

- 13 ITEM 106, 107 AND 101 QUANTITIES INCLUDE ITEMS THAT ARE STOWED WHEN INTERMEDIATE SUSPENSION IS USED. (SEE SHT 6)
- 14 SEE SHEET 5 FOR JIB STOP SETUP AND OPERATION.
- 15 ADD SHIMS (ITEM R50) AS REQUIRED TO INSIDE SPACE BETWEEN JIB BUTT AND BOOM TOP. BOTH SIDES, TO CENTER JIB BUTT AND FILL EXISTING CLEARANCE.
- 16 78 M (255.9 FT), 84 M (275.6 FT), 90 M (295.3 FT), AND 96 M (315.0 FT) BOOM REQUIRES INTERMEDIATE SUSPENSION ITEM 252. SEE BOOM ASSEMBLY A14546 FOR INTERMEDIATE SUSPENSION INFORMATION.
- 17 WIRE ROPE GUIDE IN BOOM BUTT MUST BE STOWED FOR USE WITH FIXED MAST.
- 18 SECURE DEAD END TO BOOM WHEN NOT IN USE. MAY CAUSE DAMAGE TO JIB BUTT DURING ERECTION.
- 19 WIRE ROPE GUIDE, LUFFING/AUX DRUM AND PAWL ASSY ARE REQUIRED FOR LUFFING JIB
- 20 ITEM 31 (PARTS BOX) CONTAINS PART OF ITEM R51 (JIB ASSY INT. SUSP), ITEM R52 (BOOM ASSY INT. SUSP) TO BE SHIPPED AS A LOOSE ITEM IN JOB BOX (81007957).

BILL OF MATERIAL

LUFFING JIB ASSY #59 JIB

QTY	DESCRIPTION	UNIT	MATERIAL	QTY	REVISIONS
1	PIN		172592		
2	UPPER JIB POINT WITH ROLLER		174211	4	
3	PIN COTTER .38 X 2.50 (inch)		562149		
4	WIRE ROPE 1.00 DIA W/ EYES		81015482		
5	PIN 2 HOLE 146.0 X 98.0 LG		A10812		
6	COLLAR 147 MM ID		A10814		
7	2STRAP BASIC #59 BACKSTAY 40 X 2100		A10914	10	
8	2STRAP TOP #59 JIB 40 X 10216		A10915	10	
9	2STRAP BASIC #59 BACKSTAY 40 X 6393		A10916	10	
10					
11	4LINK #58 BOOM TOP		A11676		
12	2PIN 1 HOLE W/HD 100.0 DIA X 92.3 LG		A12944		
13	2COLLAR 101 MM ID		A12945		
14	2PIN 2 HOLE 12.7 DIA X 128.0 LG		A12946		
15	4LINK #58 BOOM STRAP		A13237		
16	1TOP ASSY #59 11 M		A13417	11	
17	1STRUT ASSY MAIN - #59 LUFF JIB		A13471		
18	1STRUT ASSY JIB - #59 LUFF JIB		A13476		
19	2STRUT STOP ASSY LUFFING JIB #59		A13554		
20	1JIB STOP ASSY #59 JIB		A14093	14	
21	8LINK #59 BACKSTAY STRAP		A13644		
22	2STRAP BASIC #59 BACKSTAY 40 X 83		A13645	6	
23	4LINK #59 BACKSTAY STRAP		A13646		
24	2STRAP BASIC #59 JIB 40 X 83		A13647		
25	8PIN 2 HOLE 12.7 DIA X 185.0 LG		A13741		
26	1BUTT ASSY #59 7.00 M		A13753	11	
27					
28	1DRUM ASSY LUFFING/AUX		A10888	19	
29	1PAWL ASSEMBLY LUFFING/AUX DRUM		A13917	19	
30	1GUIDE WIRE ROPE ASSY LUFFING/AUX LINE		A11946	19	
31	1PARTS BOX		81034119	20	

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

100	PIN COTTER .188 X 1.50 (inch)	562085
101	PIN SAFETY .234 OD X 5.00 (inch)	563640
102	INSERT 12 M ASSY #59	A10712
103	STRAP 6 M #58 BOOM 40 X 5800	A10918
104	STRAP 12 M #58 BOOM 40 X 11800	A10920
105	INSERT 6 M ASSY #59	A11497
106	LINK #58 BOOM STRAP	A11539
107	PIN 1 HOLE W/HD 76.2 DIA X 160.4 LG	A13294
108	PIN 1 HOLE W/HD 65.0 DIA X 92.2 LG	A11798
109	PIN 2 HOLE 12.0 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 STOWAGE	A11538
116	PIN 2 HOLES, 19.0 DIA X 132.0 LG	A11795
117	LINK STOWAGE	A11537

OPTION: HOOK BLOCKS

200	1WEIGHT BALL SWIVEL 20 TON 1.125 WR	A13737
201	1HOOK BLOCK ASSY 41 MT (45 US)	236503
202	1HOOK BLOCK ASSY 200 TON	A14824
203	1HOOK BLOCK ASSY 100 MT (110 US)	A13154
204	1HOOK BLOCK ASSY 226 MT (250 US)	A13155
205	1BLOCK 100 METRIC TON, 28 MM ROPE	A15927
206	1HOOK BLOCK ASSY DUPLEX 180 MT (200 US)	81007437
207	1BLOCK 226 METRIC TON DUPLEX HOOK	81015106
208	1BLOCK DUPLEX 100MTON 28MM 3 SHEAVE	81016675
209		

REFERENCE ITEMS (JOB BOX ITEMS)

R50	2SHIM PACK	A16673
R51	JIB ASSY #59 INTERMEDIATE SUSPENSION	A13849
R52	BOOM ASSY #58 W/MAST INTER. SUSPENSION	A15593

1 REQUIRES BOOM TOP WIRE ROPE GUIDE EQUIPPED WITH KEEPER PLATES AND PINS FOR LUFFING JIB (REFERENCE BOOM TOP ASSY A11388 SHT 2)

2 SEE SHEET 2 FOR BOOM/BACKSTAY MAKEUP.

3 SEE SHEET 3 FOR JIB/JIB STRAP MAKEUP.

4 REQUIRED FOR JIB ERECTION.

5 REFER TO LUFFING JIB RAISING PROCEDURE FOR RAISING AND LOWERING BOOM AND JIB.

6 SEE VIEW D AND TABLE FOR PROPER ADJUSTMENT.

7 66 M (216.5 FT), 72 M (236.2 FT), 78 M (255.9 FT), AND 84 M (275.6 FT) JIB REQUIRES INTERMEDIATE SUSPENSION ITEM R51. (SEE SHEET 3 & 6 FOR INTERMEDIATE SUSPENSION INFORMATION).

8 SEE DELTA 11 AND 14

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

10 DRAWING A10913

11 IDENTIFICATION TAGS.

OBJECT NO.	ID TAGS
A11497	A10714 (OR) A17268
A10712	A11500 (OR) A17261
A13753	A13755
A13417	A13419

12 MAXIMUM NUMBER OF 6 METER INSERTS = 1. 6 METER INSERT MUST BE ADJACENT TO BUTT.

DATE: 08-22-14

REV: 1

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REQ'D. FOR VARIOUS JIB LENGTHS												
ITEM NO.		105	103	102	104	106	107	101	108	110	109	100
JIB 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
METERS	FEET											
24	78.7	1	2	0	0	8	4	4	12	12	12	36
30	98.4	0	0	1	2	8	4	4	12	12	12	36
36	118.1	1	2	1	2	12	6	6	16	16	16	44
42	137.8	0	0	2	4	12	6	6	16	16	16	44
48	157.5	1	2	2	4	16	8	8	20	20	20	52
54	177.2	0	0	3	6	16	8	8	20	20	20	52
60	196.9	1	2	3	6	20	10	10	24	24	24	60
66	216.5	0	0	4	8	20	10	10	24	24	24	60
72	236.2	1	2	4	8	24	12	12	28	28	28	68
78	255.9	0	0	5	10	24	12	12	28	28	28	68
84	275.6	1	2	5	10	28	14	14	32	32	32	76

REQ'D. FOR VARIOUS BOOM LENGTHS												
ITEM NO.		103	104	106	108	109	110	100	252	114	115	116
BOOM LENGTH		STRAP 6 M (19.7 FT)	STRAP 12 M (39.4 FT)	LINK	PIN	PIN	COLLAR	PIN COTTER	INTER-MEDIATE SUSPENSION SEE (16, 20)	PIN COTTER	LINK	PIN
METERS	FEET											
42	137.8	0	4	12	22	22	22	48	0	24	8	12
48	157.5	2	4	16	26	26	26	56	0	40	12	20
54	177.2	0	6	16	26	26	26	56	0	40	12	20
60	196.9	2	6	20	30	30	30	64	0	56	16	28
66	216.5	0	8	20	30	30	30	64	0	56	16	28
72	236.2	2	8	24	34	34	34	72	0	72	20	36
78	255.9	0	10	24	34	34	34	72	1	72	20	36
84	275.6	2	10	28	38	38	38	80	1	88	24	44
90	295.3	0	12	20	38	30	38	80	1	88	24	44
96	315.0	2	12	32	42	42	42	88	1	104	28	52

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MANITOWOC CRANES, INC. 15-1F1 Manitowoc Cranes, Inc. Manitowoc, Wisconsin JIB LUFFING ASSY #59 JIB - MAXER

DATE: 08-22-14 REV: 1 FB1

DATE: 08-22-14 REV: 1 FB1

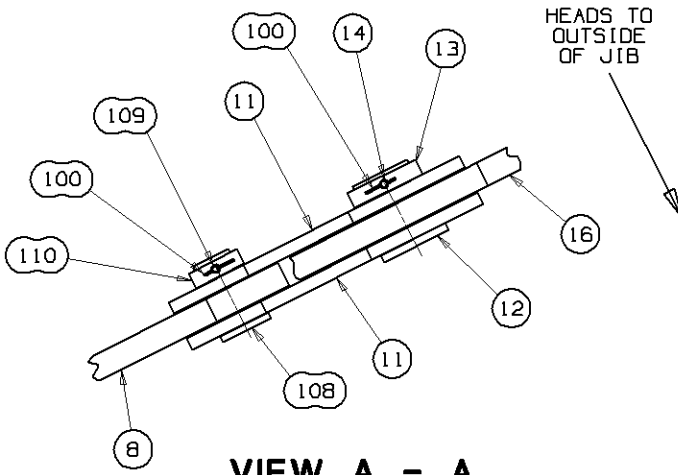
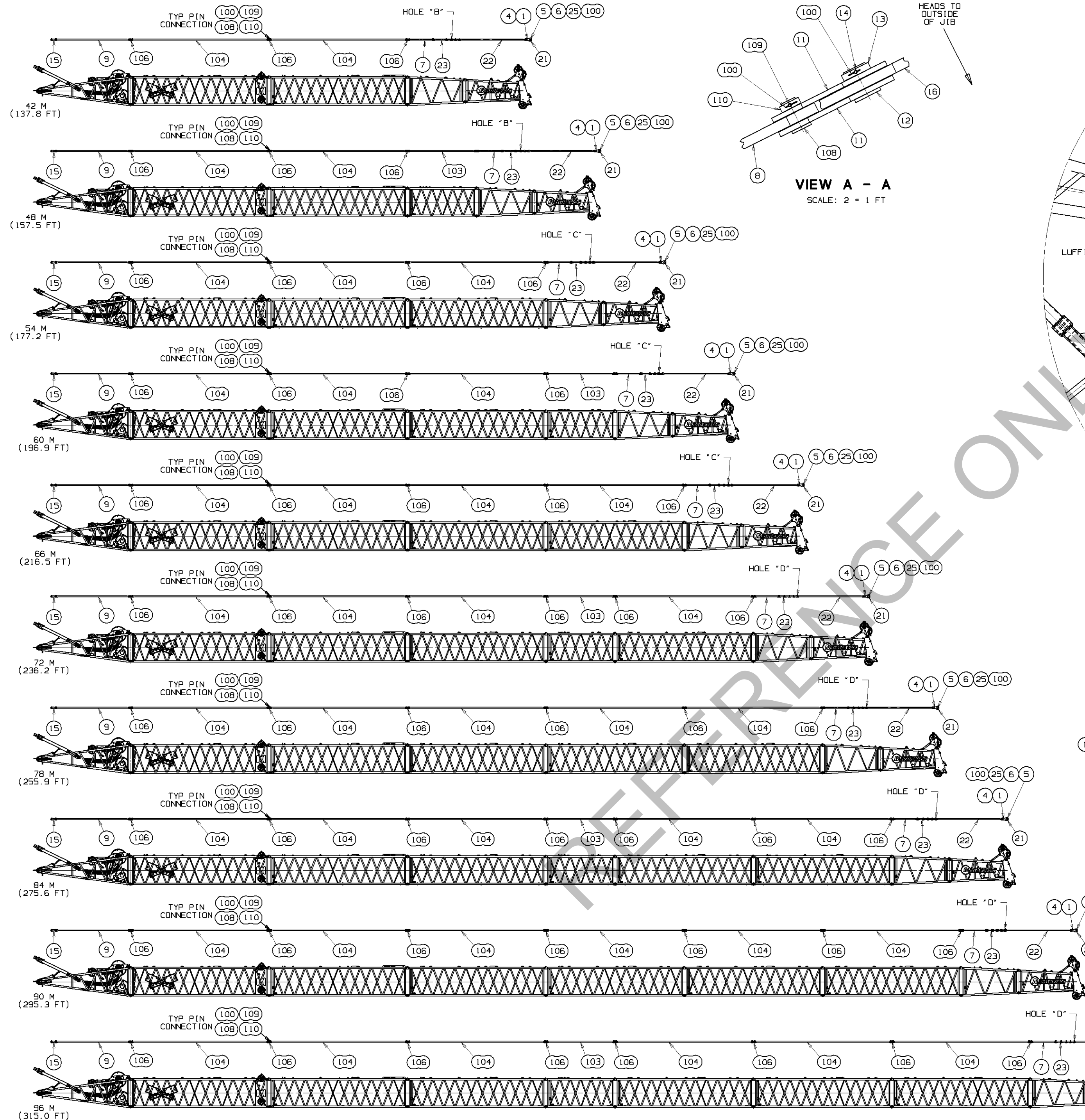
SUPERSEDES A13416 SHEET 1 OF 04-20-12

