REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
		ISSUED PER ECN 6515		
	A	REDESIGNED HANDBRAKE, SEE RECORD PRINT PER ECN 7847	6/11/2007	RAL

INTERMEDIATE POWER PROLONGED RELEASE HAND BRAKE

AAR FIELD MANUAL GROUP "R"

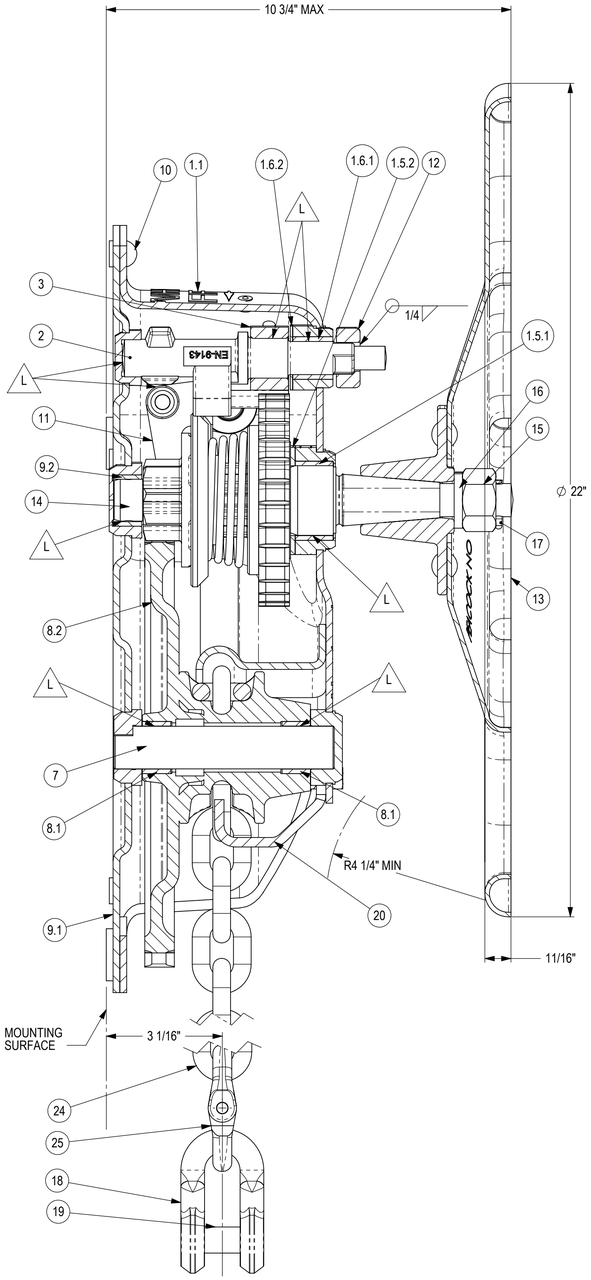
NON-SPIN VERTICAL WHEEL GRADUAL & QUICK RELEASE

AAR APPROVED VERTICAL CHAIN TRAVEL 4" THRU 40"

