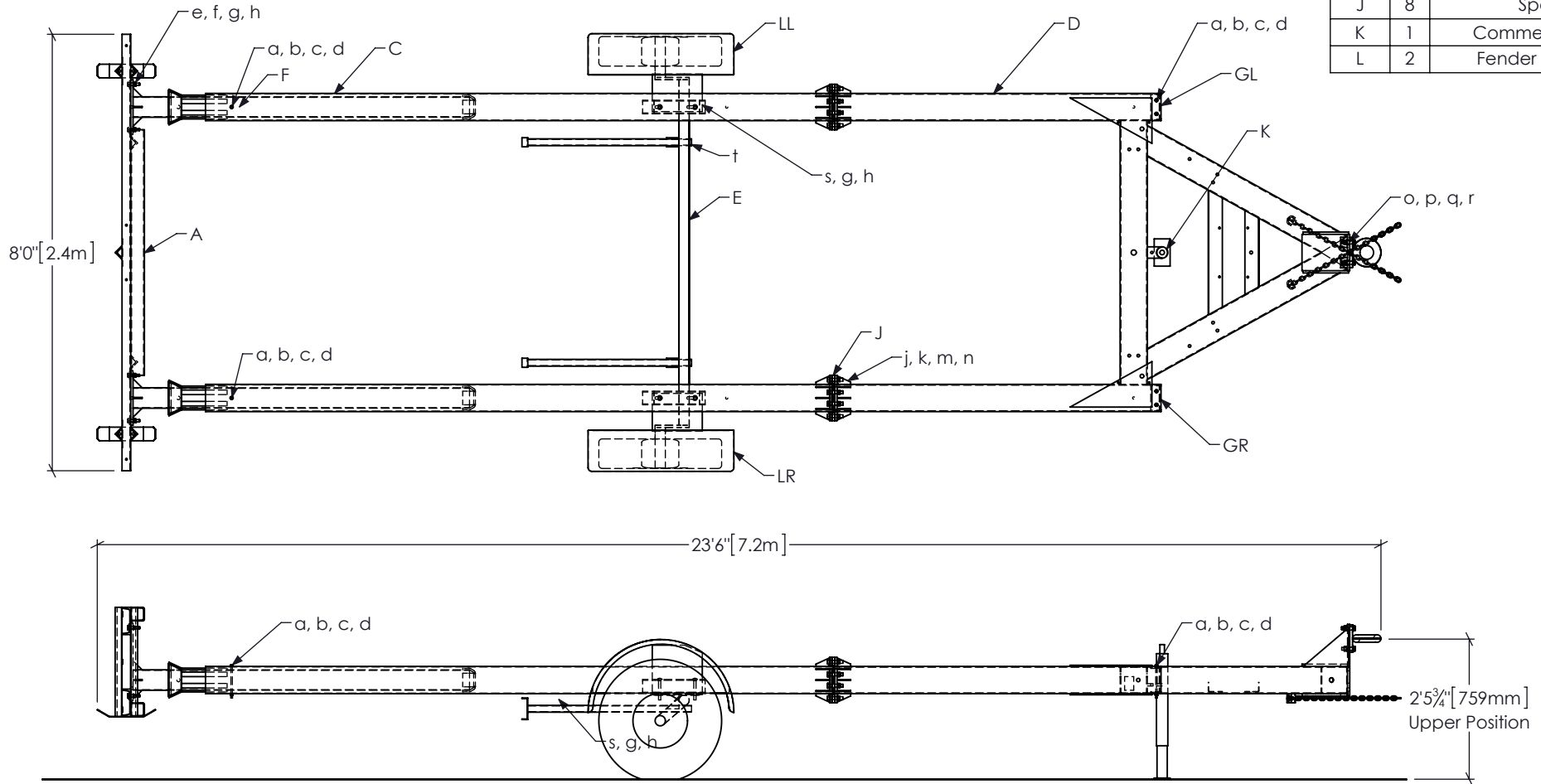


ITEM	QTY	DESCRIPTION	ITEM	QTY	DESCRIPTION	ITEM	QTY	DESCRIPTION
a	6	5/16" x 7" Grd 5 Hex Bolt	g	12	1/2" Heavy Lock Washer	o	4	5/8" x 2 1/2" Grd 5 Hex Bolt*
b	6	5/16" Washer	h	12	1/2" Grd 5 Hex Nut	p	4	5/8" Washer
c	6	5/16" Heavy Lock Washer	j	16	9/16" x 3" Grd 5 Hex bolt	q	4	5/8" Heavy Lock Washer
d	6	5/16" Grd 5 Hex Nut	k	16	9/16" SAE Washer	r	4	5/8" Grd 5 Hex Nut
e	8	1/2" x 2.25" Grd 5 Hex Bolt	m	16	9/16" Heavy Lock Washer	s	4	Retaining Clip for 1/2" Bolt
f	8	1/2" Washer	n	16	9/16" Grd 5 hex Nut	t	2	Square Tubing Plug

ITEM	QTY	DESCRIPTION
A	1	impact Head
B	2	Bursting Mandrel
C	2	First Tube
D	1	Trailer Frame
E	1	Axle Assembly
F	4	Plastic Guide Plates
G	2	End caps
H	1	Hitch Assembly
J	8	Spacer
K	1	Commercial Jack
L	2	Fender Assembly