DATE: 08-22-14 REV: 1 FB1

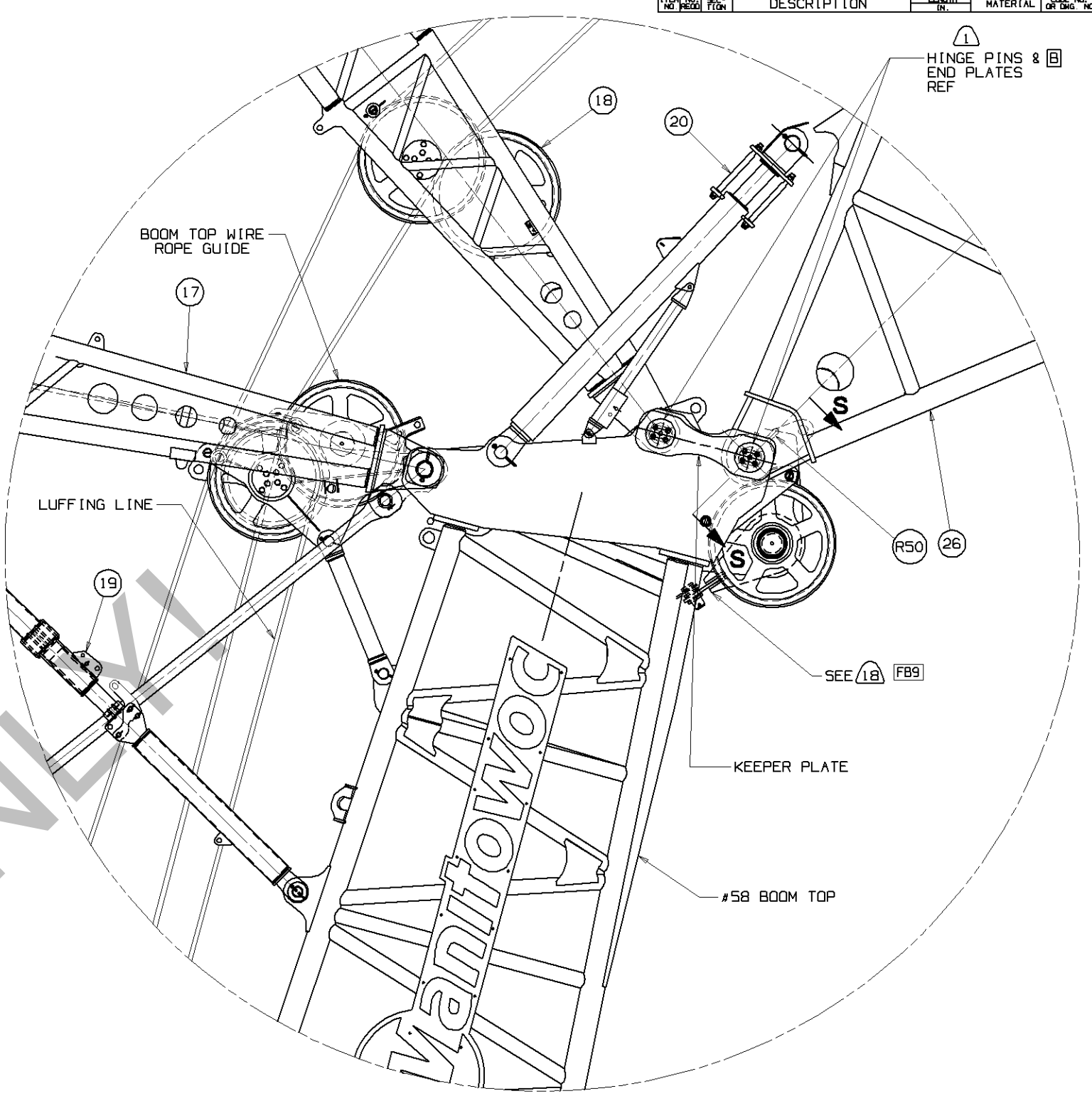
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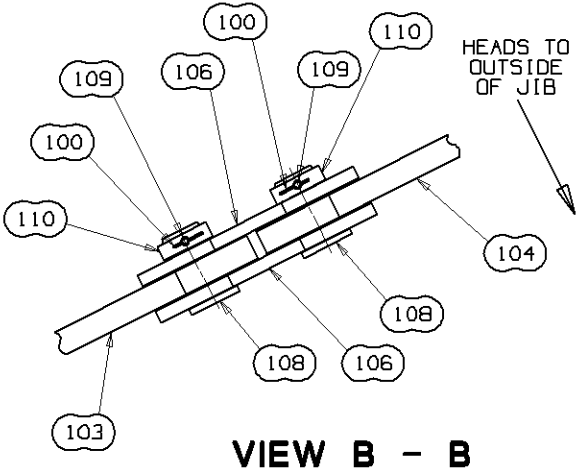




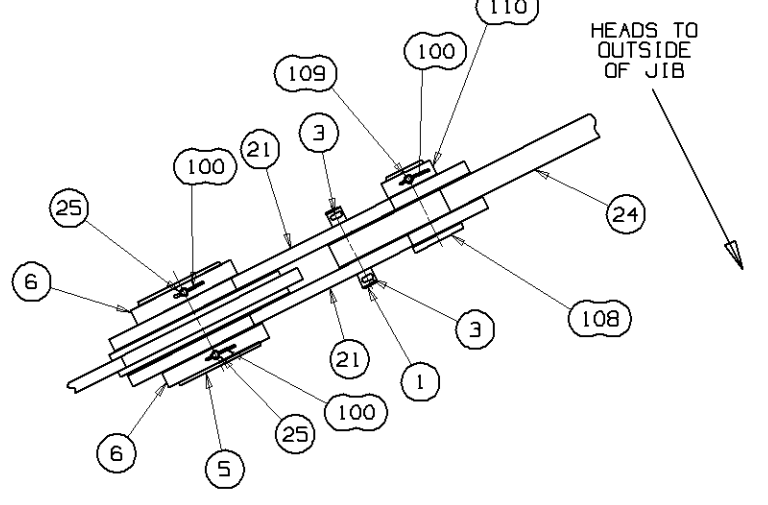
VIEW A - A  
SCALE: 2 = 1 FT



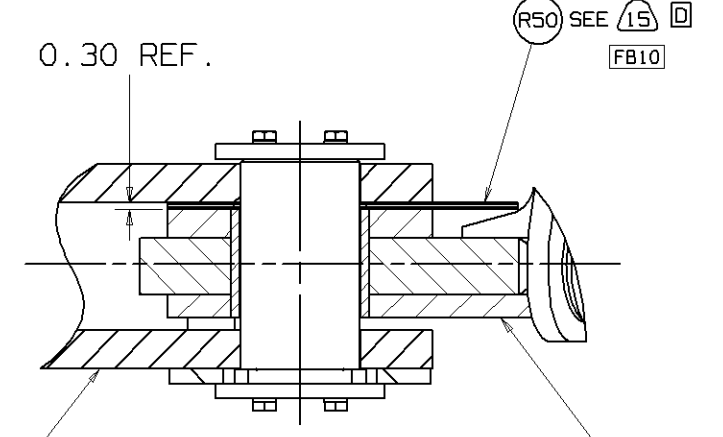
VIEW E  
SCALE: .75 = 1 FT



VIEW B - B  
TYP STRAP CONNECTION  
SCALE: 2 = 1 FT



VIEW C - C  
SCALE: 2 = 1 FT



SECTION S-S

SCALE: 3 = 1 FT  
TYPICAL BOTH SIDES

REQ'D. #58 BOOM/BACKSTAY STRAP ASSEMBLY  
SEE TABLE ON SHEET 1  
SCALE: .09=1FT

DO NOT SCALE THIS DRAWING

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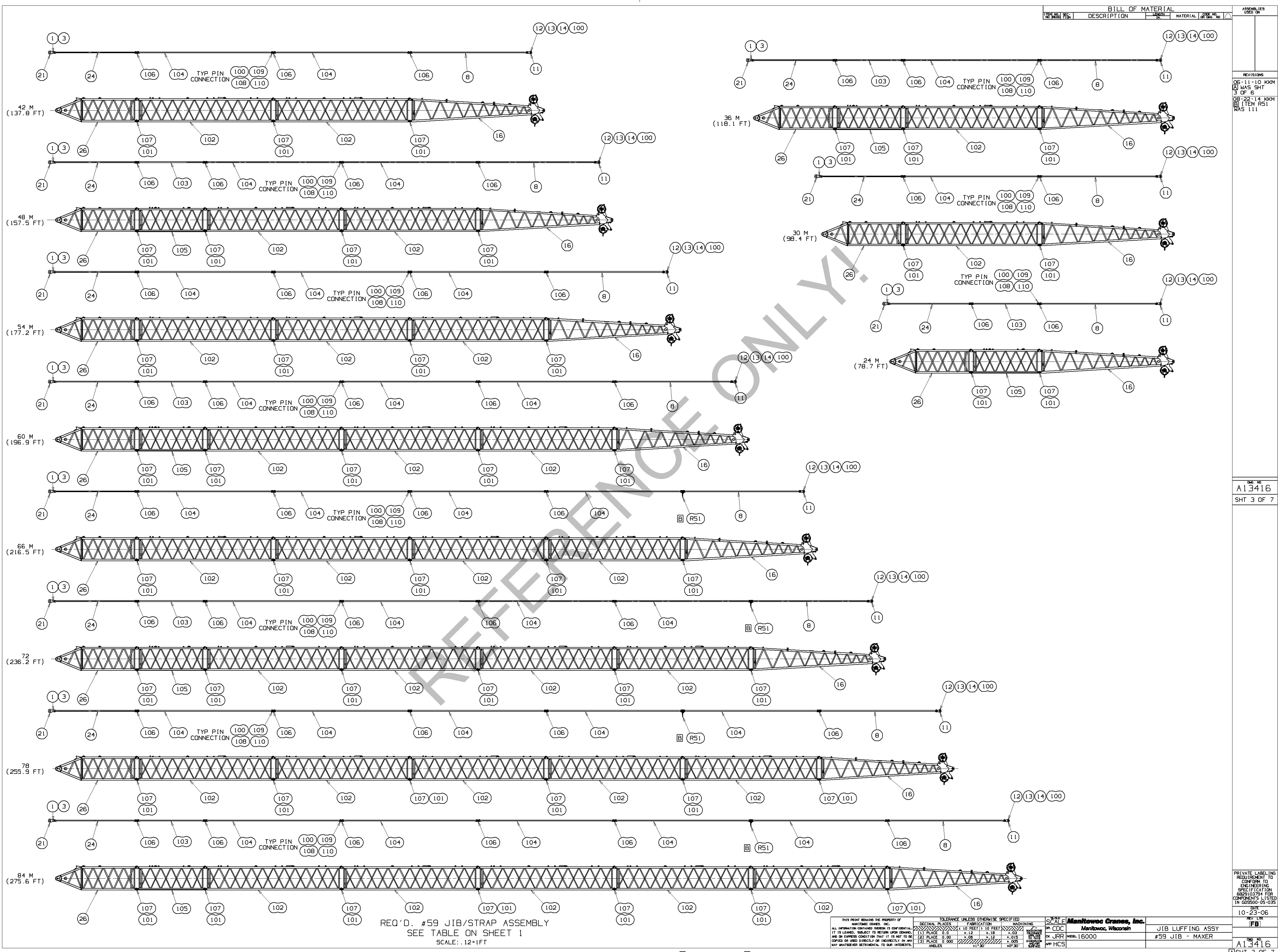
REVISIONS

