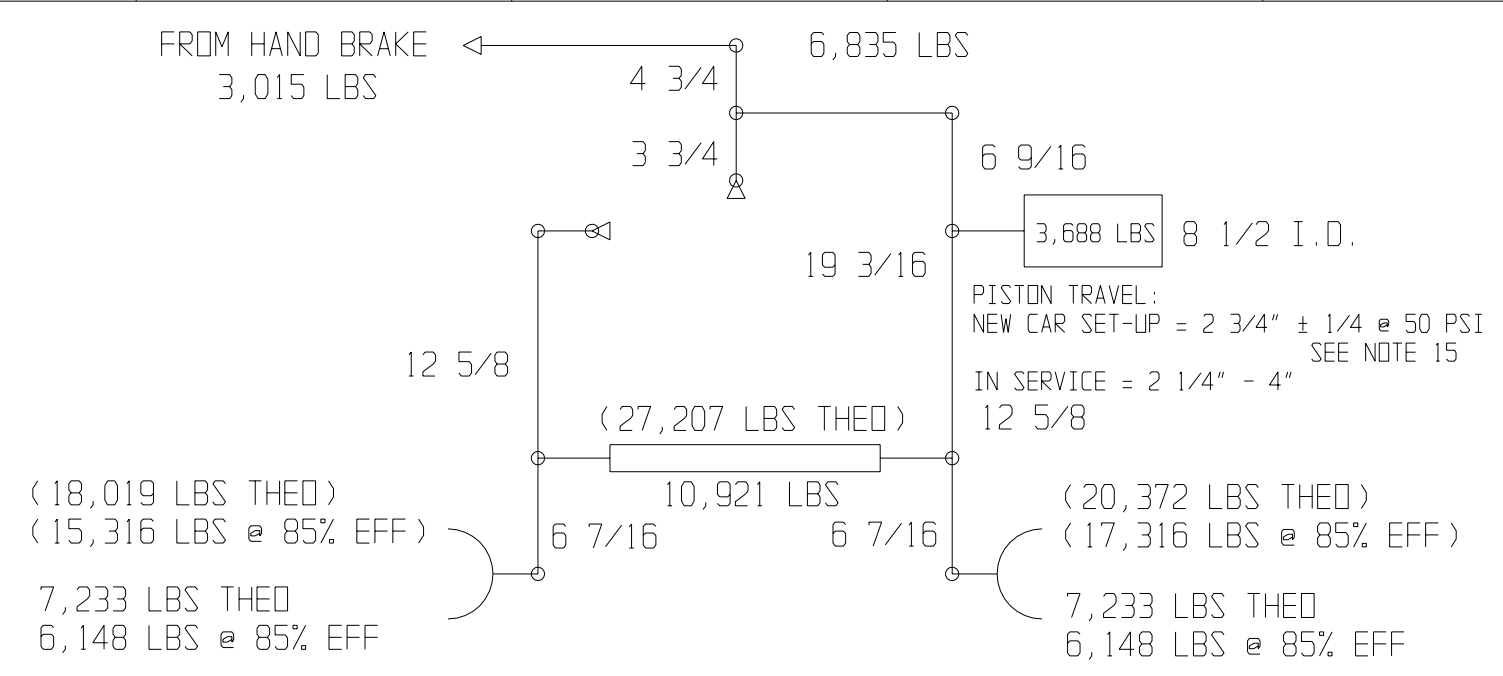