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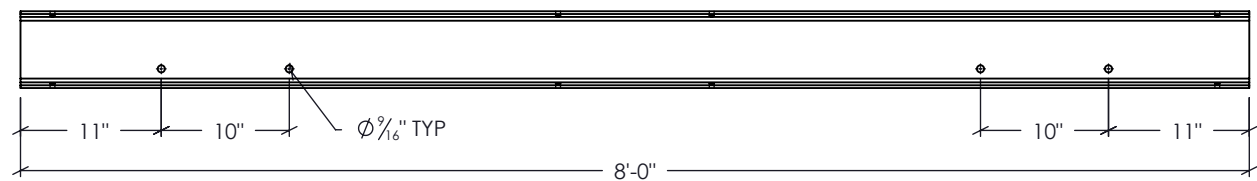
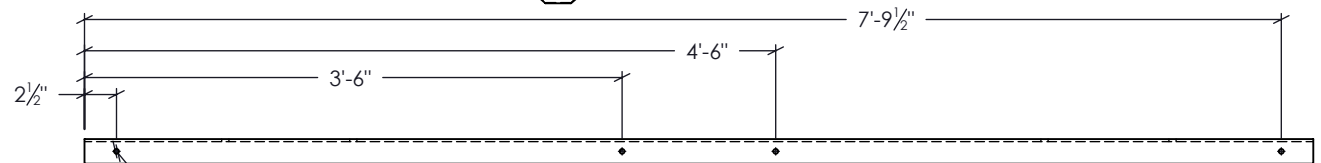
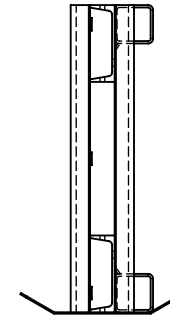
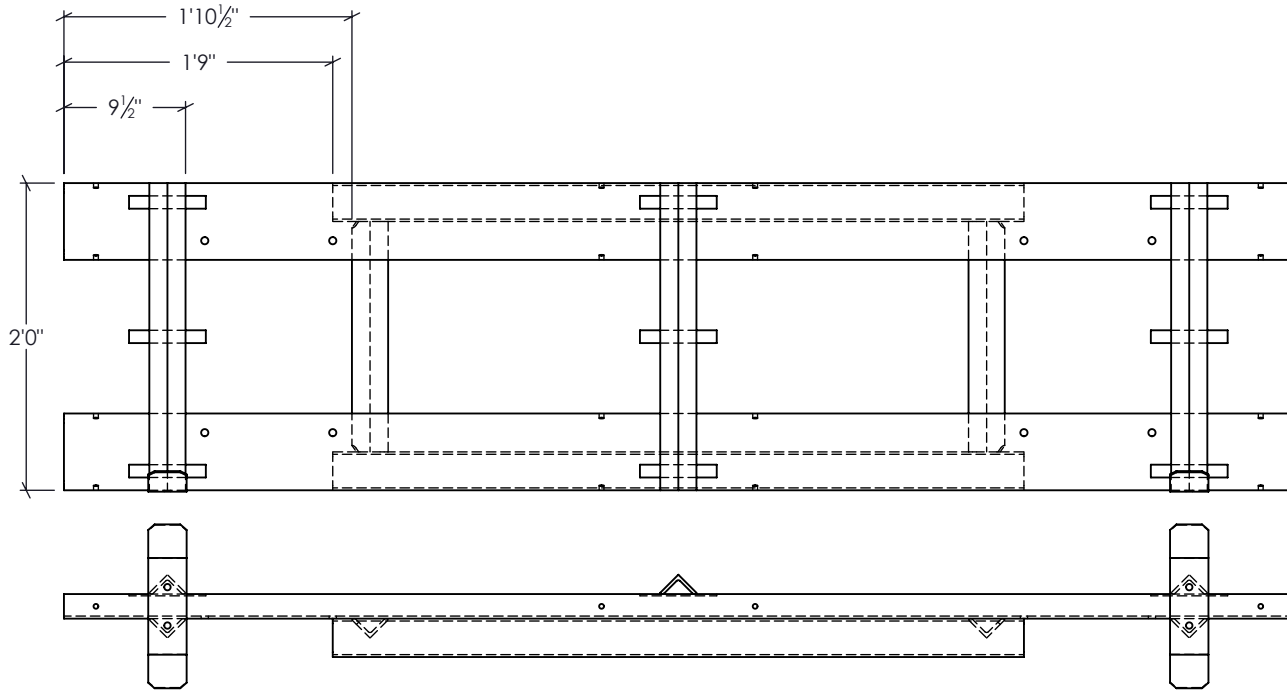
TTMA-200
Assembly

Sheet: **100**
 Date: 3/20/2018
 By: JMS
 Rev:

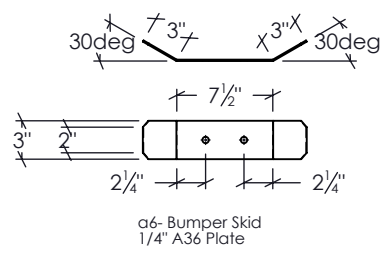
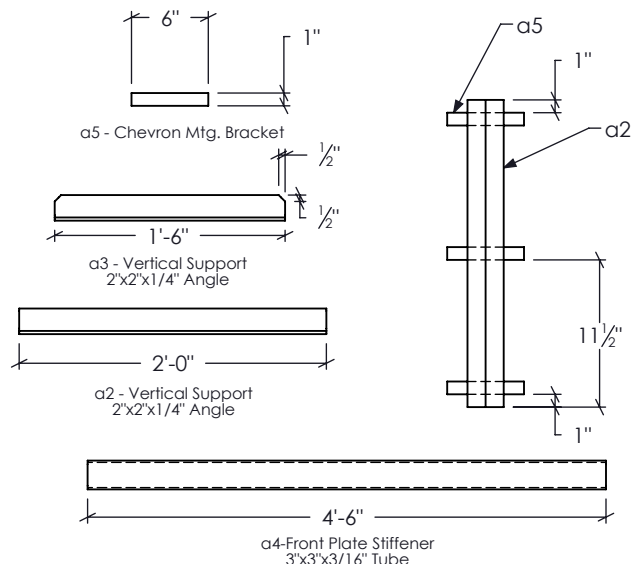
Drawing Name: TTMA-200

