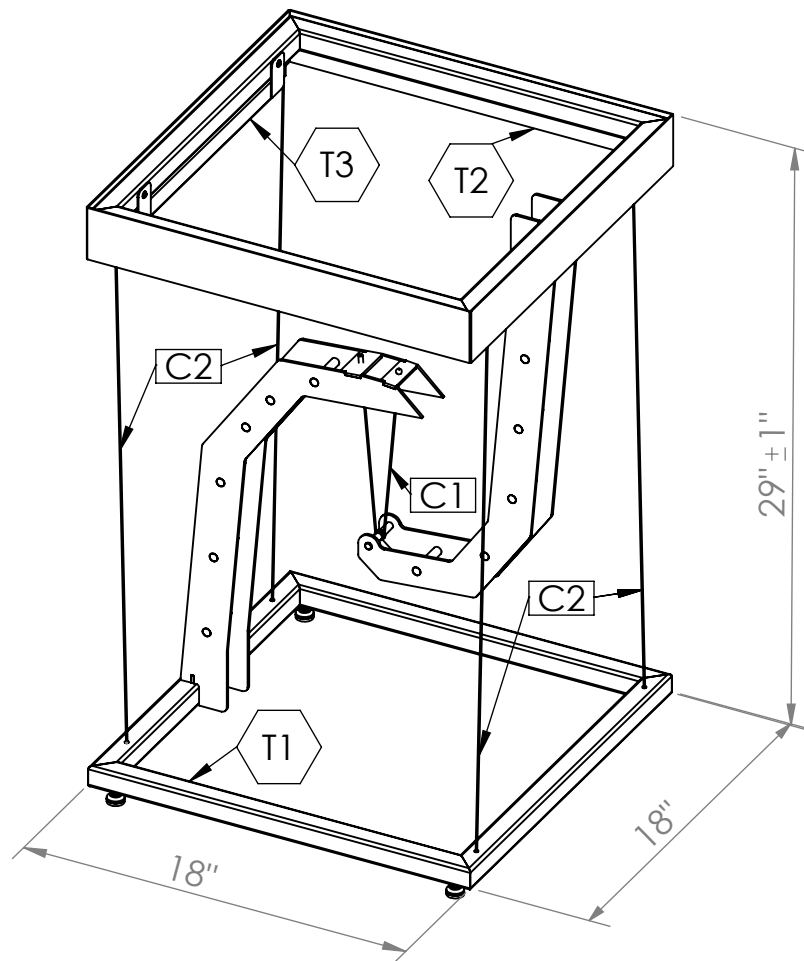


2

1

B

B



A

A

ASSEMBLY	NAME
T1	Table Lower
T2	Table Upper
C1	Center Cable
C2	Side Cable
T3	Damper Module

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES

STD. TOLERANCES: ± 1/16

Weld GTAW

MATERIAL Steel

FINISH Painted surface welds ground flush

NAME DATE

LAST MODIFIED 6/30/2022

COMMENTS:

Final Project Welding Fabrication

Community College

Instructor

TITLE:

