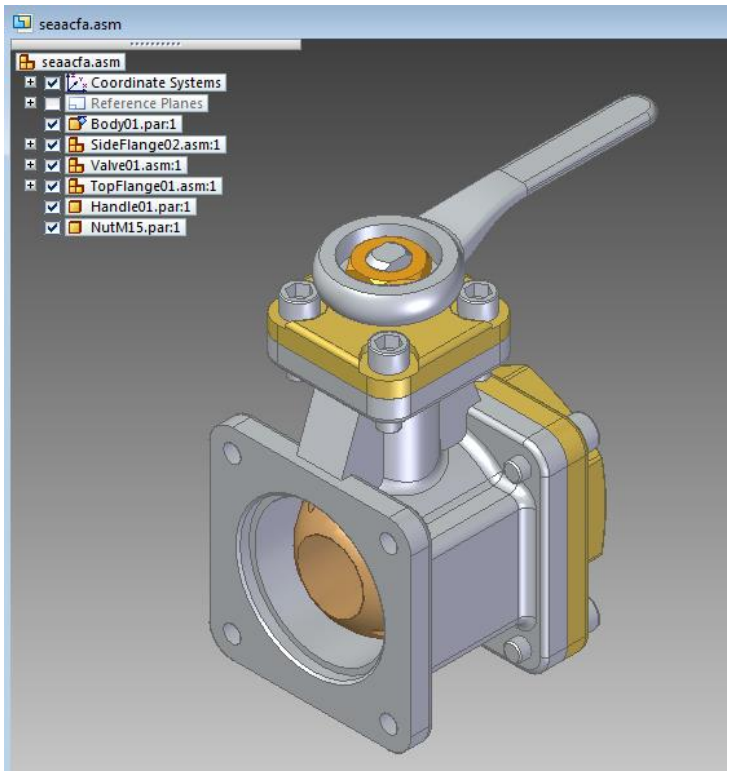
Create an Associative Part in place without using Inter-part Copies

This Tech Tip looks at how to create associative geometry without using the inter-part copy mechanism.

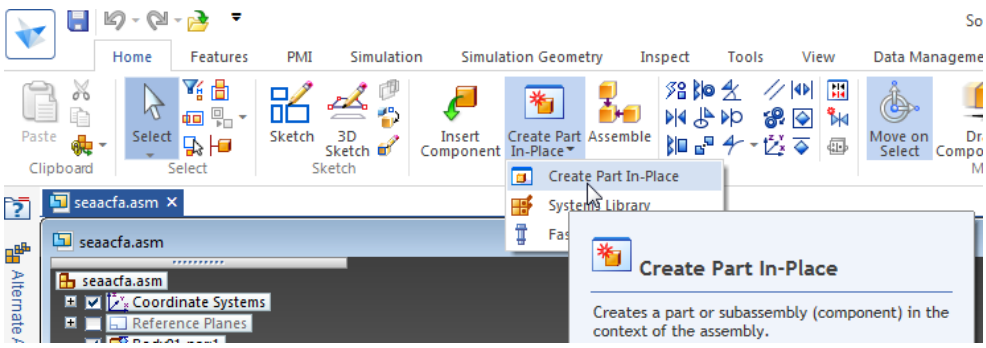
Traditionally in Solid Edge, inter-part copies are used to create associative faces to another part of an assembly, but there is another way which allows to create an associative geometry without using the inter-part copy mechanism.

In this example, we want to create a part with a common face to another part where the edges will be associative.

