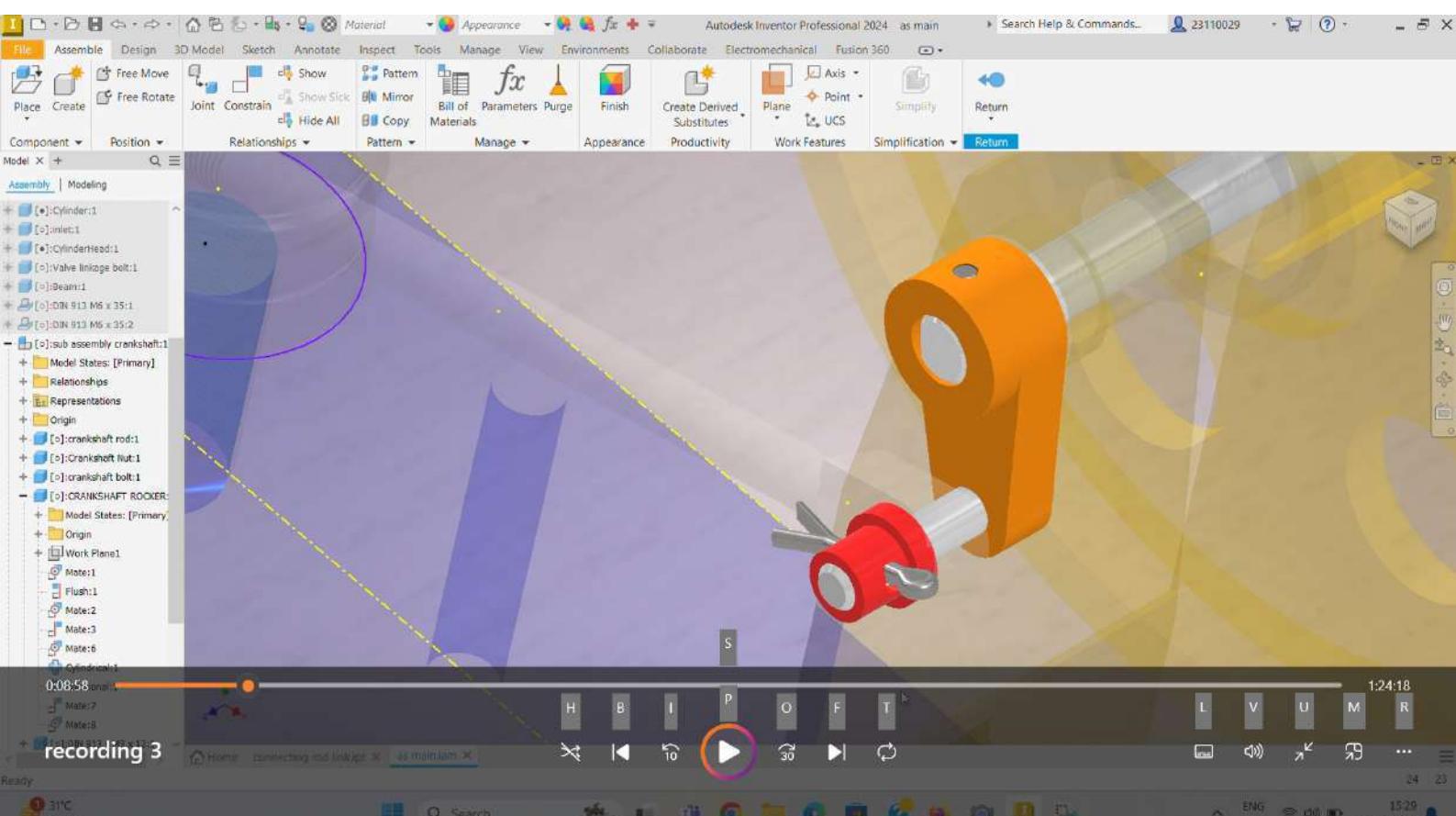


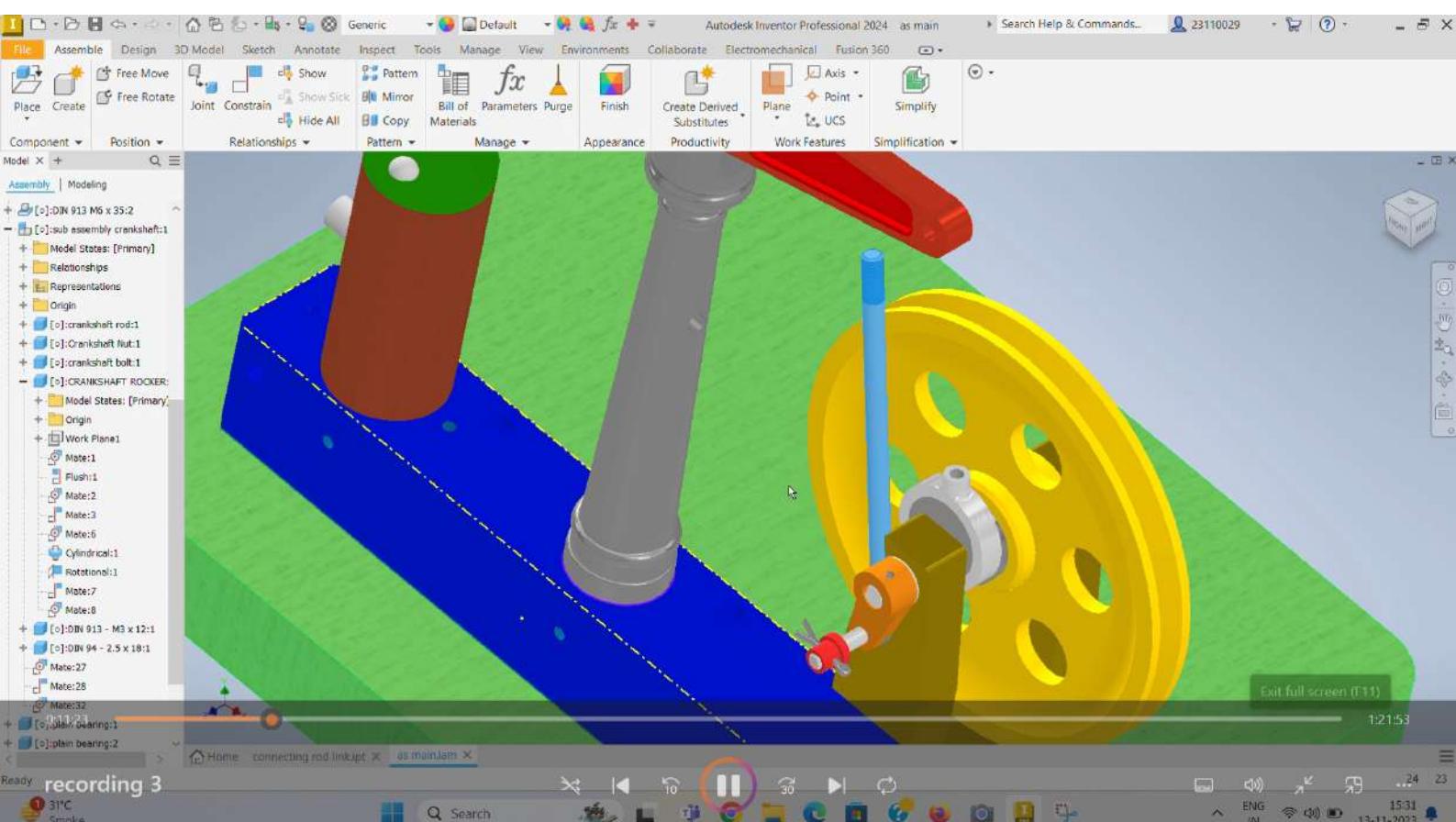


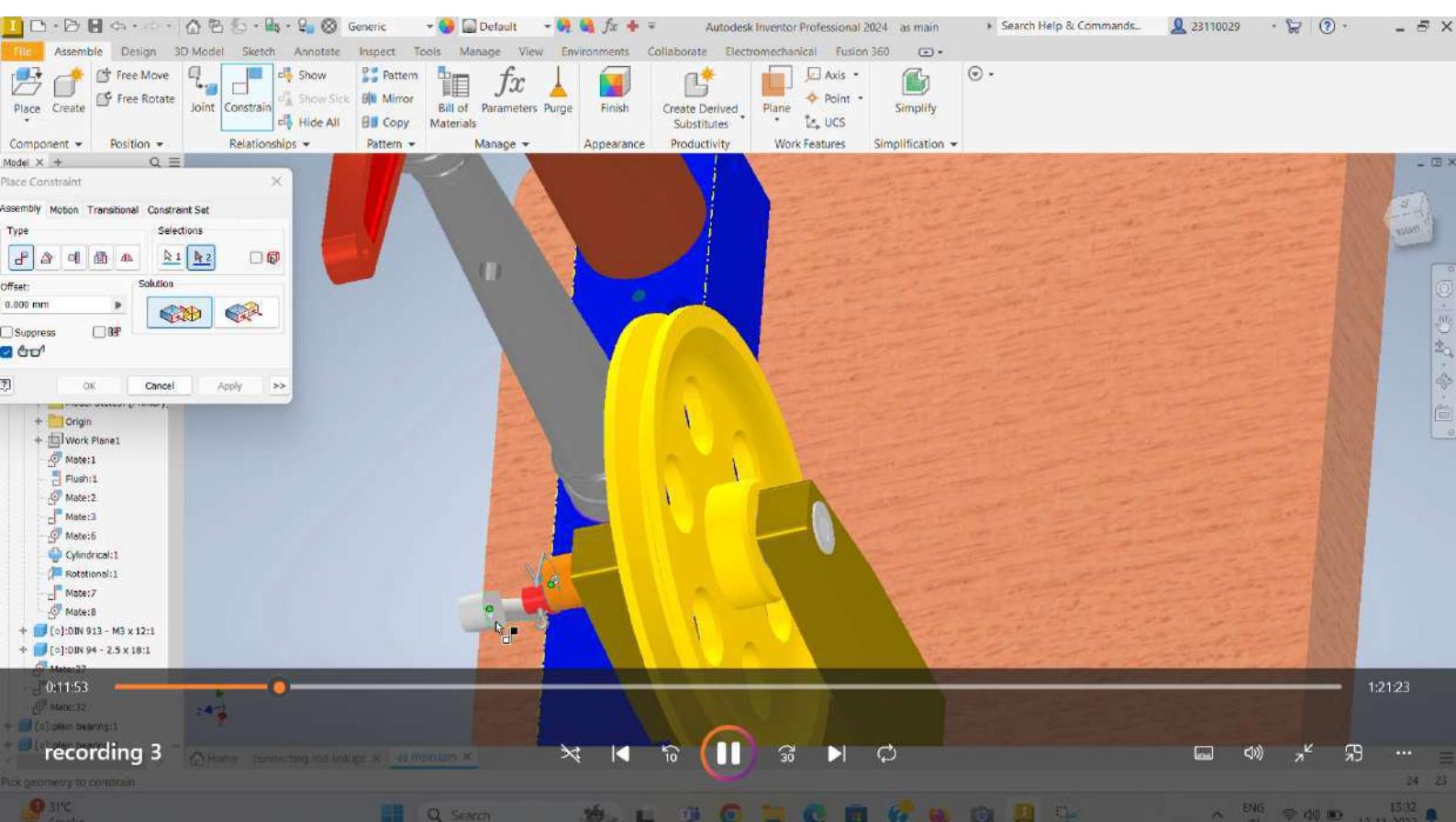


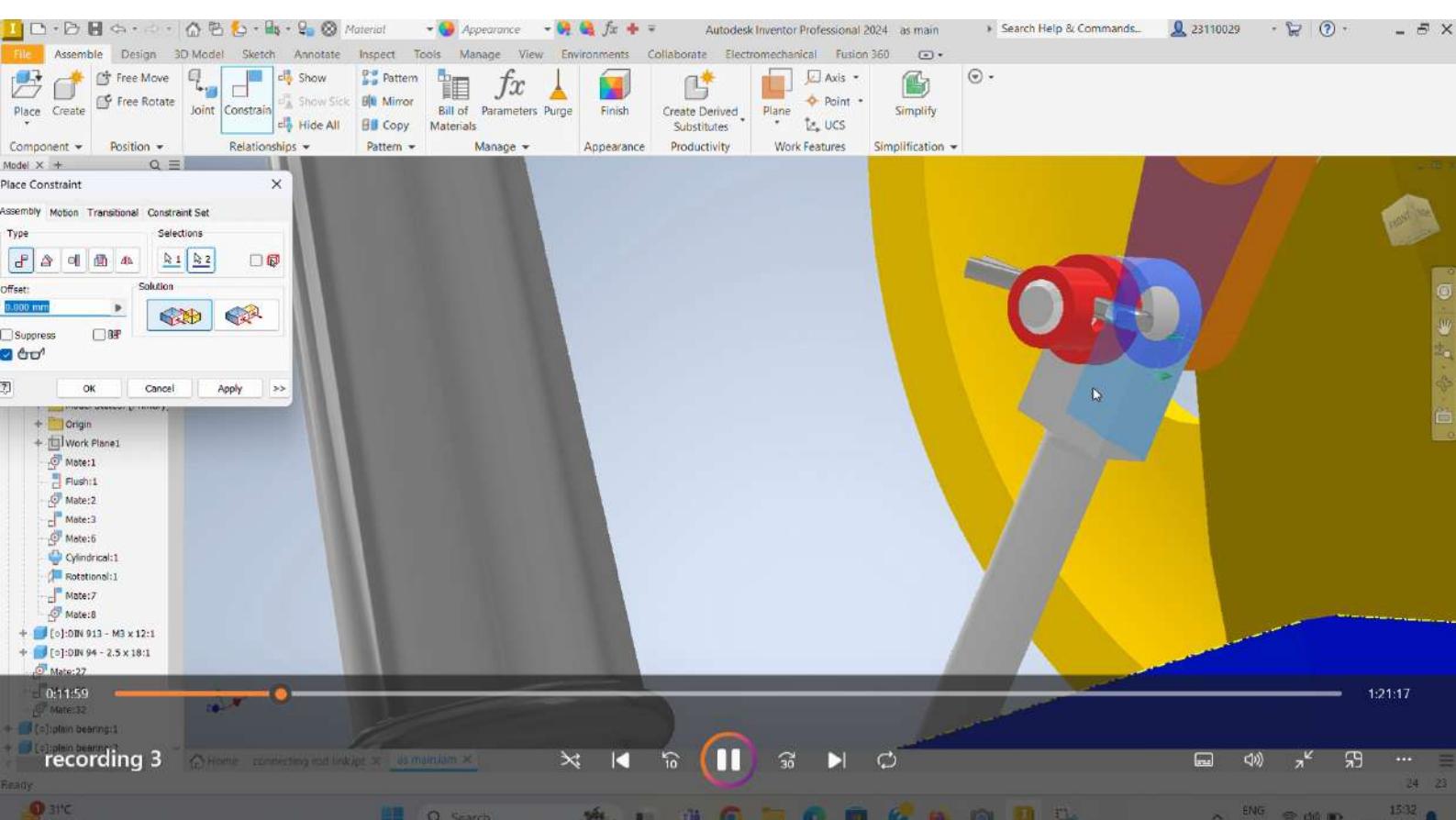


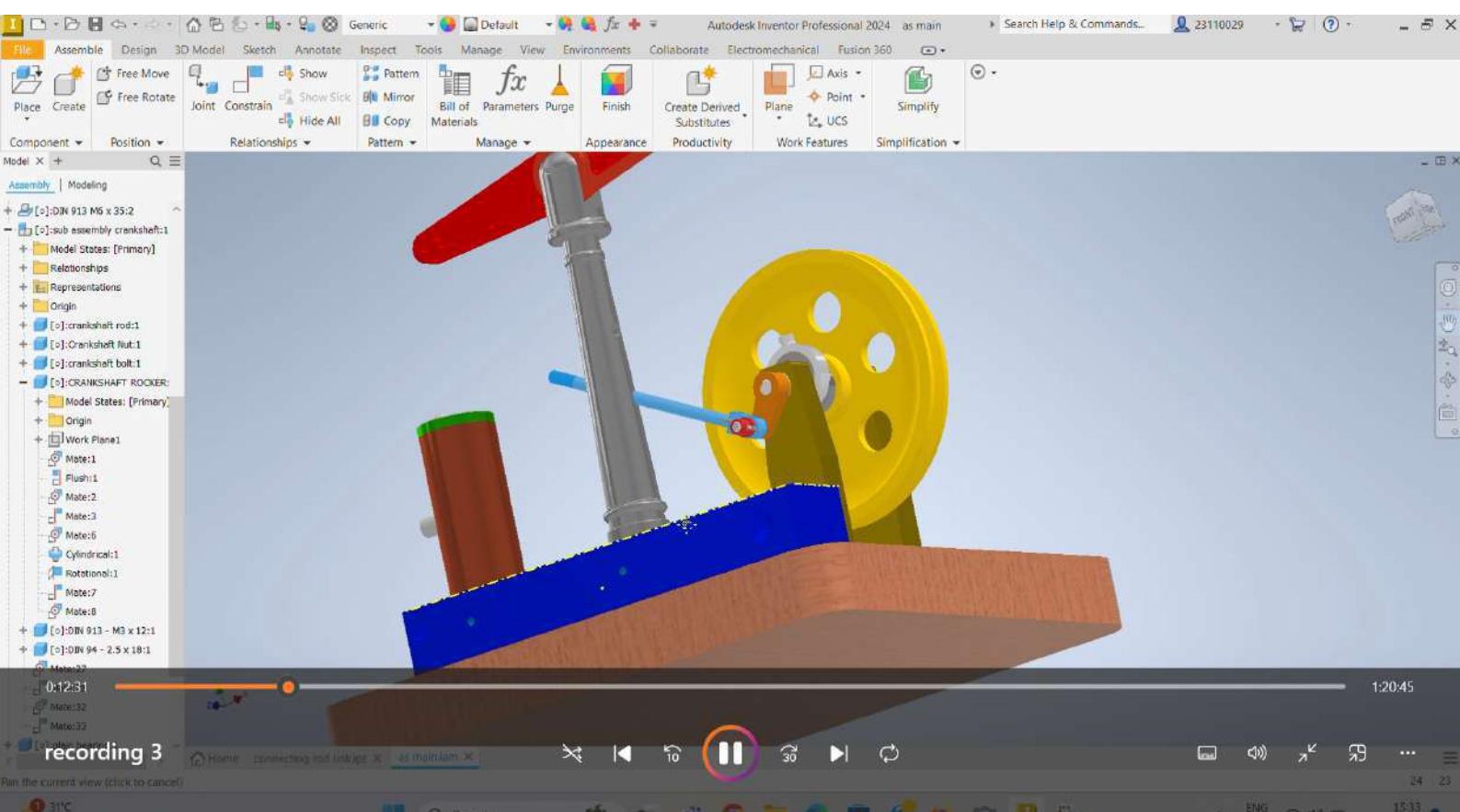


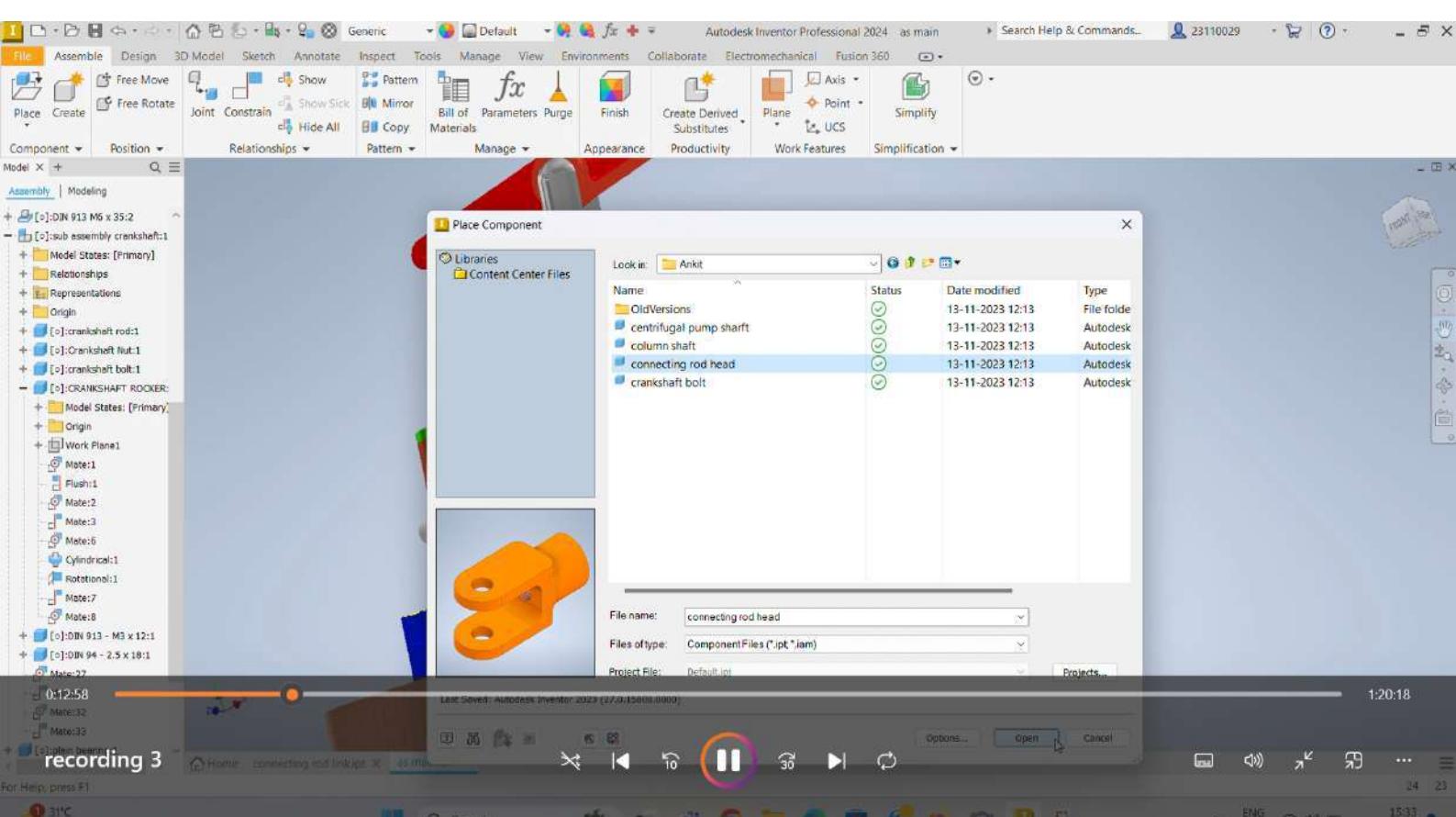


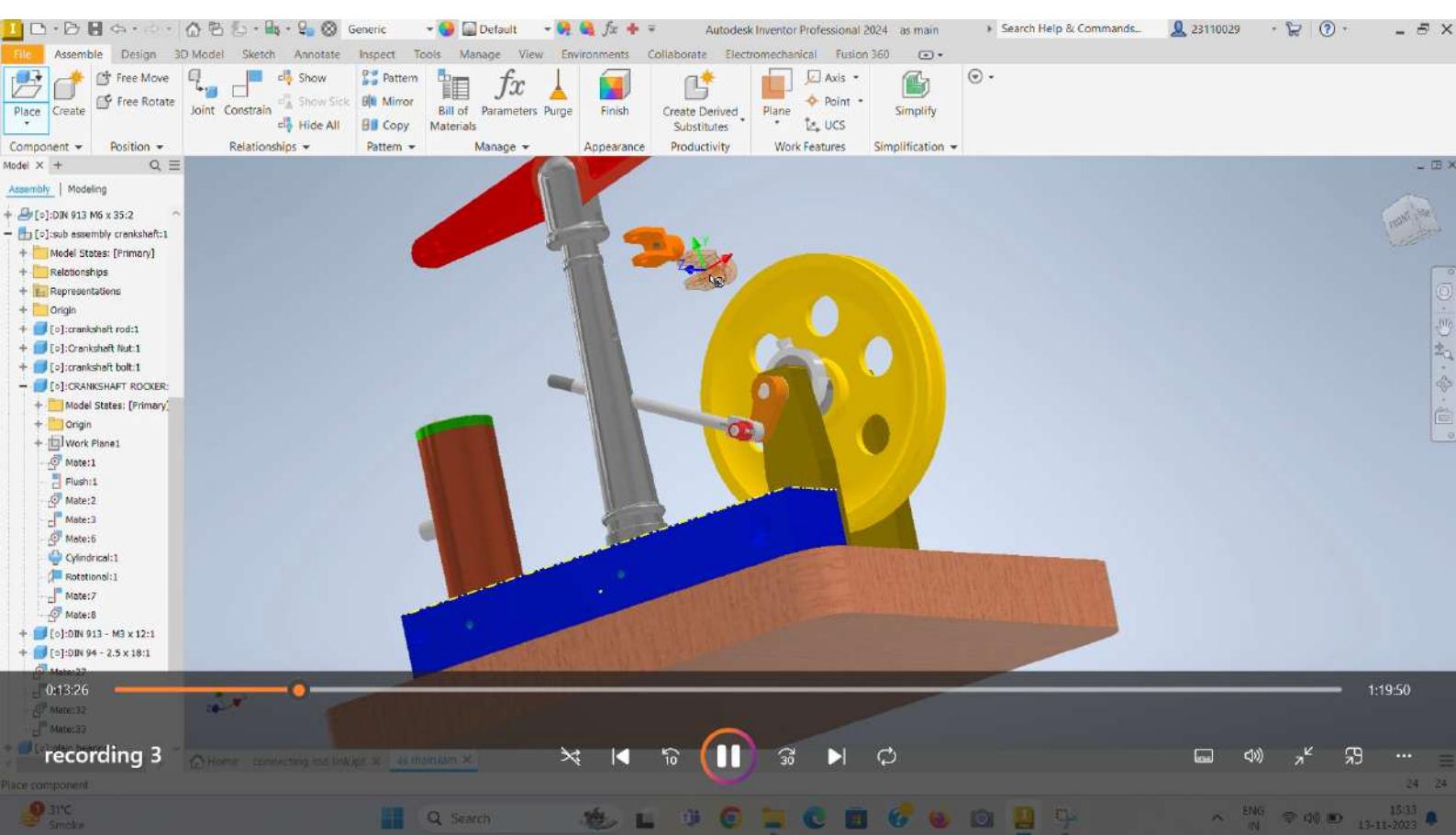


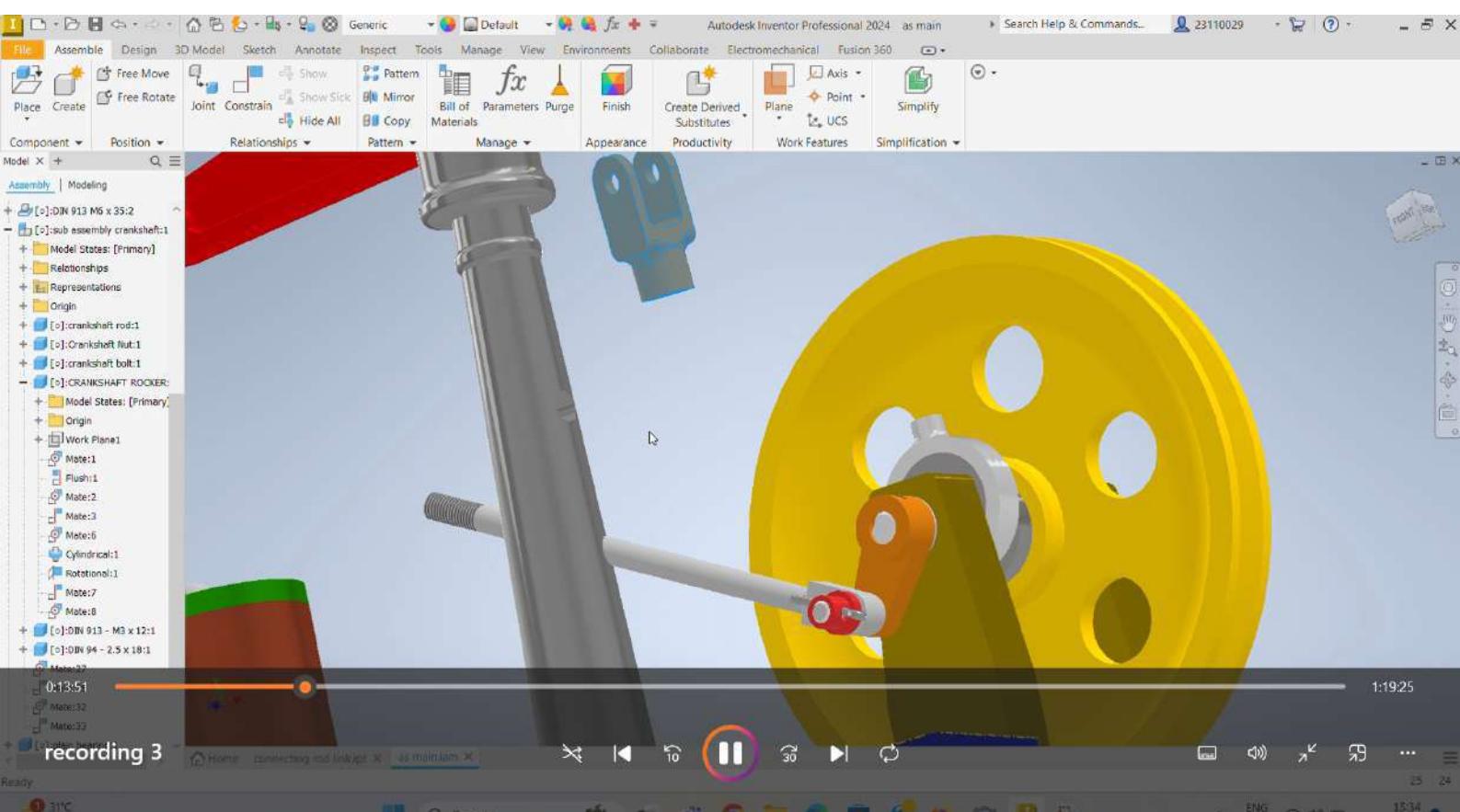


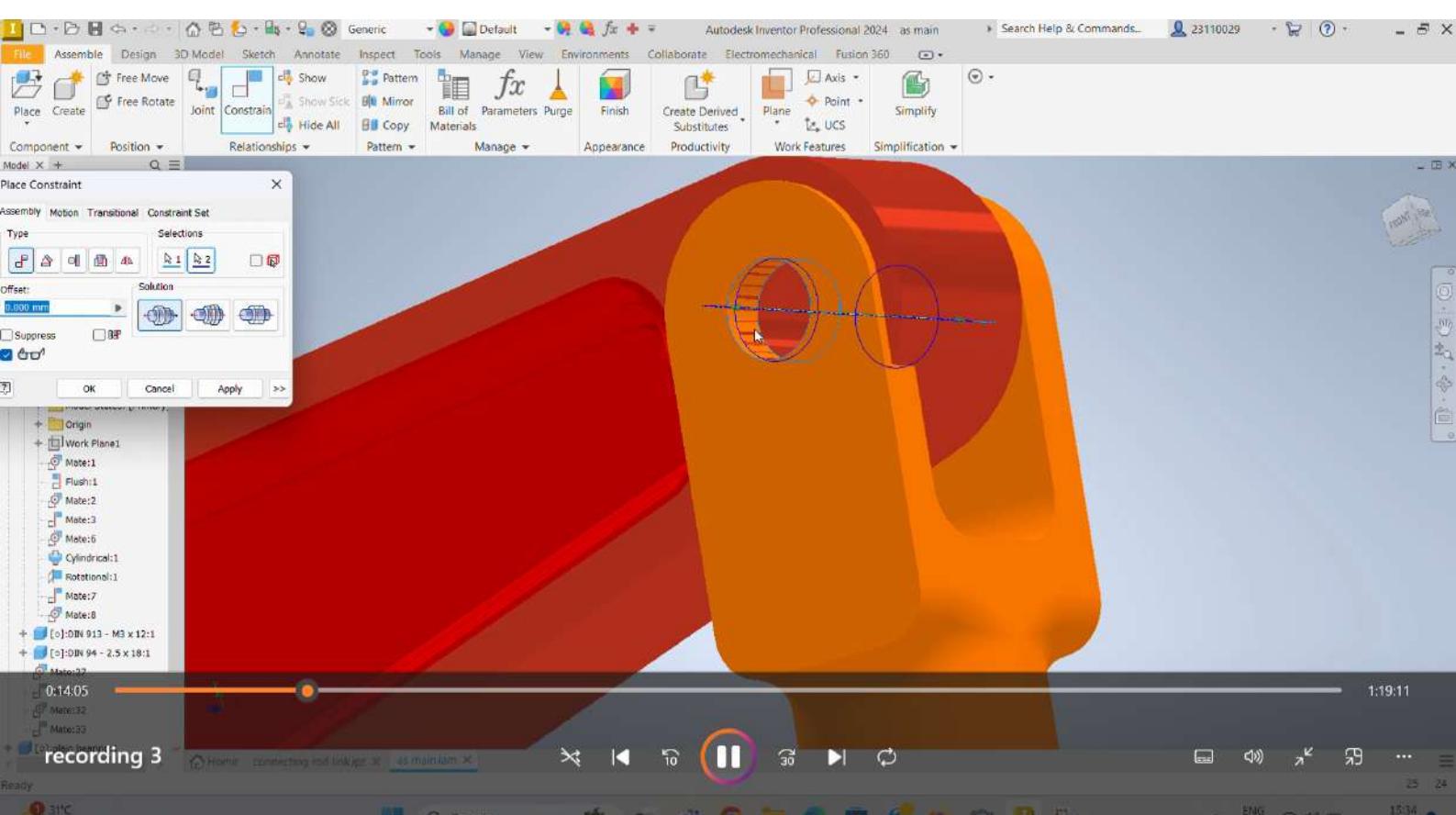


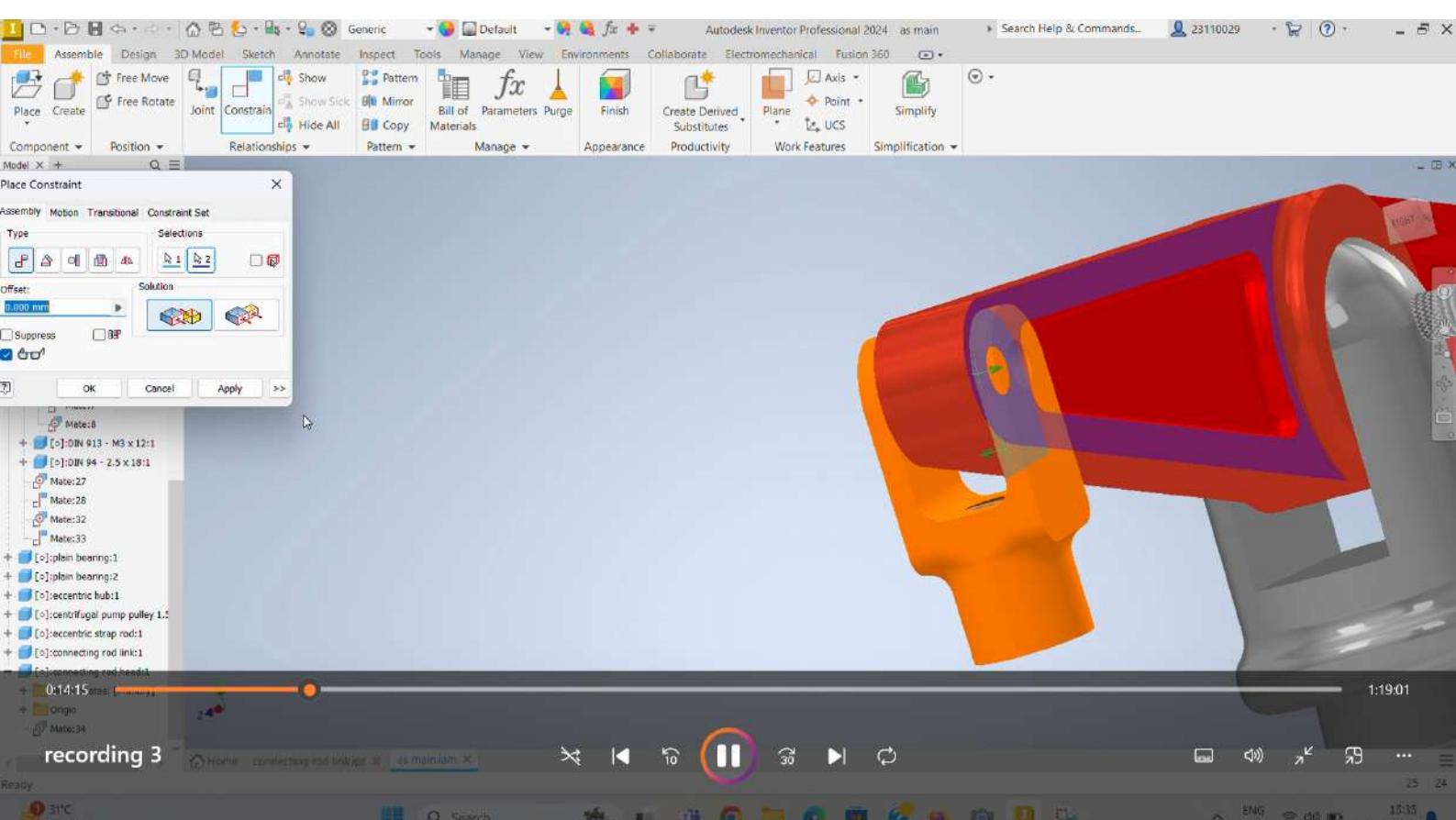


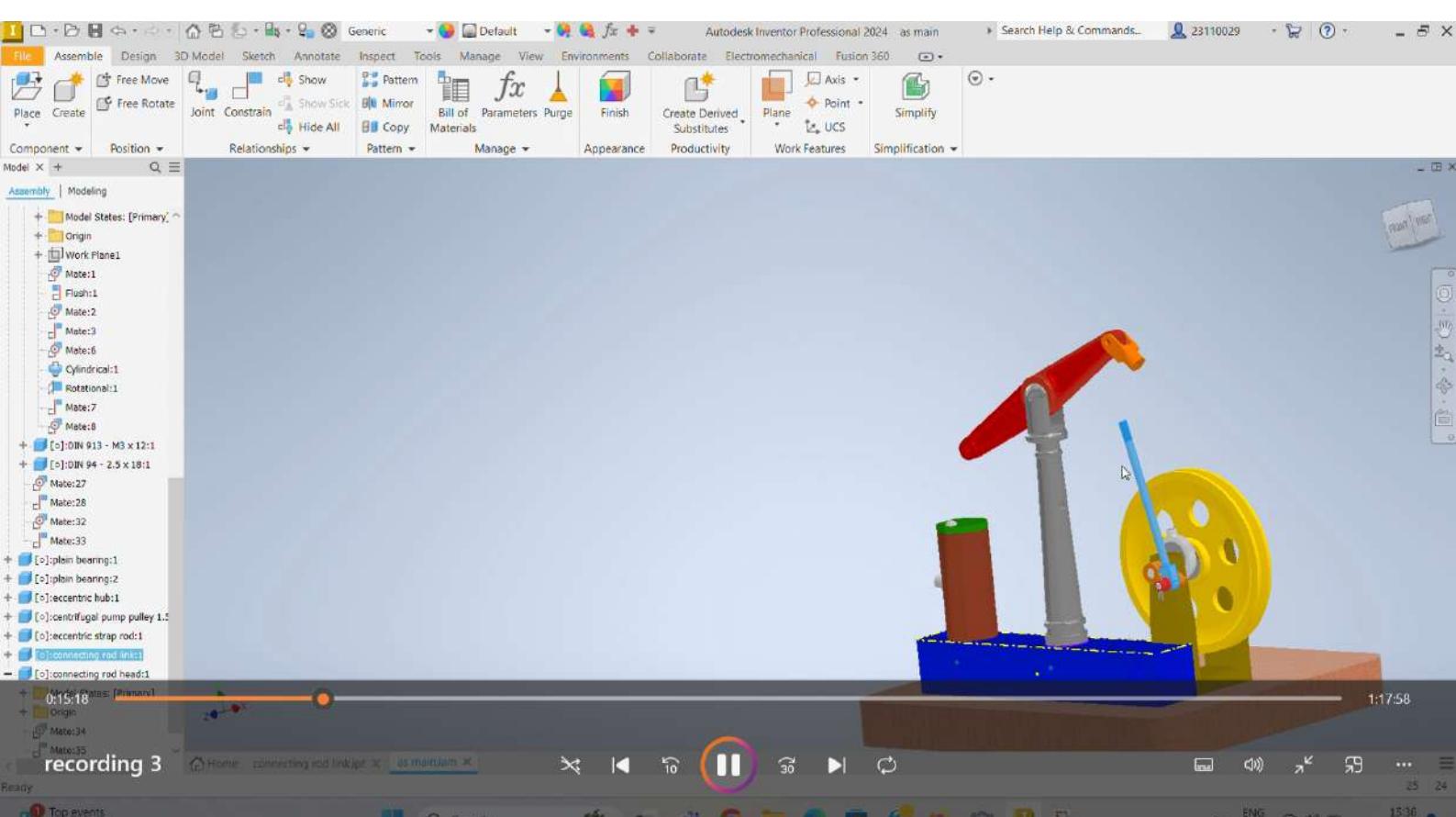


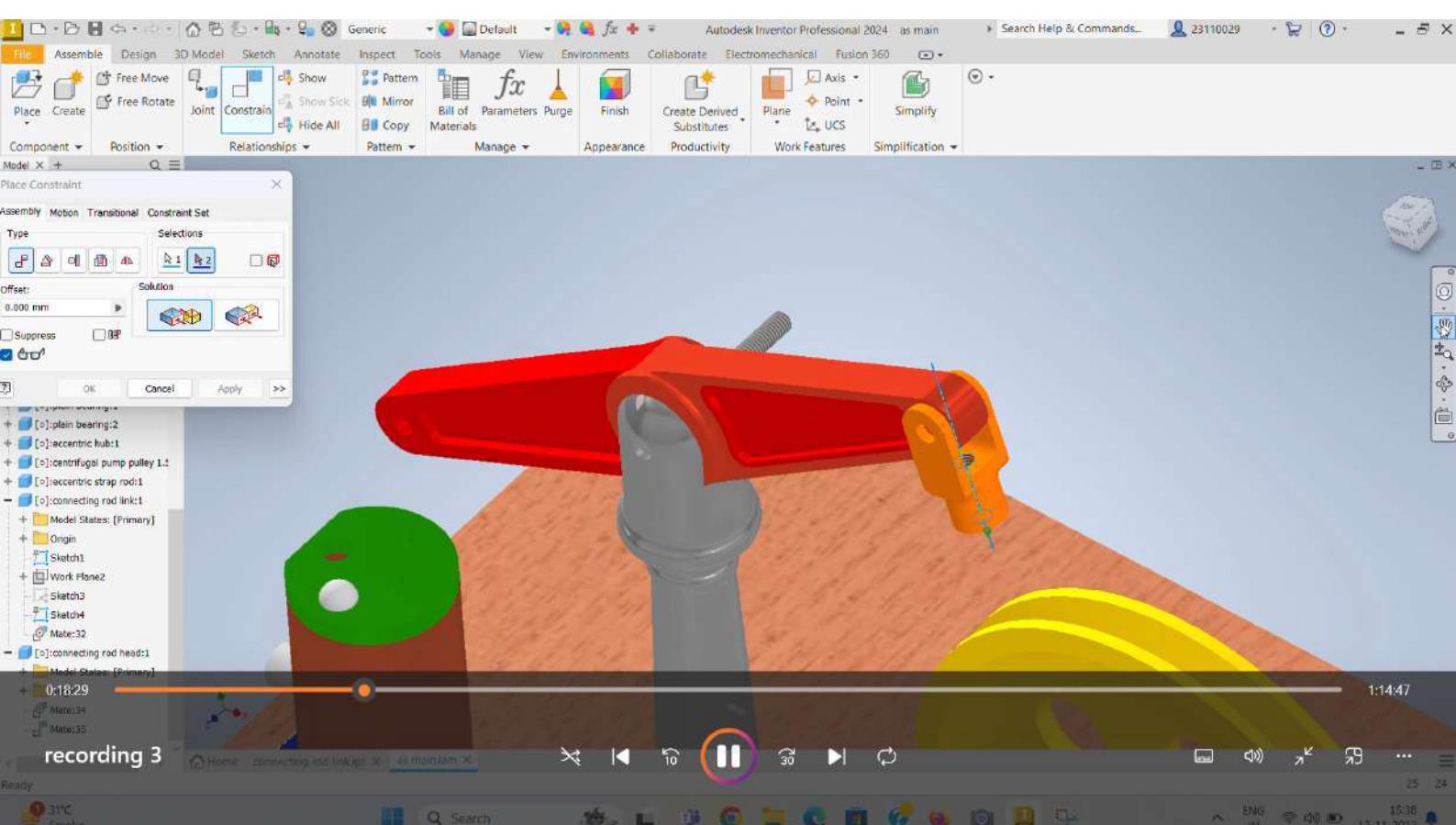


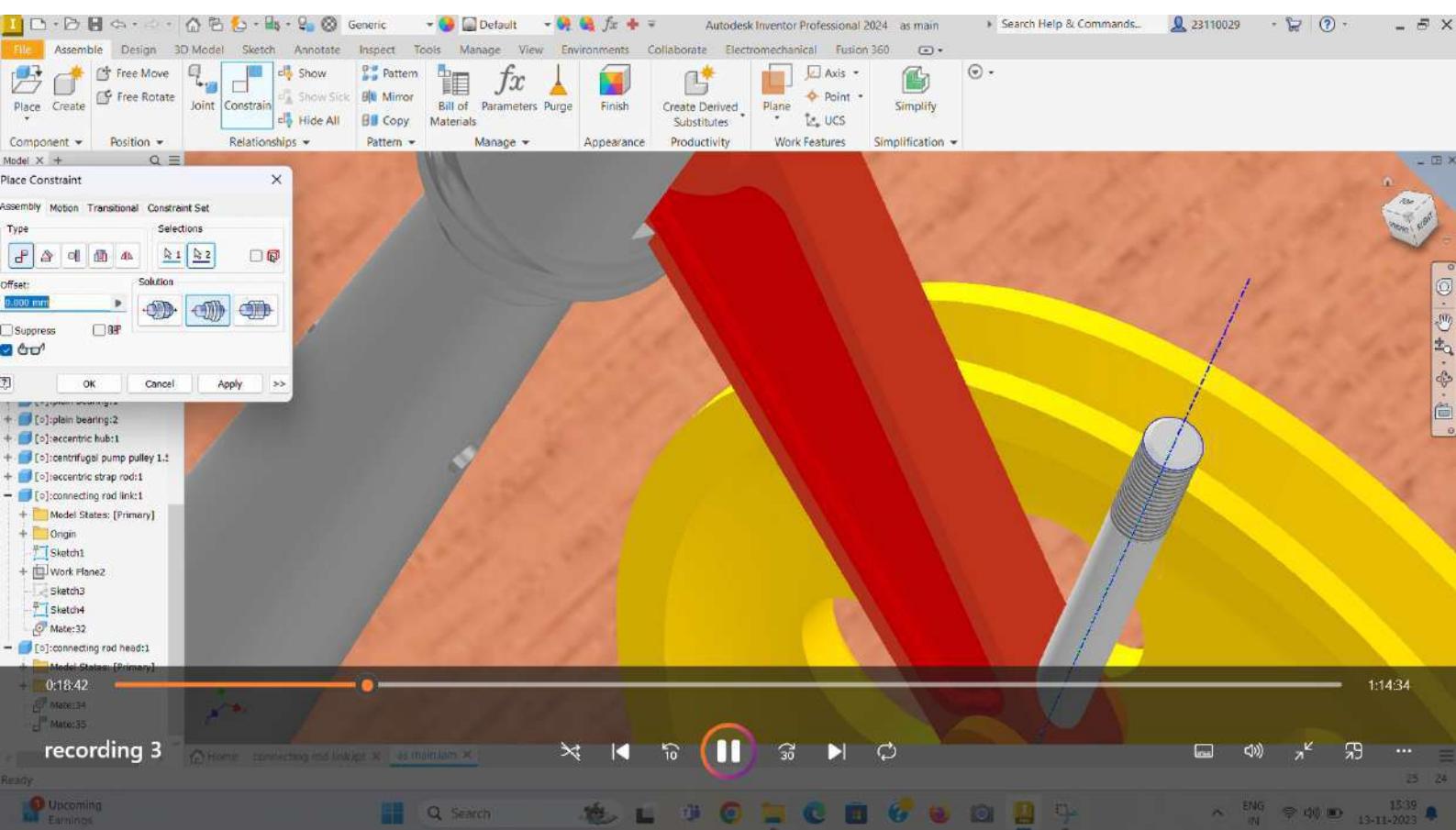


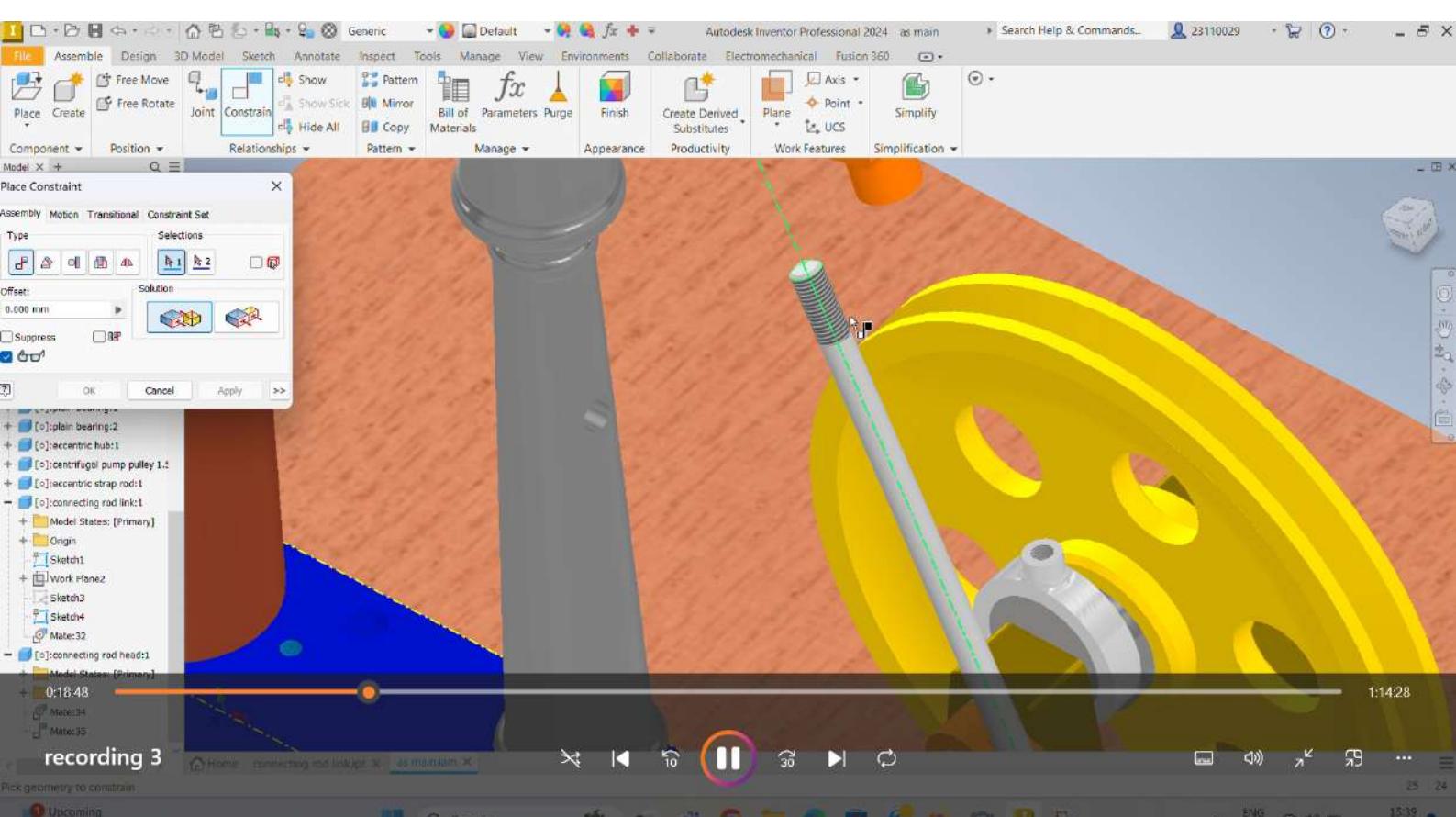


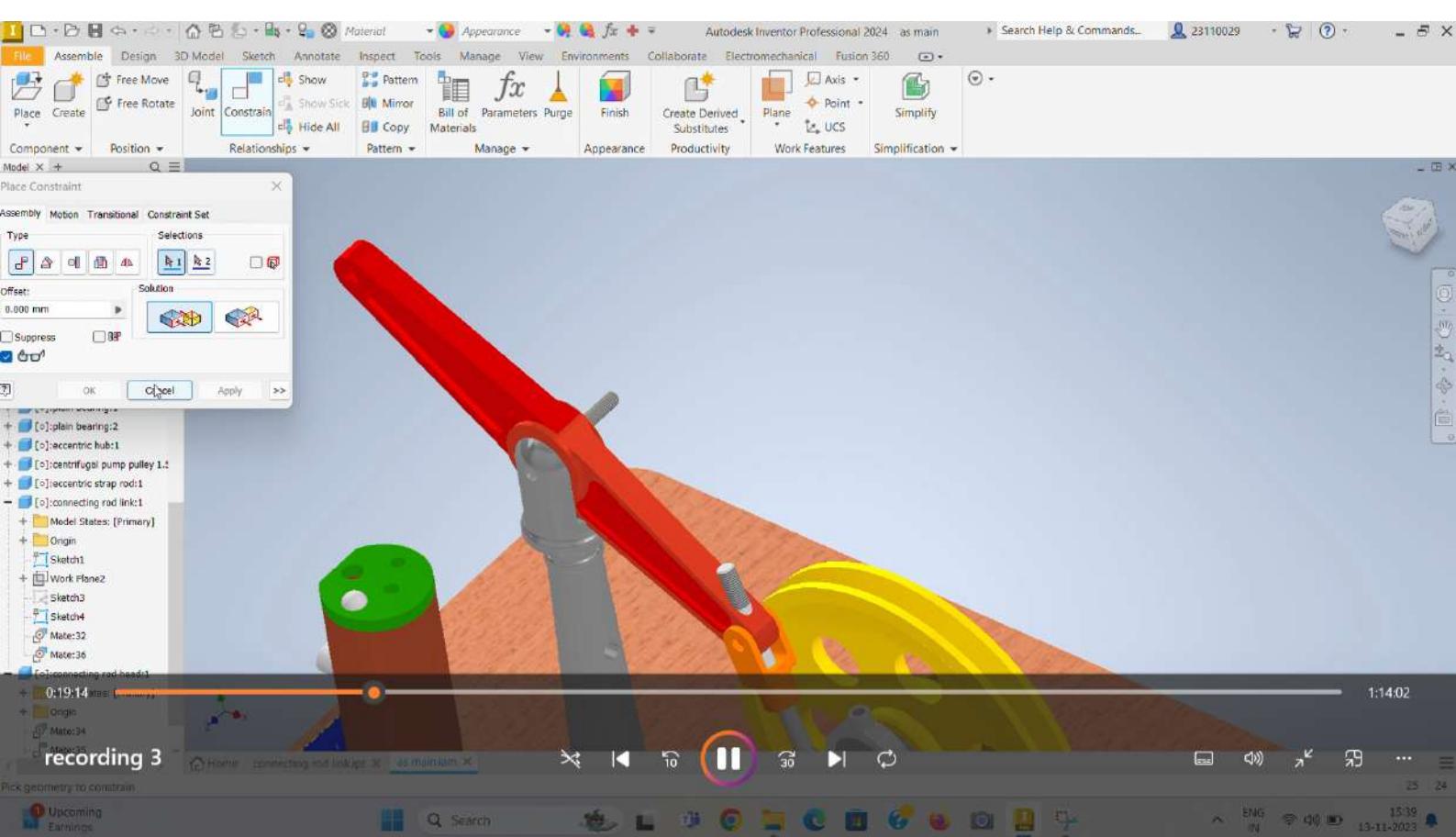


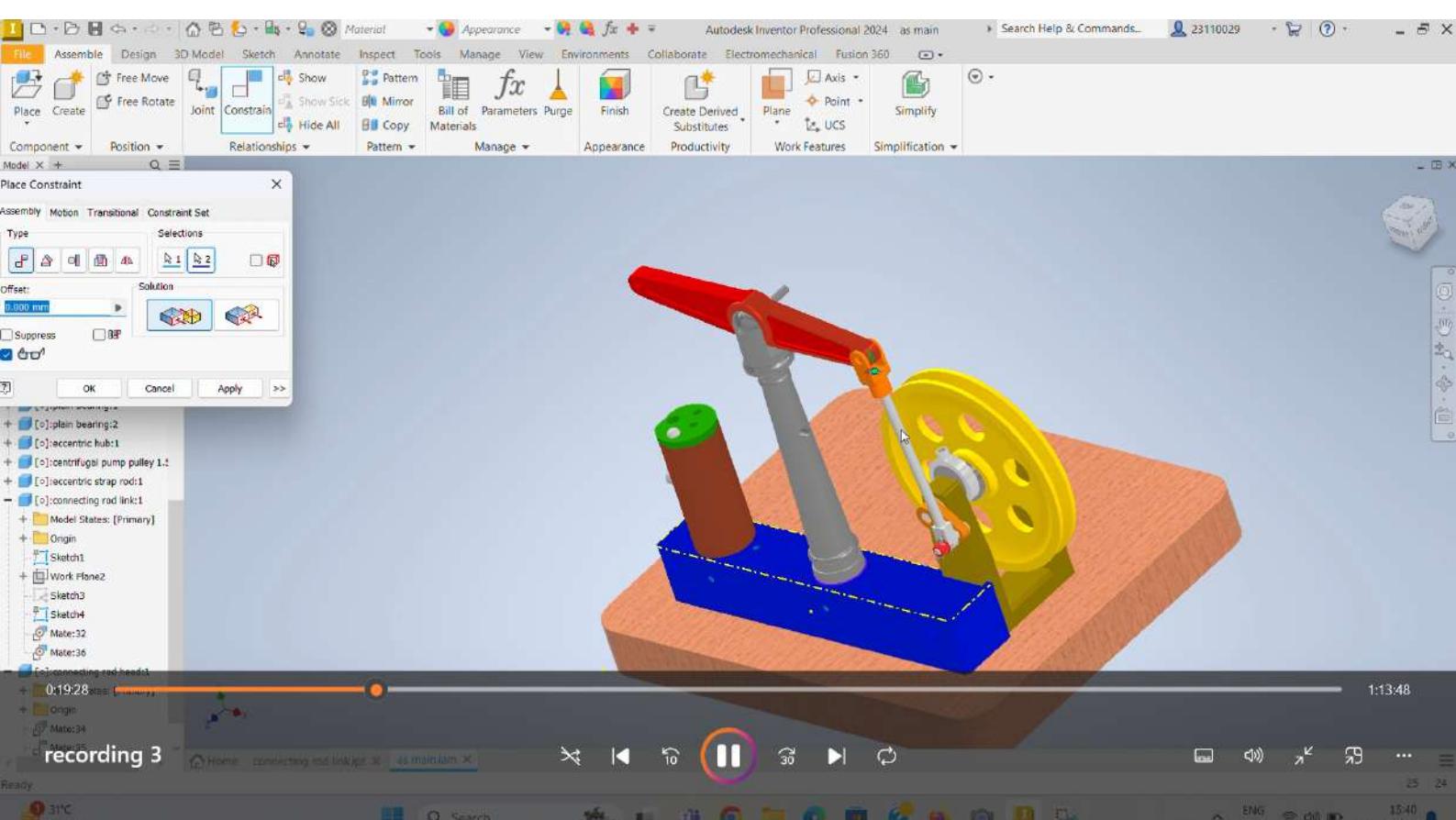


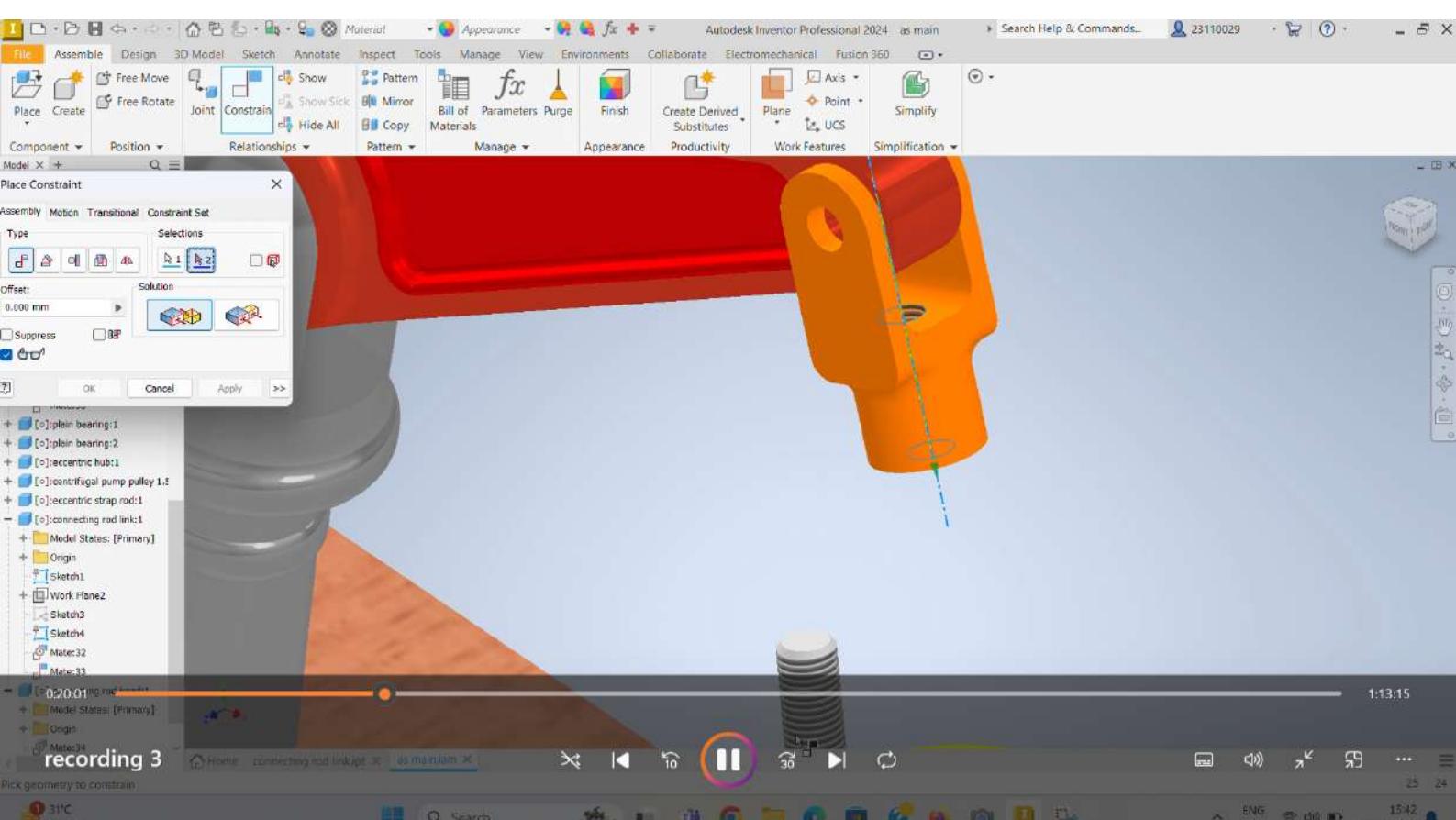


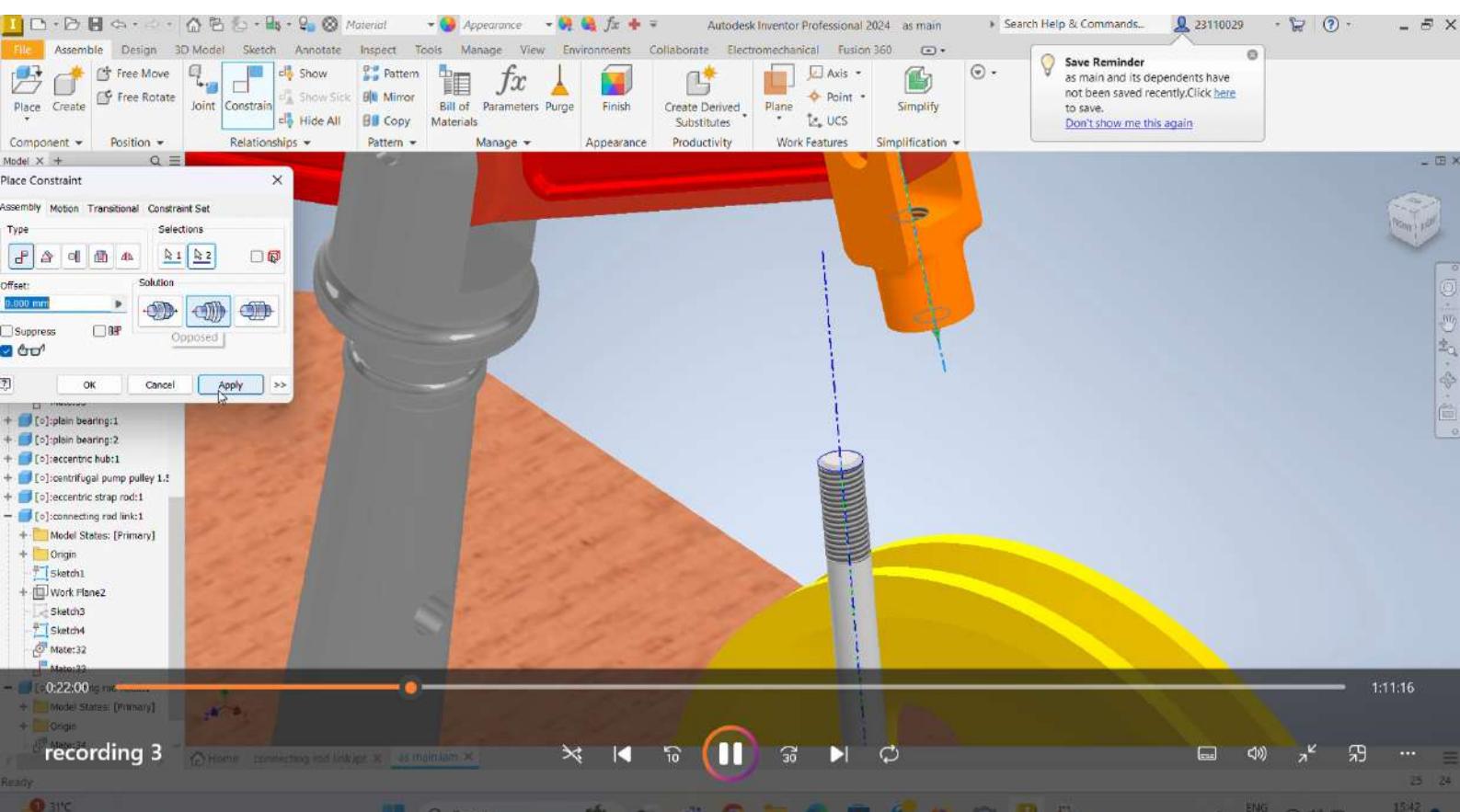


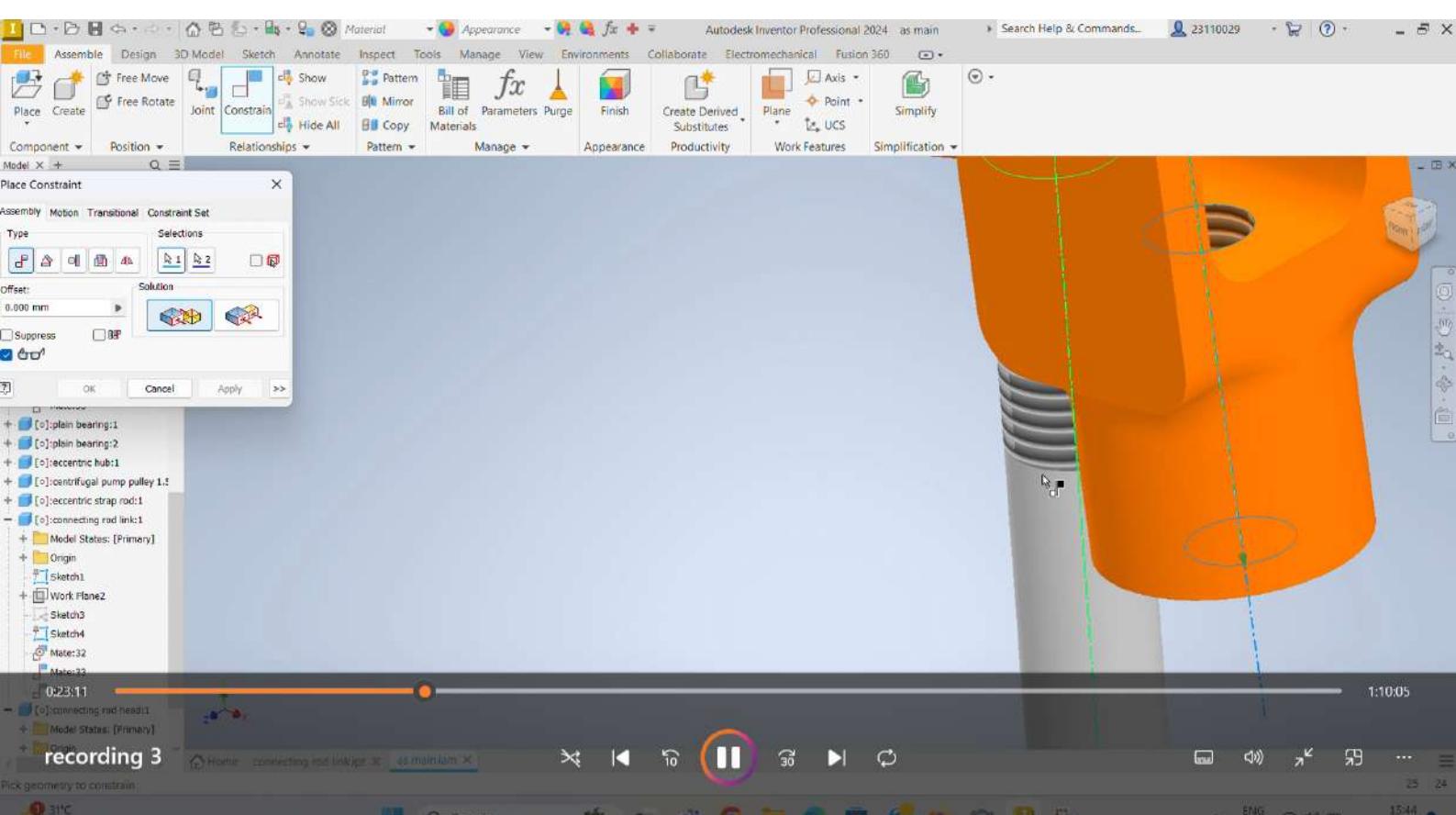


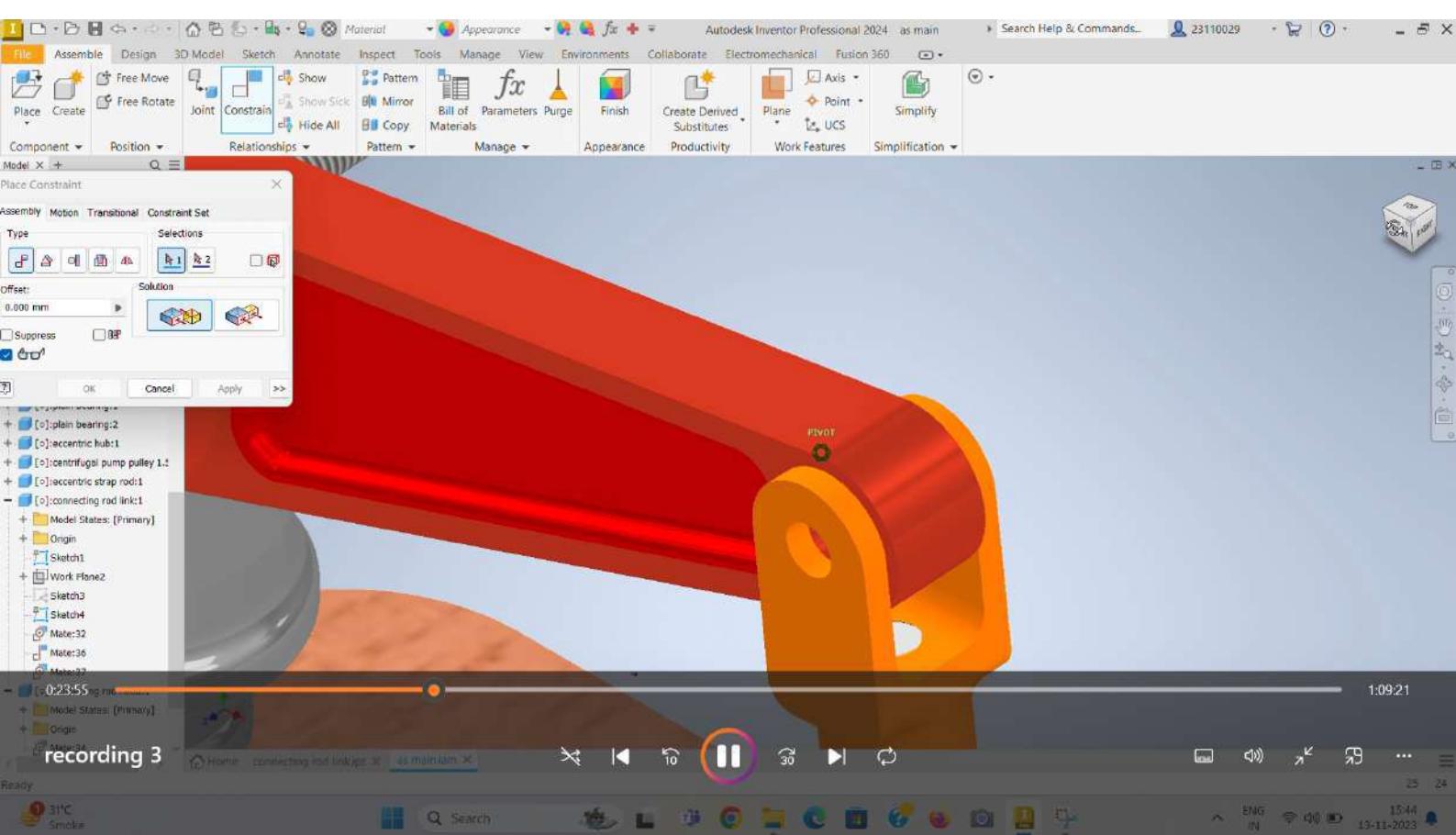


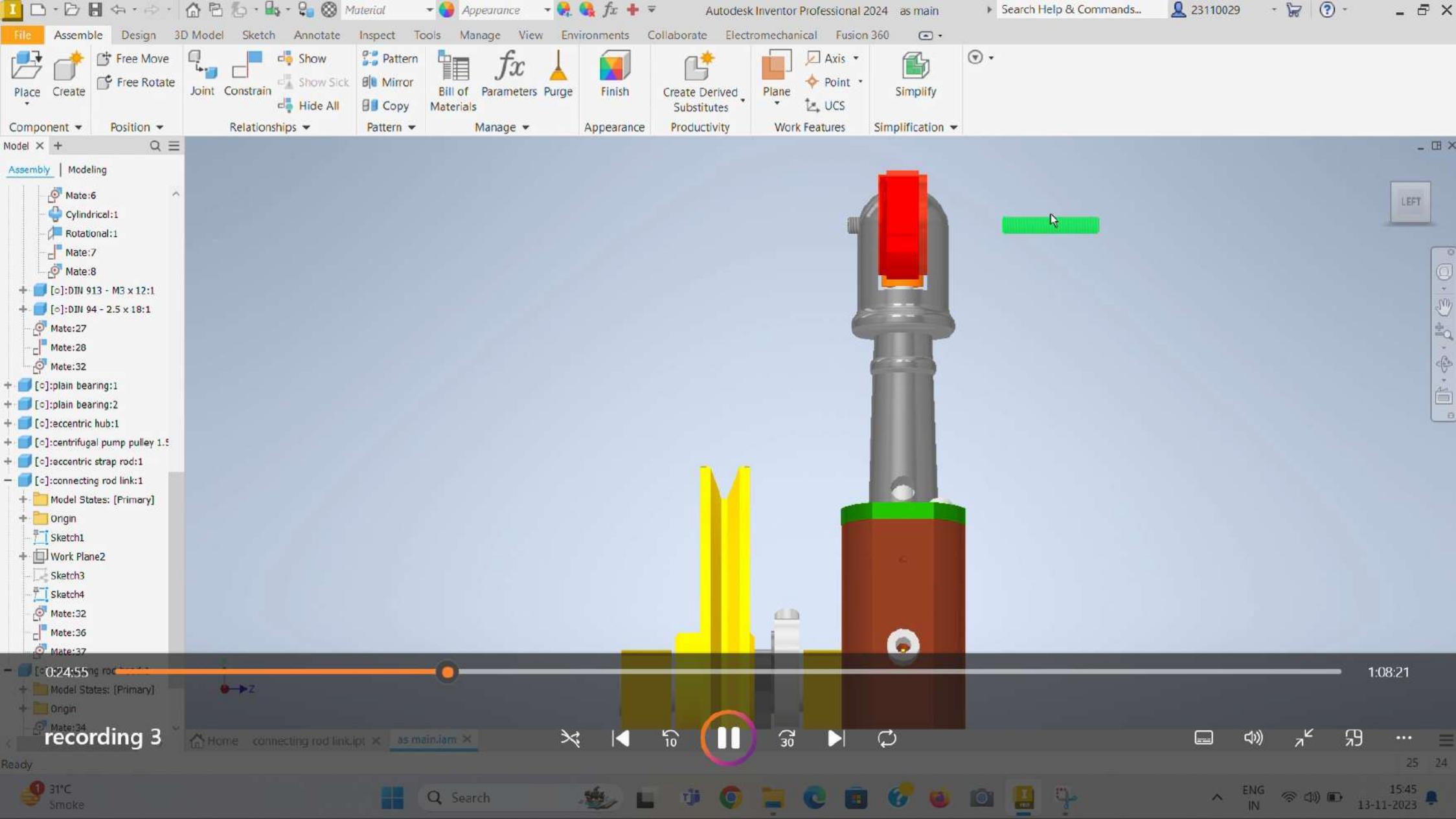






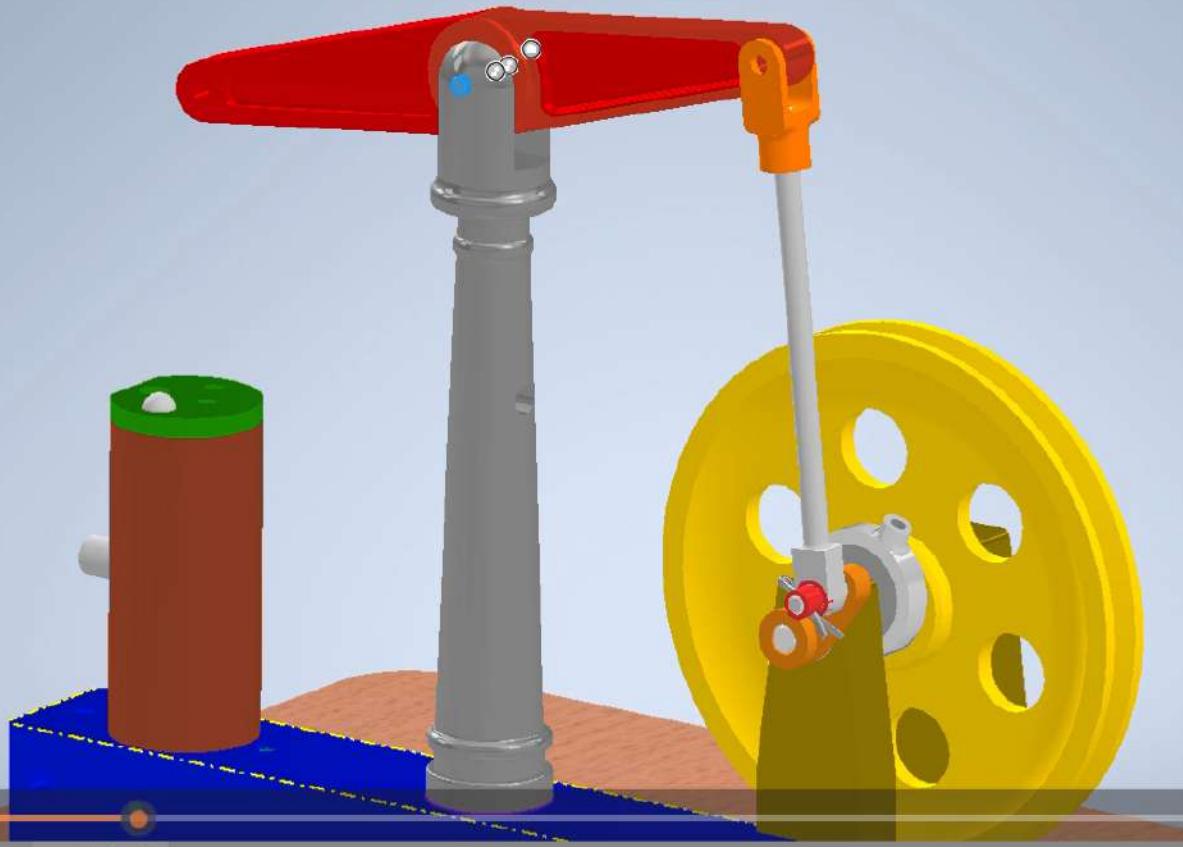






Assembly | Modeling

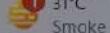
- + Relationships
 - + Representations
 - + Origin
 - + [o]:crankshaft rod:1
 - + [o]:Crankshaft Nut:1
 - + [o]:crankshaft bolt:1
 - [o]:CRANKSHAFT ROCKER:
 - + Model States: [Primary]
 - + Origin
 - + Work Plane1
 - Mate:1
 - Flush:1
 - Mate:2
 - Mate:3
 - Mate:6
 - Cylindrical:1
 - Rotational:1
 - Mate:7
 - Mate:8
 - [o]:DIN 913 - M3 x 12:1
 - [o]:DIN 94 - 2.5 x 18:1
 - Mate:27
 - Mate:28
 - Mate:32
 - + [o]:plain bearing:1
 - + [o]:plain bearing:2
 - + [o]:eccentric hub:1
 - + [o]:centrifugal pump pulley 1.5
0.2550
 - + [o]:eccentric strap rod:1



1:07:26

Ready

recording 3

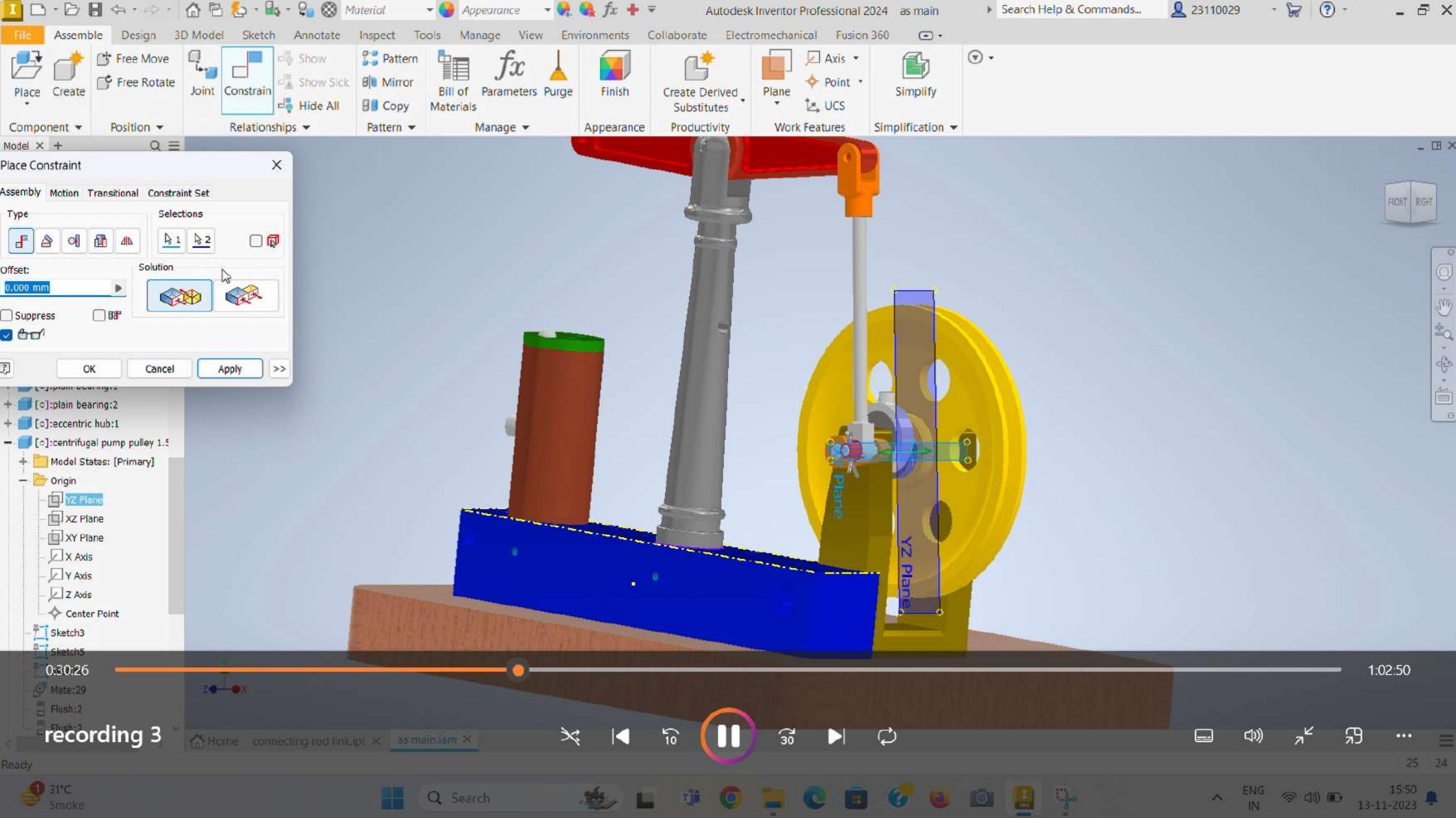


 Search



4b
23

23



Autodesk Inventor Professional 2024 as main Search Help & Commands... 23110029

File Assemble Design 3D Model Sketch Annotate Inspect Tools Manage View Environments Collaborate Electromechanical Fusion 360

Place Create Free Move Free Rotate Joint Constrain Show Pattern Bill of Materials Parameters Purge Finish Create Derived Substitutes Axis Plane Point Simplify

Relationships Hide All Copy Pattern Manage Appearance Productivity Work Features Simplification

Model X + Assembly Modeling

Model States: [Primary] Origin Work Plane1 Mate:1 Flush:1 Mate:2 Mate:3 Mate:6 Cylindrical:1 Rotational:1 Mate:7 Mate:8 [o]:DIN 913 - M3 x 12:1 [o]:DIN 94 - 2.5 x 18:1 Mate:27 Mate:28 Mate:32 [o]:plain bearing:1 [o]:plain bearing:2 [o]:eccentric hub:1 [o]:centrifugal pump pulley 1.5 Model States: [Primary] Origin YZ Plane XZ Plane 0:31:18ne X Axis Y Axis Z Axis recording 3 Home connecting rod linkage as main 31°C Smoke

Place Component

Look in: Manoj

Name	Status	Date modified	Type
OldVersions	✓	13-11-2023 12:13	File folder
Beam linkage	✓	13-11-2023 12:13	Autodesk
Beam	✓	13-11-2023 12:13	Autodesk
Fan	✓	13-11-2023 12:13	Autodesk
Wooden pin	✓	13-11-2023 12:13	Autodesk

File name: Beam linkage
Files of type: Component Files (*.ipt; *.iam)
Project File: Default.ipt

Last Saved: Autodesk Inventor 2023 (27.0.15800.0000)

Options... Open Cancel

FRONT RIGHT

1:01:58 1:01:58

Search ENG IN 15:52 13-11-2023

Autodesk Inventor Professional 2024 as main 23110029 Search Help & Commands... 31°C Smoke

File Assemble Design 3D Model Sketch Annotate Inspect Tools Manage View Environments Collaborate Electromechanical Fusion 360 Material Appearance fx + Autodesk Inventor Professional 2024 as main 23110029 Search Help & Commands... 31°C Smoke

Place Create Free Move Free Rotate Joint Constrain Show Pattern Bill of Materials Parameters Purge Finish Create Derived Substitutes Axis Plane Point Simplify

Relationships Hide All Copy Pattern Manage Appearance Productivity Work Features Simplification

Model X + Assembly Modeling

Model States: [Primary] Origin Work Plane1 Mate:1 Flush:1 Mate:2 Mate:3 Mate:6 Cylindrical:1 Rotational:1 Mate:7 Mate:8 [o]:DIN 913 - M3 x 12:1 [o]:DIN 94 - 2.5 x 18:1 Mate:27 Mate:28 Mate:32 [o]:plain bearing:1 [o]:plain bearing:2 [o]:eccentric hub:1 [o]:centrifugal pump pulley 1.5 Model States: [Primary] Origin YZ Plane XZ Plane 0:32:46ne 1:00:30 recording 3 Home connecting rod linkipt as main.ipt

Search

31°C Smoke

ENG IN 15:53 13-11-2023

