

TABLE FOR OPTIONAL I.D. TAG NO. PER SPECIFIC SERIAL NUMBER		
STANDARD I.D. TAG#	OPTIONAL I.D. TAG# PER S/N	SERIAL NUMBERS
81027809	81027810	663556- 796718 1780713-1782931
81027815	81027816	731934- 799166 1692815-1781150 699764- 799167
81027818	81027819	1777200-1780235

BILL OF MATERIAL			
QTY	DESCRIPTION	MATERIAL	ITEM NO
LUFFING JIB RIGGING LJ ON B65			
1	1	INSERT TRANSITION ASSY #500/501 6M	81023398
2	1	BUTT ASSY #500A 6.00 M	81024783
3			
4	1	UPPER POINT ASSY FRAME	81029769
5	1	TOP ASSY #501, 12M LJ	81026670
6	1	STRUT #502 SHIPPING ASSY	84020169

NO. REQ'D FOR THE FOLLOWING ITEMS ARE IN THE JIB LENGTH TABLE			
100	1	INSERT ASSY 12M #501	81023405
101	1	INSERT ASSY 6M #501	81023410
102	1	INSERT ASSY 12M #500	81027808
103	1	INSERT ASSY 12M #500 L	81027814
104	1	INSERT ASSY #500 12M W/SUSP	81027817
105	1	SUSPENSION WIRE ROPE	84051095

OPTION 1: HOOK BLOCKS			
200	1	BLOCK 350 US TON 32MM 9 SHEAVES	A08833
201	1	BLOCK HOOK 250MT 28MM WR 7 SHEAVES	81031978
202	1	BLOCK HOOK 170MT 28MM WR 5 SHEAVES	81031981
203	1	BLOCK HOOK 100MT 28MM WR 3 SHEAVES	81031987
204	1	WEIGHT BALL SWIVEL 22.2MT, 28MM & 32MM WR	81033344
205	1	BLOCK HOOK 45 TON/41 MTON 1.12 DIA WR 1 SHV	236503
206			

OPTION 2: UPPER BOOM POINT			
300			

BASIC REFERENCE ITEMS			
R1	1	GUIDE WIRE ROPE ASSY	81027767
R2	2	STRAP 9.67M #501 JIB 31.75 X 63.0	81036226
R3			
R4	2	LOAD CELL LINK 145,150 KGS	84038493
R5	1	HOIST ASSY LUFFING	81027708
R6	1	GUIDE ASSY DRUM 6 UPPER	81027946
R7	1	GUIDE ASSY DRUM 6 LOWER	81027949
R8	1	GUIDE ASSY DRUM 2,3 LOWER	81029022
R9	1	GUIDE ASSY DRUM 2,3 UPPER	81029628
R10	4	COLLAR 70.50 MM I.D.	81029689
R11	4	PIN 2 HOLE 12.8 DIA X 98.0 LG	81029708
R12	1	STRUT #502, MAIN ASSY	81025344
R13	1	STRUT ASSY #502, JIB	81025347
R14	1	STRUT STOP MAIN STRUT #502	81032853
R15	2	STOP ASSY, JIB #501A	84037517
R16	4	LINK #501 BOOM BUTT	81030028
R17	2	PIN 1 HOLE W/HD 100.0 X 86.3 LG	81032176
R18	1	SPREADER ASSY #501 MAIN STRUT	81033881
R19	4	LINK #501 12M LJ TOP	81034288
R20	4	LINK #501 12M LJ TOP	81034289
R21	6	PIN 1 HOLE X/HD 65.0 DIA X 82.3 LG	81034298
R22	2	STRAP 5.78M #500/501 JIB	81036029
R23	4	PIN 1 HOLE W/HD 69.5 DIA X 86.3 LG	81036091
R24	4	PLATE JIB STRUT HOLDBACK	81036997
R25	1	SPREADER FRAME 500/501 TRANS INSERT	81036402
R26	2	STRAP #502 JIB STRUT, BASIC	81036865
R27	2	STRAP #502 JIB STRUT	81036866
R28	2	PIN 1 HOLE W/HD 62.0 DIA X 85.8 LG	81036902
R29	4	SHIM .134 (IN) THK	81036908
R30	2	STRAP #502 MAIN STRUT, BASIC	81037361
R31	2	STRAP BASIC #502 MAIN STRUT BACKSTAY	81037362
R32	4	LINK #501 BACKSTAY, 1.38 M	81038262
R33	2	STRAP 1.42M #501 JIB 31.75 X 63.0	81038263
R34	2	PIN 1 HOLE W/HD 62.0 DIA X 92.0 LG	81039328
R35			
R36	4	PLATE 10GAX86X86	81039323
R37	1	PENDANT 31.8 (1.25 IN) DIA X 180.0 IN LG	277127
R38	1	SOCKET BUTTON FOR 28MM OR 32MM WR WITH PIN	A06278
R39	1	COLLAR 101MM I.D.	A12945
R40	1	PIN 2 HOLE 12.7 DIA X 128.0 LG	A12946
R41	1	ESI POSITION LIGHT AND ANEMOMETER	81031642
R42	1	LADDER 401 X 2400	81037823
R43	4	COLLAR 131.0MM ID	81033386
R44	4	COLLAR 121.0MM ID	81034036
R45	1	ARM 502 M STRUT RAISING	81036879
R46	2	STRUT SHIPPING, #502	84039032
R47	2	PIN #502 JIB STRUT HINGE	81039304
R48	2	PIN #501 JIB HINGE	81039305
R49	2	PLATE ANTIROTATION	81039285
R50	2	PIN WITH HEAD 100.0 DIA X 336.7 LG	84020672
R51			
R52	1	MAST RIGGING M11:503	84045340
R53	4	PIN 2 HOLE 2.25 DIA X 3.89 LG (IN)	81031296
R54	2	STAND ASSEMBLY	84046763
R55	2	PIN 1 HOLE W/HD 100.0 DIA X 162.3 LG	84046933
R56	2	PIN 1 HOLE W/HD 100.0 DIA X 94.3 LG	81029670

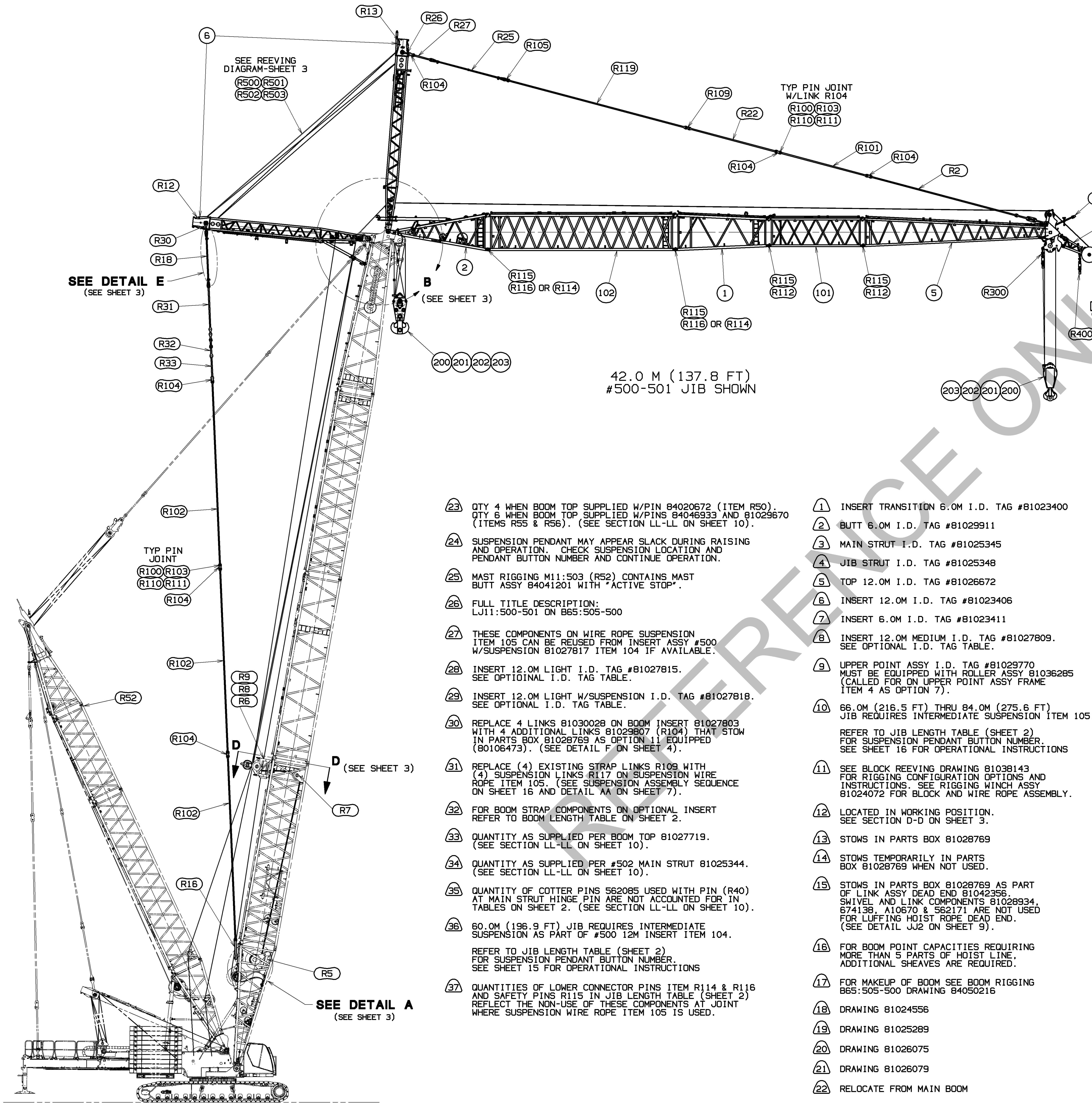
NO. REQ'D FOR THE FOLLOWING REFERENCE ITEMS ARE IN ONE OR BOTH TABLES (SHEET 2)			
R100	1	PIN COTTER 3/16 DIA X 1.50 LG	562085
R101	1	STRAP 6.00M #501 JIB 31.75 X 63.0	81029726
R102	1	STRAP 12.00M #501 JIB 31.75 X 63.0	81029728
R103	1	PIN 1 HOLE W/HD 62.0 DIA X 77.8 LG	81029806
R104	1	LINK #501 JIB	81029807
R105	1	LINK #500 BOOM	81024955
R106	1	STRAP .68M #500	81032002
R107	1	STRAP 10.22M #500	81032003
R108	1	LINK #500 SUSPENSION	81032170
R109	1	LINK #500/501 BOOM	81039439
R110	1	PIN 2 HOLES 12.7 DIA X 93.0 LG	A11799
R111	1	COLLAR 68MM I.D.	A11800
R112	1	PIN 1 HOLE W/HD 70.00 DIA X 132.4 LG	A16733
R113			
R114	1	PIN 1 HOLE W/HD 75.80 DIA X 160.4 LG	A13294
R115	1	PIN SAFETY .243 OD X 5.00	563640
R116	1	PIN 2 HOLE 75.8 X 171.9 LG	84026091
R117	1	LINK SUSPENSION	80102735
R118	1	PIN 1 HOLE W/HD 65.0 DIA X 94.3 LG	81024951
R119	1	STRAP 11.78M #500	81027401
R120	1	LINK #500 BOOM	81032298

REFERENCE ITEMS FOR ASSEMBLY AND RIGGING PURPOSE ONLY			
R200	1	MECHANICAL SWIVEL 1.5 TON	81014885
R201	1	WIRE ROPE END .31 ROPE EYE FITTING	81014886
R202	1	WIRE ROPE 8 mm (5/16 IN) DIA	81024101
R203	2	GUIDE ASSEMBLY WIRE ROPE	81028007
R204	4	SLING LIFTING 1 LEG X 4000(LBS) X 9.0(FT)	81038423
R205	2	SLING 13.0 (FT) 4000(LBS)	84026655
R206	1	WIRE ROPE #502 STRUT SHIP ASSY	84020076
R207	2	SHACKLE ANCHOR, PIN 3.25 MTON	84020077
R208	1	PIN 57.9 X 72.4 LG W/H	84020349
R209	2	SHEAVE ASSEMBLY RIGGING WINCH	A12012
R210	2	SHACKLE 20.ST SLING	81041163
R211			

REFERENCE OPTION 3: JIB TOP DEAD END			
R300	1	LINK ASSY DEAD END	81042356

REFERENCE OPTION 4: UPPER POINT DEAD END			
R400	1	LINK ASSY DEAD END	81042356

REFERENCE: WIRE ROPE			
R500	1	WIRE ROPE 28MM ASSY X 440M LG	81025294
R501	1	WIRE ROPE 28MM ASSY X 440M LG	81025300
R502	1	WIRE ROPE 28MM ASSY X 440M LG	81026078
R503	1	WIRE ROPE 28MM ASSY X 440M LG	81026082



- 23 QTY 4 WHEN BOOM TOP SUPPLIED W/PIN 84020672 (ITEM R50). QTY 6 WHEN BOOM TOP SUPPLIED W/PINS 84046933 AND 81029670 (ITEMS R55 & R56). (SEE SECTION LL-LL ON SHEET 10).
- 24 SUSPENSION PENDANT MAY APPEAR SLACK DURING RAISING AND OPERATION. CHECK SUSPENSION LOCATION AND PENDANT BUTTON NUMBER AND CONTINUE OPERATION.
- 25 MAST RIGGING M11:503 (R52) CONTAINS MAINTENANCE BUTT ASSY 84041201 WITH "ACTIVE STOP".
- 26 FULL TITLE DESCRIPTION: LJ11:500-501 ON B65:505-500
- 27 THESE COMPONENTS ON WIRE ROPE SUSPENSION ITEM 105 CAN BE REUSED FROM INSERT ASSY #500 W/SUSPENSION 81027817 ITEM 104 IF AVAILABLE.
- 28 INSERT 12.0M LIGHT I.D. TAG #81027815. SEE OPTIONAL I.D. TAG TABLE.
- 29 INSERT 12.0M LIGHT W/SUSPENSION I.D. TAG #81027818. SEE OPTIONAL I.D. TAG TABLE.
- 30 REPLACE 4 LINKS 81030028 ON BOOM INSERT 81027803 WITH 4 ADDITIONAL LINKS 81029807 (R104) THAT STOW IN PARTS BOX 81028769 AS OPTION 11 EQUIPPED (80106473). (SEE DETAIL F ON SHEET 4).
- 31 REPLACE (4) EXISTING STRAP LINKS R109 WITH (4) SUSPENSION LINKS R117 ON SUSPENSION WIRE ROPE ITEM 105. (SEE SUSPENSION ASSEMBLY SEQUENCE ON SHEET 16 AND DETAIL AA ON SHEET 7).
- 32 FOR BOOM STRAP COMPONENTS ON OPTIONAL INSERT REFER TO BOOM LENGTH TABLE ON SHEET 2.
- 33 QUANTITY AS SUPPLIED PER BOOM TOP 81027719. (SEE SECTION LL-LL ON SHEET 10).
- 34 QUANTITY AS SUPPLIED PER #502 MAIN STRUT 81025344. (SEE SECTION LL-LL ON SHEET 10).
- 35 QUANTITY OF COTTER PINS 562085 USED WITH PIN (R40) AT MAIN STRUT HINGE PIN ARE NOT ACCOUNTED FOR IN TABLES ON SHEET 2. (SEE SECTION LL-LL ON SHEET 10).
- 36 60.0M (196.9 FT) JIB REQUIRES INTERMEDIATE SUSPENSION AS PART OF #500 12M INSERT ITEM 104. REFER TO JIB LENGTH TABLE (SHEET 2) FOR SUSPENSION PENDANT BUTTON NUMBER. SEE SHEET 15 FOR OPERATIONAL INSTRUCTIONS.
- 37 QUANTITIES OF LOWER CONNECTOR PINS ITEM R114 & R116 AND SAFETY PINS R115 IN JIB LENGTH TABLE (SHEET 2) REFLECT THE NON-USE OF THESE COMPONENTS AT JOINT WHERE SUSPENSION WIRE ROPE ITEM 105 IS USED.
- 1 INSERT TRANSITION 6.0M I.D. TAG #81023400
- 2 BUTT 6.0M I.D. TAG #81029911
- 3 MAIN STRUT I.D. TAG #81025345
- 4 JIB STRUT I.D. TAG #81025348
- 5 TOP 12.0M I.D. TAG #81026672
- 6 INSERT 12.0M I.D. TAG #81023406
- 7 INSERT 6.0M I.D. TAG #81023411
- 8 INSERT 12.0M MEDIUM I.D. TAG #81027809. SEE OPTIONAL I.D. TAG TABLE.
- 9 UPPER POINT ASSY I.D. TAG #81029770 MUST BE EQUIPPED WITH ROLLER ASSY 81036285 (CALLED FOR ON UPPER POINT ASSY FRAME ITEM 4 AS OPTION 7).
- 10 66.0M (216.5 FT) THRU 84.0M (275.6 FT) JIB REQUIRES INTERMEDIATE SUSPENSION ITEM 105. REFER TO JIB LENGTH TABLE (SHEET 2) FOR SUSPENSION PENDANT BUTTON NUMBER. SEE SHEET 16 FOR OPERATIONAL INSTRUCTIONS.
- 11 SEE BLOCK REEVEING DRAWING 81036143 FOR RIGGING CONFIGURATION OPTIONS AND INSTRUCTIONS. SEE RIGGING WINCH ASSY 81024072 FOR BLOCK AND WIRE ROPE ASSEMBLY.
- 12 LOCATED IN WORKING POSITION. SEE SECTION D-D ON SHEET 3.
- 13 STOWS IN PARTS BOX 81028769
- 14 STOWS TEMPORARILY IN PARTS BOX 81028769 WHEN NOT USED.
- 15 STOWS IN PARTS BOX 81028769 AS PART OF LINK ASSY DEAD END 81042356. SWIVEL AND LINK COMPONENTS 81028934, 674138, A10670 & 562171 ARE NOT USED FOR LUFFING HOIST ROPE DEAD END. (SEE DETAIL JJ2 ON SHEET 9).
- 16 FOR BOOM POINT CAPACITIES REQUIRING MORE THAN 5 PARTS OF HOIST LINE ADDITIONAL SHEAVES ARE REQUIRED.
- 17 FOR MAKEUP OF BOOM SEE BOOM RIGGING B65:505-500 DRAWING 84050216
- 18 DRAWING 81024556
- 19 DRAWING 81025289
- 20 DRAWING 81026075
- 21 DRAWING 81026079
- 22 RELOCATE FROM MAIN BOOM

54.0 M (177.2 FT)  
#505-500 BOOM SHOWN  
SEE 17

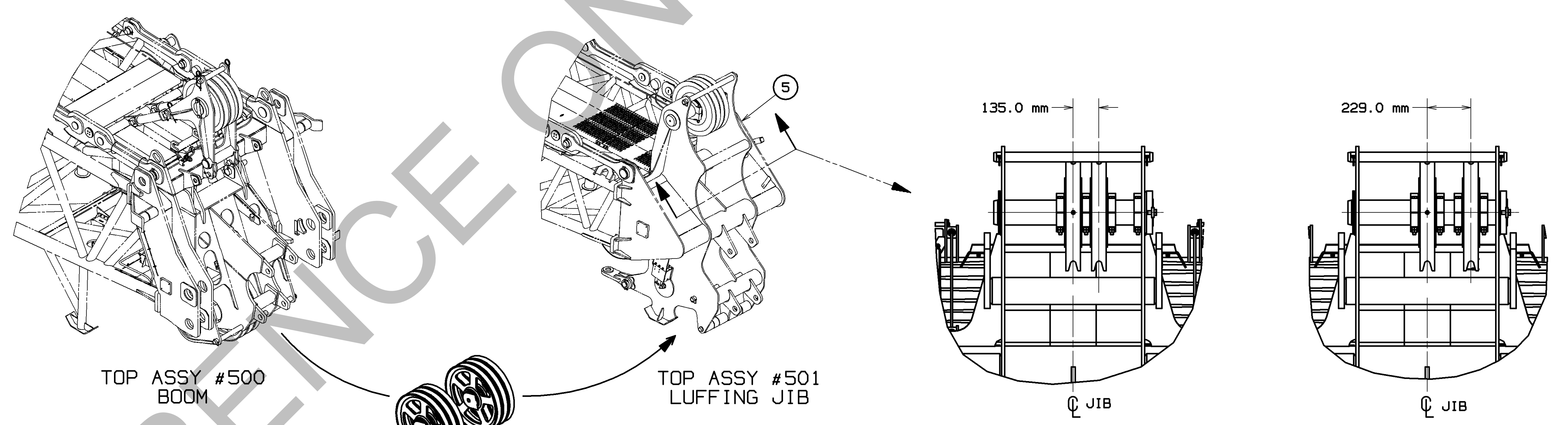
ITEMS REQ'D FOR VARIOUS JIB LENGTHS - SEE SHEETS 5 & 6 FOR JIB MAKE-UP

BILL OF MATERIAL

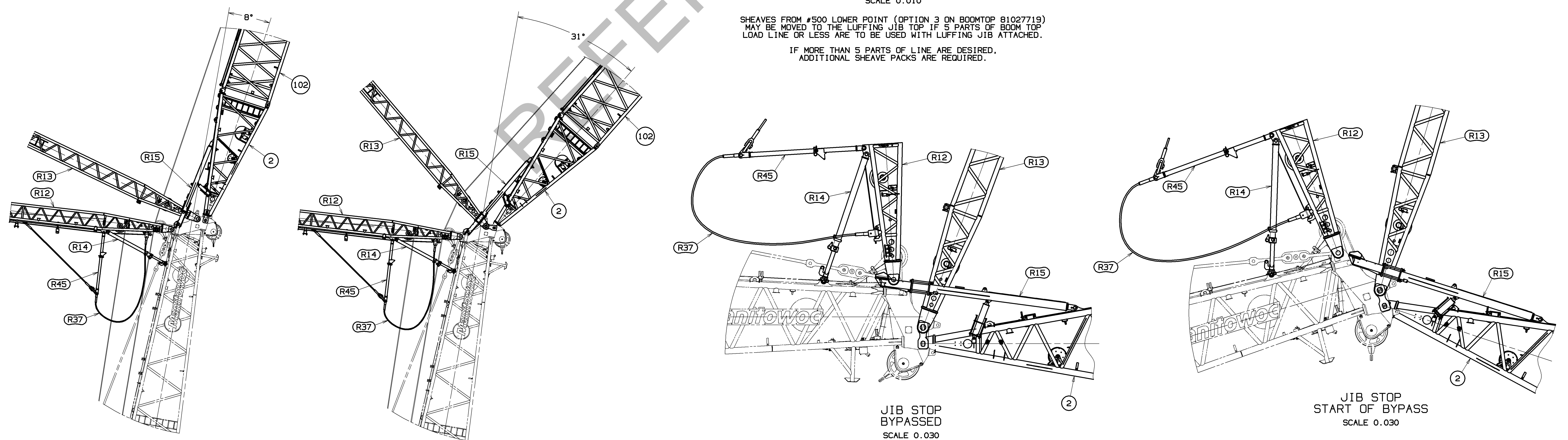
ITEM NO.	#501 INSERTS					#500 INSERTS					STRAP					LINK					PIN			COTTER	COLLAR	SUSPENSION	SUSPENSION	LOWER CONN PIN	SAFETY PIN	
	100	101	102	103	104	R101	R102	R106	R107	R119	R104	R105	R108	R109	R117	R120	R103	R110	R118	R100	R111	PART OF ITEM 104	105	R112	R116 OR R114	R115 SEE 37				
JIB LENGTH	INSERT 12M (39.4FT) ASSY	INSERT 6M (19.7 FT) ASSY	INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) SUSP ASSY	STRAP 6M (19.7 FT)	STRAP 12M (39.4FT)	STRAP SHORT W/SUSP	STRAP LONG W/SUSP	STRAP 12M (39.4FT)	LINK #501	LINK #500	LINK CONNECT W/SUSP	LINK #500/#501	LINK CONNECT W/SUSP	LINK CONNECT W/SUSP	PIN	PIN	PIN	COTTER	COLLAR	PENDANT BUTTON NUMBER SEE 24 26	PENDANT BUTTON NUMBER SEE 10 24	PIN	PIN	USED W/ R116 & R112	USED W/ R114 & R112			
24	78.7	0	0	0	0	0	0	0	0	0	8	0	0	4	0	0	8	16	2	44	16	-	-	2	2	6	4			
30	98.4	0	1	0	0	2	0	0	0	0	12	0	0	4	0	0	12	20	2	52	20	-	-	4	2	8	6			
36	118.1	0	0	1	0	0	0	0	0	2	8	4	0	4	0	0	8	20	6	52	20	-	-	2	4	10	6			
42	137.8	0	1	1	0	2	0	0	0	2	12	4	0	4	0	0	12	24	6	60	24	-	-	4	4	12	8			
48	157.5	0	0	2	0	0	0	0	0	4	8	8	0	4	0	0	8	24	10	60	24	-	-	2	6	14	8			
54	177.2	0	1	2	0	2	0	0	0	4	12	8	0	4	0	0	12	28	10	68	28	-	-	4	6	16	10			
60	196.9	0	0	2	0	1	0	0	2	2	4	8	16	2	4	0	4	8	36	22	84	36	5	-	2	8	18	10		
66	216.5	0	1	2	OR 0 1	2	0	2	2	4	12	16	2	0	4	4	12	40	22	92	40	-	2	4	6	16	10			
72	236.2	1	0	2	OR 0 1	0	2	2	2	4	12	16	2	0	4	4	12	40	22	92	40	-	3	4	6	16	10			
78	255.9	1	1	2	OR 0 1	2	2	2	2	4	16	16	2	0	4	4	16	44	22	100	44	-	4	6	6	18	12			
84	275.6	2	0	2	OR 0 1	0	4	2	2	4	16	16	2	0	4	4	16	44	22	100	44	-	4	6	6	18	12			

ITEMS REQ'D FOR VARIOUS BOOM LENGTHS - SEE SHEET 4 FOR BOOM MAKE-UP

ITEM NO.	STRAP		LINK	PIN		COTTER	COLLAR	JIB BACKSTAY ADJUSTMENT HOLE SEE DETAIL G ON SHEET 4	
	R101	R102	R104	R103	R110	R100	R111		
BOOM LENGTH	STRAP 6M (19.7FT)	STRAP 12M (39.4FT)	LINK	PIN	PIN	COTTER	COLLAR		
54	177.2	0	6	12	20	24	48	24	C
60	196.9	2	6	16	24	28	56	28	C
66	216.5	0	8	16	24	28	56	28	C
72	236.2	2	8	20	28	32	64	32	D
78	255.9	0	10	20	28	32	64	32	D
84	275.6	2	10	24	32	36	72	36	D



SHEAVES FROM #500 LOWER POINT (OPTION 3 ON BOOMTOP 81027719) MAY BE MOVED TO THE LUFFING JIB TOP IF 5 PARTS OF BOOM TOP LOAD LINE OR LESS ARE TO BE USED WITH LUFFING JIB ATTACHED. IF MORE THAN 5 PARTS OF LINE ARE DESIRED, ADDITIONAL SHEAVE PACKS ARE REQUIRED.



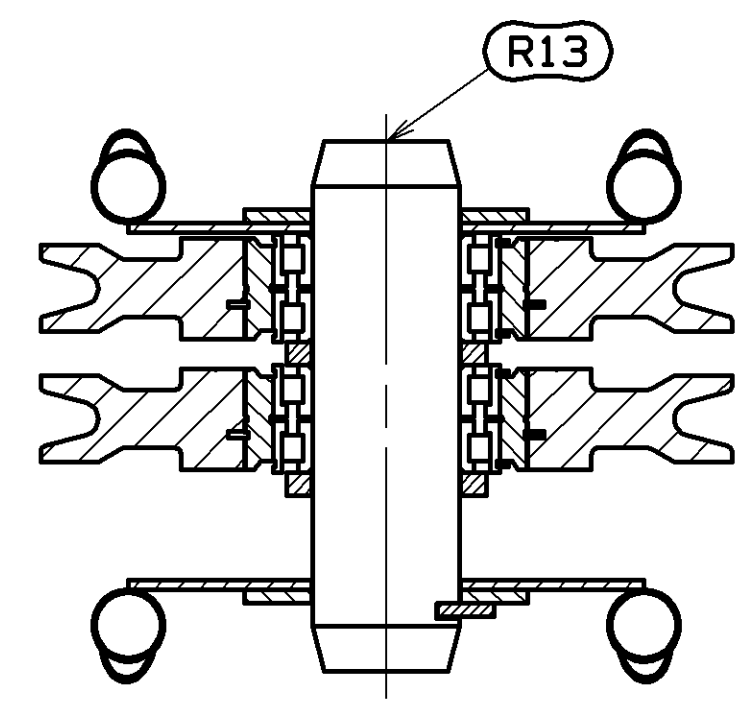
THIS DRAWING IS THE PROPERTY OF MANITOWOC CRANES, INC. ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF MANITOWOC CRANES, INC.

MANITOWOC CRANES, INC. LUFFING JIB RIGGING

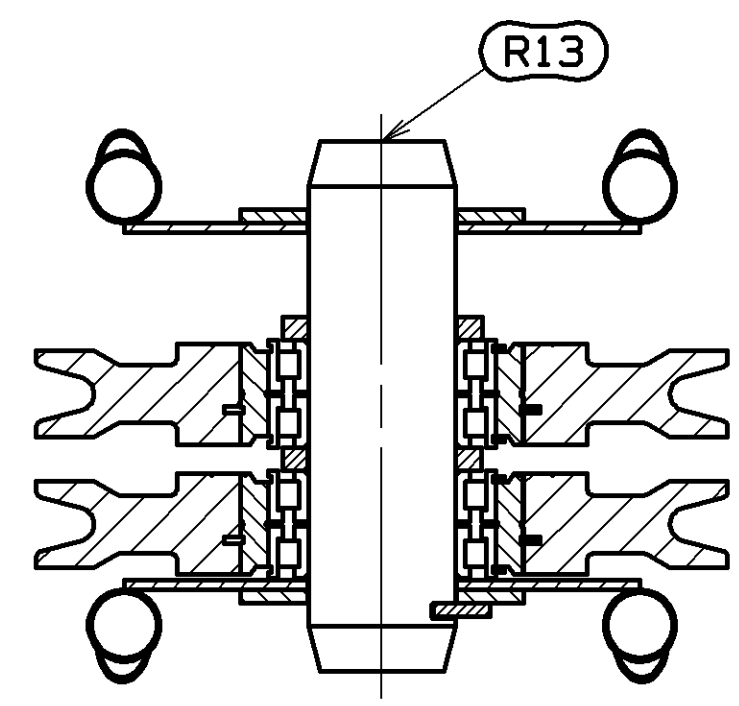
DATE: 03-27-19

REV: A

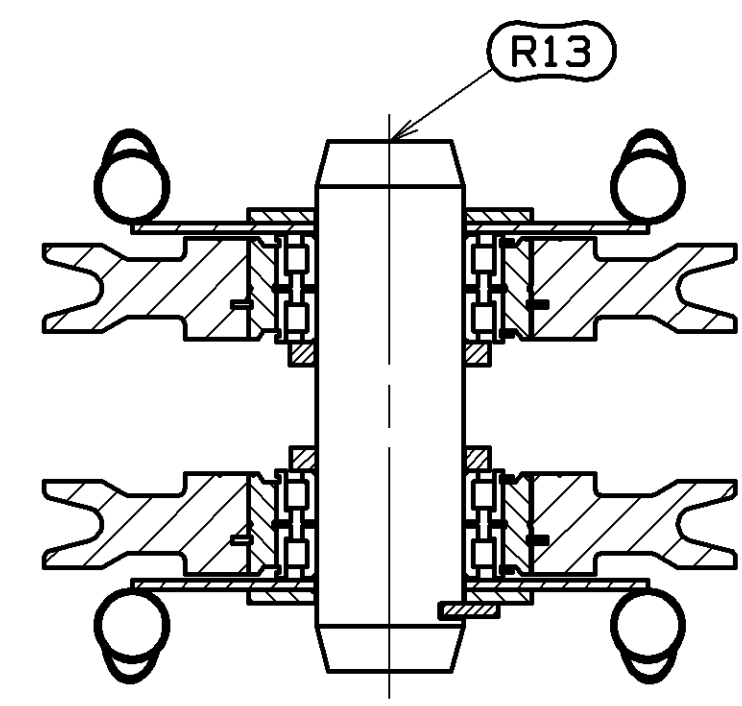
NO. 84050217 SHT 2 OF 16



CONFIGURATION 1



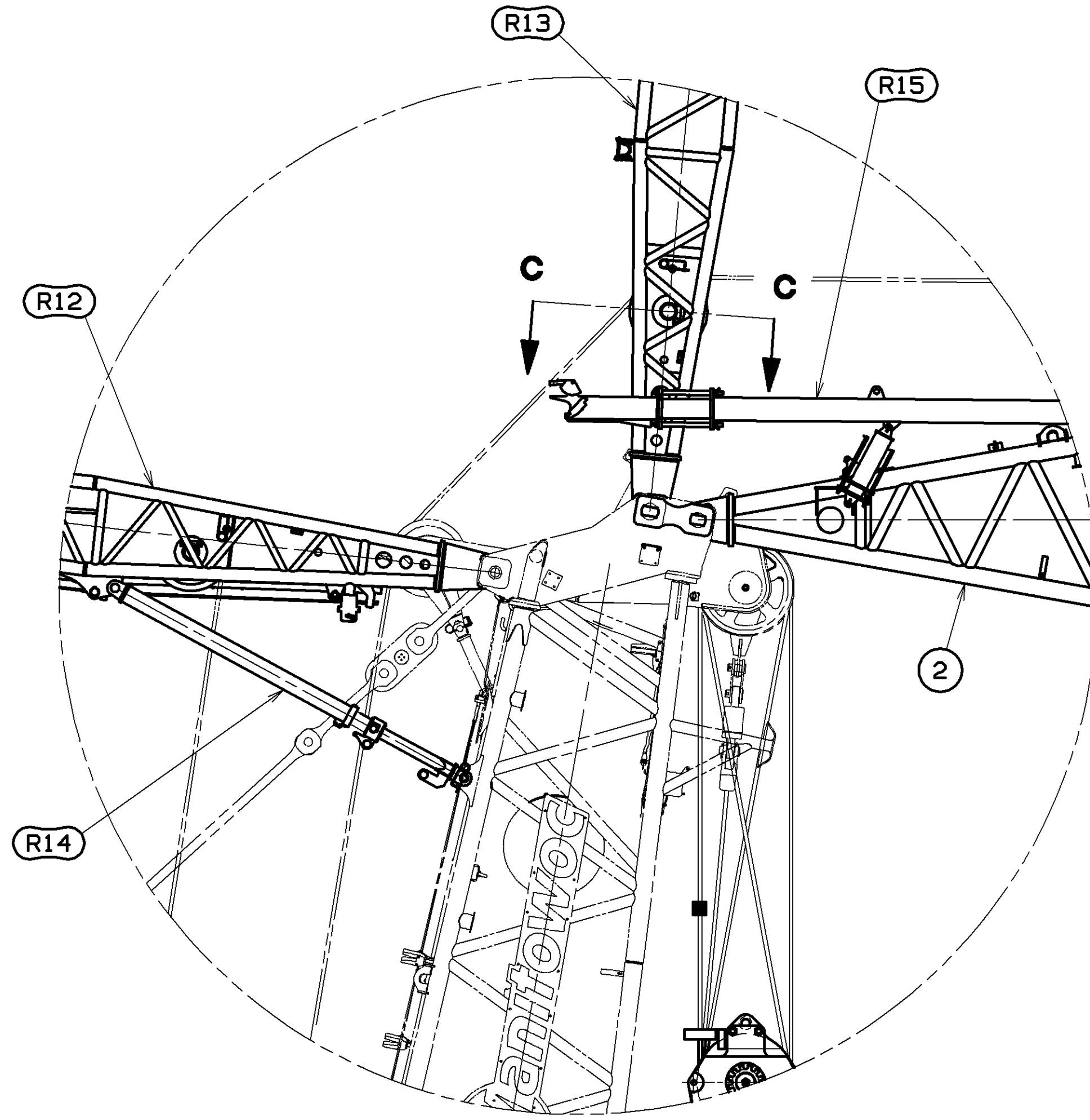
CONFIGURATION 2



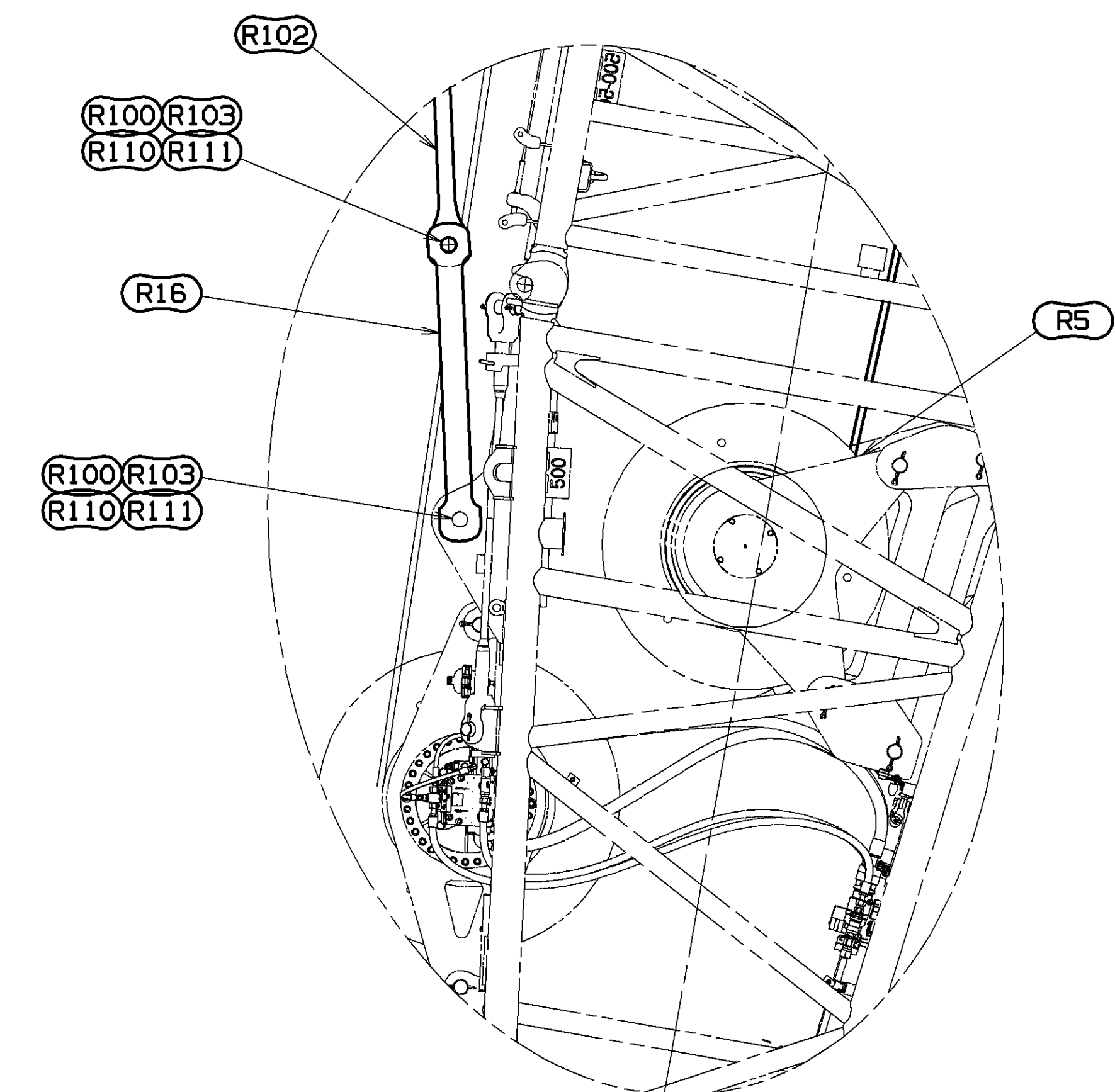
CONFIGURATION 3

**SECTION C-C**

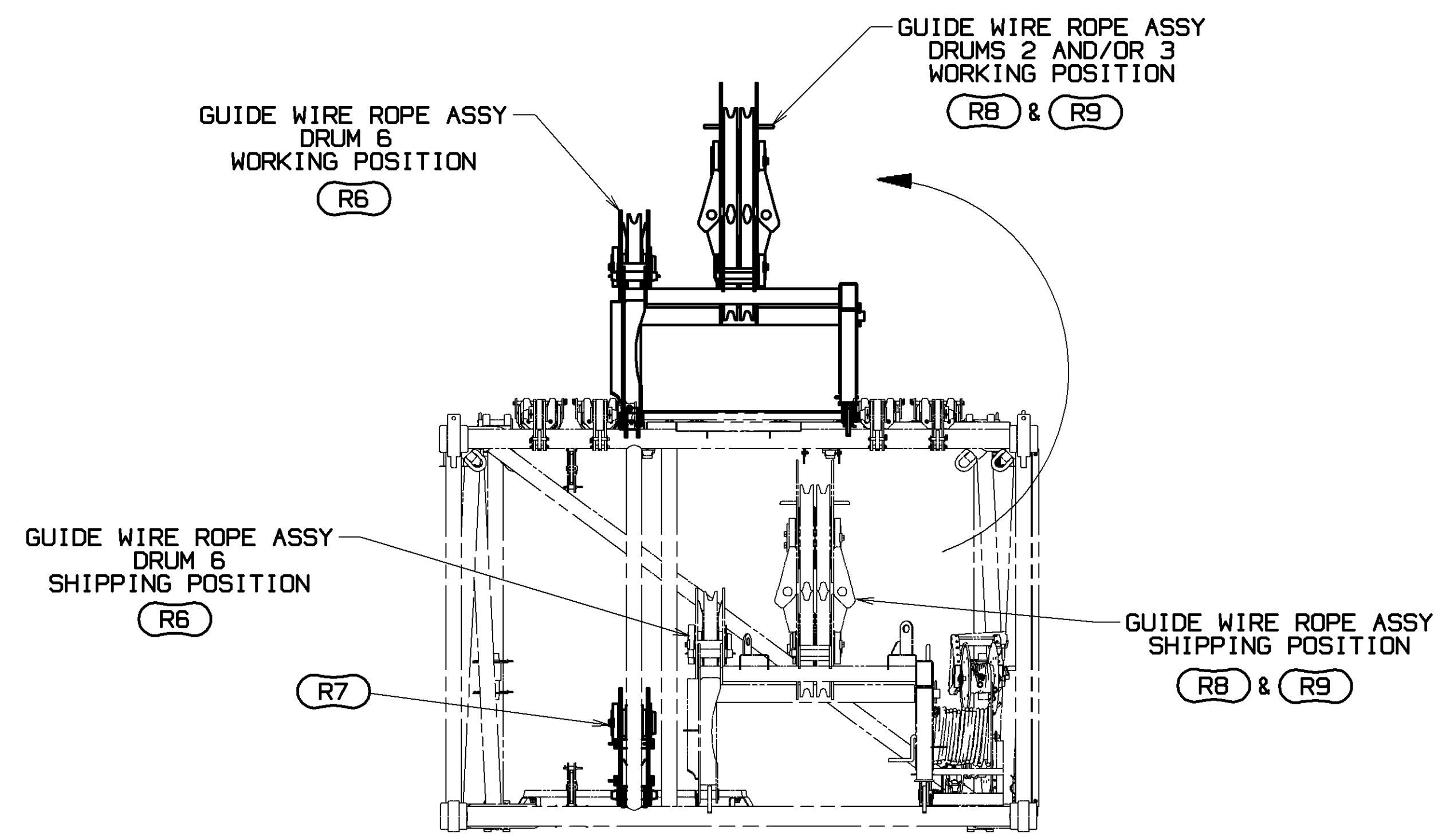
#502 JIB STRUT  
ALIGN JIB STRUT SHEAVE WITH  
SHEAVES TO BE USED ON BOOM TOP  
SCALE 0.150



