



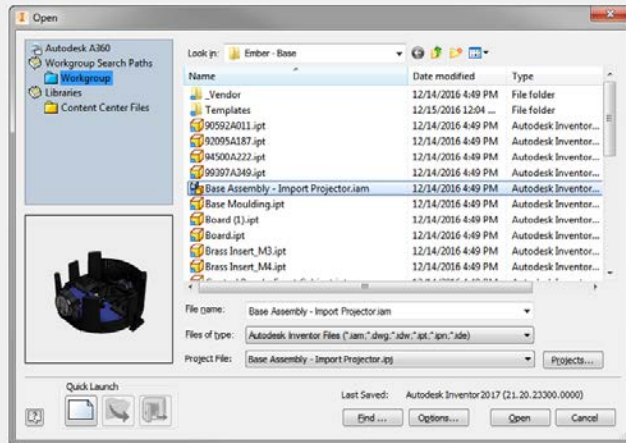
AUTODESK **INVENTOR**
Trial Projects

CAD Interoperability

Work with non-native design data

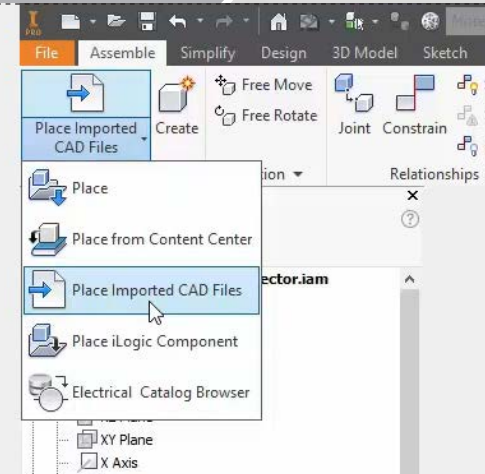
PART 1: CAD INTEROPERABILITY

1.



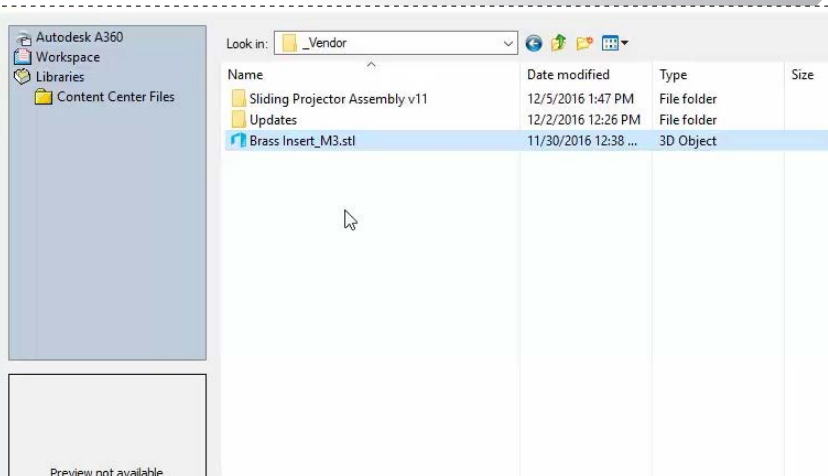
In Inventor, click the 'Projects' icon in the ribbon. Navigate to where you saved the project files and select **Base Assembly - Import Projector.ipj**. Then open **Base Assembly - Import Projector.iam**.

2.



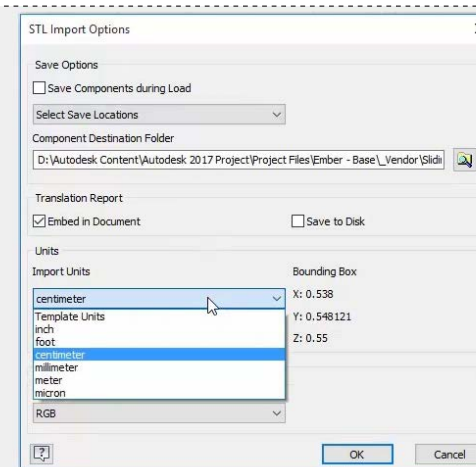
With the Base Assembly - Import Projector assembly open, begin by selecting 'Place Imported CAD Files' from the 'Component' panel.