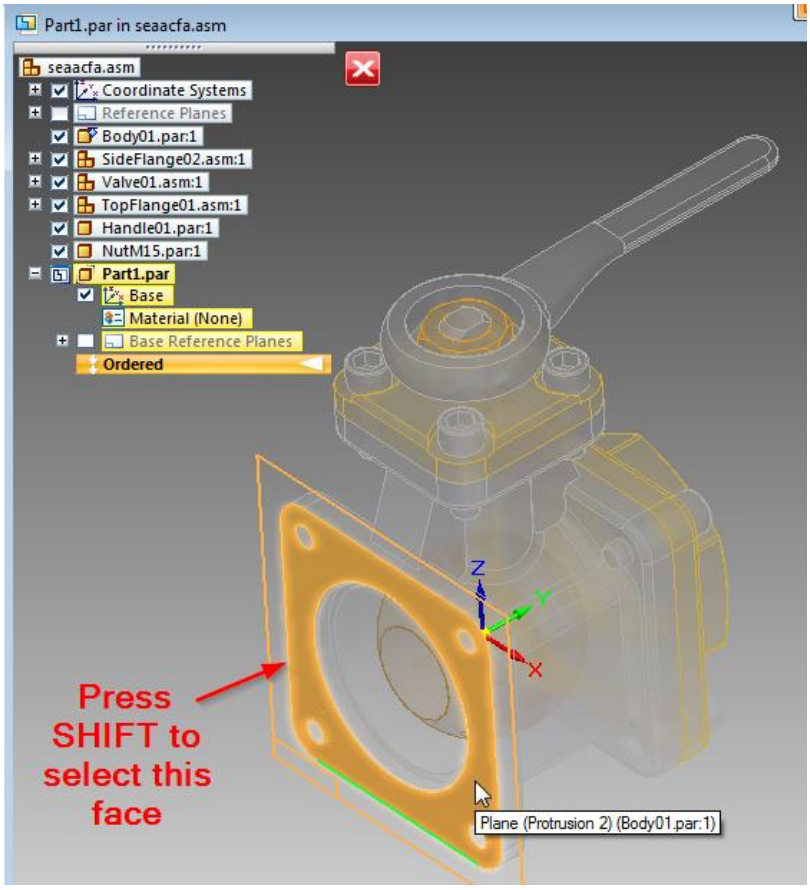
Open the assembly Seeaacfa.asm which is in the training folder. Then remove the SideFlange01.asm:1



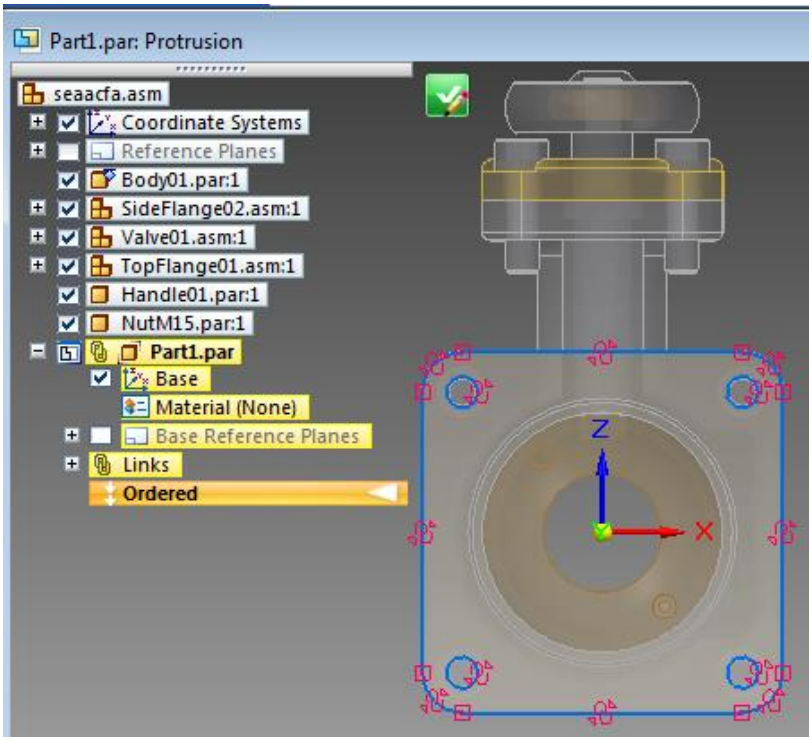
Create a part in place with the default options



