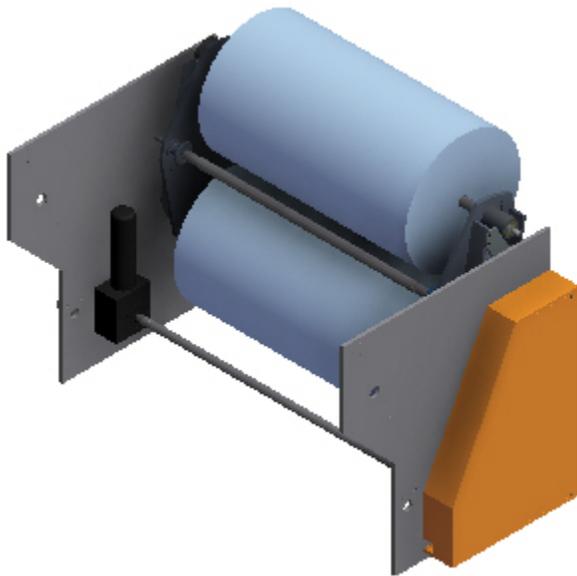


Project 2 – Assembly Interaction

1 Interacting with an Assembly Introduction

The following section will give an overview of interacting with an assembly model and using various tools to locate parts, visualize specific area of the assembly, and cut sections through the assembly to aid in viewing the model while in the assembly environment.

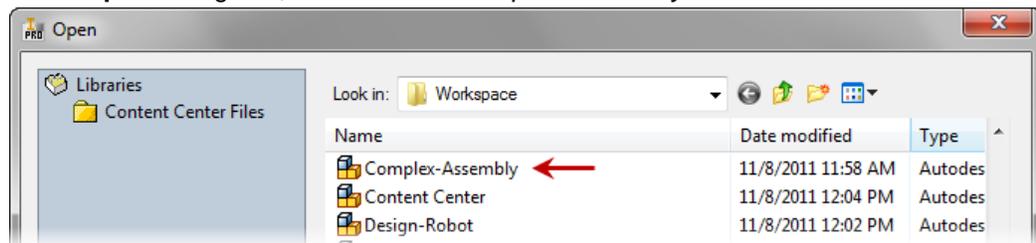
1.1 Project 2



1. Open an existing assembly file.
 - On the **Quick Access** toolbar, click **Open**.



- In the **Open** dialog box, select the file *Complex-Assembly.iam*

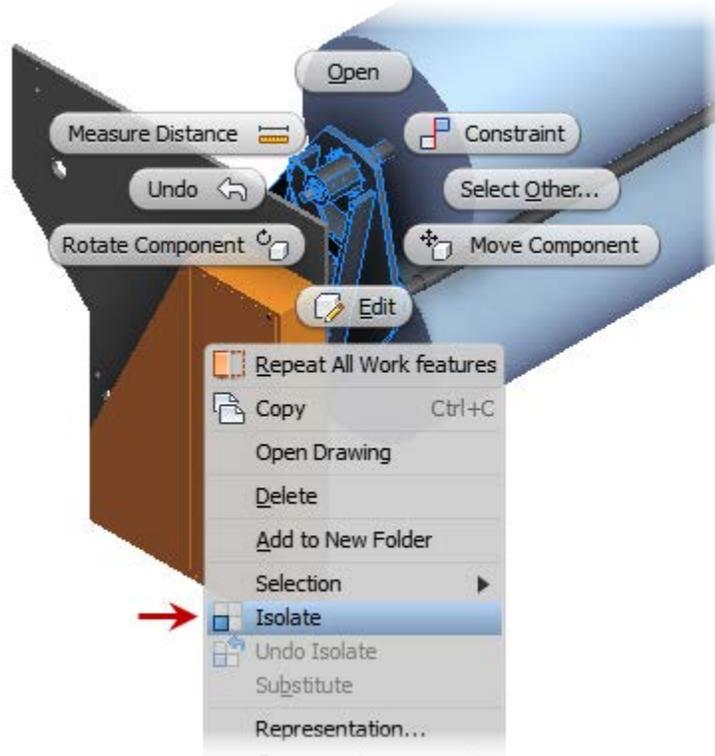


- Click **Open**.

