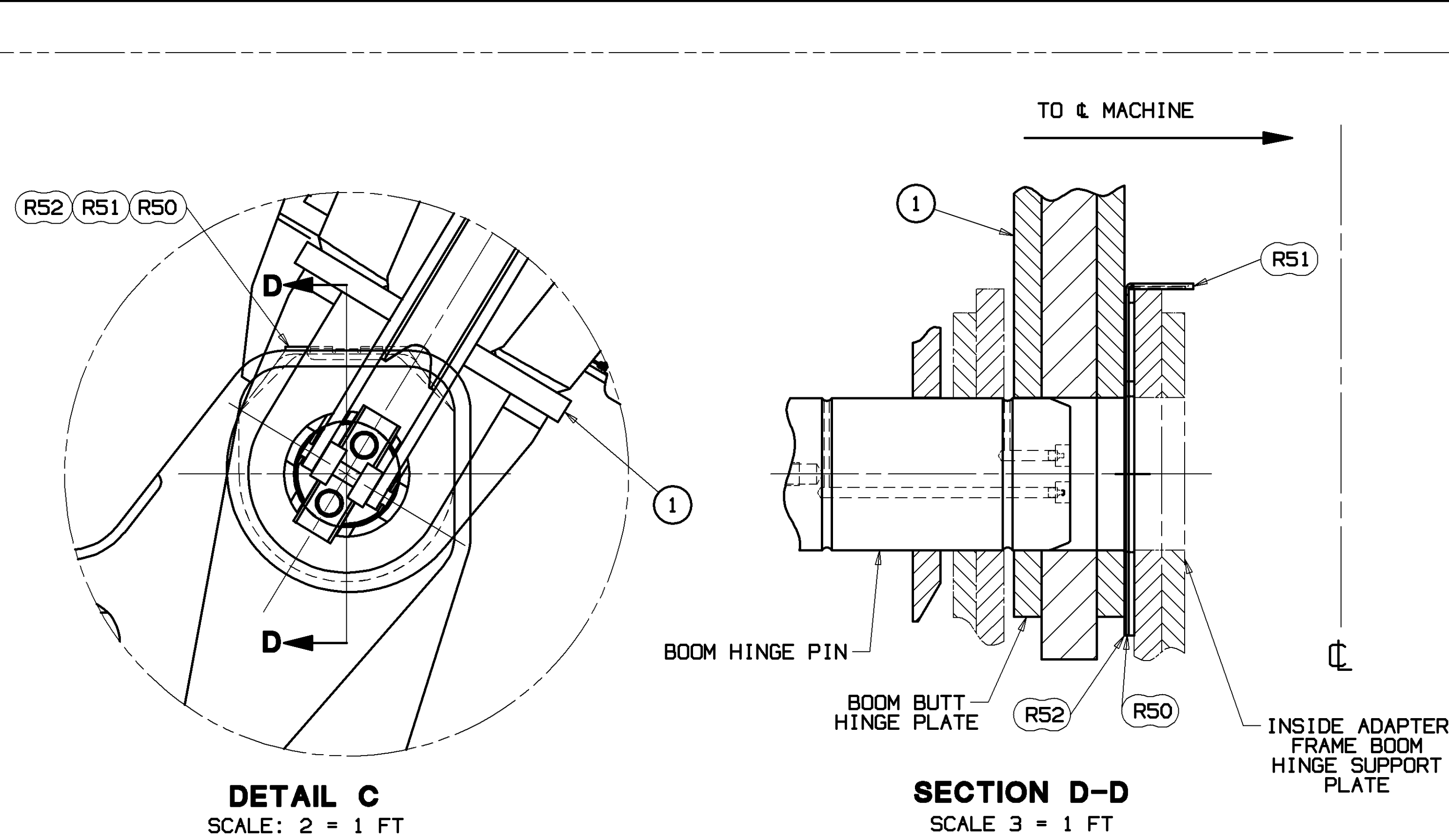


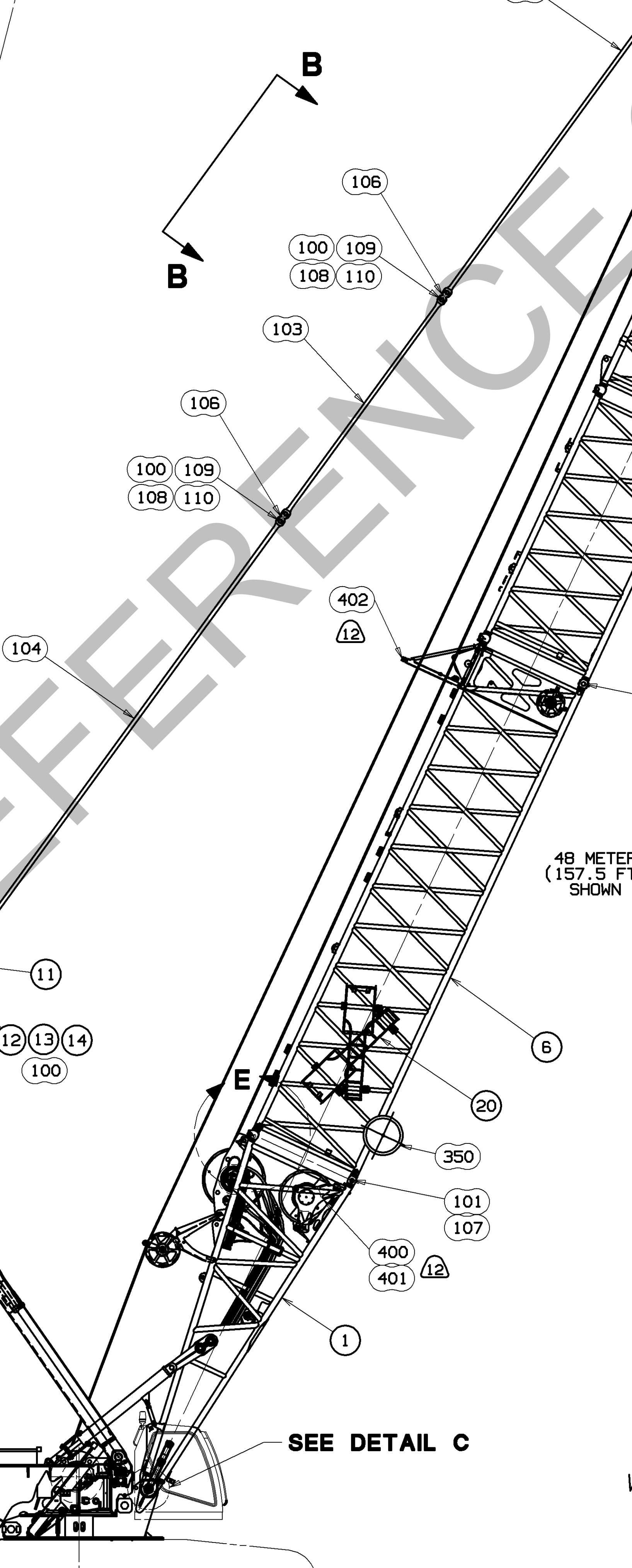
