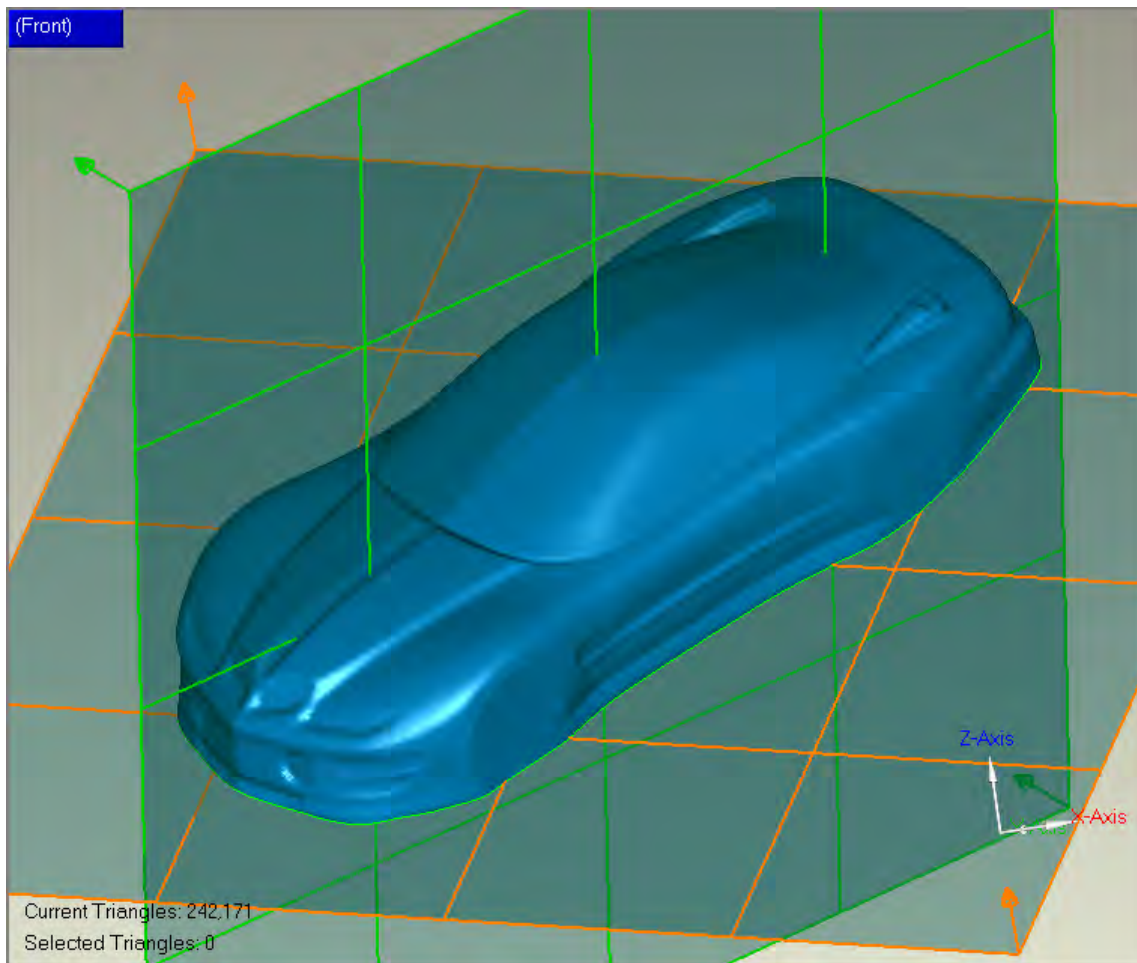


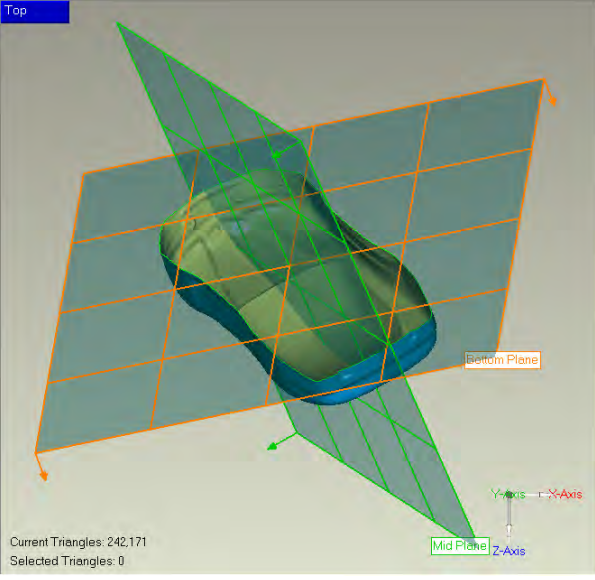


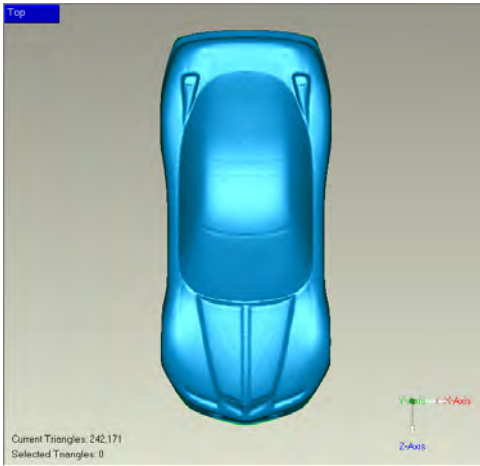
Geomagic Tutorial

Aligning Data to World Coordinate System

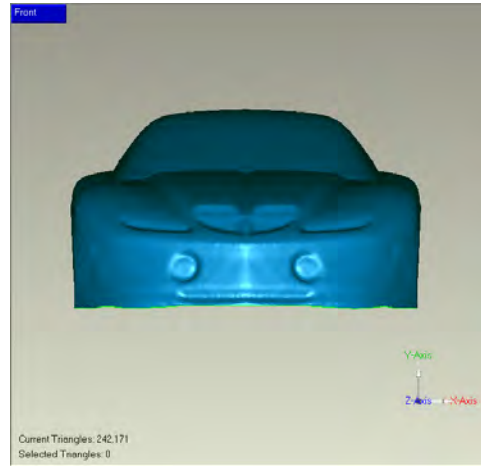
Objective:	Align the model to the basic world coordinate system by aligning datum planes with standard system planes.
Time Req'd:	Approximately 3 minutes
Files:	align-to-world.wrp



	Open align-to-world.wrp .	<i>This is a scan of a remote control car body.</i>
	Set Predefined View to Top .	<i>Note that the data is still in the orientation (shown below) that it was in after scanning, which was arbitrary. We would like to rotate and move it such that the Top view is looking at the top of the car, front view is looking at the front of the car, etc.</i>
 <p><i>Top View (before alignment)</i></p>		
	Go to Tools→Alignment→To World command. <ul style="list-style-type: none"> • From Fixed list, select XZ Plane; • From Float list; select Bottom Plane; • Click Create Pair; • Create another pair between YZ Plane and Mid Plane; • Create another pair between Origin and Nose Point; • Click OK to exit. 	<i>This command allows you to align probed or scanned datums and features with any of the world coordinate system entities:</i> <ul style="list-style-type: none"> ❖ <i>XY, XZ and YZ Planes;</i> ❖ <i>X, Y, and Z Axes;</i> ❖ <i>Origin</i>
	Switch to several different predefined views (e.g. Top, Left, Front, etc) to see the result of the alignment.	<i>Now, as shown below, the standard predefined views make more sense.</i>



Top View (after alignment)



Front View (after alignment)