Tensegrity Table

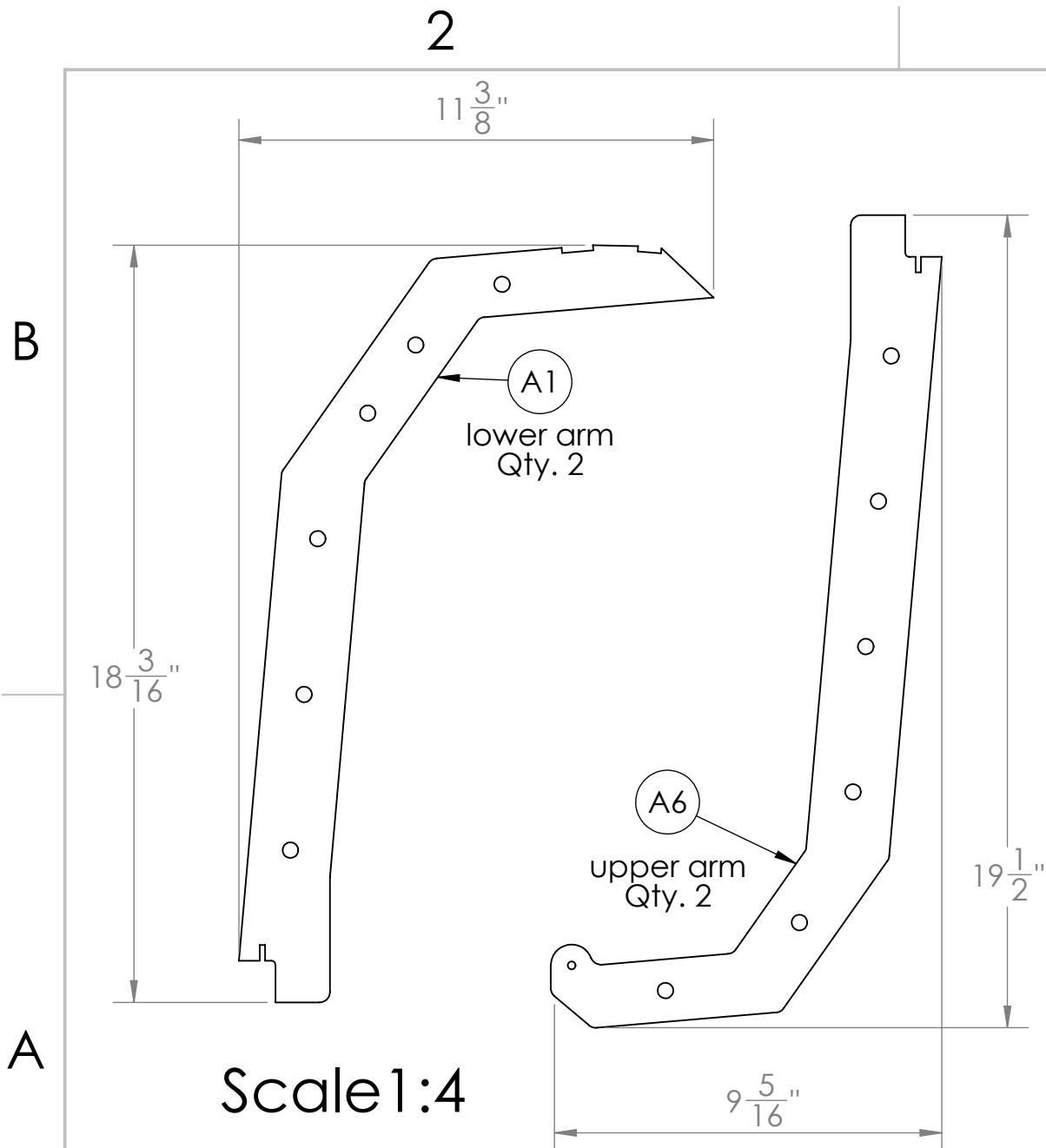
SIZE DWG. NO. REV

A Overview

SCALE: 1:8 WEIGHT: 22lb SHEET 1 OF 13

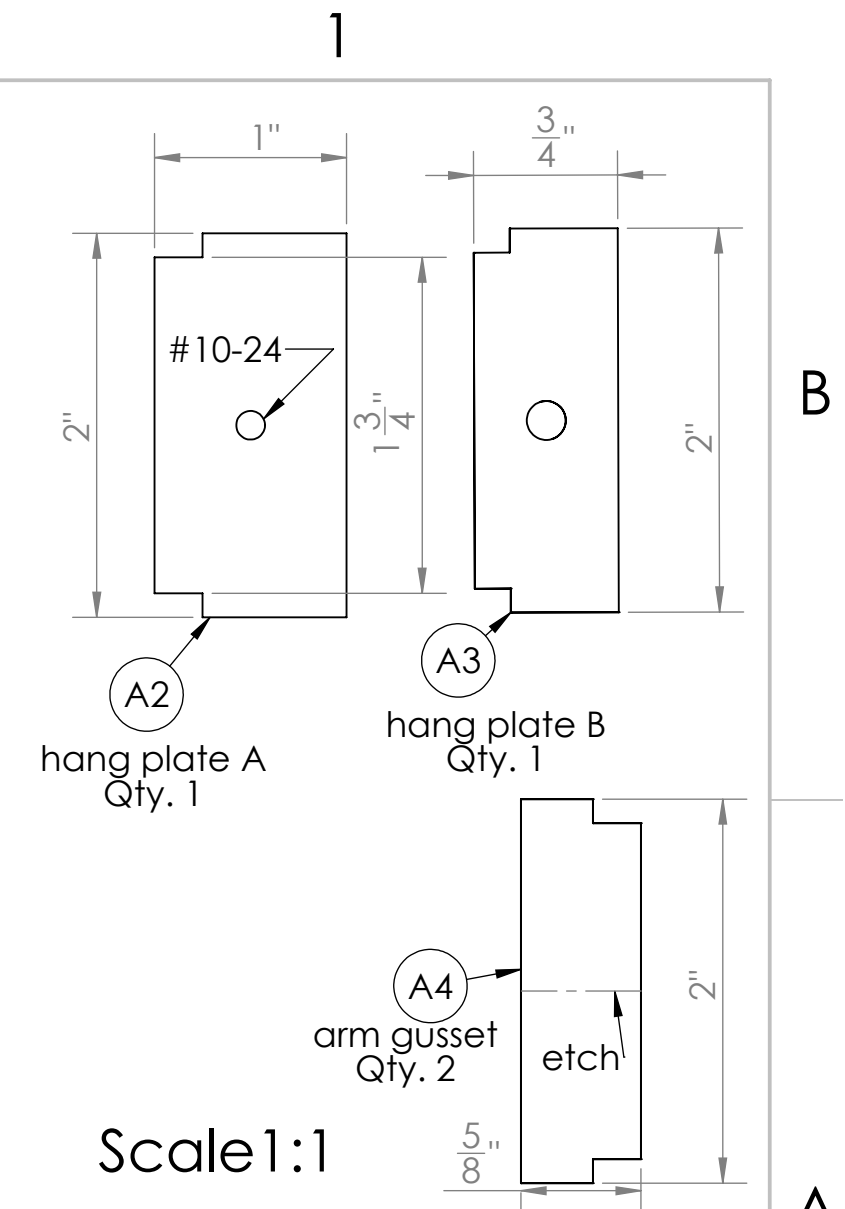
2

1



Scale 1:4

Since these components are designed for laser cutting, many of the complex dimensions have been omitted for the sake of drawing legibility.



Scale 1:1

TITLE:		
Arm Pieces (lasercut)		
SIZE	DWG. NO.	REV
A	A1, A2, A3, A4, A6	
WEIGHT:		SHEET 2 OF 13

