# AUTODESK

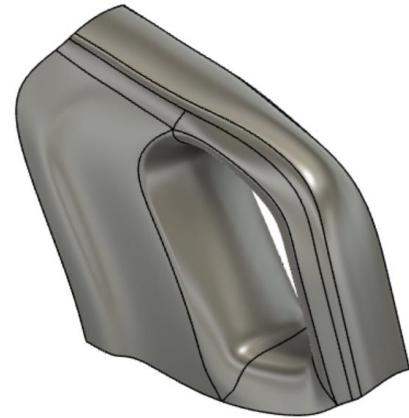## Practice exercise: Freeform modeling

Edit a Form body.

**Learning objectives:**

- Edit an existing Form body.
- Use Insert Point.
- Use Crease/Uncrease.
- Use Insert Edge.

The completed exercise
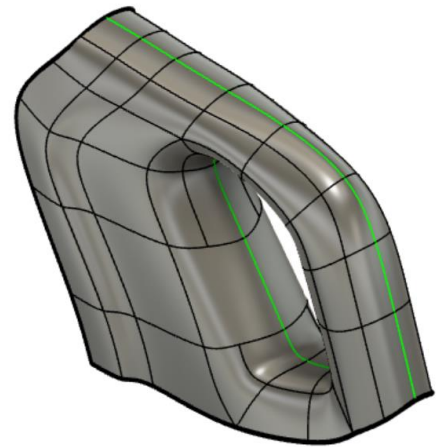
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**1.** Open the supplied dataset *crease.f3d*.

*Figure 1. Uploaded design.*

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**2.** With the Form toolset open, select Modify > Insert Point. Insert the two points pictured in Figure 2. Click OK to confirm.

NOTE: The tool may prompt with a request for a T-Spline Surface Version Upgrade which can be accepted by clicking OK.
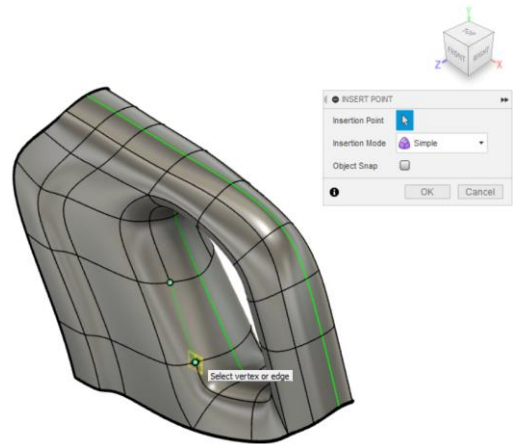
*Figure 2. Insert points on the Form body*

**3.** Use Modify > Crease to crease the pictured chain of edges. Click OK to confirm the operation.

NOTE: Recognized chains can automatically be selected by double-clicking an edge in the chain. To add additional edges, hold SHIFT.
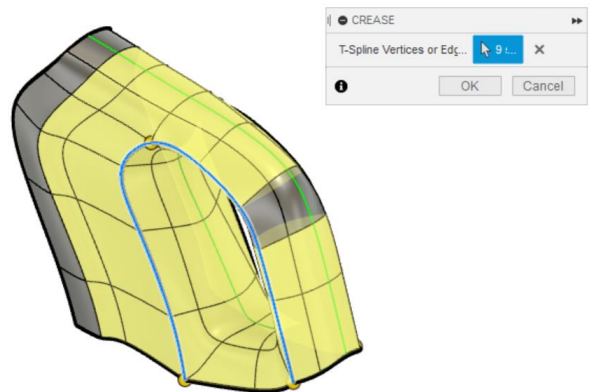
Figure 3. Crease a chain of edges

**4.** Use Modify > Insert Edge to insert an edge close to the chain of edges selected in Figure 4.
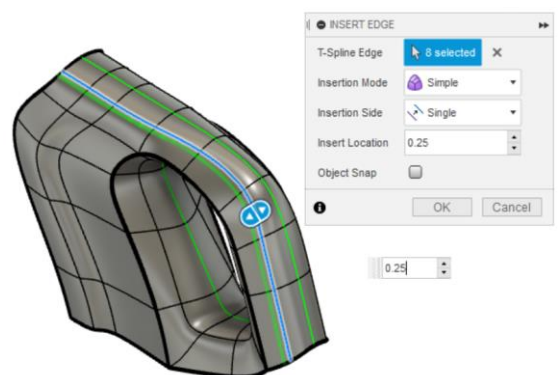
NOTE: Insert Location in this example was set to 0.25