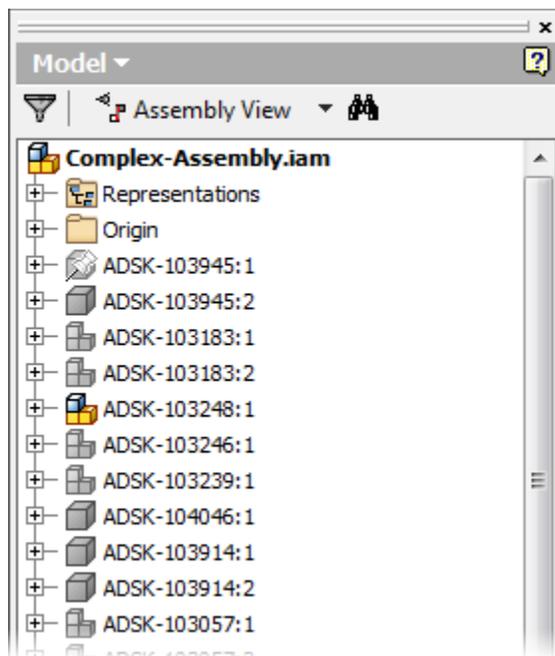
2. Isolate a component or subassembly

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- Right-click the subassembly shown. (Subassembly *ADSK-103248:1* in the browser)

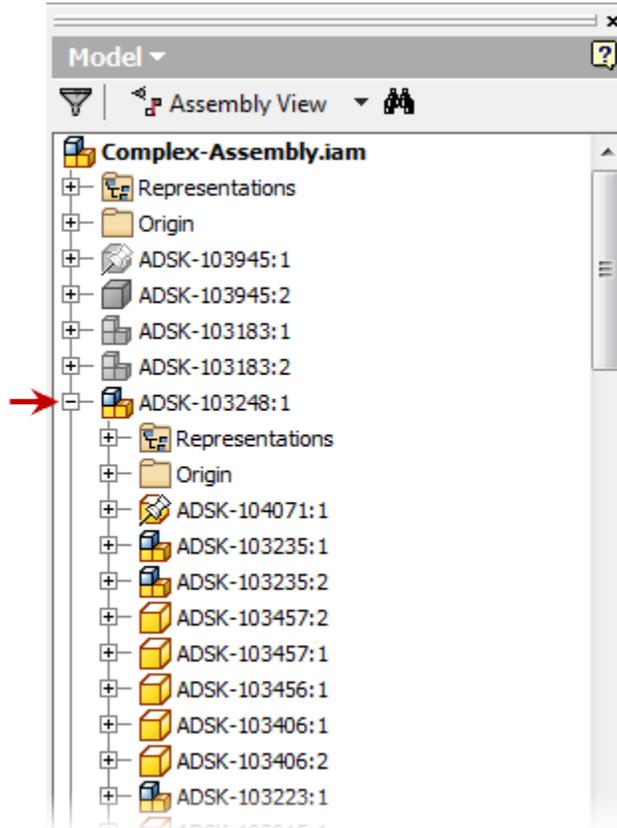


- On the Overflow Menu click the **Isolate** option
- In the browser, notice that the visibility status for all other components and subassemblies has been turned off.

