

NOTES:
1. DIMS IN INCHES
2. QTY: 1

TITLE:
BALL MANIPULATOR TOTAL ASSEMBLY

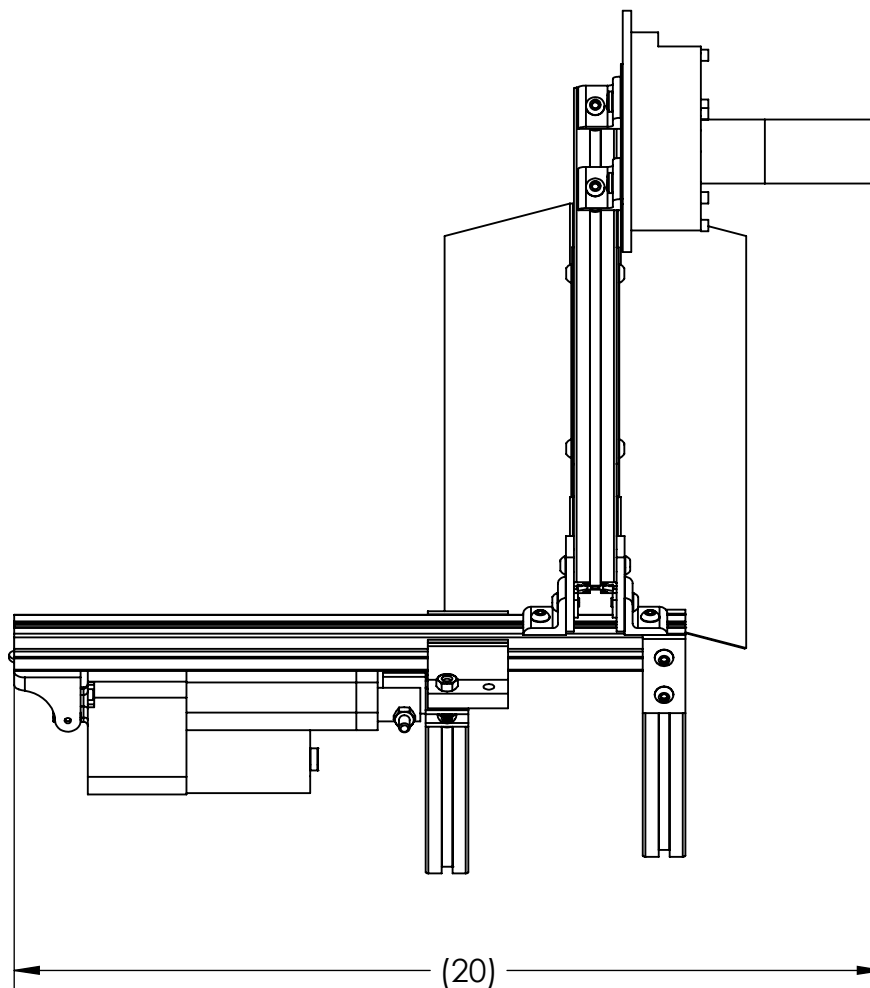
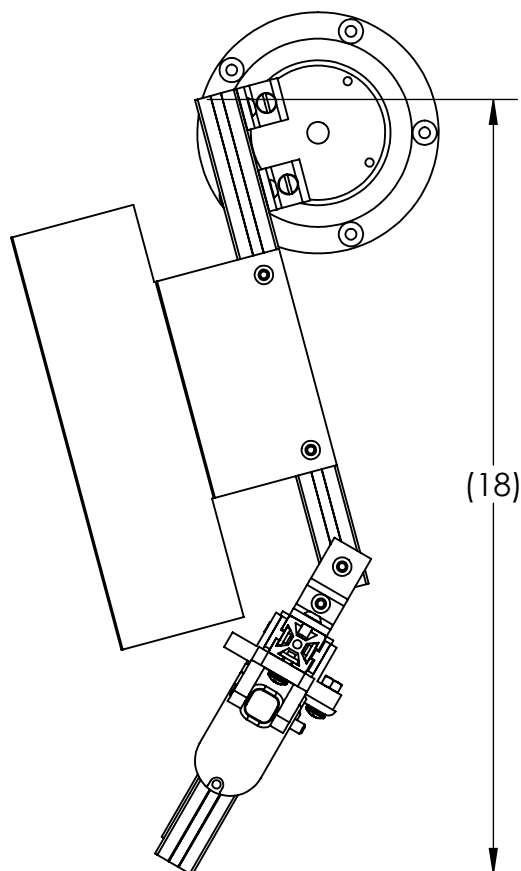
DRAWN ALLEN ZHOU

DESIGNED ALLEN ZHOU

SIZE	DWG. NO.	REV
A	EML2322L-A-009	A

SCALE: 1:2.5 SHEET 1 OF 18

TOLERANCE UNLESS NOTED			
DIMENSION TYPE	PLACES IN DIMENSION		
	0.0	0.00	0.000
LOCATIONAL	±0.050	±0.020	±0.005
ANGULAR	±5	±2	±0.5