Iron, Cast Iron Gray fx + Autodesk Inventor Professional 2024 as main Search Help & Commands... 23110029

File Assemble Design 3D Model Sketch Annotate Inspect Tools Manage View Environments Collaborate Electromechanical Fusion 360

Place Create Free Move Free Rotate Joint Constrain Show Pattern Mirror Bill of Materials Parameters Purge Finish Create Derived Substitutes Productivity Plane Axis Point UCS Simplify Relationships Copy Pattern Manage Appearance Work Features Simplification

Model X + Place Constraint X

Assembly Motion Transitional Constraint Set

Type Selections

Offset: 0.000 mm Solution

OK Cancel Apply >>

Mate:8 [o]:DIN 913 - M3 x 12:1 [o]:DIN 94 - 2.5 x 18:1 Mate:27 Mate:28 Mate:32 [o]:plain bearing:1 [o]:plain bearing:2 [o]:eccentric hub:1 [o]:centrifugal pump pulley 1.5

Model States: [Primary]

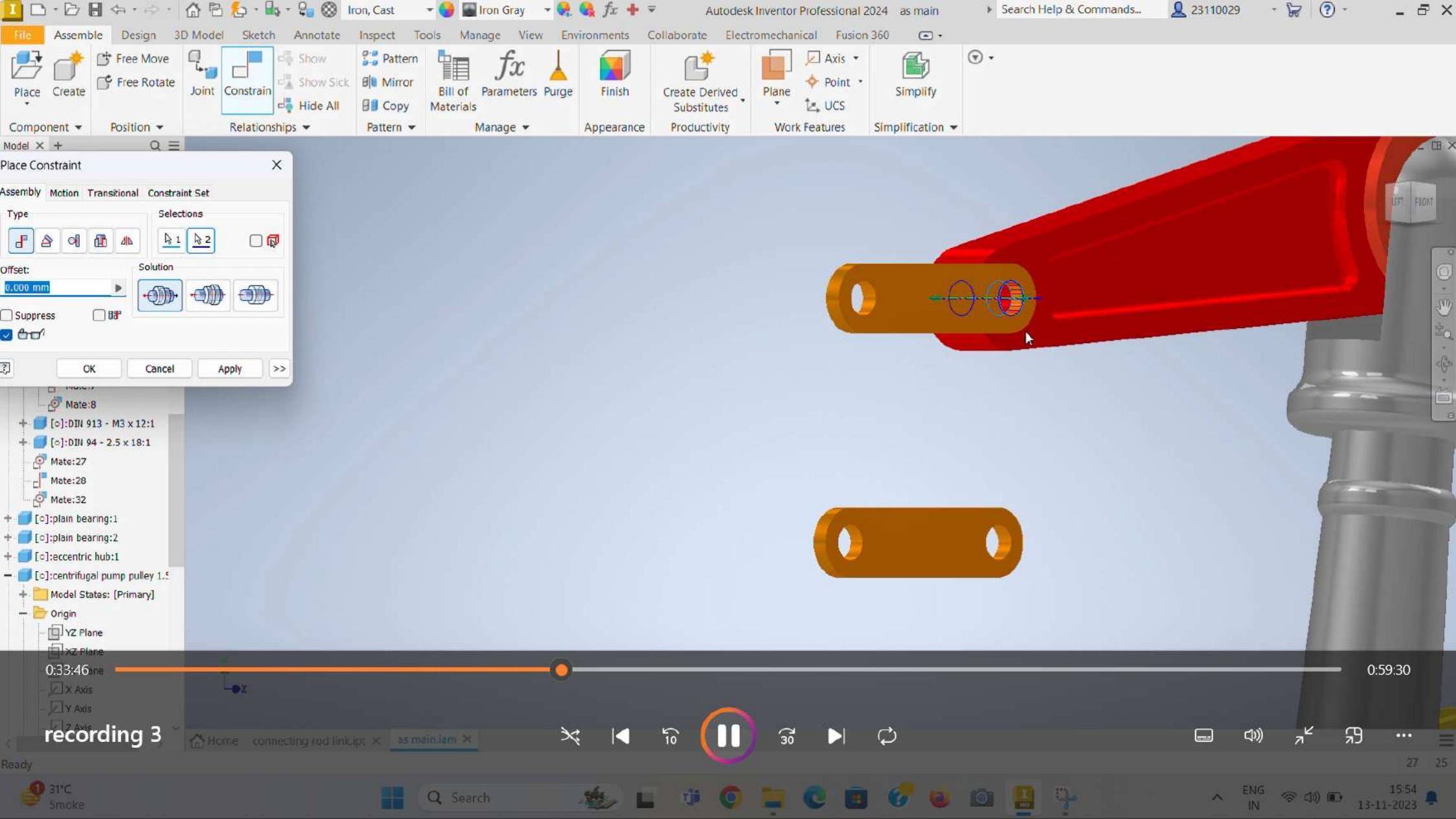
Origin YZ Plane XZ Plane X Axis Y Axis Z Axis

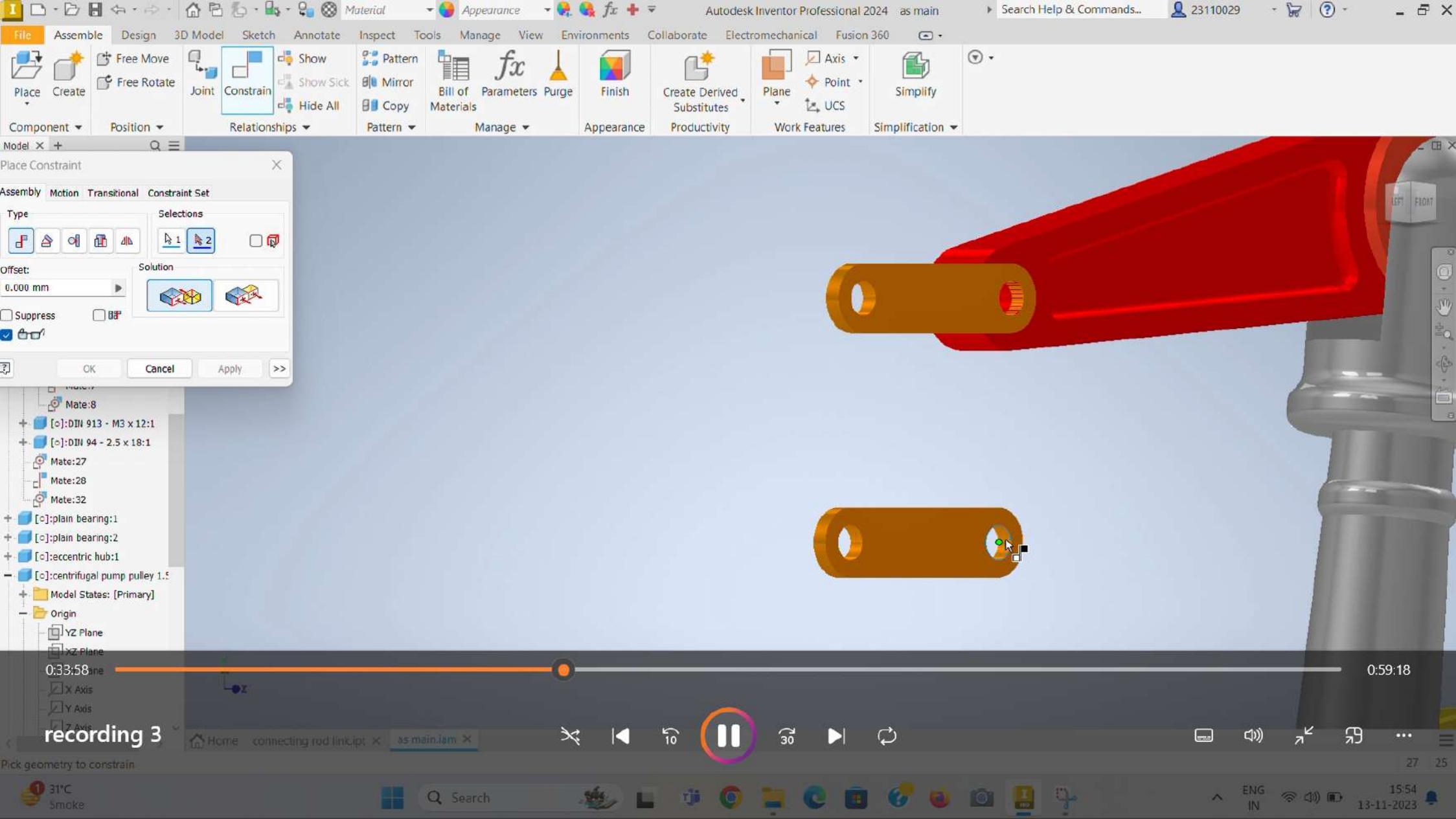
recording 3 Home connecting rod linkipt as main.ipt 1:00:06

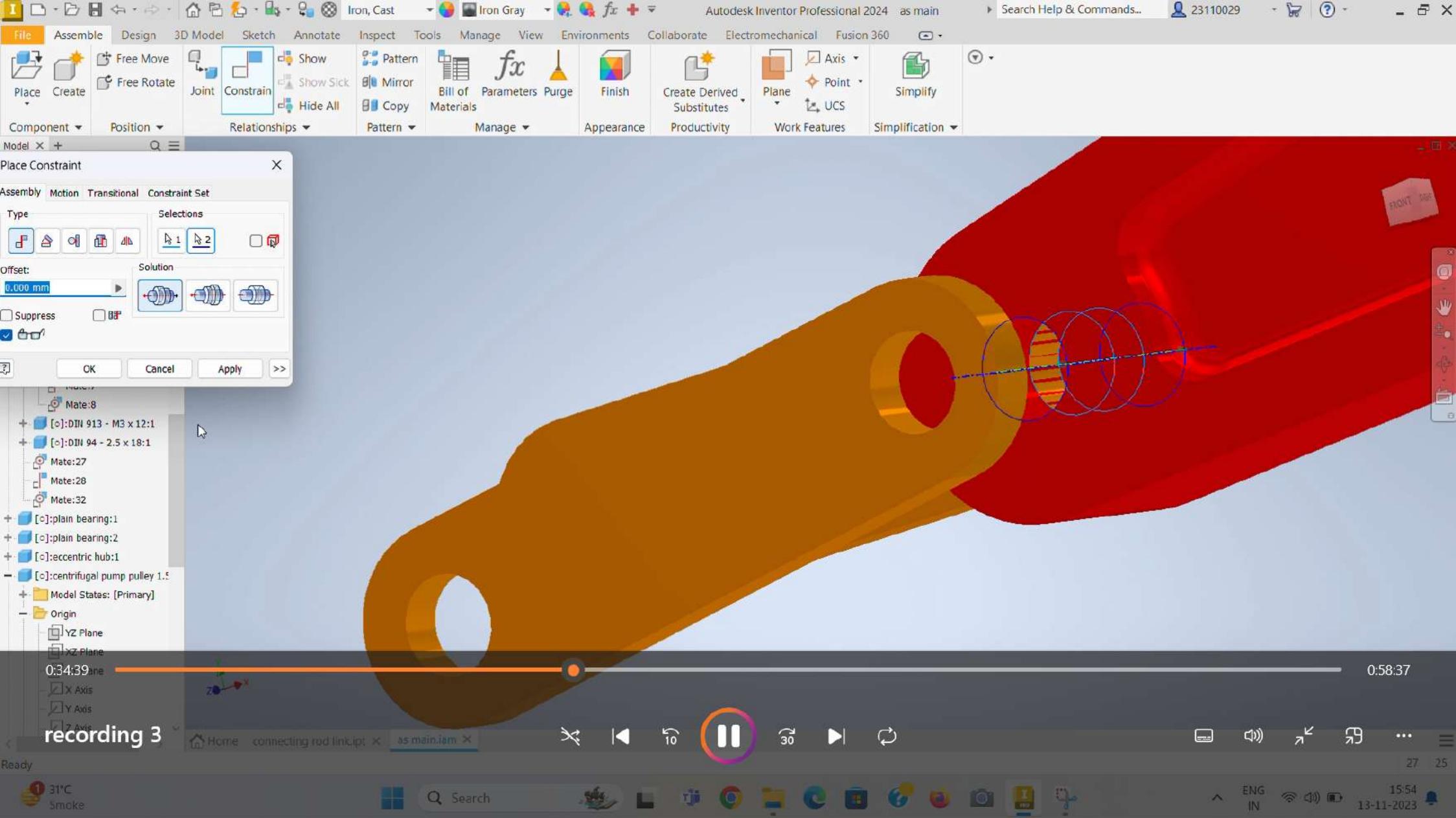
Pick geometry to constrain

1 31°C Smoke ENG IN 15:53 13-11-2023

The screenshot displays the Autodesk Inventor Professional 2024 software interface. The main workspace shows a 3D model of a connecting rod link, which consists of a central cylindrical body with two circular holes. A 'Place Constraint' dialog box is open on the left side of the screen, allowing the user to define constraints between selected features. The assembly tree on the left provides a hierarchical view of the model's components and their relationships. The bottom of the screen features a timeline indicating the recording of a video, with a progress bar from 0:33:10 to 1:00:06. The status bar at the bottom includes information about the current temperature (31°C), system status (Smoke), and system language (ENG IN). The overall interface is designed for mechanical design and engineering tasks.







Iron, Cast Iron Gray fx + Autodesk Inventor Professional 2024 as main Search Help & Commands... 23110029

File Assemble Design 3D Model Sketch Annotate Inspect Tools Manage View Environments Collaborate Electromechanical Fusion 360

Place Create Free Move Free Rotate Joint Constrain Show Pattern Mirror Bill of Materials Parameters Purge Finish Create Derived Substitutes Productivity Plane Axis Point Simplify Relationships Copy Pattern Manage Appearance Work Features Simplification

Model X + Assembly Modeling

+ Model States: [Primary] ^
+ Origin
+ Work Plane1
 Mate:1
 Flush:1
 Mate:2
 Mate:3
 Mate:6
 Cylindrical:1
 Rotational:1
 Mate:7
 Mate:8
+ [o]:DIN 913 - M3 x 12:1
+ [o]:DIN 94 - 2.5 x 18:1
 Mate:27
 Mate:28
 Mate:32
+ [o]:plain bearing:1
+ [o]:plain bearing:2
+ [o]:eccentric hub:1
- [o]:centrifugal pump pulley 1.5
+ Model States: [Primary]
- Origin
 YZ Plane
 XZ Plane
0:34:45ne 0:58:31

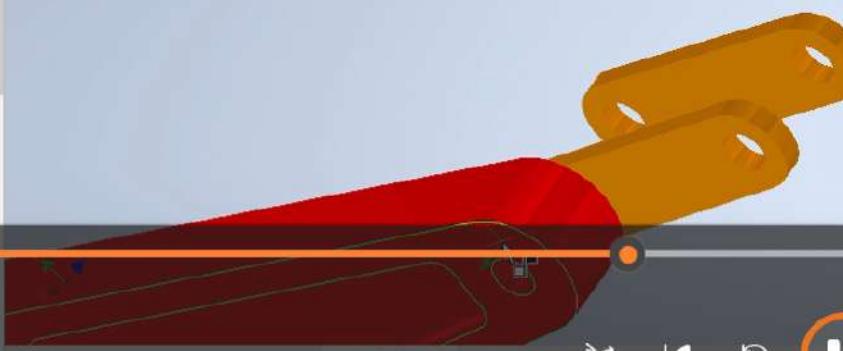
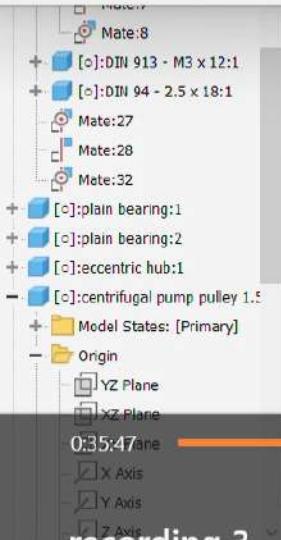
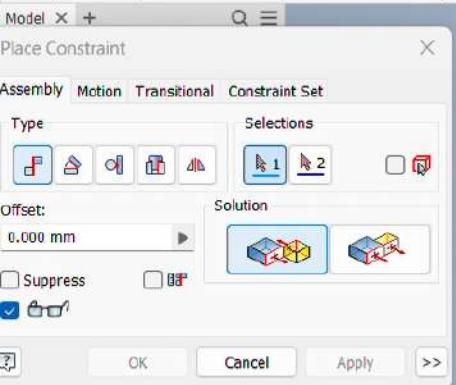
recording 3 Home connecting rod linkipt as main.ipt

31°C Smoke

Search

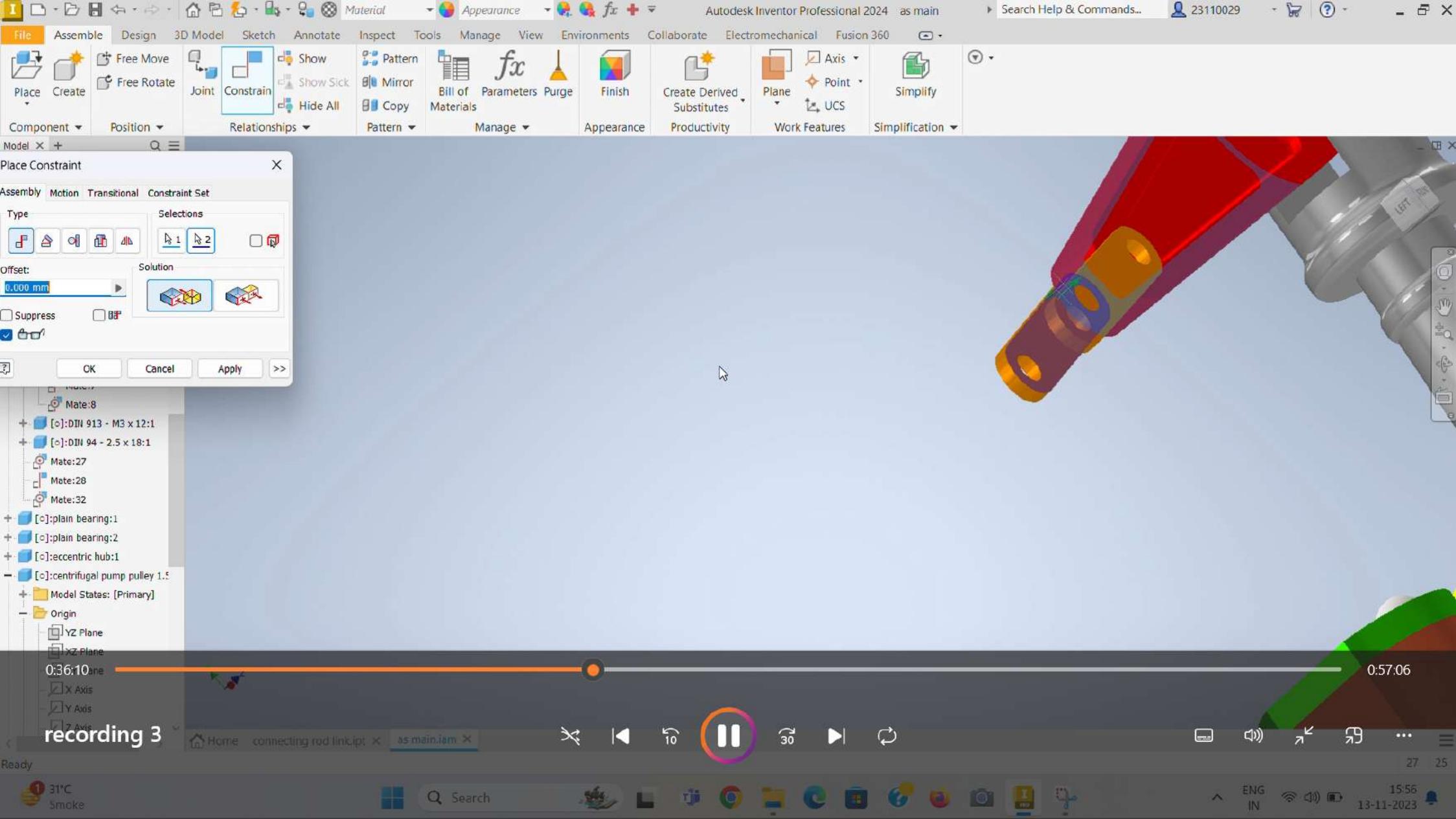
15:55 13-11-2023

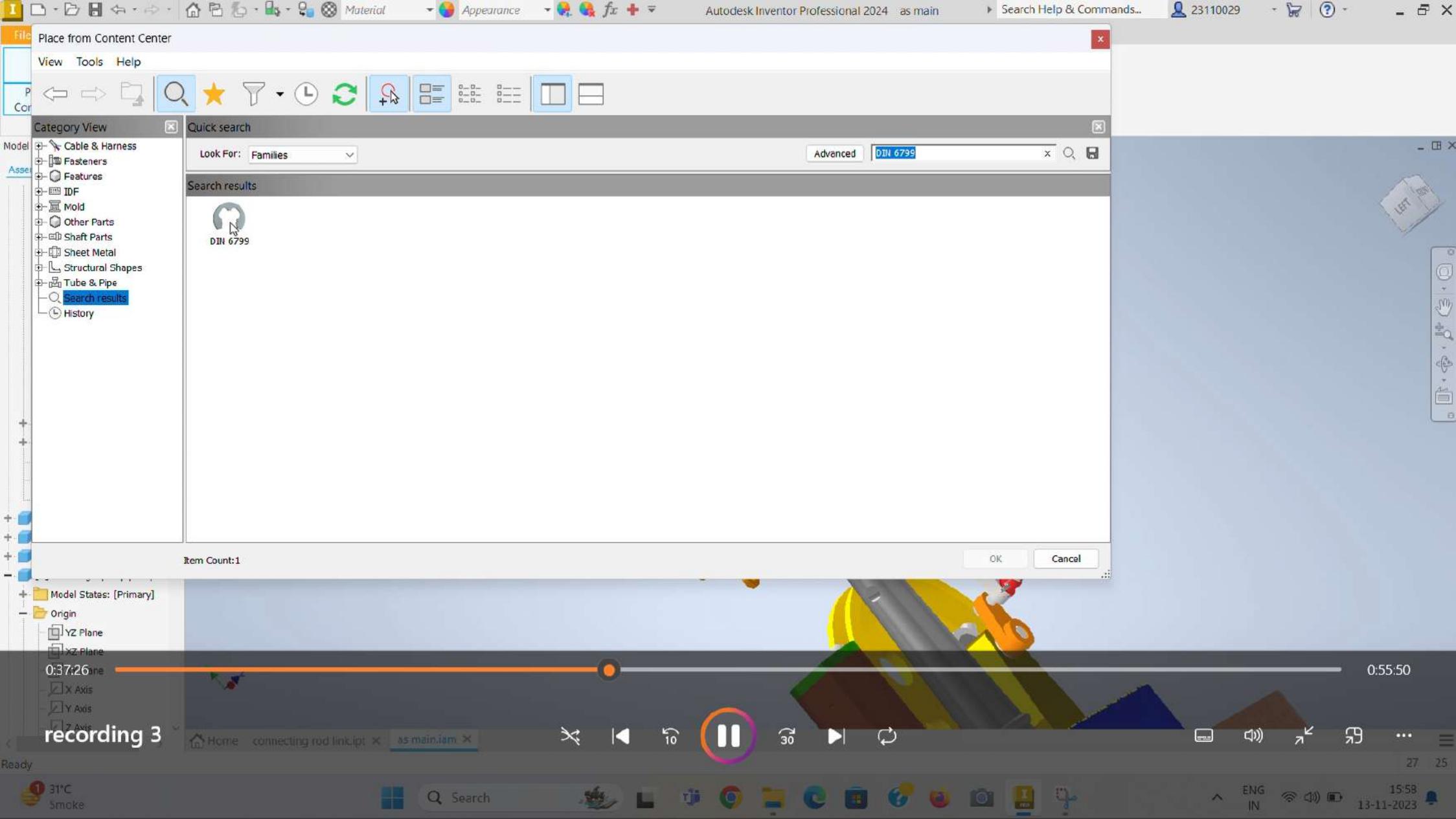
The image shows a screenshot of the Autodesk Inventor Professional 2024 software interface. The main workspace displays a 3D model of a mechanical assembly, specifically a connecting rod link. The assembly includes a long red cylindrical part, a blue connecting rod, and an orange eccentric hub. A callout labeled 'FRONT' is attached to the red part. On the left side, the assembly tree is open, showing a hierarchy of components and their relationships: 'Work Plane1' contains 'Mate:1' through 'Mate:8' and several standard parts like 'DIN 913 - M3 x 12:1' and 'DIN 94 - 2.5 x 18:1'. The 'Origin' folder contains 'YZ Plane' and 'XZ Plane'. At the bottom, a timeline indicates the model was recorded from 0:34:45 to 0:58:31. The status bar at the bottom provides system information like temperature (31°C) and date/time (13-11-2023). The top menu bar includes options like File, Assemble, Design, 3D Model, Sketch, Annotate, Inspect, Tools, Manage, View, Environments, Collaborate, Electromechanical, and Fusion 360.