2

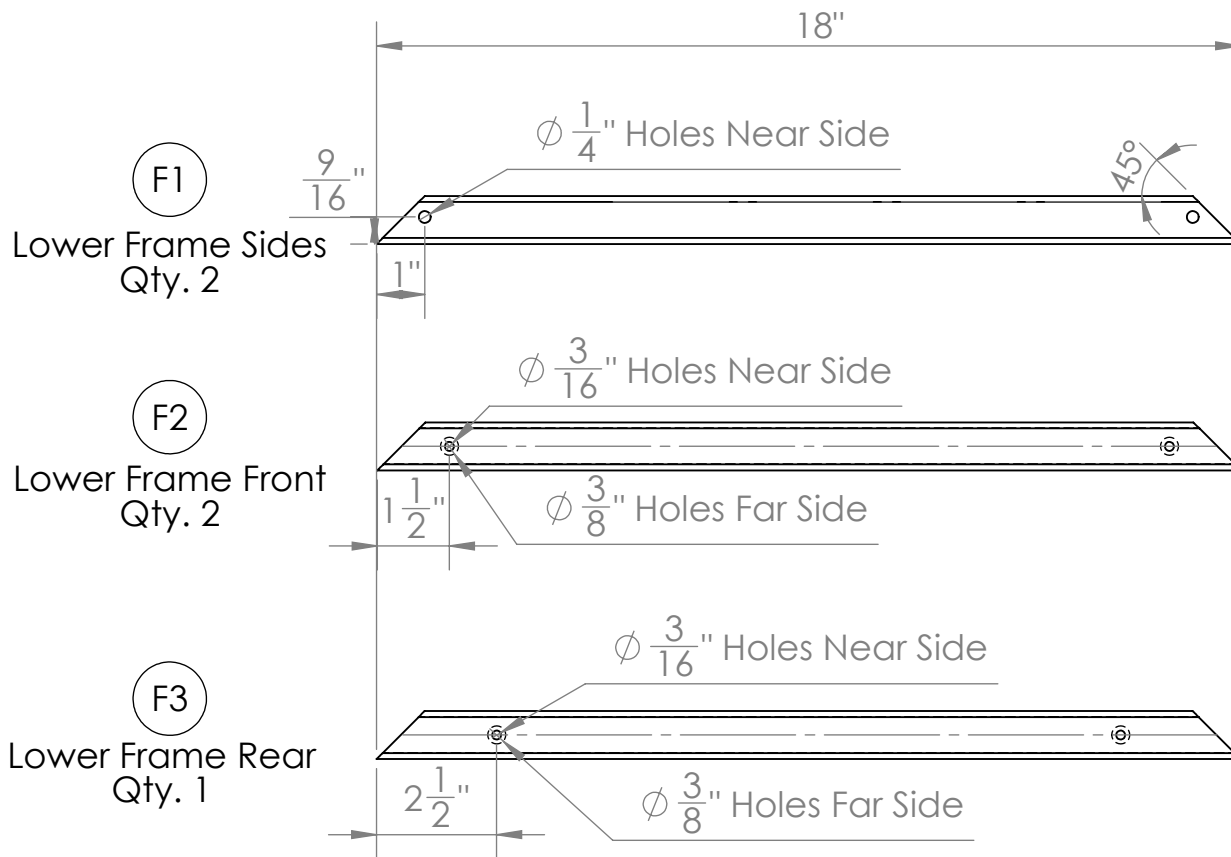
1

B

B

A

A



F1, F2, F3
 SQUARE TUBULAR STEEL
 1" x 14ga
 Cut 45° for Miter

TITLE:		
Lower Frame Pieces		
SIZE	DWG. NO.	REV
A	F1, F2, F3	
SCALE: 1:4	WEIGHT:	SHEET 3 OF 13

2

1

2

1

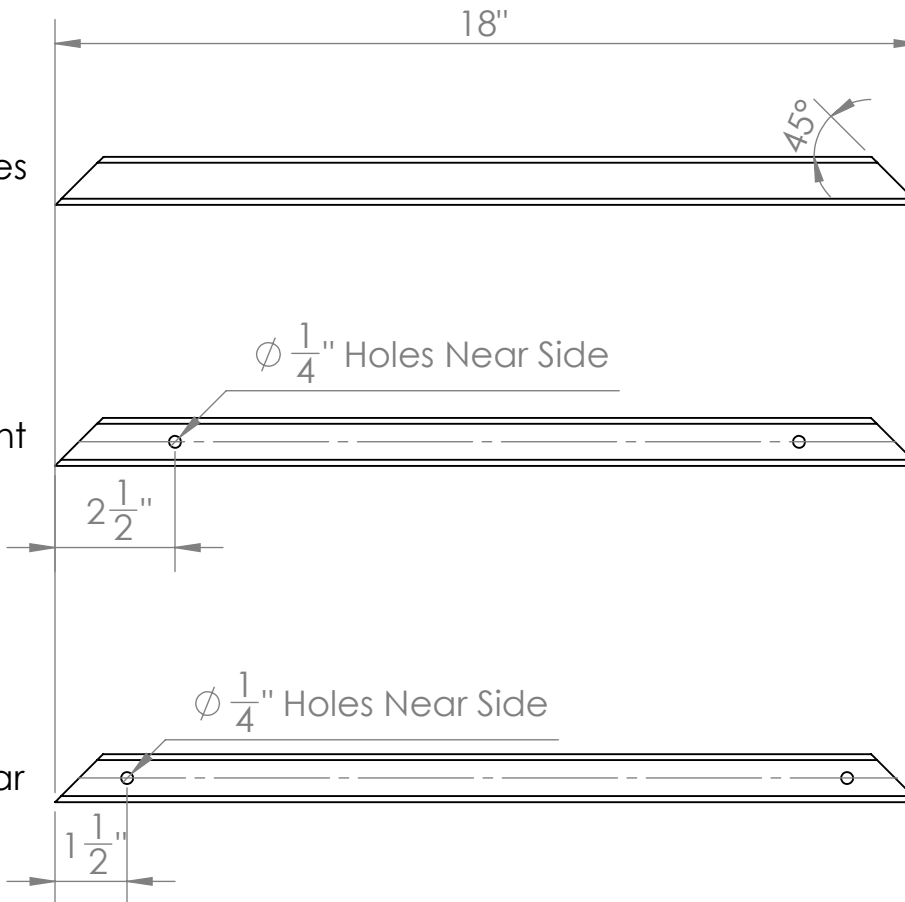
B

B

F4
Upper Frame Sides
Qty. 2

F5
Upper Frame Front
Qty. 1

F6
Upper Frame Rear
Qty. 1



F4, F5, F6
SQUARE TUBULAR STEEL
1" x 14ga

Cut 45° for Miter

A

A

TITLE:

Upper Frame
Major Pieces

SIZE

DWG. NO.

REV

A

F4, F5, F6

SCALE: 1:4

WEIGHT:

SHEET 4 OF 13

2

1

2

1

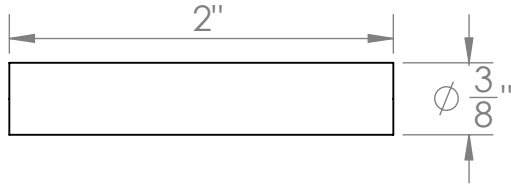
B

B

SCALE 1:1

A5

Arm Brace Dowel
Qty. 12



Steel, Round Bar Stock

Scale 1:4

F7

Top Skirt
Qty. 4



Steel, Sheet
16ga or similar

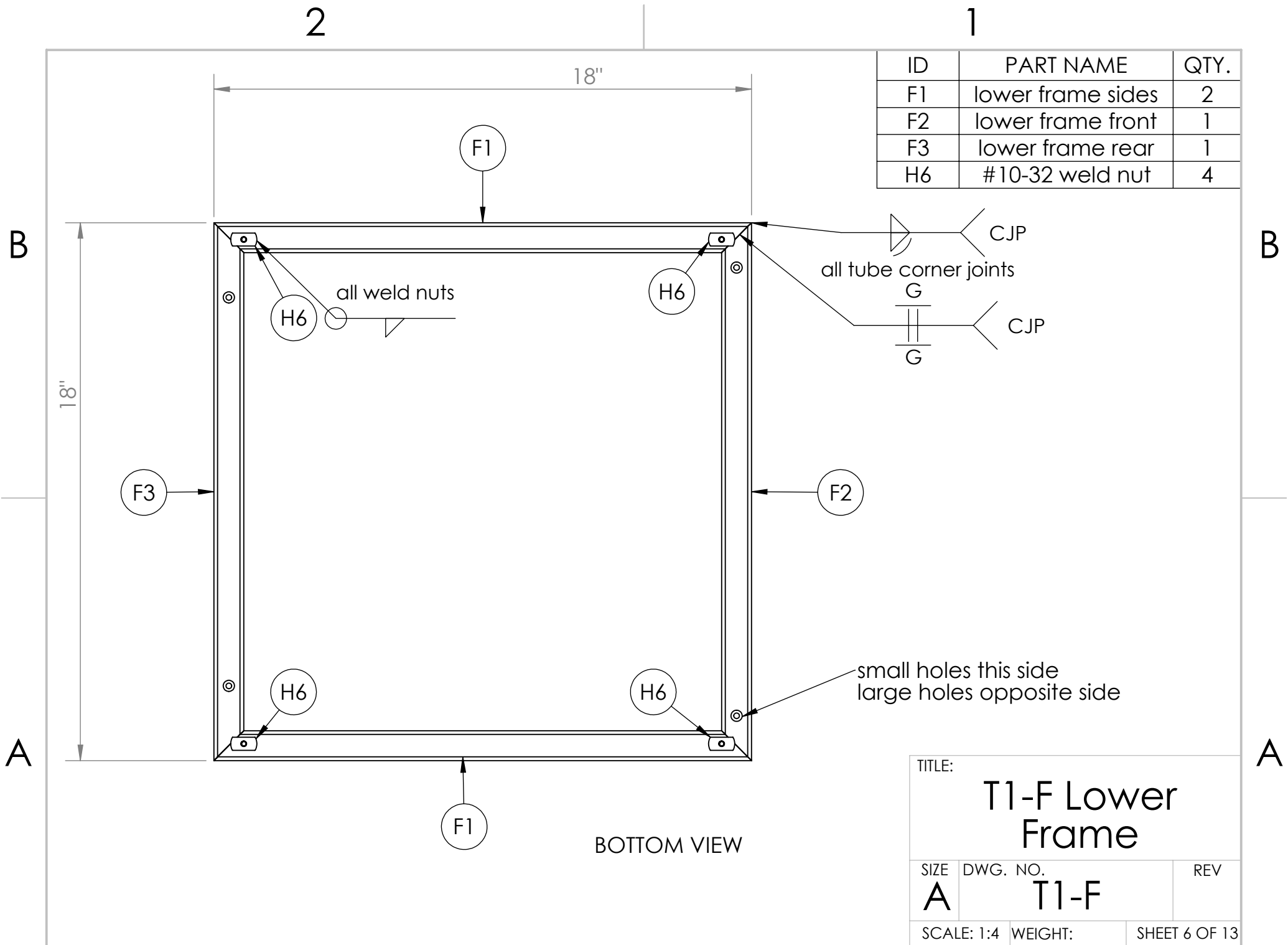
A

A

TITLE: Brace Dowels; Top Skirts		
SIZE A	DWG. NO. A5, F7	REV
WEIGHT:		SHEET 5 OF 13

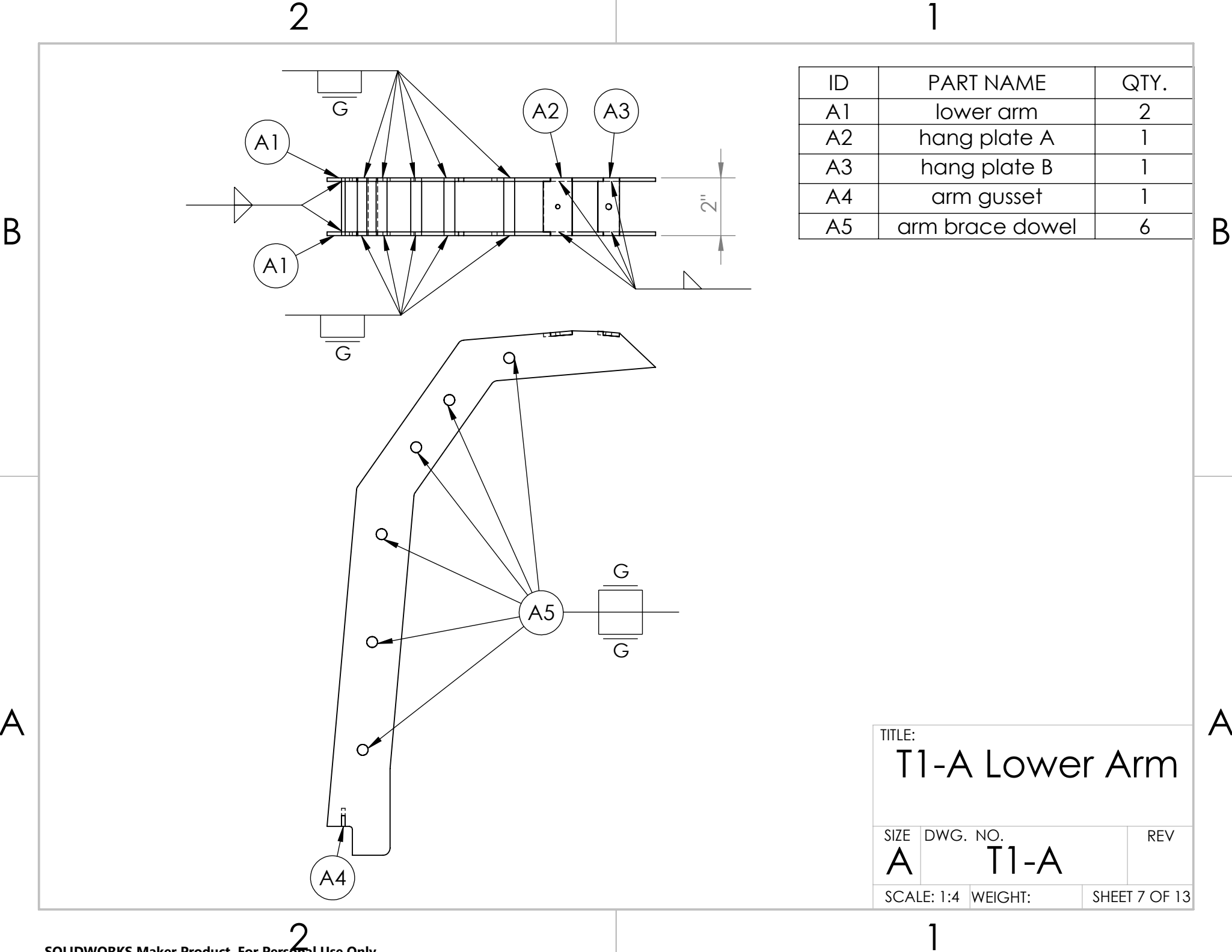
2

1



ID	PART NAME	QTY.
F1	lower frame sides	2
F2	lower frame front	1
F3	lower frame rear	1
H6	#10-32 weld nut	4