03-17-10 JAS  
UPDATED BOOM  
SIGN  
06-11-10 KKM  
A WAS SHT  
2 OF 6  
B1 ADDED (2)  
08-22-14 KKM  
C1 UPDATED  
VIEW  
D1 WAS ITEM  
27

ASSEMBLIES  
USED ON

DATE  
10-23-06  
REV  
FBI

NO  
A13416  
SHT 2 OF 7



BILL OF MATERIAL			
ITEM NO.	QTY.	DESCRIPTION	MATERIAL

ASSEMBLIES USED ON
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REVISIONS
06-11-10 KKM
A) WAS SHT 3 OF 6
08-22-14 KKM
B) ITEM R51 WAS 111

06-11-10 KKM
A13416
SHT 3 OF 7

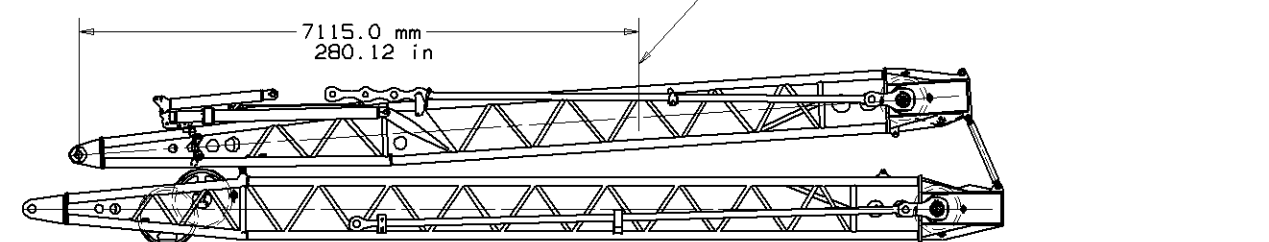
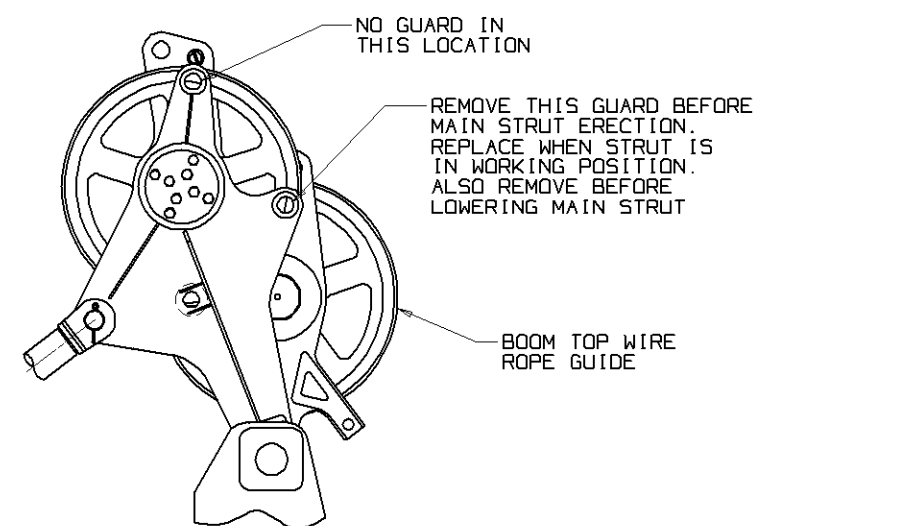
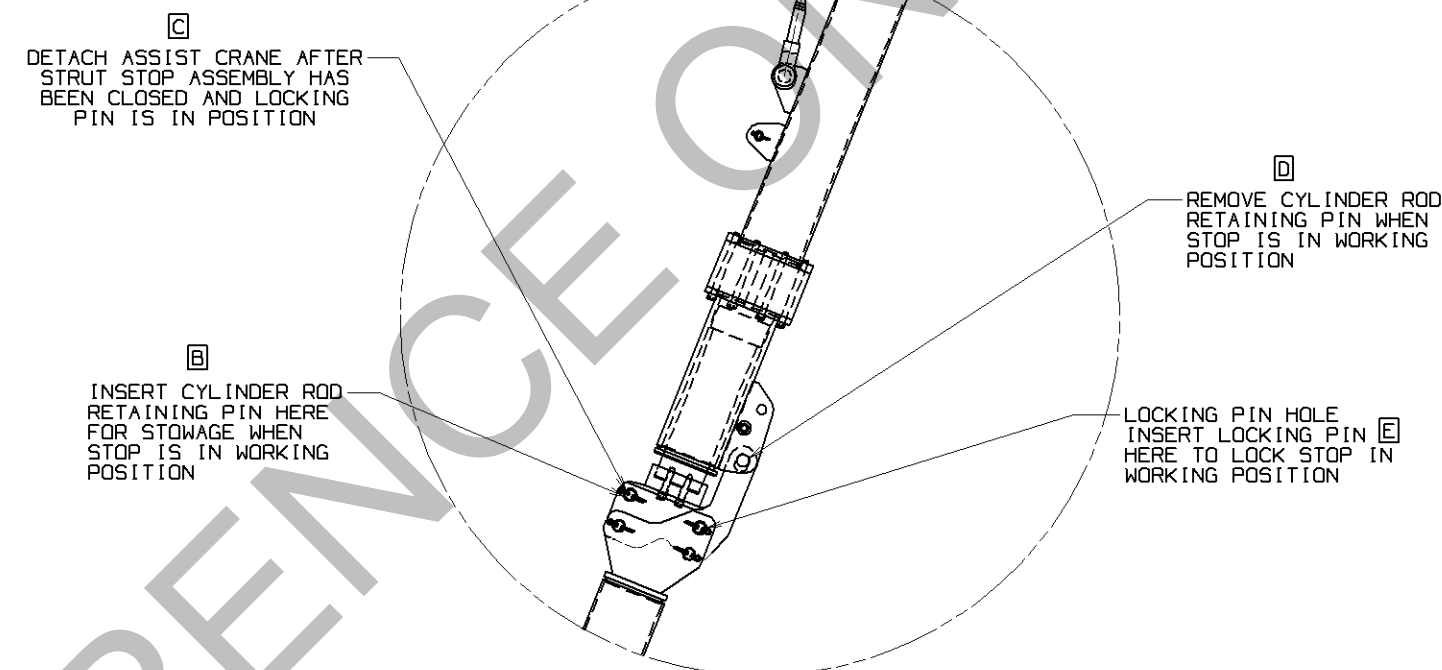
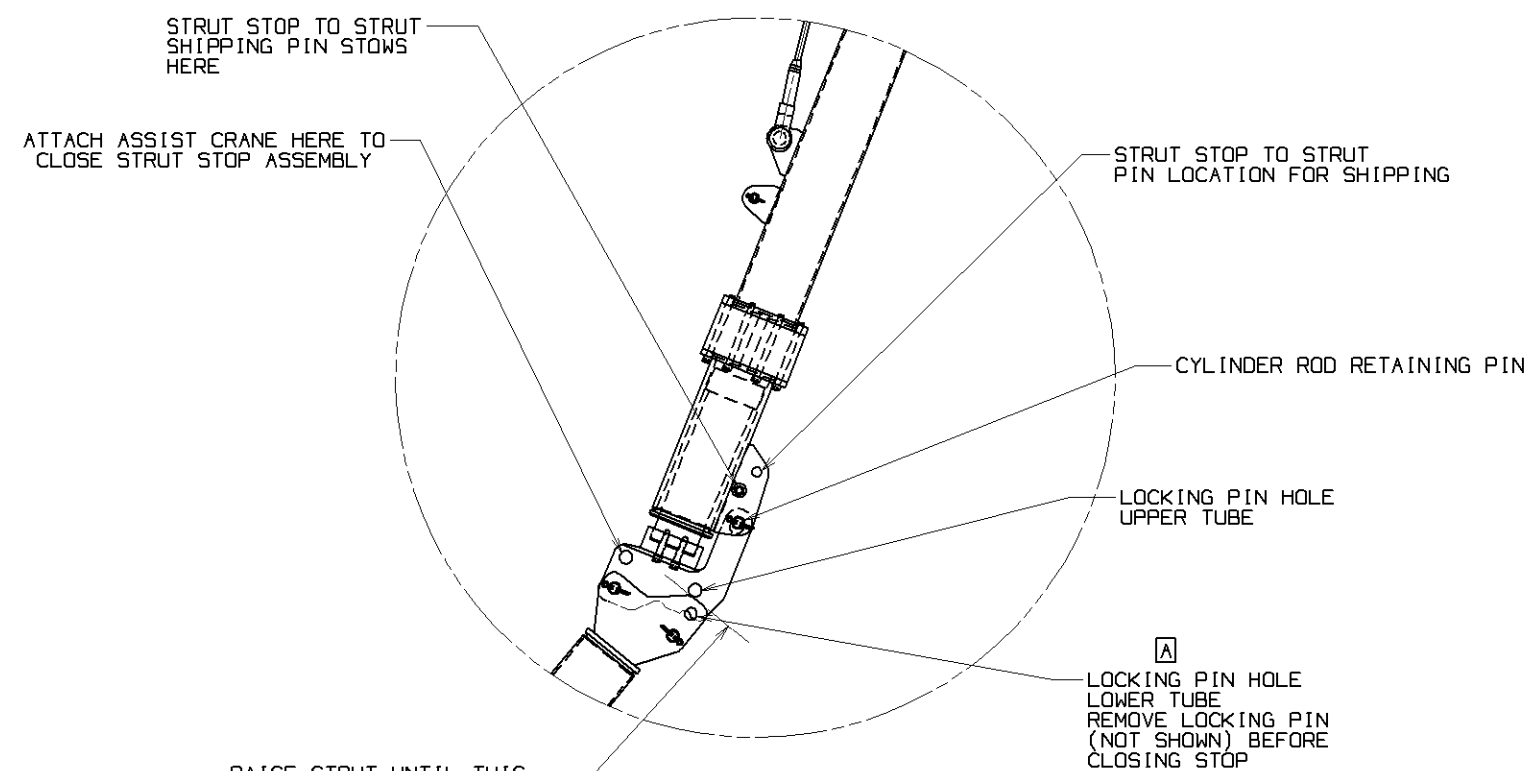
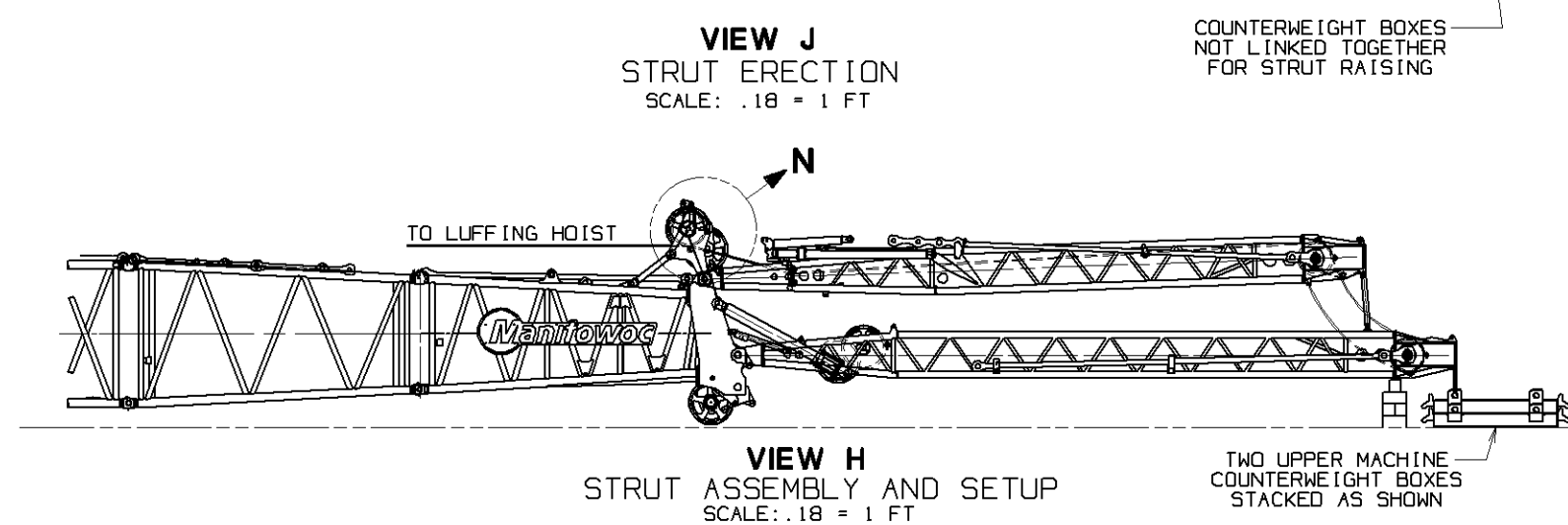
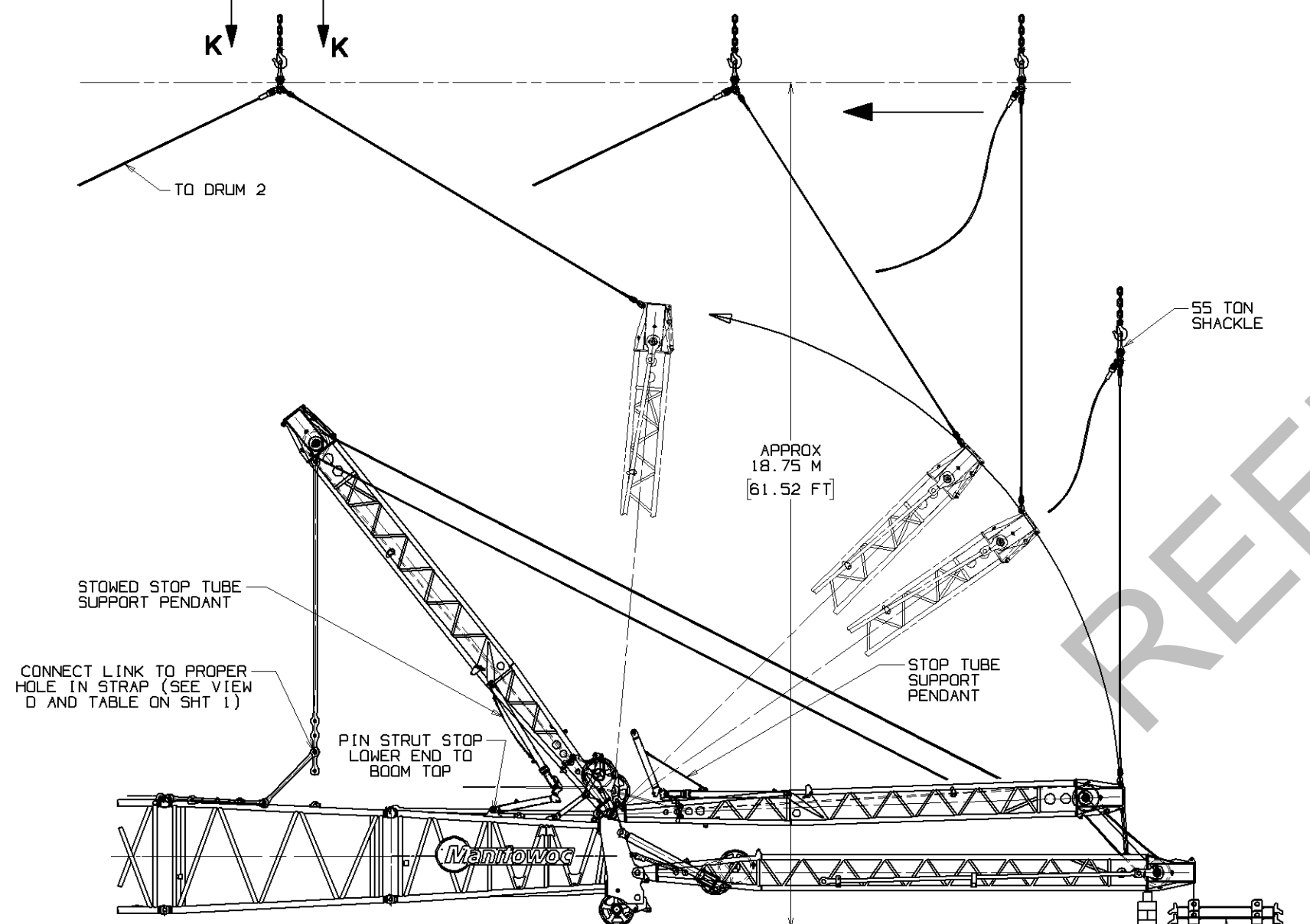
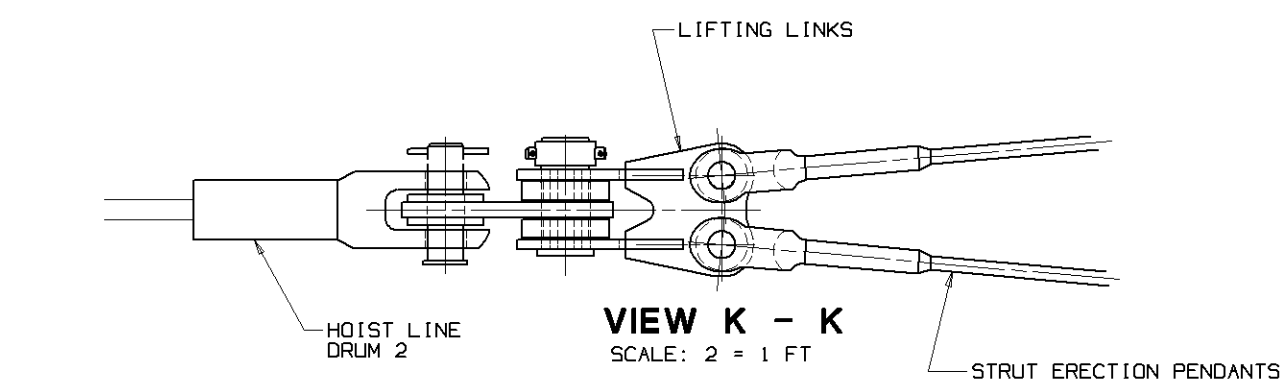
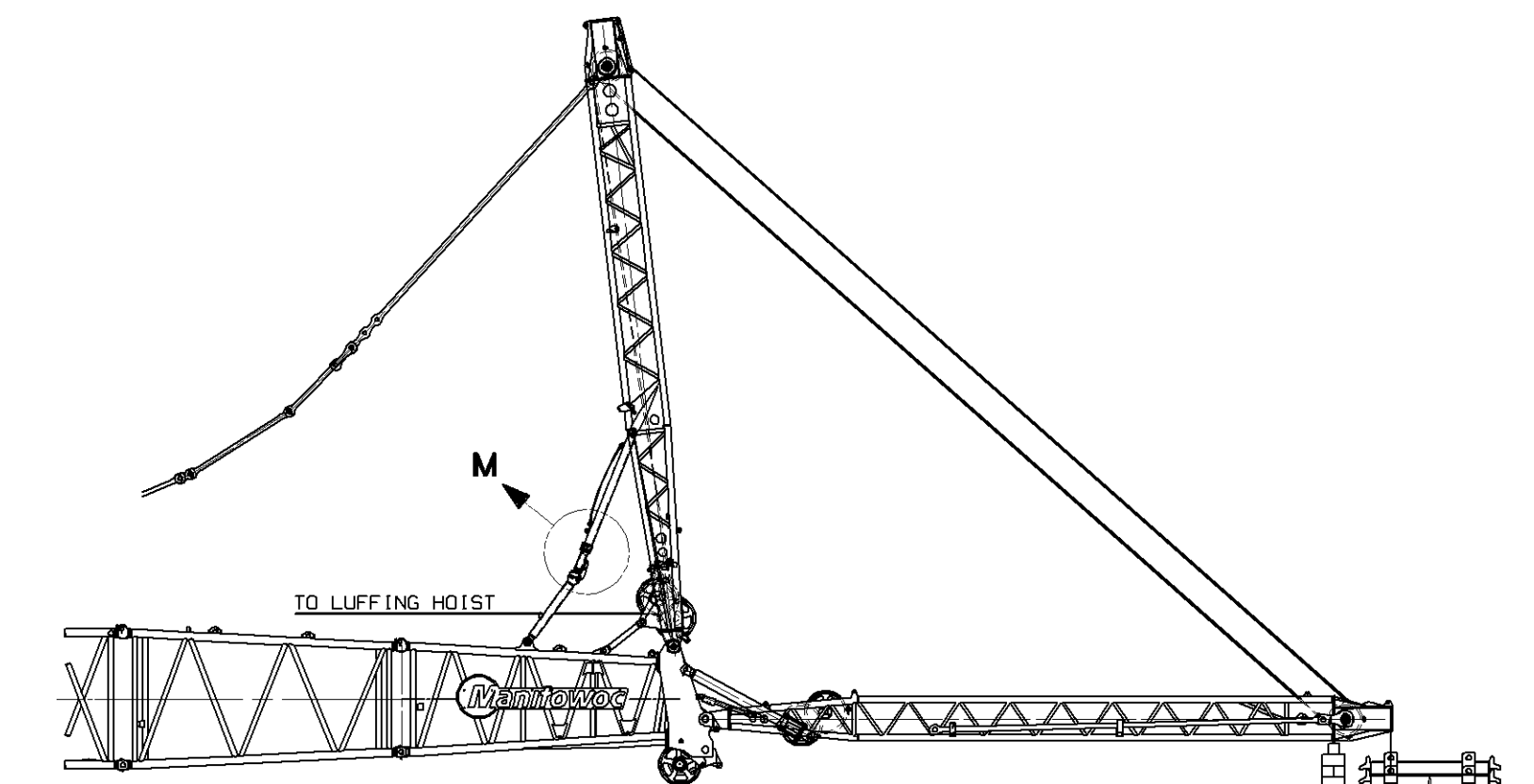
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 6829103794 FOR COMPONENTS LISTED IN 105200-05-025
DATE 10-23-06
REV. 111
FB
A13416
SHT 3 OF 7

