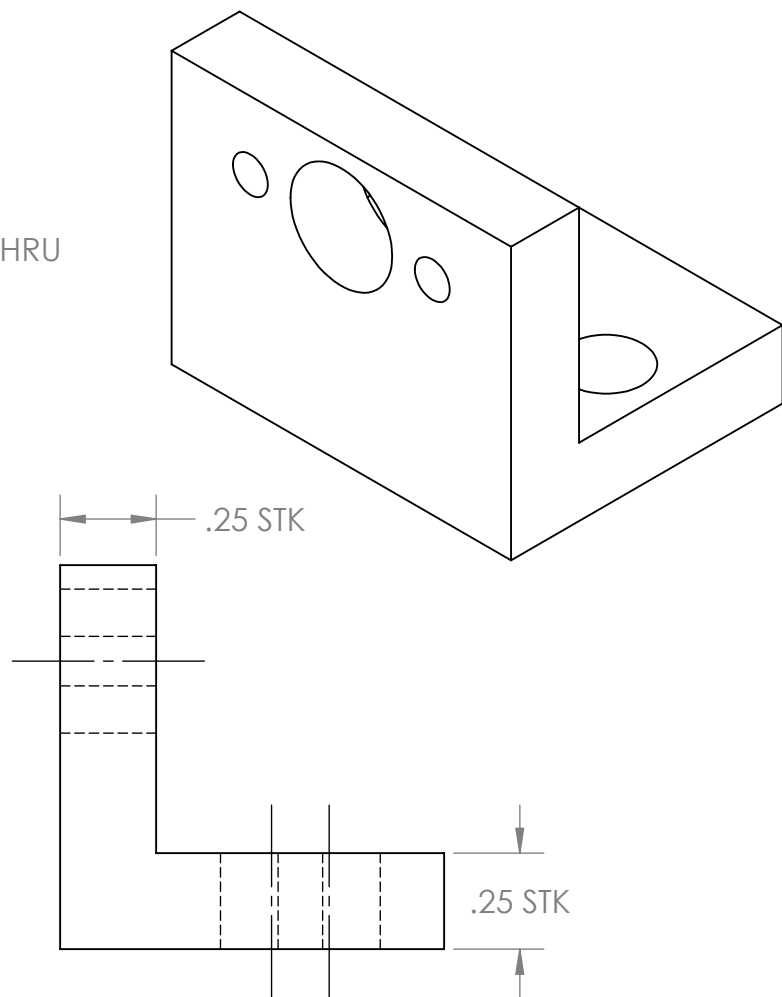


1

B



A

REV 1	INITIAL RELEASE
REV 2	FIXED DIMENSIONS
REV 3	FIX MANUFACTURING PLAN

- |  |               |
|--|---------------|
| <b>UNLESS OTHERWISE SPECIFIED:</b>                     |               |
| DIMENSIONS ARE IN INCHES                               |               |
| <b>TOLERANCES:</b>                                     |               |
| MACHINED ANGULAR:                                      | $\pm 1^\circ$ |
| BENT ANGULAR:  | $\pm 3^\circ$ |
| TWO PLACE DECIMAL:                                     | $\pm 0.01$    |
| THREE PLACE DECIMAL:                                   | $\pm 0.005$   |
| INTERPRET GEOMETRIC<br>TOLERANCES PER: ASME Y14.5-2009 |               |
| <b>MATERIAL</b><br>1" x 1" x 1/4" Aluminum             |               |
| <b>FINISH</b><br><br><b>BURR FREE</b>                  |               |

	NAME	DATE
DRAWN	DKFREELA	10/26/21
CHECKED	CRENZ	10/27/21
GS/IA APPR.		
SHOP APPR.		
INSPECTED		
COMMENTS: QUANTITY: 1		

ME 250 TEAM 103

# MOTOR BRACKET

REV

3

SHEET 1 OF 2

1

**MANUFACTURING PLAN**

RAW MATERIAL STOCK: 1" x 1" x 1/4" Aluminum Angle Stock

STEP	PROCESS DESCRIPTION	MACHINE	FIXTURE	TOOL(S)	SPEED (RPM)
1	Cut Raw Stock 1.250"	Bandsaw	Bandsaw Vise	---	---
2	Deburr part	File		File	
3	Face off both sides and measure with caliper	Mill	Vise L - stock Block	1/4" endmill with chuck	1000
4	Secure Angle stock in mill with the back edge on top and other edge on the outside of the parallels around .25" away from vice and use vice stop to constrain in X direction	Mill	Vise L - stock Block		
5	Cut to length step with L-stock block	Mill	Vise L - stock Block	1/4" endmill with chuck	1000
6	Find Center using the edge where the 90 degree angle occurs and the top edge	Mill	1.375" parallels	Edge Finder with Chuck	1000
7	centerdrill	Mill	1.375" parallels	Centerdrill with chuck	800
8	Drill center .375" clearance hole through the material	Mill	1.375" parallels	3/8 Drill Bit with chuck	800
9	centerdrill	Mill	1.375" parallels	Centerdrill with chuck	1600
10	Drill the left .129" clearance hole through the material	Mill	1.375" parallels	#30 Drill Bit with chuck	1600
11	centerdrill	Mill	1.375" parallels	Centerdrill with chuck	1600
12	Drill the right .129" clearance hole through the material	Mill	1.375" parallels	#30 Drill Bit with chuck	1600
13	Rotate Part				
14	Part is already centered using the same vice stop location	Mill	1.375" parallels	Edge Finder	1000
15	centerdrill	Mill	1.375" parallels	Centerdrill with chuck	1400
16	Drill the left .266" clearance hole through the material	Mill	1.375" parallels	.266 Drill Bit with chuck	1400
17	centerdrill	Mill	1.375" parallels	Centerdrill with chuck	1400
18	Drill the right .266" clearance hole through the material	Mill	1.375" parallels	.266 Drill Bit with chuck	1400
19	Deburr part	file		file	