EML2322L – MAE Design and Manufacturing Laboratory

GEOMETRIC DIMENSIONING & TOLERANCING (HW #6)

Name:	Lab Period (i.e. W2-3):
References: EML2322L-GD&T Drawing Expla EML2322L Motor Mount Design Guide, Exceller	
Description: This assignment highlights GD&T industry. Refer to the provided reference docume needed to answer any of the questions, use the bat TO ANSWER THESE QUESTIONS. Messy wassignment pages and stapled together will be per	ents to complete this assignment. If extra room is ck side of the page. WORK INDIVIDUALLY work or answers that are not hand written on these
Give an example of a situation in which using is more appropriate than using traditional dim	g geometric dimensioning and tolerancing (GD&T) ensioning and tolerancing (TD&T)?
2. Give an example of a situation in which using	g TD&T is more appropriate than using GD&T?
3. Describe exactly what each component of the associated "A" is indicating (see PowerPoint	
	.003 - A

4.	What does a <i>basic dimension</i> represent?
5.	Are hole callouts different in TD&T and GD&T? For each (or both) provide the hole callout(s) for three 3/8" threaded holes through a ½" thick steel plate.
6.	Draw 6 geometric characteristic symbols used in the example GD&T drawings that may be used in FCF and provide a description of what each defines.
7.	Complete the drawing on the following page. Assign appropriate values to match the tolerances specified in the drawing provided in the EML2322L Motor Mount Design Guide .