TOLERANCE UNLESS OTHERWISE SPECIFIED			
DECIMAL PLACES	FABRICATION	MACHINING	WELDING
(1) PLACE 0.5	+ .12	+ .18	+ .03
(2) PLACE 0.00	+ .06	+ .12	+ .015
(3) PLACE 0.000	+ .006	+ .005	+ .0025
ANGLES	+ 11.25	+ 10.25	+ 10.25

SCALE	Manitowoc Cranes, Inc.
DR. CDC	Manitowoc, Wisconsin
CHK JRR	JIB LUFFING ASSY
APP HCS	#59 JIB - MAXER
MODEL 16000	

REQ'D. #59 JIB/STRAP ASSEMBLY  
SEE TABLE ON SHEET 1  
SCALE: .12=1FT

DO NOT SCALE THIS DRAWING



## STRUT RAISING PROCEDURE

1. STRUTS TO BE ASSEMBLED AND BLOCKED AS SHOWN IN VIEW "H". ASSEMBLE JIB STRUT HINGE PIN AND KEEPER PLATE IN PROPER ORIENTATION AND TEMPORARILY ATTACH END PLATES (SEE VIEW "E" ON SHT 2). TWO UPPER MACHINE COUNTERWEIGHTS TO BE POSITIONED UNDER JIB STRUT STOP AS SHOWN. COUNTERWEIGHT TIE LINKS TO BE DISCONNECTED FROM STRUT STOP AND ATTACHED TO STRUT STOP USING SUITABLE MEANS. CAPACITY OF ATTACHMENT HARDWARE MUST BE 25,000 POUNDS OR GREATER PER SIDE. REEVE STRUTS. REMOVE ROPE GUARD FROM WIRE ROPE GUIDE ON BOOM TOP (SEE VIEW "N").
2. STRUT STOP ASSEMBLIES TO BE RETRACTED AND POSITIONED AS SHOWN IN VIEW "J". REMOVE AND STOP STRUT STOP TO STRUT SHIPPING PINS. REMOVE FEW "M" LEFT END TUBES. PRESSURES TO BE WITHIN 5 PSI OF EACH OTHER. PRESSURE GAGE TO BE:  

230	PSI	±5	PSI	AT	90°F	(32	DEG	C)
240	PSI	±5	PSI	AT	70°F	(21	DEG	C)
220	PSI	±5	PSI	AT	50°F	(10	DEG	C)
210	PSI	±5	PSI	AT	30°F	(-1	DEG	C)

240	PSI	±5	PSI	AT	90°F	{ 32 DEG C }
230	PSI	±5	PSI	AT	70°F	{ 21 DEG C }
220	PSI	±5	PSI	AT	50°F	{ 10 DEG C }
210	PSI	±5	PSI	AT	30°F	{ -1 DEG C }

3. ATTACH ASSIST CRANE (25M OR 80 FT BOOM MIN. WITH 40,000# CAPACITY REQ.) TO LIFTING LINKS FROM MAIN STRUT ASSEMBLY WITH A 55 TON SHACKLE. (SEE VIEW "J" AND "K-K") RUN LOAD LINE FROM DRUM 2 TO LINKS (SEE VIEW "J" AND "K-K") RAISE MAIN STRUT WHILE PAYING OUT LUFFING HOIST LINE. DO NOT RAISE UPPER COUNTERWEIGHT BOX OR LOWER BOX. CONTRAST PAYST SYSTEM EASING UPPER COUNTERWEIGHT ROCK. AFTER RAISING MAIN STRUT TO 45 DEGREES USE LOAD LINE TO PULL STRUT WHILE FOLLOWING WITH ASSIST CRANE.
4. CONTINUE TO PAY OUT LUFFING HOIST LINE WHILE EASING MAIN STRUT OVER CENTER AND LOWER STRUT UNTIL STRUT STOPS AND BACKLAY STRUTS CAN BE CONNECTED. CONNECT STRUT TO LOWER END TO BOOM OR LOWER STRUT. TOP LOWER TIE UP SPOT PENDANT (SEE VIEW D). CONNECT BACKLAYS STRAPS IN PROPER POSITION (SEE VIEW D AND TABLE ON SHEET I) FOR ASSEMBLED BOOM LENGTH.
5. CONNECT TIE LINKS BETWEEN TWO COUNTERWEIGHT BOXES AT JIB STRUT TOP. SLOWLY RAISE MAIN STRUT BY TAKING UP LUFFING HOIST LINE UNTIL STRUT APPROACHES POSITION SHOWN IN VIEW "M".

