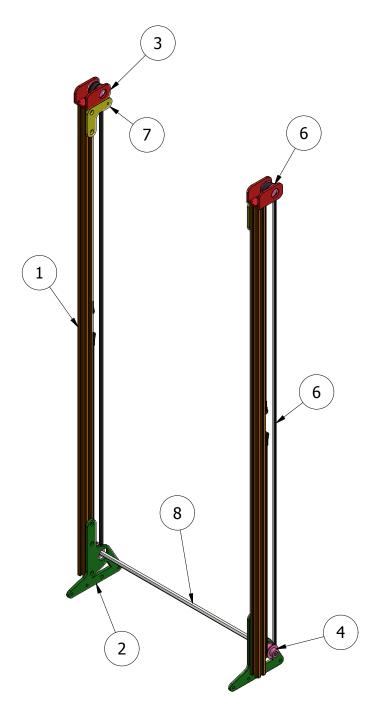


# **Elevator and Intake**

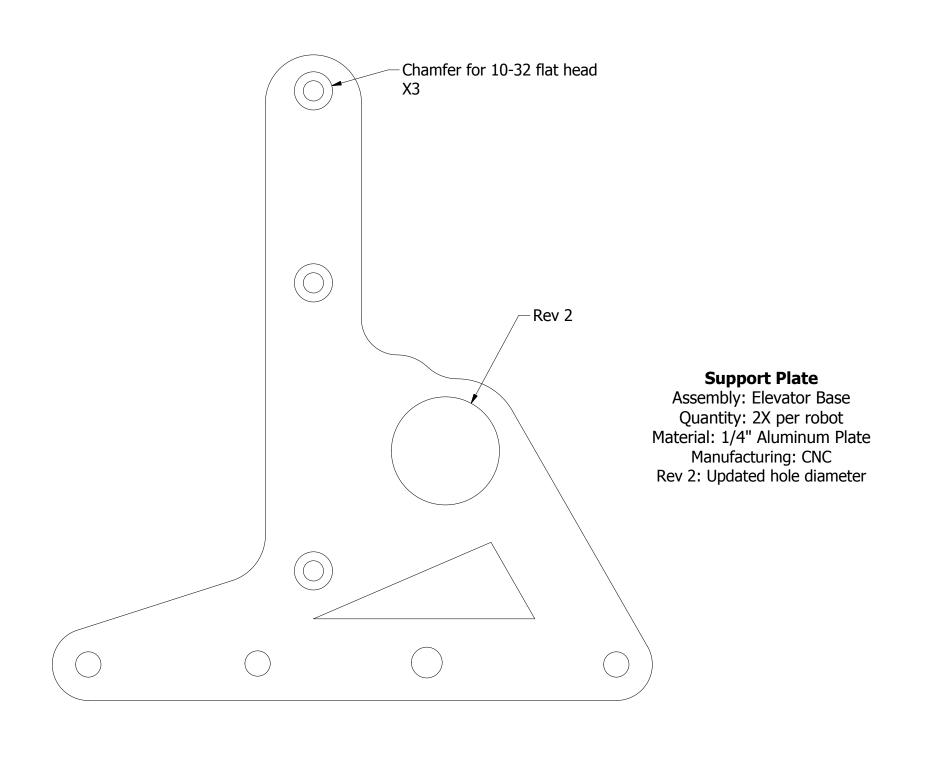
Rev 4: Updated Intake Assembly

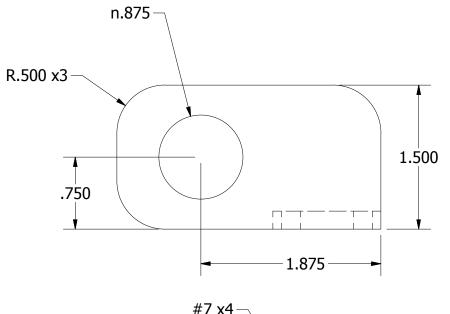


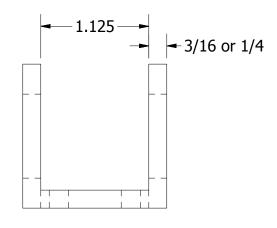
# **Elevator Base**

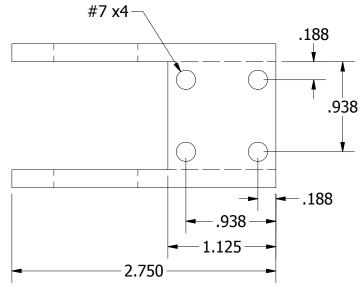
Rev 2: Updated support plate

PARTS LIST					
ITEM	QTY	PART NUMBER	MASS	MATERIAL	
1	2	Rail	1.909 lbmass	Aluminum	
2	2	Support Plate	0.131 lbmass	Aluminum	
3	2	First Stage Pulley Bracket	0.144 lbmass	Aluminum	
