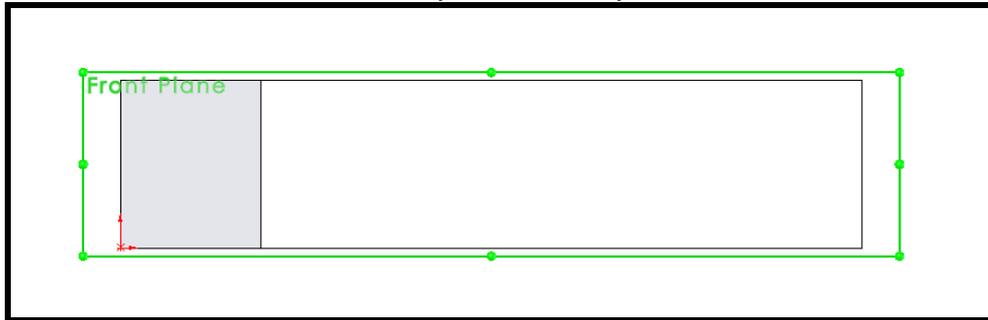
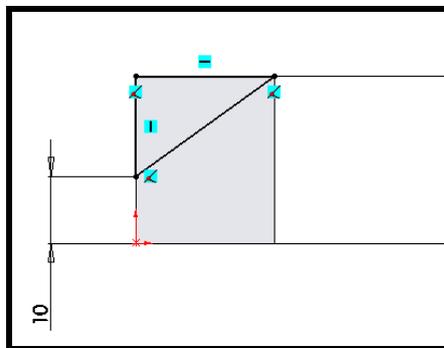


Basic Features – Extruded Cut. A Strap Clamp (Part 2).

We can remove the two corners from the block, producing the sloped ends of the strap clamp.
 Start by inserting a sketch on to the plane running through the centre of the part, in this example the front plane.



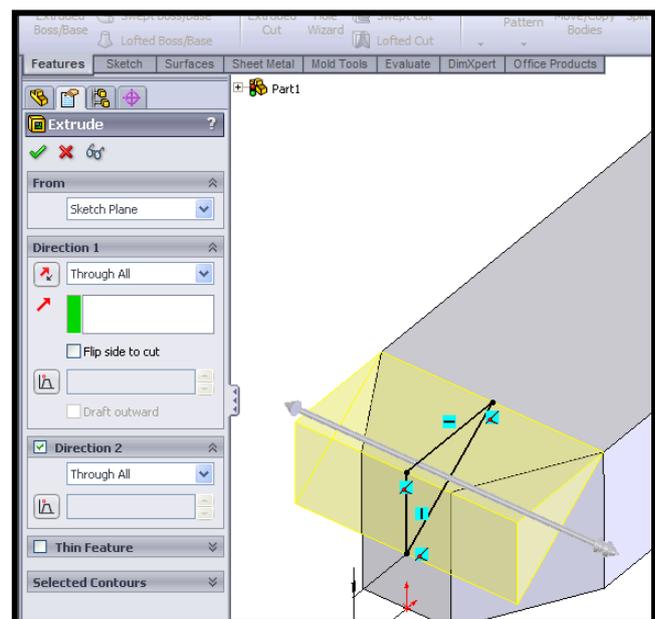
Select the “normal to” option from the modify view options to set the plane flat to the screen.



Add the sketch lines, ensuring all relations are in place, to fully define the sketch you should only require one dimension.

Select the feature, “Extruded cut”, for this feature, cutting from the centre out we must select the option to cut in the second direction, select the check box to do this.

