

FIND NO.	QTY.	CAGE CODE	ITEM IDENTIFICATION OR PART NO	NOMENCLATURE	MATERIAL	SPECIFICATION	NOTE	ZONE
31	8		GR67-31	NUT & WASHER CASTING, TRUSS ROD	CASTING			
32	10		GR67-32	STAKE POCKET	CASTING			
33	1		1018	BRAKE WHEEL	CASTING		7.	
34	1		1018	PAWL AND RATCHET	CASTING		7.	
35	1		0045	K VALVE MASTER	CASTING		7.	
36	1		0045	K VALVE SLAVE	CASTING		7.	
37	8		95395A101	WASHER, FLAT	BRASS	.062 ID x .125 OD x .015 THK	2.	
38	2		9291GA335	WASHER, FLAT	BRASS	0.172" ID X 0.375" OD X 0.031" THK	2.	
39	2		9001GA009	TAPPING INSERT FOR WOOD	BRASS No 8-32 UNC		2.	
40	2		94070A194	SCREW, MACHINE, PAN HEAD	BRASS, No 8-32 UNC x 1/2" LG		2.	
41	8		91545A420	WASHER, FLAT	NYLON	3.2mm ID X 7mm OD X .5mm THK	2.	
42	2		R2032	ARCH BAR TRUCK	PLASTIC		4.	
43	4		92421	WHEEL SET	STEEL, 31.0mm DIAMETER		3.	
44	2		1831	COUPLER, LARGE OFFSET	PLASTIC		6.	

FIND NO.	QTY.	CAGE CODE	ITEM IDENTIFICATION OR PART NO	NOMENCLATURE	MATERIAL	SPECIFICATION	NOTE	ZONE
1	1		GR67-01	CENTER SILL BEAM, LEFT	WOOD	3/16 X 7/16 X 12 1/4		
2	1		GR67-02	CENTER SILL BEAM, RIGHT	WOOD	3/16 X 7/16 X 12 1/4		
3	2		GR67-03	INTERMEDIATE SILL BEAM	WOOD	3/16 X 7/16 X 12 1/4		
4	2		GR67-04	SIDE SILL BEAM	WOOD	1/4 X 7/16 X 12 1/4		
5	2		GR67-05	END BEAM	WOOD	1/4 X 7/16 X 4 7/16		
6	2		GR67-06	BUFFER BLOCK	WOOD	1/4 X 7/16 X 2		
7	2		GR67-07	BODY BOLSTER	WOOD	3/16 X 1/2 X 4 1/4		
8	2		GR67-08	NEEDLE BEAM	WOOD	3/16 X 3/8 X 4 1/4		
9	24		GR67-09	DECK PLANK	WOOD	3/32 X 3/8 X 4 7/16		
10	1		GR67-10	DECK PLANK, NOTCHED	WOOD	3/32 X 3/8 X 4 7/16		
11	4		GR67-11	DECKING PLANK, NOTCHED	WOOD	3/32 X 3/8 X 4 7/16		
12	4		GR67-12	DECKING PLANK, NOTCHED	WOOD	3/32 X 3/8 X 4 7/16		
13	2		GR67-13	KING PIN PAD	WOOD	3/16 X 1/2 X 1		
14	2		GR67-14	K VALVE MOUNTING PLANK	WOOD	3/32 X 3/8 X 1 7/8		
15	1		GR67-15	BRAKE RIGGING SHORT LEVER	BRASS, 1/32 X 1/8 X 1 9/32	MAKE FROM 815026	8.	
16	1		GR67-16	BRAKE RIGGING LONG LEVER	BRASS, 1/32 X 1/8 X 1 5/8	MAKE FROM 815026	8.	
17	2		GR67-17	BRAKE ROD, LONG	BRASS, ROUND, .047 DIA	MAKE FROM 8859K91	2.	
18	1		GR67-18	BRAKE LEVER ROD	BRASS, ROUND, .047 DIA	MAKE FROM 8859K91	2.	
19	1		GR67-19	BRAKE TAKE UP ROD	BRASS, ROUND, .047 DIA	MAKE FROM 8859K91	2.	
20	3		GR67-20	BRAKE RIGGING SUPPORT	BRASS, ROUND, .047 DIA	MAKE FROM 8859K91	2.	
21	4		GR67-21	TRUSS ROD, OUTER	BRASS, ROUND, .063 DIA	MAKE FROM 8859K511	2.	
22	4		GR67-22	TRUSS ROD, INNER	BRASS, ROUND, .063 DIA	MAKE FROM 8859K511	2.	
23	1		GR67-23	BRAKE WHEEL STAFF	BRASS, ROUND, .063 DIA X 2 1/4	MAKE FROM 8859K511	2.	
24	8		GR67-24	QUEEN POST TUBE	TUBING, BRASS, .066 ID X .014 WALL THK	MAKE FROM 8859K18	2.	
25	8		GR67-25	COTTER PIN, NEEDLE BEAM	BRASS, 1/16 DIA	MAKE FROM 98450A106	2.	
26	8		GR67-26	COTTER PIN, BOLSTER	BRASS, 1/16 DIA	MAKE FROM 98450A106	2.	
27	2		GR67-27	ESCLUTCHEON PIN	BRASS	MAKE FROM 97936A115	2.	
28	1		GR67-28	BRAKE STAFF SUPPORT	BRASS, 1/64 X 1/8 X 0.489	MAKE FROM F-1X-4	9.	
29	2		GR67-29	BUSHING	BUTYRATE TUBE	MAKE FROM TB8 (1/4" OD X 1/8" ID)		
30	4		GR67-30	TURNBUCKLE	CASTING		5.	

NOTES:

1. BELOW LISTED SUPPLIERS ARE THOSE USED IN THE DEVELOPMENT OF THIS DRAWING PACKAGE. ALTERNATE SUPPLIERS MAY BE USED AT THE BUILDERS OPTION. I HAVE NO AFFILIATION WITH ANY OF THE SUPPLIERS NOTED BELOW.
2. PART NUMBER LISTED IS FOR MCMMASTER-CARR SUPPLY COMPANY, 6100 FULTON INDUSTRIAL BLVD, ATLANTA, GA, 30336 (404) 346-7000.
3. PART NUMBER LISTED IS FOR BACHMANN INDUSTRIES, 1400 EAST ERIE AVENUE, PHILADELPHIA, PA 19124 (215) 533-1600.
4. PART NUMBER LISTED IS FOR USA TRAINS, PO BOX 100, MALDON, MA 02148 (781) 322-6084.
5. PART NUMBER LISTED IS FOR PLASTRUCT, INC., 1020 SOUTH WALLACE PLACE, CITY OF INDUSTRY, CA 91748 (636)912-7016 OR (800) 666-7015.
6. PART NUMBER LISTED IS FOR KADEE QUALITY PRODUCTS, 673 AVENUE C, WHITE CITY, OR 97503 (541) 826-3883.
7. PART NUMBER LISTED IS FOR OZARK MINIATURES, INC., 3461 S 5225W, CEDAR CITY, UT 84720 (435) 586-1036.
8. PART NUMBER LISTED IS FOR K&S PRECISION METALS, 6911 W 59th STREET, CHICAGO, IL 60638 (773) 586-8503.
9. PART NUMBER LISTED IS FOR SPECIAL SHAPTES, 6911 W 59th STREET, CHICAGO, IL 60638 (773) 586-8517.
10. MANY OF THE ABOVE ITEMS MY BE PURCHASED FROM YOUR LOCAL HOBBY SHOP OR YOUR PREFERRED ON LINE SUPPLIER.
11. ADDITIONAL ADHESIVES, PAINTS, DECALS, ETC., MAY BE FOUND AT HOBBY LOBBY, MICHAELS, OR JO ANNES FABRICS.
12. LOCTITE 242 THREAD LOCKER MAY BE FOUND AT FASTENAL (www.fastenal.com).



THIS DRAWING PACKAGE IS AN ENHANCEMENT TO THE DRAWINGS PUBLISHED IN GARDEN RAILWAYS MAGAZINE! ORIGINALLY DRAWN AND PROVIDED BY TED STINSON

ZONE	LTR	DESCRIPTION	DATE	APPROVED
-		ORIGINAL ISSUE.		

CAD GENERATED DRAWING. CHANGES SHALL BE INCORPORATED BY THE CURRENT DESIGN ACTIVITY. THIS DOCUMENT IS THE PROPERTY OF CITICO CREEK MODEL PRODUCTS AND MUST BE RETURNED ON DEMAND. THE INFORMATION HEREON MAY NOT BE USED OR DIVULGED WITHOUT THE EXPRESSED WRITTEN PERMISSION OF CITICO CREEK MODEL PRODUCTS.	INTERPRET DRAWING PER ASME Y14.100 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ANGLES ± 0°30' FRACTIONS ± 1/32 DECIMALS ± .X .05 .XX .02 .XXX .010 BROKEN EDGES 0.15 MAX. FILLETS .015 R MAX. PART SHALL BE FREE OF BURRS SURFACE ROUGHNESS 125 ✓	Citico Creek Model Products PO Box 223 Lynn Haven, FL 32444	Citico Creek Model Products	
			PROJECT: B.C. 2015-06-03 Drawn: _____ Engr/Dagn: _____ Checked: _____ Approved: _____	TITLE: FLAT CAR
DO NOT SCALE THIS DRAWING THIRD ANGLE PROJECTION		SIZE: D CAGE CODE: - DWG NO.: GR Plan Set 67 REV: -	SCALE: NONE UNIT WT.: SHEET 1 OF 5	

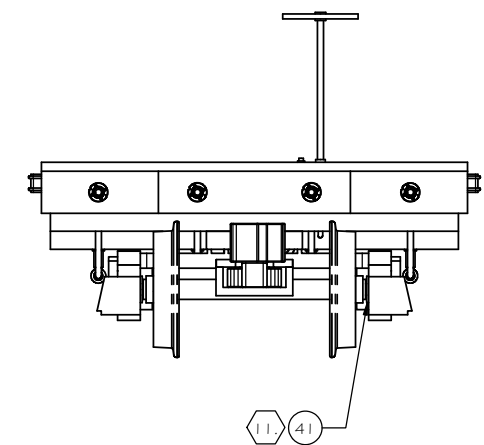
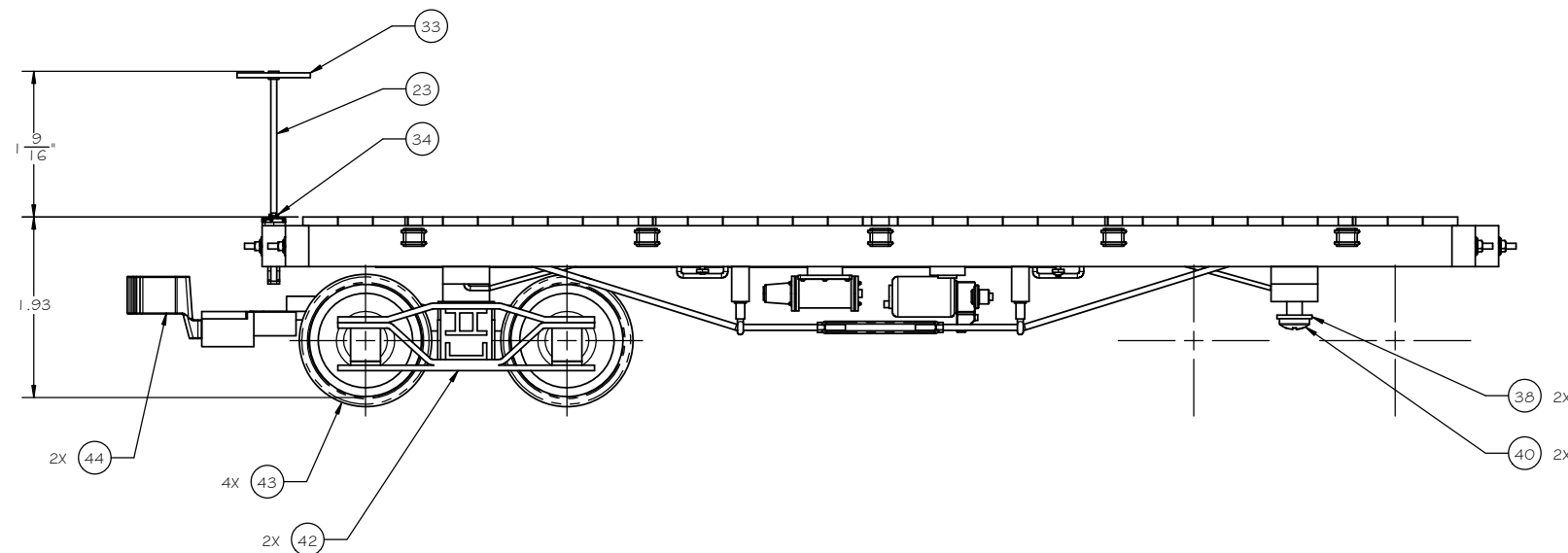
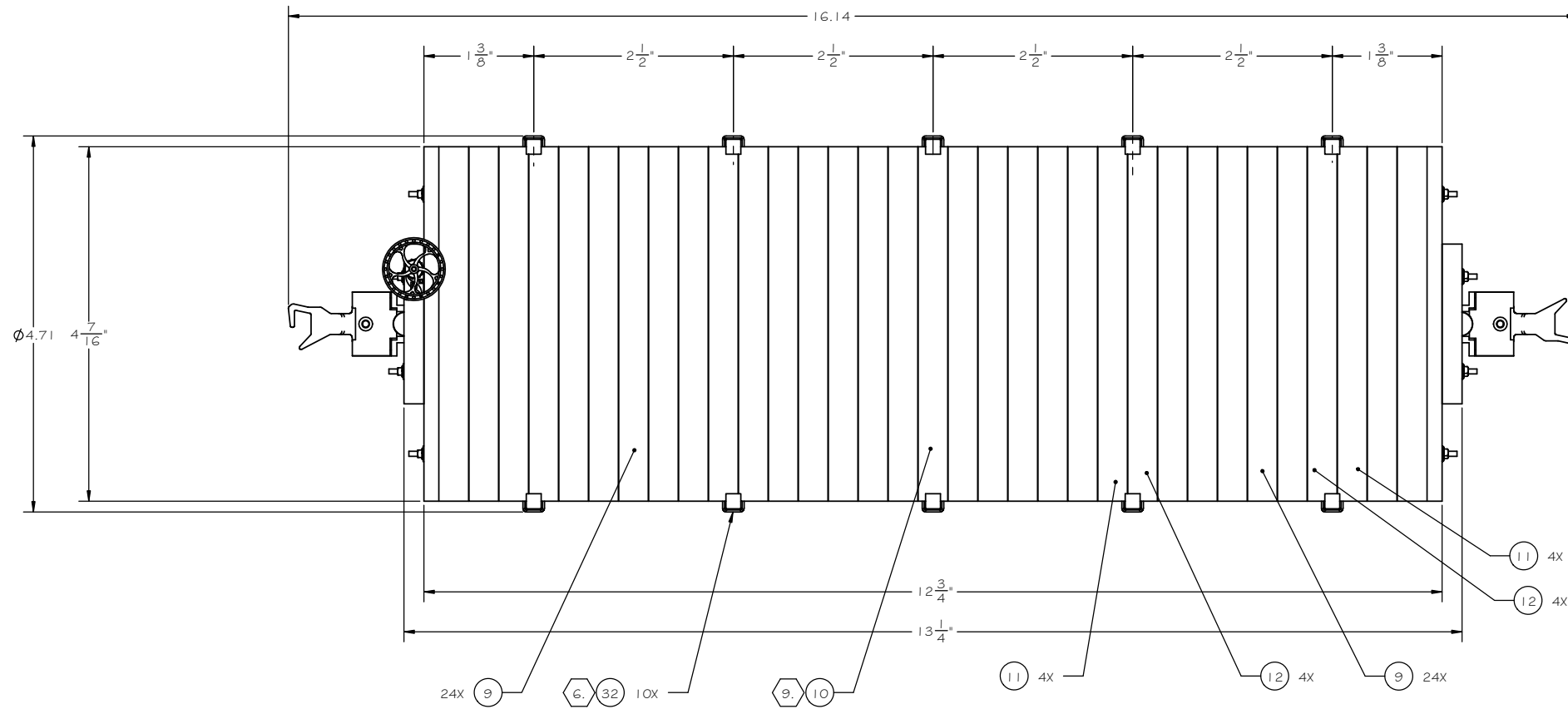
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1	REVISION			
1	SHEET			