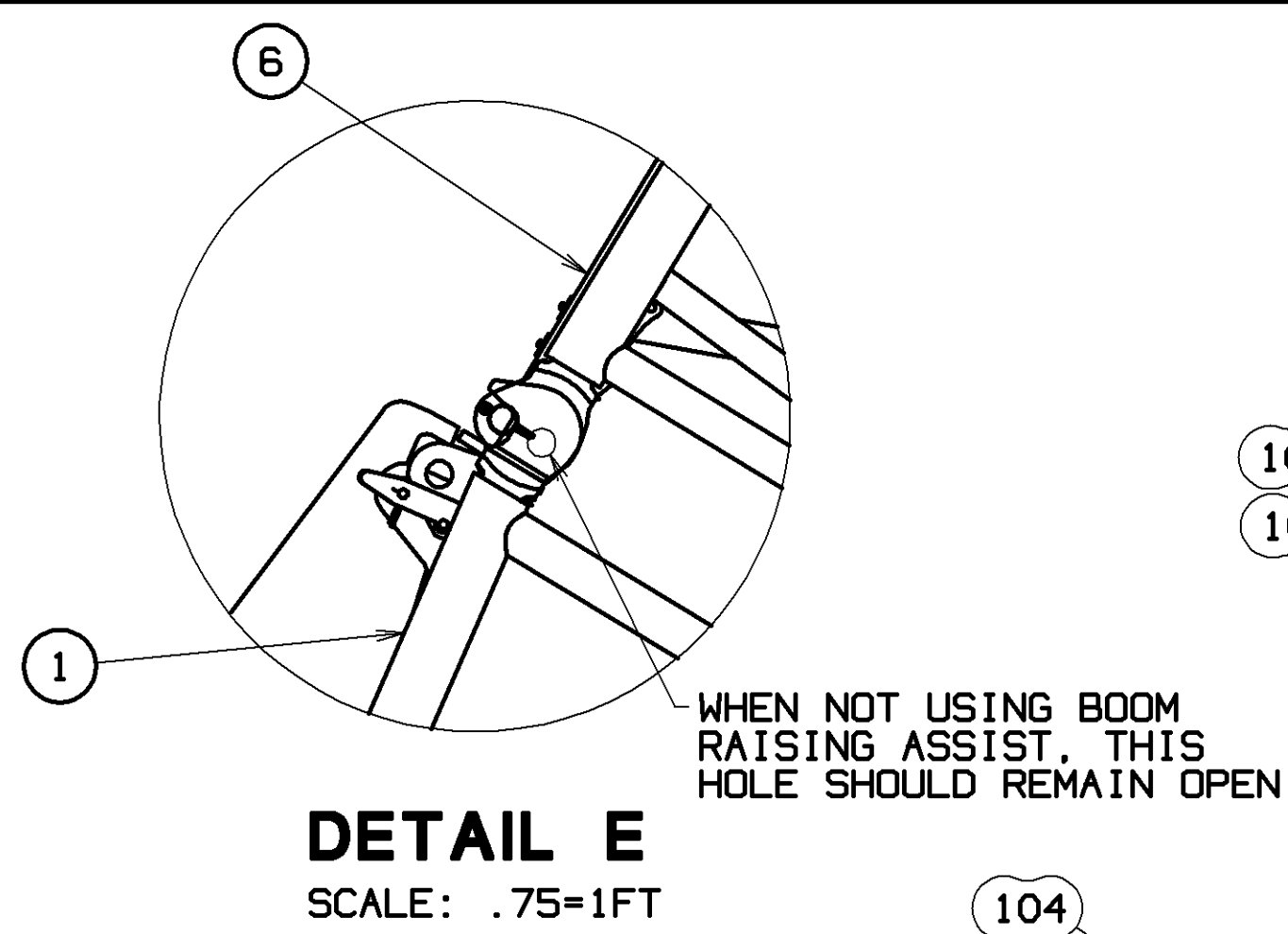
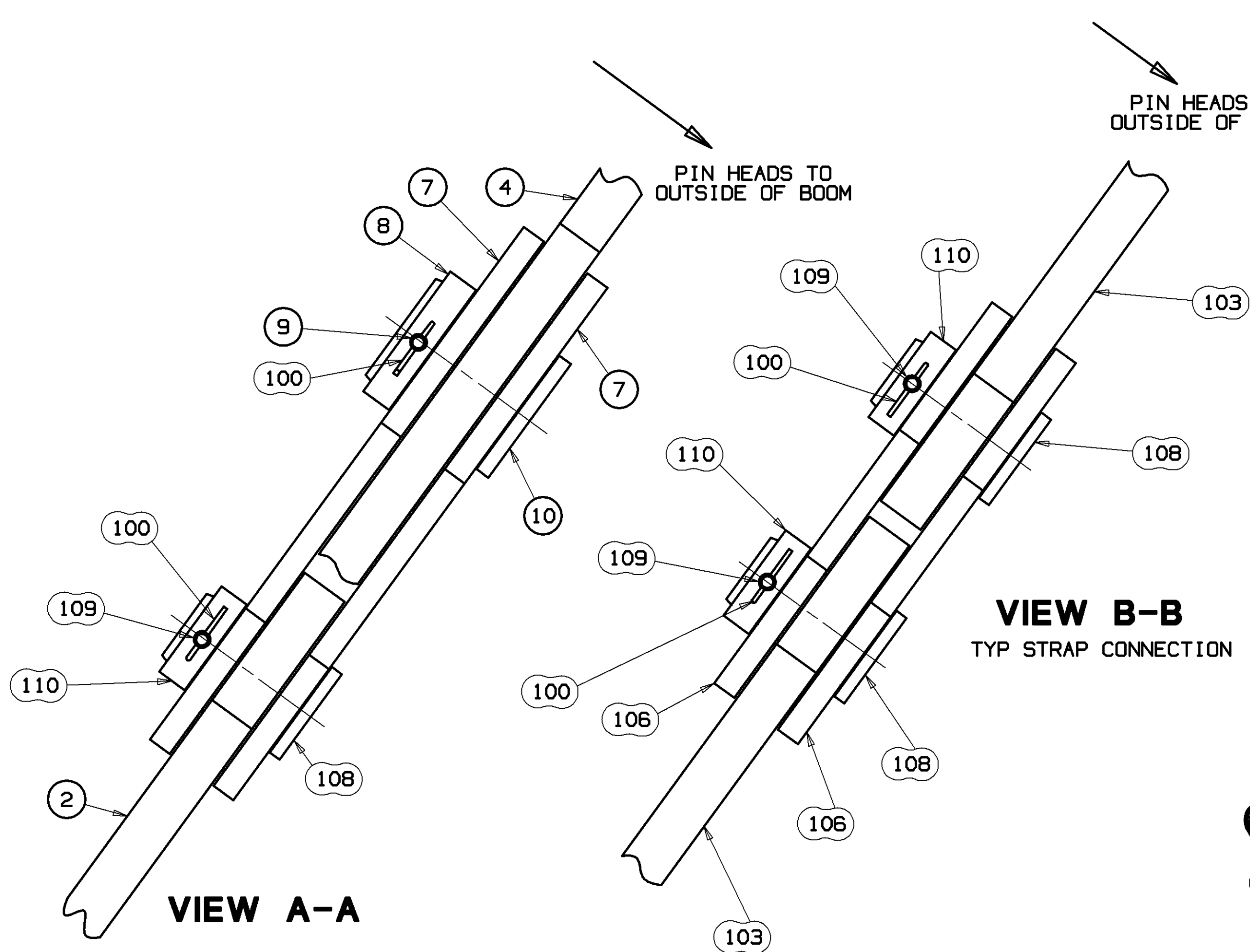
REQ'D. FOR VARIOUS BOOM LENGTHS

