Sub InsertHatchesIntoAssembly()

' This code places the hatch into our assembly (up to two times), if applicable

' Hatches are always place on the top of the tank body assembly, at either end of the tank

' This set of commands is to place the front hatch, if the user has opted to include one

If F\_HATCH Then

' In order to locate where to put the hatch assembly in our master assembly file, we will use matrix positioning

' See presentation included in this kit that explains how matrix positioning works - it's easier than it looks or sounds

Dim matrixG = ThisDoc.Geometry.Matrix(1, 0, 0, 10.625, 0, 1, 0, TANK\_OD / 2 + 3, 0, 0, 1, TANK\_L / 2 - F\_HATCH\_OFF - 21.5, 0, 0, 0, 1)

' This can be taken from an iLogic snippet, and is used to insert components into assemblies

' This code inserts the hatch assembly into our master tank assembly file

' Instead of placing at the origin, it places it based on our input matrix we created (matrixG)

' Note that we are grounding all geometry, and we are not using any constraints to place the hatch

Dim componentG = Components.Add("Front Hatch:1", LIBRARY\_PATH & "Hatches\20 Inch\MW-SW 103.iam", \_

position := matrixG, grounded := True, visible := True, appearance := Nothing)

End If

If R\_HATCH Then

' In order to locate where to put the hatch assembly in our master assembly file, we will use matrix positioning

' See presentation included in this kit that explains how matrix positioning works - it's easier than it looks or sounds

Dim matrixH = ThisDoc.Geometry.Matrix(-1, 0, 0, -10.625, 0, 1, 0, TANK\_OD / 2 + 3, 0, 0, -1, -TANK\_L / 2 + R\_HATCH\_OFF + 21.5, 0, 0, 0, 1)

' This can be taken from an iLogic snippet, and is used to insert components into assemblies

' This code inserts the selected manway assembly into our master tank assembly file

' Instead of placing at the origin, it places it based on our input matrix we created (matrixH)

' Note that we are grounding all geometry, and we are not using any constraints to place the manway

Dim componentH = Components.Add("Rear Hatch:1", LIBRARY\_PATH & "Hatches\20 Inch\MW-SW 103.iam", \_

position := matrixH, grounded := True, visible := True, appearance := Nothing)

End If

End Sub