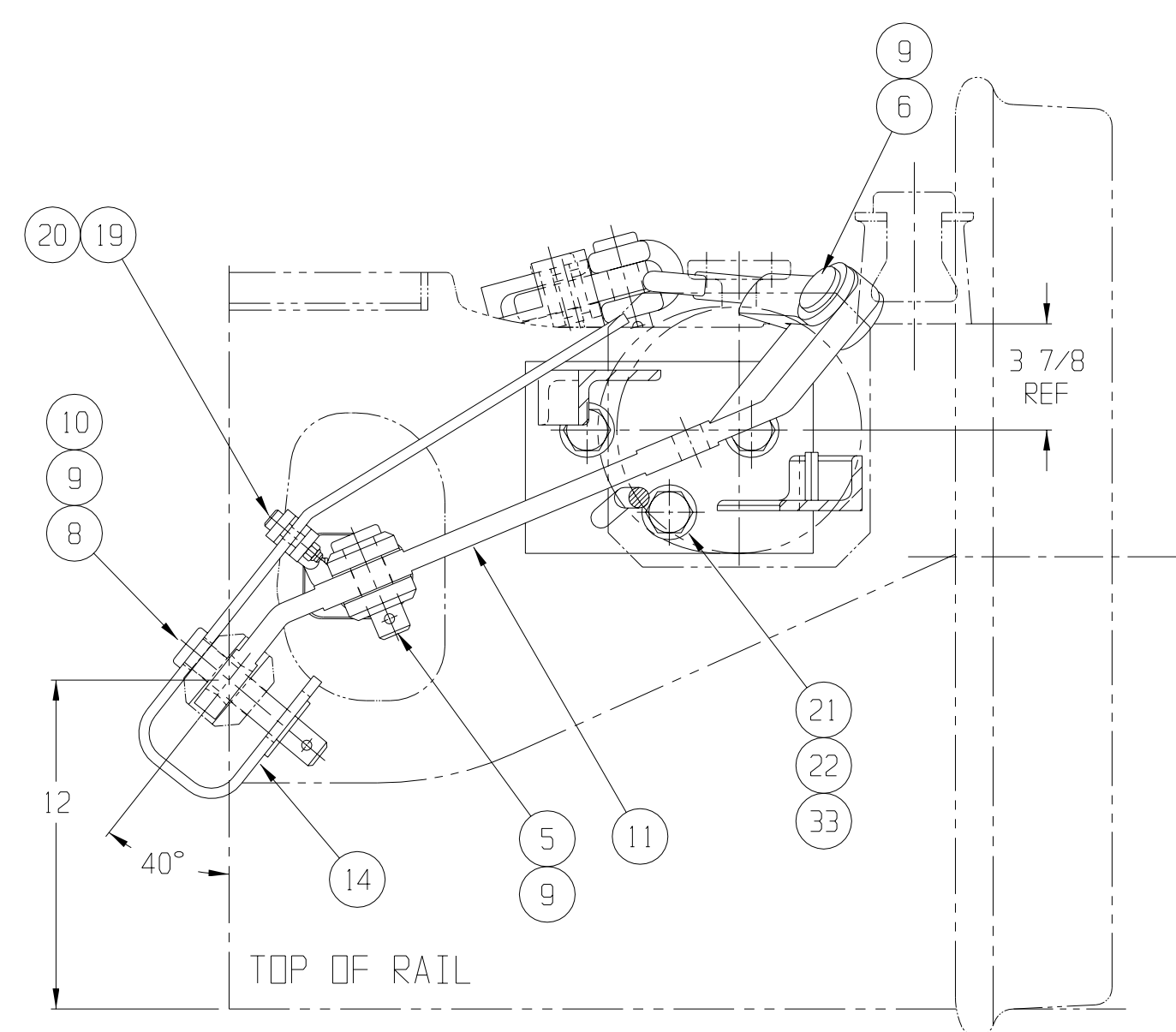