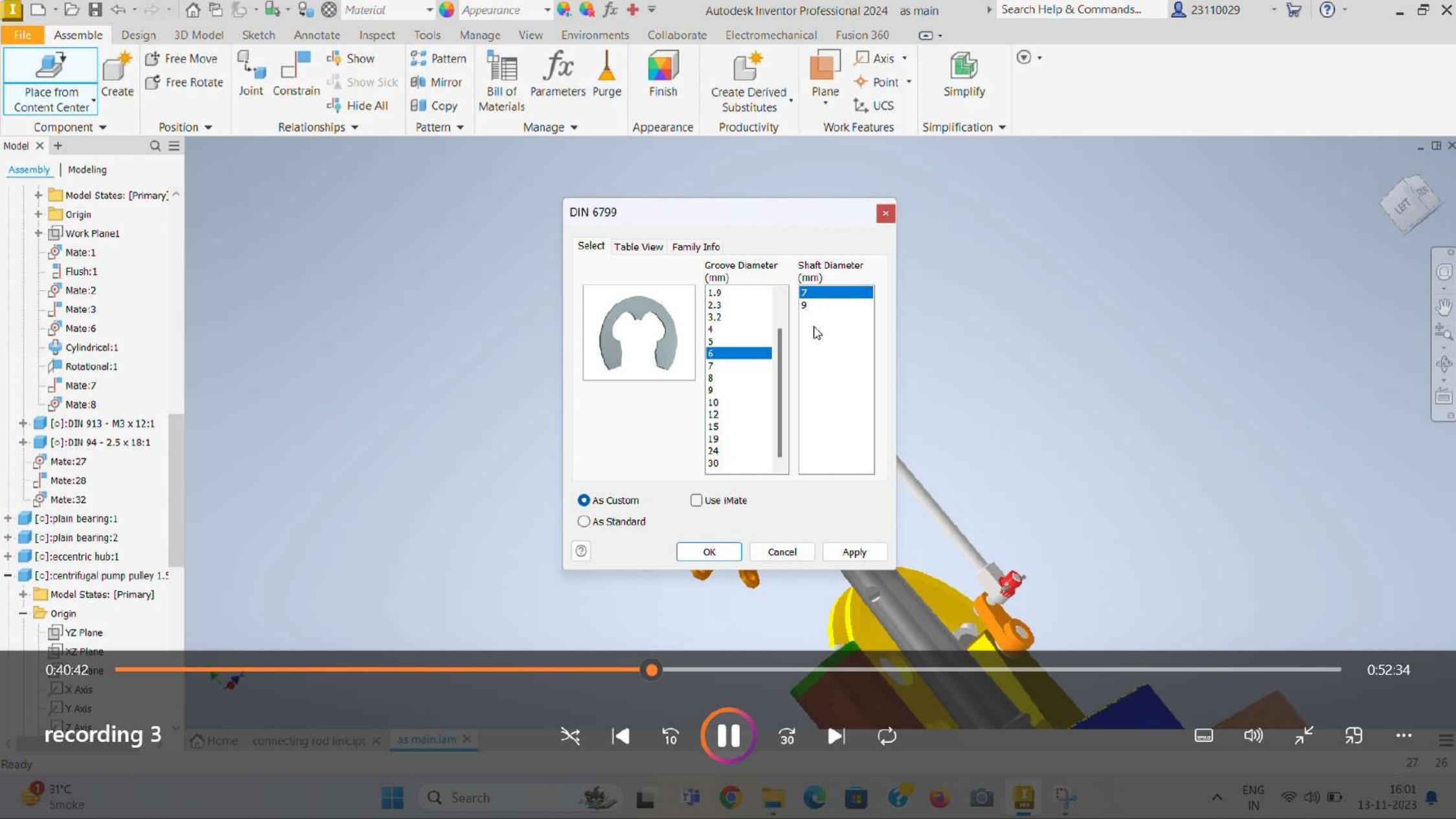


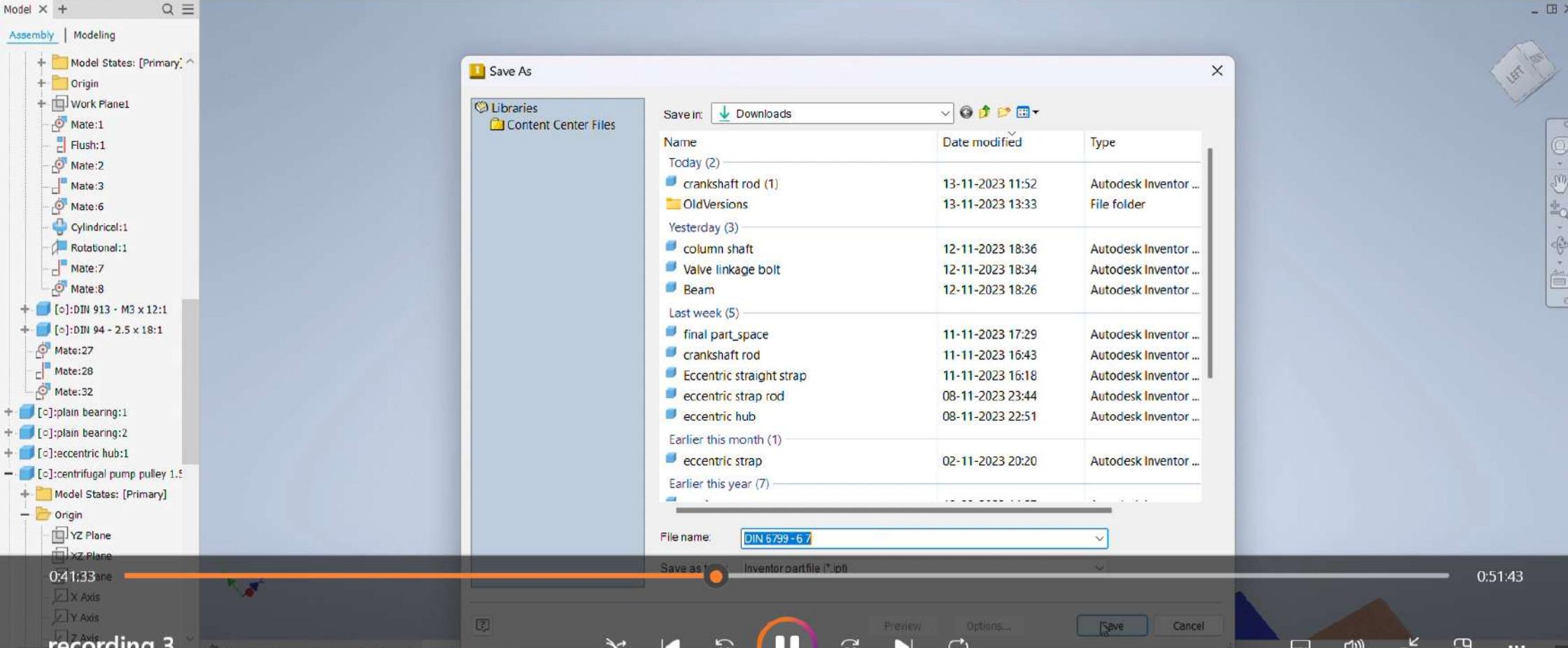
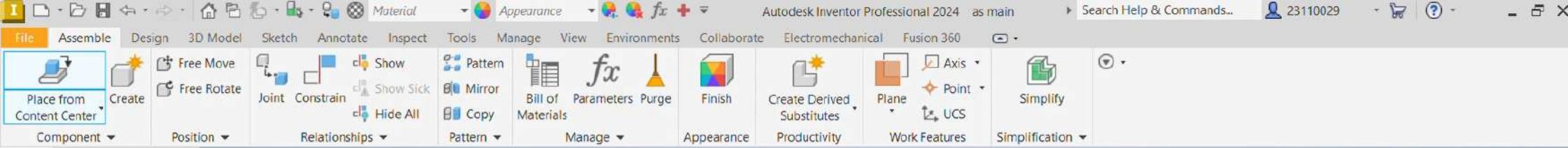
recording 3











Autodesk Inventor Professional 2024 as main 23110029 Search Help & Commands... 16.02 13-11-2023

File Assemble Design 3D Model Sketch Annotate Inspect Tools Manage View Environments Collaborate Electromechanical Fusion 360

Place from Content Center Create Free Move Free Rotate Show Joint Constrain Show Sick Pattern Mirror Copy Bill of Materials Parameters Purge Finish Create Derived Substitutes Plane Axis Point UCS Simplify Relationships Pattern Manage Appearance Work Features Simplification

Model X + Assembly Modeling

+ Model States: [Primary] ^
+ Origin
+ Work Plane1
 Mate:1
 Flush:1
 Mate:2
 Mate:3
 Mate:6
 Cylindrical:1
 Rotational:1
 Mate:7
 Mate:8
+ [o]:DIN 913 - M3 x 12:1
+ [o]:DIN 94 - 2.5 x 18:1
 Mate:27
 Mate:28
 Mate:32
+ [o]:plain bearing:1
+ [o]:plain bearing:2
+ [o]:eccentric hub:1
- [o]:centrifugal pump pulley 1.5
+ Model States: [Primary]
- Origin
 YZ Plane
 XZ Plane
0:41:42ine 0:51:34

recording 3 Home connecting rod linkipt as main.iam

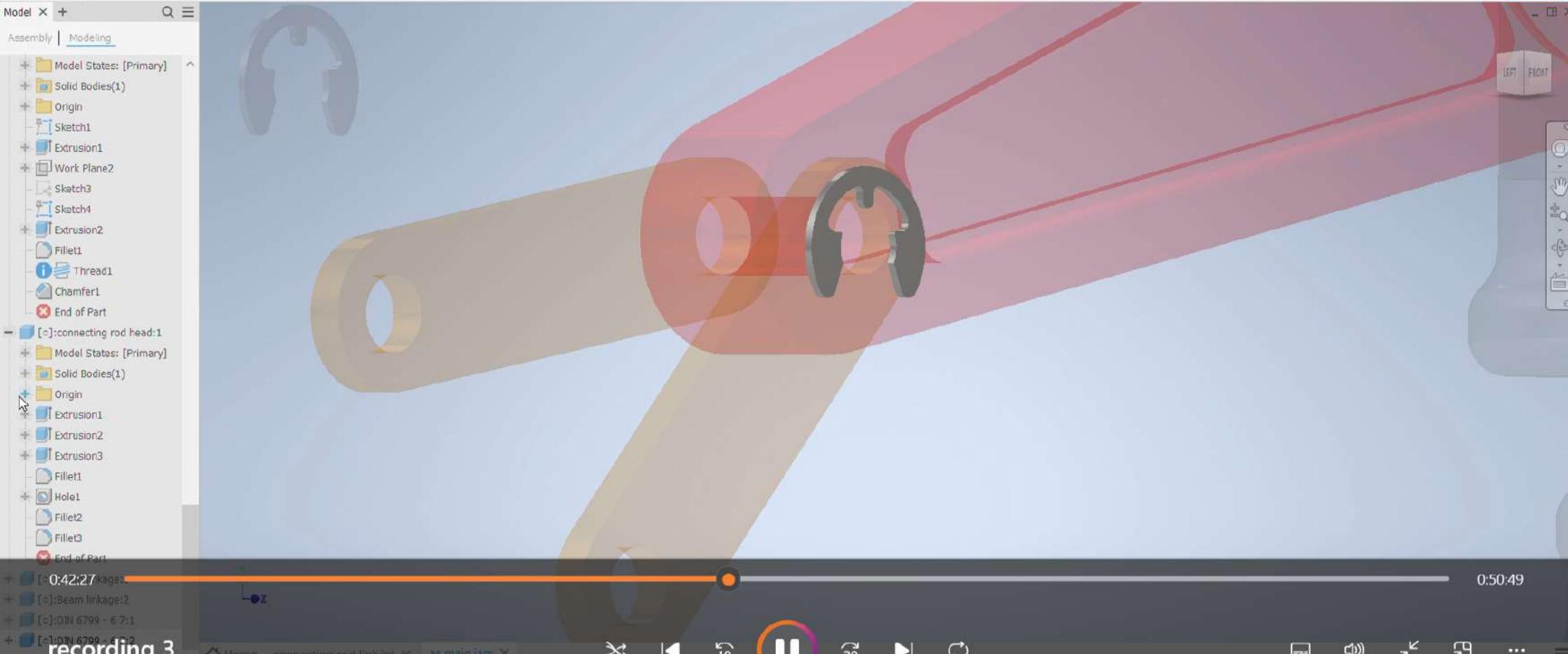
Place component

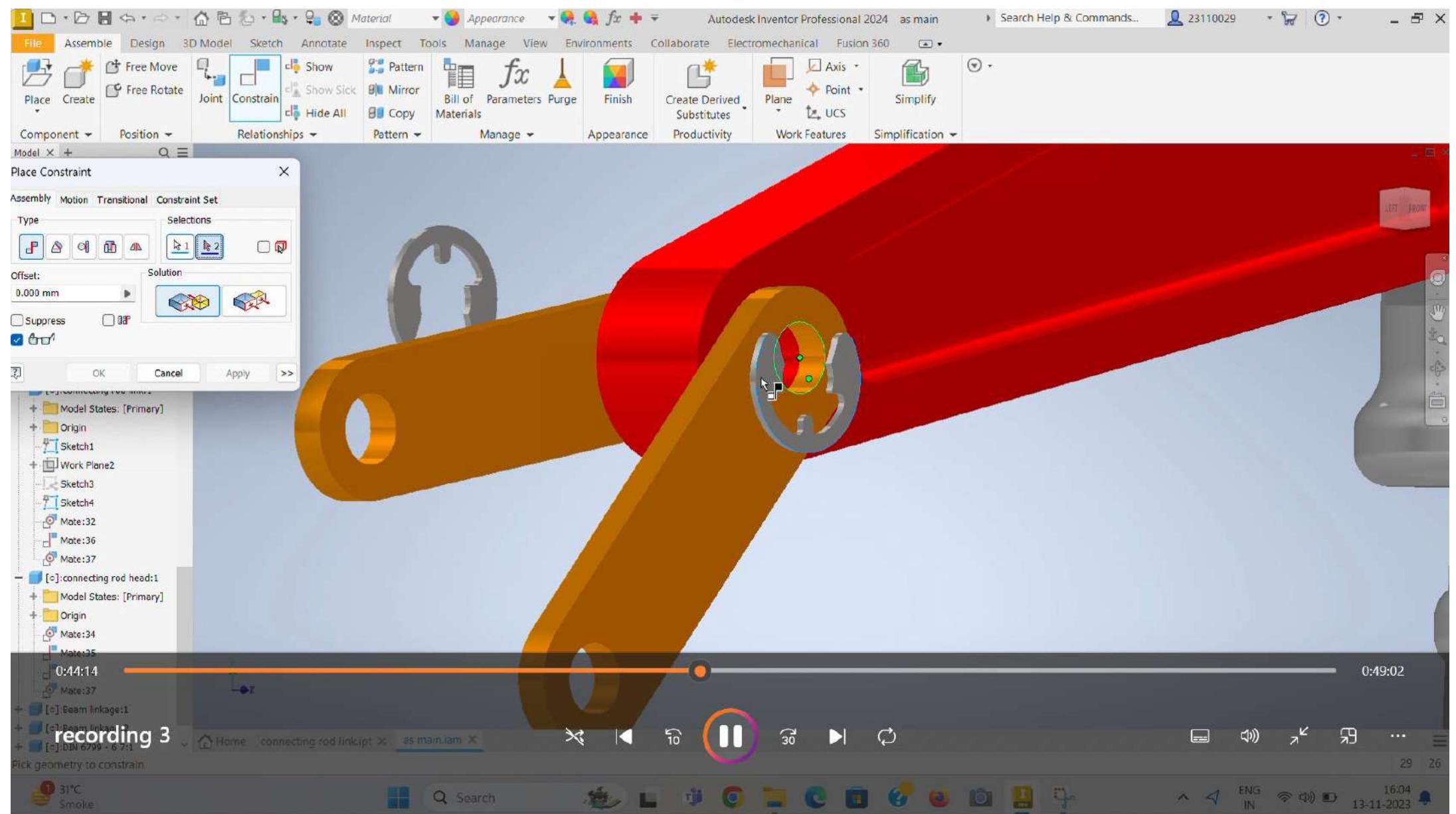
1 31°C Smoke

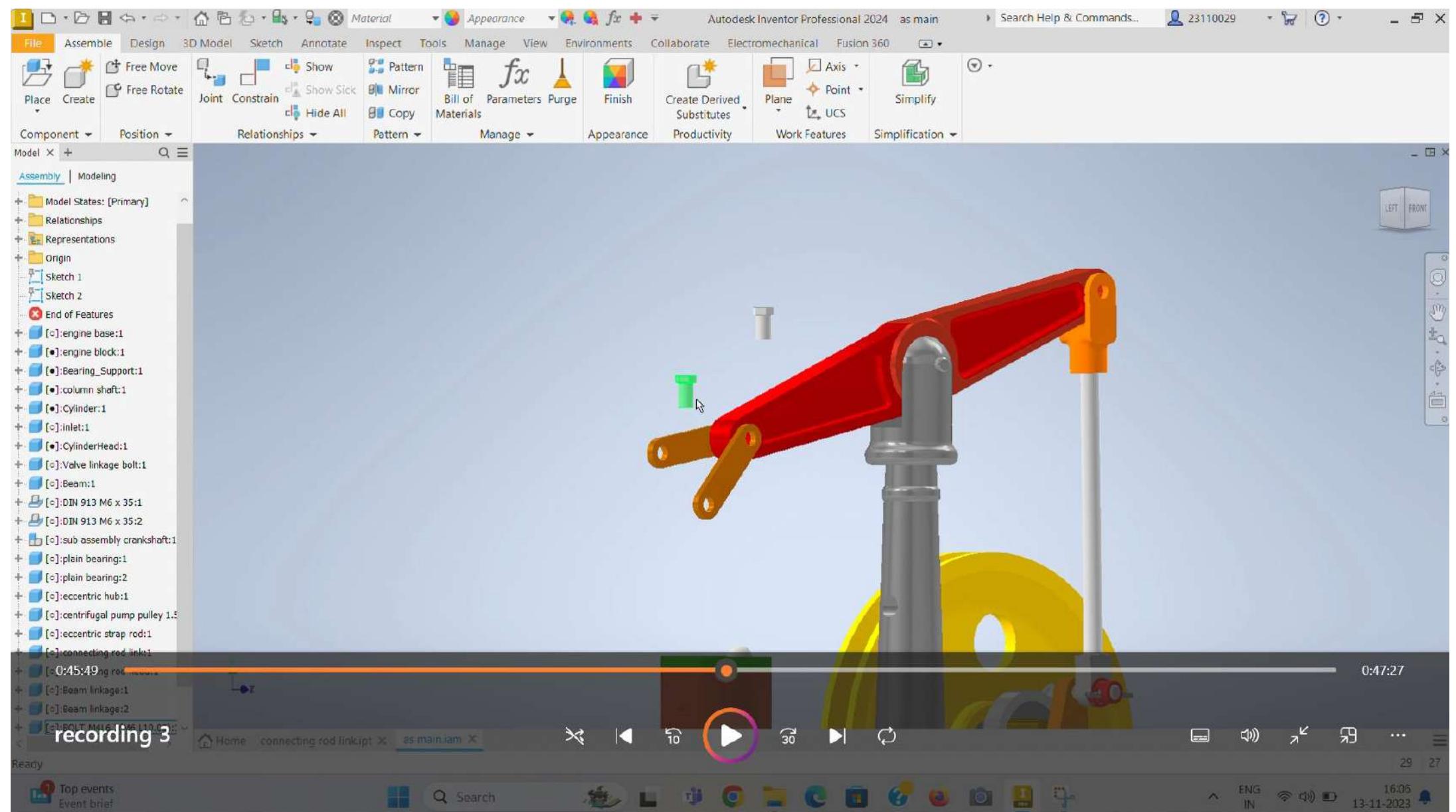
Search

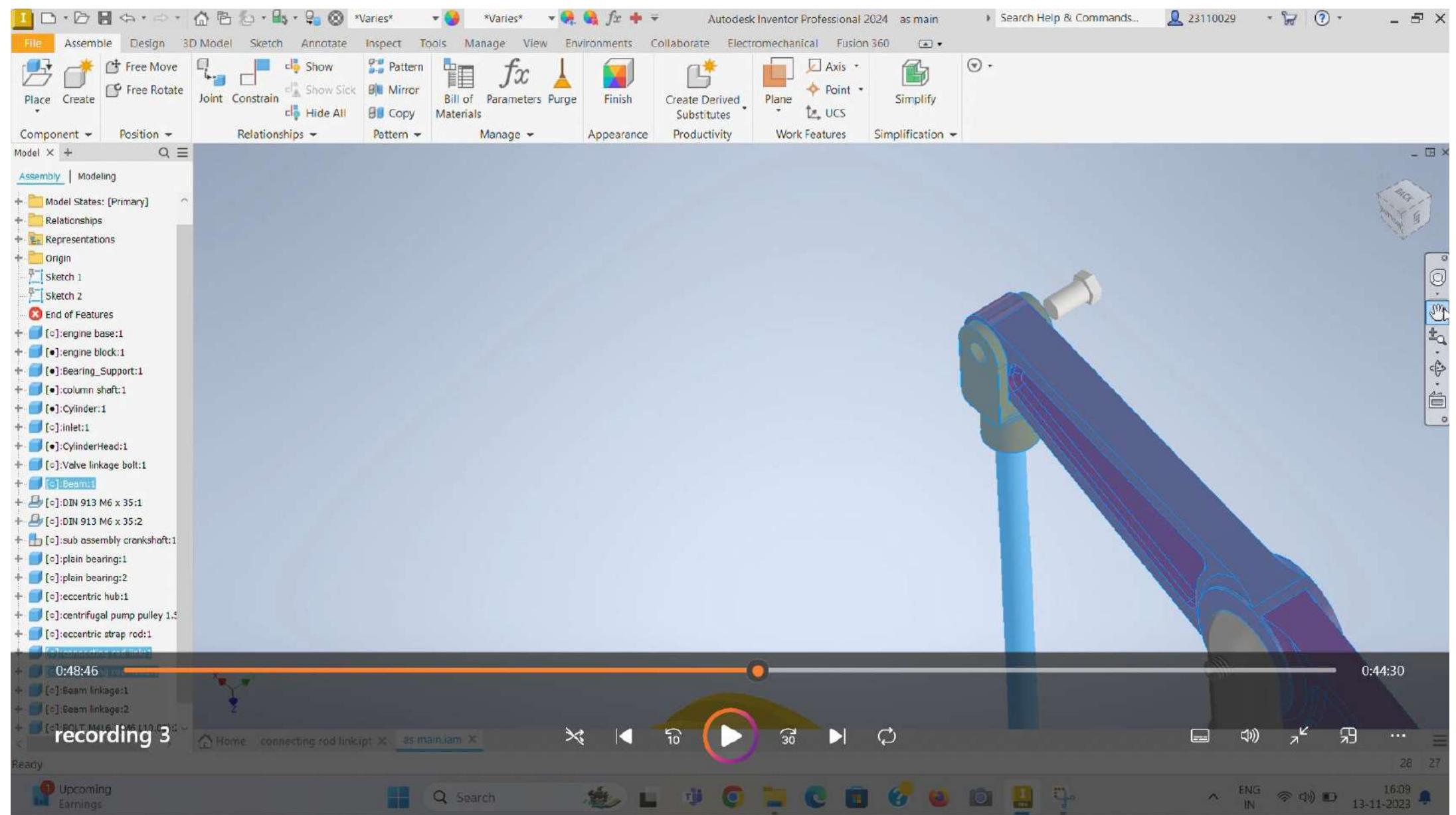
27 26

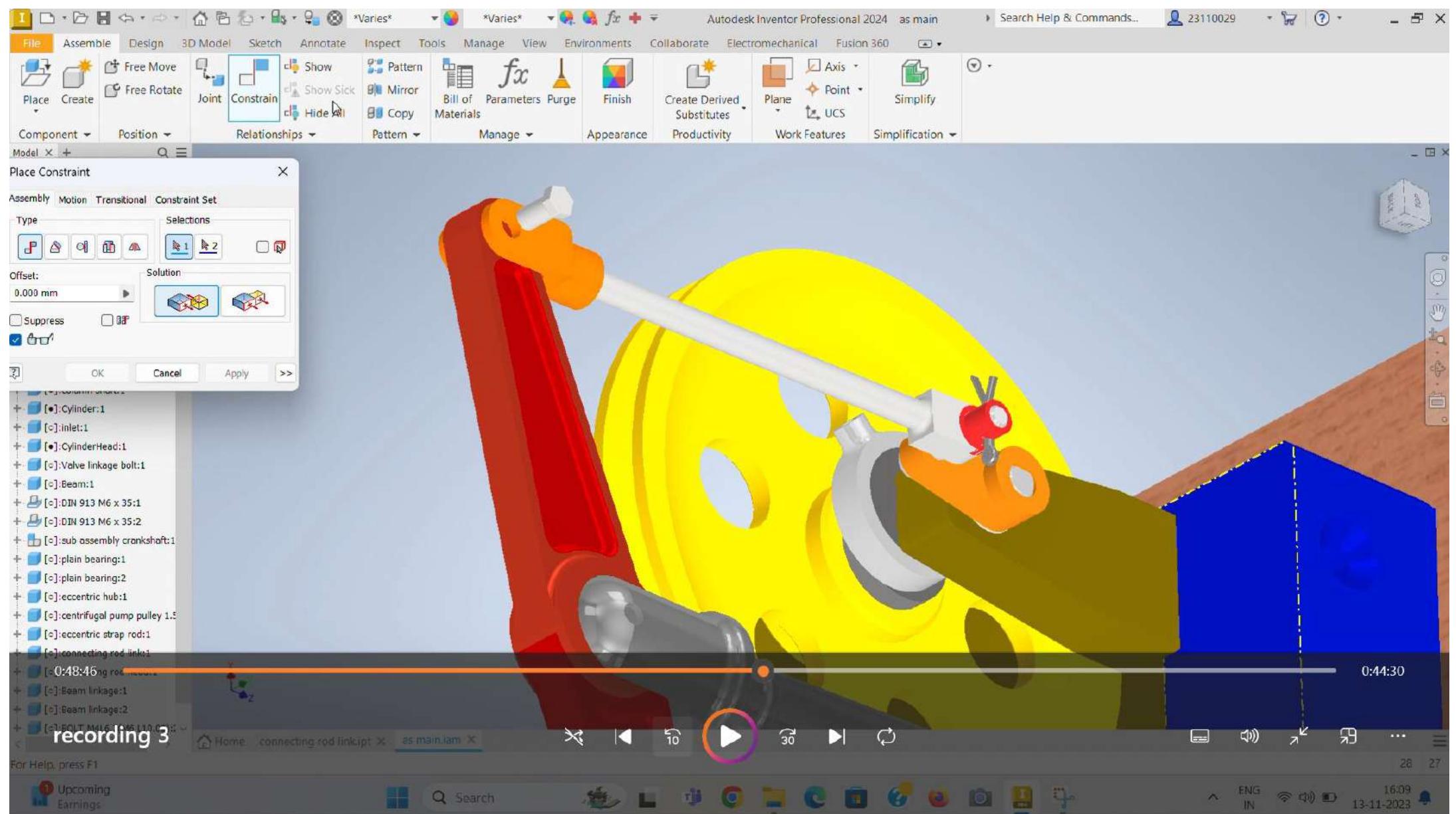
The screenshot shows a 3D model of a mechanical assembly in Autodesk Inventor. The assembly consists of several parts: a red connecting rod, a grey shaft, a yellow eccentric hub, and various bearings and fasteners. The model is shown in a 3D view with a coordinate system (X, Y, Z) and a timeline at the bottom indicating a duration of 0:41:42 to 0:51:34. The left panel displays the assembly tree, listing components like 'Work Plane1', 'DIN 913 - M3 x 12:1', and 'centrifugal pump pulley 1.5'. The status bar at the bottom shows system information including temperature (31°C), battery level (Smoke), and system date (13-11-2023).

