

1 WIRE ROPE GUIDE PARTS IN THIS INSERT ARE
REQUIRED FOR USE OF AUXILIARY DRUMS #2, #3
AND #6. WHEN DRUMS #2, #3 AND #6 ARE NOT USED
OR ARE NOT PRESENT, ROPE GUIDE MAY REMAIN IN
SHIPPING POSITION DURING OPERATION.

2 TOP 10.0M I.D. TAG #81027720

3 INSERT 12.00M HEAVY W/SHEAVES I.D. TAG #81027804.
SEE OPTIONAL I.D. TAG TABLE.

4 BUTT 8.0M I.D. TAG #81028037

5 INSERT 12.00M MEDIUM I.D TAG #81027809.
SEE OPTIONAL I.D. TAG TABLE.

6 INSERT 12.00M MEDIUM W/ EQUALIZER I.D. TAG #81027812.
SEE OPTIONAL I.D. TAG TABLE.

7 INSERT 12.00M LIGHT I.D. TAG #81027815.
SEE OPTIONAL I.D. TAG TABLE.

8 INSERT 12.00M LIGHT W/SUSPENSION I.D. TAG #81027818.
SEE OPTIONAL I.D. TAG TABLE.

9 INSERT 6.00M MEDIUM I.D. TAG #81027821.
SEE OPTIONAL I.D. TAG TABLE.

10 REFER TO CAPACITY CHART IF JIB BACKSTAY STRAPS,
LINKS AND RETAINING HARDWARE REMAIN ON BOOM
ASSY. (SEE VIEW C-C)

11 REFER TO BOOM LENGTH TABLE (SHEET 2)
FOR SUSPENSION PENDANT BUTTON NUMBER.
SEE SHEET 8 FOR OPERATIONAL INSTRUCTIONS.

C2 12 UPPER POINT ASSY I.D. TAG #81029770.
MAY BE EQUIPPED WITH ROLL ASSY 81036285
(CALLED FOR ON UPPER POINT ASSY FRAME
ITEM 300 AS OPTION 7).

13 BOOM STRAPS & LINKS ON 12M HEAVY INSERT (ITEM 2)
AND 12M EQUALIZER INSERT (ITEM 4) UP TO
EQUALIZER (R9) MAY REMAIN ON INSERTS DURING
WORKING CONDITIONS. (SEE DETAIL E ON SHEET 4).

14 EQUALIZER SPACER LINKS TO BE LOCATED IN
STOWAGE POSITION DURING WORKING CONDITIONS.
(SEE DETAIL E ON SHEET 4).

15 STOWED NOT USED BOOM STRAPS, LINKS & HARDWARE
PER DELTA NOTES 13 & 14 ARE NOT ACCOUNTED FOR
IN BOOM LENGTH TABLE ON SHEET 2.

16 STOWS IN PARTS BOX 81028769 AS OPTION EQUIPPED.

C3 17 SEE BLOCK REEVING DRAWING 81038141 FOR 1 DRUM
RIGGING CONFIGURATION OPTIONS AND INSTRUCTIONS.
SEE RIGGING WINCH ASSY 81024072 FOR BLOCK AND
WIRE ROPE ASSEMBLY.

C4 18 SEE BLOCK REEVING DRAWING 81038142 FOR 2 DRUM
RIGGING CONFIGURATION OPTIONS AND INSTRUCTIONS.
SEE RIGGING WINCH ASSY 81024072 FOR BLOCK AND
WIRE ROPE ASSEMBLY.

19 CALLED FOR ON TOP ASSY ITEM 1 AS OPTION 1 EQUIPPED.

20 CALLED FOR ON TOP ASSY ITEM 1 AS OPTION 2 EQUIPPED.
FOR SHEAVE CONFIGURATION REFER TO VIEW Q-Q
ON SHEET 2.

21 CALLED FOR ON TOP ASSY ITEM 1 AS OPTION 3 EQUIPPED.
FOR SHEAVE CONFIGURATION REFER TO VIEW Q-Q
ON SHEET 2.

22 ITEM R401 (84028327) CONSISTS OF LINK 84028318 AND
PENDANT 277435 UTILIZED FOR TANDEM DRUM REEVING.
SEE REVISED DRAWING 81038142. LINK 84028318 STOWS
IN PARTS BOX 81028769 AS OPTION 7. PENDANT 277435
STOWS ON #500 BOOM BUTT ASSY ITEM 3 (81028036).

23 FOR ASSEMBLY AND RIGGING PURPOSE ONLY.
STOWS IN PARTS BOX 81028769 AS SELF
RIGGING KIT 81038439.

C5 24 MAST RIGGING M10:503 (R1) CONTAINS MAST BUTT
ASSY 81025137 WITH "PASSIVE" FIXED MAST STOP.

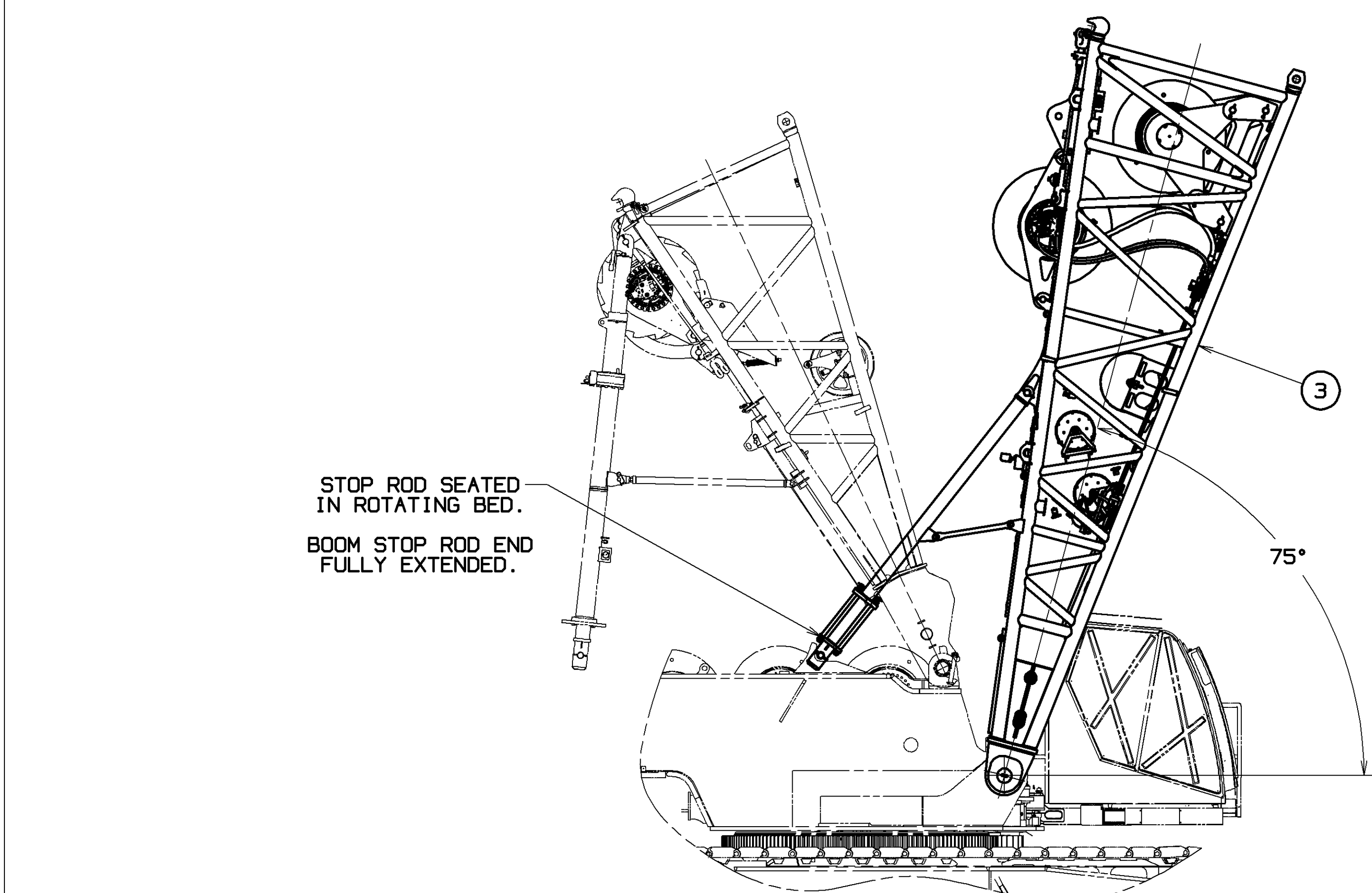
MAST RIGGING M11:503 (R3) CONTAINS MAST BUTT
ASSY 84041201 WITH "ACTIVE" FIXED MAST STOP.

C11 25 SUSPENSION PENDANT MAY APPEAR SLACK DURING RAISING
AND OPERATION. CHECK SUSPENSION LOCATION AND
PENDANT BUTTON NUMBER AND CONTINUE OPERATION.

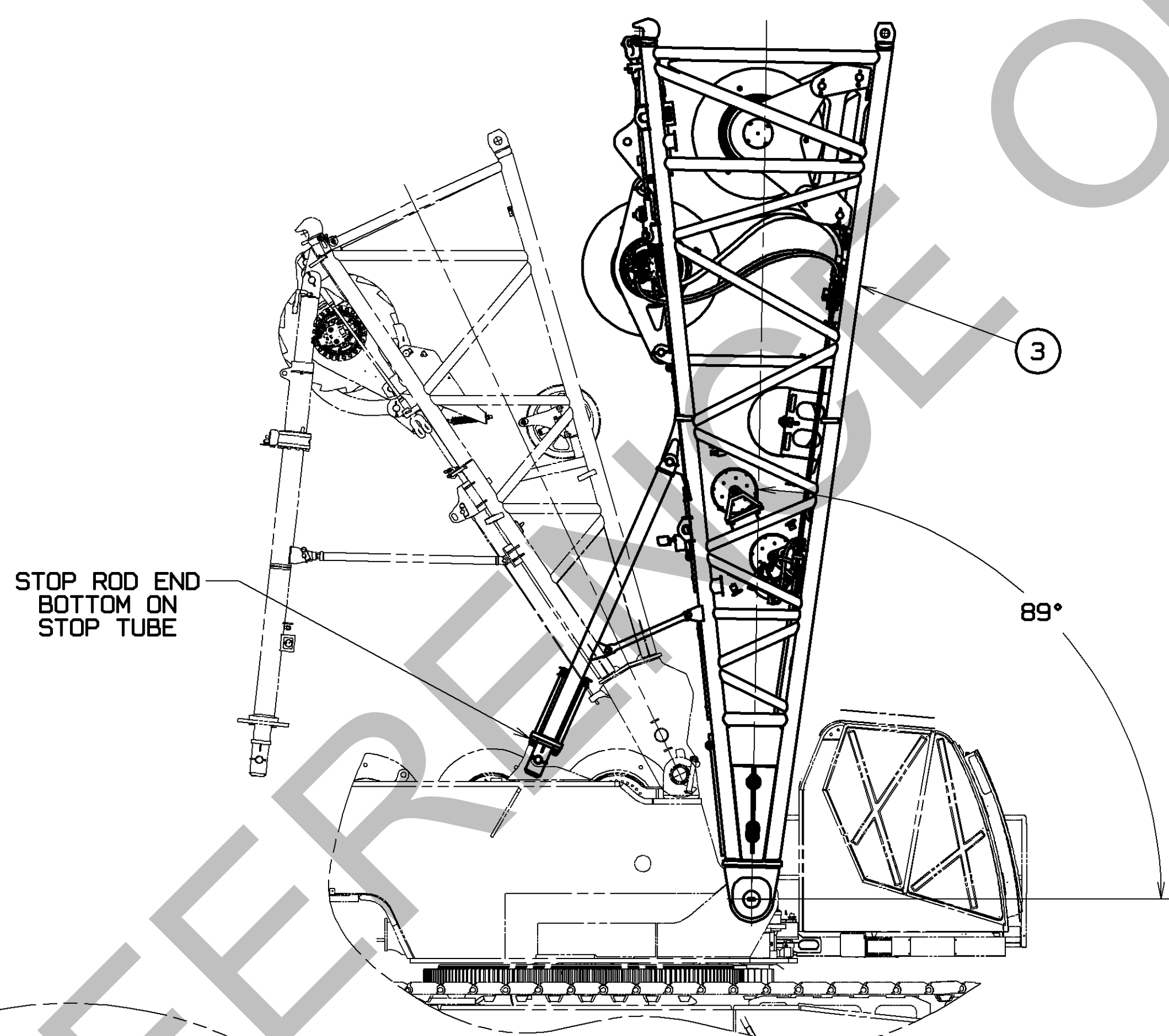
D3 26 P/N 81029670 ITEMS R10 & R25 ARE IDENTICAL.
ITEM R10 IS ALWAYS REQUIRED.
ITEM R25 REPLACES ITEM R11 ON LATER TOP
ASSY'S ITEM 1.

BILL OF MATERIAL							ASSEMBLY ON
REV.	QTY	ITEM	DESCRIPTION	UOM	MATERIAL	REV. OF	NO.
BOOM RIGGING B60:500							81023943
1	1		TOP ASSY #500, 10.0 M			81027719	2
2	1		INSERT ASSY 12M H #500			81027803	13
3	1		BUTT ASSY #500 8.00 M			81028036	4
4	1		INSERT ASSY #500, 12.0M EQ			81027811	6
5							
6							
NO. REQ'D FOR THE FOLLOWING ITEMS ARE IN THE BOOM LENGTH TABLE							REVISIONS 03-07-16 AUB ADDED "OR R204" TO ALL R207 CALLOUTS (SHEETS 6 & 7) 10-18-16 RWJ C11 ITEM R3 ADDED (B/H) C26/C34 DELTA NOTE 12,17&18 REVISED (SHT 1) C51/DELTA NOTE 24 ADDED (SHT 1) C8/ADDED "OR R3" TO ALL R1 CALLOUTS C7/05C8 ADDED 84045340 TO 81025930 CALLOUTS 1N STEP 5A & 6 & "DISASSEMBLE PROCEDURE" (SHEETS 6 & 7) C10 ITEM R25 ADDED (B/H) C11 DELTA NOTE 25 ADDED (SHT 1) 08-02-17 RWJ D1 ITEM R2 WAS 81025734 (B/H) 32 ITEM R206 ADDED (B/H) D3 DELTA NOTE 26 ADDED (B/H) D4 NOTE ADDED (SHT 2) D5 DETAIL T ADDED (SHT 6) D6 DETAIL V ADDED (SHT 6) D7 LIFT TABLE ADDED (SHT 6) D8 CHORD W/UP VIEW ADDED (SHT 6)
100	1		INSERT ASSY #500, 12.00M MEDIUM			81027808	5
101							
102							
103	1		INSERT ASSY 12M L #500			81027814	7
104	1		INSERT ASSY #500, 12.00M W/SUSPENSION			81027817	8
105							
106	1		INSERT ASSY 6M #500			81027820	9
107							
108							
OPTION 1: HOOK BLOCKS							
200	1		BLOCK 350 US TON 32MM 9 SHEAVES			A09833	
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 SHEAVE			236503	
206							
OPTION 2: UPPER BOOM POINT							
300	1		UPPER POINT ASSY FRAME			81029769	12
301							
BASIC REFERENCE ITEMS							
R1	1		MAST RIGGING M10:503			81025690	24
R2	1		LOAD CELL LINK 145,150 KGS			84038493	
R3	1		MAST RIGGING M11:503			84045340	24
R4							
R5	2		STRAP 7.69M #500			81027399	
R6							
R7	4		LINK #500 BOOM			81028035	
R8	4		LINK #500 BOOM			81028043	
R9	1		EQUALIZER ASSY			81029025	
R10	2		PIN 1 HOLE W/HD 100.0 DIA X 94.3 LG			81029670	26
R11	2		PIN WITH HEAD 100.0 DIA X 336.7 LG			84020672	26
R12	4		PIN 1 HOLE W/HD 69.5 DIA X 94.3 LG			81029688	
R13	4		COLLAR 70.50MM I.D.			81029689	
R14	4		PIN 2 HOLE 12.7 DIA X 98.0 LG			81029708	
R15	4		LINK EQ TO BOOM STRAP			81036487	
R16	2		STRAP 1.69M #500			81036553	
R17							
R18	4		COLLAR 101MM I.D.			A12945	
R19	4		PIN 2 HOLE 12.7 DIA X 128.0 LG			A12946	
R20							
R21							
R22	1		POINT #500, LOWER ASSY			81027736	19
R23	1		SHEAVE ASSY #500 LWR PT DE			81034794	20
R24	1		SHEAVE ASSY #500 LOWER PNT			81034795	21
R25	2		PIN 1 HOLE W/HD 100.0 DIA X 94.3 LG			81029670	26
R26							
NO. REQ'D FOR THE FOLLOWING REFERENCE ITEMS ARE IN THE BOOM LENGTH TABLE (SHEET 2)							81023382
R100	1		PIN COTTER 3/16 DIA X 1.50 LG			562085	
R101	1		PIN 1 HOLE W/HD 65.0 DIA X 94.3 LG			81024951	
R102	1		LINK #500 BOOM			81024955	
R103	1		STRAP 11.78M #500			81027401	
R104	1		STRAP 5.78M #500			81029621	
R105	1		STRAP .68M #500			81032002	
R106	1		STRAP 10.22M #500			81032003	
R107	1		LINK #500 SUSPENSION			81032170	
R108	1		LINK #500 BOOM			81032298	
R109	1		PIN 2 HOLE 75.80 X 171.9 LG			84026091	
R110							
R111							
R112	1		PIN 2 HOLES 12.7 DIA X 93.0 LG			A11799	
R113	1		COLLAR 65MM I.D.			A11800	
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	
REFERENCE ITEMS FOR ASSEMBLY AND RIGGING PURPOSE ONLY							
R200							
R201							
R202							
R203	2		SLING 50000 LBS 6.15 FT			84018961	16
R204	4		SLING 13.0 (FT) 40000 (LBS)			84026655	23
R205	4		SHACKLE 25MT			624759	23
R206							
R207	4		SLING LIFTING 1 LEG X 40000(LBS) X 9.0(FT)			81038423	23
R208	1		SHACKLE 20.5T SLING			81041163	23
R209							
R210							
REFERENCE OPTION 3: SINGLE REEVING							
R300	1		LINK ASSY DEAD END			81042356	16
REFERENCE OPTION 4: TANDEM REEVING							
R400	1		LINK ASSY DEAD END			81042356	16
R401	1		PENDANT ASSY DEAD END			84028327	22