4	2	15T XL Pulley	0.059 lbmass	Aluminum	
5	2	1.125" Printed Pulley	0.025 lbmass	Printed ABS	
6	2	First Stage Belt	0.077 lbmass	Purchased	
7	2	First Stage Anchor	0.110 lbmass	Aluminum	
8	1	Driveshaft	0.703 lbmass	Steel	



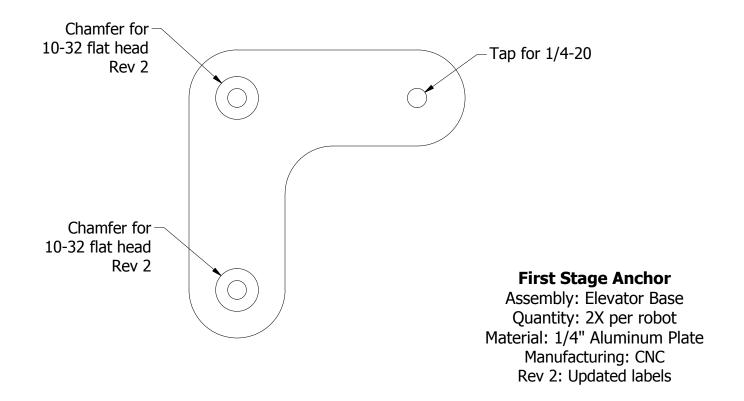


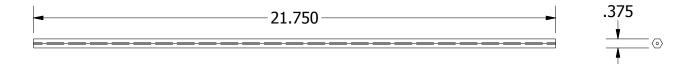




# **First Stage Pulley Bracket**

Assembly: Elevator Base
Quantity: 2X per robot
Material: 3/16" by 1.5" C Channel
or 1/4" by 1.625" C Channel
Manufacturing: Mill
Rev 1