Scale: NONE

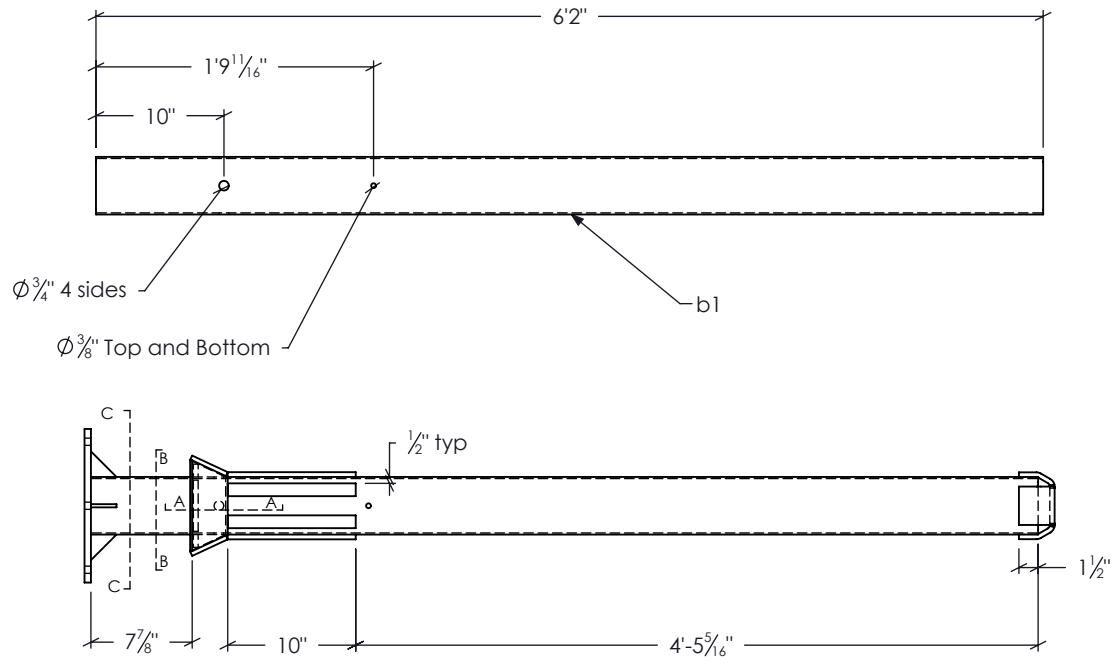
ITEM	QTY	DESCRIPTION	MATERIAL
A	1	Impact Head	
a1T	1	Front Plate - Top	C6X8.2 Channel
a1B	1	Front Plate - Bottom	C6X8.2 Channel
a2	5	Vertical Supports	2"x2"x1/4" Angle
a3	2	Vertical Supports	2"x2"x1/4" Angle
a4	2	Front Plate Stiffener	3"x3"x3/16" Tube
a5	9	Chevron Mounting Bracket	12 Gage
a6	2	Bumper Skid	1/4" A36 Plate



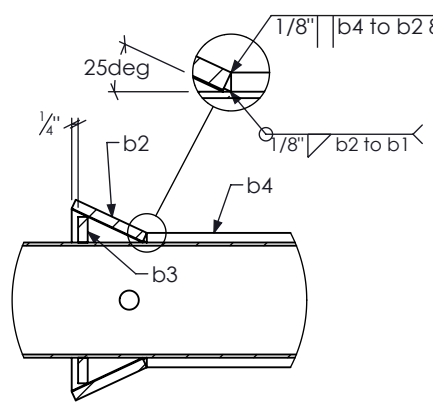
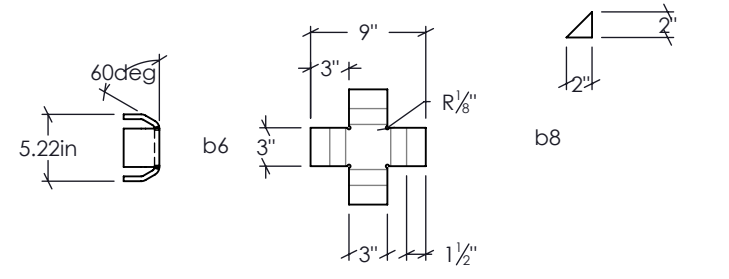
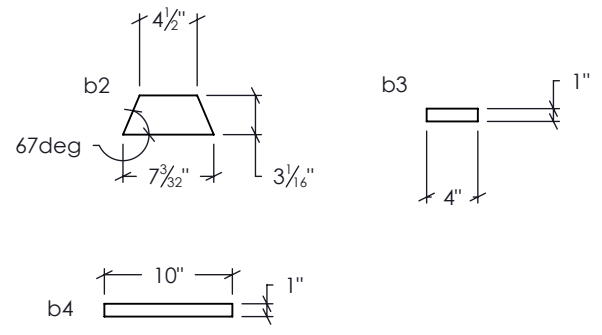
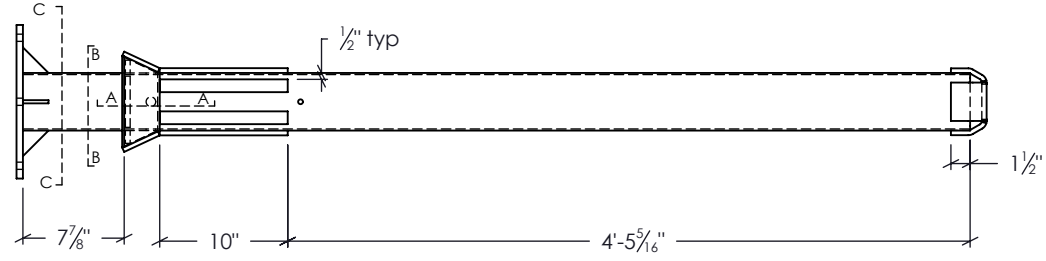
a1T & a1B- Front Plate
C6X8.2 Channel



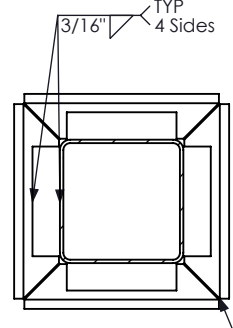
<p>Gregory Industries, Inc. 4100 13th Street, SW Canton, Ohio 44710 Phone: 330-447-4800x123</p>	<p>TTMA-200</p> <p>Impact Head Assembly</p>	<p>Sheet: 101</p>
	<p>Drawing Name: TTMA-200</p> <p>Scale: NONE</p>	<p>Date: 3/20/2018</p> <p>By: JMS</p> <p>Rev: </p>