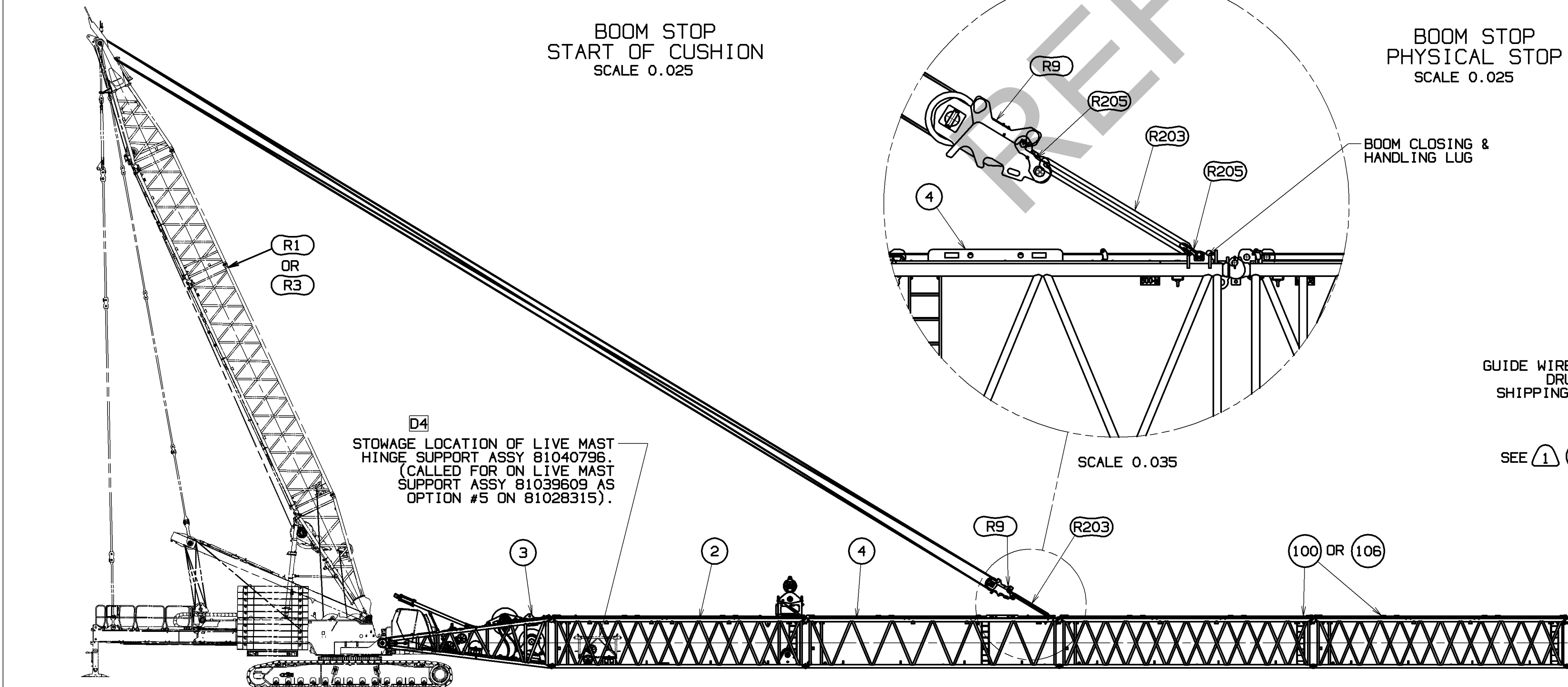
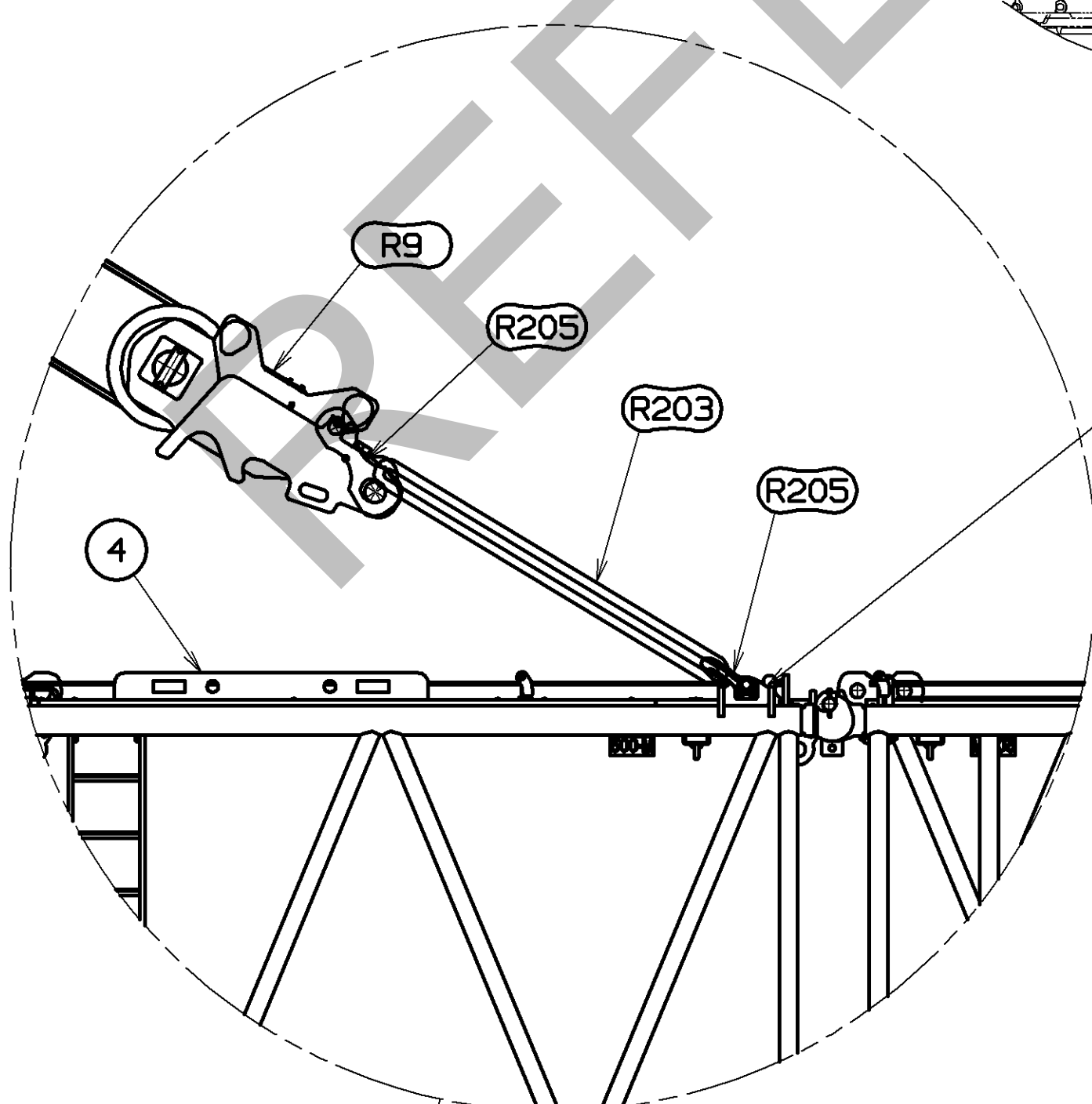
(15) ITEMS REQ'D FOR VARIOUS BOOM LENGTHS - SEE SHEETS 3, 4 & 5 FOR BOOM MAKE-UP																				
ITEM NO.		MEDIUM		LIGHT		STRAP				LINK			PIN		COTTER	COLLAR	SUSPENSION	LOWER CONN PIN	SAFETY PIN	
		100	106	103	104	R103	R104	R105	R106	R102	R107	R108	R101	R112	R100	R113	(25)	R109 OR R114	R115	
BOOM LENGTH		INSERT 12M (39.4FT) ASSY	INSERT 6M (19.7FT) ASSY	INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) SUSP ASSY	STRAP 12M (39.4FT)	STRAP 6M (19.7FT)	STRAP SHORT W/SUSP	STRAP LONG W/SUSP	LINK	LINK CONNECT W/SUSP	LINK W/SUSP	PIN	PIN	COTTER	COLLAR	PENDANT BUTTON NUMBER SEE (11)	PIN	USED W/R109	USED W/R114
METERS	FEET																			
42	137.8	0	0	0	0	0	0	0	0	4	0	0	8	8	32	8	-	6	12	6
48	157.5	0	1	0	0	0	2	0	0	8	0	0	12	12	40	12	-	8	16	8
54	177.2	1	0	0	0	2	0	0	0	8	0	0	12	12	40	12	-	8	16	8
60	196.9	1	1	0	0	2	2	0	0	12	0	0	16	16	48	16	-	10	20	10
66	216.5	2	0	0	0	4	0	0	0	12	0	0	16	16	48	16	-	10	20	10
72	236.2	2	1	0	0	4	2	0	0	16	0	0	20	20	56	20	-	12	24	12
78	255.9	2	0	0	1	4	0	2	2	20	2	4	28	28	72	28	9	12	24	12
84	275.6	2	1	0	1	4	2	2	2	24	2	4	32	32	80	32	8	14	28	14
90	295.3	2	0	1	1	6	0	2	2	24	2	4	32	32	80	32	6	14	28	14
96	315.0	2	1	1	1	6	2	2	2	28	2	4	36	36	88	36	6	16	32	16
102	334.6	2	0	2	1	8	0	2	2	28	2	4	36	36	88	36	3	16	32	16
108	354.3	2	1	2	1	8	2	2	2	32	2	4	40	40	96	40	7	18	36	18
114	374.0	2	0	3	1	10	0	2	2	32	2	4	40	40	96	40	5	18	36	18
120	393.7	2	1	3	1	10	2	2	2	36	2	4	44	44	104	44	4	20	40	20



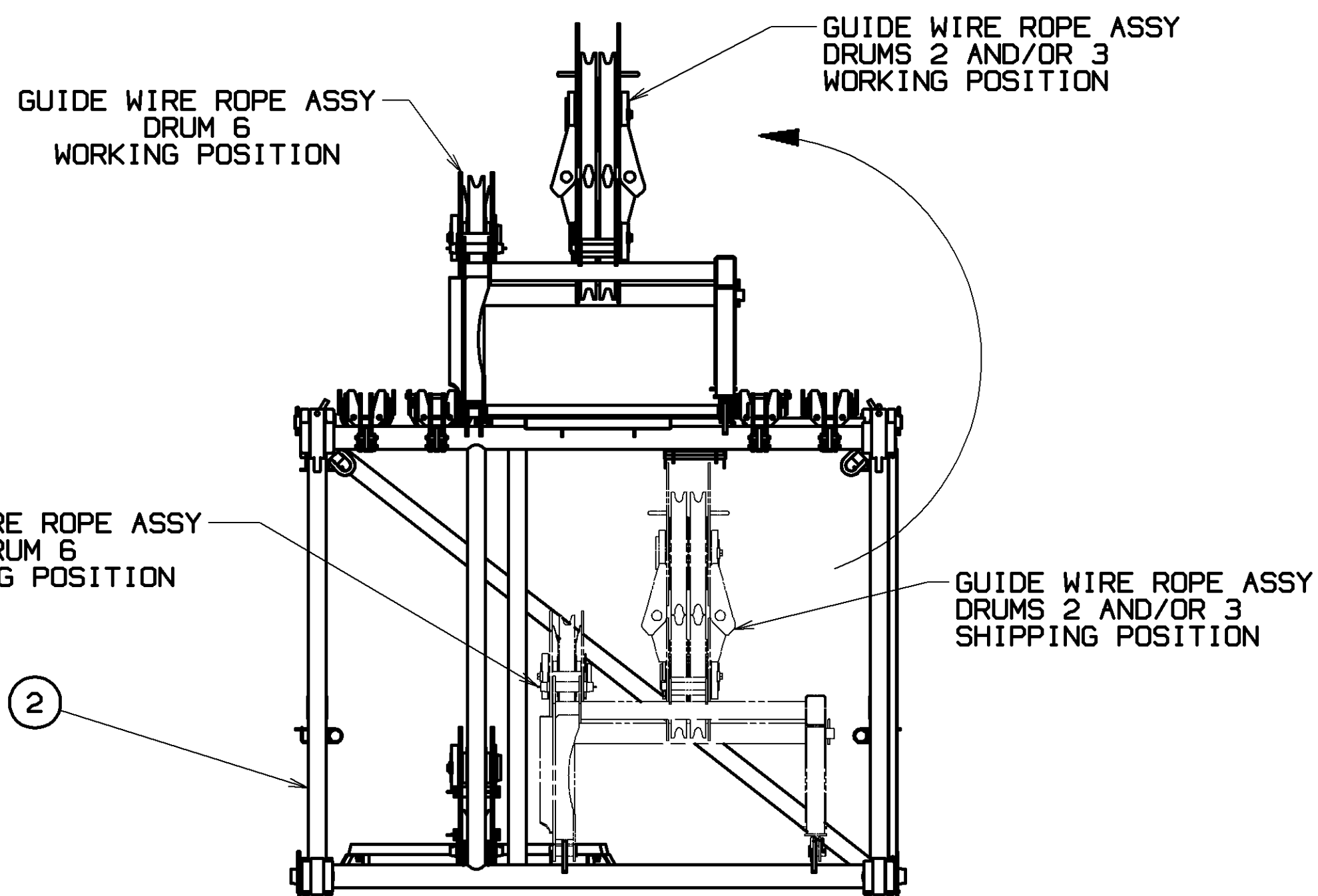
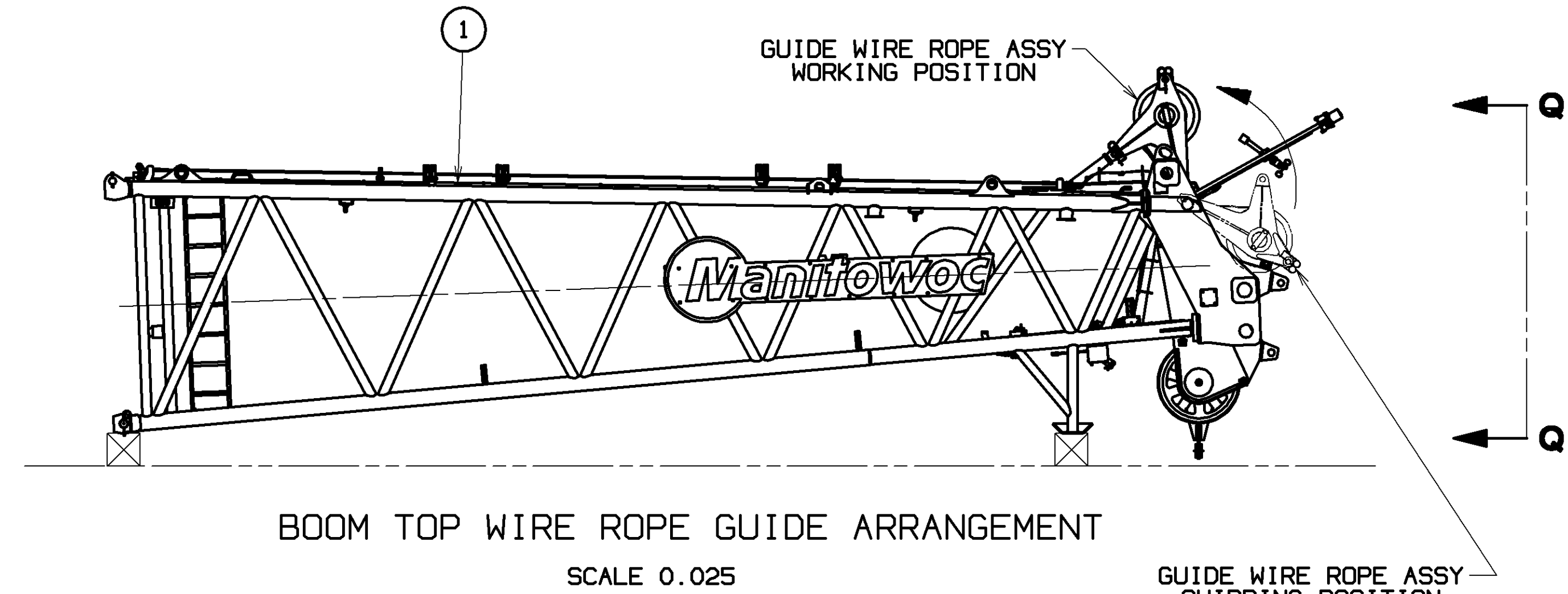
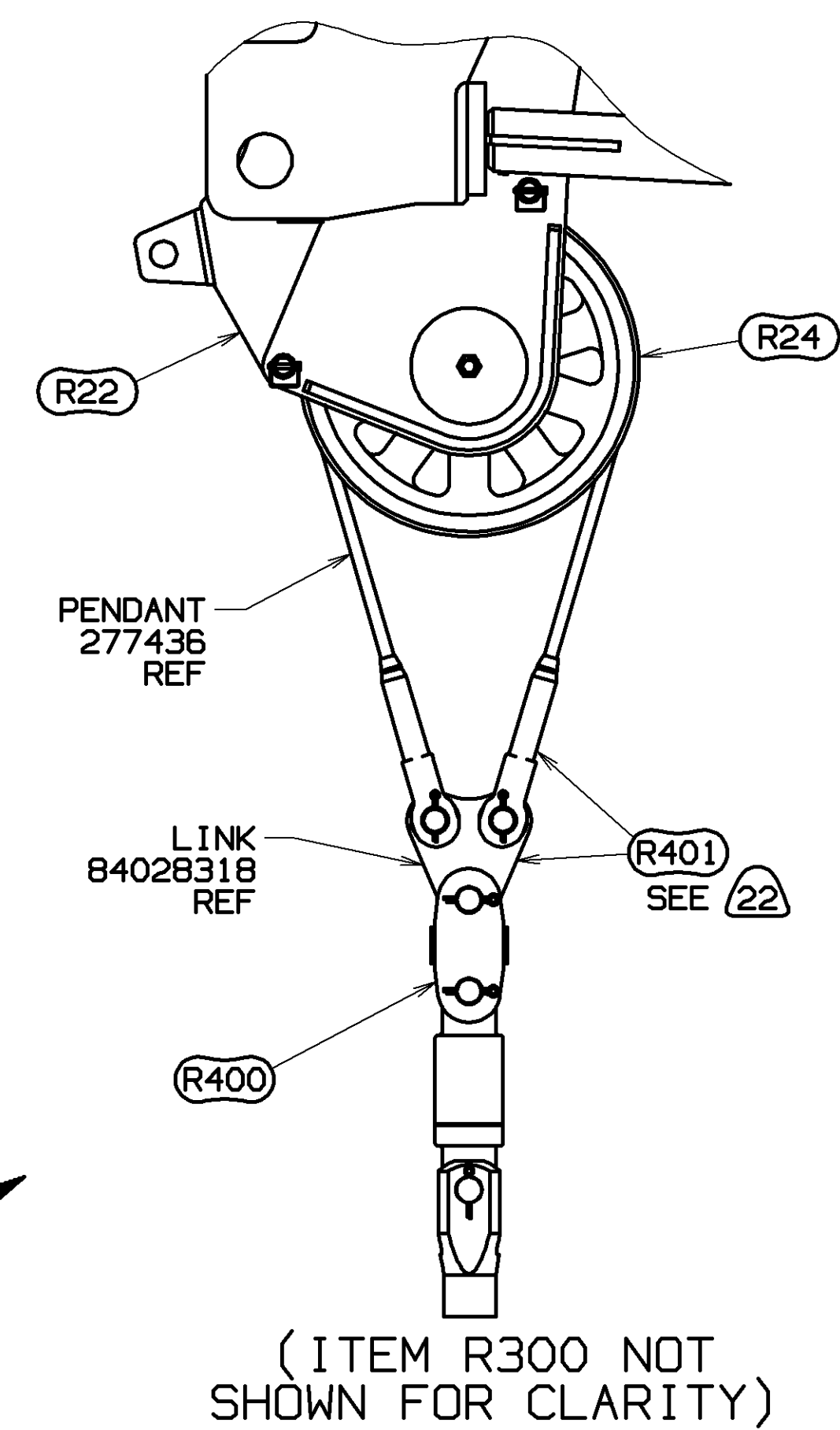
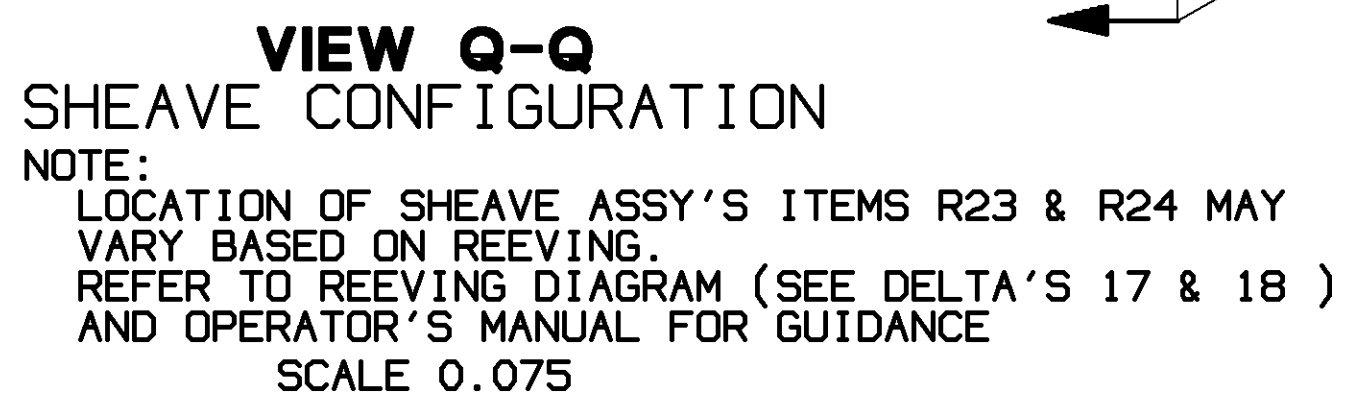
BOOM STOP
START OF CUSHION
SCALE 0.025



