

TABLE FOR OPTIONAL I.D. TAG NO. PER SPECIFIC SERIAL NUMBER		
STANDARD I.D. TAG#	OPTIONAL I.D. TAG# PER S/N	SERIAL NUMBERS
81027804	81027805	689535- 799165 1791626-1802759
81027809	81027810	663556- 796718 1780713-1782931
81027812	81027813	757034- 806114 1757058-1757085
81027815	81027816	731934- 799166 1692815-1781150
81027821	81027822	668416- 797214 1776722-1778448

BILL OF MATERIAL			
QTY	DESCRIPTION	MATERIAL	REF. NO.
BOOM RIGGING B87:505-500			
1	POINT ASSY EXT UPPER #58	A11993	12
2			
3	BUTT ASSY #500 8.00 M	81028036	4
4	INSERT ASSY EQ #505 12M XH	80134705	35
5			
6	TOP ASSY #500W, 3.0 M	84052213	2

NO. REQ'D FOR THE FOLLOWING ITEMS ARE IN THE BOOM LENGTH TABLE			
100	INSERT ASSY 12M H #500	81027803	3
101	INSERT ASSY 12M #500	81027808	5
102	INSERT ASSY 12M ED M #500	81027811	6
103	INSERT ASSY 6M #500	81027820	9
104	INSERT ASSY 3M #500	80107717	27
105	INSERT ASSY #505 12M H	84048756	18
106	SUSPENSION WIRE ROPE	84051095	11
107			
108	INSERT ASSY #505/500 12M H	84047995	7
109	INSERT ASSY 12M H #500/505	84048000	8
110	INSERT ASSY #500/505 12M H	80111376	28
111	INSERT ASSY #505/500 12M H	80111380	29
112	INSERT ASSY #505/500 12M H	80126409	30
113	INSERT ASSY #500/505 12M H	80126413	31
114	SUSPENSION WIRE ROPE #505	80135440	41
115	GUIDE ASSY #505	80135474	
116	INSERT ASSY 12M #505 XH	80134701	32
117	INSERT ASSY #505 12M H	80137011	33
118	INSERT ASSY 12M #500 L	81027814	34

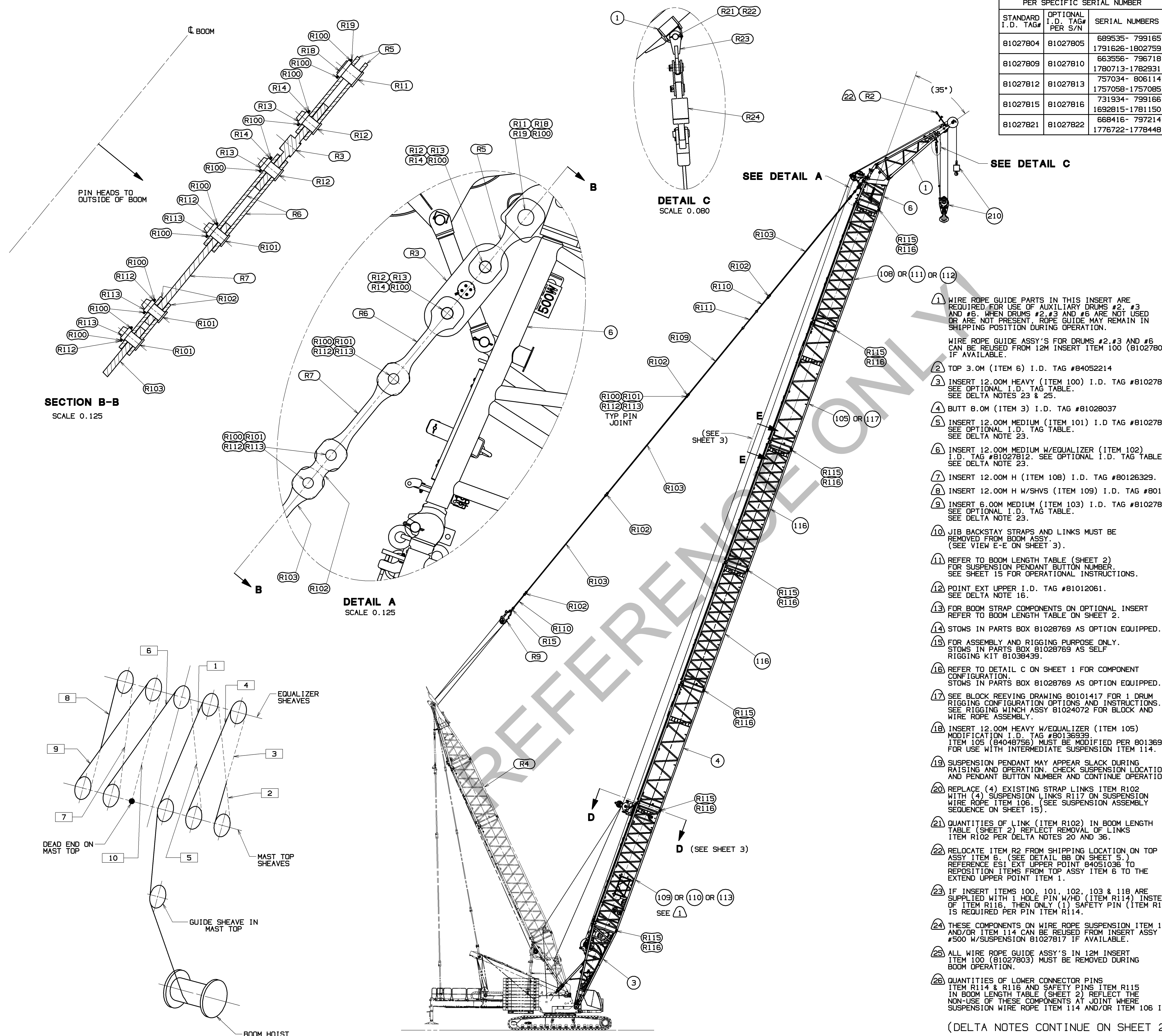
OPTION 1: HOOK BLOCKS			
210	HOOK BLOCK SHIP LOOSE OPTIONS	80136699	17

BASIC REFERENCE ITEMS			
R1			
R2	1	ESI WARNING LIGHT	80102557
R3	2	LOAD CELL LINK 145.150 KGS	84038493
R4	1	MAST RIGGING M11:503	84053403
R5	4	STRAP #500 BOOM	84052200
R6	4	STRAP #500 BOOM	84052201
R7	2	STRAP .62M #500	84052203
R8			
R9	1	EQUALIZER ASSY	81029025
R10			
R11	4	PIN 1 HOLE W/HD 100.0 DIA X 94.3 LG	81029670
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 ED TO BOOM STRAP	81036487
R16			
R17			
R18	4	COLLAR 101MM I.D.	A12945
R19	4	PIN 2 HOLE 12.7 DIA X 128.0 LG	A12946
R20			
R21	1	PIN 1 HOLE W/HD 2.25 DIA X 4.02 LG	A10670
R22	1	PIN COTTER 1/2 DIA X 3.50 LG	562171
R23	1	LINK CROSS, 58.8 DIA HOLE	80102833
R24	1	LINK ASSY DEAD END	81042356

NO. REQ'D FOR THE FOLLOWING REFERENCE ITEMS ARE IN THE BOOM LENGTH TABLE (SHEET 2)			
R100		PIN COTTER 3/16 DIA X 1.50 LG	562085
R101		PIN 1 HOLE W/HD 65.0 DIA X 94.3 LG	81024951
R102		LINK #500 BOOM	81024955
R103		STRAP 11.78M #500	81027401
R104		STRAP 5.78M #500	81029621
R105		STRAP 2.78M #500	80107907
R106			
R107		LINK #505 BOOM	84051117
R108			
R109		STRAP 8.07M #500	81036552
R110		STRAP 1.69M #500	81036553
R111		LINK #500 BOOM	81036554
R112		PIN 2 HOLES 12.7 DIA X 93.0 LG	A11799
R113		COLLAR 66MM I.D.	A11800
R114		PIN 1 HOLE W/HD 75.80 DIA X 160.4 LG	A13294
R115		PIN SAFETY .243 OD X 5.00	563640
R116		PIN 2 HOLE 75.80 X 171.9 LG	84026091
R117		LINK SUSPENSION	84051117

REFERENCE ITEMS FOR ASSEMBLY AND RIGGING PURPOSE ONLY			
R200			
R201			
R202			
R203	2	SLING 50000 LBS 6.15FT	84018961
R204	4	SLING 13.0 (FT) 40000 (LBS)	84026655
R205	4	SHACKLE 25MT	624759
R206			
R207	4	SLING LIFTING 1 LEG X 40000(LBS) X 9.0(FT)	81038423
R208	4	SHACKLE 20.5T SLING	81041163

PRIVATE LABELING REQUIREMENT TO CONFORM TO SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 05200-05-026
DATE 05-05-22
REV. LTR. A
80134737
SHT 1 OF 13