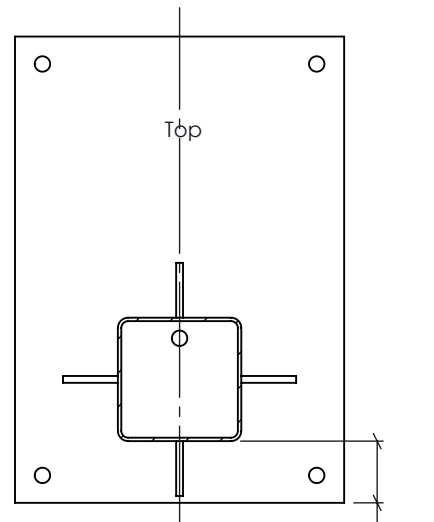
ITEM	QTY	DESCRIPTION	MATERIAL
B	2	Bursting Mandrel	
b1	2	Mandrel Tube	4.5"x4.5"x1/8" A500 B
b2	8	Burster Plate	3/8" AR360-400
b3	8	Burster Support	3/8" A36
b4	16	Guide Strap	3/8" A36
b6	2	End Plate	3/8" A36
b7	2	Mandrel End Plate	1/2" A36
b8	8	Gusset Plate	1/4" A36
F	4	Plastic Guide	3/16" UHMW



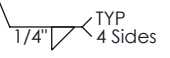
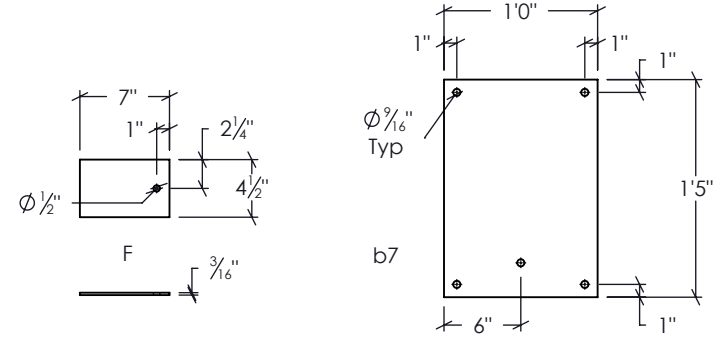
DETAIL "A-A"
 Note: Positioning of b3 is critical to maintain the angle of the burster plate b2



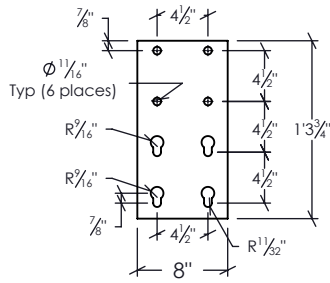
SECTION "B-B"
 SCALE 1 : 7



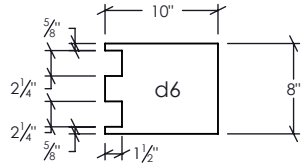
SECTION "C-C"
 Bottom



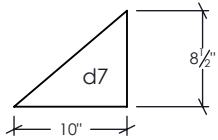
 Gregory Industries, Inc. 4100 13th Street, SW Canton, Ohio 44710 Phone: 330-447-4800x123	TTMA-200 Mandrel Assembly	Sheet: 102 Date: 3/20/2018
	Drawing Name: TTMA-200 Scale: NONE	By: JMS Rev:



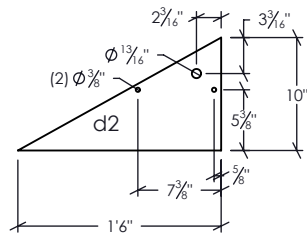
d5



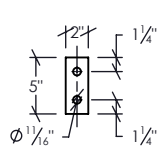
d6



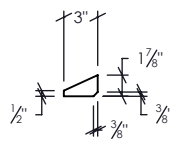
d7



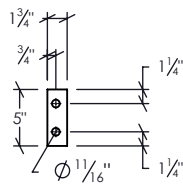
d2



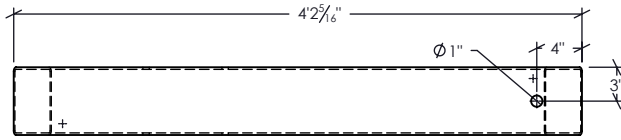
d8



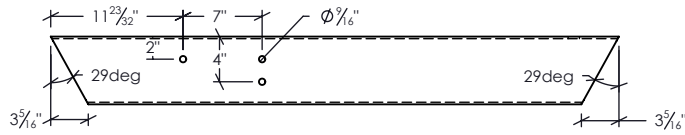
d9



d10



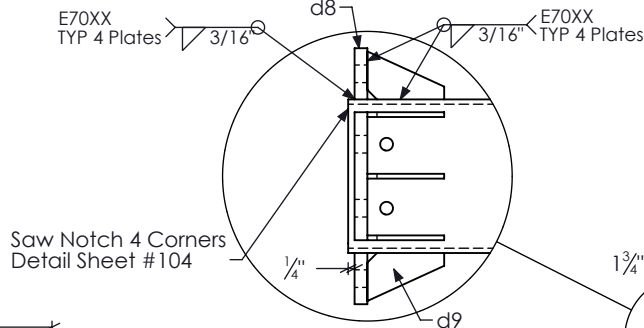
d4



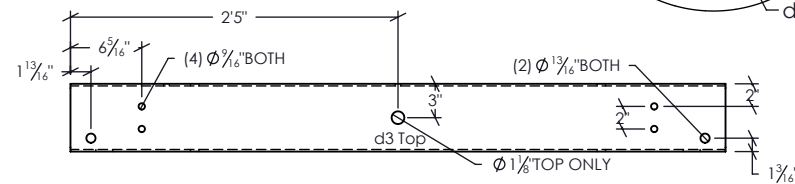
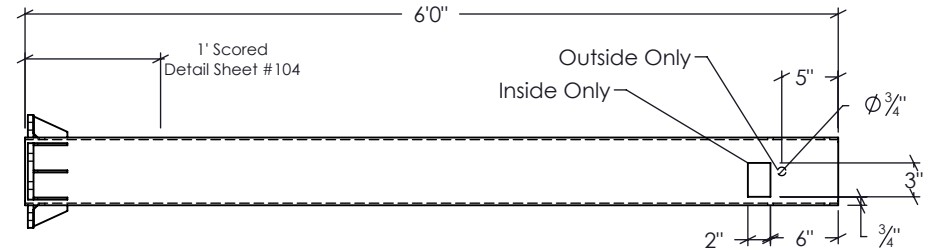
d8