BOOM STOP
PHYSICAL STOP
SCALE 0.025



BOOM HANDLING WITH EQUALIZER
(SEE TABLE)



SECTION P-P
12M HEAVY INSERT (ITEM 2)
ROPE GUIDE ARRANGEMENT
(FROM SHEET 1)
SCALE 0.040

BOOM HANDLING WITH EQUALIZER WITH EQUALIZER ATTACHED TO BOOM INSERTS MAXIMUM BOOM INSERTS THAT CAN BE CANTILEVERED BEYOND 12M EQUALIZER INSERT IS AS FOLLOWS		
LENGTH	6M (19.7FT) INSERT 81027820	12M (39.4FT) INSERT 81027808
6M (19.7FT)	1	0
12M (39.4FT)	0	1
18M (59.1FT)	1	1
24M (78.7FT)	0	2

TOLERANCE UNLESS OTHERWISE SPECIFIED		SCALE	Mantowoc Cranes, Inc.		REF. DIM.
DECIMAL PLACES	FRACTIONS	1:10	DR. AUB	Mantowoc, Wisconsin	BOOM RIGGING
(1) PLACE 0.0	1/16	1:10	CK. RHY	MODEL MLC300	B60:500
(2) PLACE 0.00	1/32	1:10	APP. DLG		
(3) PLACE 0.000	1/64	1:10			
ANGLES	11° 30'	11° 30'			

PRIVATE LABELING REQUIREMENT TO CONFORM TO SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 862901-06-026

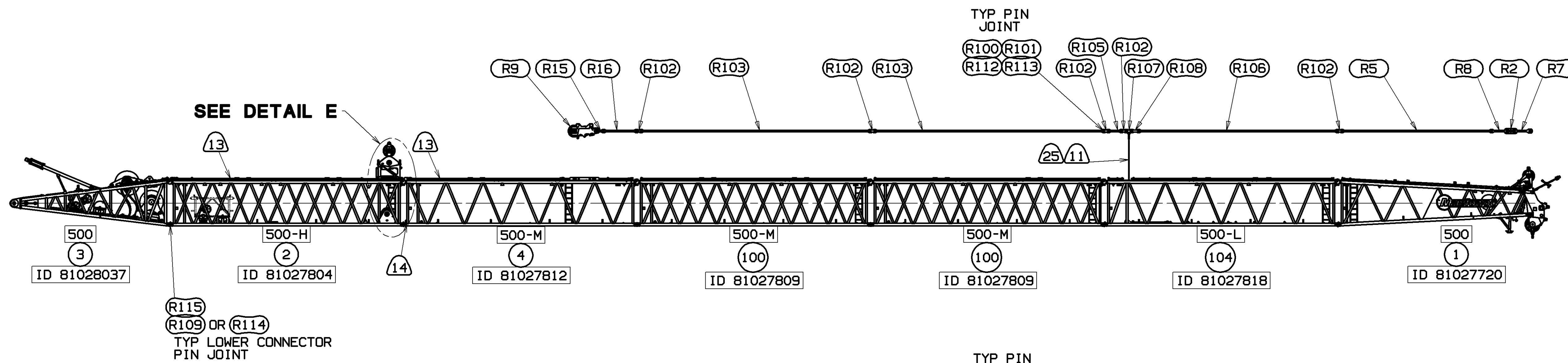
DATE 02-23-16

REF. DIM. D

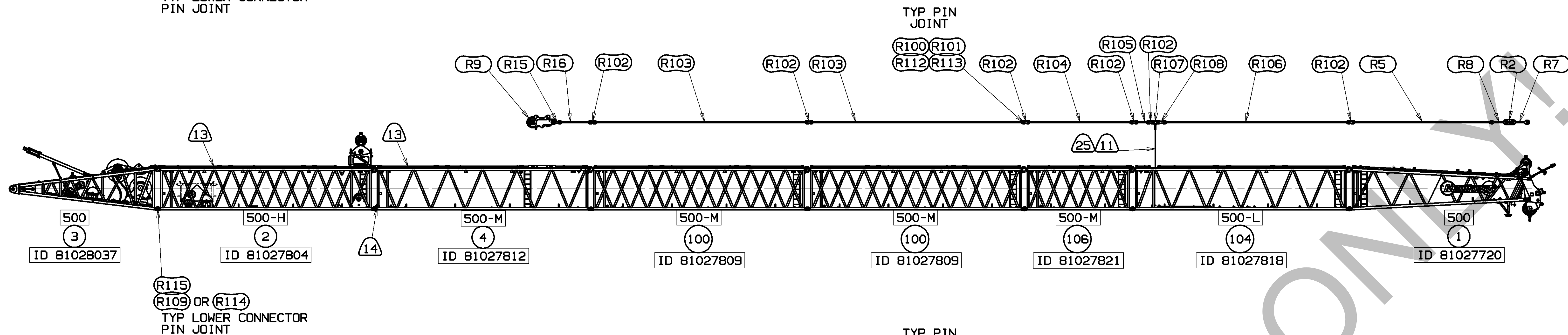
81023382

SHT 2 OF 8

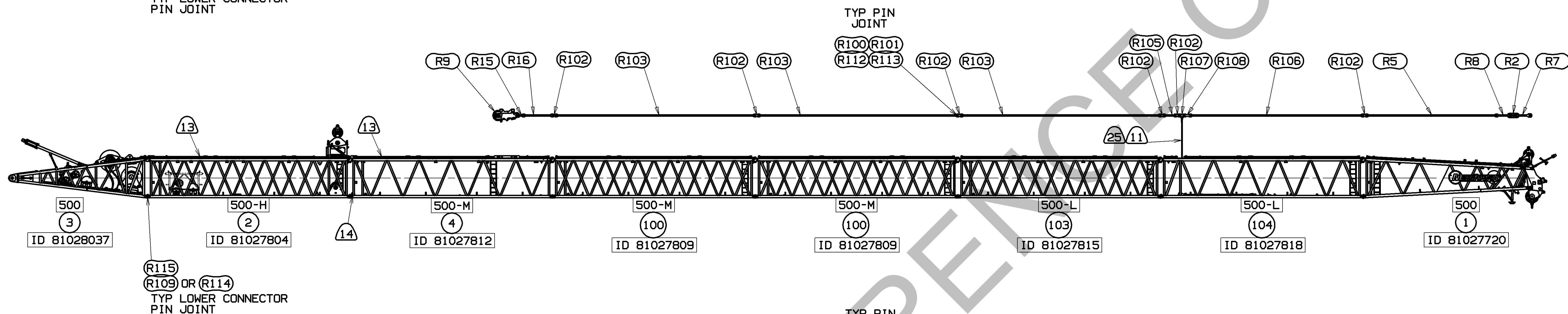
78.0 M
(255.9 FT)



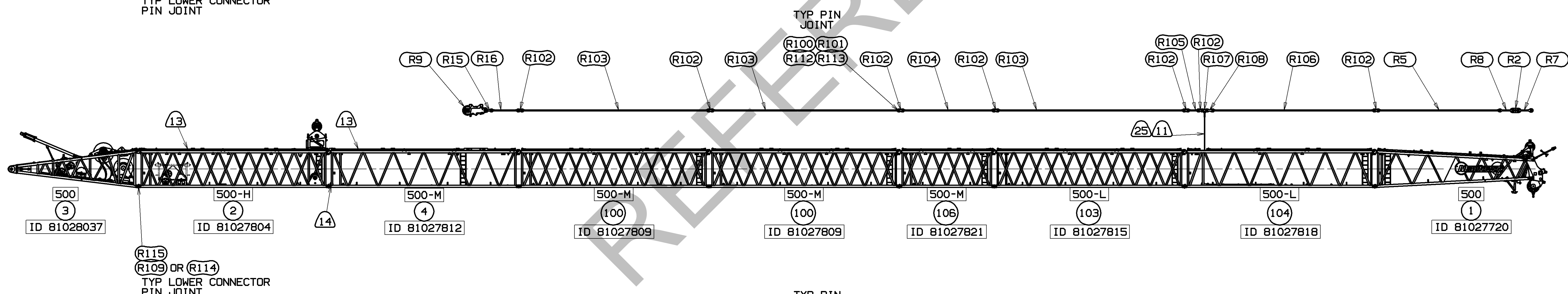
84.0 M
(275.6 FT)



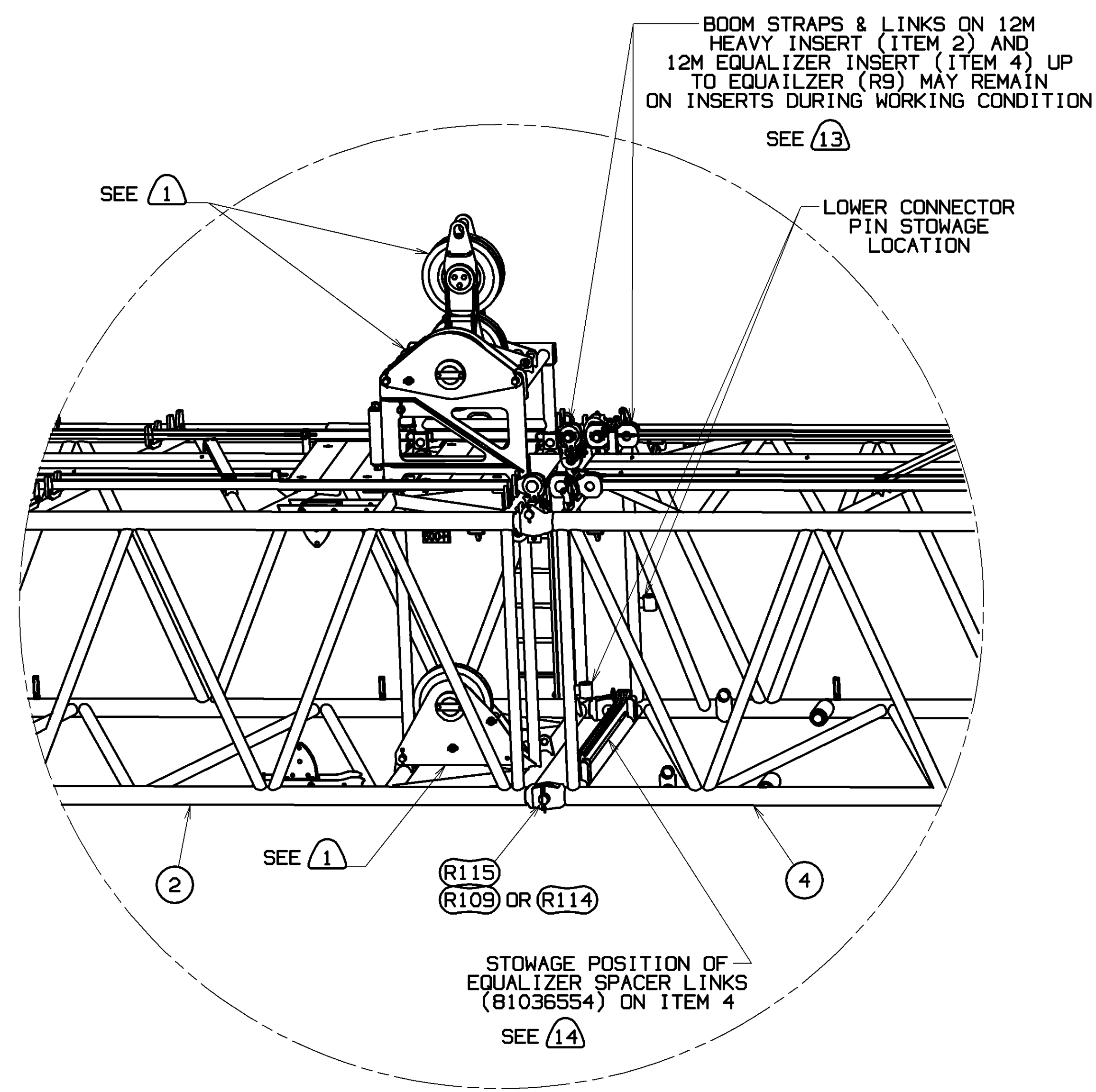
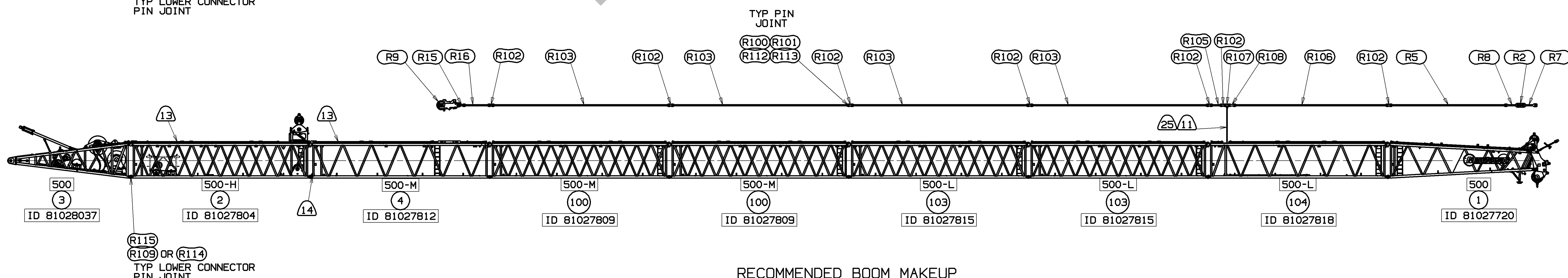
90.0 M
(295.3 FT)