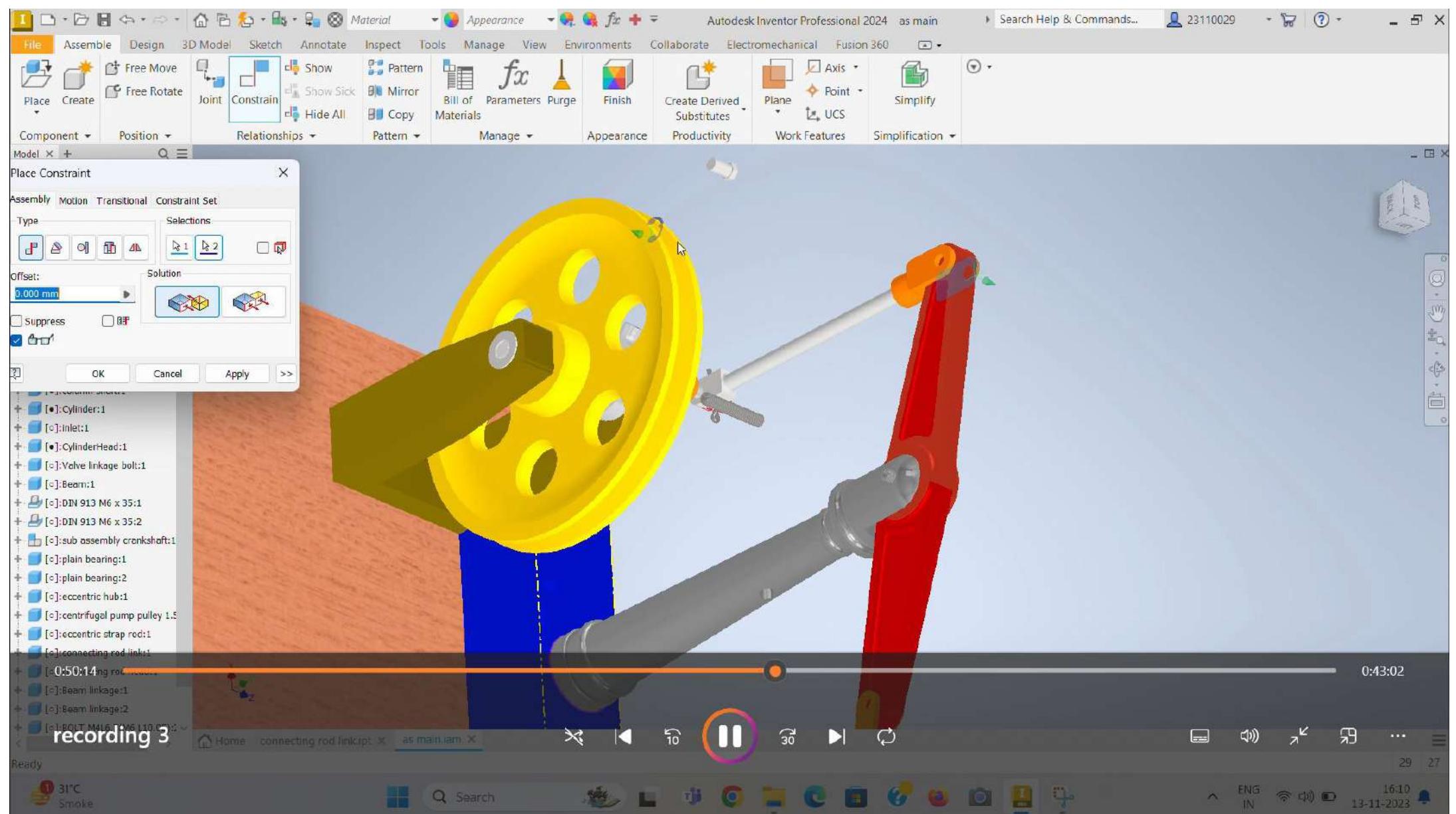


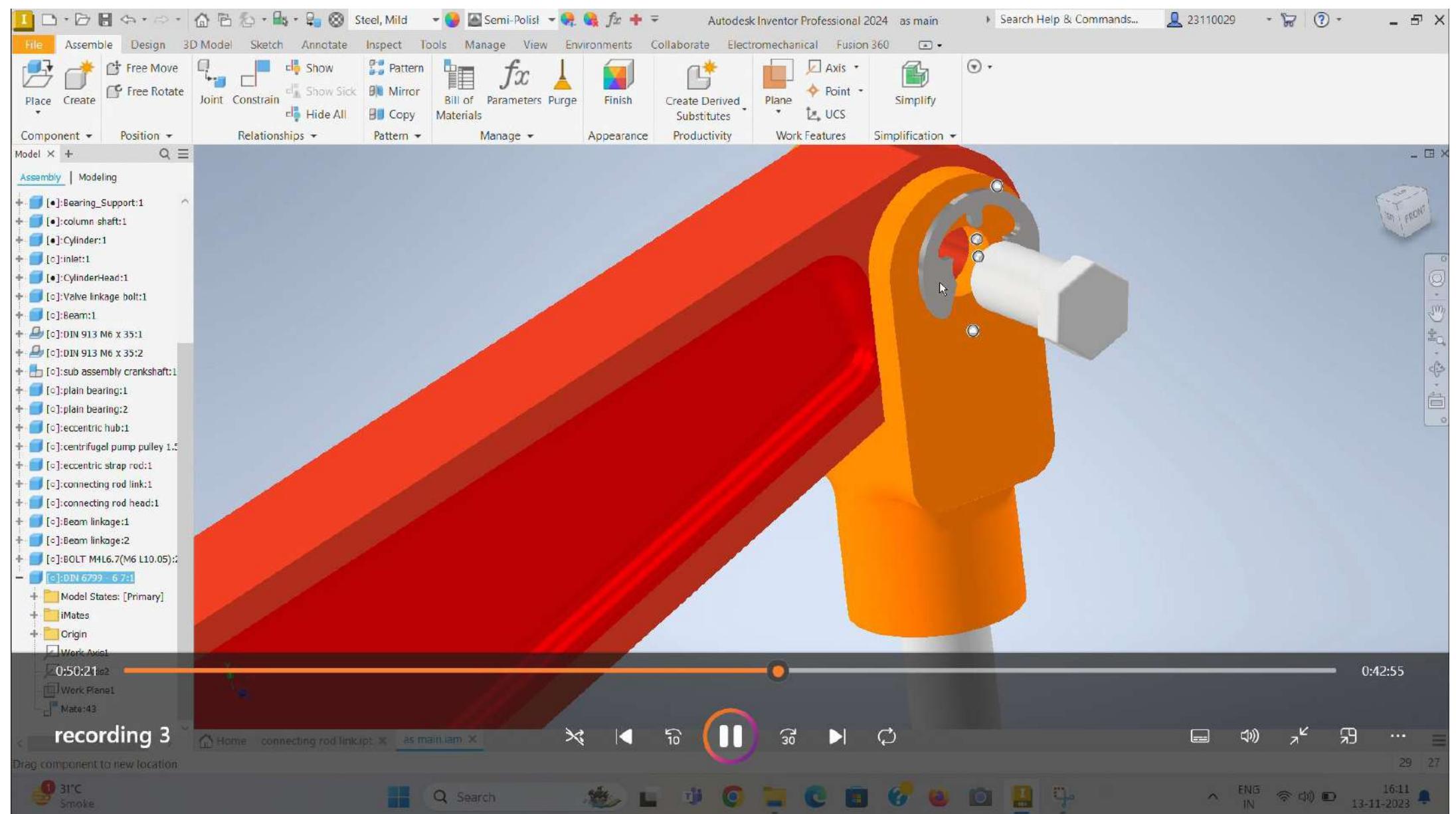


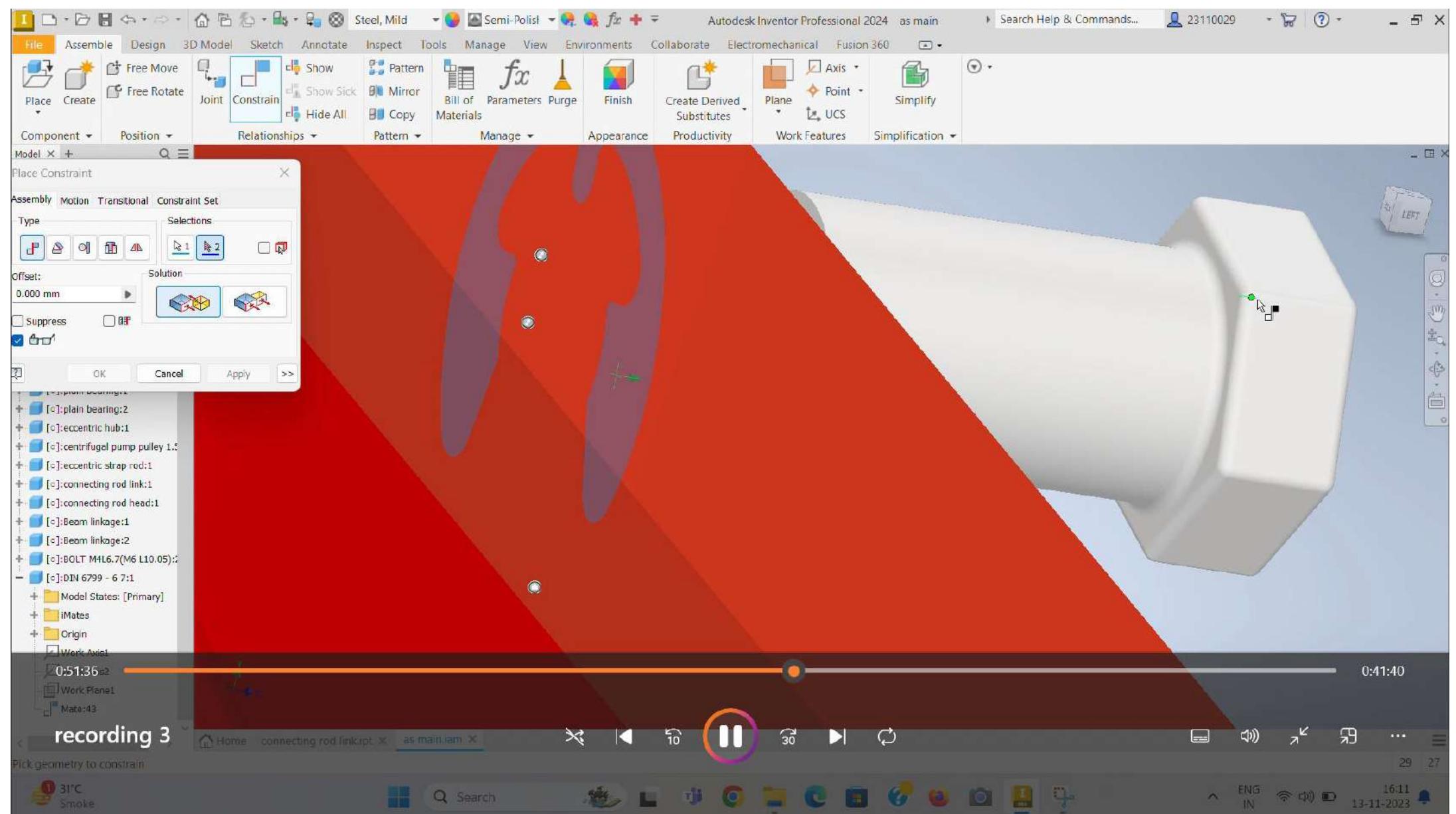


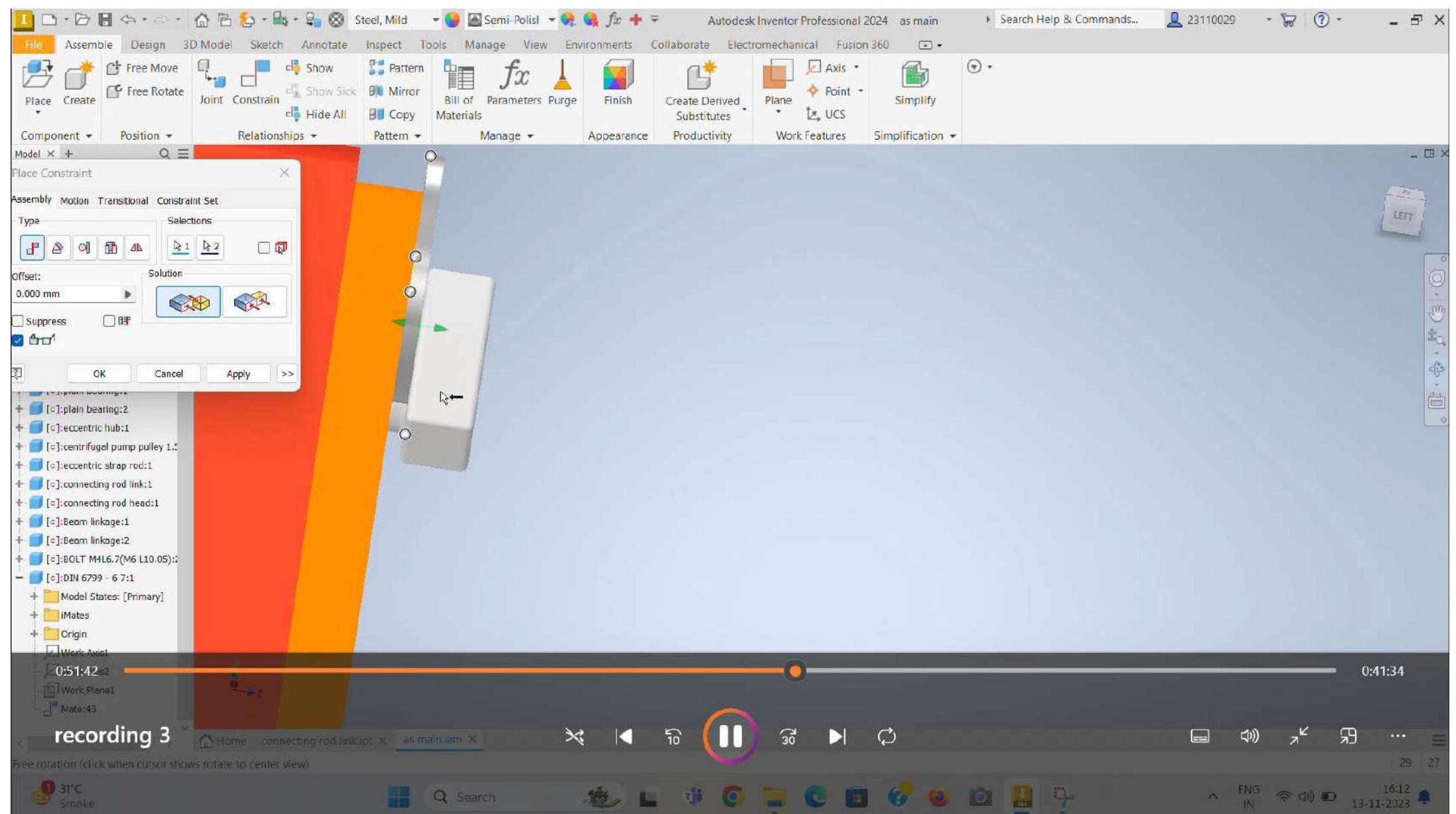


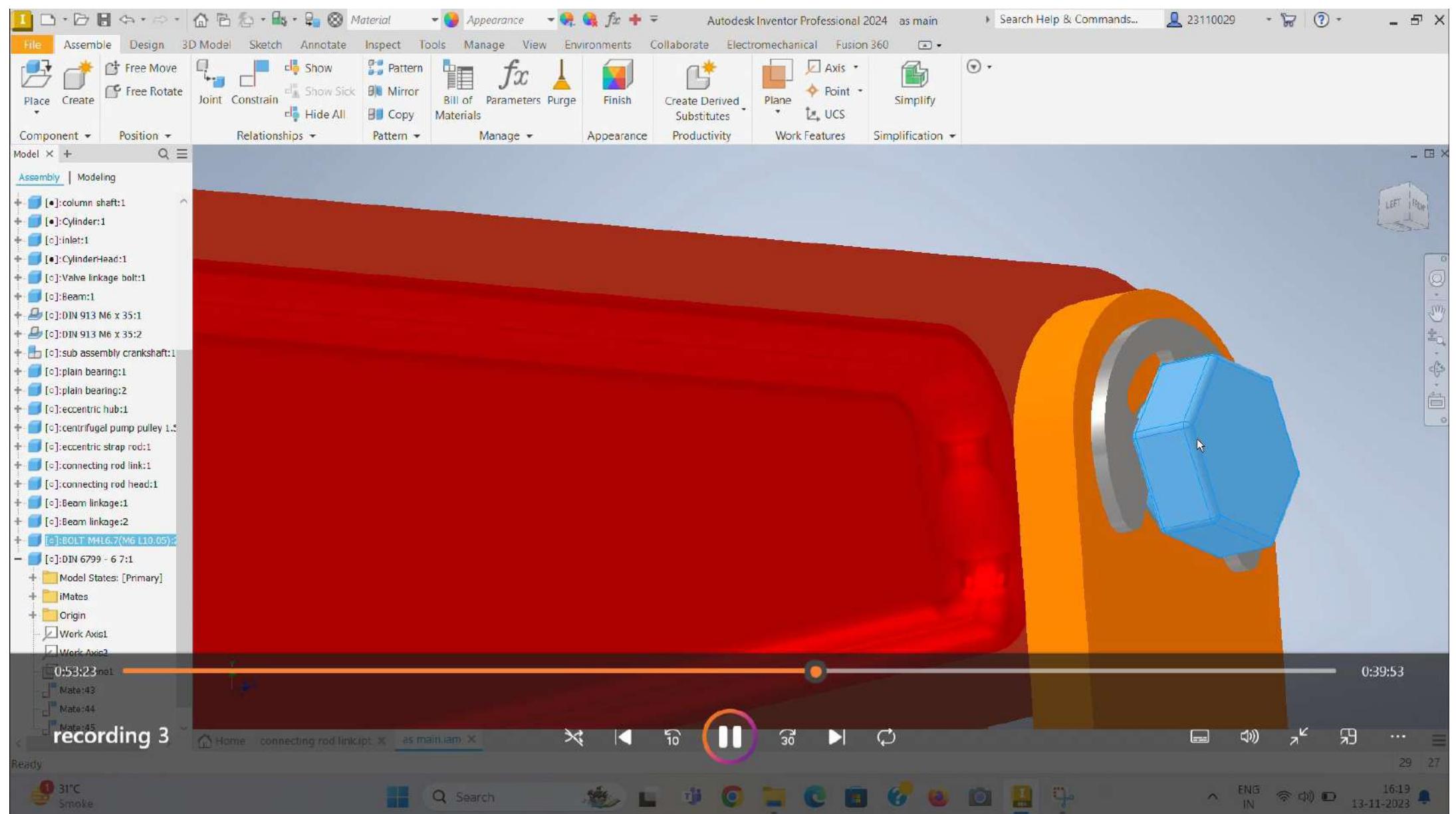


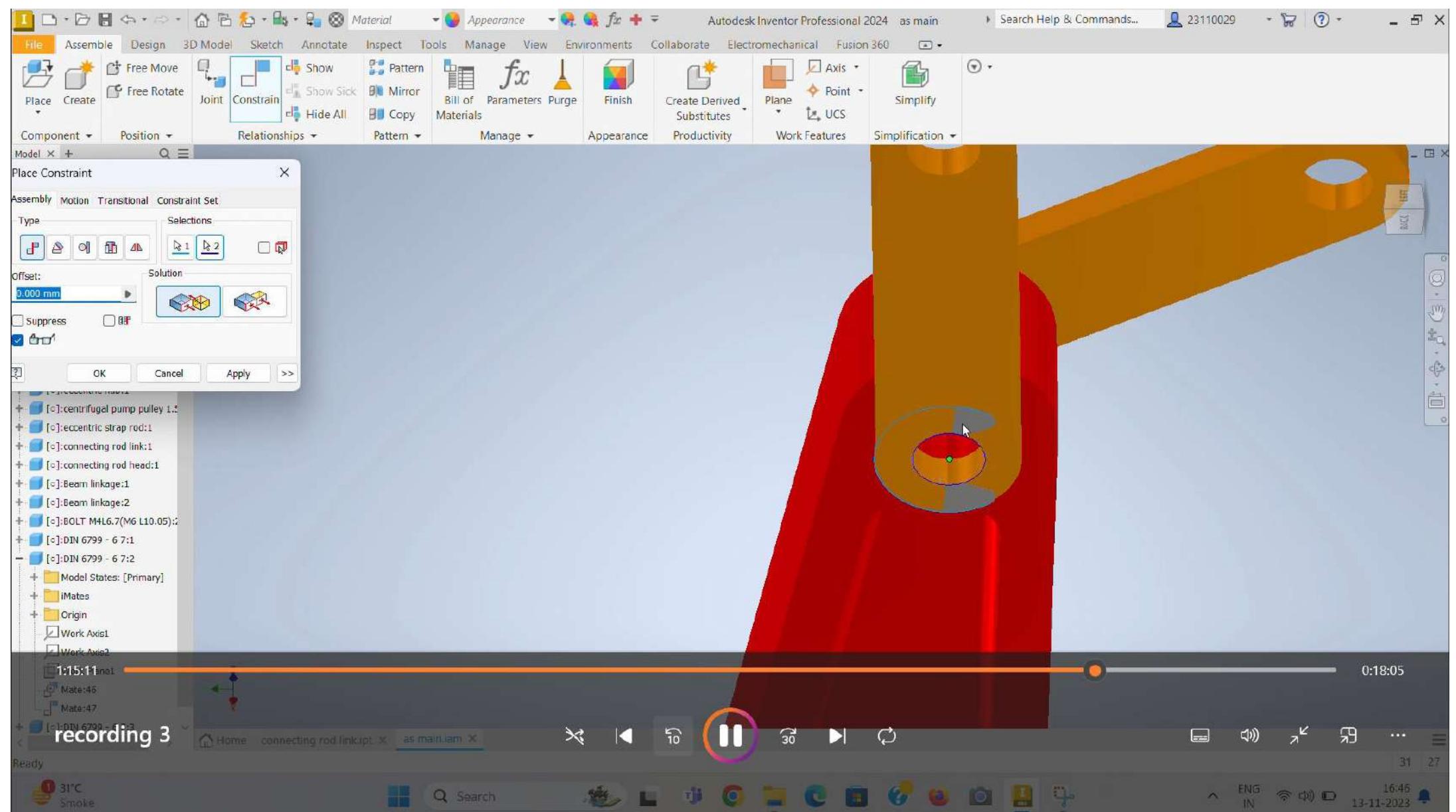


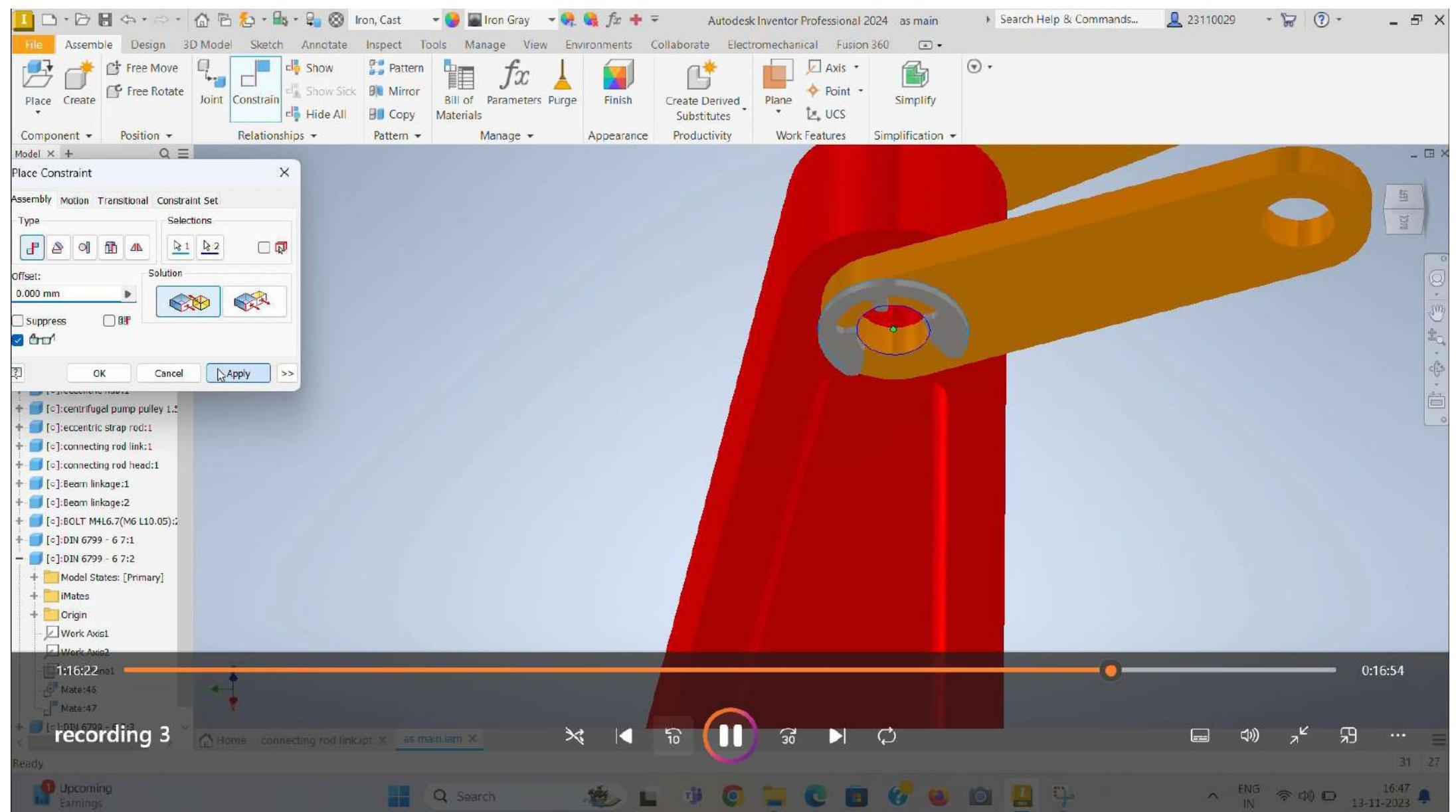


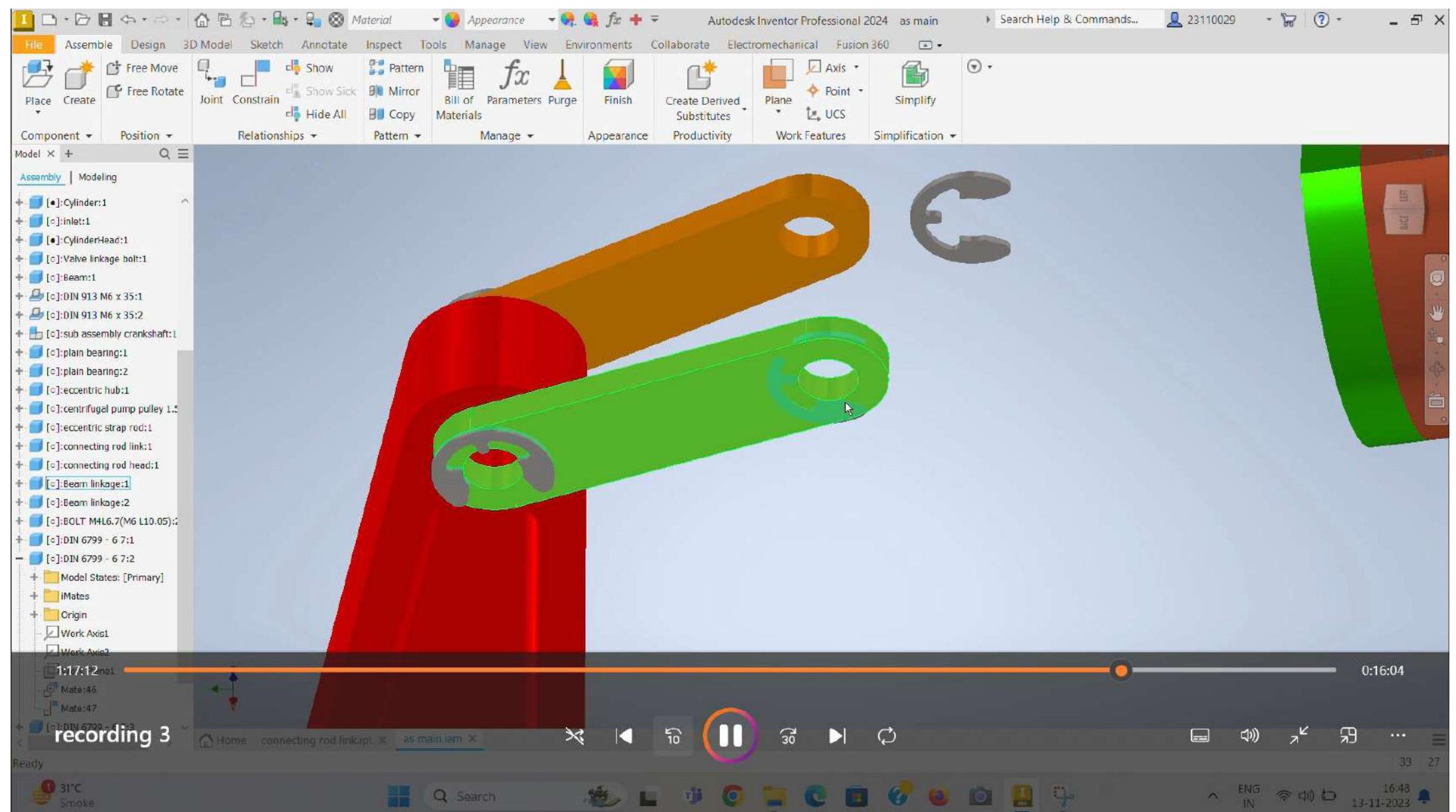


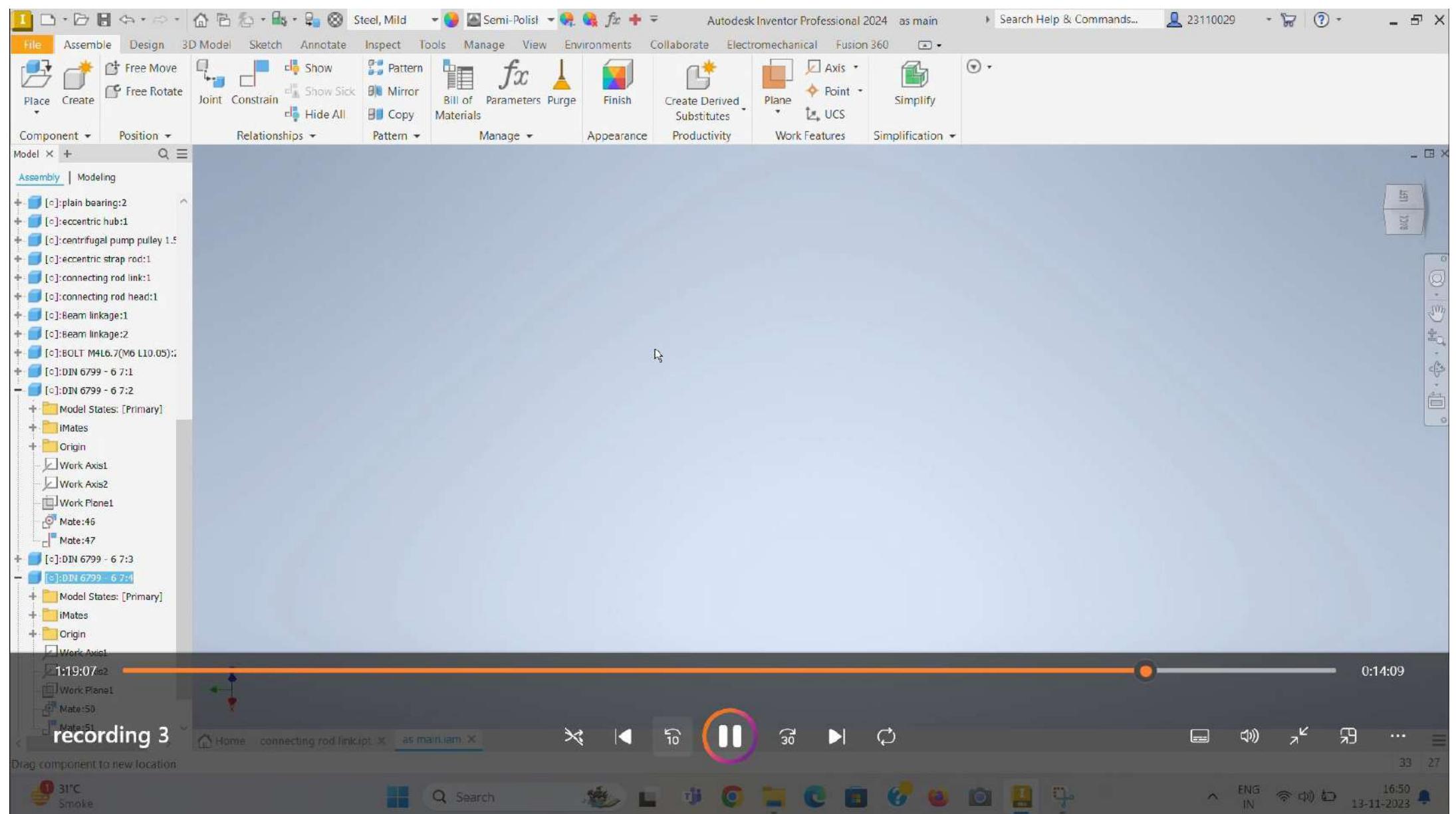


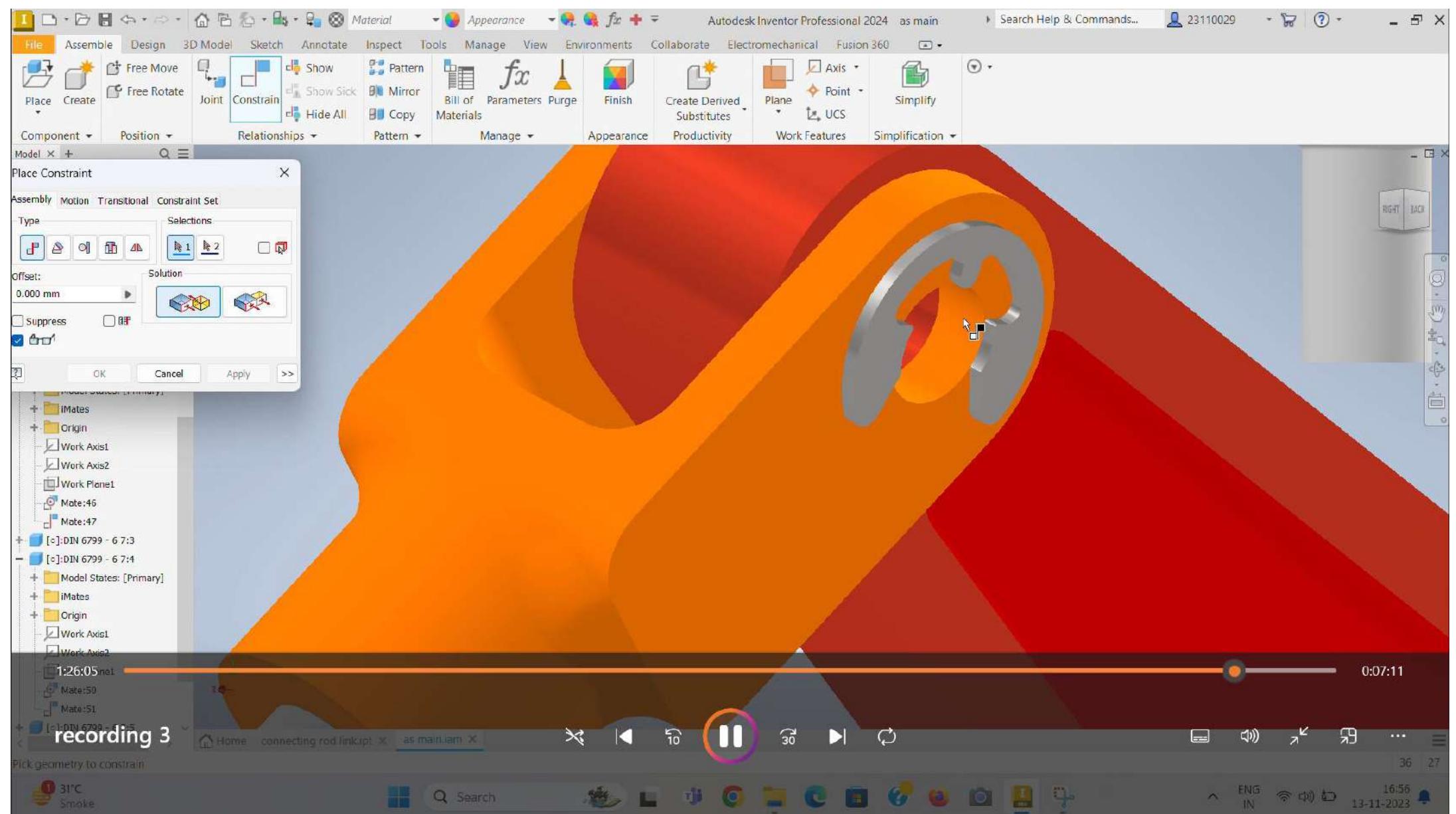


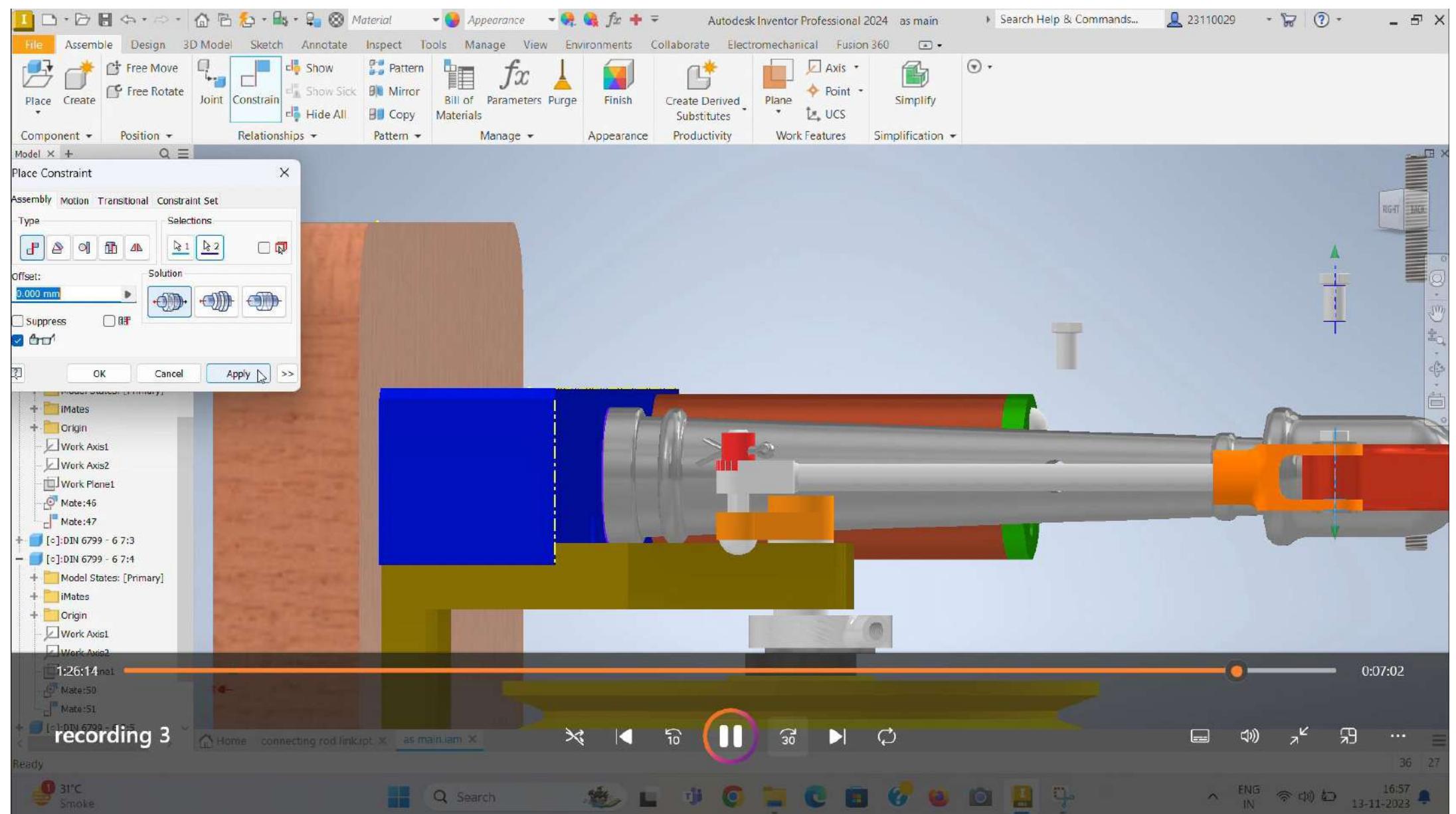


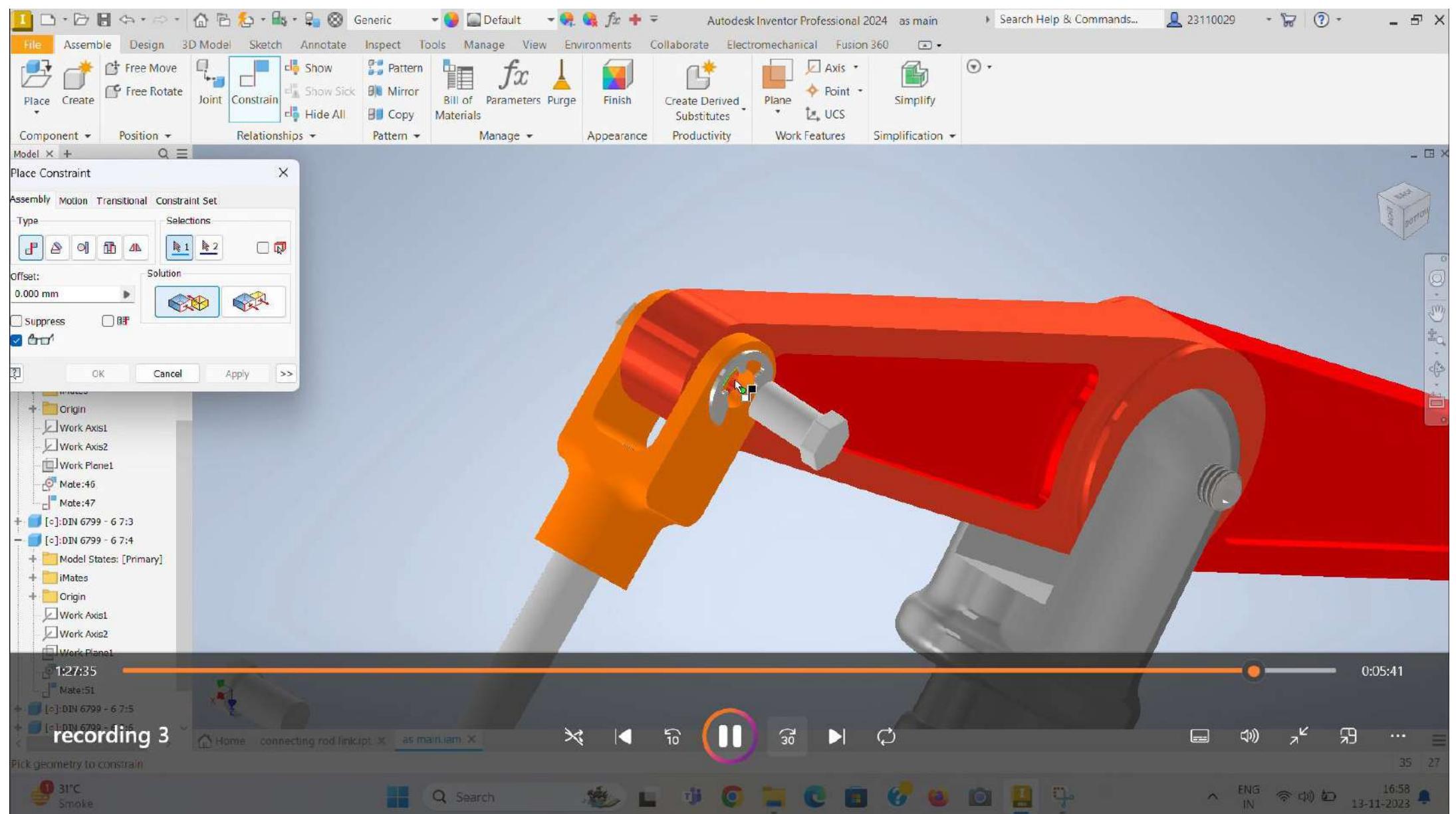


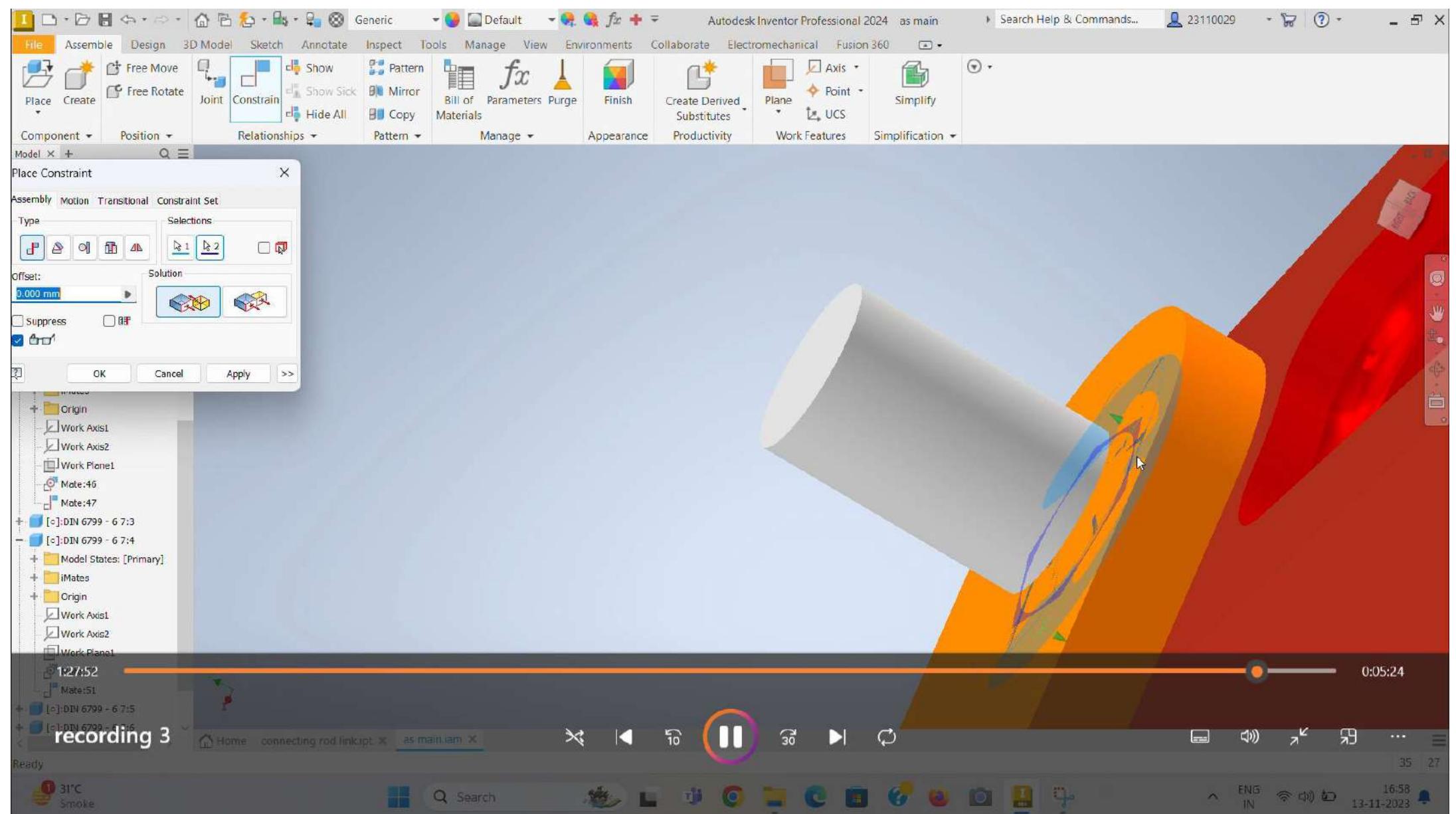


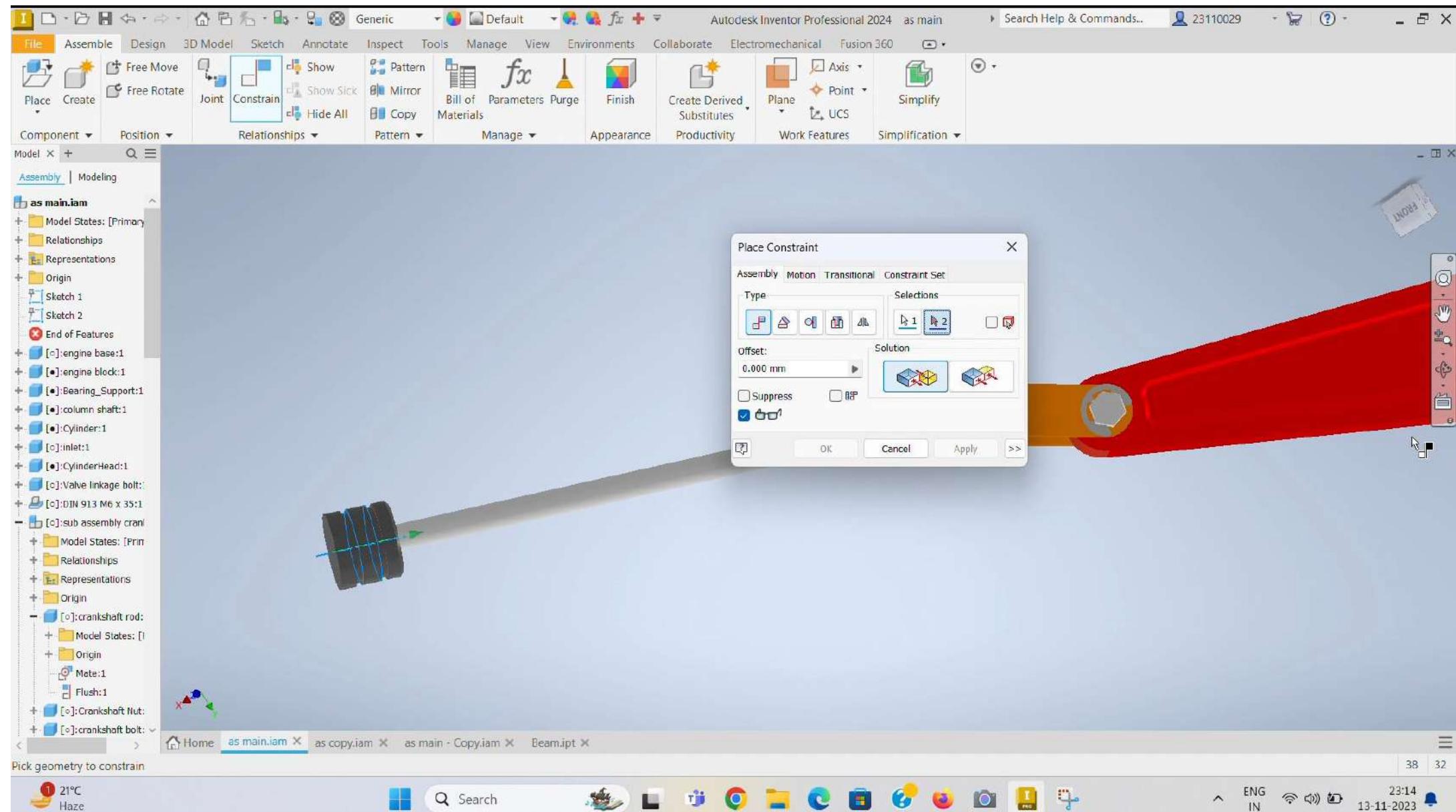


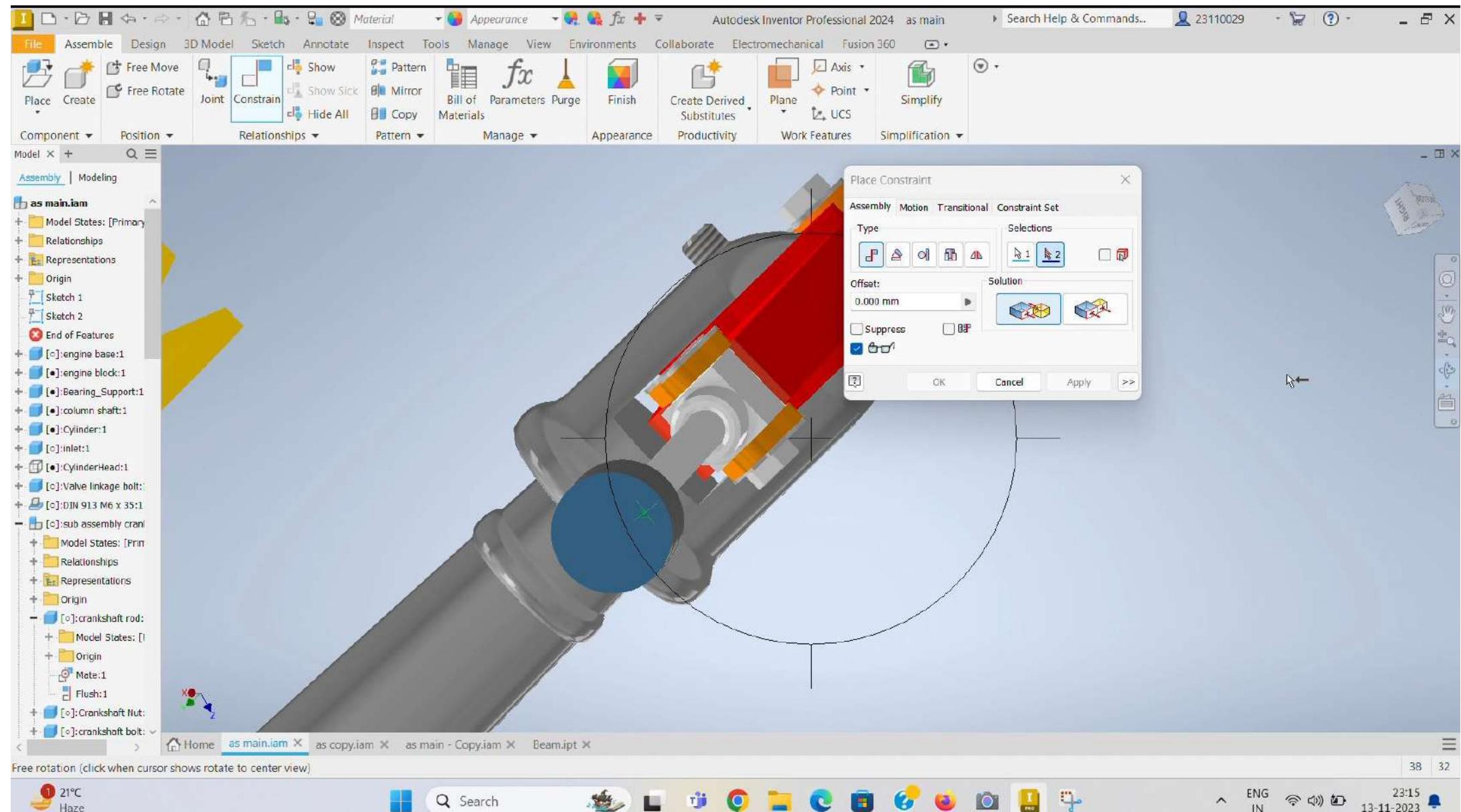


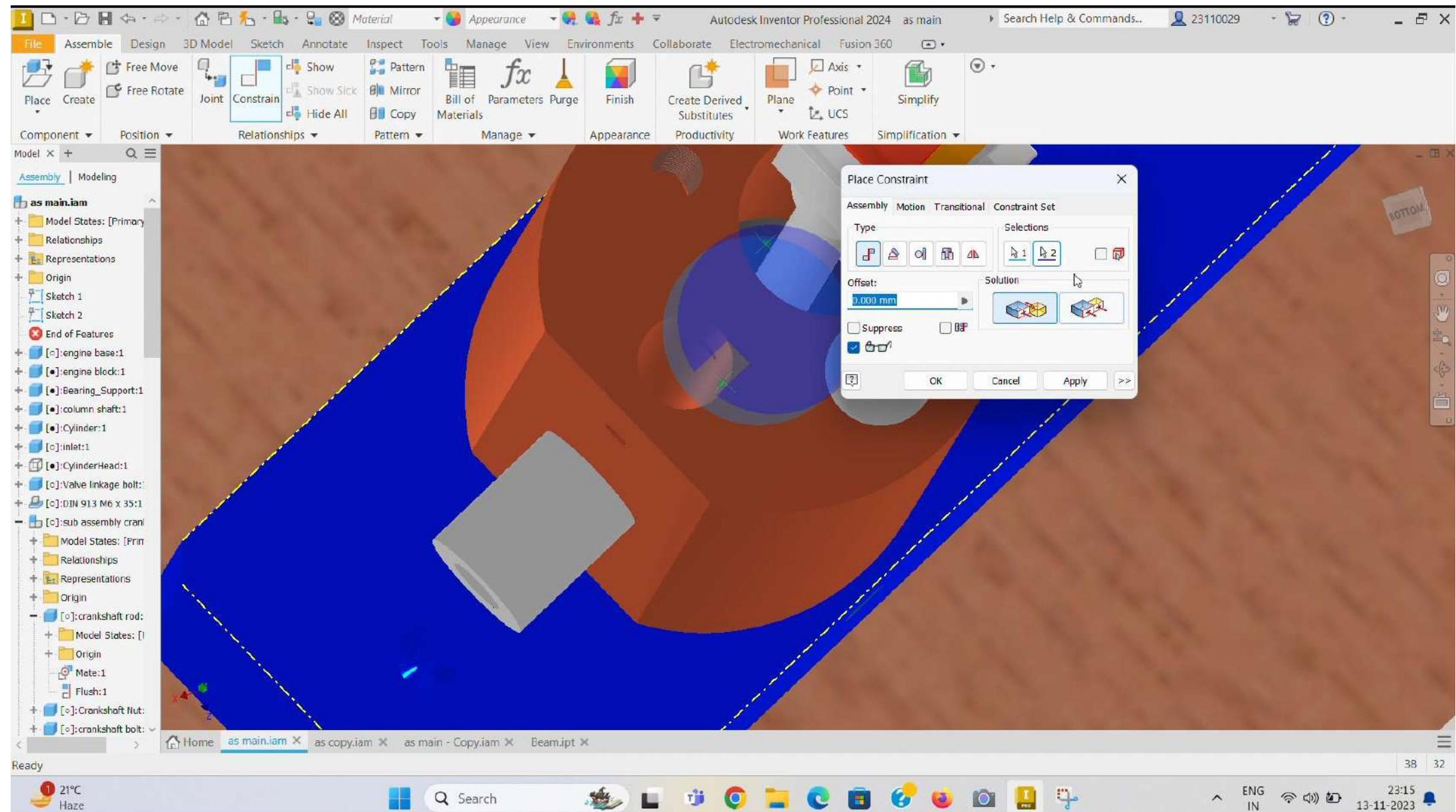


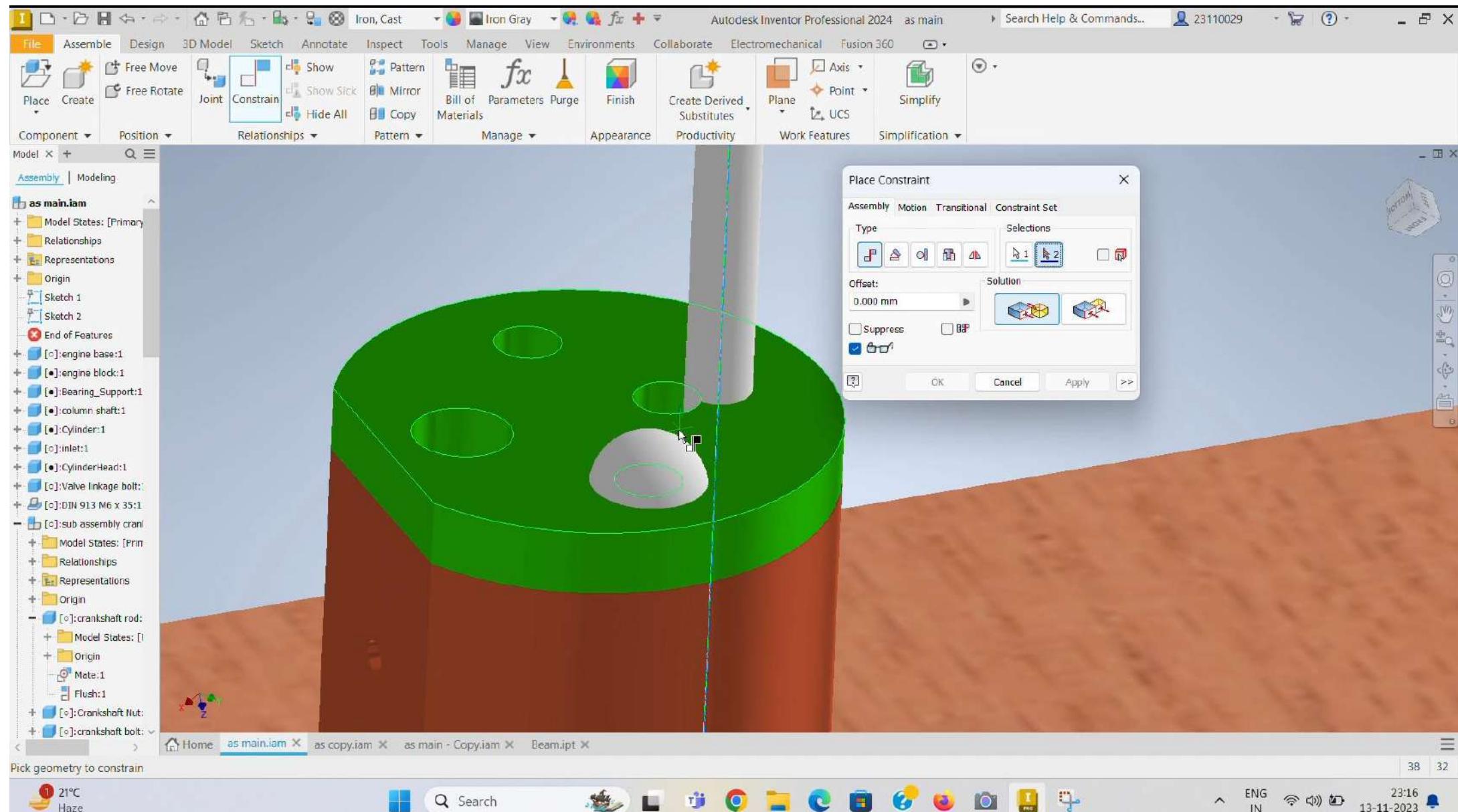


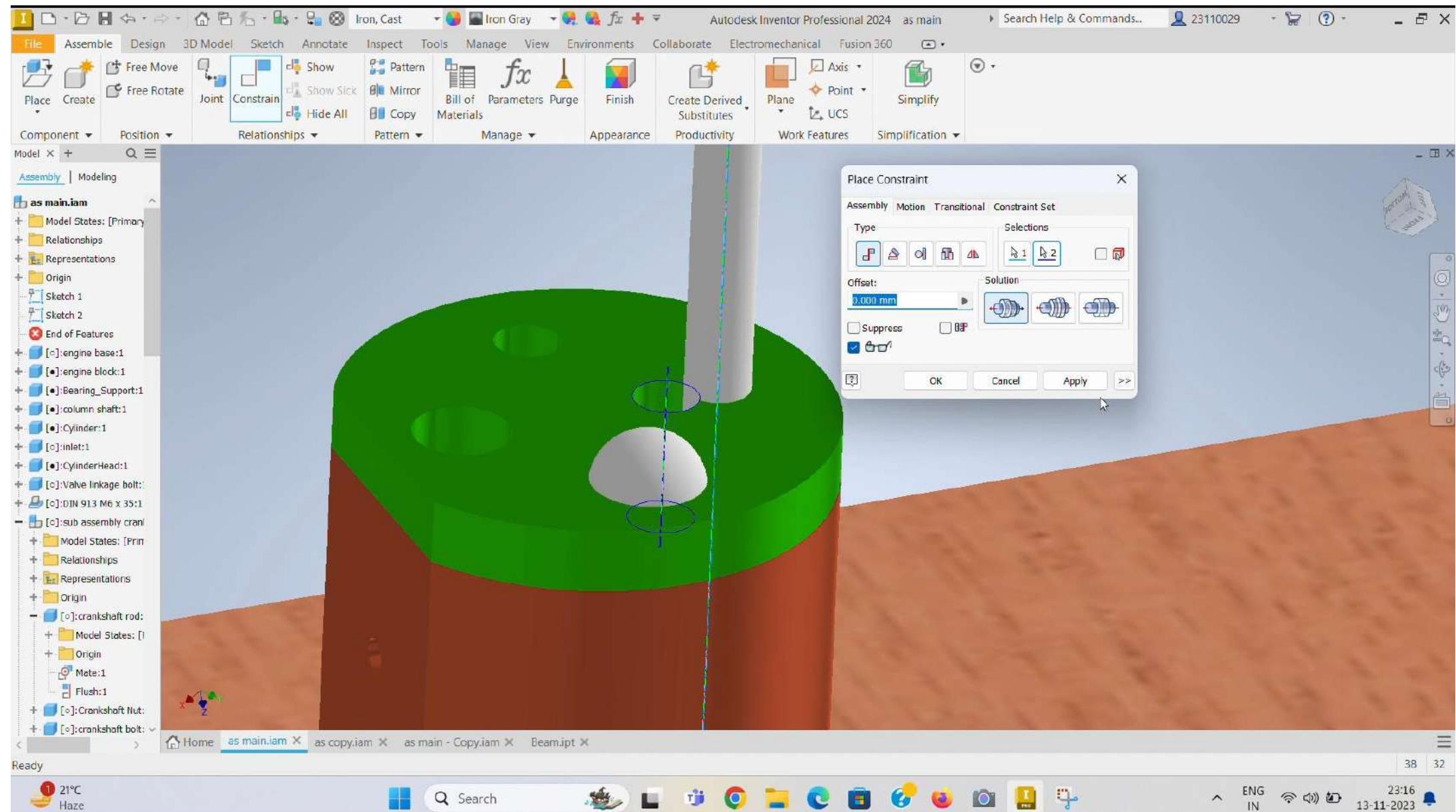


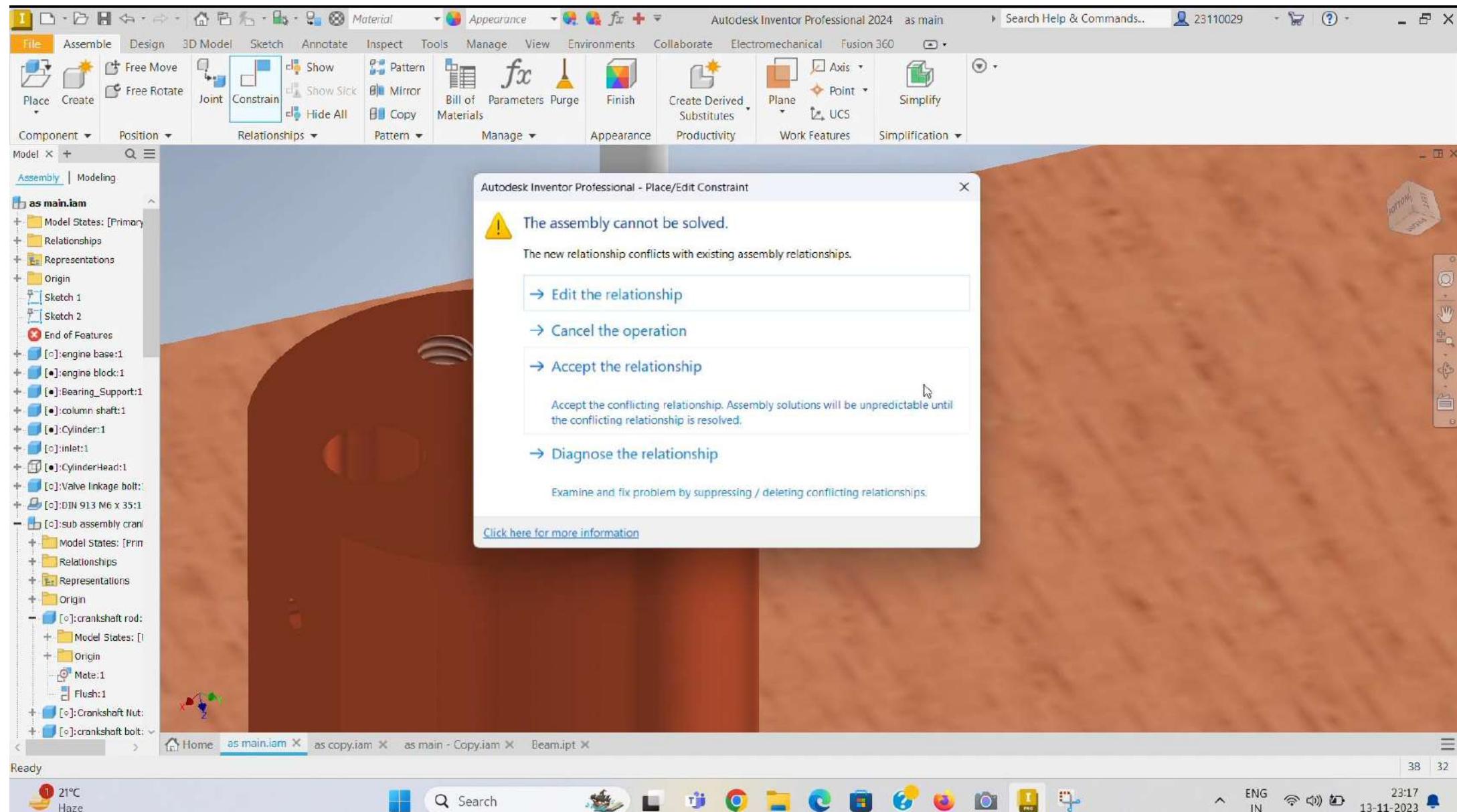


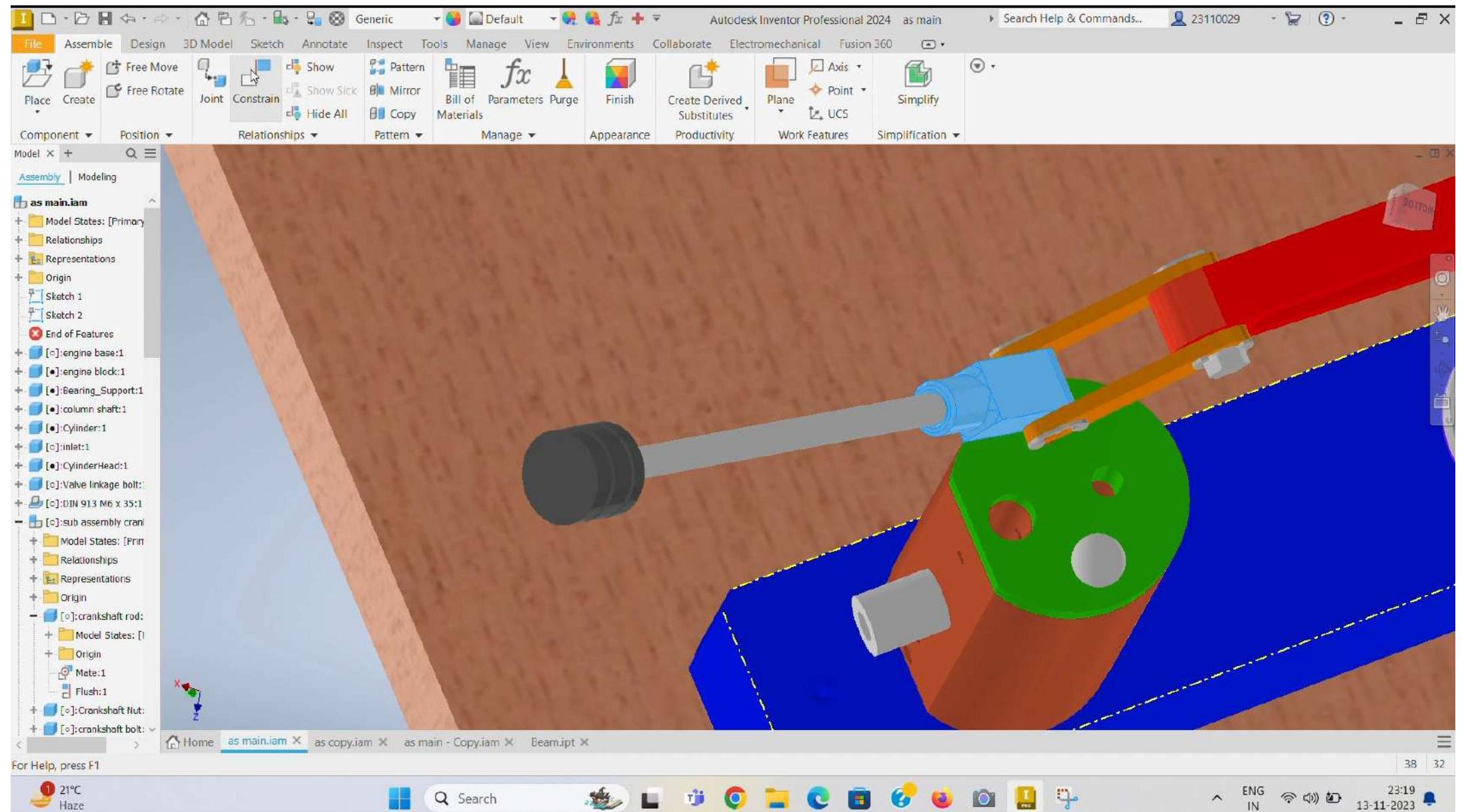


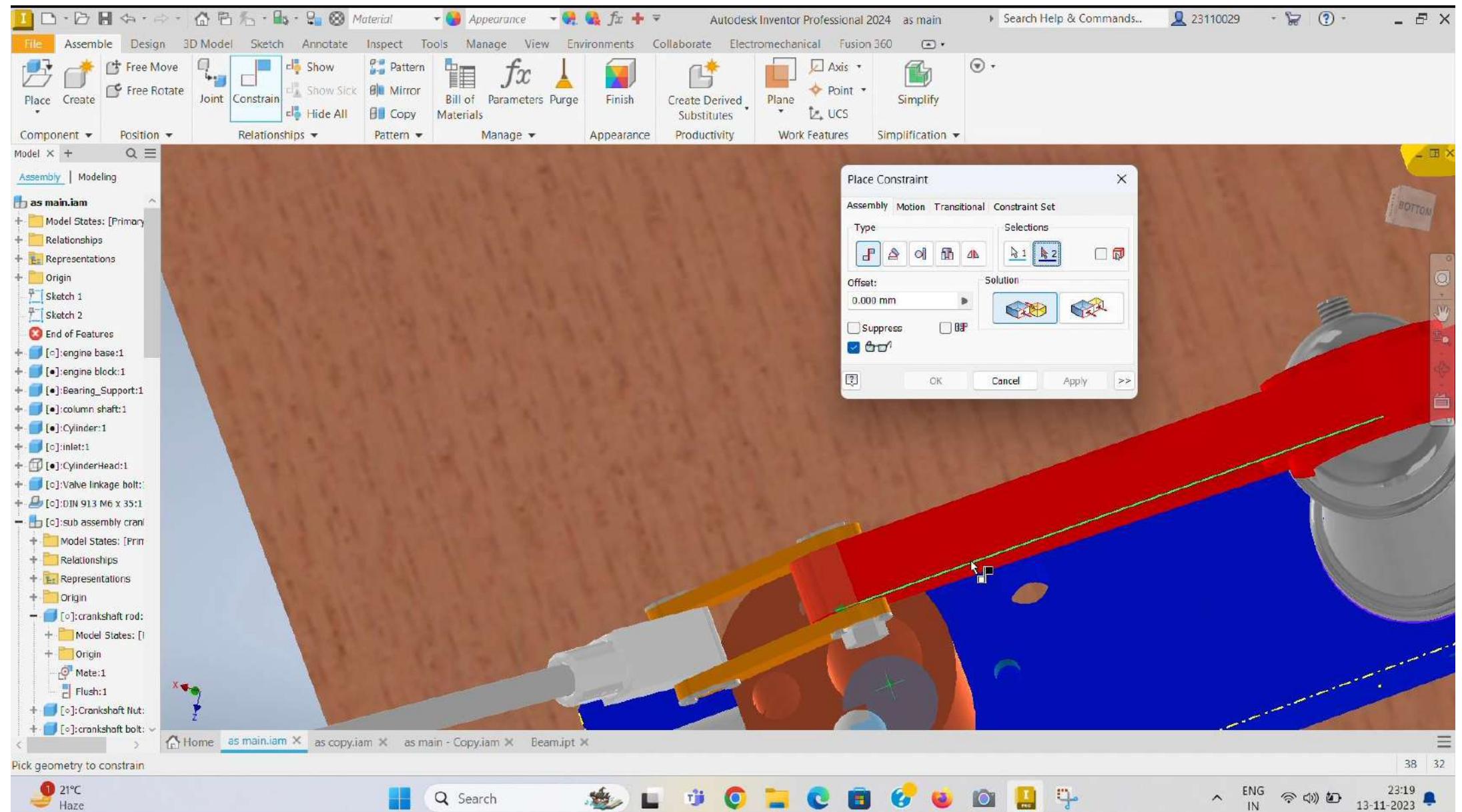


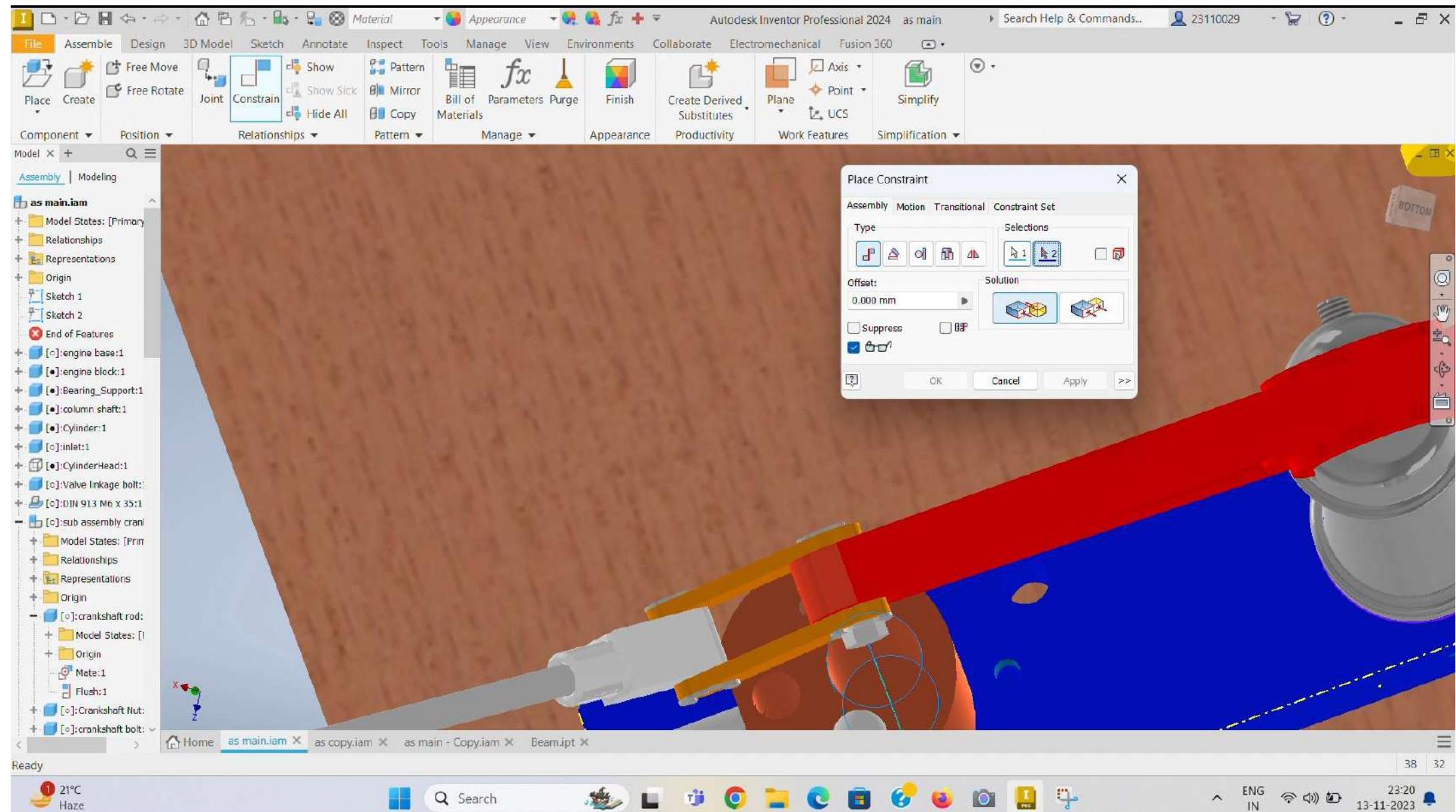


