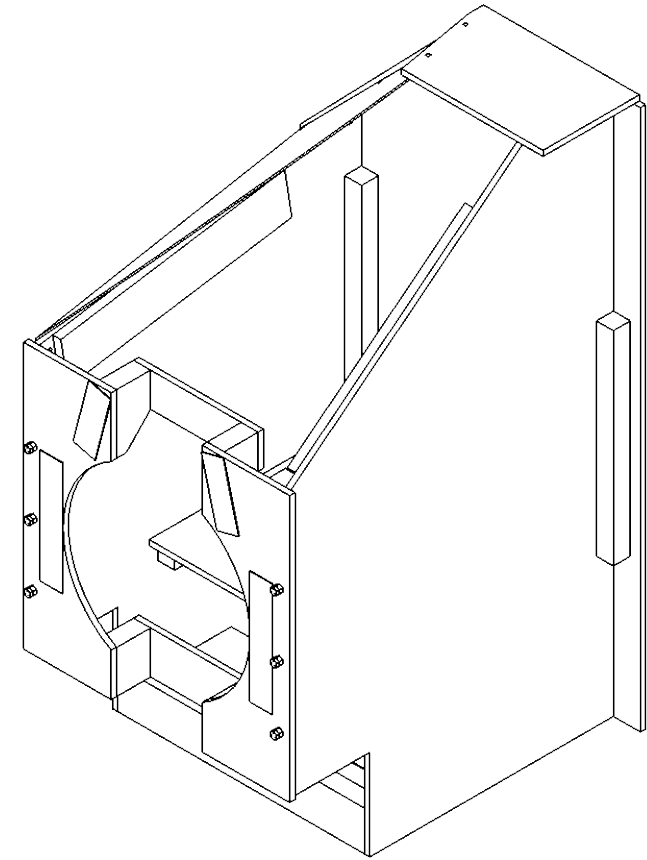


B

ITEM NO.	PART NUMBER	QTY.
1	TE-19107-01	1
2	TE-19107-02	1
3	TE-19107-03	1
4	TE-19107-04	1
5	TE-19107-05	1
6	TE-19107-06	2
7	TE-19107-07	1
8	TE-19107-08	6
9	TE-19107-09	2
10	TE-19107-10	9
11	TE-19107-11	3
12	TE-19107-12	2
13	TE-19107-13	4
14	TE-19107-14	4
15	TE-19107-15	2
16	TE-19107-16	2
17	TE-19107-19	2
18	TE-19107-20	2
19	Tee nut .375_16	6
20	hex nut_.375_16	6
21	hex_.375_16_.625	6

Material	QTY
15/32" (1/2") A/C or CDX Plywood	1.5 sheets
1/8" Hardboard	.25 sheet
23/32"(3/4") A/C or CDX Plywood	.125 sheet
2"x 2"x 8'	1.5
2"x 4"x 8'	1
TEE nut 3/8"-16	6
Hex Nut 3/8"-16	6
Hex Head 3/8"-16 x .75	6
2" Hook Fastener	63.5"
2" Vison Tape	11"
1.25" wood screws	50
2.5" wood screws	25



B

A

A

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		TOLERANCES:
		FRACTIONAL ±1/16
		ANGULAR: MACH ±1° BEND ±1°
		TWO PLACE DECIMAL ±.01
		THREE PLACE DECIMAL ±.001
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

NAME	DATE
DRAWN	
CHECKED	
ENG APPR.	
MFG APPR.	
Q.A.	
COMMENTS:	



TITLE:

# Cargo Front Single

SIZE	DWG. NO.	REV
<b>A</b>	<b>TE-19107</b>	
SCALE: 1:24	WEIGHT:	SHEET 1 OF 14

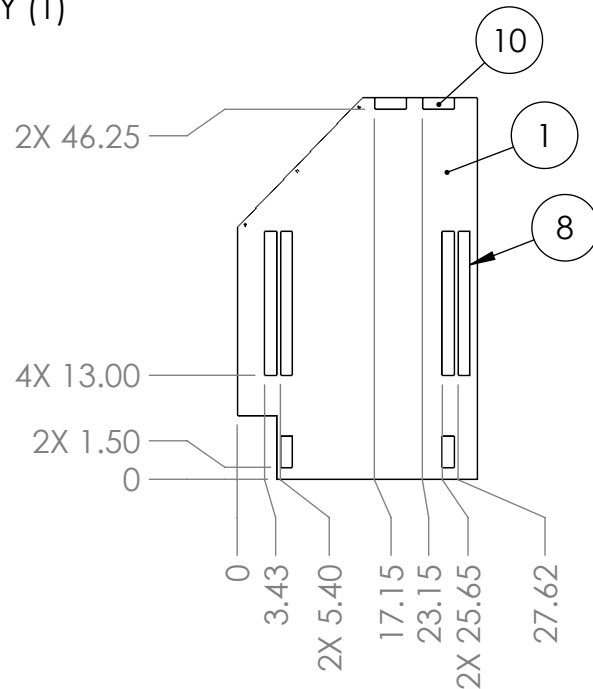
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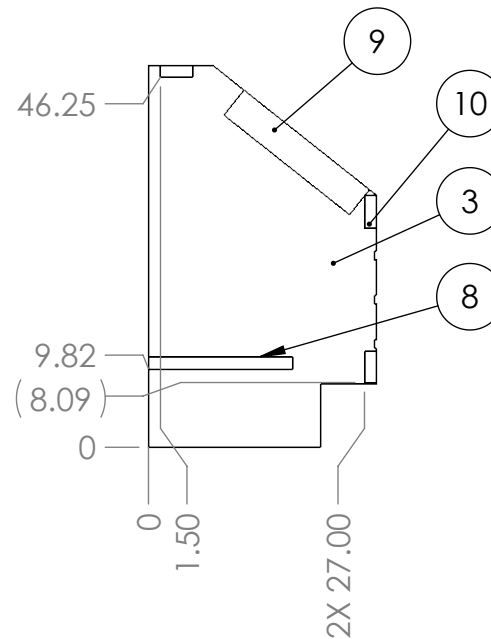
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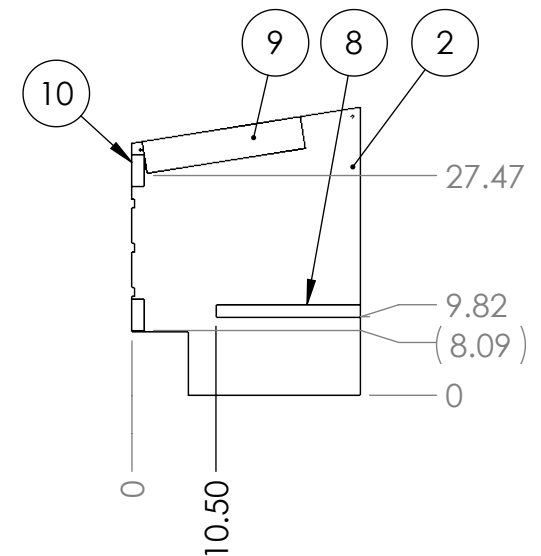
Step 1:  
QTY (1)



Step 2:  
QTY (1)



Step 3:  
QTY (1)



Note:

Attach 10 8 to 1

Spacing between 8 is for 1/2" Plywood

Use a scrap piece of plywood help set spacing  
Pre-drill and use 1.25" wood screws

Note:

Attach 8 10 9 to 3

Pre-drill and use 1.25" wood screws

Note:

Attach 10 9 8 to 2

Pre-drill and use 1.25" wood screws

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APPLICATION

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DIMENSIONS ARE IN INCHES  
TOLERANCES:  
FRACTIONAL  $\pm 1/16$   
ANGULAR: MACH  $\pm 1^\circ$  BEND  $\pm 1^\circ$   
TWO PLACE DECIMAL  $\pm .01$   
THREE PLACE DECIMAL  $\pm .001$

INTERPRET GEOMETRIC  
TOLERANCING PER:

MATERIAL

FINISH

DO NOT SCALE DRAWING

DRAWN

CHECKED

ENG APPR.