96.0 M
(315.0 FT)



102.0 M
(334.6 FT)



DETAIL E
SEE DELTA NOTES 13, 14 & 15
SCALE 0.035

RECOMMENDED BOOM MAKEUP
FOR TYP PIN JOINT SEE SECTION B-B
AND DETAILS F & G

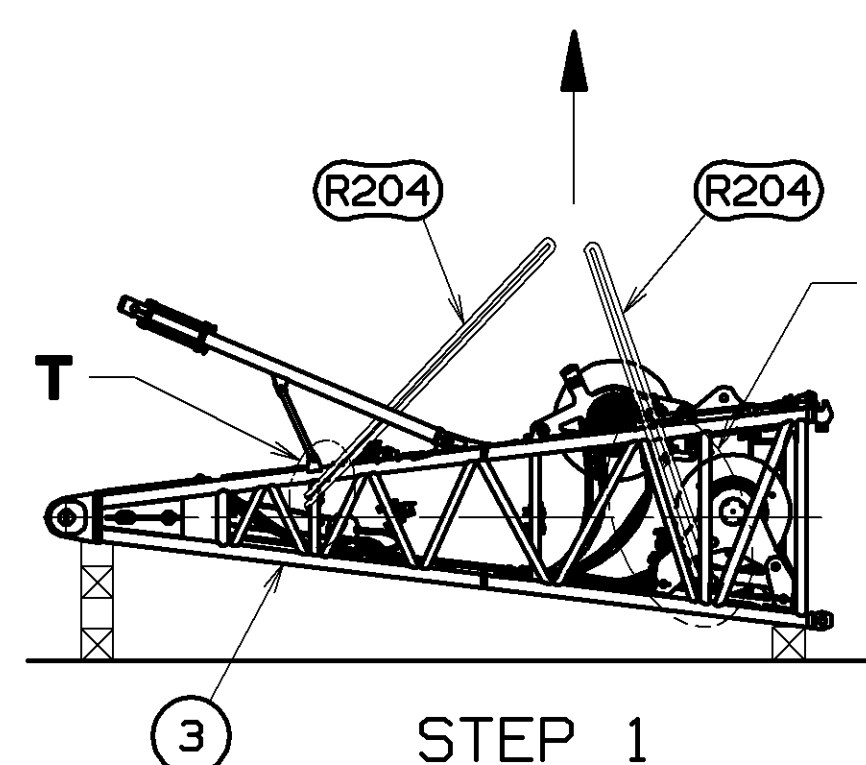
D5

D7

D8

SEE DETAIL T

SEE DETAIL U



STEP 1

BOOM BUTT PREP

BLOCK AND POSITION BOOM BUTT (ITEM 3) TO HANG APPROXIMATELY LEVEL PICK AS FOLLOWS:

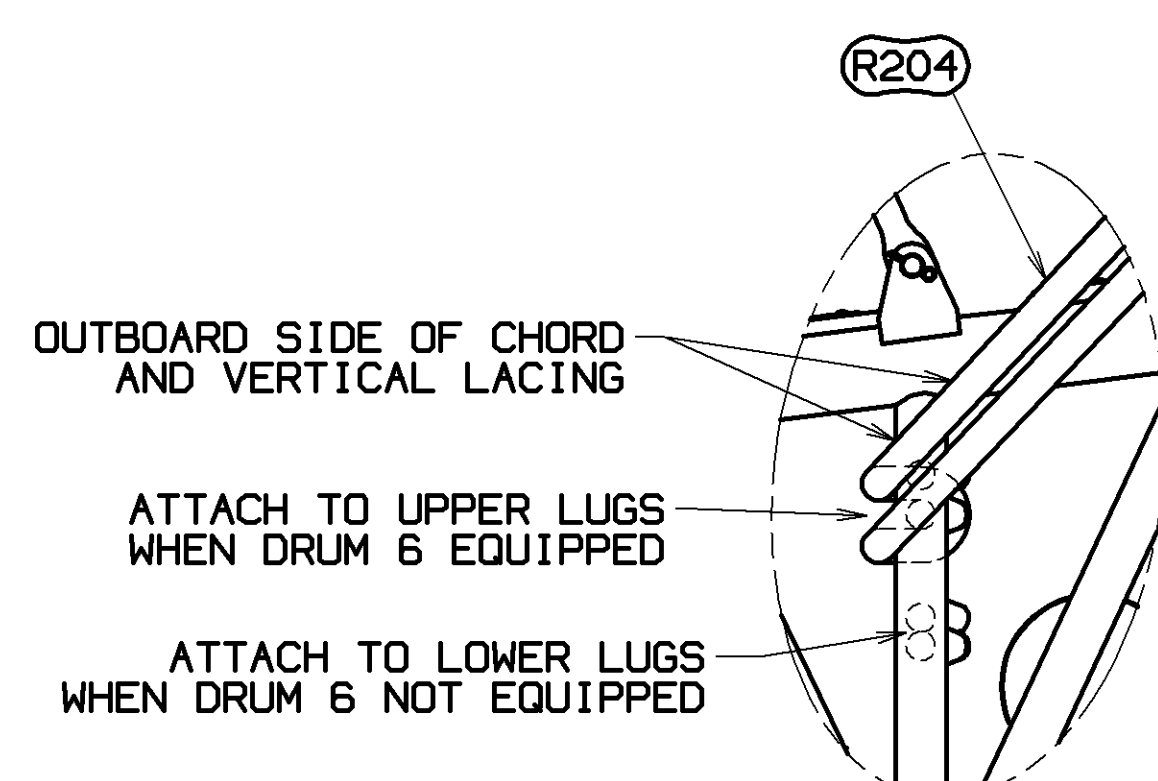
1. ROUTE SLINGS (R204) ON THE INBOARD SIDE OF THE BOOM STOPS.

2. ROUTE SLINGS (R204) NEAREST BOOM HINGE OVER THE OUTBOARD SIDE OF THE BOOM BUTT CHORDS AND THE OUTBOARD SIDE OF THE VERTICAL LACINGS THAT THE SLING LUGS ARE WELDED TO. (SEE DETAIL T)

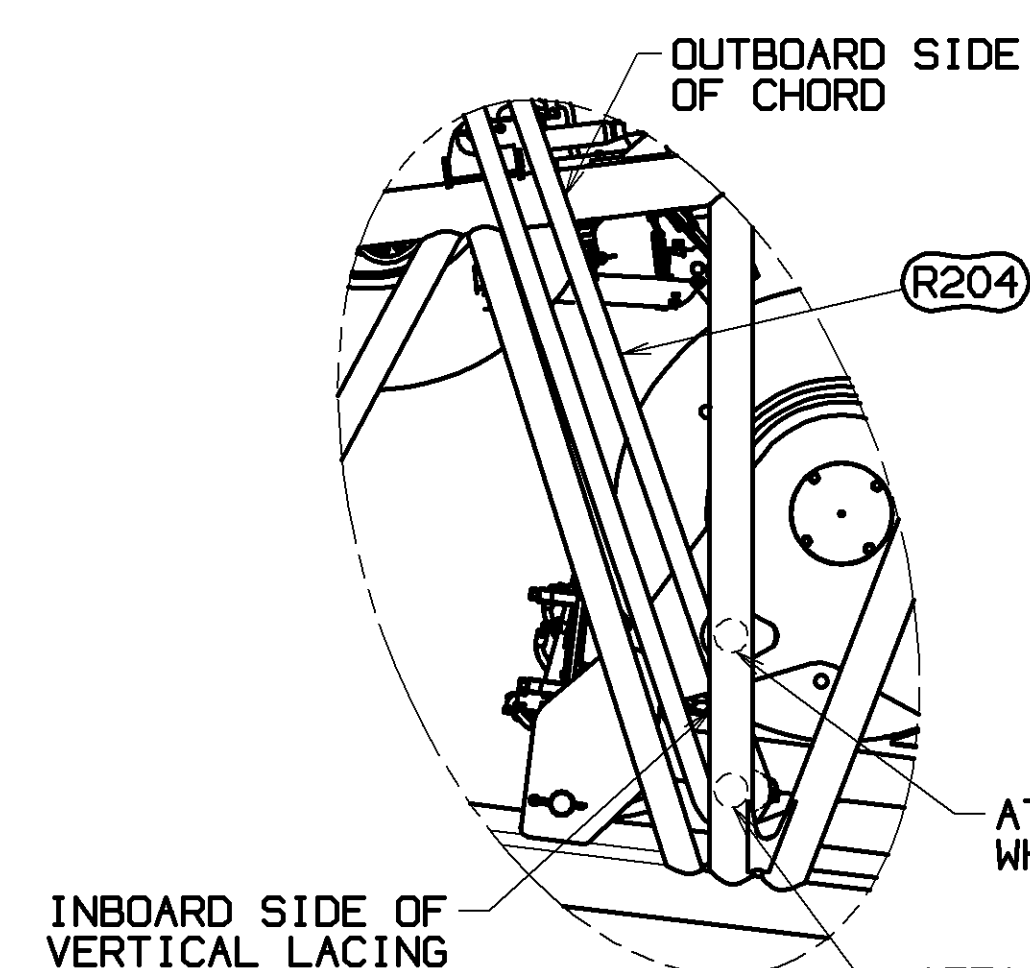
ROUTE SLINGS (R204) NEAREST CONNECTOR END OVER THE OUTBOARD SIDE OF THE BOOM BUTT CHORDS AND THE INBOARD SIDE OF THE VERTICAL LACINGS THAT THE SLING LUGS ARE WELDED TO. (SEE DETAIL U)

3. WHEN DRUM 6 EQUIPPED USE SLING LUGS NEAREST BOOM HINGE AND LOWER BUTT SLING LUGS TOWARD CONNECTOR END. (SEE DETAILS T & U)

WHEN DRUM 6 NOT EQUIPPED USE LOWER BUTT SLING LUGS NEAREST BOOM HINGE AND UPPER BUTT SLING LUGS TOWARD CONNECTOR END. (SEE DETAILS T & U)

DETAIL T
SCALE 0.075

D5

DETAIL U
SCALE 0.050

D6

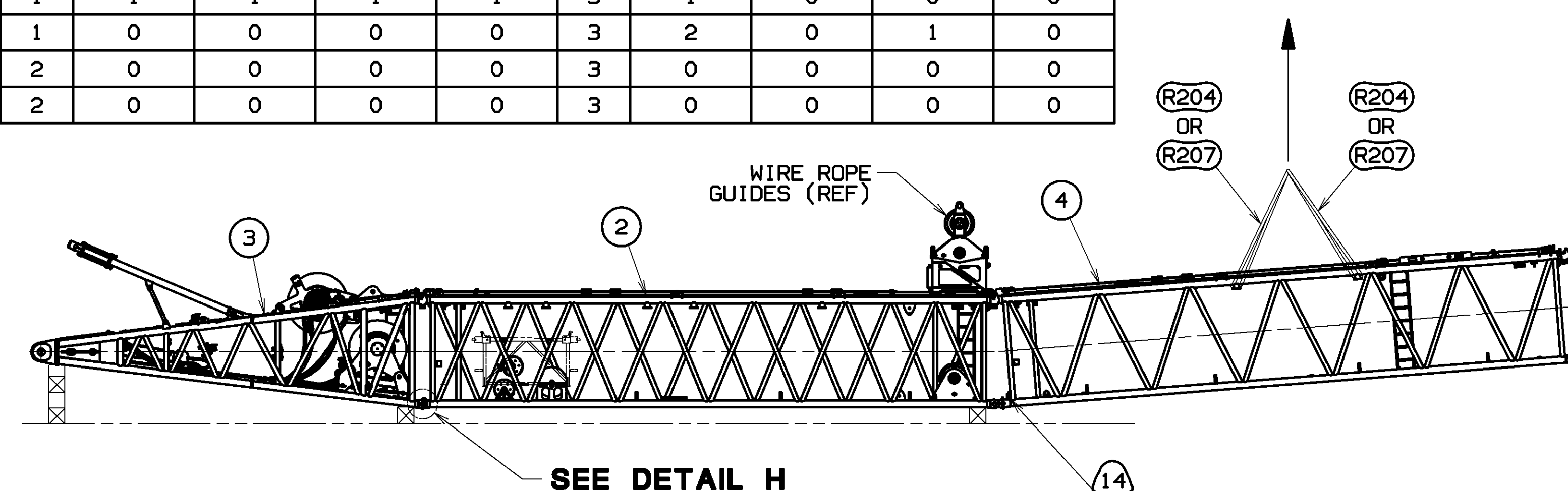
DO NOT SCALE THIS DRAWING

D7

INSERT CONFIGURATION	SLINGS (4)	R205 SHACKLE (25 MT)	BACK/HINGE SLING				FRONT/TOP SLING			
			LEFT		RIGHT		LEFT		RIGHT	
			POST	R208 SHACKLE (20.5 T)	WRAP ON CHORD	R208 SHACKLE (20.5 T)	WRAP ON CHORD	POST	R208 SHACKLE (20.5 T)	WRAP ON CHORD
WITH LUFFING JIB BACKSTAYS AND DRUM 6 ASSEMBLED	R207	2	1	0	0	0	0	3	1	0
	R204	2	1	0	0	0	0	3	1	0
WITHOUT LUFFING JIB BACKSTAYS, WITH DRUM 6	R207	2	1	1	1	1	1	3	1	0
	R204	2	1	0	0	0	0	3	2	1
WITHOUT LUFFING JIB BACKSTAYS OR DRUM 6	R207	2	2	0	0	0	0	3	0	0
	R204	2	2	0	0	0	0	3	0	0