ITEM NO.	102	103	105	104	106	107	101	108	110	109	100	114	115	116	117	R53	118
BOOM LENGTH	INSERT 6 M (19.7 FT) ASSY	STRAP 6 M (19.7 FT)	INSERT 12 M (39.4 FT) ASSY	STRAP 12 M (39.4 FT)	LINK	PIN	PIN SAFETY	PIN	COLLAR	PIN	PIN COTTER	PIN COTTER	LINK, STRAP STORAGE	PIN	LINK, STRAP STORAGE	INTER- MEDIATE SUSPENSION SEE (11)	INSERT #58 12 M W/ BACKSTAY LUGS (39.4 FT) ASSY
METERS	FEET																
30	98.4	0	0	0	2	8	6	6	12	12	12	32	40	12	8	20	0
36	118.1	1	2	0	2	12	8	8	16	16	16	40	16	4	4	8	0
42	137.8	0	0	0	4	12	8	8	16	16	16	40	16	4	4	8	0
48	157.5	1	2	0	4	16	10	10	20	20	20	48	32	8	8	16	0
54	177.2	0	0	1	6	16	10	10	20	20	20	48	32	8	8	16	0
60	196.9	1	2	1	6	20	12	12	24	24	24	56	48	12	12	24	0
66	216.5	0	0	2	8	20	12	12	24	24	24	56	48	12	12	24	0
72	236.2	1	2	2	8	24	14	14	28	28	28	64	64	16	16	32	0
78	255.9	0	0	3	10	24	14	14	28	28	28	64	64	16	16	32	1
84	275.6	1	2	3	10	28	16	16	32	32	32	72	80	20	20	40	1
90	295.3	0	0	4	12	28	16	16	32	32	32	72	80	20	20	40	1
96	315.0	1	2	4	12	32	18	18	36	36	36	80	96	24	24	48	1



BOOM BUTT SHIM INSTALLATION PROCEDURE

1. CENTER BOOM BUTT ON ROTATING BED.
2. INSERT THE THICKEST SHIM POSSIBLE BETWEEN THE BUTT HINGE PLATE AND THE INSIDE ADAPTER FRAME LUGS ON EACH SIDE OF THE MACHINE.
3. INSERT THE NEXT THICKEST SHIM POSSIBLE BETWEEN THE BUTT HINGE PLATE AND THE FIRST SHIM ON EACH SIDE OF THE MACHINE.
4. INSERT THE LAST SHIM IF POSSIBLE BETWEEN THE BUTT HINGE PLATE AND THE PREVIOUS SHIM ON BOTH SIDES OF THE MACHINE.
5. WITH THE SHIM TABS TO THE TOP SIDE RESTING ON THE ADAPTER FRAME HINGE SUPPORT PLATES, THE MAXIMUM BOOM BUTT SIDE PLAY IS TO BE 2mm.
6. ENGAGE BOOM HINGE PIN COMPLETELY.



VIEW SHOWING BOOM EQUIPPED WITH EXTENDED UPPER BOOM POINT

ITEM 106, 107, AND 101 QUANTITIES INCLUDE ITEMS THAT ARE STORED WHEN INTERMEDIATE SUSPENSION IS USED. (SEE SHT 4)

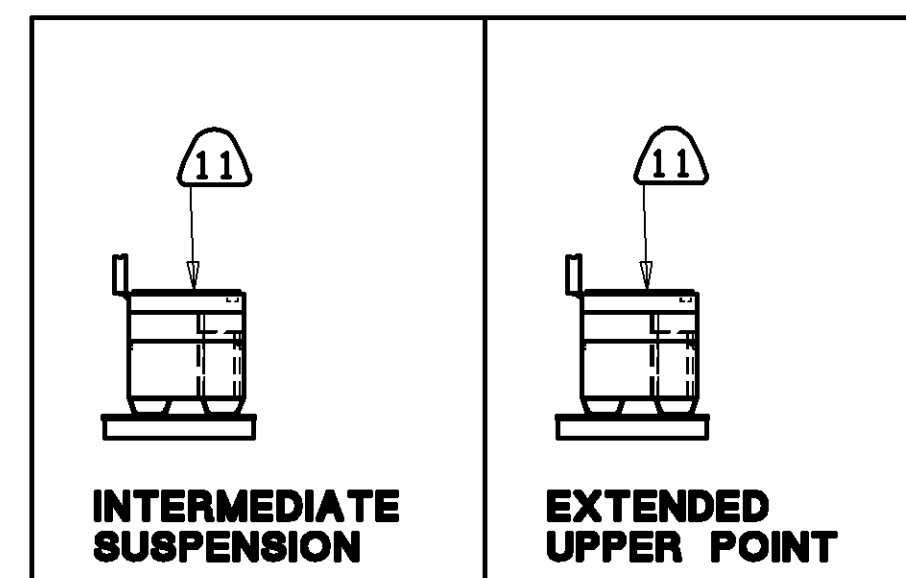
BOOM POINT ASSEMBLY MUST BE REMOVED FROM BOOM TOP WHEN EXTENDED UPPER BOOM POINT IS USED. REFER TO EXTENDED UPPER BOOM POINT CAPACITY CHART FOR SPECIFIC BOOM COMBINATIONS AND CONDITIONS.

IDENTIFICATION TAGS.

OBJECT NO.	ID TAGS
A10882	A10883 (OR) 81006893 (OR) 81017385
A11388	A11389 (OR) 81005899 (OR) 81006895
A11396	A11352 (OR) 81005868 (OR) 81006897 (OR) A18714
A11543	A11544 (OR) A17834 (OR) 81006890 81016137 (OR) 81016715 (OR) 81017393
A10789	A10790 (OR) A17189 (OR) 81005680
A11531	A11532 (OR) A17211 (OR) 81005679 (OR) 81016711

ITEM 19 (PARTS BOX) CONTAINS PARTS OF ITEMS R53 (INT. SUSP), 250 (UPPER BOOM POINT), 300 (EXTENDED UPPER BOOM POINT) TO BE SHIPPED AS A LOOSE ITEM IN JOB BOX (81007957).

ITEMS 400, 401 AND 402 ARE TO BE USED FOR THE AUX DRUM OPTION.