- 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 3.0M (ITEM 6) I.D. TAG #84052214
- 3 INSERT 12.00M HEAVY (ITEM 100) I.D. TAG #81027804. SEE OPTIONAL I.D. TAG TABLE. SEE DELTA NOTES 23 & 25.
- 4 BUTT 8.0M (ITEM 3) I.D. TAG #81028037
- 5 INSERT 12.00M MEDIUM (ITEM 101) I.D. TAG #81027809. SEE OPTIONAL I.D. TAG TABLE. SEE DELTA NOTE 23.
- 6 INSERT 12.00M MEDIUM W/EQUALIZER (ITEM 102) I.D. TAG #81027812. SEE OPTIONAL I.D. TAG TABLE. SEE DELTA NOTE 23.
- 7 INSERT 12.00M H (ITEM 108) I.D. TAG #80126329.
- 8 INSERT 12.00M H W/SHVS (ITEM 109) I.D. TAG #80126330.
- 9 INSERT 6.00M MEDIUM (ITEM 103) I.D. TAG #81027821. SEE OPTIONAL I.D. TAG TABLE. SEE DELTA NOTE 23.
- 10 JIB BACKSTAY STRAPS AND LINKS MUST BE REMOVED FROM BOOM ASSY. (SEE VIEW E-E ON SHEET 3).
- 11 REFER TO BOOM LENGTH TABLE (SHEET 2) FOR SUSPENSION PENDANT BUTTON NUMBER. SEE SHEET 15 FOR OPERATIONAL INSTRUCTIONS.
- 12 POINT EXT UPPER I.D. TAG #81012061. SEE DELTA NOTE 16.
- 13 FOR BOOM STRAP COMPONENTS ON OPTIONAL INSERT REFER TO BOOM LENGTH TABLE ON SHEET 2.
- 14 STOWS IN PARTS BOX 81028769 AS OPTION EQUIPPED.
- 15 FOR ASSEMBLY AND RIGGING PURPOSE ONLY. STOWS IN PARTS BOX 81028769 AS SELF RIGGING KIT 81038439.
- 16 REFER TO DETAIL C ON SHEET 1 FOR COMPONENT CONFIGURATION. STOWS IN PARTS BOX 81028769 AS OPTION EQUIPPED.
- 17 SEE BLOCK REEVING DRAWING 80101417 FOR 1 DRUM RIGGING CONFIGURATION OPTIONS AND INSTRUCTIONS. SEE RIGGING WINCH ASSY 81024072 FOR BLOCK AND WIRE ROPE ASSEMBLY.
- 18 INSERT 12.00M HEAVY W/EQUALIZER (ITEM 105) MODIFICATION I.D. TAG #80136939. ITEM 105 (84048756) MUST BE MODIFIED PER 80136939 FOR USE WITH INTERMEDIATE SUSPENSION ITEM 114.
- 19 SUSPENSION PENDANT MAY APPEAR SLACK DURING RAISING AND OPERATION. CHECK SUSPENSION LOCATION AND PENDANT BUTTON NUMBER AND CONTINUE OPERATION.
- 20 REPLACE (4) EXISTING STRAP LINKS ITEM R102 WITH (4) SUSPENSION LINKS R117 ON SUSPENSION WIRE ROPE ITEM 106. (SEE SUSPENSION ASSEMBLY SEQUENCE ON SHEET 15).
- 21 QUANTITIES OF LINK (ITEM R102) IN BOOM LENGTH TABLE (SHEET 2) REFLECT REMOVAL OF LINKS ITEM R102 PER DELTA NOTES 20 AND 36.
- 22 RELOCATE ITEM R2 FROM SHIPPING LOCATION ON TOP ASSY ITEM 6. (SEE DETAIL BB ON SHEET 5.) REFERENCE ESI EXT UPPER POINT, 84051036 TO REPOSITION ITEMS FROM TOP ASSY ITEM 6 TO THE EXTEND UPPER POINT ITEM 1.
- 23 IF INSERT ITEMS 100, 101, 102, 103 & 118 ARE SUPPLIED WITH 1 HOLE PIN W/HD (ITEM R14) INSTEAD OF ITEM R116, THEN ONLY (1) SAFETY PIN (ITEM R115) IS REQUIRED PER PIN ITEM R114.
- 24 THESE COMPONENTS ON WIRE ROPE SUSPENSION ITEM 106 AND/OR ITEM 114 CAN BE REUSED FROM INSERT ASSY #500 W/SUSPENSION 81027817 IF AVAILABLE.
- 25 ALL WIRE ROPE GUIDE ASSY'S IN 12M INSERT ITEM 100 (81027803) MUST BE REMOVED DURING BOOM OPERATION.
- 26 QUANTITIES OF LOWER CONNECTOR PINS ITEM R114 & R116 AND SAFETY PINS ITEM R115 IN BOOM LENGTH TABLE (SHEET 2) REFLECT THE NON-USE OF THESE COMPONENTS AT JOINT WHERE SUSPENSION WIRE ROPE ITEM 114 AND/OR ITEM 106 IS USED.

(DELTA NOTES CONTINUE ON SHEET 2)

BOOM HOIST REEVING DIAGRAM FOR 10 PART LINE FOR REFERENCE ONLY

83.0 M (272.3 FT)
#505-500 BOOM SHOWN

TOLERANCE UNLESS OTHERWISE SPECIFIED		FINISHING		MATERIAL	
DECIMAL PLACES	FRACTIONS	DR. RHY	DR. DLG	DR. DLG	APP. JRR
(1) PLACE 0.00	±.12	±.12	±.12	±.12	±.12
(2) PLACE 0.00	±.06	±.06	±.06	±.06	±.06
(3) PLACE 0.000	±.006	±.006	±.006	±.006	±.006

ITEMS REQ'D FOR VARIOUS BOOM LENGTHS - SEE SHEETS 4, 5, 6 & 7 FOR BOOM MAKE-UP

BILL OF MATERIAL

ITEM NO.	XHEAVY	HEAVY				MEDIUM				LIGHT	STRAP				LINK				PIN		COTTER	COLLAR	SUSPENSION	LWR CONN PIN	SAFETY PIN	GUIDE	SUSPENSION	
		116	108 OR 111 OR 112	109 OR 110 OR 113	105 OR 117	100	101	102	103	104	118	R103	R104	R105	R109	R110	R102	R107	R111	R117	R101	R112	R100	R113	106 (19)	R114 AND /OR R116	R115	115
BOOM LENGTH	INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) ASSY 505/500	INSERT 12M (39.4FT) ASSY 500/505 W/SHEAVE	INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) ASSY	INSERT 12M (39.4FT) ASSY	INSERT 6M (19.7FT) ASSY	INSERT 3M (9.8FT) ASSY	INSERT 12M (39.4FT) ASSY	STRAP 12M (39.4FT)	STRAP 6M (19.7FT)	STRAP 3M (9.8FT)	STRAP LONG W/EQUAL	STRAP SHORT W/EQUAL	LINK SEE (21)	LINK CONN W/SUSP	LINK W/EQUAL	LINK CONN W/SUSP	PIN	PIN	COTTER	COLLAR	PENDANT BUTTON NUMBER SEE (41)	PIN SEE (23) (26)	SAFETY PIN SEE (23) (26)	WIRE ROPE GUIDE UPPER	PENDANT BUTTON NUMBER SEE (41)
METERS	FEET																											
83	272.3	2	1	1	1	0	0	0	0	0	6	0	0	2	4	20	0	4	0	28	28	72	28	---	14	28	0	---
86	282.2	2	1	1	1	0	0	0	0	1	6	0	2	2	4	24	0	4	0	32	32	80	32	---	16	32	0	---
89	292.0	2	1	1	1	0	0	0	1	0	6	2	0	2	4	20	4	4	0	32	32	80	32	---	14	28	1	1
92	301.8	2	1	1	1	0	0	0	1	1	6	2	2	2	4	24	4	4	0	36	36	88	36	---	16	32	1	1
95	311.7	2	1	1	1	1	0	0	0	0	8	0	0	2	4	20	4	4	0	32	32	80	32	---	14	28	1	2
98	321.5	2	1	1	1	1	0	0	0	1	8	0	2	2	4	24	4	4	0	36	36	88	36	---	16	32	1	2
101	331.4	2	1	1	1	1	0	0	1	0	8	2	0	2	4	24	4	4	0	36	36	88	36	---	16	32	1	3
104	341.2	2	1	1	1	1	0	0	1	1	8	2	2	2	4	28	4	4	0	40	40	96	40	---	18	36	1	3
107	351.0	2	1	1	1	1	OR 0/1	1	0	0	8	0	0	4	6	24	4	4	0	40	40	96	40	---	16	32	1	4
110	360.9	2	1	1	1	1	OR 0/1	1	0	1	8	0	2	4	6	28	4	8	0	44	44	104	44	---	18	36	1	4
113	370.7	2	1	1	1	1	OR 0/1	1	0	1	8	2	0	4	6	28	4	8	0	44	44	104	44	---	18	36	1	4
116	380.6	2	1	1	1	1	OR 0/1	1	0	1	8	2	2	2	4	32	4	8	0	48	48	112	48	---	20	40	1	5
119	390.4	2	1	1	1	1	OR 1/2	1	0	0	10	0	0	4	6	28	4	8	0	44	44	104	44	---	18	36	1	5
122	400.3	2	1	1	1	1	OR 1/2	1	0	1	10	0	2	4	6	32	4	8	0	48	48	112	48	---	20	40	1	5
125	410.1	2	1	1	1	1	OR 1/2	1	0	1	10	2	0	4	6	32	4	8	0	48	48	112	48	---	20	40	1	6
128	419.9	2	1	1	1	1	OR 1/2	1	0	1	10	2	2	2	4	32	4	8	4	52	52	120	52	3	20	40	1	6
131	429.8	2	1	1	1	1	OR 1/2	1	0	0	12	0	0	4	6	28	4	8	4	48	48	112	48	3	18	36	1	7

(DELTA NOTES CONTINUED FROM SHEET 1)

- (27) INSERT 3.00M MEDIUM (ITEM 104) I.D. TAG #80107718.
- (28) INSERT 12.00M HEAVY W/SHEAVES (ITEM 110) I.D. TAG #80126392.
- (29) INSERT 12.00M H (ITEM 111) I.D. TAG #80126391.
- (30) INSERT 12.00M H (ITEM 112) I.D. TAG #80126410 (POST-MACHINED) OR I.D. TAG #80137641 (PRE-MACHINED).
- (31) INSERT 12.00M HEAVY W/SHEAVES (ITEM 113) I.D. TAG #80126414 (POST-MACHINED) OR I.D. TAG #80136021 (PRE-MACHINED).
- (32) INSERT 12.00M XHEAVY (ITEM 116) I.D. TAG #80134703.
- (33) INSERT 12.00M HEAVY W/EQUALIZER (ITEM 117) I.D. TAG #80135490.
- (34) INSERT 12.00M LIGHT (ITEM 118) I.D. TAG #81027815. SEE OPTIONAL I.D. TAG TABLE. SEE DELTA NOTE 23.
- (35) INSERT 12.00M XHEAVY W/EQUALIZER (ITEM 4) I.D. TAG #80134708.
- (36) REPLACE (4) EXISTING STRAP LINKS ITEM R102 WITH (4) SUSPENSION LINKS R107 ON SUSPENSION WIRE ROPE ITEM 114. (SEE SUSPENSION ASSEMBLY SEQUENCE ON SHEET 12).
- (37) BOOM STRAPS AND LINKS ON 12M HEAVY INSERT (ITEM 109 OR 110 OR 113) MAY REMAIN ON INSERT DURING WORKING CONDITIONS. (SEE DETAIL G ON SHEET 7). (UNUSED STOWED BOOM STRAPS, LINKS & HARDWARE ARE NOT ACCOUNTED FOR IN BOOM LENGTH TABLE ON SHEET 2).
- (38) MAST RIGGING M11:503 (R4) CONTAINS MAST BUTT ASSY 84041201 WITH "ACTIVE" FIXED MAST STOP.
- (39) ALL MEDIUM INSERTS (ITEMS 101, 102, 103 & 104) MAY BE ASSEMBLED IN ANY ORDER ON BOOM LENGTHS 92M, 104M, 110M, 113M, AND 116M.
- (40) BOOM BLOCKING TO BE PLACED AT INSERT NEXT TO SUSPENSION BEAM (ITEM 106 AND 114).
- (41) REFER TO BOOM LENGTH TABLE (SHEET 2) FOR SUSPENSION PENDANT BUTTON NUMBER. SEE SHEET 12 FOR OPERATIONAL INSTRUCTIONS.