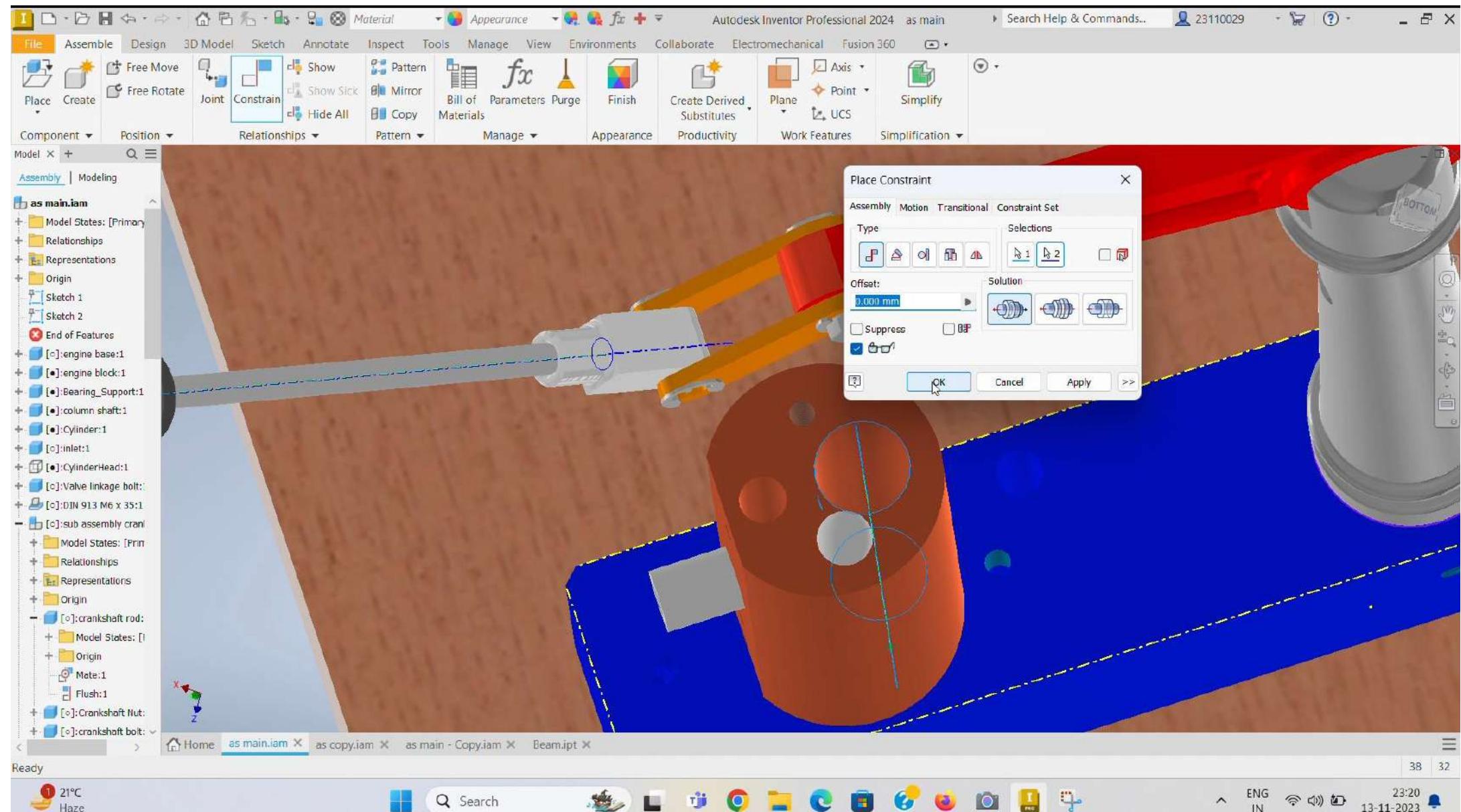


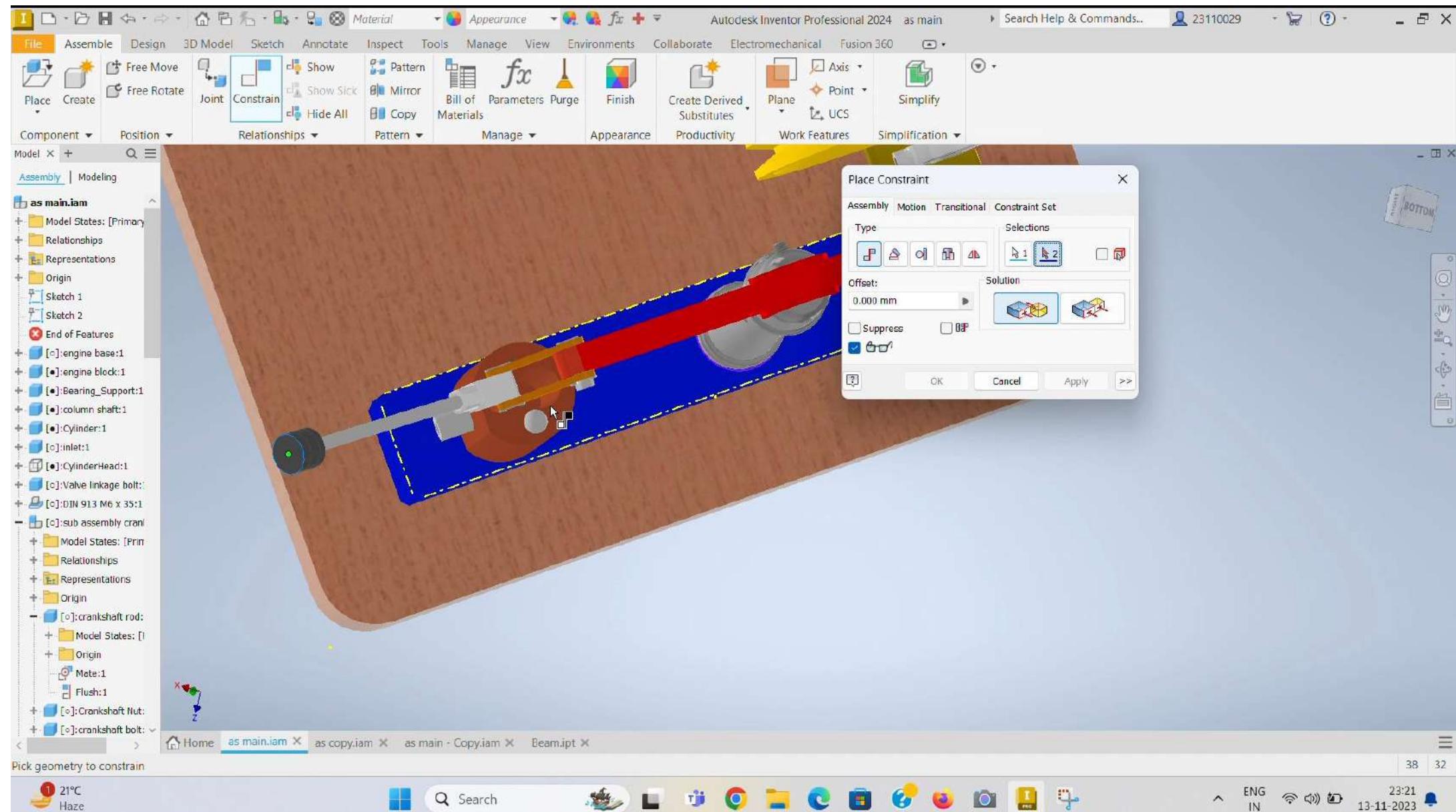


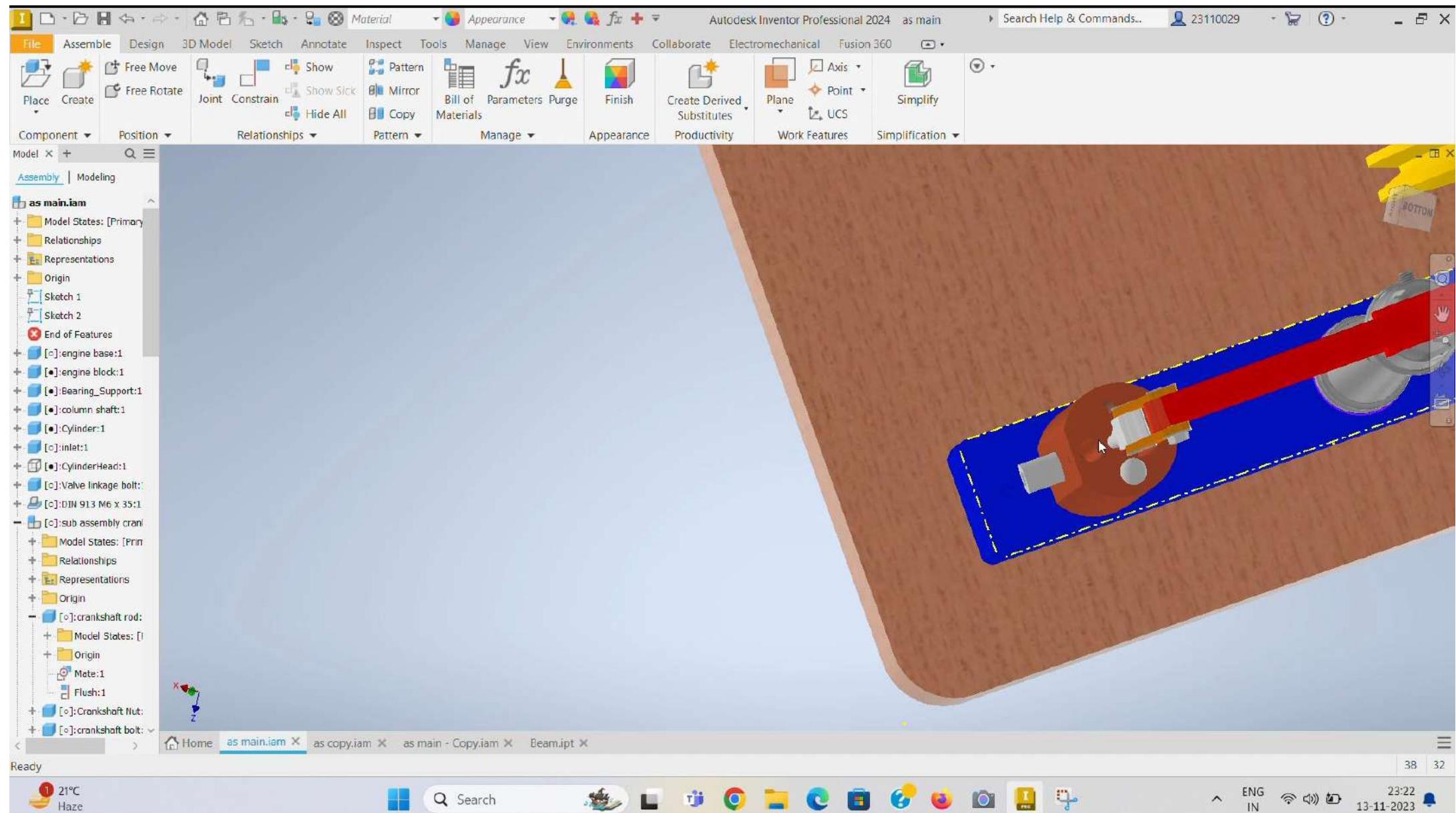


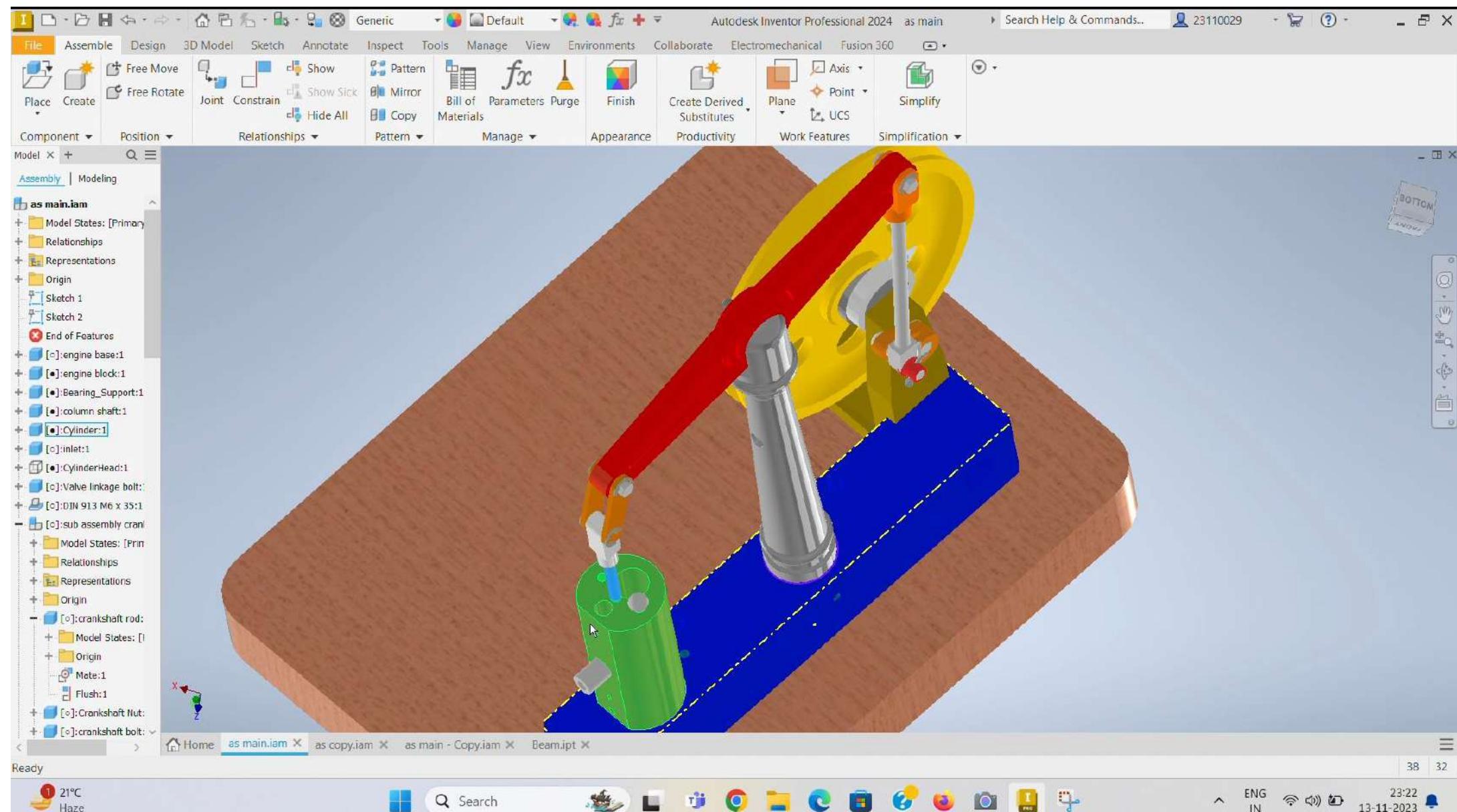


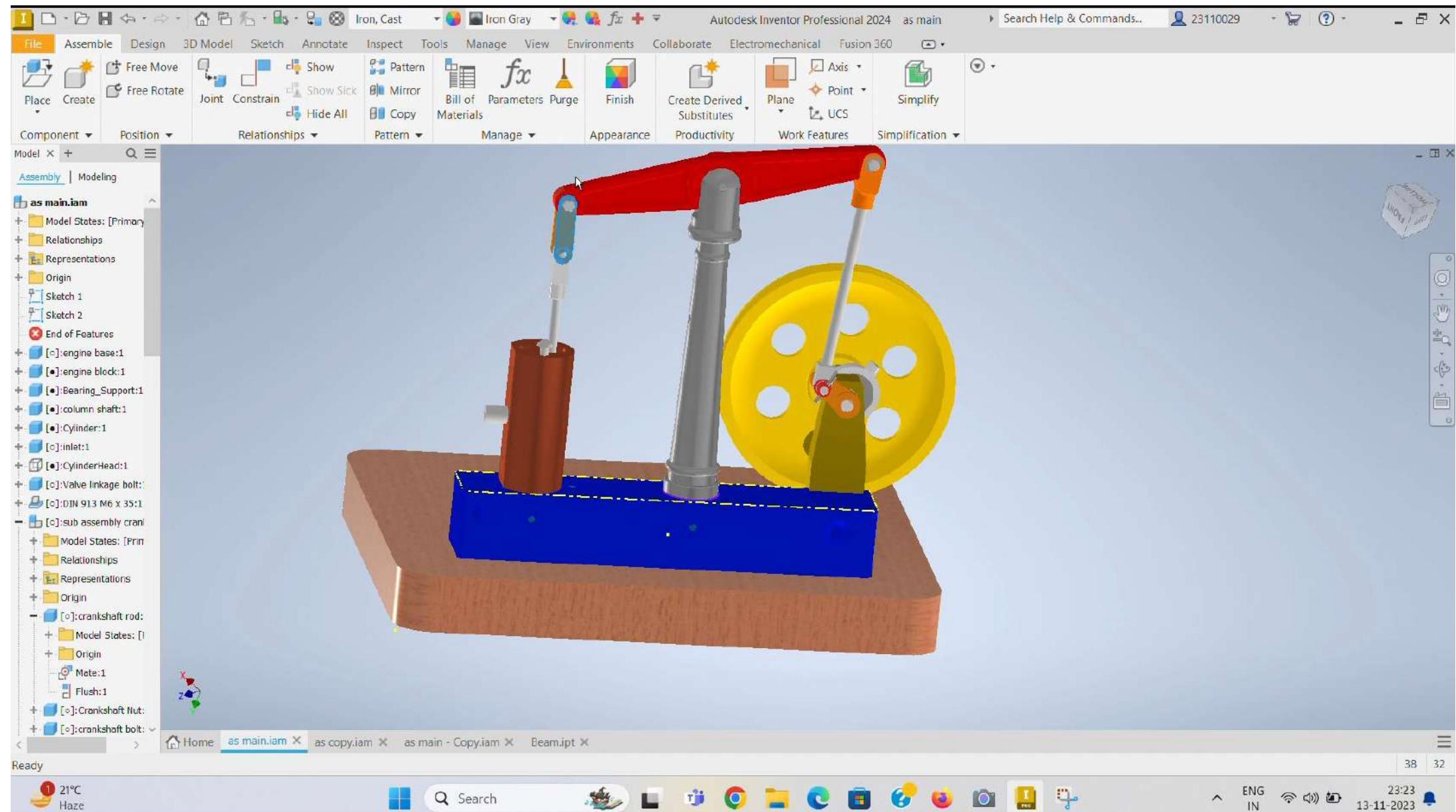


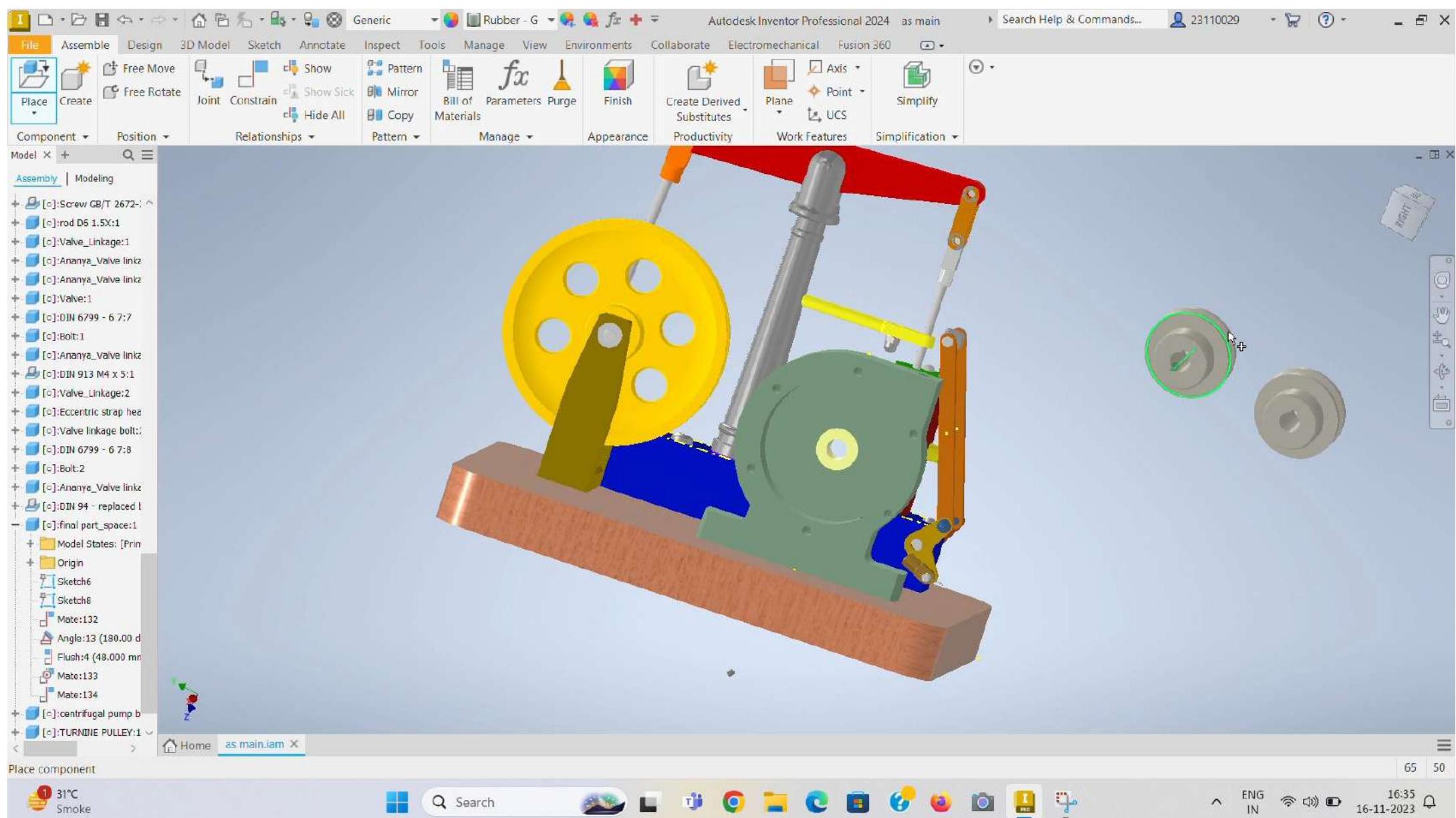


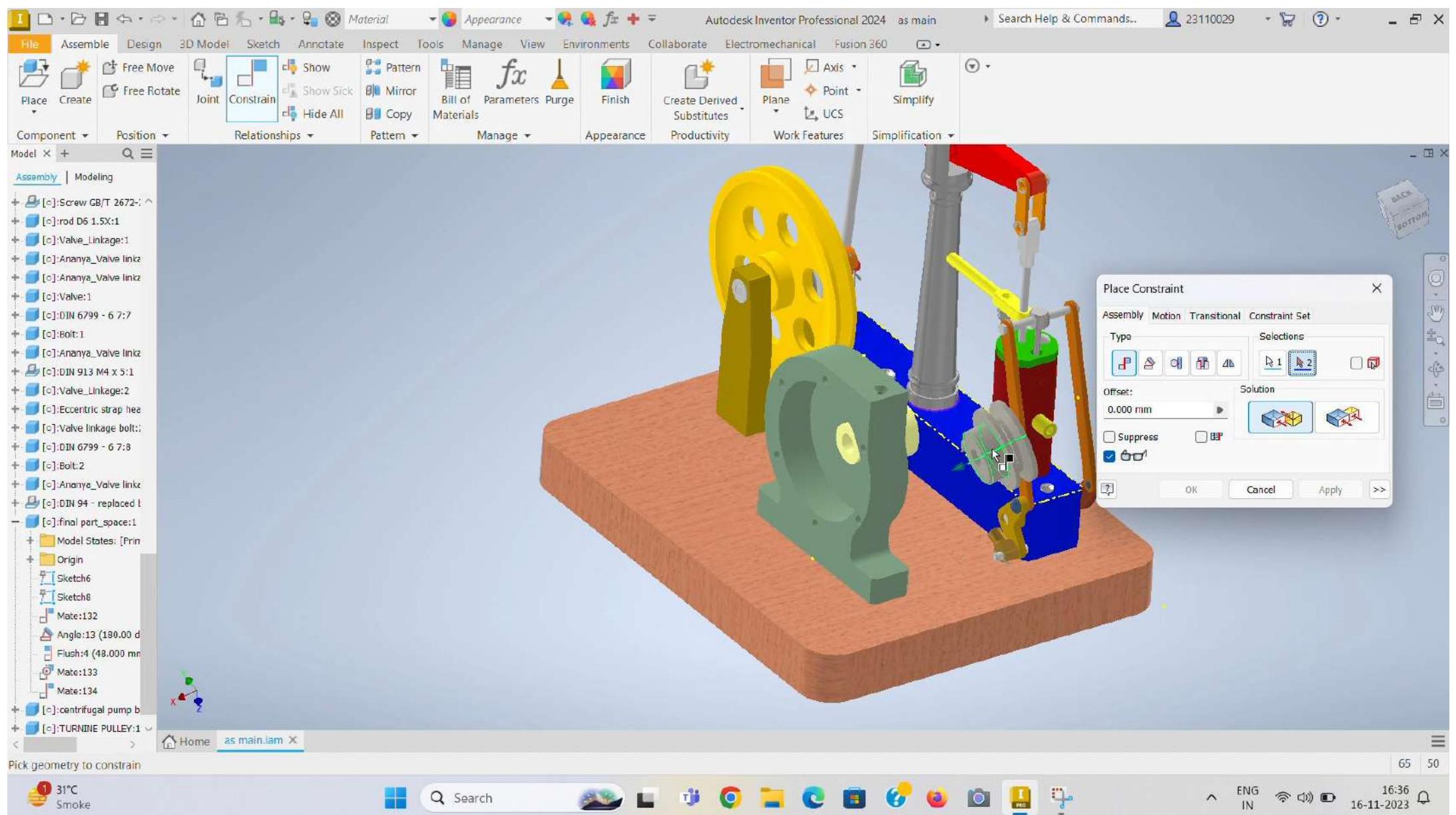


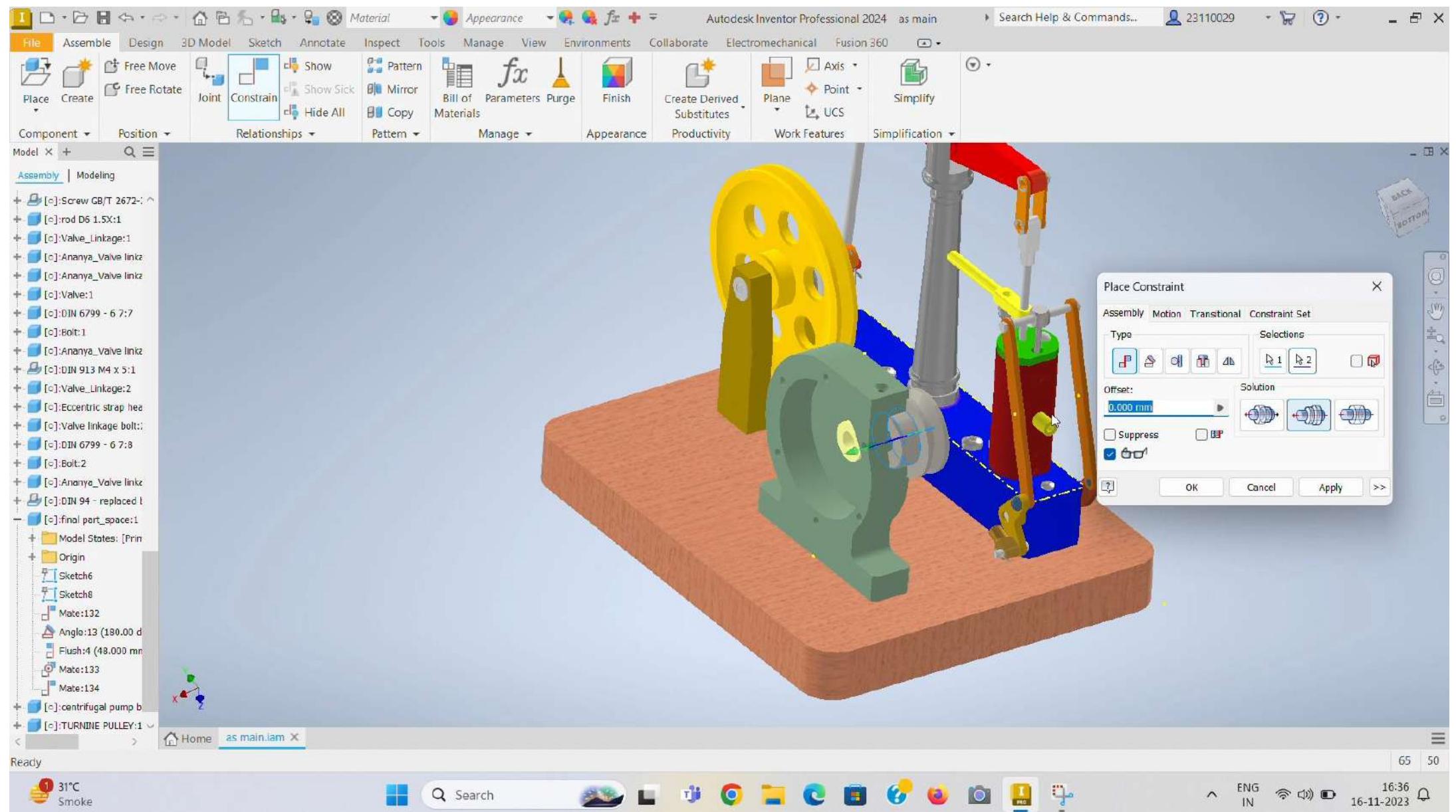


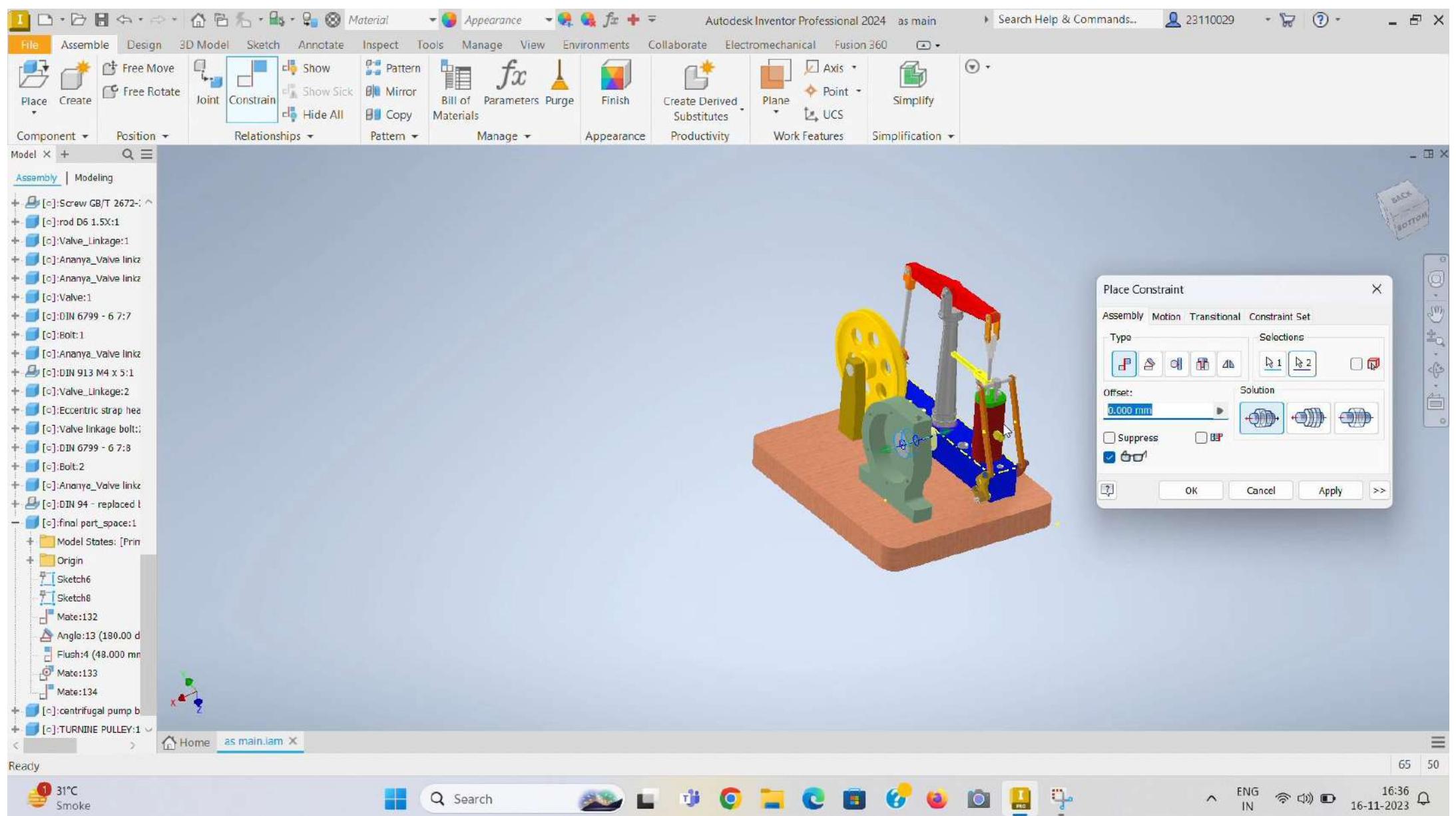


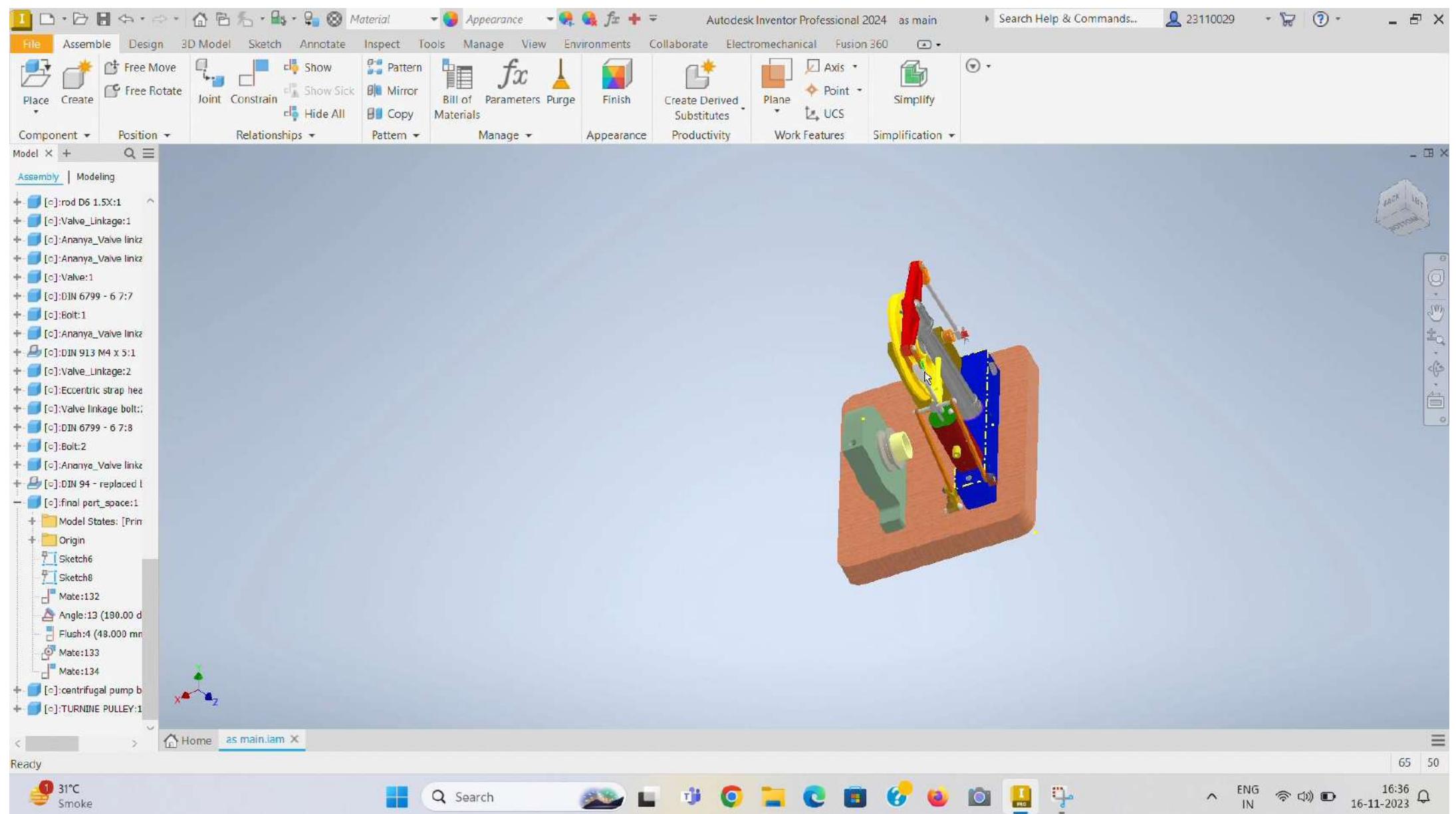


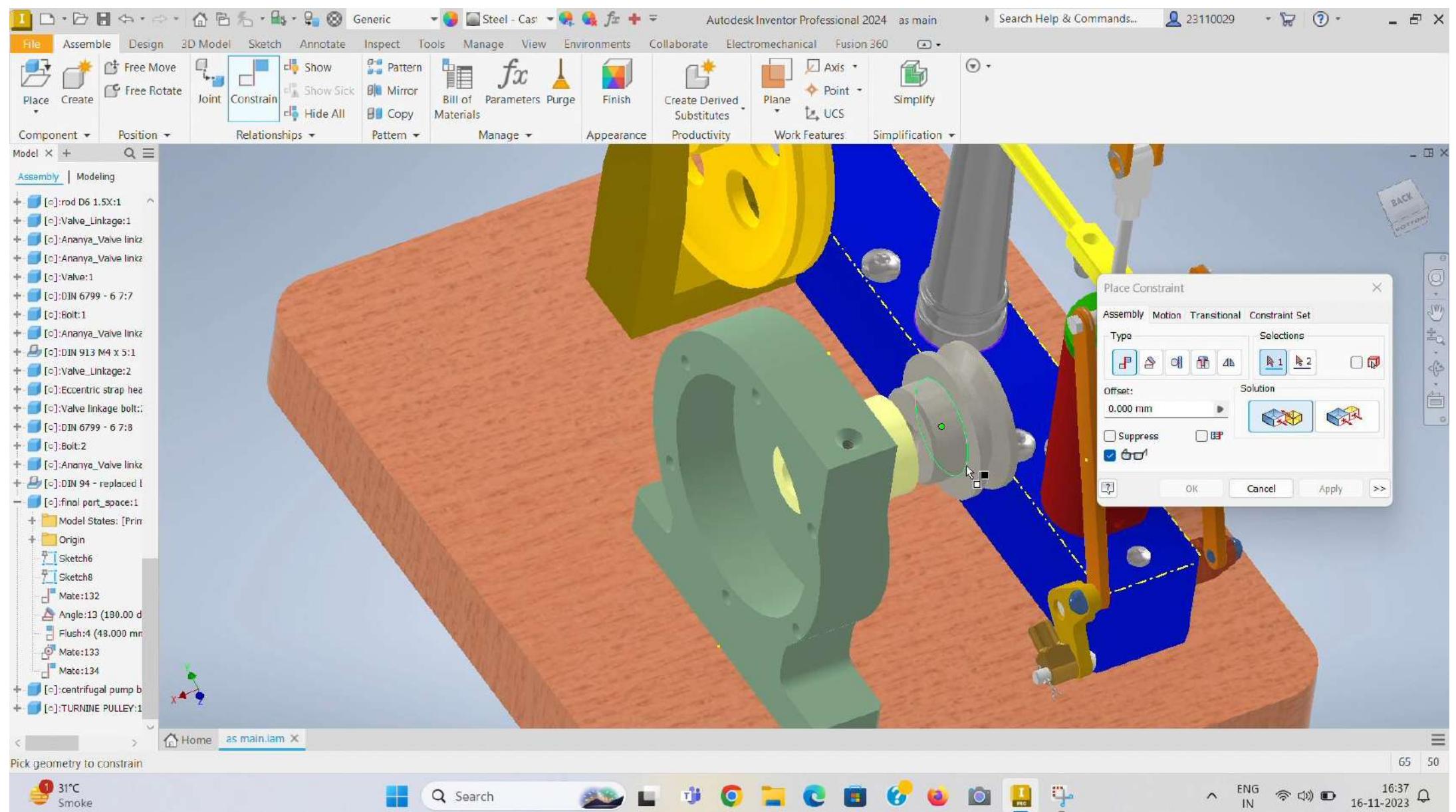


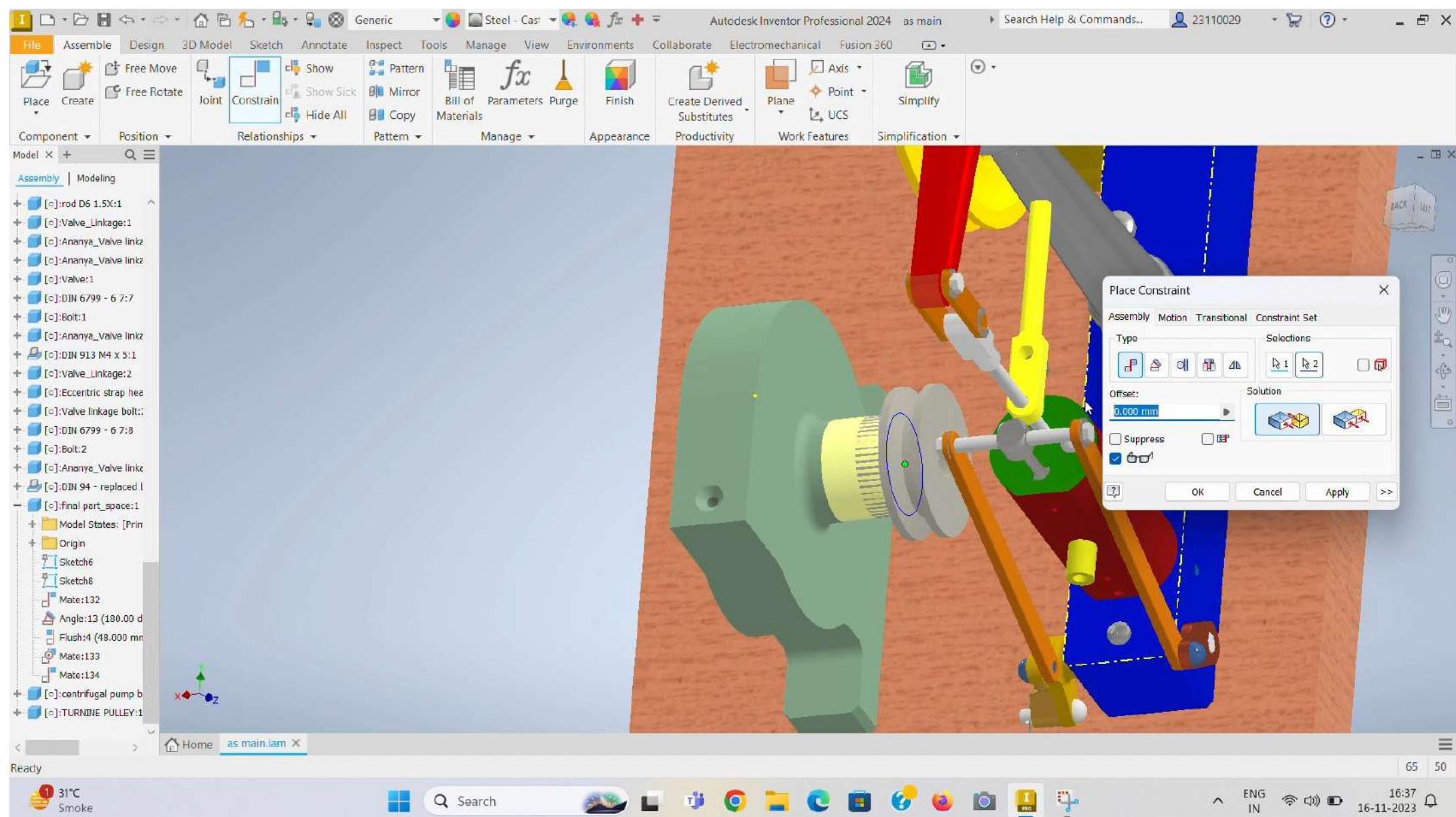


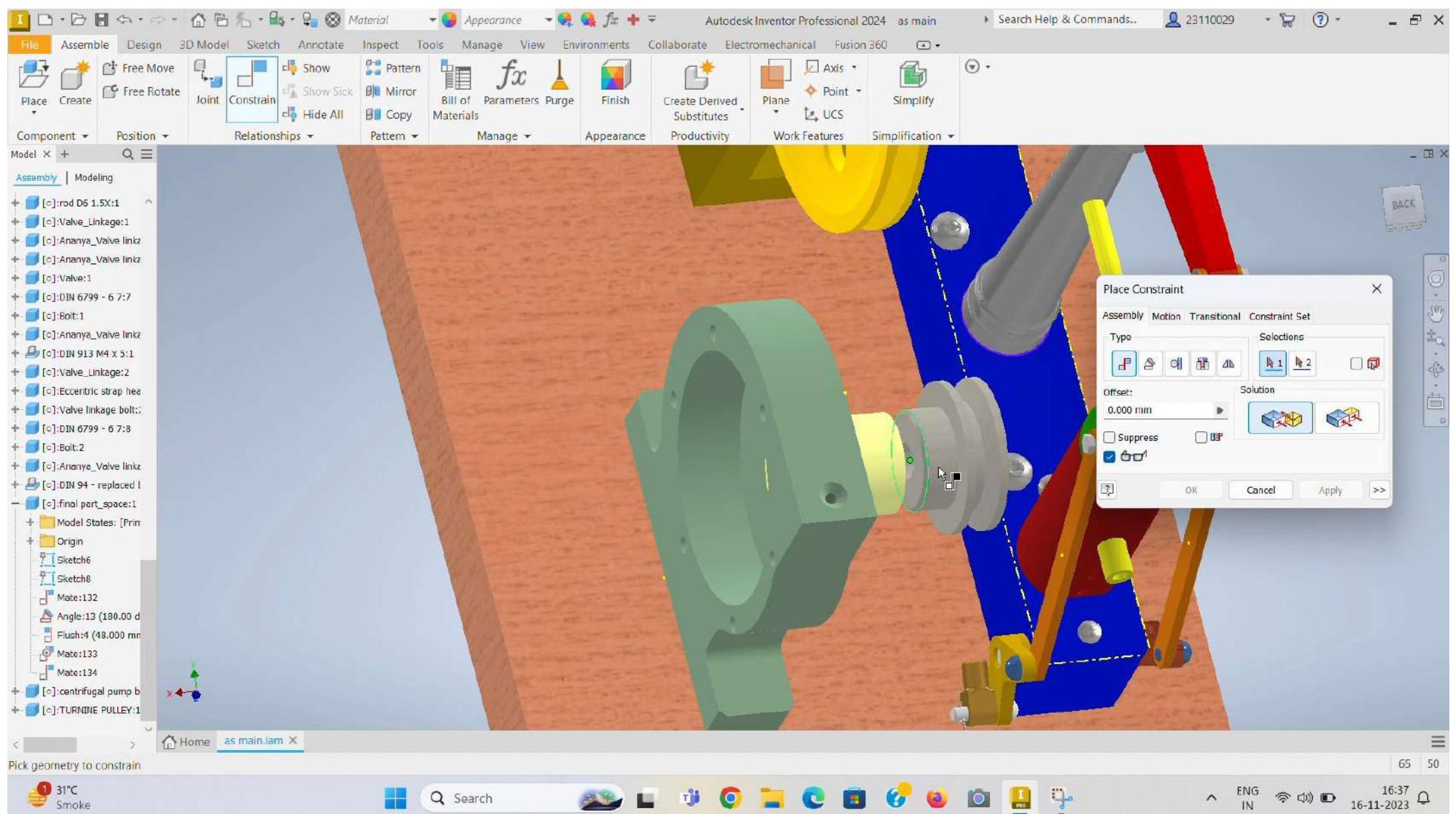


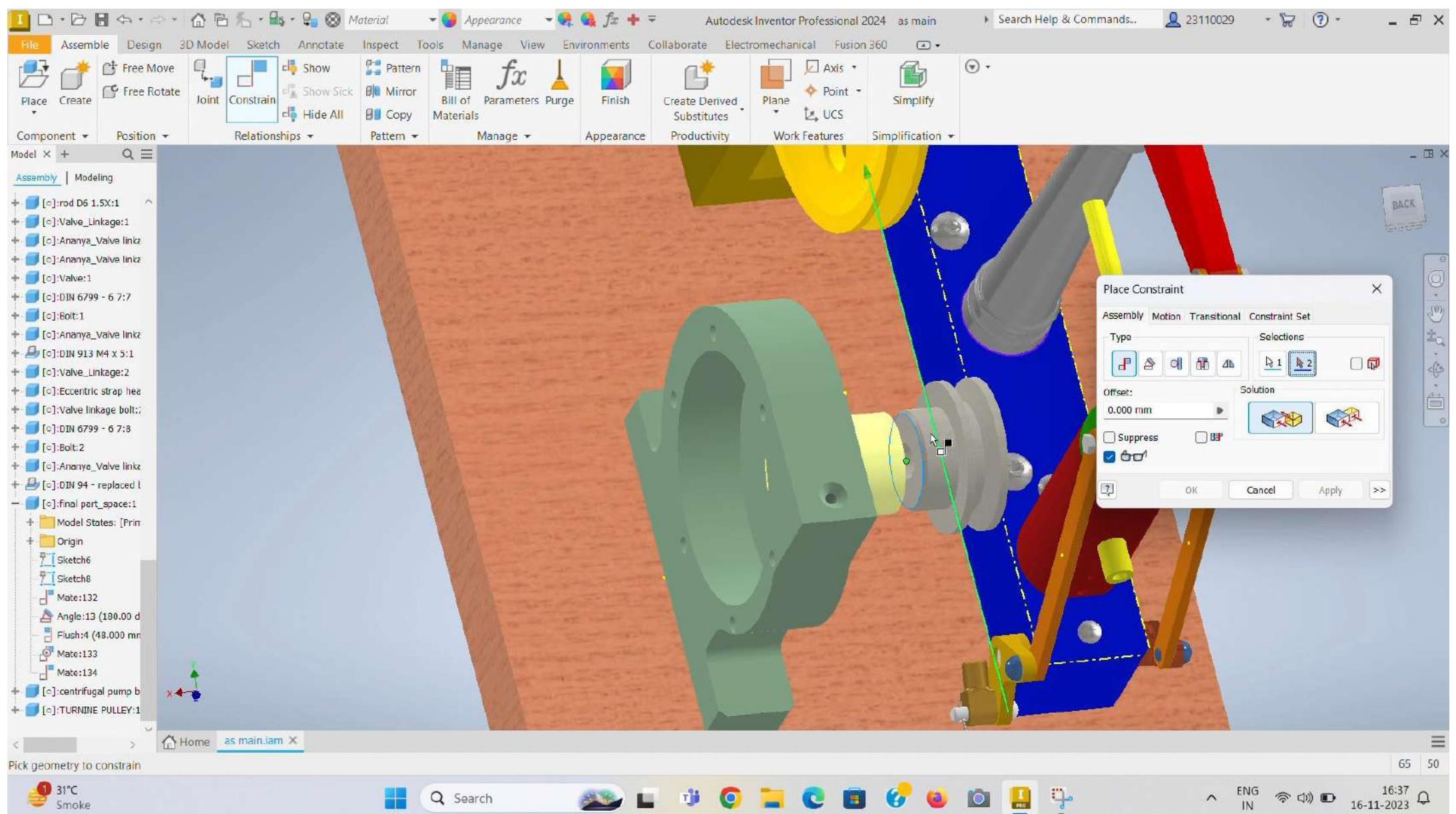


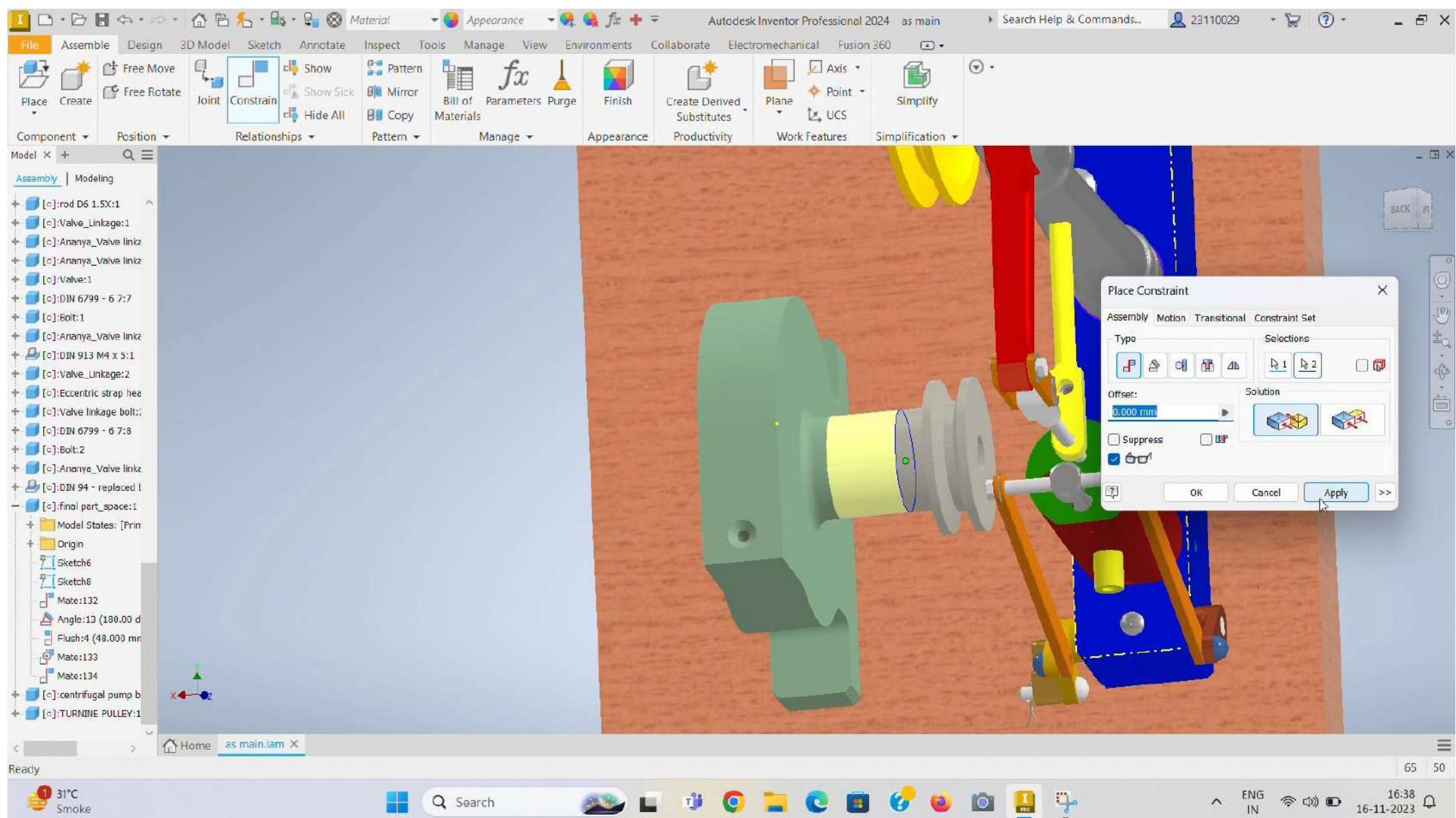


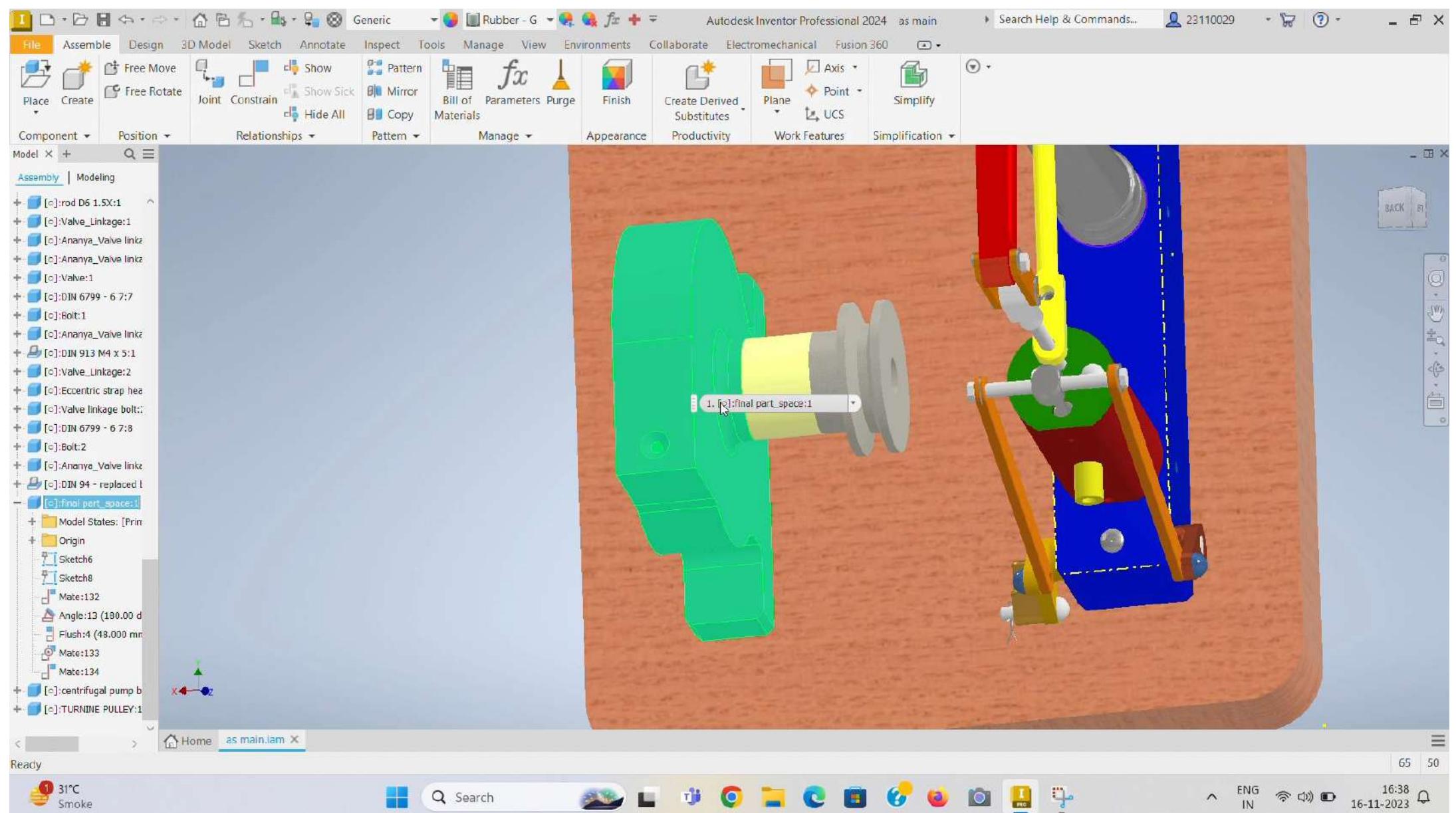


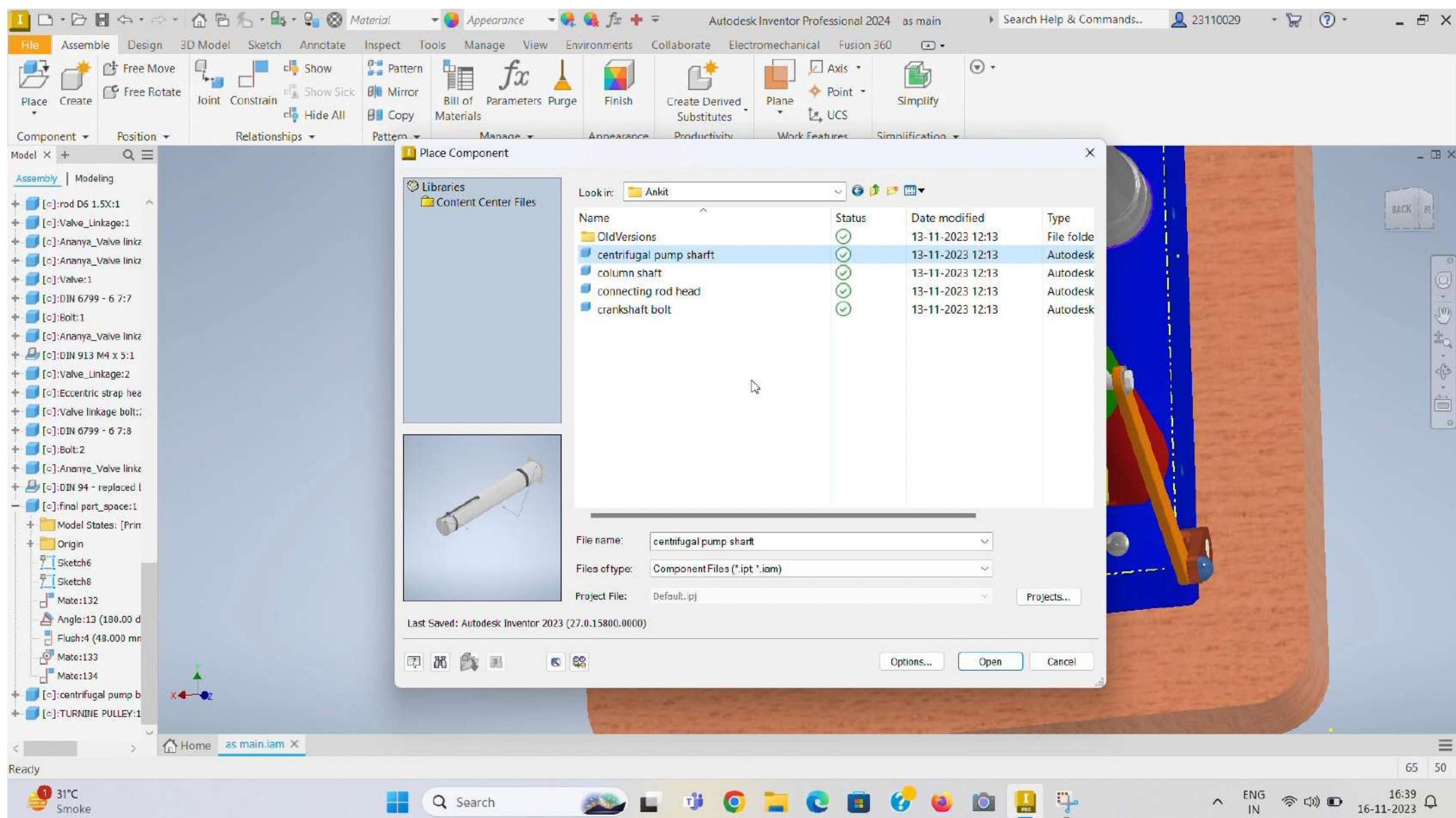


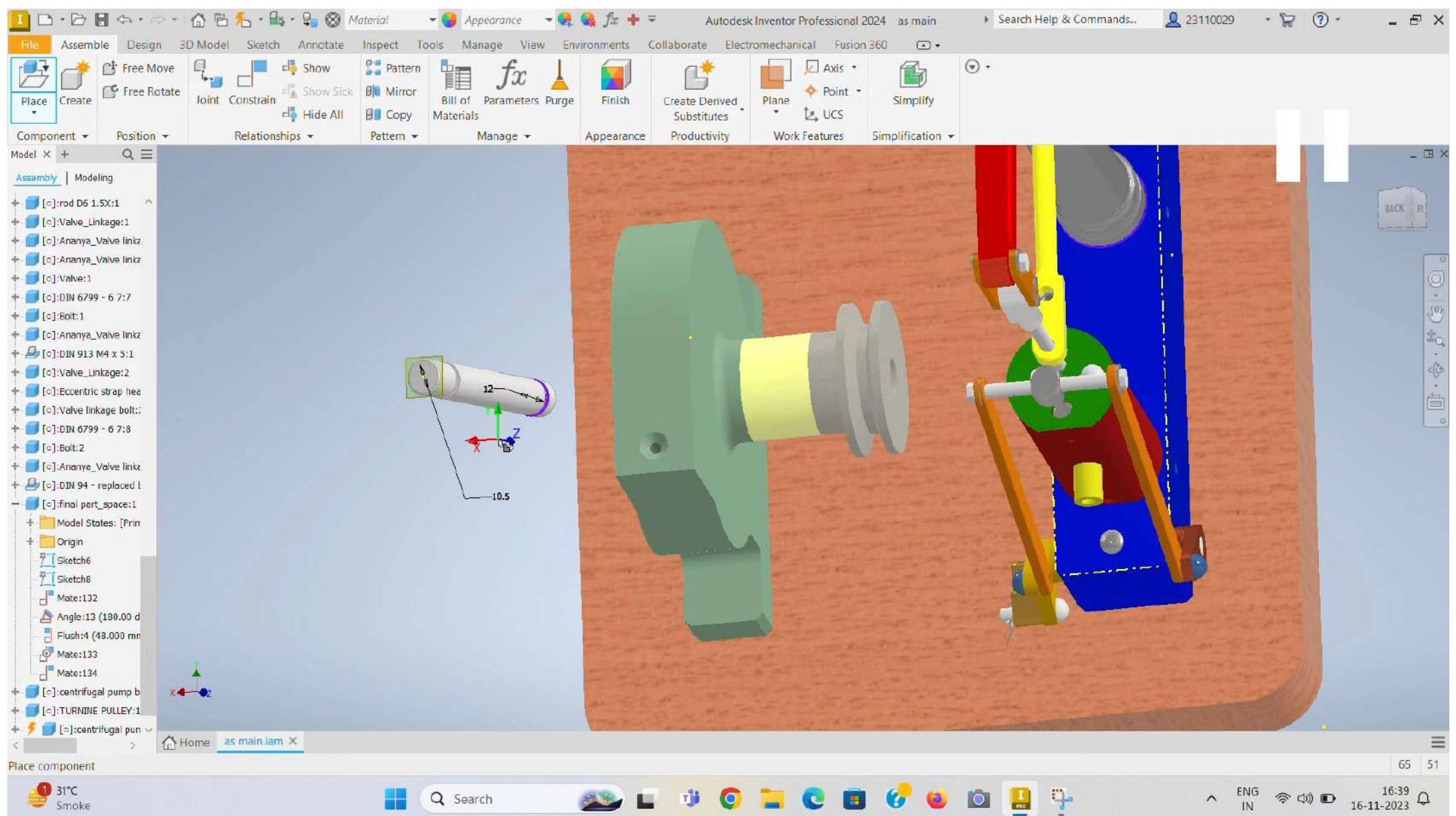


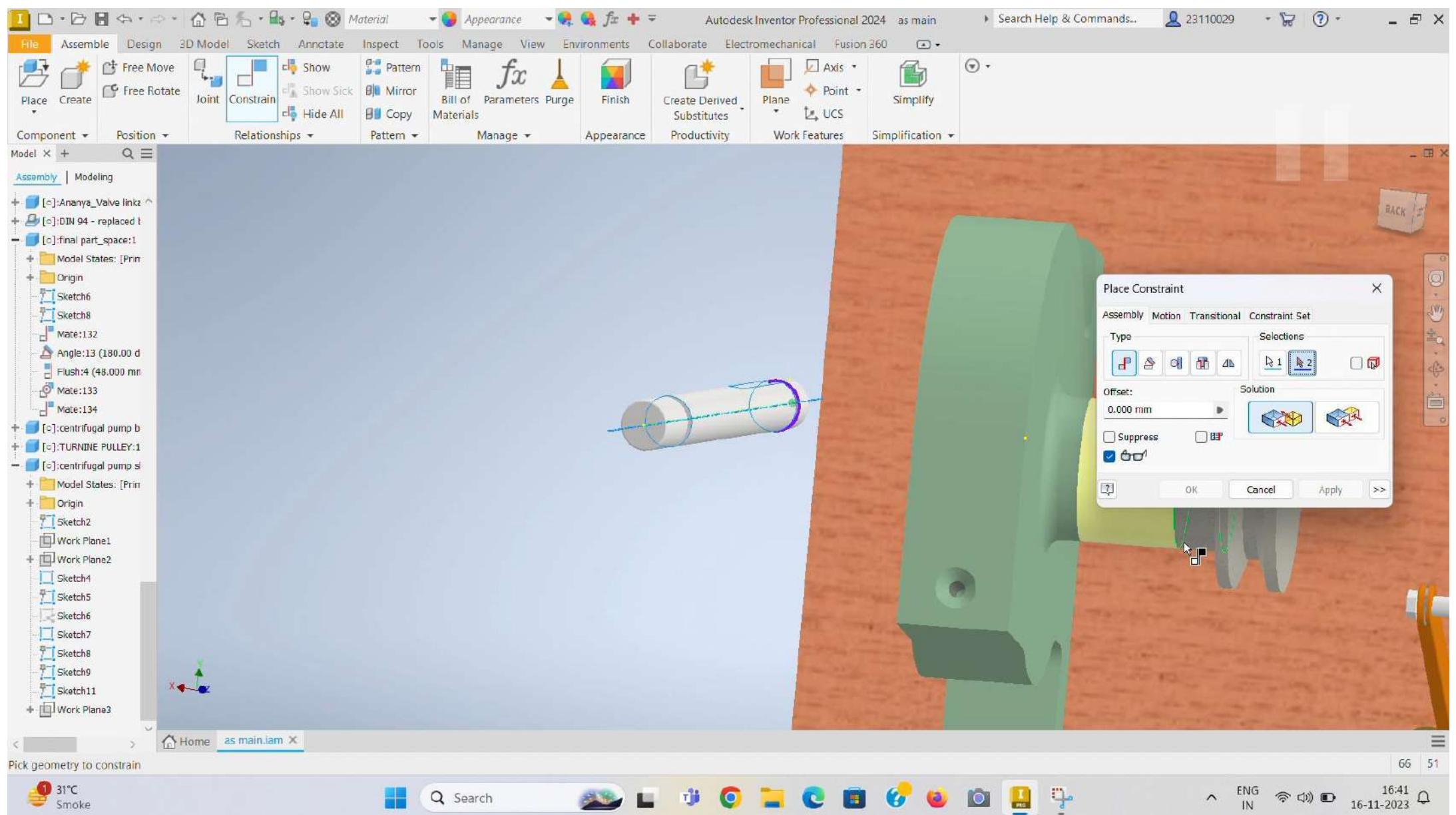


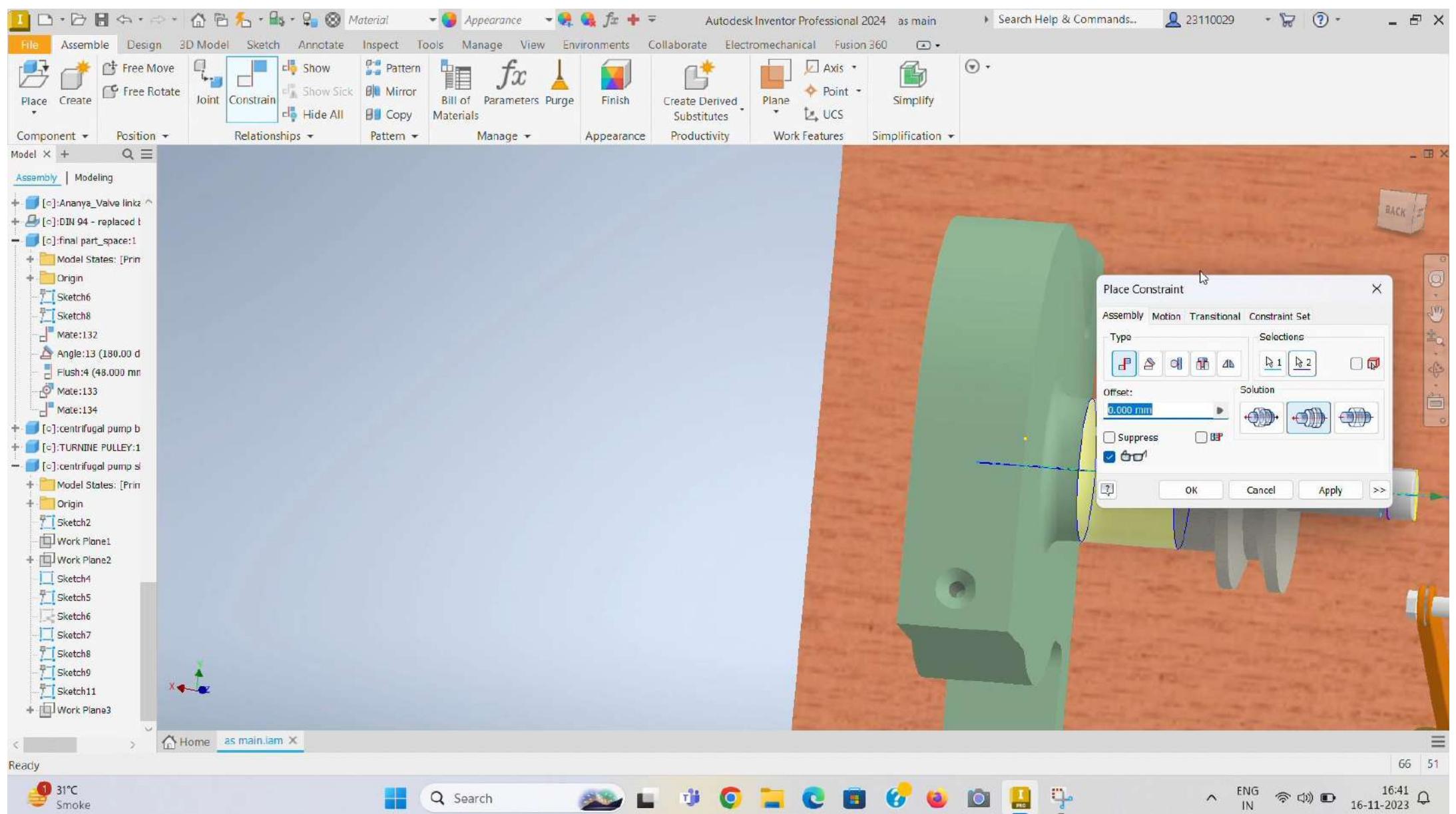


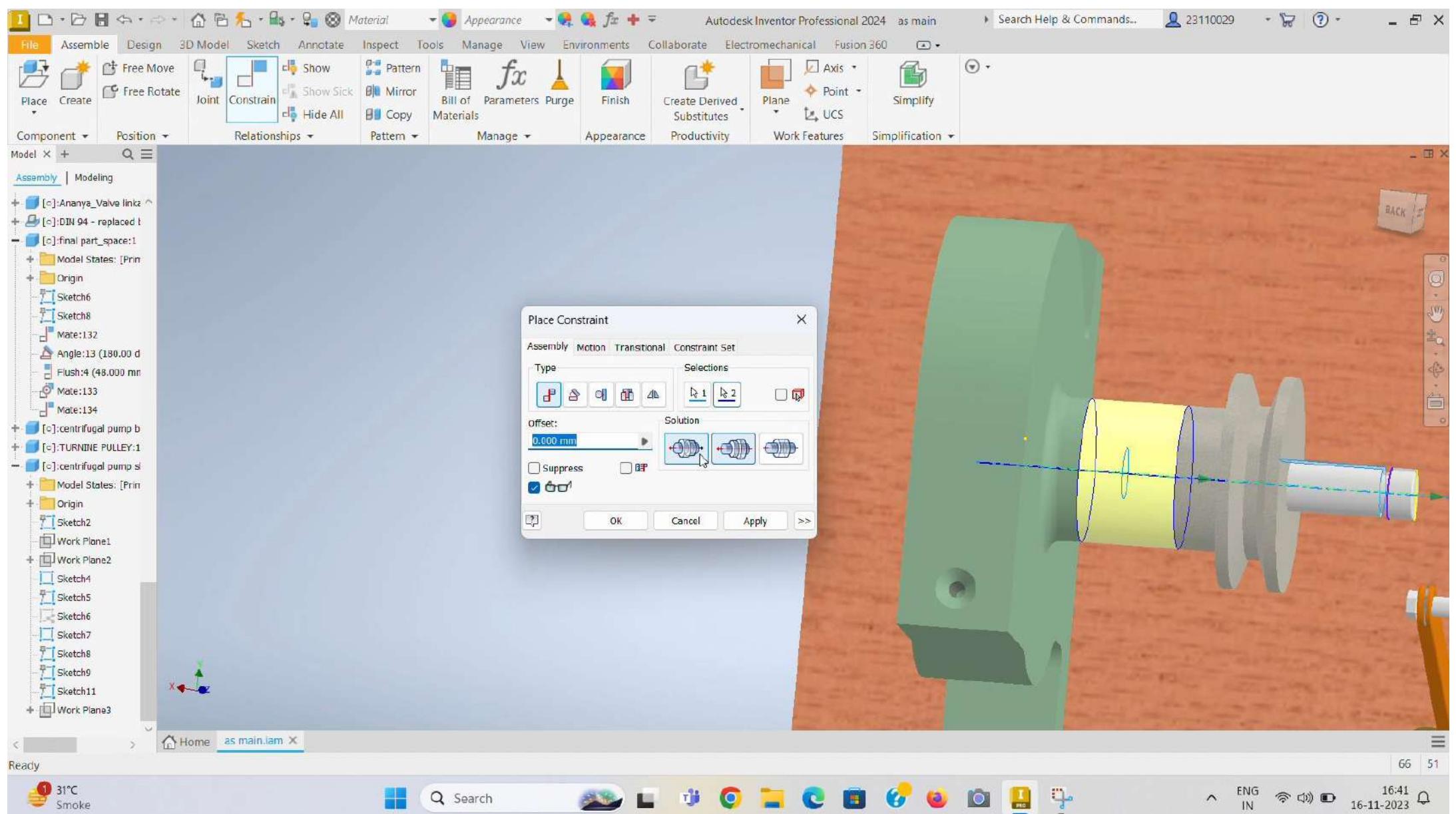


