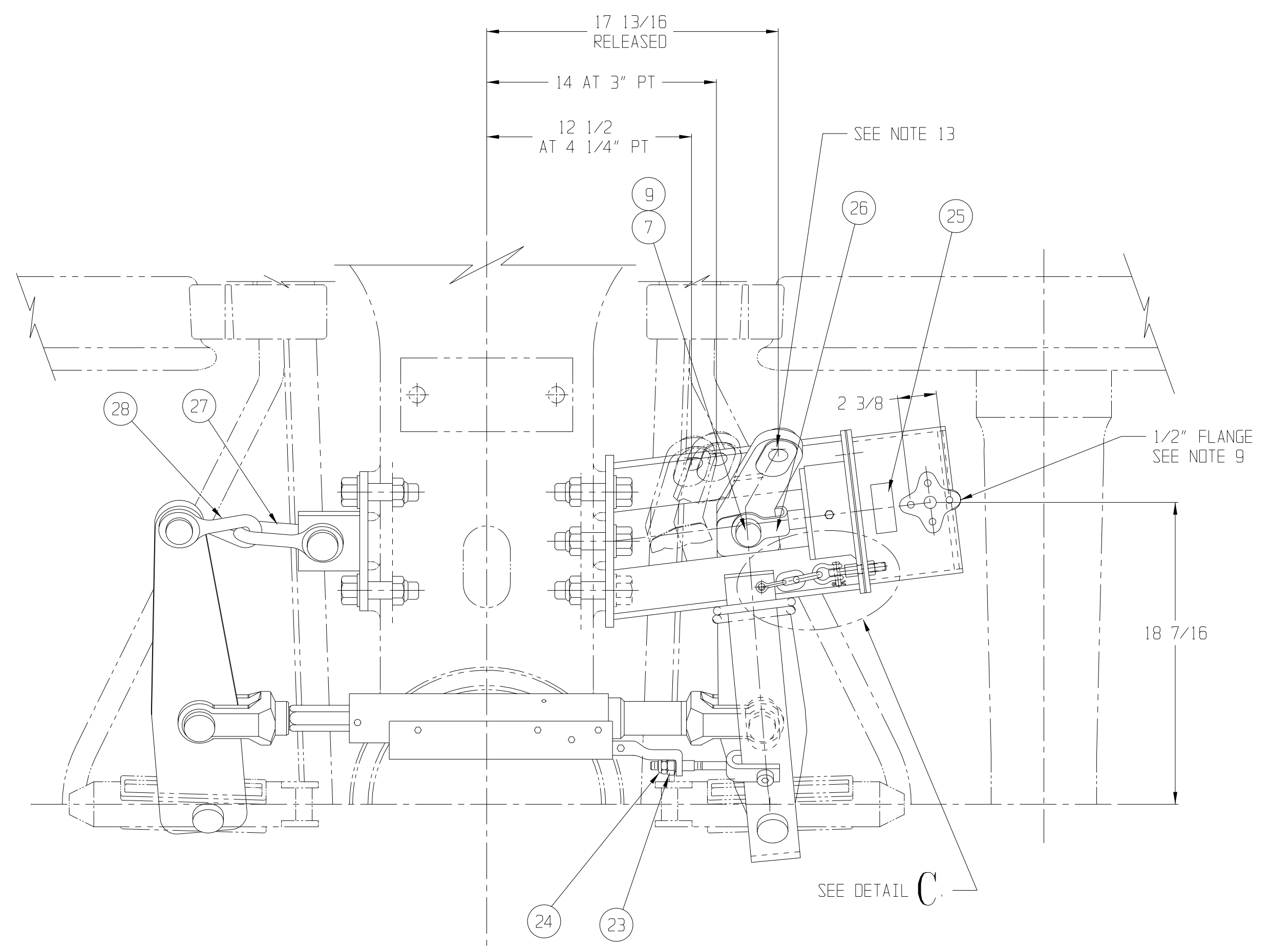
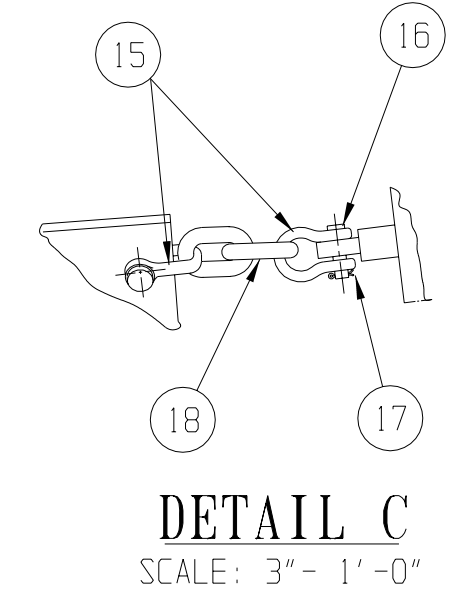
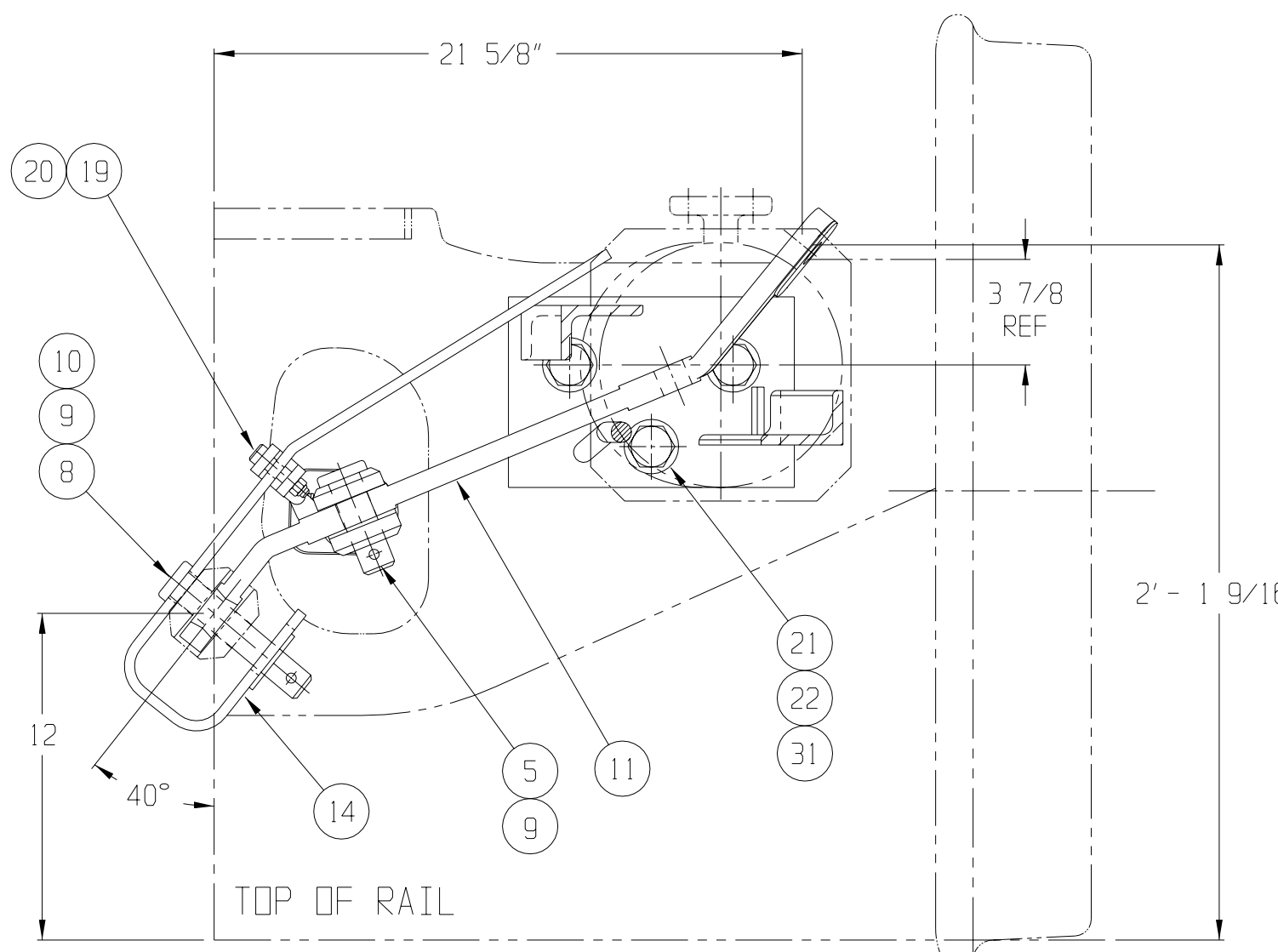
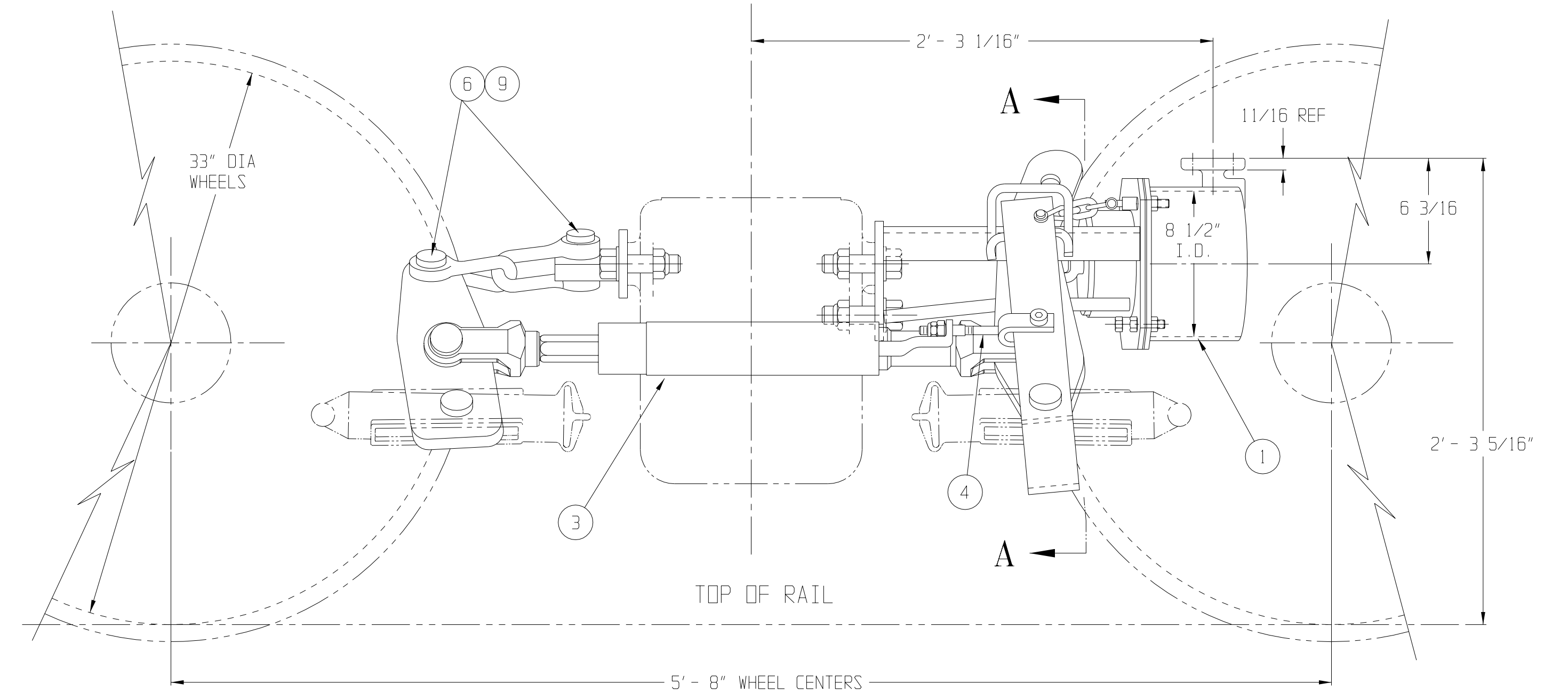
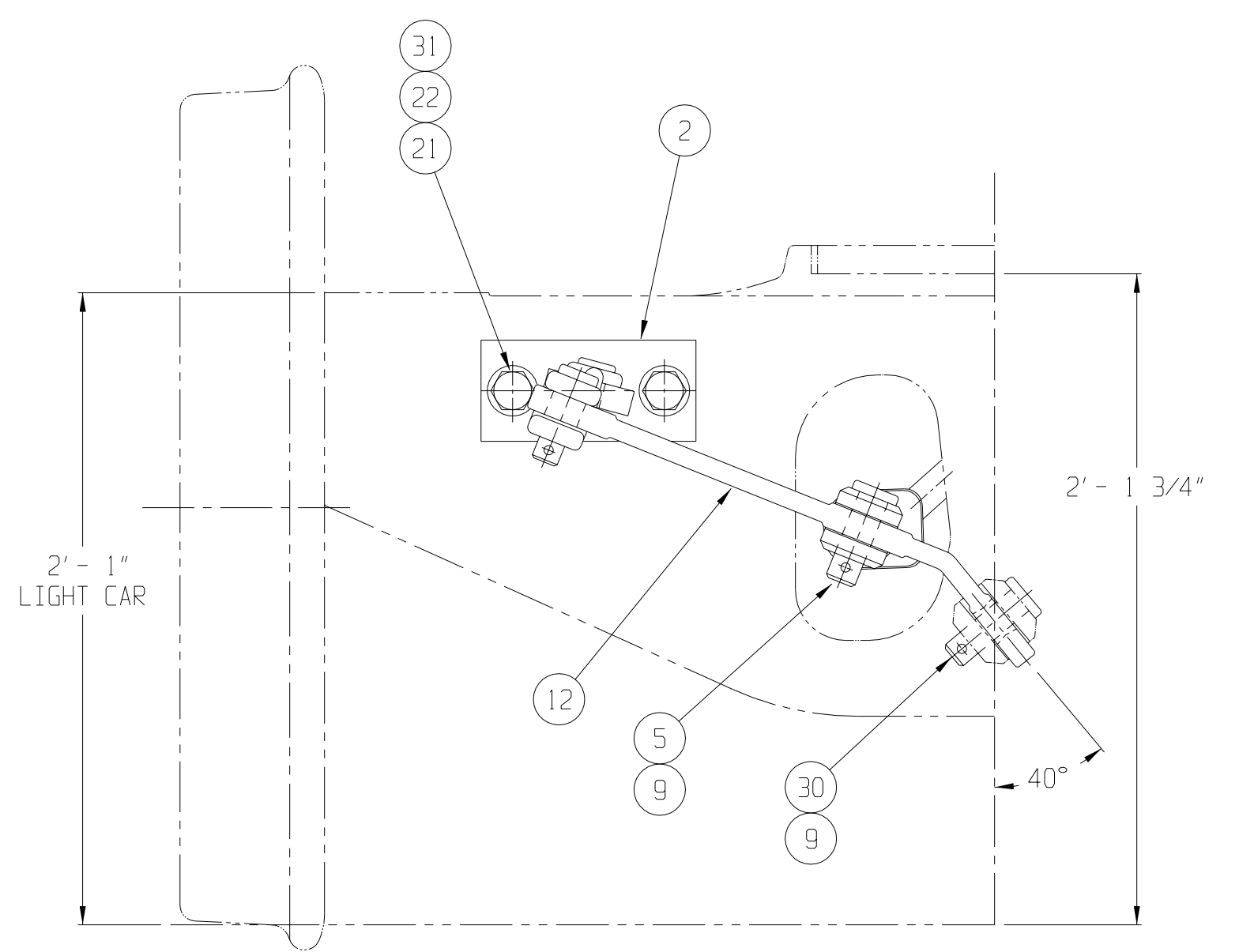


COVERED BY PATENTS
U.S. 4312428
CANADA 1163931

REVISIONS			
LTR	DATE	DESCRIPTION	BY
A	3-23-95	REDRAWN ON CAD; ADDED ITEM 29 TO THE B.M. REARRANGED ITEM 27 THRU 30 IN B.M. & THE VIEWS REVISED & ADDED NOTES TO THE NOTE BLOCK. DIM. 18 1/16 WAS 18 3/8; 2" - 3 5/16" WAS 2" - 2 13/16"; 11/16 WAS 3/4; 6 3/16 WAS 6 1/4; 2" - 3 1/16 WAS 2" - 3 3/4"; 1" - 9 5/8" WAS 21 1/8"; 2" - 1 9/16" WAS 2" - 1 5/16"; P/N 9578-1124 WAS 9547-1124. EDR 95-200	PL
B	10-17-95	IT. 29 WAS 1 REG'D. CHANGED NOTE 11 EDR 95-561	LPS
C	4-6-00	ADDED ITEM 31 & NOTE 14. ITEM 9 WAS 7 REG'D. IT 23 (P/N 33158) WAS 3443-33. REVISED FORCE DIAGRAM, WAS BASED ON 50 PSI. TITLE "70 TON ASSEMBLY..." WAS APPLICATION. PER ECN #2660	JMB
D	05-18-00	DIM 18 7/16 WAS 18 1/16 AND 17 13/16 WAS 18 (TOP VIEW) ADDED ITEM 32. PER ECN #2751	JMB
E	09/27/06	IT 9 (P/N 4034-18) WAS 9008-2 AND IT 31 (P/N 4034-13) WAS 9008-3. PER ECN #7230	PS
F	10/16/06	DELETED ITEM 31 (P/N 4034-13). ITEM 9 WAS 5 REG'D. ITEM 31 WAS ITEM 32. ECN #7279	PS