MFG APPR.

Q.A.

COMMENTS:

NAME

DATE



TITLE:

Cargo Front  
Single

SIZE

DWG. NO.

REV

A

TE-19107

SCALE: 1:24 WEIGHT:

SHEET 2 OF 14

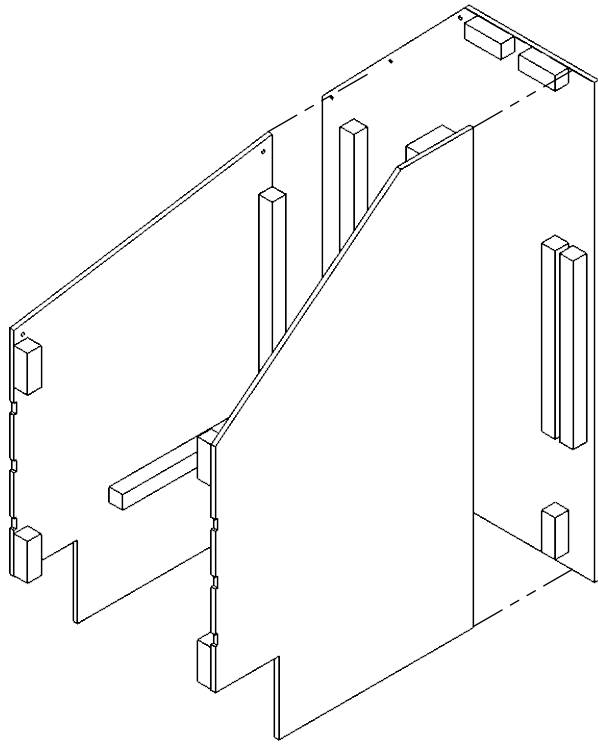
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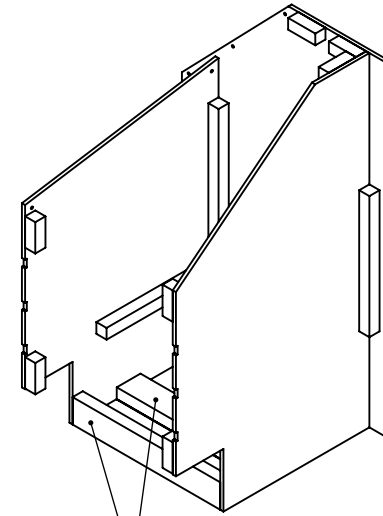
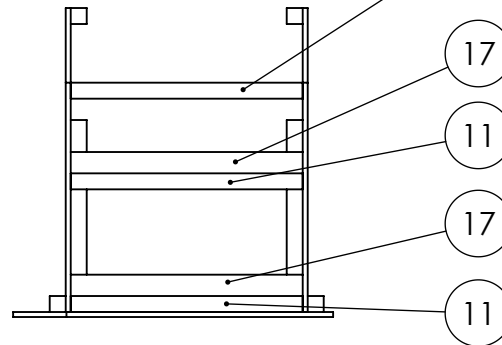
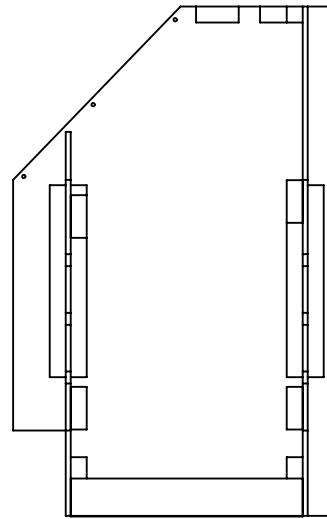
1

Step 4:



Slide the assemblies from Step 2 and Step 3 into the assembly from Step 1.

Step 5:



Attach (11) to bottom as shown  
Pre-drill and use 2.5" wood screws

Apply (17) if used on carpet to the  
bottom of the 2"x 4"



A

A

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TOLERANCES:	
FRACTIONAL $\pm 1/16$	
ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	
TWO PLACE DECIMAL $\pm .01$	
THREE PLACE DECIMAL $\pm .001$	
INTERPRET GEOMETRIC TOLERANCING PER:	
MATERIAL	
FINISH	
NEXT ASSY	USED ON
APPLICATION	
DO NOT SCALE DRAWING	

NAME	DATE
DRAWN	
CHECKED	
ENG APPR.	
MFG APPR.	
Q.A.	
COMMENTS:	

			
TITLE:			
Cargo Front Single			
SIZE	DWG. NO.		REV
A	TE-19107		
SCALE: 1:24		WEIGHT:	SHEET 3 OF 14

2

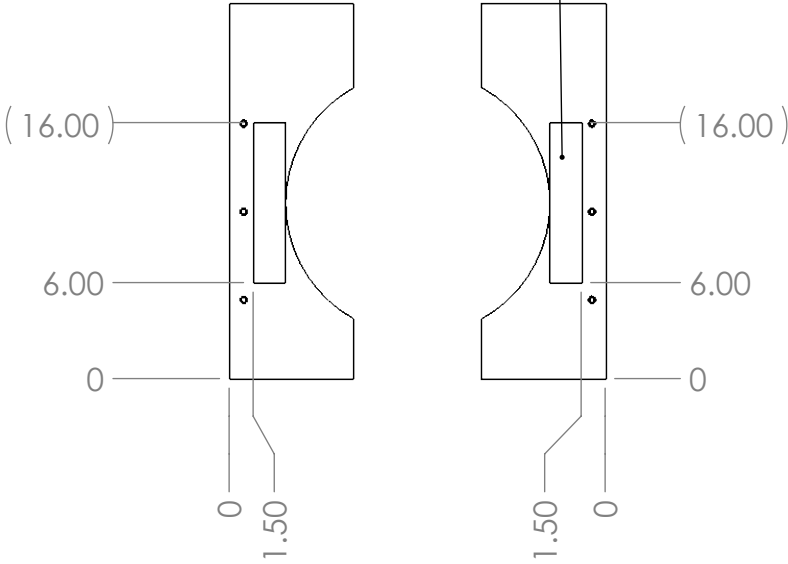
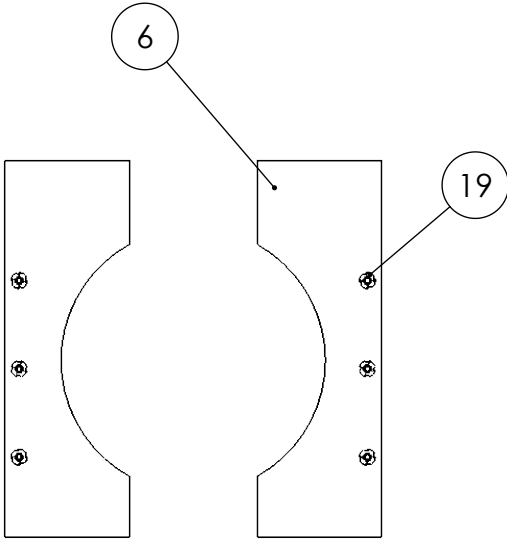
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2

1

Step 6:

Step 7:



Install Tee Nut (19)  
Hammer in to seat

Flip over  
Attach (16) to (6) front.  
Hook should be tangent to  
the circular cutouts.