REV	DATE	BY	APP
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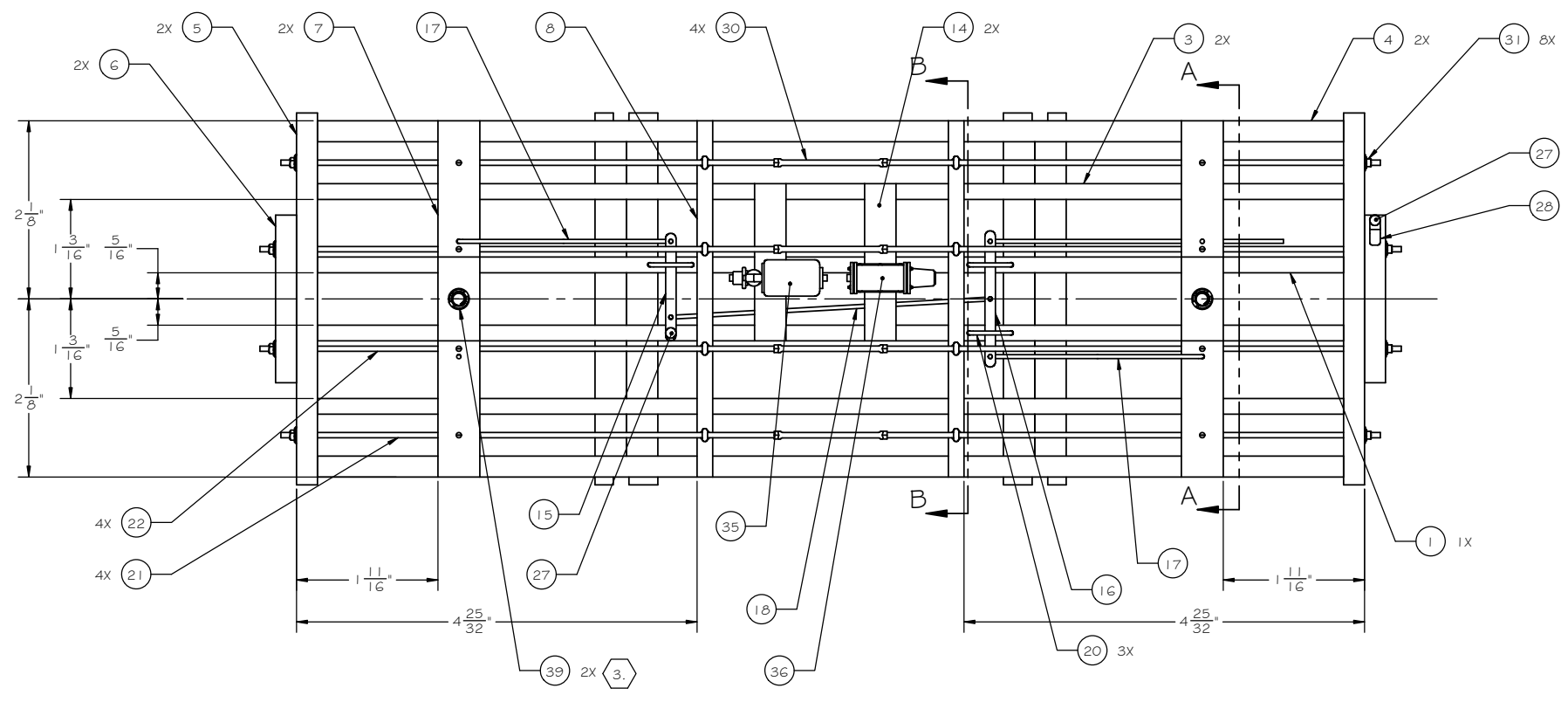
APPLICATION: NEXT ASSY, USED ON