**DETAIL B**  
(FROM SHEET 1)  
SCALE 0.030

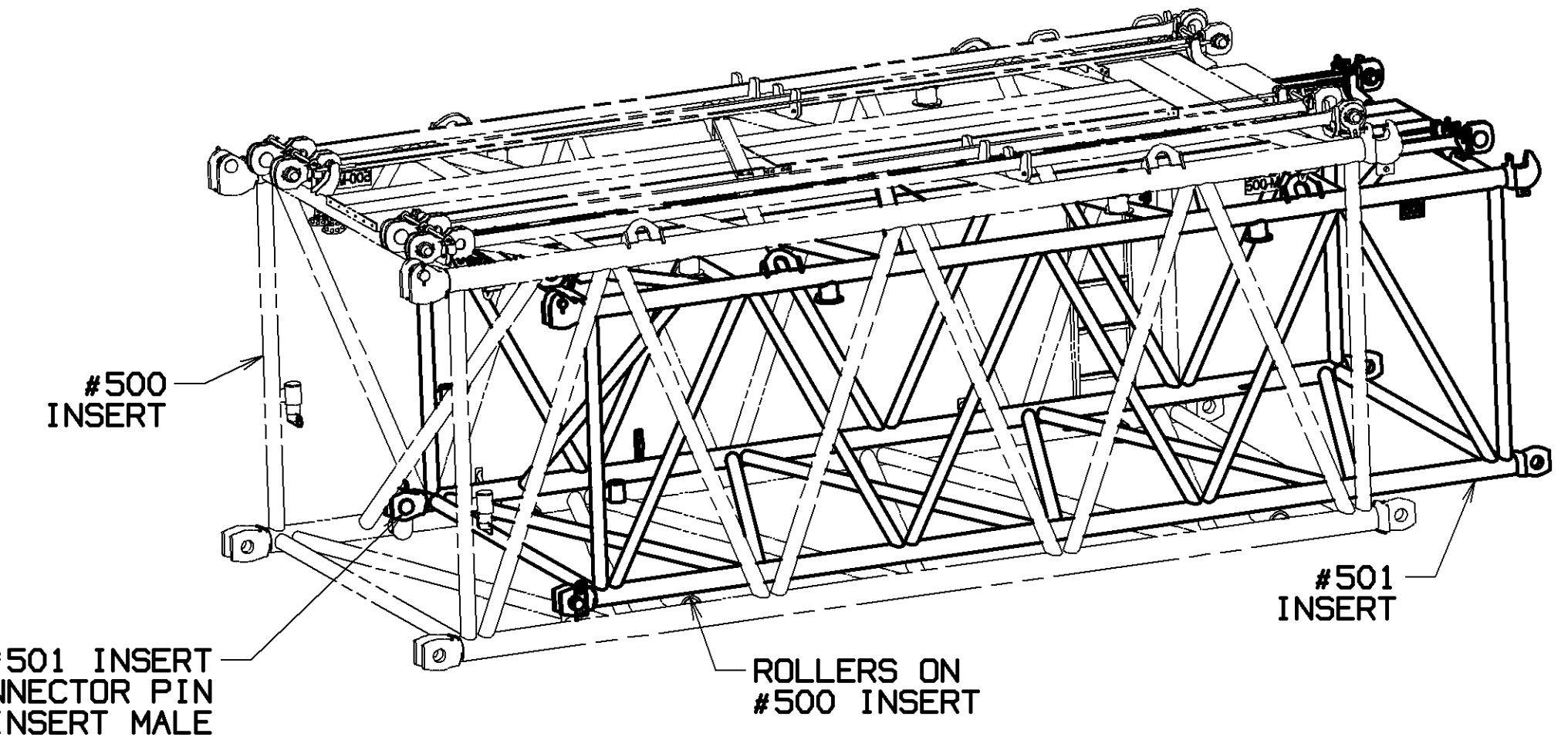


**DETAIL A**  
(FROM SHEET 1)  
SCALE 0.050

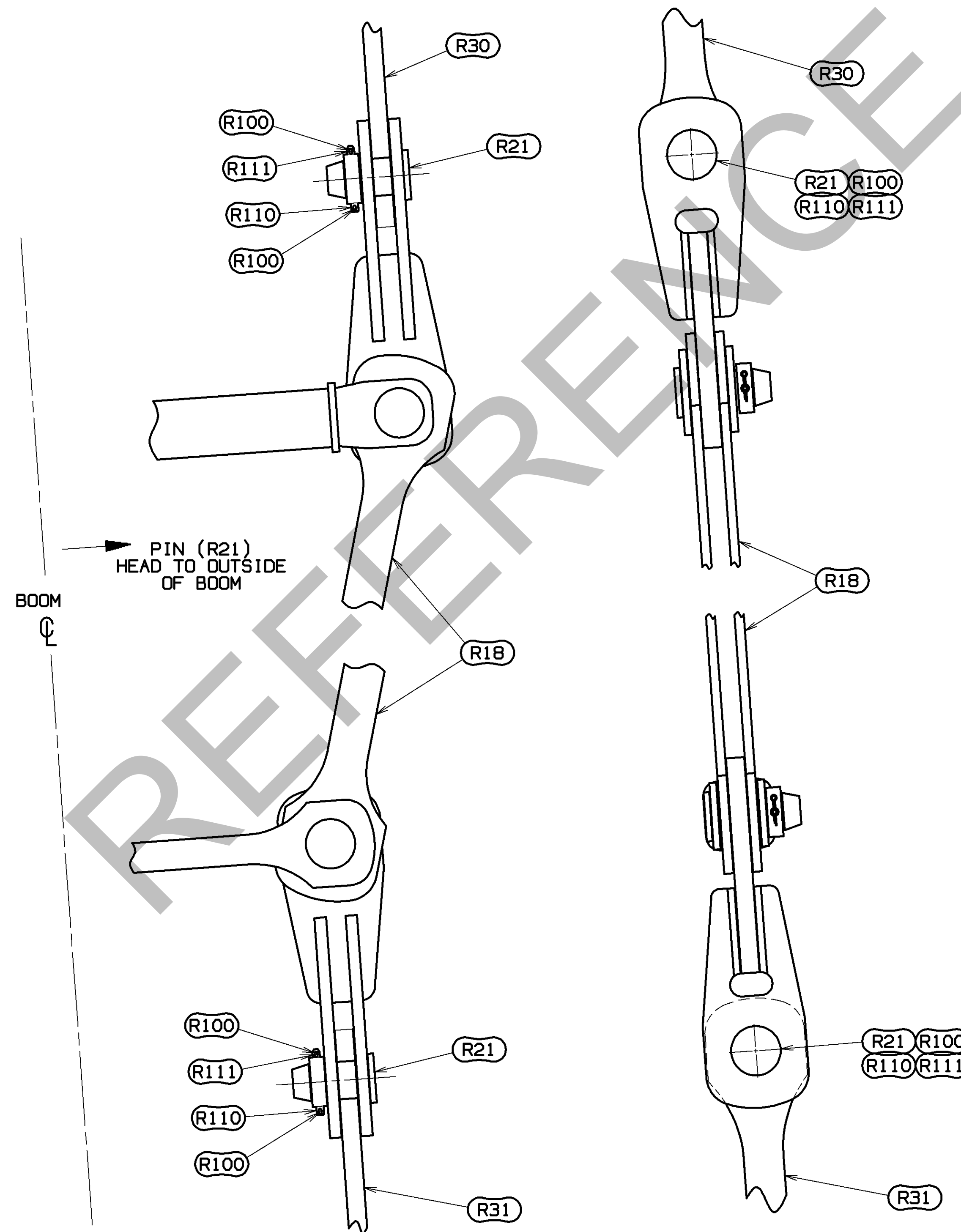


**SECTION D-D**  
12M 3.5M WIDE HEAVY INSERT  
ROPE GUIDE ARRANGEMENT  
(FROM SHEET 1)  
SCALE 0.040

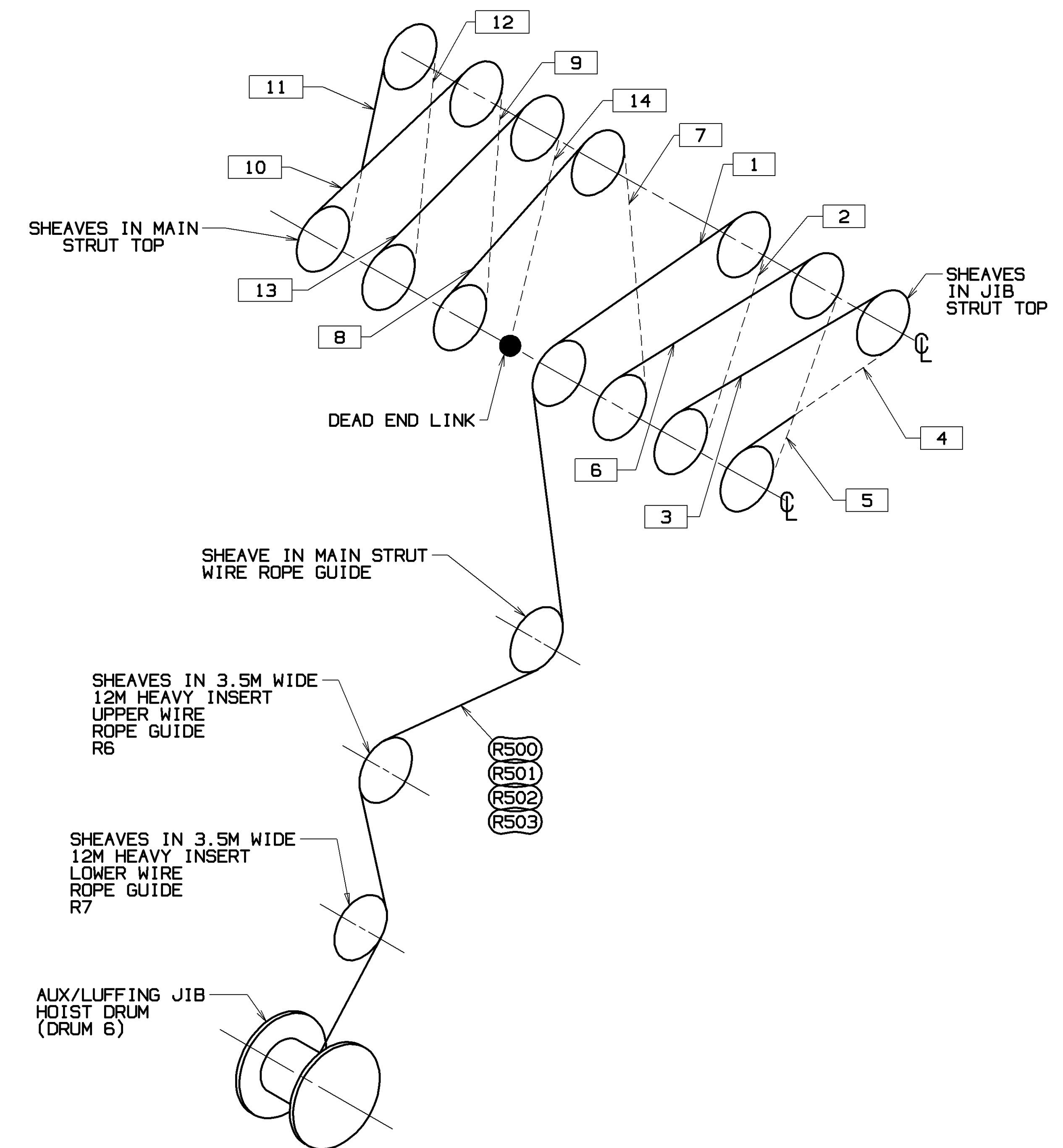
BILL OF MATERIAL		
QTY	DESCRIPTION	MATERIAL
<b>STOWABLE INSERT CONFIGURATION</b> (#501 INTO #500)		
#500 INSERT W/STOWABLE #501 INSERT FEATURE	#501 (6M) STOWABLE INSERT	#501 (12M) STOWABLE INSERT
81027820 (6M)	81023410 (ITEM 101)	-----
81027808 (12M)	-----	81023405 (ITEM 100)
81027811 (12M)	-----	81023405 (ITEM 100)



**STOWABLE INSERT CONFIGURATION**  
(#501 INTO #500)  
SEE TABLE



**DETAIL E**  
(FROM SHEET 1)  
SCALE 0.180

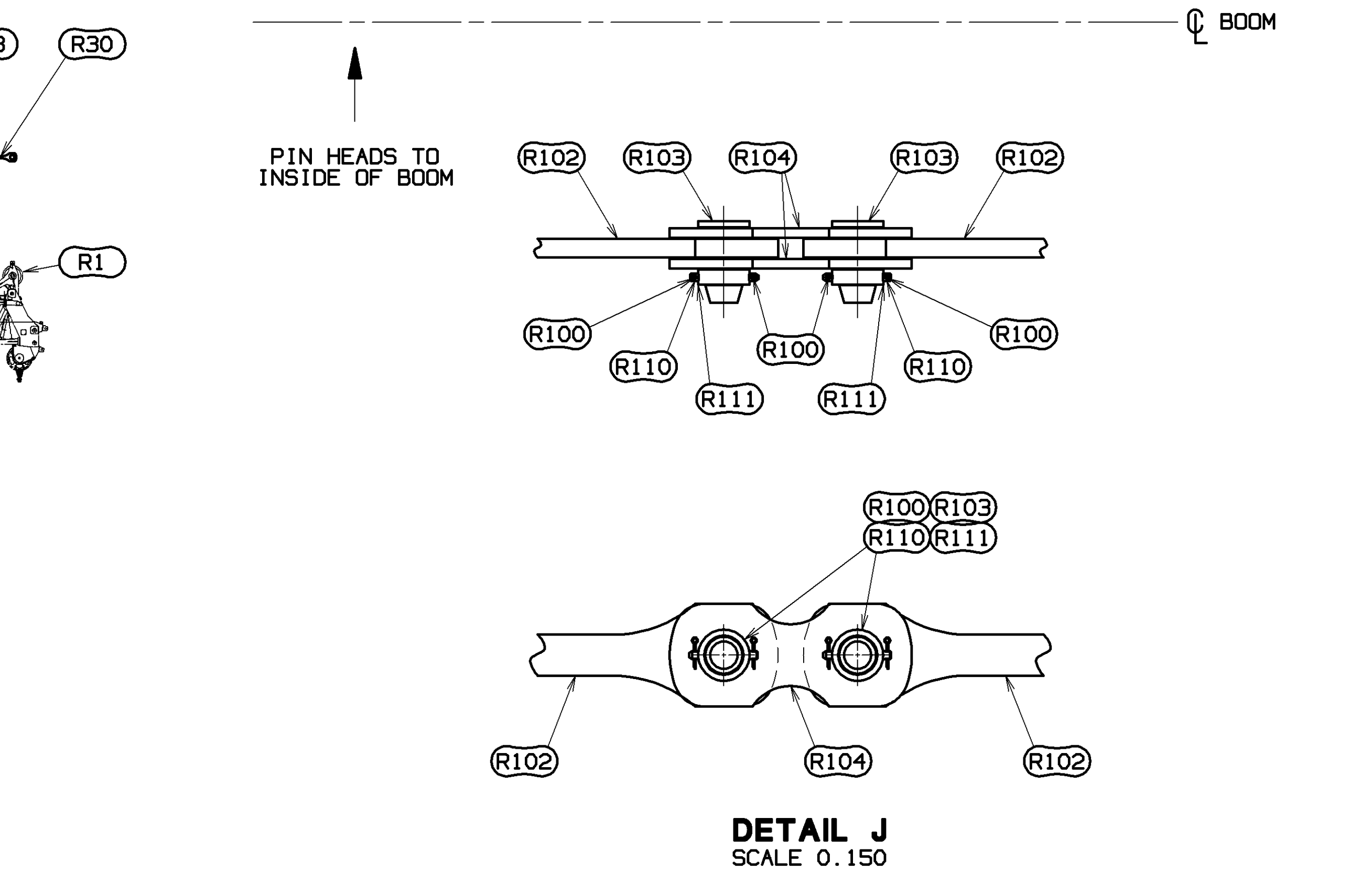
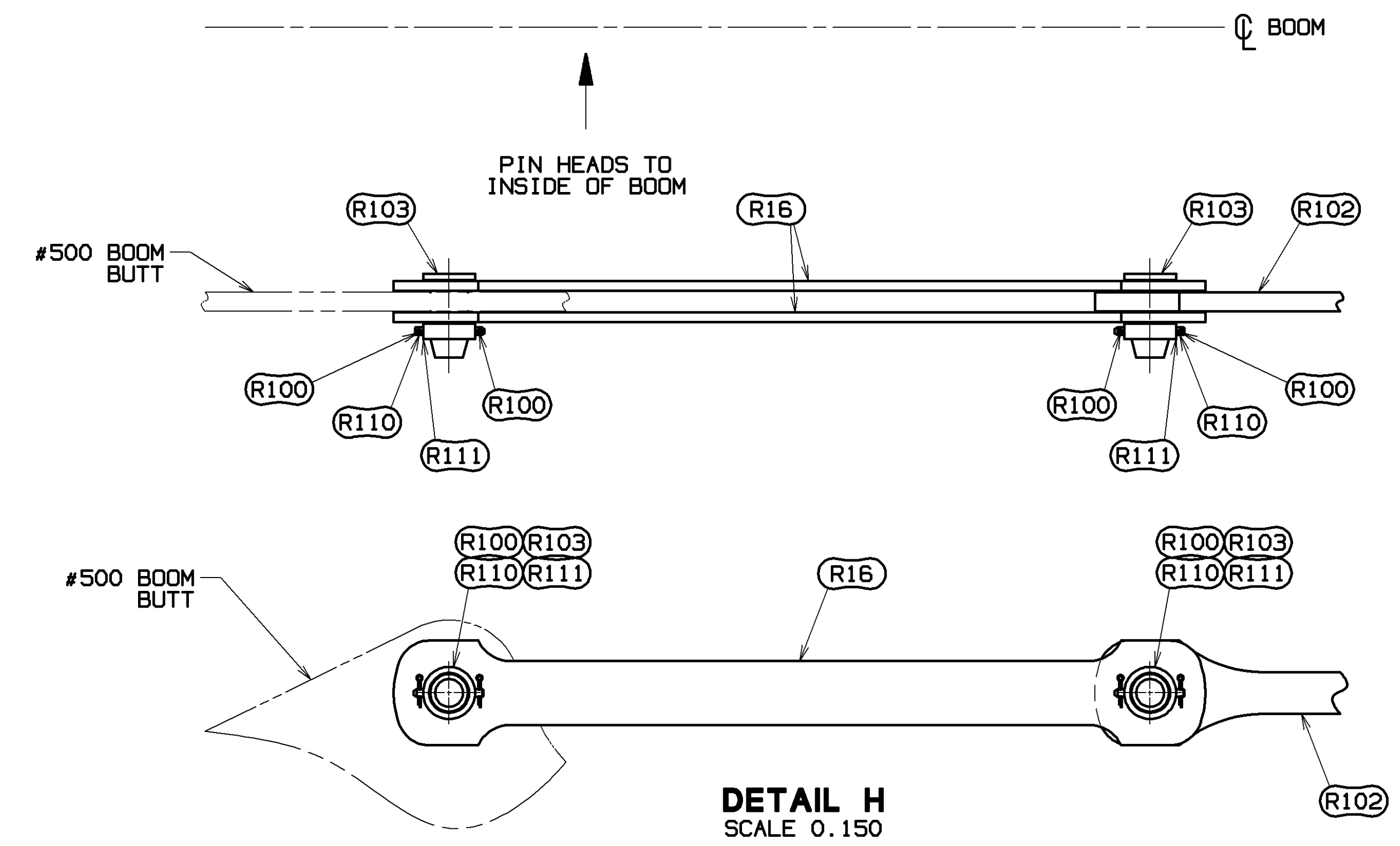
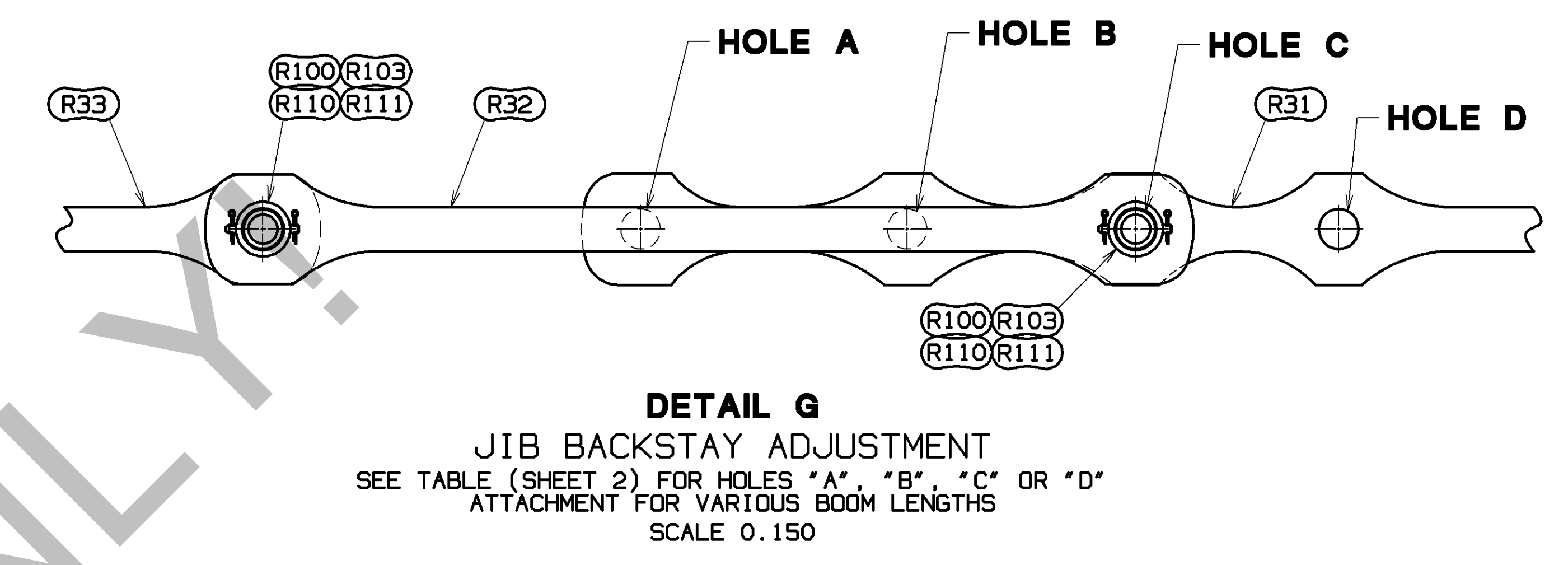
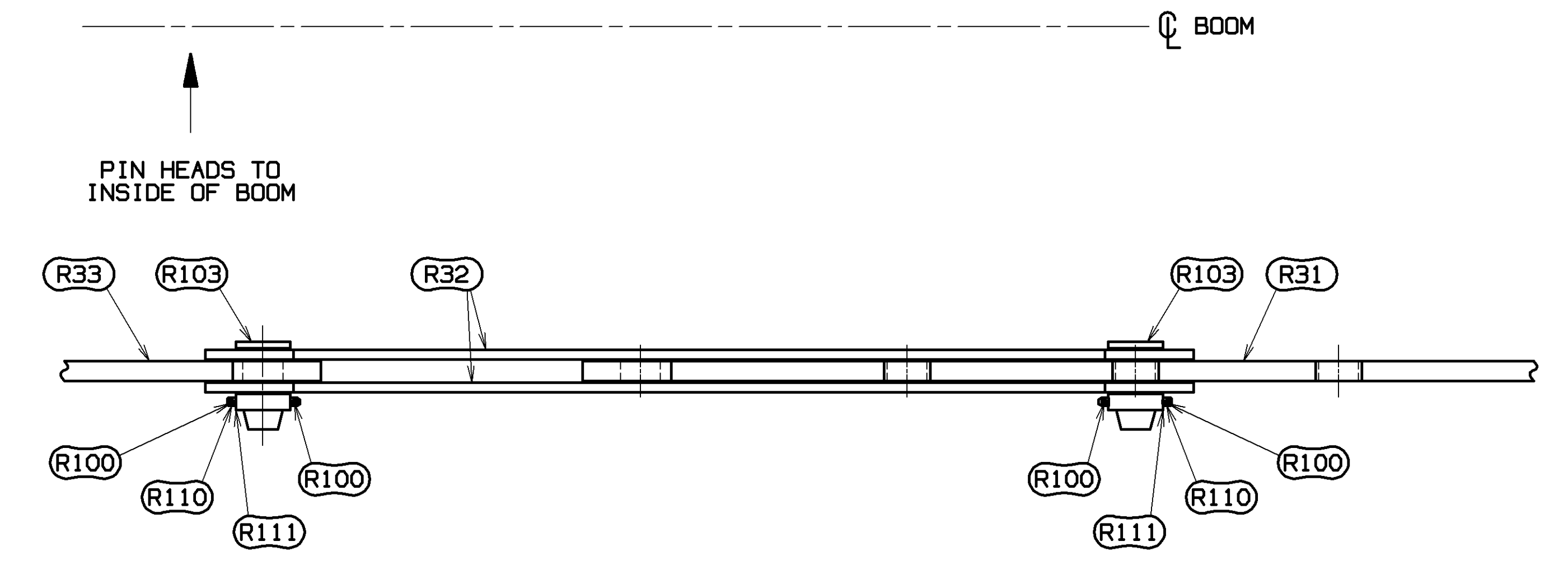
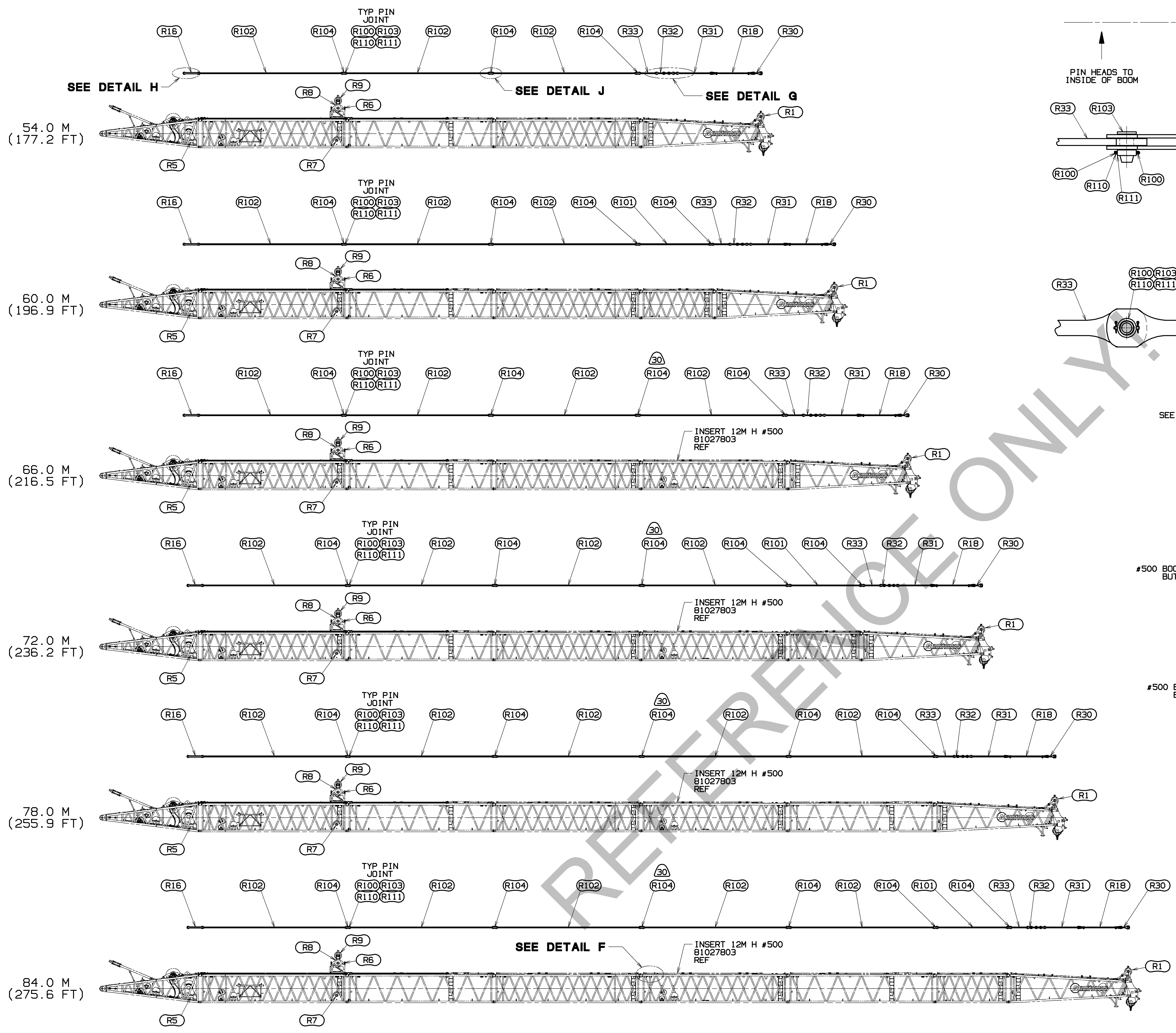


**LUFFING JIB HOIST  
REEVING DIAGRAM  
FOR 14 PART LINE**

84050217  
SHT 3 OF 16

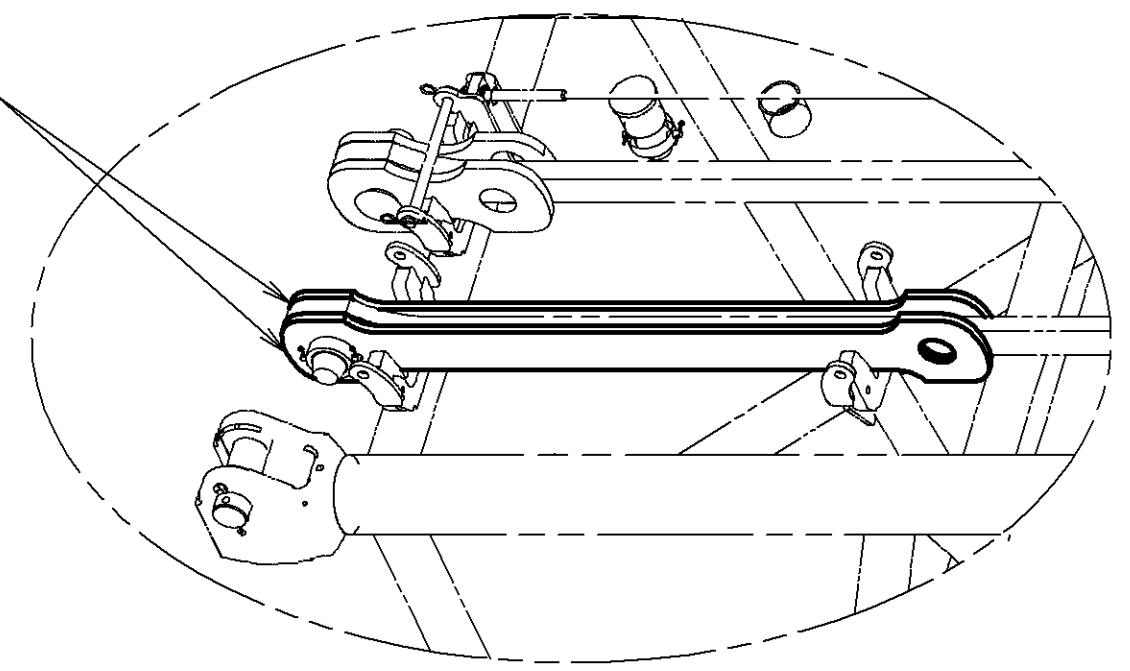
PRIVATE LABELING  
REQUIREMENT TO  
CONFORM TO  
ENGINEERING  
SPECIFICATION  
8629103794 FOR  
COMPONENTS LISTED  
IN 862900-05-026  
DATE  
03-27-19  
REV. LTR.  
A

<small>THIS PRINT REMAINS THE PROPERTY OF MANITOWOC CRANES, INC. IF IT IS LOST, SUBJECT TO RETURN (BY OWNER), AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER DETRIMENTAL TO OUR INTERESTS.</small>	<small>TOLERANCE UNLESS OTHERWISE SPECIFIED</small> DECIMAL PLACES      FRACTIONS      FINISHING (1) PLACE 0.5      1/16, 1/8, 1/4, 3/8, 1/2, 5/8, 3/4, 7/8, 1      TO BE USED IN ALL DIMENSIONS UNLESS OTHERWISE SPECIFIED		<small>NOTED</small> DR. RHY CK. KJV MODEL.MLC300 APP JRR	<b>Manitowoc Cranes, Inc.</b> Manitowoc, Wisconsin LUFFING JIB RIGGING LJ ON B65	84050217 SHT 3 OF 16
	<small>DO NOT SCALE THIS DRAWING</small>		<small>DATE</small> 03-27-19	<small>REV. LTR.</small> A	<small>DATE</small> 03-27-19



REQ'D #505-500 BOOM/#501 BACKSTAY STRAP ASSEMBLY  
 SEE TABLE ON SHEET 2  
 FOR TYP PIN JOINT SEE DETAILS A, E, F, G, H AND J

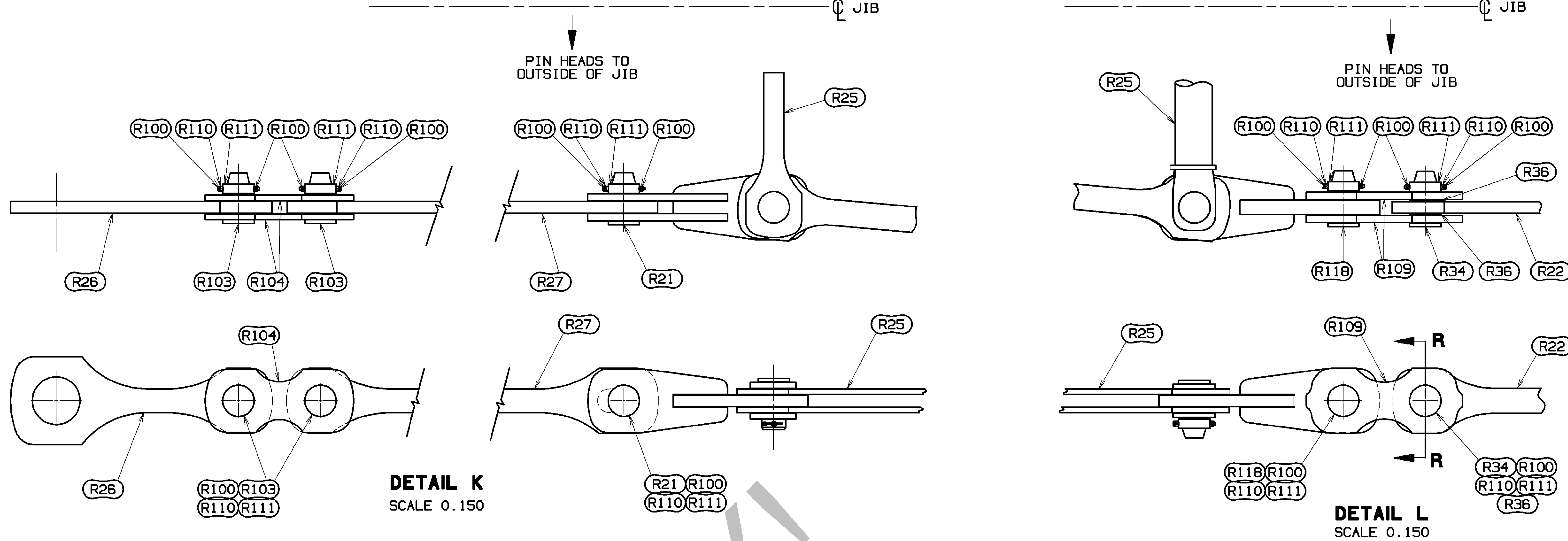
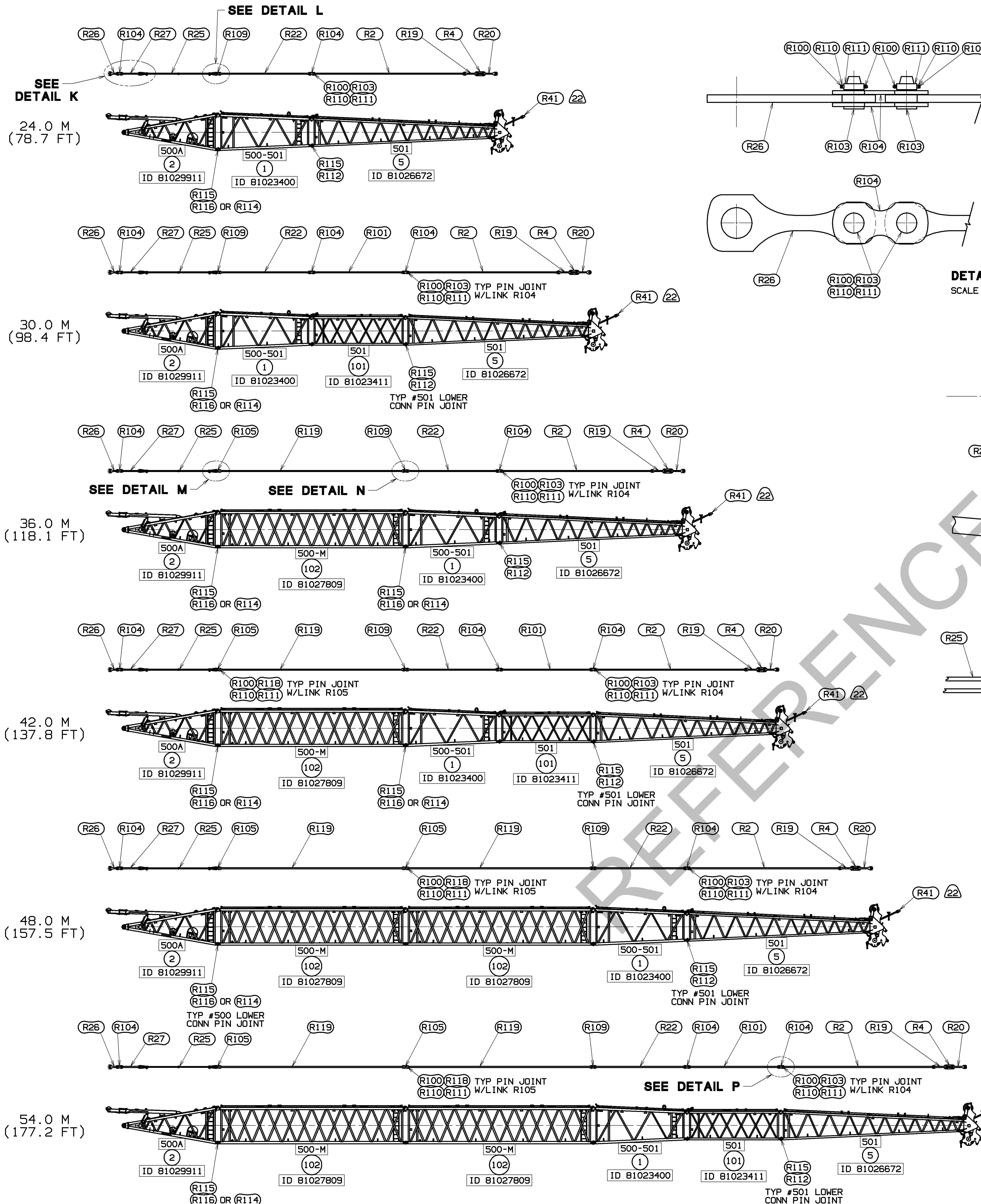
REMOVE EXISTING BOOM BUTT LINKS  
 81030028 (SHOWN) FROM 12M H #500  
 INSERT 81027803 AND REPLACE WITH  
 LINKS R104 SHIPPED IN PARTS BOX  
 81028769



DETAIL F  
 SCALE 0.075

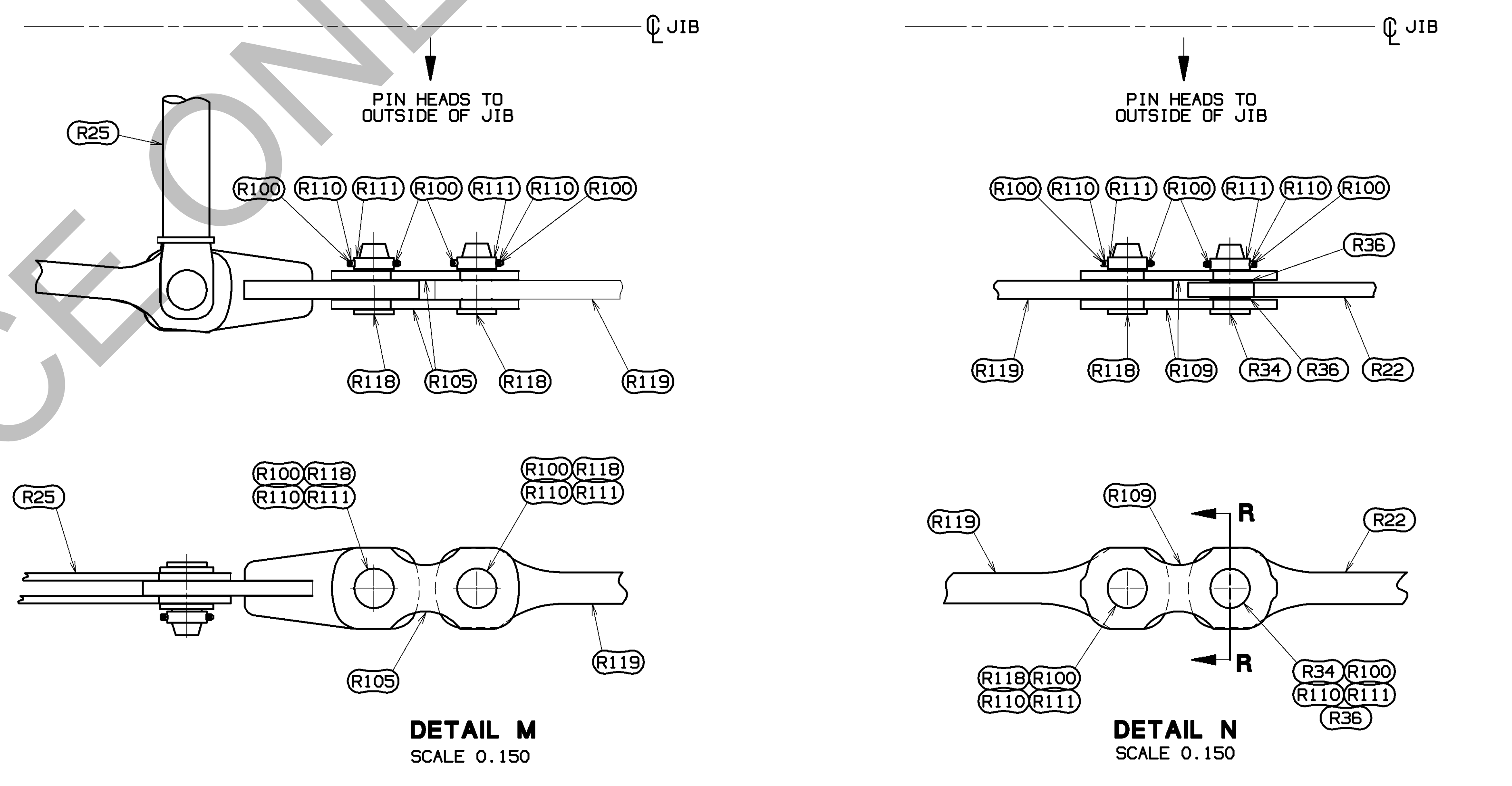
<small>THIS DRAWING IS THE PROPERTY OF MANITOWOC CRANES, INC. ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF MANITOWOC CRANES, INC.</small>	<small>DECIMAL PLACES</small> (1) PLACE 0.5    1.12    1.18    1.05 (2) PLACE 0.00    1.08    1.12    1.015 (3) PLACE 0.000    1.08    1.008    1.000		<small>MANUFACTURING</small> DR. RHY CK. KJV APP. JRR	<small>SCALE</small> 1:10 <b>Manitowoc Cranes, Inc.</b> Manitowoc, Wisconsin MODEL MLC300	<small>DESCRIPTION</small> LUFFING JIB RIGGING LJ ON B65	<small>DATE</small> 03-27-19 <small>REV. LTR.</small> A
	<small>TOLEANCE UNLESS OTHERWISE SPECIFIED</small>		<small>MANITOWOC CRANES, INC.</small>	<small>DATE</small> 03-27-19	<small>REV. LTR.</small> A	
	<small>MANITOWOC CRANES, INC.</small>		<small>DATE</small> 03-27-19	<small>REV. LTR.</small> A		