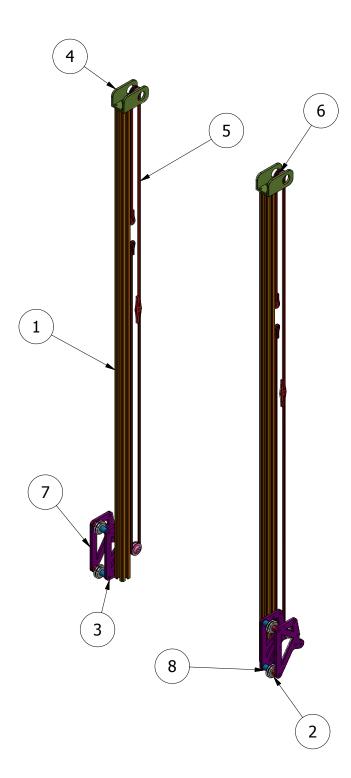




# **Driveshaft**

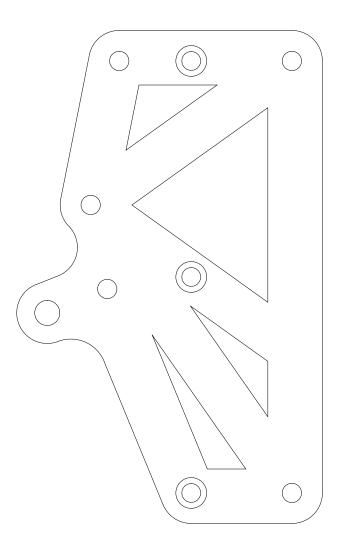
Assembly: Elevator Base Quantity: 2X per robot Material: 3/8" Steel Hex Shaft Manufacturing: Cut from stock

Rev 1



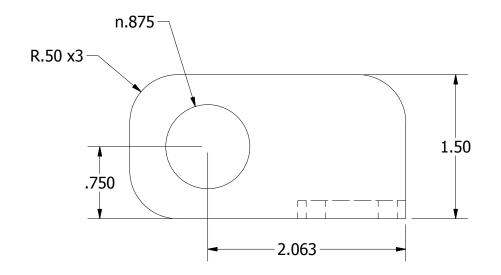
# First Stage Rev 1

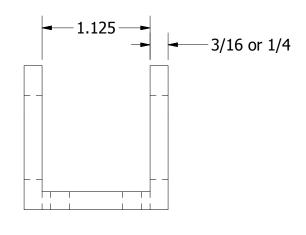
PARTS LIST						
ITEM	QTY	PART NUMBER	MASS	MATERIAL		
1	2	Rail	1.909 lbmass	Aluminum		
2	6	Roller and Bushing	0.111 lbmass	Purchased		
3	2	Middle Plate	0.089 lbmass	Aluminum		
4	2	Second Stage Pulley Bracket	0.151 lbmass	Aluminum		
5	2	Second Stage Belt	0.133 lbmass	Paracord		
6	4	Line Pulley	0.010 lbmass	Printed ABS		
7	2	Outside Plate	0.192 lbmass	Aluminum		
8	6	First Stage Roller Spacer	0.009 lbmass	Aluminum		

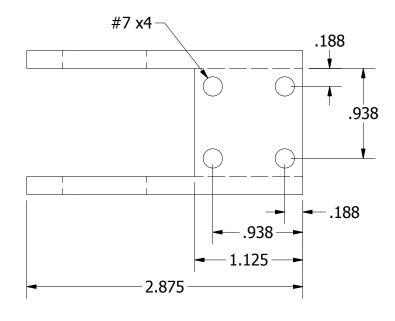


# **Middle Plate**

Assembly: First Stage
Quantity: 2X per robot
Material: 1/4" Aluminum Plate
Manufacturing: CNC
Rev 1







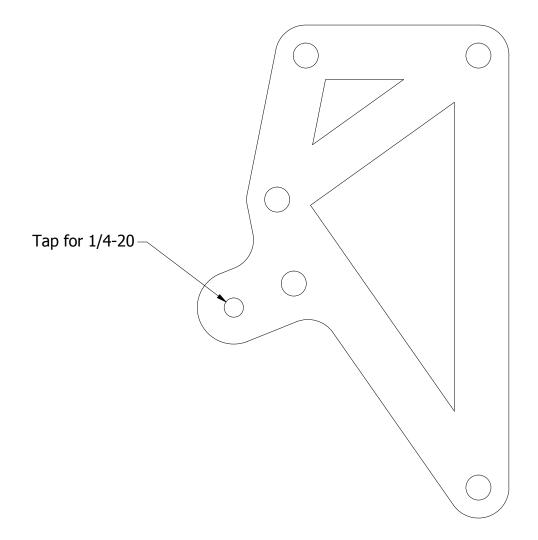
# **Second Stage Pulley Bracket**

Assembly: First Stage Quantity: 2X per robot

Material: 3/16" by 1.5" C Channel

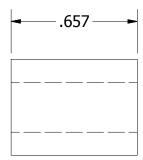
or 1/4" by 1.625" C Channel Manufacturing: Mill