ITEM NO.	DESCRIPTION	QUANTITY	MATERIAL	UNIT	ASSEMBLY
1	BOOM ASSEMBLY #58 A10415	1			
2	1 BUTT ASSY #58 8.0 M	1	A10882	10	
3	2 STRAP TOP #58 BOOM 40 X 83	2	A10917	10	
4	2 STRAP 5 METER #58 BOOM 40 X 83	2	A10919	10	
5	1 TOP ASSY #58 5.0 M	1	A11388	10	
6	1 INSERT TRANSITION ASSY #58 5.0 M	1	A11396	10	
7	1 INSERT 12.0 M ASSY #58 W/AUX SHEAVES	1	A11543	10	
8	4 LINK #58 BOOM TOP	4	A11676	10	
9	2 COLLAR 101 mm ID	2	A12945	10	
10	2 PIN 2 HOLE 12.7 DIA X 128.0 LG	2	A12946	10	
11	2 PIN 1 HOLE W/HD 100.0 DIA X 92.3 LG	2	A12944	10	
12	4 LINK #58 BOOM STRAP	4	A14907	10	
13	2 PIN 1 HOLE W/HD 92.0 LG	2	A14926	10	
14	2 COLLAR	2	A14925	10	
15	2 PIN 2 HOLE 12.7 DIA	2	A14929	10	
16					
17					
18					
19	1 PARTS BOX PALLET ASSY BOOM	1	81034821	11	
20	1 BOOM ASSY #58 LADDER STORAGE	1	A13170	10	
21					

NO. REQ'D. FOR THE FOLLOWING ITEMS ARE IN TABLES

100	PIN COTTER .188 X 1.50	562085
101	PIN SAFETY .234 OD X 5.00	563640 8
102	INSERT 6 M ASSY #58 (MEDIUM)	A10789 6
103	STRAP 6 METER #58 BOOM 40 X 83	A10918
104	STRAP 12 METER #58 BOOM 40 X 83	A10920
105	INSERT 12 M ASSY #58 (MEDIUM)	A11531 10
106	LINK #58 BOOM STRAP	A11539 8
107	PIN 1 HOLE W/HD 76.2 DIA X 160.4 LG	A13294 8
108	PIN 1 HOLE W/HD 65.0 DIA X 92.0 LG	A11798
109	PIN 2 HOLE 12.7 DIA X 93.0 LG	A11799
110	COLLAR 66.0 ID	A11800
111		
112		
113		
114	PIN COTTER .125 X 1.50	562045
115	LINK, STRAP STORAGE	A11538
116	PIN 2 HOLES, 19.0 DIA X 132.0 LG	A11795
117	LINK, STRAP STORAGE	A11537
118	INSERT ASSY #58 12M (MEDIUM) W/LUG	81017299
119		
120		
121		
122		

OPTION 1: HOOK BLOCKS

200		
201	1 HOOK & WEIGHT BALL ASSY 18 MT (20 US)	A13737
202	1 HOOK BLOCK ASSY 41 MT (45 US)	236503 4
203	1 HOOK BLOCK ASSY 226 MT (250 US)	A13155
204	1 HOOK BLOCK ASSY 100 MT (110 US)	A13154
205	1 HOOK BLOCK ASSY 408 MT (450 US)	A07752
206	1 HOOK BLOCK ASSY 317 MT (350 US)	A08833
207	1 BLOCK 226 METRIC TON DUPLEX HOOK	81015106
208		
209	1 BLOCK 100 METRIC TON, 28 MM ROPE	A15927
210	1 BLOCK 100MT 3 SHEAVE	A17740
211		
212	1 HOOK BLOCK ASSY DUPLEX 180 MT (200 US)	81007437
213	1 BLOCK DUPLEX 100MTON 28MM 3 SHEAVE	81016675

OPTION 2: UPPER BOOM POINT (9/11)

250	1 BOOM POINT UPPER ASSY	81034218
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OPTION 3: EXTENDED UPPER BOOM POINT (9/11/16)

300	1 BOOM POINT UPPER ASSY EXTENDED #58	A11993
301		

OPTION 4: LUFFING JIB PREP (12)

400	1 DRUM ASSY LUFFING/AUX	A10888
401	1 PAWL ASSEMBLY LUFFING DRUM	A13917
402	1 GUIDE WIRE ROPE ASSY LUFFING/AUX LINE	A11946

OPTION 5: TAGLINE ASSY

350	1 TAGLINE ASSY #58 BOOM	81002643
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JOB BOX REFERENCE ITEMS (11)

R50	2 SHIM .119 (IN.) THK	A13178
R51	2 SHIM .060 THK	A15521
R52	2 SHIM .059 (IN.) THK	A15522
R53	1 BOOM ASSY #58 INTERMEDIATE SUSPENSION	A13137 1

SEE TABLE FOR NUMBER REQUIRED:
78 M (255.9 FT), 84 M (275.6 FT), 90 M (295.3 FT) AND 96 M (315 FT) BOOM REQUIRES INTERMEDIATE SUSPENSION ITEM R53.
(SEE SHT 2 AND 4)

MAXIMUM NUMBER OF 6 METER INSERTS = 1.

6 METER INSERT MUST BE ADJACENT TO 12 METER INSERT W/AUX SHEAVES.

USE FOR 2 PART LINE ON UPPER BOOM POINT. ALSO USED FOR MACHINE ASSEMBLY WITH 9.75 M (32 FT) LIVE MAST.

SEE SHEET 2 FOR BOOM MAKEUP.

SEE (2), (3) AND (10).

ALL JIB BACKSTAY STRAPS, LINKS AND PINS STORED WITH INSERTS MUST BE REMOVED FOR USE WITH THIS ASSEMBLY.