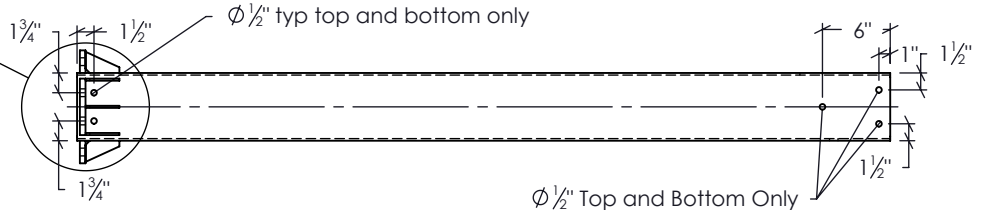
d4



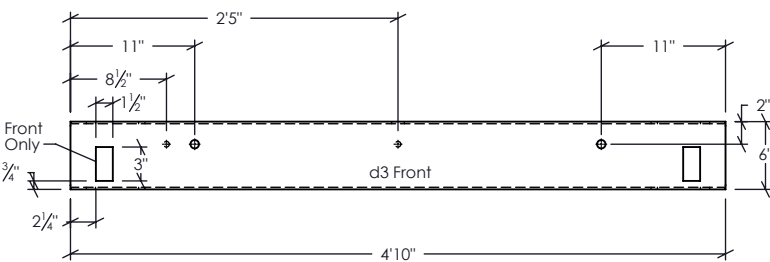
Saw Notch 4 Corners
Detail Sheet #104



d3 Top



d1 - Frame Tube

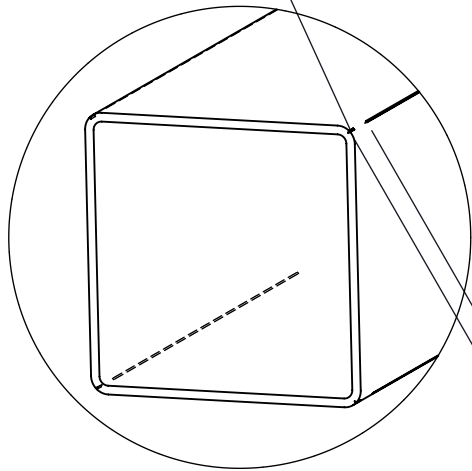


d3 Front

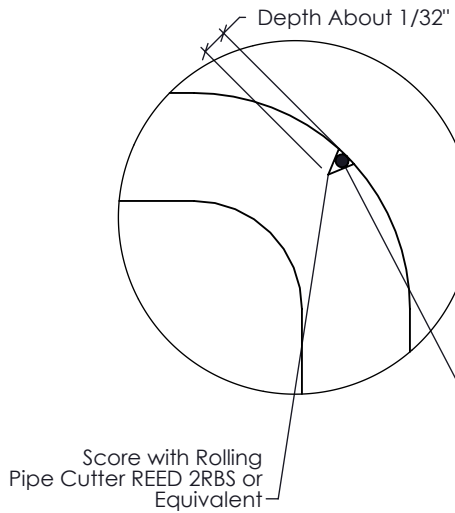
ITEM	QTY	DESCRIPTION	MATERIAL
d1	2	Frame Tube	6"x6"x3/16" A500 B
d2	4	Gusset Plate	1/4" A36
d3	1	Cross Tube	6"x6"x3/16" A500 B
d4	2	Hitch Tube	6"x6"x3/16" A500 B
d5	1	Hitch Plate	1/2" A36
d6	2	Hitch Support Plate	1/2" A36
d7	2	Hitch Gusset	1/2" A36
d8	8	Splice Plate (4 For Part C)	1/2" A36
d9	24	Splice Gusset Plate (12 for Part C)	3/16" A36
d10	8	Space	5/8" A36