PRIVATE LABELING  
 REQUIREMENT TO  
 CONFORM TO  
 ENGINEERING  
 SPECIFICATION  
 8629103794 FOR  
 COMPONENTS LISTED  
 IN 03-27-19-026  
 DATE  
 03-27-19  
 REV. LTR.  
 A  
 84050217  
 SHT 4 OF 16



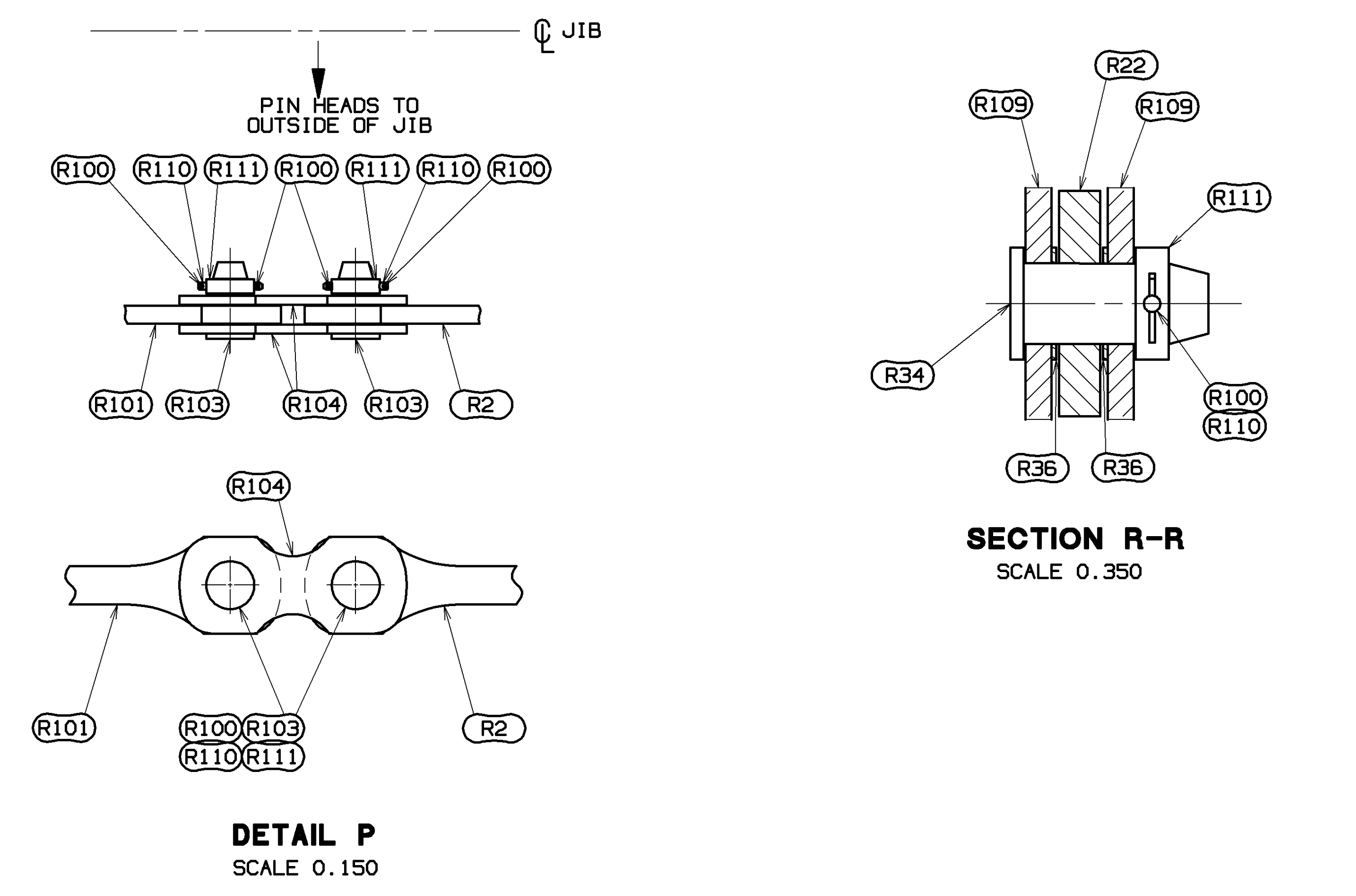
DETAIL K  
SCALE 0.150

DETAIL L  
SCALE 0.150



DETAIL M  
SCALE 0.150

DETAIL N  
SCALE 0.150



DETAIL P  
SCALE 0.150

SECTION R-R  
SCALE 0.350

REQ'D. #500-501 JIB/BACKSTAY STRAP ASSEMBLY  
 SEE TABLE ON SHEET 2  
 FOR TYP STRAP PIN JOINT SEE DETAILS K, L, M, N, P AND Y  
 SCALE 0.010

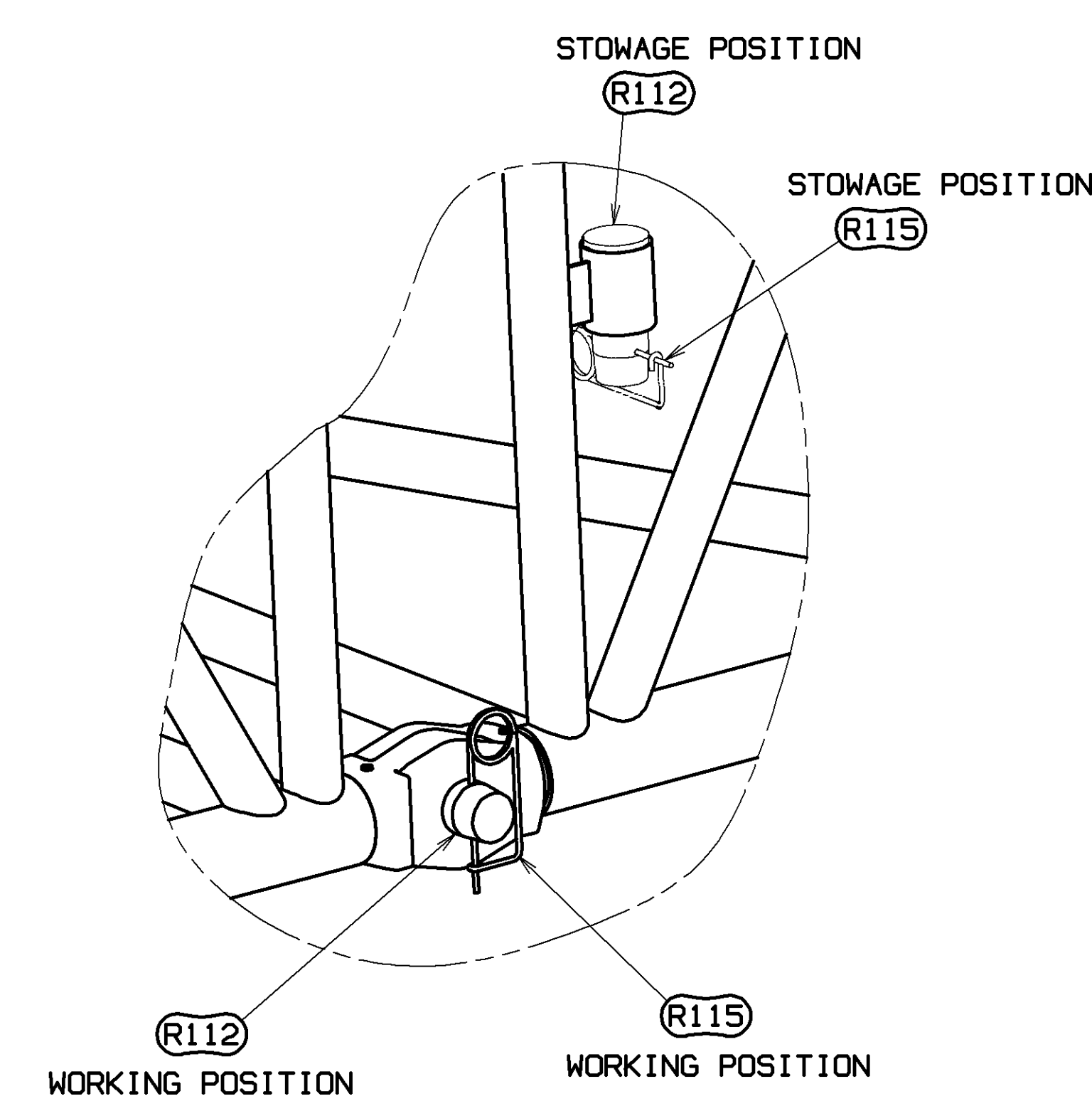
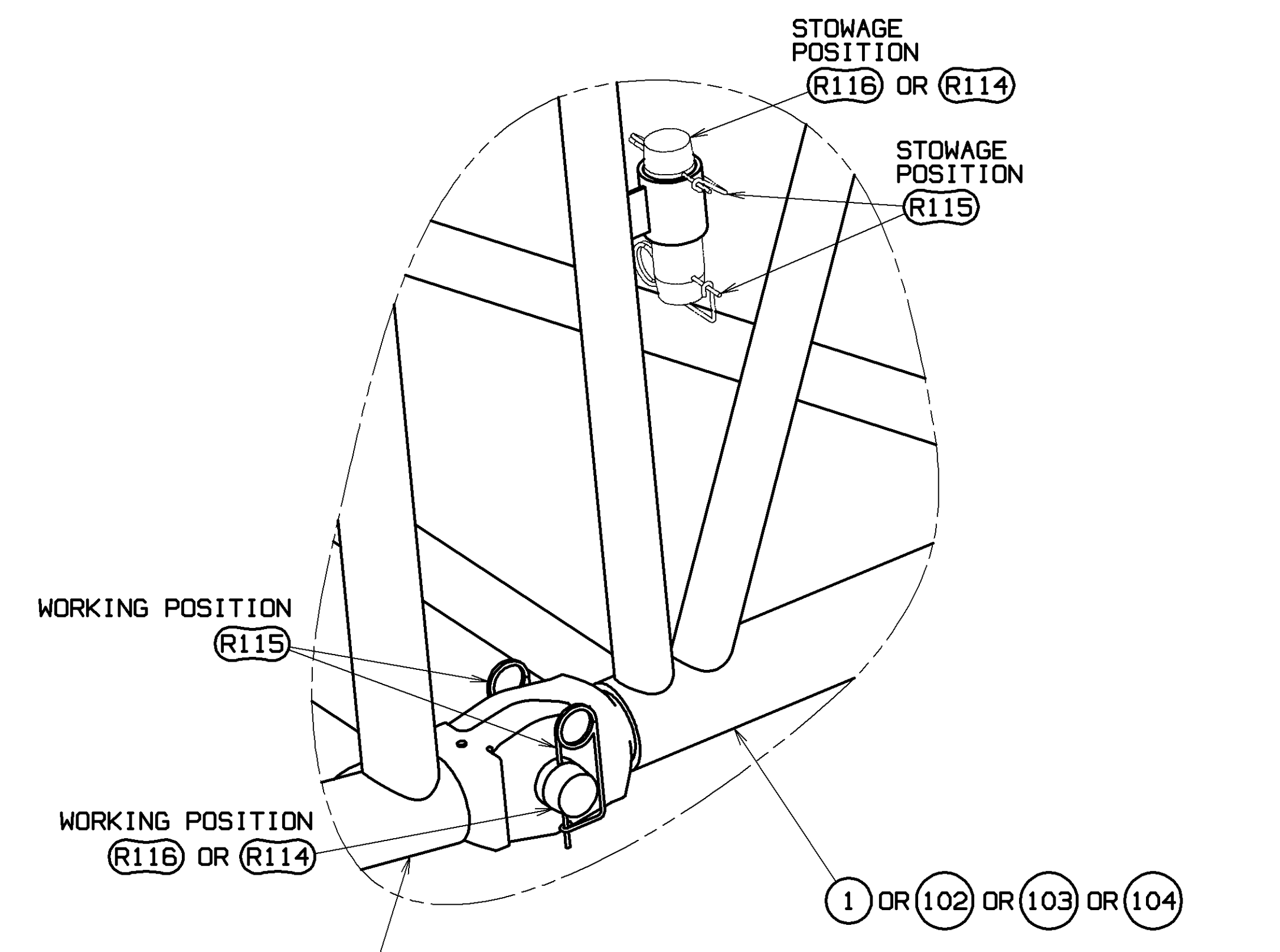
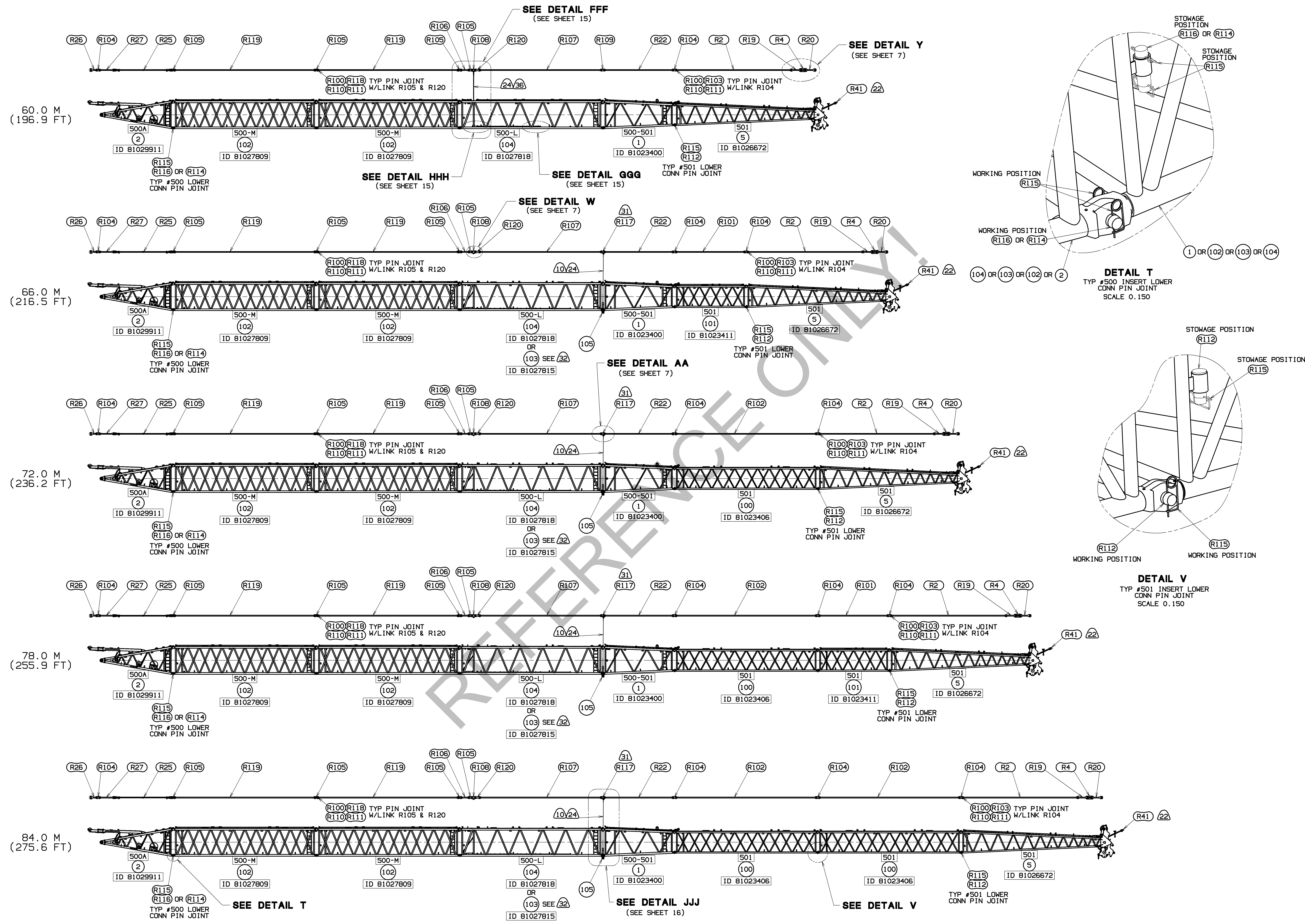
DO NOT SCALE THIS DRAWING

84050217  
 SHT 5 OF 16

PRIVATE LABELING  
 REQUIREMENT TO  
 CONFORM TO  
 ENGINEERING  
 SPECIFICATION  
 8629103794 FOR  
 COMPONENTS LISTED  
 IN SECTION 05-026  
 DATE  
 03-27-19  
 REF. LIT.  
 A

<small>THIS PRINT REMAINS THE PROPERTY OF          MANITOWOC CRANES, INC.          ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL          AND IS LOANED, SUBJECT TO RETURN UPON DEMAND,          AND ON EXPRESS CONDITION THAT IT IS NOT TO BE          COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY          MANNER DETRIMENTAL TO OUR INTERESTS.</small>	<small>DECIMAL PLACES</small> 1) PLACE 0.5 2) PLACE 0.00 3) PLACE 0.000 ANGLES		<small>TELERANCE UNLESS OTHERWISE SPECIFIED</small> FABRICATION ± .10 FEET > 10 FEET ± .12 ± .18 ± .03 ± .015 ± .015 ± .006 ± .006 ± .007 ± .007		<small>MANITOWOC CRANES, INC.</small> Manitowoc, Wisconsin MODEL MLC300 APP JRR	<small>LUFFING JIB RIGGING</small> LJ ON B65
	<small>SCALE</small> 1/10		<small>DATE</small> 03-27-19			
	<small>NO. OF SHEETS</small> 16		<small>SHEET NO.</small> 5			

BILL OF MATERIAL		ASSEMBLIES USED IN
QTY	DESCRIPTION	MATERIAL

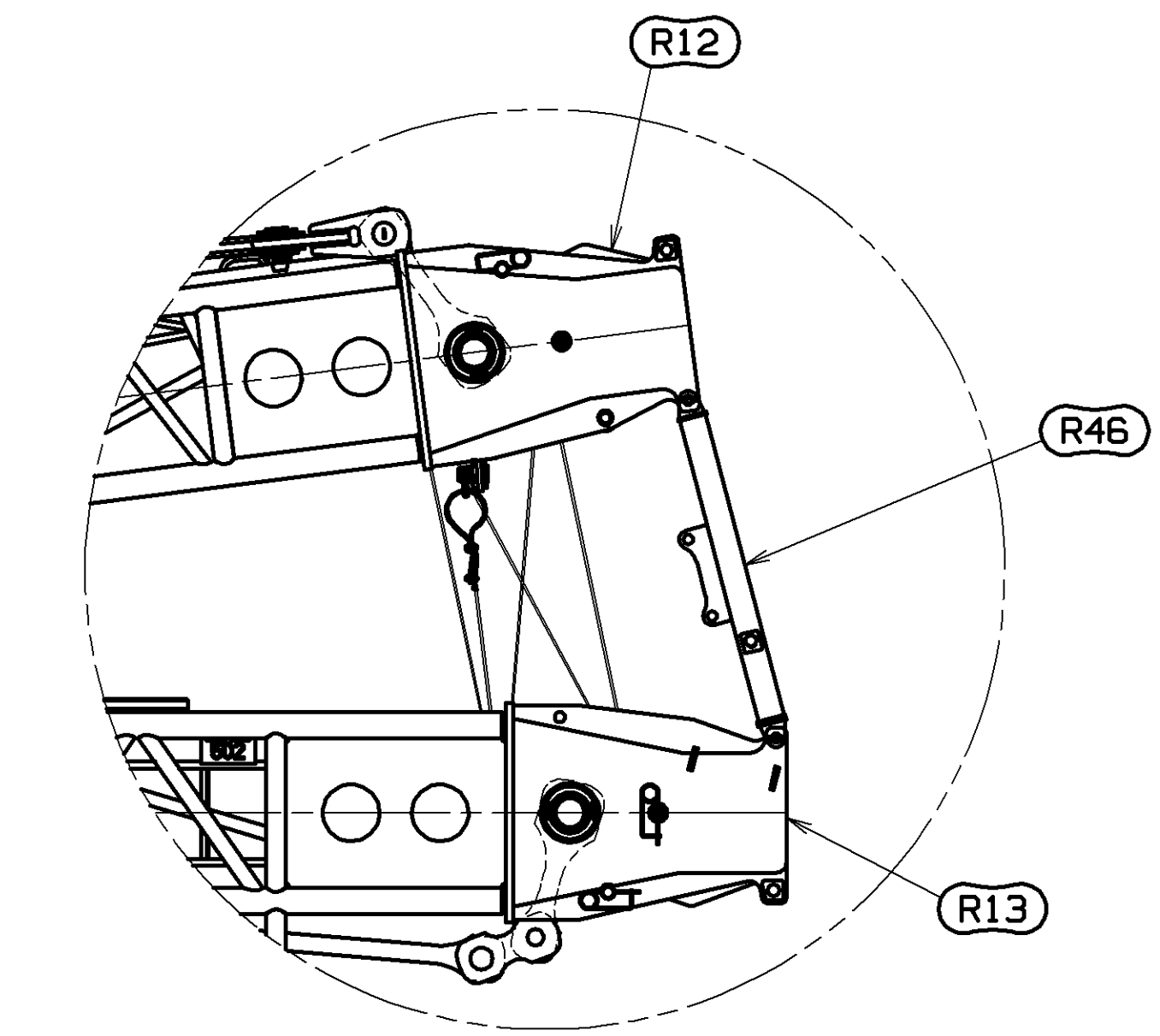
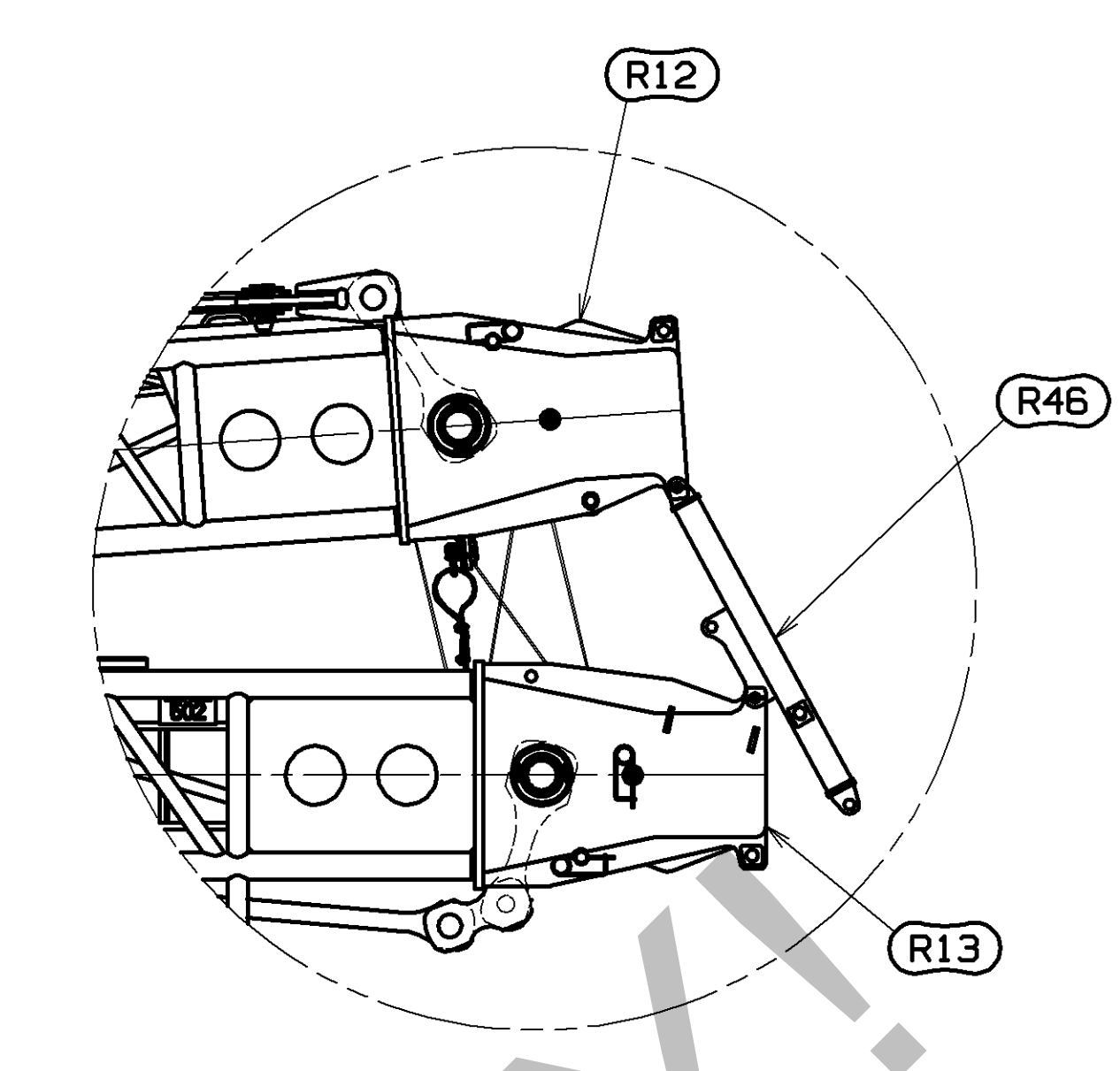
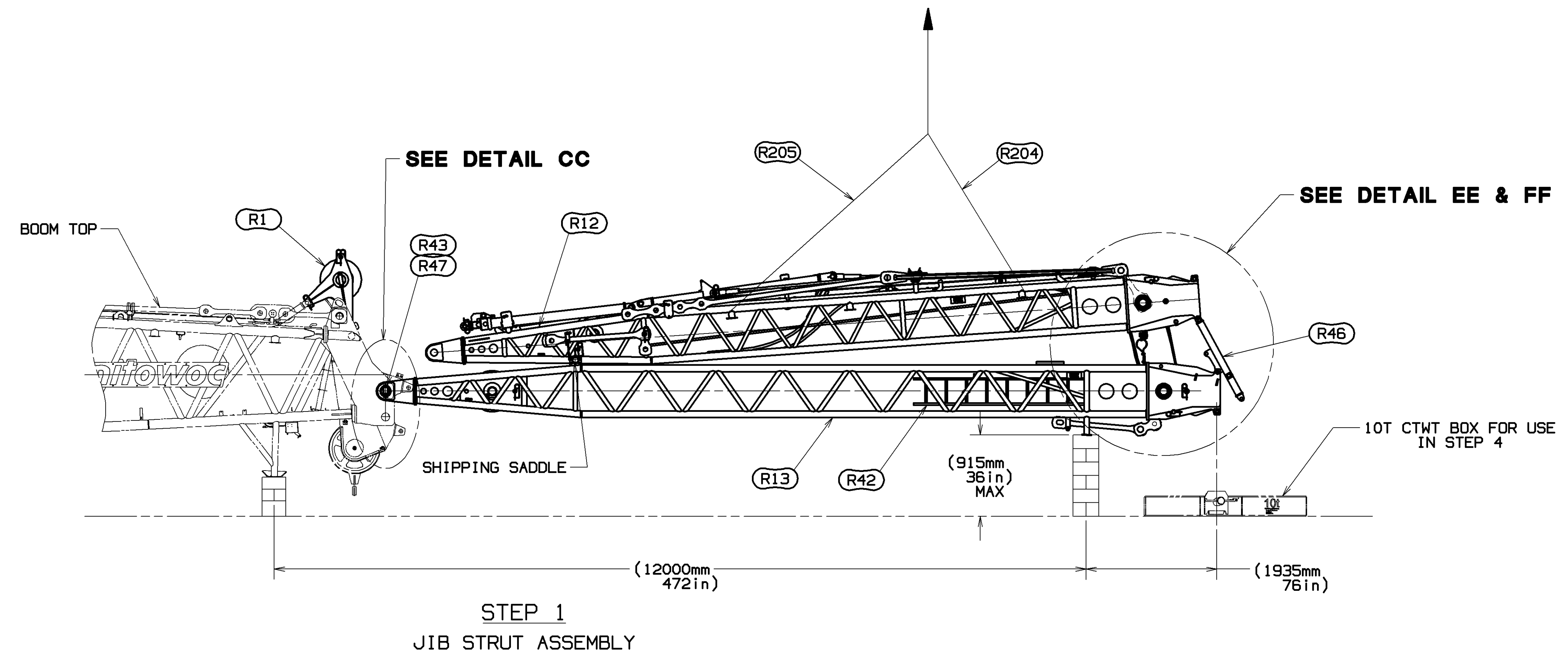


REQ'D. #500-501 JIB/BACKSTAY STRAP ASSEMBLY  
 SEE TABLE ON SHEET 2  
 FOR TYP STRAP PIN JOINT SEE DETAILS K, L, M, N, P, W, Y AND AA

<small>THIS DRAWING IS THE PROPERTY OF          ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL          IT IS LOANED, SUBJECT TO RETURN UPON DEMAND,          AND ON EXPRESS CONDITION THAT IT IS NOT TO BE          COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY          MANNER WITHOUT THE WRITTEN PERMISSION OF          MANITOWOC CRANES, INC.</small>	<small>DECIMAL PLACES      FRACTIONS      TOLERANCE UNLESS OTHERWISE SPECIFIED</small> (1) PLACE 0.5      1/16"      ± 0.10 (2) PLACE 0.00      1/32"      ± 0.05 (3) PLACE 0.000      1/64"      ± 0.005 ANGLES      11.25°      ± 0.10°		<small>DATE</small> 03-27-19 <small>REV. LTR.</small> A
	<small>MANITOWOC CRANES, INC.</small> Manitowoc, Wisconsin	<small>PROJECT</small> LUFFING JIB RIGGING	
	<small>DESIGNER</small> DR. RHY	<small>DATE</small> 03-27-19	
	<small>APP. JRR</small>	<small>MODEL</small> MLC300	



BILL OF MATERIAL				ASSEMBLIES USED ON
QTY	DESCRIPTION	MATERIAL	QTY	NO.



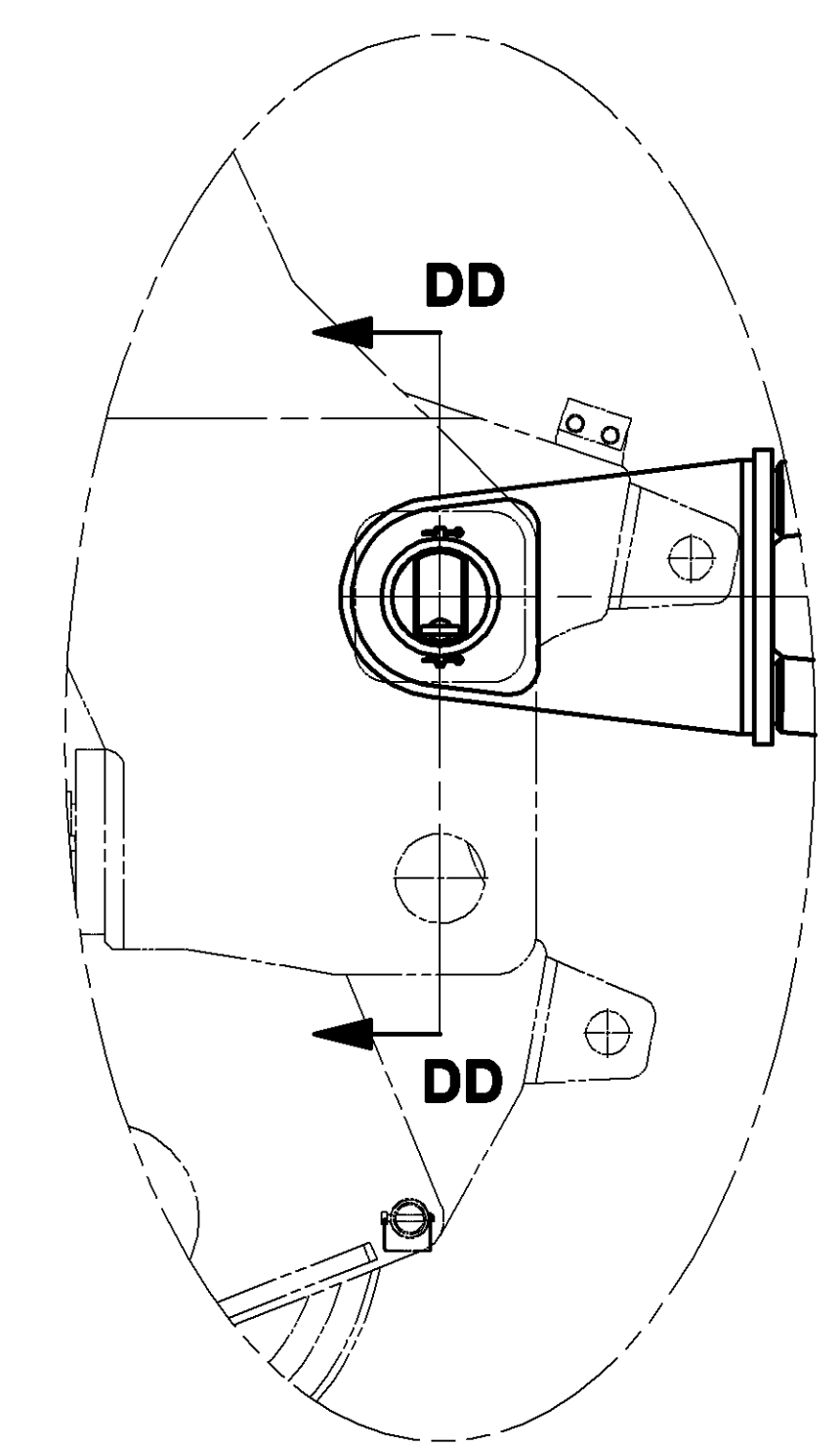
PROVIDE BLOCKING AND (1) 10T CTWT BOX AS SHOWN. TEMPORARILY REMOVE HINGE PIN (R47), COLLARS (R43) AND PINS FROM JIB STRUT (R13). USING ASSIST CRANE WITH SLINGS (R204) & (R205) AS SHOWN, LIFT THE JIB STRUT (R13) AND MAIN STRUT (R12) IN THE "AS SHIPPED" CONFIGURATION (ITEM 6) AND ATTACH JIB STRUT (R13) TO JIB STRUT HINGE ON BOOM TOP AS SHOWN.

REASSEMBLE JIB STRUT HINGE PIN (R47) AND TEMPORARILY ATTACH COLLARS (R43) AND PINS TO RETAIN THE HINGE PIN. (REFER TO DETAIL CC AND SECTION DD-DD).

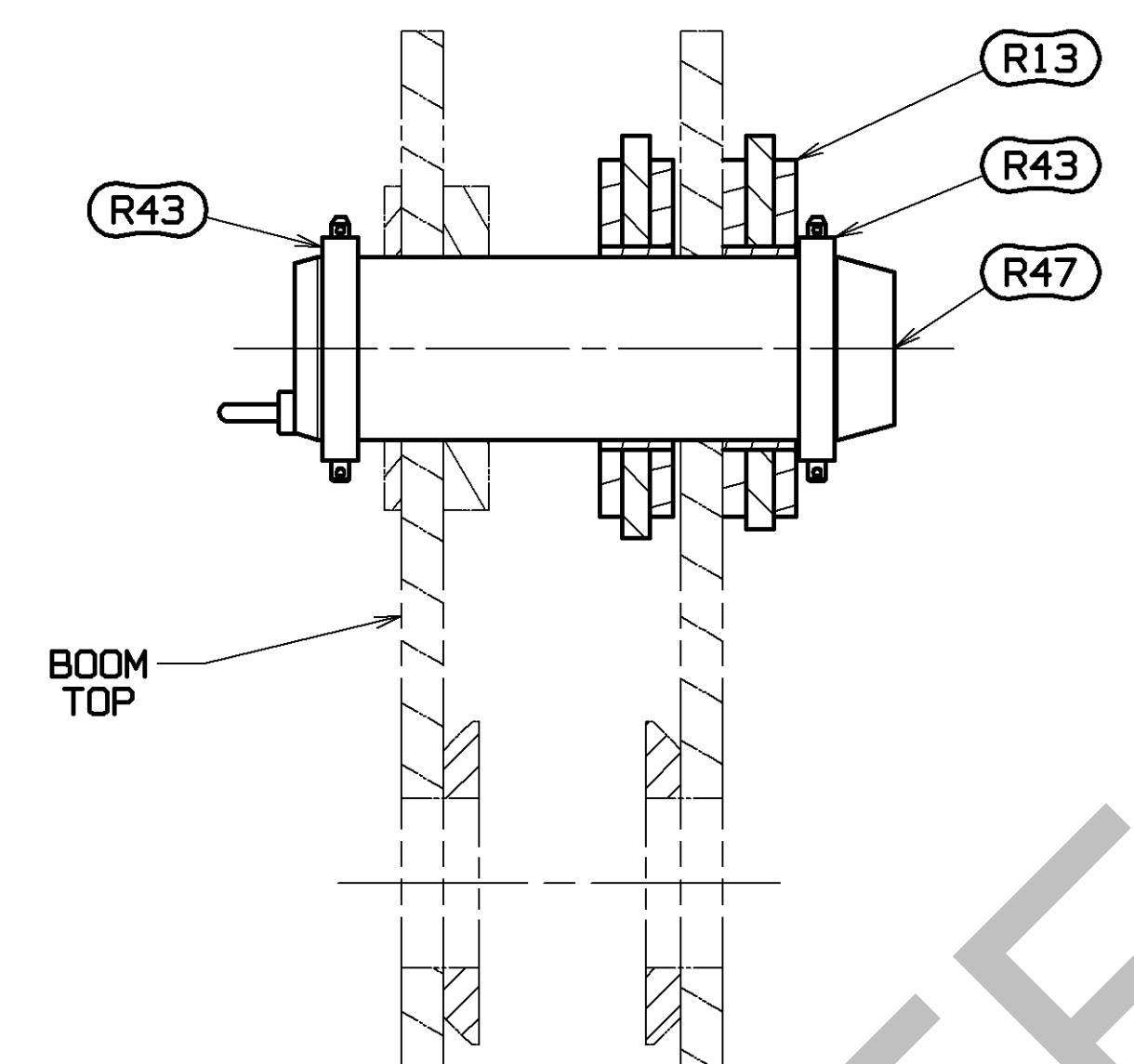
IF SHIPPING STRUT (R46) IS ATTACHED PER DETAIL EE, MAIN STRUT (R12) MAY BE ELEVATED USING ASSIST CRANE TO PIVOT AROUND SHIPPING SADDLE (SEE DETAIL HH ON SHEET 9) AND RELOCATE SHIPPING STRUT (R46) TO JIB STRUT (R13) PER DETAIL FF. (REPOSITION OF THE SHIPPING STRUT WILL AID IN THE REEVING OF STRUTS PER STEP 2).

**DETAIL EE**  
POSITION OF SHIPPING STRUT (R46) WHEN TRANSPORTED ON A FLATBED TRAILER  
SCALE 0.040

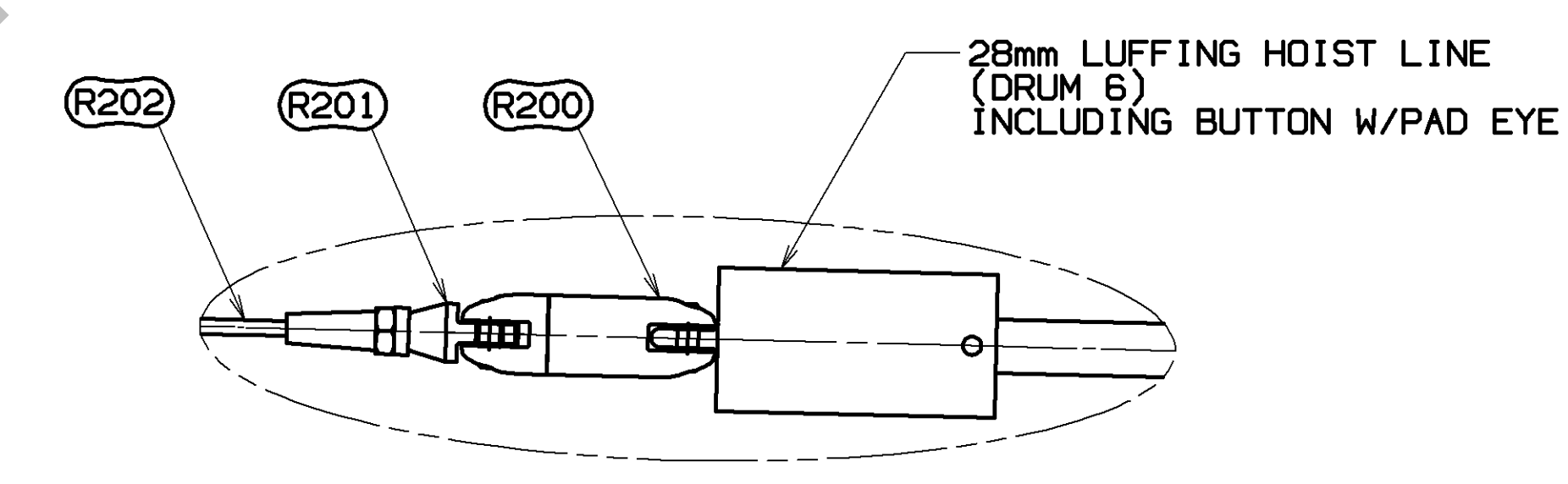
**DETAIL FF**  
POSITION OF SHIPPING STRUT (R46) WHEN TRANSPORTED ON A DROP-DECK TRAILER  
SCALE 0.040



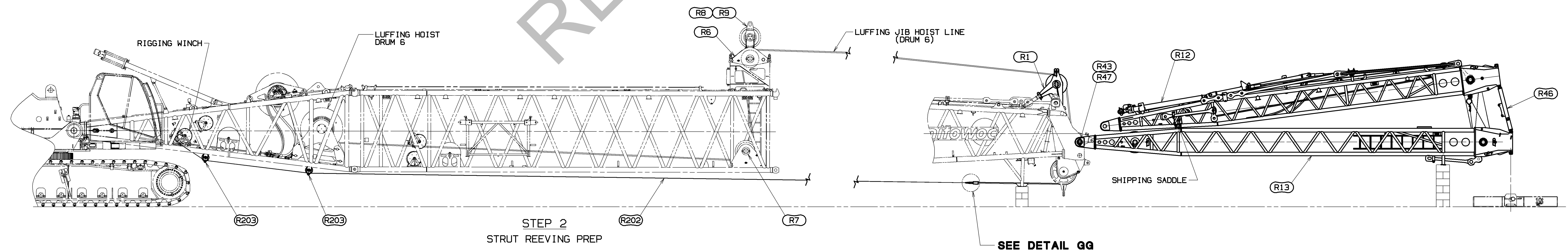
**DETAIL CC**  
SCALE 0.100



**SECTION DD-DD**  
SCALE 0.200



**DETAIL GG**  
SCALE .300



WHEN EQUIPPED WITH LOWER BOOM POINT SHEAVES, VERIFY THAT ALL RIGGING WINCH WIRE ROPE GUIDE ASSY'S (R203) ARE IN WORKING POSITION. ROUTE RIGGING WINCH LINE (R202) AS SHOWN. RIGGING WINCH LINE (R202) TO ROUTE THRU ROPE GUIDES (R203) UNDER LOWER BOOM POINT TO OVER BOOM TOP WIRE ROPE GUIDE (R1), OVER WIRE ROPE GUIDE (R6) AND UNDER WIRE ROPE GUIDE (R7).