SUPERSEDES A10415 SHEET 1 OF 04-22-13

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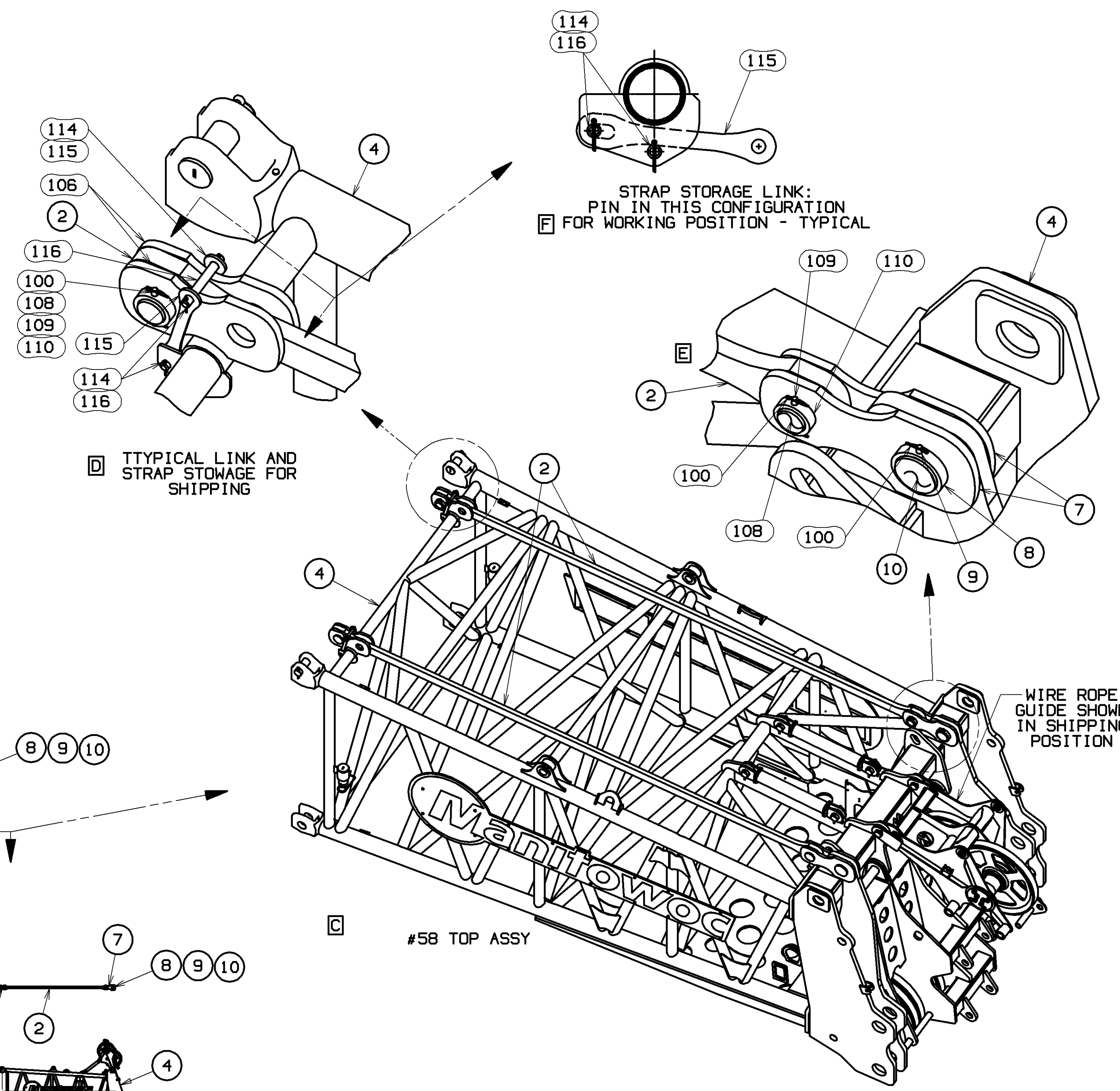
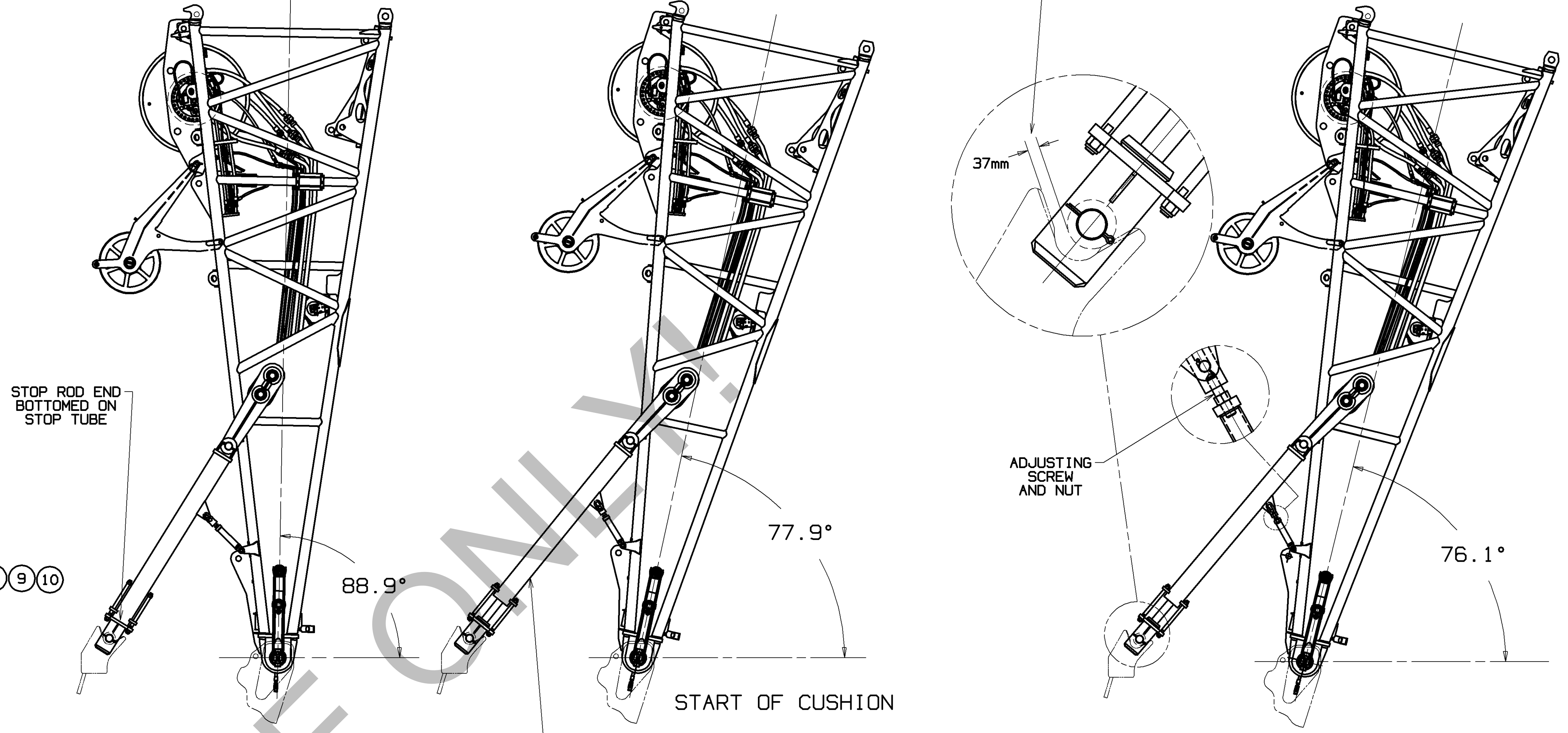