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

REVISONS



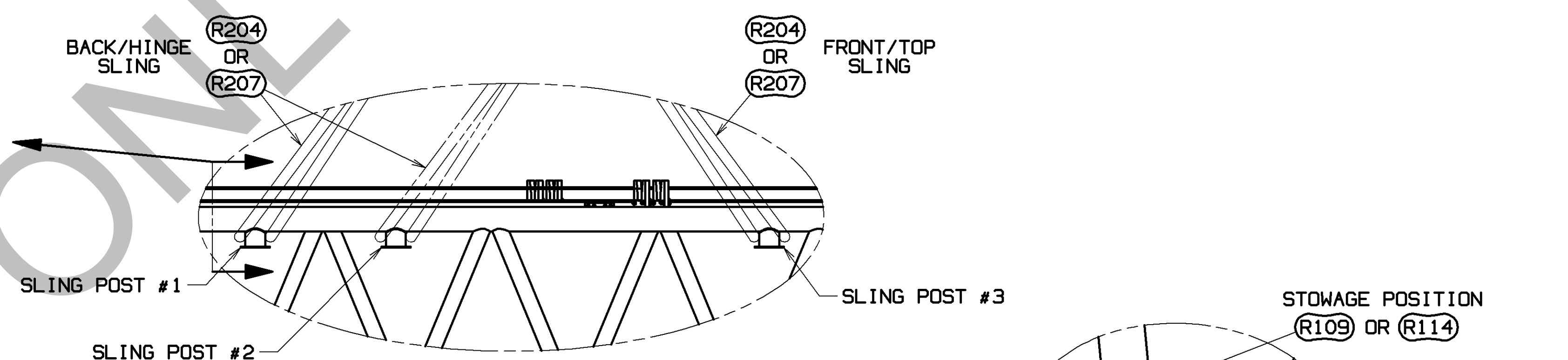
SEE DETAIL H

STEP 2

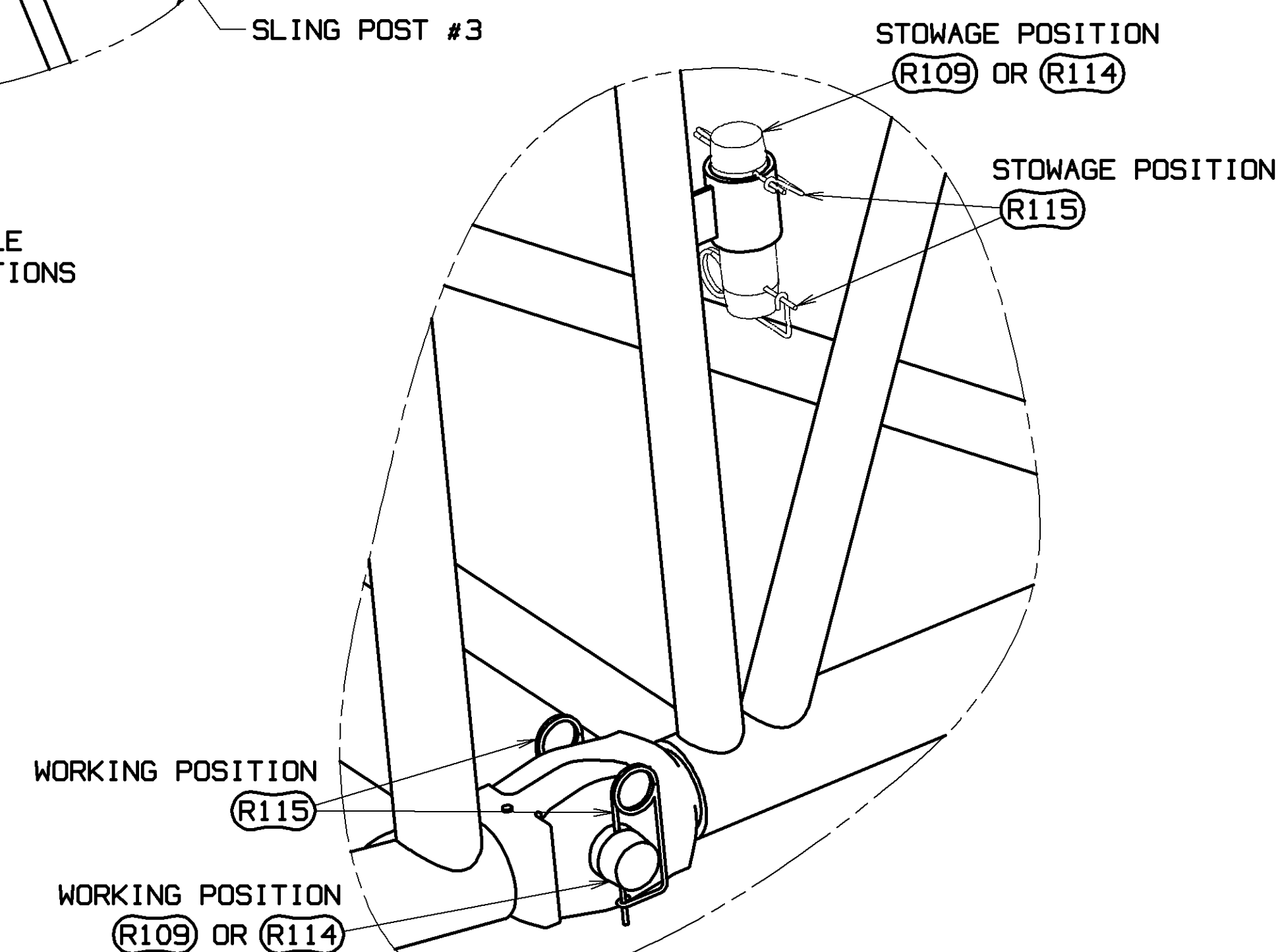
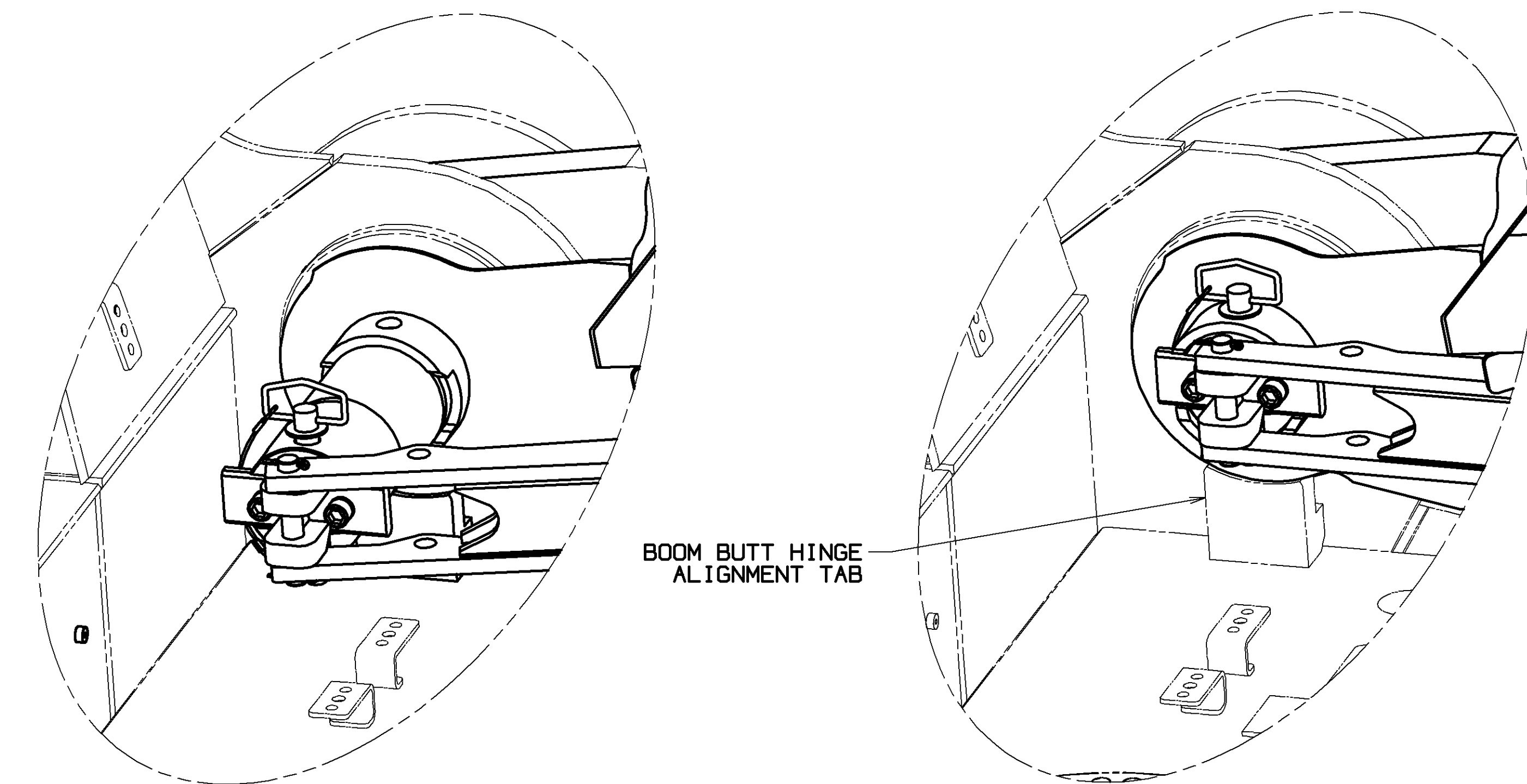
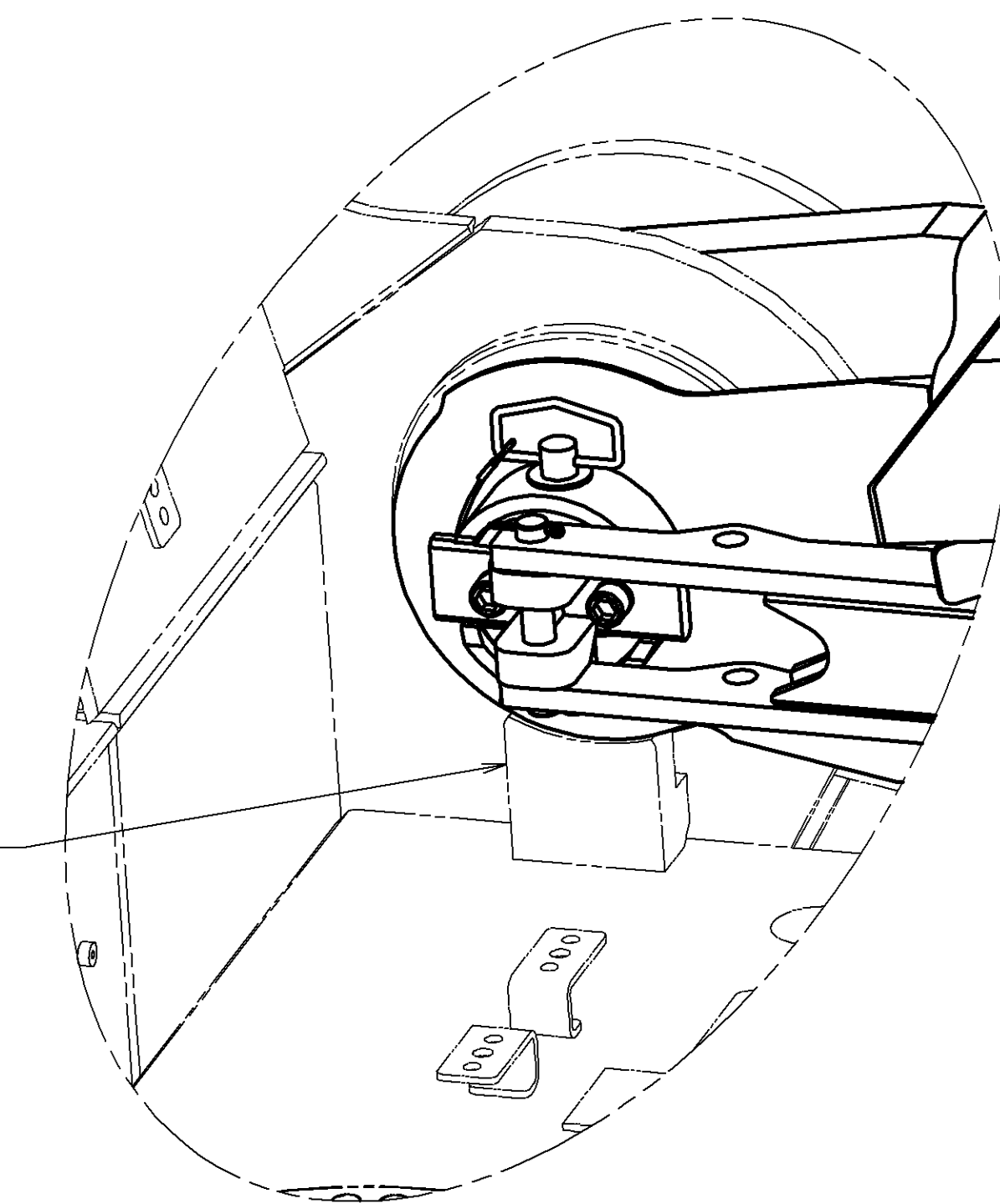
BOOM "BUTT TO EQUALIZER INSERT" ASSEMBLY

RELOCATE WIRE ROPE GUIDES IN 12M INSERT (ITEM 2) TO TOP OF INSERT PER USE OF DRUMS 2, 3 AND 6. (SEE SECTION P-P ON SHEET 2)

CONTINUE ASSEMBLING 12M INSERTS (ITEM 2 AND 4) TO BUTT (ITEM 3) USING (4) EQUAL LENGTH LIFTING SLINGS (R207 OR R204). INSTALL LOWER BOOM CONNECTOR PINS. (SEE DETAIL H). RELOCATE EQUALIZER SPACER LINKS TO STOWAGE LOCATION (SEE DETAIL E ON SHEET 4).



DETAIL K

SCALE 0.050
SEE PARTIAL BOOM LIFT TABLE FOR VARIOUS INSERT CONFIGURATIONSDETAIL H
SCALE 0.150DETAIL J
BOOM HINGE INSTALLATION
PIN PULLER RETRACTED
(VIEW LOOKING FROM CENTERLINE
BOOM TOWARD FAR SIDE HINGE PIN)DETAIL J
BOOM HINGE INSTALLATION
PIN PULLER EXTENDED
(VIEW LOOKING FROM CENTERLINE
BOOM TOWARD FAR SIDE HINGE PIN)

STEP 3A

BOOM HANDLING WITH FIXED MAST

USING PREVIOUSLY ASSEMBLED FIXED MAST (R1 OR R3) PER ASSEMBLY INSTRUCTIONS 81025690 OR 84045340. POSITION FIXED MAST AT APPROXIMATELY 60° FROM HORIZONTAL WITH BUTT BETWEEN CRAWLERS.

INSTALL COUNTERWEIGHT BOXES TO TRAY.

NOTE: THE COUNTERWEIGHT TRAY IS TO BE AT THE MINIMUM POSITION.

WARNING: DO NOT RAISE THE MAST BEYOND 69° IF COUNTERWEIGHT IS INSTALLED WITHOUT ATTACHING BOOM TO MACHINE AND CONNECTING EQUALIZER TO BOOM STRAPS. CRANE COULD TIP.

USE (4) EQUAL LENGTH LIFTING SLINGS (R207 OR R204) TO HANDLE THE PARTIAL BOOM WITH THE FIXED MAST. ATTACH SLINGS WITH SHACKLES (R205 & R208) TO EQUALIZER (R9) AND APPROPRIATE SLING POSTS ON 12M INSERT (ITEM 2). (LIFTING POINTS AND COMPONENTS VARY ON 12M INSERT (ITEM 2) PER WITH DRUM 6 OR WITHOUT DRUM 6. SEE DETAIL K AND PARTIAL BOOM LIFT TABLE).

STEP 3B

INSTALL PARTIAL BOOM

RAISE PARTIAL BOOM AND SET INNER PLATE OF BUTT HINGE ON ALIGNMENT TAB OF ROTATING BED. (SEE DETAIL J). ACTIVATE HINGE PIN CYLINDER TO INSTALL HINGE PIN INTO BUTT (ITEM 3).

LOWER PARTIAL BOOM ONTO BLOCKING.

DETACH LIFTING SLINGS (R207 OR R204) FROM 12M INSERT (ITEM 2).

PRIVATE LABELING
REQUIREMENT TO
CONFORM TO
ENGINEERING
SPECIFICATION
81023382 FOR
COMPONENTS LISTED
IN 81023382-06-006

DATE

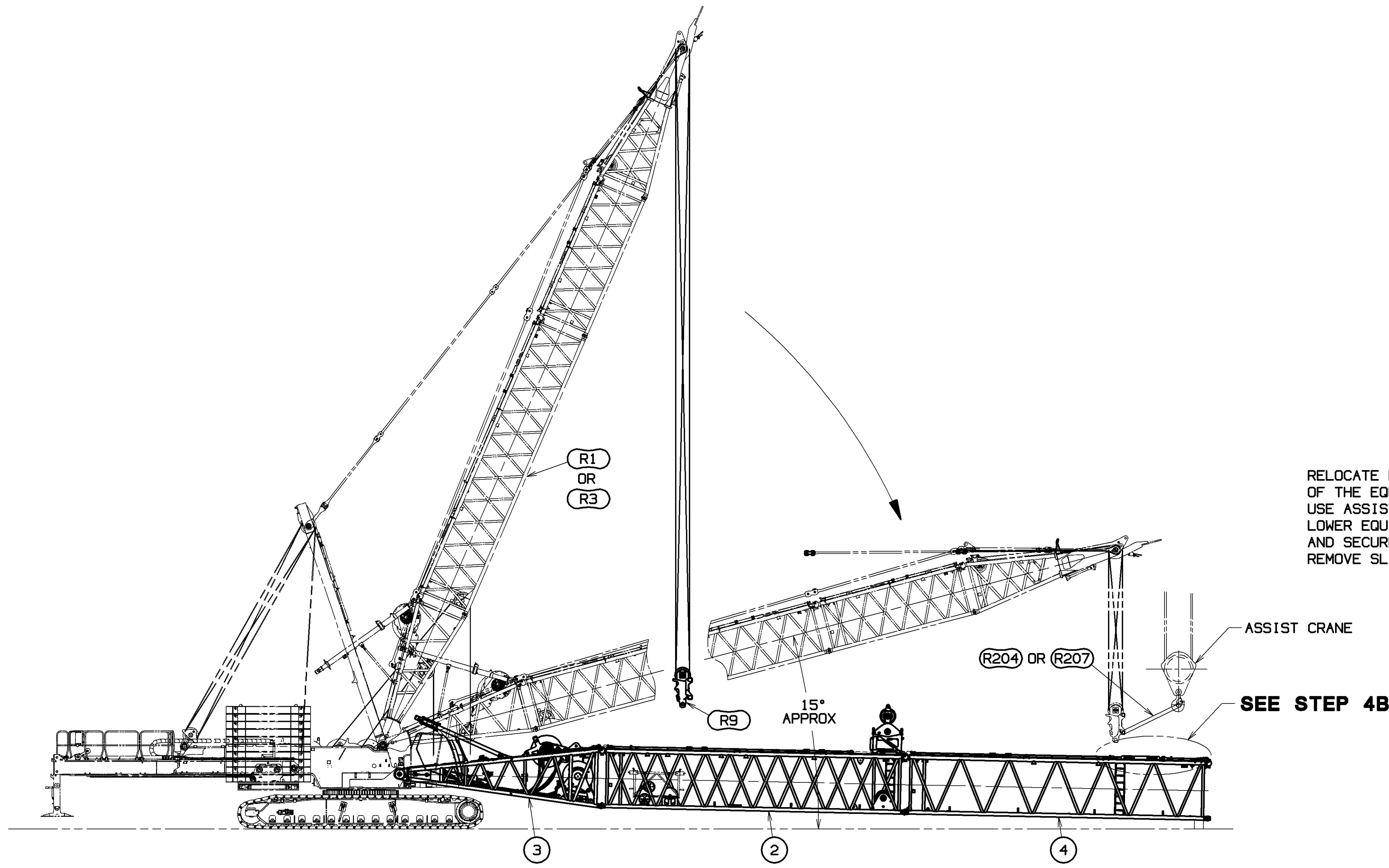
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D