3.



Navigate to the Vendor folder located in the downloaded files, select the **Brass Inset_M3.stl** file, and then click 'Options'.

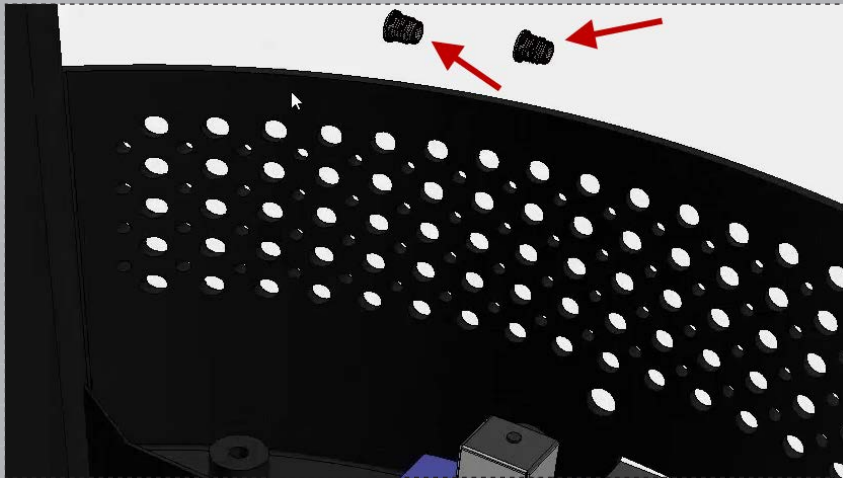
4.



Ensure centimeter is selected for the 'Import Units' and click 'OK'.

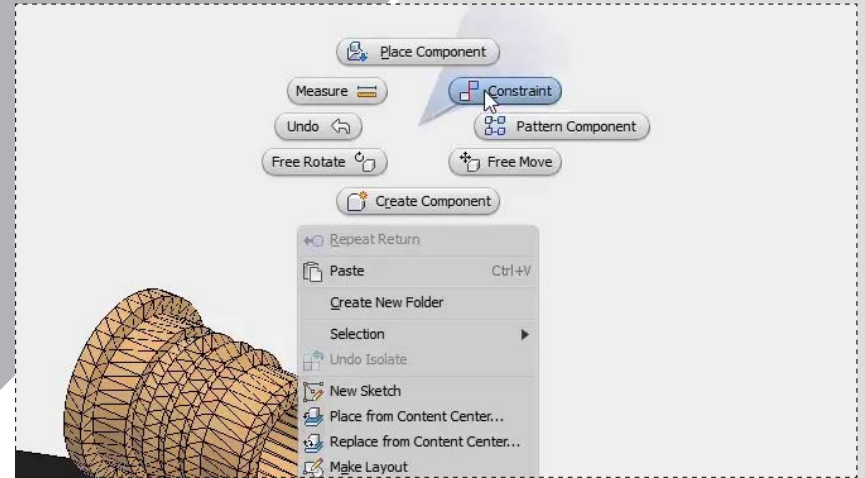
PART 1: CAD INTEROPERABILITY

5.



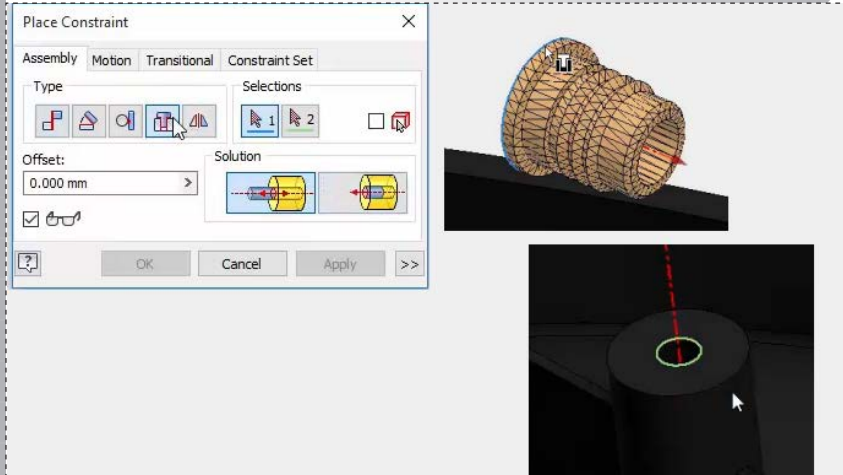
Click 'Open' to begin inserting instances of the part and place two instances of the fitting into the assembly. (Note the .STL file imports as a 3D mesh.)