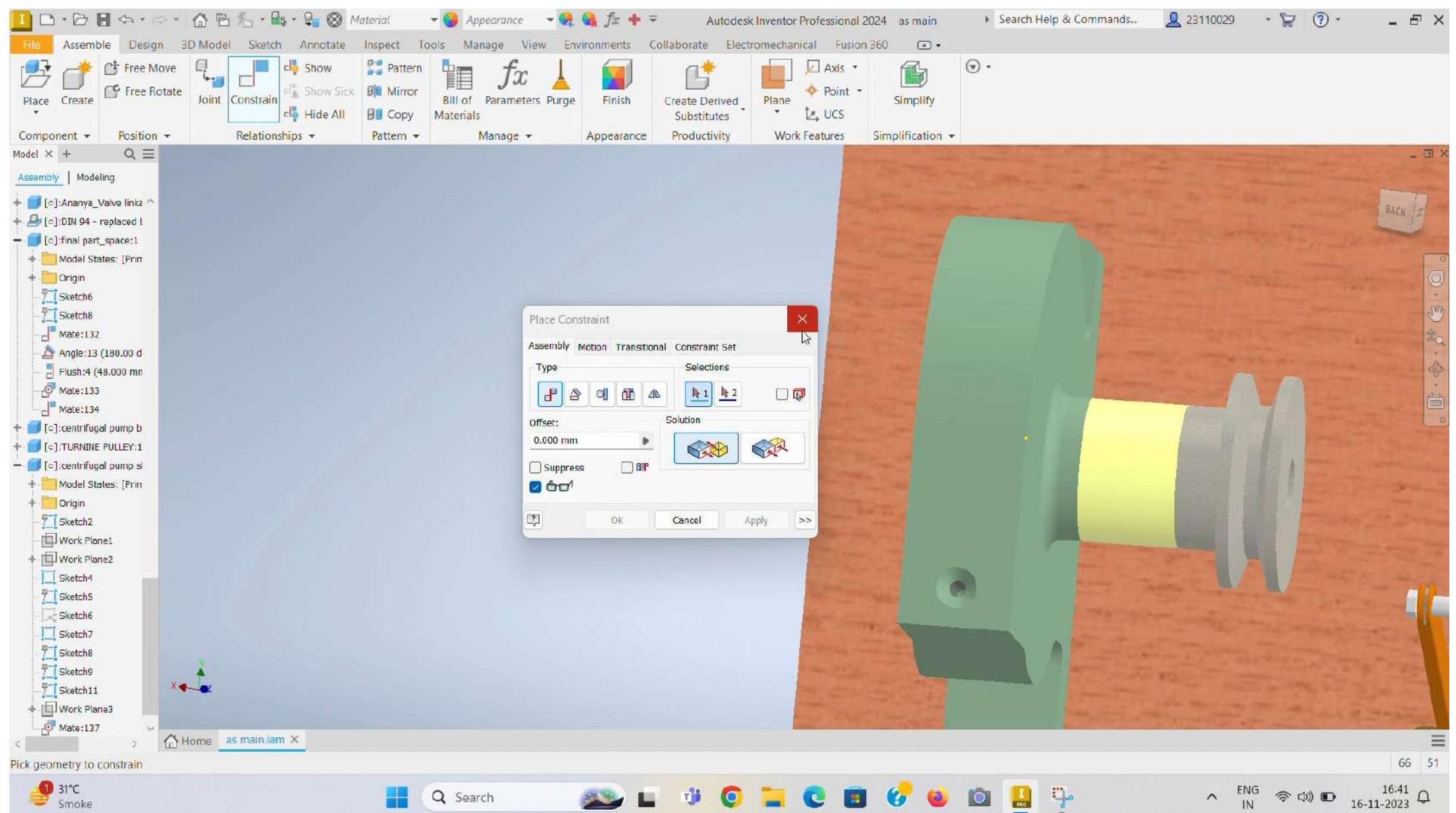


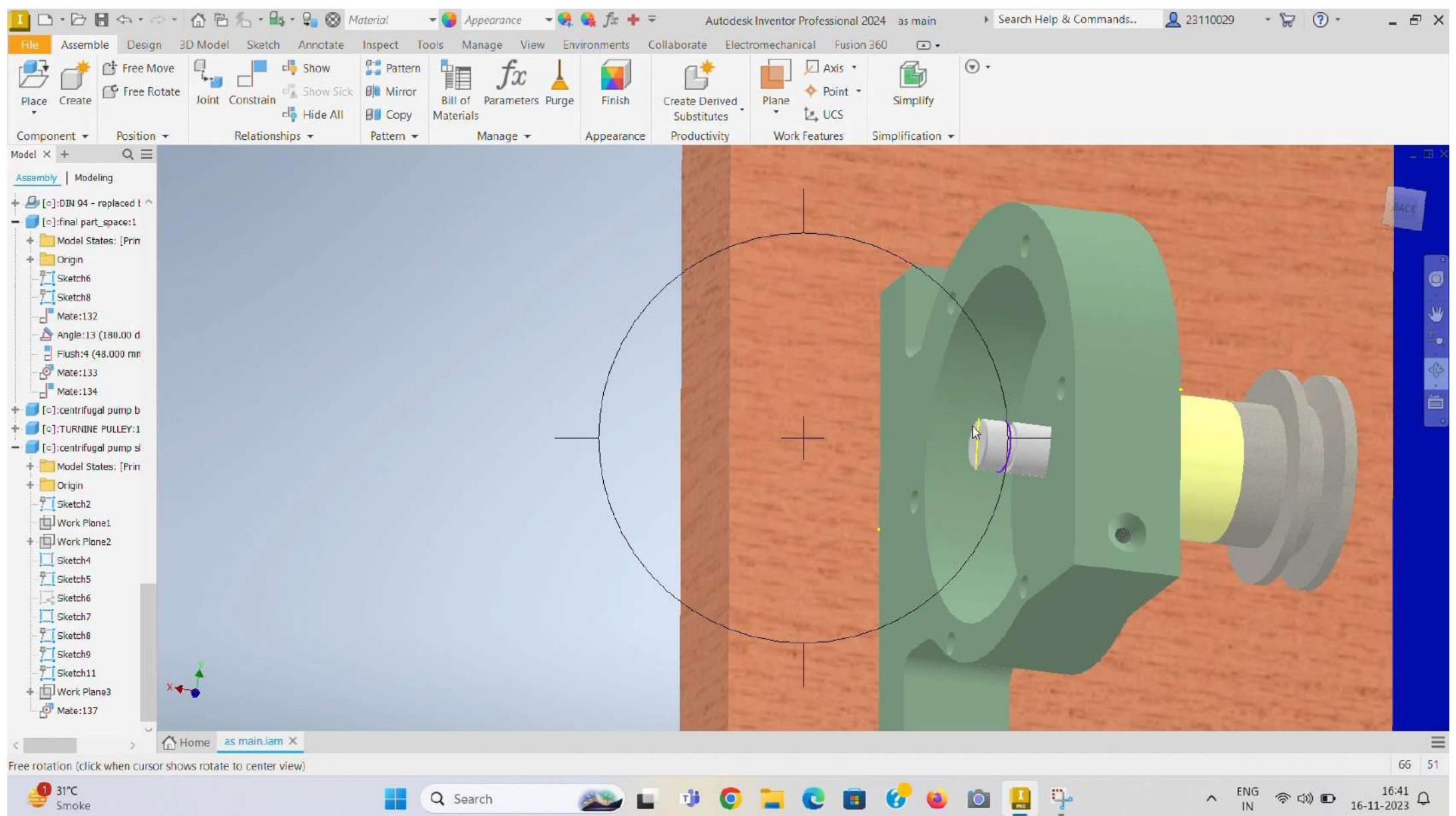


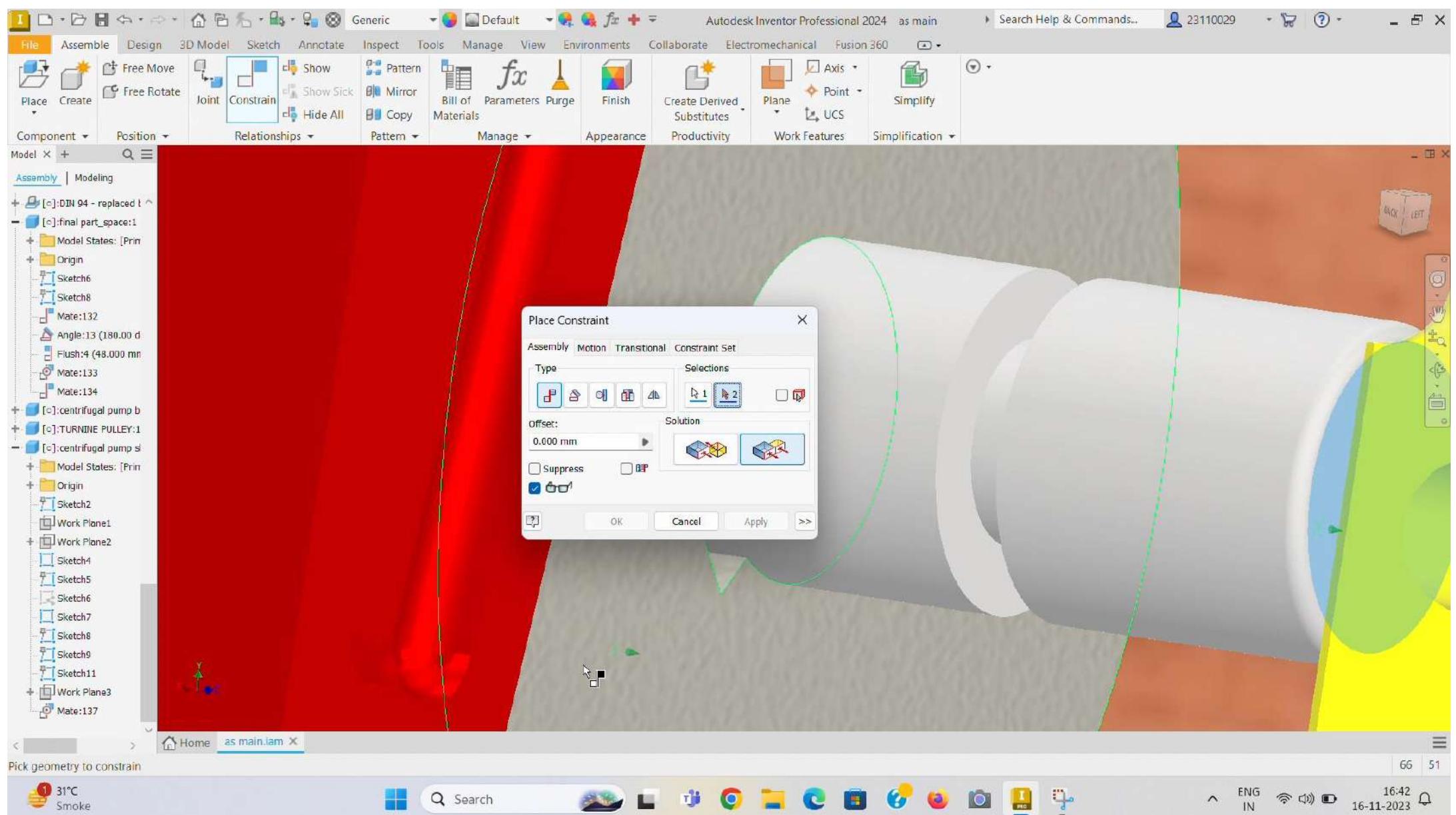


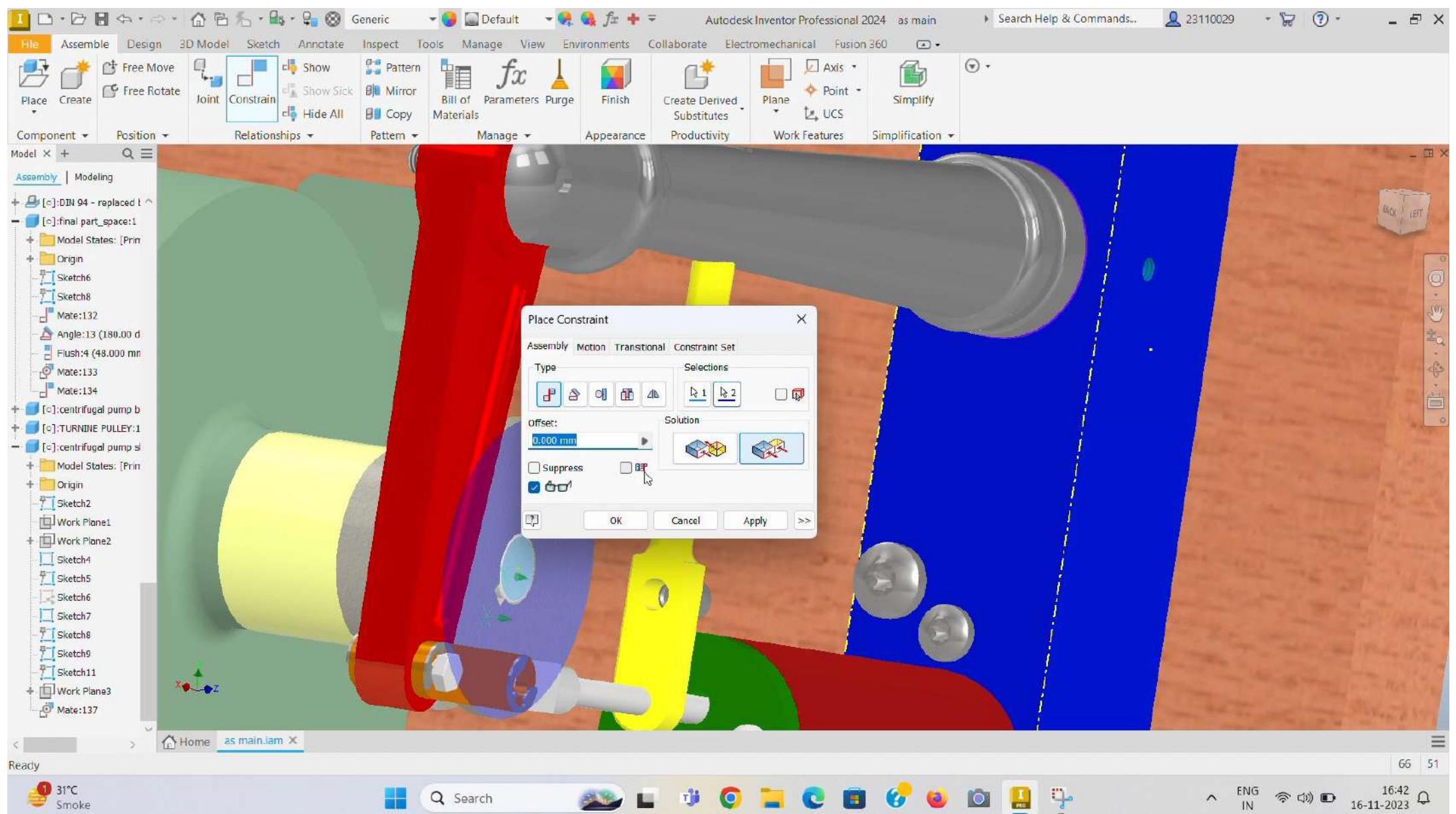


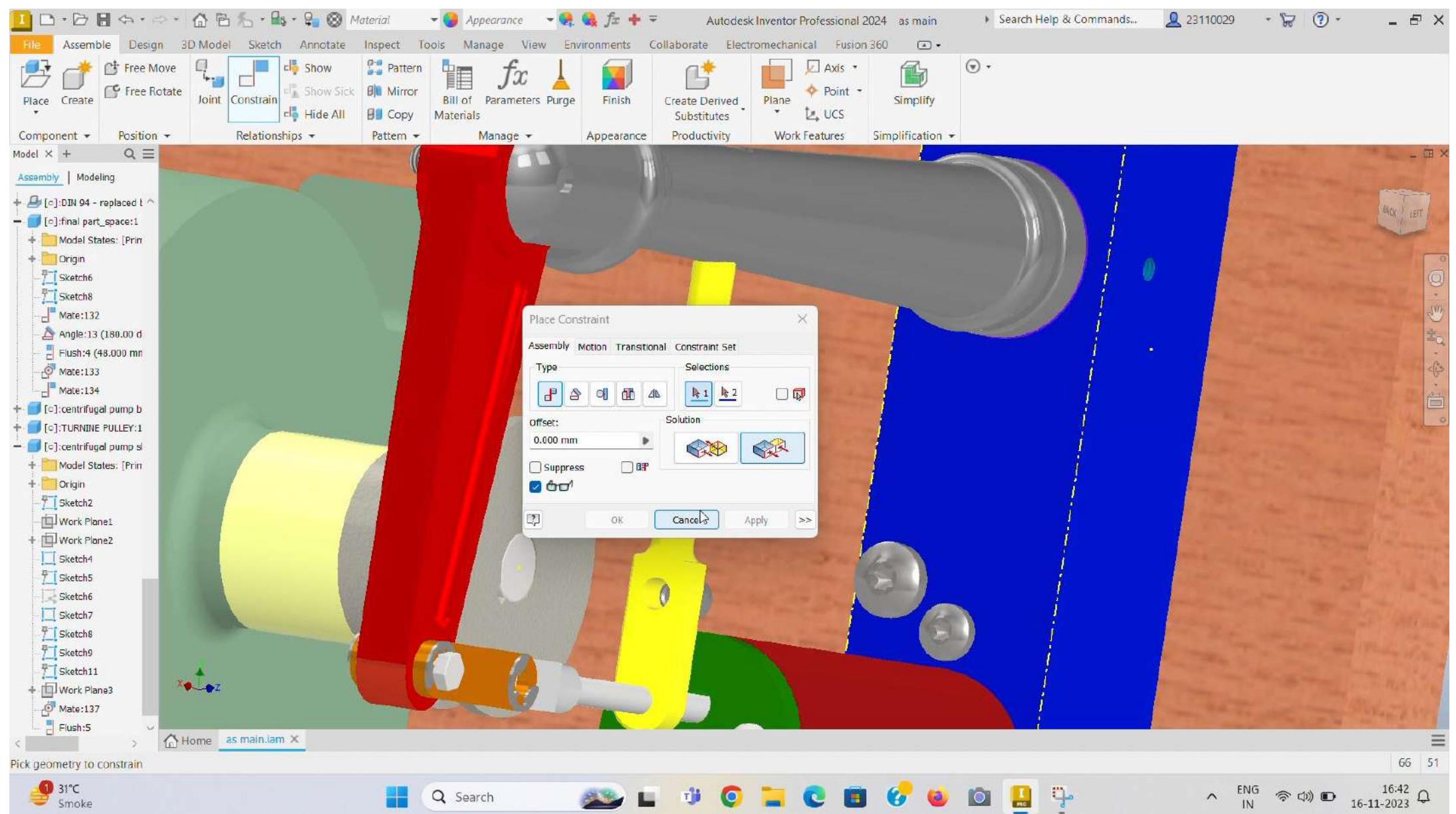


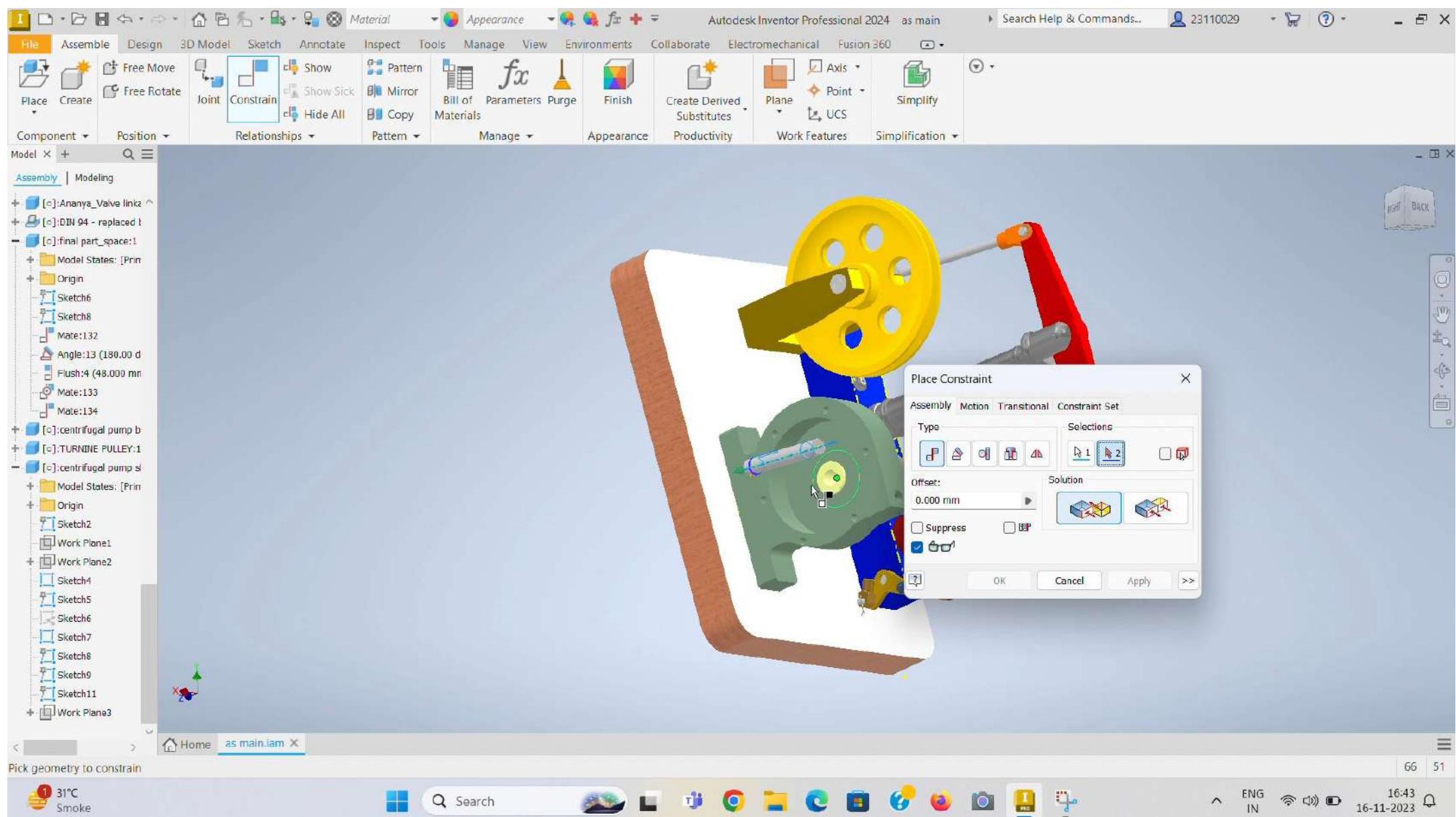


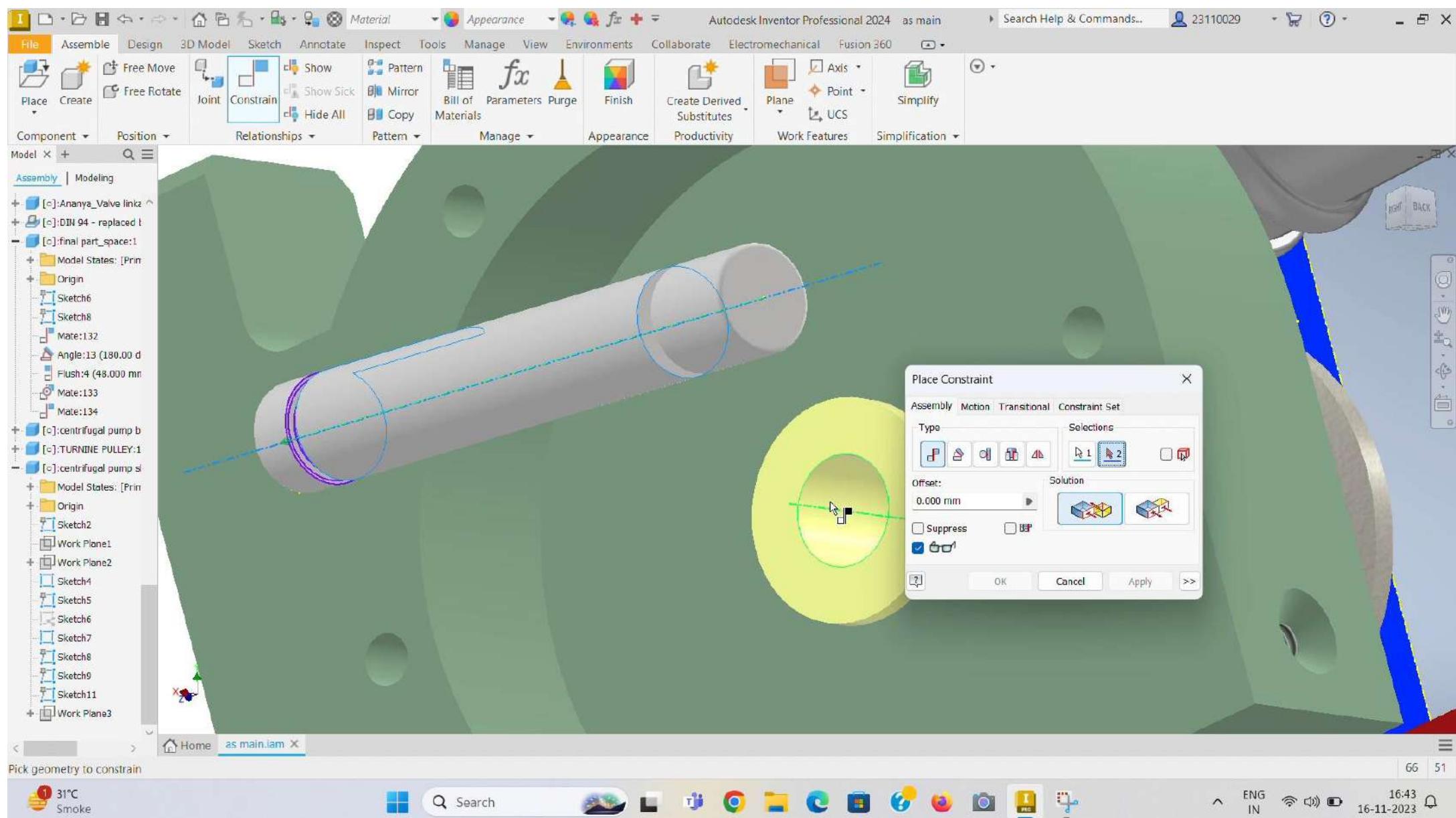


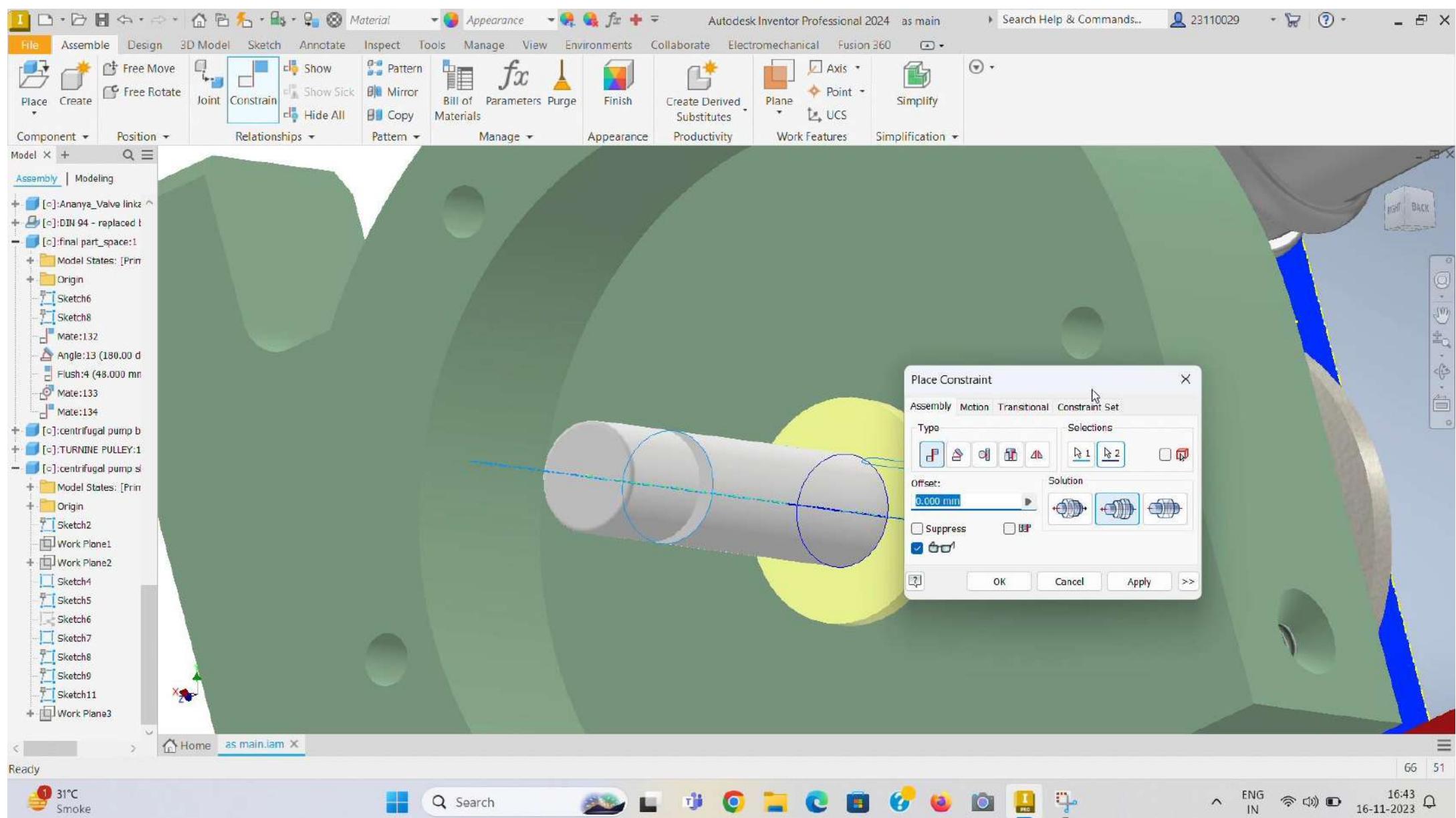


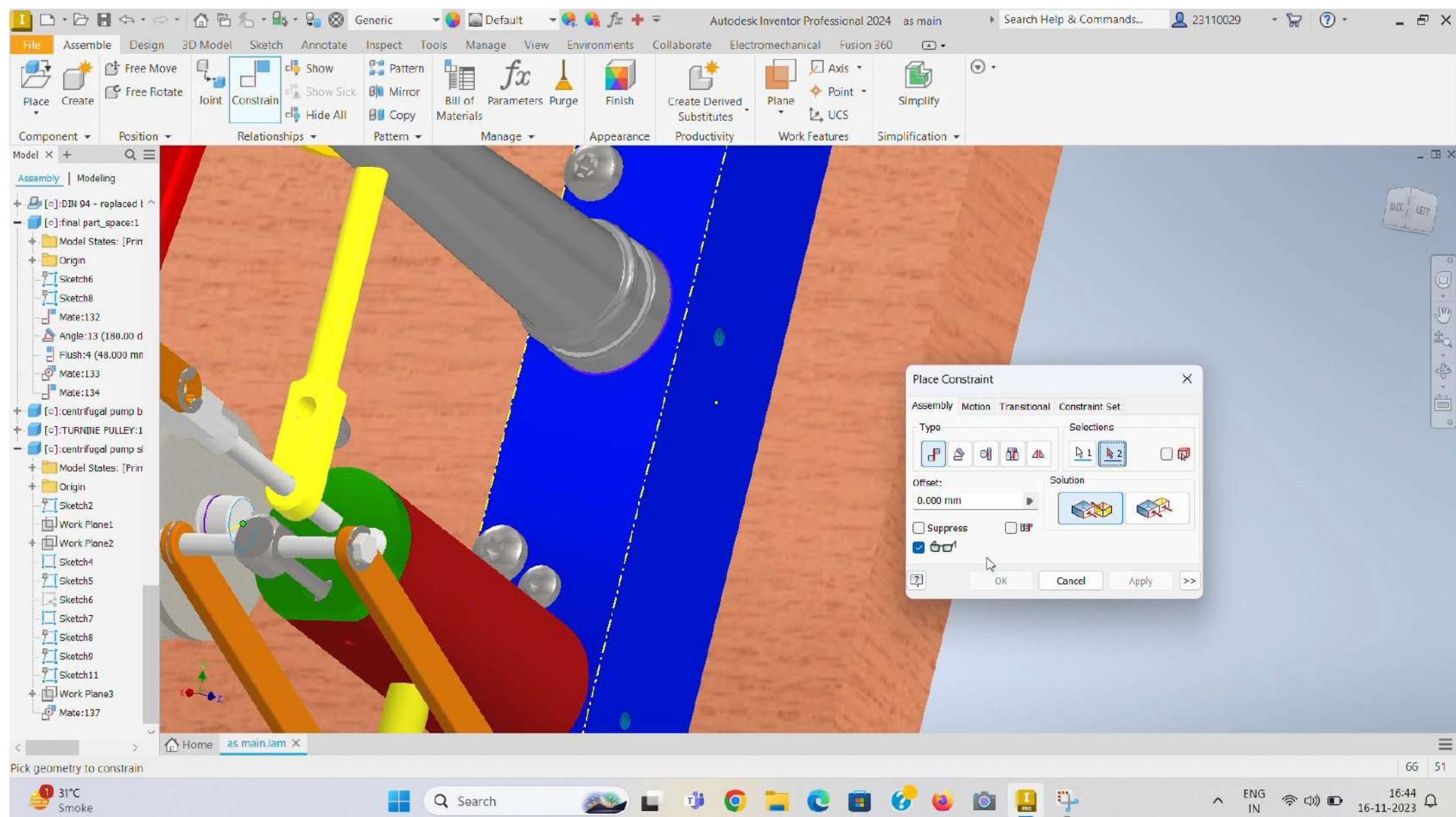


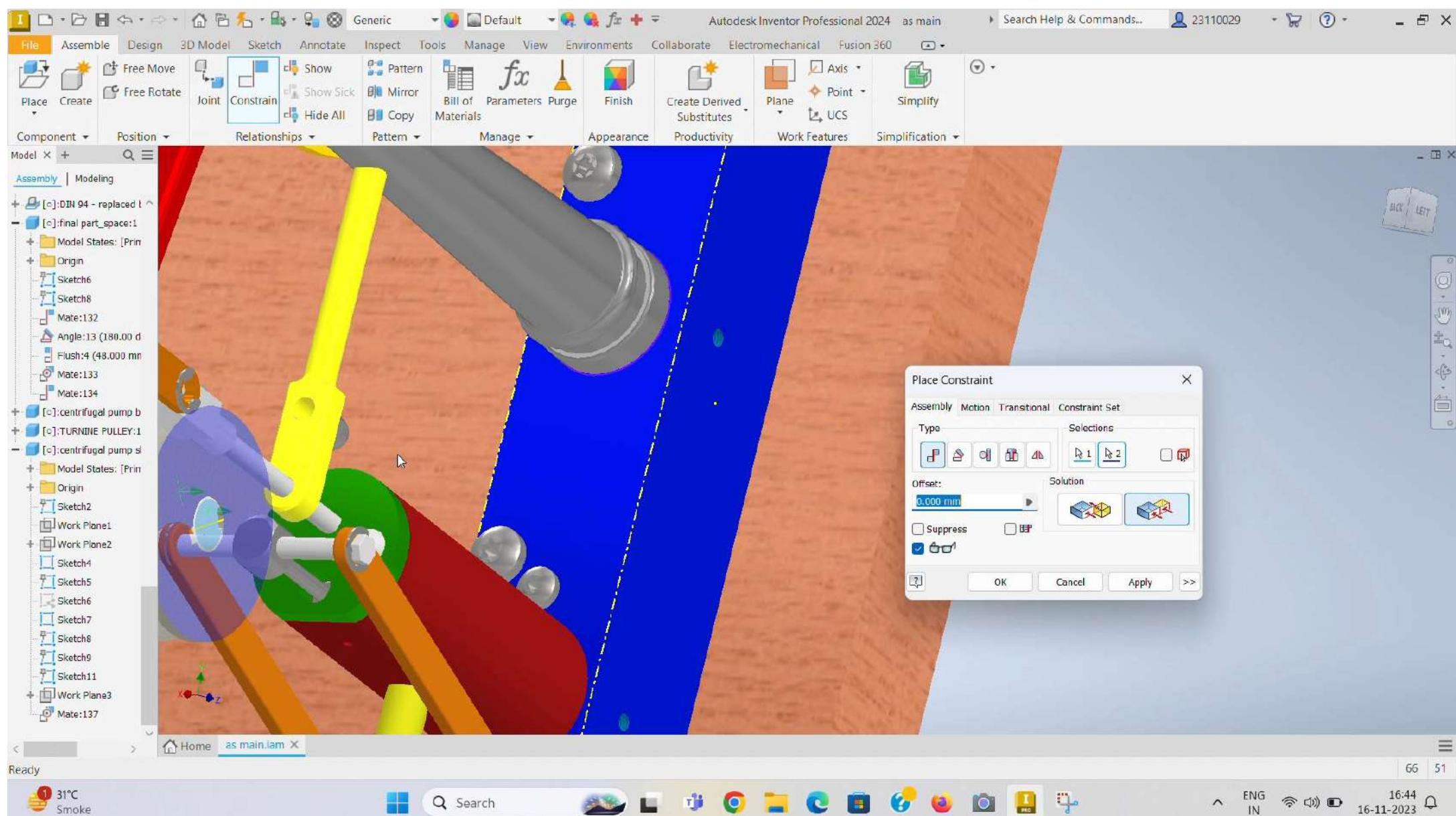


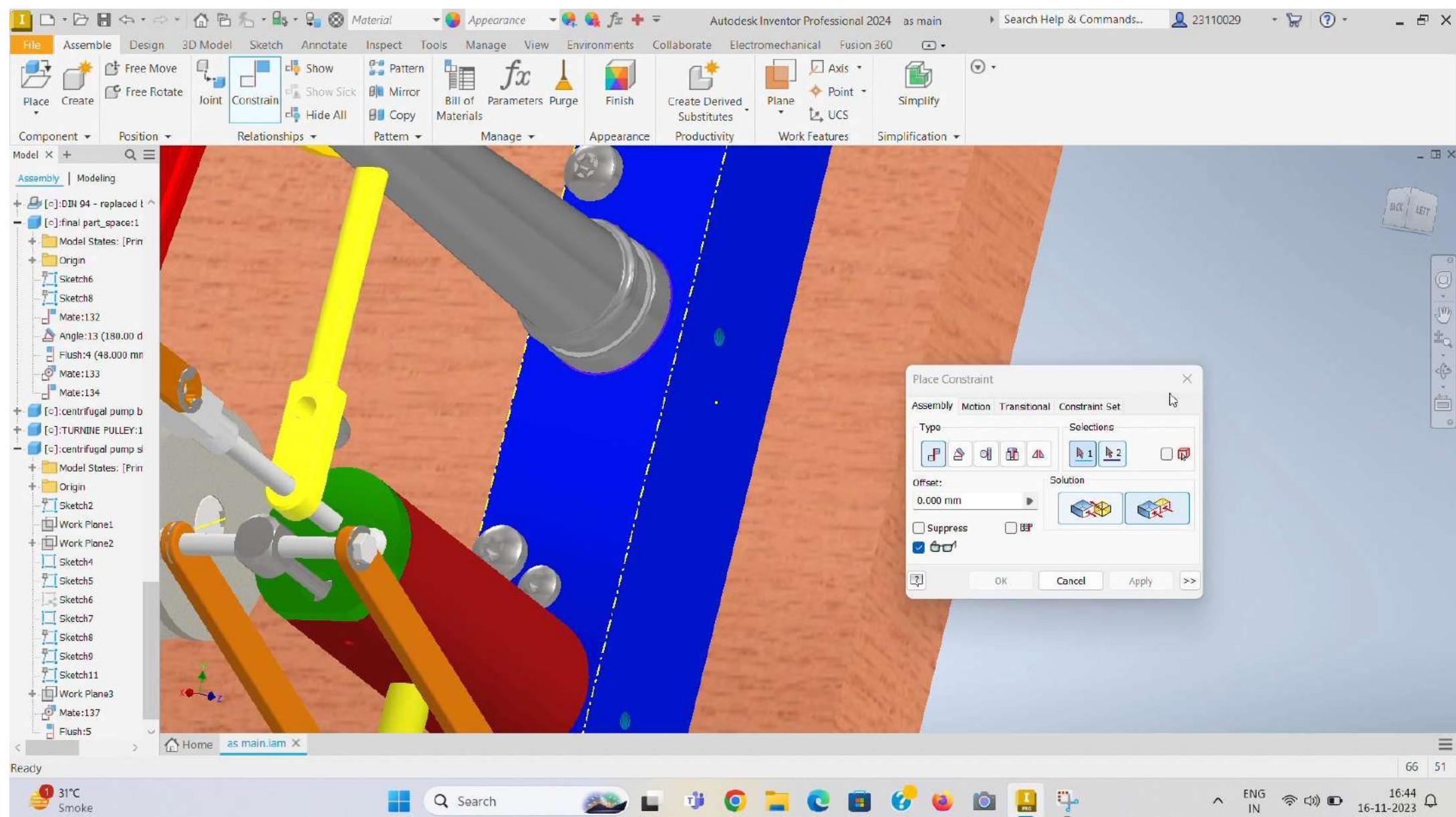


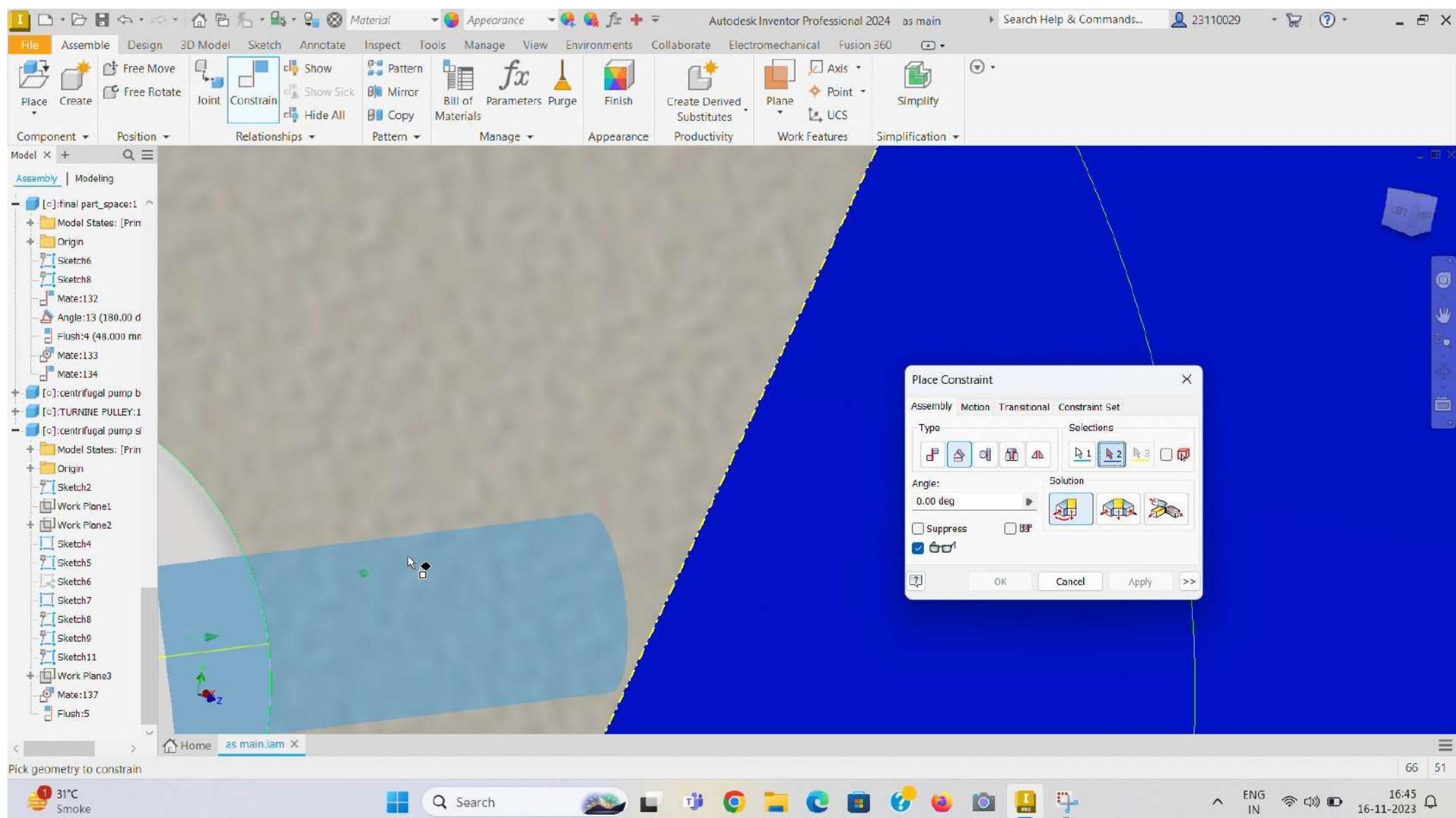


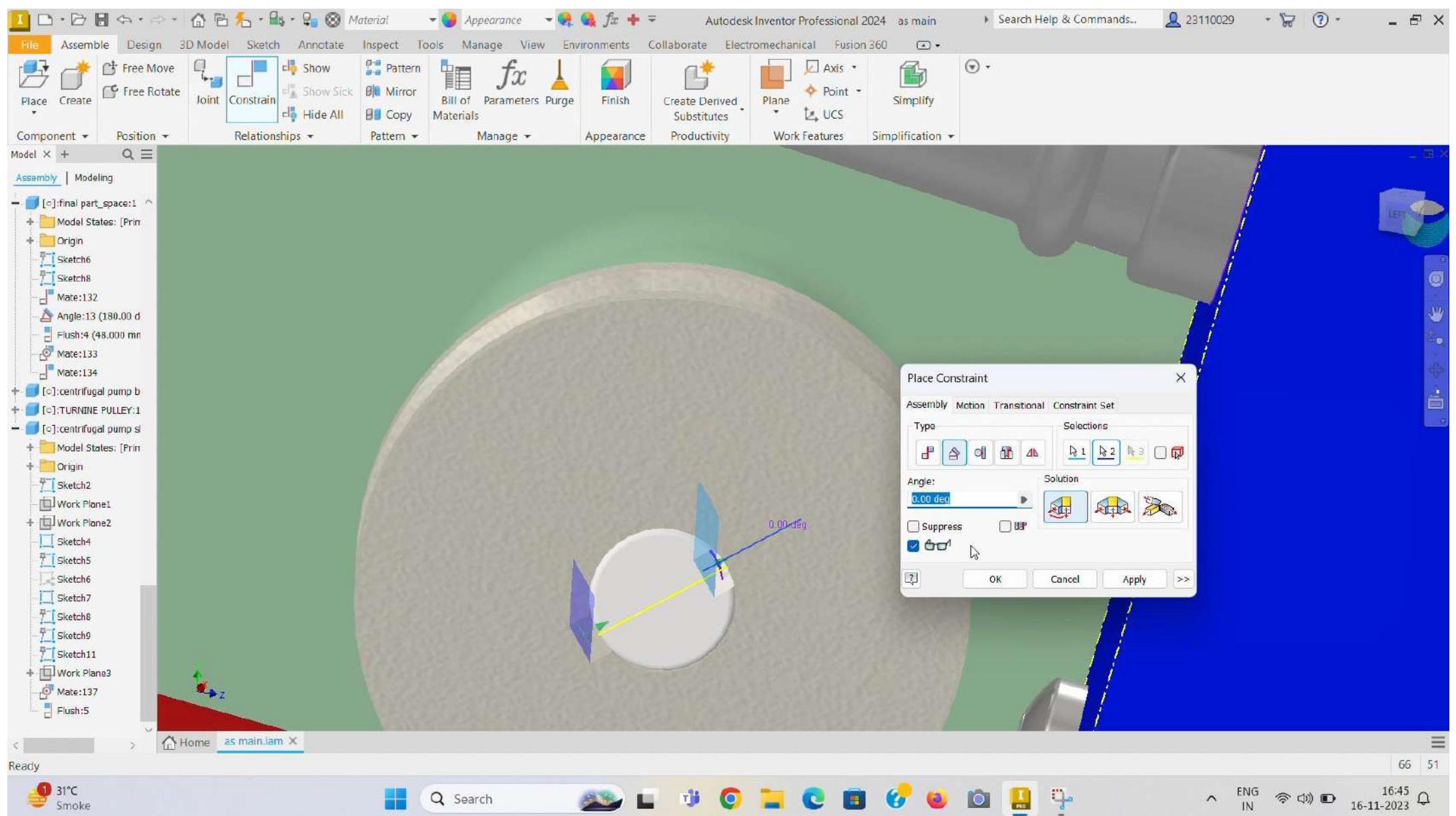


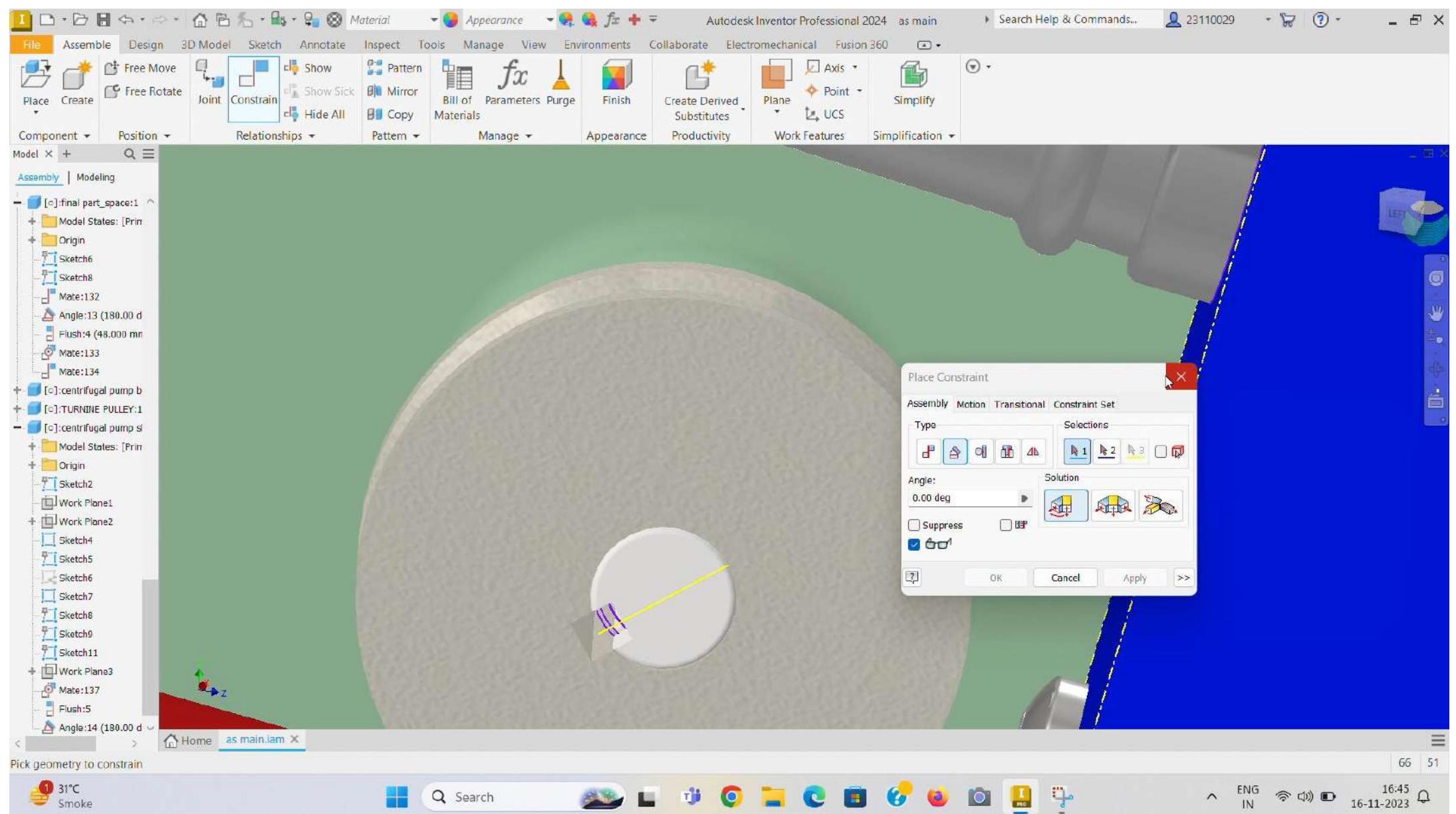


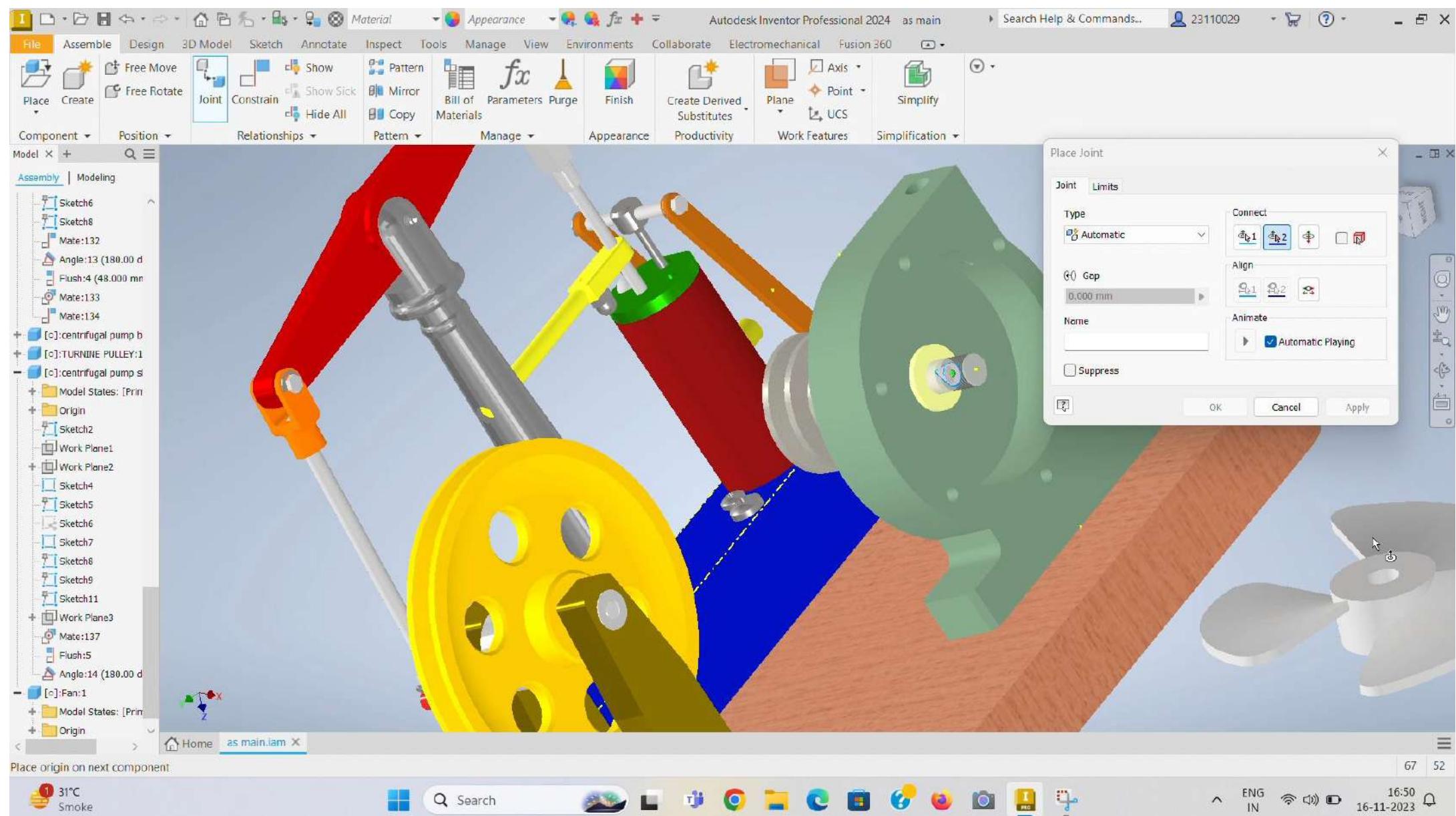


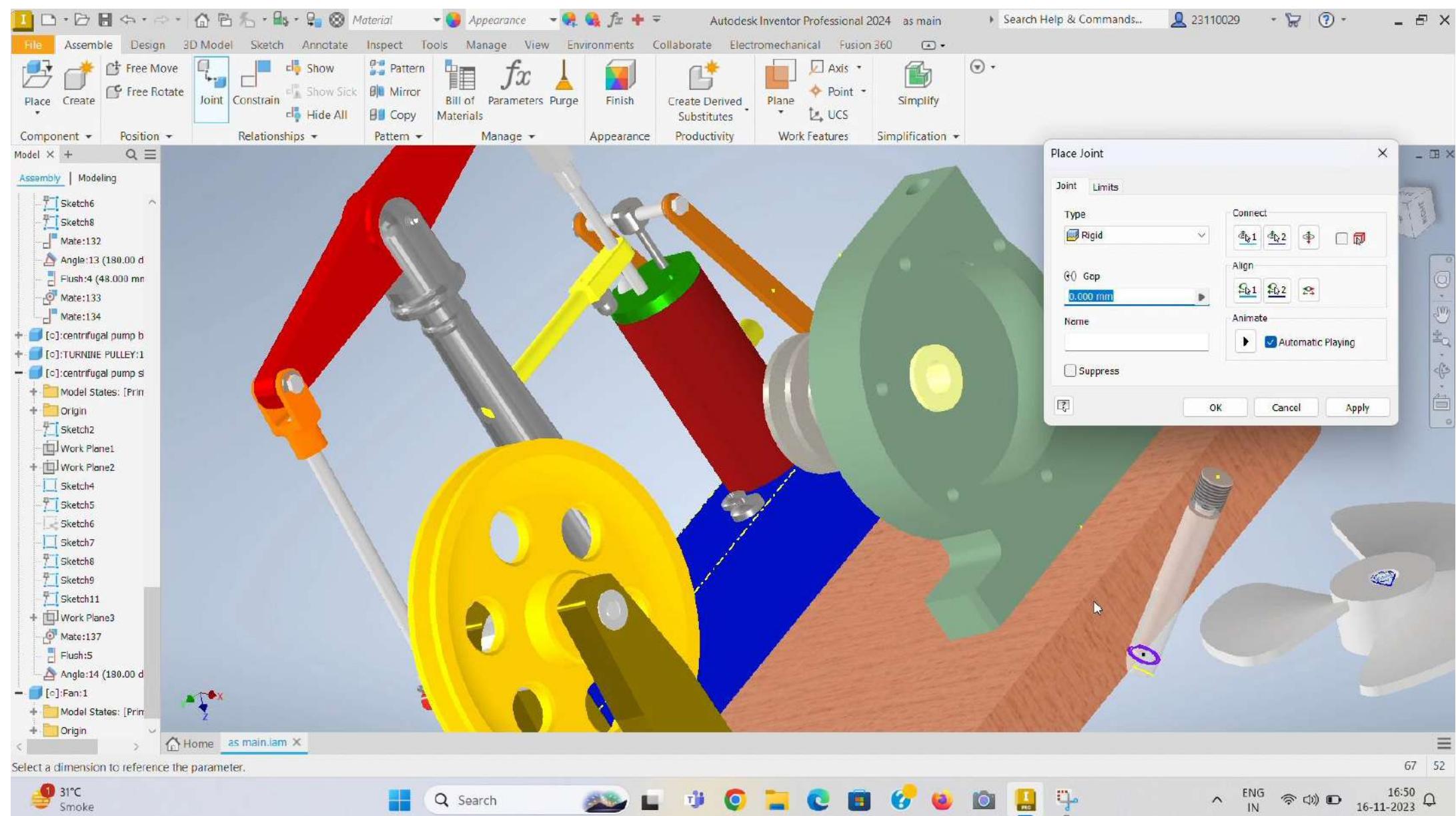


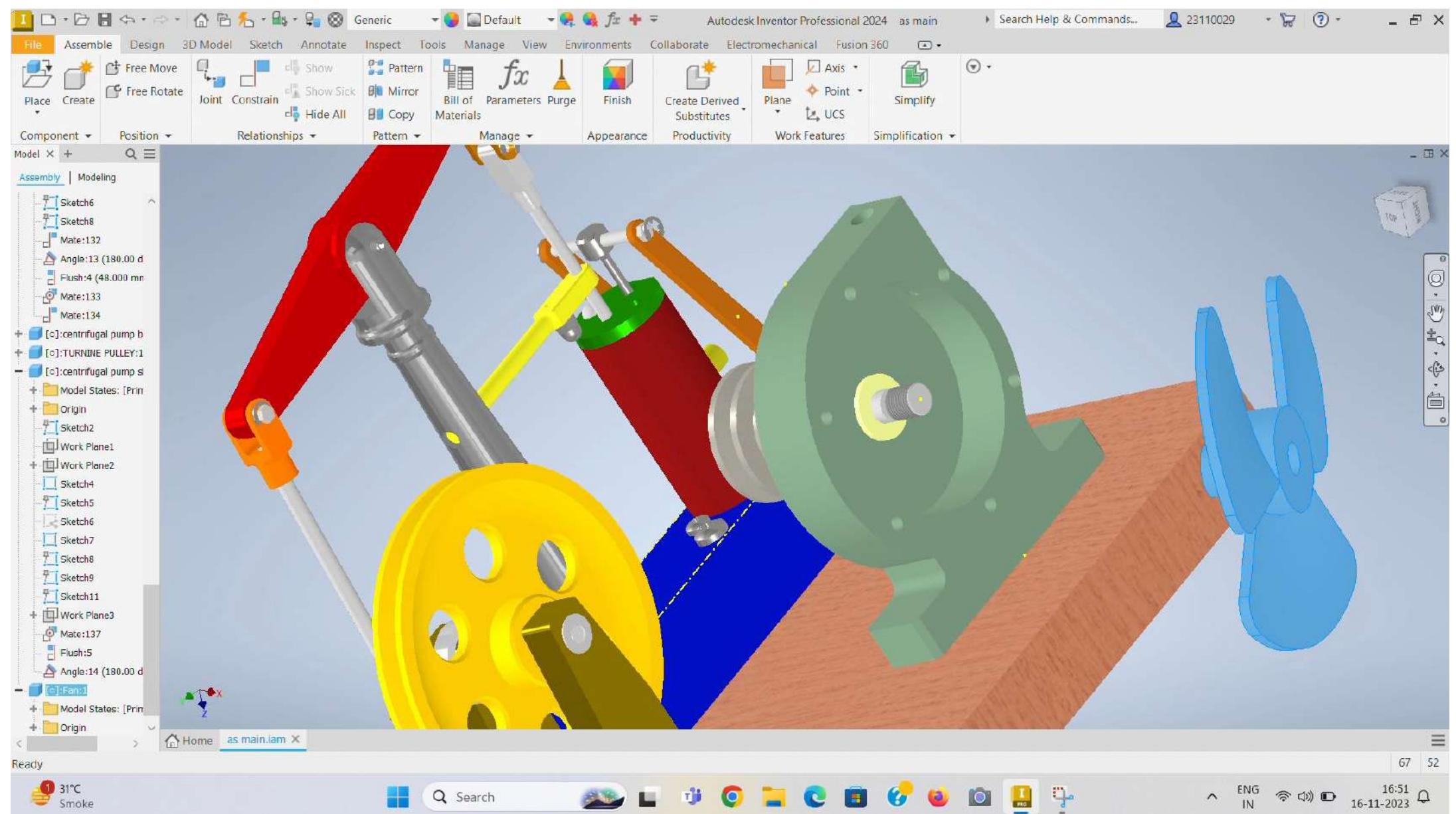


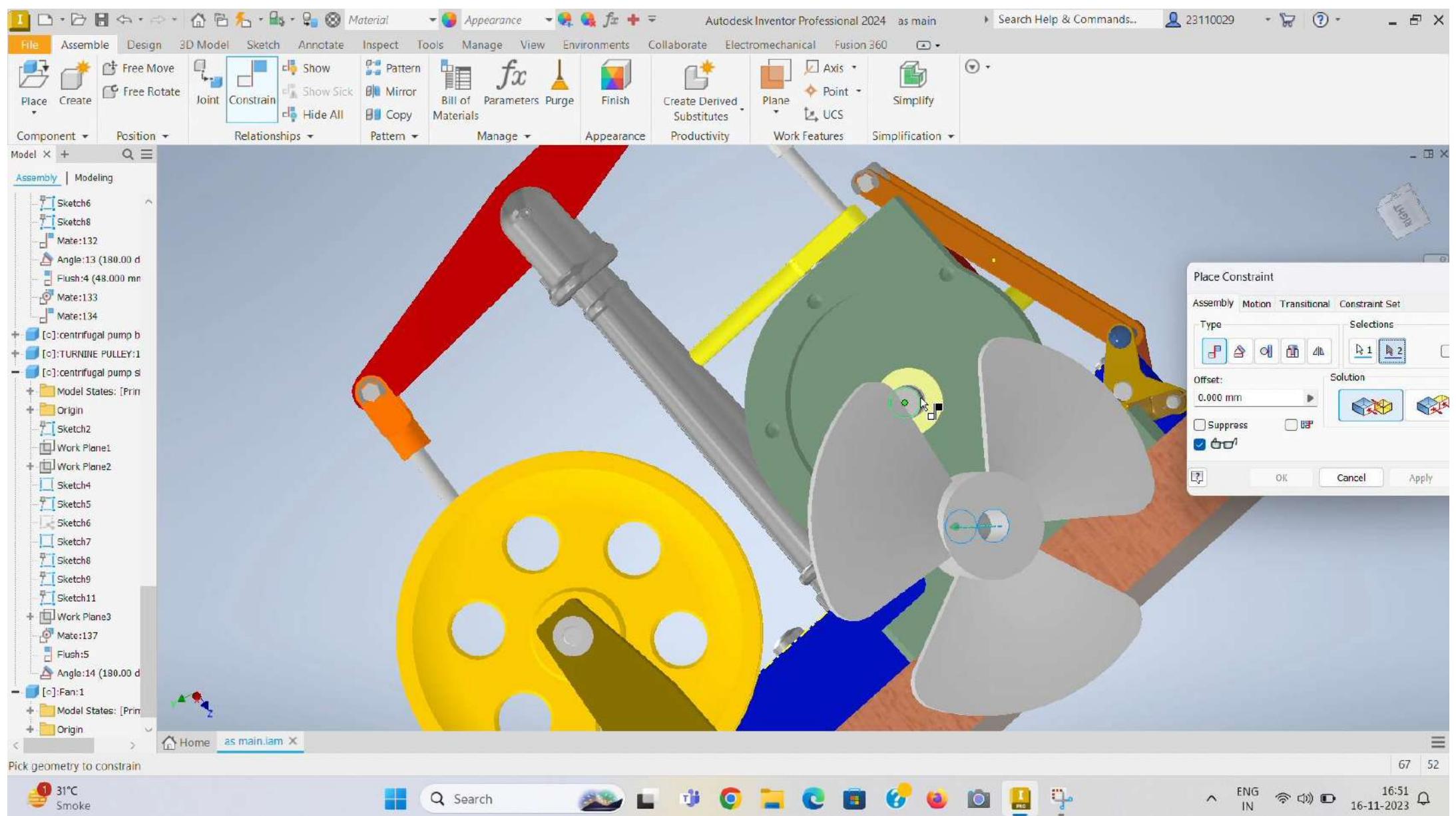












31°C
Smoke



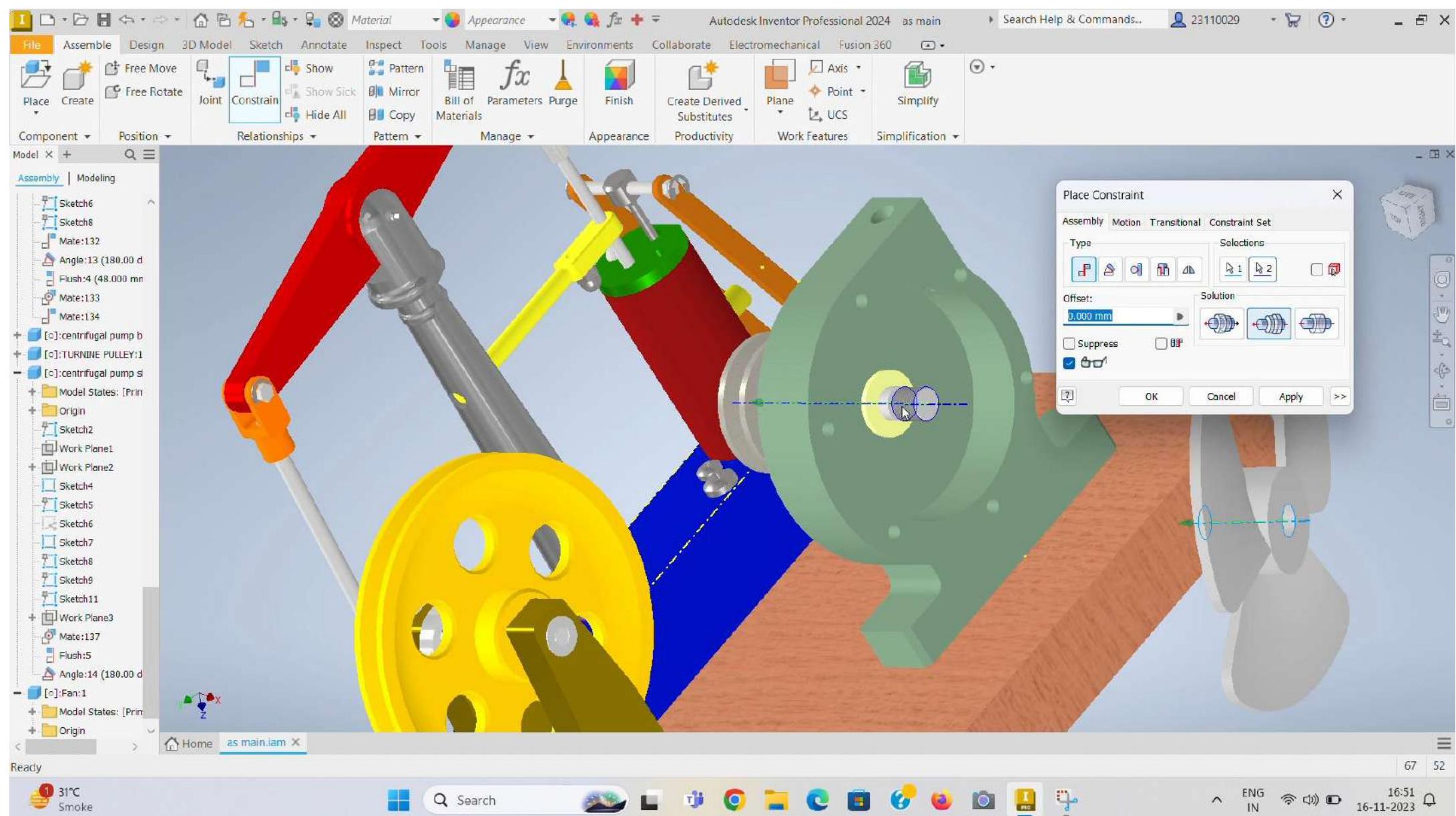
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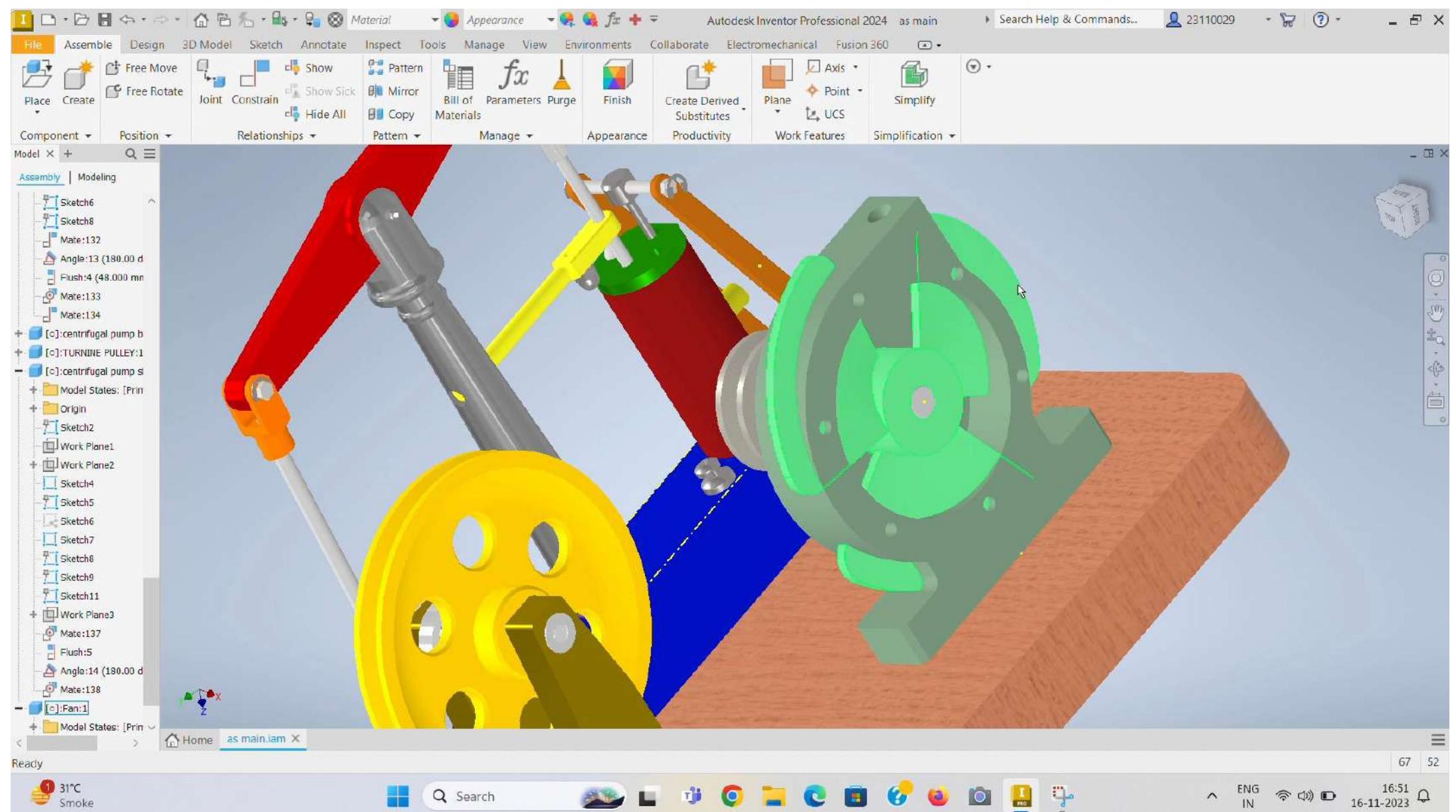


