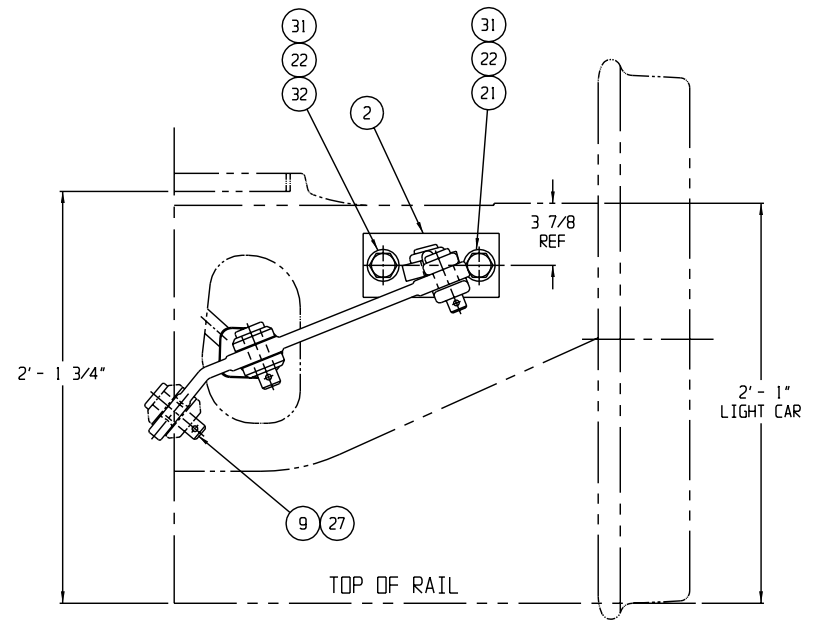
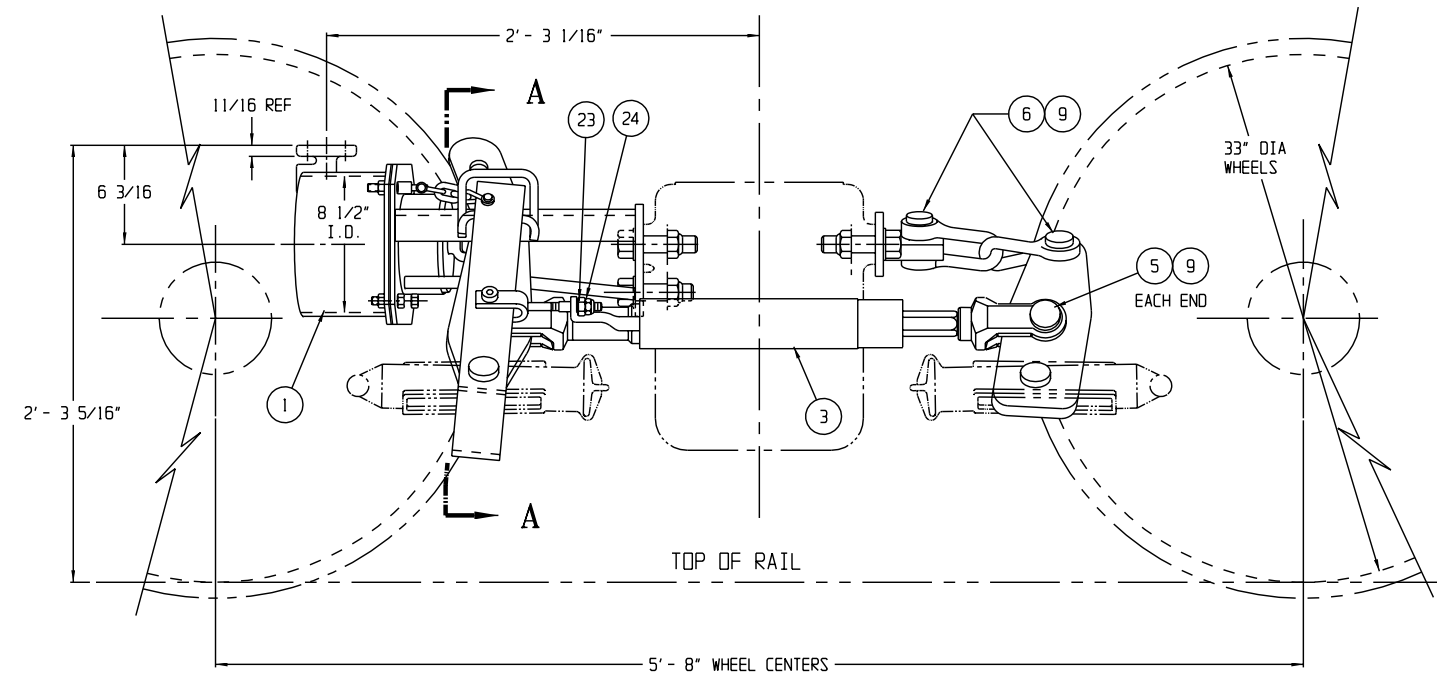