G	08/08/07	ADDED DIM TO LIVE LEVER LOCATION AT 3" & 4 1/4" PISTON TRAVEL (TOP VIEW). ECN #7942	PS



- NOTE:
- SEE PURCHASE ORDER FOR DRAWING NO. SHOWING TRUCK MOUNTED BRAKE AND LEVER LOCATIONS.
 - QUANTITIES SHOWN ARE FOR TRUCK SET OF MATERIAL.
 - THIS TRUCK MOUNTED BRAKE IS DESIGNED FOR USE WITH NO. 24 BRAKE BEAMS. WHEN USING ANY OTHER BRAKE BEAMS CONTACT ELLCON NATIONAL.
 - BADGE PLATES WILL BE SUPPLIED BY CARBUILDER.
 - THESE PARTS TO BE SHIPPED AS AN ASSEMBLY P/N 31550.
 - TRUCK MOUNTED BRAKE IS SHOWN IN LIGHT CAR. BRAKE RELEASED, AT HAND BRAKE TRUCK WITH LIVE LEVER NO. 9548-1624.
 - DO NOT LIFT USING ANY PART OF THE TRUCK MOUNTED BRAKE.
 - TORQUE NUTS (ITEM 22) TO 250-300 FT. LBS.
 - FOR AIR BRAKE CONNECTION THE CARBUILDER WILL USE (2) 1/2-13 UNC HEX HEAD SELF LOCKING CAP SCREWS.