- WARNING: STOP WILL NOT CLOSE WITH LUFFING HOIST.  
LUFF UP TO POSITION INDICATED IN VIEW "M"  
ONLY OR DAMAGE TO STRUT, STOP AND BOOM  
TOP WILL OCCUR.

WARNING: STOP WILL NOT CLOSE WITH LUFFING HOIST.  
LUFF UP TO POSITION INDICATED IN VIEW "M"  
ONLY OR DAMAGE TO STRUT. STOP AND BOOM  
TOP WILL OCCUR.

6. ATTACH ASSIST CRANE TO ONE OF THE STOP TUBE ASSEMBLIES AS INDICATED IN VIEW "M". REMOVE LOCKING PIN. SLOWLY HOIST UP STOP TUBE INTO POSITION. (STAY FOR THE OTHER STOP TUBE ASSEMBLY. NOTE: ONLY A SLIGHT VERTICAL MOVEMENT IS REQUIRED TO SNAP TUBE INTO POSITION.)
7. WITH BOTH STOP TUBE ASSEMBLIES CLOSED (SNAPPED IN POSITION) INSERT PREVIOUSLY REMOVED LOCKING PIN INTO STOP LOCKING HOLE TO LOCK STOP IN WORKING POSITION.

- DANGER: DO NOT DRIVE OUT CYLINDER ROD RETAINING PINS. PINS MUST BE LOOSE WHEN THEY ARE REMOVED OR CYLINDER ROD MAY EXTEND RAPIDLY. IF EITHER PIN IS TIGHT, FOLLOW STEP 8 TO REMOVE PINS.

**DANGER:** DO NOT DRIVE OUT CYLINDER ROD RETAINING PINS. PINS MUST BE LOOSE WHEN THEY ARE REMOVED OR CYLINDER ROD MAY EXTEND RAPIDLY. IF EITHER PIN IS TIGHT, FOLLOW STEP 8 TO REMOVE PINS.

8. PULL DOWN TO SET JIB STRUT ON BLOCKING AND ALLOW A SLIGHT AMOUNT OF SLACK IN REEVEING HOIST LINES FROM DRUM 2. ATTACHED TO THE RAISING PENDANTS. SLOWLY RAISE MAIN STRUT BACK TO REMOVE LOAD IN CYLINDER ROD RETAINING PINS AND REMOVE PINS. (CAUTION: PULL ONLY ENOUGH TO REMOVE LOAD ON PINS OR DAMAGE TO STRUT AND STOPS MAY OCCUR). INSERT CYLINDER ROD RETAINING PINS IN HOLES INDICATED IN VIEW "M" FOR STORAGE. PULL OUT LOAD HOIST STRUT. CYLINDERS WILL EXTEND ALLOWING STRUT TO ROTATE FORWARD.

9. REMOVE ASSIST CRANE FROM MAIN STRUT ERECTION PENDANTS AND STOW ERECTION LINKS AND PENDANTS IN PROPER LOCATION ON MAIN STRUT TO PREVENT DAMAGE TO STRUT AND STOPS. REPLACE ROPE GUARD IN WIRE ROPE GUIDE ON BOOM TOP (SEE VIEW "N").

11. LUFF UP ON LUFFING HOIST LINE TO RAISE JIB STRUT TO A MAXIMUM OF 70 DEGREES TO HORIZONTAL.

12. ASSEMBLE JIB BUTT AND ONE INSERT. USE A FOUR POINT HOOKUP WITH SLINGS AROUND CHORDS AND ATTACH TO BOOM TOP. APPLY TO THREADS LOCTITE #242 (MCC OBJECT NO. 822293) AND TORQUE CAPSCREWS ON JIB STRUT AND JIB BUTT END PLATES TO 100 FT/LBS. (SEE VIEW "E" SHT 2)

13. PULL STRUT FORWARD AND CONNECT JIB STRAPS ON STRUT WITH STRAPS ON INSERT. FINISH ASSEMBLY OF JIB AND CONNECT STRAPS. (SEE VIEW ON SHT 4).

14. INSTALL JIB UPPER BOOM POINT WITH ROLLER TO JIB TOP.

15. INSTALL JIB STOPS AND JIB STOP CONTROL CABLE. (SEE SHT 5)

16. LUFFING JIB IS READY FOR RAISING AND OPERATION. REFER TO LUFFING JIB RAISING PROCEDURE FOR RAISING AND LOWERING BOOM AND JIB.

## STRUT LOWERING PROCEDURE

1. WITH JIB UPPER POINT ROLLER ON GROUND LOWER BOOM AND LUFFING JIB TO 145 DEGREES BETWEEN BOOM AND JIB

2. PERFORM JIB STOP PROCEDURE FOR LOWERING BOOM AND JIB.  
(SEE SHT 5) THEN CONTINUE TO LOWER BOOM AND JIB TO  
BLOCKING.

3. DISCONNECT JIB STRAPS AND REMOVE JIB.

4. LOWER JIB STRUT WITH LUFFING HOIST AND STOW STRAPS. JIB STRUT MAY NEED TO BE PULLED FORWARD TO START LOWERING. SUPPORT JIB STRUT ON BLOCKING AS SHOWN IN VIEW "L".

5. TIE OFF JIB STRUT TO COUNTERWEIGHT BOXES AS SHOWN IN VIEW "L". BOXES MUST BE CONNECTED WITH LINKS.

6. LUFF DOWN WITH LUFFING HOIST TO ALLOW A SLIGHT AMOUNT OF SLACK IN REEVING. REMOVE ROPE GUARD AS INDICATED IN VIEW "N".

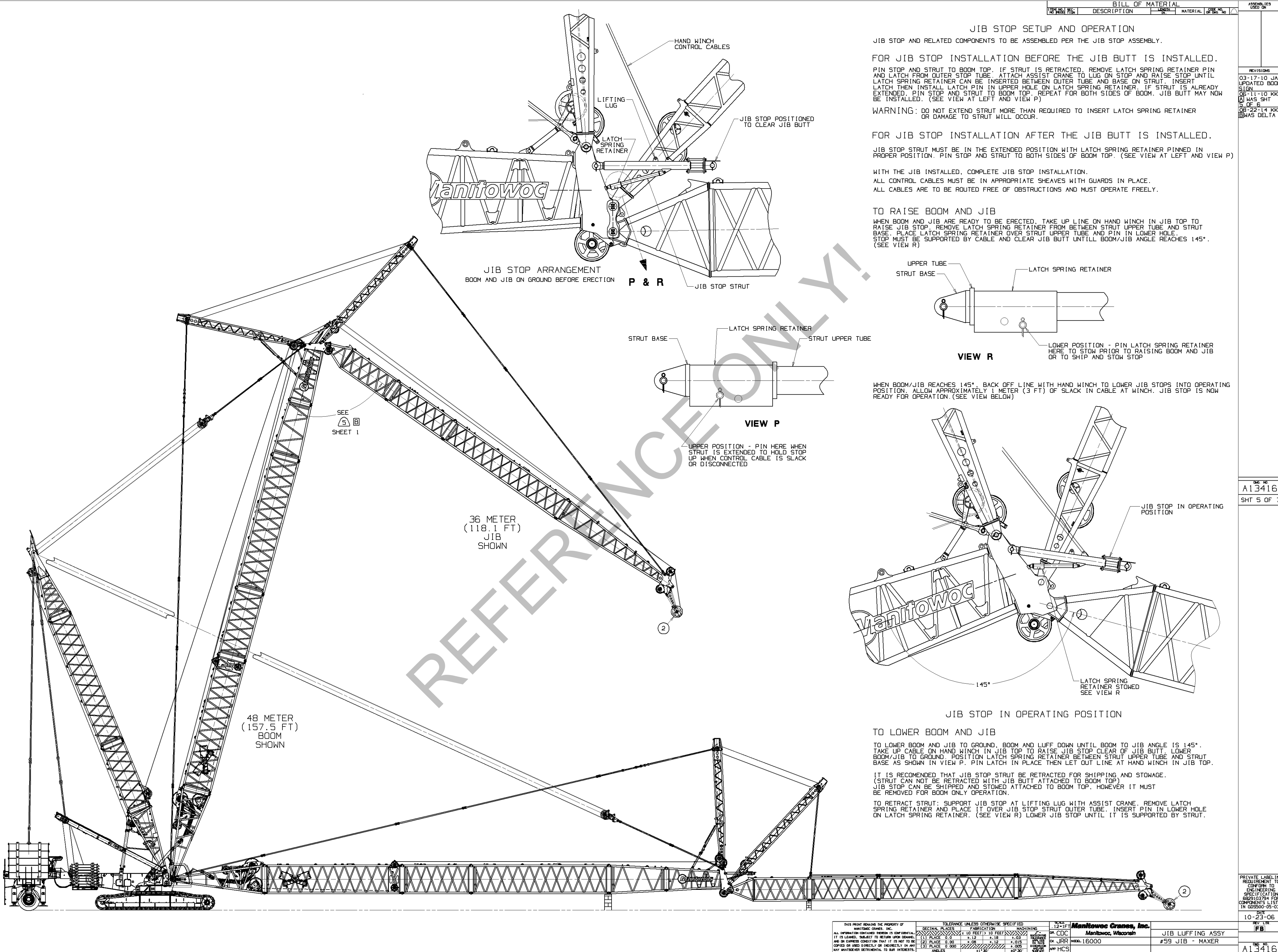
7. ATTACH ASSIST CRANE TO STRUT ERECTION PENDANTS, LINKS AND HOIST LINE FROM DRUM 2. SLOWLY PULL MAIN STRUT BACK WITH DRUM 2 TO RETRACT CYLINDERS IN STRUT POSITS. (CAUTION: ONLY PULL BACK ENOUGH TO ALIGN CYLINDER ROD RETAINING PIN HOLES OR DAMAGE TO STRUT AND STRUT STOPS MAY OCCUR. REMOVE RETAINING PINS FROM STORAGE POSITION HOLD AND INSERT TO RETAIN CYLINDER ROD. REMOVE STOP LOCKING PINS FROM WORKING POSITION. (SEE VIEW "M").

8. PAY OUT HOIST LINE FROM DRUM 2 TO UNLATCH STRUT STOP TUBES. (NOTE: UNDER SOME CONDITIONS IT MAY BE NECESSARY TO LUFF UP SLIGHTLY TO UNLATCH STOP TUBES.) WITH STOP TUBES UNLATCHED LUFF DOWN UNTIL BACKSTAY STRAPS CAN BE DISCONNECTED AND STRUT STOP TO BOOM TOP PINS CAN BE REMOVED. DISCONNECT STRAPS, ATTACH STOP TUBE SUPPORT PENDANT, INSERT LOCKING PIN INTO LOCK PIN HOLE LOWER TUBE AND REMOVE STOP TO BOOM TOP PINS.

9. DISCONNECT TIE LINKS BETWEEN COUNTERWEIGHT BOXES AT JIB STRUT TOP. SLOWLY LUFF UP AND FOLLOW WITH ASSIST CRANE AND HOIST LINE TO MOVE MAIN STRUT OVER CENTER. LOWER MAIN STRUT TO JIB STRUT FOR DISASSEMBLY.