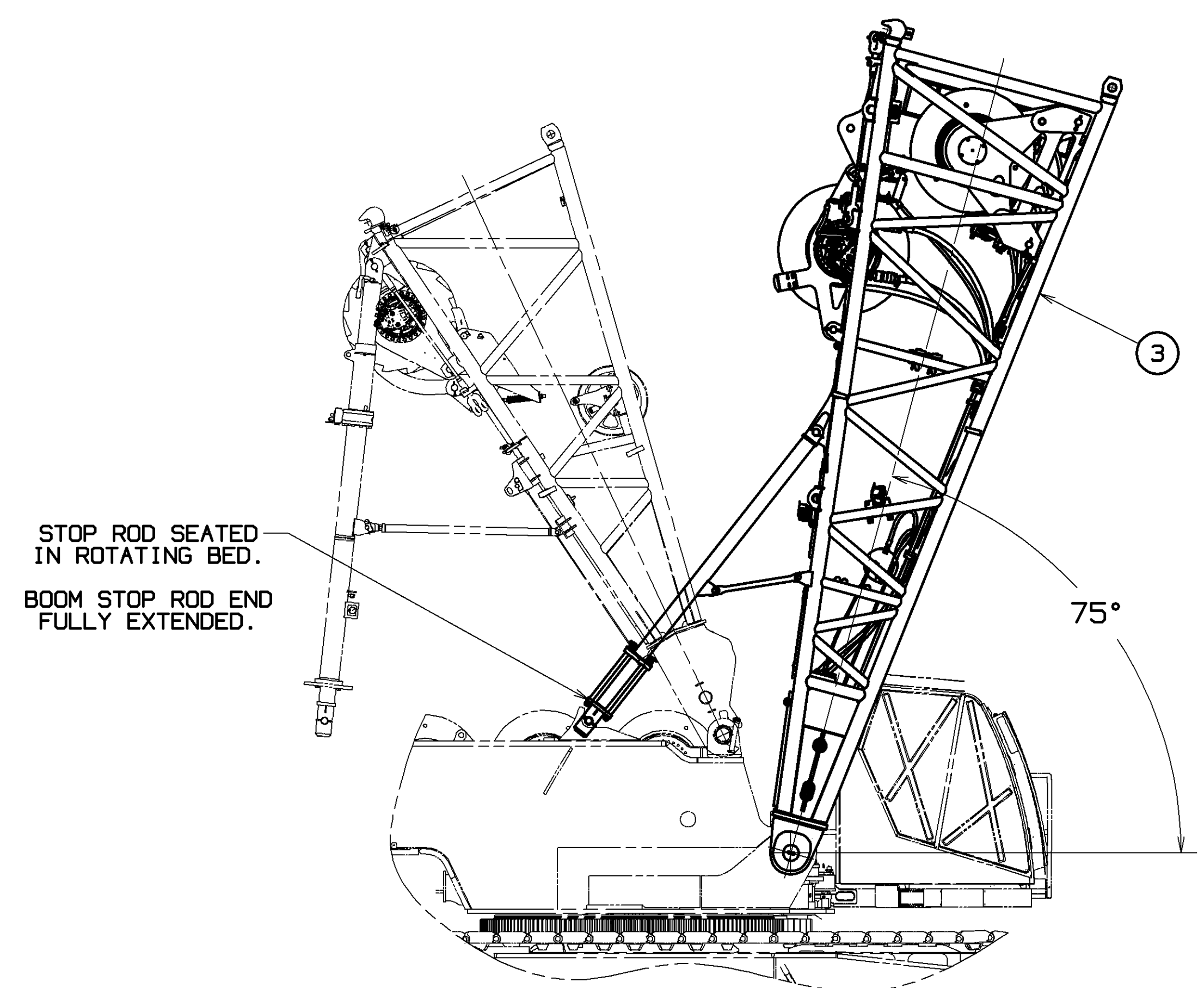
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SHT 2 OF 13

REFERENCE ONLY

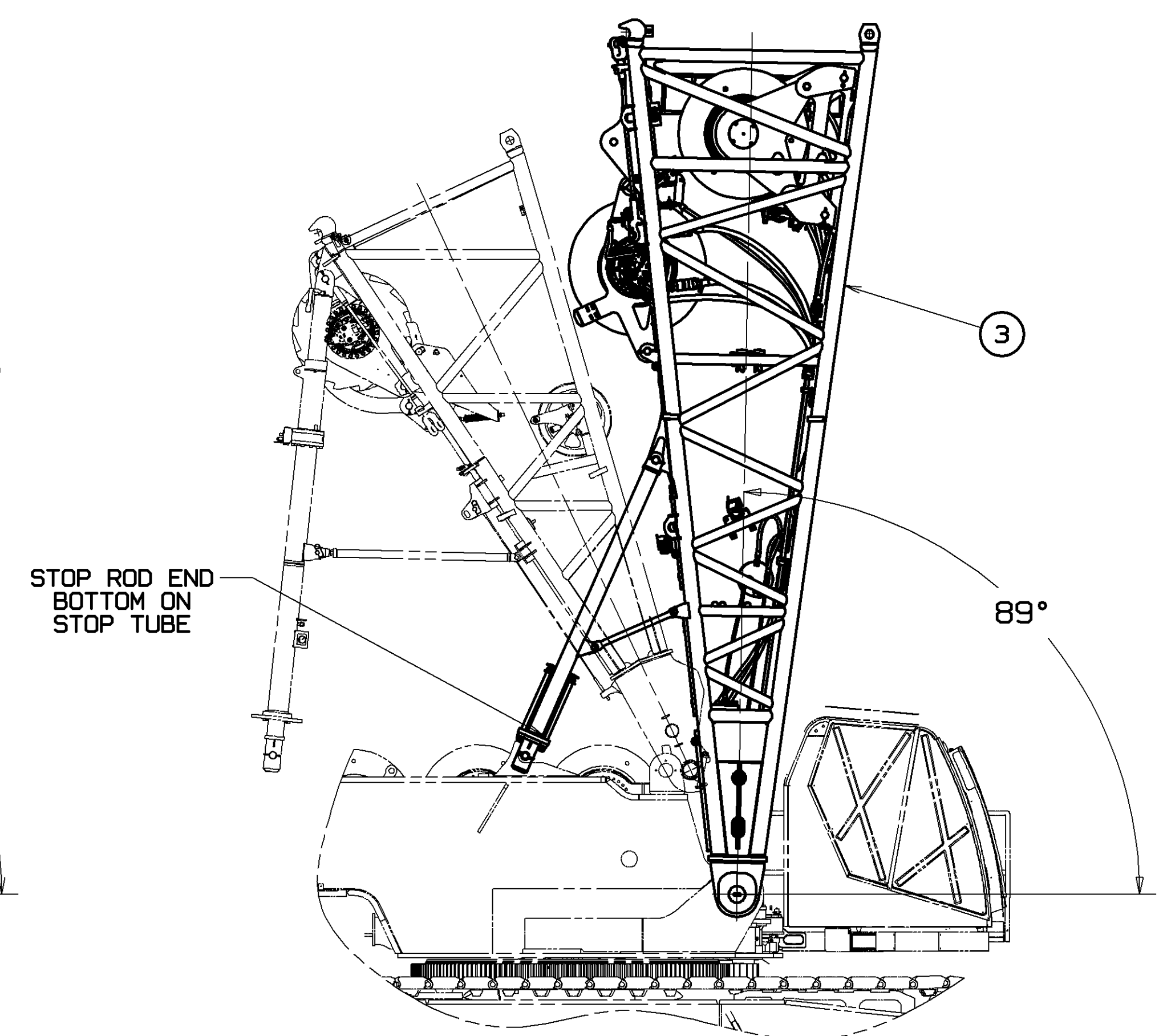
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PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 6829103794 FOR COMPONENTS LISTED IN SECTION 05-05