6.



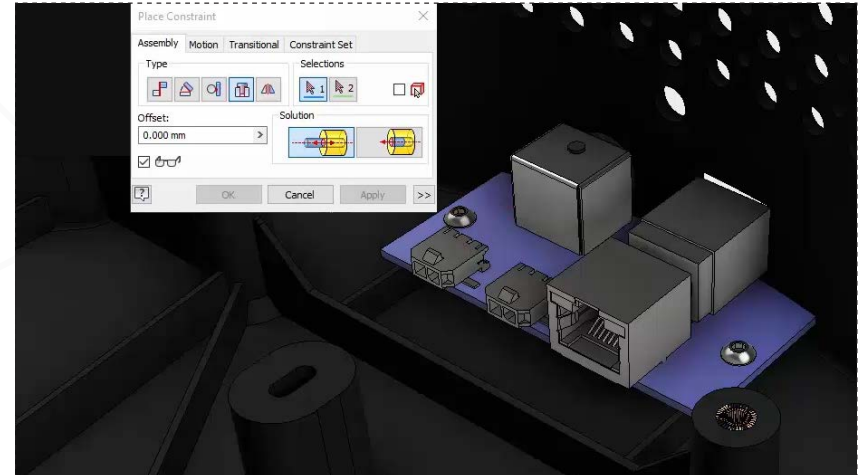
Select "Constrain" from the marking menu to begin placing the parts. (Note that even though the part is made of mesh geometry, Inventor still recognizes hole centers and cylindrical faces.)

7.



Activate the 'Insert Constraint' from the dialog, select the top edge on the fitting, and then select the inner edge of the boss feature to place the part.

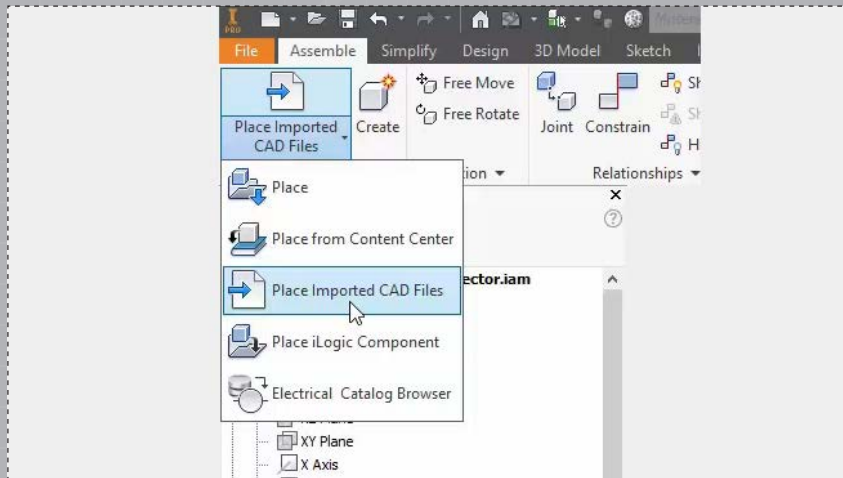
8.



Apply the constraint, and repeat the process you used in the prior step to place the second fitting onto the other boss. Apply the constraint, and then exit the command. Save the assembly to continue.