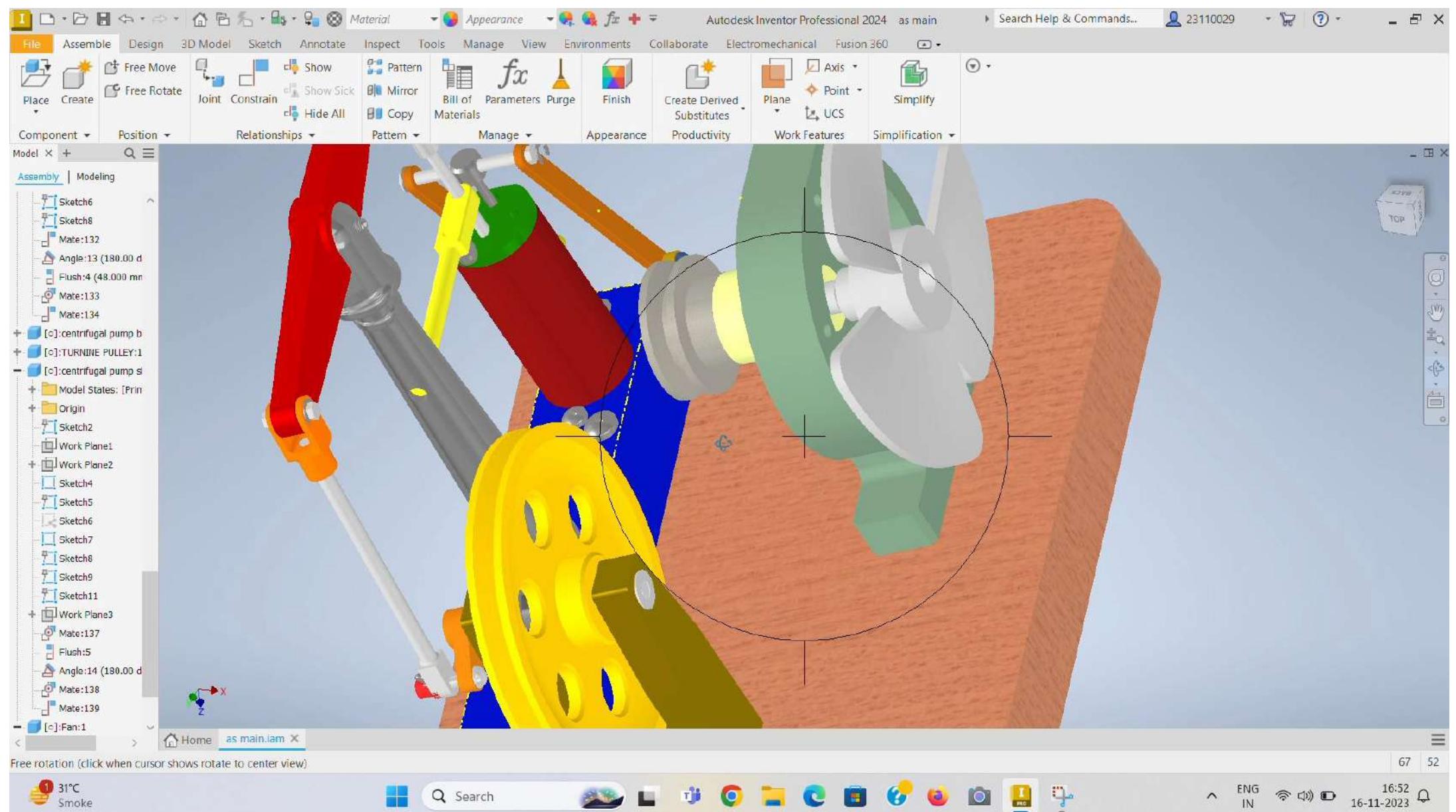
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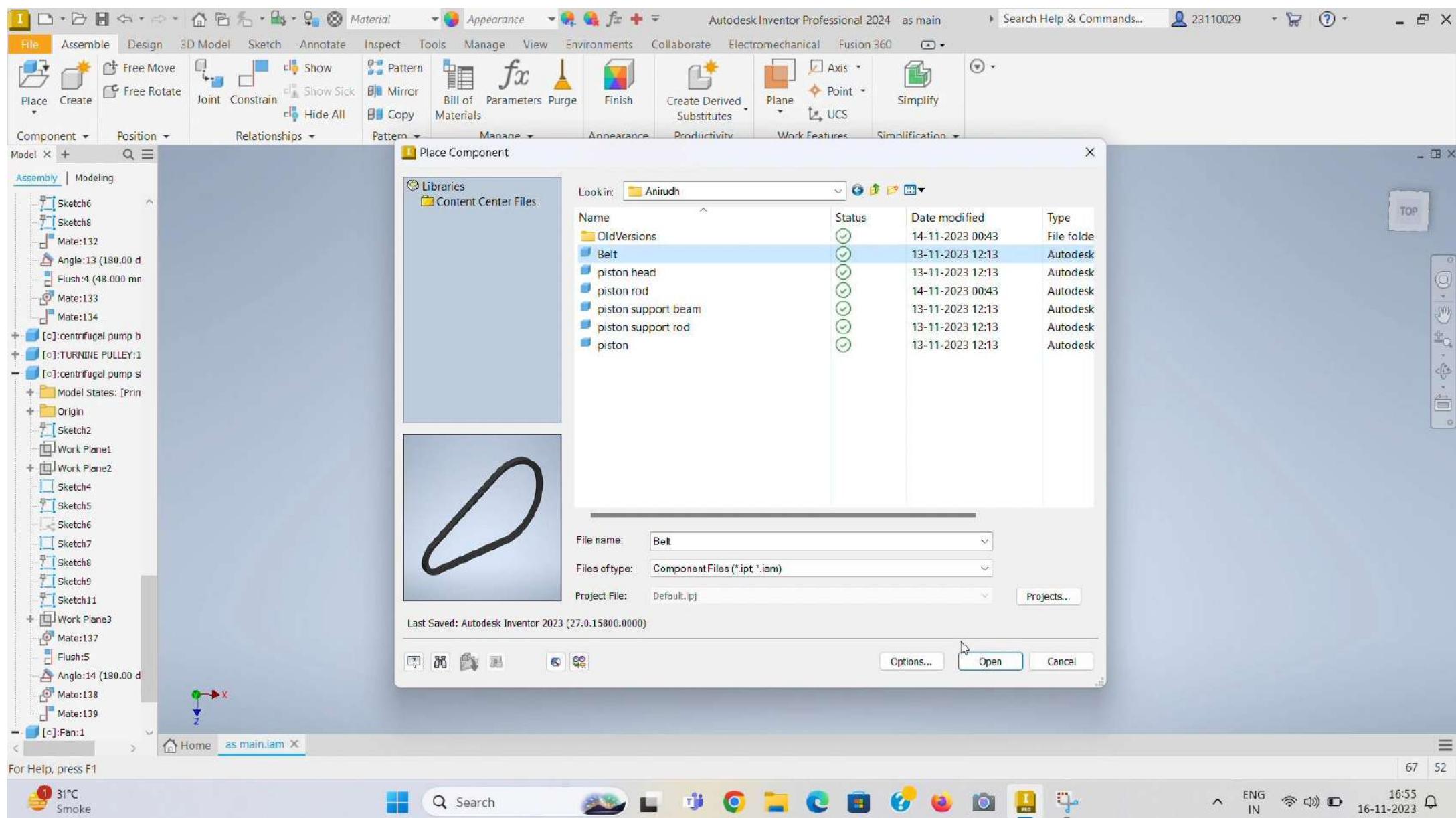


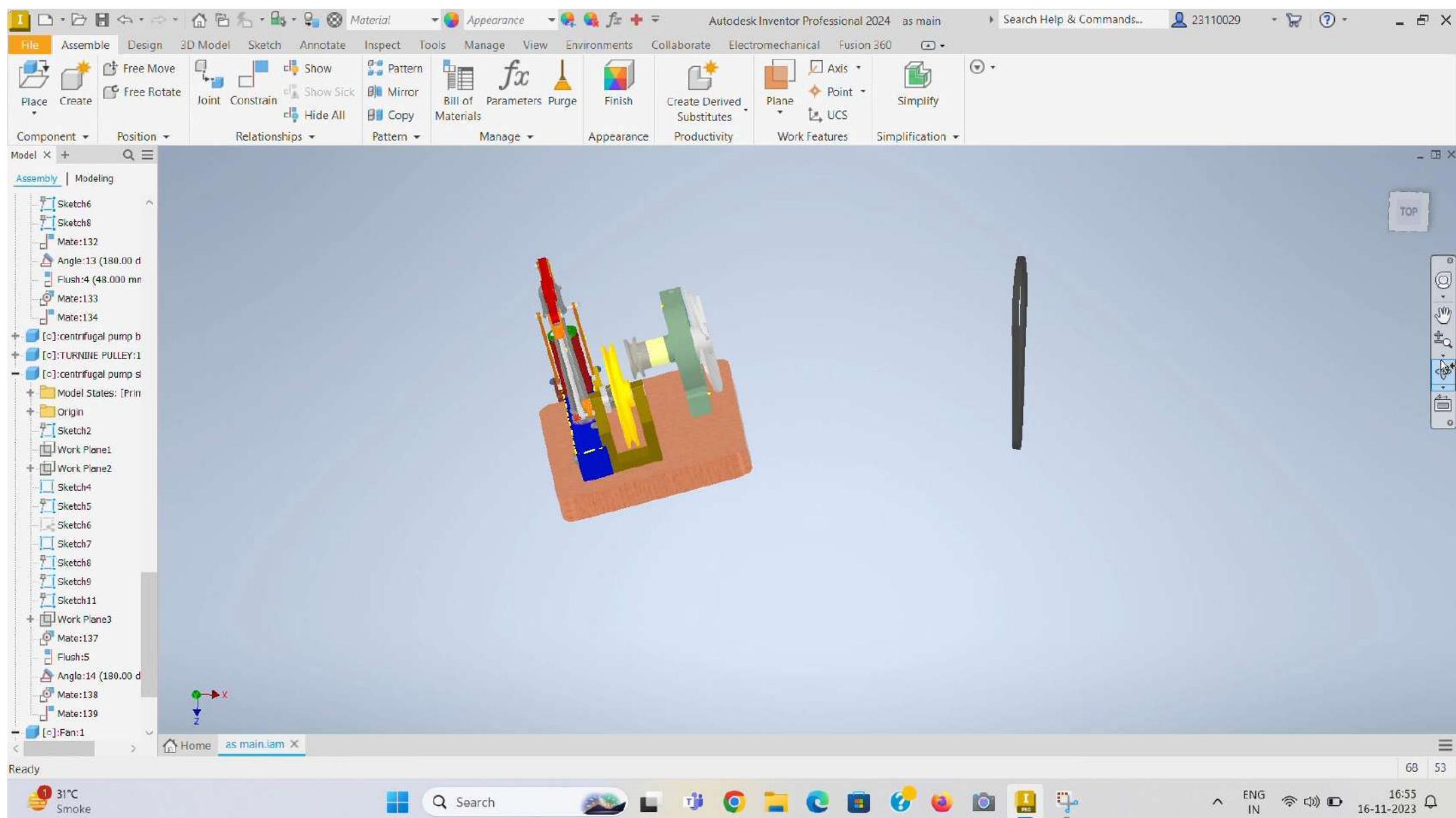
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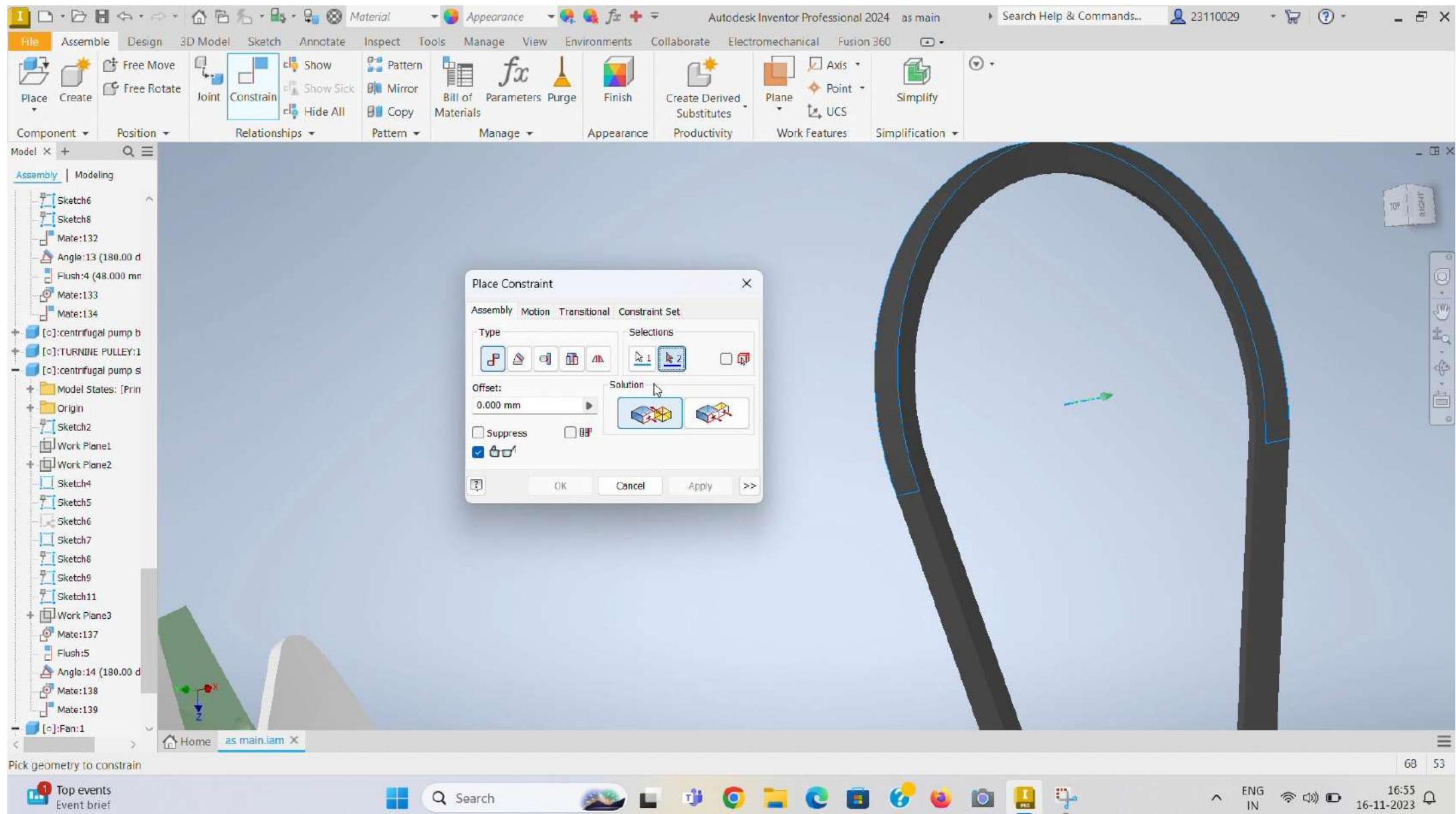


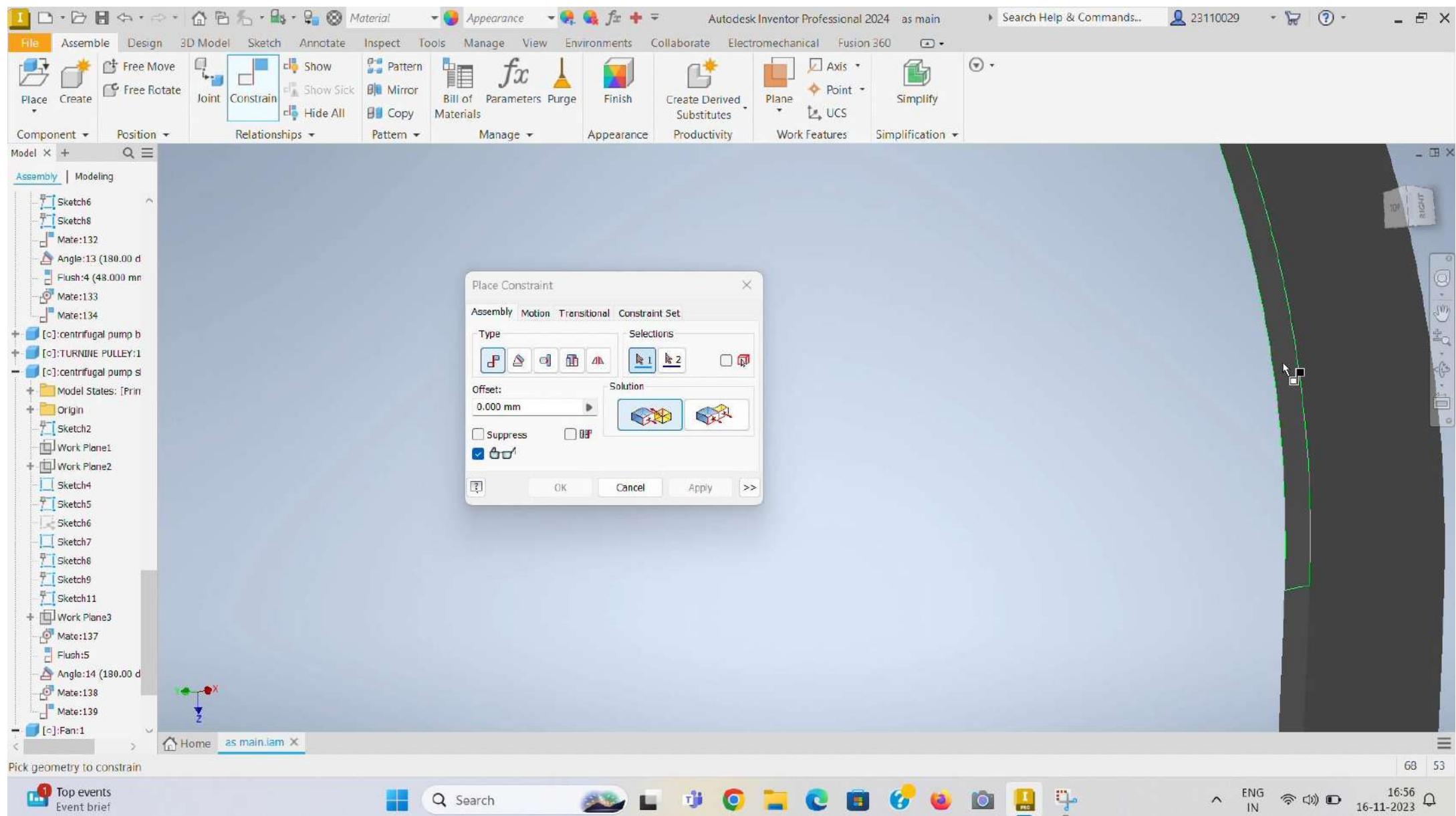


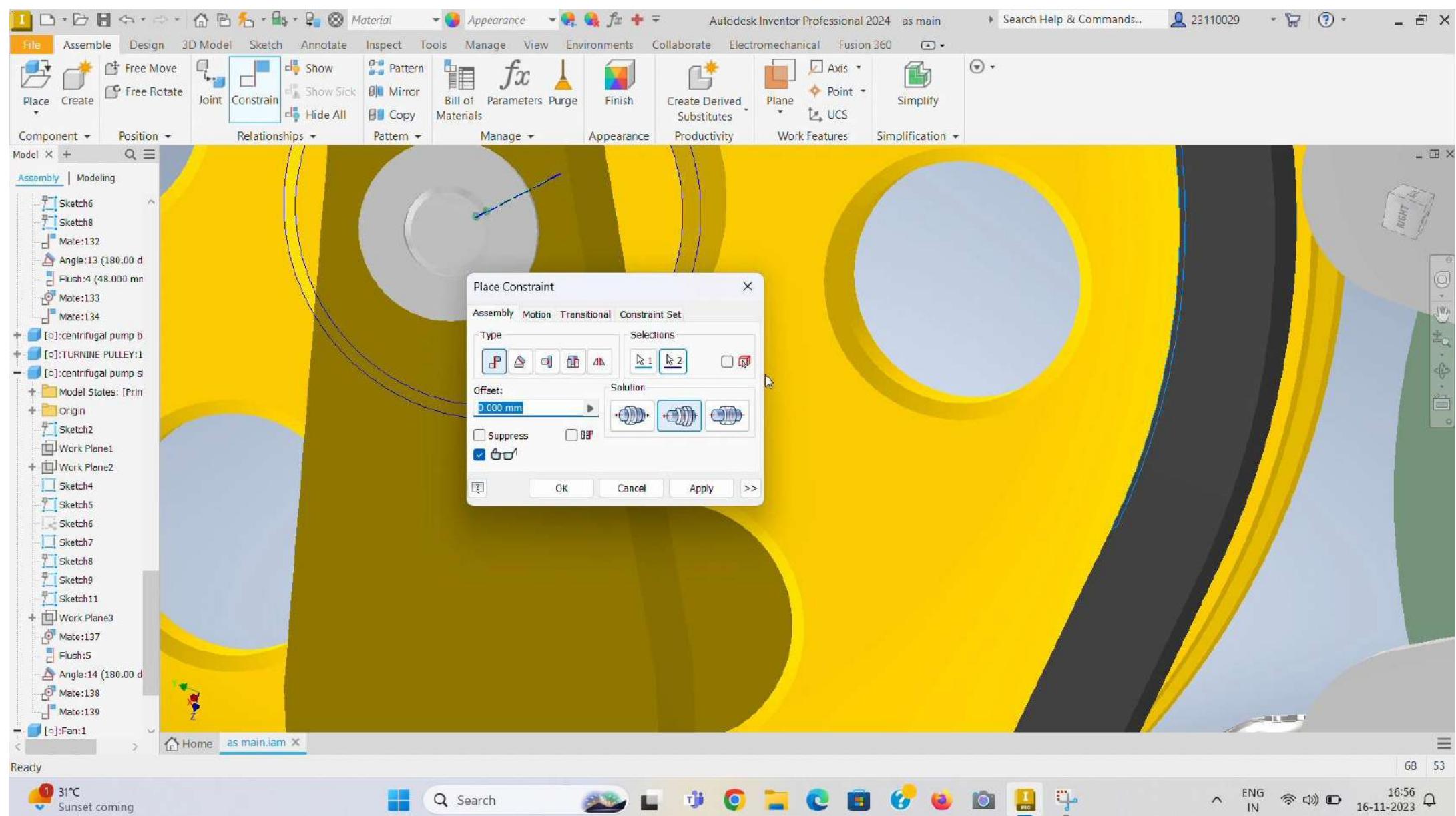


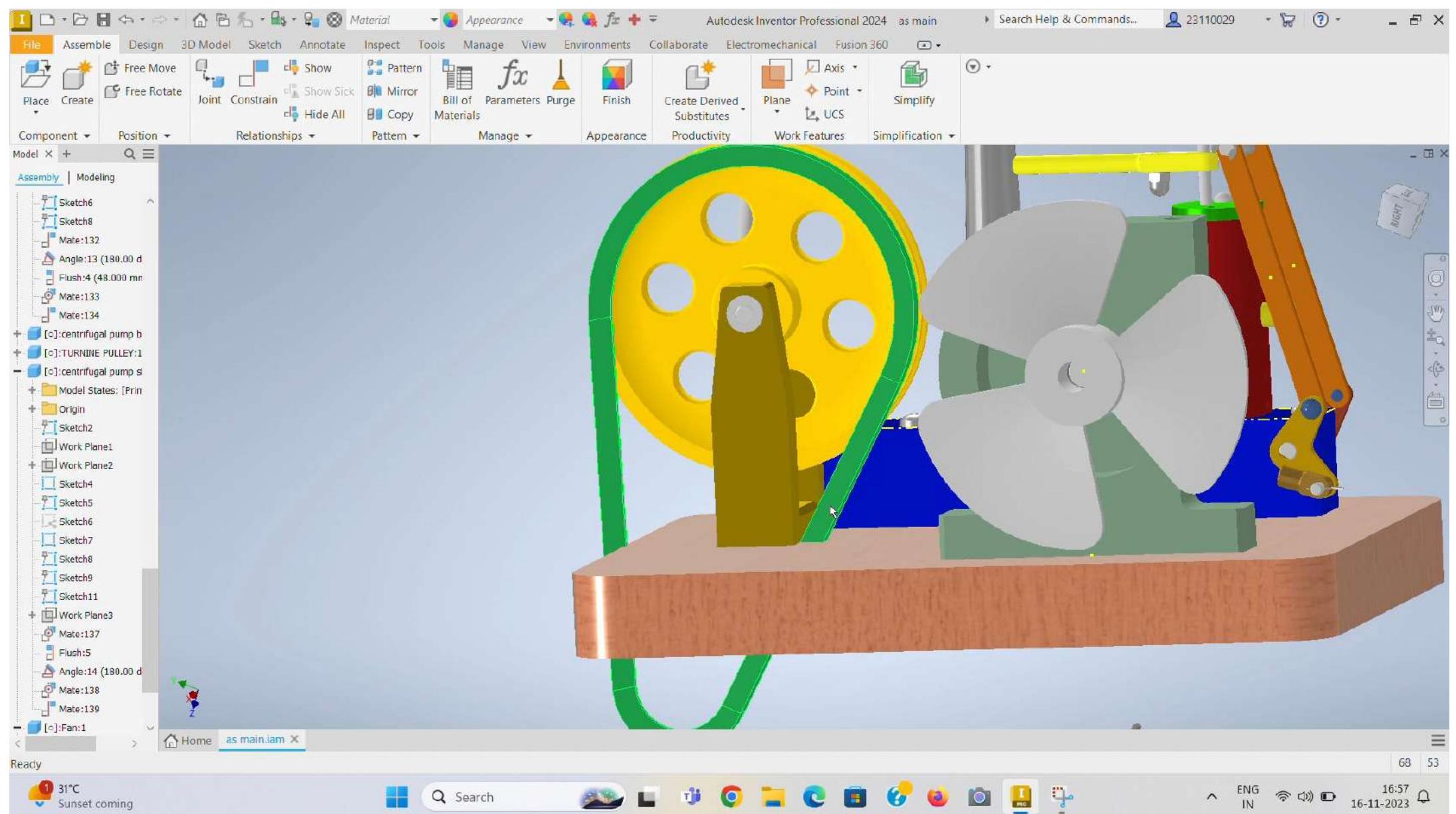


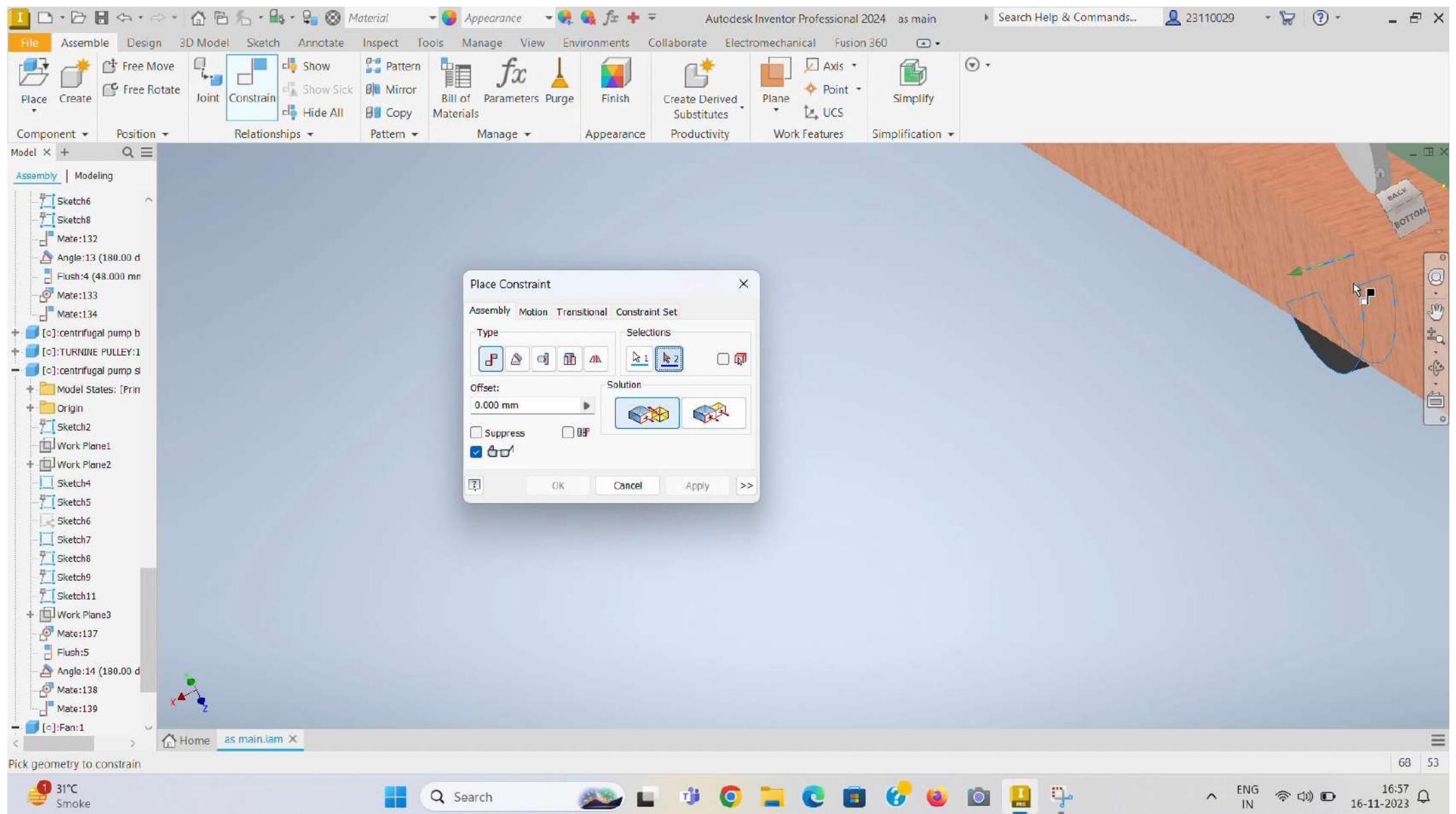


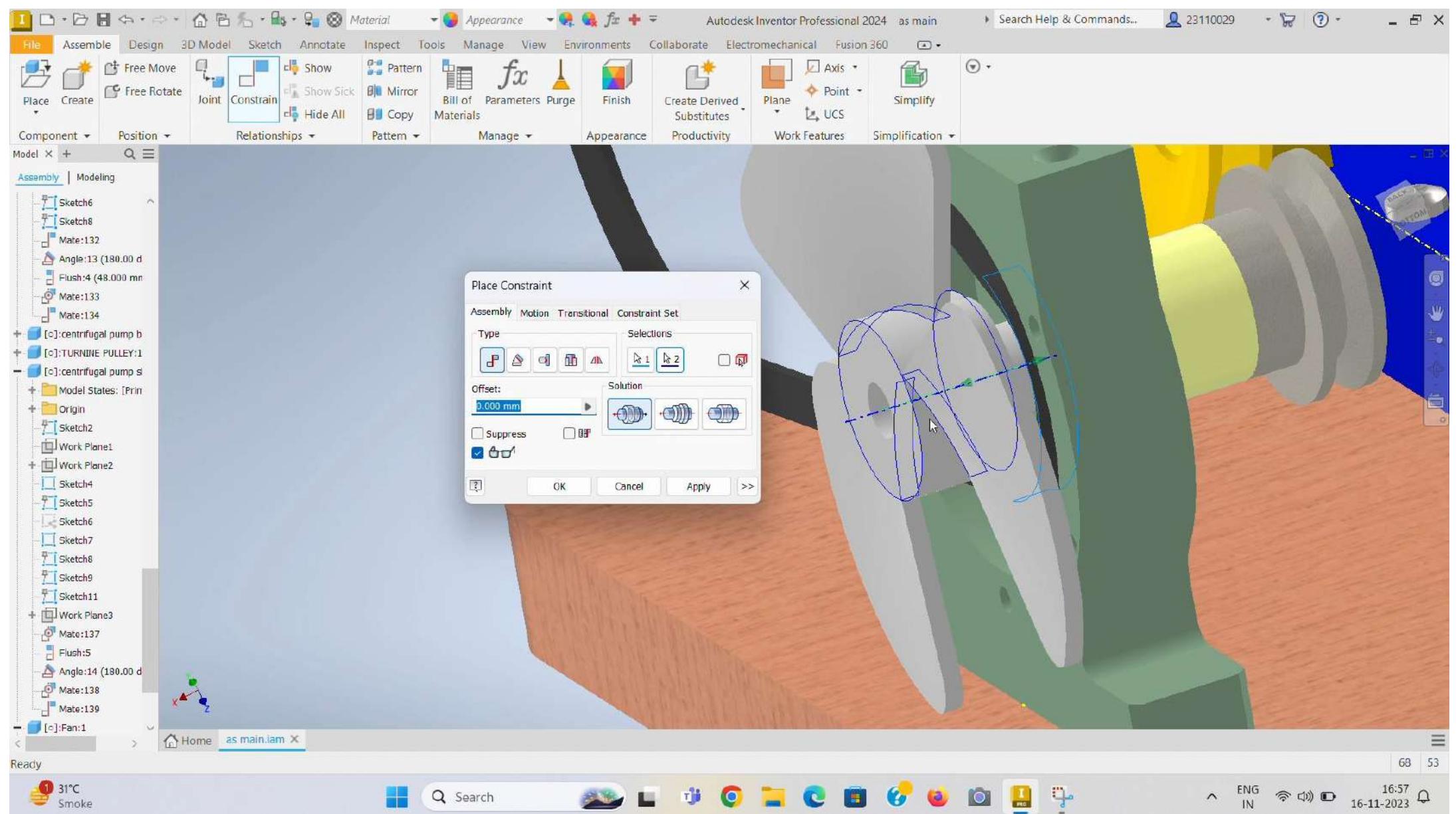


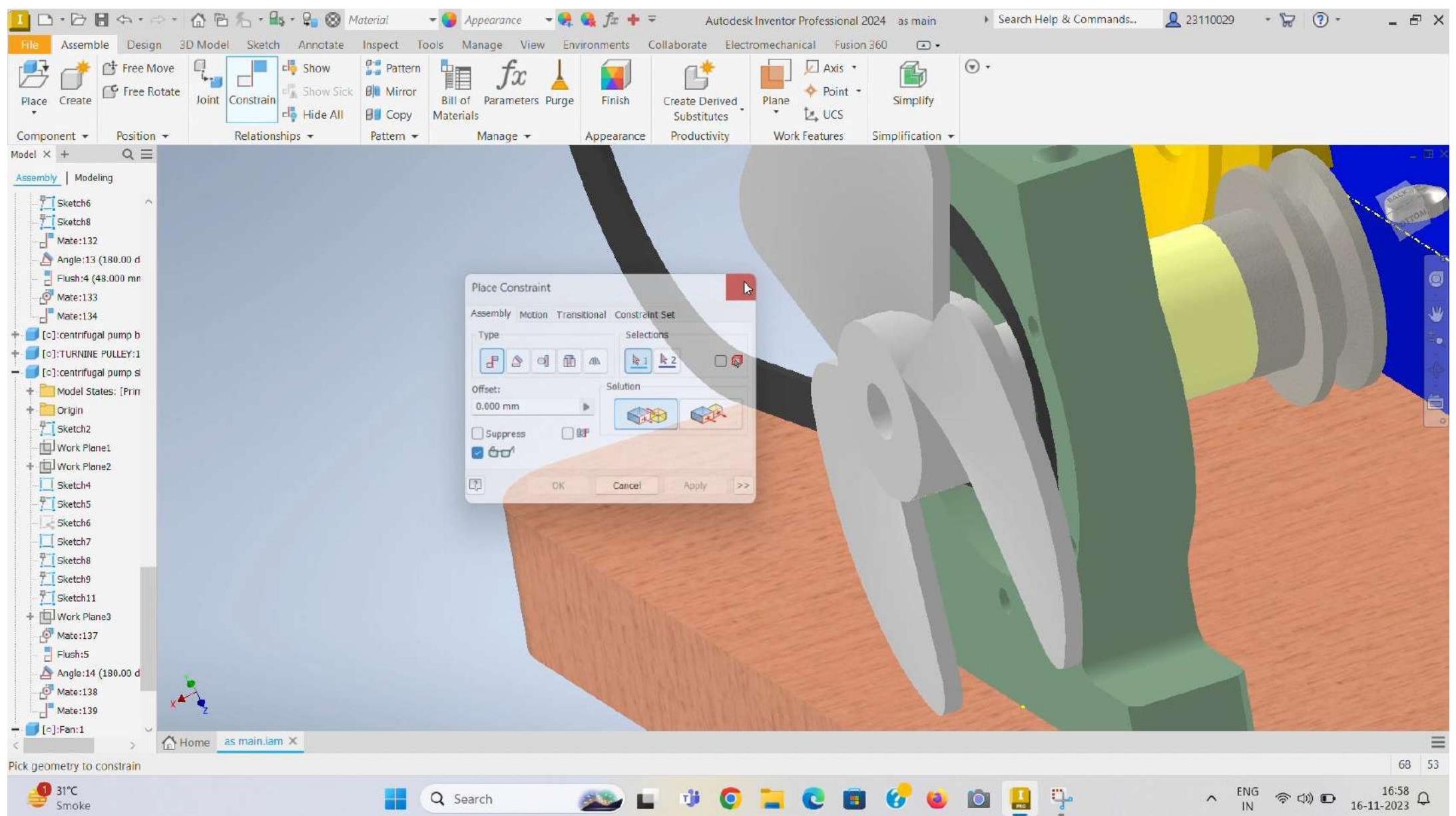




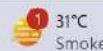








Pick geometry to constrain



Search

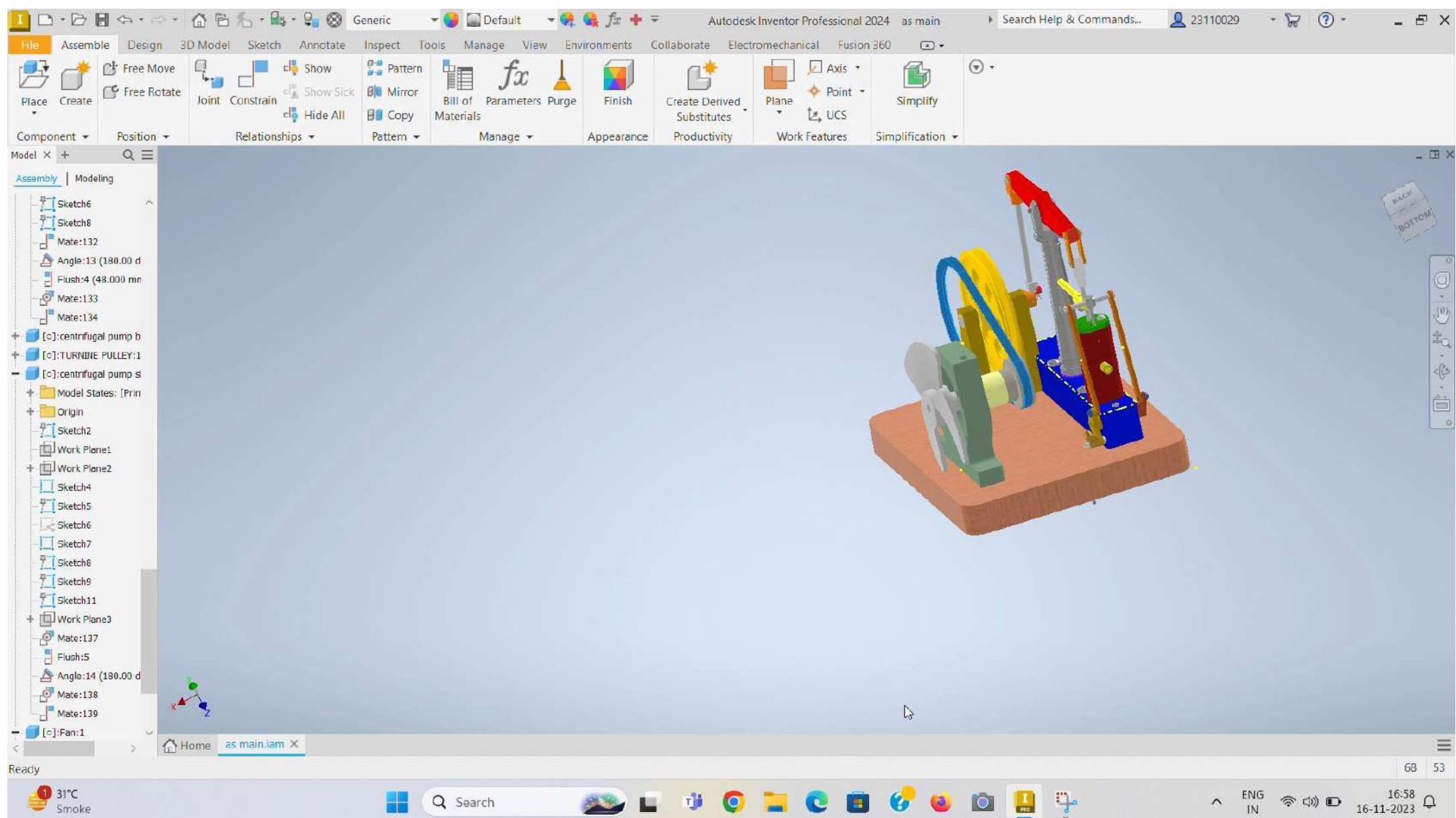


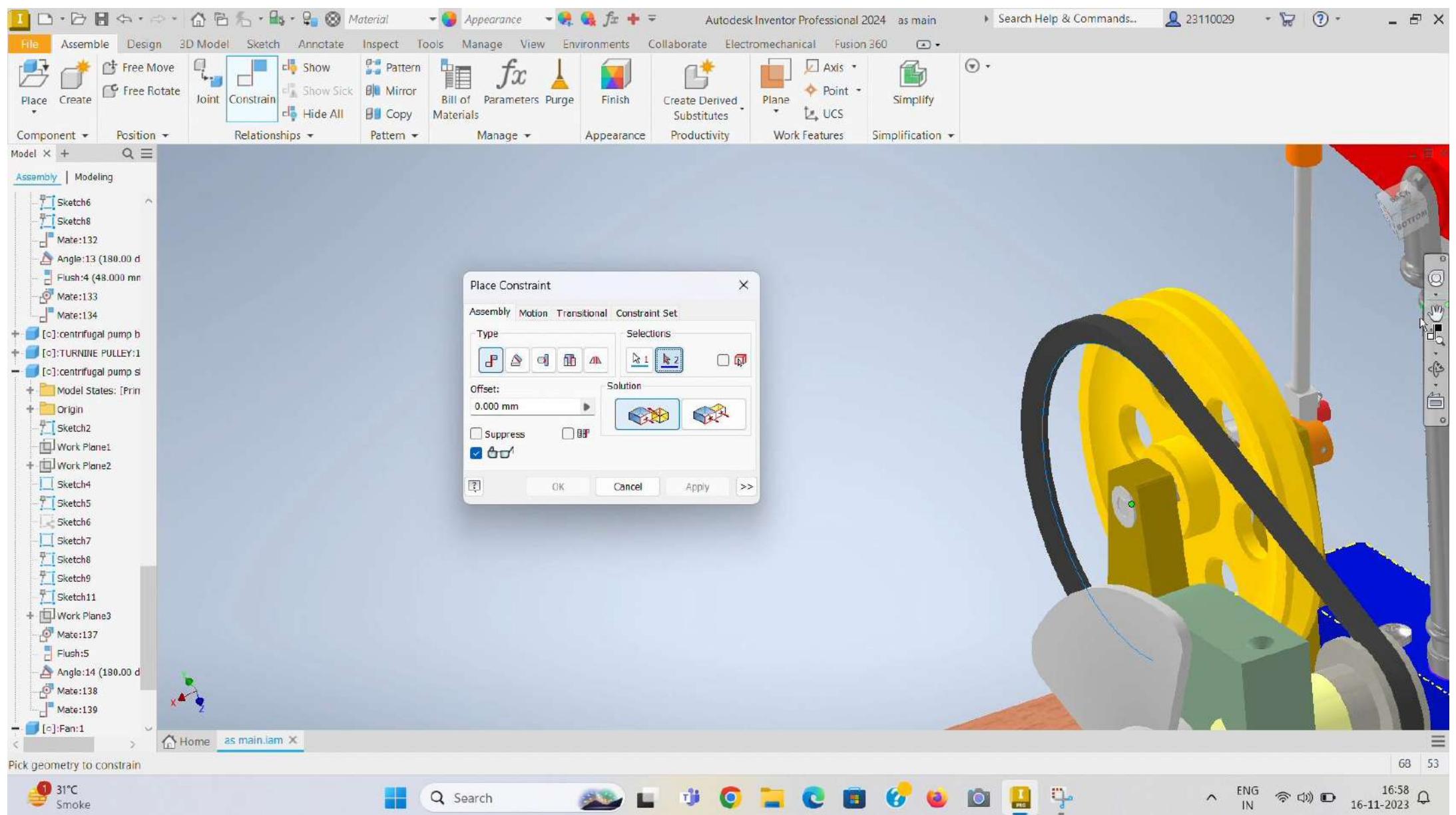
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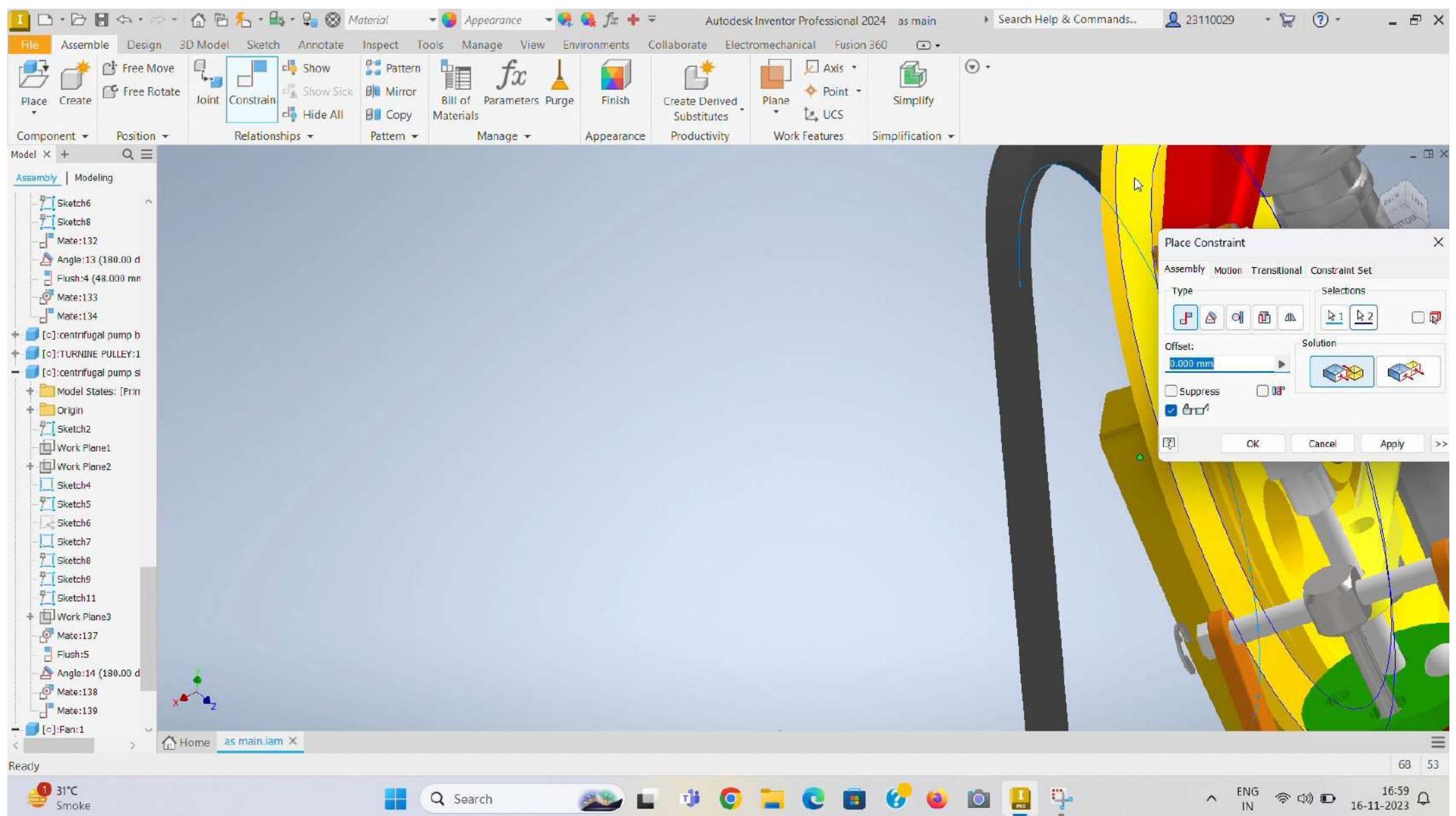


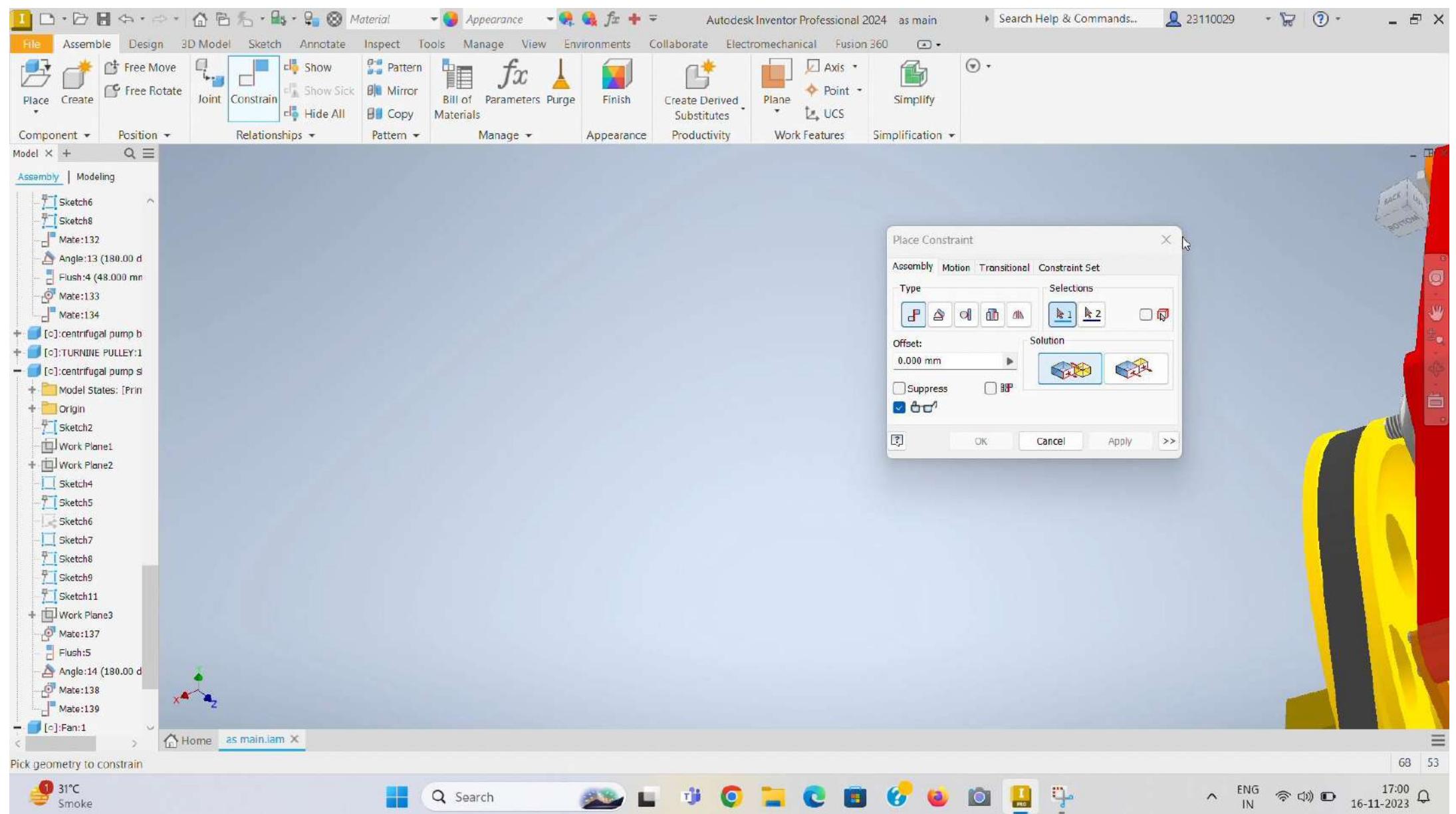
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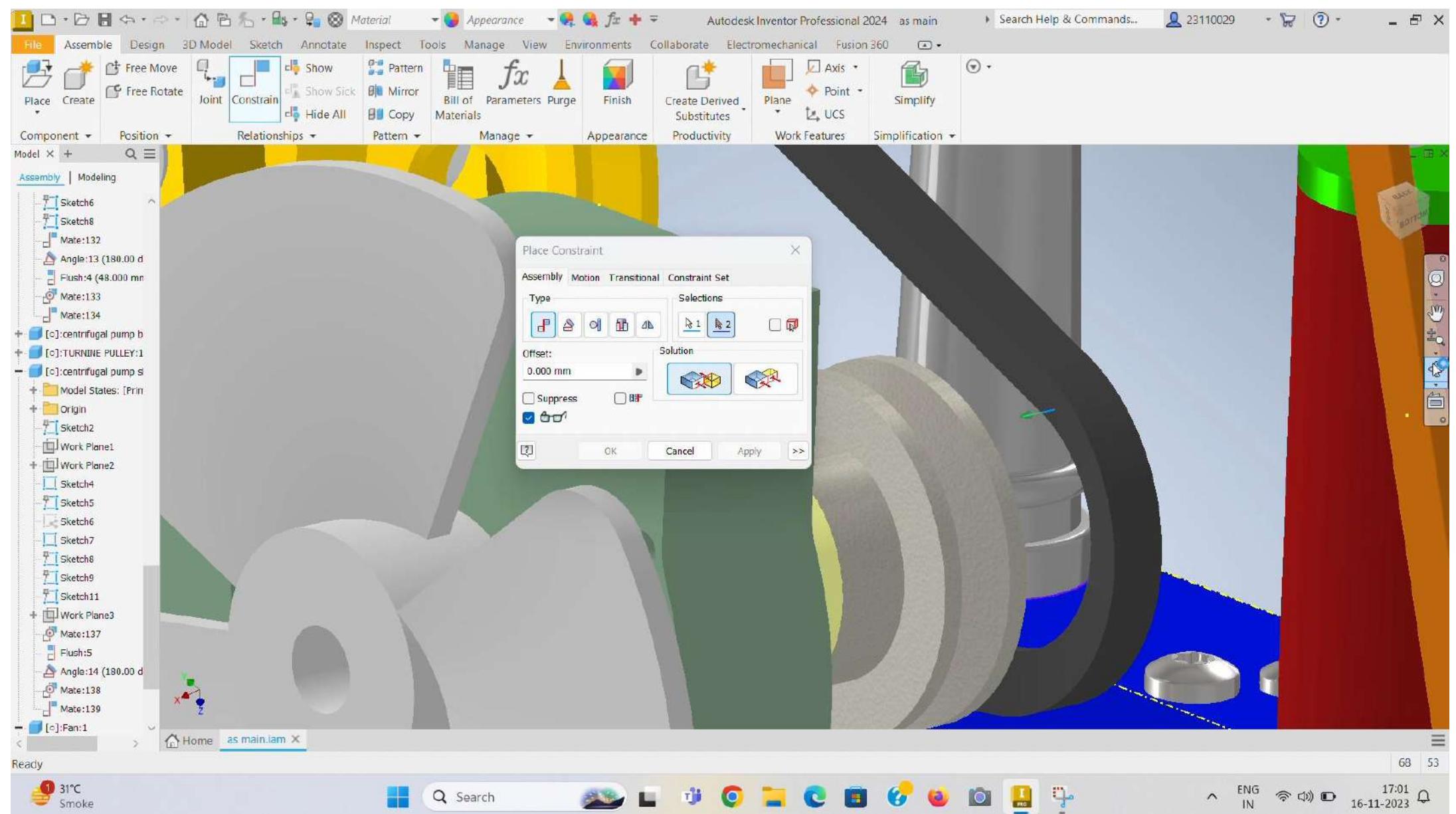
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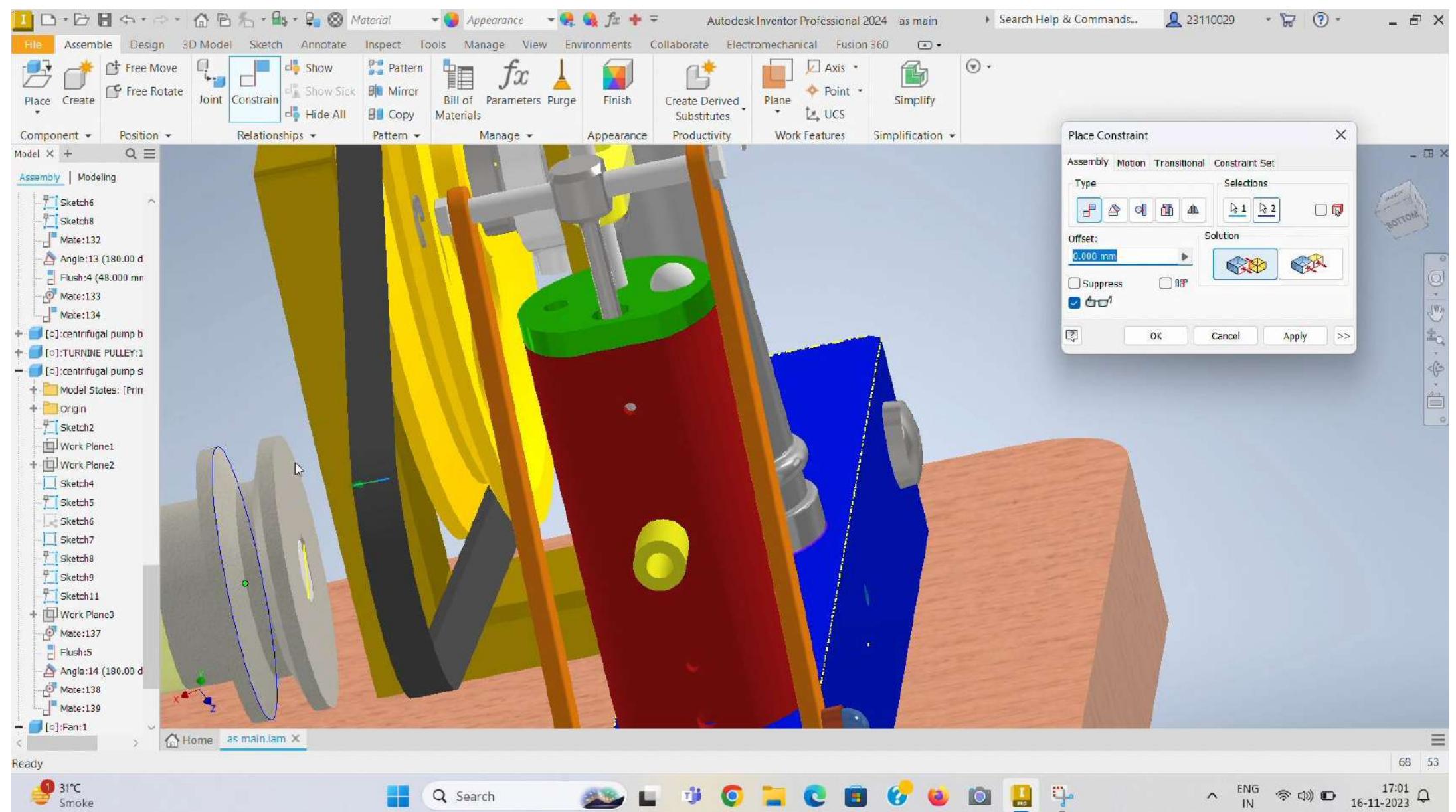