TITLE:		
T1-F Lower Frame		
SIZE	DWG. NO.	REV
A	T1-F	
SCALE: 1:4	WEIGHT:	SHEET 6 OF 13



ID	PART NAME	QTY.
A1	lower arm	2
A2	hang plate A	1
A3	hang plate B	1
A4	arm gusset	1
A5	arm brace dowel	6

TITLE:
T1-A Lower Arm

SIZE	DWG. NO.	REV
A	T1-A	

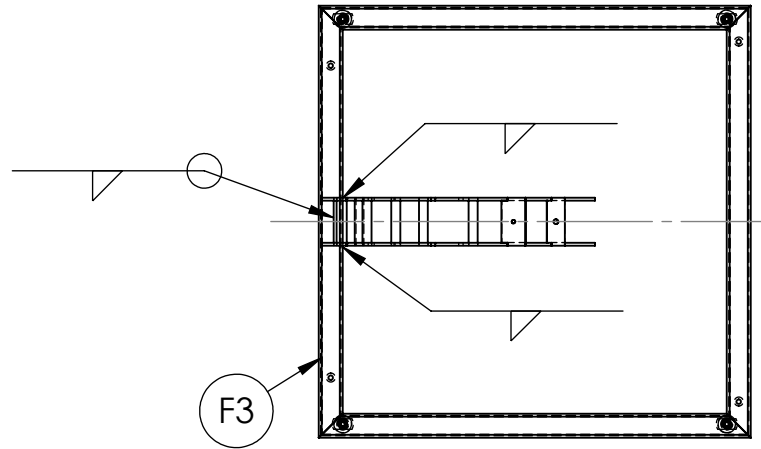
SCALE: 1:4	WEIGHT:	SHEET 7 OF 13
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2

1

B

B

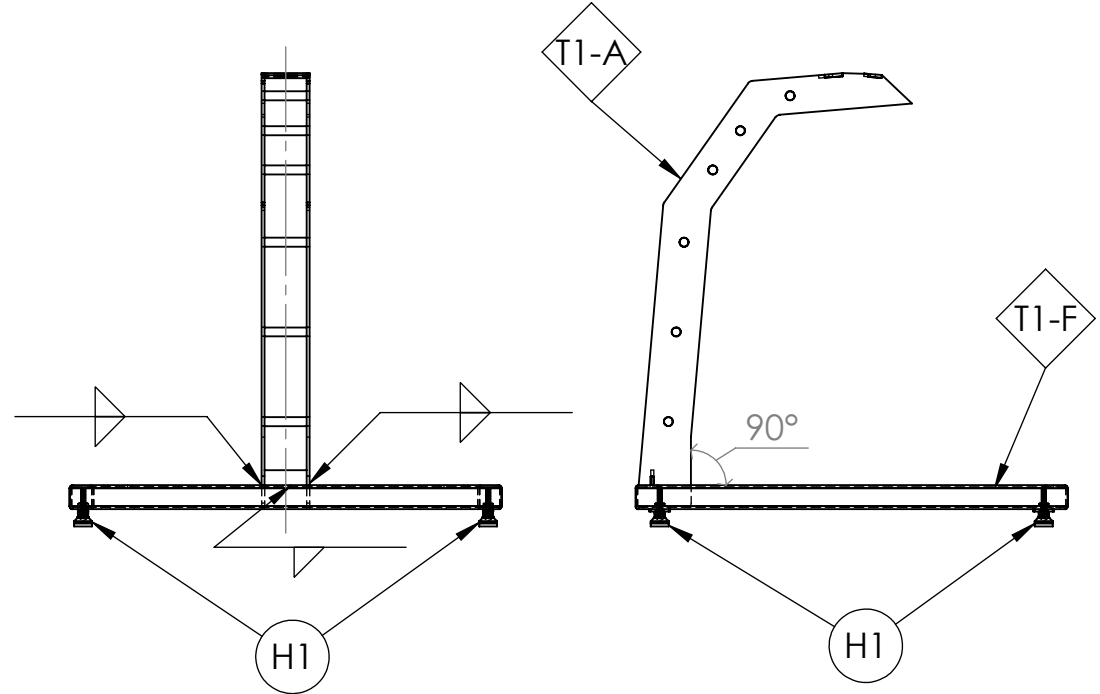


ID	PART NAME	QTY.
T1-A	lower arm s.assembly	1
T1-F	lower frame s.assembly	1
H1	leveling foot	4

Carefully note relative positions of F2 and F3 frame holes. T1-A must be welded to component F3.