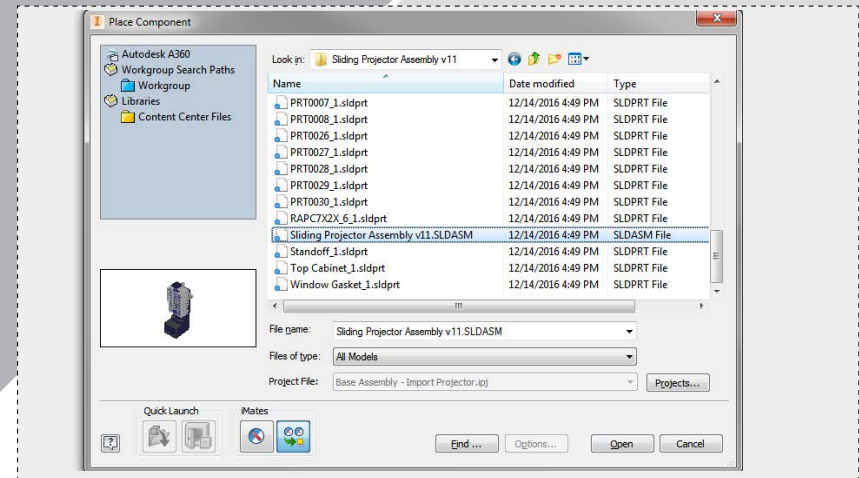
PART 2: CAD INTEROPERABILITY

9.



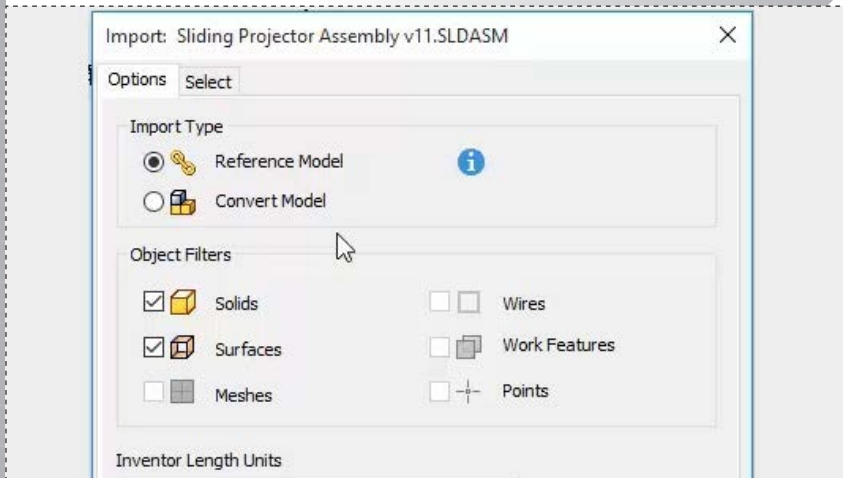
Select Place 'Imported CAD Files' from the Component panel to begin inserting another part.

10.



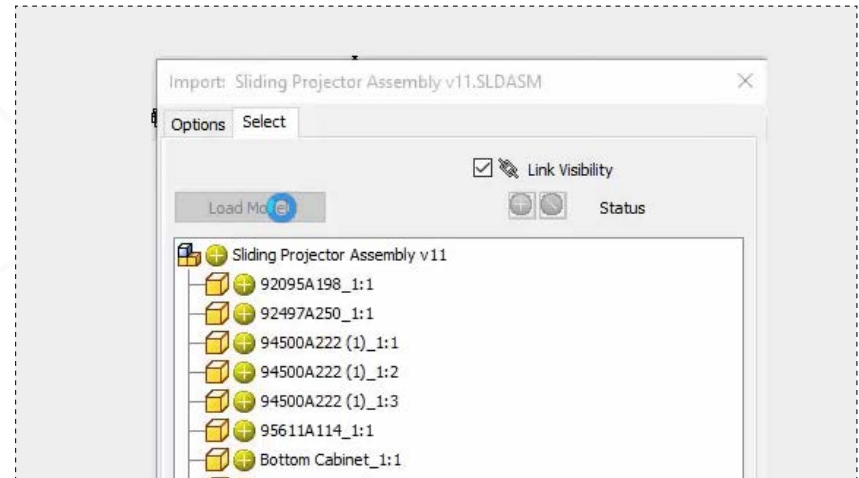
Navigate to the Vendor | Sliding Projector Assembly folder, select the **Sliding Projector Assembly v11.SLDASM** file, and click 'Open'.

11.



