

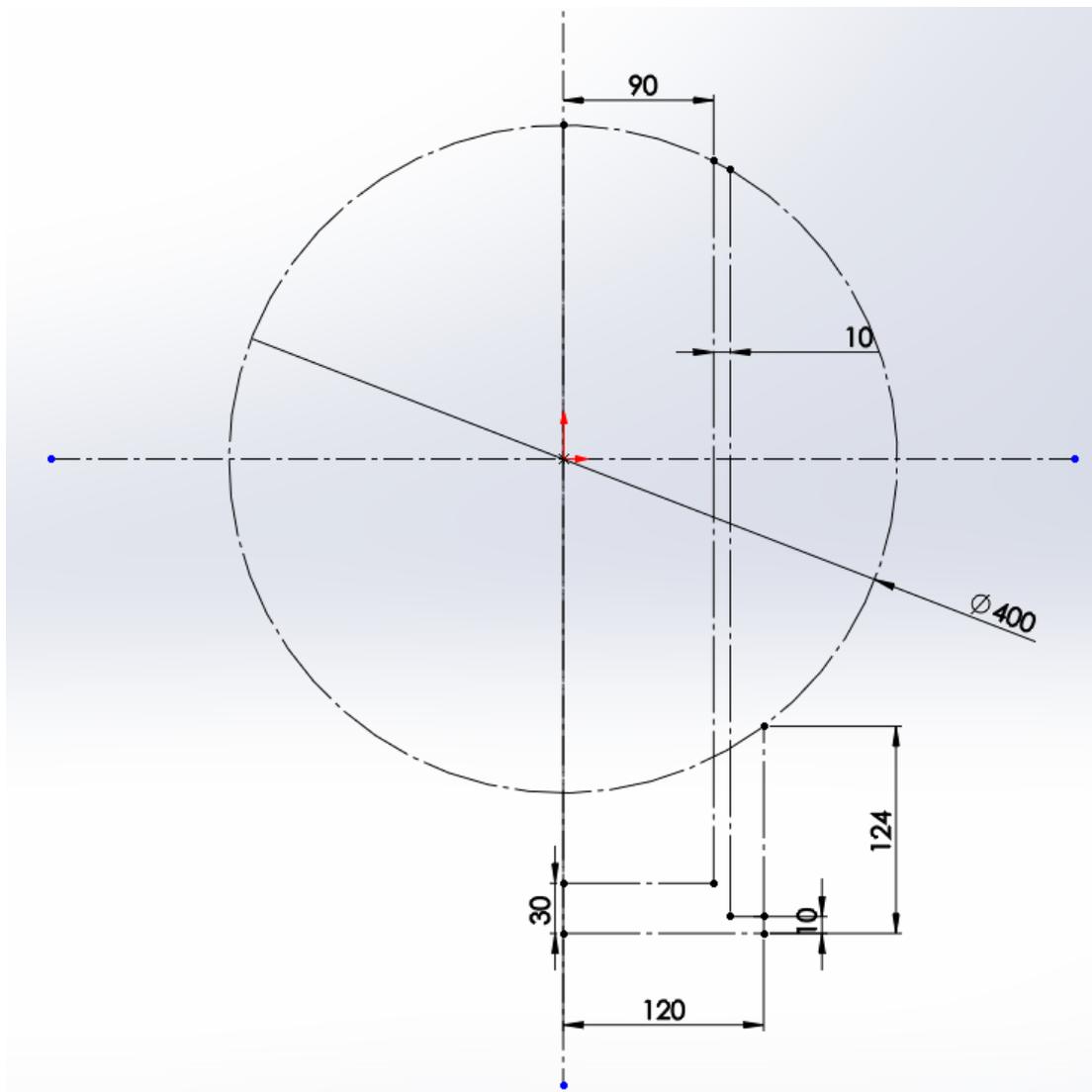
Camera Turret Model

Study your part and look for symmetry.

I chose to use the front view of the camera.

Create a sketch on the front plane and fully dimension all the sketch entities.

I guessed at some relative dimensions that looked like your picture but you will need to substitute the actual dimensions.