Figure 4. Insert an edge

**5.** As Form tools do not have design history, explore an approach to revert changes by using Modify > Uncrease to remove the crease applied in Figure 3.
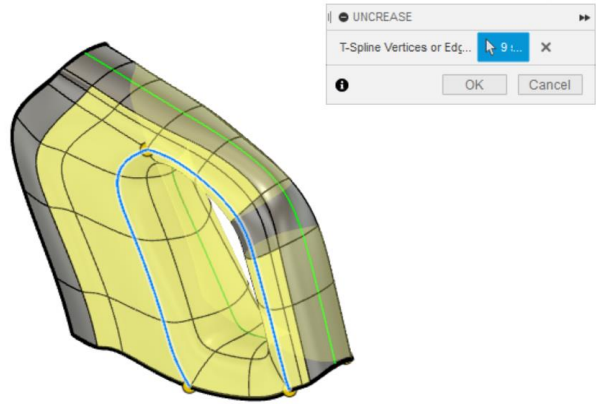


Figure 5. Use Uncrease to revert an operation

**6.** Use Modify > Insert Edge to add a new chain to approximately match the output shown in Figure 6.

NOTE: The display mode of the Form body can be toggled between Box, Control Frame, and Smooth displays using ALT + 1, 2, or 3 respectively. Alternatively, the Utilities > Display Mode menu can be used.
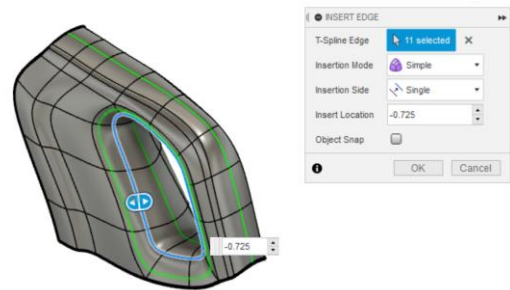


Figure 6. Create a rough sketch

**7.** Use Modify > Edit Form to narrow the grip region of the Form body. Consider moving vertices and edges to achieve the desired shape.
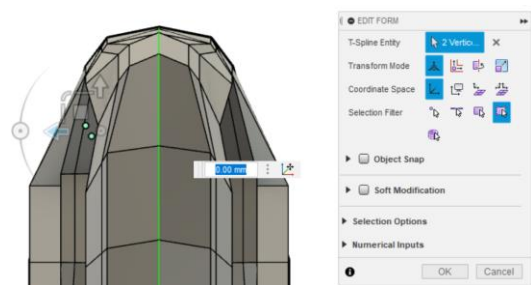


Figure 7. Use Edit Form

**8.** Using Utilities > Convert, convert the Form body into a surface body. Select the entire Form body for the Selection field and choose a few defining edges for the Keep Edges field. These edges will be preserved during the conversion. Click OK to confirm.
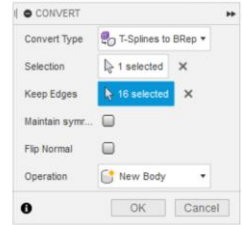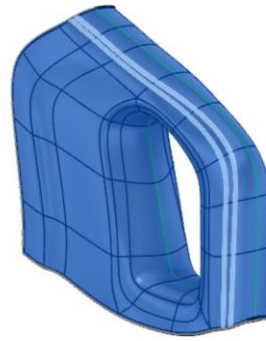


Figure 8. Use the Convert utility

**9.** Verify that the original Form body and the newly converted surface body are in the Browser.
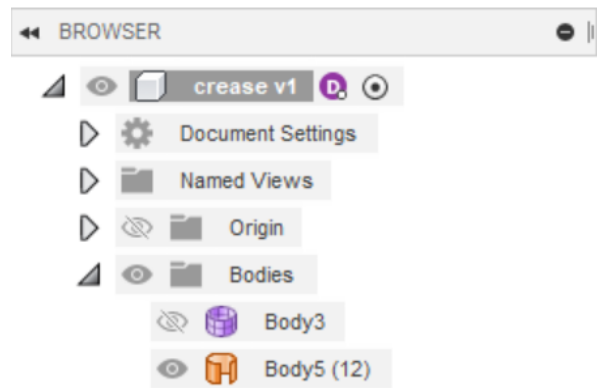


Figure 9. Review the Browser

**10.** Save the design.



Figure 10. Save