ITEM	QTY	DESCRIPTION	MATERIAL
D		Trailer Frame Assembly	

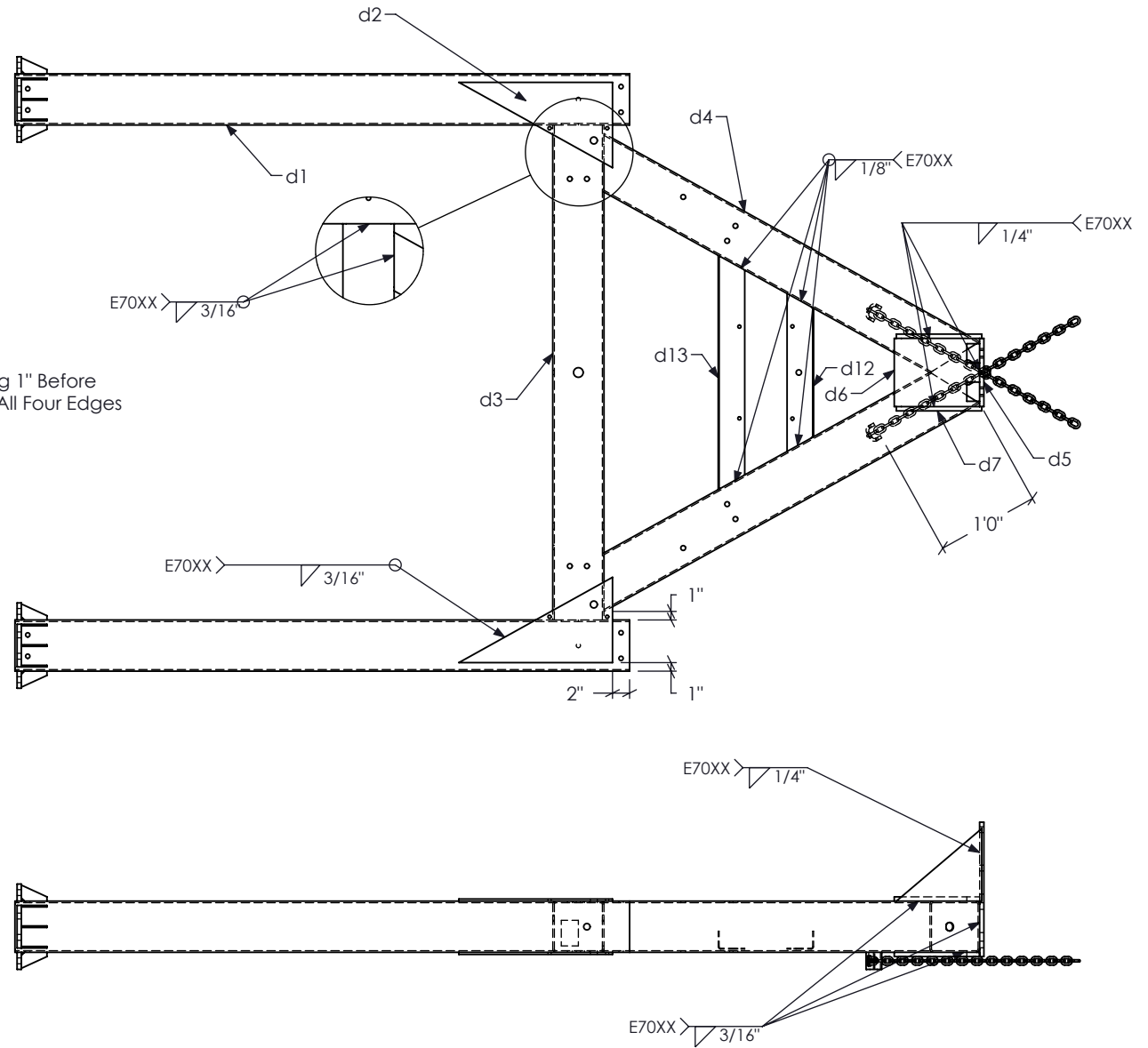
45 Degree Saw Cut to Depth of Tube all Four Corners after Galvanizing



End Scoring 1" Before End of Tube. All Four Edges



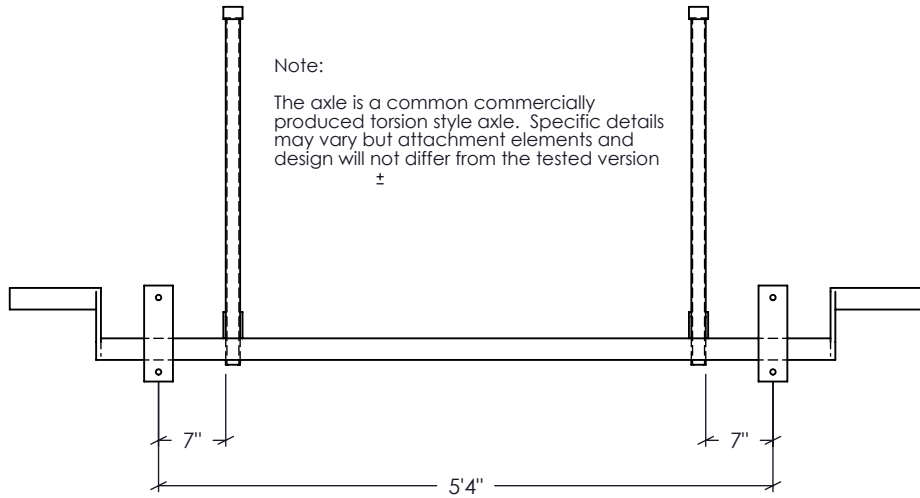
Gage Depth with Flush Insertion of 0.025" Wire



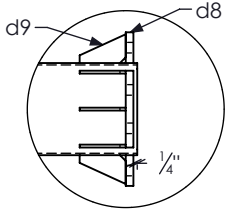
<p>Gregory Industries, Inc. 4100 13th Street, SW Canton, Ohio 44710 Phone: 330-447-4800x123</p>	<p>TTMA-200 Trailer Frame Assembly and Scoring Details</p>	Sheet:	104
		Date:	3/20/2018
Drawing Name:	TTMA-200	Scale:	NONE
By:	JMS	Rev:	

Note:

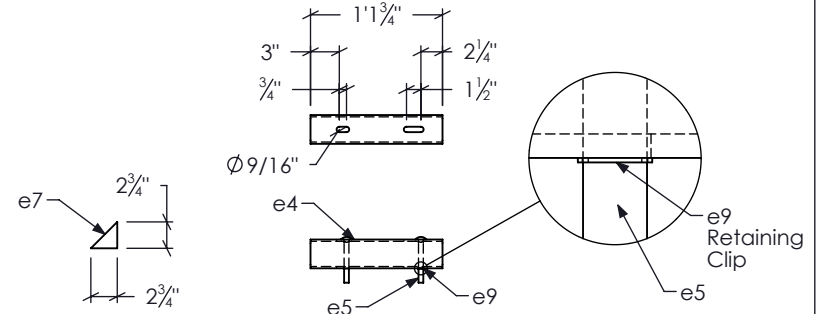
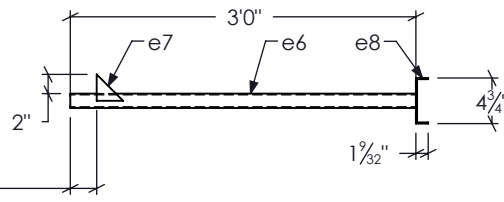
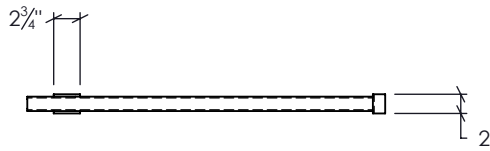
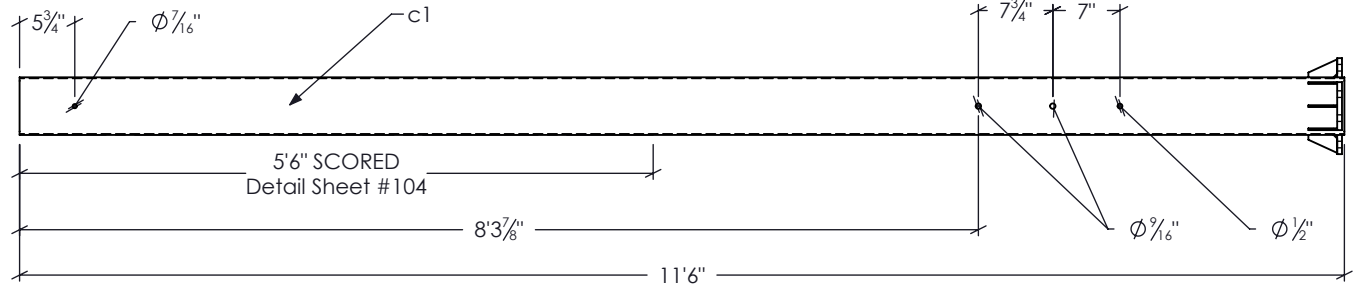
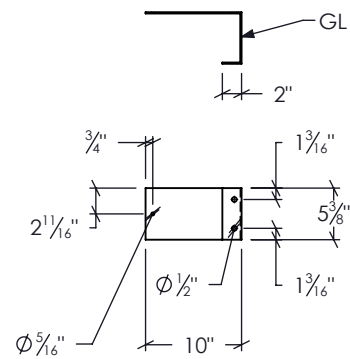
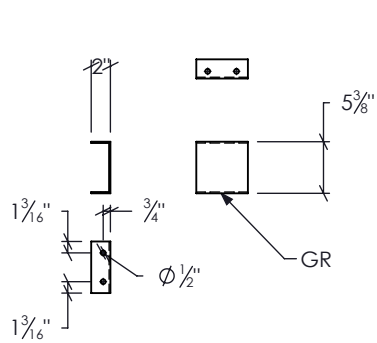
The axle is a common commercially produced torsion style axle. Specific details may vary but attachment elements and design will not differ from the tested version
±



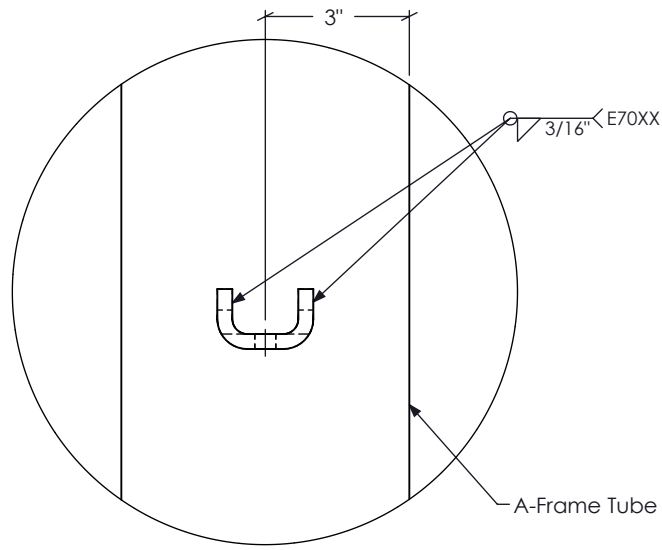
ITEM	QTY	DESCRIPTION	Material
C	2	First Tube	
c1	2	Bursting Tube	6"x6"x1/8" A500 B
E	1	Axle Assembly	
e4	2	Axle Shear Connector	3"x3"x3/16" A500 B
e5	4	Shear Bolts	1/2" x 4 1/2" Carriage Bolt Grd 5
e6	2	Axle Push Tubes	1 1/2"x1 1/2"x11 Gage A500 B
e7	4	Gusset Plate	1/4" A36
e8	2	End Plate	10 Gage A36
e9	4	Retaining Ring	1/2"
GR	1	PS End Tube Cover	18 Pre-Galvanized Gage A36
GL	1	DS End Tube Covers	18 Pre-Galvanized Gage A36



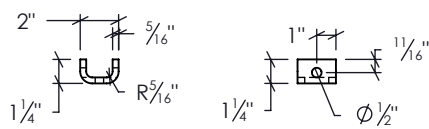
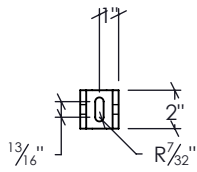
DETAIL A
SCALE 2 : 25



<p>Gregory Industries, Inc. 4100 13th Street, SW Canton, Ohio 44710 Phone: 330-447-4800x123</p>	<p>TTMA-200 First Tube, Axle Assembly and Front End Covers</p>	Sheet:	105
		Date:	3/20/2018
Drawing Name:	TTMA-200	Scale:	NONE
By:	JMS	Rev:	



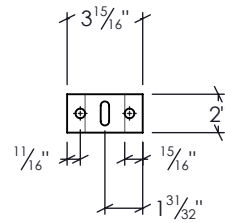
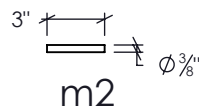
Chain Attachment Detail
NOT TO SCALE