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	DECIMAL PLACES	FRACTIONS	MACHINING	DR CDC		
	(1) PLACE 0.0	1/16 1/8 1/4 3/8 1/2 5/8 3/4 7/8	± 0.005	DR JRR MODEL 16000	JTB LUFFING ASSY	
	(2) PLACE 0.00	± 0.008 ± 0.012 ± 0.015	± 0.005		#59 JTB - MAXER	
	(3) PLACE 0.000	± 0.001 ± 0.002 ± 0.003	± 0.001		DWG NO. A1341	





BILL OF MATERIAL					ASSEMBLIES USED ON
ITEM NO.	QTY	DESCRIPTION	UNIT	MATERIAL	
					CODE NO. OF SH.
UP AND OPERATION					
LIED PER THE JIB STOP ASSEMBLY.					
ORE THE JIB BUTT IS INSTALLED.					
TRACTED. REMOVE LATCH SPRING RETAINER PIN					
CRANE TO LUG ON STOP AND RAISE STOP UNTIL					
IN OUTER TUBE AND BASE ON STRUT. INSERT					
IN LATCH SPRING RETAINER. IF STRUT IS ALREADY					
PEAT FOR BOTH SIDES OF BOOM. JIB BUTT MAY NOW					
REQUIRED TO INSERT LATCH SPRING RETAINER					

JIB STOP SETUP AND OPERATION

JIB STOP AND RELATED COMPONENTS TO BE ASSEMBLED PER THE JIB STOP ASSEMBLY.

FOR JIB STOP INSTALLATION BEFORE THE JIB BUTT IS INSTALLED.

PIN STOP AND STRUT TO BOOM TOP. IF STRUT IS RETRACTED, REMOVE LATCH SPRING RETAINER PIN AND LATCH FROM OUTER STOP TUBE. ATTACH ASSIST CRANE TO LUG ON STOP AND RAISE STOP UNTIL LATCH SPRING RETAINER CAN BE INSERTED BETWEEN OUTER TUBE AND BASE ON STRUT. INSERT LATCH THEN INSTALL LATCH SPRING RETAINER. IF STRUT IS ALREADY EXTENDED, PIN STOP AND STRUT TO BOOM TOP. REPEAT FOR BOTH SIDES OF BOOM. JIB BUTT MAY NOW BE INSTALLED. (SEE VIEW AT LEFT AND VIEW P)

WARNING: DO NOT EXTEND STRUT MORE THAN REQUIRED TO INSERT LATCH SPRING RETAINER OR DAMAGE TO STRUT WILL OCCUR.

FOR JIB STOP INSTALLATION AFTER THE JIB BUTT IS INSTALLED.

JIB STOP STRUT MUST BE IN THE EXTENDED POSITION WITH LATCH SPRING RETAINER PINNED IN PROPER POSITION. PIN STOP AND STRUT TO BOTH SIDES OF BOOM TOP. (SEE VIEW AT LEFT AND VIEW P)

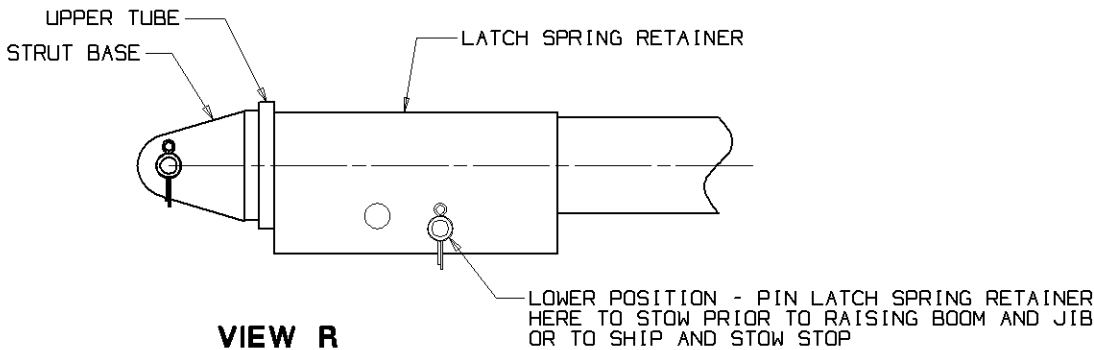
WITH THE JIB INSTALLED, COMPLETE JIB STOP INSTALLATION.

ALL CONTROL CABLES MUST BE IN APPROPRIATE SHEAVES WITH GUARDS IN PLACE.

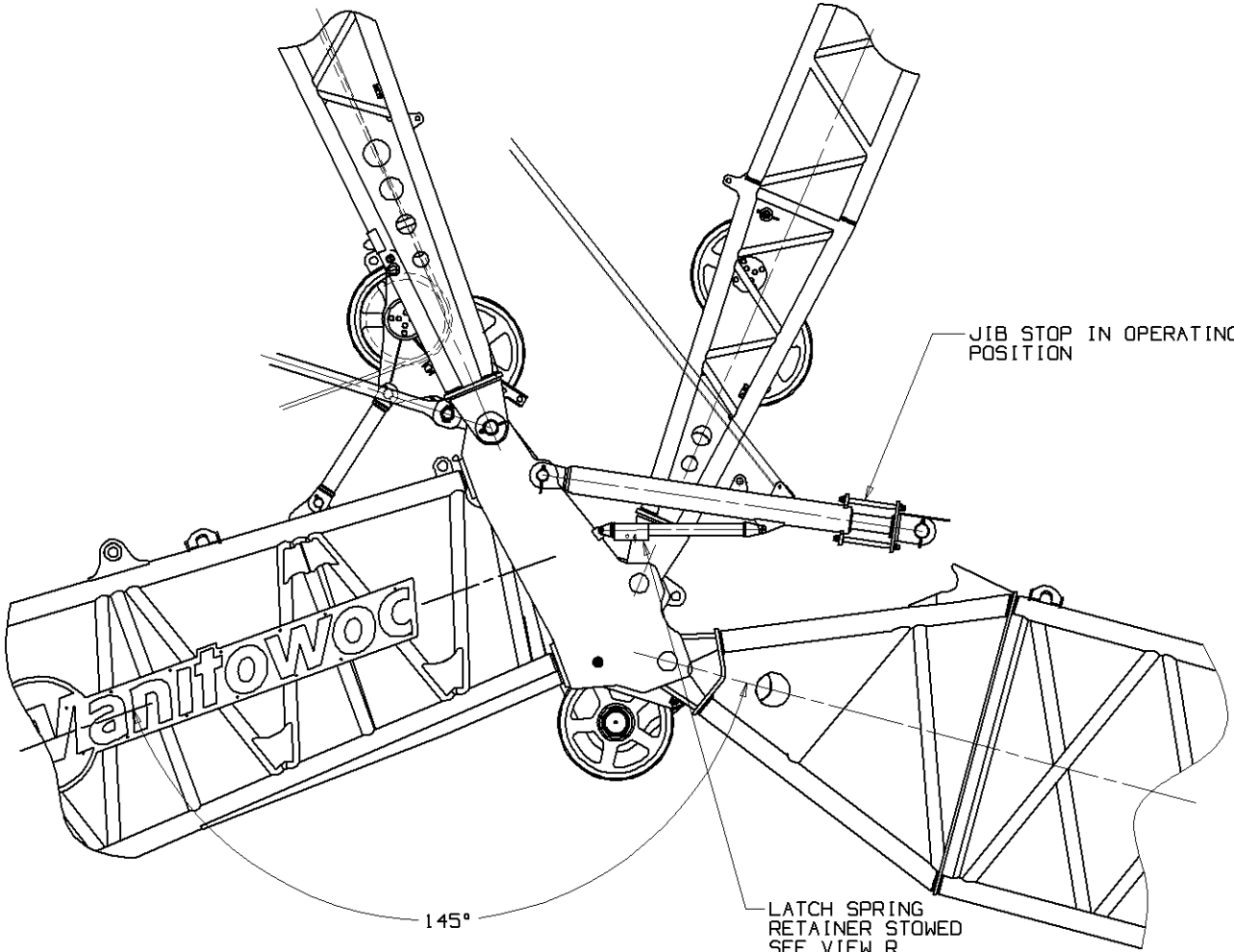
ALL CABLES ARE TO BE ROUTED FREE OF OBSTRUCTIONS AND MUST OPERATE FREELY.

TO RAISE BOOM AND JIB

WHEN BOOM AND JIB ARE READY TO BE ERECTED, TAKE UP LINE ON HAND WINCH IN JIB TOP TO RAISE JIB STOP. REMOVE LATCH SPRING RETAINER FROM BETWEEN STRUT UPPER TUBE AND STRUT BASE. PLACE LATCH SPRING RETAINER OVER STRUT UPPER TUBE AND PIN IN LOWER HOLE. STOP MUST BE SUPPORTED BY CABLE AND CLEAR JIB BUTT UNTILL BOOM/JIB ANGLE REACHES 145°. (SEE VIEW R)



WHEN BOOM/JIB REACHES 145°. BACK OFF LINE WITH HAND WINCH TO LOWER JIB STOPS INTO OPERATING POSITION. ALLOW APPROXIMATELY 1 METER (3 FT) OF SLACK IN CABLE AT WINCH. JIB STOP IS NOW READY FOR OPERATION. (SEE VIEW BELOW)



JIB STOP IN OPERATING POSITION

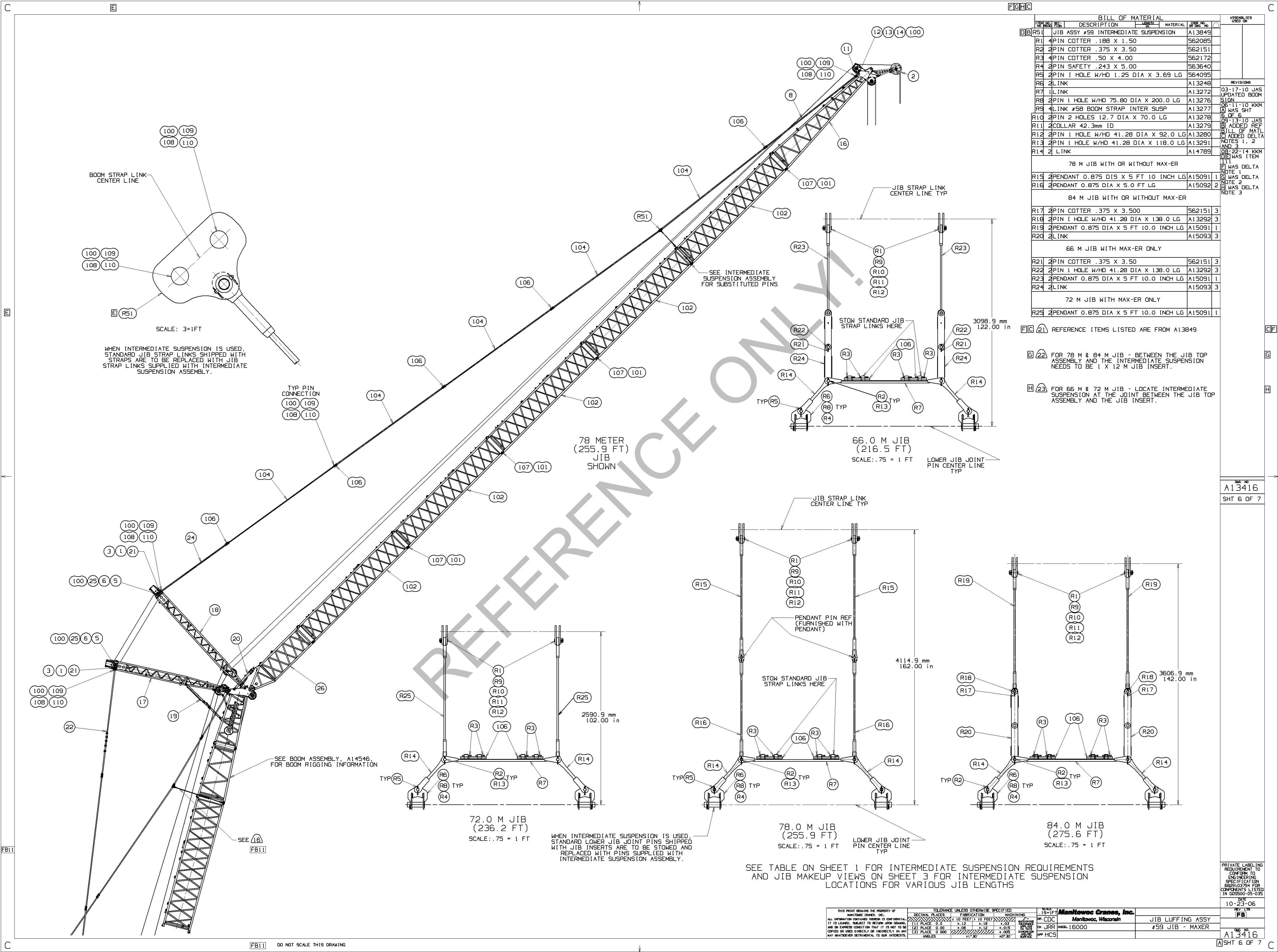
TO LOWER BOOM AND JIB

TO LOWER BOOM AND JIB TO GROUND, BOOM AND LUFF DOWN UNTIL BOOM TO JIB ANGLE IS 145°. TAKE UP CABLE ON HAND WINCH IN JIB TOP TO RAISE JIB STOP CLEAR OF JIB BUTT. LOWER BOOM/JIB TO GROUND. POSITION LATCH SPRING RETAINER BETWEEN STRUT UPPER TUBE AND STRUT BASE AS SHOWN IN VIEW P. PIN LATCH IN PLACE THEN LET OUT LINE AT HAND WINCH IN JIB TOP.