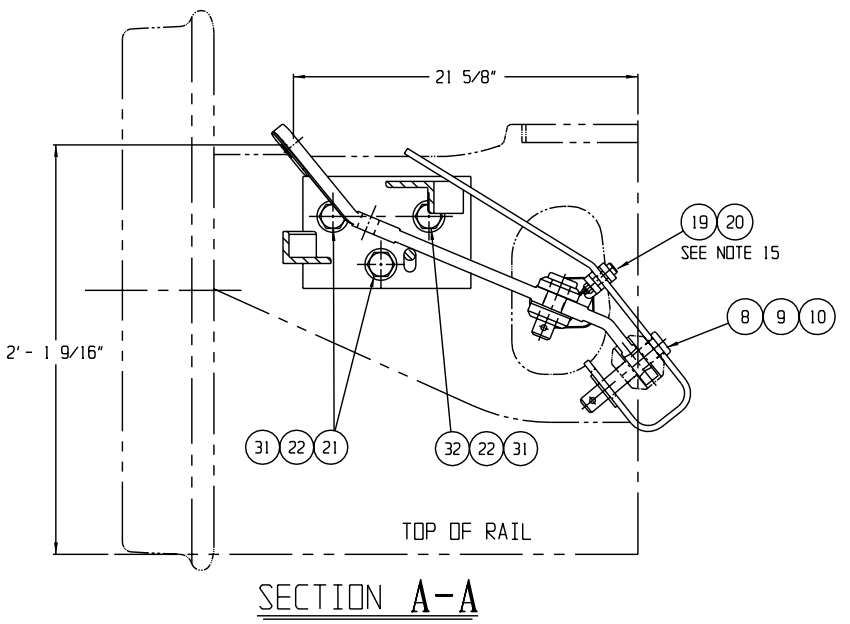
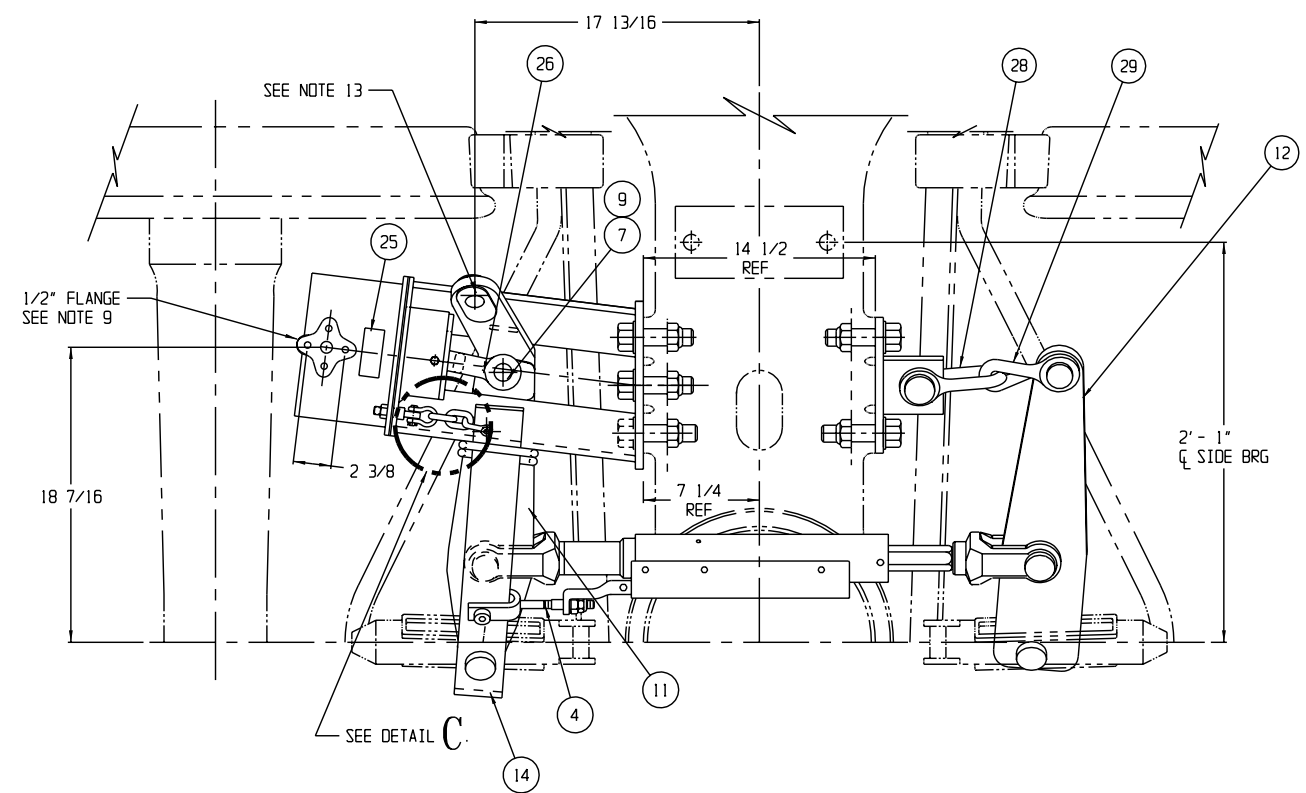