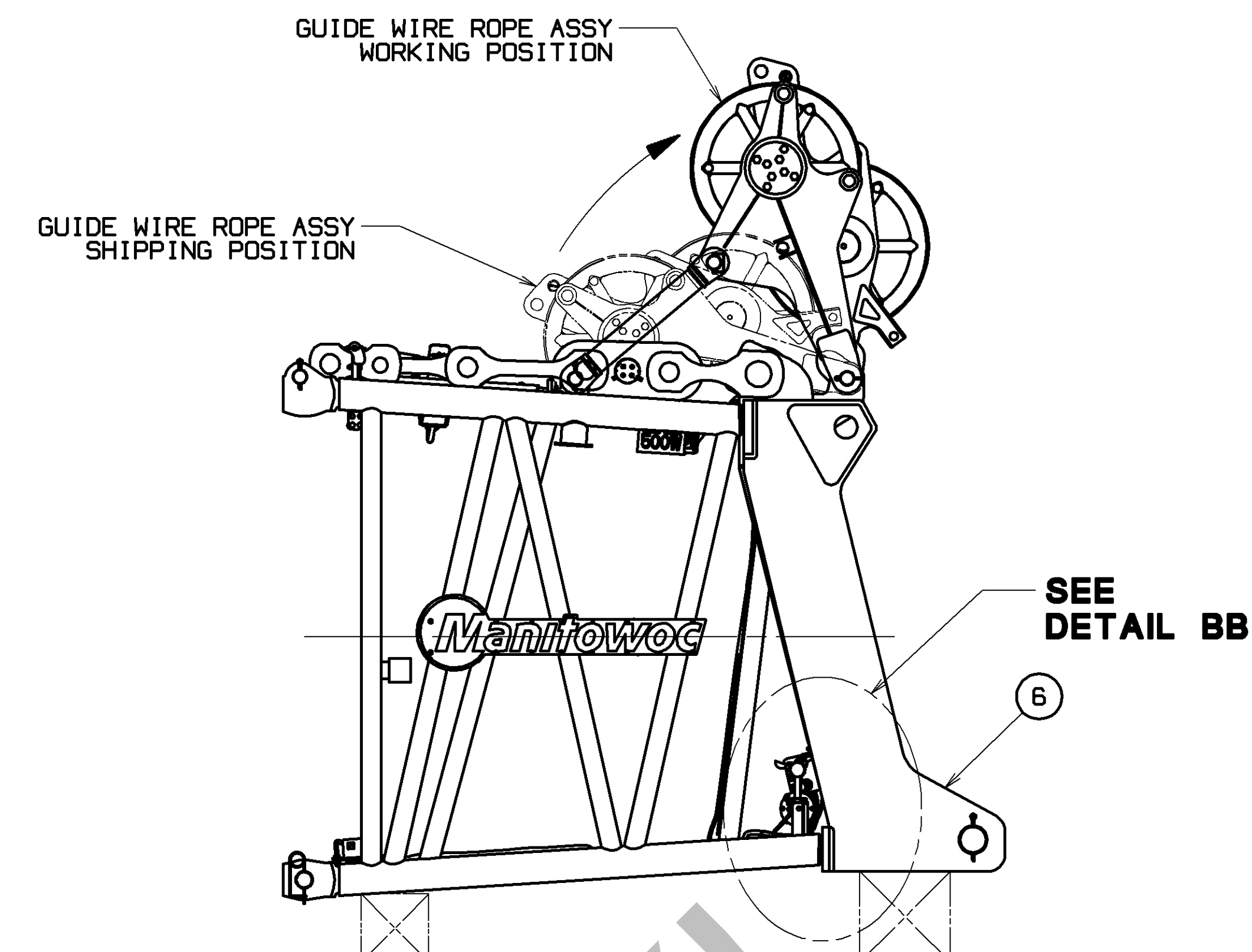
BILL OF MATERIAL		ASSEMBLIES USED ON
QTY	DESCRIPTION	MATERIAL



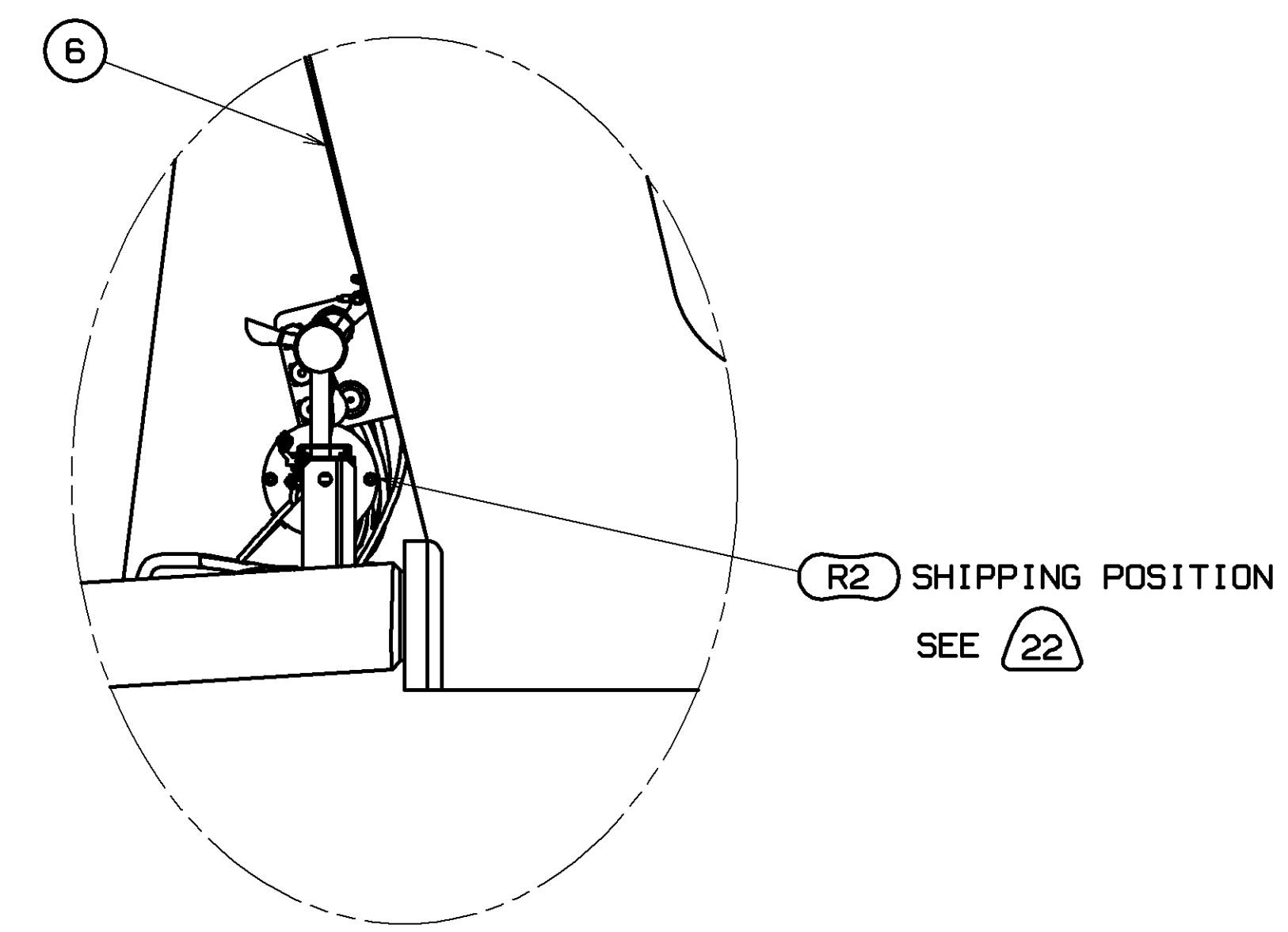
BOOM STOP START OF CUSHION
SCALE 0.025



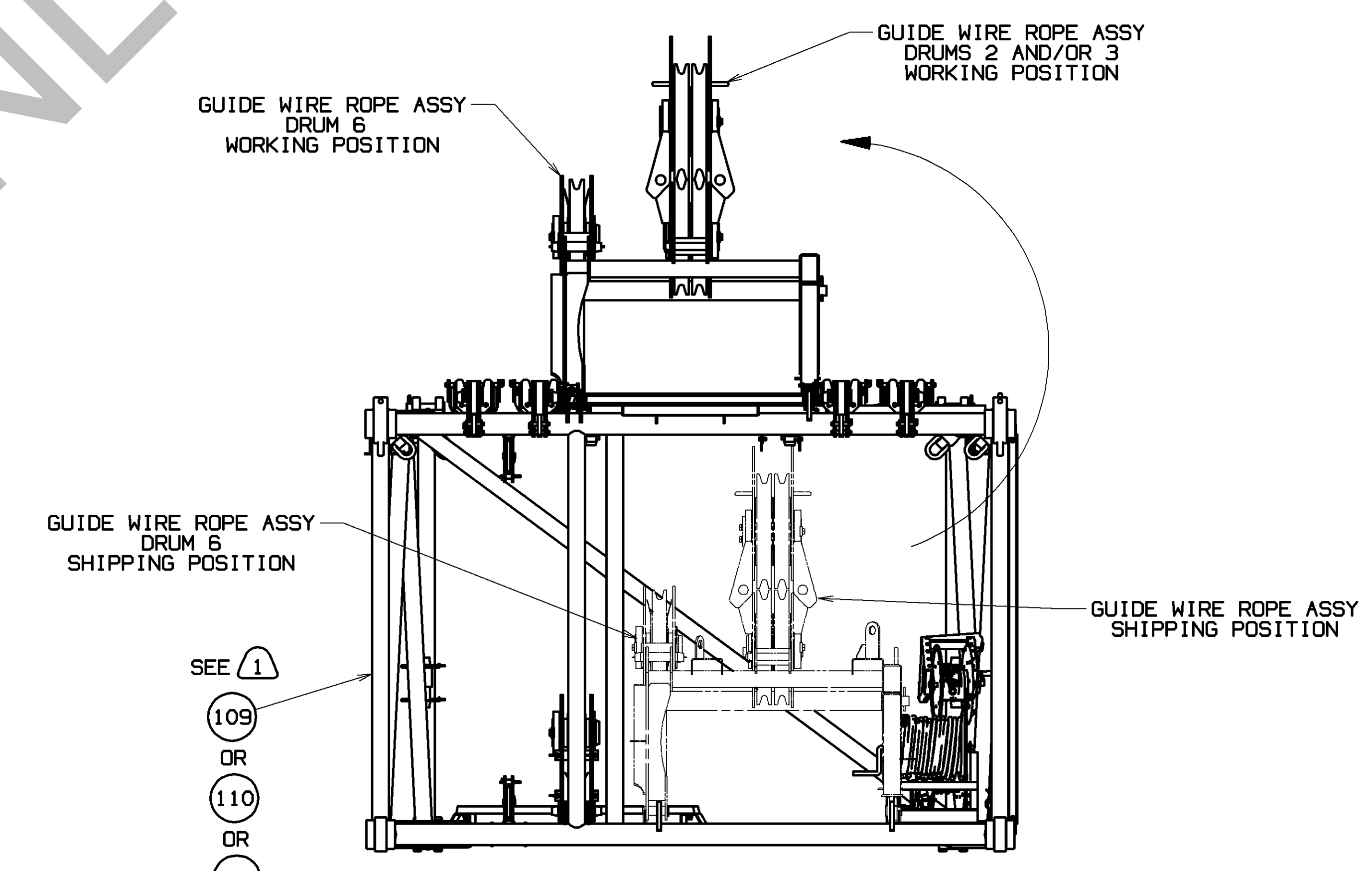
BOOM STOP PHYSICAL STOP
SCALE 0.025



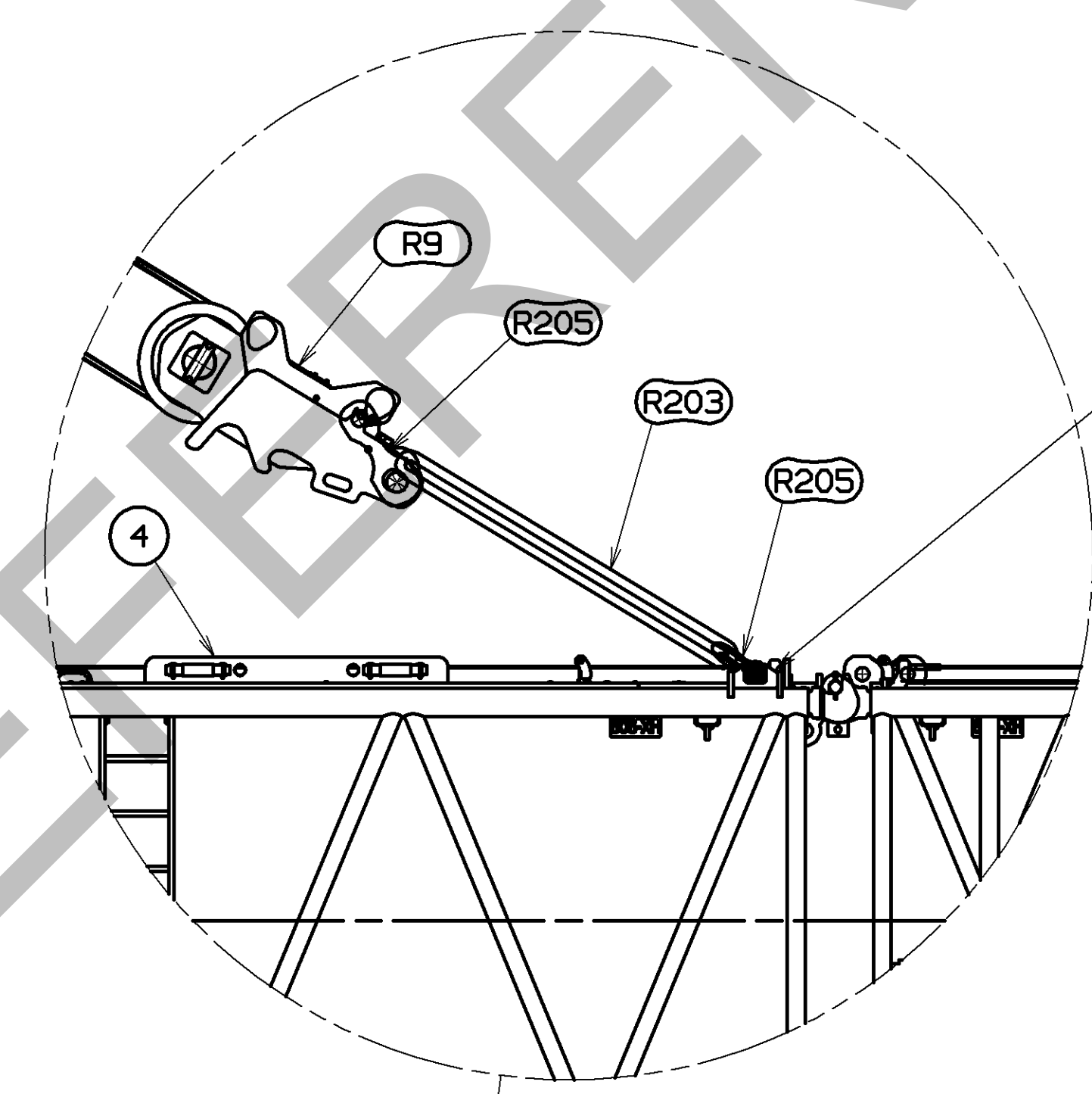
BOOM TOP WIRE ROPE GUIDE ARRANGEMENT
SCALE 0.050



DETAIL BB
SCALE 0.125