A

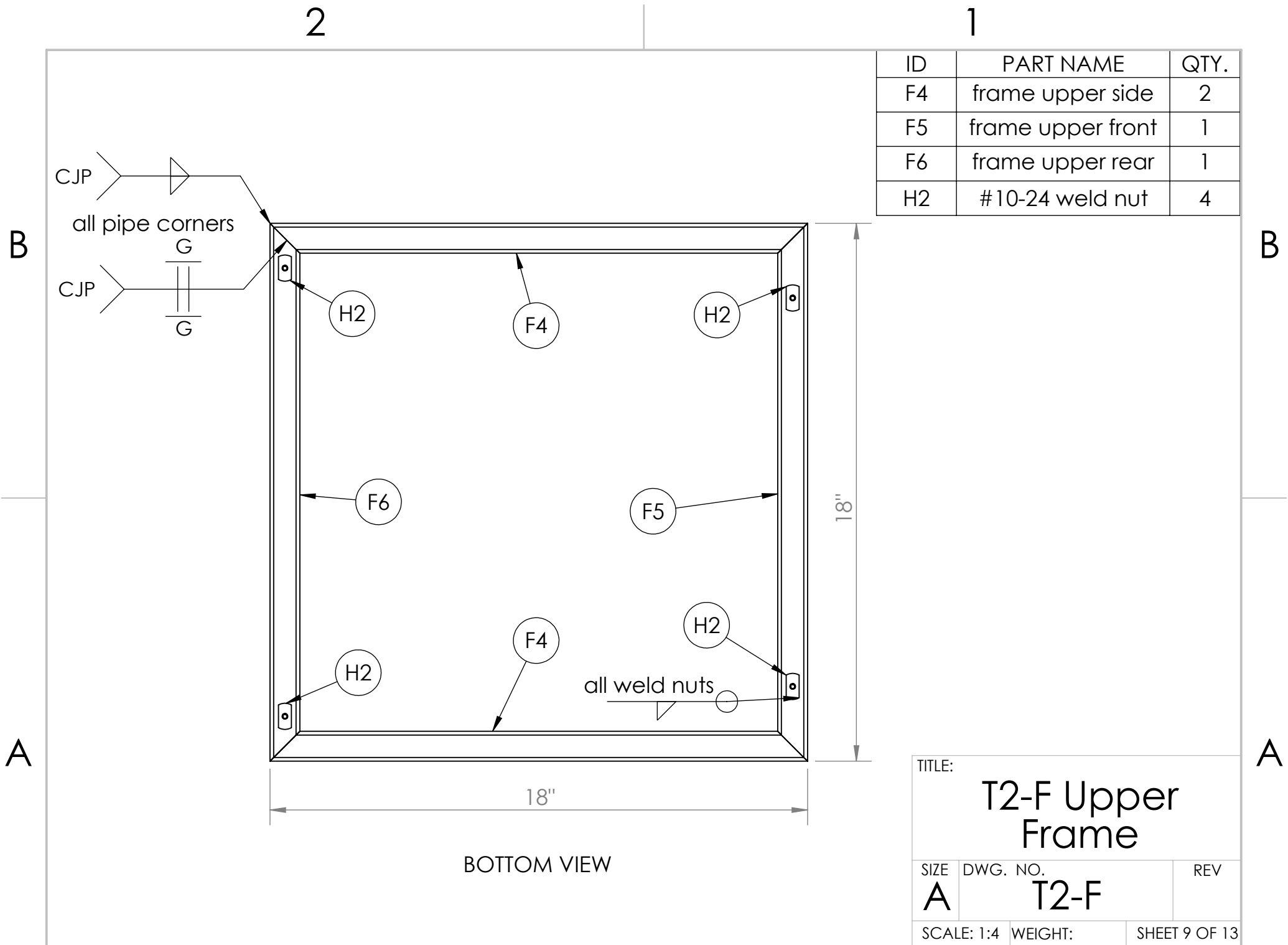
A



TITLE: T1 Lower Table Assembly		
SIZE A	DWG. NO. T1	REV
SCALE: 1:8	WEIGHT:	SHEET 8 OF 13

2

1



ID	PART NAME	QTY.
F4	frame upper side	2
F5	frame upper front	1
F6	frame upper rear	1
H2	#10-24 weld nut	4

