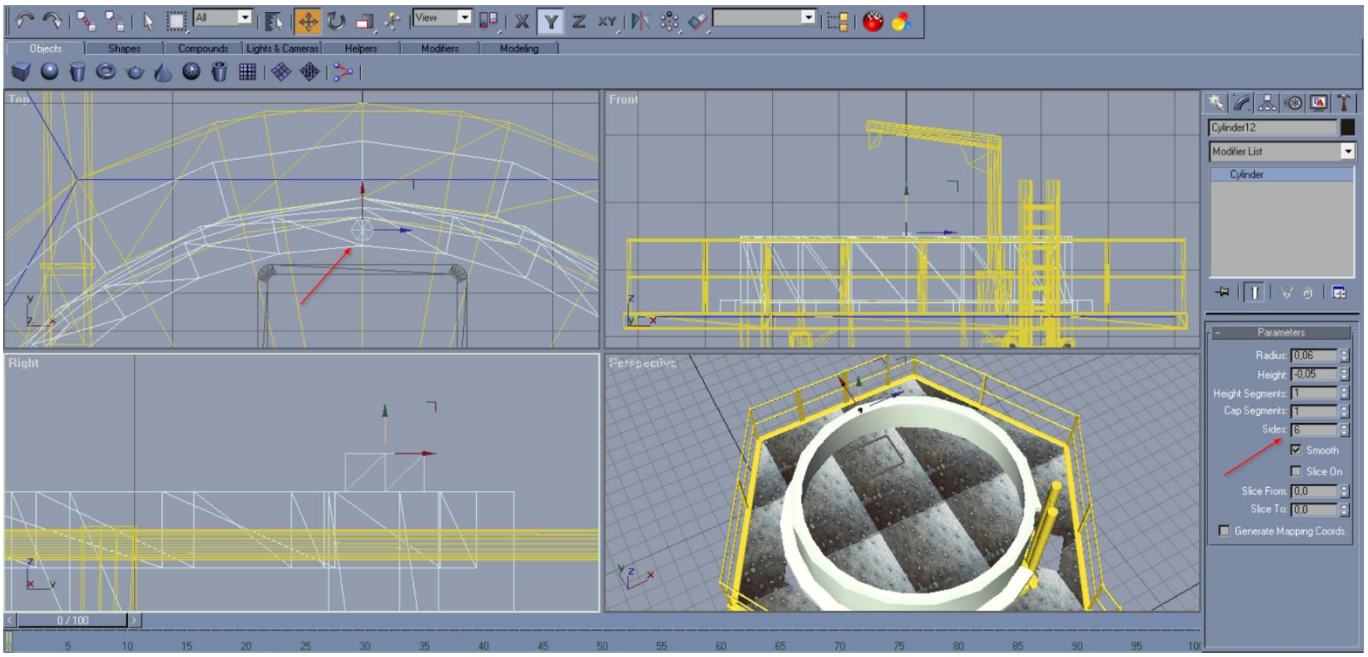
GMAX: RingArray (Flange-) Tutorial

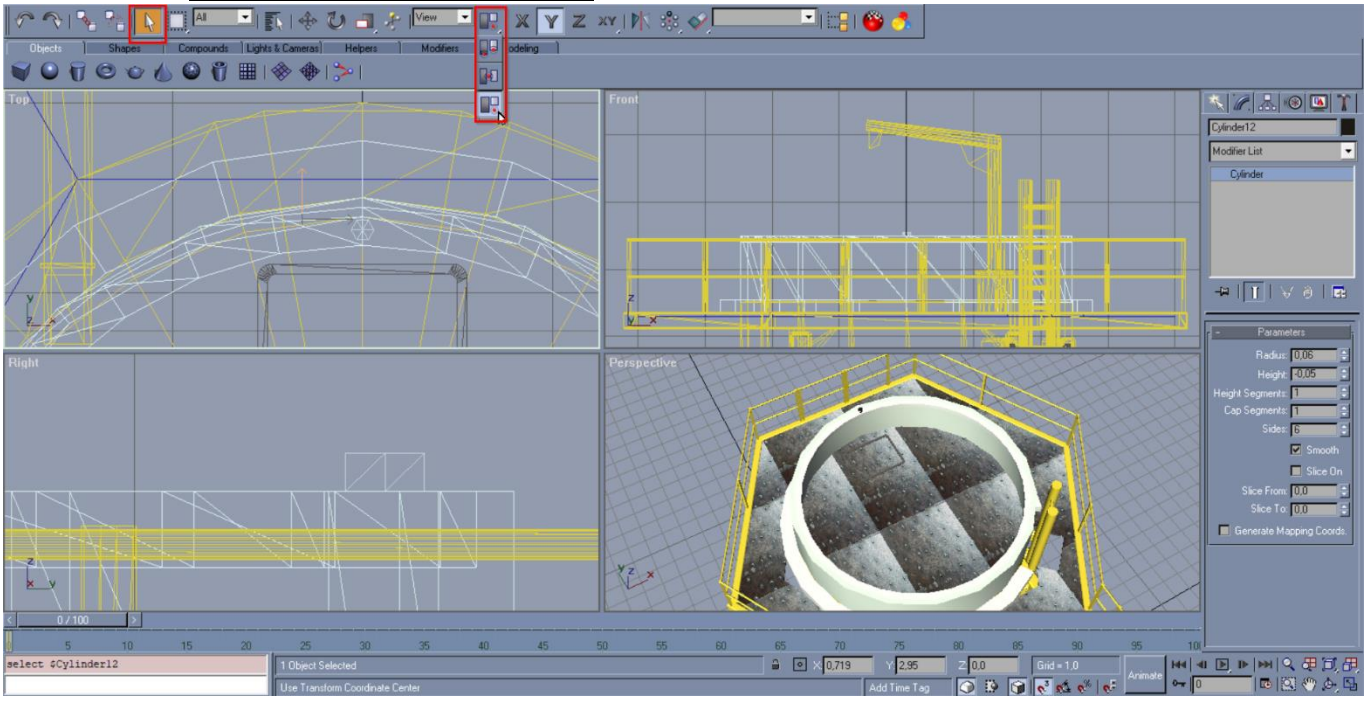
I decided to share a little bit of what I have learned over the past few months using gmax to create models for sc4. One of the things that bugged me the most was not knowing how to use the RingArray function properly. This is a very frequently used function for me in other modeling tools like inventor, where one would simply pick the axis of rotation after selection the tool. This tool can be used to create circular arranged (re-oriented or not) copies of shapes e.g. the bolts in a flange, which I am going to use as an example for a demonstration. The tutorial comes in form of a PDF with detailed screenshots.