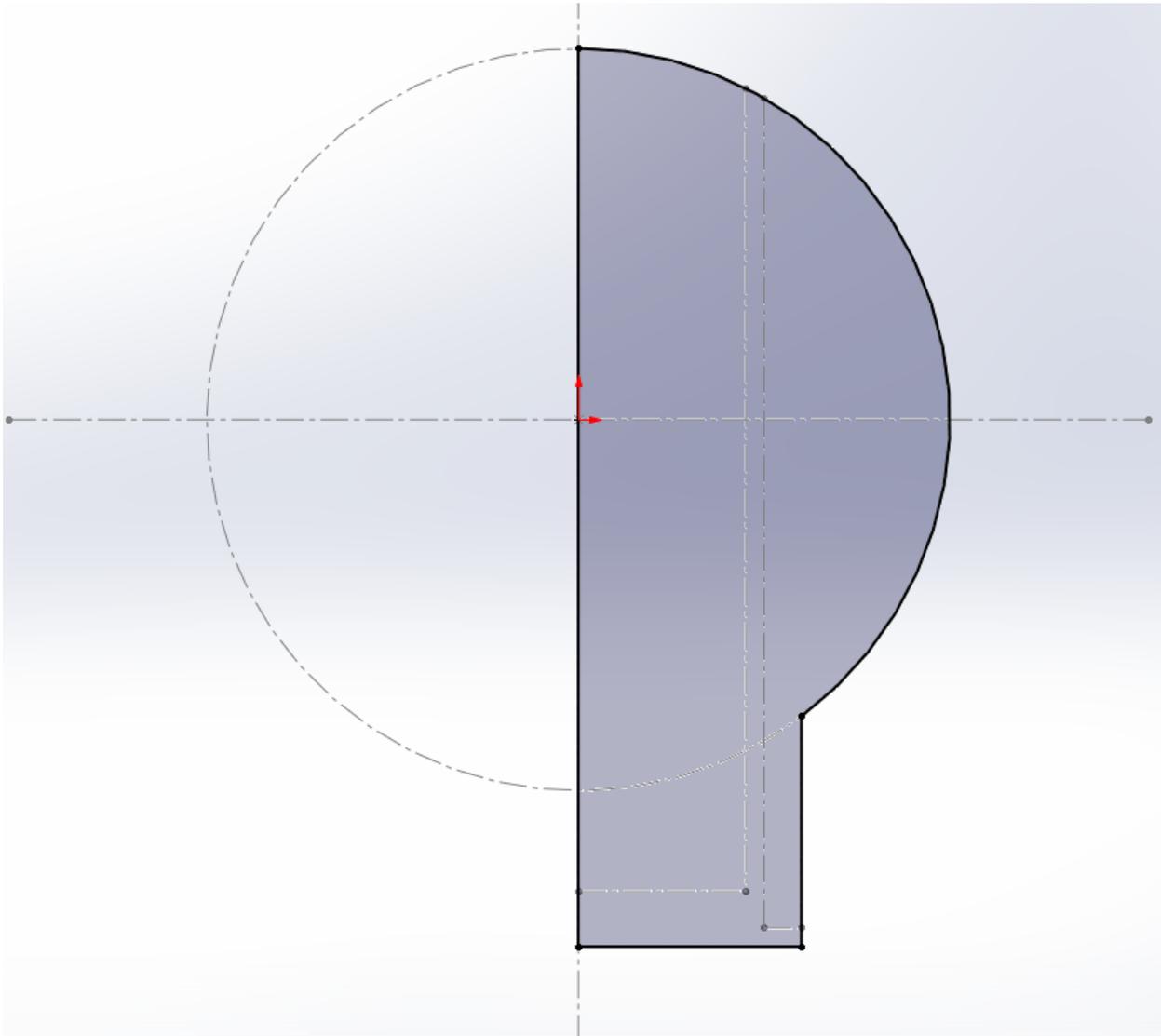
Save this sketch and use it for each of the parts.

Support model

Open a copy of your front view and save as Support.prt

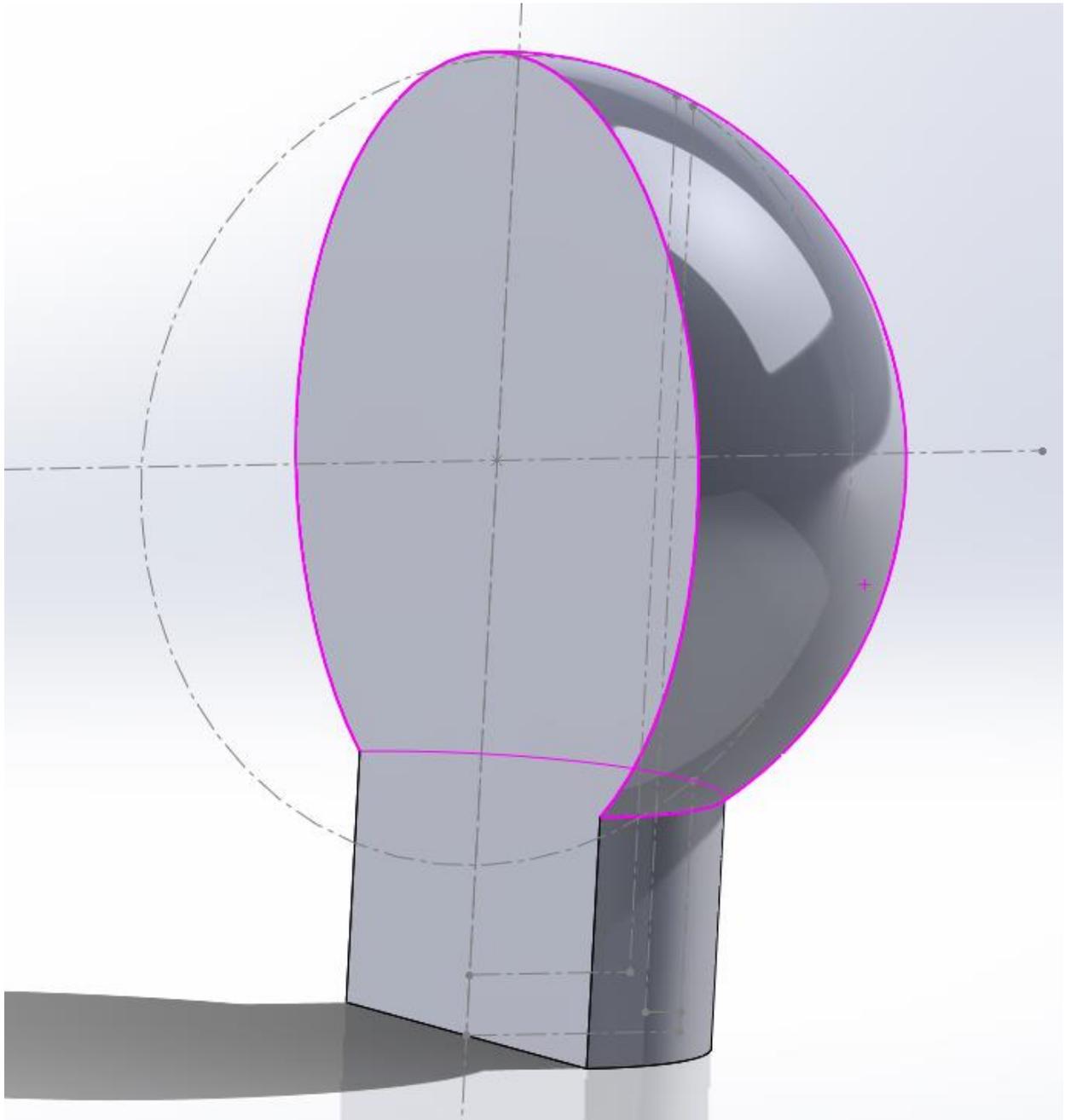
Open this part and create a sketch on the front plane.