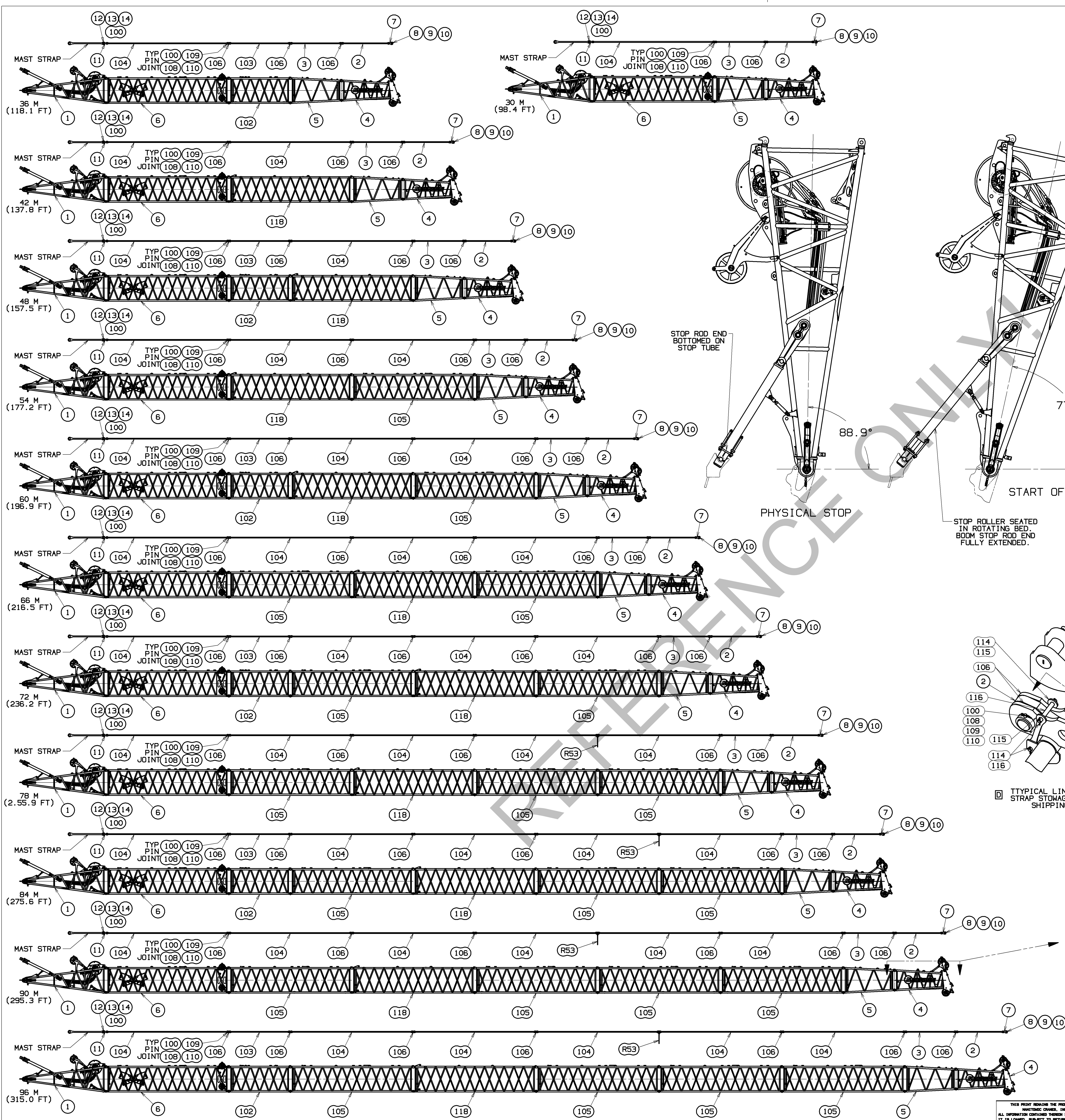
PRIVATE LABELING
REQUIREMENT TO
CONFORM TO
SPECIFICATION
S629103794 FOR
COMPONENTS LISTED
IN S62900-06-026