B

B



A

A

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		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
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		THREE PLACE DECIMAL $\pm .001$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		



TITLE:

# Cargo Front Single

SIZE	DWG. NO.	REV
<b>A</b>	<b>TE-19107</b>	

SCALE: 1:24 WEIGHT: SHEET 4 OF 14

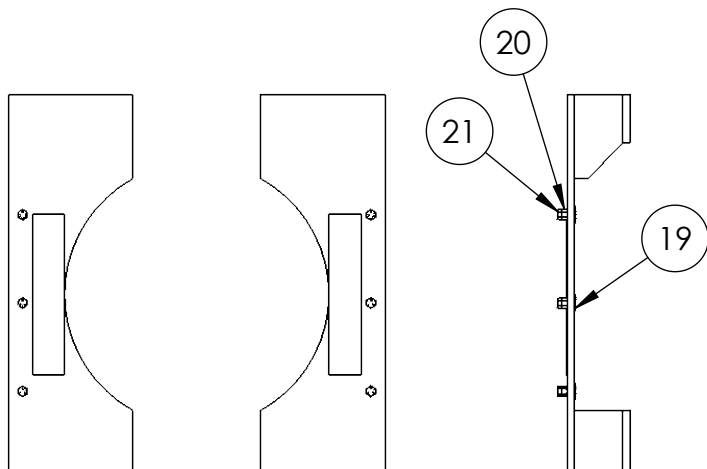
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1

2

1

Step 8:

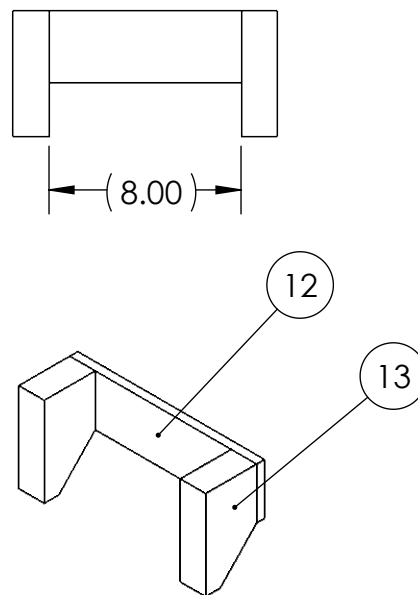


Note:

Attach (21) (20), then attach to (19)

Repeat for all instances

Step 9:

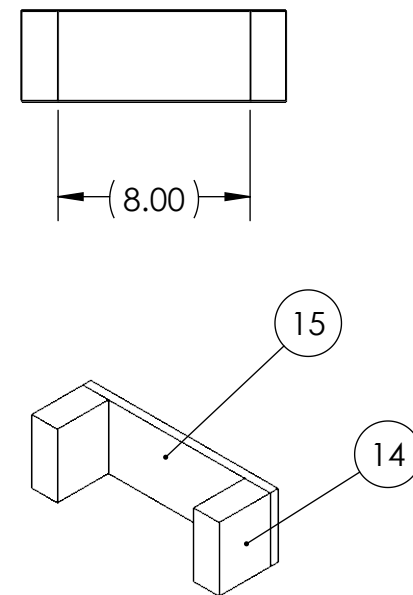


Note:

Attach (13) to (12) as shown

Pre-drill and use 1.25" screws

Step 10:



Note:

Attach (14) to (15) as shown

Pre-drill and use 1.25" screws

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NEXT ASSY

USED ON

APPLICATION

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES  
TOLERANCES:  
FRACTIONAL  $\pm 1/16$   
ANGULAR: MACH  $\pm 1^\circ$  BEND  $\pm 1^\circ$   
TWO PLACE DECIMAL  $\pm .01$   
THREE PLACE DECIMAL  $\pm .001$

INTERPRET GEOMETRIC  
TOLERANCING PER:

MATERIAL

FINISH

DO NOT SCALE DRAWING

DRAWN

CHECKED

ENG APPR.

MFG APPR.

Q.A.

COMMENTS:

NAME

DATE



**FIRST**  
**ROBOTICS**  
**COMPETITION**



**SOLIDWORKS**  
Modeling Solutions Partner

TITLE:

**Cargo Front**  
**Single**

SIZE

**A**

DWG. NO.

**TE-19107**

REV

SCALE: 1:24 WEIGHT:

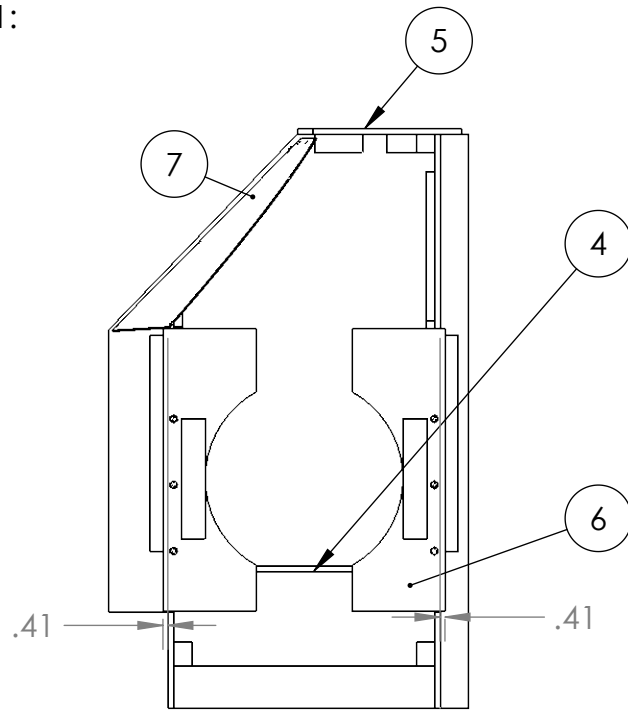
SHEET 5 OF 14

2

1

B

Step 11:



Note:

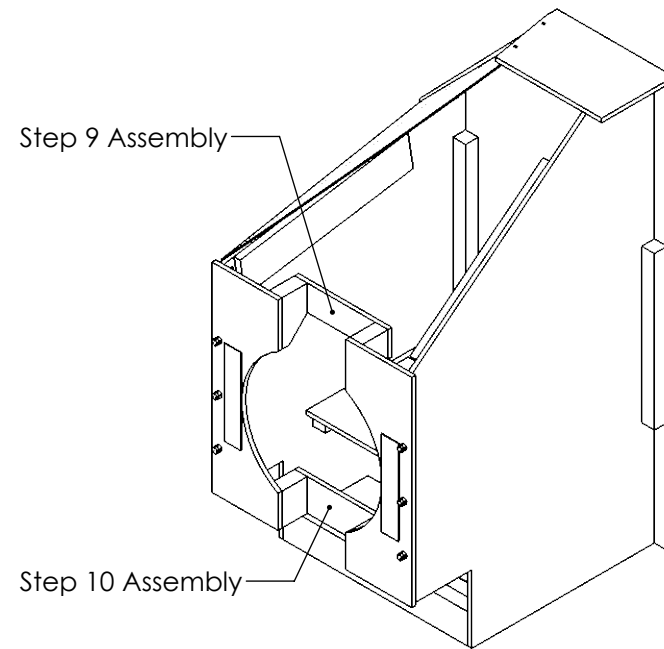
Attach (6) to assembly, with an overhang of .41"; pre-drill and use 1.25" screws

Attach (5) to assembly; pre-drill and use 1.25" screws

Attach (7) to (5) and rest of assembly with cable ties

Attach (4) to (8); pre-drill and use 1.25" screws

Step 12:



Note:

Attach assembly from Step 9 flush to the opening and top of (6)

Attach assembly from Step 10 flush to the opening and bottom of (6)

(6)

Pre-drill and use 2.5" screws

A

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		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
		TWO PLACE DECIMAL $\pm .01$
		THREE PLACE DECIMAL $\pm .001$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

**FIRST  
ROBOTICS  
COMPETITION****SOLIDWORKS**  
Modeling Solutions Partner

TITLE:

# Cargo Front Single

SIZE	DWG. NO.	REV
<b>A</b>	<b>TE-19107</b>	
SCALE: 1:24 WEIGHT:		SHEET 6 OF 14

B

A

2

1

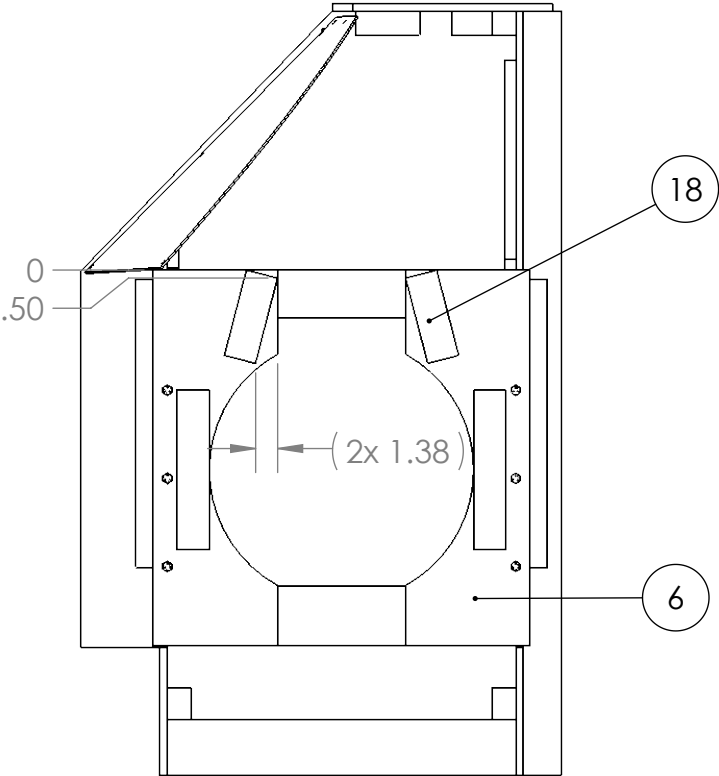
2

1

Step 13:

B

B



18

6

Note:

Attach 18 to 6

A

A

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		FRACTIONAL $\pm 1/16$
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
		TWO PLACE DECIMAL $\pm .01$
		THREE PLACE DECIMAL $\pm .001$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		



TITLE: Cargo Front Single		
SIZE A	DWG. NO. TE-19107	REV
SCALE: 1:24 WEIGHT:		SHEET 7 OF 14

2

1

2

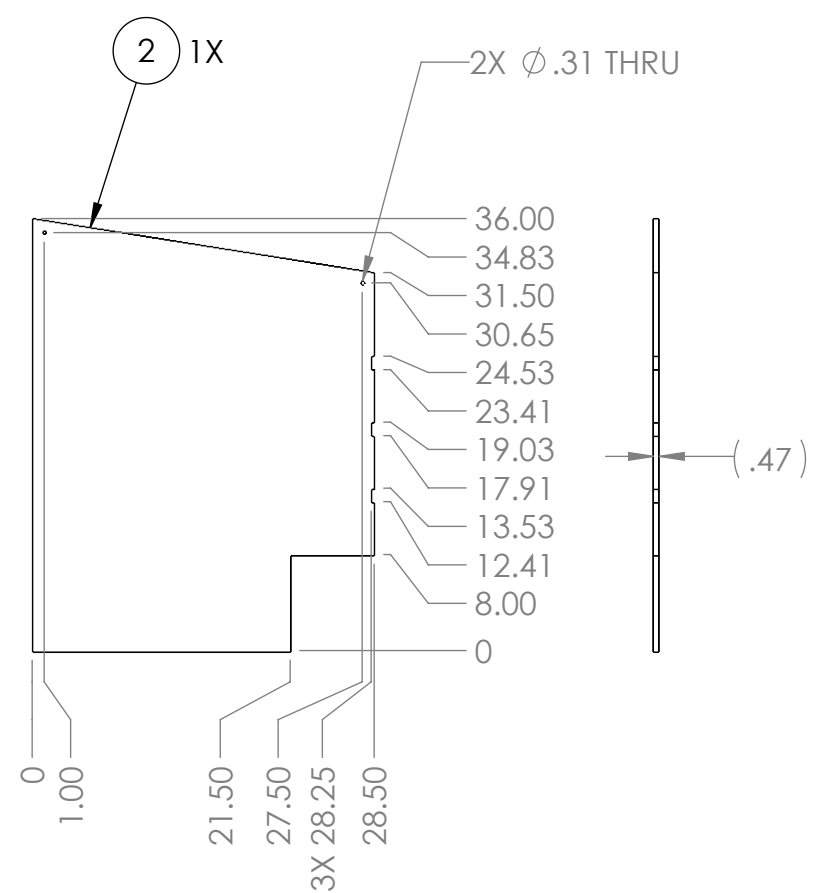
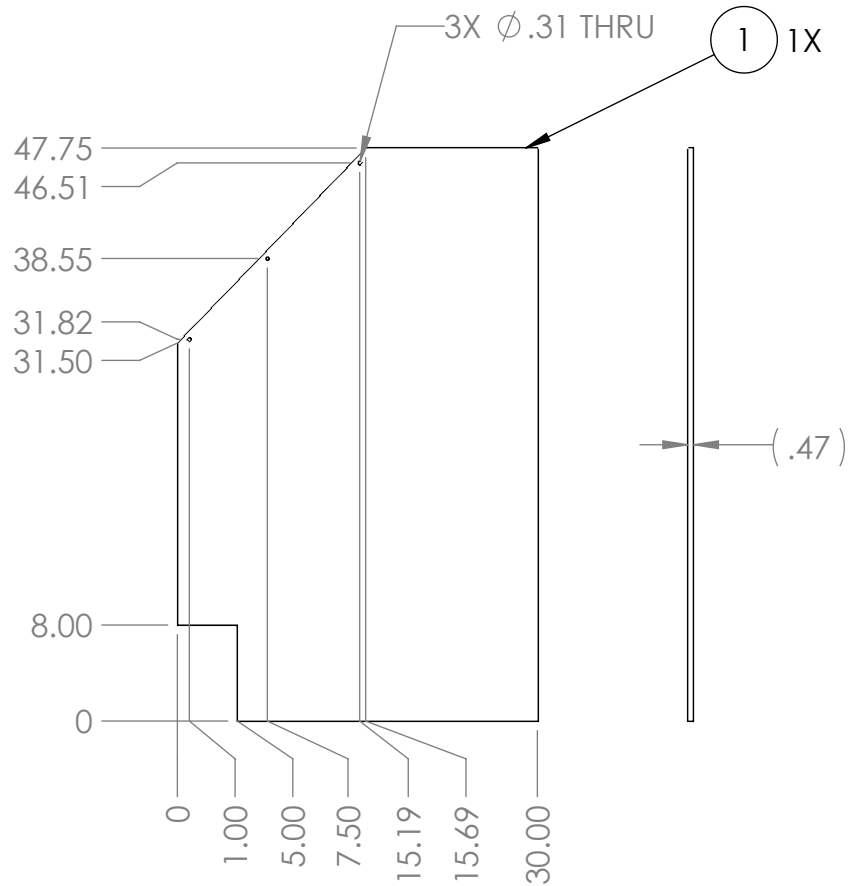
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TE-19107-01

