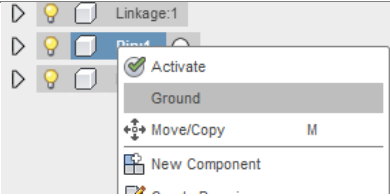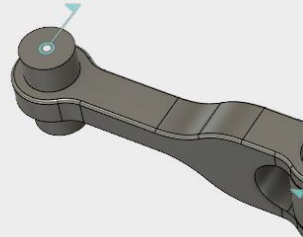# AUTODESK.

Lesson: Practice Exercise

Practice: Assemble components using joints.
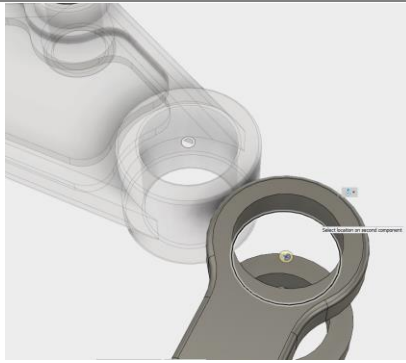
Learning Objectives:
- Ground a component.
- Create an as-built joint.
- Create a joint.

Step 1: Assemble components

1. Upload and open the file L7-PE-01.f3d.	
2. Right click on the component "Pin" in the browser and select Ground.	
3. Select Assemble > As-built Joint. Select Linkage:1 and Rocker:1 as the components. Set the Type to Revolute and set the pivot point at their common location as shown.	
4. Repeat the As-built joint between Linkage:1 and Pin:1.	

5. Select Assemble > Joint and set the motion type to Revolute. When selecting components you must select them by their joint location. Select the upper edge of Rocker:1 at its large opening. For Component2 select the inner edge of the bore on Linkage(1):1 as shown. **Note:** The components will move into place and animate the motion. The first selection will automatically move to the second selection.	
6. Test the motion by grabbing a component in the canvas area and movign it with the mouse. Save the file. **Note:** As a bonus select Pin:1 in the browser, Copy it and Paste New in the canvas area. Ground its location and create a joint between it and the second link to make a 4 bar linkage.	