WITH RIGGING WINCH LINE ROUTED PER PREVIOUS INSTRUCTIONS, ATTACH RIGGING WINCH LINE (R202) TO 28mm LUFFING HOIST LINE (DRUM 6) AND PAY IN RIGGING WINCH UNTIL LUFFING HOIST IS UNDER BOTTOM OF LOWER BOOM POINT

DETACH RIGGING WINCH LINE (R202) FROM 28mm LUFFING HOIST LINE. REMOVE LUFFING HOIST LINE FROM LOWER BOOM POINT AND BOOM TOP WIRE ROPE GUARD (R1) FOR USE IN STRUT REEVING STEP 3 ON SHEET 9.

84050217  
SHT 8 OF 16

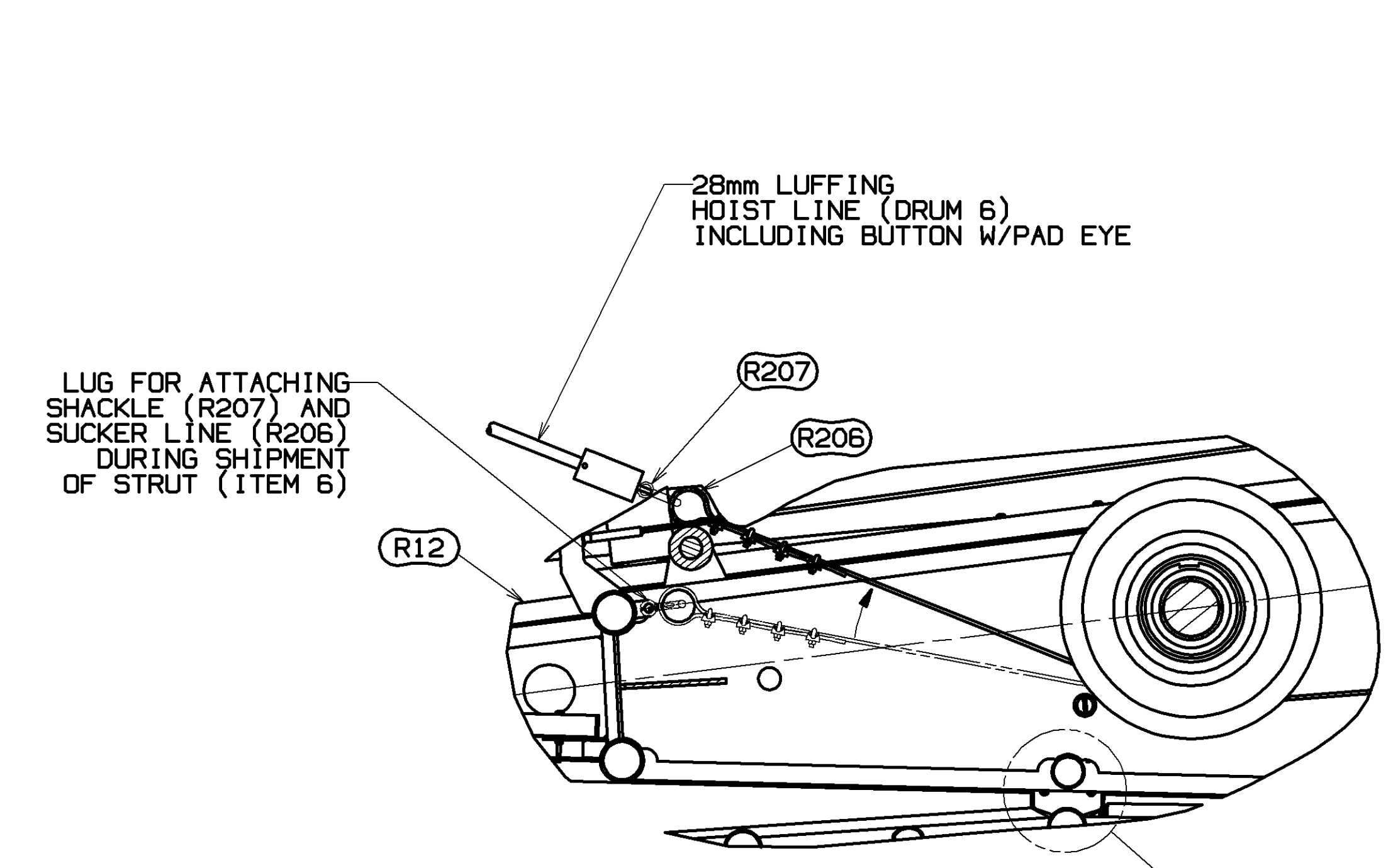
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN SECTION 03-05E  
DATE 03-27-19  
REV. LTR. A

DECIMAL PLACES	FABRICATION	MACHINING	WELDING	WELDING
(1) PLACE 0.5	±.12	±.18	±.05	±.05
(2) PLACE 0.00	±.08	±.12	±.015	±.015
(3) PLACE 0.000	±.008	±.012	±.008	±.008
ANGLES	±1.30°	±1.30°	±0.50°	±0.50°

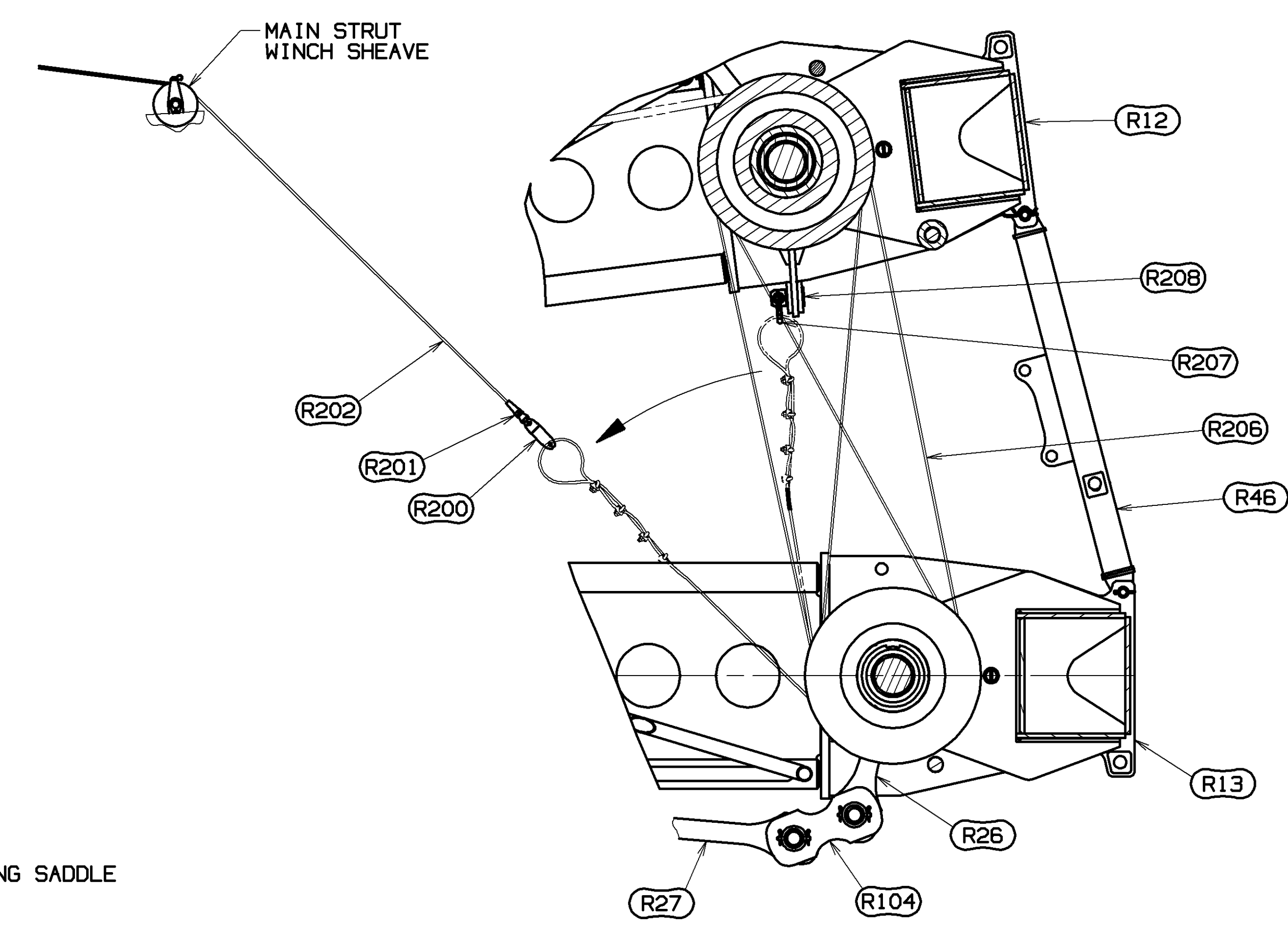
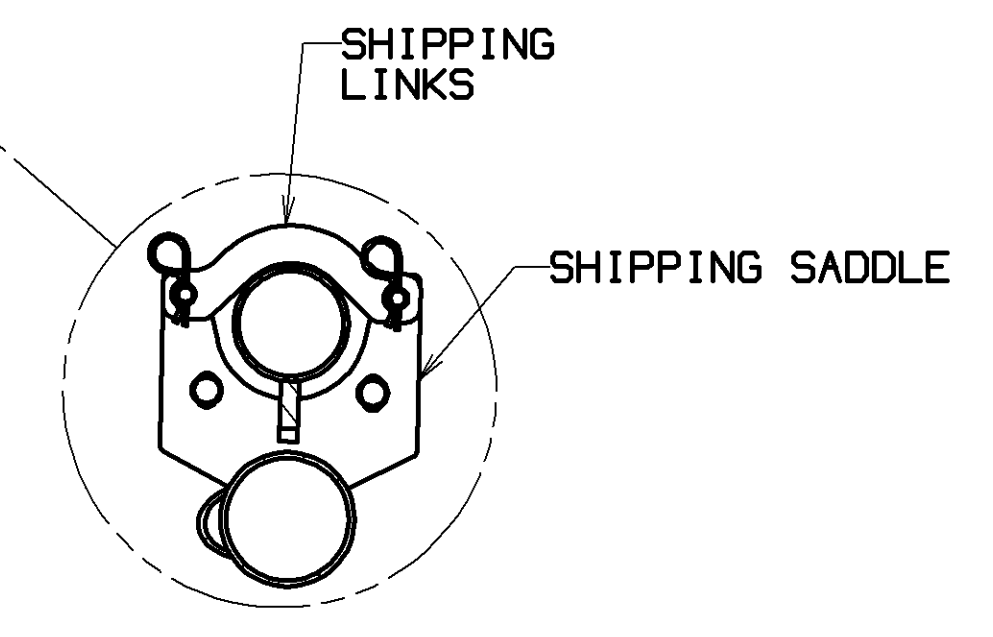
SCALE 0.025	<b>Manitowoc Cranes, Inc.</b>	LUFFING JIB RIGGING
DR. RHY	Manitowoc, Wisconsin	LJ ON B65
CK. KJV	MODEL MLC300	
APP. JRR		



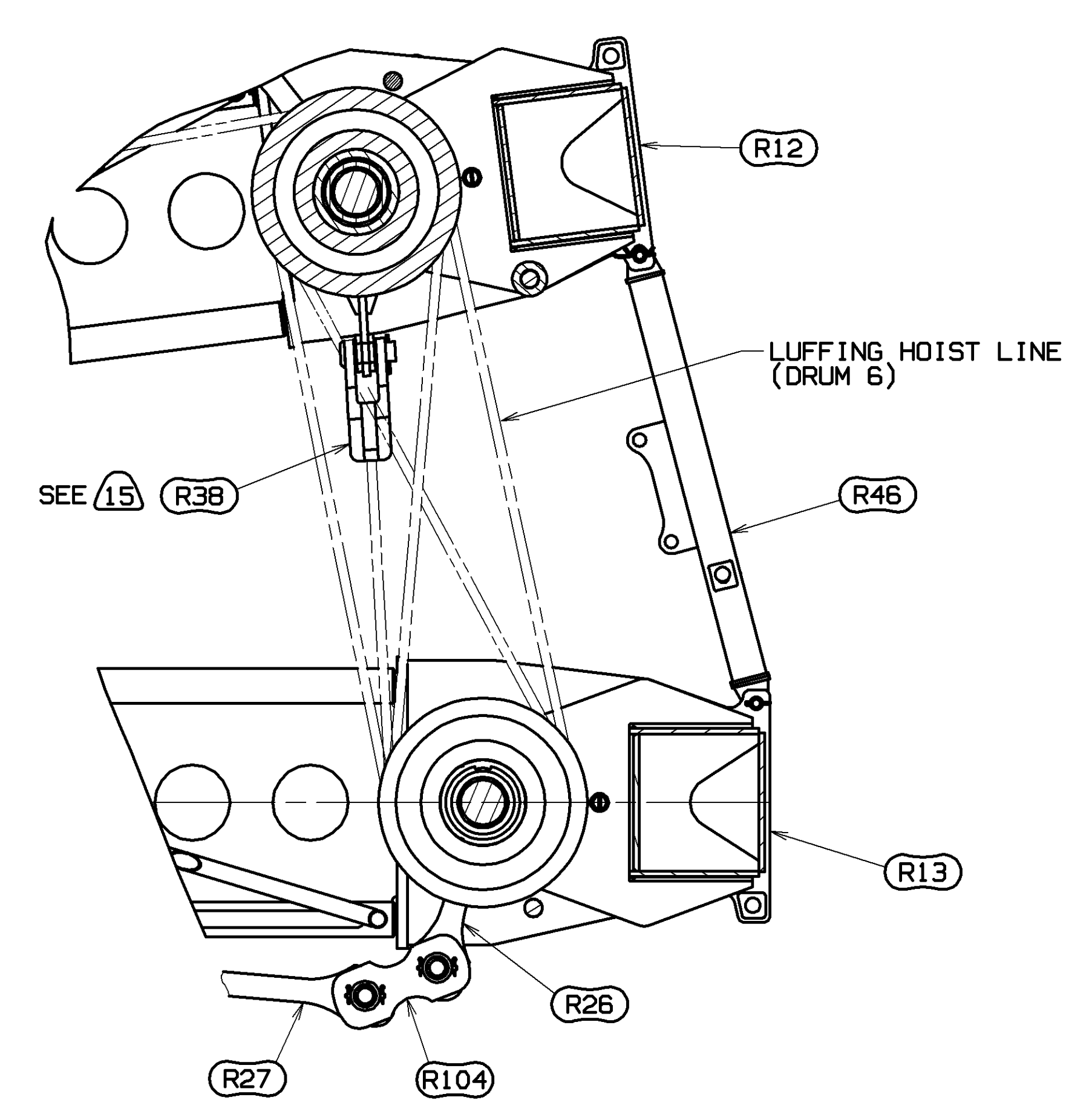
BILL OF MATERIAL		ASSEMBLED USED ON
QTY	DESCRIPTION	MATERIAL



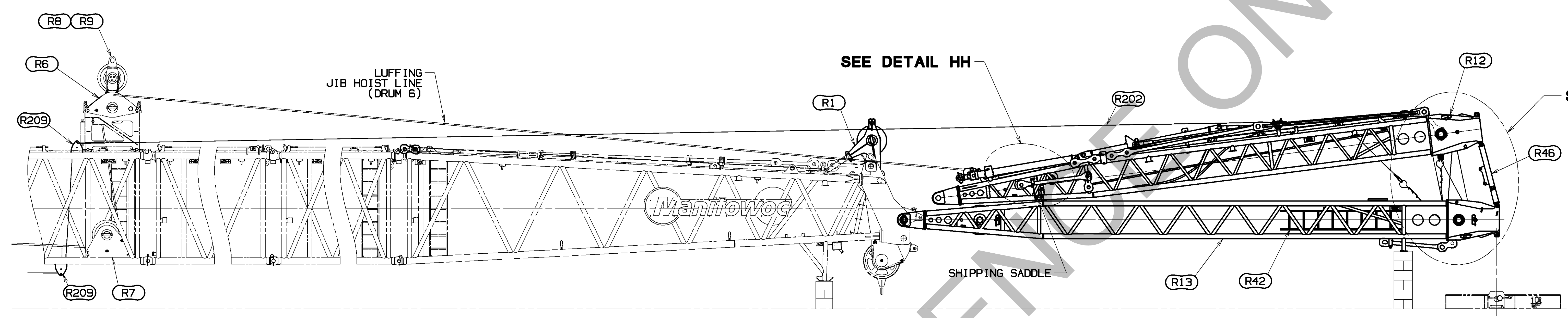
**DETAIL HH**  
CROSS SECTION VIEW SHOWING  
LUFFING HOIST TO SUCKER LINE CONNECTION  
SCALE 0.090



**DETAIL JJ1**  
CROSS SECTION VIEW SHOWING  
RIGGING WINCH LINE TO SUCKER LINE CONNECTION  
SCALE 0.075



**DETAIL JJ2**  
CROSS SECTION VIEW SHOWING  
LUFFING HOIST LINE TO MAIN STRUT DEAD END CONNECTION  
SCALE 0.075



**STEP 3**  
STRUT REEVING

DETACH SHACKLE (R207) AND SUCKER LINE (R206) FROM STOWAGE LUG NEAR THE HINGE END OF THE MAIN STRUT (R12) AND ATTACH TO 28mm LUFFING HOIST LINE (DRUM 6). (SEE DETAIL HH).

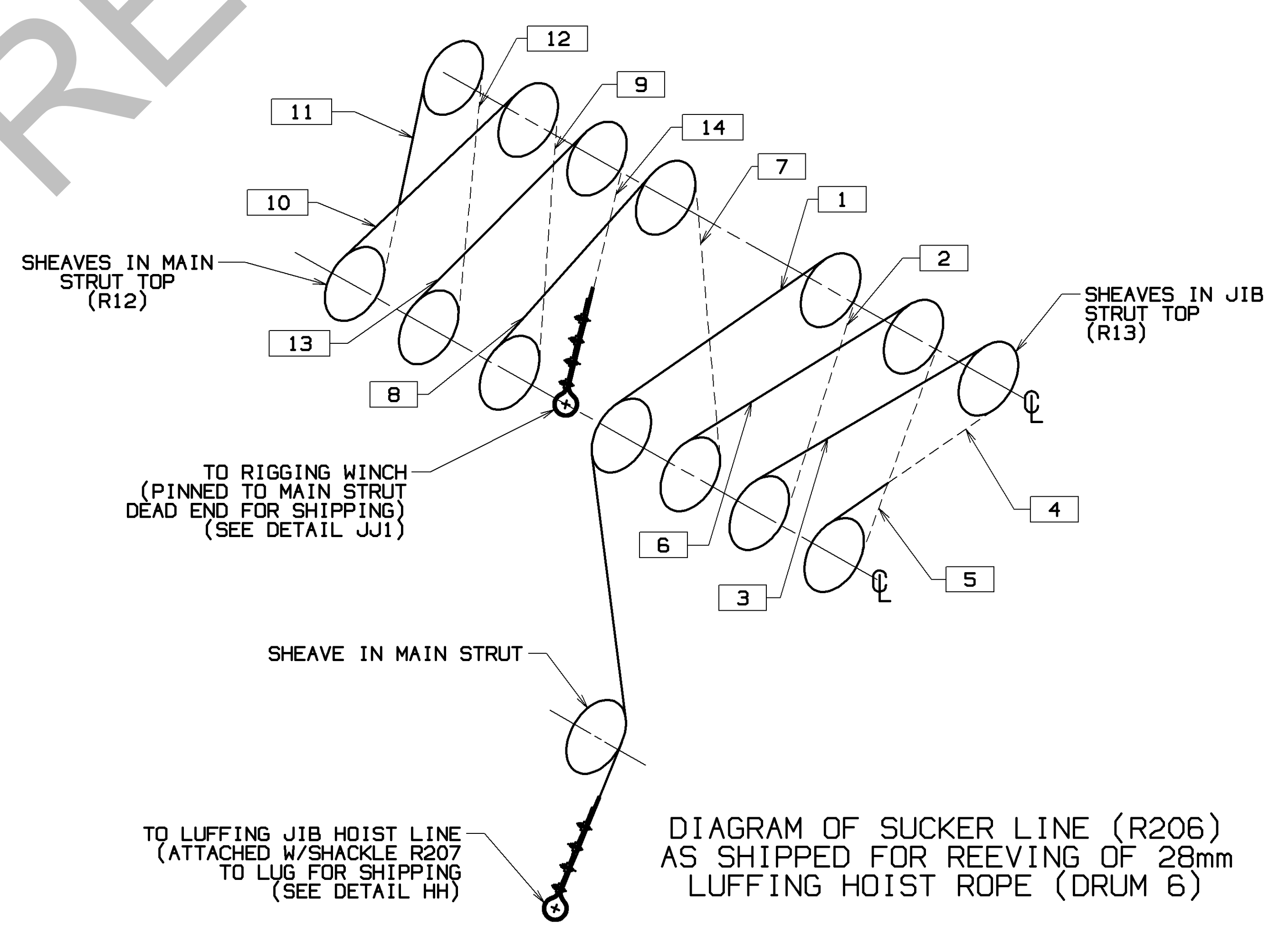
DETACH PIN (R208) AND SHACKLE (R207) FROM MAIN STRUT DEAD END AND SUCKER LINE (R206). STOW PIN AND SHACKLE IN PARTS BOX 81028769. WITH RIGGING WINCH WIRE ROPE GUIDE ASSYS (R209) IN WORKING POSITION, ROUTE RIGGING WINCH LINE (R202) AS SHOWN. PAY OUT RIGGING WINCH LINE (R202) OVER MAIN STRUT WINCH SHEAVE AND ATTACH TO THIS END OF SUCKER LINE (R206). (SEE DETAIL JJ1)

PAY IN RIGGING WINCH LINE (R202) TO PULL 28mm LUFFING HOIST LINE (DRUM 6) INTO REEVING OF MAIN AND JIB STRUT SHEAVES.

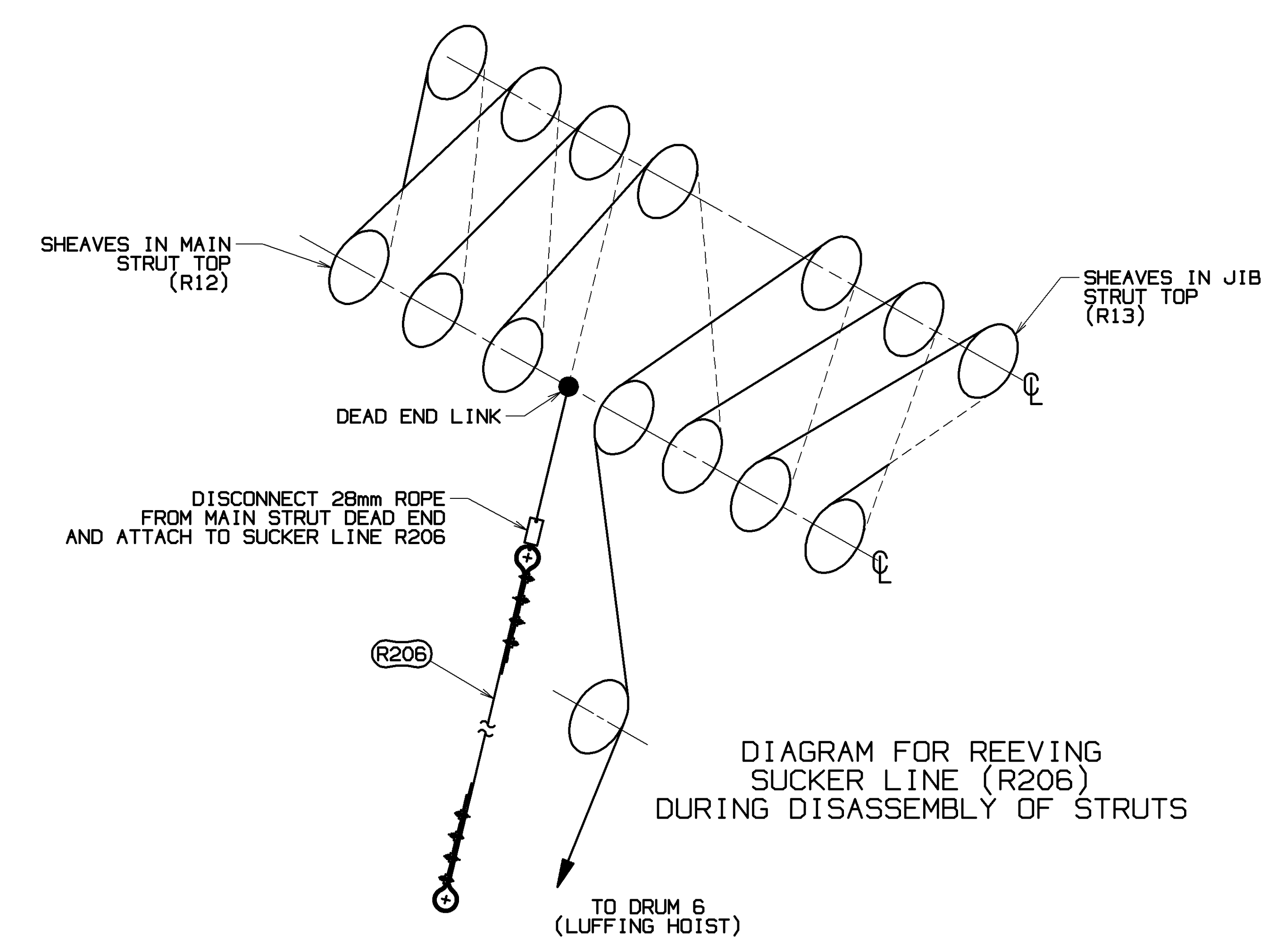
DETACH RIGGING WINCH LINE (R202) FROM SUCKER LINE (R206) AND POSITION RIGGING WINCH LINE (R202) ON BOOM TOP FOR USE IN RAISING ARM HOOK-UP STEP 6 ON SHEET 11.

DETACH SUCKER LINE (R206) AND SHACKLE (R207) FROM LUFFING HOIST LINE AND ATTACH LUFFING LINE TO DEAD END (R38) LOCATED IN THE MAIN STRUT (R12). (SEE DETAIL JJ2).

STORE SUCKER LINE (R206) AND SHACKLE (R207) IN PARTS BOX 81028769 WHEN NOT USED.



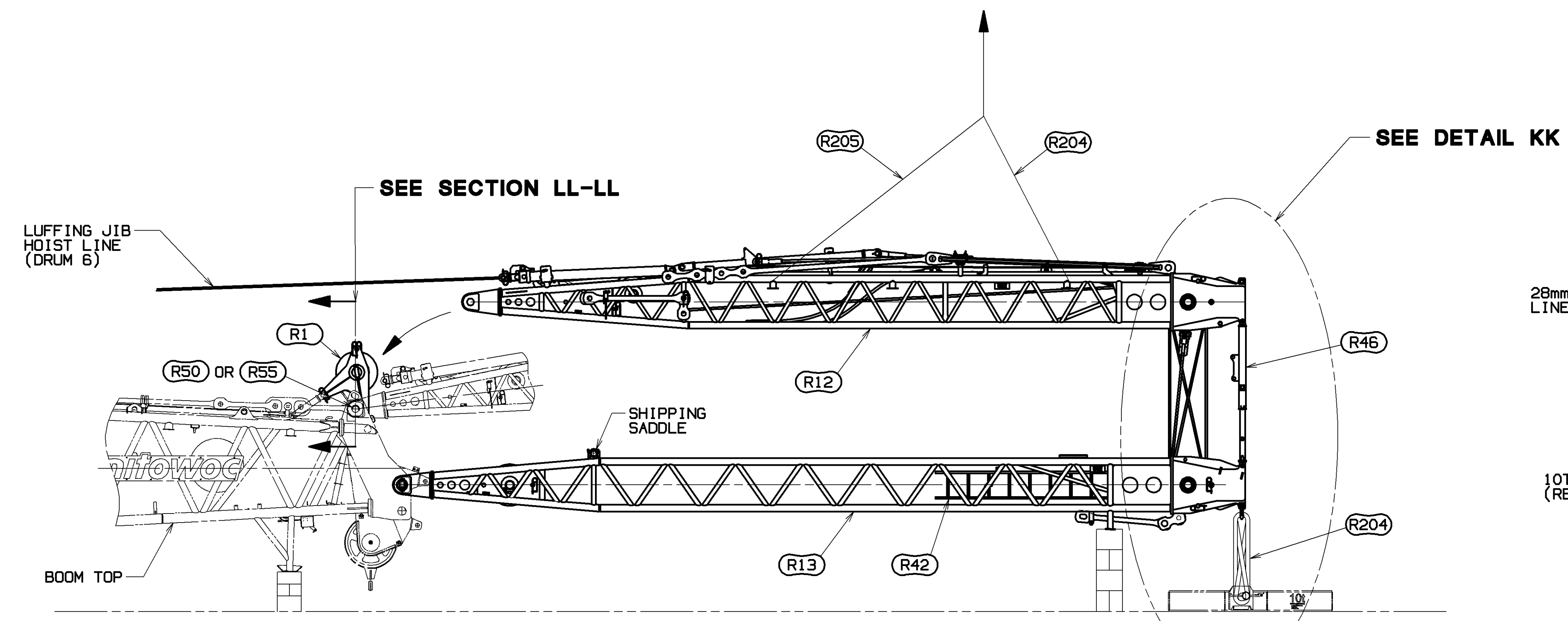
**DIAGRAM OF SUCKER LINE (R206)**  
AS SHIPPED FOR REEVING OF 28mm  
LUFFING HOIST ROPE (DRUM 6)



**DIAGRAM FOR REEVING**  
SUCKER LINE (R206)  
DURING DISASSEMBLY OF STRUTS

TOLERANCE UNLESS OTHERWISE SPECIFIED		MANUFACTURING	DATE
DECIMAL PLACES	FABRICATION	FINISHING	
(1) PLACE 0.5	±.12	±.18	03-27-19
(2) PLACE 0.00	±.08	±.12	REV. LNK
(3) PLACE 0.000	±.008	±.015	A

THIS DRAWING IS THE PROPERTY OF MANITOWOC CRANES, INC. IT IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER DETRIMENTAL TO OUR INTERESTS.	MANITOWOC CRANES, INC. LUFFING JIB RIGGING LJ ON B65	DATE 03-27-19 REV. LNK A
---	--	-----------------------------------



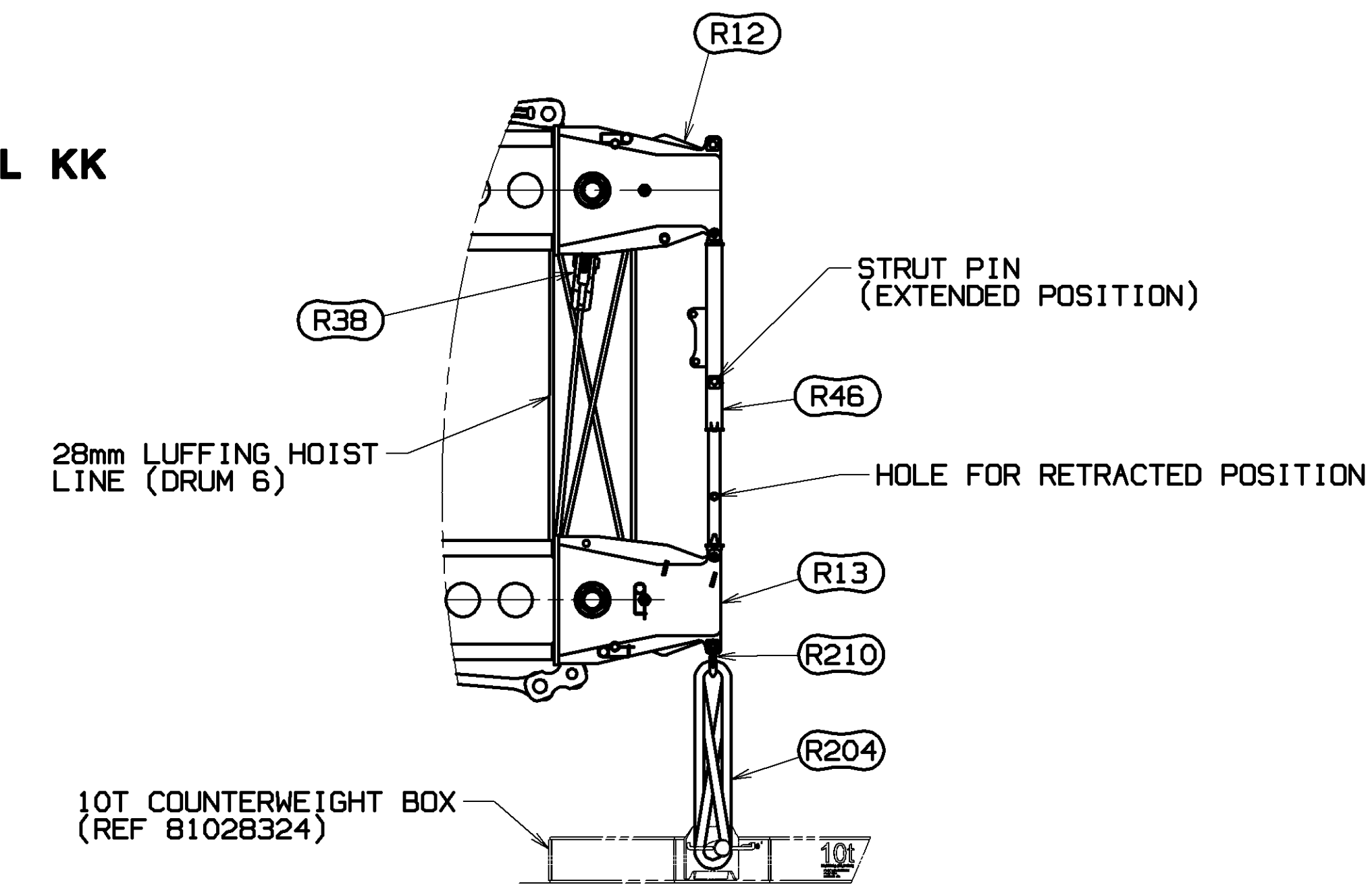
STEP 4  
MAIN STRUT ASSEMBLY

SECURE JIB STRUT (R13) TO 10T CTWT BOX WITH SHACKLE (R210) AND DOUBLE WRAP SLING (R204) (2-PLACES). WITH SHIPPING STRUT (R46) POSITIONED AS SHOWN IN DETAIL FF ON SHEET 8, REMOVE STRUT PIN FROM SHIPPING STRUT RETRACTED POSITION. (SEE DETAIL KK).

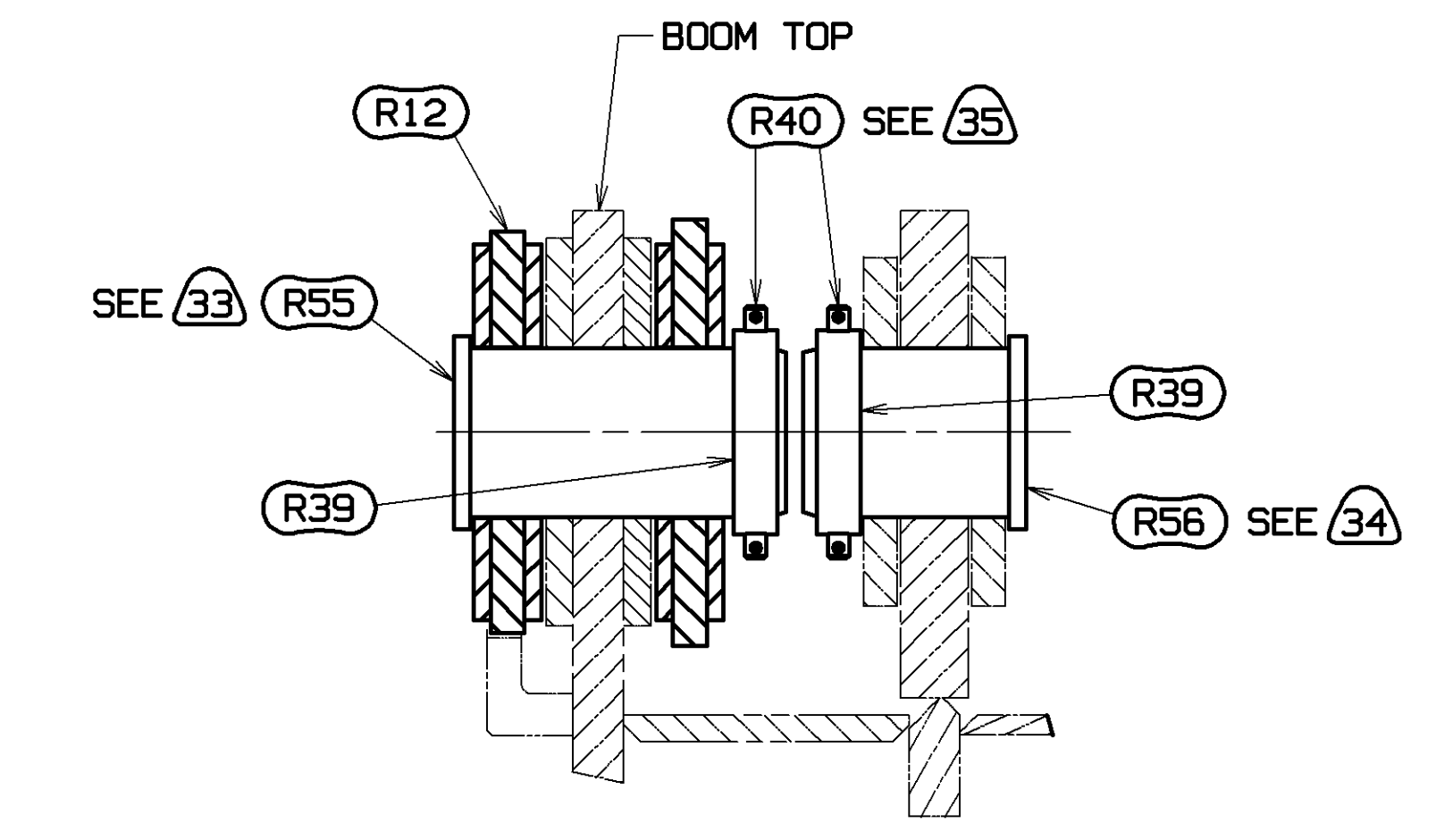
DISCONNECT THE SHIPPING LINKS AT THE SHIPPING SADDLES ON THE JIB STRUT (R13) TO ALLOW THE MAIN STRUT (R12) TO LIFT FREELY. (SEE DETAIL HH ON SHEET 9). USING AN ASSIST CRANE WITH SLINGS (R204) & (R205) AS SHOWN LIFT THE MAIN STRUT (R12) FROM ITS SHIPPING POSITION WHILE PAYING OUT LUFFING HOIST LINE (DRUM 6) ALLOWING SHIPPING STRUT (R46) TO TELESCOPE TO EXTENDED POSITION. REPLACE STRUT PIN INTO SHIPPING STRUT EXTENDED POSITION. (SEE DETAIL KK).

WITH THE MAIN STRUT (R12) FREE, PIVOT MAIN STRUT HINGE TO THE BOOM TOP.  
SECURE MAIN STRUT HINGE PIN (R50 OR R55) WITH PROVIDED COLLARS (R39) AND PINS (R40). (SEE SECTION LL-LL).

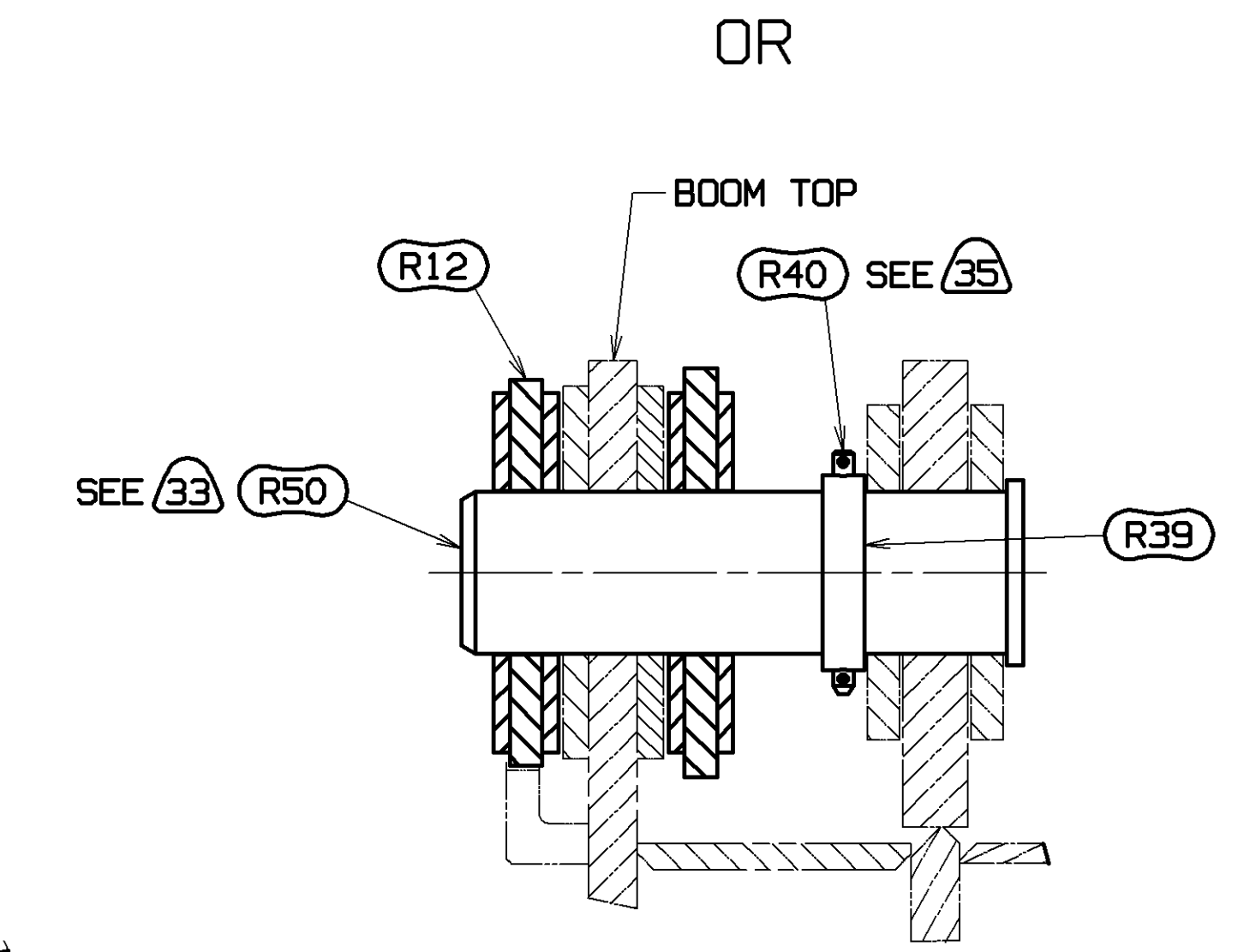
CAUTION: DO NOT ALLOW MAIN STRUT (R12) TO ROTATE BELOW HORIZONTAL WHEN PINNED TO BOOM TOP. DAMAGE MAY OCCUR.