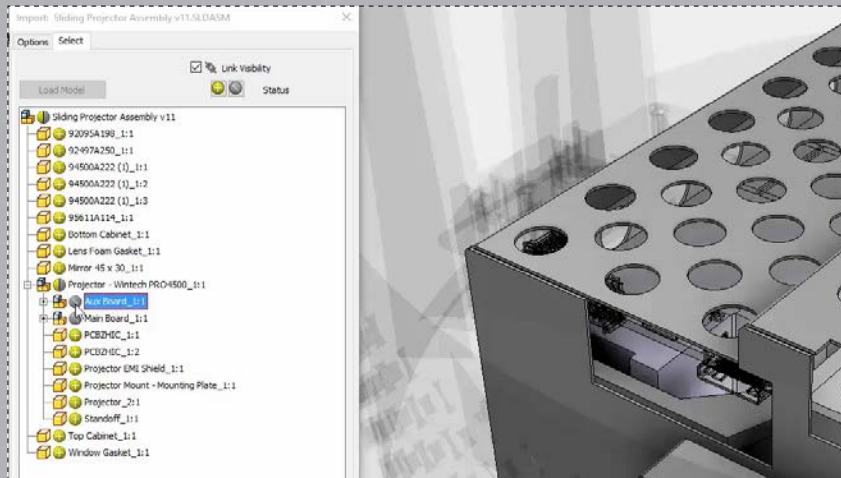
Ensure the 'Reference Model' option is selected so that Autodesk AnyCAD technology can be utilized if changes are made to the model later.

12.



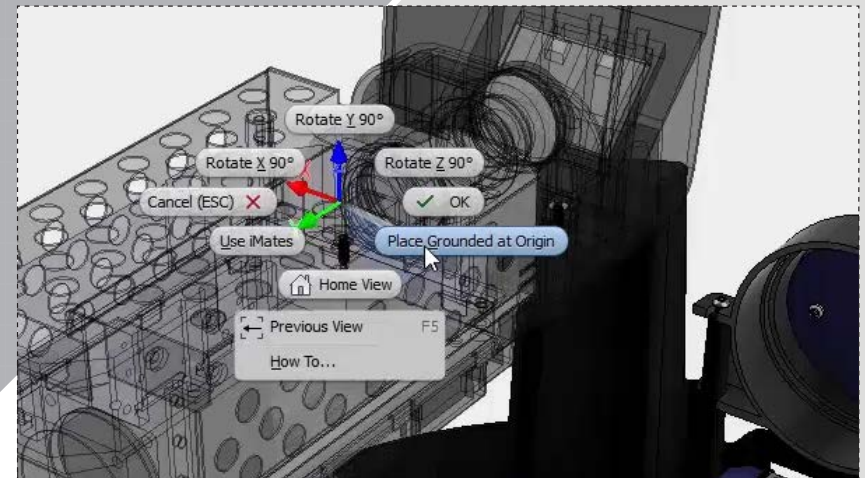
Access the 'Select' tab and click 'Load Model' to preview and select the geometry you want to import into the assembly.

13.



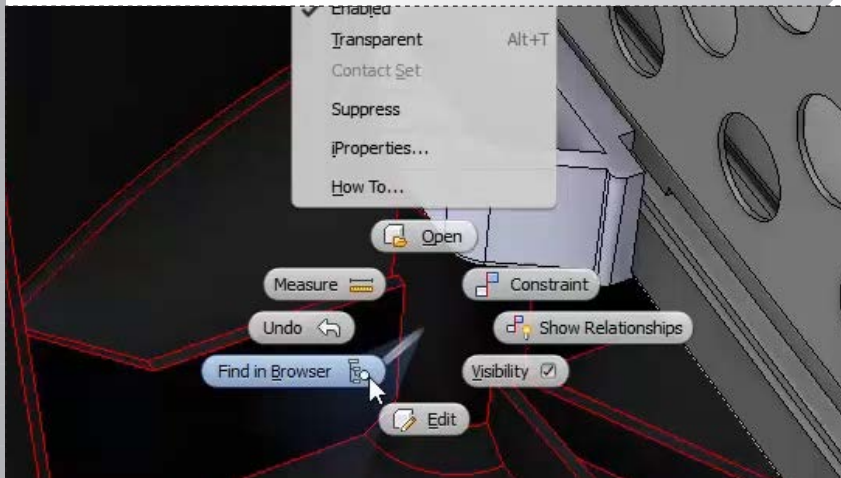
Uncheck the two projector PCB boards as shown to exclude them from the import. Click 'OK' to place the part into the assembly.

