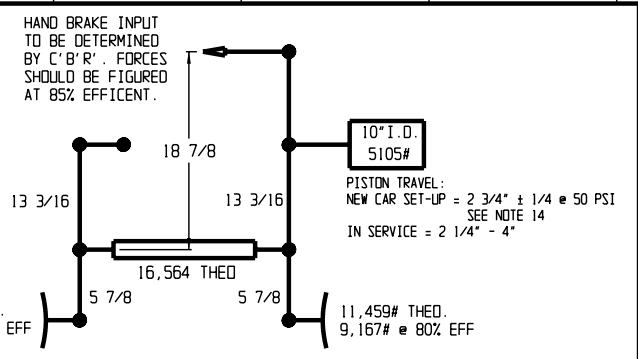
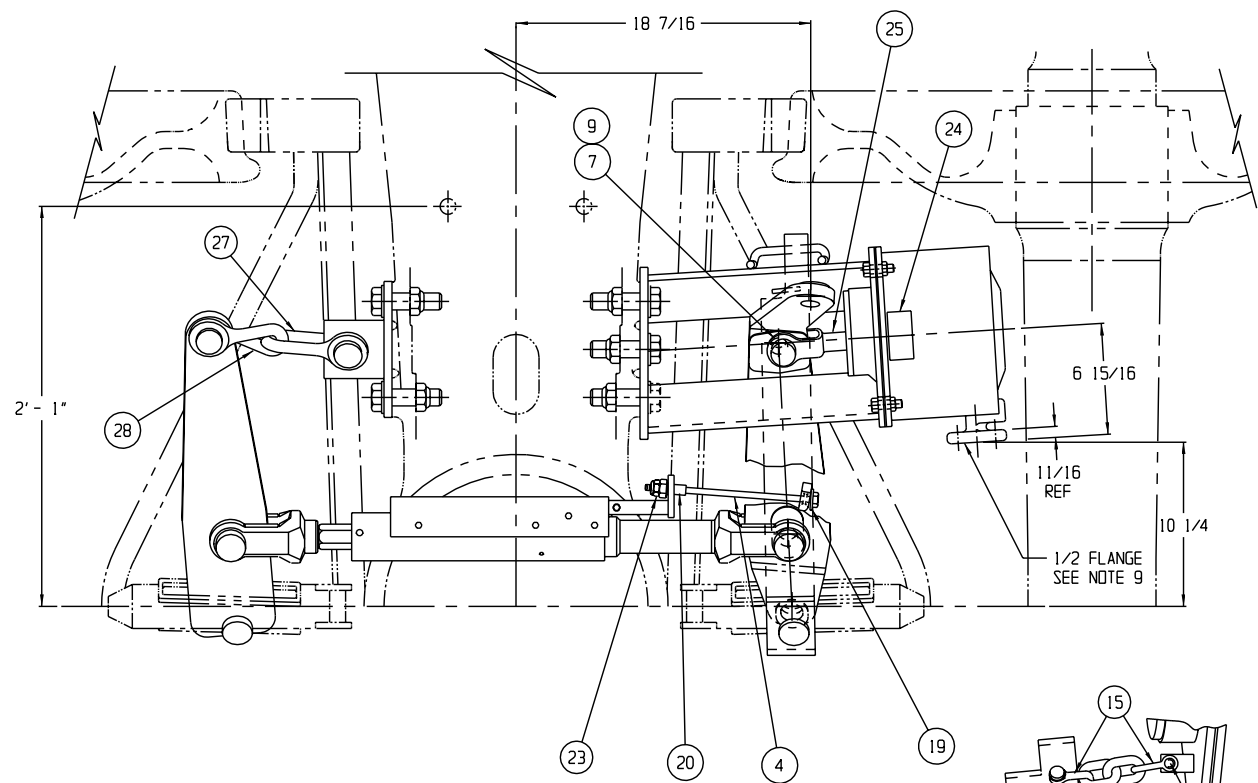


