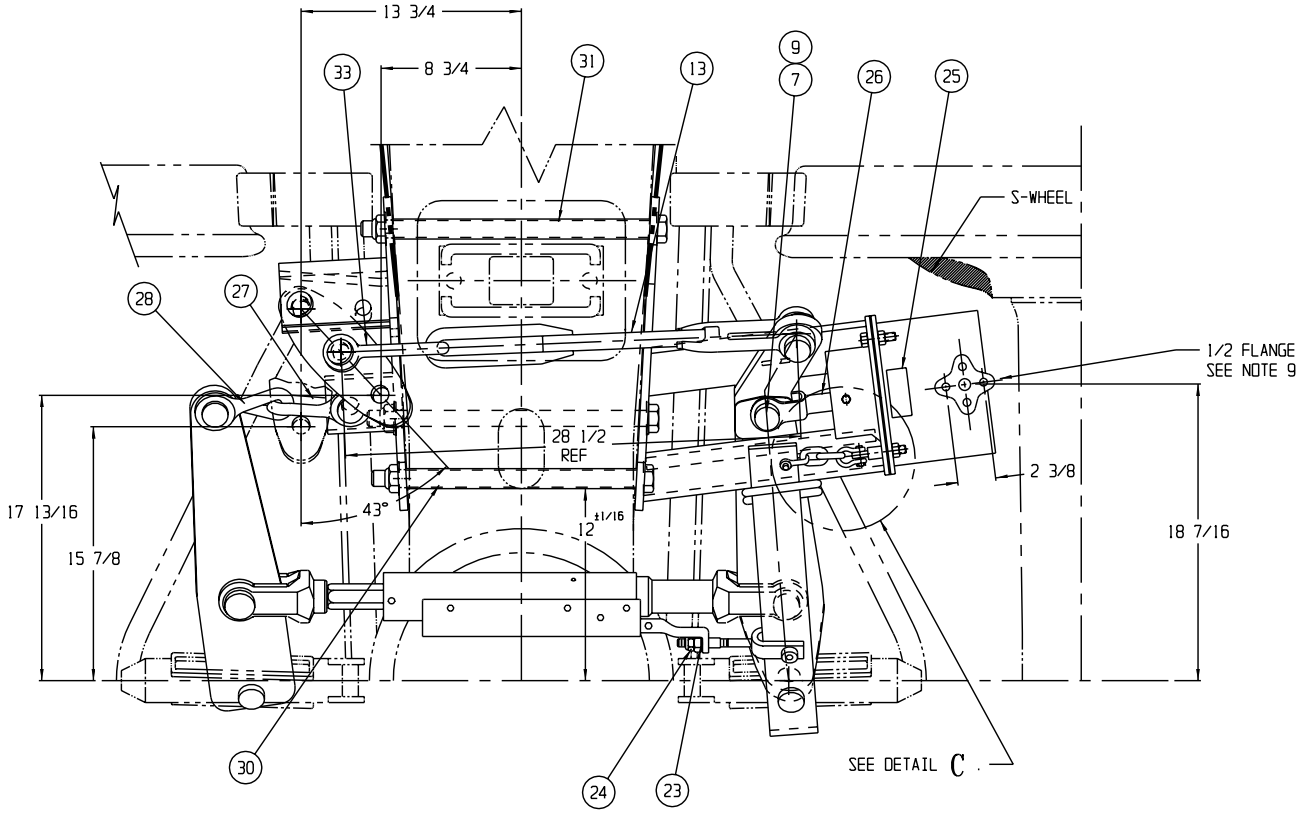
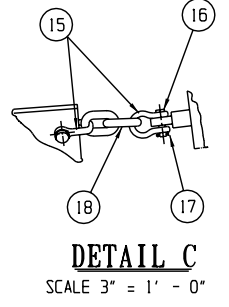