14.



Select 'Place Grounded at Origin' from the marking menu to correctly locate the part, and then cancel the insert part command.

15.



Find the **Base Molding:1** part in the browser and double-click it to edit it.

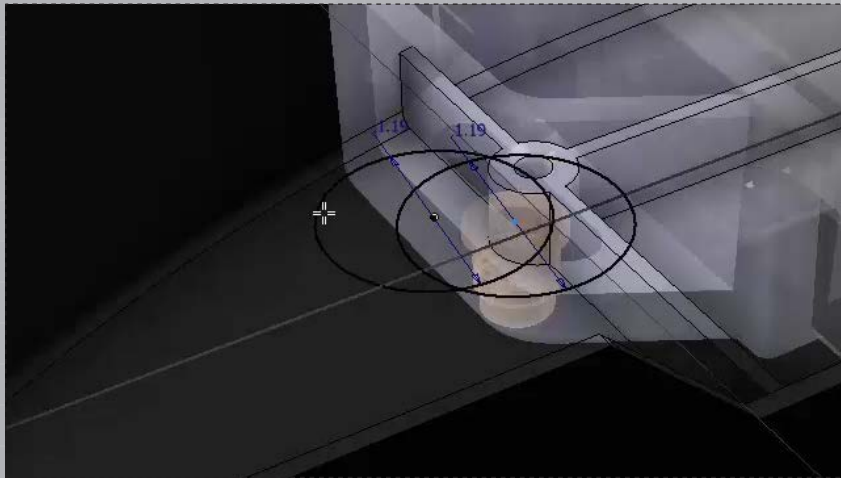
16.



Double-click 'Sketch7' under the **Mounting Boss** feature to edit it.

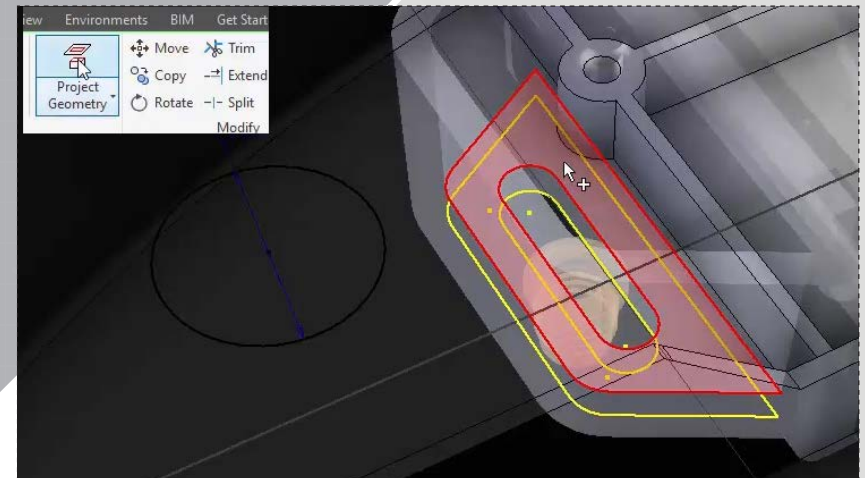
PART 2: CAD INTEROPERABILITY

17.