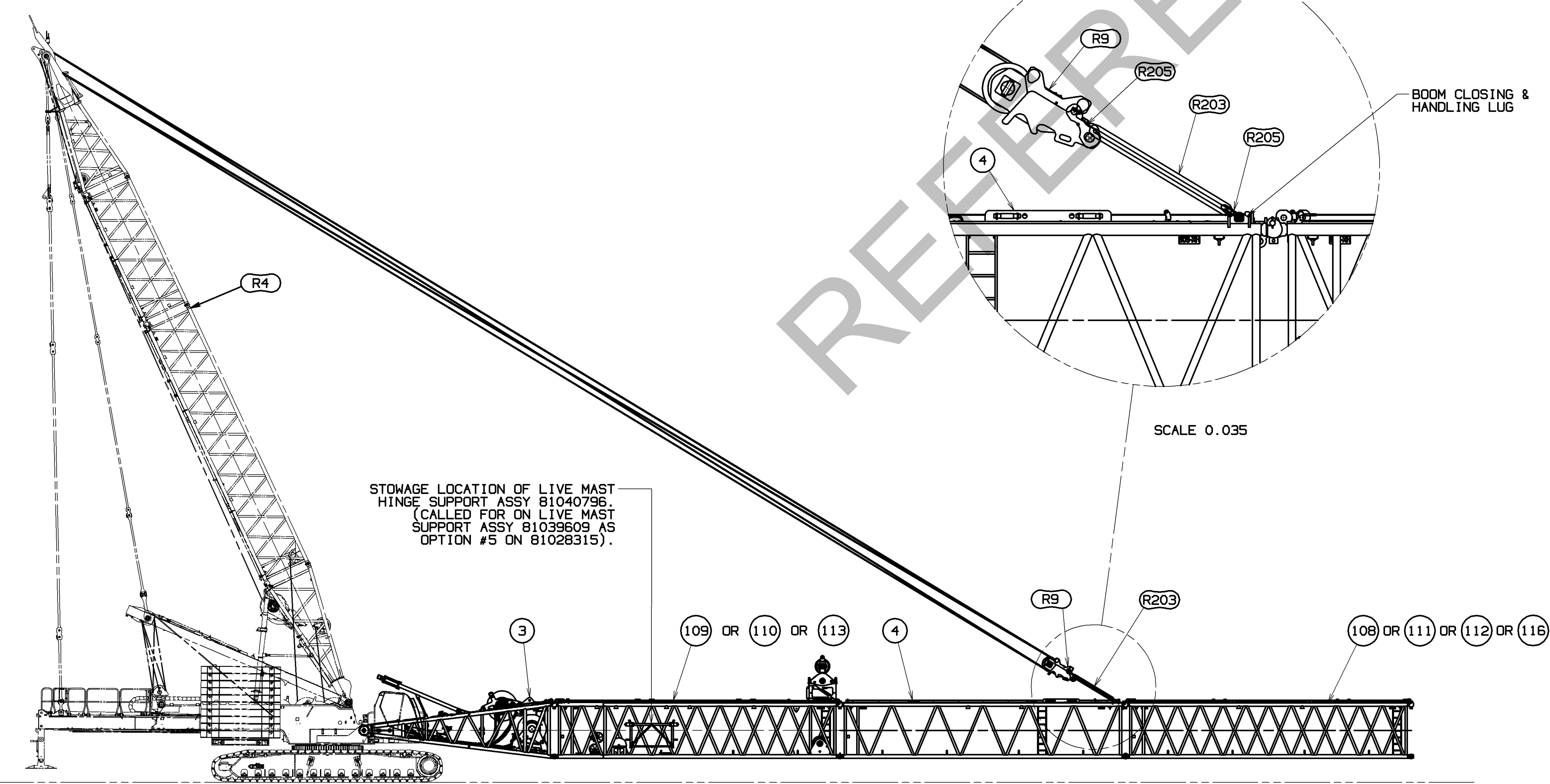


SECTION D-D
12M 3.5M WIDE HEAVY INSERT (ITEM 109 OR 110 OR 113)
ROPE GUIDE ARRANGEMENT
(FROM SHEET 1)
SCALE 0.050

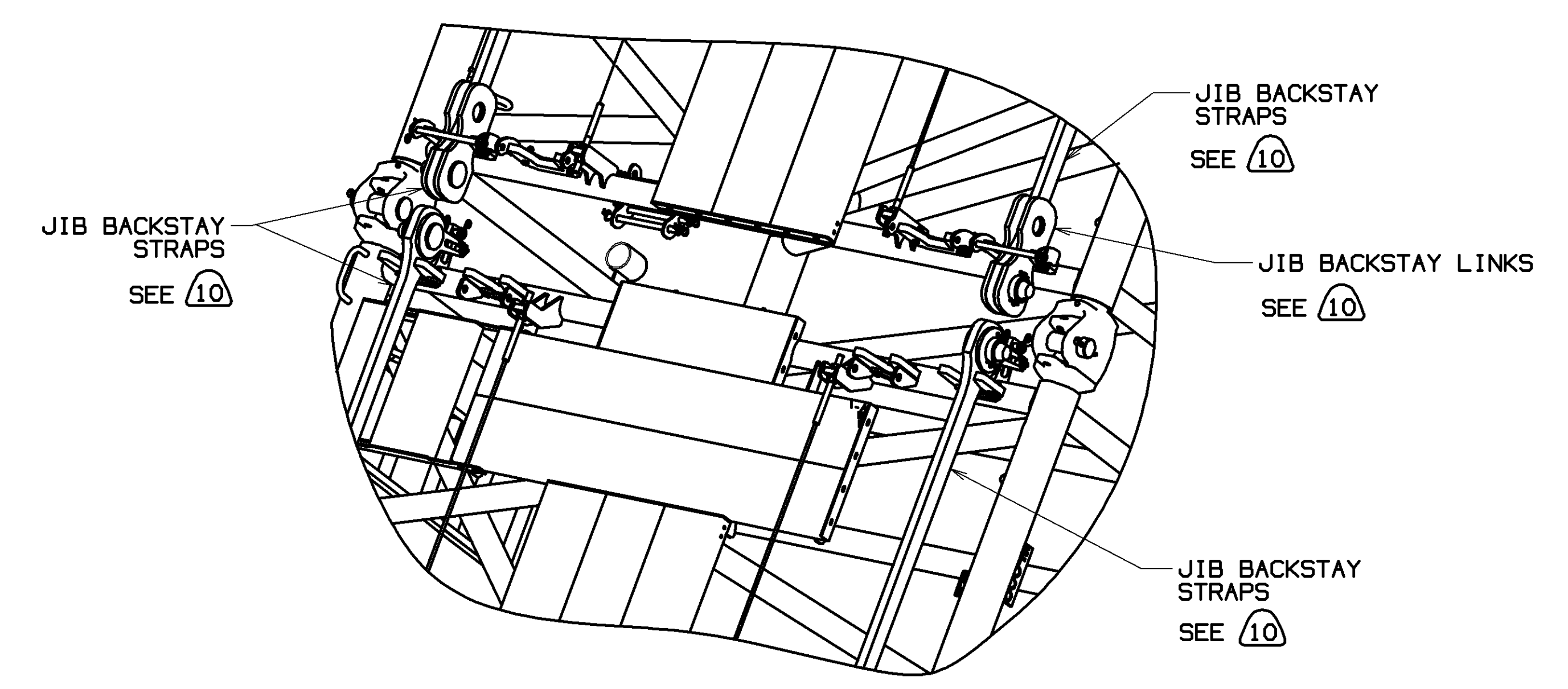


BOOM CLOSING & HANDLING LUG

SCALE 0.035



BOOM HANDLING WITH EQUALIZER
(WITH EQUALIZER ATTACHED TO BOOM INSERTS
MAXIMUM BOOM INSERTS THAT CAN BE CANTILEVERED
BEYOND 12M EQUALIZER INSERT IS AS SHOWN)