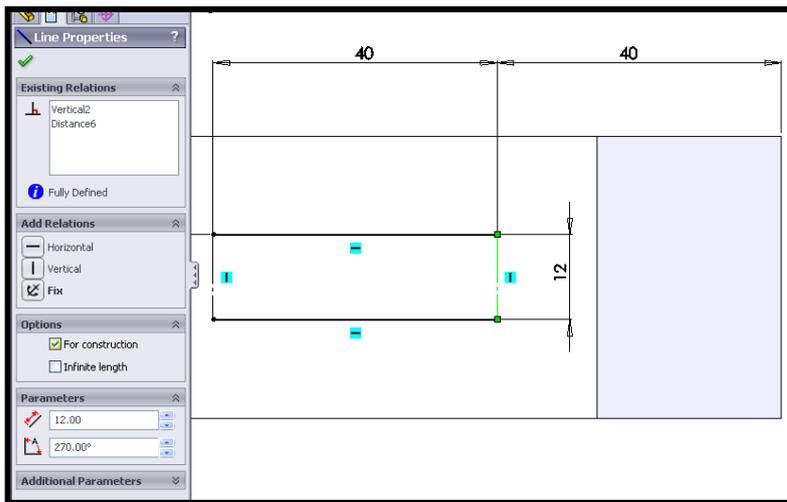
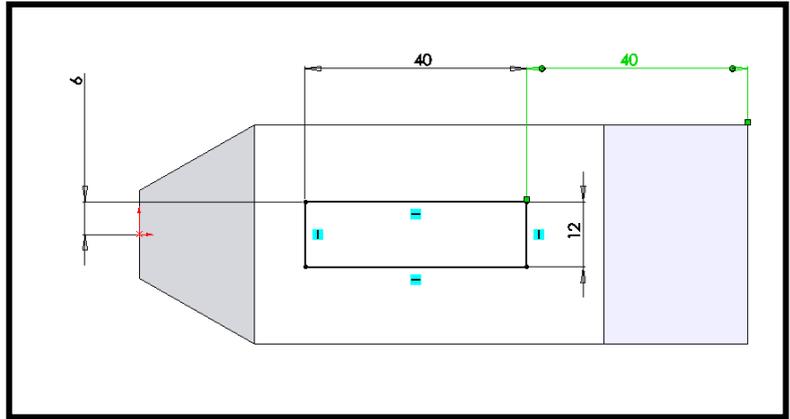
Set the end conditions to cut “through all”.



Repeat for the opposite end. Start another new sketch and cut in both direction.

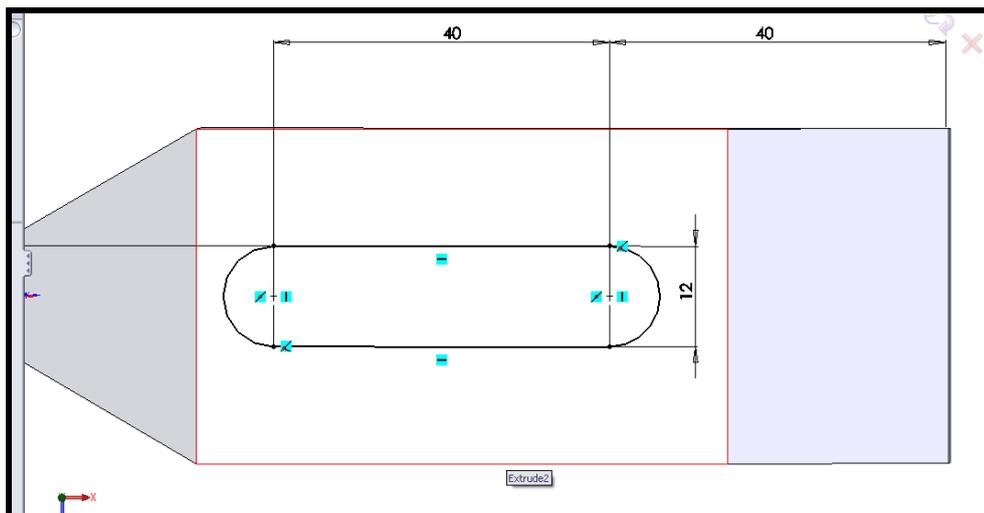
Sketching with construction lines.

The slot needs to be produced for the clamp stud to pass through, start a sketch on the top plane, use the rectangle sketch tool to begin, add the required dimensions and relations.



The two vertical lines can be used as construction lines; we can change them from outline to construction. To do this, select the line, note that the property manager changes, select the check box for construction.

Close the sketch by adding the two arcs, use centre point arc sketch tool, the first point to select is the mid-point of the construction line, then select the end points of the same line, do this in a counter clockwise direction (standard CAD and CAE method for arc production).



Use Extruded Cut to produce the slot. Finish the model, add the chamfers to the upper and lower edges of the slot, use the chamfer tool on the feature toolbar.