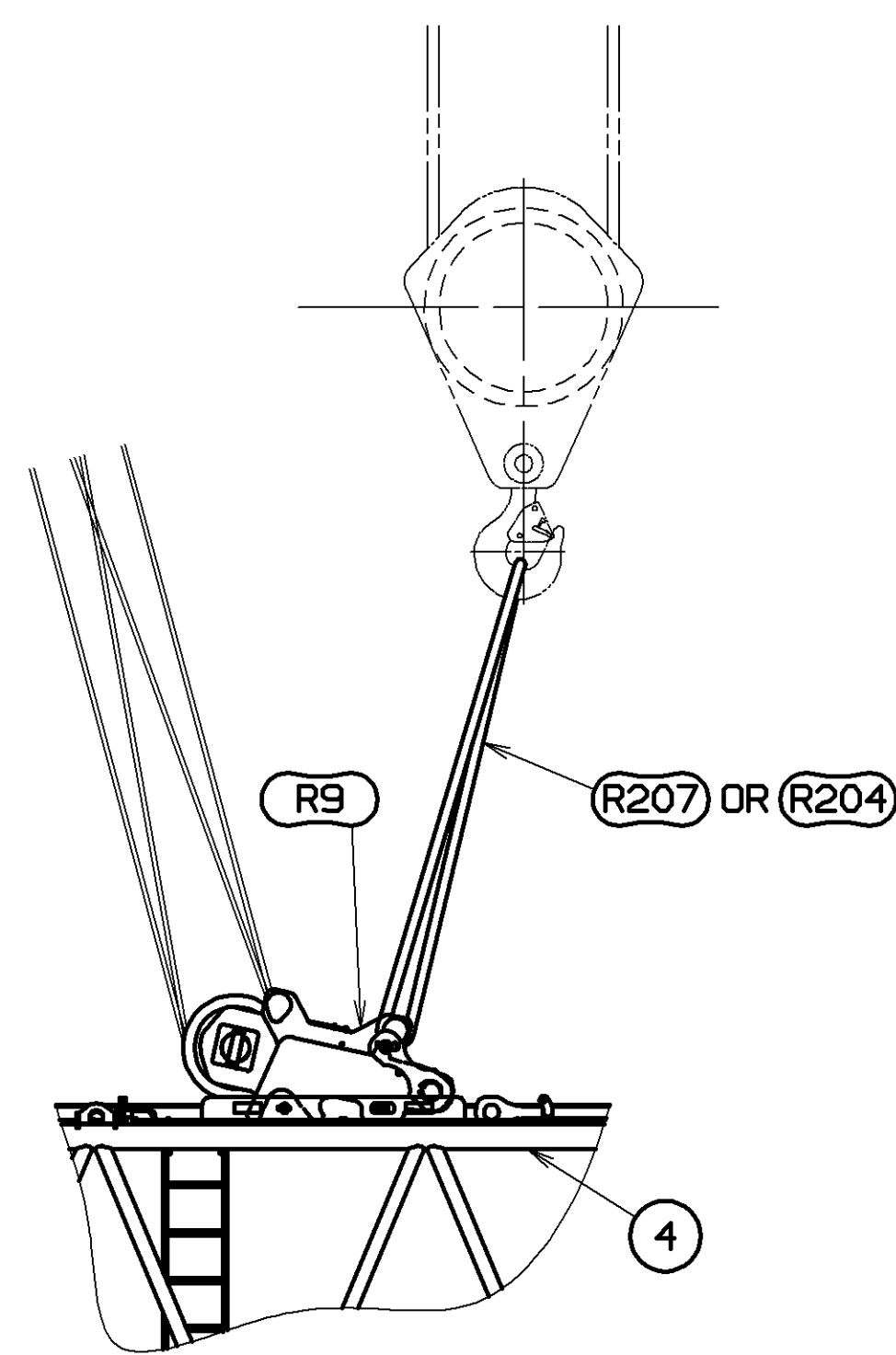
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SHT 6 OF 8



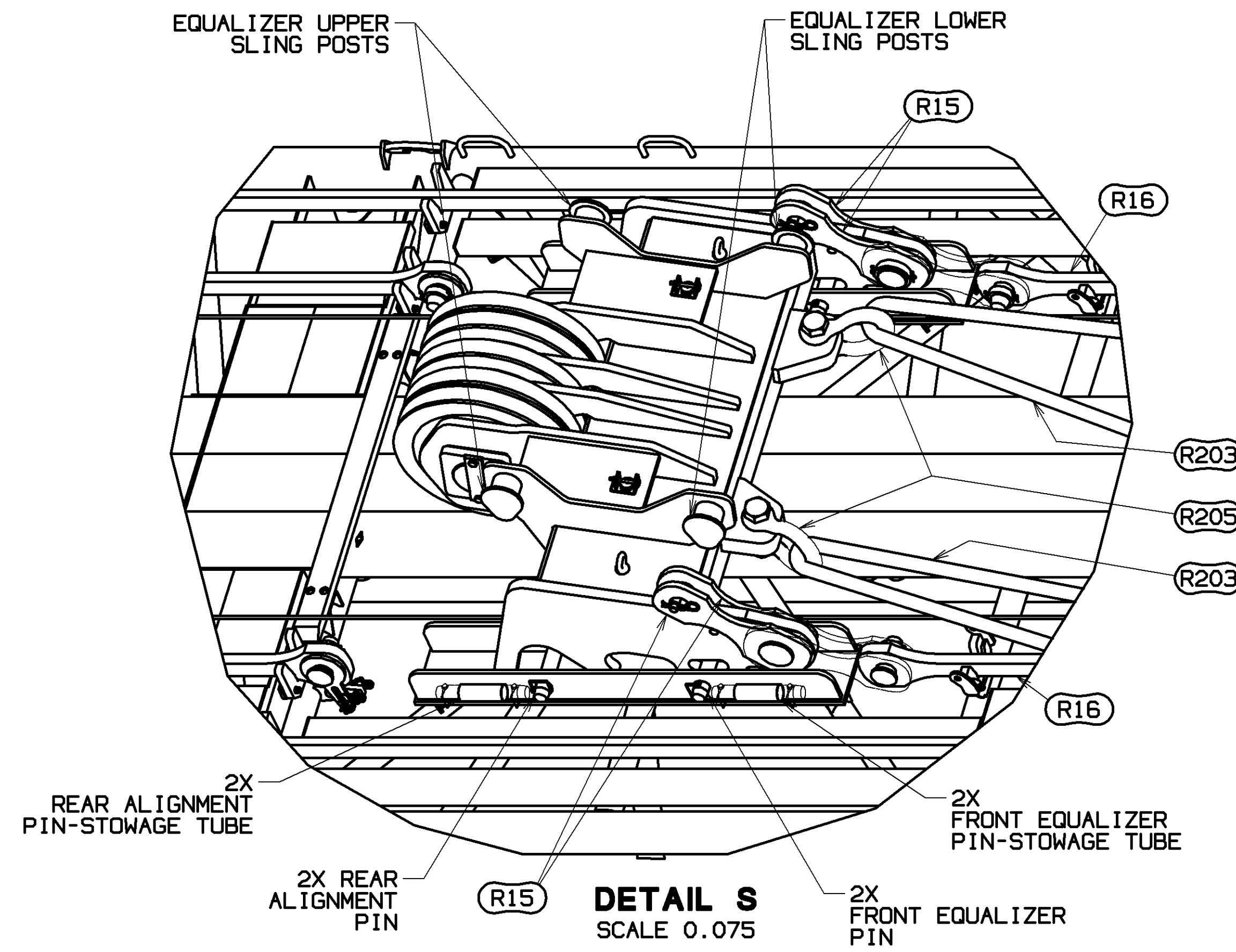
STEP 4A

EQUALIZER TO INSERT ALIGNMENT
LOWER FIXED MAST TO APPROXIMATELY 15° WITH EQUALIZER (R9) SLIGHTLY ABOVE EQUALIZER INSERT (ITEM 4).
ATTACH ASSIST CRANE TO EQUALIZER (R9) LOWER SLING POSTS WITH LIFTING SLINGS (R207 OR R204).

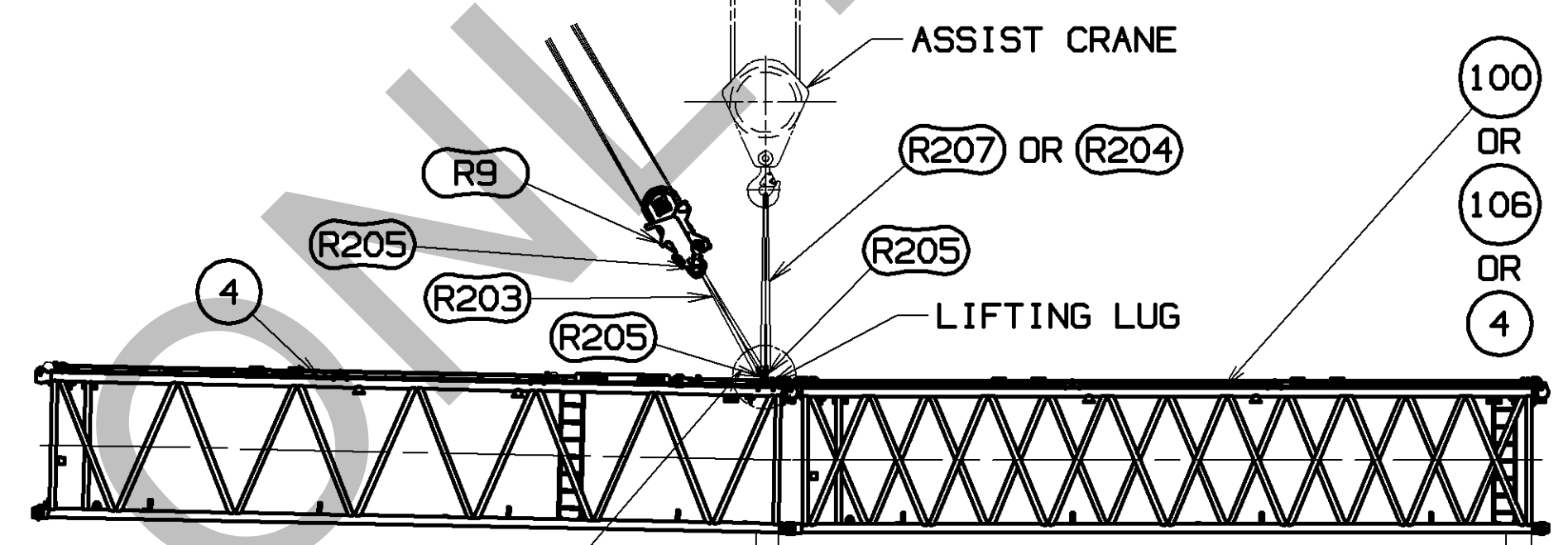


STEP 4B

RELOCATE REAR ALIGNMENT PINS FROM STORAGE TUBES TO THE REAR OF THE EQUALIZER RAILS. (SEE DETAIL S).
USE ASSIST CRANE TO POSITION EQUALIZER (R9) HORIZONTALLY.
LOWER EQUALIZER ONTO RAILS OF EQUALIZER INSERT (ITEM 4) AND SECURE WITH FRONT EQUALIZER PINS. (SEE DETAIL S).
REMOVE SLINGS (R207 OR R204) FROM EQUALIZER LOWER SLING POSTS.
SCALE 0.025



DETAIL S
SCALE 0.075



SEE DETAIL R

STEP 5

BOOM CLOSING

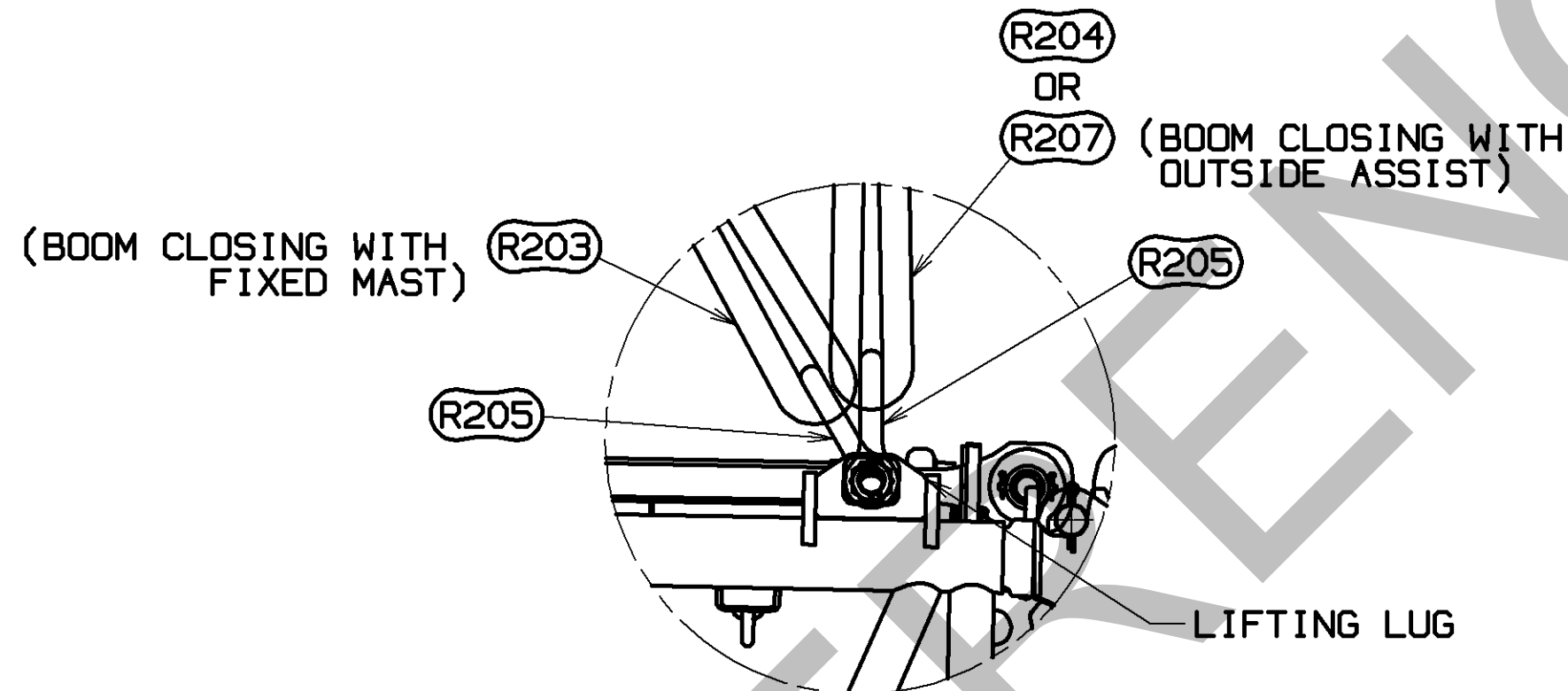
ASSEMBLE DESIRED BOOM LENGTH CONFIGURATION PER SHEETS 3, 4 & 5 OR CANTILEVERED INSERTS PER TABLE ON SHEET 2 FOR BOOM HANDLING WITH EQUALIZER.