Select the following lines and trim portions of lines as shown below.



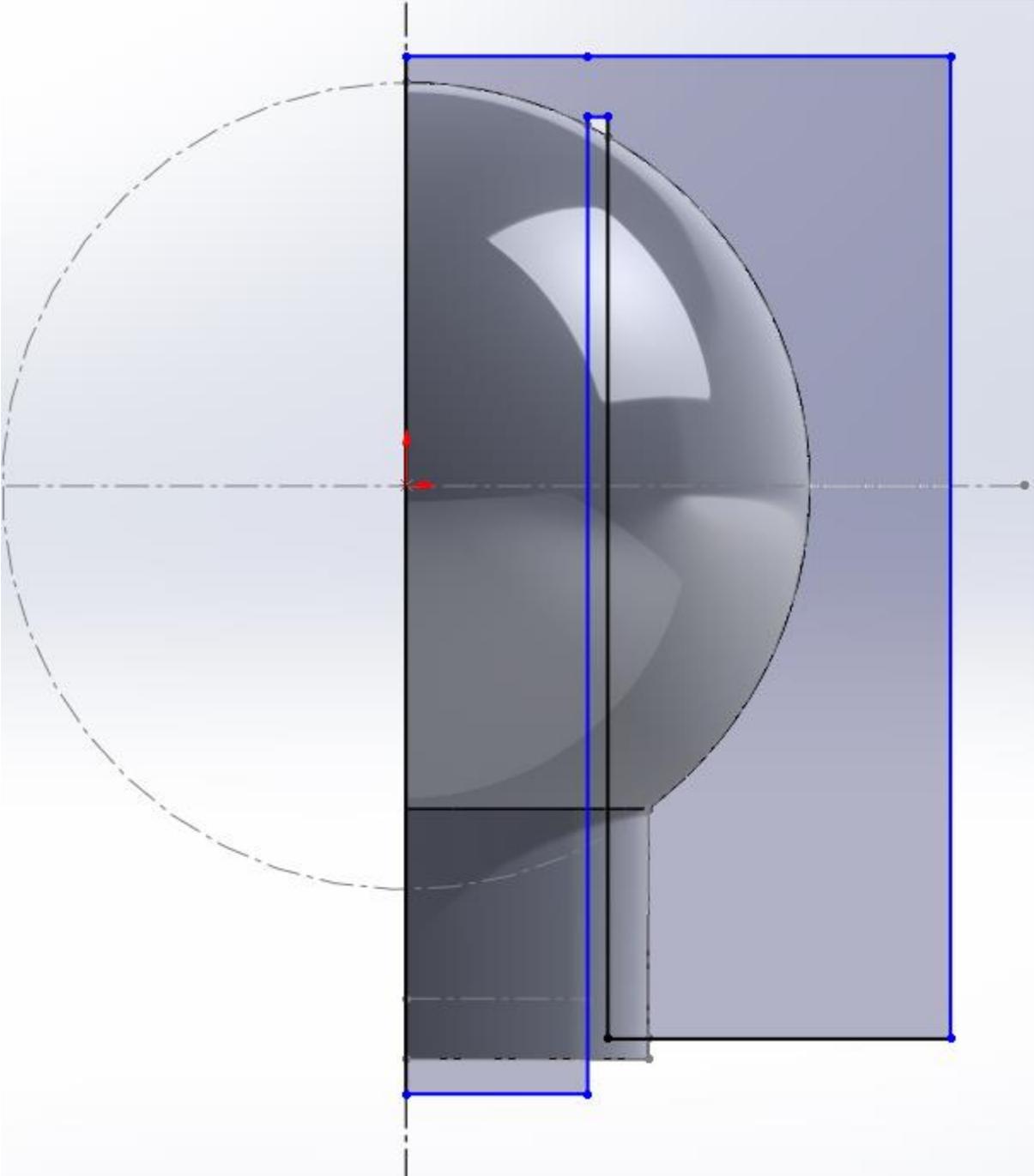
Use the revolve feature command using this sketch and the vertical center line as the axes.

You will end up with this body.