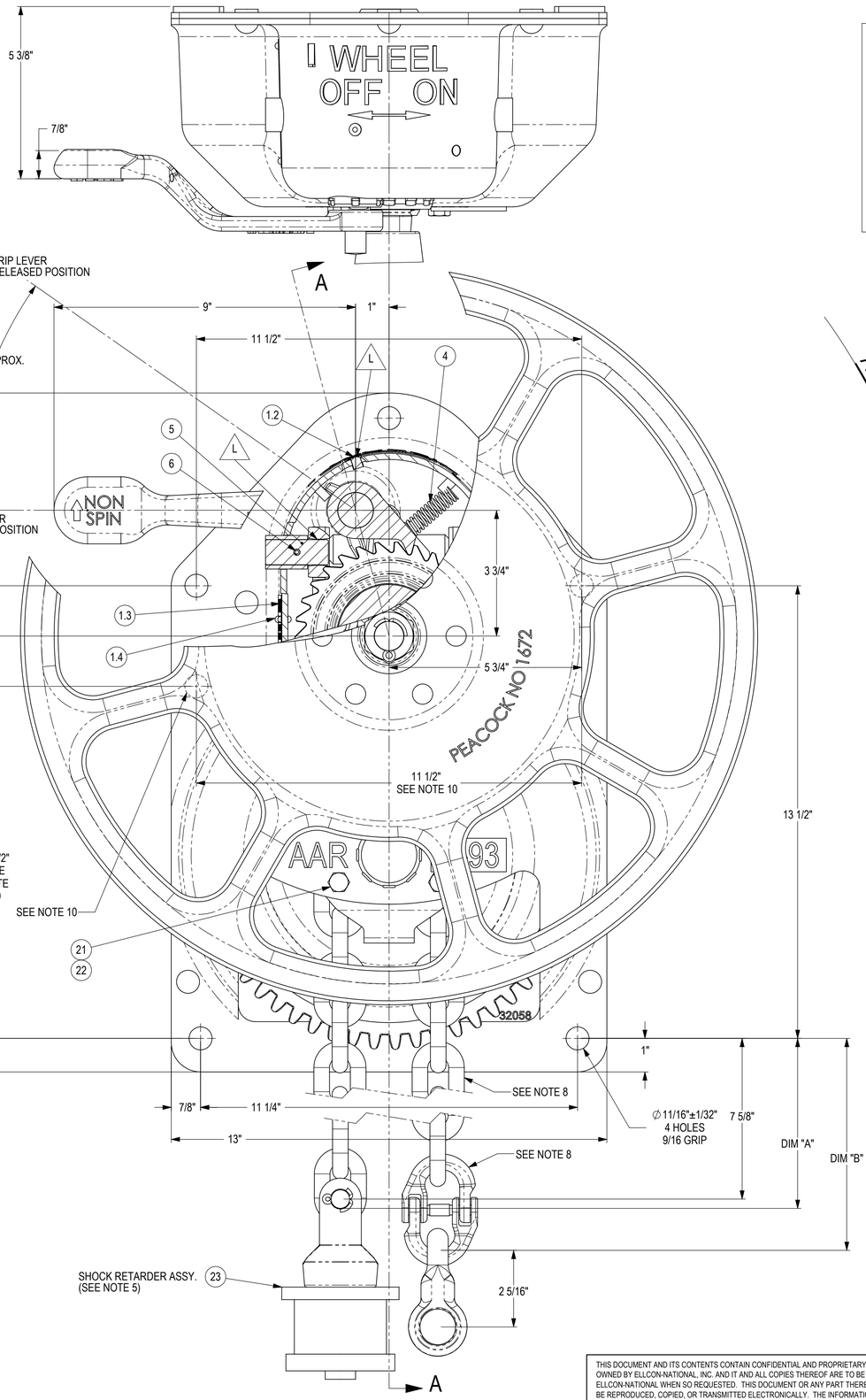
BRAKES FURNISHED COATED WITH BLACK PRIMER

APPROXIMATE WEIGHT 102 LBS

GENERAL DATA



SECTION A-A



NOTES:

1. WE RECOMMEND HAND BRAKE BE APPLIED TO CAR AFTER BLASTING. WHEN SUBJECTED TO BLASTING, HAND BRAKE MUST BE PROTECTED FROM SHOT OR GRIT MATERIAL. REF. AAR FREIGHT CAR DESIGN SPECIFICATION PARA. 5.2.2
2. BELL CRANK OR SHEAVE FURNISHED AS SPECIFIED. SEE DRAWING D-32235 FOR PROPER INSTALLATION.
3. SEE DRAWING DX-33000SR FOR IDENTIFICATION OF PARTS
4. ALL DIMENSIONS ± 1/16 UNLESS OTHERWISE SPECIFIED.
5. SHOCK RETARDER ASSEMBLY CAN BE FURNISHED WITH CHAIN LENGTH AS SPECIFIED. SEE DWG. C-7360 FOR LENGTH VARIATIONS. FOR MOUNTING TO CAR SEE DWG. D-32235.
6. LUBRICATION RESERVOIRS AND LUBRICATING POINTS INDICATED BY ⚠ .
7. WHEN APPLYING HAND WHEEL, TORQUE NUT TO 160 FT-LBS AND INSERT COTTER THRU SHAFT.
8. THE CHAIN MUST BE INSERTED INTO THE CHAIN DRUM WITH WELD PROJECTING OUT. THE COUPLING LINK MUST BE INSTALLED AS SHOWN IN FRONT VIEW. DIMENSION "A" + "B" = 34 1/8 ±1/2
9. WHEN THE BRAKE IS QUICK RELEASED, THE BRAKE REMAINS IN THE RELEASED MODE UNTIL THE HAND WHEEL IS ROTATED IN THE APPLIED DIRECTION.
10. THIS HOLE IS ONLY USED WHEN REPLACING AN EXISTING GROUP "O" HAND BRAKE.

ITEM NO.	Part No	DESCRIPTION	QTY.
25	32234	COUPLING LINK	1
24	32157	CHAIN	1
23	7360	SHOCK RETARDER	1
22	4493-8	NUT	2
21	998-A	BOLT	2
20	30693	PRESSED STRIPPER	1
19	240	RIVET	1
18	458	CLEVIS	1
17	4034-9	COTTER PIN	1
16	242	LOCK WASHER	1
15	241	NUT	1
14	32082-3	PINION ASSEMBLY	1
13	1672	HAND WHEEL ASSEMBLY	1
12	32275	TRIP LEVER	1
11	4622	YOKE ASSEMBLY	1
10	454	RIVET	5
9.2	32071	BEARING	1
9.1	32058	BACK PLATE	1
9	32102	BACKPLATE ASSEMBLY	1
8.2	32172	GEAR & CHAIN DRUM ASSEMBLY	1
8.1	32071	BEARING	2
8	32172	CHAIN DRUM ASSEMBLY	1
7	32069	GEAR SHAFT	1
6	1664	ROLL PIN	2
5	9236	YOKE SHAFT	2
4	32075	PAWL SPRING	1
3	35148	COMBINATION PAWL	1
2	9143-2	CAM SHAFT	1
1.6.2	32231-3	FRONT PAWL SHAFT THURST BEARING	1
1.6.1	32231-4	FRONT PAWL SHAFT BEARING	1
1.6	32231	FRONT PAWL SHAFT BEARING	1
1.5.2	32074-3	BEARING WASHER	1
1.5.1	32074-4	BEARING	1
1.5	32074	PINION BEARING	1
1.4	3338-1	RIVET	2
1.3	31818	WARNING LABEL	1
1.2	5892	OIL CUP	1
1.1	32072	HOUSING	1
1	35352	HOUSING ASSEMBLY	1

BILL OF MATERIAL

LEGEND
∅ - DIAMETER ⏥ - DEPTH ⌴ - COUNTERBORE ⌵ - COUNTERSINK ▱ - FLATNESS // - PARALLELISM ⊥ - PERPENDICULARITY ◎ - CONCENTRICITY

TOLERANCES AND FINISHES UNLESS OTHERWISE NOTED
DECIMALS .XX ±
DECIMALS .XXX ±
ANGLES ±
FRACTIONS ±
DRILLED HOLE DIAMETERS +.010/-.001
BREAK ALL SHARP CORNERS AND EDGES
C'SK ALL TAPPED HOLES 118° x ONE THREAD DEEP
MACHINED SURFACES 125

MATERIAL:

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NEXT ASSY | USED ON

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

INTERMEDIATE POWER HAND BRAKE DESIGNATION 33000SR

SCALE	1:2	DATE	8/24/2005	REV.
DRAWN	MMM		D-33000SR	A
CHECKED				