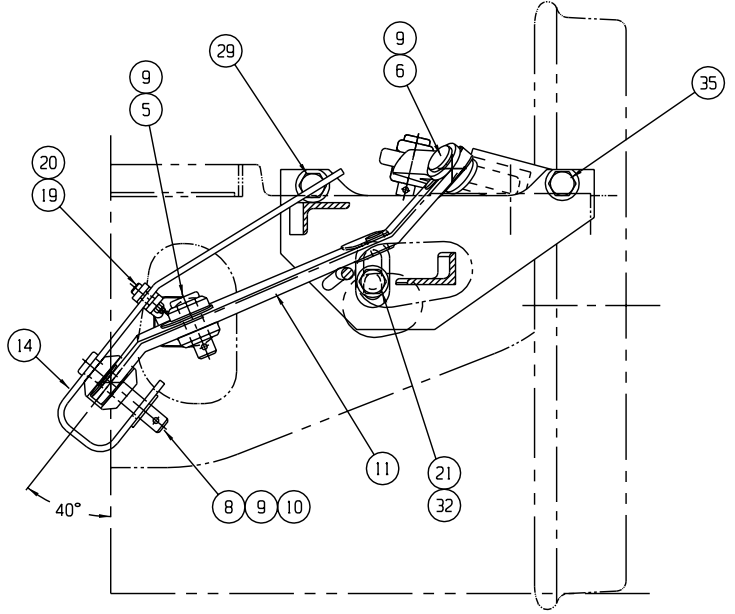
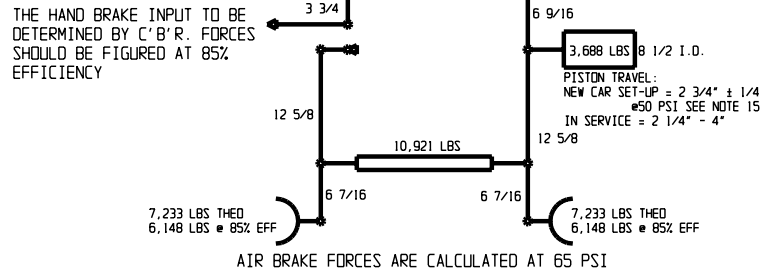