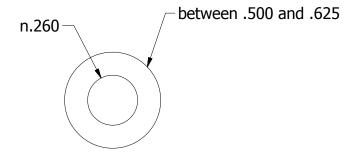
Rev 1



# **Outside Plate**

Assembly: First Stage
Quantity: 2X per robot
Material: 1/4" Aluminum Plate
Manufacturing: CNC
Rev 1





# **First Stage Spacer**

Assembly: First Stage
Quantity: 6X per robot
Material: Aluminum Anything
Manufacturing: lathe
Rev 1

# **Second Stage**

Rev 2: Updated cylinder arm drawing

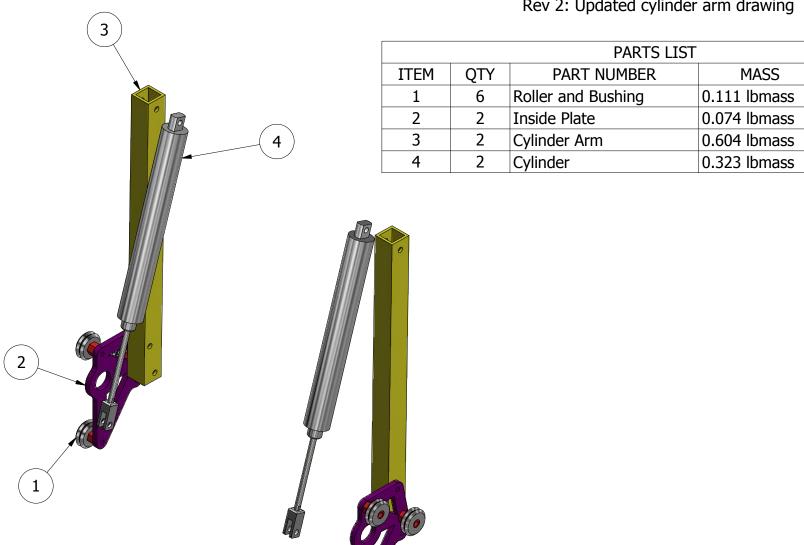
**MATERIAL** 

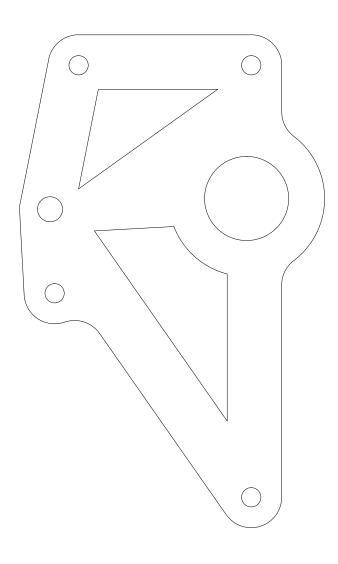
Purchased

Aluminum

Aluminum

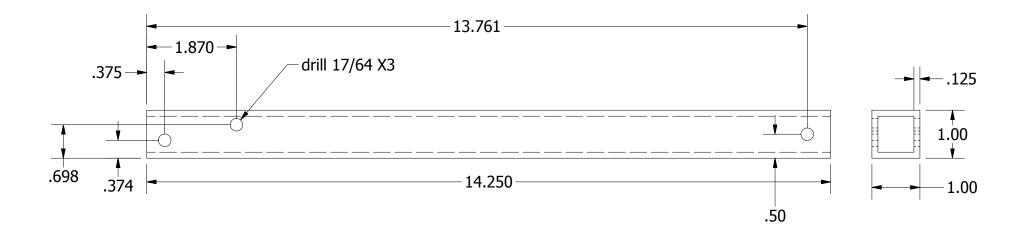
Purchased





# **Inside Plate**

Assembly: Second Stage
Quantity: 2X per robot
Material: 1/4" Aluminum Plate
Manufacturing: CNC
Rev 1