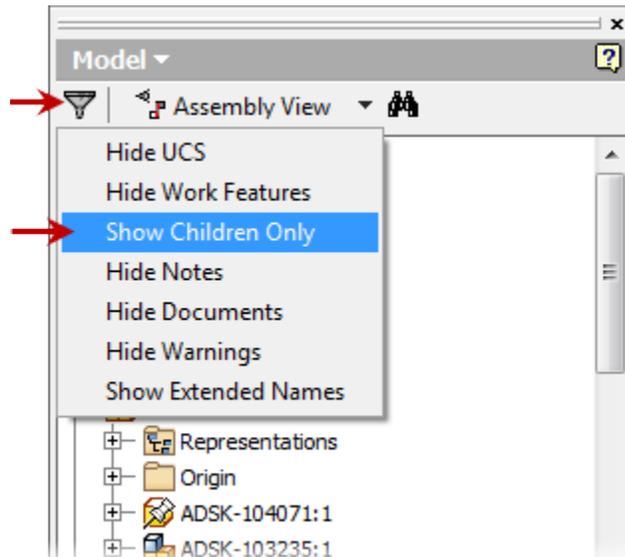


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3. Use a browser filter
 - In the browser, expand the isolated subassembly *ADSK-103248:1*
 - Notice the nested subassemblies and components.

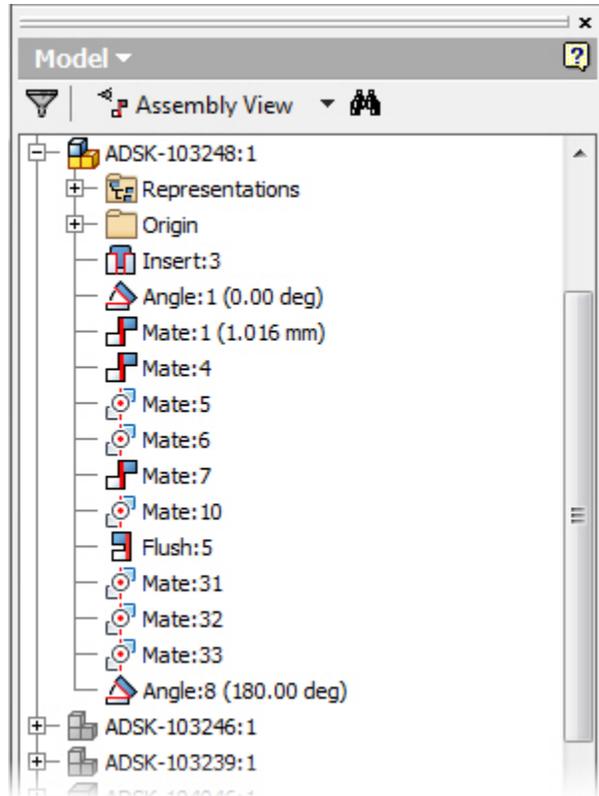


- On the **Browser Filters** menu, click **Show Children Only**.



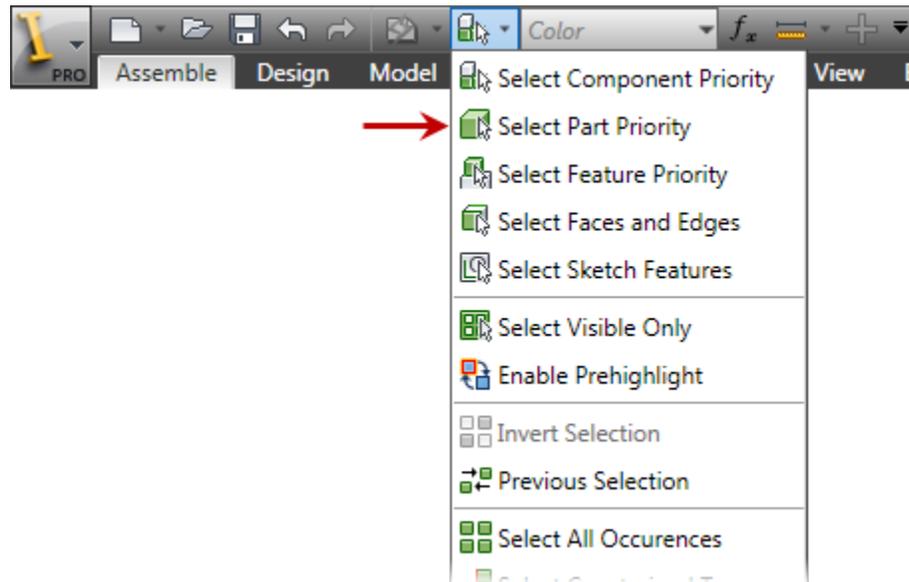
Project 2 – Assembly Interaction

- All nested components and subassemblies are filtered out of the browser list. While they are not displayed in the browser, they are still visible in the graphics window.