 - THERE SHOULD BE SLACK ALLOWED IN HORIZONTAL CHAIN CONNECTION FOR A CAR TO NEGOTIATE A 180 FT. OR 150 FT. RADIUS CURVE FOR A.A.R. SPECIFICATION.
 - THE (2) PISTON TRAVEL INDICATOR DECALS ITEM 29 (P/N 32804) HAVE TO BE APPLIED BY THE CAR BUILDER TO EACH SIDE OF THE CAR IN THE CYLINDER AREA. THE DECALS ARE SHIPPED LOOSE.
 - UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE NOMINAL.
 - 6" CLEVIS, CLEVIS PIN AND COTTER PIN FOR HAND BRAKE CONNECTION WILL BE SUPPLIED BY THE CAR BUILDER.
 - SEE ELLCON NATIONAL'S INSTALLATION AND FIELD SERVICE INSTRUCTIONS FOR SET-UP PROCEDURES.



5	3958-48	WASHER, PLAIN HARDENED 1"	31
1	30538-1	CLEVIS PIN 1 11/32 DIA X 3 TO C HOLE	30
2	32804	P.T. INDICATOR DECAL	29
1	31411	CLEVIS (90° R.H. TWIST)	28
1	8819	CLEVIS	27
1	9894	PUSH ROD (PART OF ITEM 1)	26
1	30252	NAMEPLATE (PART OF ITEM 1)	25
1	4493-35	NUT (ESNA), 1/2-13 (PART OF ITEM 3)	24
1	33158	CONTROL ROD NUT (PART OF ITEM 3)	23
5	4493-31	NUT (ESNA), 1-8	22
5	3442-137	BOLT, 1-8 UNC X 3 3/4 LG (GR.5)	21
1	5340-4	SHOULDER BOLT, 3/8-16	20
1	4493-8	NUT (ESNA), 3/8-16	19
1	31439	CHAIN	18
2	31438-3	COTTER PIN	17
2	31438-2	PIN	16
2	31438-1	SHACKLE	15
1	31157	ACTUATOR LEVER	14
A/R	9547-3124	LIVE LEVER (NON HAND BRAKE TRUCK)	13
A/R	9578-1124	DEAD LEVER	12
A/R	9548-1624	LIVE LEVER (HAND BRAKE TRUCK)	11
1	3958-35	WASHER, PLAIN, 1 3/8	10
7	4034-18	COTTER PIN, 3/8 DIA X 2 1/2 LG	9
1	30538-2	CLEVIS PIN, 1 11/32 X 5 3/8 TO C HOLE	8
1	30166-2	CLEVIS PIN, 1 3/32 X 2 1/2 TO C HOLE	7
2	30166-1	CLEVIS PIN, 1 3/32 X 3 TO C HOLE	6
2	30167-1	CLEVIS PIN, 1 7/32 X 3 TO C HOLE	5
1	31139	CONTROL ARM (PART OF ITEM 3)	4
1	7100-26	SLACK ADJUSTER (DOUBLE ACTING)	3
1	30985	DEAD LEVER BRACKET	2
1	31510-1	BOLSTER SADDLE AND CYLINDER ASSY	1
QTY	PART NO.	DESCRIPTION	ITEM

BILL OF MATERIAL

ELLCON NATIONAL
50 BEECHTREE BLVD. GREENVILLE, S.C. 29605

70 TON ASSEMBLY
MODEL 8500
TRUCK MOUNTED BRAKE

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MATERIAL:	WEIGHT: 210 LBS PER TMB WITH HANDBRAKE LEVER (LESS BRAKE BEAMS, SHOES, KEYS AND CYLINDER HOSE)
SCALE	2" = 1'-0"
DATE	12-3-90
REV.	
DRAWN	STAZ
CHECKED	DMS
TMB-289-L G	

QP-450	95911	150	GUNDERSON	NORFOLK SOUTHERN	A-31769
JOB NO.	E-N SALES	CUST. ORDER NO.	TRUCKS	CAR BUILDER	RAILROAD LEVER LOCATION