TITLE:		
T2-F Upper Frame		
SIZE	DWG. NO.	REV
A	T2-F	
SCALE: 1:4	WEIGHT:	SHEET 9 OF 13

2

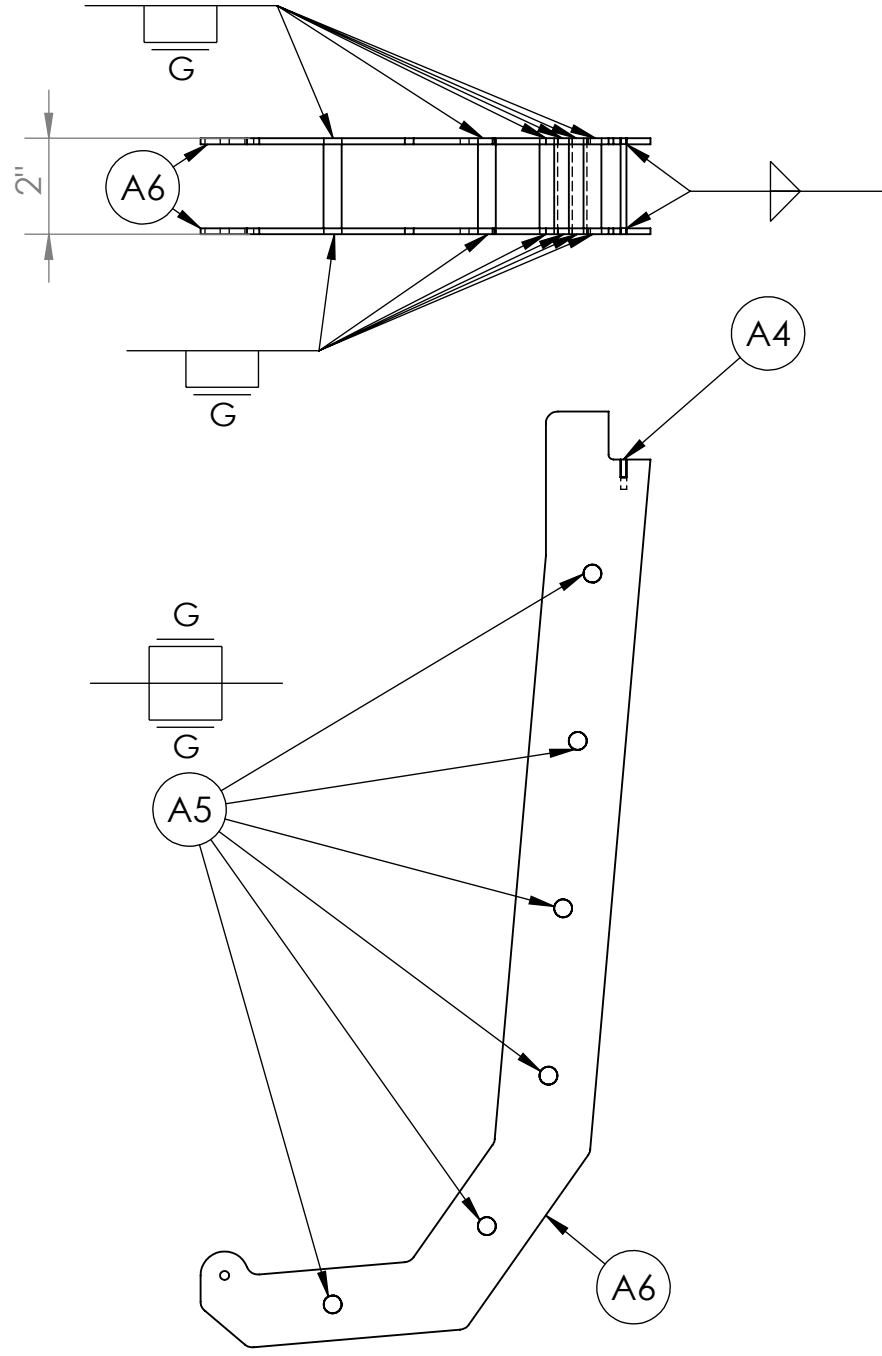
1

B

B

A

A



ID	PART NAME	QTY.
A4	arm gusset	1
A5	arm brace dowel	6
A6	upper arm	2

TITLE:
T2-A Upper Arm

SIZE	DWG. NO.	REV
A	T2-A	

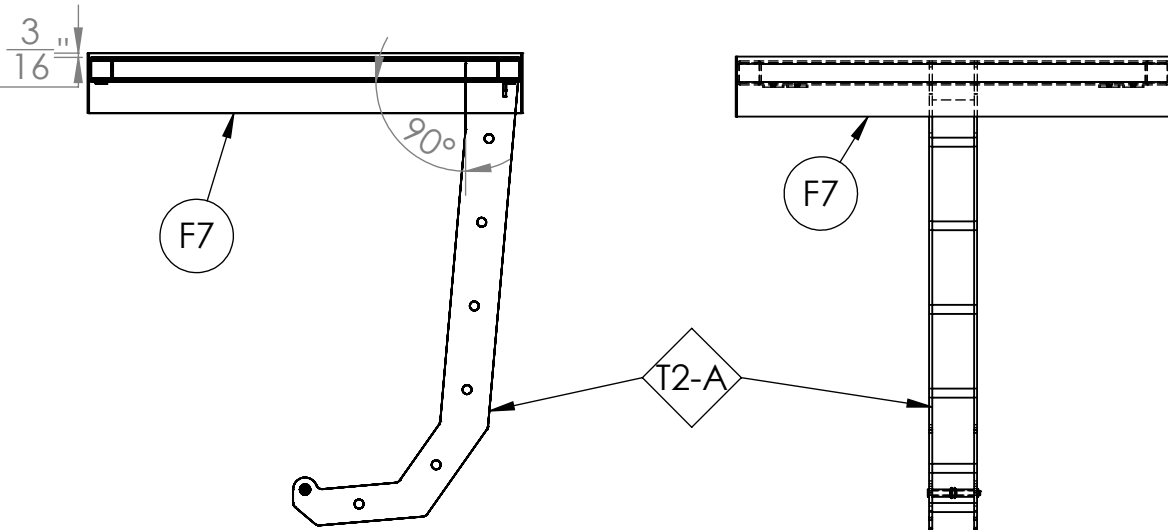
SCALE: 1:4 WEIGHT: SHEET 10 OF 13

2

1

2

1

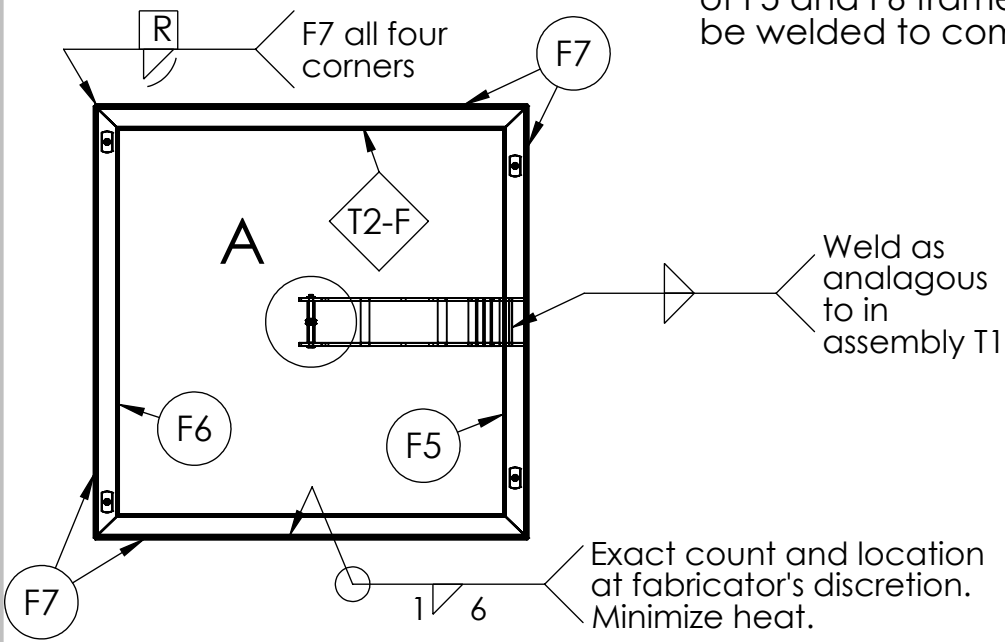


ID	PART NAME	QTY.
T2-A	Upper Frame s.assembly	1
T2-F	Upper Arm s.assembly	1
F7	top skirt	4
H2	weld nut	4
H3	clevis pin	1
H4	unthreaded spacer	2
H5	wire rope thimble	1
H7	single wave washer	2

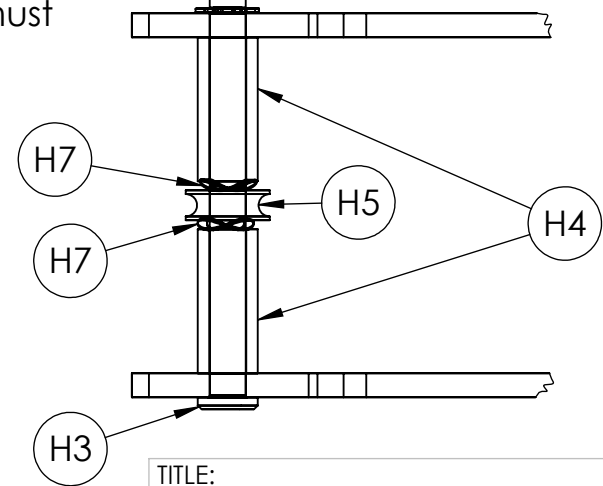
B

B

Carefully note relative positions of F5 and F6 frame holes. T2-A must be welded to component F5.