08-12-14

PATTERN NO.

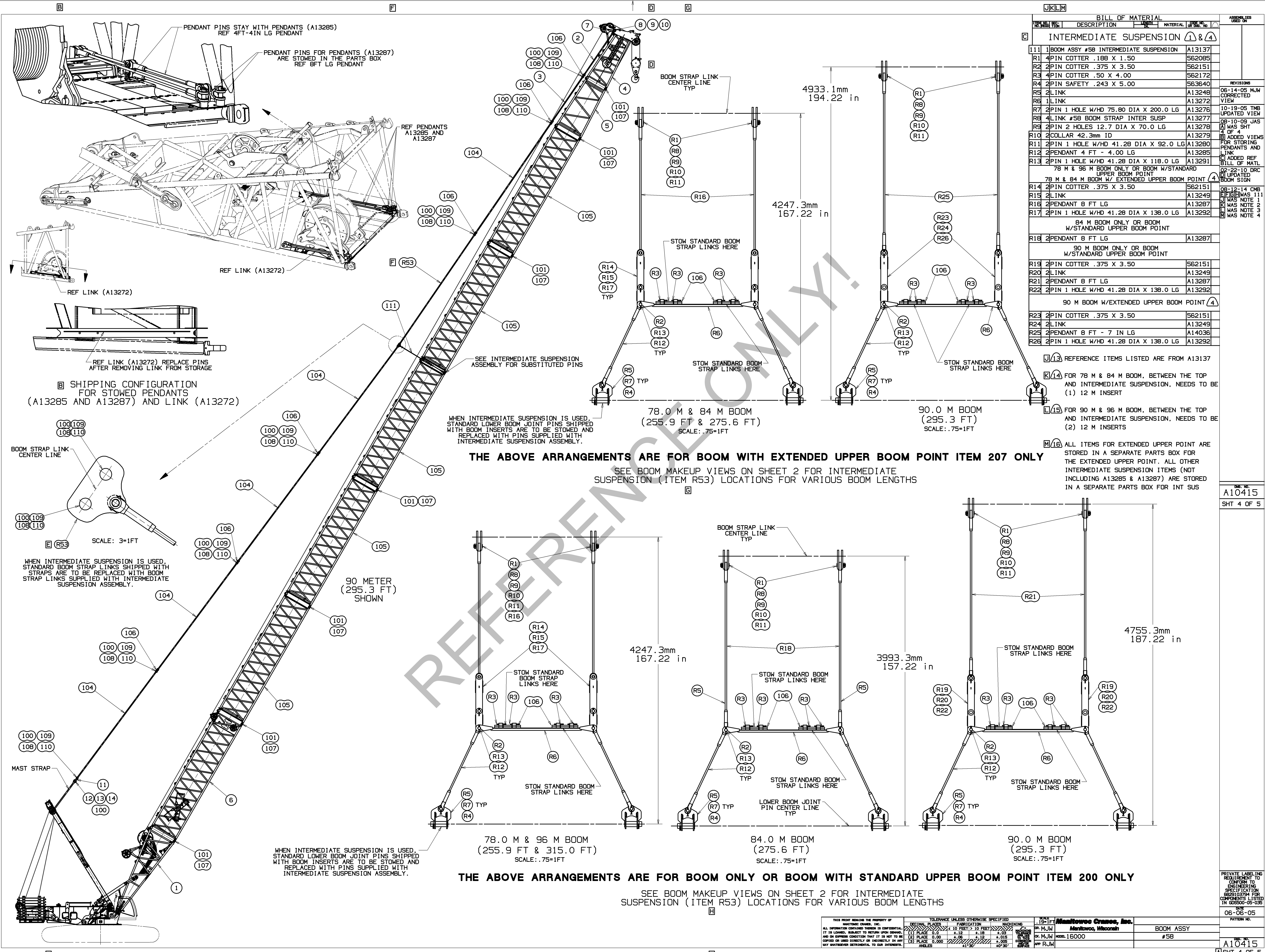
A10415

SHT 1 OF 5



BILL OF MATERIAL				ASSEMBLIES USED IN
QTY	DESCRIPTION	UNIT	MATERIAL	QTY
REVISIONS				
06-06-05 MJW ADDED SHT 4, INTERMEDIATE SUSPENSION DATA & 96 METER BOOM				
10-19-05 TMB UPDATED VIEWS				
08-10-09 JAS AT WAS SHT 2				
02-18-12 TK PICTURE				
04-02-12 KRW UPDATED ALL				
06-12-14 CNB BALLOON R53 WAS 111				
100-NO				
A10415				
SHT 2 OF 5				
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 86290-06-026				
02-14-05				
PATTERN NO.				
Manitowoc Cranes, Inc.			BOOM ASSY	
Marinette, Wisconsin			#58	
DR: MJW			MODEL 16000	
CK: MJW			APP: RJW	
SCALE: 1/8"=1'-0"			TOLERANCE UNLESS OTHERWISE SPECIFIED	
DECIMAL PLACES			FRACTIONS	
1 PLACE 0.1			1/16	
2 PLACE 0.01			1/32	
3 PLACE 0.001			1/64	
ANGLES			1°	

DO NOT SCALE THIS DRAWING



BILL OF MATERIAL				ASSEMBLIES USED IN
QTY NO. USED	ITEM NO.	DESCRIPTION	MATERIAL	
INTERMEDIATE SUSPENSION ① & ④				
111	1	BOOM ASSY #58 INTERMEDIATE SUSPENSION	A13137	
R1	4	PIN COTTER .188 X 1.50	562085	
R2	2	PIN COTTER .375 X 3.50	562151	
R3	4	PIN COTTER .50 X 4.00	562172	
R4	2	PIN SAFETY .243 X 5.00	563640	
R5	2	LINK	A13248	REVISIONS 06-14-05 MJW CORRECTED VIEW
R6	1	LINK	A13272	
R7	2	PIN 1 HOLE W/HD 75.80 DIA X 200.0 LG	A13276	10-19-05 TMB UPDATED VIEW
R8	4	LINK #58 BOOM STRAP INTER SUSP	A13277	08-10-09 JAS A WAS SHT 4 OF 4
R9	2	PIN 2 HOLES 12.7 DIA X 70.0 LG	A13278	B ADDED VIEWS FOR STORING PENDANTS AND LINK
R10	2	COLLAR 42.3mm ID	A13279	A ADDED REF BILL OF MATL
R11	2	PIN 1 HOLE W/HD 41.28 DIA X 92.0 LG	A13280	02-22-10 DRC D UPDATED BOOM SIGN ④
R12	2	PENDANT 4 FT - 4.00 LG	A13285	
R13	2	PIN 1 HOLE W/HD 41.28 DIA X 118.0 LG	A13291	
78 M & 96 M BOOM ONLY OR BOOM W/STANDARD UPPER BOOM POINT				
78 M & 84 M BOOM W/ EXTENDED UPPER BOOM POINT ④				
R14	2	PIN COTTER .375 X 3.50	562151	08-12-14 CMB E F G H WAS 111
R15	2	LINK	A13249	I WAS NOTE 1
R16	2	PENDANT 8 FT LG	A13287	J WAS NOTE 2
R17	2	PIN 1 HOLE W/HD 41.28 DIA X 138.0 LG	A13292	K WAS NOTE 3
84 M BOOM ONLY OR BOOM W/STANDARD UPPER BOOM POINT				L WAS NOTE 4
R18	2	PENDANT 8 FT LG	A13287	
90 M BOOM ONLY OR BOOM W/STANDARD UPPER BOOM POINT				
R19	2	PIN COTTER .375 X 3.50	562151	
R20	2	LINK	A13249	
R21	2	PENDANT 8 FT LG	A13287	
R22	2	PIN 1 HOLE W/HD 41.28 DIA X 138.0 LG	A13292	
90 M BOOM W/EXTENDED UPPER BOOM POINT ④				
R23	2	PIN COTTER .375 X 3.50	562151	
R24	2	LINK	A13249	
R25	2	PENDANT 8 FT - 7 IN LG	A14036	
R26	2	PIN 1 HOLE W/HD 41.28 DIA X 138.0 LG	A13292	

U13 REFERENCE ITEMS LISTED ARE FROM A13137

K14 FOR 78 M & 84 M BOOM, BETWEEN THE TOP AND INTERMEDIATE SUSPENSION, NEEDS TO BE (1) 12 M INSERT

L15 FOR 90 M & 96 M BOOM, BETWEEN THE TOP AND INTERMEDIATE SUSPENSION, NEEDS TO BE (2) 12 M INSERTS

M16 ALL ITEMS FOR EXTENDED UPPER POINT ARE STORED IN A SEPARATE PARTS BOX FOR THE EXTENDED UPPER POINT. ALL OTHER INTERMEDIATE SUSPENSION ITEMS (NOT INCLUDING A13285 & A13287) ARE STORED IN A SEPARATE PARTS BOX FOR INT SUS

10415
SHT 4 OF 5

PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 86290-06-056

DATE 06-06-05

PATTERN NO.