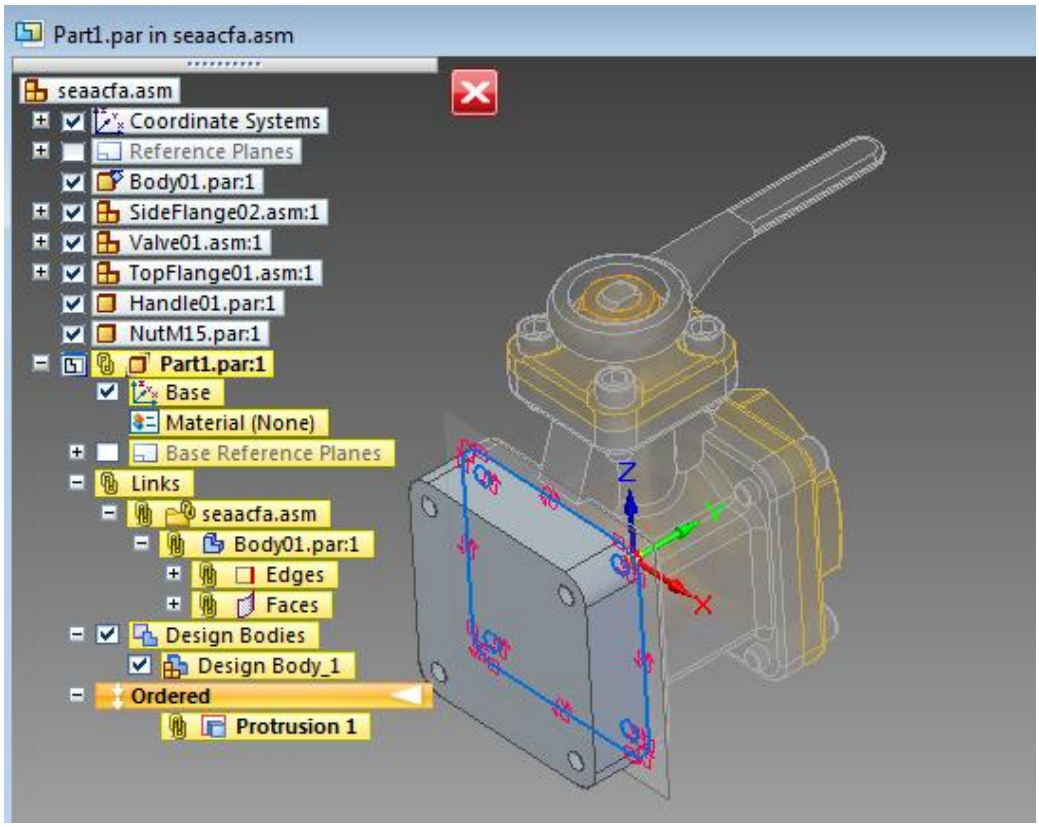
Select the extrude command. At this moment you are unable to select a plane or face. But if you press SHIFT, you will notice you can now select a face from any other part of the assembly.



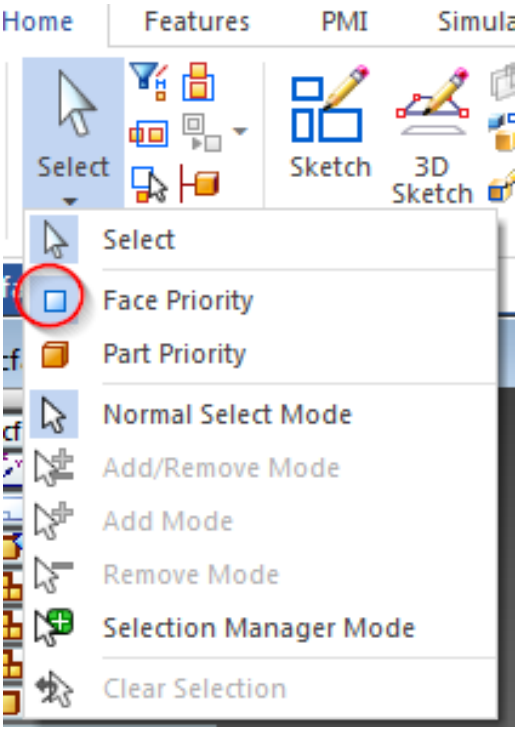
With the "Project to sketch" command you can insert external edges linked to the other part:



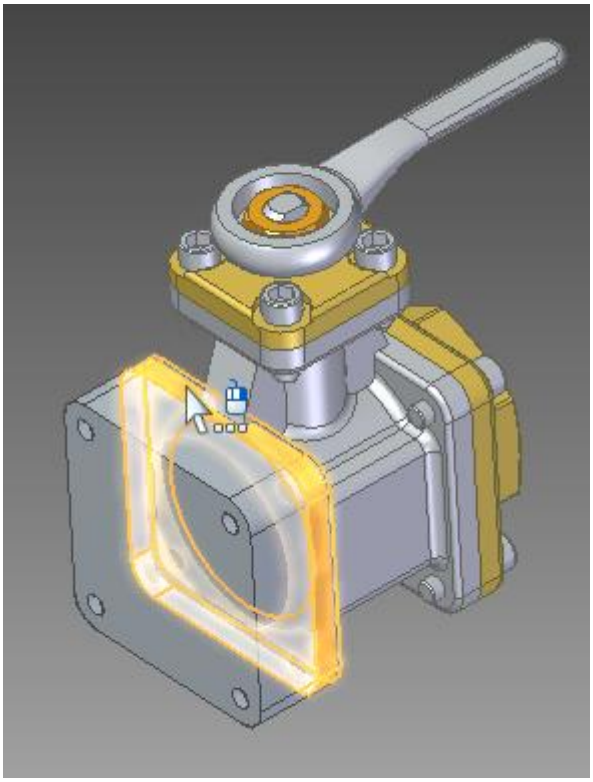
Click to set a distance and then your part is created. You will notice no inter-part copy has been added in the pathfinder:



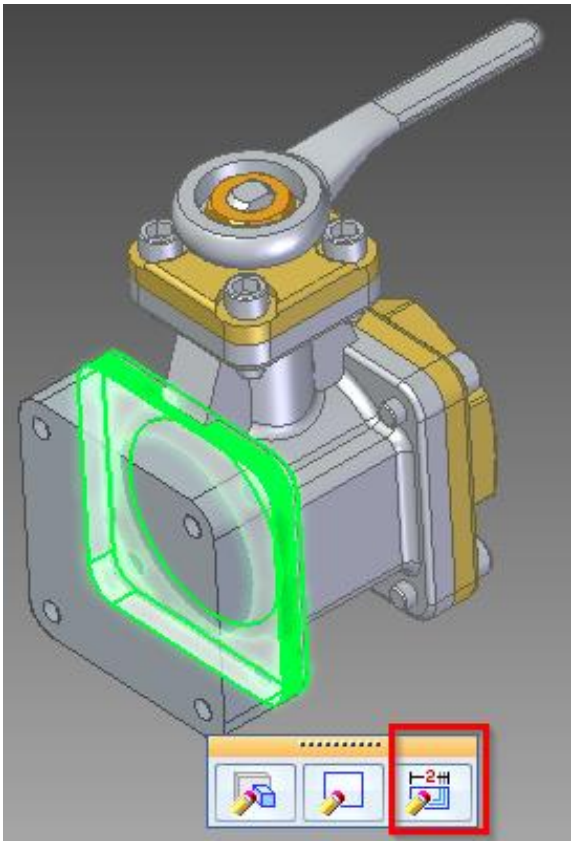
Close the part, and return to the assembly. You can now verify that the new part is associative to the other part. Activate the face priority in the select command using CTRL-Space and in the menu, make sure that this option is highlighted:



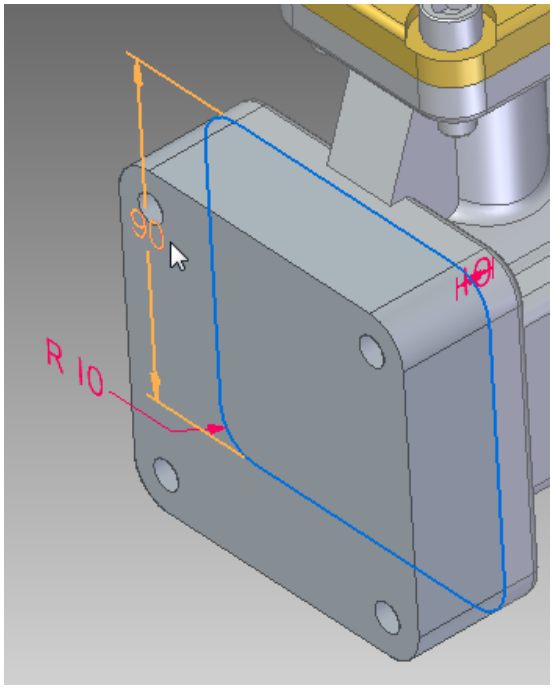
Select this face as shown in this picture



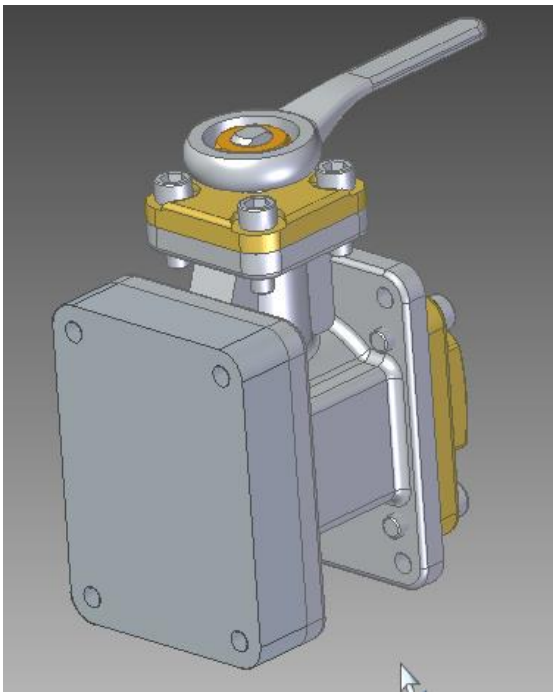
Then select the dynamic edit.



Edit and modify the dimension:



The new part is updated based on the other part.



By using the SHIFT key it is faster to create a part with an associative face, but Inter-part copy offers a more powerful usage.