SUGGESTED ASSEMBLY INSTRUCTIONS

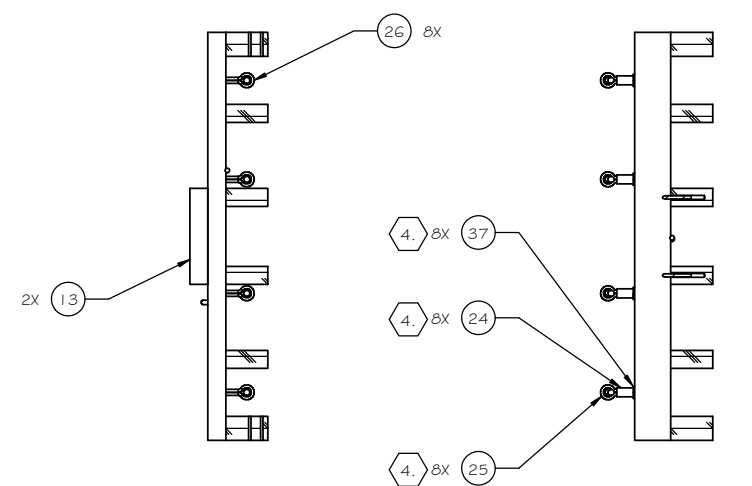
- FIND NUMBERS 14 THRU 20, (K VALVE MOUNTING PLANK, BRAKE RIGGING SHORT LEVER, BRAKE RIGGING LONG LEVER, BRAKER ROD-LONG, BRAKE LEVER ROD, BRAKE TAKE UP ROD, BRAKE RIGGIN SUPPORT), 35 (K VALVE MASTER), AND 36 (K VALVE SLAVE) MAY BE ELIMINATED IF BRAKE RIGGING DETAIL IS NOT DESIRED.
- ASSEMBLE MAIN FRAME COMPONENTS FIND NUMBERS 1 (CENTER SILL BEAM, LEFT), 2 (CENTER SILL BEAM, RIGHT), 3 (INTERMEDIATE SILL BEAM), 4 (SIDE SILL BEAM), 5 (END BEAM AND 6 (BUFFER BLOCK) USING A GOOD QUALITY WOOD GLUE.
- ASSEMBLE FIND NUMBERS 7 (BODY BOLSTER) AND 13 (KING PIN PAD) SEPARATELY. AFTER GLUE HAS COMPLETELY DRIED, DRILL 1/4" HOLE AS SHOWN. INSTALL FIND NUMBER 39 (TAPPING INSERT FOR WOOD) IN 1/4" HOLE WITH SCREW DRIVER SLOT LOCATED ON FIND NUMBER 7 SIDE OF ASSEMBLY. COATING THE HOLE WITH THICK CA PRIOR TO INSTALLING THE TAPPING INSERT WILL SECURE IT IN PLACE PERMANENTLY. LOCATE AND INSTALL ASSEMBLY ON FRAME.
- ASSEMBLE FIND NUMBERS 24 (QUEEN POST TUBE), 25 (COTTER PIN, NEEDLE BEAM), AND 37 (WASHER, FLAT) AND SOLDER TO MAKE A QUEEN POST (8 REQUIRED).
- SLIP ONE EACH QUEEN POST AND FIND NUMBER 26 (COTTER PIN, BOLSTER) ON TO EACH FIND NUMBER 21 (TRUSS ROD, OUTER) AND FIND NUMBER 22 (TRUSS ROD, INNER). SLIP TRUSS RODS THROUGH END BEAM AND BUFFER BLOCKS, AND ENDS OF COTTER PINS INTO APPROPRIATE HOLES IN BOLSTER AND NEEDLE BEAM. A DAB OF THICK CA IN THE BOLSTER AND NEEDLE BEAM HOLES IS RECOMMENDED.
- INSTALL FIND NUMBER 32 (STAKE POCKETS) INTO PRE DRILLED HOLES IN SIDE BEAMS USING A DAB OF THICK CA ON TWO PINS OF EACH POCKET.
- INSTALL FIND NUMBER 28 (BRAKE STAFF SUPPORT) USING FIND NUMBER 27 (ESCUTCHEON PIN). LOCATE AND INSTALL FIND NUMBER 34 (PAWL AND RATCHET) USING THICK CA. (RECOMMEND DRILLING THE HOLE IN THE PAWL AND RATCHET SLIGHTLY LARGER THAN THE DIAMETER OF THE BRAKE STAFF TO ALLOW THE STAFF AND BRAKE WHEEL TO BE REMOVABLE).
- INSTALL FIND NUMBER 31 (NUT AND WASHER CASTING, TRUSS ROD) ON THE ENDS OF THE TRUSS RODS USING THICK CA.
- CAREFULLY LOCATE AND INSTALL FIND NUMBER 10 (DECK PLANK, NOTCHED). CLEAN ANY EXCESS GLUE FROM ASSEMBLY BEFORE GLUE SETS UP, THIS WILL BE THE ANCHOR BOARD FOR THE REMAINDER OF THE DECKING. INSTALL REMAINDER OF DECKING IN THE ORDER SHOWN BEING CAREFULL TO MAINTAIN TIGHT FIT AND PROPER ORDER OF FULL AND NOTCHED PLANKS.
- FIND NUMBER 42 (ARCH BAR TRUCK), DRILL KING PIN HOLE OUT TO 1/4 (.250) DIAMETER. CUT FIND NUMBER 29 (BUSHING) FROM TB8 TUBE APPROXIMATELY 1/4" LONG. INSTALL BUSHING IN KING PIN HOLE IN TRUCK BOLSTER MAKING IT FLUSH ON THE BOTTOM OF THE BOLSTER. SECURE USING ACC OR SOLVENT, AND ALLOW TO SET OVERNIGHT. ONCE SET, FILE BUSHING FLUSH WITH TOP OF BOLSTER. DRILL BUSHING OUT TO 0.172" (1 1/64") DIAMETER.
- USE NYLON WASHERS TO CENTER AXLES IN TRUCK SIDE FRAMES. THESE WASHERS MAY VARY IN THICKNESS, USE IN MULTIPLES OF 2 ON EACH AXLE.