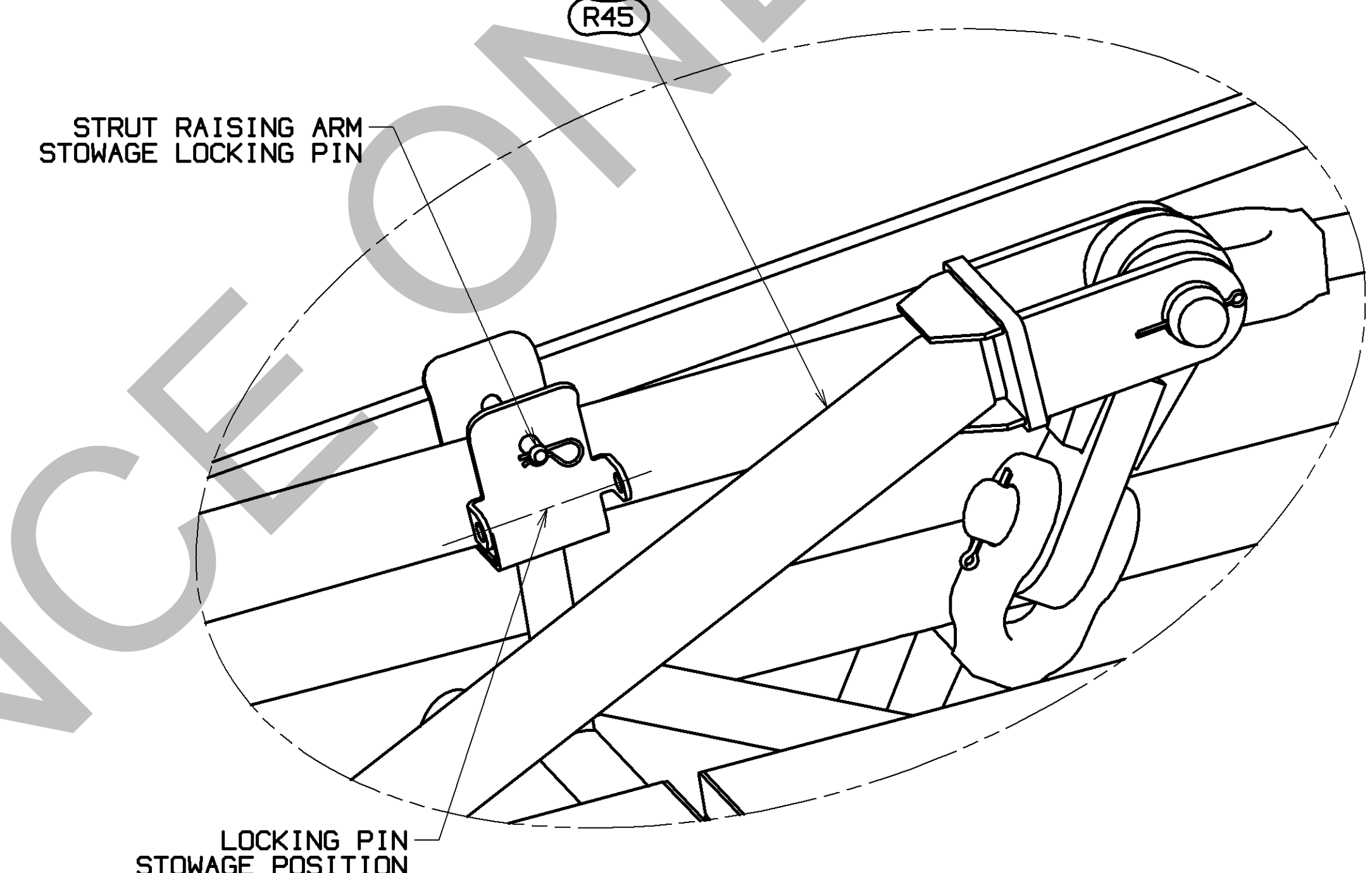
DETAIL KK  
SCALE 0.030



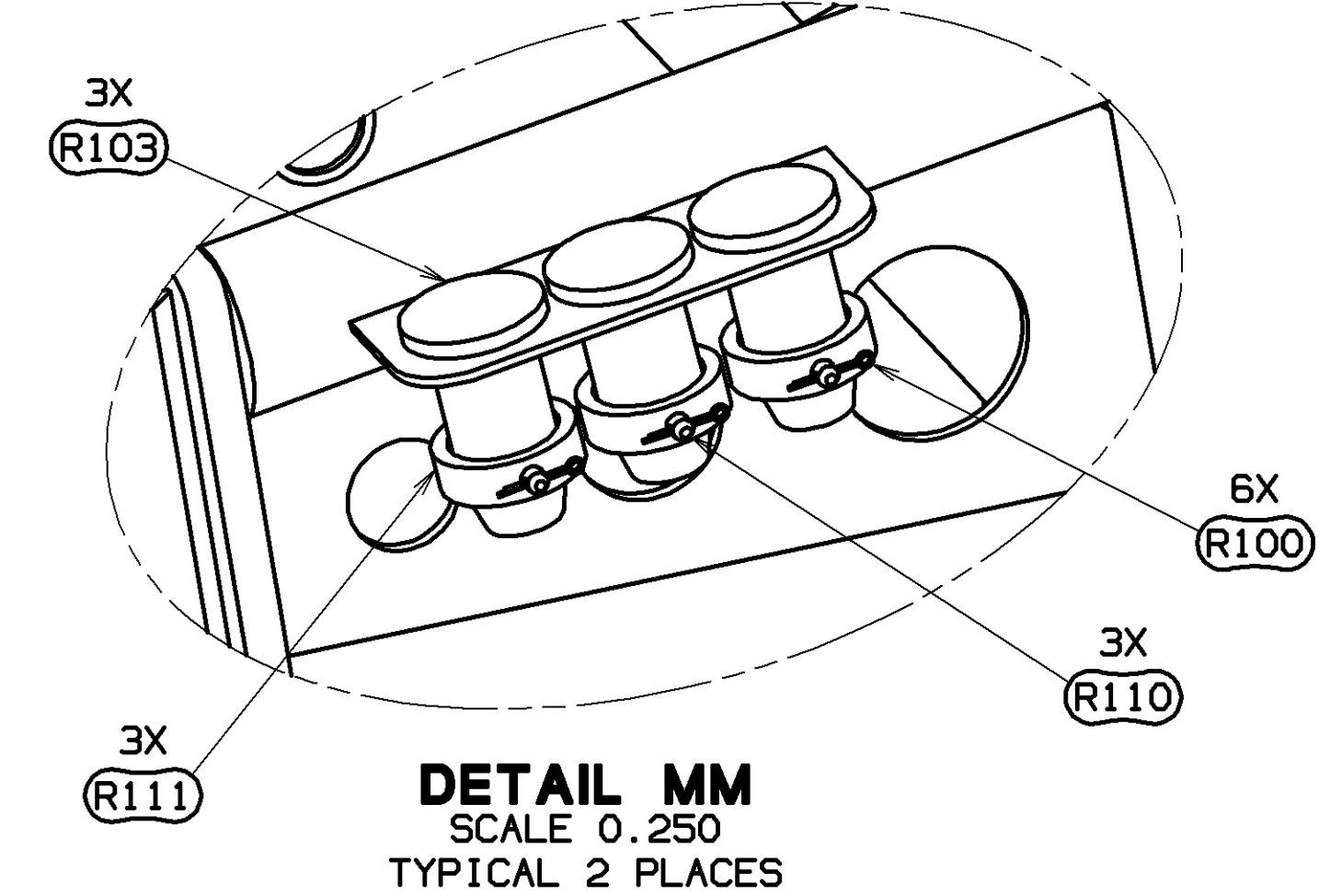
SECTION LL-LL  
SCALE 0.250  
TYPICAL 2 PLACES



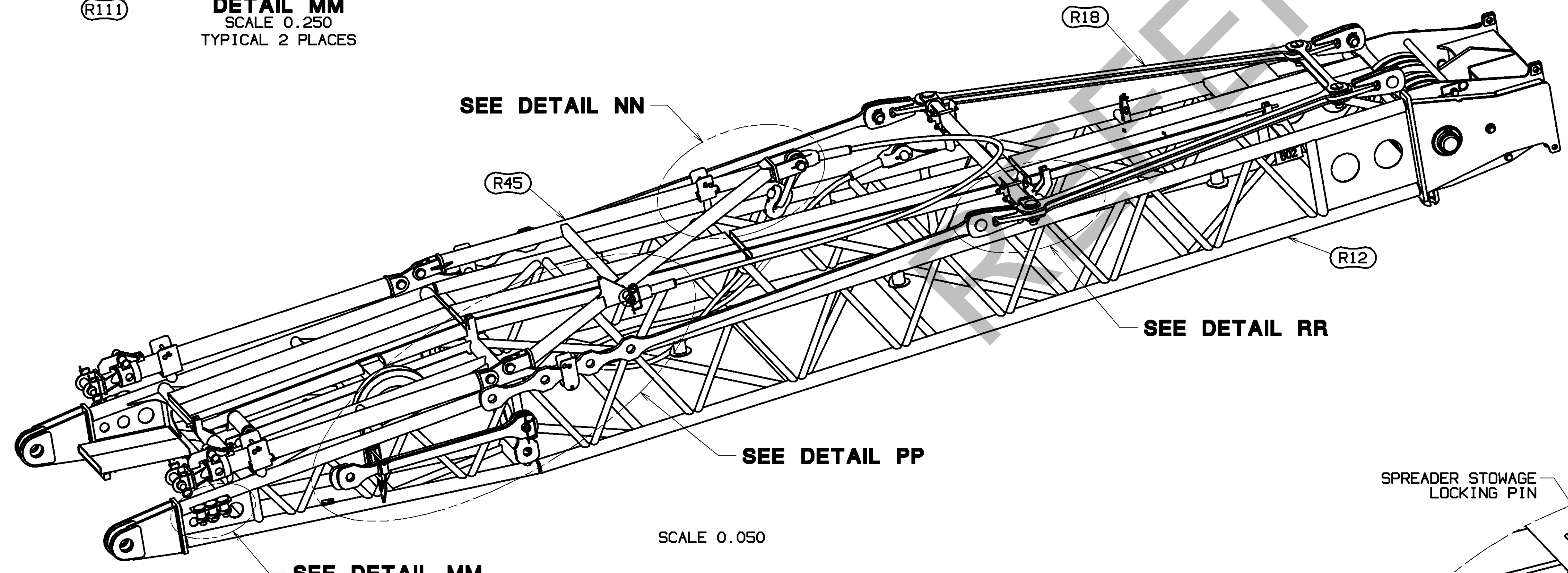
SECTION LL-LL  
SCALE 0.250  
TYPICAL 2 PLACES



DETAIL NN  
SCALE 0.200



DETAIL MM  
SCALE 0.250  
TYPICAL 2 PLACES



STEP 5  
PINS AND STRAP REMOVAL FROM MAIN STRUT (R12)

TO PREP MAIN STRUT FOR RAISING ARM HOOK UP AND BACKSTAY CONNECTION

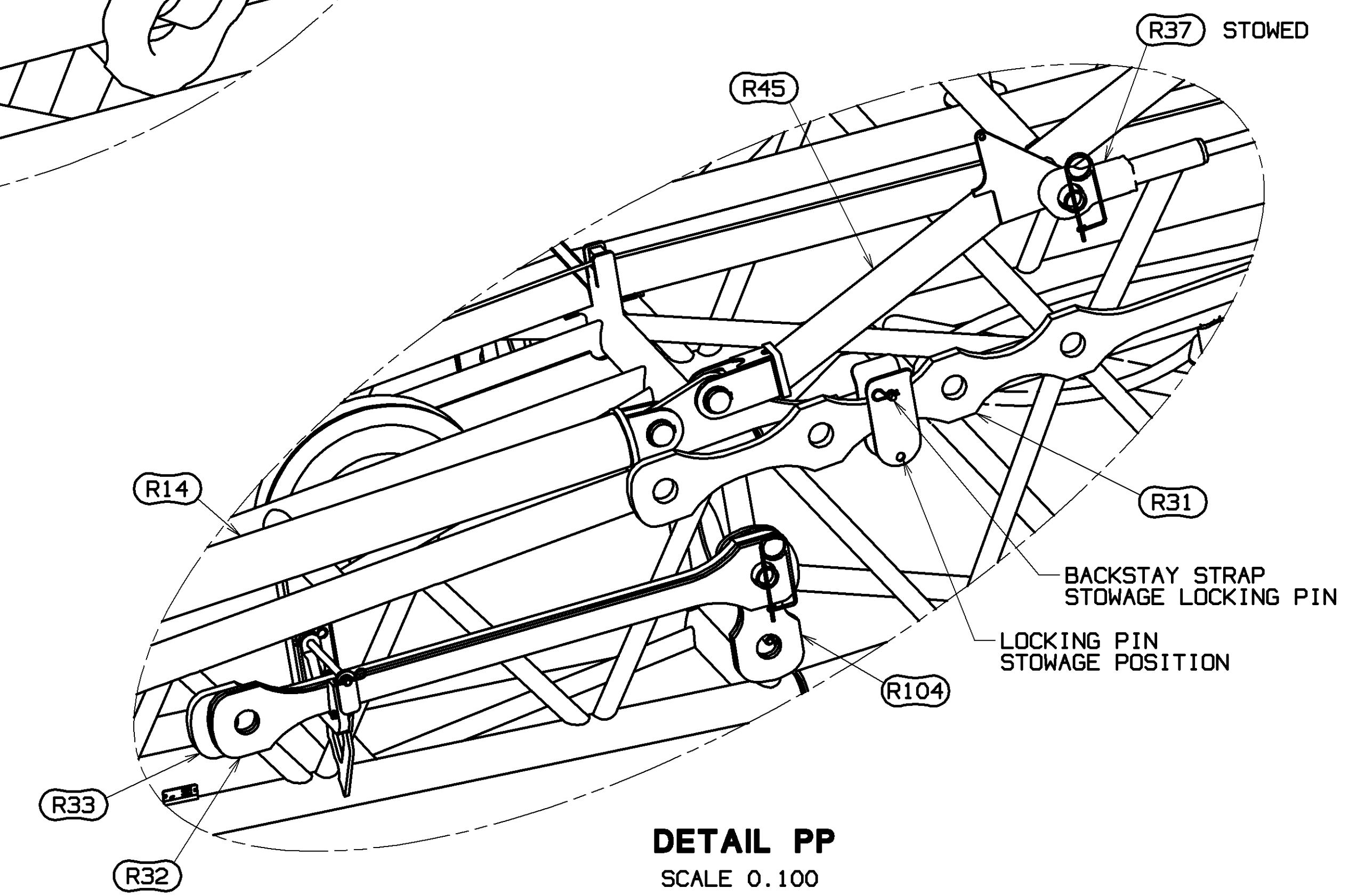
FROM THE TOP OF THE MAIN STRUT (R12) REMOVE THE PIN HOLDING THE STRUT RAISING ARM (R45) IN SHIPPING POSITION AND STOW PIN IN THE TABS ON THE SHIPPING BRACKET. (SEE DETAIL NN)

REMOVE PINS HOLDING MAIN STRUT BACKSTAY STRAPS (R31) AND SPREADER ASSY (R18) IN SHIPPING POSITION AND STOW PINS IN DESIGNATED STOWAGE LOCATIONS. (SEE DETAILS PP & RR)

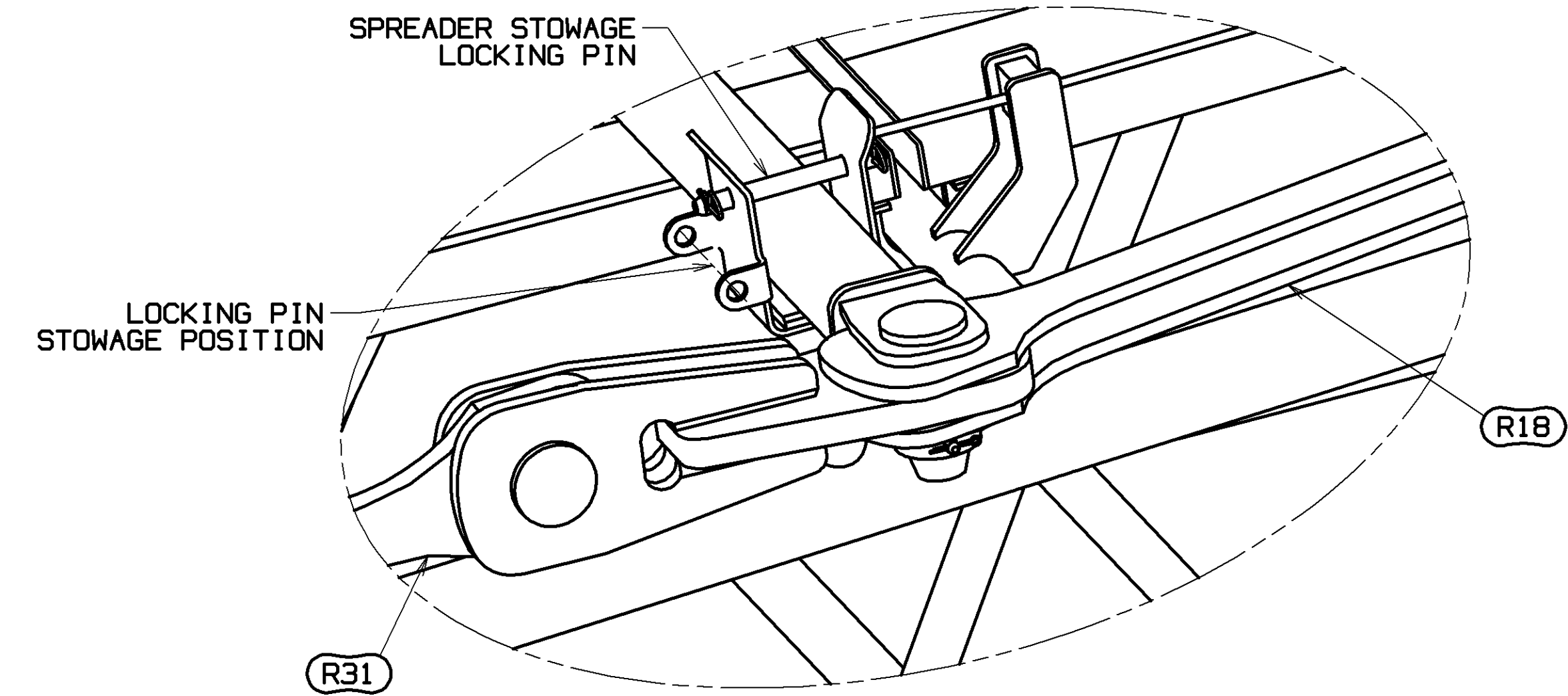
REMOVE STRAPS (R33) AND LINKS (R32 & R104) FROM SHIPPING POSITION. (SEE DETAIL PP)

REMOVE STRAP PINS (R103), COLLARS (R111) AND PINS (R110) FROM SHIPPING POSITION. (SEE DETAIL MM)

POSITION STRAPS, LINKS, PINS AND COLLARS ON BOOM TOP (B1027719) WITH LINKS (R104) ATTACHED TO PRECEDING INSERT STRAP. (SEE DETAIL VV ON SHEET 11)



DETAIL PP  
SCALE 0.100



DETAIL RR  
SCALE 0.200

DECIMAL PLACES	FRACTIONS	MACHINING	WELDING	DR. RHY	DATE
(1) PLACE 0.5	1/2	±.10	±.05		
(2) PLACE 0.00	1/16	±.12	±.015		
(3) PLACE 0.000	1/64	±.12	±.008		

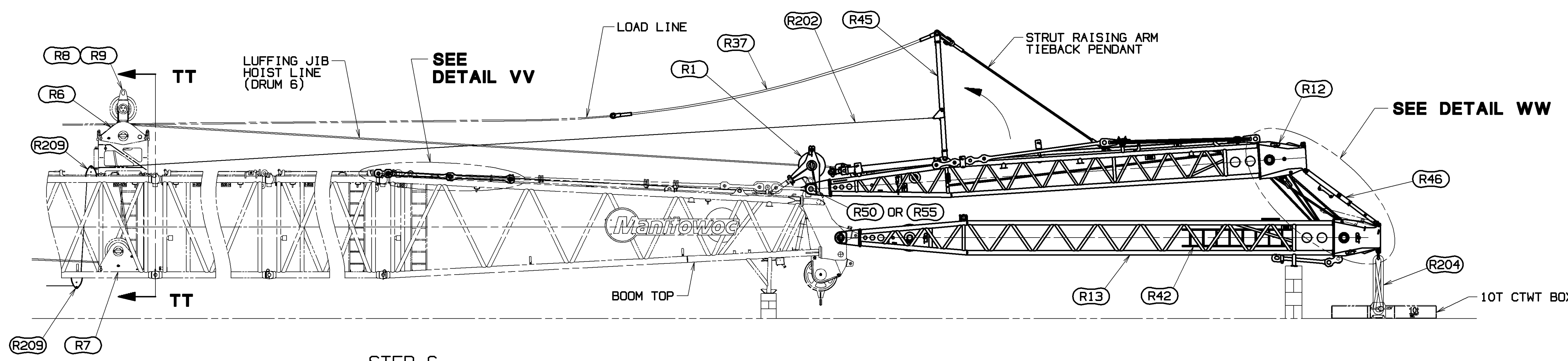
TOLERANCE UNLESS OTHERWISE SPECIFIED: ±.025  
 THIS DRAWING IS THE PROPERTY OF MANITOWOC CRANES, INC. ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER UNLESS APPROVED BY MANITOWOC CRANES, INC.

DATE: 03-27-19  
 REF. LIT.: A  
 MODEL: MLC300  
 LUFFING JIB RIGGING  
 LJ ON B65

84050217  
SHT 10 OF 16

PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 86290-05-026

BILL OF MATERIAL				ASSEMBLIES USED ON
QTY	DESCRIPTION	MATERIAL	DATE	REV



**STEP 6**  
RAISING ARM HOOK-UP

DETACH RAISING PENDANT (R37) FROM ITS SHIPPING LOCATION (SEE DETAIL PP ON SHEET 10) AND ATTACH THE FREE END OF THE PENDANT TO AN APPROPRIATE LOAD LINE. ATTACH RIGGING LINE (R202) TO MAIN STRUT RAISING ARM (R45).

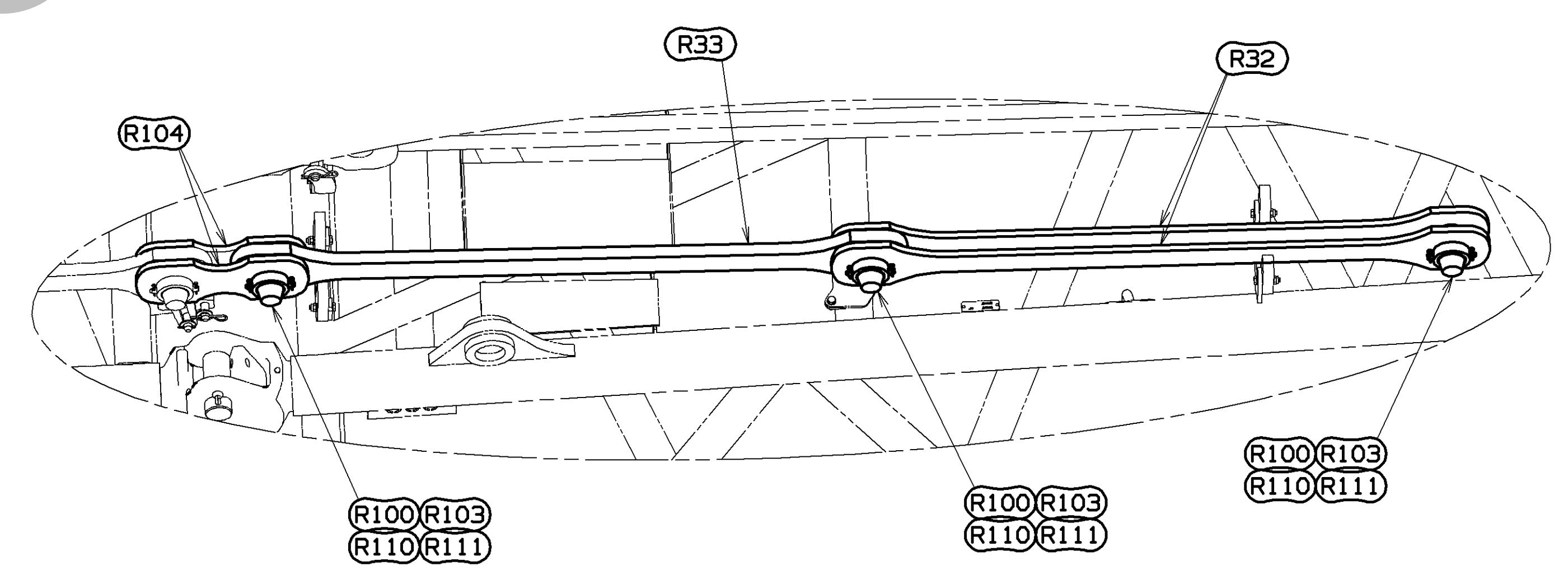
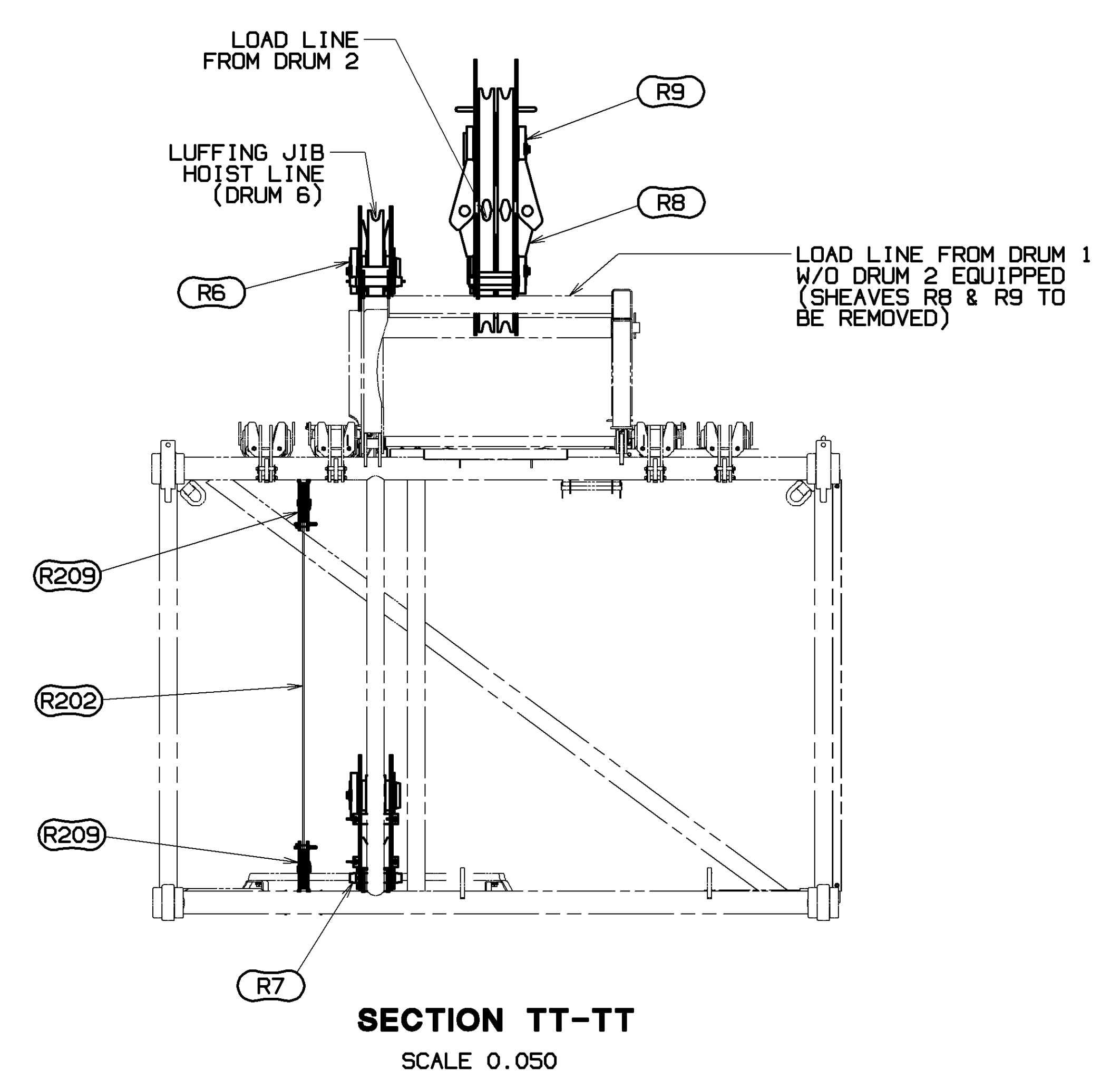
NOTE: IF DRUM 2 IS EQUIPPED, DRUM 2 MUST BE USED FOR STRUT RAISING. DRUM 1 OR 3 CANNOT BE USED. THE LOAD LINE FROM DRUM 2 MUST BE CONTAINED BETWEEN THE TWO SHEAVES ON THE WIRE ROPE GUIDES (R8 & R9). IF USING LOAD LINE FROM DRUM 1 (WITHOUT DRUM 2 EQUIPPED), THE LOAD LINE MUST LAY ON THE TOP OF THE WIRE ROPE GUIDE FRAME AND THE UPPER AND LOWER SHEAVES (R8 & R9) MUST BE REMOVED FROM THE FRAME. SPECIAL CARE MUST BE TAKEN TO ENSURE THAT THE ROPE PROPERLY SPOOLS ON THE DRUM DURING THE FOLLOWING STEPS. (SEE SECTION TT-TT)

CAUTION: IF RIGGING WINCH IS NOT USED, MAIN STRUT RAISING ARM (R45) MAY RAISE SUDDENLY WHEN LOAD LIND IS RETRACTED CAUSING LOAD LINE AND DEAD END TO DROP ONTO BOOM TOP.

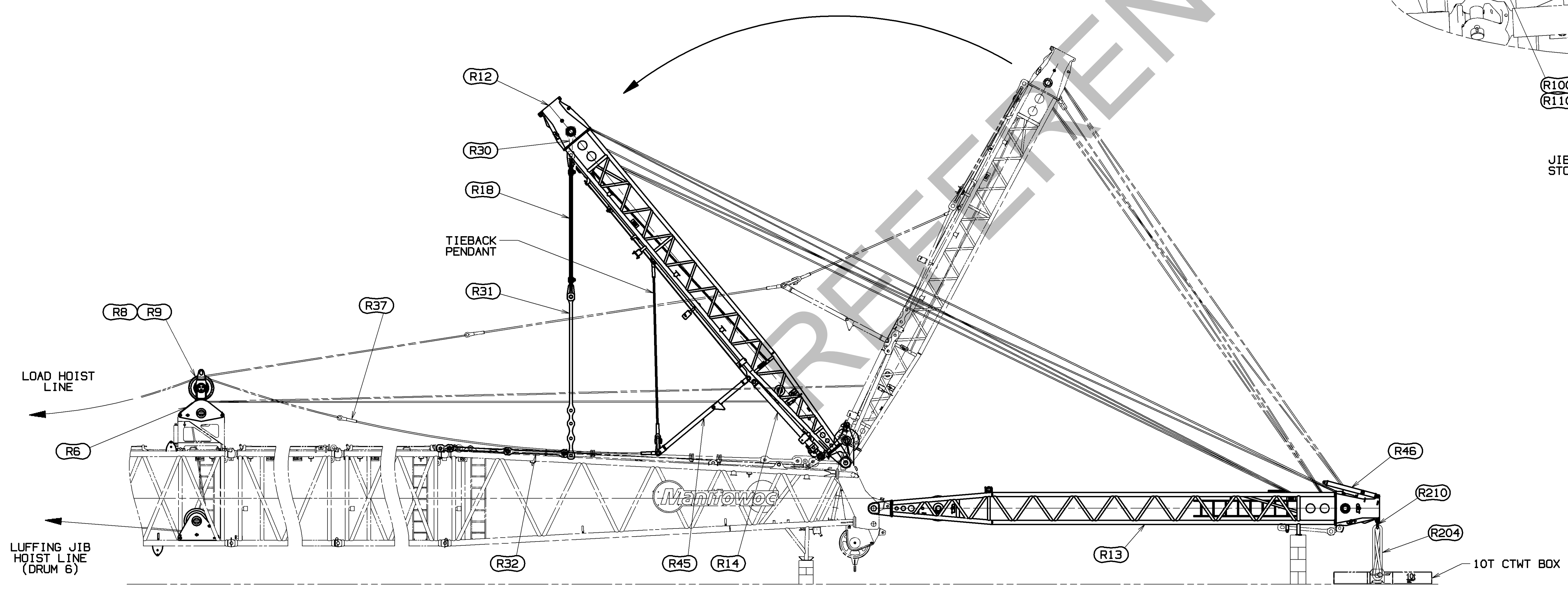
PAY IN RIGGING WINCH LINE (R202) RAISING THE MAIN STRUT RAISING ARM (R45) INTO WORKING POSITION. PAY IN THE LOAD LINE UNTIL THE STRUT RAISING ARM TIE BACK PENDANT IS TAUT. AT THIS POINT THE RIGGING WINCH LINE MAY BE DISCONNECTED OR KEPT TAUT THROUGH THE RAISING PROCESS.

CONTINUE TO SUPPORT MAIN STRUT (R12) WITH LOAD LINE AND REMOVE THE STRUT PIN FROM THE SHIPPING STRUT EXTENDED LOCATION AND THE PIN ATTACHING THE SHIPPING STRUT (R46) TO THE MAIN STRUT (R12). (SEE DETAIL WW).

RETRACT SHIPPING STRUT (R46) AND RELOCATE THE STRUT PIN TO THE RETRACTED POSITION. ROTATE THE SHIPPING STRUT (R46) INTO STOWAGE POSITION ON JIB STRUT (R13). REATTACH STRUT (R46) WITH THE PIN PREVIOUSLY REMOVED FROM MAIN STRUT. (SEE DETAIL WW).



**DETAIL VV**  
JIB PREP LOCATION OF STRAPS AND LINKS R32, R33 & R104 FROM STOWAGE ON MAIN STRUT AS SHOWN IN DETAIL PP ON SHEET 10  
SCALE 0.100



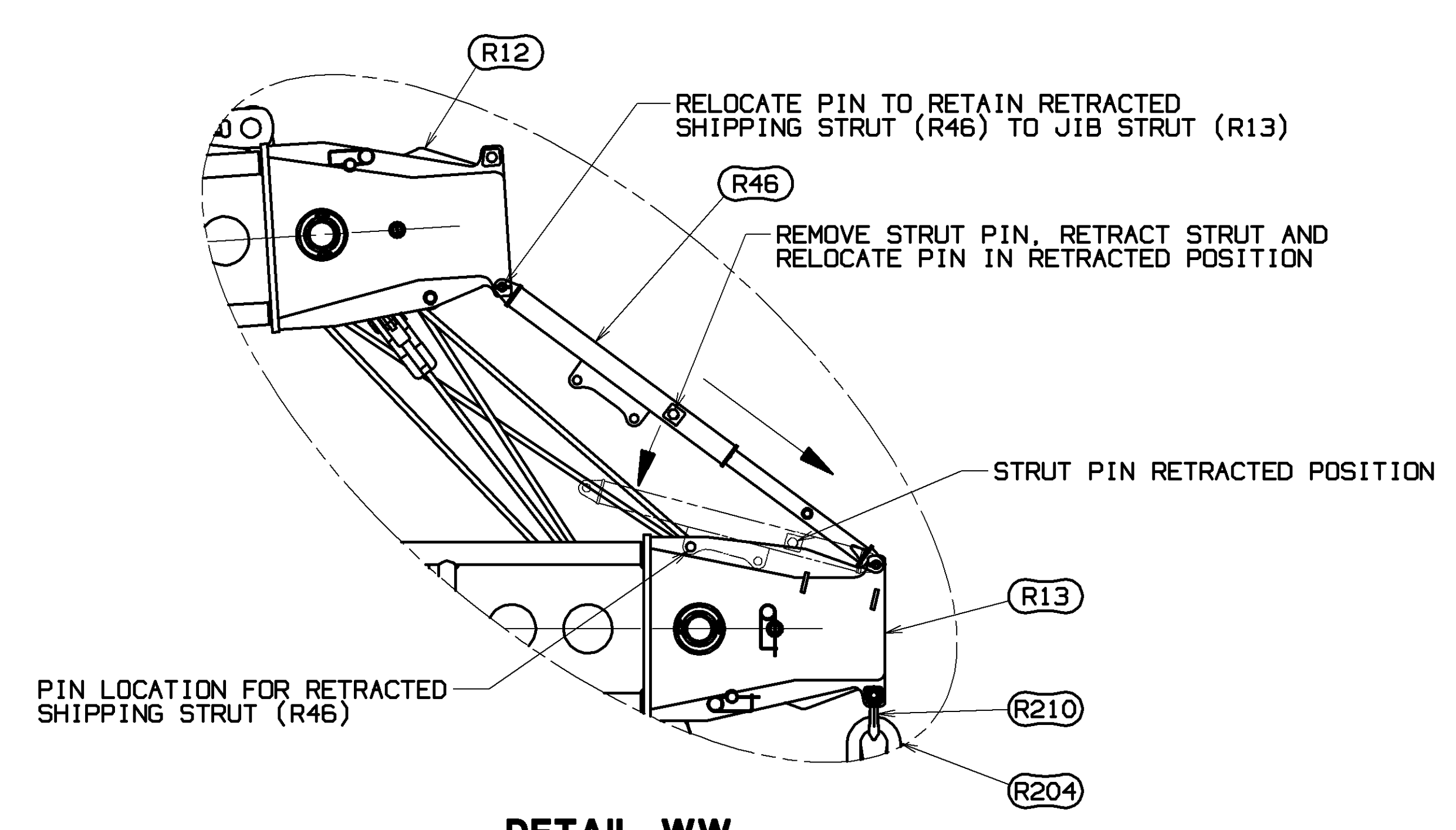
**STEP 7**  
MAIN STRUT RAISING AND BACKSTAY CONNECTION

CONTINUE TO PAY IN LOAD HOIST, RAISING THE MAIN STRUT (R12) OVER VERTICAL, ENSURING THAT THE LUFFING HOIST REEVING DOES NOT BECOME SLACK. WITH THE MAIN STRUT BEYOND VERTICAL, CONTROL OF ITS ANGLE WILL TRANSITION FROM THE LOAD LINE (ATTACHED TO THE RAISING PENDANT R37) TO THE LUFFING HOIST (DRUM 6).

AS THE MAIN STRUT (R12) CONTINUES BEYOND VERTICAL, THE BACKSTAY STRAPS (R30)(R31) AND SPREADER (R18) WILL BEGIN TO HANG VERTICALLY. RAISE THE MAIN STRUT UNTIL THE BACKSTAY STRAPS (R31) HANG IN POSITION OVER THE LUFFING JIB BACKSTAY STRAPS LOCATED ON THE MAIN BOOM.

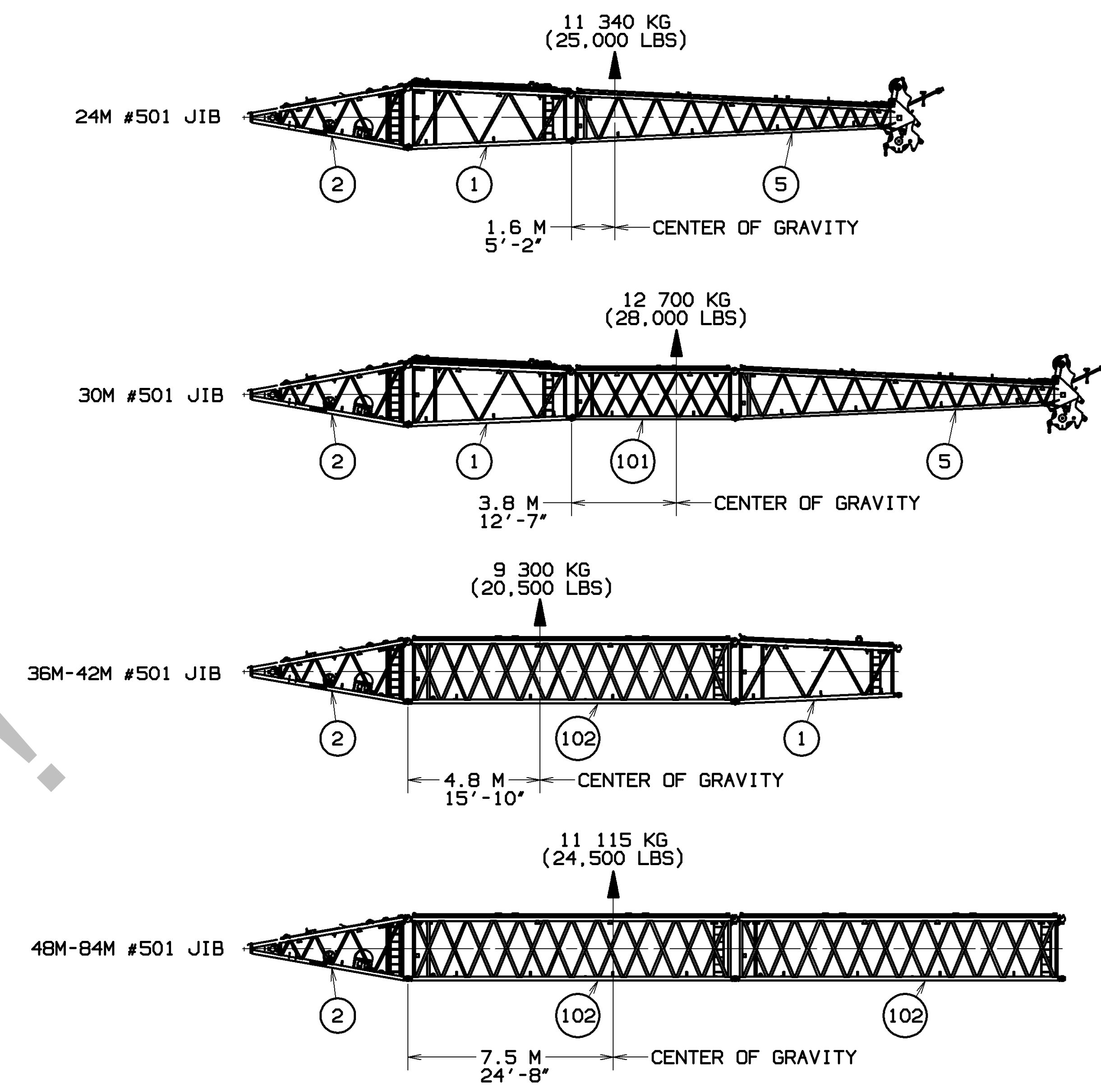
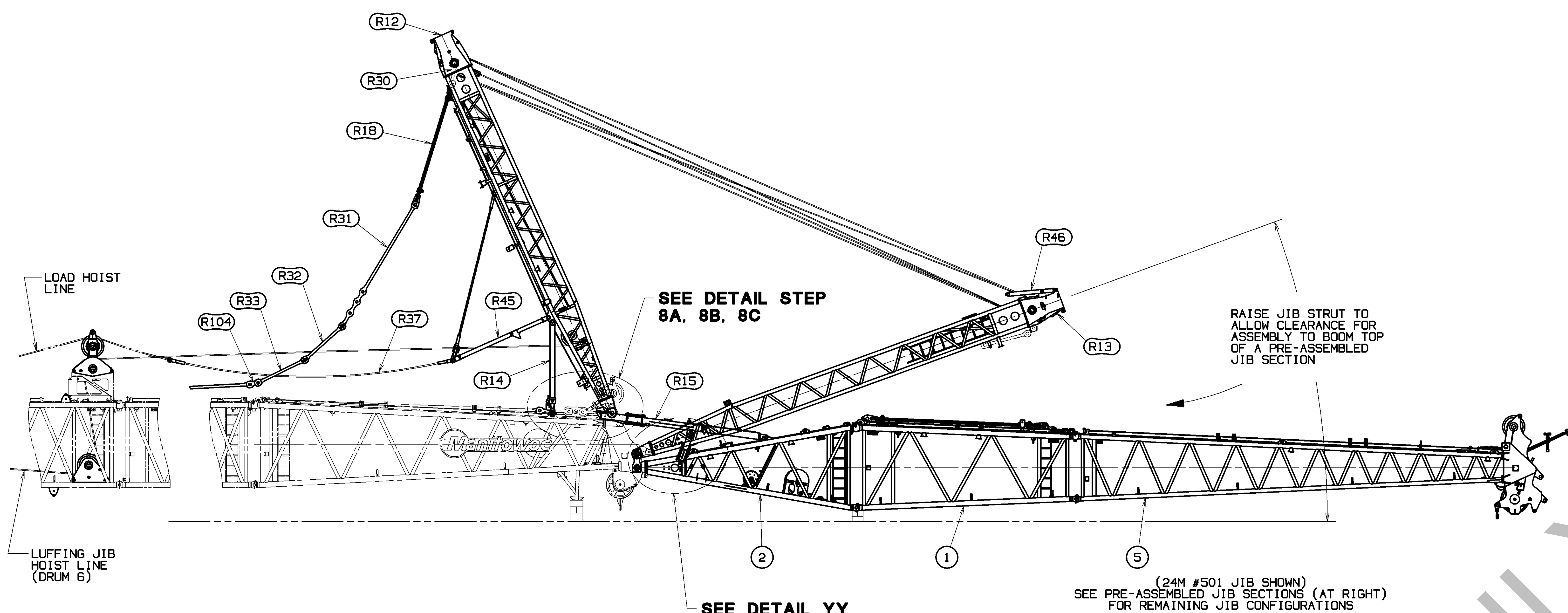
ATTACH THE LINKS (R32) FROM THE MAIN BOOM TOP TO THE ADJUSTABLE BACKSTAY STRAP (R31). VERIFY HOLE LOCATION (A,B,C, OR D) PER BOOM LENGTH TABLE ON SHEET 2 AND DETAIL G ON SHEET 4.