COVERED BY PATENTS
U.S. 4312428
CANADA 1163931

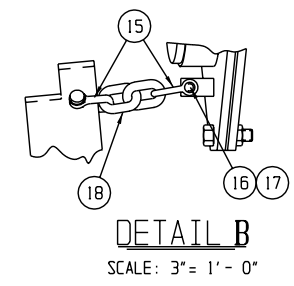
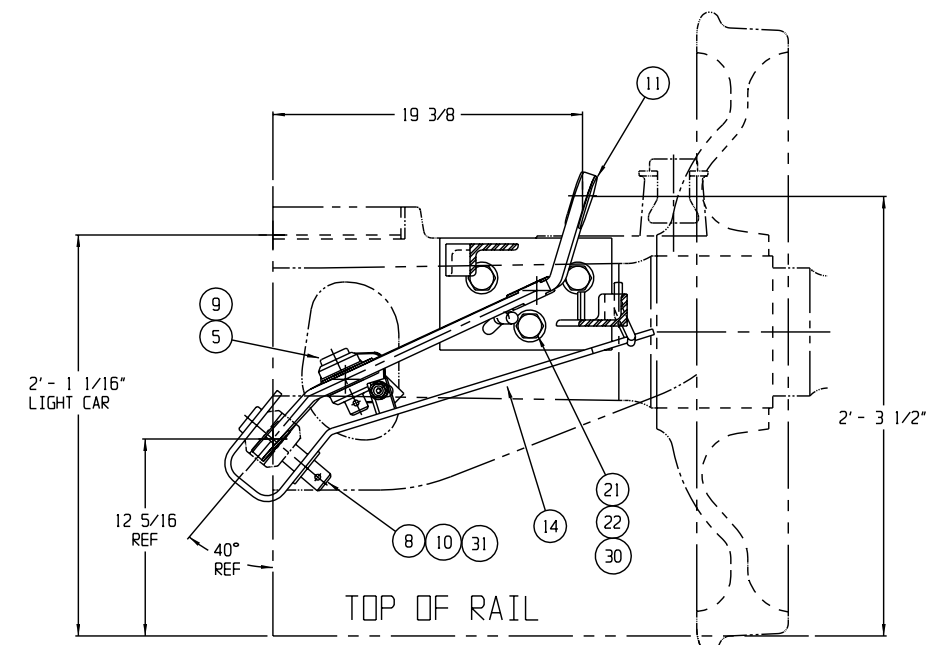
| REVISIONS | | | |
|-----------|------|----------------------|----|
| LTR | DATE | DESCRIPTION | BY |
| | | ISSUED PER ECN #2413 | |



NOTE: AIR BRAKE FORCES ARE CALCULATED AT 65 PSI.



- NOTE:
- SEE PURCHASE ORDER FOR DRAWING NO. SHOWING TRUCK MOUNTED BRAKE AND LEVER LOCATIONS.
 - QUANTITIES SHOWN ARE FOR ONE 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. 9548-1524
 - 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 NEGOCIATE A 180 FT. OR 150 FT. RADIUS CURVE AS PER 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.
 - 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.