TITLE			
FLAT CAR			
SIZE	CAGE CODE	DWG NO.	REV
D	-	GR Plan Set G7	-
SCALE	NONE	UNIT WT.	SHEET 2 OF 5

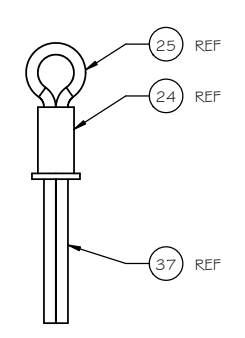
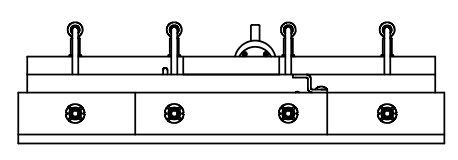
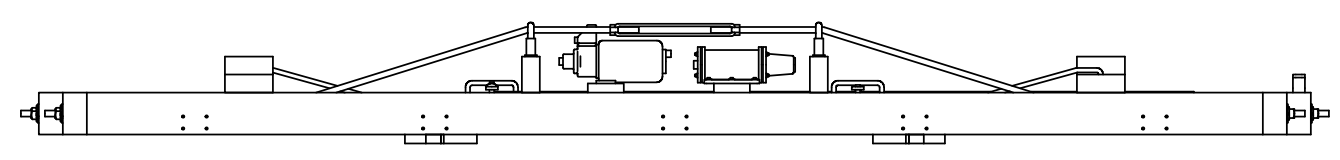


BOTTOM VIEW

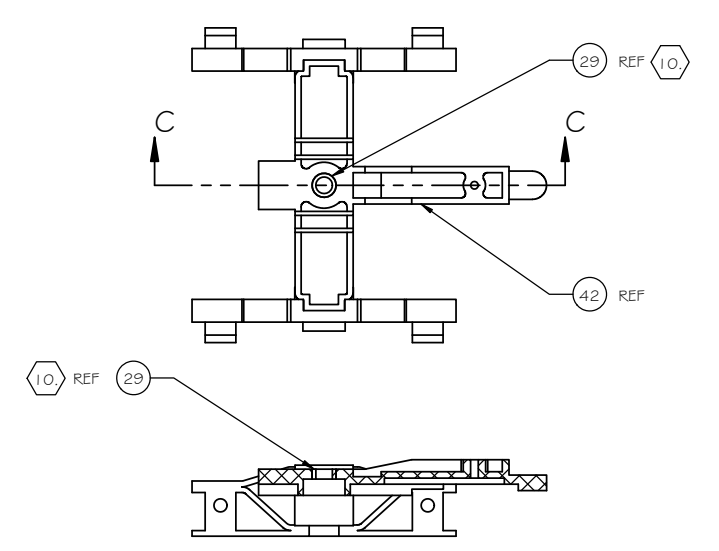


SECTION A-A

SECTION B-B

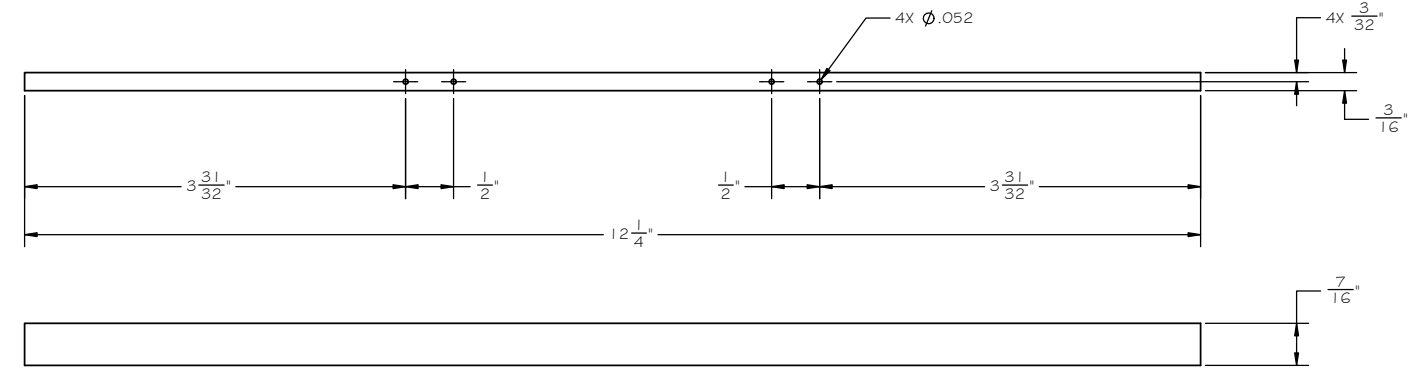


QUEEN POST ASSEMBLY

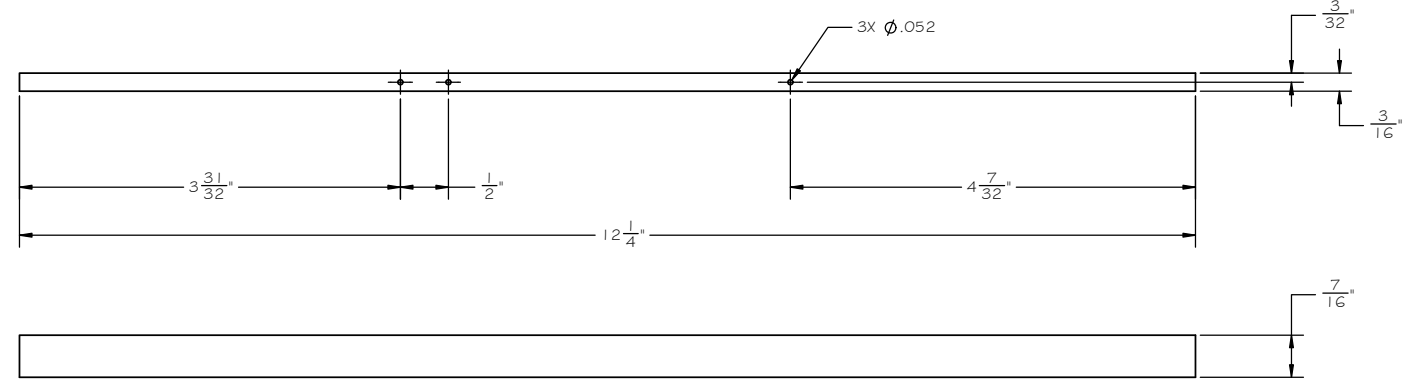


SECTION C-C

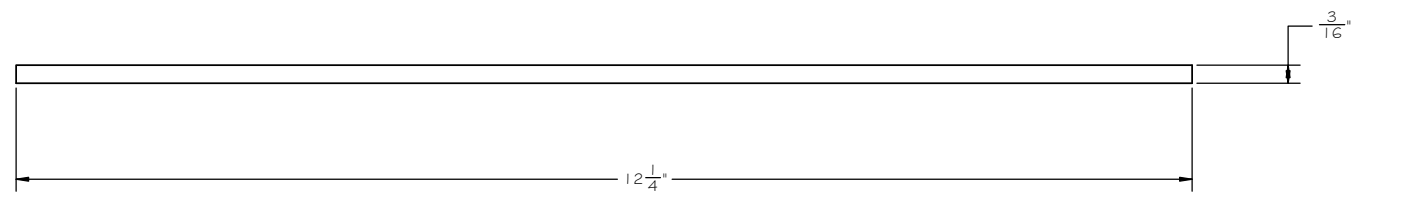
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FLAT CAR			
SIZE	CAGE CODE	DWG NO.	REV
D	-	GR Plan Set 67	-
SCALE	NONE	UNIT WT.	SHEET 3 OF 5