CAUTION: IF USING POSITIONS B,C, OR D DO NOT ALLOW ADJUSTABLE BACKSTAY STRAP (R31) TO EXTEND INTO BOOM TOP. STRAP CAN CATCH ON BOOM TOP AND DAMAGE LACINGS.



**DETAIL WW**  
SCALE 0.050

<small>THIS PRINT REMAINS THE PROPERTY OF MANITOWOC CRANES, INC. ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL. IT IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER WHATSOEVER DETRIMENTAL TO OUR INTERESTS.</small>	<small>TELERANCE UNLESS OTHERWISE SPECIFIED</small> DECIMAL PLACES      FABRICATION (1) PLACE 0.5      ±.12      ±.18      ±.03 (2) PLACE 0.00      ±.08      ±.12      ±.015 (3) PLACE 0.000      ±.008      ±.008      ±.008 ANGLES      11.25°      10°      10°		<small>WELD</small> G20	<small>MANITOWOC CRANES, INC.</small> DR. RHV      Manitowoc, Wisconsin      LUFFING JIB RIGGING CK. KJV      MODEL MLC300      LJ ON B65 APP. JRR	<small>PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 03500-09-036</small> DATE 03-27-19 REF. LIT. A
	<small>DO NOT SCALE THIS DRAWING</small>			84050217 SHT 11 OF 16	



PRE-ASSEMBLED JIB SECTIONS FOR STEP 8  
SCALE 0.008

**STEP 8**  
**STRUT STOP CONNECTION AND JIB BUTT ASSEMBLY**

PAY IN THE LUFFING JIB HOIST LINE (DRUM 6) TO BRING THE MAIN STRUT (R12) BACK TOWARDS VERTICAL AND TO POSITION STRUT STOP (R14) OVER THE STOP LUG ON THE MAIN BOOM TOP.

WITH MAIN STRUT STOP (R14) IN STOWED POSITION REMOVE STRUT STOP STOWAGE LOCKING PINS, ALLOWING STOP TO HANG VERTICALLY ABOVE THE STOP LUGS. PLACE LOCKING PINS IN THE TABS ON THE BRACKET. TEMPORARILY REMOVE THE MAIN PIN FROM THE END OF THE MAIN STRUT STOP (R14). (SEE DETAIL STEP 8A)

REMOVE THE CENTER PIN FROM ITS SHIPPING LOCATION ON THE MAIN STRUT STOP AND ALLOW THE INNER MOST TUBE TO TELESCOPE OUTWARD UNTIL THE END OF THE STOP CAN BE CONNECTED TO THE STOP LUG USING THE PREVIOUSLY REMOVED MAIN PIN. (SEE DETAIL STEP 8B)

BEGIN RETRACTING THE LUFFING JIB HOIST LINE (DRUM 6) WHILE ALLOWING THE INNER MOST STOP TUBE TO TELESCOPE. WHEN THE CENTER HUB OF THE INNER MOST TUBE IS ALIGNED WITH THE EQUIVALENT HOLE ON THE MIDDLE STOP TUBE, USE THE CENTER PIN (REMOVED IN "DETAIL STEP 8B") TO LOCK THE TUBES TOGETHER. REMOVE THE SHIPPING PIN CONNECTING THE MIDDLE TUBE TO THE OUTER MOST TUBE AND STORE PIN IN THE REAR MOST SET OF HOLES. (SEE DETAIL STEP 8C)

PAYOUT THE LUFFING JIB HOIST LINE (DRUM 6) UNTIL THE MAIN STRUT (R12) RESTS ON THE MAIN STRUT STOPS (R14). (SEE ASSEMBLY STEP 9.1 AND 9.2 VIEWS ON SHEET 13).

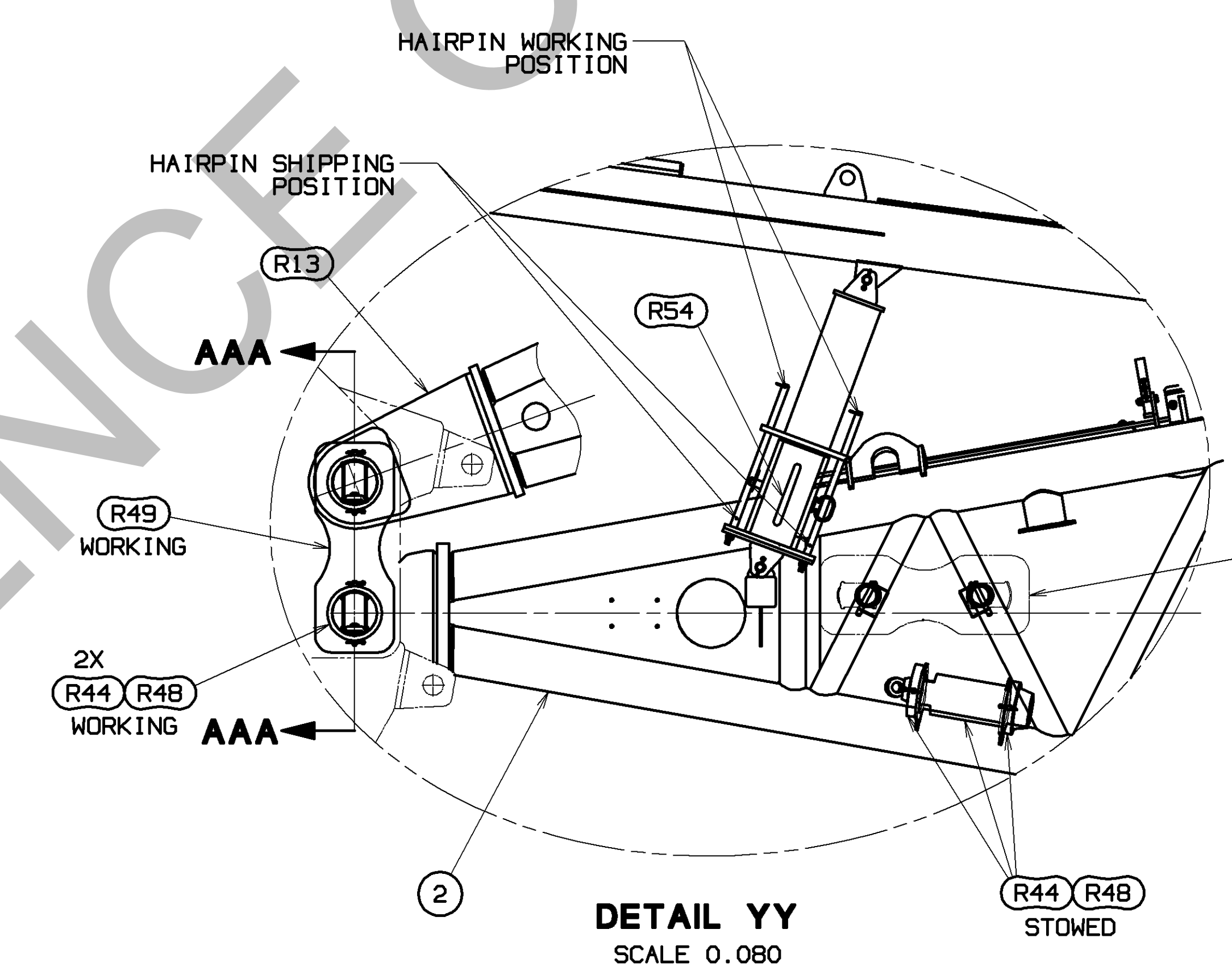
DETACH THE LOAD LINE FROM THE STRUT RAISING PENDANT (R37) AND ATTACH END OF STRUT RAISING PENDANT TO STRUT STOP STOWAGE BRACKET. (SEE ASSEMBLY STEP 9.1 AND 9.2 VIEWS ON SHEET 13 AND SEE DETAIL CCC ON SHEET 13).

DETACH 10T CTWT BOX FROM JIB STRUT (R13) AND STOW SLINGS (R204) AND SHACKLES (R210) IN PARTS BOX 81028769.

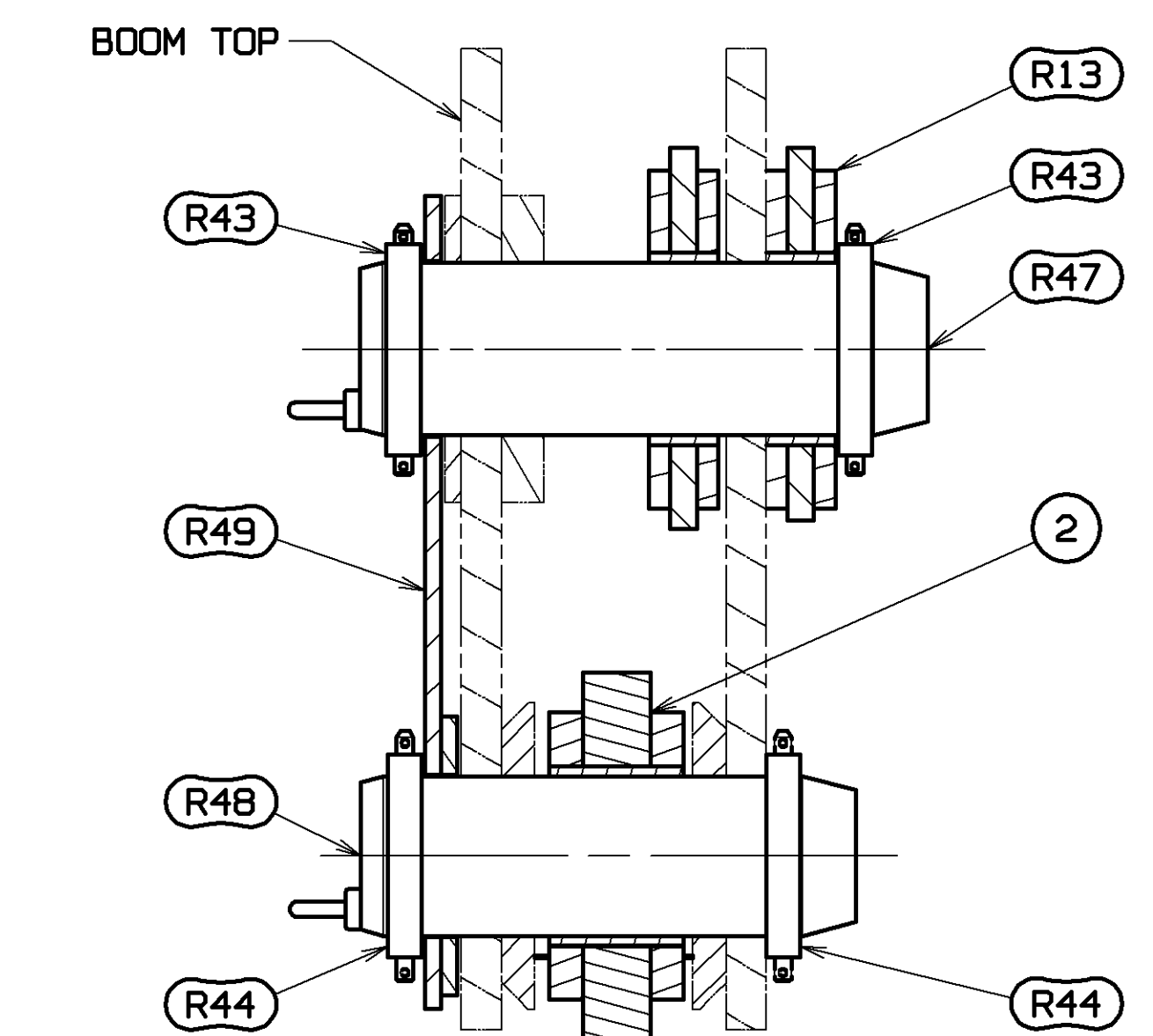
PRE-ASSEMBLE (PER DESIRED JIB CONFIGURATION) THE #501 JIB BUTT (ITEM 2). TO INSERTS AND/OR JIB TOP AS SHOWN. USING ASSIST CRANE AND STAND ASSEMBLY (R54) RAISE JIB STOPS TO ASSEMBLY POSITION. RELOCATE JIB STOP STRUT HAIRPIN FROM SHIPPING POSITION TO WORKING POSITION TO ALLOW JIB STOP STRUT TO EXTEND. (SEE DETAIL YY).

NOTE: FOR JIB LENGTHS 36M AND LONGER, RELOCATE THE FRONTSTAY SPREADER (R25) FROM TOP OF TRANSITION INSERT (ITEM 1) TO TOP OF 12M INSERT (ITEM 102) CLOSEST TO JIB BUTT (ITEM 2).

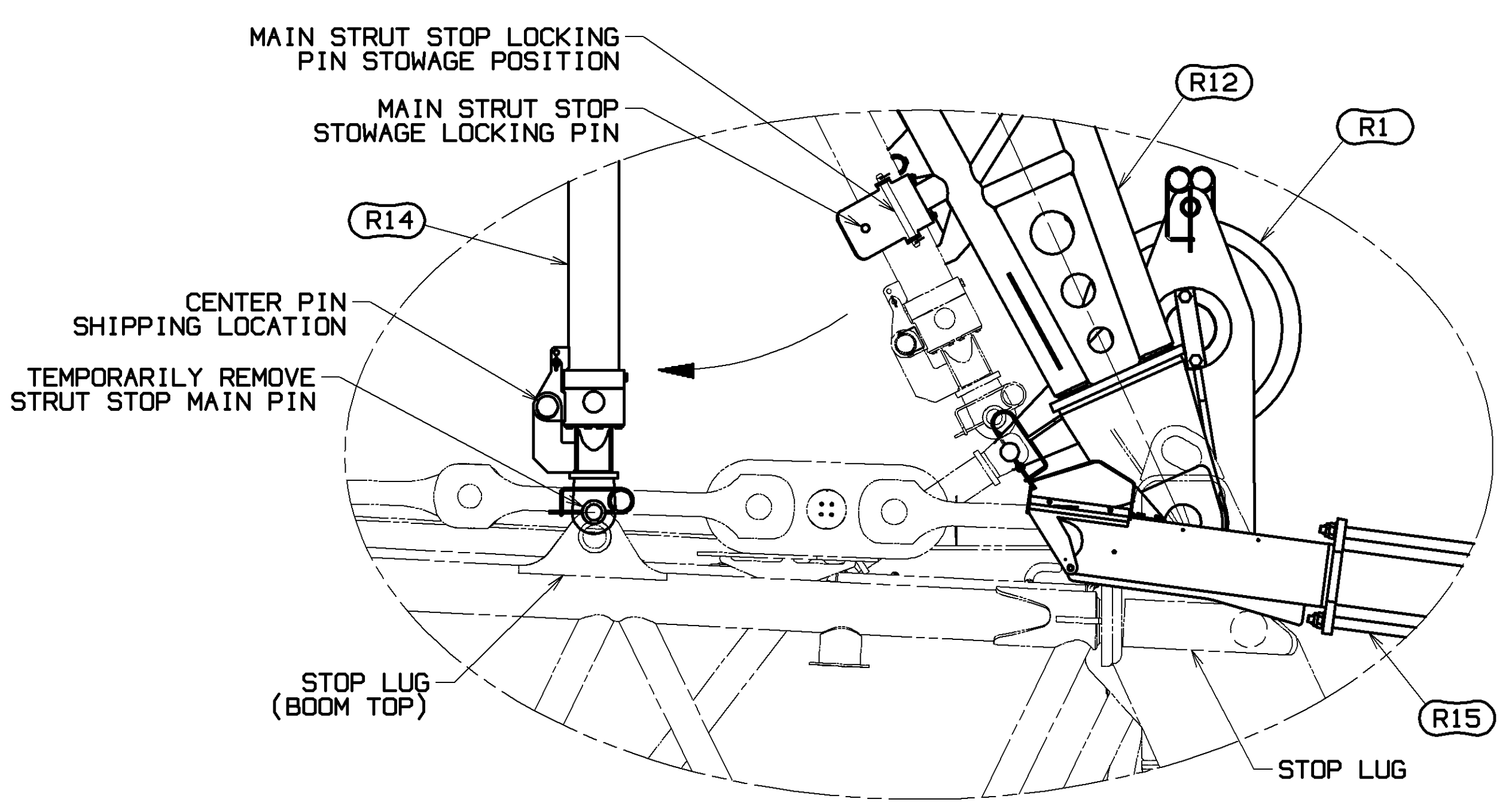
RAISE JIB STRUT (R13) TO ALLOW THE PRE-ASSEMBLED JIB SECTION TO BE LOCATED AND ASSEMBLED TO BOOM TOP AS SHOWN. ENSURE THAT LUFFING JIB STOPS (R15) ARE SUPPORTED AND SITTING ON TOP OF THE STOP LUGS ON THE BOOM TOP. (SEE DETAIL STEP 8A, 8B AND 8C). REMOVE STAND ASSEMBLY (R54) AND STORE IN PARTS BOX 81028769. ASSEMBLE JIB BUTT HINGE PIN (R48) AND KEEPER PLATE (R49) IN PROPER ORIENTATION AND ATTACH COLLARS (R44) AND PINS TO RETAIN THE HINGE PIN AND KEEPER PLATE. (SEE DETAIL YY AND SECTION AAA-AAA).



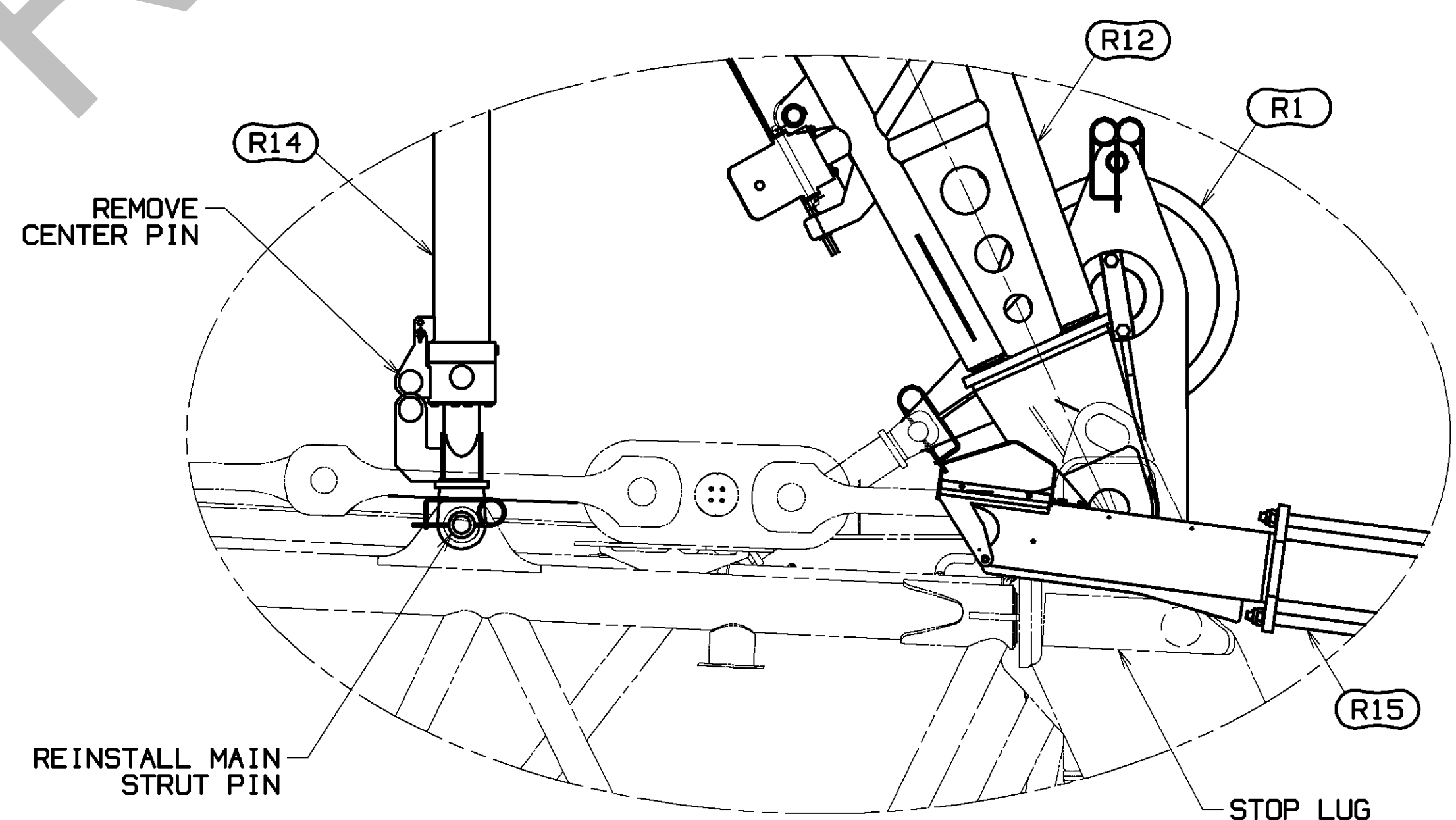
**DETAIL YY**  
SCALE 0.080



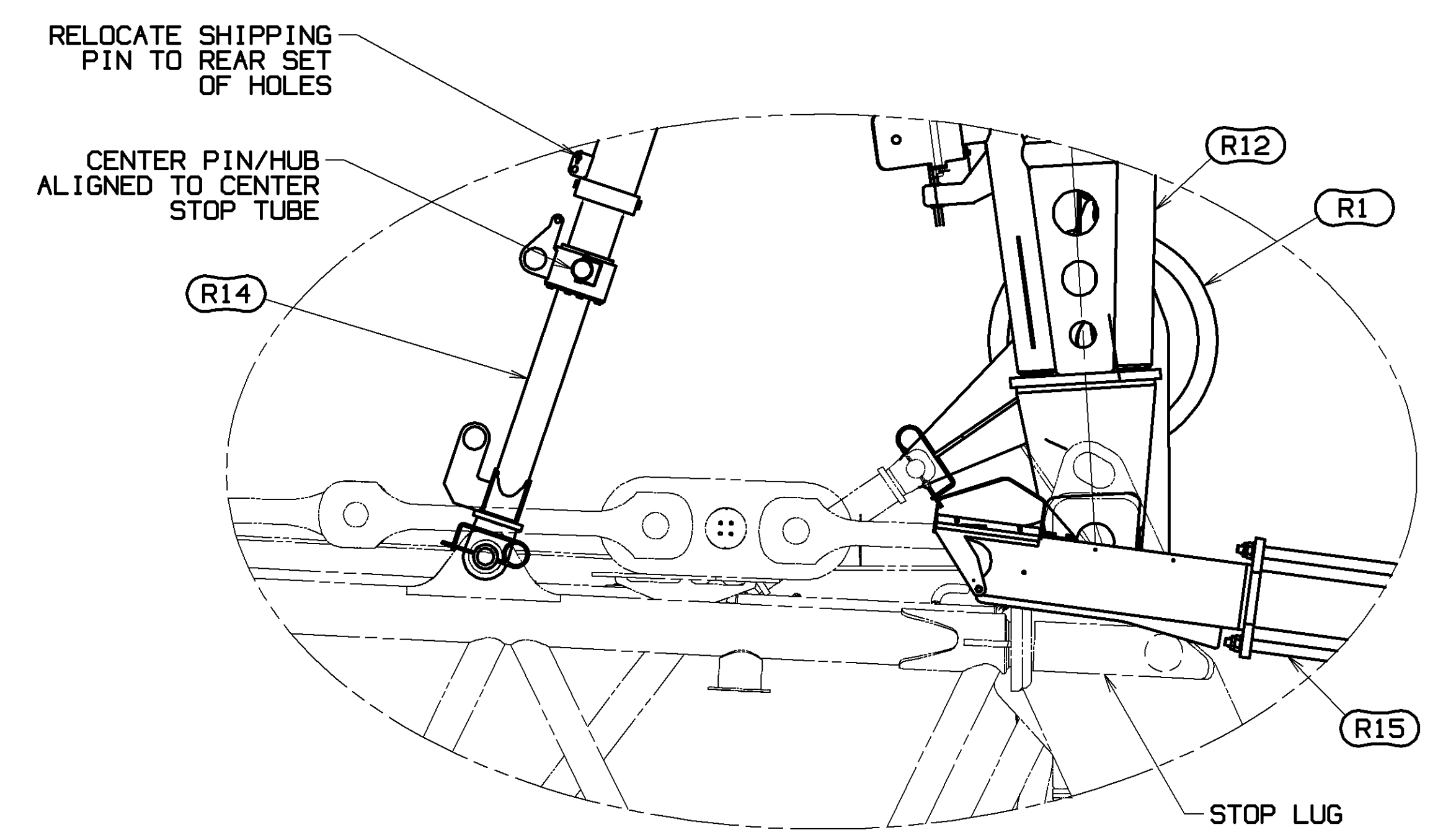
**SECTION AAA-AAA**  
SCALE 0.200



**DETAIL STEP 8A**  
SCALE 0.100

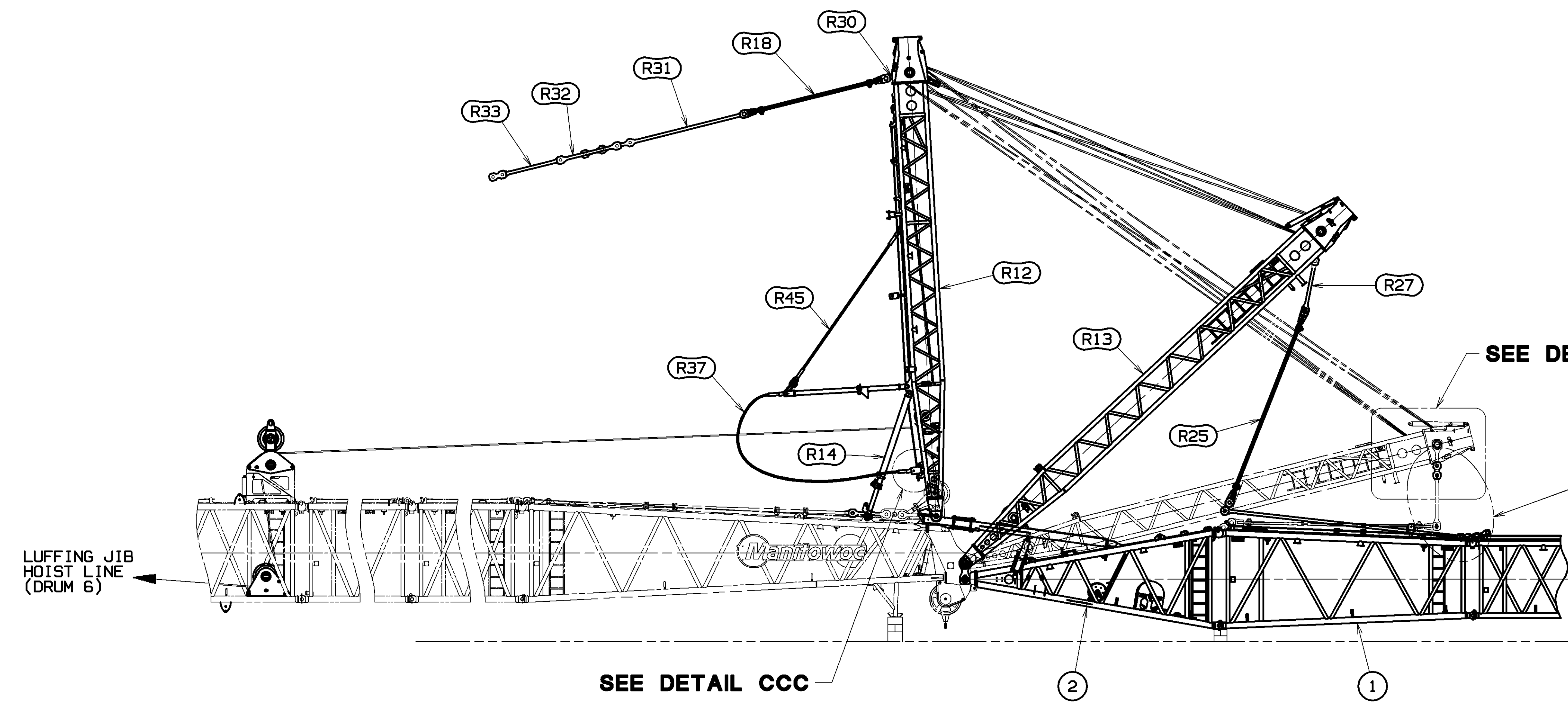


**DETAIL STEP 8B**  
SCALE 0.100



**DETAIL STEP 8C**  
SCALE 0.100

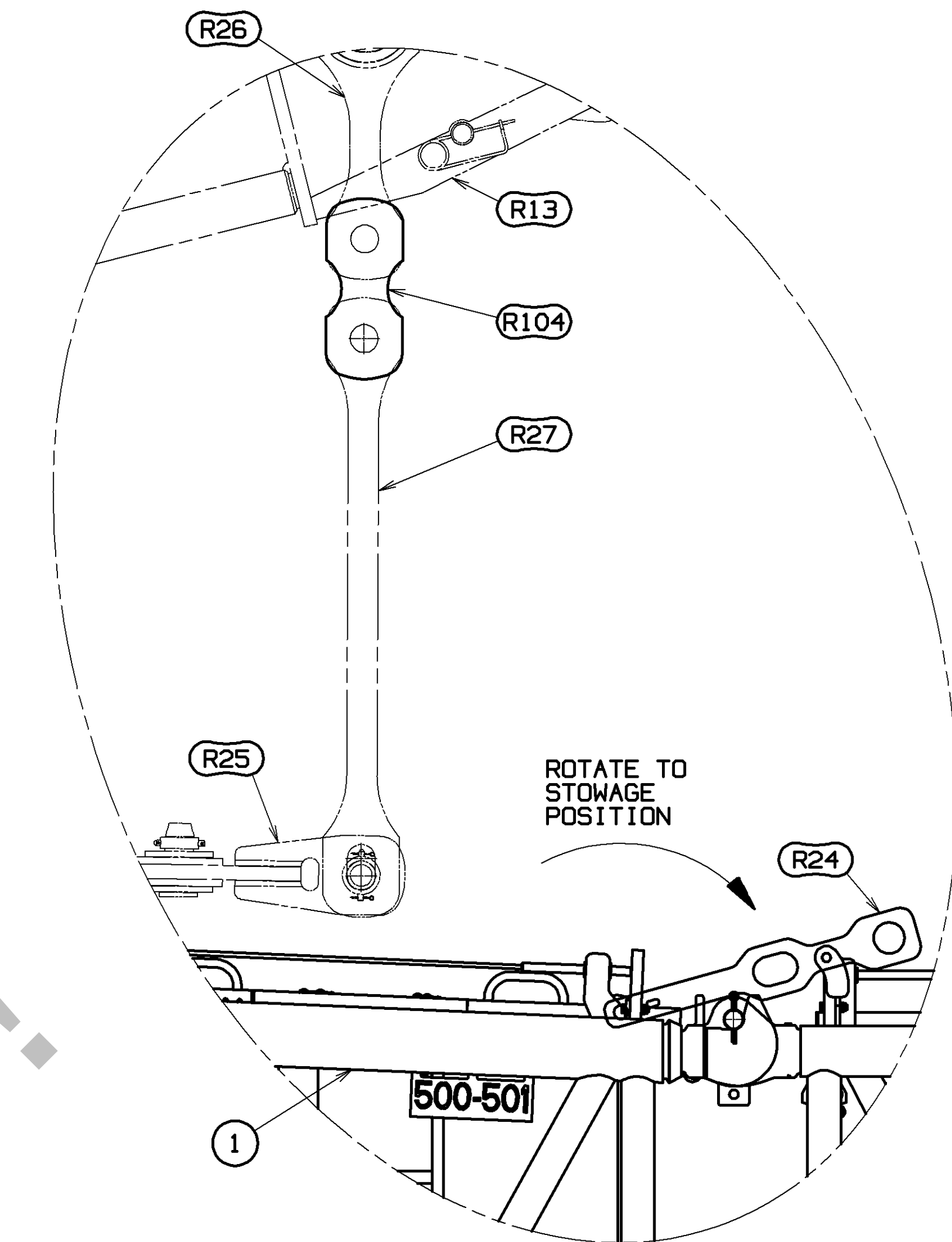
BILL OF MATERIAL				ASSEMBLIES USED IN
QTY	DESCRIPTION	MATERIAL	QTY	



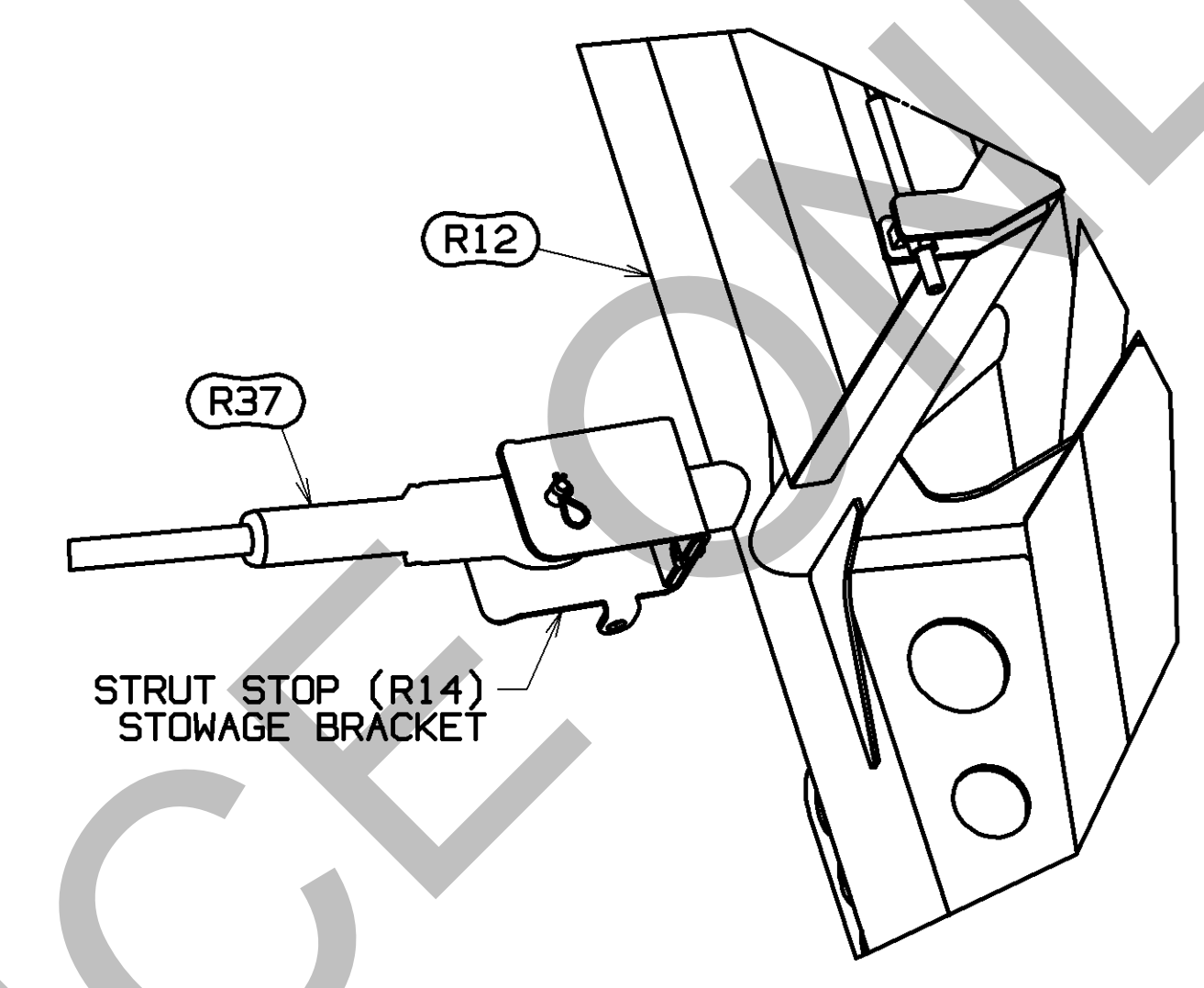
SEE DETAIL CCC

**STEP 9.1**  
**JIB STRUT RAISING FOR LUFFING JIB 24M & 30M**

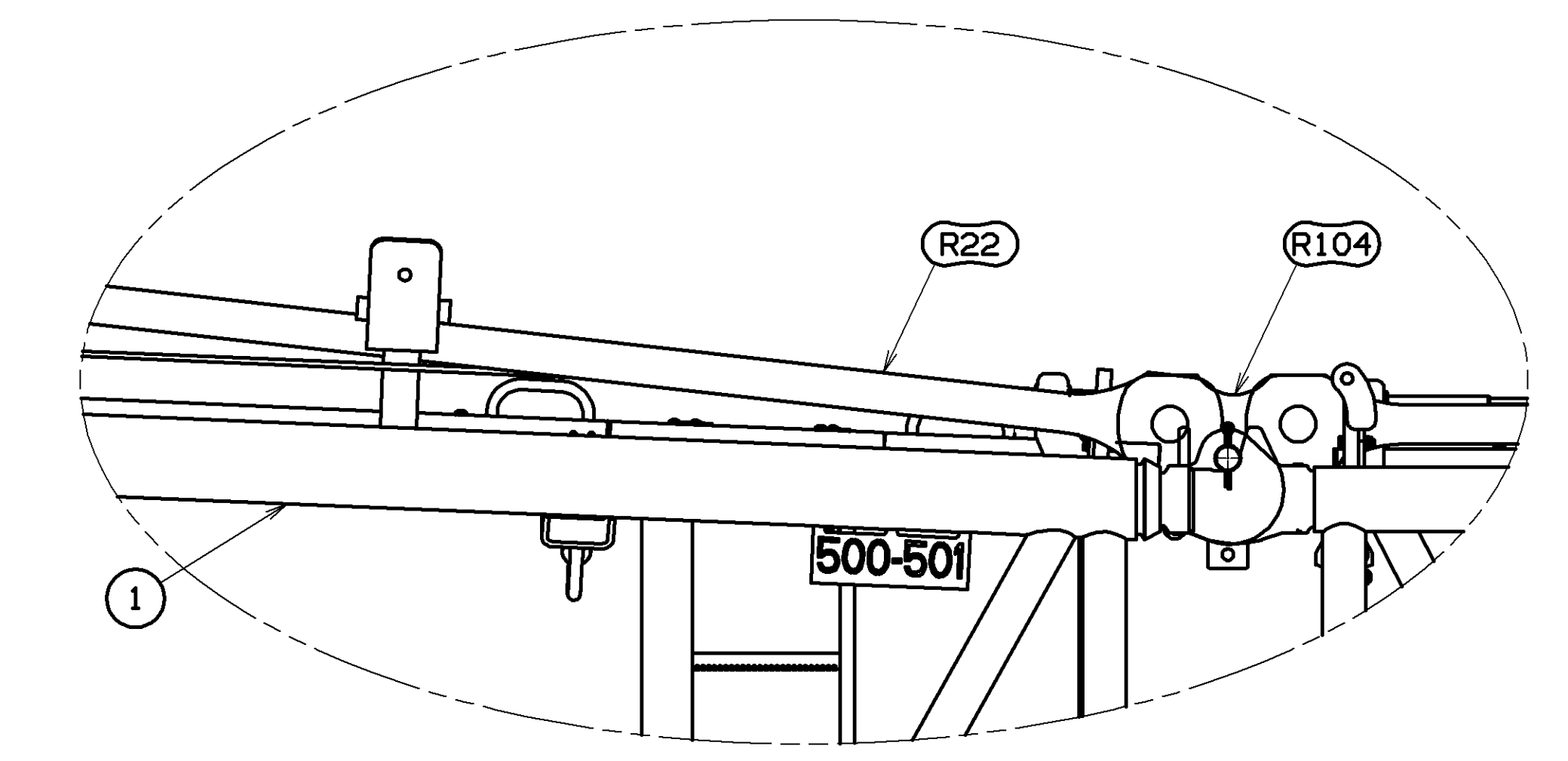
COMPLETE THE ASSEMBLY OF DESIRED JIB CONFIGURATION TO PRE-ASSEMBLED JIB BUTT ASSY.  
 INSTALL LOWER JIB CONNECTOR PINS. (SEE DETAIL T AND DETAIL V ON SHEET 6).  
 ASSEMBLE STRAP/LINK CONNECTIONS BEGINNING AT THE JIB TOP.  
 LOWER JIB STRUT (R13) TO REMOVE JIB STRUT BASIC STRAPS (R27) (R104) (R26) FROM SHIPPING BRACKET. (SEE DETAIL BBB).  
 ALIGN AND ATTACH THE BASIC STRAP (R27) TO THE FRONTSTAY SPREADER (R25). (SEE DETAIL STEP 9A).  
 ASSEMBLE STRAP/LINK CONNECTION (R22 & R104) AT TRANSITION INSERT (ITEM 1) AND #501 INSERT. (SEE DETAIL STEP 9B).  
 RETRACT THE LUFFING JIB HOIST LINE (DRUM 6) TO RAISE THE JIB STRUT (R13) FROM ITS ASSEMBLY POSITION.  
 THE LUFFING JIB IS READY FOR RAISING AND OPERATION.