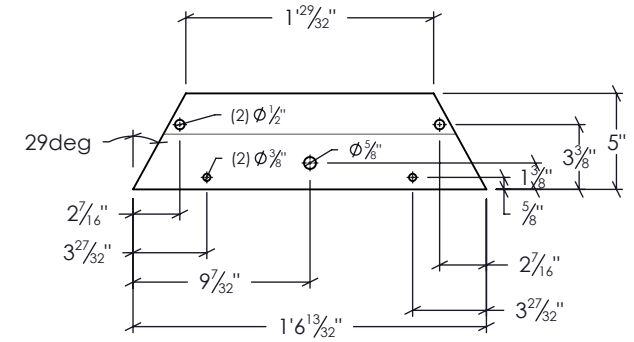
Bend Diagram

m1

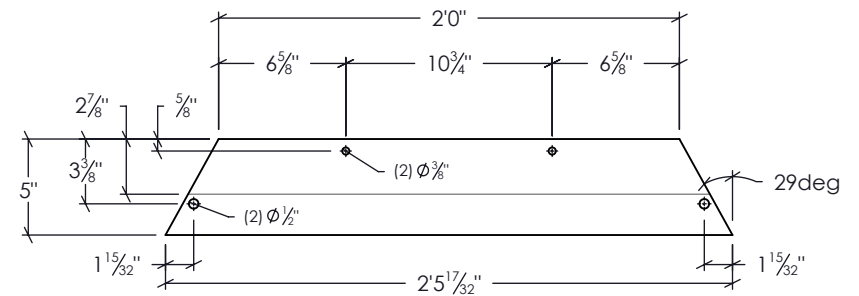
m3



Flat Pattern



d12



d13

ITEM	QTY	DESCRIPTION	MATERIAL
m1	2	Chain Bracket	5/16" A36
m2	2	Retainer Rod	Ø 3/8" Cold Rolled A36 Rod
m3	2	Cotter Pin	Ø 3/32" Hairpin Cotter
d12	1	Front battery Mount - 18.5"x5"	1/8" A36
d13	1	Rear Battery Mount 27.5" x 5"	1/8" A36



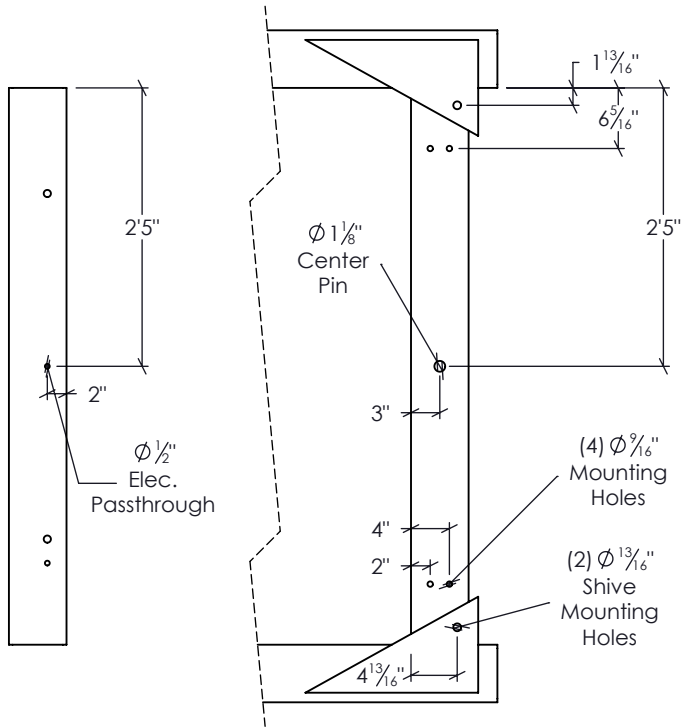
Gregory Industries, Inc.
4100 13th Street, SW
Canton, Ohio 44710
Phone: 330-447-4800x123

TTMA-200
Safety Chain
Attachment Details

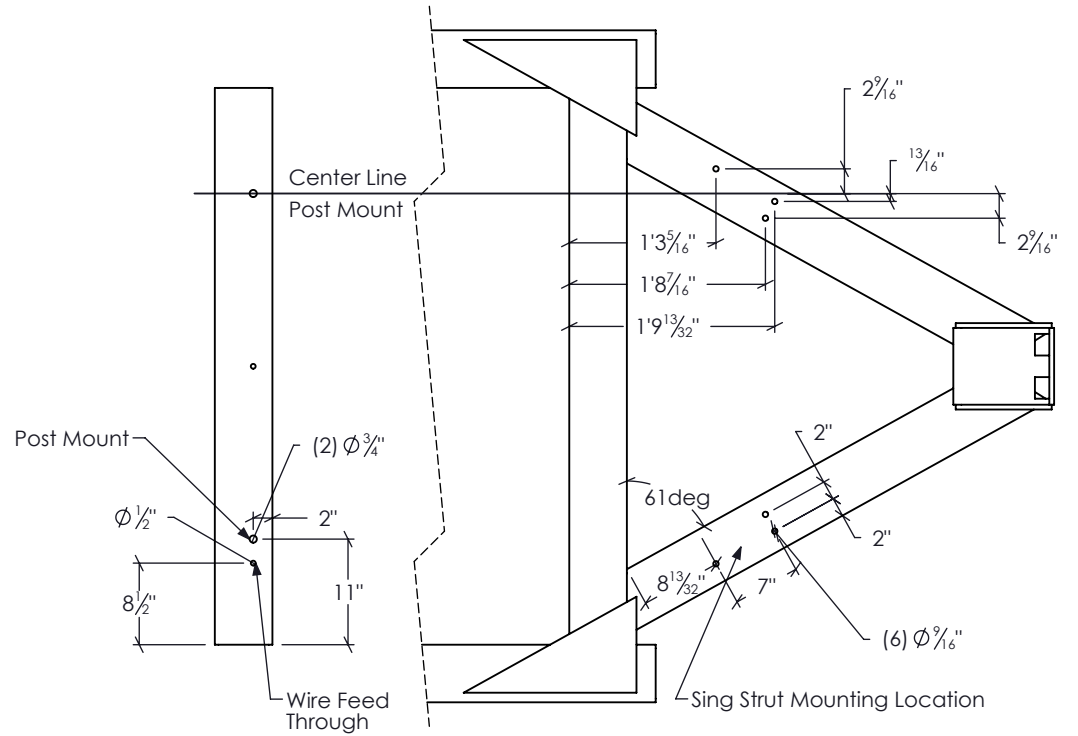
Drawing Name:
TTMA-200

Scale:
NONE


Sheet:
106
Date:
3/20/2018
By:
JMS
Rev:



Reverse Guidance Mounting Detail



Arrow Board Mounting Detail

 Gregory Industries, Inc. 4100 13th Street, SW Canton, Ohio 44710 Phone: 330-447-4800x123	TTMA-200 Arrow Board and Reverse Guidance Mounting Detail	Sheet:	107
		Date:	3/20/2018
Drawing Name: TTMA-200	Scale: NONE	By: JMS	Rev: 