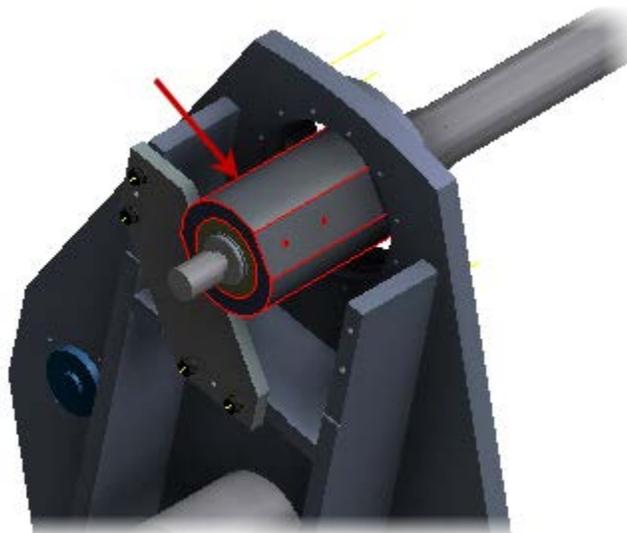


- Now, clear the browser filter by unchecking **Show Children Only** on the **Browser Filters** menu to display all components and subassemblies.
4. Change Selection Priority
- In the graphics window, try to select any of the individual components in the subassembly *ADSK-103248:1*. The entire subassembly is selected / highlighted.
 - To set the selection priority click **Selection Priority** drop down menu from the Quick Access tool bar.

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- Click **Select Part Priority**
- Select the component indicated.

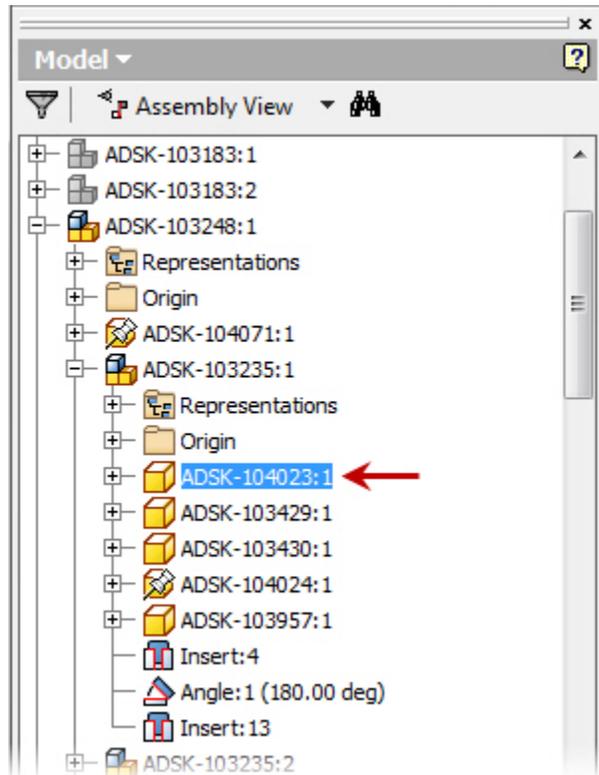


5. To locate the component reference in the browser, right-click the component in the graphics window. On the **Overflow Menu** click **Find in Browser**.



Project 2 – Assembly Interaction

- The component *ADSK-104023:1* is highlighted in the browser.