VIEW E-E
BOOM ASSY WITH BOOM STRAPS WORKING
AND JIB BACKSTAY STRAPS STOWED
REMOVE JIB BACKSTAY LINKS
AND STRAPS FROM BOOM ASSY
(FROM SHEET 1)
SCALE 0.070

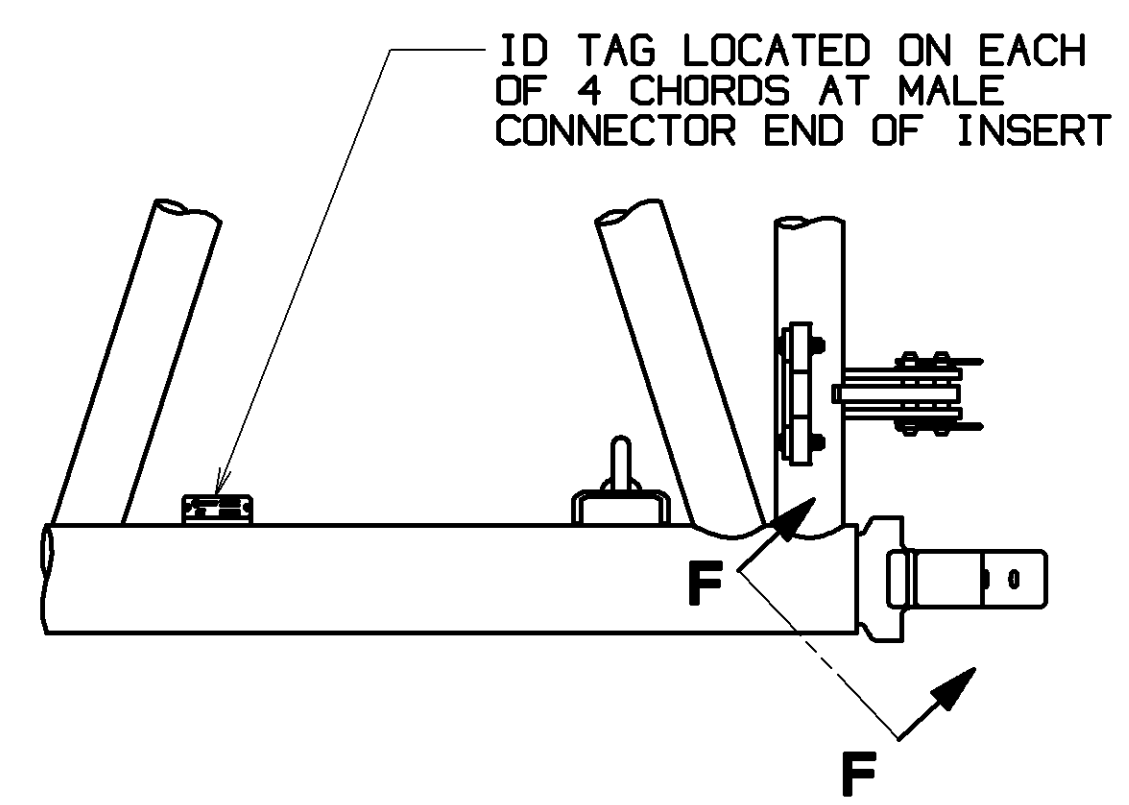
STOWAGE LOCATION OF LIVE MAST
HINGE SUPPORT ASSY 81040796.
(CALLED FOR ON LIVE MAST
SUPPORT ASSY 81039609 AS
OPTION #5 ON 81028315).

REFERENCE ONLY

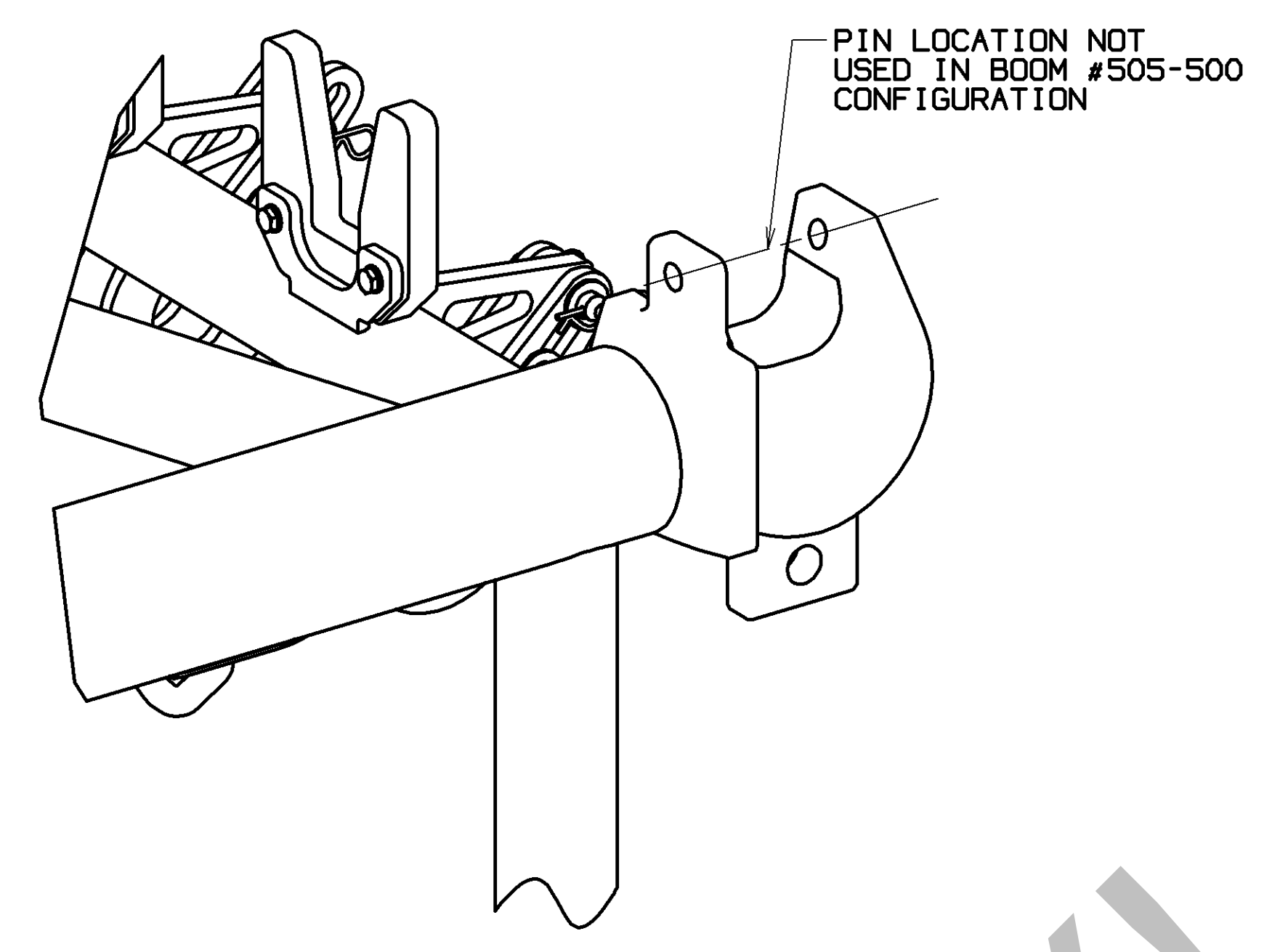
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SHT 3 OF 13

PRIVATE LABELING
REQUIREMENT TO
CONFORM TO
ENGINEERING
SPECIFICATION
8629103794 FOR
COMPONENTS LISTED
IN 86290-05-026
DATE
05-05-22
REV. LTR.
A

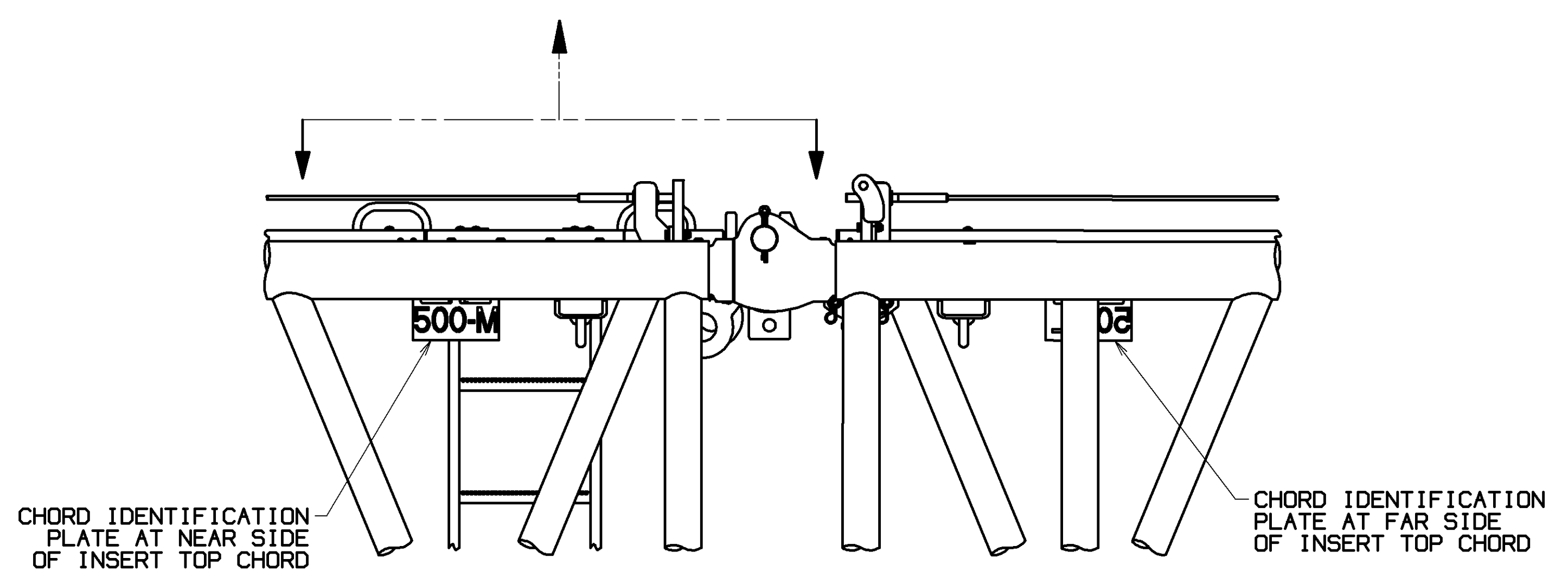
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	<small>DECIMAL PLACES</small>	<small>FABRICATION</small>		
	<small>(1) PLACE 0.5</small> <small>(2) PLACE 0.00</small> <small>(3) PLACE 0.000</small>	<small>± 0.12</small> <small>± 0.18</small> <small>± 0.08</small> <small>± 0.12</small> <small>± 0.015</small> <small>± 0.006</small> <small>± 0.006</small>		
	<small>ANGLES</small>	<small>± 1°</small> <small>± 30'</small>		
<small>BOOM RIGGING</small>			<small>B87:505-500</small>	<small>80134737</small>