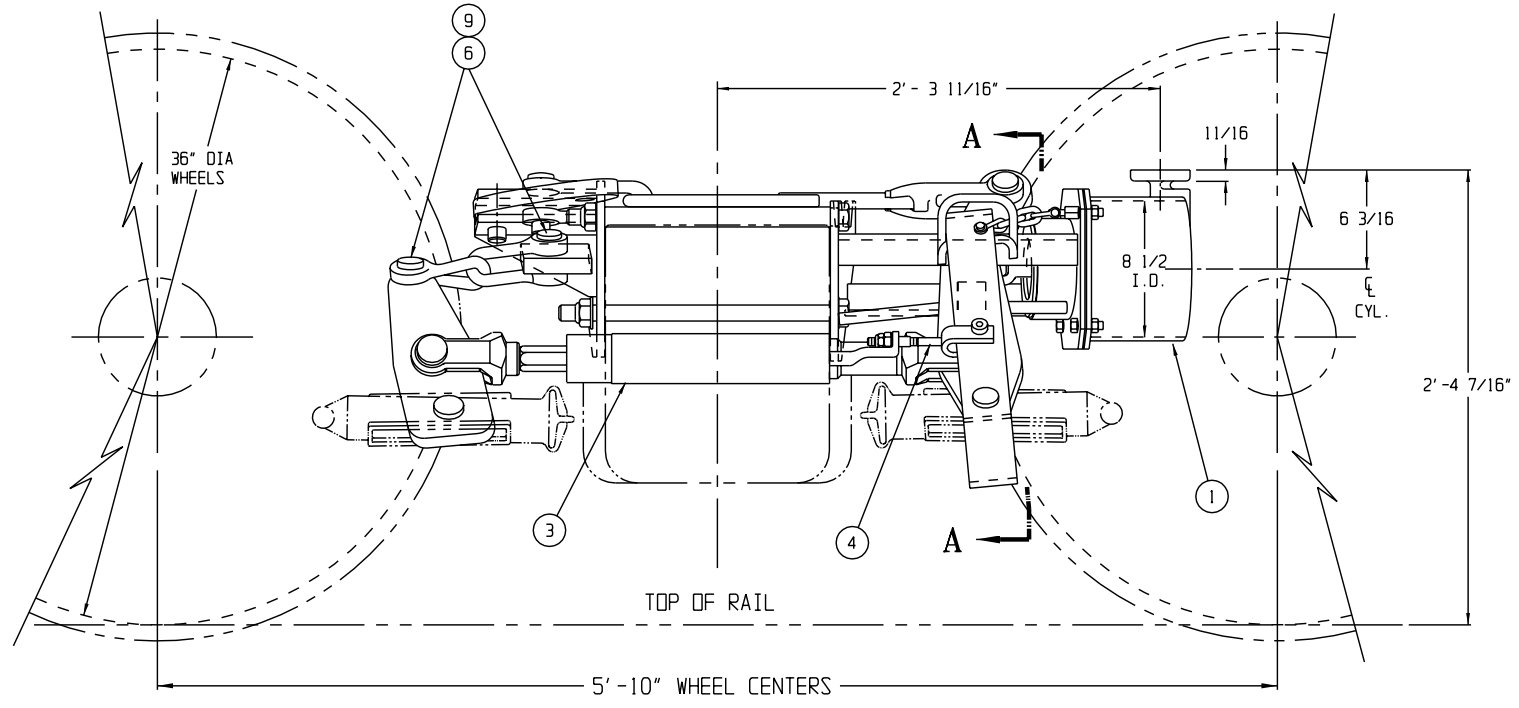
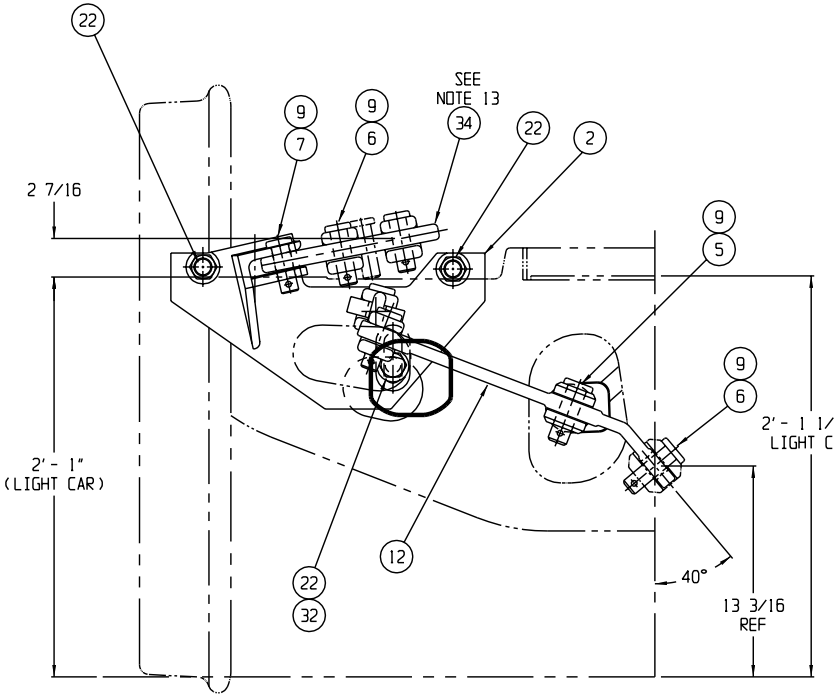