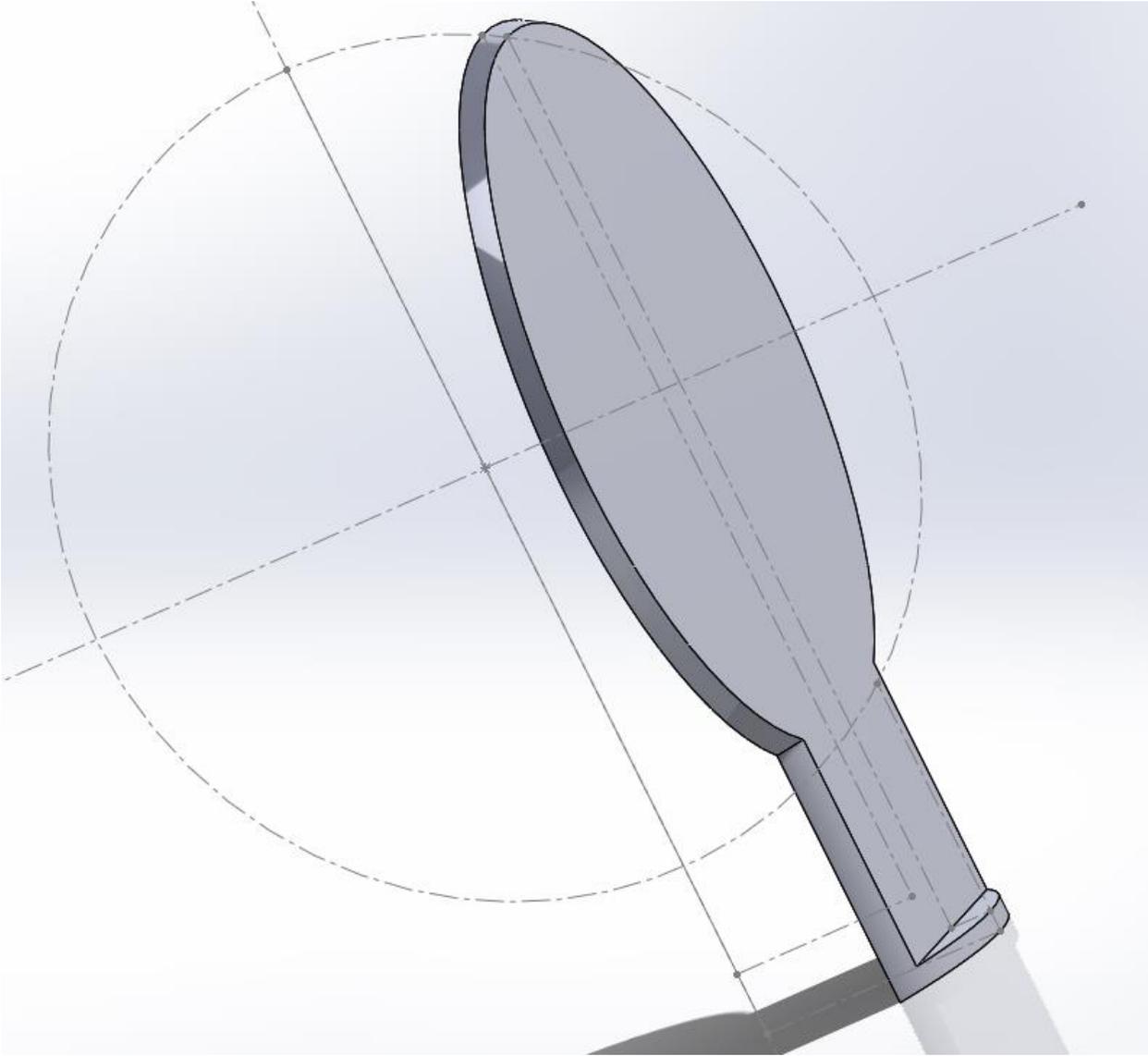


Now you need to remove the material not associated with the side supports.

Create another sketch on the from plane as shown below.