COVERED BY PATENTS
U.S. 4312428
CANADA 1163931

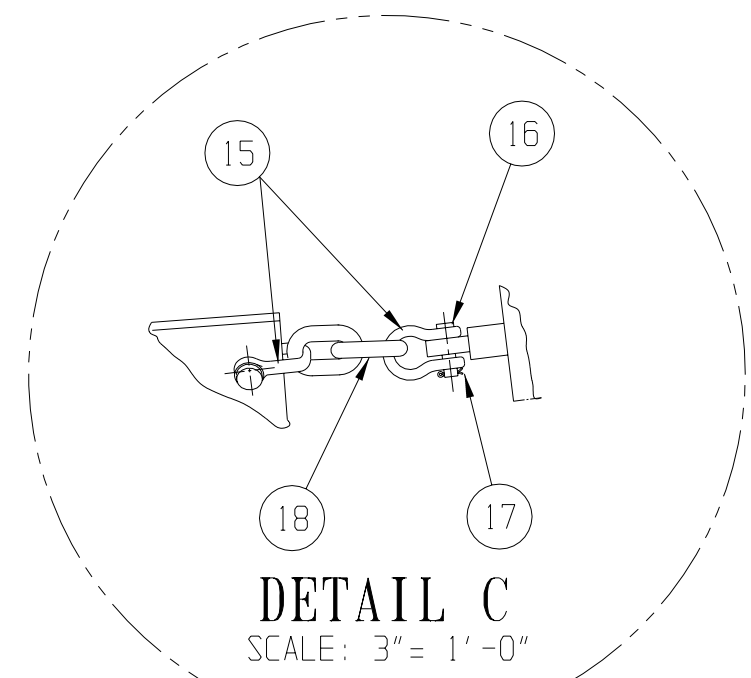
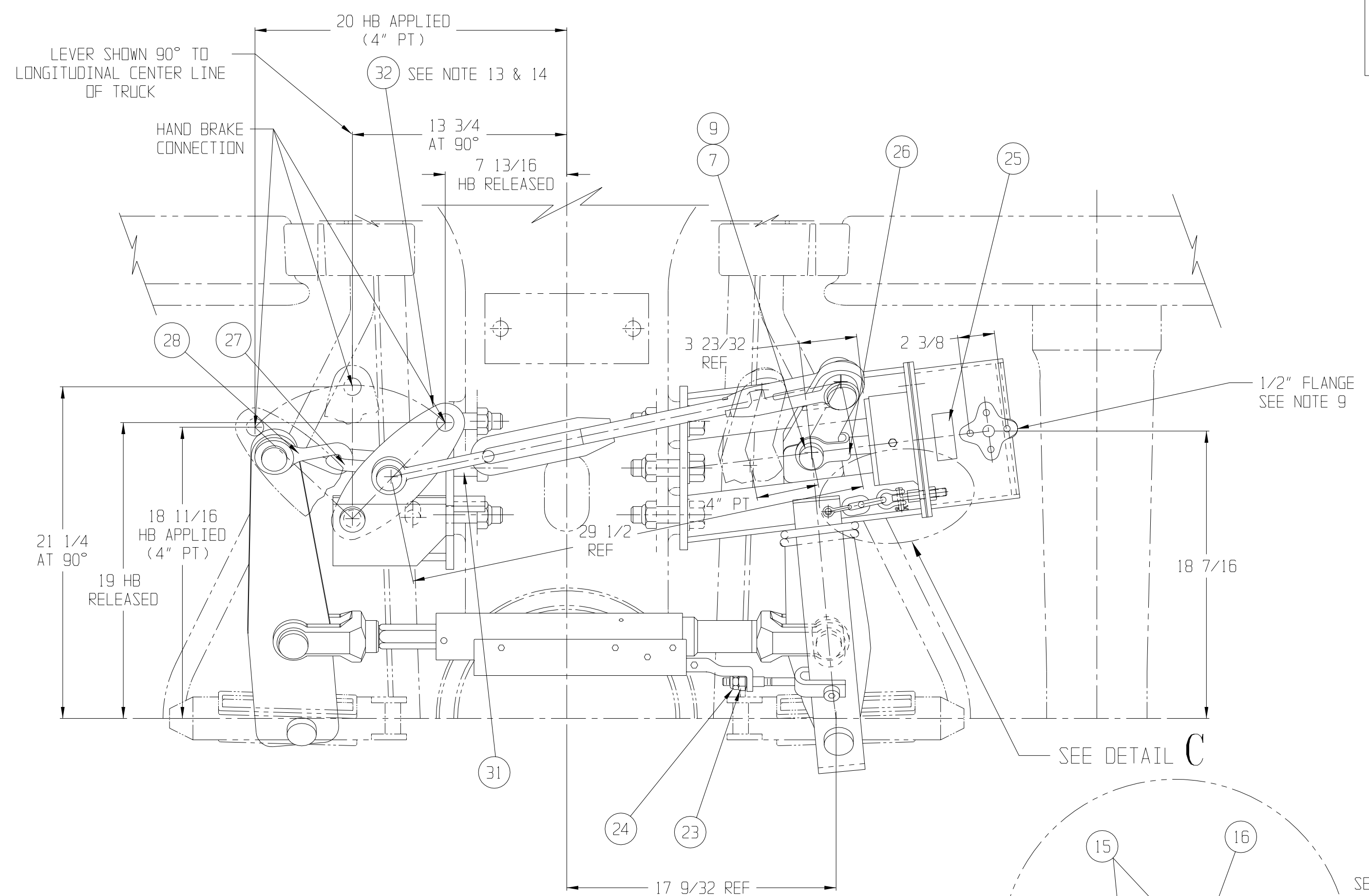
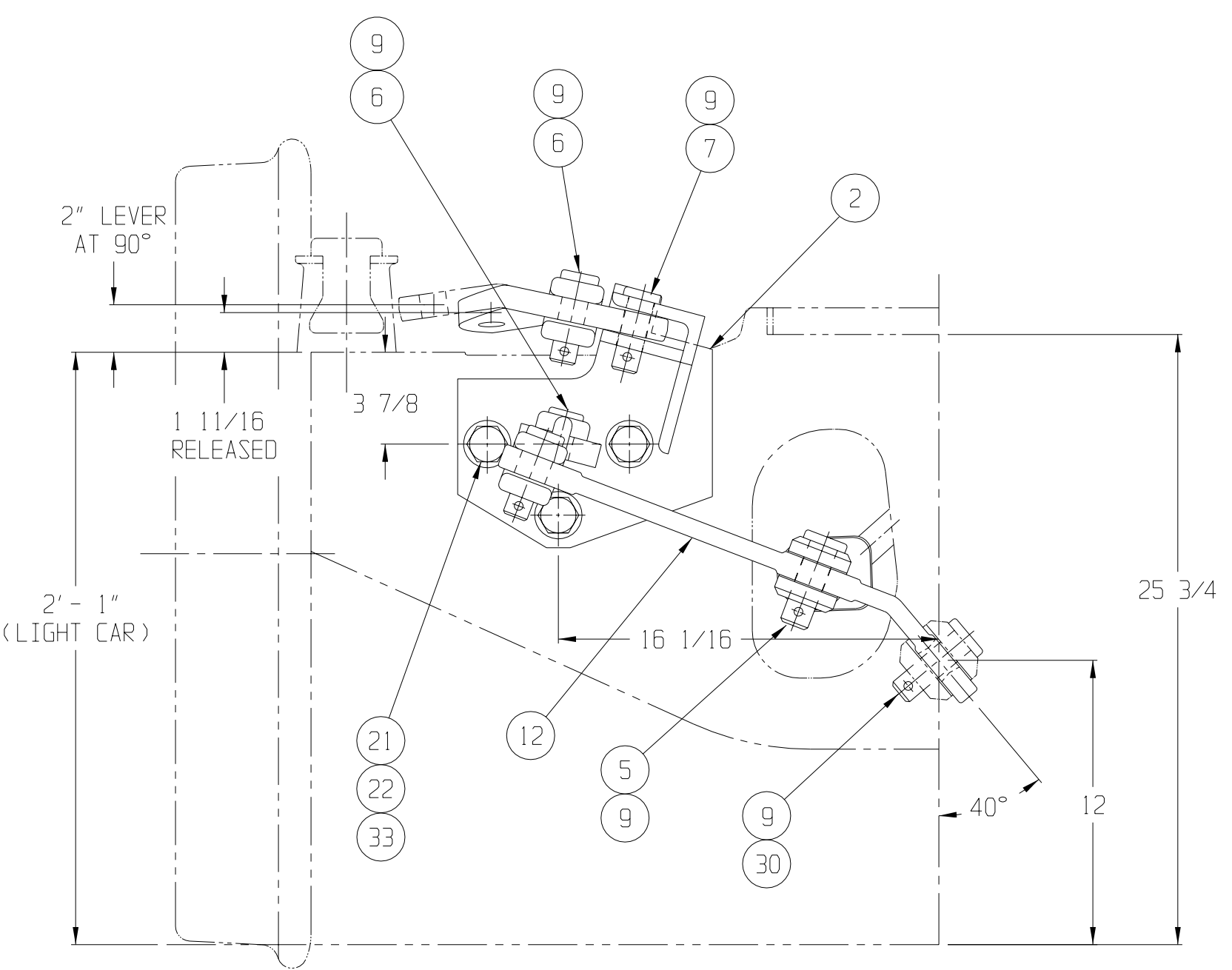
REVISIONS			
LTR	DATE	DESCRIPTION	BY
	11/26/97	ISSUED PER EEN #321.	PS
A	1-18-99	ADDED IT-34, & NOTE 15. IT-9 WAS QTY 10. AIR BRAKE FORCES WERE CALCULATED AT 50 PSI. PER EEN #1788	JT
B	5-18-00	DIM 18 7/16 WAS 18 1/16 ASSEMBLY WAS APPLICATION. PER EEN #2751	JMB
C	09/27/06	IT 9 (P/N 4034-18) WAS 9008-2 AND IT 34 (P/N 4034-13) WAS 9008-3. PER EEN #7230	PS
D	10/16/06	DELETED ITEM 34 (P/N 4034-13). ITEM 9 WAS 8 REQ'D. PER EEN #7229	PS
E	07/23/07	ADDED HB CONNECTION DIM (TOP VIEW). DIM 3 23/32 WAS 3 17/32, 7 13/16 WAS 7 15/16 & 19 WAS 19 1/8. PER EEN #7924	PS