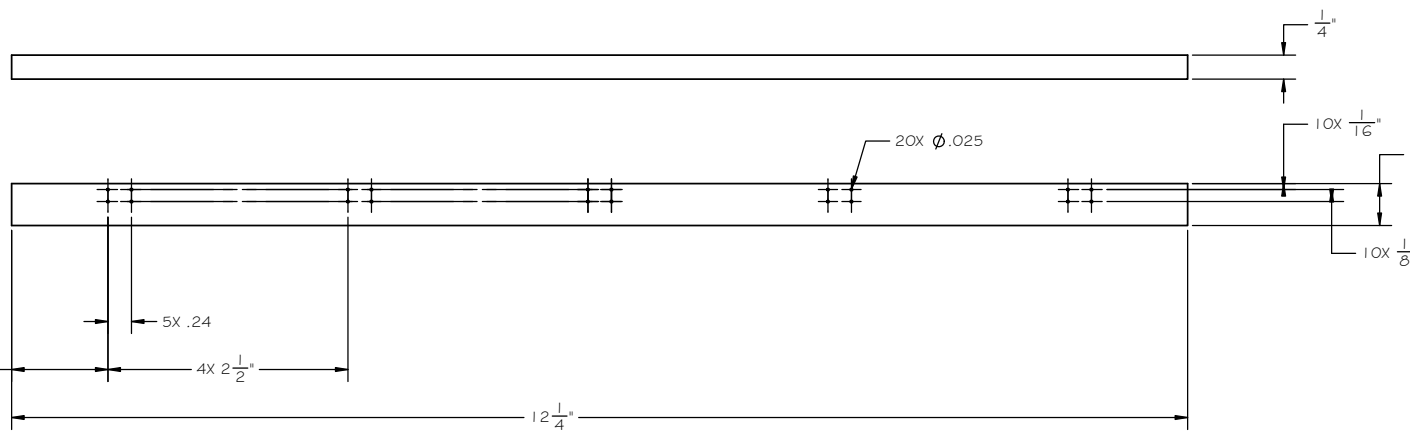
GR67-01 LEFT CENTER SILL



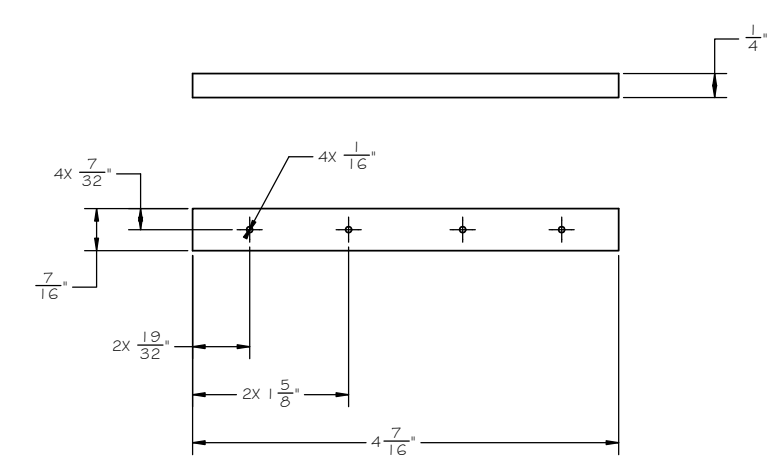
GR67-02 RIGHT CENTER SILL



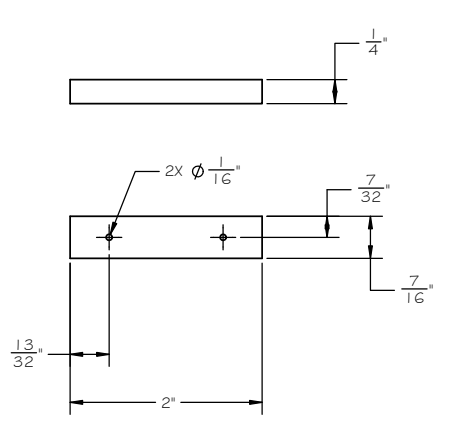
GR67-03 INTERMEDIATE SILL



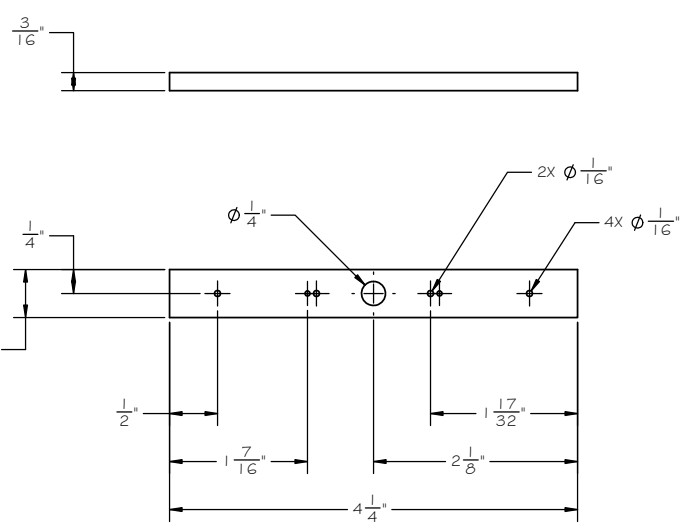
GR67-04 SIDE SILL



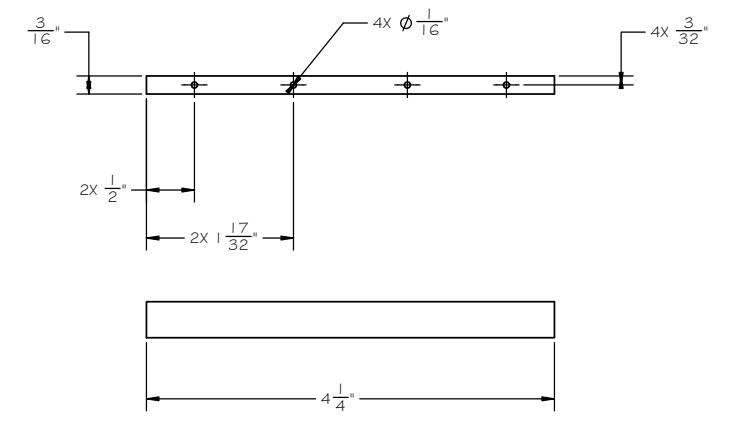
GR67-05 END BEAM



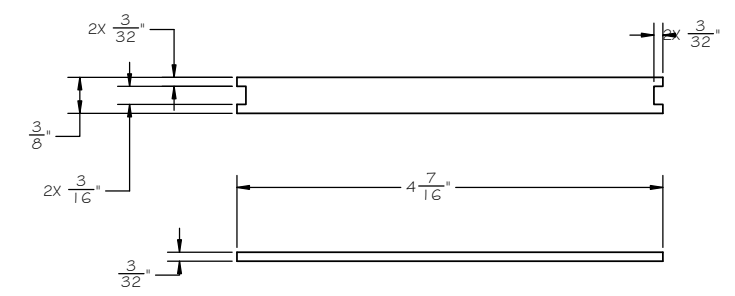
GR67-06 BUFFER BLOCK



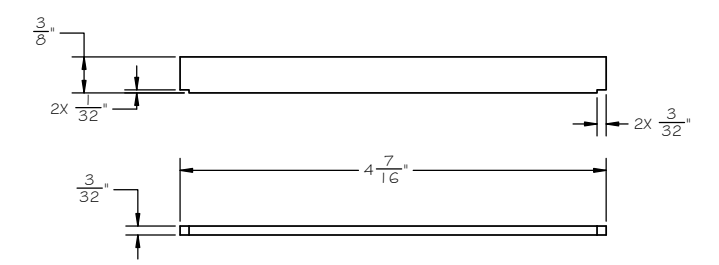
GR67-07 BODY BOLSTER



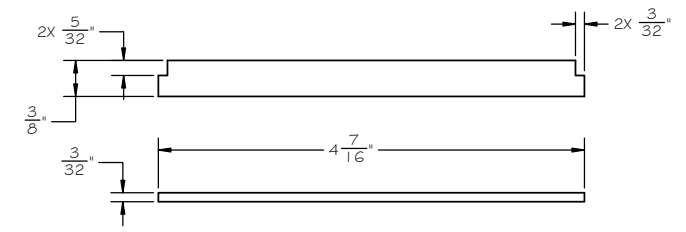
GR67-08 NEEDLE BEAM