BOOM CLOSING WITH OUTSIDE ASSIST

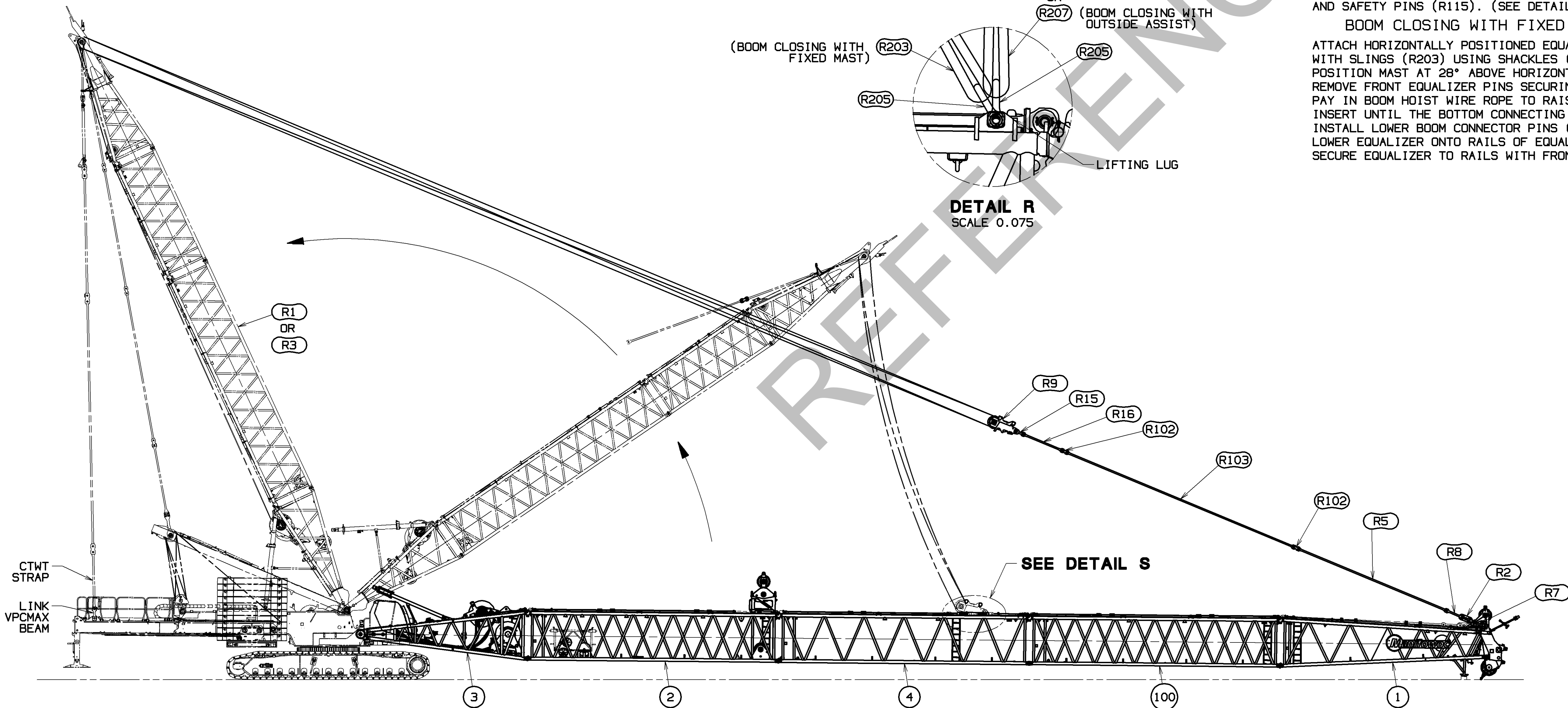
ATTACH ASSIST CRANE TO LIFTING LUGS ON EQUALIZER INSERT (ITEM 4) USING LIFTING EQUAL LENGTH SLINGS (R207 OR R204) AND SHACKLES (R205). (SEE DETAIL R) LIFT UP ON EQUALIZER INSERT AND INSTALL LOWER BOOM CONNECTOR PINS (R109 OR R114) AND SAFETY PINS (R115). (SEE DETAIL H ON SHEET 6). DETACH SLINGS AND SHACKLES.

BOOM CLOSING WITH FIXED MAST

ATTACH HORIZONTALLY POSITIONED EQUALIZER (R9) TO EQUALIZER INSERT (ITEM 4) WITH SLINGS (R203) USING SHACKLES (R205) AT BOTH ENDS. (SEE DETAIL R AND S)
POSITION MAST AT 28° ABOVE HORIZONTAL.
REMOVE FRONT EQUALIZER PINS SECURING EQUALIZER TO INSERT RAILS. (SEE DETAIL S)
PAY IN BOOM HOIST WIRE ROPE TO RAISE THE EQUALIZER (R9) AND THE EQUALIZER INSERT UNTIL THE BOTTOM CONNECTING HOLES BETWEEN THE INSERTS ARE ALIGNED.
INSTALL LOWER BOOM CONNECTOR PINS (R109 OR R114) AND SAFETY PINS (R115). (SEE DETAIL H ON SHEET 6)
LOWER EQUALIZER ONTO RAILS OF EQUALIZER INSERT AND REMOVE SLINGS (R203) AND SHACKLES (R205) FROM BOTH ENDS.
SECURE EQUALIZER TO RAILS WITH FRONT EQUALIZER PINS. (SEE DETAIL S).



DETAIL R
SCALE 0.075



STEP 6

EQUALIZER TO STRAPS ASSEMBLY

CONNECT BOOM STRAPS/LINKS FROM BOOM TOP TO EQUALIZER INSERT (ITEM 4) IF NOT PREVIOUSLY DONE.
CONNECT EQUALIZER LINKS (R15) TO BOOM STRAPS (R16). (SEE DETAIL S).
REMOVE PINS SECURING EQUALIZER (R9) TO INSERT IF INSTALLED. (SEE DETAIL S).
(PINS SECURING EQUALIZER TO INSERT ARE ONLY REQUIRED WHEN CHANGING BOOM LENGTHS AND THE EQUALIZER IS NOT SUPPORTED BY AN ASSIST CRANE OR CONNECTED TO THE BOOM STRAPS).

RAISE FIXED MAST (R1 OR R3) AND CONNECT MAST COUNTERWEIGHT STRAPS TO LINKS ON VPC-MAX BEAM PER FIXED MAST ASSEMBLY INSTRUCTIONS 81025690 OR 84045340.

BOOM UP TO DESIRED ANGLE.

PROCEDURE TO DISASSEMBLE BOOM

1. BOOM DOWN AND SUPPORT BOOM ON BLOCKING.
2. BOOM FIXED MAST (R1 OR R3) 1° TOWARD MAST STOPS AND DISCONNECT MAST COUNTERWEIGHT STRAPS FROM LINKS ON VPC-MAX BEAM.
3. ROTATE FIXED MAST PAST VERTICAL PER FIXED MAST ASSEMBLY INSTRUCTIONS 81025690 OR 84045340.
4. PAY OUT BOOM HOIST TO LOWER EQUALIZER (R9) ONTO INSERT RAILS AND SECURE WITH EQUALIZER PIN. (SEE DETAIL S).
5. DISCONNECT LINKS (R15) FROM EQUALIZER STRAPS (R16) AND PIN LINKS (R15) INTO STOWAGE POSITION. (SEE DETAIL S).
6. DISCONNECT BOOM STRAPS/LINKS AT EACH JOINT.
7. WITH PROPER BLOCKING IN PLACE AND SUPPORT FROM ASSIST CRANE REMOVE INSERT LOWER CONNECTOR PINS AND DISENGAGE UPPER CONNECTOR PINS FROM INSERTS TOWARD BOOM TOP FROM EQUALIZER INSERT.
WARNING: BOOM MUST BE PROPERLY BLOCKED TO PREVENT SHIFTING DURING PIN REMOVAL
8. REMOVE VPC-MAX COUNTERWEIGHT
WARNING: DO NOT RAISE THE MAST BEYOND 69° IF COUNTERWEIGHT IS INSTALLED WITHOUT ATTACHING BOOM TO MACHINE AND CONNECTING EQUALIZER TO BOOM STRAPS. CRANE COULD TIP
9. REMOVE PINS SECURING EQUALIZER TO INSERT IF INSTALLED. (SEE DETAIL S)
10. FOR REMOVAL OF BOOM BUTT/EQUALIZER INSERT ASSEMBLY REVERSE INSTALLATION STEPS 1 THRU 3 ON SHEET 6.

PROCEDURE TO DISASSEMBLE BOOM FOR BOOM MAKE UP RECONFIGURATIONS

1. BOOM DOWN AND SUPPORT BOOM ON BLOCKING.
2. PAY OUT BOOM HOIST TO LOWER EQUALIZER (R9) ONTO INSERT RAILS AND SECURE WITH EQUALIZER PIN. (SEE DETAIL S).
3. FOR ALL BOOM LENGTHS LEAVE EQUALIZER LINKS (R15) AND STRAPS (R16) PINNED TOGETHER.
4. SECURE EQUALIZER (R9) TO EQUALIZER RAILS USING FRONT EQUALIZER PIN (SEE DETAIL S).
5. DISCONNECT BOOM STRAPS/LINKS NECESSARY FOR BOOM RECONFIGURATION.
6. WITH PROPER BLOCKING IN PLACE AND SUPPORT FROM ASSIST CRANE REMOVE INSERT LOWER CONNECTOR PINS AND DISENGAGE UPPER CONNECTOR PINS PER REQUIRED CONFIGURATION.
WARNING: BOOM MUST BE PROPERLY BLOCKED TO PREVENT SHIFTING DURING PIN REMOVAL

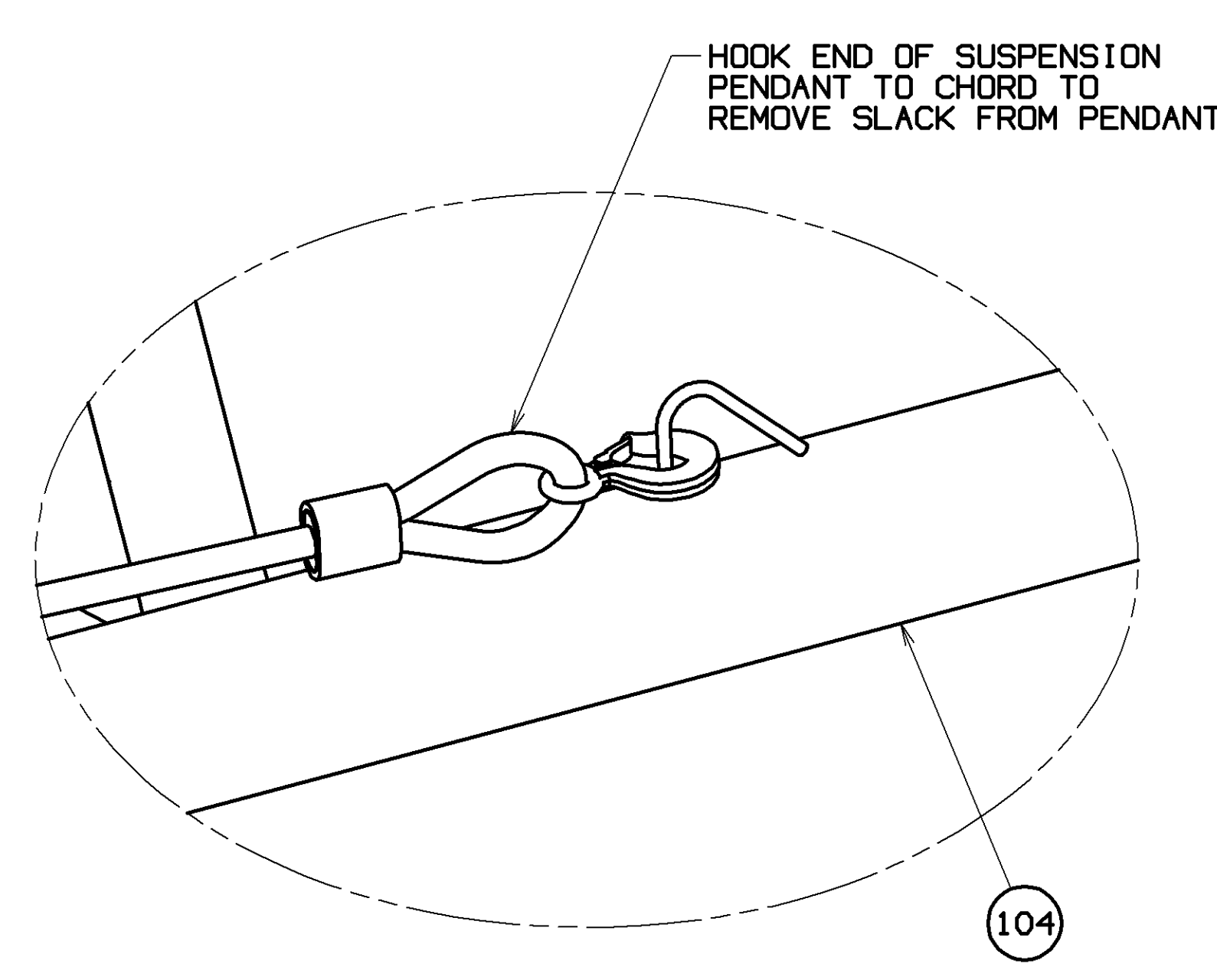
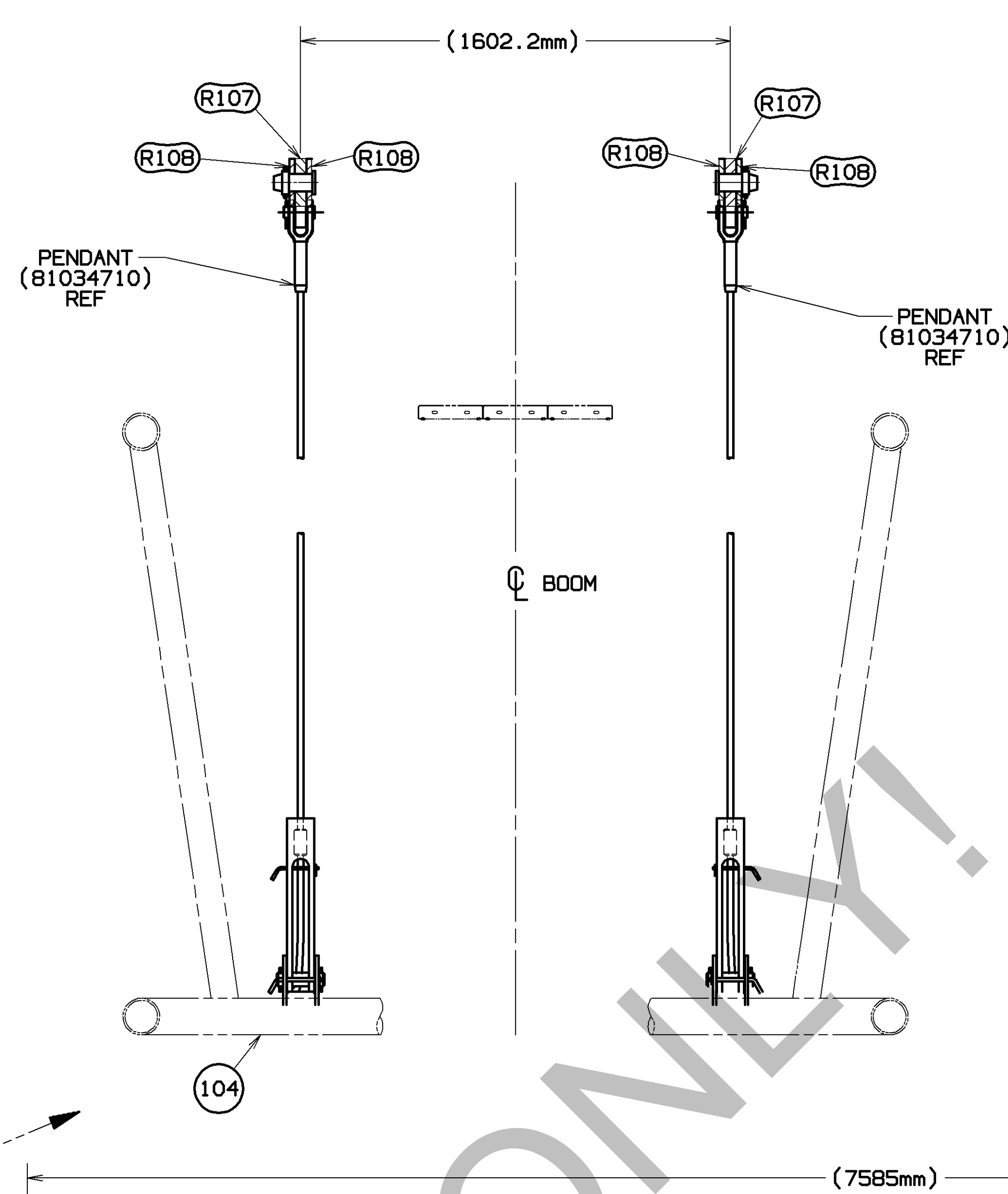
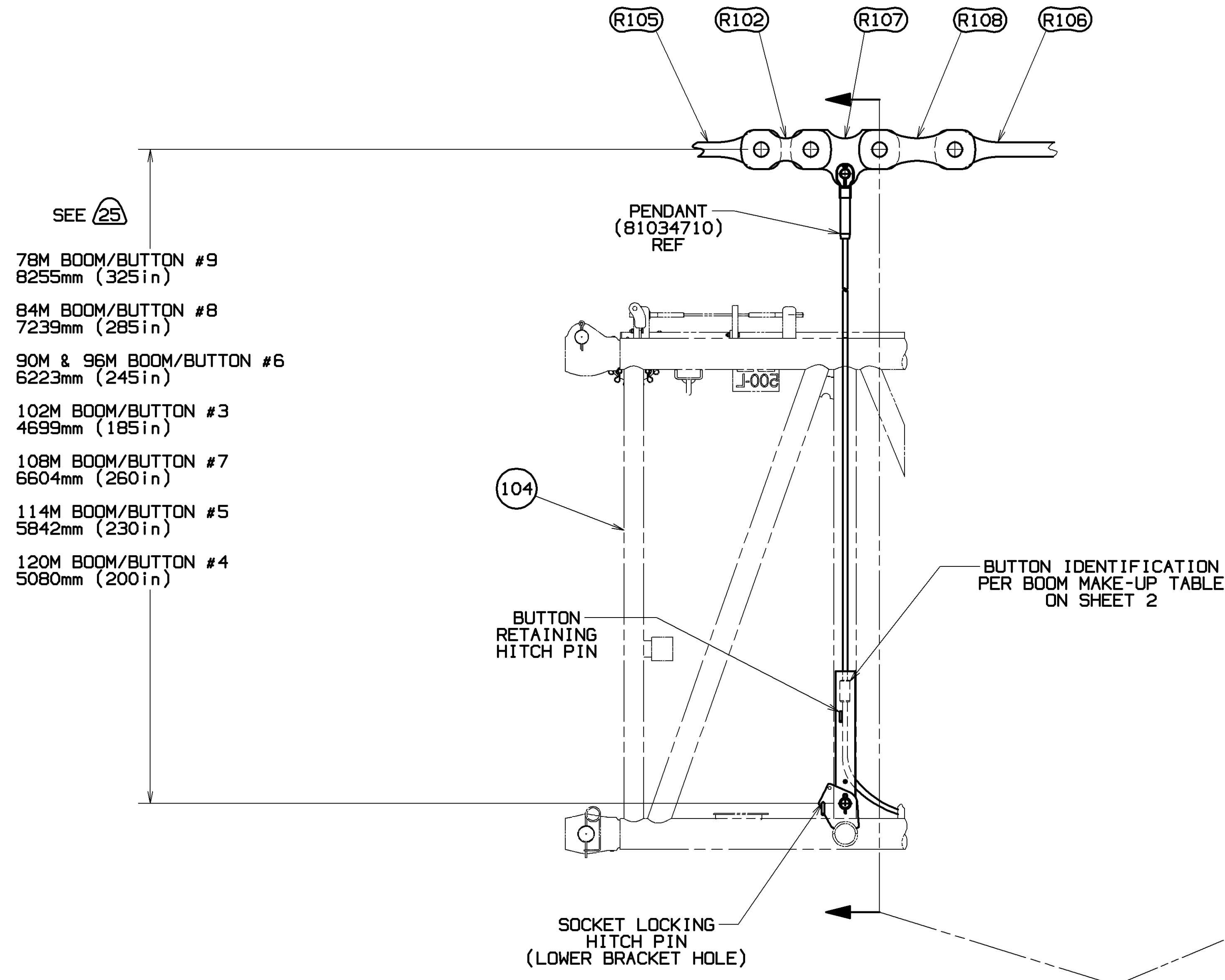
INTERMEDIATE SUSPENSION OPERATIONAL INSTRUCTIONS

SEE BOOM MAKEUP VIEWS ON SHEETS 3,4 & 5 AND BOOM LENGTH TABLE ON SHEET 2 FOR REQUIRED SUSPENSION AND WIRE ROPE BUTTON IDENTIFICATION LOCATION.