NOTE: AIR BRAKE FORCES ARE CALCULATED AT 65 PSI, HAND BRAKE FORCES ARE SHOWN IN PARENTHESIS.



SECTION A-A



- 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.
 - THE HAND BRAKE CONNECTION ON THE MULTIPLYING LEVER (IT. 32) IS IDENTIFIED BY "HAND BRAKE" AND IS PAINTED WHITE.
 - SEE ELLCON NATIONAL'S INSTALLATION AND FIELD SERVICE INSTRUCTIONS FOR SET-UP PROCEDURES.

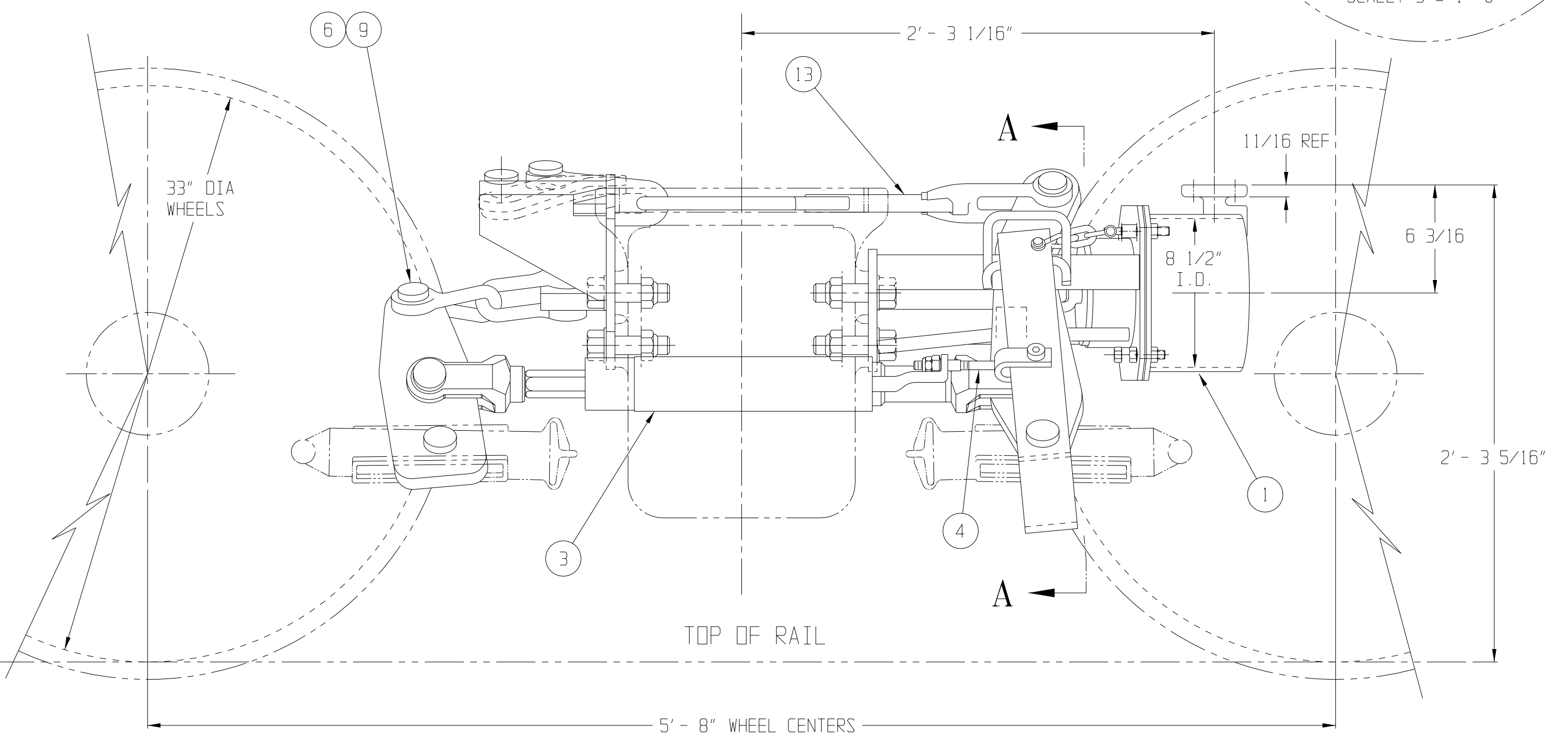
SEE NOTE 1 AND 14

SEE NOTE 11

6	3958-48	WASHER, HARDENED 1"	33
A/R	32361-20	MULTIPLYING LEVER (DOUBLE)	32
1	32315	CLEVIS	31
1	30538-1	CLEVIS PIN, 1 11/32 X 3 TO C HOLE	30
2	32804	P.T INDICATOR DECAL (NOT SHOWN)	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 ARM NUT (PART OF ITEM 3)	23
6	4493-31	NUT (ESNA), 1-8	22
6	3442-137	BOLT, 1-8 UNC X 3 3/4 LG. (GR5)	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
1	33715-1	PULL ROD	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
10	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