GR67-10 DECKING - NOTCHED

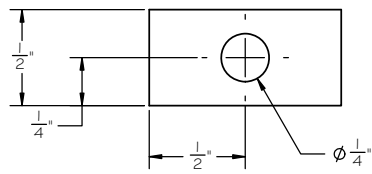


GR67-11 DECKING - NOTCHED

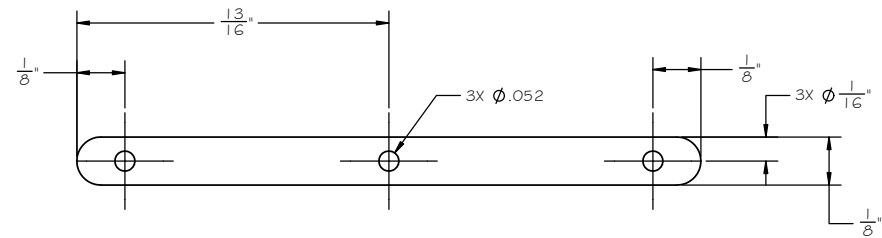


GR67-12 DECKING - NOTCHED

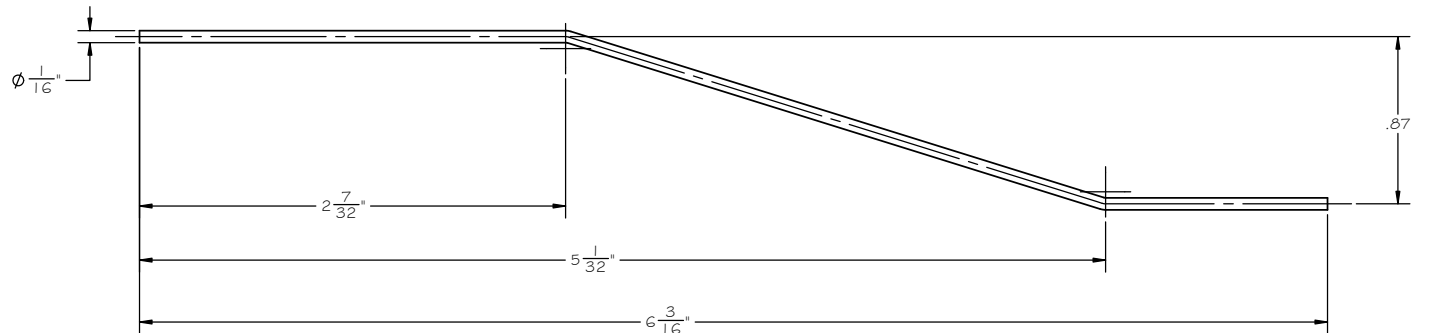
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FLAT CAR			
SIZE	CAGE CODE	DWG. NO.	REV
D	-	GR Plan Set G7	-
SCALE	NONE	UNIT WT.	SHEET 4 OF 5



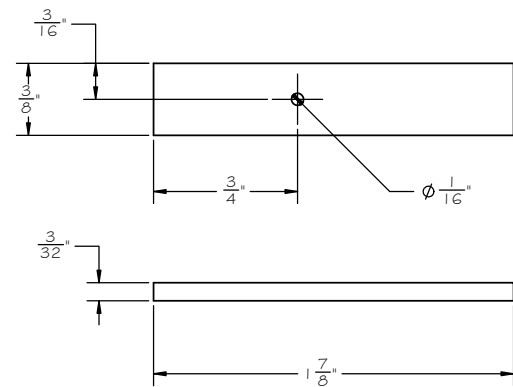
GR67-13 KING PIN BLOCK
SCALE: 4:1



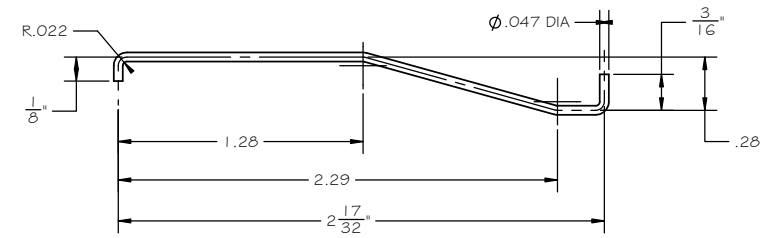
GR67-16 BRAKE RIGGING LONG LEVER
SCALE: 4:1