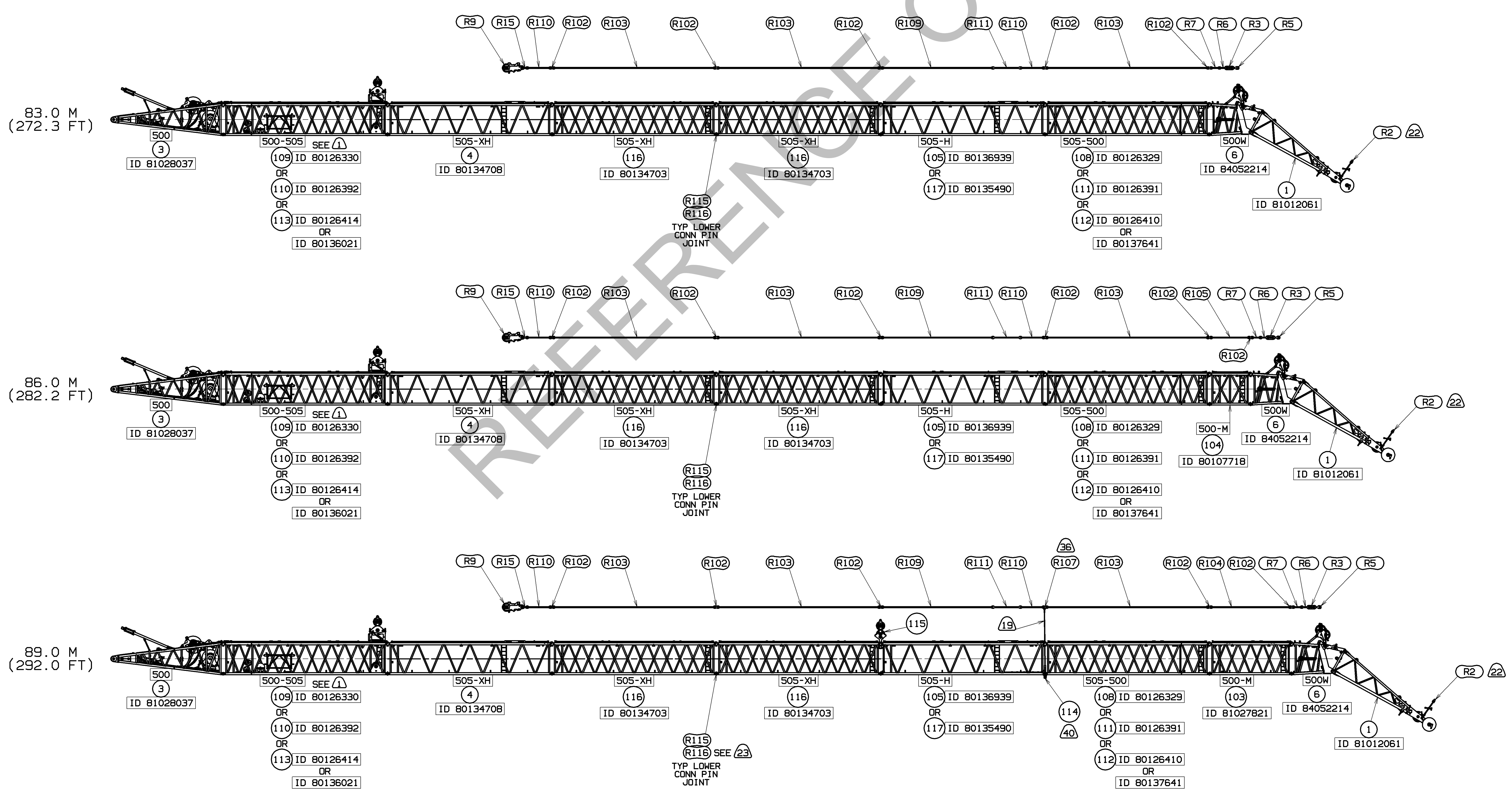
TYPICAL LOCATION OF INSERT ID TAGS
SCALE 0.100



VIEW F-F
UPPER MALE CONNECTOR PIN HOLE
SCALE 0.250



TYPICAL LOCATION OF BOOM CHORD IDENTIFICATION PLATE
SCALE 0.100



RECOMMENDED BOOM MAKEUP
FOR TYP STRAP PIN JOINT SEE SECTION B-B
AND DETAILS H, J, K & L

TOLERANCE UNLESS OTHERWISE SPECIFIED		MANUFACTURING	DATE
DECIMAL PLACES	FABRICATION	DR: RHY	05-05-22
(1) FINE 0.5	F. 10 FEET > 10 FEET	CK: DLG	
(2) PLACE 0.00	F. 0.06	APP: JRR	
(3) PLACE 0.000	F. 0.015		
ANGLES	11.25°		

MANITOWOC CRANES, INC.	BOOM RIGGING
Manitowoc, Wisconsin	B87:505-500
MODEL: MLC300	

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

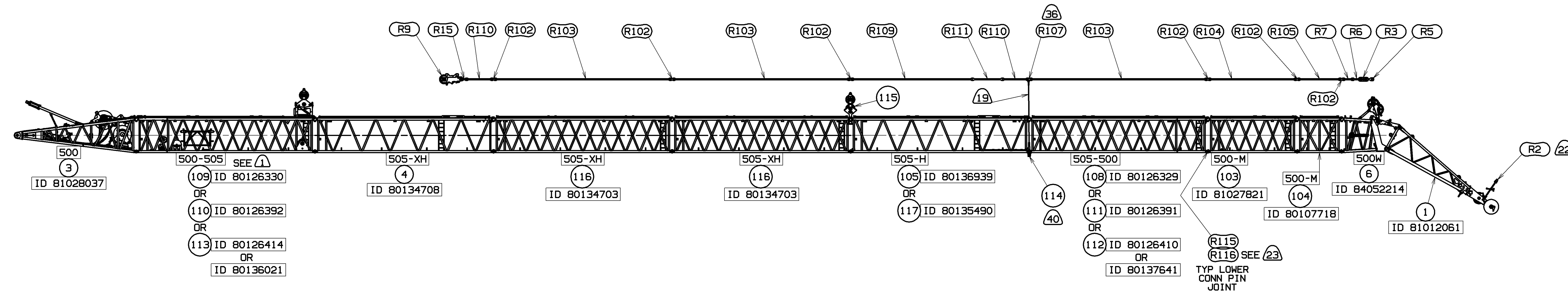
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REV: L1

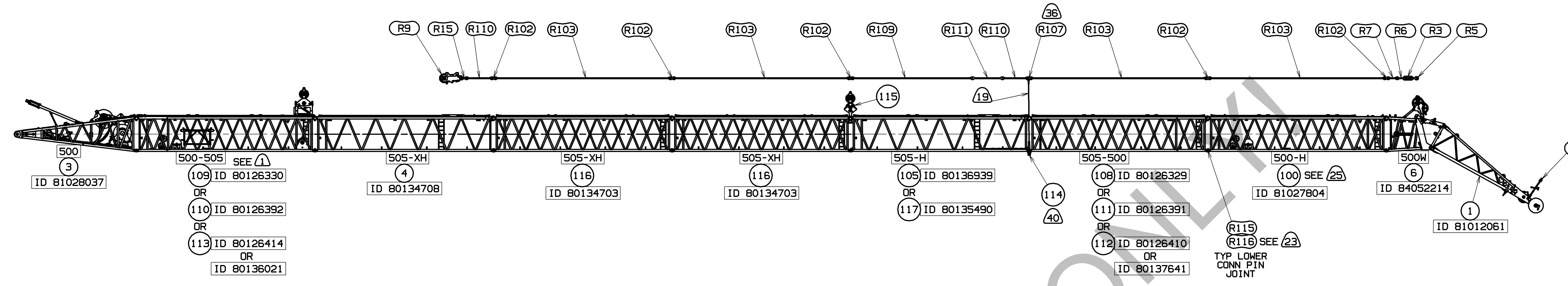
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SHT 4 OF 13