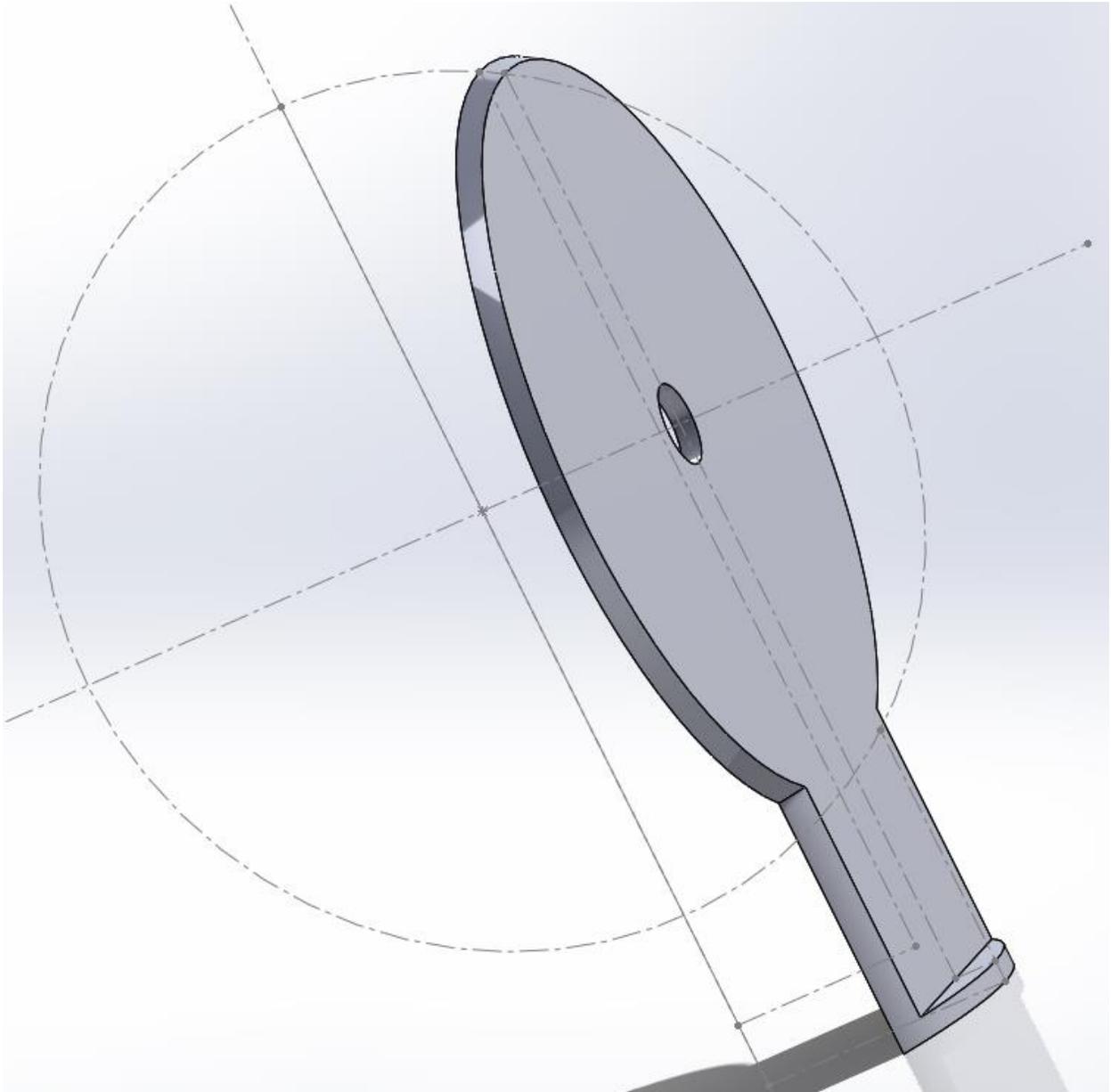


Use extruded cut feature midplane through all both directions extruded cut feature and you will end up with the following body.



Last thing to do is put a hole in the center of the sphere for the camera to pivot.

Here is the completed body – less any mounting holes.