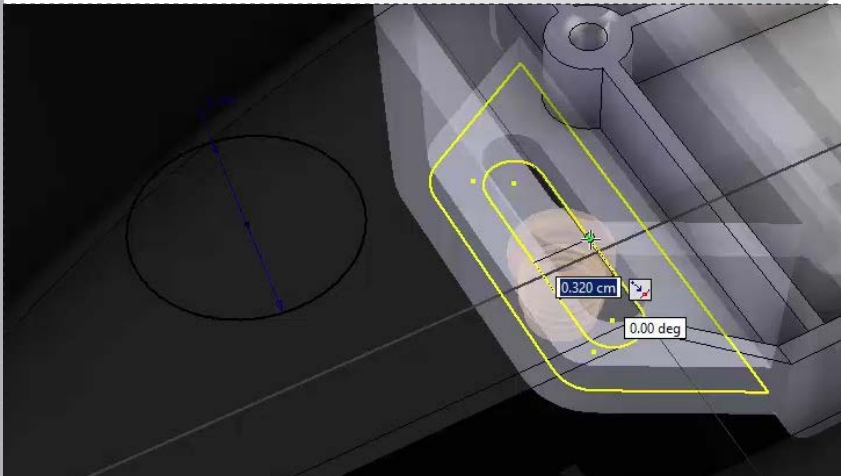
Drag the unconstrained circle away from the boss temporarily.

18.



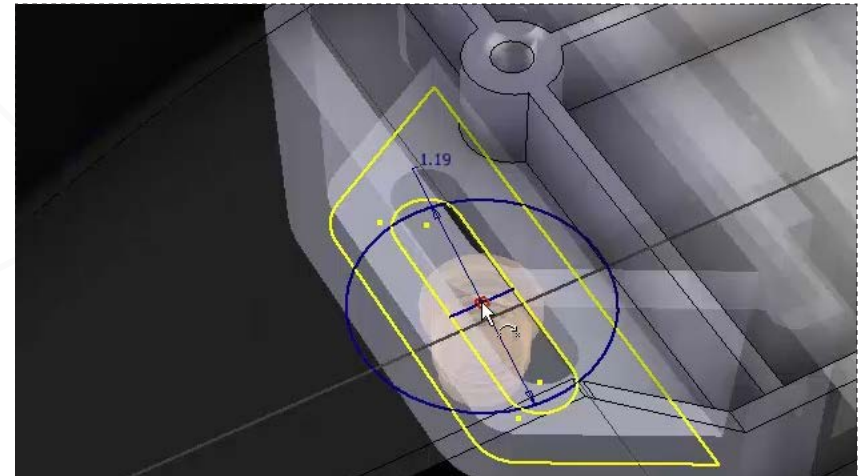
Activate 'Project Geometry', and then select the tab face as shown.

19.



Sketch a line between the two midpoints on the slot outline.

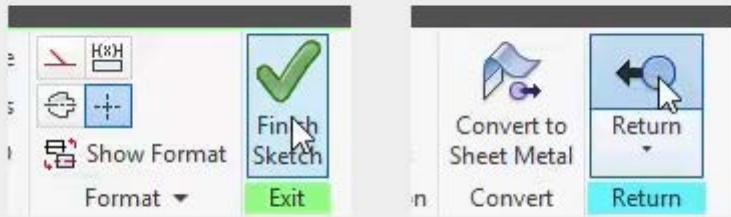
20.



Select 'OK' to exit the line command, and then create a coincident relation between the circle's center and the midpoint of the line you just sketched.

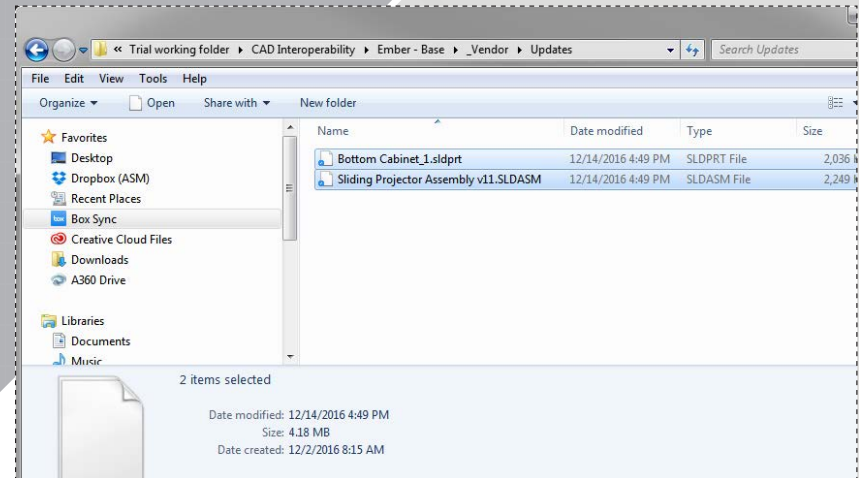
PART 2: CAD INTEROPERABILITY

21.