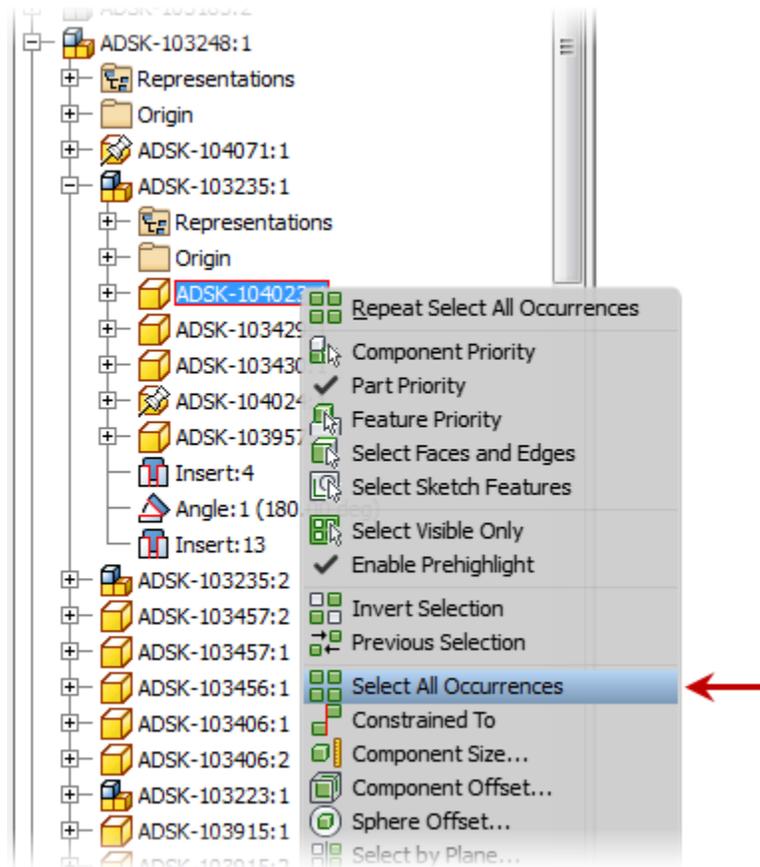


- To select all occurrences of the component *ADSK-104023*:

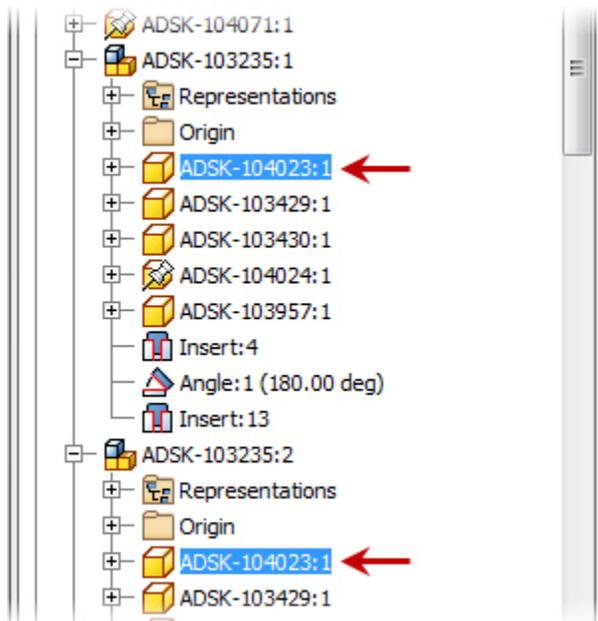
- Press SHIFT + right-click the selected component.

Project 2 – Assembly Interaction

- Click **Select All Occurrences**



- In the browser, expand the subassemblies as shown. All occurrences of the component are selected in the browser and in the graphics window.