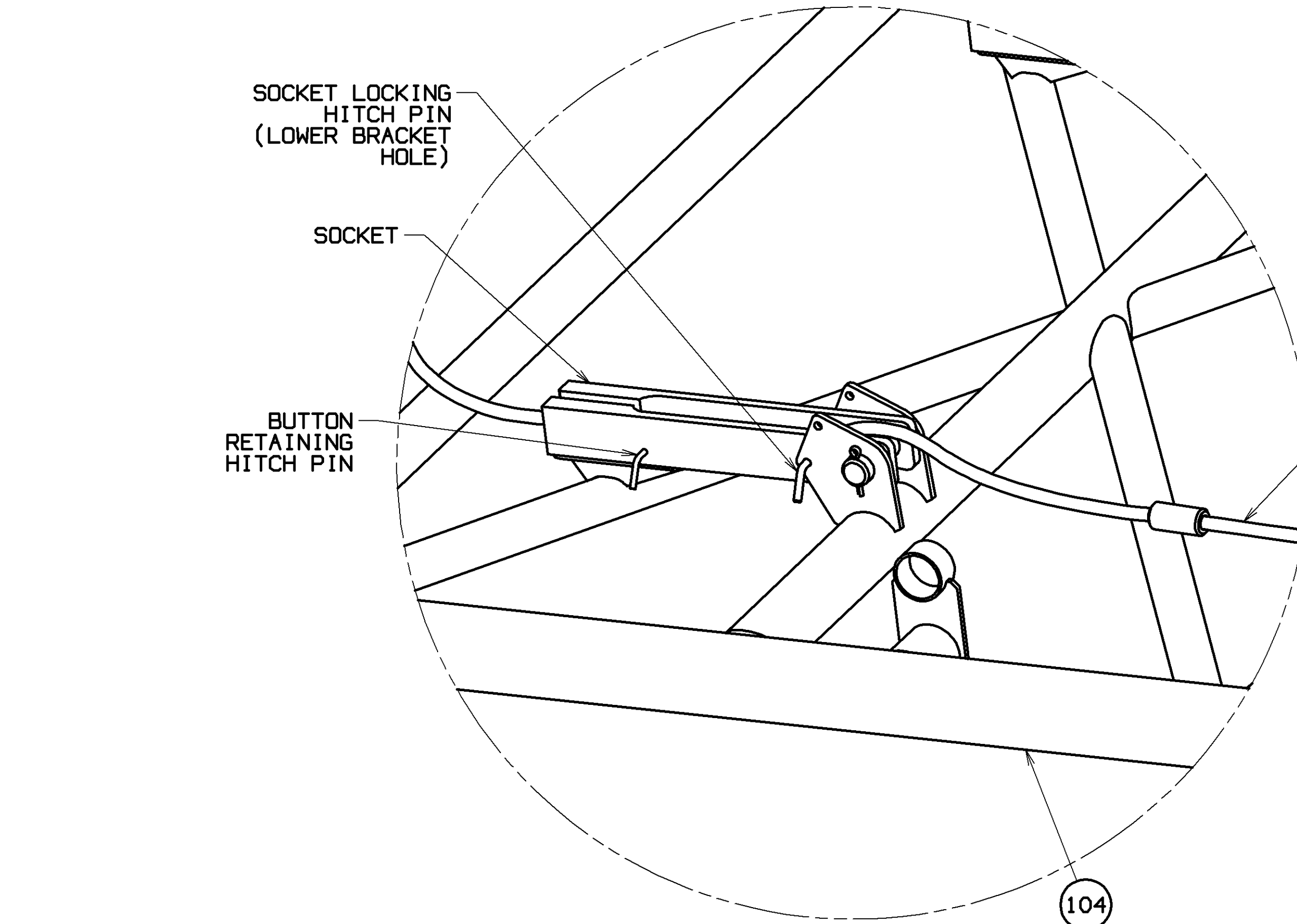
1. FROM STOWED POSITION REMOVE SOCKET LOCKING HITCH PIN FROM SOCKET AND LOWER BRACKET HOLE.
(SEE DETAIL L - STOWED)
PIVOT SOCKET INTO ASSEMBLY PREP POSITION AND REINSTALL SOCKET LOCKING HITCH PIN INTO SOCKET AND UPPER BRACKET HOLE.
(SEE DETAIL L - ASSEMBLY PREP)
2. VERIFY THAT CORRECT PENDANT BUTTON 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 L - ASSEMBLY PREP)
3. RELOCATE SOCKET LOCKING HITCH PIN FROM SOCKET AND UPPER BRACKET HOLE TO LOWER BRACKET HOLE.
(SEE DETAIL L - WORKING)
4. BOOM UP SLOWLY AS PENDANT BECOMES TIGHT AND SOCKET PIVOTS INTO WORKING POSITION.
(SEE DETAIL L - WORKING)

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

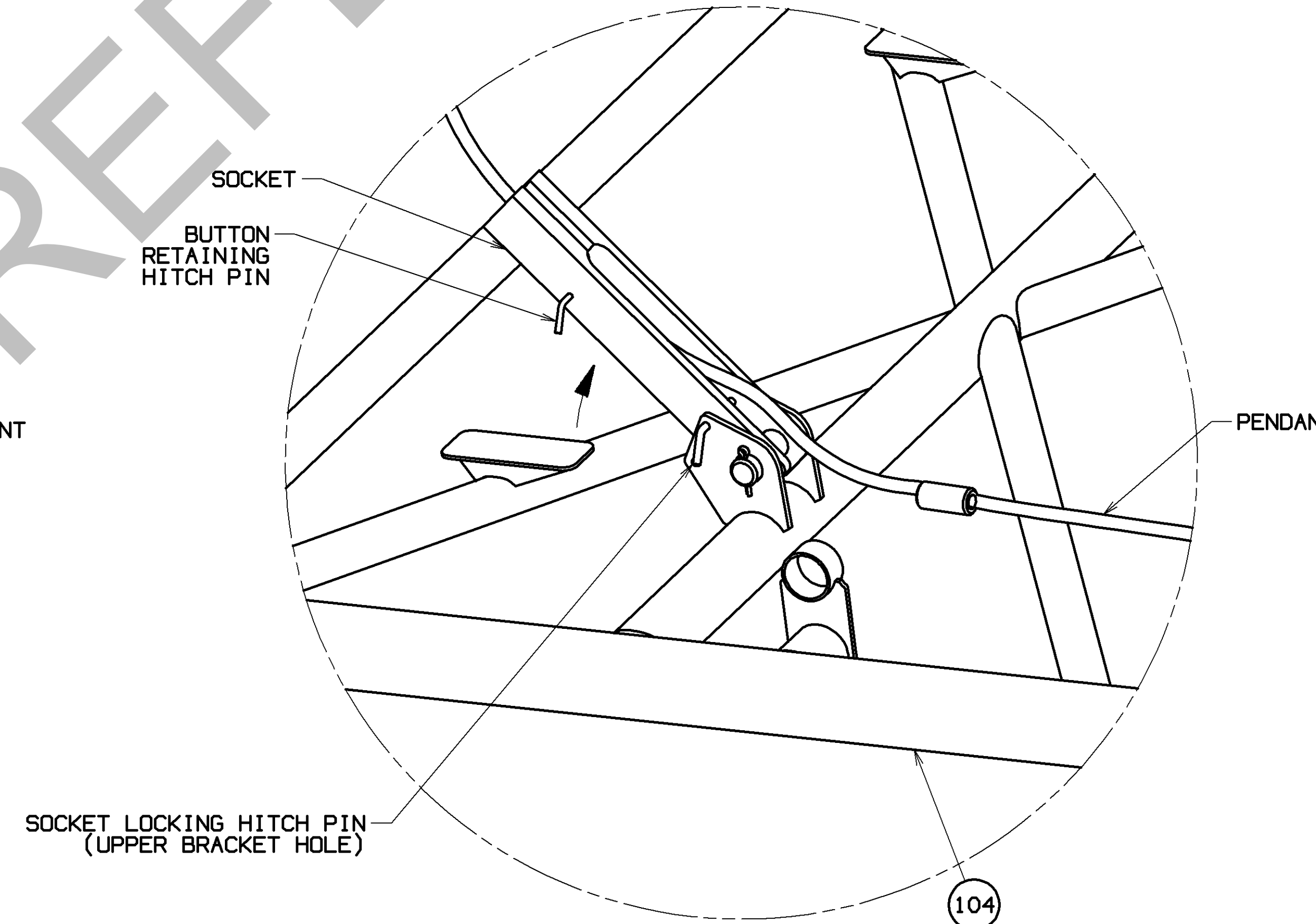
VERIFY THAT SLACK IN PENDANT ALLOWS FOR SOCKET TO PIVOT INTO STOWED POSITION. (SEE DETAIL M).



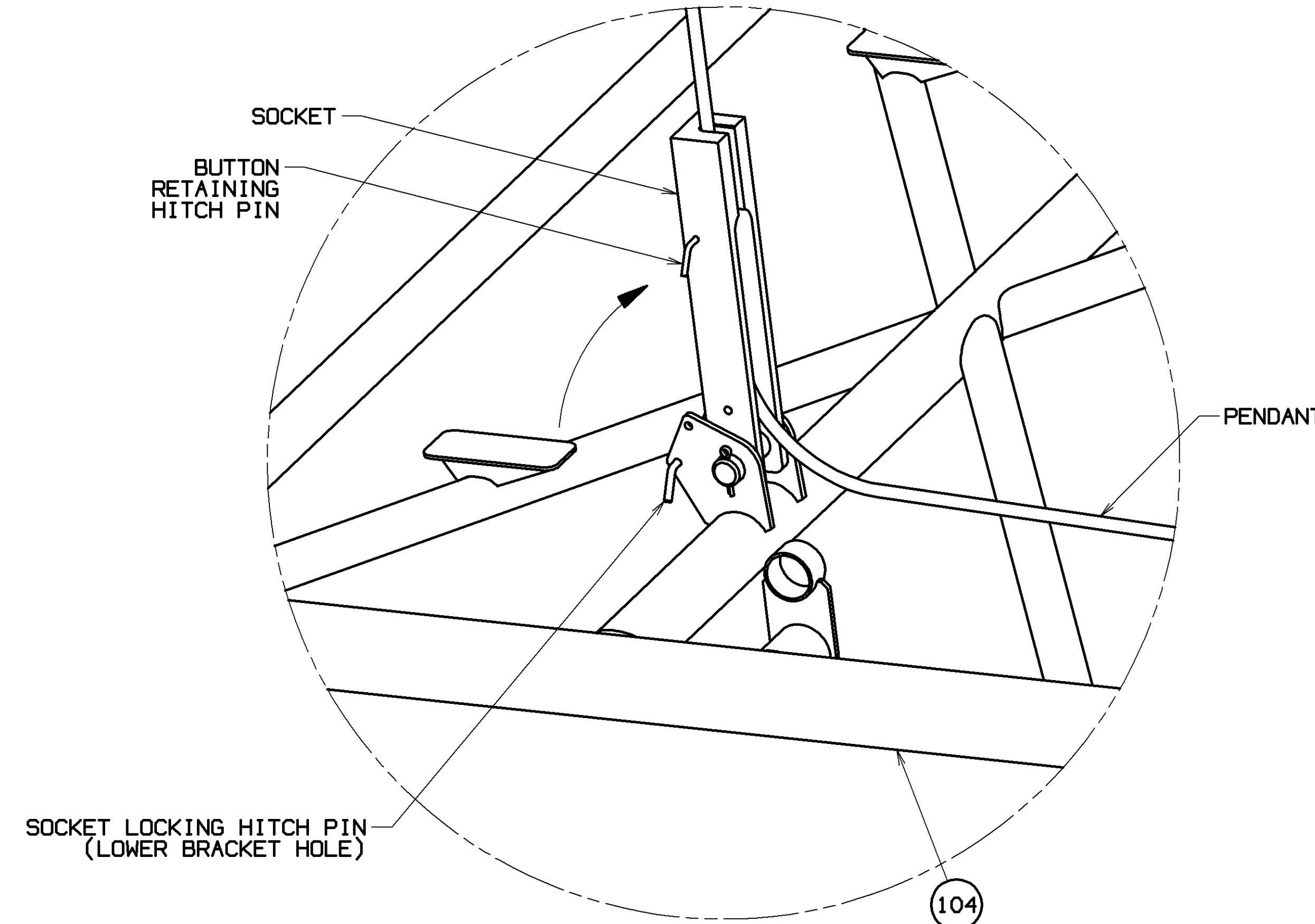
DETAIL M
(FROM SHEET 5)



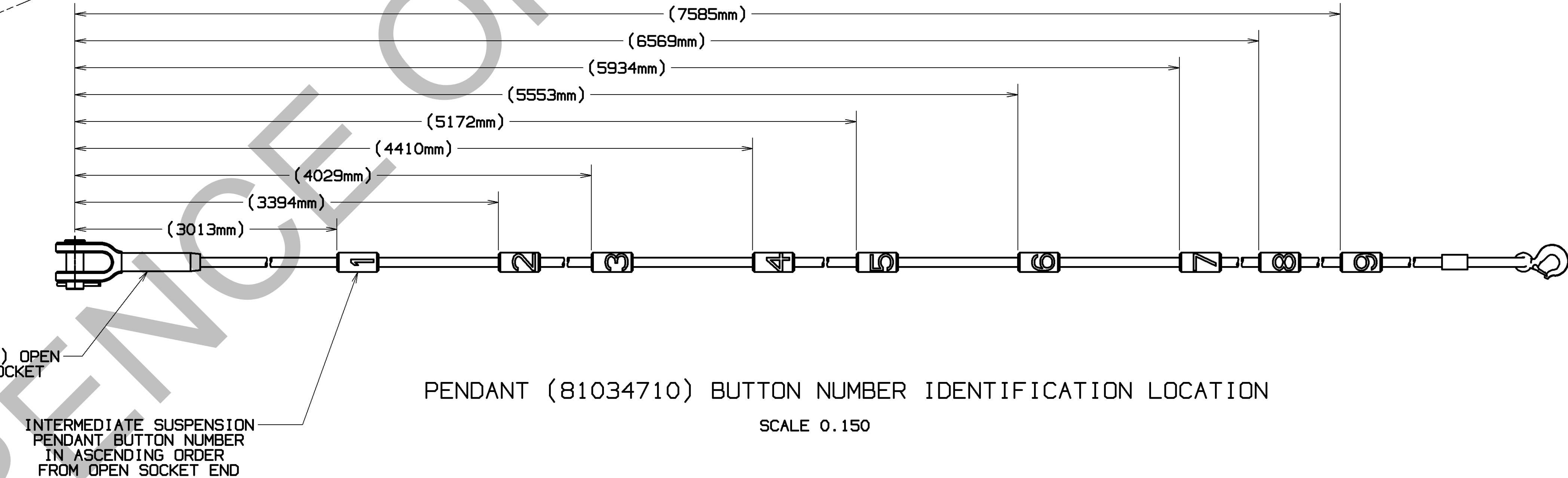
DETAIL L - STOWED
(FROM SHEET 5)



DETAIL L - ASSEMBLY PREP
(FROM SHEET 5)



DETAIL L - WORKING
(FROM SHEET 5)



TOLERANCE UNLESS OTHERWISE SPECIFIED				NOTED		Manitowoc Cranes, Inc.		BOOM RIGGING	
DECIMAL PLACES				DR. AUB		Manitowoc, Wisconsin		B60:500	
FRACTIONS				CK. RHV		MODEL MLC300			
ANGLES				APP. DLG					