# **Cylinder Arm**

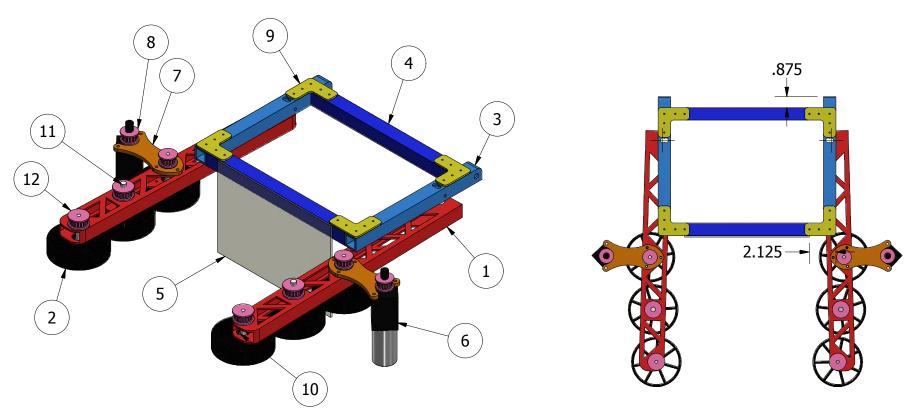
Assembly: Second Stage Quantity: 2X per robot Material: 1" Aluminum Box Manufacturing: Mill Rev 3: Changed hole definition

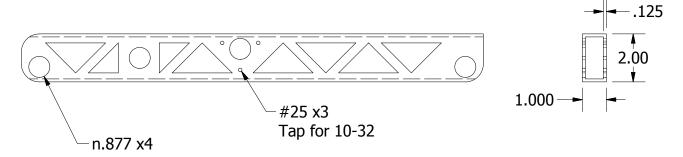
measurements

# **Cube Intake**

Rev 3: Added dimensions for Cube Intake Assembly

PARTS LIST						
ITEM	QTY	PART NUMBER	MASS	MATERIAL		
1	2	Intake Arm	0.942 lbmass	Aluminum		
2	6	Compliant Wheels	0.150 lbmass	Purchased		
3	2	Pivot Arm	0.464 lbmass	Aluminum		
4	2	Cross Brace	0.280 lbmass	Aluminum		
5	1	Rest Plate	0.379 lbmass	Polycarbonate		
6	2	Bag Motor and Gearbox	0.436 lbmass	Purchased		
7	2	Motor Mount	0.150 lbmass	Aluminum		
8	4	15T XL Pulley	0.049 lbmass	Purchased or		
				Printed		
9	4	Rivet Plate	0.046 lbmass	Aluminum		
10	2	Roller Shaft	0.039 lbmass	Aluminum		
11	4	Roller Drive Shaft	0.056 lbmass	Aluminum		
12	8	18T XL Pulley	0.028 lbmass	Printed ABS		





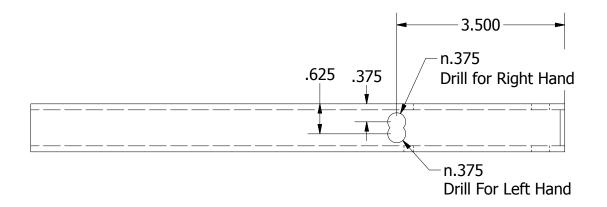
#### **Intake Arm**

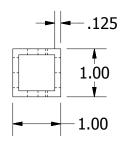
Assembly: Cube Intake Quantity: 2X per robot Material: 2" x 1" Aluminum Box