TE-19107-02

B

B



Note:  
Material: 15/32" (1/2") A/C or CDX Plywood

Note:  
Material: 15/32" (1/2") A/C or CDX Plywood



A

A

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		TOLERANCES:
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		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
		TWO PLACE DECIMAL $\pm .01$
		THREE PLACE DECIMAL $\pm .001$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		

 		
TITLE:		
Cargo Front Single		
SIZE	DWG. NO.	REV
A	TE-19107	
SCALE: 1:24 WEIGHT:		SHEET 8 OF 14

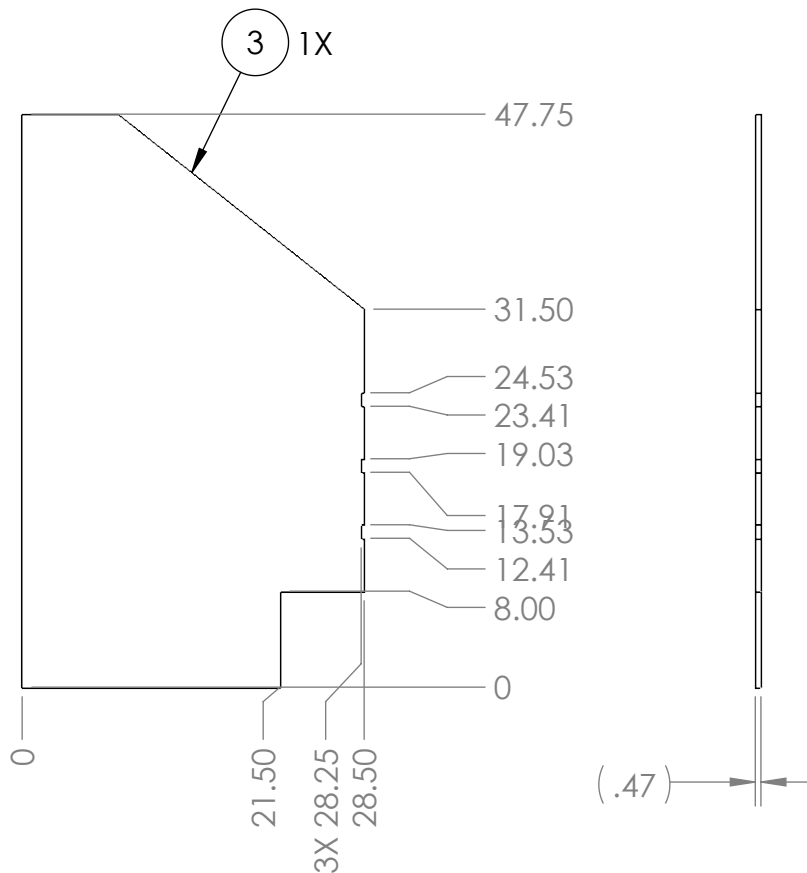
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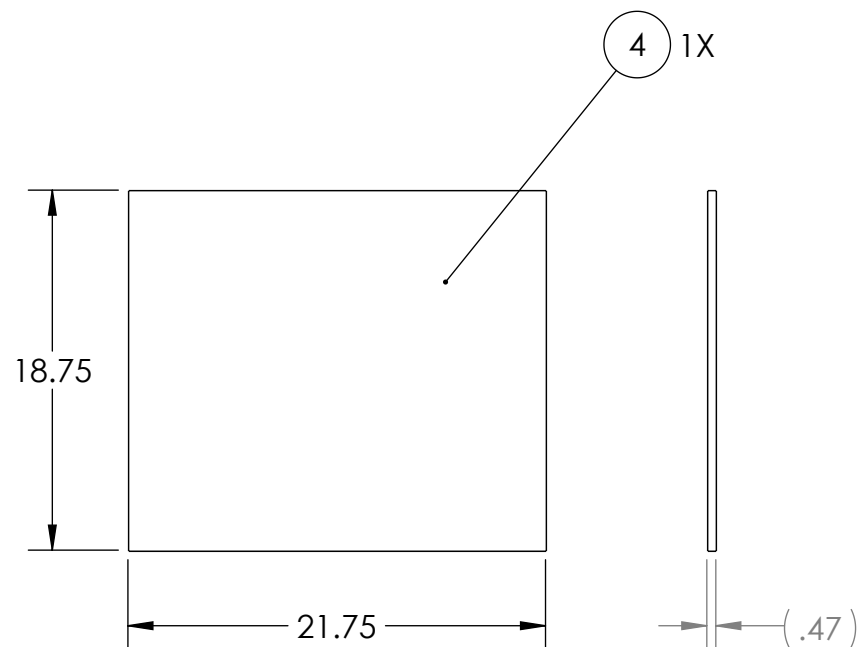
B

TE-19107-03



Note:  
Material: 15/32" (1/2") A/C or CDX Plywood

TE-19107-04



Note:  
Material: 15/32" (1/2") A/C or CDX Plywood

B

A

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		TOLERANCES:
		FRACTIONAL $\pm 1/16$
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
		TWO PLACE DECIMAL $\pm .01$
		THREE PLACE DECIMAL $\pm .001$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		



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**COMPETITION**



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TITLE:

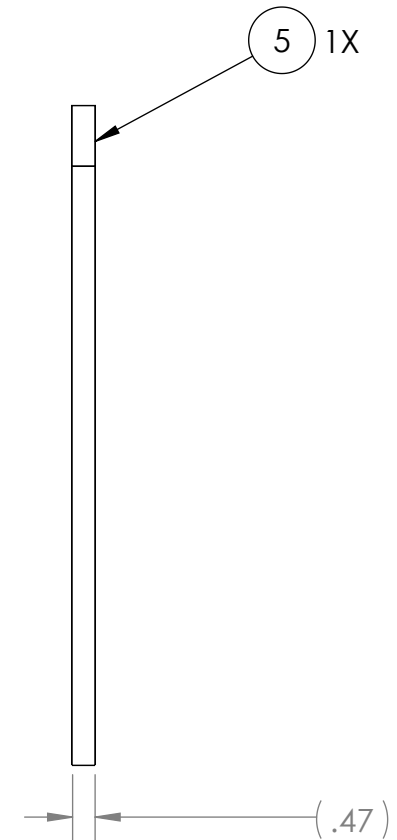
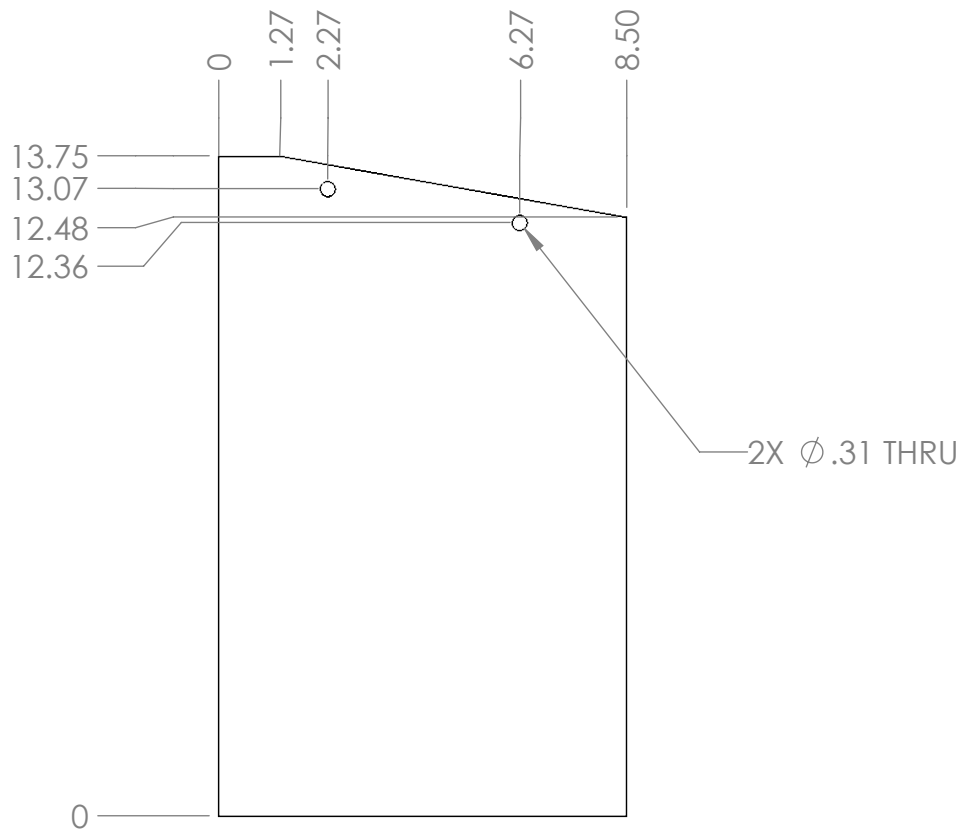
**Cargo Front  
Single**

SIZE	DWG. NO.	REV
<b>A</b>	<b>TE-19107</b>	
SCALE: 1:24	WEIGHT:	SHEET 9 OF 14

2

1

TE-19107-05



Note:  
Material: 15/32" (1/2") A/C or CDX Plywood

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		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$
		TWO PLACE DECIMAL $\pm .01$
		THREE PLACE DECIMAL $\pm .001$
		INTERPRET GEOMETRIC TOLERANCING PER:
		MATERIAL
NEXT ASSY	USED ON	FINISH
APPLICATION		DO NOT SCALE DRAWING

	NAME	DATE
DRAWN		
CHECKED		
ENG APPR.		
MFG APPR.		
Q.A.		
COMMENTS:		



TITLE:

# Cargo Front Single

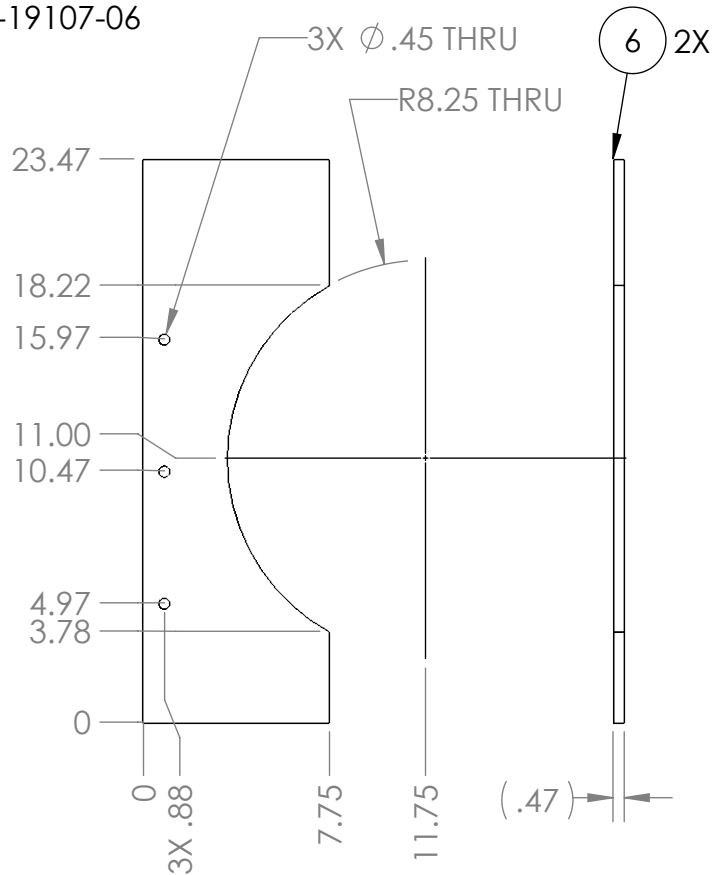
SIZE	DWG. NO.	REV
<b>A</b>	TE-19107	

SCALE: 1:24 WEIGHT:

SHEET 10 OF 14

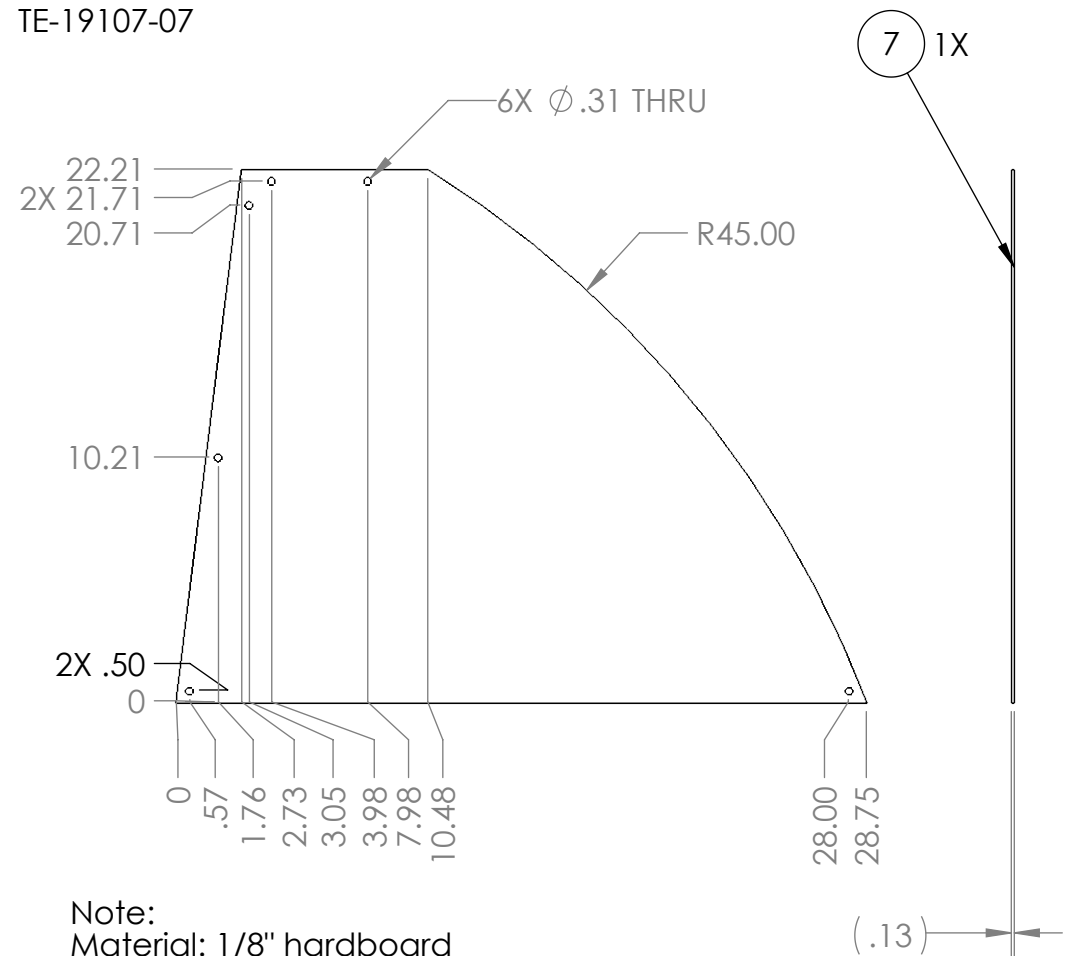
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TE-19107-06



Note:  
Material: 15/32" (1/2") A/C or CDX Plywood

TE-19107-07



Note:  
Material: 1/8" hardboard

B

A

A

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		DIMENSIONS ARE IN INCHES	DRAWN	
		TOLERANCES:	CHECKED	
		FRACTIONAL $\pm 1/16$	ENG APPR.	
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.	
		TWO PLACE DECIMAL $\pm .01$	Q.A.	
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:	
		INTERPRET GEOMETRIC TOLERANCING PER:		
		MATERIAL		
		FINISH		
NEXT ASSY	USED ON			
APPLICATION		DO NOT SCALE DRAWING		



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TITLE:

Cargo Front  
Single

SIZE	DWG. NO.	REV
<b>A</b>	TE-19107	

SCALE: 1:24 WEIGHT:

SHEET 11 OF 14

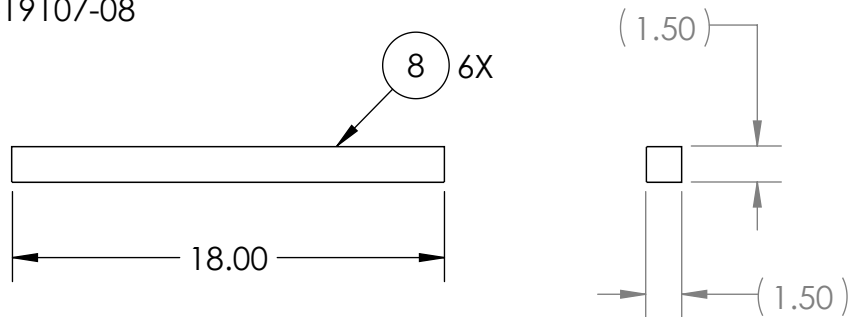
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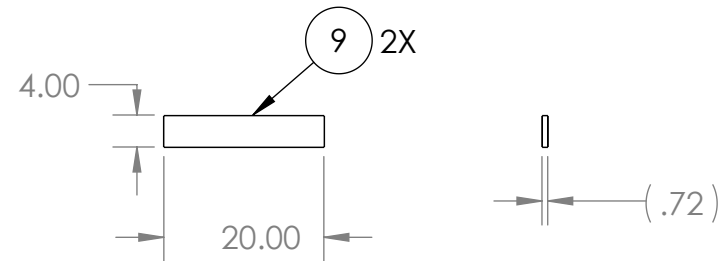
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TE-19107-08



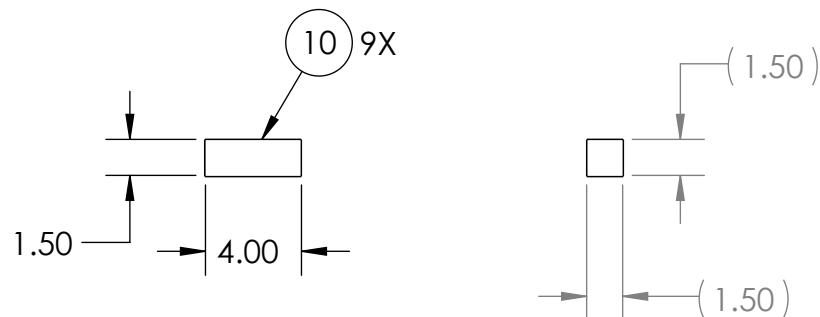
Note:  
Material 2"x 2" Pine Lumber

TE-19107-09



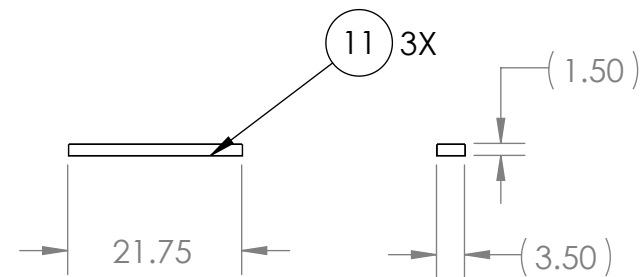
Note:  
Material: 23/32" (3/4") A/C or CDX Plywood

TE-19107-10



Note:  
Material 2"x 2" Pine Lumber

TE-19107-11



Note:  
Material 2"x 4" Pine Lumber

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NEXT ASSY

USED ON

APPLICATION

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DIMENSIONS ARE IN INCHES  
TOLERANCES:  
FRACTIONAL  $\pm 1/16$   
ANGULAR: MACH  $\pm 1^\circ$  BEND  $\pm 1^\circ$   
TWO PLACE DECIMAL  $\pm .01$   
THREE PLACE DECIMAL  $\pm .001$

INTERPRET GEOMETRIC  
TOLERANCING PER:

MATERIAL

FINISH

DO NOT SCALE DRAWING

DRAWN

CHECKED

ENG APPR.