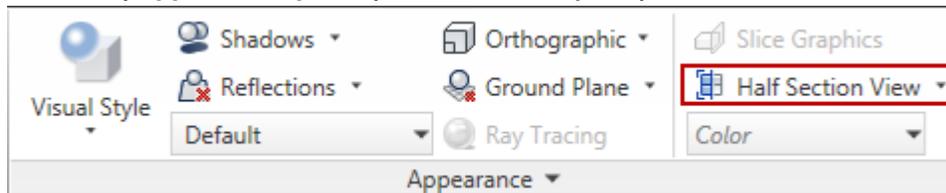
Project 2 – Assembly Interaction

7. To undo the effects of the **Isolate** tool used in the beginning of the exercise, right-click anywhere in the graphics window. Click **Undo Isolate**.
 - The visibility status of all components is returned to their previous state, prior to the **Isolate** tool being used.

8. Create a half-section view:

- Start the **Half Section View** tool

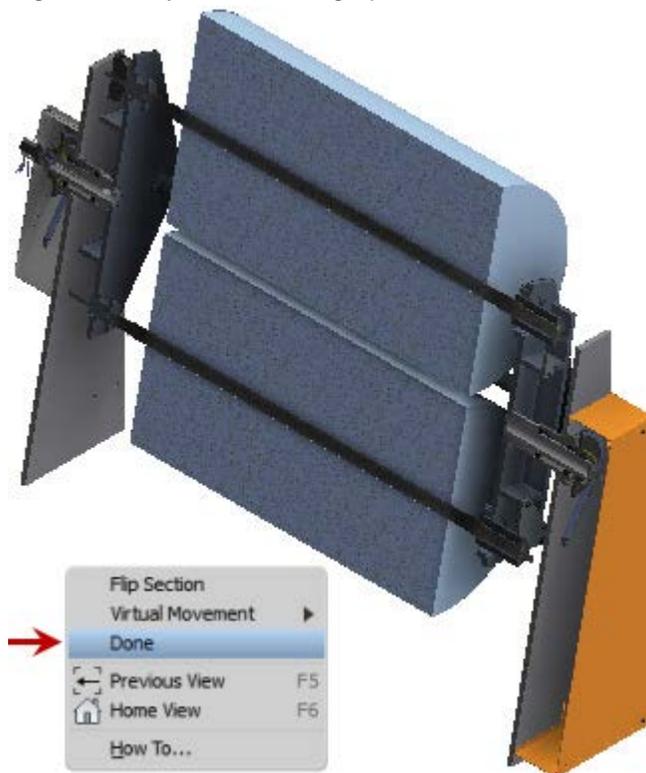
View tab | Appearance panel | Section View flyout | Half Section View



- In the browser, scroll to the bottom of the list and select *Work Plane3*.
- Click **OK** on the **Offset** dialog box



- Right-click anywhere in the graphics window. Click **Done**.

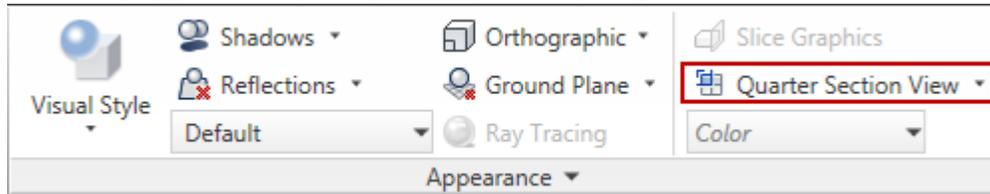


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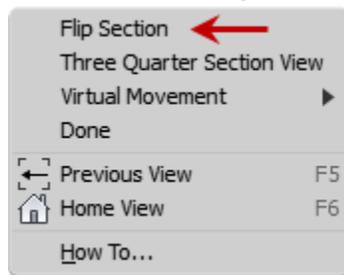
9. Create a quarter-section and three-quarter section views:

- Start the **Quarter Section** tool

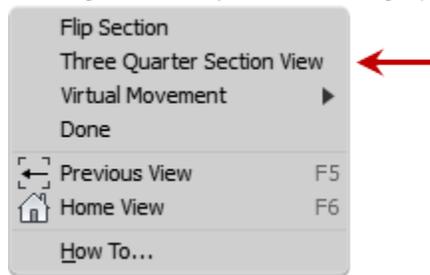
View tab | Appearance panel | Section View flyout | Quarter Section View



- In the browser, scroll to the bottom of the list. Select *Work Plane3*.
- Click **OK** on the **Offset** dialog box.
- Now select *Work Plane4*.
- Click **OK** on the **Offset** dialog box.
- Right-click anywhere in the graphics window. Click **Flip Section**. Continue to click **Flip Section**, notice how the section view changes.