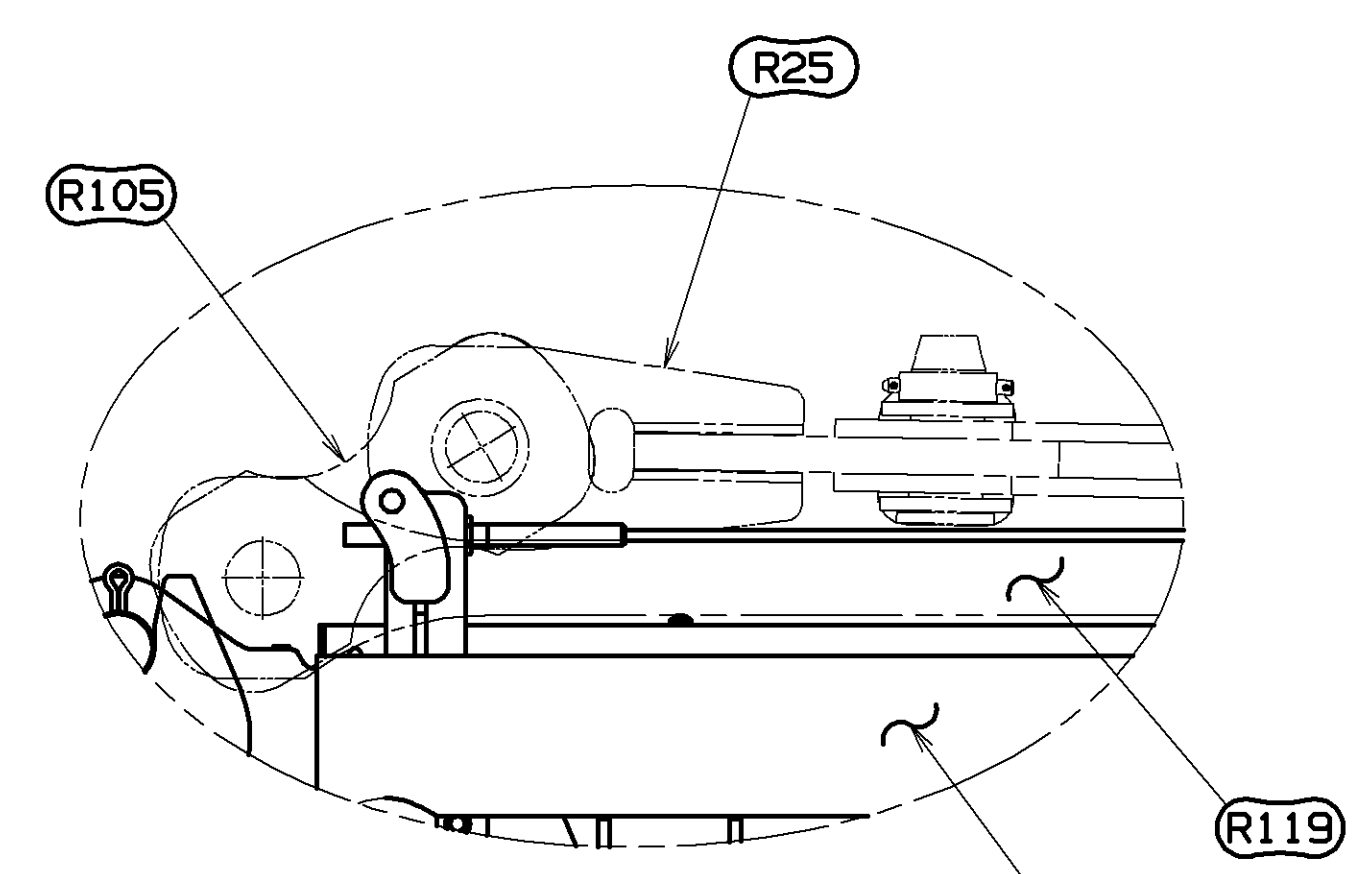
**DETAIL STEP 9A**  
 SCALE 0.100



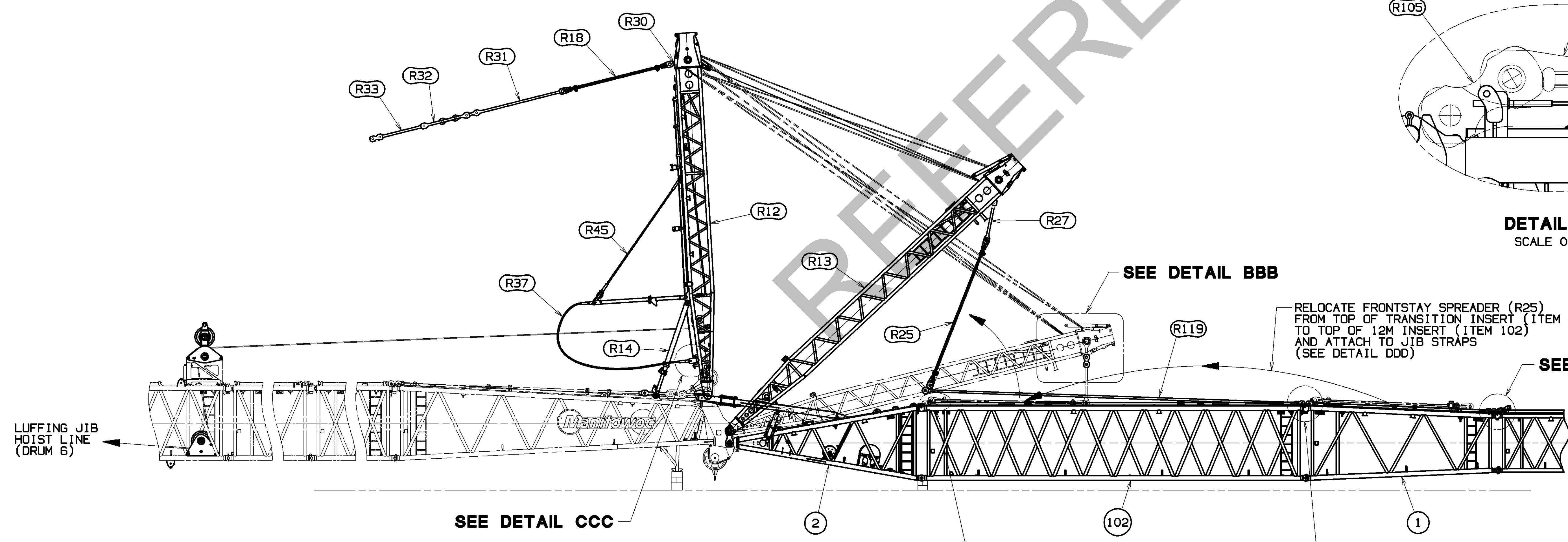
**DETAIL CCC**  
 SCALE 0.125



**DETAIL STEP 9B**  
 SCALE 0.100



**DETAIL DDD**  
 SCALE 0.150



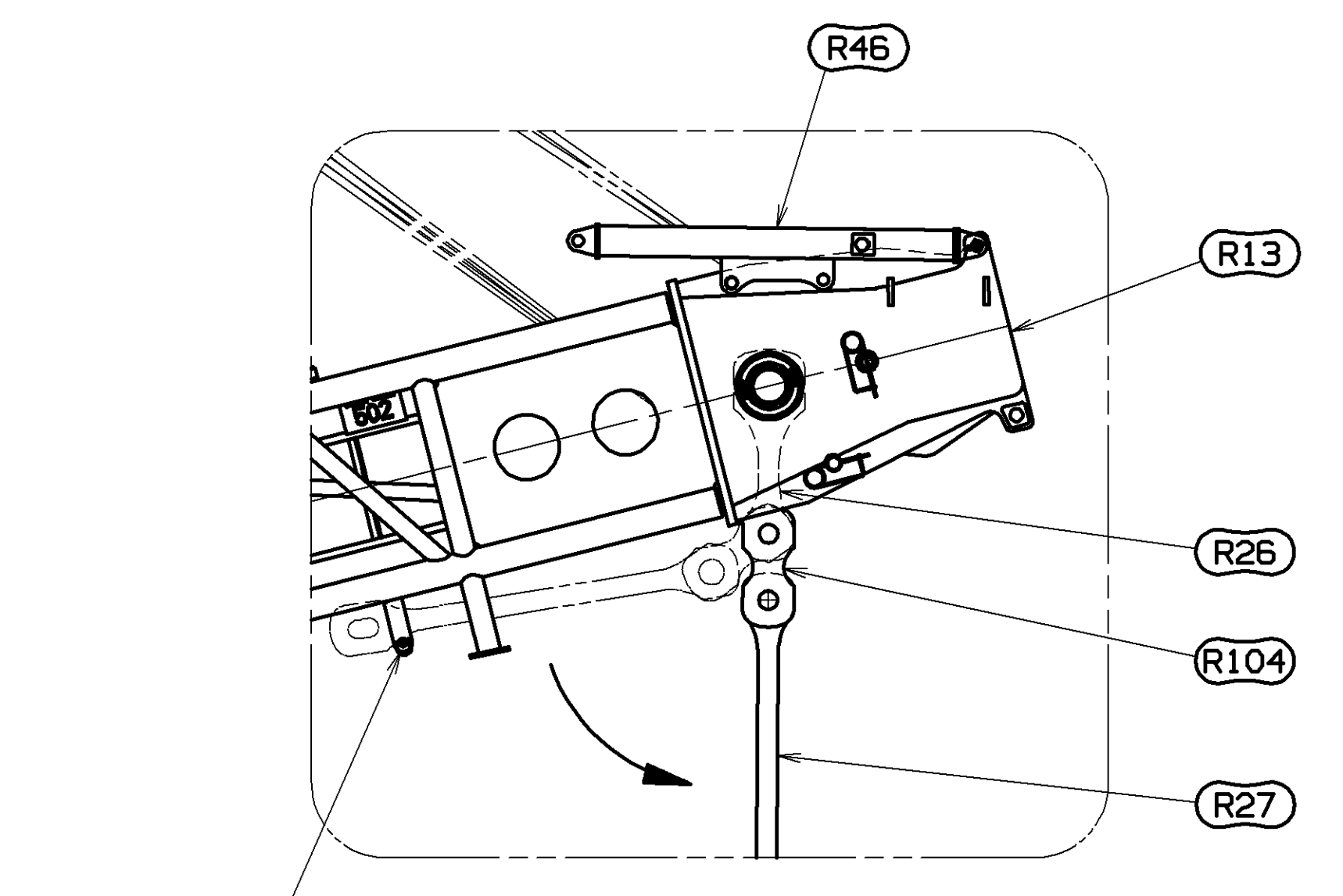
SEE DETAIL CCC

**STEP 9.2**  
**JIB STRUT RAISING FOR LUFFING JIB 36M THRU 84M**

COMPLETE THE ASSEMBLY OF DESIRED JIB CONFIGURATION TO PRE-ASSEMBLED JIB BUTT ASSY.  
 NOTE: RELOCATE THE FRONTSTAY SPREADER (R25) FROM TOP OF TRANSITION INSERT (ITEM 1) TO TOP OF 12M INSERT (ITEM 102) CLOSEST TO JIB BUTT (ITEM 2).  
 INSTALL LOWER JIB CONNECTOR PINS. (SEE DETAIL T AND DETAIL V ON SHEET 6).  
 ASSEMBLE STRAP/LINK CONNECTIONS BEGINNING AT THE JIB TOP.  
 LOWER JIB STRUT TO REMOVE JIB STRUT BASIC STRAPS (R27) (R104) (R26) FROM SHIPPING BRACKET. (SEE DETAIL BBB).  
 ALIGN AND ATTACH THE BASIC STRAP (R27) TO THE FRONTSTAY SPREADER (R25) THAT WAS RELOCATED FROM (ITEM 1).  
 ASSEMBLE STRAP/LINK CONNECTION (R22 & R104) AT TRANSITION INSERT (ITEM 1) AND #501 INSERT. (SEE DETAIL STEP 9B).  
 RETRACT THE LUFFING JIB HOIST LINE (DRUM 6) TO RAISE THE JIB STRUT (R13) FROM ITS ASSEMBLY POSITION.  
 THE LUFFING JIB IS READY FOR RAISING AND OPERATION.

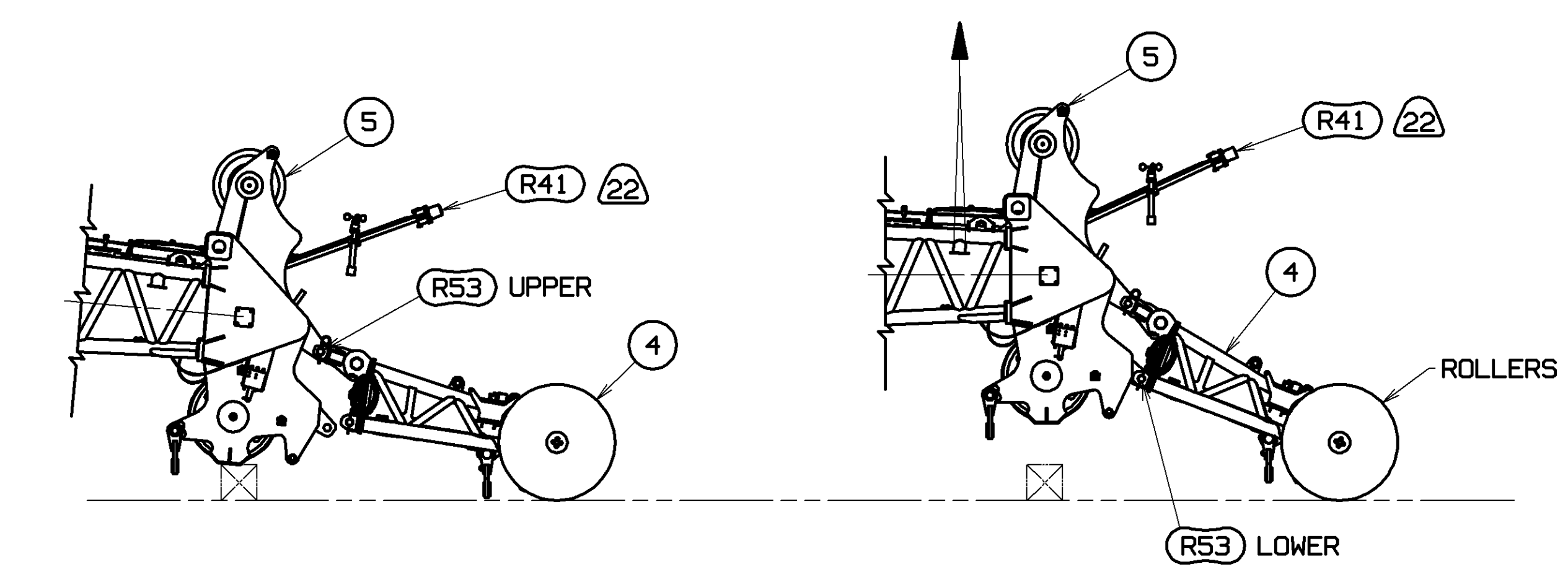
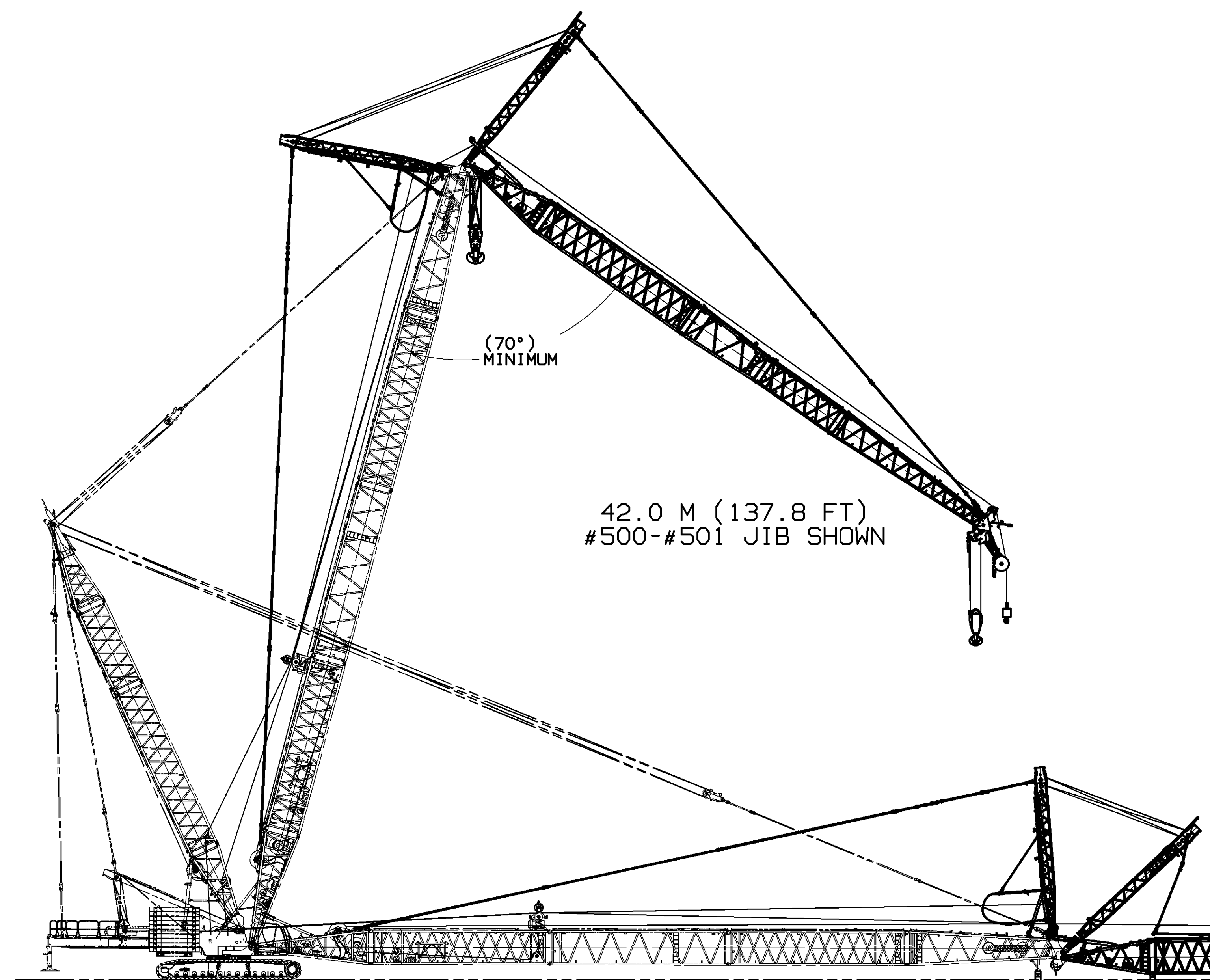
RELOCATE FRONTSTAY SPREADER (R25) FROM TOP OF TRANSITION INSERT (ITEM 1) TO TOP OF 12M INSERT (ITEM 102) AND ATTACH TO JIB STRAPS (SEE DETAIL DDD)

SEE DETAIL STEP 9B



**DETAIL BBB**  
 SCALE 0.050

<small>THIS DRAWING IS THE PROPERTY OF MANITOWOC CRANES, INC. ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF MANITOWOC CRANES, INC.</small>	<small>TOLERANCE UNLESS OTHERWISE SPECIFIED</small>		<small>MANITOWOC CRANES, INC. MODEL MLC300</small>	<small>LUFFING JIB RIGGING</small>
	<small>DECIMAL PLACES</small>	<small>FRACTIONS</small>		
	<small>1) PLACE 0.5</small> <small>2) PLACE 0.00</small> <small>3) PLACE 0.000</small>	<small>1/16</small> <small>1/8</small> <small>3/16</small> <small>1/2</small> <small>3/4</small> <small>1</small>		
<small>DATE</small>	<small>REV. LTR.</small>	<small>DATE</small>	<small>REV. LTR.</small>	<small>DATE</small>
<small>03-27-19</small>	<small>A</small>	<small>03-27-19</small>	<small>A</small>	<small>03-27-19</small>



ALIGN UPPER BOOM POINT (ITEM 4) UPPER HOLES WITH HOLES IN THE JIB TOP (ITEM 5) AND INSTALL (2) PINS (R53) AND SAFETY PINS

USING ASSIST CRANE ATTACH SLINGS TO JIB TOP LIFTING LUGS AND LIFT JIB TOP TO ALIGN THE LOWER HOLES IN THE UPPER BOOM POINT (ITEM 4) WITH THE HOLES IN THE JIB TOP (ITEM 5). INSTALL (2) PINS (R53) AND SAFETY PINS. LOWER JIB TOP TO ALLOW ROLLERS TO CONTACT GROUND. REMOVE SLINGS.

**DETAIL EEE**  
UPPER BOOM POINT INSTALLATION  
SCALE 0.025

SEE DETAIL EEE

54.0 M (177.2 FT)  
#505-#500 BOOM SHOWN

**TO RAISE BOOM AND JIB**

CONSULT LUFFING JIB RAISING PROCEDURE 9665-A TO DETERMINE WHEN LOWER POINTS NEED TO BE REMOVED. WHEN BOOM AND JIB ARE READY TO BE ERECTED, CHECK THAT JIB STOP LATCH AND LOCK OPERATE FREELY. JIB STOP OPERATES BASED ON JIB ANGLE ABOVE HORIZONTAL AND REQUIRES NO FURTHER OPERATOR INTERACTION.

BOOM UP WHILE LUFFING JIB POINT WHEELS ROLL ON GROUND. WHEN REQUIRED BOOM TO JIB ANGLE FOR THE LENGTHS ARE REACHED, REMOVE EXCESS JIB PENDANT SLACK.

NOTE: DO NOT UNDER ANY CONDITION ALLOW BOOM TO LUFFING JIB ANGLE TO BECOME LESS THAN 70°.

RAISE BOOM AND LUFFING JIB SIMULTANEOUSLY WITH ONLY BOOM HOIST UNTIL BOOM REACHES ANGLE LISTED IN THE LUFFING JIB RAISING PROCEDURE 9665-A.

**TO LOWER BOOM AND JIB**

POSITION BOOM AT 83° PRIOR TO LOWERING LUFFING JIB. LOWER LUFFING JIB UNTIL BOOM TO LUFFING JIB ANGLE REACHES VALUE SPECIFIED IN LUFFING JIB RAISING PROCEDURE 9665-A. LOWER BOOM UNTIL LUFFING JIB POINT ROLLERS CONTACT GROUND. CONTINUE TO LOWER BOOM WHILE LUFFING JIB ROLLERS ROLL ALONG GROUND.

NOTE: DO NOT UNDER ANY CONDITION ALLOW BOOM TO LUFFING JIB ANGLE TO BECOME LESS THAN 70°.

DURING BOOM AND JIB LOWERING, JIB STOPS MUST LOCK AND RIDE OVER TOP OF JIB STOP TUBES. (SEE DETAILS STEP 8A, 8B & 8C ON SHEET 12).

**DISASSEMBLY PROCEDURE 1**  
JIB STRUT TIE OFF

(REVERSE OF STEPS 9.1 AND 9.2 ON SHEET 13)  
LUFF DOWN TO DETACH STRAP/LINK CONNECTION PER PRE-ASSEMBLED JIB SECTIONS. (SEE SHEET 12).

DETACH BASIC STRAP (R27) FROM FRONTSTAY SPREADER (R25) (SEE DETAIL STEP 9A ON SHEET 13) AND SECURE IT TO JIB STRUT (R13). (SEE DETAIL BBB ON SHEET 13).

DETACH JIB INSERTS/TOP FROM PRE-ASSEMBLED JIB SECTIONS. (SEE SHEET 12). FOR LUFFING JIBS 36M THRU 84M RELOCATE FRONTSTAY SPREADER (R25) TO TOP OF TRANSITION INSERT (ITEM 1).

DETACH RAISING PENDANT (R37) FROM STOWAGE BRACKET (SEE DETAIL CCC ON SHEET 13) AND ATTACH THE FREE END OF THE PENDANT TO AN APPROPRIATE LOAD LINE.

**DISASSEMBLY PROCEDURE 2**  
PRE-ASSEMBLED JIB SECTION REMOVAL AND STRUT STOP DISCONNECT

(REVERSE OF STEP 8 ON SHEET 12)  
LUFF UP TO BRING THE JIB STRUT (R13) TOWARDS VERTICAL TO ALLOW CLEARANCE FOR REMOVAL OF PRE-ASSEMBLED JIB SECTION.

WITH JIB SECTION PROPERLY BLOCKED, DETACH JIB BUTT (ITEM 2) FROM JIB BUTT HINGE ON BOOM TOP. (SEE DETAIL YY AND SECTION AAA-AAA ON SHEET 12).

REMOVE JIB STOP STRUT HAIRPIN FROM WORKING POSITION TO ALLOW JIB STOP STRUT TO RETRACT. (SEE DETAIL YY ON SHEET 12).

USING AN ASSIST CRANE LIFT THE JIB BUTT (ITEM 2) AND PRE-ASSEMBLED JIB SECTIONS UP AND AWAY FROM THE JIB STOP LUGS ON BOTH SIDES OF THE BOOM. WITH THE JIB STOP STRUT NOW RETRACTED REINSTALL JIB STOP STRUT HAIRPIN IN SHIPPING POSITION. (SEE DETAIL YY ON SHEET 12).

PROVIDE BLOCKING AND (1) 10T CTWT BOX AS SHOWN IN STEP 1 (SHEET 8). LOWER JIB STRUT (R13) AND ATTACH TO CTWT BOX WITH SLINGS (R204) AND SHACKLES (R210). (SEE DETAIL KK ON SHEET 10).

**DISASSEMBLY PROCEDURE 3**  
STRUT STOP DISCONNECT

(REVERSE OF STEP 8 ON SHEET 12)  
PAY OUT LUFFING JIB HOIST LINE (DRUM 6) TO ALLOW LOCKING OF MAIN STRUT STOP TUBES (R14). (SEE DETAIL STEPS 8C AND 8B ON SHEET 12).

WITH MAIN STRUT STOP (R14) RETRACTED TEMPORARILY REMOVE THE MAIN PIN FROM THE END OF THE MAIN STRUT STOP AND STOW STRUT STOP TO MAIN STRUT (R12). RETURN MAIN PIN TO END OF MAIN STRUT STOP (R14). (SEE DETAIL STEP 8A ON SHEET 12).

**DISASSEMBLY PROCEDURE 4**  
BACKSTAY DISCONNECT, RAISING ARM HOOK-UP & LOWERING AND MAIN STRUT LOWERING

(REVERSE OF STEP 7 ON SHEET 11 AND STEP 6 ON SHEET 11)  
PAY IN LOAD HOIST TO POSITION SPREADER (R18) AND MAIN STRUT BACKSTAY STRAPS (R31) VERTICALLY. WITH LINKS (R32) HORIZONTALLY SUPPORTED ON BOOM TOP STRAP BRACKETS, DISCONNECT ADJUSTABLE BACKSTAY STRAPS (R31) FROM LINKS (R32). (SEE DETAIL VV ON SHEET 11).  
CAUTION: IF USING POSITIONS B,C, OR D DO NOT ALLOW ADJUSTABLE BACKSTAY STRAP (R31) TO EXTEND INTO BOOM TOP. STRAP CAN CATCH ON BOOM TOP AND DAMAGE LACINGS.

ATTACH RIGGING WINCH LINE (R202) TO THE MAIN STRUT RAISING ARM (R45).  
CAUTION: IF RIGGING WINCH IS NOT USED MAIN STRUT RAISING ARM (R45) MAY COLLAPSE SUDDENLY WHEN LOAD LINE IS PAYED OUT CAUSING LOAD LINE AND DEAD END TO DROP ONTO BOOM TOP.

PAY IN LUFFING HOIST TO BRING MAIN STRUT (R12) TOWARD VERTICAL. [CONTROL OF ITS ANGLE WILL TRANSITION FROM THE LUFFING HOIST LINE TO THE LOAD LINE ATTACHED TO THE RAISING PENDANT (R37)]. CONTINUE TO PAY OUT LOAD LINE WHILE PAYING IN LUFFING HOIST LINE (DRUM 6), ENSURING THAT THE LUFFING HOIST REEVING DOES NOT BECOME SLACK, LOWER THE MAIN STRUT (R12) SLIGHTLY ABOVE HORIZONTAL ALLOWING SHIPPING STRUT (R46) ON JIB STRUT (R13) TO BE EXTENDED AND ATTACHED TO MAIN STRUT (R12). (SEE DETAIL WW ON SHEET 11).

NOTE: DO NOT ALLOW THE JIB STRUT (R13) TO RAISE MORE THAN 300mm (12 INCHES) ABOVE BLOCKING.

WITH RIGGING WINCH LINE (R202) CONTROLLING MAIN STRUT RAISING ARM (R45), DETACH LOAD LINE FROM STRUT RAISING PENDANT (R37) AND STOW FREE END OF PENDANT (R37) ON RAISING ARM. (SEE DETAIL PP ON SHEET 10).

PAY OUT RIGGING WINCH LINE (R202) LOWERING THE MAIN STRUT RAISING ARM (R45) INTO STOWAGE POSITION. ENGAGE LOCKING PINS TO SECURE RAISING ARM (R45). (SEE DETAIL NN ON SHEET 10). DETACH RIGGING WINCH LINE (R202) FROM MAIN STRUT RAISING ARM (R45).

**DISASSEMBLY PROCEDURE 5**  
BACKSTAY STRAP STOWAGE ON MAIN STRUT

RELOCATE STRAPS/LINKS (R32)(R33)(R104) AND PINS/COLLARS (R100)(R103)(R110)(R111) FROM BOOM TOP (SEE DETAIL VV ON SHEET 11) TO STOWED POSITION ON MAIN STRUT (R12). (SEE DETAIL MM AND DETAIL PP ON SHEET 10).

ENGAGE LOCKING PINS TO SECURE BACKSTAY STRAPS (R31) AND SPREADER ASSY (R18) IN SHIPPING POSITION. (SEE DETAIL RR ON SHEET 10).

**DISASSEMBLY PROCEDURE 6**  
MAIN STRUT DISASSEMBLY

(REVERSE OF STEP 4 ON SHEET 10)  
USING AN ASSIST CRANE TO SUPPORT THE MAIN STRUT (R12), DETACH THE MAIN STRUT HINGE FROM THE BOOM TOP. HINGE PINS (R50) OR (R55) AND CORRESPONDING COLLAR PINS (R40) AND COLLARS (R39) ARE TO REMAIN WITH BOOM TOP. (SEE SECTION LL-LL ON SHEET 10).

LOWER MAIN STRUT ONTO JIB STRUT AND ATTACH SHIPPING LINKS LOCATED ON THE HINGE END. (SEE DETAIL HH ON SHEET 9).

**DISASSEMBLY PROCEDURE 7**  
STRUT SUCKER LINE REEVING

(REVERSE OF STEP 3 ON SHEET 9)  
DETACH LUFFING HOIST LINE (DRUM 6) FROM MAIN STRUT (R12) DEAD END (R38). (SEE DETAIL JJ2 ON SHEET 9).

ATTACH SUCKER LINE (R206) AND SHACKLE (R207) TO UNATTACHED END OF LUFFING HOIST LINE. (SEE DETAIL HH ON SHEET 9 FOR ROPE CONNECTION).

PAY IN HOIST LINE BRINGING SUCKER LINE INTO REEVING. DETACH HOIST LINE AND SECURE BOTH ENDS OF SUCKER LINE (R206) PER DETAIL HH AND JJ1 ON SHEET 9.

**DISASSEMBLY PROCEDURE 8**  
JIB STRUT DISASSEMBLY

DETACH SLING (R204) AND SHACKLE (R210) FROM 10T CTWT BOX AND JIB STRUT (R13).

USING AN ASSIST CRANE TO SUPPORT THE MAIN STRUT (R12) AND JIB STRUT (R13), DETACH JIB STRUT (R13) FROM JIB STRUT HINGE ON BOOM TOP. HINGE PINS (R47), COLLARS (R43) AND RETAINING HARDWARE TO BE REASSEMBLED INTO JIB STRUT HINGE FOR SHIPPING. (SEE DETAIL CC AND SECTION DD-DD ON SHEET 8).

TRAILER STRUT #502 SHIPPING ASSY (ITEM 6). SEE DETAILS EE AND FF ON SHEET 8 FOR POSITION OF SHIPPING STRUT (R46) WHEN TRANSPORTED ON A FLATBED OR A DROP-DECK TRAILER.

<small>THIS PRINT BECOMES THE PROPERTY OF METTRAC CRANES, INC. ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL. IT IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER WHATSOEVER DETRIMENTAL TO OUR INTERESTS.</small>	TOLERANCE UNLESS OTHERWISE SPECIFIED		SCALE	<b>Manitowoc Cranes, Inc.</b> MODEL MLC300 LUFFING JIB RIGGING LJ ON B65
	DECIMAL PLACES	FRACTIONS	1:100	
	(1) PLACE 0.5	1/16	1/16	
(2) PLACE 0.00	1/32	1/32		
(3) PLACE 0.000	1/64	1/64		

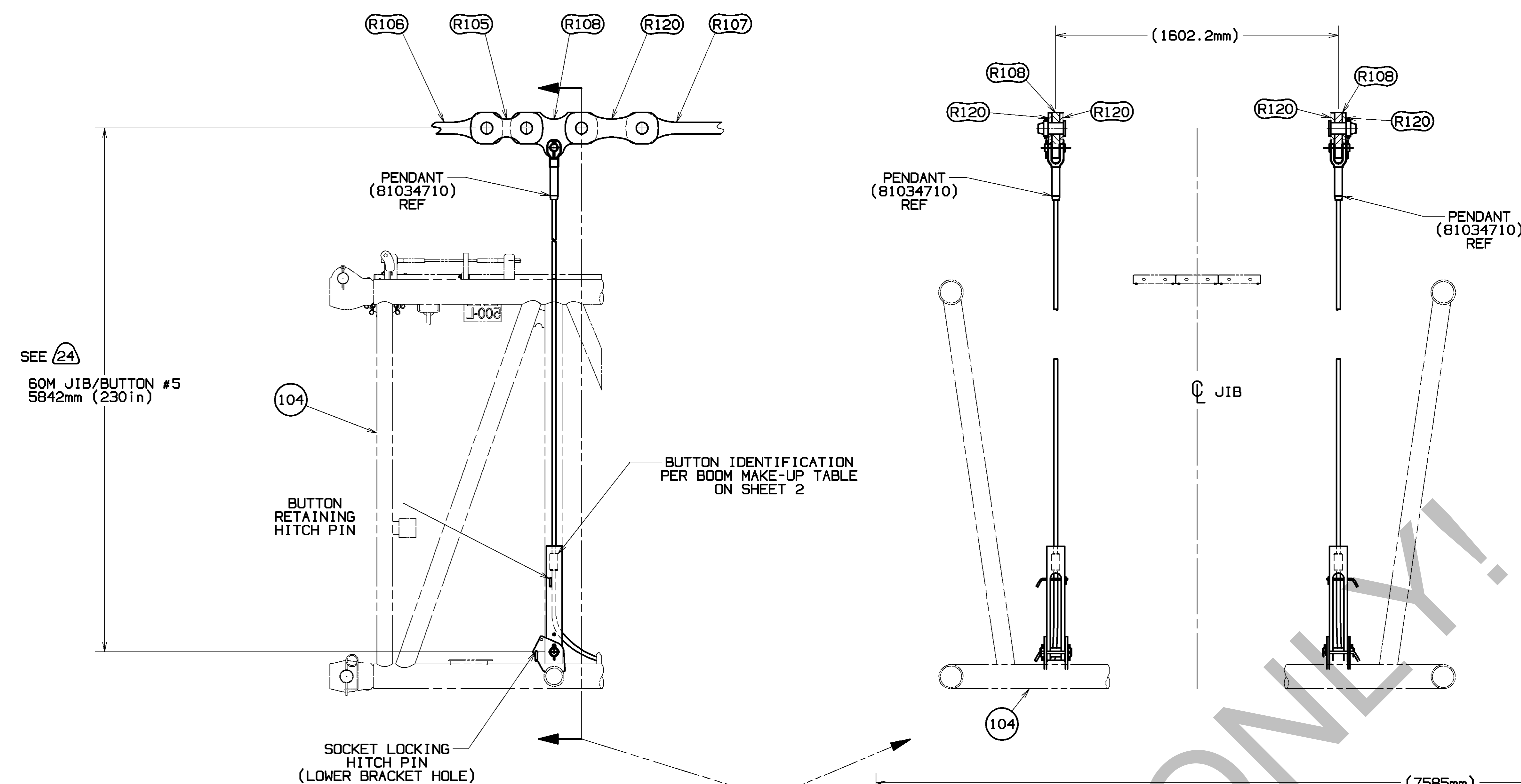
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 6829103794 FOR COMPONENTS LISTED IN 682900-08-026

DATE: 03-27-19

REV. LNK: A

NO. 84050217

SHT 14 OF 16



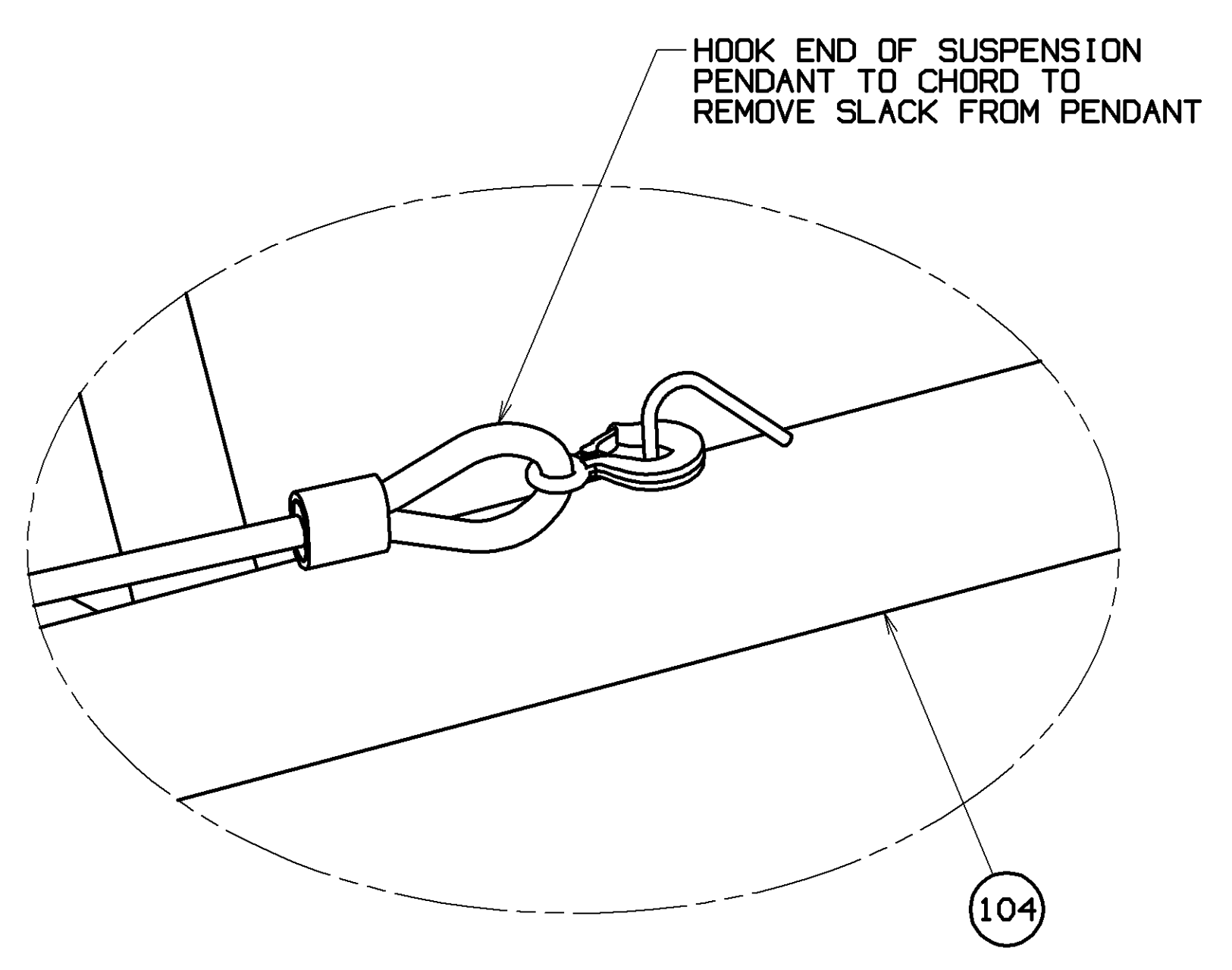
INTERMEDIATE SUSPENSION OPERATIONAL INSTRUCTIONS

SEE JIB MAKEUP VIEWS ON SHEETS 5 & 6 AND JIB LENGTH TABLE ON SHEET 2 FOR REQUIRED SUSPENSION AND WIRE ROPE BUTTON IDENTIFICATION LOCATION.

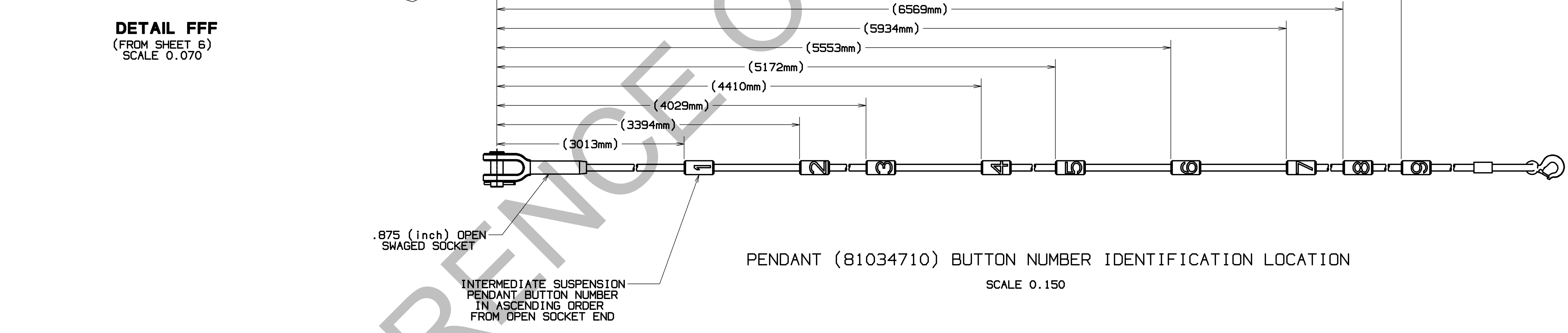
1. FROM STOWED POSITION REMOVE SOCKET LOCKING HITCH PIN FROM SOCKET AND LOWER BRACKET HOLE. (SEE DETAIL HHH - STOWED) PIVOT SOCKET INTO ASSEMBLY PREP POSITION AND REINSTALL SOCKET LOCKING HITCH PIN INTO SOCKET AND UPPER BRACKET HOLE. (SEE DETAIL HHH - ASSEMBLY PREP)
2. VERIFY THAT CORRECT PENDANT BUTTON IS INSTALLED IN SOCKET. IF NEEDED REMOVE BUTTON RETAINING HITCH PIN FROM SOCKET AND POSITION THE IDENTIFIED PENDANT BUTTON INTO SOCKET. REINSTALL BUTTON RETAINING HITCH PIN INTO SOCKET, LOCKING PENDANT IN POSITION. (SEE DETAIL HHH - ASSEMBLY PREP)
3. RELOCATE SOCKET LOCKING HITCH PIN FROM SOCKET AND UPPER BRACKET HOLE TO LOWER BRACKET HOLE. (SEE DETAIL HHH - WORKING)
4. BOOM UP SLOWLY AS PENDANT BECOMES TIGHT AND SOCKET PIVOTS INTO WORKING POSITION. (SEE DETAIL HHH - WORKING)

FOR STOWAGE OF INTERMEDIATE SUSPENSION REVERSE SETUP INSTRUCTION STEPS 1 THRU 4, ASSURING SOCKET PIVOTS TOWARD STOWAGE POSITION.

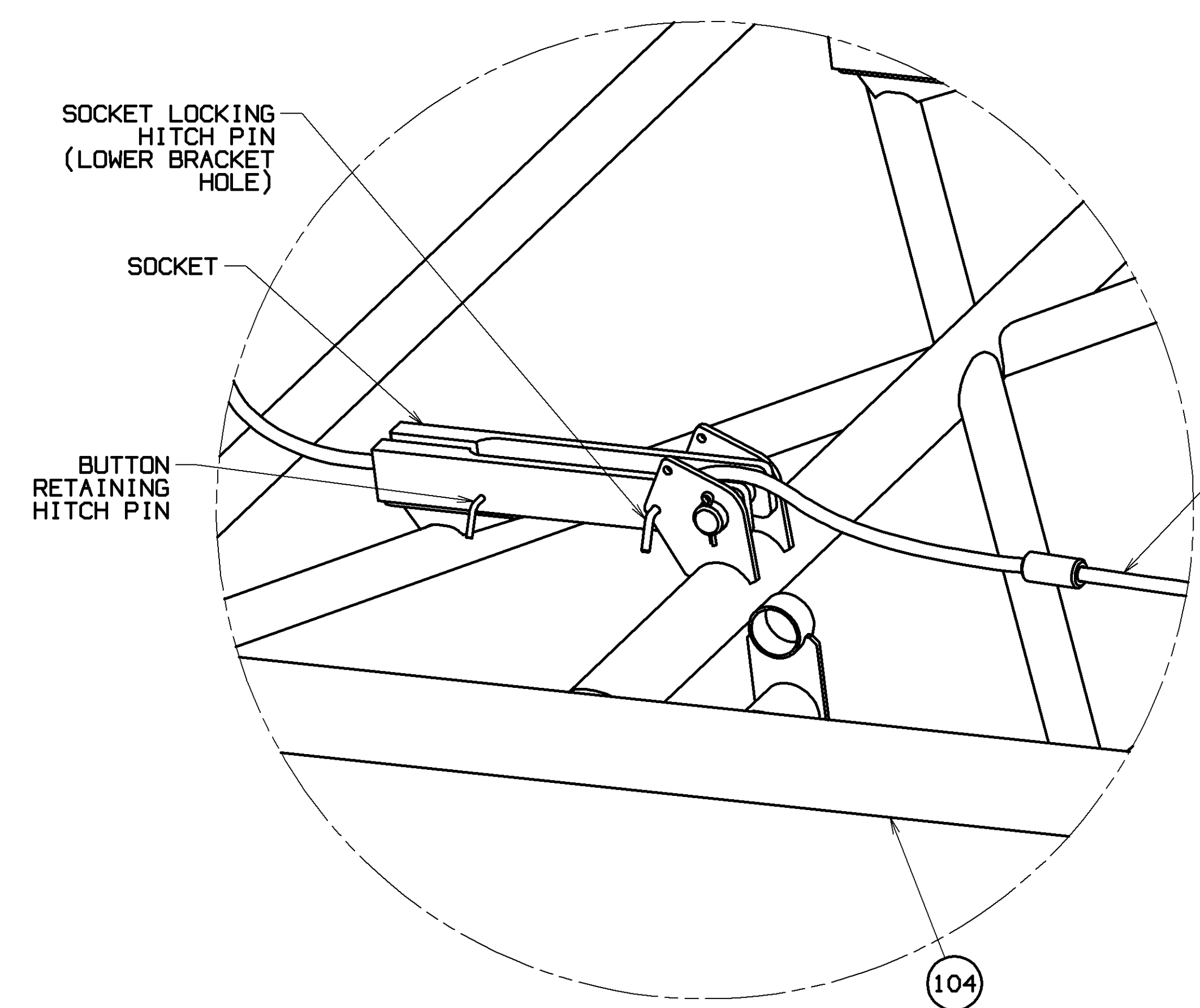
VERIFY THAT SLACK IN PENDANT ALLOWS FOR SOCKET TO PIVOT INTO STOWED POSITION. (SEE DETAIL GGG).