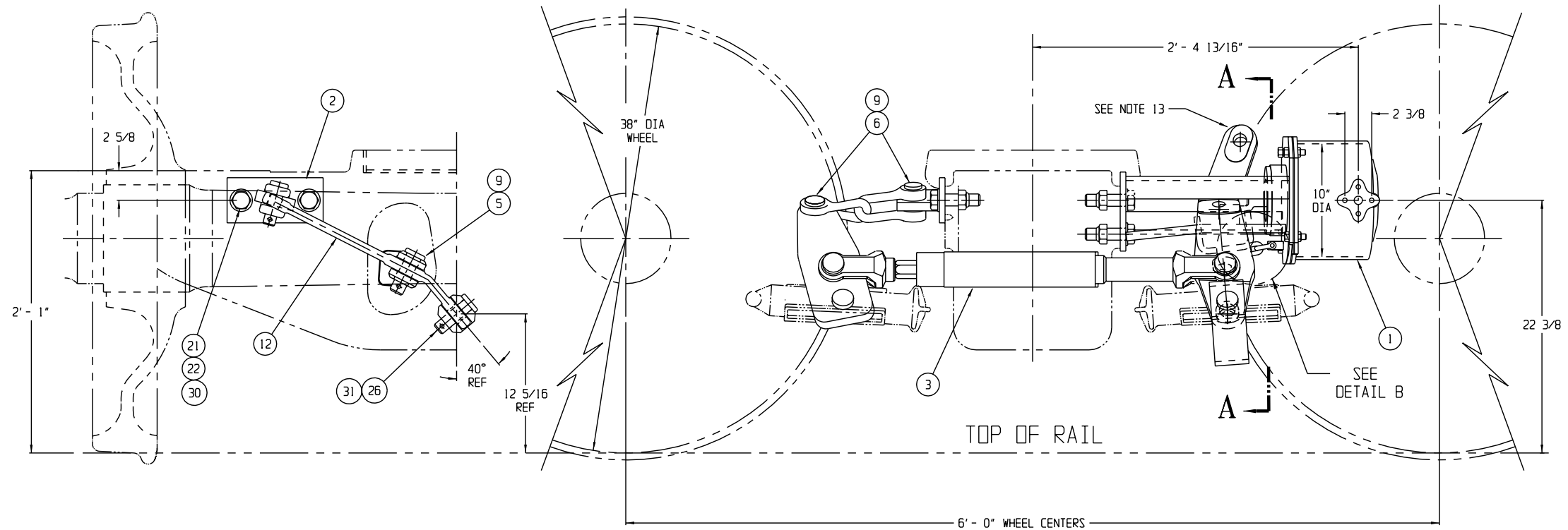


SEE NOTE 11

SEE NOTE 5

SEE NOTE 1

| | | | |
|-----|-----------|---|----|
| 2 | 9008-3 | COTTER PIN, WEDGE FAST, 5/16 X 3" LG | 31 |
| 5 | 3958-48 | WASHER, PLAIN HARDENED, 1" | 30 |
| 2 | 32804 | PISTON TRAVEL INDICATOR DECAL (NOT SHOWN) | 29 |
| 1 | 31411 | CLEVIS (90 R.H. TWIST) | 28 |
| 1 | 8819 | CLEVIS | 27 |
| 1 | 30538-1 | CLEVIS PIN 1 11/32" Ø x 3 TO C HOLE | 26 |
| 1 | 30218 | PUSH ROD ASS'Y (PART OF ITEM 1) | 25 |
| 1 | 30252 | NAMEPLATE | 24 |
| 1 | 4493-35 | NUT (ESNA), 1/2-13 (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 | 33158 | CONTROL ARM NUT 1/2-13 (PART OF ITEM 3) | 20 |
| 1 | 3958-45 | WASHER, 1/2 (PART OF ITEM 3) | 19 |
| 1 | 31439 | CHAIN ASS'Y | 18 |
| 2 | 31438-3 | COTTER PIN | 17 |
| 2 | 31438-2 | PIN | 16 |
| 2 | 31438-1 | SHACKLE | 15 |
| 1 | 30835-1 | ACTUATOR LEVER | 14 |
| A/R | 9547-3524 | LIVE LEVER (NON HAND BRAKE TRUCK) | 13 |
| A/R | 9578-3424 | DEAD LEVER | 12 |
| A/R | 9548-1524 | LIVE LEVER (HAND BRAKE TRUCK) | 11 |
| 1 | 3958-35 | WASHER, PLAIN, 1 3/8 | 10 |
| 5 | 9008-2 | COTTER PIN, WEDGE FAST, 5/16 X 2 1/2 | 9 |
| 1 | 30538-2 | CLEVIS PIN, 1 11/32" Ø x 5 3/8 TO C HOLE | 8 |
| 1 | 30166-2 | CLEVIS PIN, 1 3/32" Ø x 2 1/2 TO C HOLE | 7 |
| 2 | 30166-1 | CLEVIS PIN, 1 3/32" Ø x 3 TO C HOLE | 6 |
| 2 | 30167-1 | CLEVIS PIN, 1 7/32" Ø x 3 TO C HOLE | 5 |
| 1 | 30836 | CONTROL ROD, 1/2-13 (PART OF ITEM 3) | 4 |
| 1 | 7100-22 | SLACK ADJUSTER (DOUBLE ACTING) | 3 |
| 1 | 30985 | DEAD LEVER BRACKET ASS'Y | 2 |
| 1 | 33810-1 | BOLSTER SADDLE AND CYLINDER ASS'Y | 1 |



TOLERANCES AND FINISHES UNLESS OTHERWISE NOTED
DECIMALS .XX
DECIMALS .XXX
ANGLES ±
FRACTIONS ±
DRILLED HOLE DIAMETERS
BREAK ALL SHARP CORNERS AND EDGES
C/SK ALL TAPPED HOLES 118" ± ONE THREAD DEEP
MACHINED SURFACES 125/



125 TON ASSEMBLY
MODEL 8500
TRUCK MOUNTED BRAKE

| | | | |
|--|---------------------|----------------|------|
| MATERIAL: 239 LBS PER TMB WITH HANDBRAKE LEVER (LESS BRAKE BEAMS, SHOES, KEYS AND CYLINDER HOSE) | SCALE: 2" = 1" - 0" | DATE: 12/30/99 | REV. |
| DRAWN: PS | CHECKED: P.SPT | TMB-314-LK | |

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.