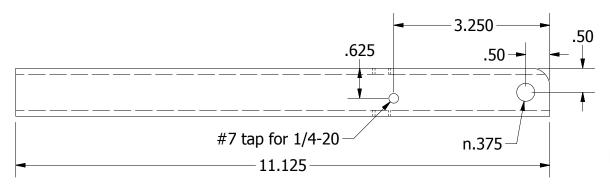
Manufacturing: Mill

Rev 2: Updated hole diameters and

dimensional callouts



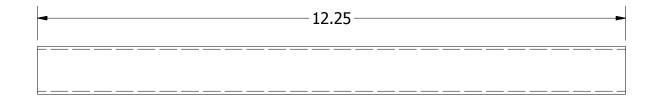


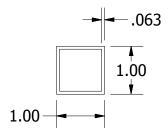


#### **Pivot Arm**

Assembly: Cube Intake Quantity: One each RH, LH Material: 1" Aluminum Box Manufacturing: Mill

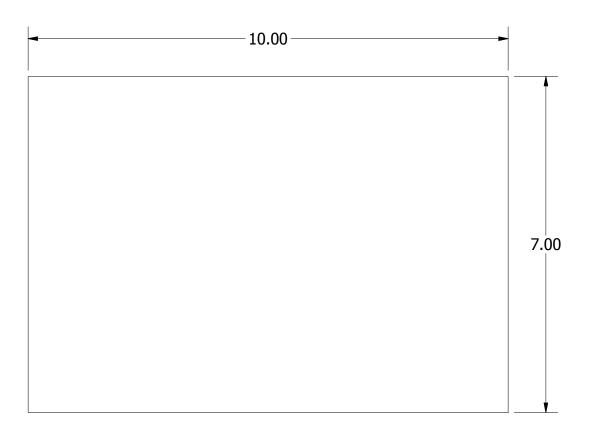
Rev 2: Added missing hole dimensions





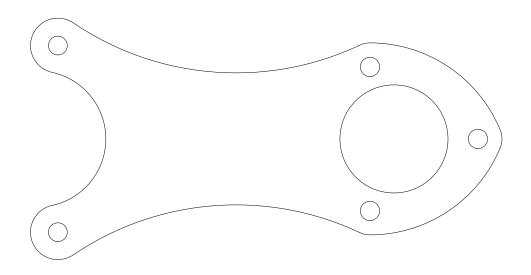
# **Cross Brace**

Assembly: Cube Intake Quantity: 2X per robot Material: 1" Aluminum Box Manufacturing: Mill Rev 1



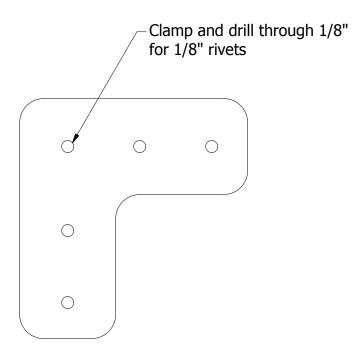
# **Rest Plate**

Assembly: Cube Intake
Quantity: 1X per robot
Material: 1/8" Polycarbonate Plate
Manufacturing: CNC
Rev 1



# **Motor Mount**

Assembly: Cube Intake Quantity: 2X per robot Material: 1/4" Aluminum Plate Manufacturing: CNC Rev 1



# **Rivet Plate**

Assembly: Cube Intake Quantity: 4X per robot Material: 1/8" Aluminum Plate Manufacturing: CNC Rev 1

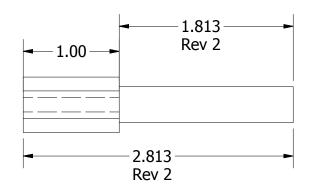
#### **Roller Shaft**

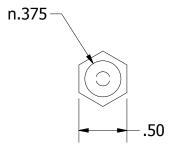
Assembly: Cube Intake Quantity: 2X per robot

Material: 1/2" Aluminum Hex Shaft

Manufacturing: Lathe

Rev 2: Updated lengths, removed hole





# **Roller Drive Shaft**

Assembly: Cube Intake Quantity: 2X per robot

Material: 1/2" Aluminum Hex Shaft

Manufacturing: Lathe

Rev 2: Updated lengths, removed hole