MFG APPR.

Q.A.

COMMENTS:

NAME

DATE



**FIRST  
ROBOTICS  
COMPETITION**



Modeling Solutions Partner

TITLE:

**Cargo Front  
Single**

SIZE

**A**

DWG. NO.

**TE-19107**

REV

SCALE: 1:24 WEIGHT:

SHEET 12 OF 14

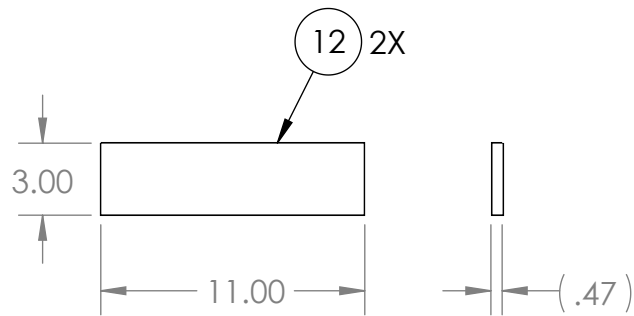
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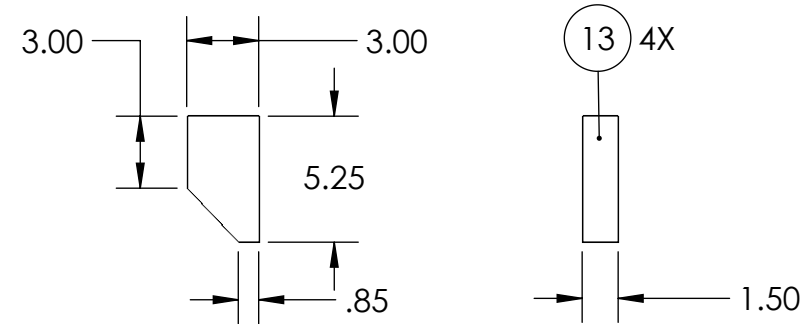
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TE-19107-12



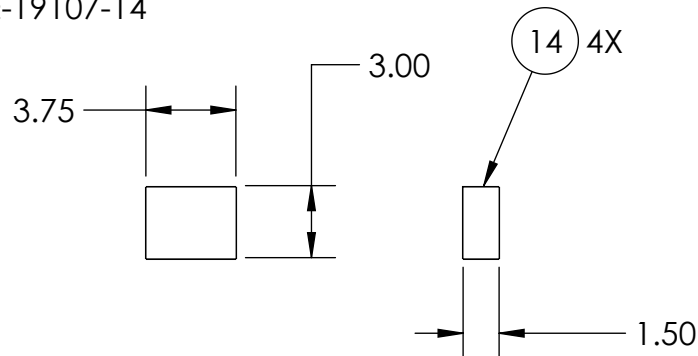
Note:  
Material: 15/32" (1/2") A/C or CDX Plywood

TE-19107-13



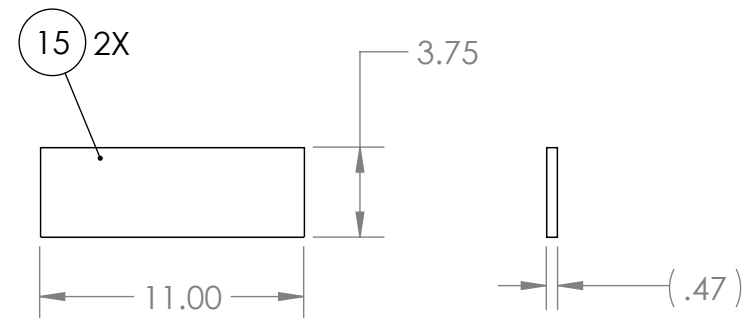
Note:  
Material 2"x 4" Pine Lumber

TE-19107-14



Note:  
Material 2"x 4" Pine Lumber

TE-19107-15



Note:  
Material: 15/32" (1/2") A/C or CDX Plywood

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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN INCHES		DRAWN	
		TOLERANCES:		CHECKED	
		FRACTIONAL $\pm 1/16$		ENG APPR.	
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$		MFG APPR.	
		TWO PLACE DECIMAL $\pm .01$		Q.A.	
		THREE PLACE DECIMAL $\pm .001$		COMMENTS:	
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			



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Modeling Solutions Partner

TITLE:

**Cargo Front  
Single**

SIZE

**A**

DWG. NO.

**TE-19107**

REV

SCALE: 1:24 WEIGHT:

SHEET 13 OF 14

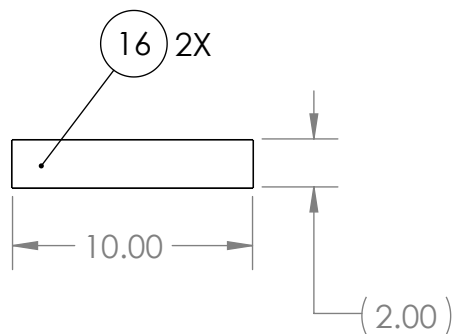
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1

2

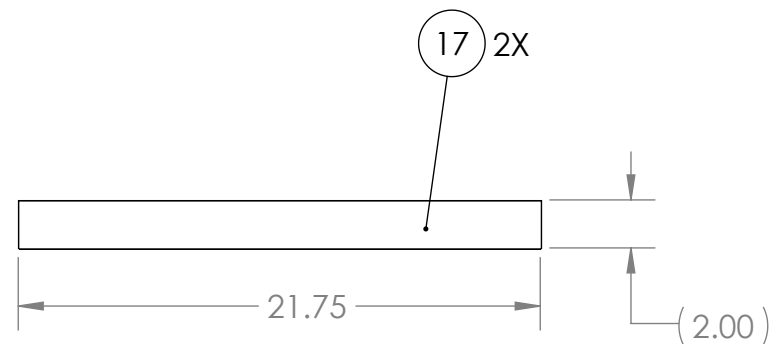
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TE-19107-16



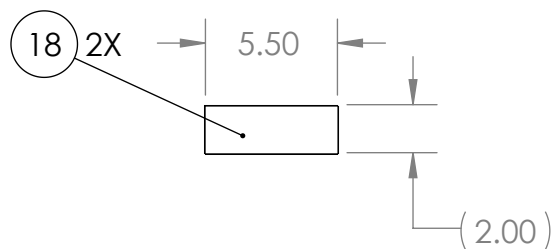
Note:  
2" Hook Fastener

TE-19107-19



Note:  
2" Hook Fastener

TE-19107-20



Note:  
2" Vison Tape

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		TOLERANCES:	CHECKED		
		FRACTIONAL $\pm 1/16$	ENG APPR.		
		ANGULAR: MACH $\pm 1^\circ$ BEND $\pm 1^\circ$	MFG APPR.		
		TWO PLACE DECIMAL $\pm .01$	Q.A.		
		THREE PLACE DECIMAL $\pm .001$	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
NEXT ASSY	USED ON	FINISH			
APPLICATION		DO NOT SCALE DRAWING			



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TITLE:

Cargo Front  
Single

SIZE

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DWG. NO.

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REV

SCALE: 1:24 WEIGHT:

SHEET 14 OF 14

2

1