Bear in mind that the resolution which with the model appears in the game is not too high, so the array and objects used should have a reasonable size.

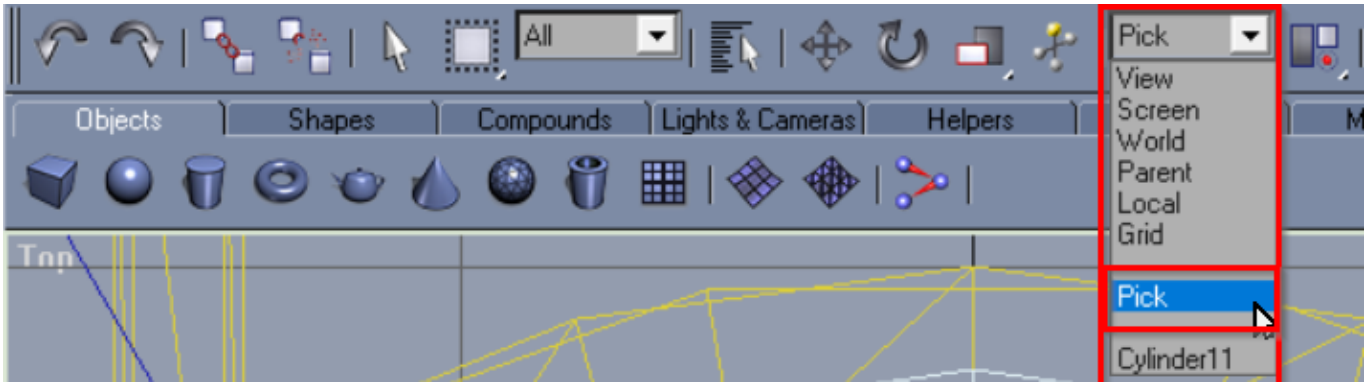
(1) To begin we create a cylinder that we use as the base or our flange and a nice small cylinder with 6 sides that looks like a nut and place the nut on the flange.