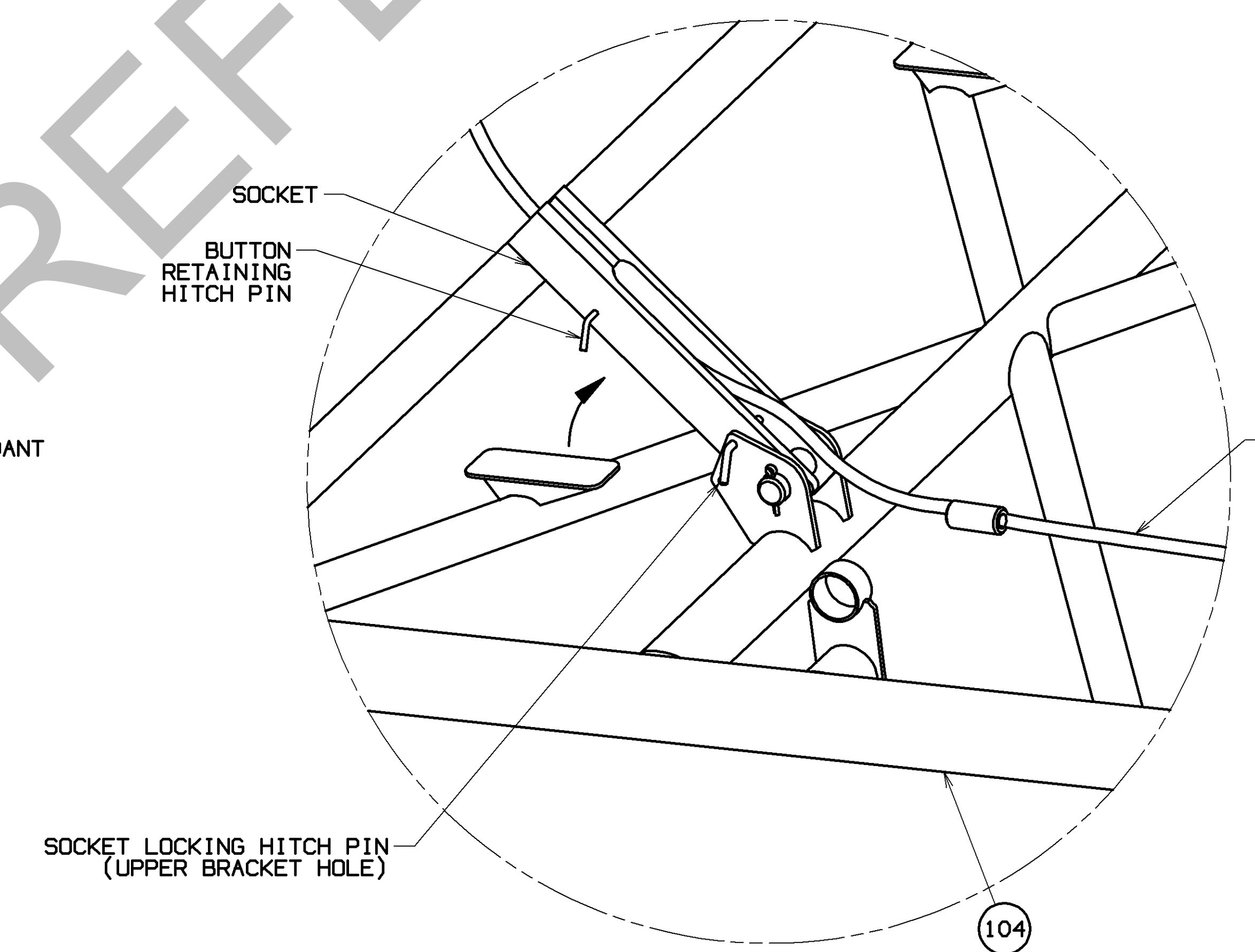
**DETAIL GGG**  
 (FROM SHEET 6)  
 SCALE 0.250



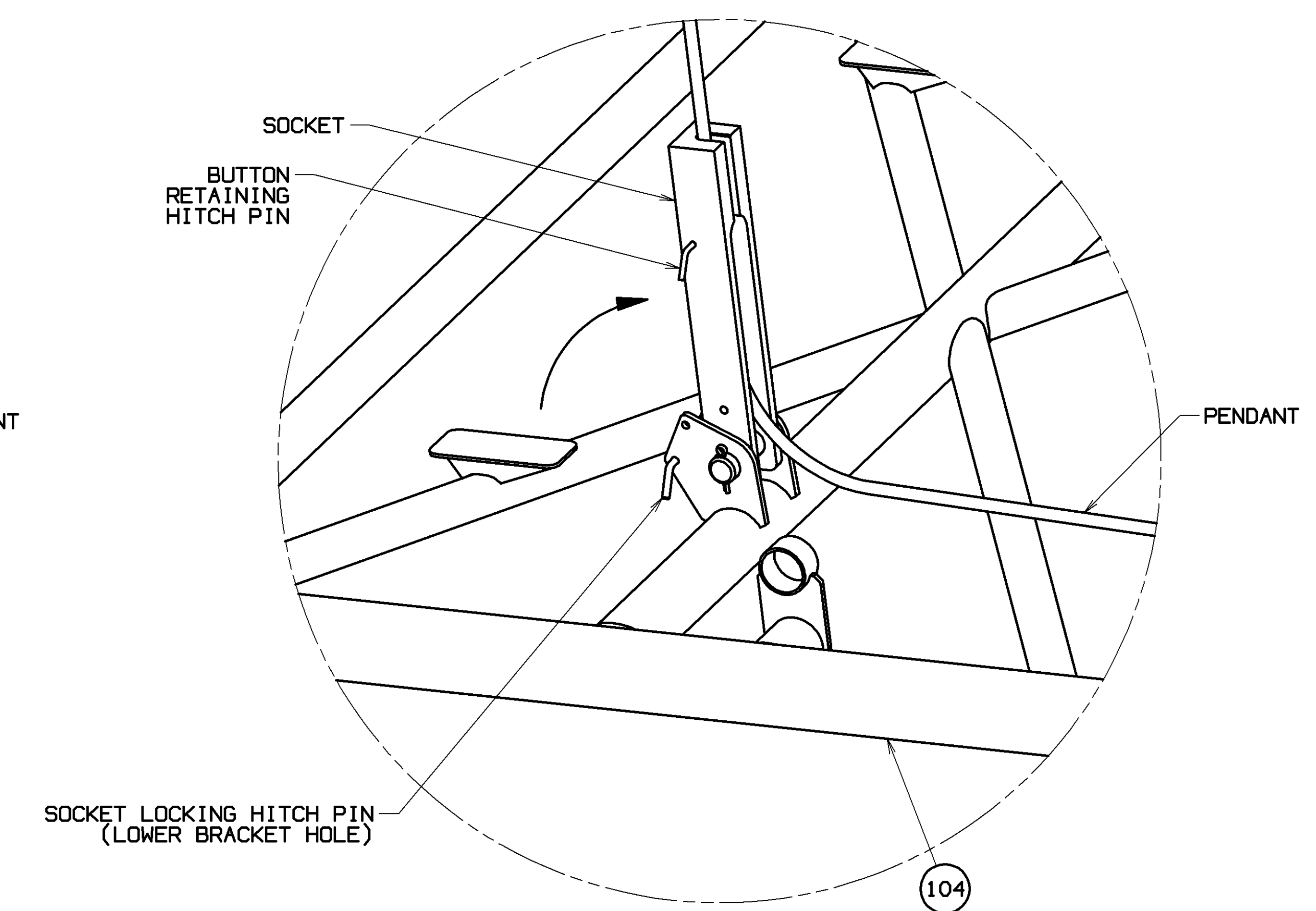
**PENDANT (81034710) BUTTON NUMBER IDENTIFICATION LOCATION**  
 SCALE 0.150



**DETAIL HHH - STOWED**  
 (FROM SHEET 6)  
 SCALE 0.200



**DETAIL HHH - ASSEMBLY PREP**  
 (FROM SHEET 6)  
 SCALE 0.200

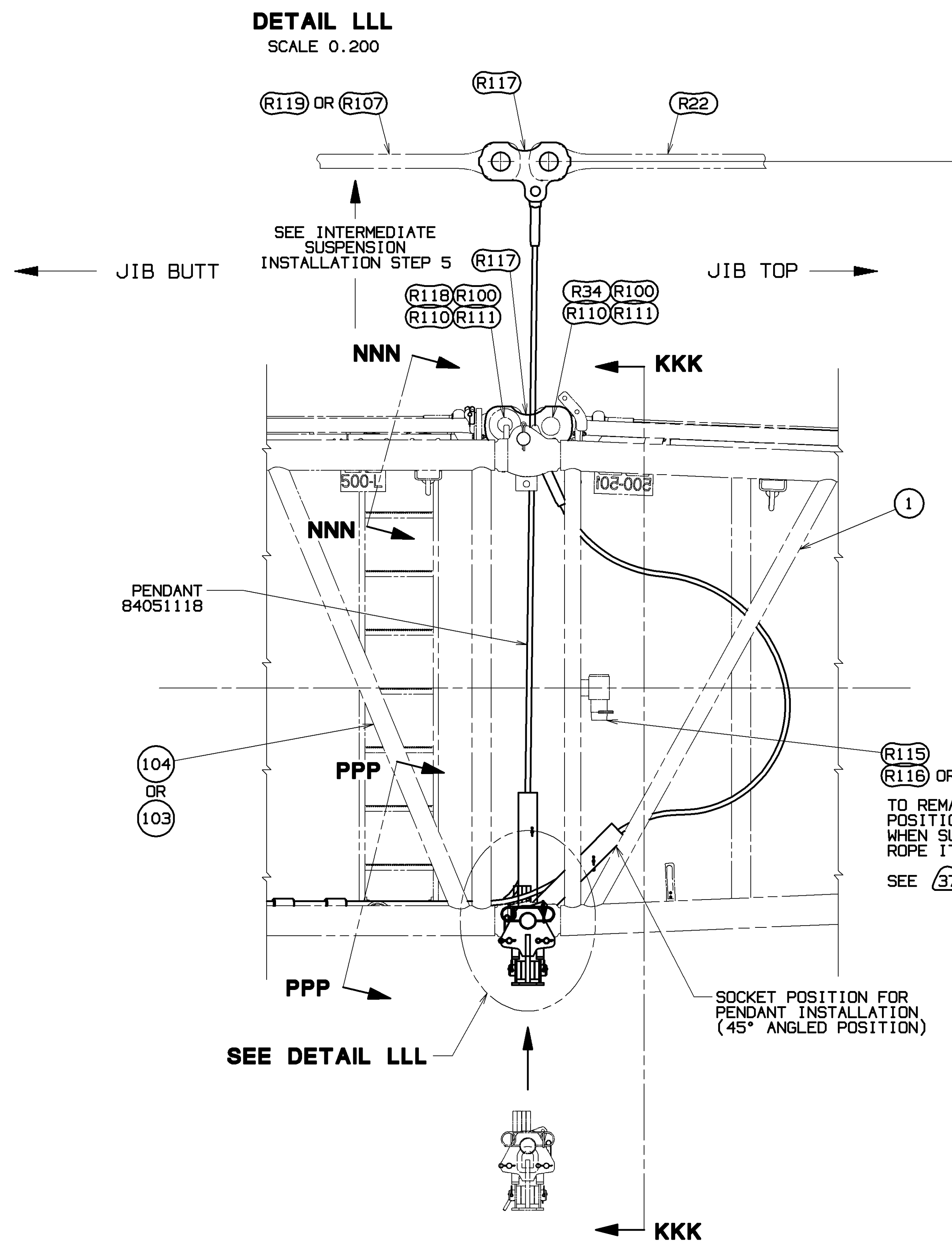
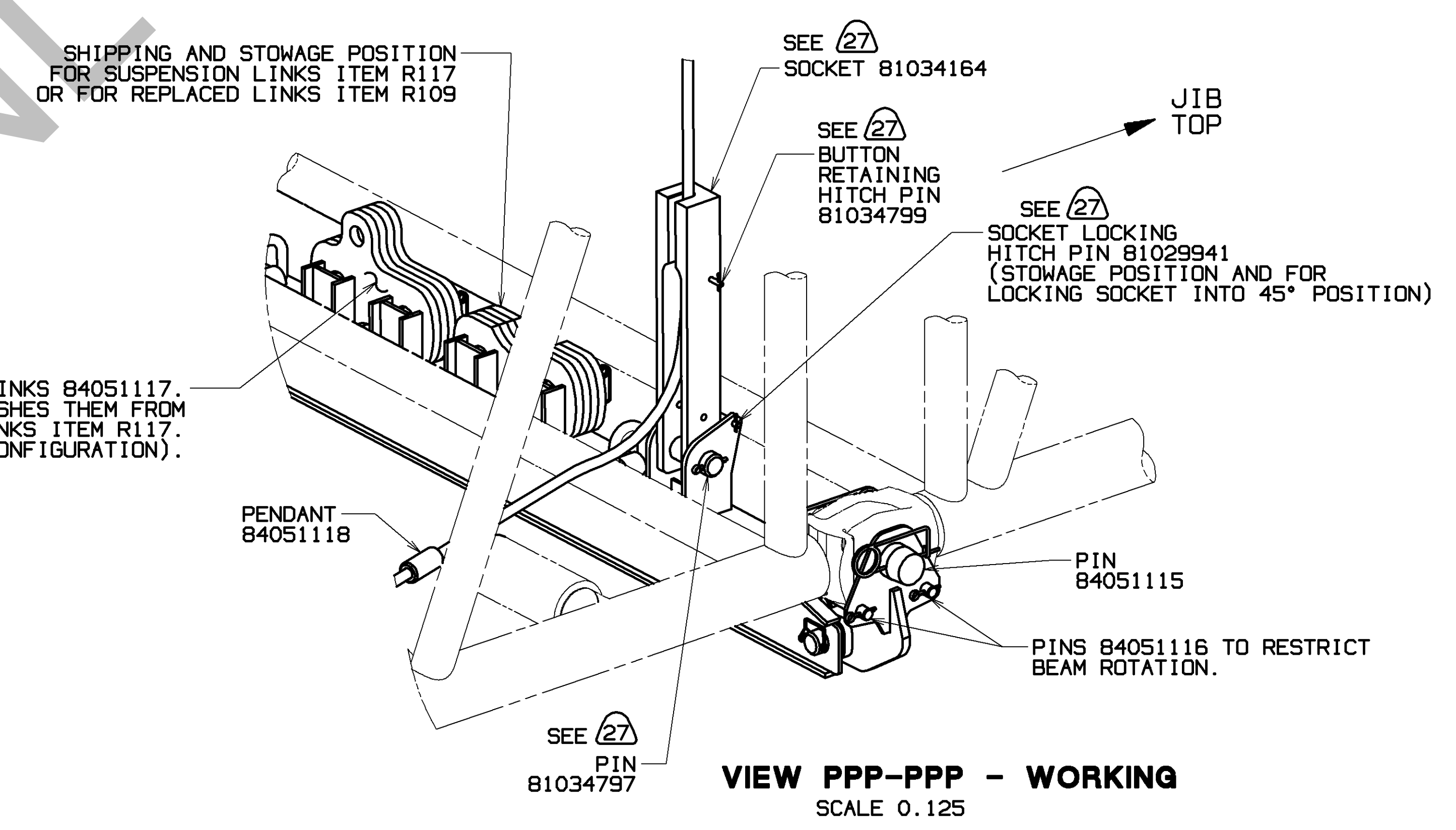
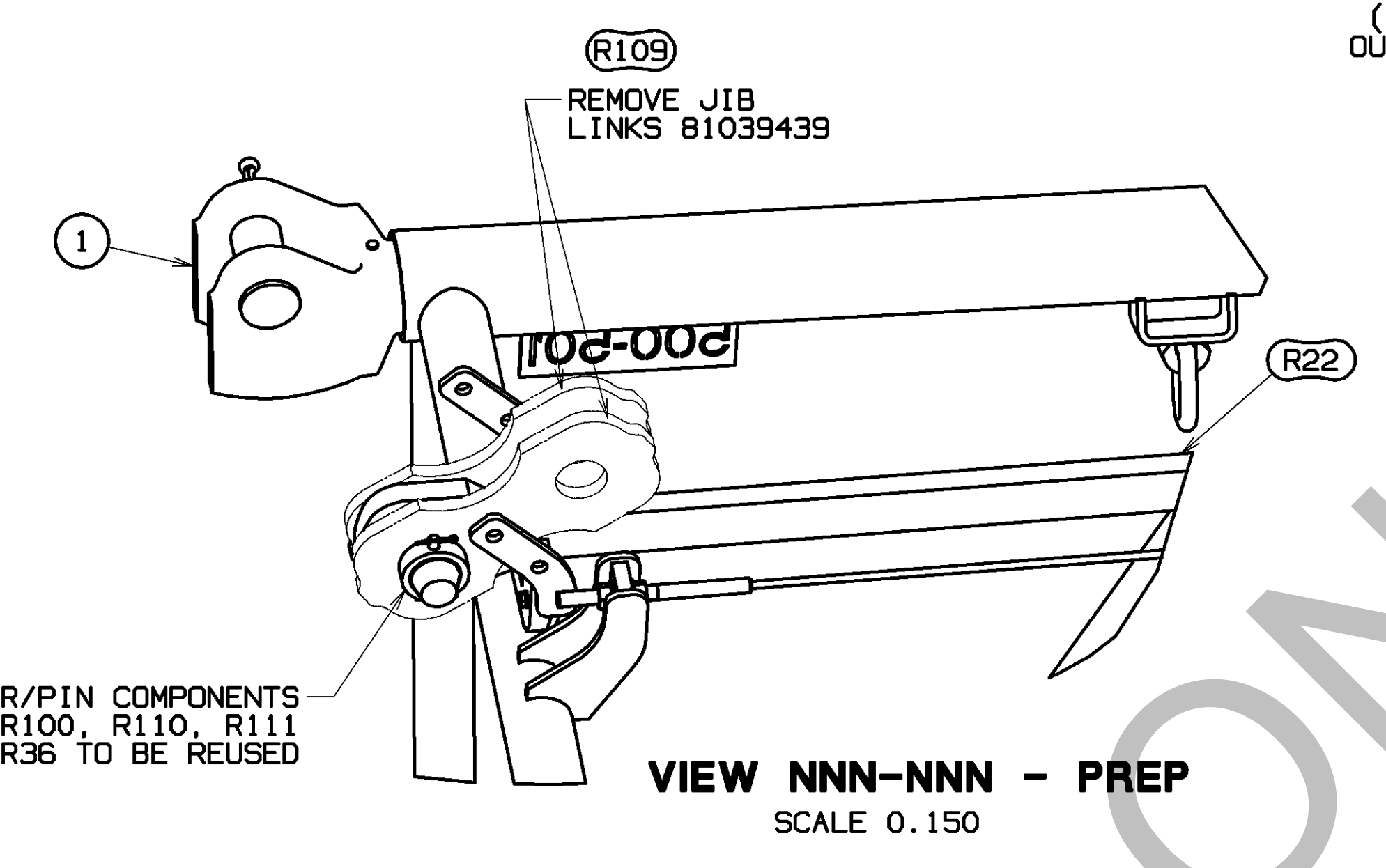
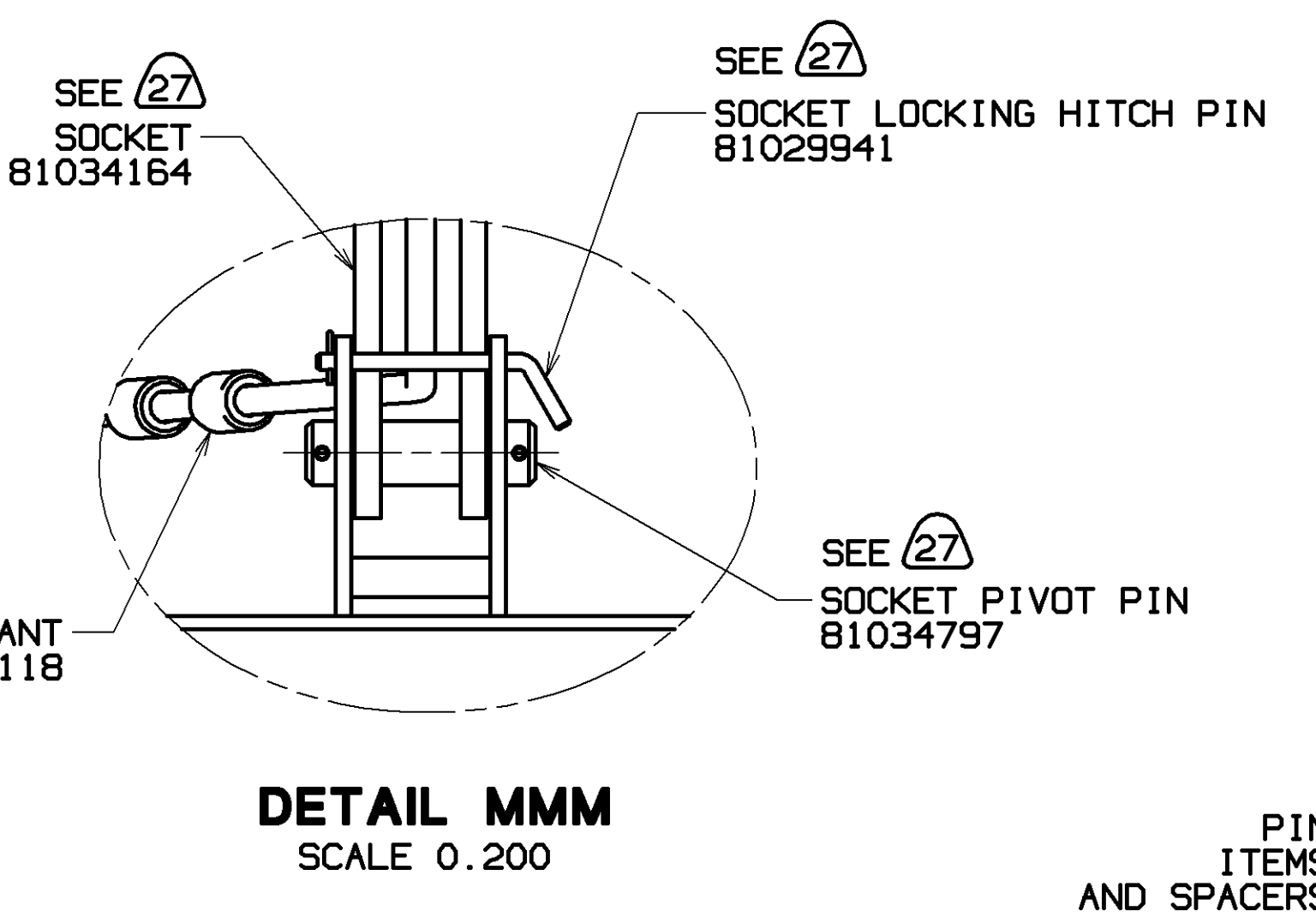
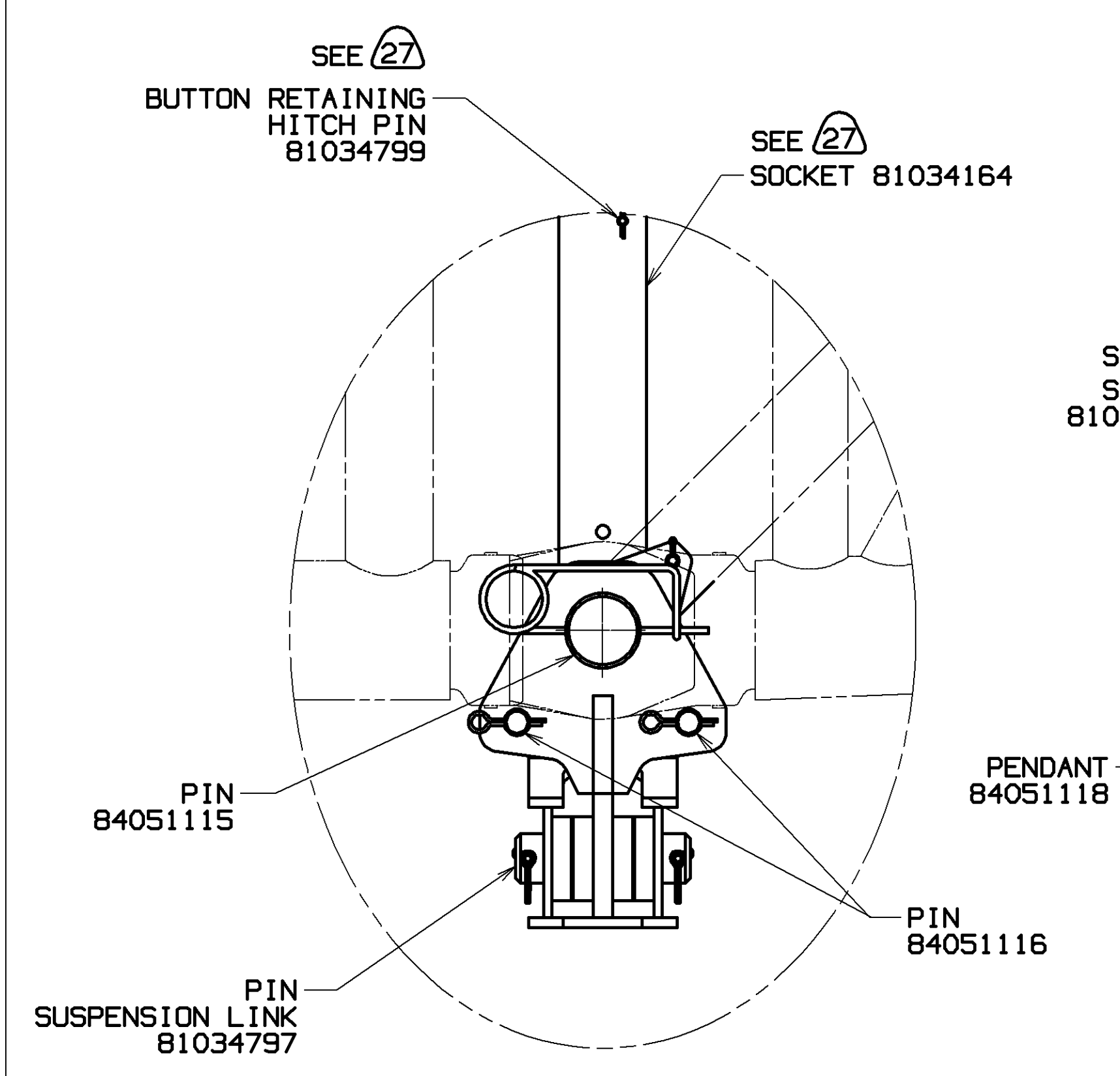
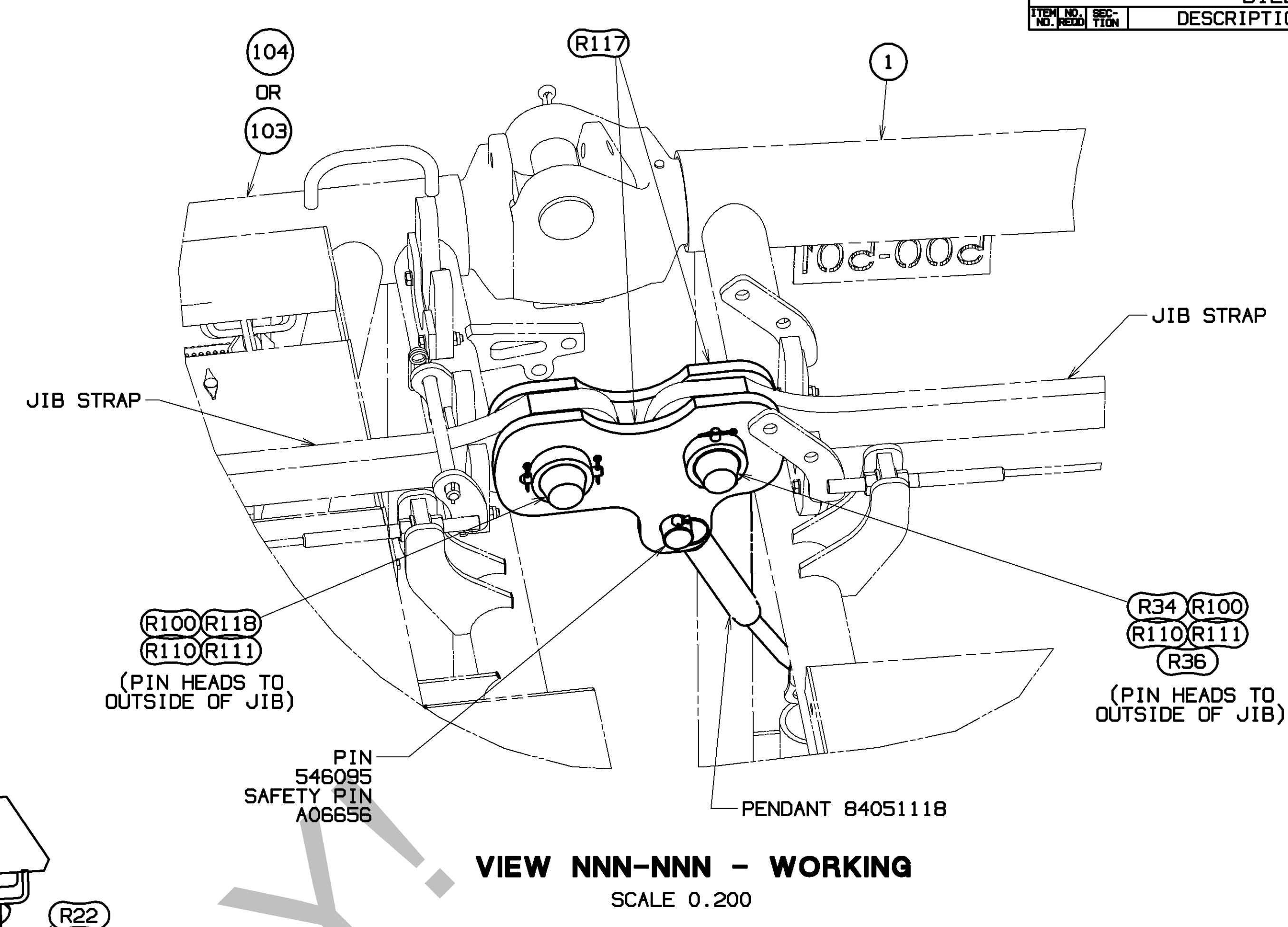
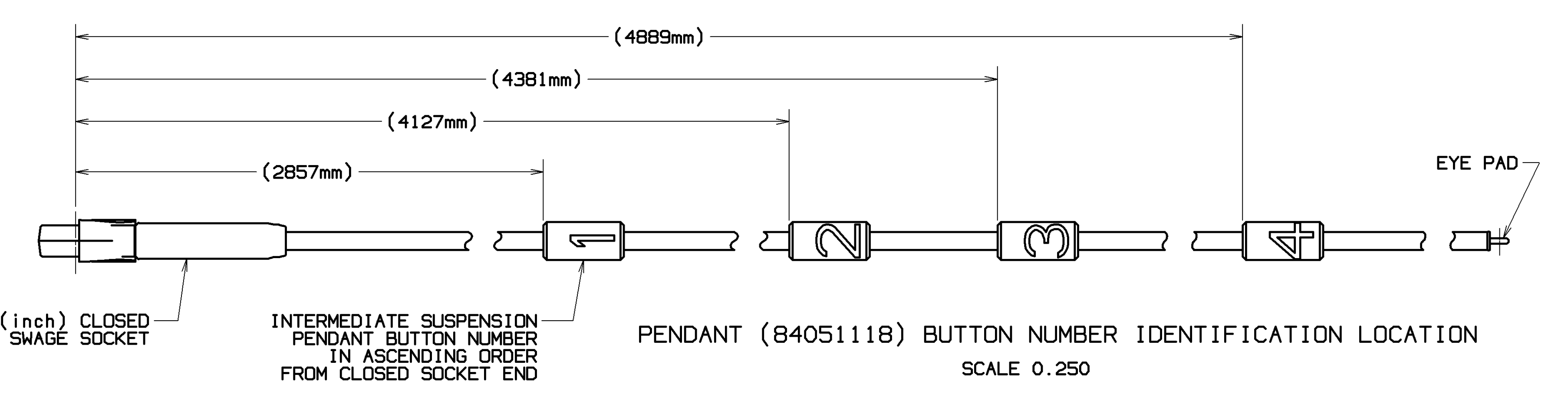


**DETAIL HHH - WORKING**  
 (FROM SHEET 6)  
 SCALE 0.200

84050217  
 SHT 15 OF 16

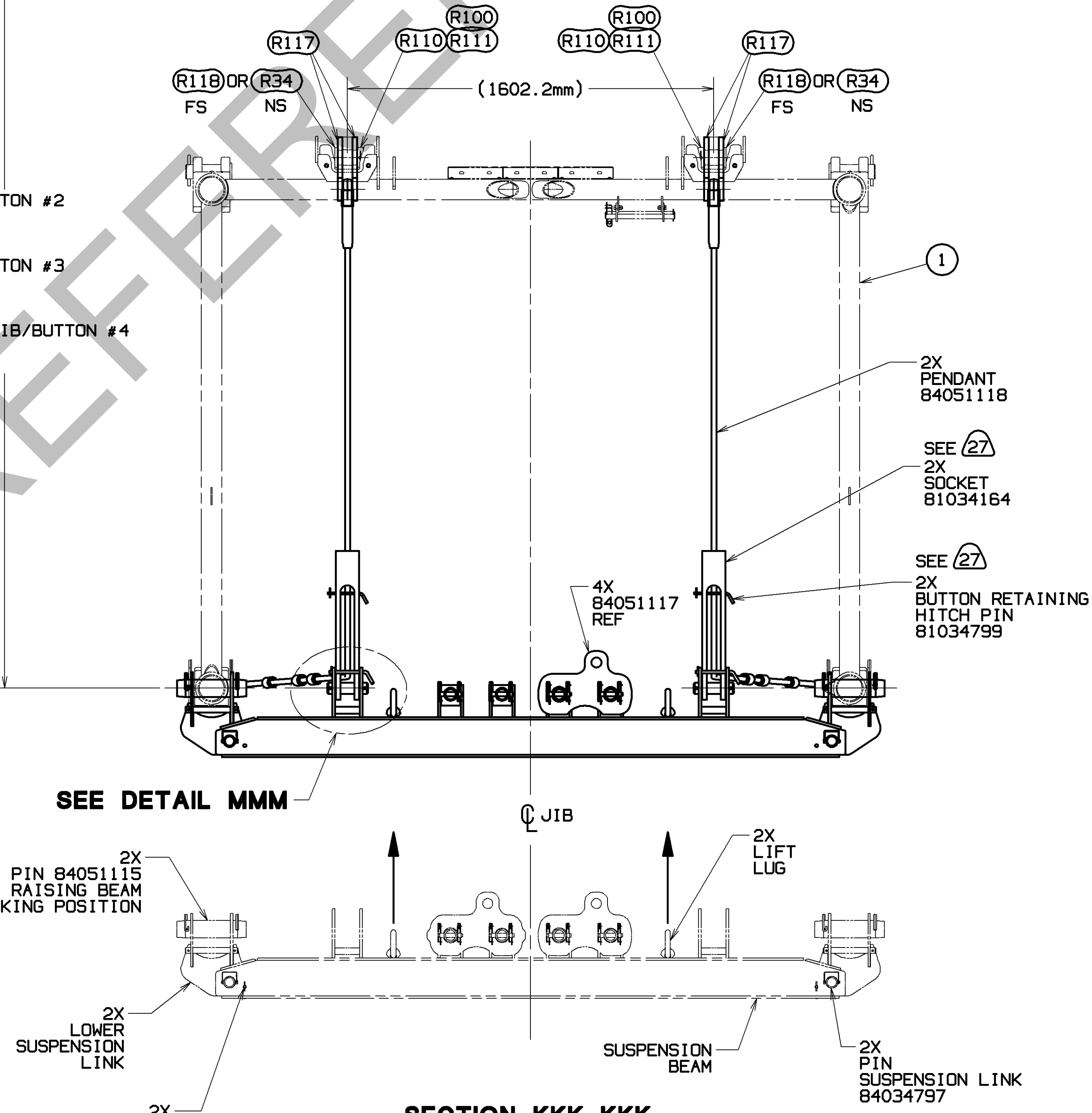
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN SECTION 03-036  
 DATE 03-27-19  
 REF. LIT. A

THIS DRAWING IS THE PROPERTY OF MANITOWOC CRANES, INC. ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL. IT IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF MANITOWOC CRANES, INC.	TOLERANCE UNLESS OTHERWISE SPECIFIED:		MANITOWOC CRANES, INC. Manitowoc, Wisconsin MODEL MLC300 LUFFING JIB RIGGING LJ ON B65	
	DECIMAL PLACES	FABRICATION		FINISHING
	(1) PLACE 0.5	±.12 ±.18 ±.05		TO THE NEAREST 0.015
(2) PLACE 0.00	±.08 ±.12 ±.015	TO THE NEAREST 0.005	DATE 03-27-19 DR. RHV CK. KJV APP. JRR	
(3) PLACE 0.000	±.008 ±.012 ±.005	TO THE NEAREST 0.001	84050217 SHT 15 OF 16	



STOWAGE POSITION OF SUSPENSION LINKS 84051117. THE SMOOTH END PROFILE DISTINGUISHES THEM FROM THE IRREGULAR END PROFILE ON LINKS ITEM R117. (84051117 WILL BE USED IN BOOM CONFIGURATION).

- SEE 24
- 66M JIB/BUTTON #2  
4826.0mm  
(190.01in)
- 72M JIB/BUTTON #3  
5080.0mm  
(200.01in)
- 78M & 84M JIB/BUTTON #4  
5568.0mm  
(220.01in)



INTERMEDIATE SUSPENSION (ITEM 105) INSTALLATION

- SEE JIB MAKEUP VIEWS ON SHEET 6 AND JIB LENGTH TABLE ON SHEET 2 FOR REQUIRED SUSPENSION & WIRE ROPE BUTTON IDENTIFICATION LOCATION. REFERENCE SUSPENSION WIRE ROPE ASSY 84051095 FOR ADDITIONAL INFORMATION. (REFER TO VIEW OF PENDANT 84051118 ON THIS SHEET FOR BUTTON NUMBER I.D. LOCATION).
- FROM TRANSITION INSERT (ITEM 1), REMOVE (4) BOOM LINKS (R109) AND STORE IN PARTS BOX 81028769 OR ON SUSPENSION BEAM AFTER LINKS ITEMS R117 HAVE BEEN REMOVED. (SEE PPP-PPP - WORKING). PIN/COLLAR/PIN COMPONENTS (ITEMS R34, R100, R110 & R111) AND SPACERS (R36) WILL BE REUSED WITH SUSPENSION LINKS (ITEM R117) PER STEP 4 BELOW. (SEE VIEW NNN-NNN - PREP).
  - POSITION SUSPENSION BEAM AND LOWER SUSPENSION LINK UNDER APPROPRIATE INSERT AT MALE CONNECTOR END. ASSEMBLE UPPER CONNECTOR OF MATING INSERT AND PIVOT INSERT TO ALIGN LOWER CONNECTOR HOLES. WITH SOCKETS 81034164 AND LOWER CONNECTOR PINS 84051115 REMOVED FROM SUSPENSION BEAM, USE AN ASSIST TO RAISE SUSPENSION BEAM ASSY TO ALIGN LOWER CONNECTOR AND LOWER SUSPENSION LINK HOLES. REINSTALL PIN 84051115. (SEE DETAIL JJJ AND SECTION KKK-KKK).
  - REINSTALL SOCKET INTO SUSPENSION BEAM AND PIVOT SOCKET INTO 45° POSITION. REINSTALL SOCKET LOCKING PIN THRU BRACKET AND SOCKET (ANGLED POSITION). (SEE DETAIL JJJ).
  - ATTACH INSERT JIB STRAPS WITH DOUBLE LINKS (R117) USING EXISTING PIN/COLLAR/PIN COMPONENTS (ITEMS R34, R100, R110 & R111) AND SPACERS (R36) REMOVED IN VIEW NNN-NNN - PREP. ATTACH CLOSED SOCKET END OF PENDANT 84051118 TO LINKS R117. (SEE VIEW NNN-NNN - WORKING).
  - WITH SOCKET LOCKED IN 45° POSITION, SLOWLY RAISE JIB. AS THE STRAPS RISE, GUIDE THE INTERMEDIATE SUSPENSION PENDANTS THROUGH THE OPENING BETWEEN THE JIB INSERTS. STOP THE JIB RAISING PROCEDURE WHEN THE REQUIRED PENDANT BUTTON NEARS THE SOCKET. REMOVE BUTTON RETAINING HITCH PIN FROM SOCKET. POSITION THE IDENTIFIED PENDANT BUTTON OF THE MULTI-BUTTON PENDANT 84051118 INTO SOCKET AND REINSTALL BUTTON RETAINING HITCH PIN INTO SOCKET, LOCKING PENDANT IN POSITION. (SEE DETAIL JJJ).
  - PRIOR TO CONTINUATION OF JIB RAISING, REMOVE SOCKET LOCKING HITCH PIN FROM 45° POSITIONED SOCKET AND BRACKET. STOW IN BRACKET HOLE (STOWAGE POSITION) ALLOWING SOCKET TO PIVOT AS JIB STRAPS RAISE. (SEE VIEW PPP-PPP - WORKING).
  - BOOM UP SLOWLY AS PENDANT BECOMES TIGHT AND SOCKET PIVOTS INTO WORKING POSITION.

DETAIL JJJ  
 SUSPENSION WIRE ROPE  
 ITEM 105, 84051095  
 (FROM SHEET 6)  
 SCALE 0.075

LOCATION OF SOCKET LOCKING HITCH PIN (81029941) IN SUSPENSION BEAM DURING SETUP TO ALIGN THE LOWER SUSPENSION LINK

TOLERANCE UNLESS OTHERWISE SPECIFIED		MATERIAL		FINISHING		MATERIAL		QTY		UNIT		NO.	
DECIMAL PLACES	FRACTIONS	10 FEET	10 FEET	10 FEET	10 FEET	10 FEET	10 FEET	10 FEET	10 FEET	10 FEET	10 FEET	10 FEET	10 FEET
(1) PLACE 0.05	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16	1/16
(2) PLACE 0.00	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32	1/32
(3) PLACE 0.000	1/64	1/64	1/64	1/64	1/64	1/64	1/64	1/64	1/64	1/64	1/64	1/64	1/64
ANGLES	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°	11.25°

PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 862900-05-026  
 DATE 03-27-19  
 REF. LIT. A  
 84050217  
 SHT 16 OF 16