COVERED BY PATENTS
U.S. 4312428
CANADA 1163931

REVISIONS			
LTR	DATE	DESCRIPTION	BY
		ISSUED PER ECN # 1922	
A	9-12-01	TMB-504-L WAS TMB-604-L. REVISED NOTES 5, 9 AND TOP VIEW 3RD LEVER/PULL ROD & DIMS DIM 2'-4 7/16" WAS 2'-4 1/2" PER ECN #3767	KLS
B	12/07/01	REVISED PICTURE OF ITEM 2. PER ECN #3928	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. 18 BRAKE BEAMS. WHEN USING ANY OTHER BRAKE BEAMS CONTACT ELLCON NATIONAL.
 - BADGE PLATES WILL BE SUPPLIED BY CARBUILDER.
 - THESE PARTS MAKE ASSEMBLY P/N 31550.
 - TRUCK MOUNTED BRAKE IS SHOWN IN LIGHT CAR, BRAKE RELEASED, AT HAND BRAKE TRUCK WITH LIVE LEVER NO. 9548-16.
 - 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 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 36 (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 (2 3/4" LG.) AND COTTER PIN FOR HAND BRAKE CONNECTION WILL BE SUPPLIED BY THE CAR BUILDER.
 - THE HAND BRAKE CONNECTION ON THE MULTIPLYING LEVER (ITEM 34) IS IDENTIFIED BY "HAND BRAKE" AND IS PAINTED WHITE.
 - SEE ELLCON NATIONAL'S INSTALLATION AND FIELD SERVICE INTRUCTIONS FOR SET-UP PROCEDURES.



- SEE NOTE 11
- SEE NOTE 1 & 14
- SEE NOTE 5
- SEE NOTE 1

QTY.	PART NO.	DESCRIPTION	ITEM
2	32804	P.T. INDICATOR DECAL	36
1	3442-178	BOLT, 1-8 UNC X 18 1/2 LG (GR.5)	35
A/R	32361	MULTIPLYING LEVER	34
1	32315	CLEVIS	33
2	3958-29	WASHER-PLAIN 1"	32
1	9193-31	SPACER, LONG 16 1/8 LG	31
1	9193-32	SPACER, SHORT 14 15/32 LG	30
1	3442-111	BOLT, 1-8 UNC X 17 LG (GR.5)	29
1	31411	CLEVIS (90 R.H. TWIST)	28
1	8819	CLEVIS	27
1	9280	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
3	4493-31	NUT (ESNA), 1-8	22
1	3442-104	BOLT, 1-8 UNC X 17 1/2 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	31141	ACTUATOR LEVER	14
1	33116-1	PULL ROD	13
A/R	9578-11	DEAD LEVER	12
A/R	9548-16	LIVE LEVER (HAND BRAKE TRUCK)	11
1	3958-28	WASHER, PLAIN, 1 1/4	10
10	9008-2	COTTER PIN, WEDGE FAST, 5/16 X 2 1/2	9
1	30166-4	CLEVIS PIN, 1 3/32 X 5 3/8 TO Q HOLE	8
2	30166-2	CLEVIS PIN, 1 3/32 X 2 1/2 TO Q HOLE	7
5	30166-1	CLEVIS PIN, 1 3/32 X 3 TO Q HOLE	6
2	30167-1	CLEVIS PIN, 1 7/32 X 3 TO Q HOLE	5
1	31139	CONTROL ARM (PART OF ITEM 3)	4
1	7100-26	SLACK ADJUSTER (DOUBLE ACTING)	3
1	34011-1	DEAD LEVER BRACKET	2
1	34040-1	BOLSTER SADDLE AND CYLINDER ASSY	1

BILL OF MATERIAL

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

100 TON APPLICATION
MODEL 8500
TRUCK MOUNTED BRAKE

SCALE 2'-1" = 0" DATE 9/8/97 REV. A

WEIGHT: 274 LBS PER TMB (LESS BRAKE BEAMS, SHOES, KEYS AND CYLINDER HOSE)

CHECKED P.S. P.SDP1

TMB-504-L B

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.