Creating Box Tutorial

1 Select **Sketch->Rectangle** tool
2 Draw a Box of size **80**mm*__60__mm
    Tab to move between dimensions
3 **Orient->Home** to get view to fit
4 Select **Edit->Pull** and make the box of height **40**mm
    With the mouse left click the surface and pull upward in direction of yellow arrow
    While holding the **left mouse** button down press **space** and enter 40mm for the height
5 **Edit->Select** 4 vertical edges (rotate to get fourth)
    Hold **Ctrl** to multi select edges
    Hold **Middle mouse** button down and drag to rotate object
6 **Edit->Pull** a round **10**mm
    Left click the edge(yellow arrow) and pull inward.
    While holding the **left mouse** button down press **space** and enter 10mm for the roundness
7 **Edit->Select** and select the top face
8 **Mode->Sketch**
9 **Orient->Plan View**
10 Select **Sketch->Circle** tool
11 Place **4**mm circles in the four corners, at the centre of the rounded edges
12 **Orient->Home**
13 Select **Edit->Pull** then select the 4 circles(Use control to add to selection)
    Select the area of circle and not the perimeter
14 **Pull** to a depth of **36**mm
    Grab yellow arrow and pull downward
    Without releasing the mouse press space and type 36mm
15 **Edit->Select** and select the 4 circle edges
16 Select **Edit->Pull** and change mode to **Chamfer**, pulling **3**mm
    Grab yellow arrow and pull outwards
    Without releasing the mouse press space and type 3mm
17 **Edit->Select** the top edge (double click)
18 Select **Edit->Pull**
19 Change **Pull** mode back to **Round**
20 **Pull** the top edge to **2**mm
    Grab yellow arrow and pull inward
    Without releasing the mouse press space and type 2mm
21 **Edit->Select** the top face
22 Then chose **Insert->Plane**
23 **Edit->Move** the plane down by **10**mm
    Grab the blue vertical arrow and pull downward
    Without releasing the mouse press space and type 10mm
24 **Intersect->Split Body**
25 Click on the box
26 Then click on the edge of the blue plane
27 **Edit->Select** and select the top
    This is done by clicking the left mouse button three times
28 **Edit->Move** and drag to the left by **85**mm
    Grab the red arrow and pull to the left to separate the two parts
29 **Orient->Home**
30 Move over to the structure window and rename the two parts box and cover
    Right click on the Solid name and click rename
31 **Edit->Select** and select the top surface of the bottom half
32 **Insert->Shell** and set the wall thickness to **4**mm
33 Flip to the underside of the cover
    Middle mouse button and drag
34 **Edit->Select** and select the bottom surface of the top half
35 **Insert->Shell** and set the wall thickness to **8**mm
36 **Edit->Select** and select the outer bottom surface
37 **Orient->Plan View**
38 **Sketch->Offset Curve** and offset by **3**mm
    Select the inner outline, ie double click the line
    Drag up and press space
    Type 3mm for the offset
39 Rotate the view, by holding down the middle mouse button and dragging

40 **Edit->Pull** ribbing up by **2**mm
Select the ribbing
Grab yellow arrow and pull downwards
Without releasing the mouse press space and type 2mm
41 Move over to the structure window, and Delete the surface
42 **Edit->Move**
43 Select the cover, click 3 times
44 **Move Anchor**
45 Select bottom right circle diameter
46 **Move Upto**
Rotate the view, by holding down the middle mouse button and dragging
47 Choose the box circle
48 Move over to the structure window, right click on Box **Move to New Component**
49 Right click on cover **Move to New Component**
50 Click on plane and press delete

Cutting Holes in Box Tutorial

1 Start up Window explorer and drag and drop the file **D15.rsdoc** into your design.
2 Press **Orient->Home** to get the drawing to fit again
3 **Edit->Move** and grab the red arrow and drag to the left by ~65mm
4 Click three times to select the entire component
5 **Edit->Move->Anchor** and select the underbelly of the connector
6 **Edit->Move->UpTo** and select the top of the box
7 Press **Orient->Home** to get the drawing to fit again
8 **Edit->Move** and grab the red and green arrows and position the component in the centre of the box
9 Click three times to select the entire box top
10 **Intersect->Combine**, selecting first the D15 connector as the cutter object.
11 Lastly select the centre of the D15 as the area to be removed (The highlighted yellow area)
12 **Sketch->Circle** and click the top of the box to select the sketch plane
13 Press **Orient->PlanView**
14 Place a circle on each of the D15 attachment holes
15 **Mode->3D Mode** and rotate the view slightly
16 **Edit->Pull** and pull the surface away from you to generate two holes
17 **Edit->Move** then triple click the D15 connector and move the connector away from the box
18 Rotate the box around to take a view from the top
19 Click on rounds and double click to select them all and press the **Delete** to remove them
20 Click on remaining facing surface select **Edit->Pull** and pull the surface away from you to complete the cut-out