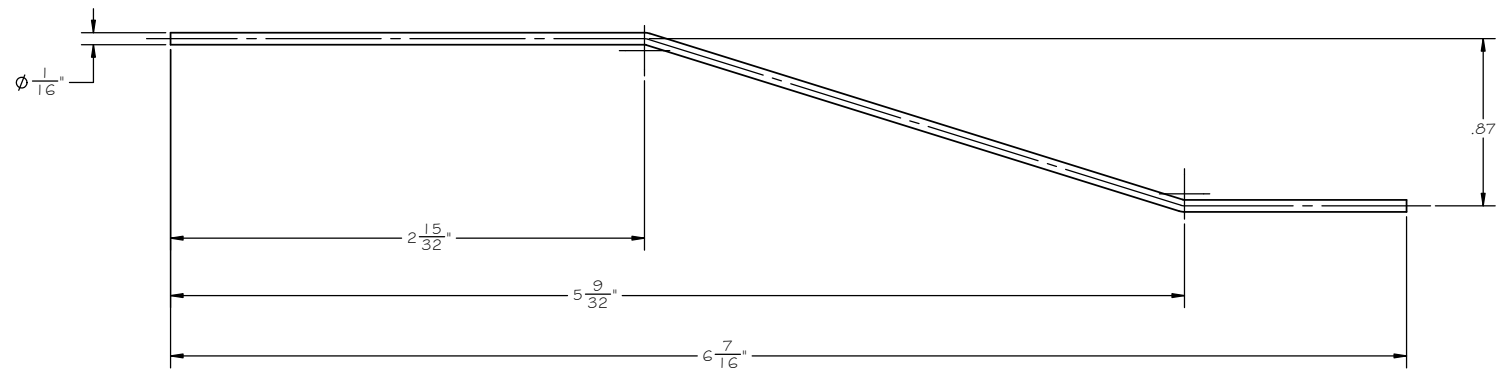
GR67-21 TRUSS ROD, OUTER
SCALE: 2:1



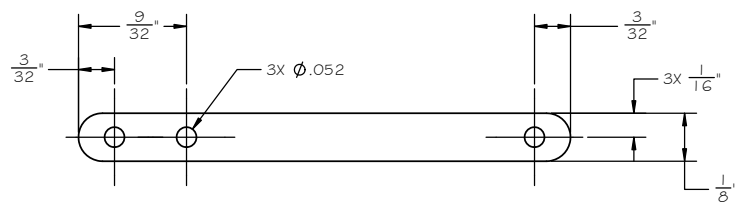
GR67-14 K VALVE MOUNTING PLANK
SCALE: 2:1



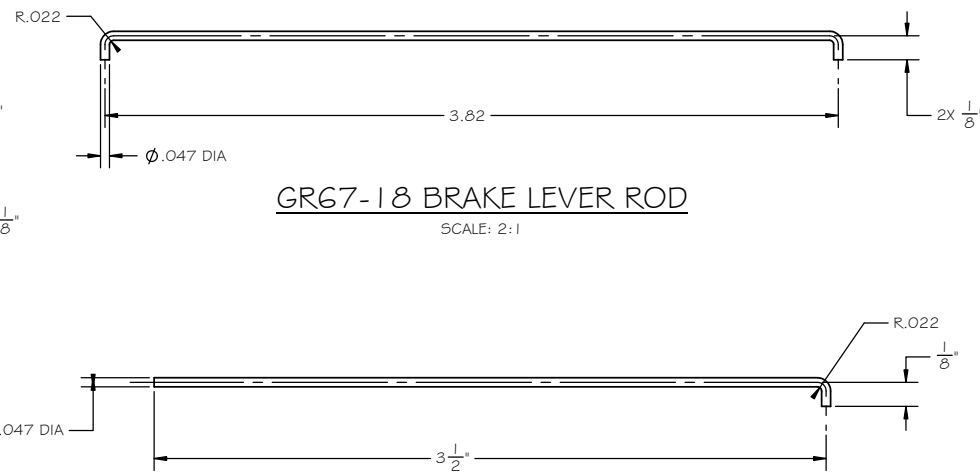
GR67-17 BRAKE ROD LONG
SCALE: 2:1



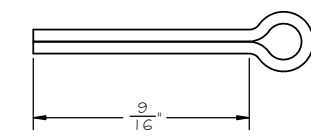
GR67-22 TRUSS ROD, INNER
SCALE: 2:1



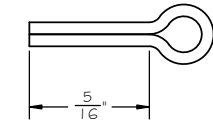
GR67-18 BRAKE LEVER ROD
SCALE: 2:1



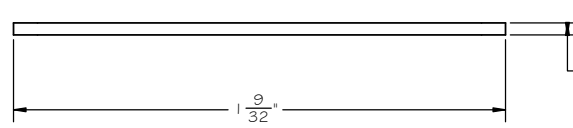
GR67-19 BRAKE TAKE UP ROD
SCALE: 2:1



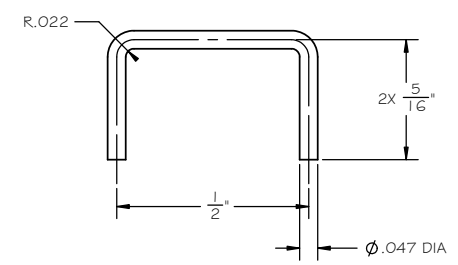
GR67-25 COTTER PIN, NEEDLE BEAM
SCALE: 4:1



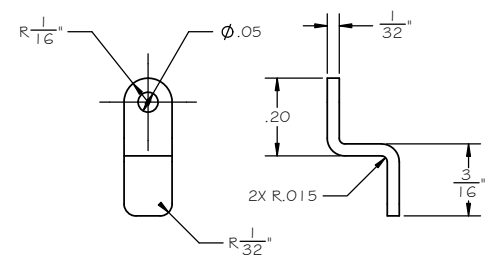
GR67-26 COTTER PIN, BOLSTER
SCALE: 4:1



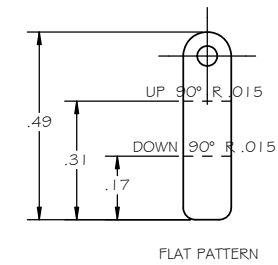
GR67-15 BRAKE RIGGING SHORT LEVER
SCALE: 4:1



GR67-20 BRAKE RIGGING SUPPORT
SCALE: 4:1



GR67-28 BRAKE STAFF SUPPORT
SCALE: 4:1



GR67-27 ESCUTCHEON PIN
SCALE: 4:1

TITLE			
FLAT CAR			
SIZE	CAGE CODE	DWG. NO.	REV.
D	-	GR Plan Set G7	-
SCALE	NONE	UNIT WT.	SHEET 5 OF 5