2	30166-2	CLEVIS PIN, 1 3/32 X 2 1/2 TO C HOLE	7
4	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	33980	DEAD LEVER BRACKET	2
1	31510-1	BOLSTER SADDLE AND CYLINDER	1
QTY.	PART NO.	DESCRIPTION	ITEM

SEE NOTE 5

SEE NOTE 1



THIS DOCUMENT AND ITS CONTENTS CONTAIN CONFIDENTIAL AND PROPRIETARY INFORMATION OWNED BY ELLCON-NATIONAL, INC. AND IT AND ALL COPIES THEREOF ARE TO BE RETURNED TO ELLCON-NATIONAL WHEN SO REQUESTED. THIS DOCUMENT OR ANY PART THEREOF SHALL NOT BE REPRODUCED, COPIED, OR TRANSMITTED ELECTRONICALLY. THE INFORMATION CONTAINED HEREIN SHALL NOT BE DISCLOSED BY THE RECIPIENT TO OTHERS OR USED BY RECIPIENT WITHOUT THE PRIOR WRITTEN CONSENT SPECIFIC TO EACH CASE. ELLCON-NATIONAL, INC.

MATERIAL: WEIGHT: 253 LBS PER TMB WITH HANDBRAKE LEVER (LESS BRAKE BEAMS, SHOES, KEYS AND CYLINDER HOSE)

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

70 TON ASSEMBLY
MODEL 8500-THIRD LEVER
TRUCK MOUNTED BRAKE

SCALE: 2'-11'-0" DATE: 4-28-97 REV.:

DRAWN P.L. CHECKED P. SOPT

TMB-689-L E