- NOTES:
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 2. QTY: 1

TITLE:
 BALL MANIPULATOR TOTAL ASSEMBLY

DRAWN ALLEN ZHOU

DESIGNED ALLEN ZHOU

SIZE	DWG. NO.	REV
A	EML2322L-A-009	A

SCALE: 1:4.5

SHEET 2 OF 18

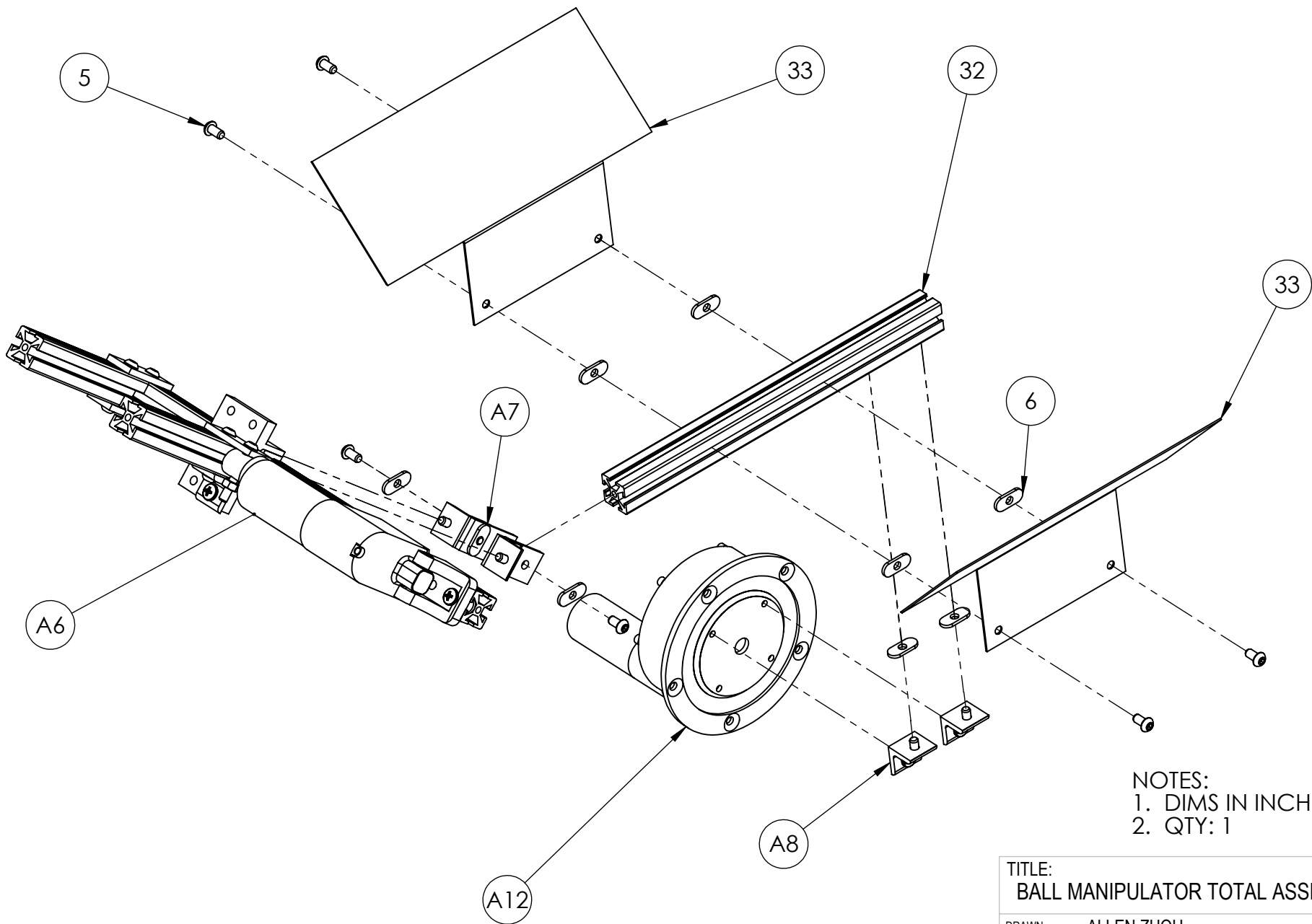
TOLERANCE UNLESS NOTED			
DIMENSION TYPE	PLACES IN DIMENSION		
	0.0	0.00	0.000
LOCATIONAL	±0.050	±0.020	±0.005
ANGULAR	±5	±2	±0.5

ITEM NO.	PART NUMBER	DESCRIPTION	STRETCH/Q TY.
5	EML2322L-0005	1/4-20 x 1/2 in BUTTON HEAD CAP SCREW	6
6	EML2322L-0006	1/4-20 T-NUT	8
33	EML2322L-0033	BALL MANIPULATOR CHANNEL	2
32	EML2322L-0032	80/20 EXTRUSION - 12 in	1
A6	EML2322L-A-006	CLAW ASSEMBLY	1
A7	EML2322L-A-007	CLAW MOUNT ASSEMBLY	2
A8	EML2322L-A-008	GLOBE MOTOR BRACKET ASSEMBLY	2
A12	EML2322L-A-012	4.5 RPM GLOBE MOTOR ASSEMBLY	1
33	EML2322L-0033	BALL MANIPULATOR CHANNEL MOTOR SIDE	1

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TITLE: BALL MANIPULATOR TOTAL ASSEMBLY			
DRAWN		ALLEN ZHOU	
DESIGNED		ALLEN ZHOU	
SIZE	DWG. NO.		REV
A	EML2322L-A-009		A
SCALE: 1:8		SHEET 3 OF 18	

TOLERANCE UNLESS NOTED			
DIMENSION TYPE	PLACES IN DIMENSION		
	0.0	0.00	0.000
LOCATIONAL	±0.050	±0.020	±0.005
ANGULAR	±5	±2	±0.5



NOTES:
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TITLE:
BALL MANIPULATOR TOTAL ASSEMBLY

DRAWN ALLEN ZHOU

DESIGNED ALLEN ZHOU

SIZE	DWG. NO.	REV
A	EML2322L-A-009	A

SCALE: 1:4 SHEET 4 OF 18

DIMENSION TYPE	PLACES IN DIMENSION		
	0.0	0.00	0.000
LOCATIONAL	±0.050	±0.020	±0.005
ANGULAR	±5	±2	±0.5