IT IS RECOMMENDED THAT JIB STOP STRUT BE RETRACTED FOR SHIPPING AND STOWAGE. (STRUT CAN NOT BE RETRACTED WITH JIB BUTT ATTACHED TO BOOM TOP) JIB STOP CAN BE SHIPPED AND STOWED ATTACHED TO BOOM TOP, HOWEVER IT MUST BE REMOVED FOR BOOM ONLY OPERATION.

TO RETRACT STRUT: SUPPORT JIB STOP AT LIFTING LUG WITH ASSIST CRANE. REMOVE LATCH SPRING RETAINER AND PLACE IT OVER JIB STOP STRUT OUTER TUBE. INSERT PIN IN LOWER HOLE ON LATCH SPRING RETAINER. (SEE VIEW R) LOWER JIB STOP UNTIL IT IS SUPPORTED BY STRUT.

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BILL OF MATERIAL					ASSEMBLIES USED IN
ITEM NO.	QTY	DESCRIPTION	UNIT	MATERIAL	
R51	1	JIB ASSY #59 INTERMEDIATE SUSPENSION		A13849	
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	PIN I HOLE W/HD 1.25 DIA X 3.69 LG		564095	
R6	2	LINK		A13248	
R7	1	LINK		A13272	
R8	2	PIN I HOLE W/HD 75.80 DIA X 200.0 LG		A13276	
R9	4	LINK #58 BOOM STRAP INTER SUSP		A13277	
R10	2	PIN 2 HOLES 12.7 DIA X 70.0 LG		A13278	
R11	2	COLLAR 42.3mm ID		A13279	
R12	2	PIN I HOLE W/HD 41.28 DIA X 92.0 LG		A13280	
R13	2	PIN I HOLE W/HD 41.28 DIA X 118.0 LG		A13291	
R14	2	LINK		A14789	
78 M JIB WITH OR WITHOUT MAX-ER					
R15	2	PENDANT 0.875 DIS X 5 FT 10 INCH LG		A15091	1
R16	2	PENDANT 0.875 DIA X 5.0 FT LG		A15092	2
84 M JIB WITH OR WITHOUT MAX-ER					
R17	2	PIN COTTER .375 X 3.500		562151	3
R18	2	PIN I HOLE W/HD 41.28 DIA X 138.0 LG		A13292	3
R19	2	PENDANT 0.875 DIA X 5 FT 10.0 INCH LG		A15091	1
R20	2	LINK		A15093	3
66 M JIB WITH MAX-ER ONLY					
R21	2	PIN COTTER .375 X 3.50		562151	3
R22	2	PIN I HOLE W/HD 41.28 DIA X 138.0 LG		A13292	3
R23	2	PENDANT 0.875 DIA X 5 FT 10.0 INCH LG		A15091	1
R24	2	LINK		A15093	3
72 M JIB WITH MAX-ER ONLY					
R25	2	PENDANT 0.875 DIA X 5 FT 10.0 INCH LG		A15091	1

- FIG 21 REFERENCE ITEMS LISTED ARE FROM A13849
- FIG 22 FOR 78 M & 84 M JIB - BETWEEN THE JIB TOP ASSEMBLY AND THE INTERMEDIATE SUSPENSION NEEDS TO BE 1 X 12 M JIB INSERT.
- FIG 23 FOR 66 M & 72 M JIB - LOCATE INTERMEDIATE SUSPENSION AT THE JOINT BETWEEN THE JIB TOP ASSEMBLY AND THE JIB INSERT.

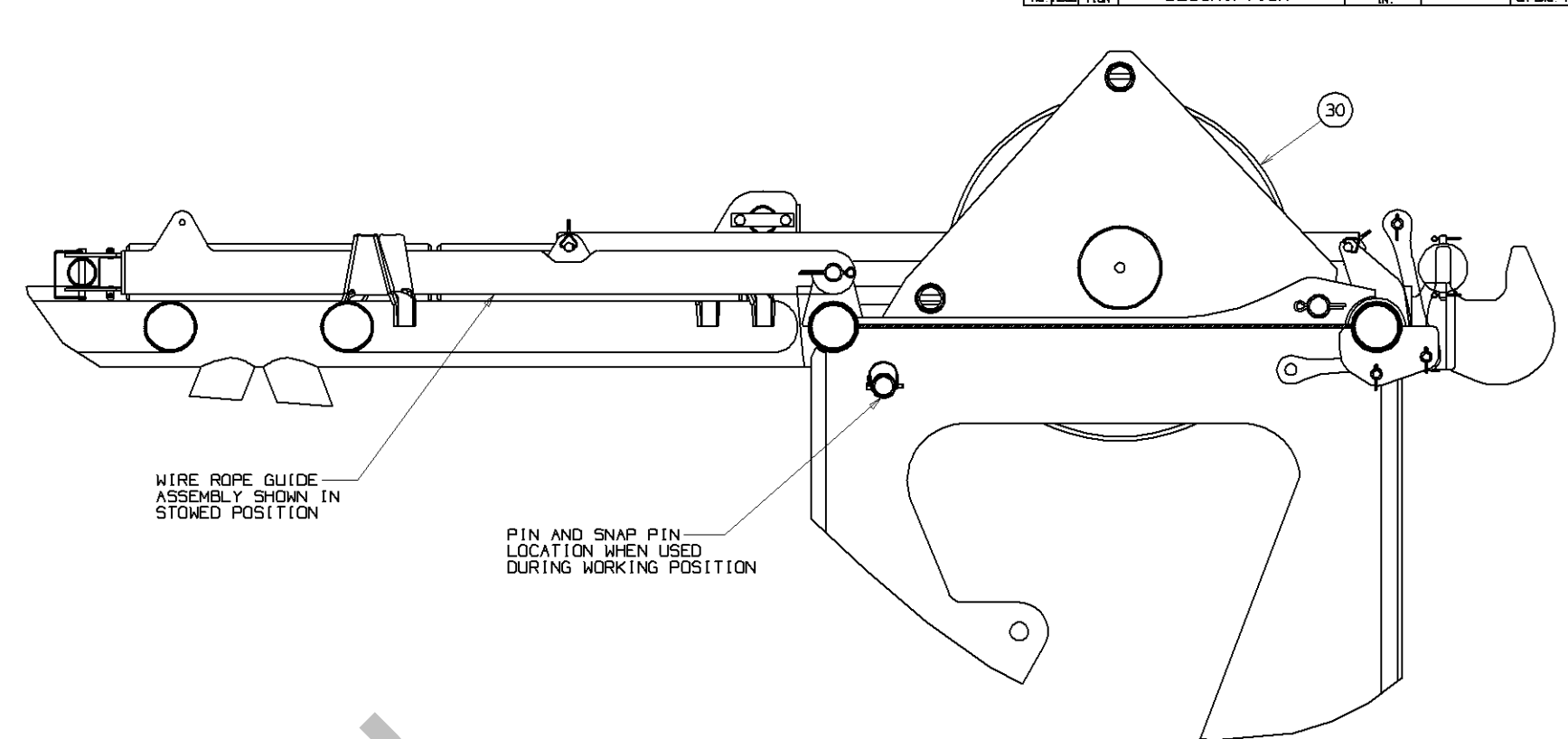
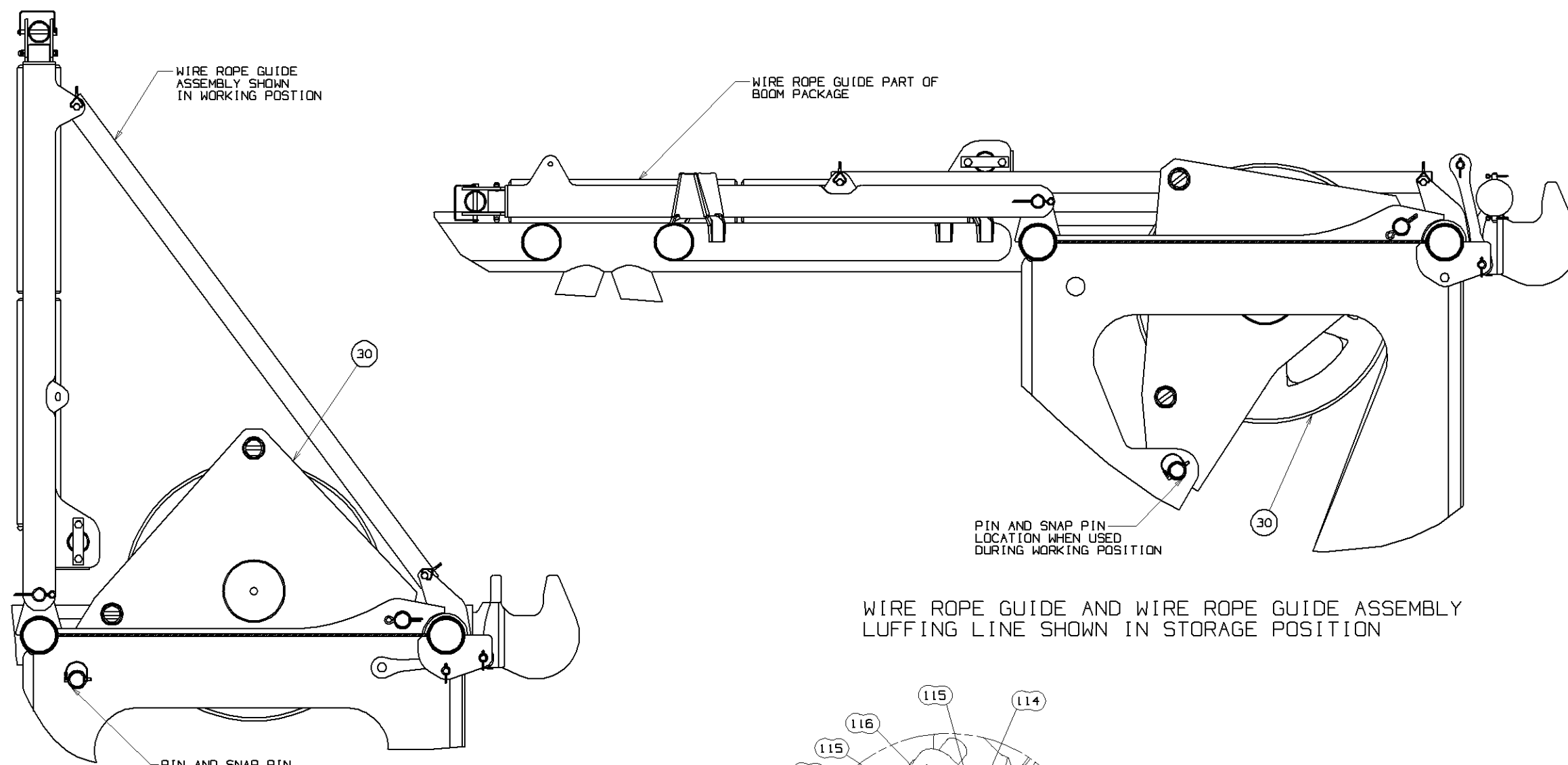
FIG NO  
A13416  
SHT 6 OF 7

PRIVATE LABELING  
REQUIREMENT TO  
CONFORM TO  
ENGINEERING  
SPECIFICATION  
6829103794 FOR  
COMPONENTS LISTED  
IN 68290-05-025