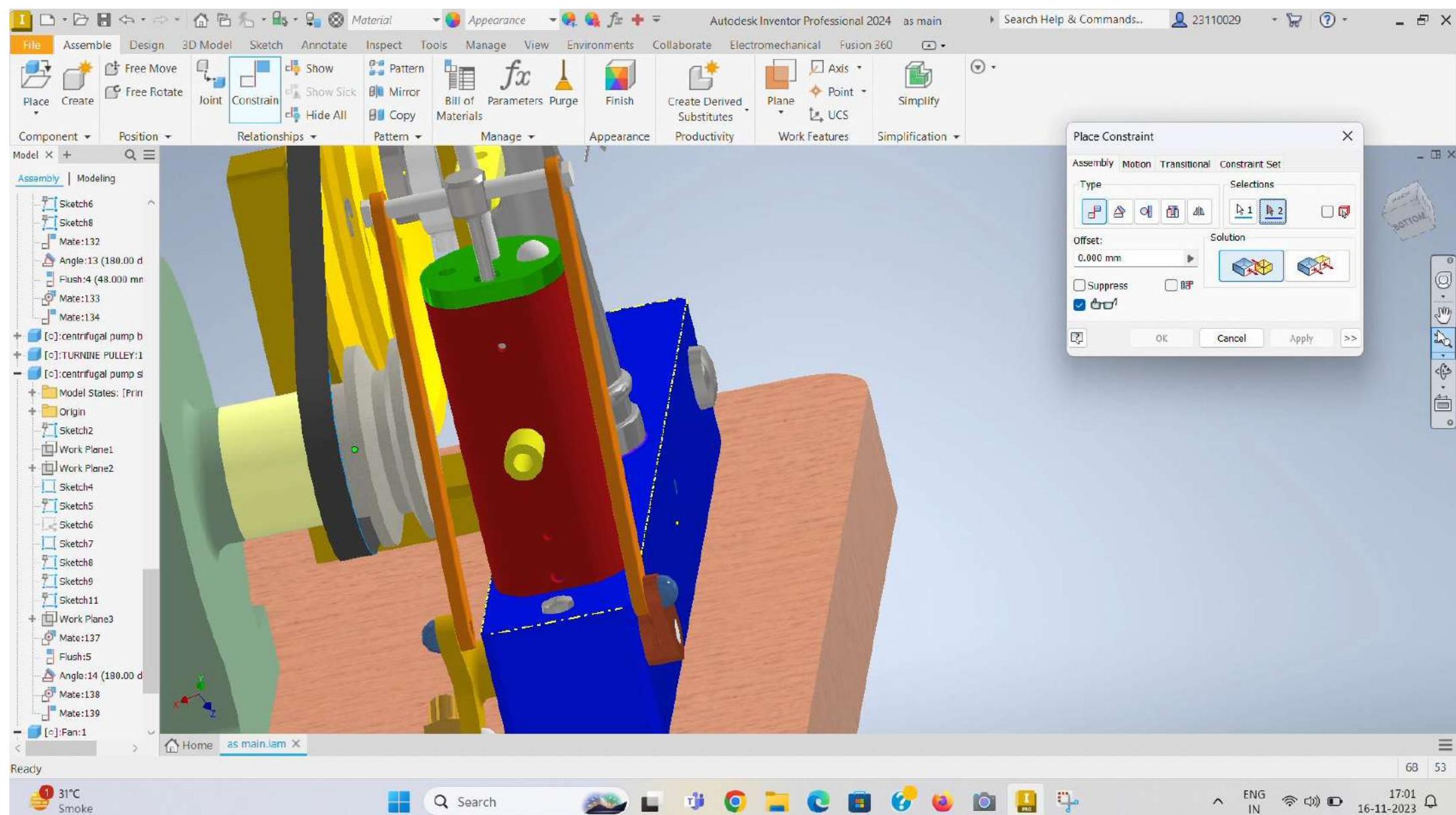


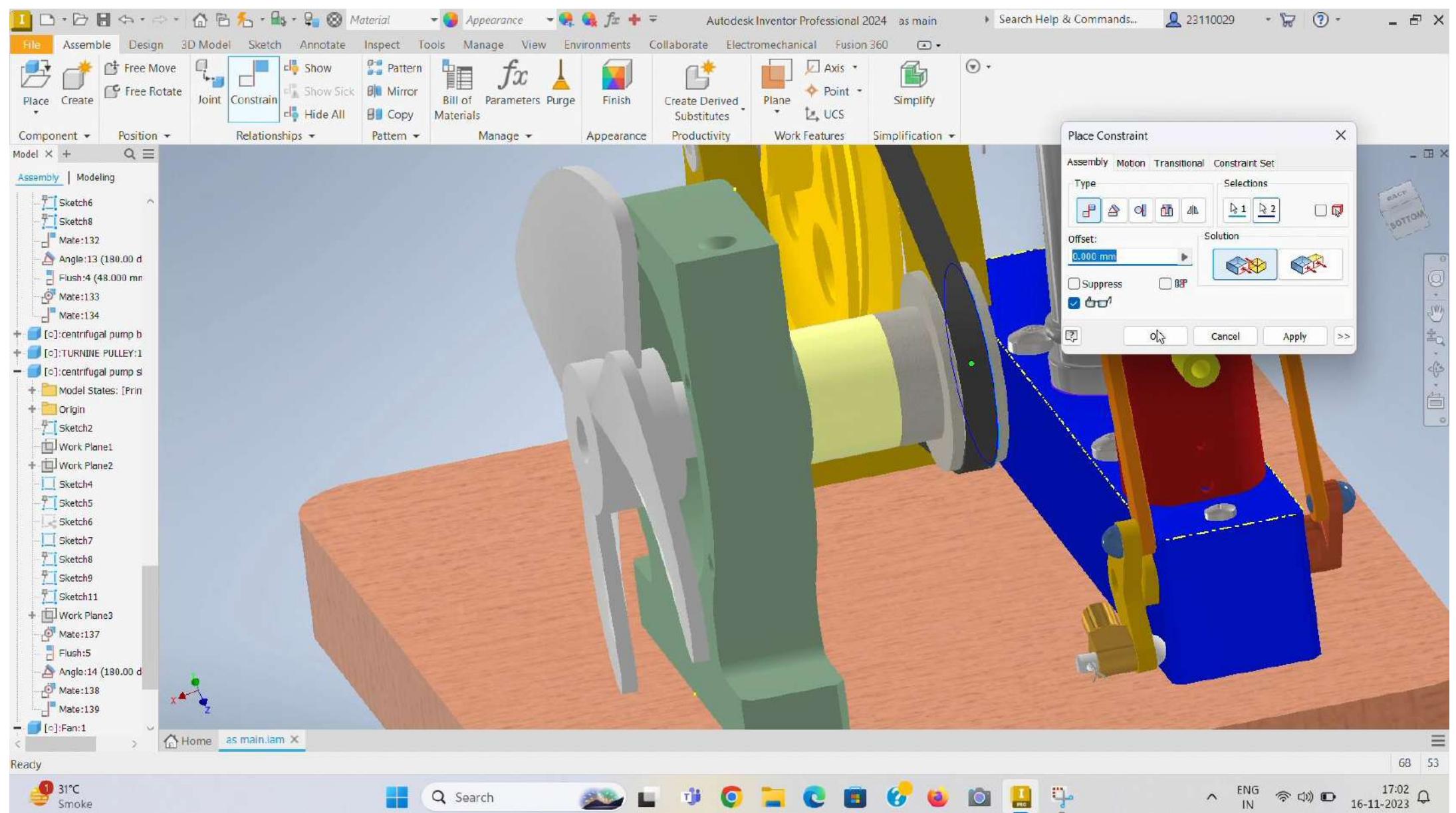


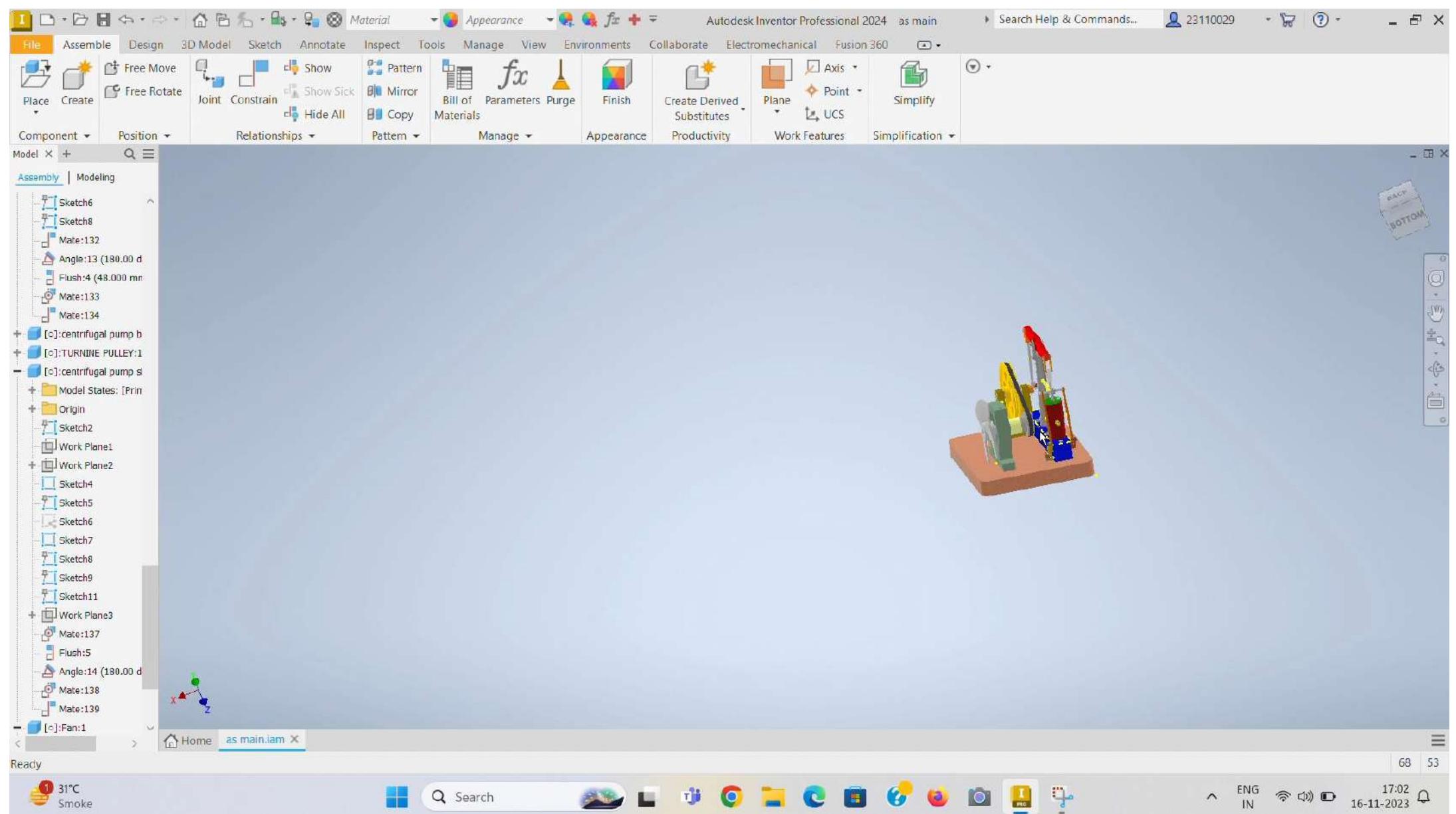


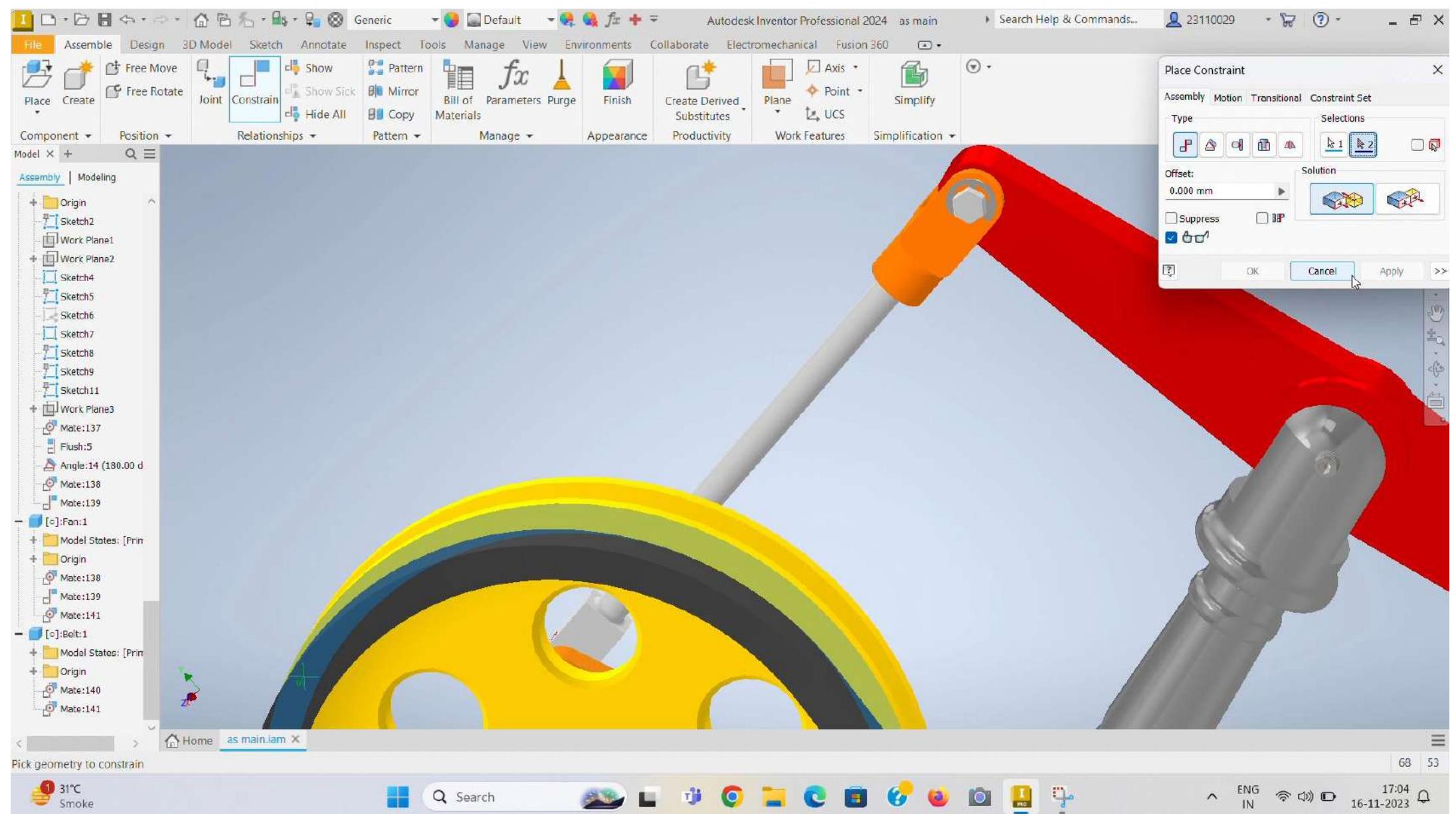


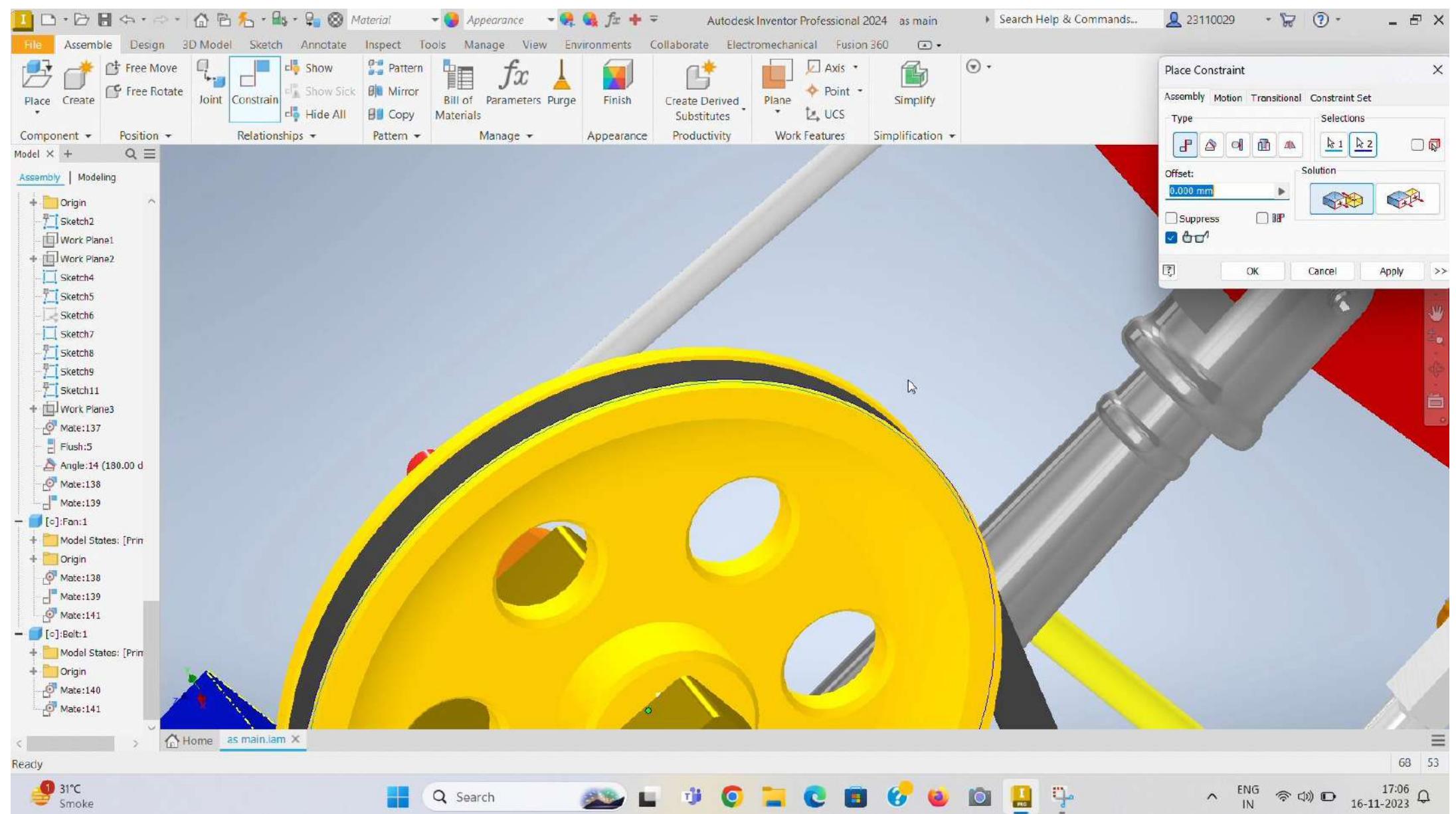


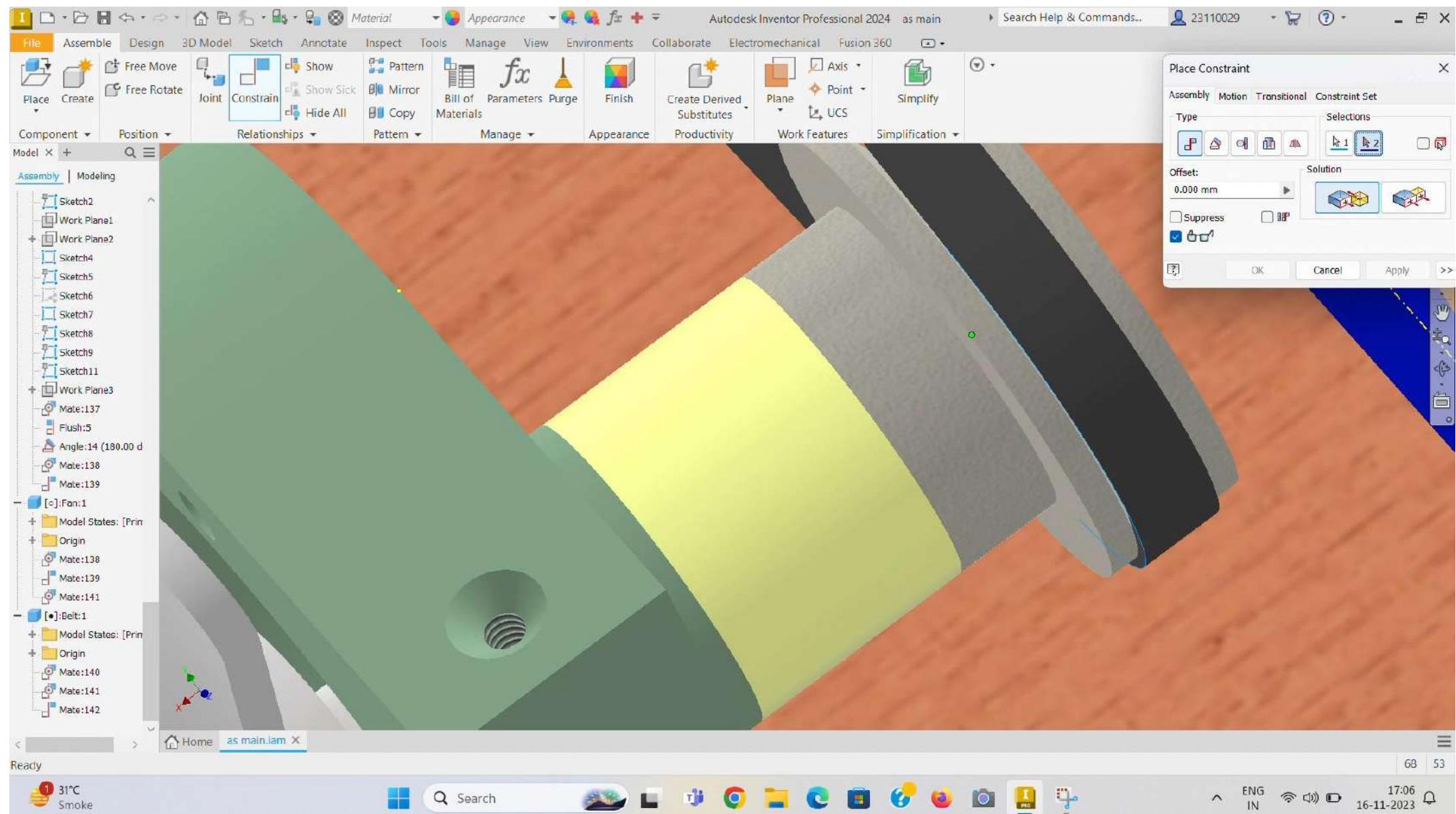


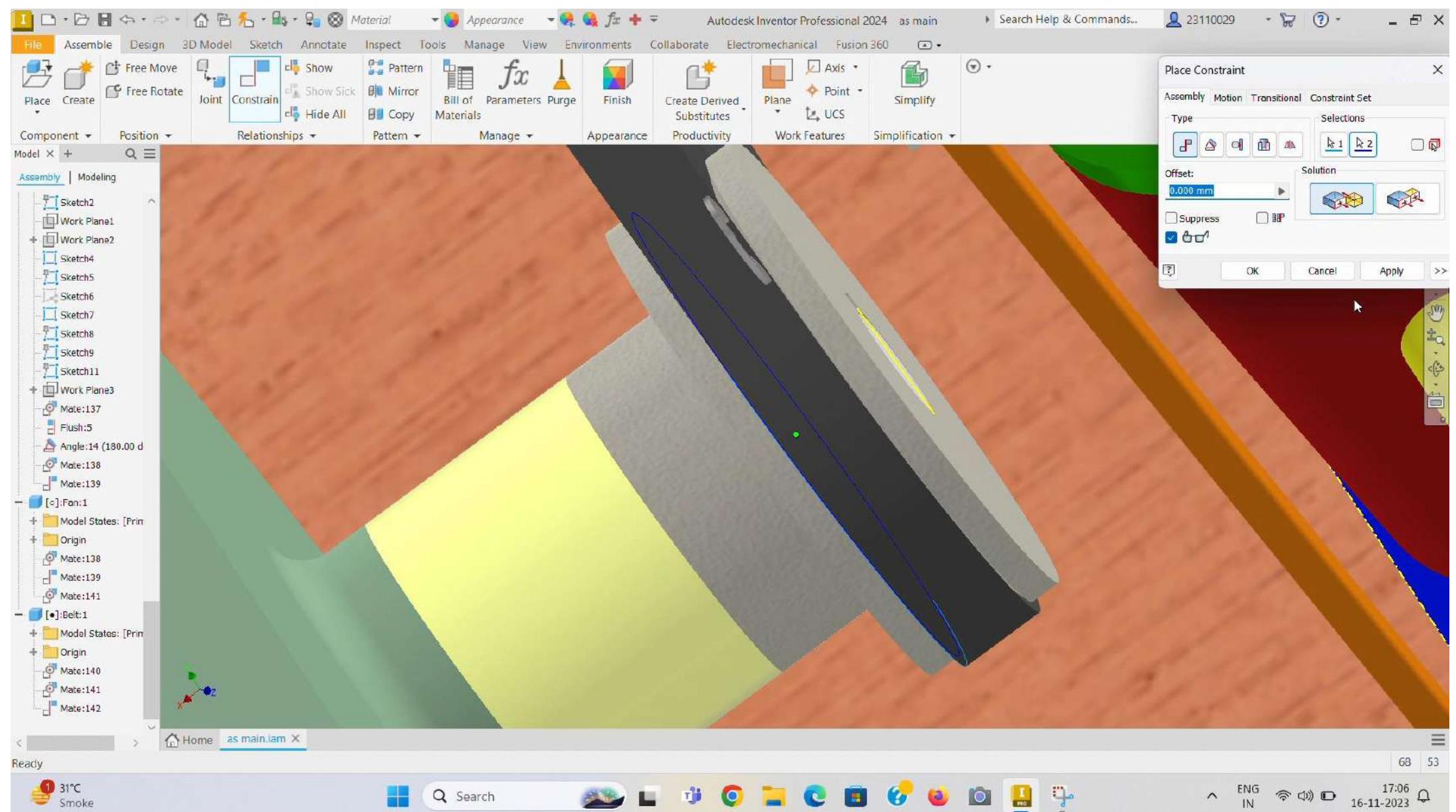


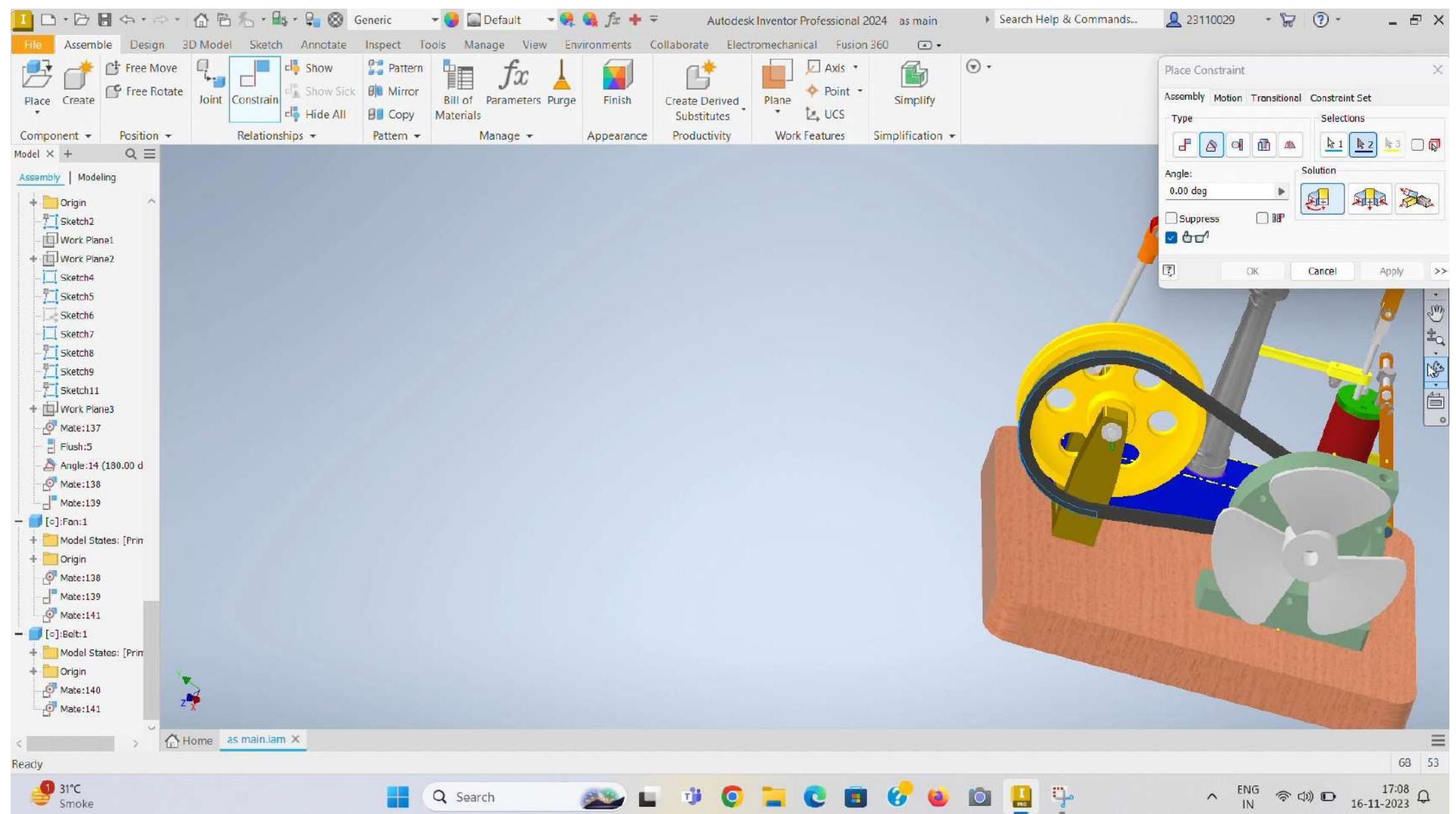


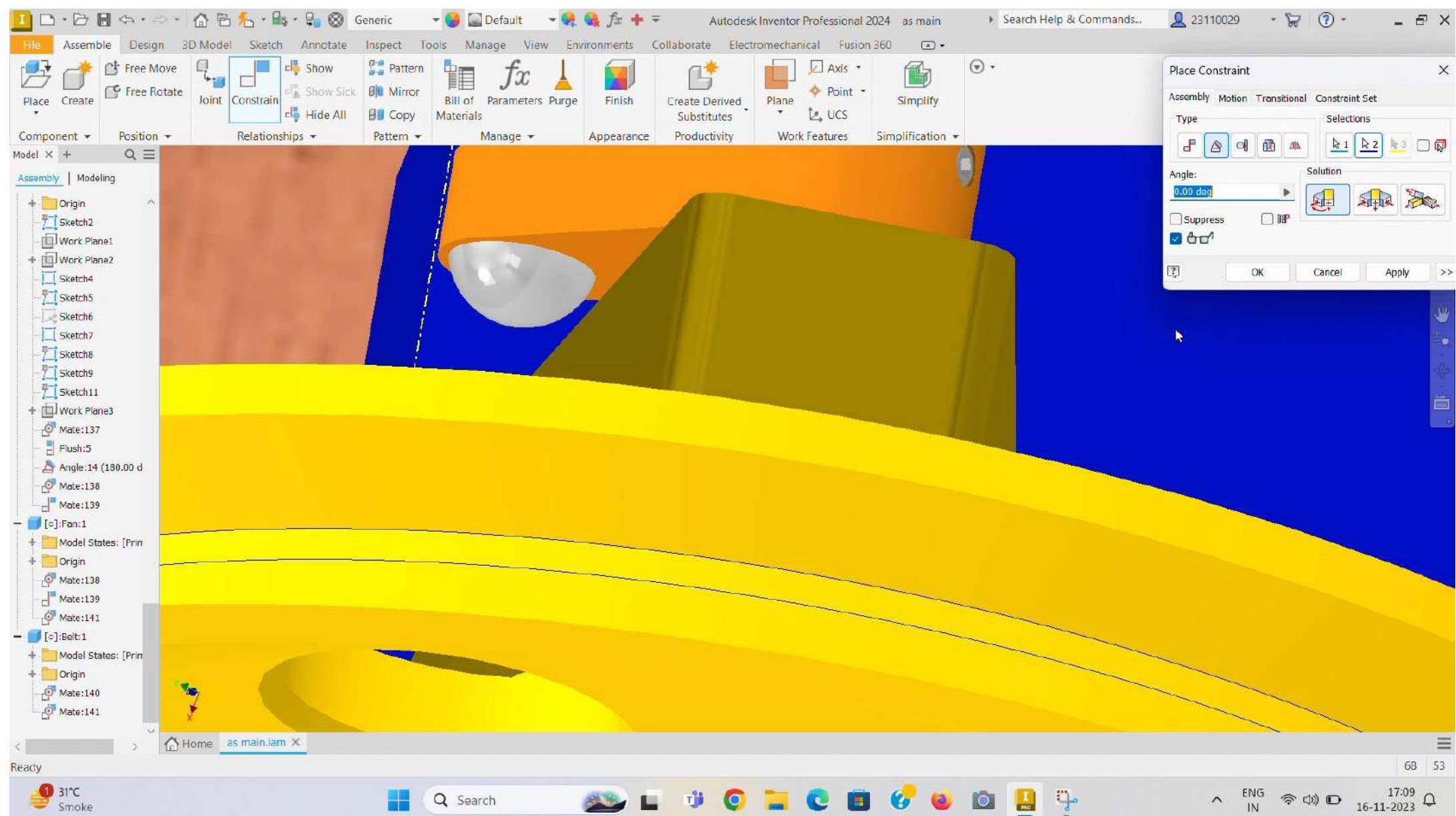


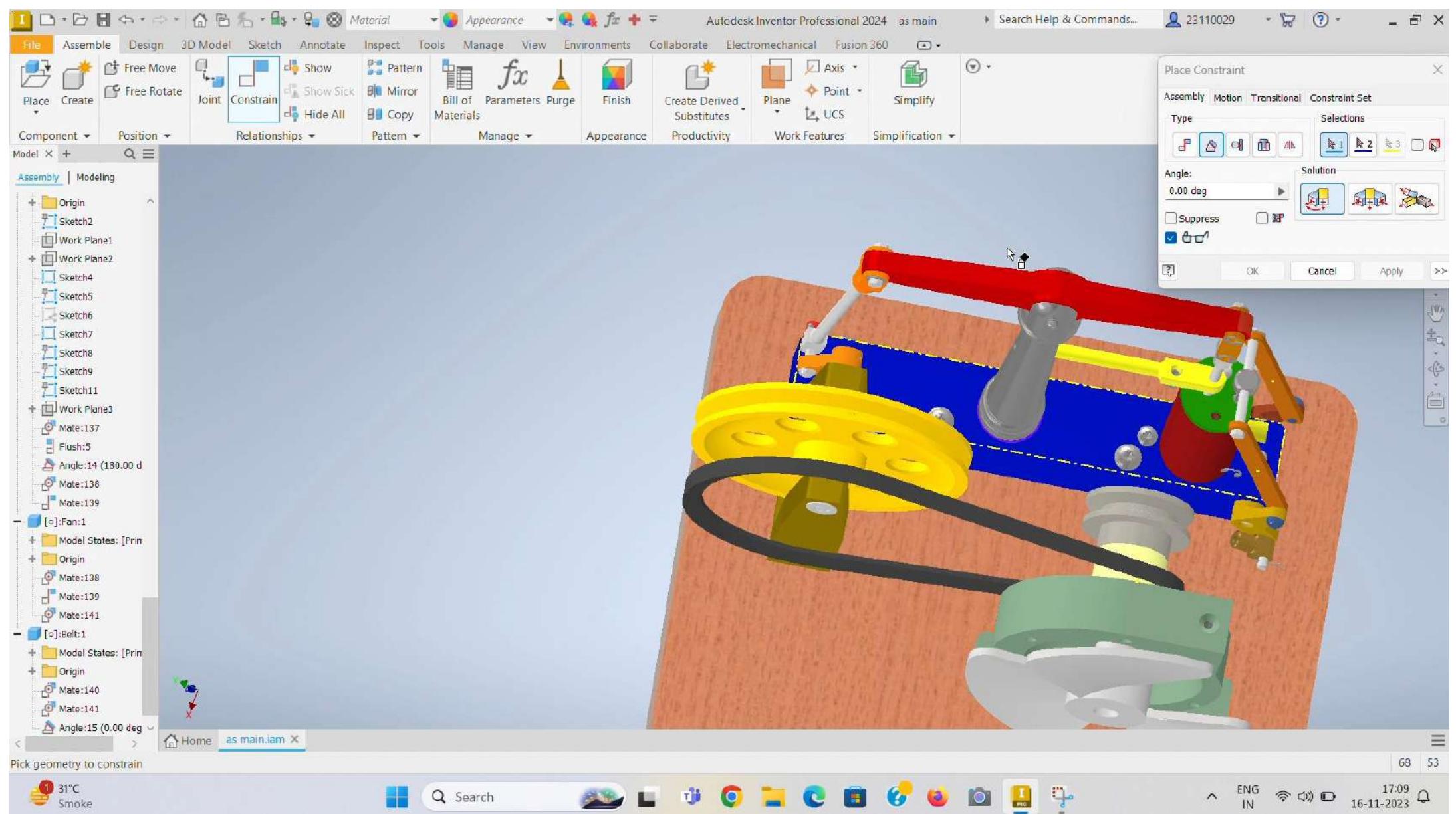


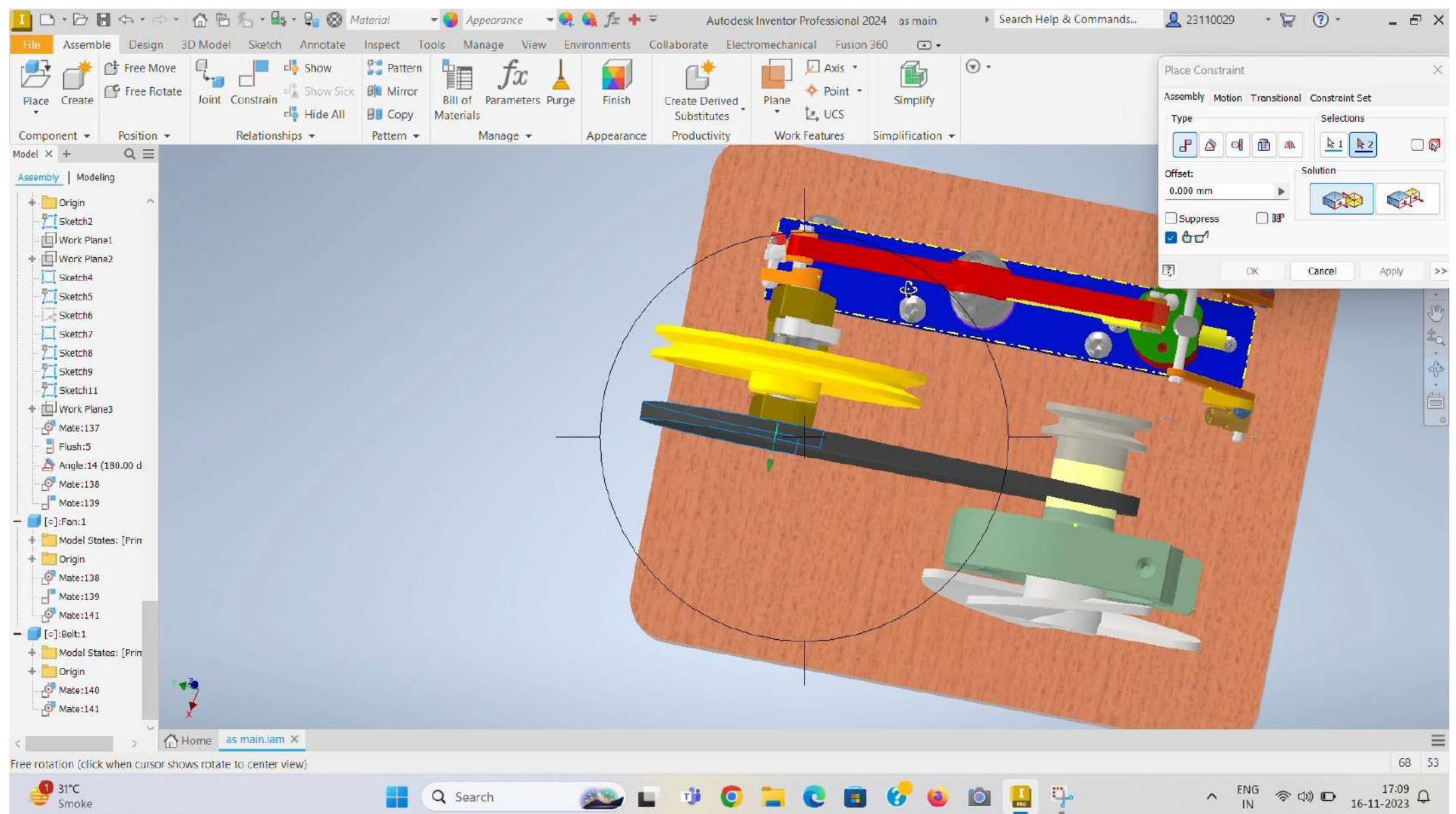


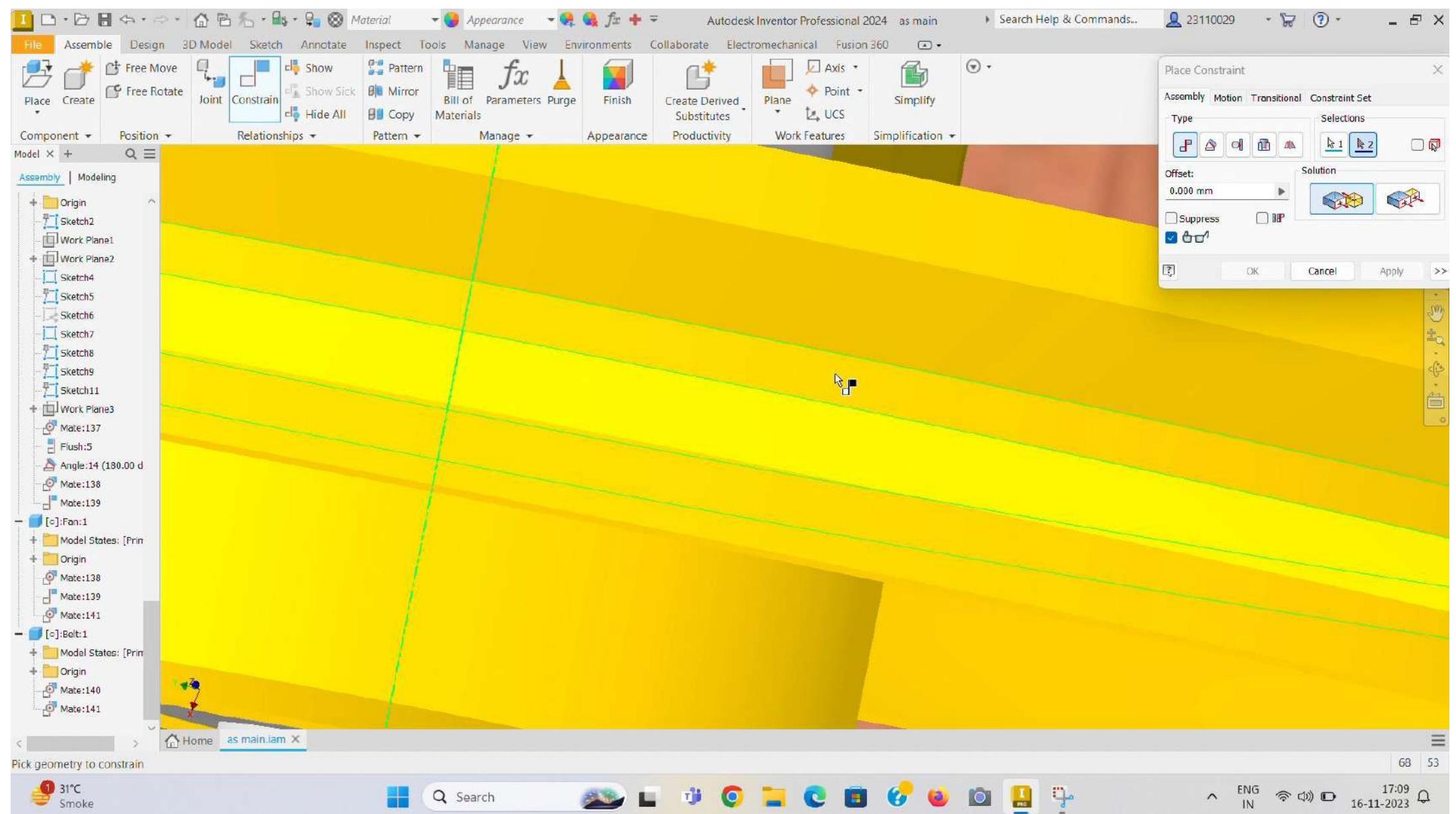


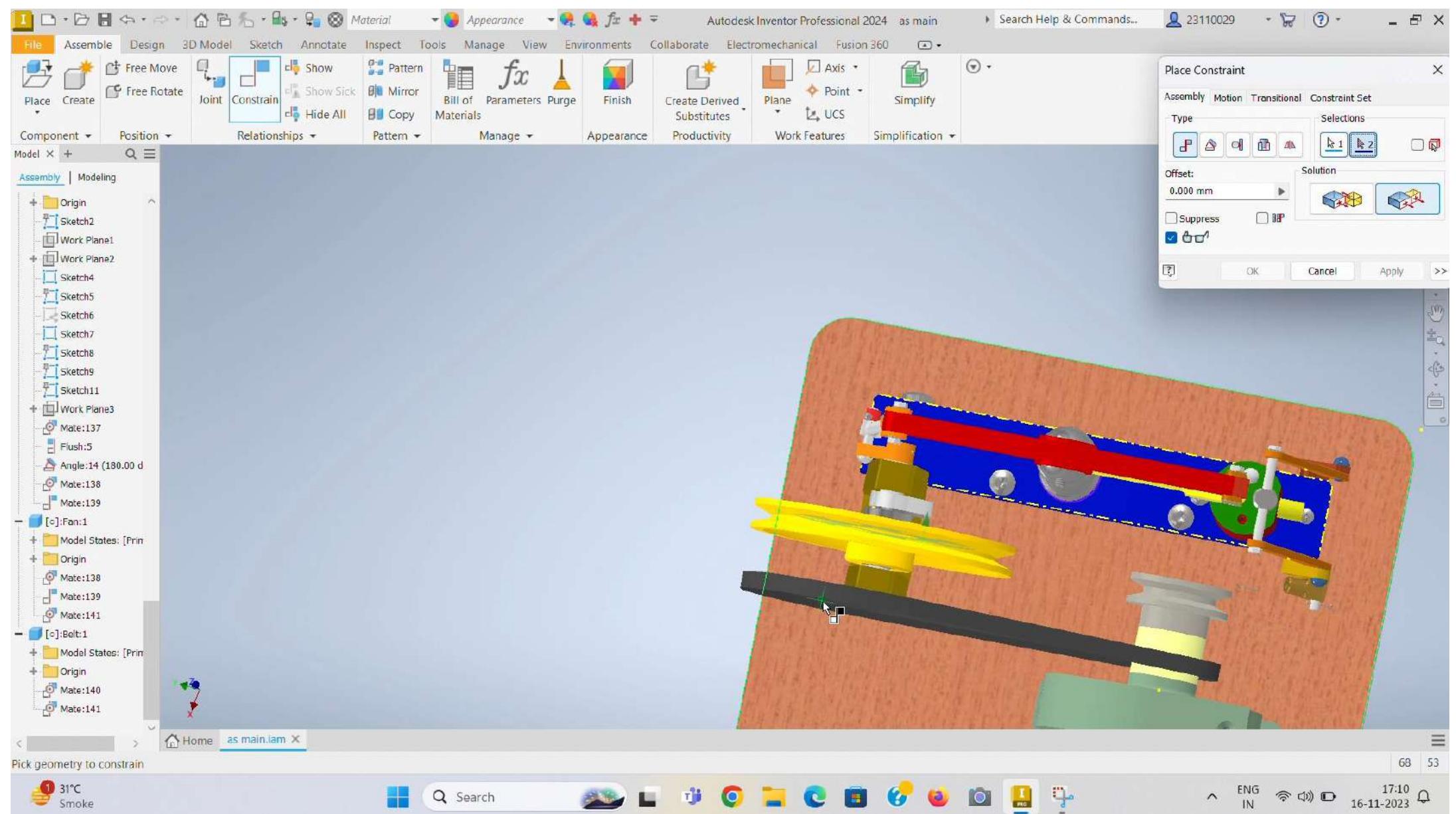


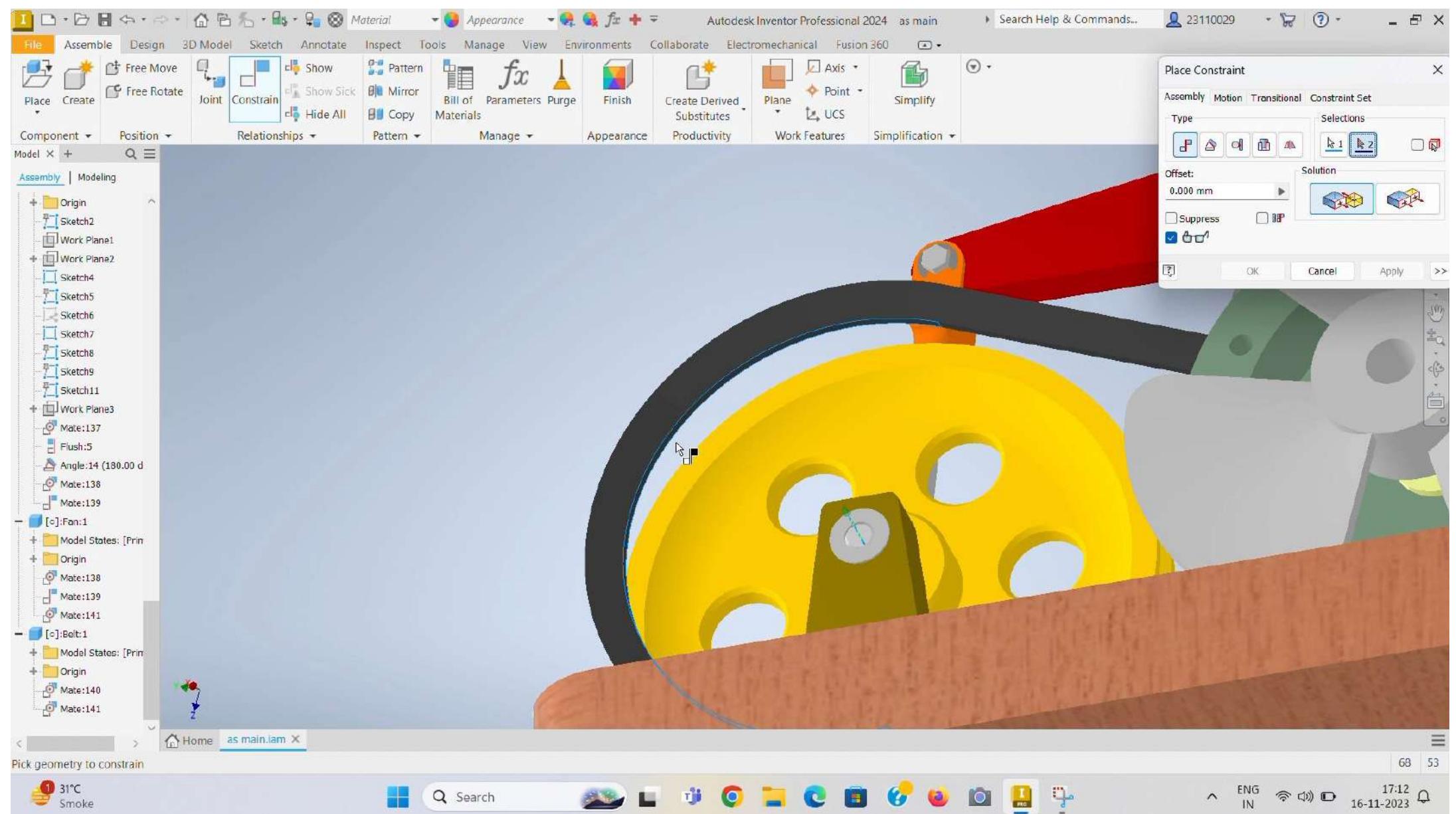


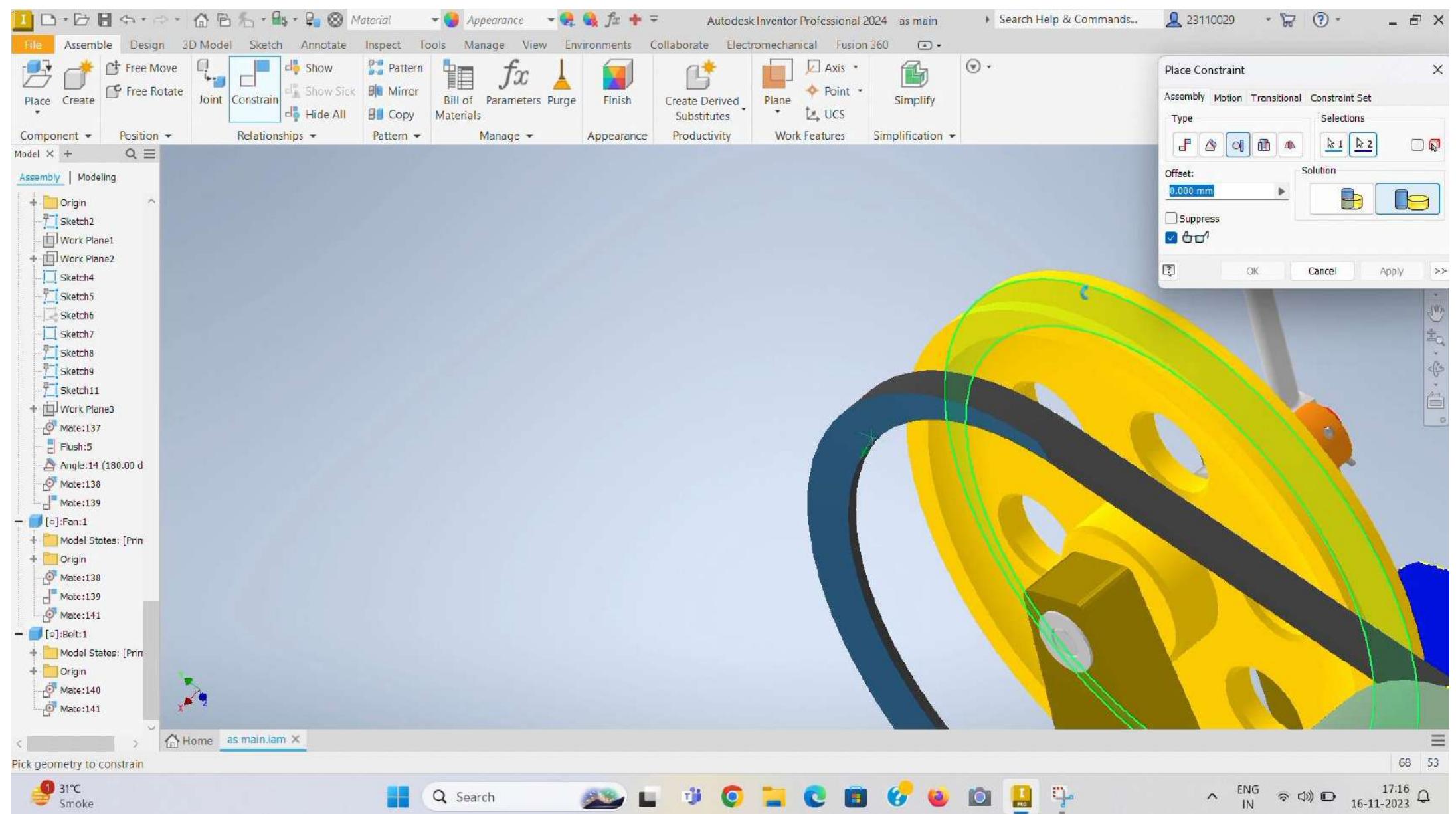












31°C
Smoke



ENG IN 17:16 16-11-2023