10415
SHT 4 OF 5

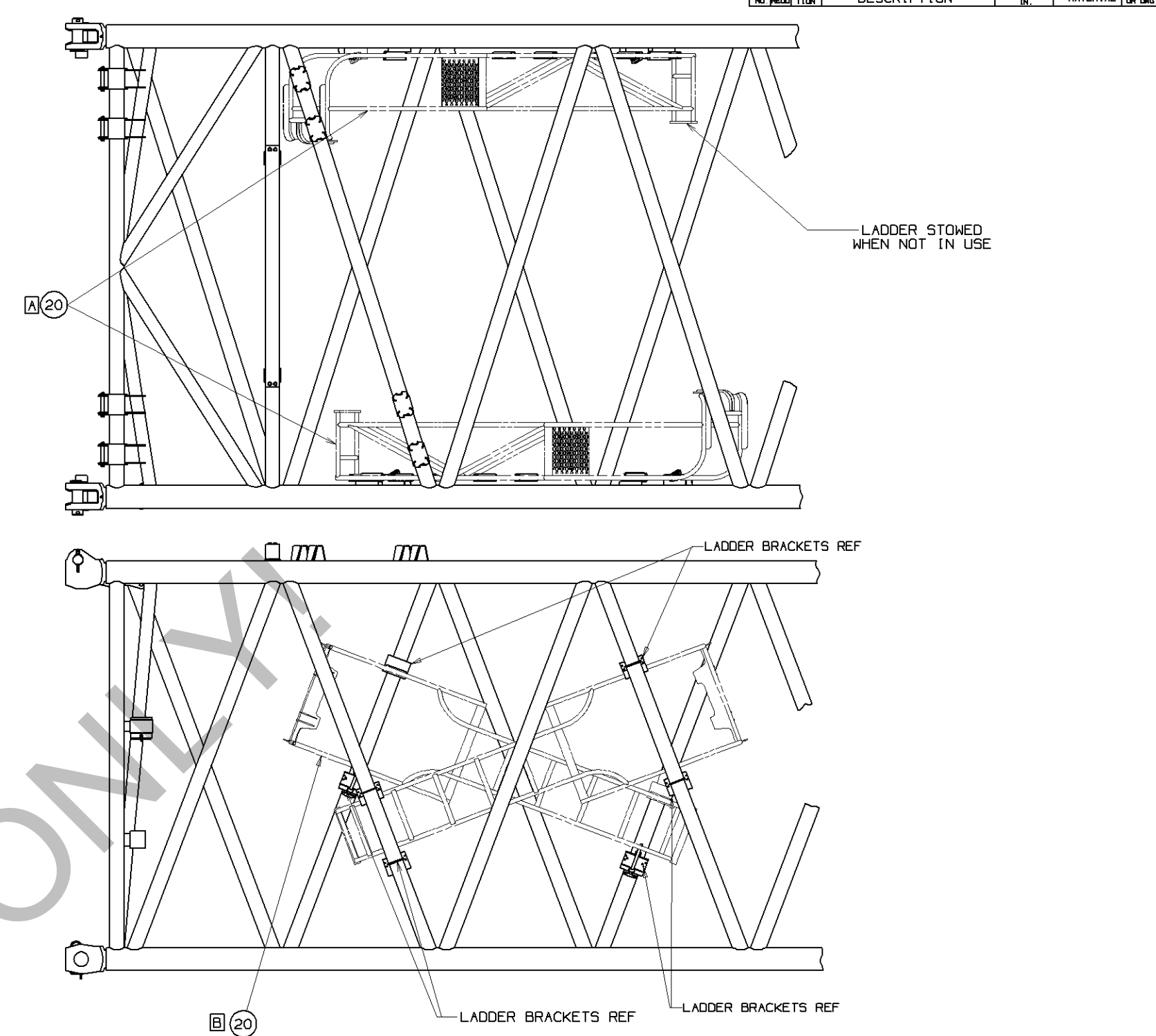
DO NOT SCALE THIS DRAWING

THE ABOVE ARRANGEMENTS ARE FOR BOOM WITH EXTENDED UPPER BOOM POINT ITEM 207 ONLY

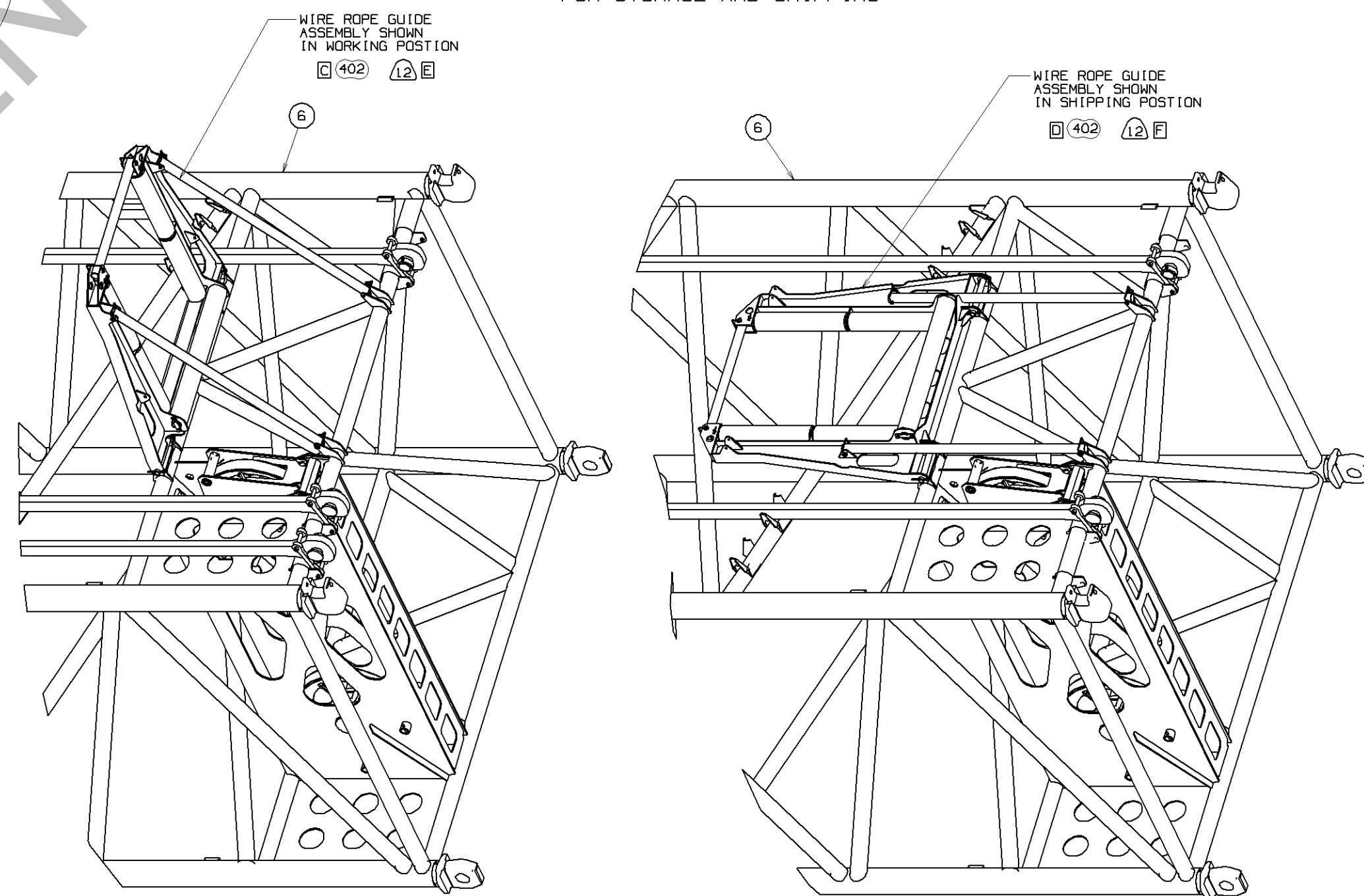
SEE BOOM MAKEUP VIEWS ON SHEET 2 FOR INTERMEDIATE SUSPENSION (ITEM R53) LOCATIONS FOR VARIOUS BOOM LENGTHS

THE ABOVE ARRANGEMENTS ARE FOR BOOM ONLY OR BOOM WITH STANDARD UPPER BOOM POINT ITEM 200 ONLY

SEE BOOM MAKEUP VIEWS ON SHEET 2 FOR INTERMEDIATE SUSPENSION (ITEM R53) LOCATIONS FOR VARIOUS BOOM LENGTHS



WIRE ROPE GUIDE SHOWN IN STOWAGE POSITION



WIRE ROPE GUIDE IN SHIPPING POSITION

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ORIGINAL PLACES	FABRICATION	MACHINING																
(1)  .0004	(1)  .0004	(1)  .0004																
(2)  .0004	(2)  .0004	(2)  .0004																
(3) .0004	(3) .0004	(3) .0004																
				DR. JAS MCH. MJW APP. HJW MOD. 16000		UCL NCL A10415												