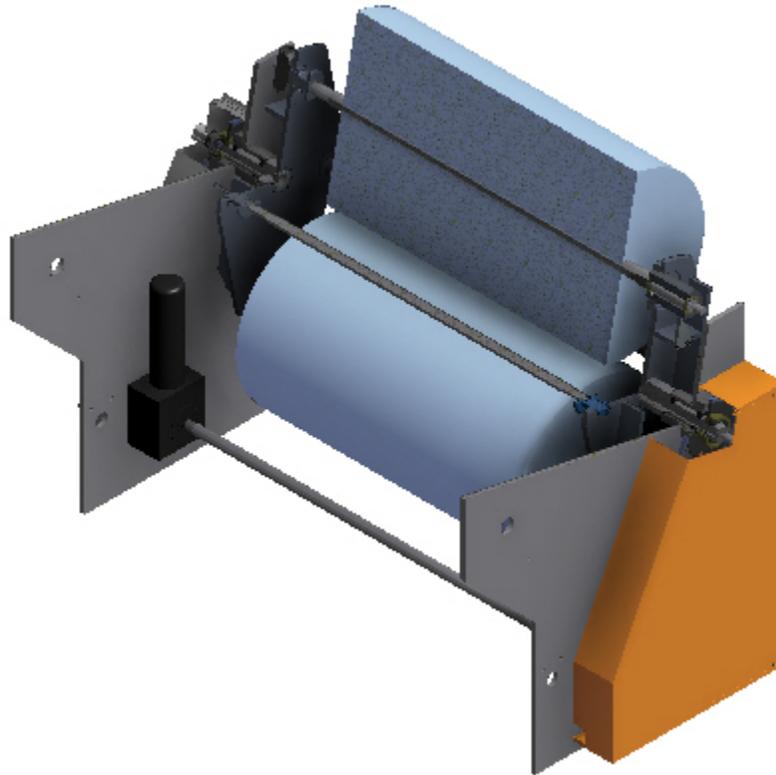
- Now right-click anywhere in the graphics window. Click **Three Quarter Section View**.



- Notice how the section view changes from a Quarter Section to a Three Quarter Section view.
- Right-click anywhere in the graphics window. Click **Flip Section**. Continue to click **Flip Section**, until the section view is displayed as shown.

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Project 2 – Assembly Interaction

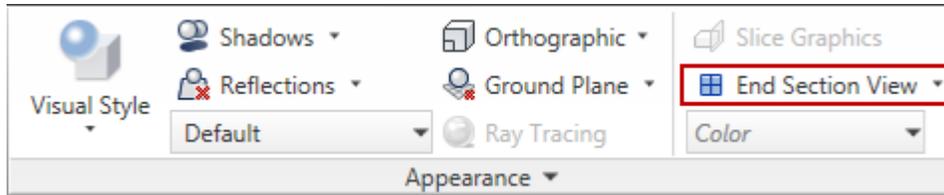


10. With the **Section View** command still active, use **Virtual Movement** to modify the section view.
- Right-click anywhere in the graphics window. Click **Virtual Movement**.
 - Select **Section Plane 2** from the flyout.
 - Click anywhere in the graphics window and Drag the plane
 - Drag the section plane until the offset is **-550**, or directly enter **-550** into the **Offset** dialog box.
 - Click **OK** on the **Offset** dialog box.
 - Right-click anywhere in the graphics window. Click **Done**.

Project 2 – Assembly Interaction

11. End Section View

View tab | Appearance panel | Section View flyout | End Section View



12. Close all files. Do not save.