DETAIL A
SCALE 1 : 1



A

A

TITLE: Upper Table Assembly		
SIZE A	DWG. NO. T2	REV
SCALE: 1:8	WEIGHT:	SHEET 11 OF 13

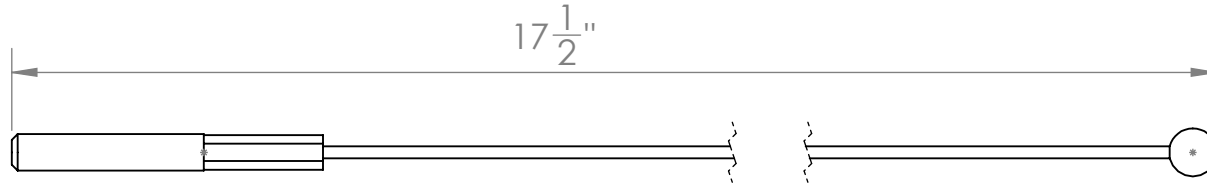
2

1

B

B

C1
Qty. 1



End A
Threaded plug
#10-24 x 1"
Stainless Steel
Hexagonal Swaged

Cable
1/16 7x7
Stainless Steel

End B
Plain Ball
Diameter 0.25
Stainless Steel

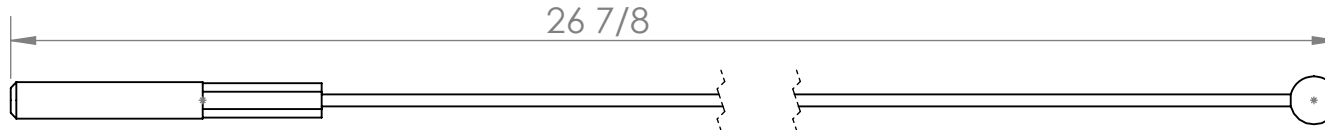
Lexco #
465-S-1.000-1/16

Lexco #
570S-2

A

A

C2
Qty. 4



Length Tolerance
 $\pm 1/8$

TITLE: Lexco Custom Cable Assemblies		
SIZE A	DWG. NO. C1, C2	REV
SCALE: 1:1	WEIGHT:	SHEET 12 OF 13

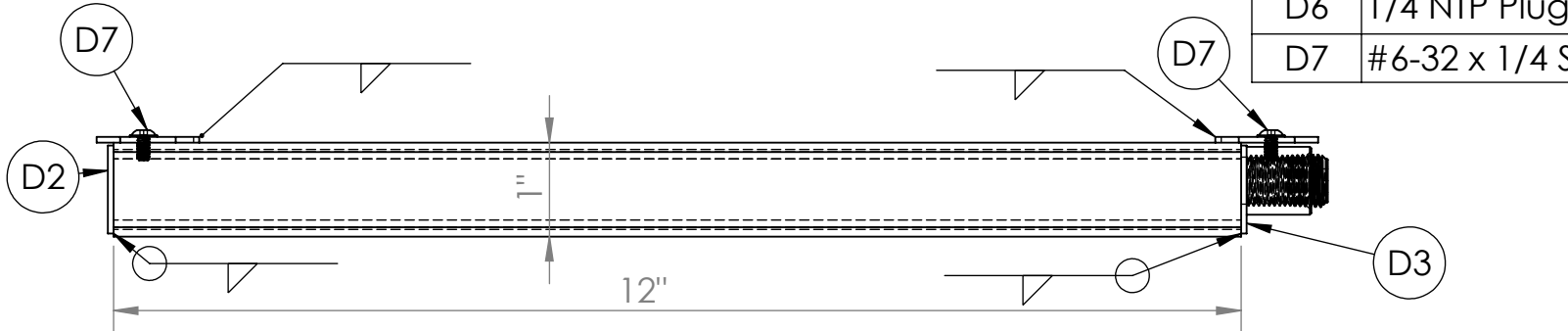
2

1

ID	PART NAME	QTY.
D1	Damper Tube	1
D2	Damper Closed End	1
D3	Damper Port End	1
D4	1/4 NTP Connector	1
D5	Damper Bracket	2
D6	1/4 NTP Plug	1
D7	#6-32 x 1/4 Screw	2

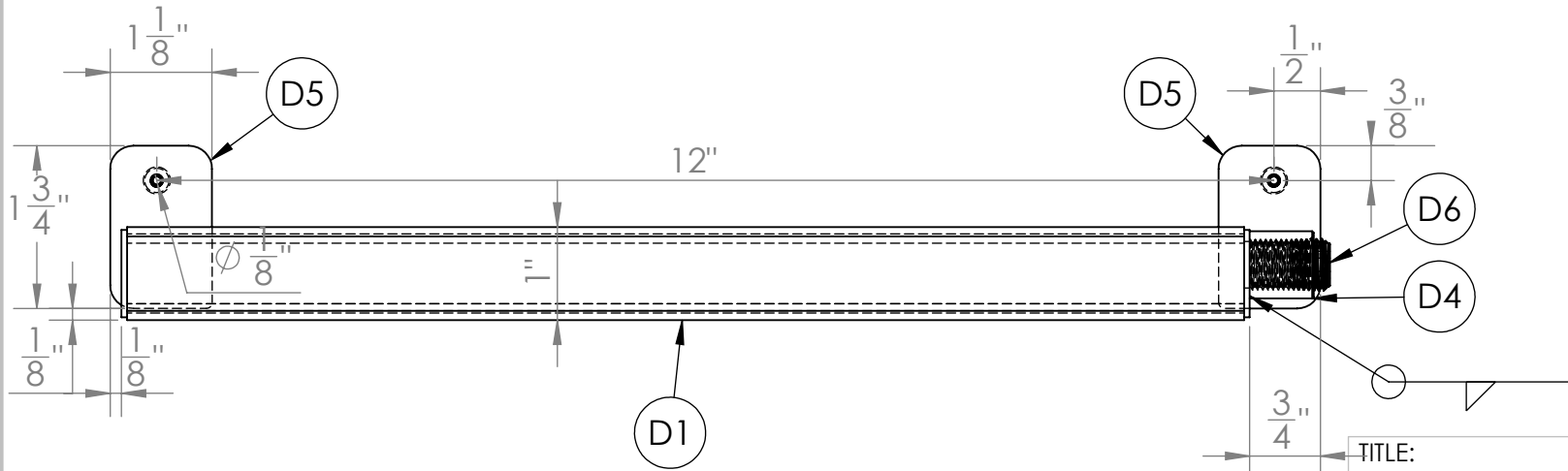
B

B



A

A



Welds must be water-tight
 Fill damper unit with approx. 100mL 5W-30 motor oil

TITLE:
Damper Module

SIZE	DWG. NO.	REV
A	T3	
SCALE: 1:2	WEIGHT:	SHEET 13 OF 13

2

1