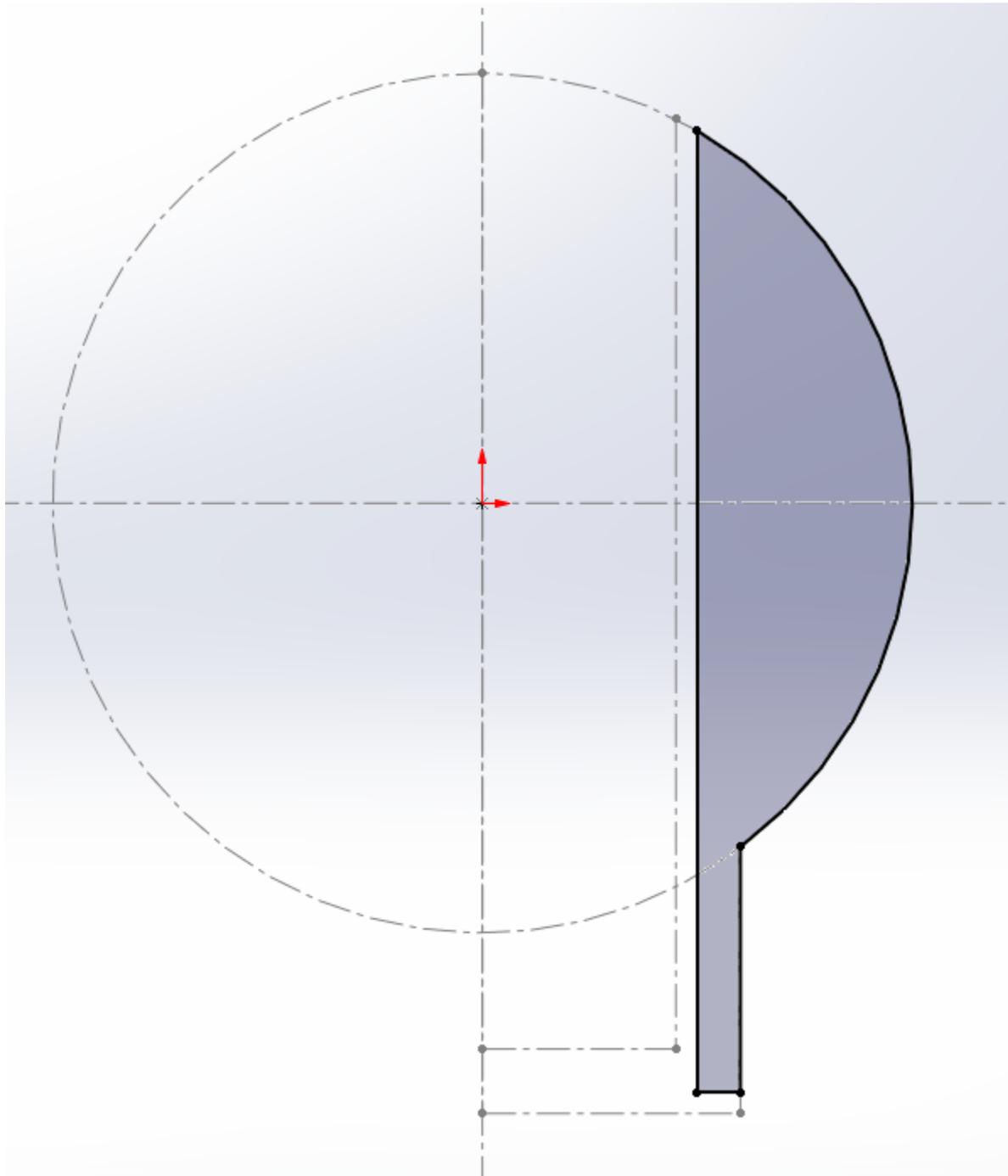


Next we will tackle the side cover.

Open your sketch part and save as Side Cover.prt

Open this part and create a sketch on the front plane.

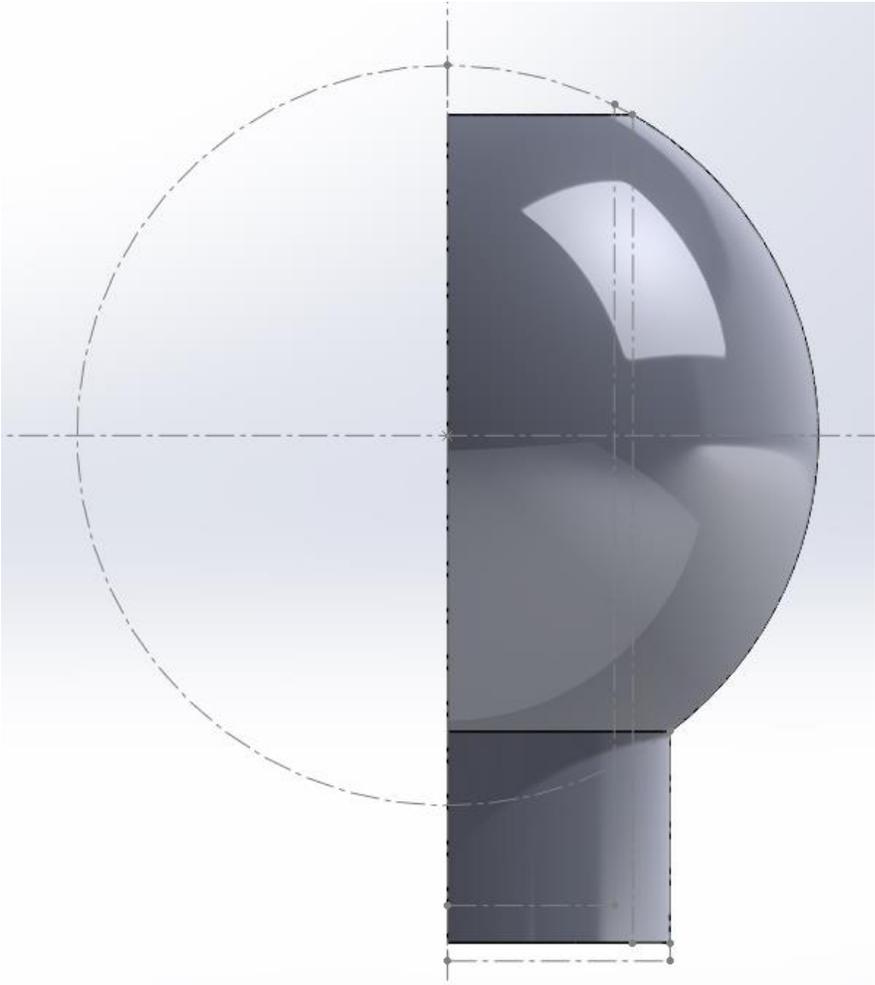
Select the following lines and trim portions of lines as shown below.



Save this sketch and use the revolve feature using the following settings:

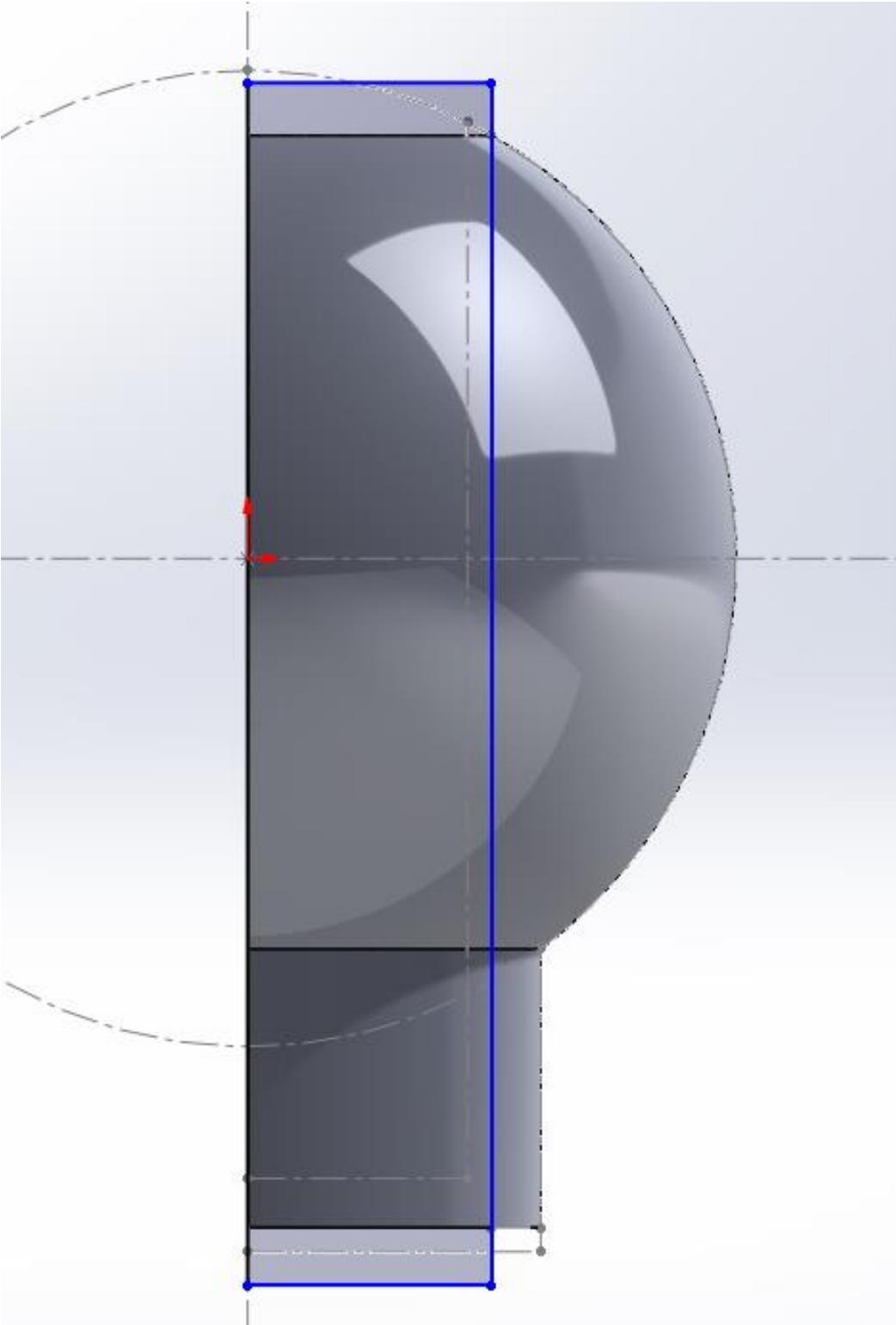
 Revolve1 	<p>Note this is the center of the sphere – not the edge of the sketch</p>
 	
Axis of Revolution 	
 <input type="text" value="Line2@Sketch3"/>	
Direction1 	
 <input type="text" value="Mid Plane"/>	
 <input type="text" value="180.00deg"/>	
Selected Contours 	

This will give you the body shown below:

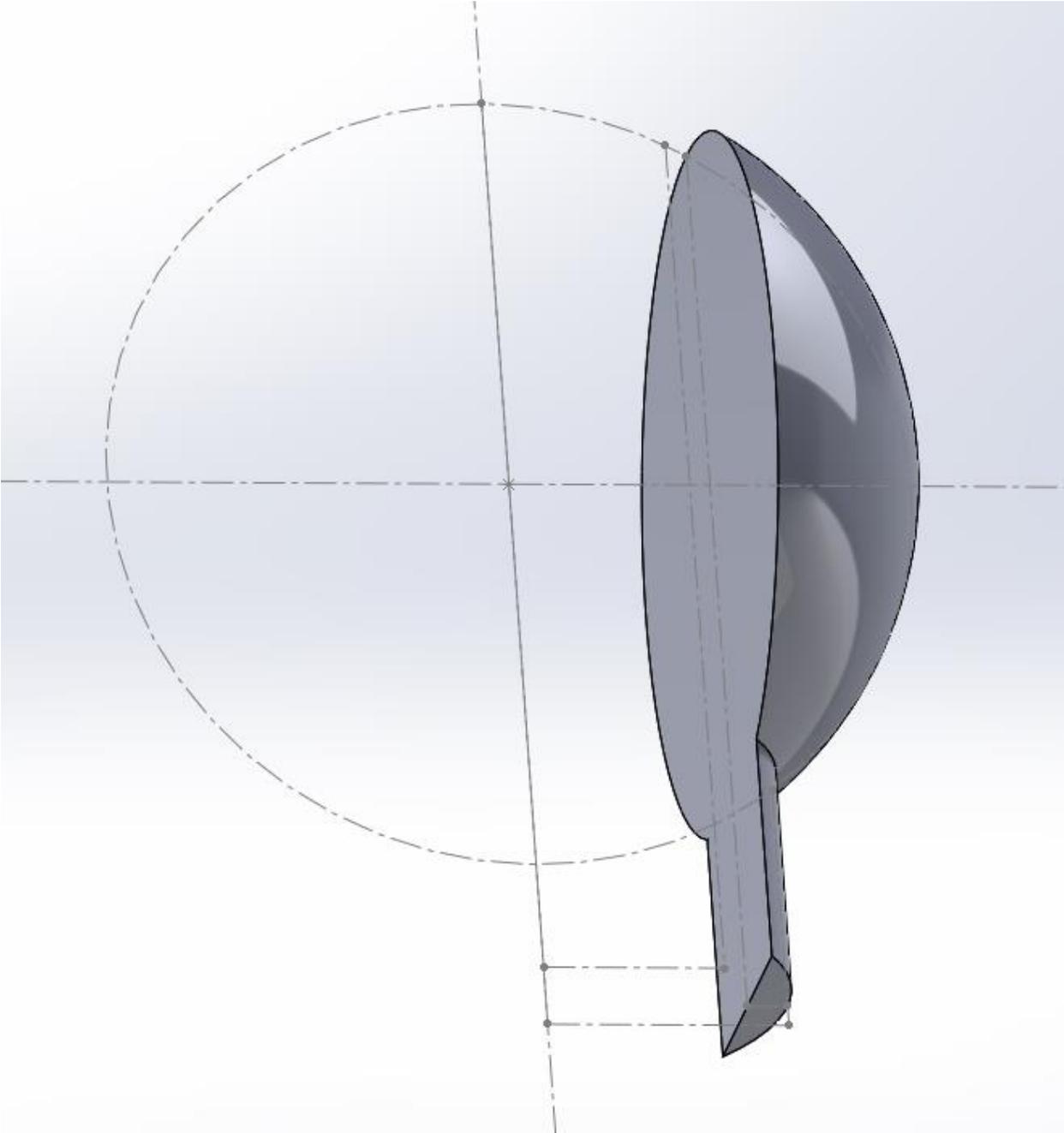


Now we need to trim away the unwanted material.

Create a sketch on the front plane as shown below:

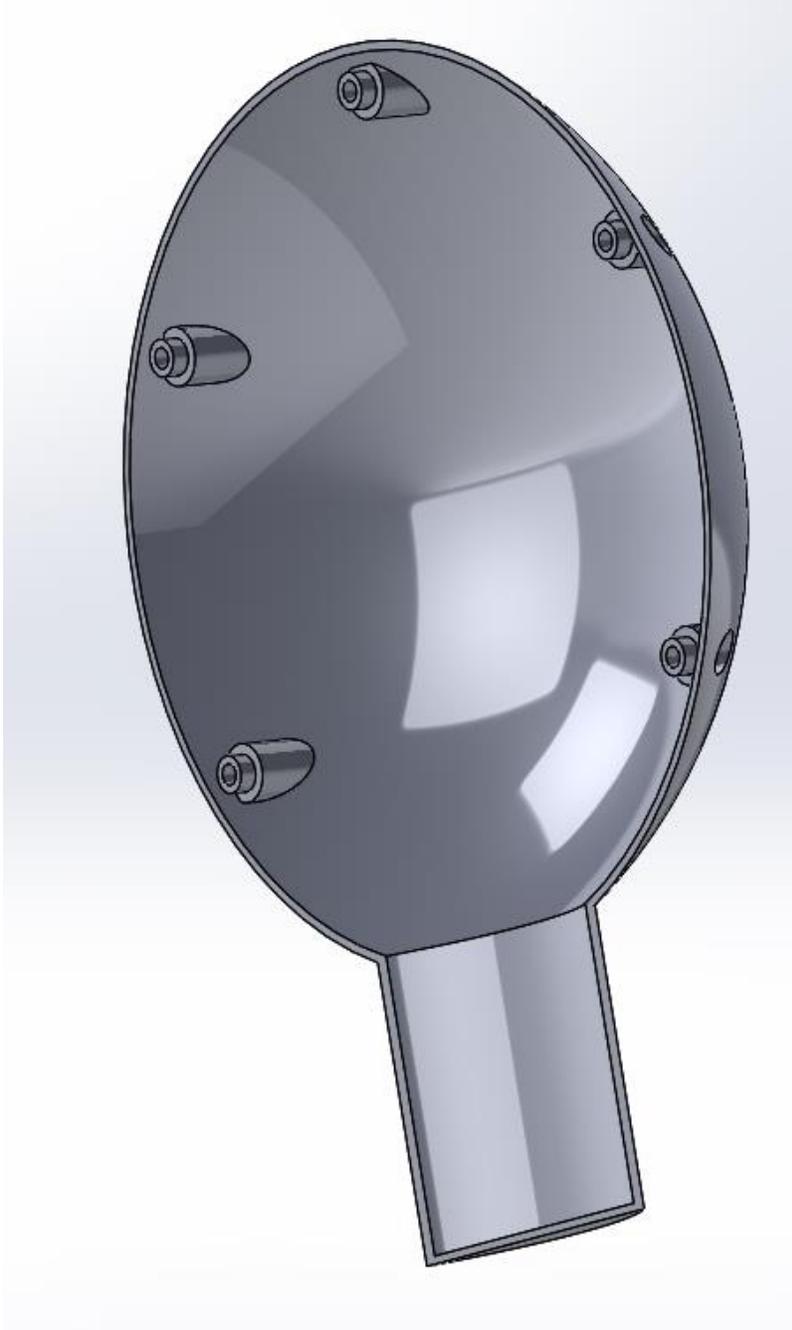


Use extruded cut feature midplane through all both directions extruded cut feature and you will end up with the following body.



Then all you need to do is create the mounting hole pattern on the right plane and use the shell command to remove the unwanted material and you will end up with a body like the one below.

Your part probably has some internal ribs as well.



Use the same principle to create the Camera section in the middle.