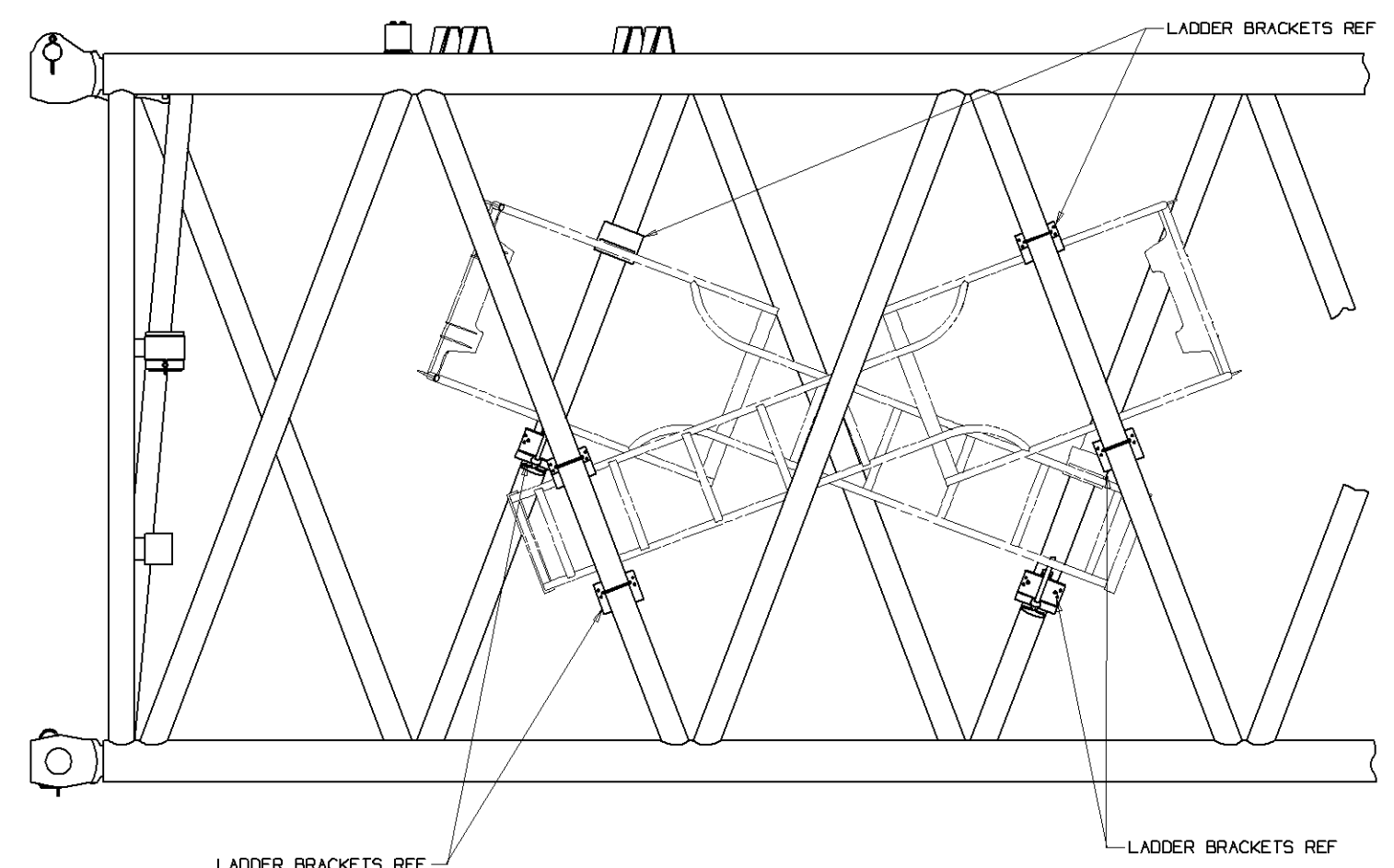
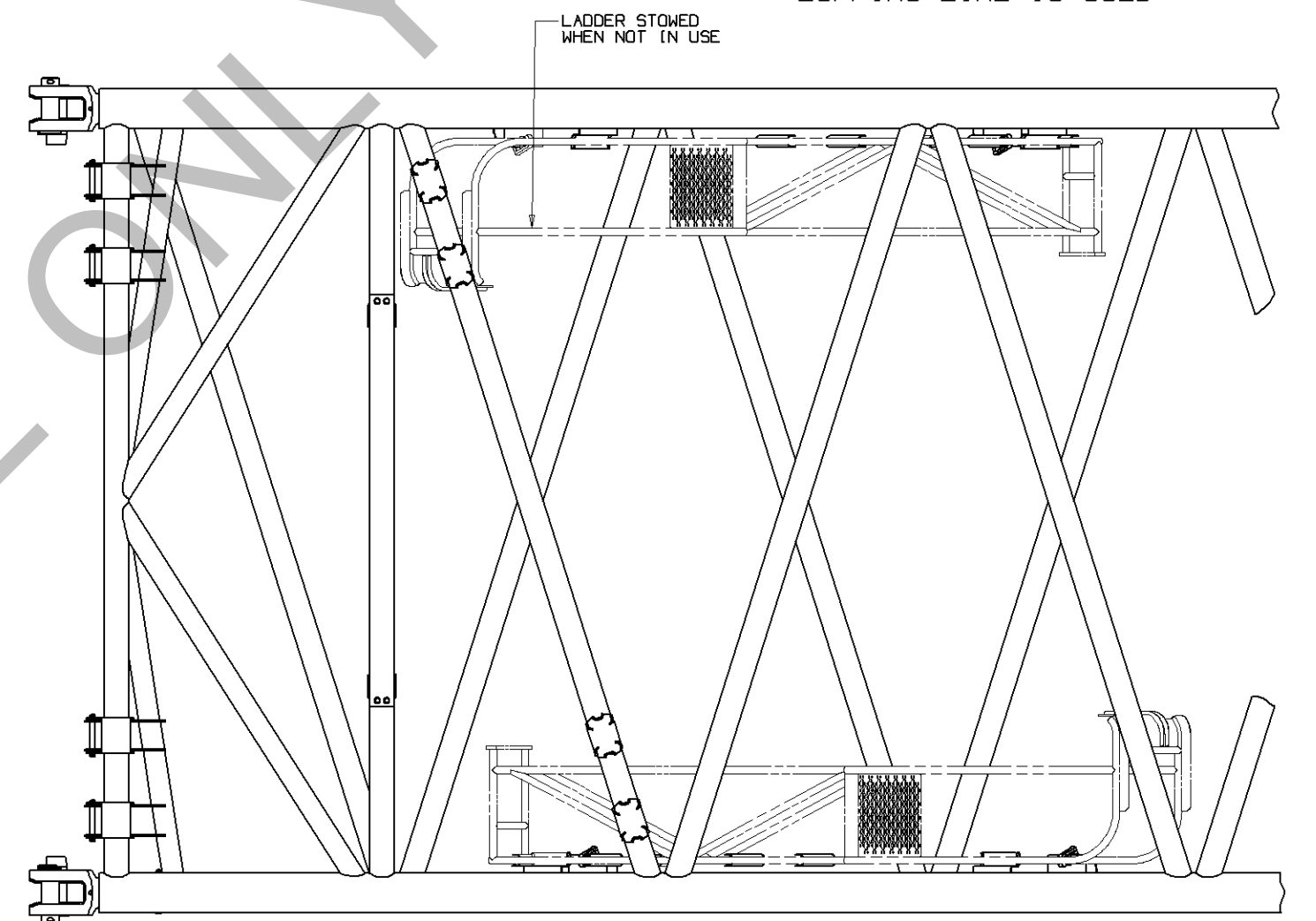
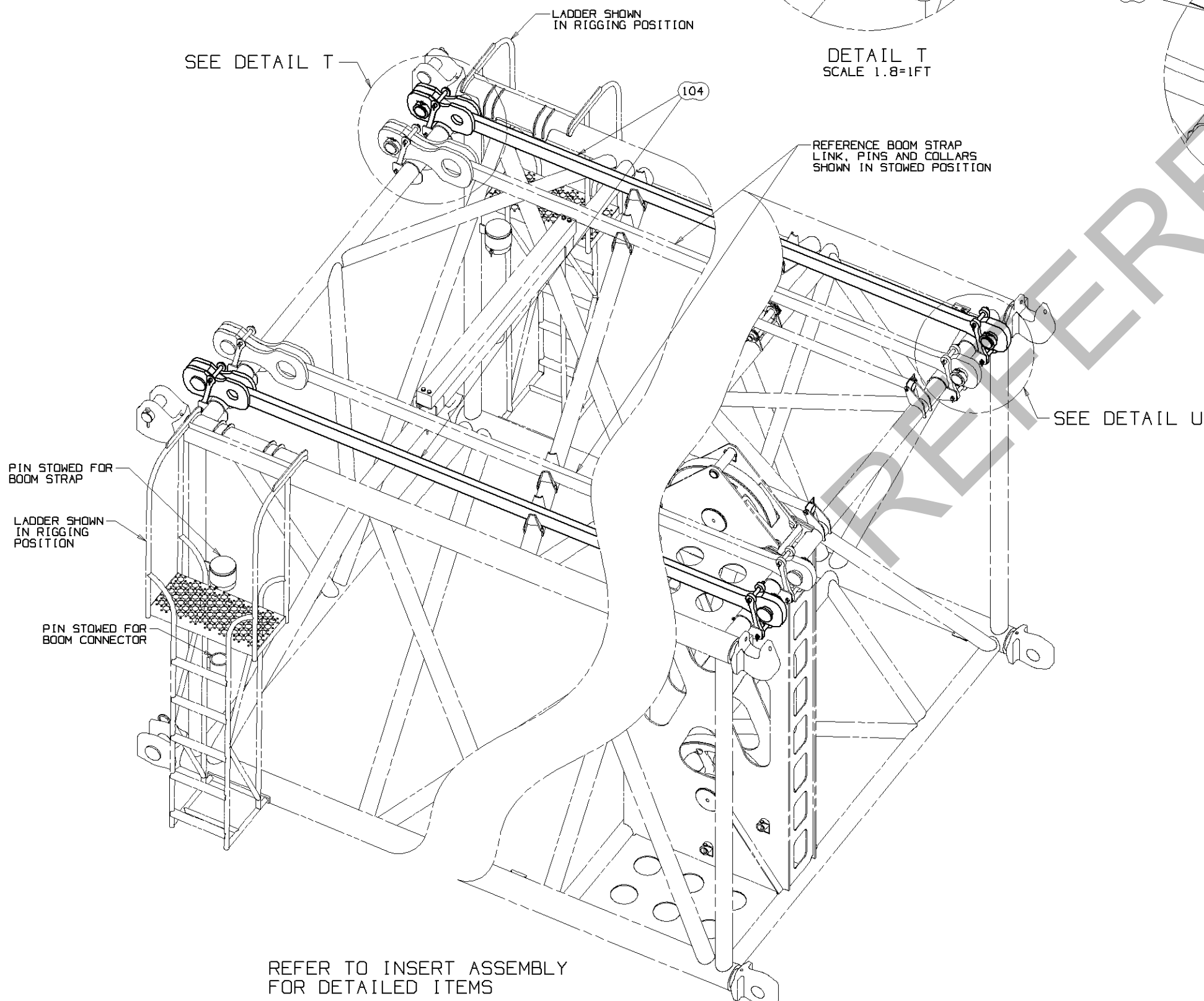
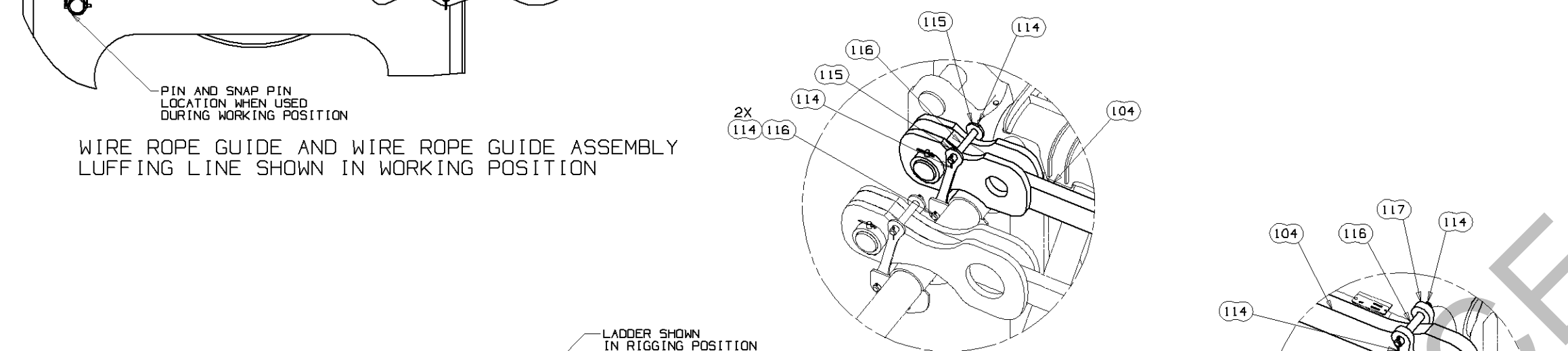
DATE  
10-23-06  
REV  
FB

MANITOWOC CRANES, INC.  
JIB LUFFING ASSY  
#59 JIB - MAXER  
A13416

SHT 6 OF 7



WIRE ROPE GUIDE CAN BE STOWED  
WHILE THE WIRE ROPE GUIDE ASSEMBLY  
LUFFING LINE IS USED



SECURE LADDERS IN BRACKETS  
FOR STORAGE AND SHIPPING