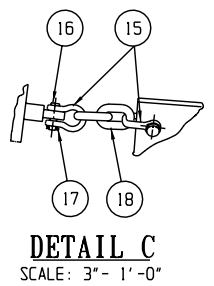
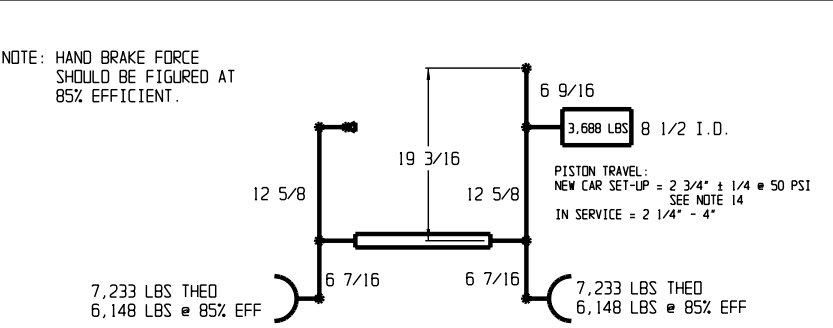
COVERED BY PATENTS
U.S. 4312428
CANADA 1163931

REVISIONS			
LTR	DATE	DESCRIPTION	BY
C	4-7-98	REDRAWN ON CAD WITH THE FOLLOWING CHANGES: ADDED NOTES & RENUMBERED EXISTING NOTES ADDED: NOTE IN SCHW DNG, 82% EFF LBS IN SCHW DNG, DIM 2'-1 3/4" @ E-9, DIM 7 1/4" @ H-14, DIM 14 1/2" @ K-13, ITEMS 30 & 31. "SEE NOTE 5" @ J-17. PISTON TRAVEL WAS 3" @ B-14. DETAIL C WAS VEIN 9-B. ITEM 23 WAS P/N 3443-33, FOLLOWING DIMS CHANGED: 2'-1" LIGHT CAR WAS 2'-1 5/8" @ E-5/6, 2'-1 9/16" WAS 2'-1 5/16" @ J-10, 21 5/8" WAS 21 1/8" @ K-7, 2'-3 5/16" WAS 2'-2 13/16" @ E-17, 6 3/16 WAS 6 1/4" @ F-17, 11/16 REF WAS 3/4" @ F-16, 2'-3 1/16" WAS 2'-3 3/4" @ G-14, 18 1/16" WAS 18 3/8" @ J-17, 19 3/16" WAS 19 1/8" @ B-15 PER ECN #1232	AKH
D	12-9-98	ADDED IT 32, IT 9 WAS QTY 7, CHANGED IT 9 WITH IT 32 IN TWO PLACES WITH IT 9 & 27. FORCE DIAGRAM WAS CALCULATED BASED ON 50 PSI. PER ECN #1226	JT
E	12-31-98	ADDED NOTE 14, ADDED "50 PSI" AND "SEE NOTE 14" @ B-14. CHANGE PICTURE OF ITEM 1, 17 13/16" WAS 18" @ L-14, 18 7/16" WAS 18 1/16" @ J-17. PER ECN #1753	AKH
F	6-1-00	DELETED ITEM 32 (P/N 9008-3). ITEM 9 WAS 5 REQ'D. P/N 4034-18 WAS 9008-2. ASSEMBLY WAS APPLICATION IN THE TITLE BLOCK. PER ECN #2793	JMB
G	8-1-00	ADDED ITEM 32 (P/N 3442-190). ITEM 21 WAS 5 REQ'D. PER ECN #2883	PS
H	10-10-05	ADDED NOTE 15 AND "SEE NOTE 15" @ J6 PER ECN #6546	BMP