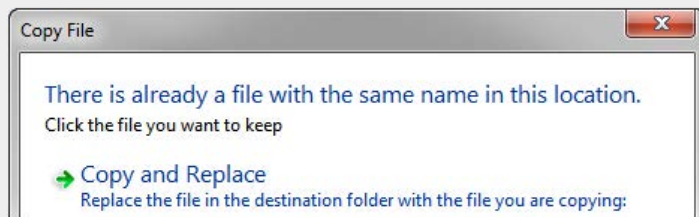
Click 'Finish Sketch' to exit the sketch, and then 'Return' to the assembly.

22.



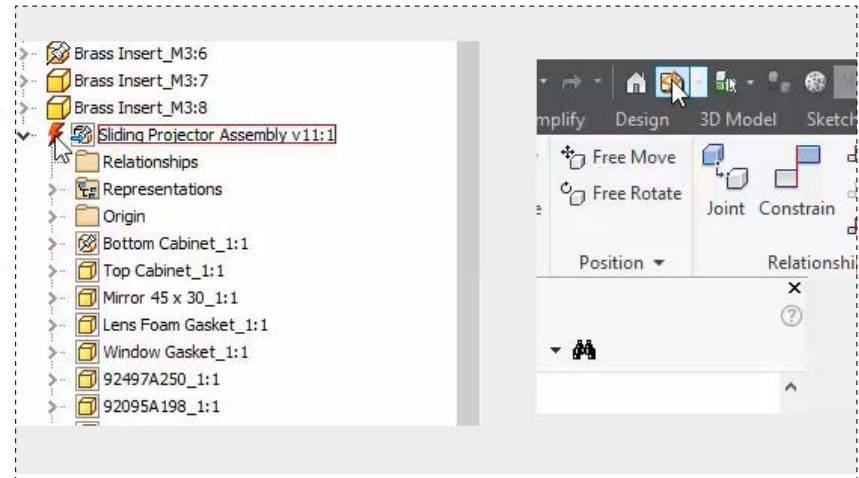
In your file explorer, navigate to Project Files | Ember - Base | Vendor | Updates, and copy the two files to your clipboard.

23.



Navigate to the Vendor | Sliding Projector Assembly v11 folder and paste the copied files, choosing to replace existing files.

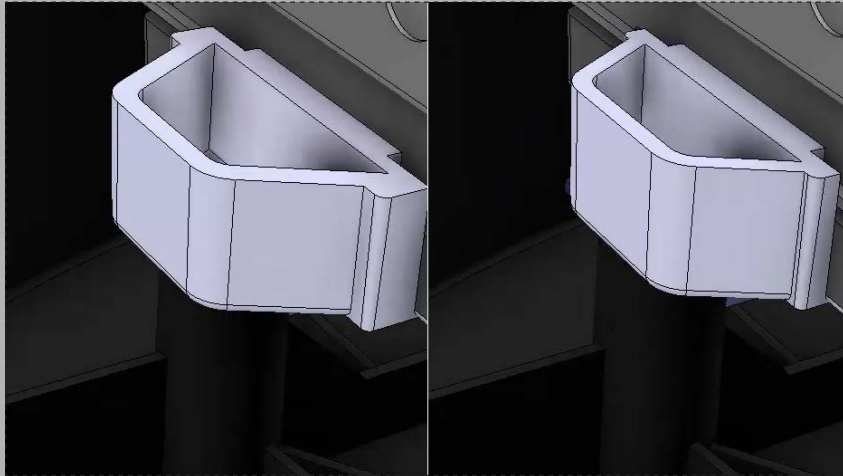
24.



Select 'Update' on the menu bar to apply the updated geometry.

PART 2: CAD INTEROPERABILITY

25.



Note how the boss in the projector assembly automatically updates to match the change to the imported geometry. Save the assembly to finish.



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