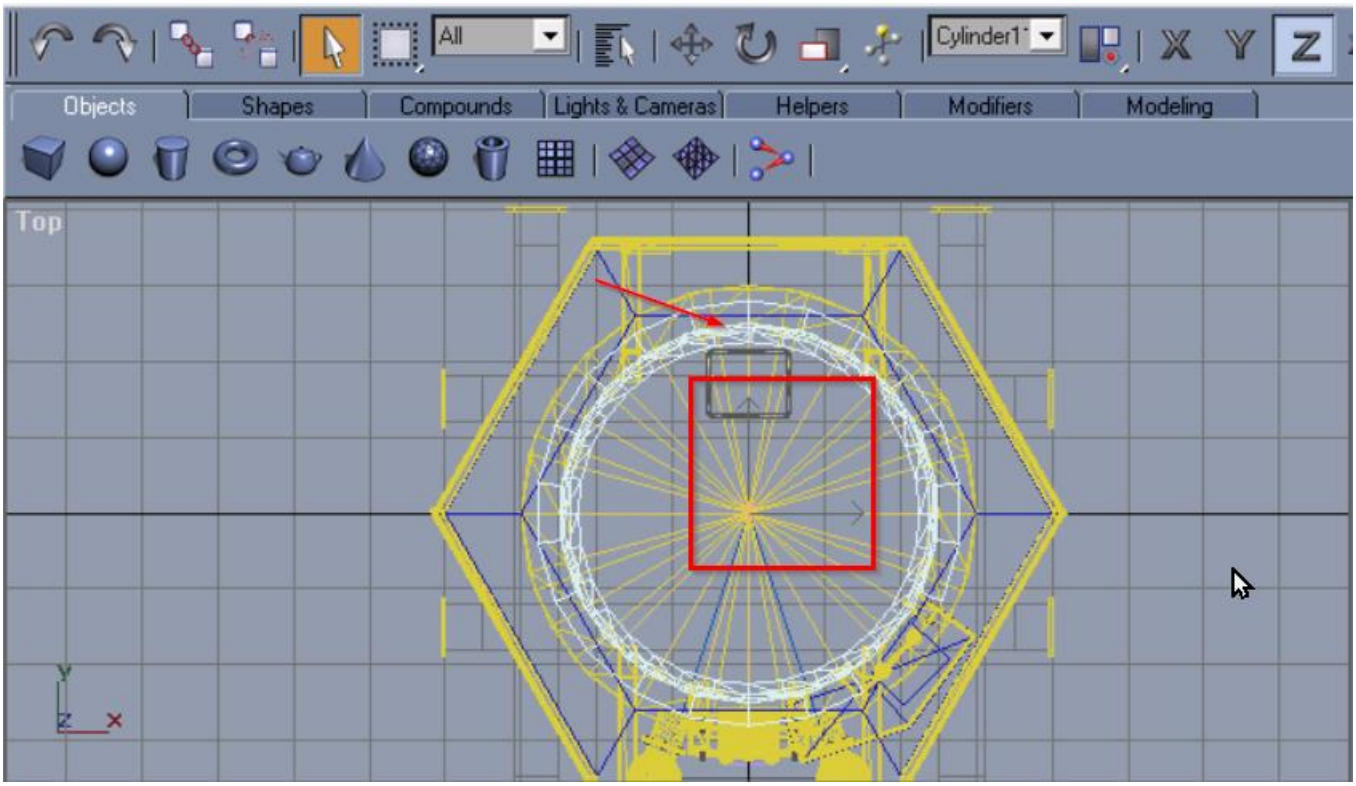
(2) Secondly, we select the object we want to use in the ring array (the nut) using the Select Object tool and then select Use Transform Coordinate Center.



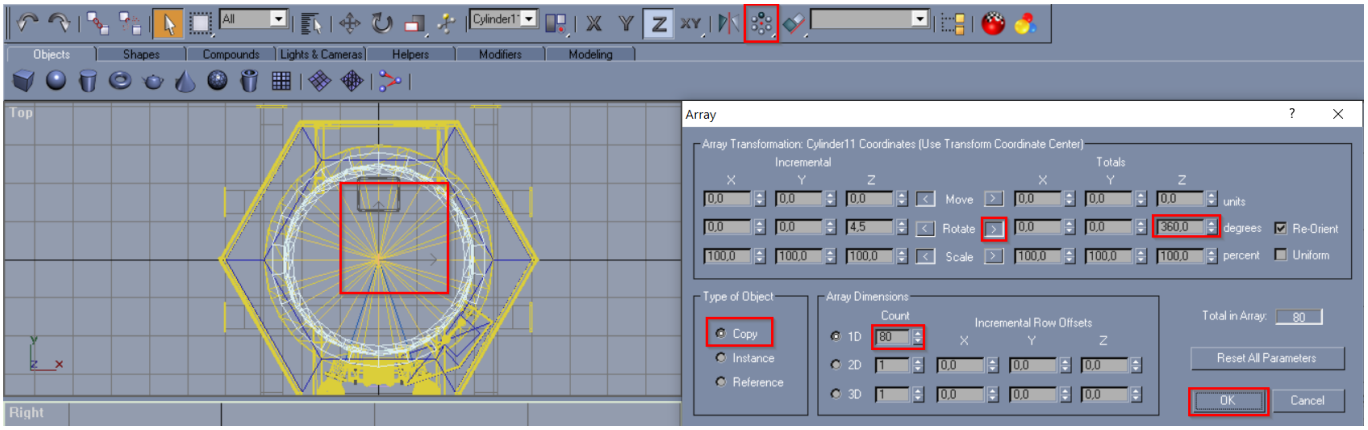
(3) Next, from the Reference Coordinate System dropdown we select Pick and then click an object that has its center in the center of our desired rotation.



(4) The Coordinate System should jump to the center of the selected object now, WHILE we still have the nut selected.



(5) Finally, we are able to use the Array tool and select the > right of the rotate setting and type in the desired degree for the arrangement (for our flange 360°). Pay attention to the alignment of the coordinate system, maybe you need to rotate around X or Y. Select Copy for the object type and how many copies you want in your arrangement. The Angle between the copies will be calculated automatically (rotation degree / number of objects). Confirm with OK.



The result should now look something like this. I recommend selecting and grouping all bolts/nuts for easier handling while continuing your work.