- 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. 9548-2624.
 - 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 SELF LOCKING BOLTS.
 - 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 30 (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.
 - CLEVIS, CLEVIS PIN AND COTTER PIN FOR HAND BRAKE CONNECTION WILL BE SUPPLIED BY THE CAR BUILDER.
 - SEE ELLCON NATIONALS INSTALLATION AND FIELD SERVICE INSTRUCTIONS FOR SET-UP PROCEDURE.
 - SHOULDER BOLT, ITEM 20, CAN BE ASSEMBLED FROM TOP AS SHOWN OR FROM THE BOTTOM WITH NUT, ITEM 19, AT TOP.

QTY.	PART NO.	DESCRIPTION	ITEM
2	3442-190	BOLT, 1-8 UNC X 4.0 LG (GR.5)"GREEN"	32
5	3958-48	WASHER, PLAIN HARDENED 1"	31
2	32804	P.T. INDICATOR DECAL	30
1	31411	CLEVIS (90° R.H. TWIST)	29
1	8819	CLEVIS	28
1	30538-1	CLEVIS PIN 1 11/32 DIA X 3 TO Q HOLE	27
1	9894	PUSH ROD (PART OF ITEM 1)	26
1	30252	NAMEPLATE (PART OF ITEM 1)	25
1	31076-1	LOCKNUT, STOVER, 1/2-13 (PART OF ITEM 3)	24
1	33158	CONTROL ARM NUT, 1/2-13 (PART OF IT 3)	23
5	31076-3	LOCKNUT, STOVER, 1-8	22
3	3442-137	BOLT, 1-8 UNC X 3 3/4 LG (GR.5)	21
1	5340-4	SHOULDER BOLT, 3/8-16	20
1	31076-4	LOCKNUT, STOVER, 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	31157-1	ACTUATOR LEVER	14
A/R	9547-4124	LIVE LEVER (NON HAND BRAKE TRUCK)	13
A/R	9578-2124	DEAD LEVER	12
A/R	9548-2624	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 Q HOLE	8
1	30166-2	CLEVIS PIN, 1 3/32 X 2 1/2 TO Q HOLE	7
2	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	7100-26RS	SLACK ADJUSTER (DOUBLE ACTING)	3
1	30985-2	DEAD LEVER BRACKET	2
1	31805-2	BOLSTER SADDLE AND CYLINDER ASS'Y	1



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MATERIAL: 218 LBS PER TMB WITH HANDBRAKE LEVER (LESS BRAKE BEAMS, SHOES, KEYS AND CYLINDER HOSE)

SCALE	DATE	REV.
2" = 1'-0"	2-11-91	

DRAWN DC
CHECKED DMS

TMB-291-R H

BILL OF MATERIAL

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

70 TON ASSEMBLY
MODEL 8500
TRUCK MOUNTED BRAKE