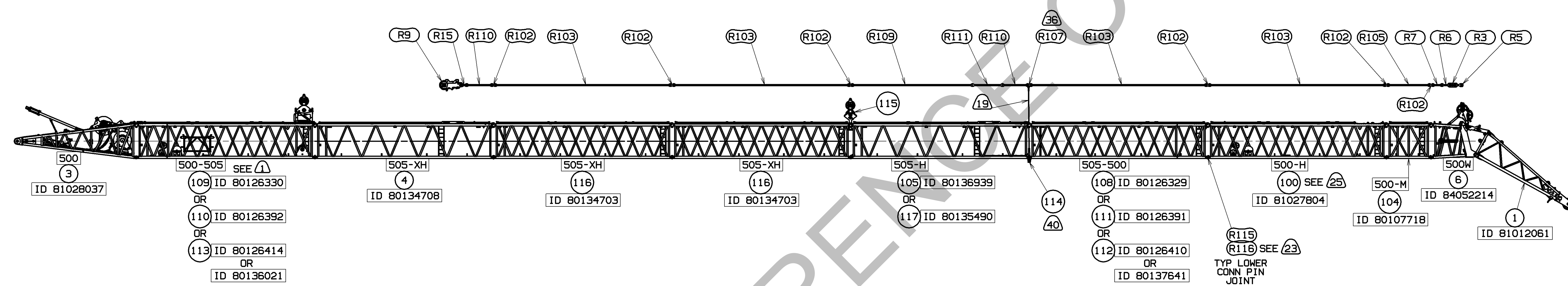
92.0 M
 (301.8 FT)
 SEE 39



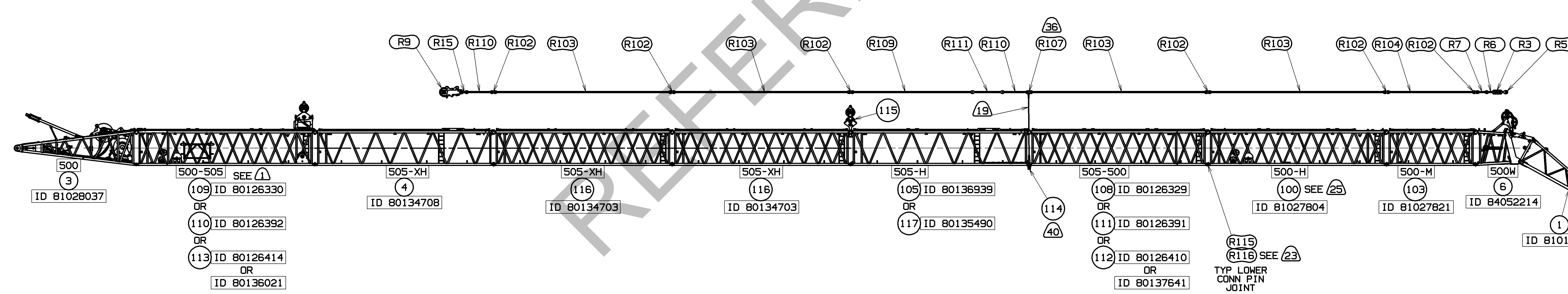
95.0 M
 (311.7 FT)



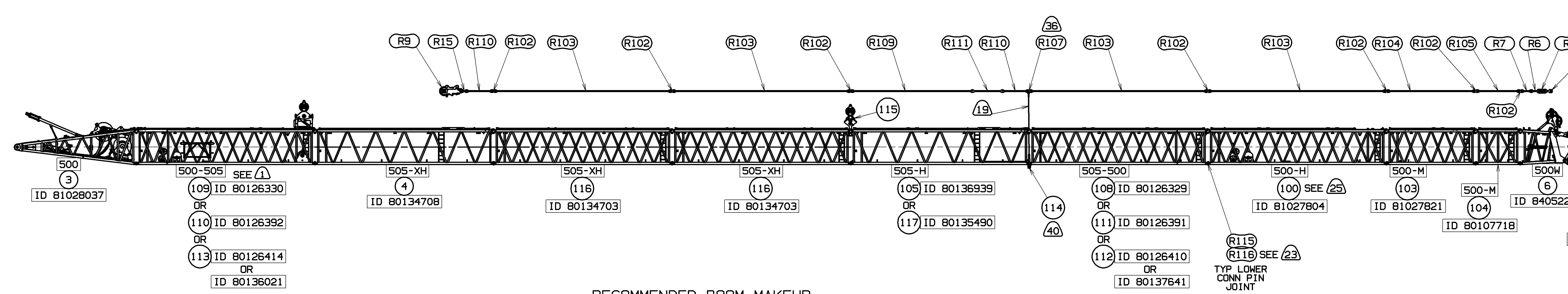
98.0 M
 (321.5 FT)



101.0 M
 (331.4 FT)



104.0 M
 (341.2 FT)
 SEE 39



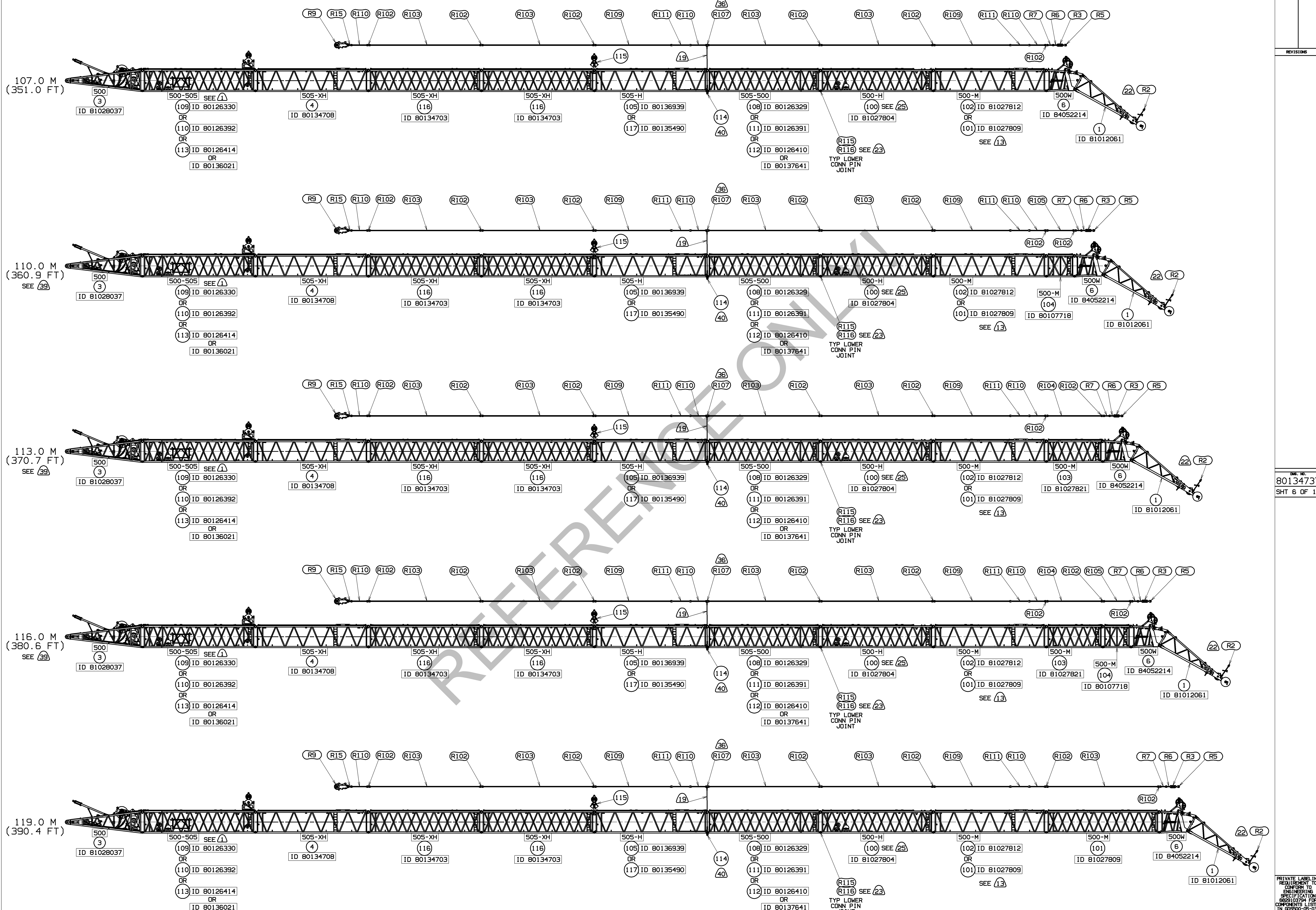
RECOMMENDED BOOM MAKEUP
 FOR TYP STRAP PIN JOINT SEE SECTION B-B
 AND DETAILS H, J, K & L

DECIMAL PLACES	FABRICATION	MACHINING
(1) PLACE 0.5	± 0.12	± 0.18
(2) PLACE 0.00	± 0.08	± 0.15
(3) PLACE 0.000	± 0.05	± 0.08
ANGLES	± 1.0°	± 0.5°

MANUFACTURED BY	MANITOWOC CRANES, INC.	MODEL	MLC300
DR.	RHV	DATE	05-05-22
CHK.	DLG	DESCRIPTION	BOOM RIGGING
APP.	JRR	ITEM NO.	B87:505-500

PRIVATE LABELING
 REQUIREMENT TO
 CONFORM TO
 ENGINEERING
 SPECIFICATION
 6829103794 FOR
 COMPONENTS LISTED
 IN 682906-05-026
 DATE
 05-05-22
 REC'D BY
 A
 80134737
 SHT 5 OF 13

NO.	REV.	DESCRIPTION	DATE	MATERIAL	BY	APP.



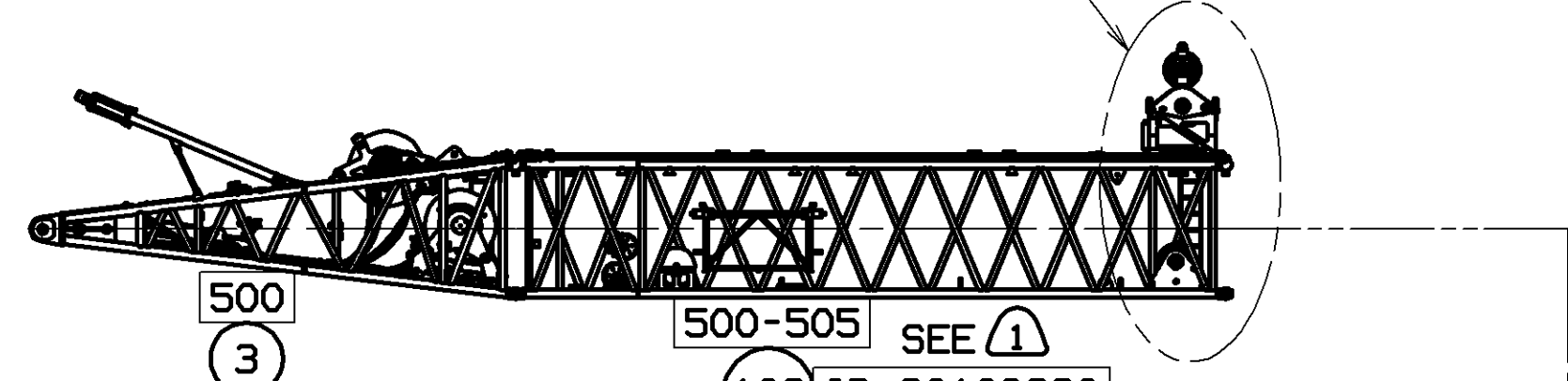
RECOMMENDED BOOM MAKEUP
FOR TYP STRAP PIN JOINT SEE SECTION B-B
AND DETAILS H, J, K & L

TOLERANCE UNLESS OTHERWISE SPECIFIED		FABRICATION		MACHINING		MATERIAL		PARTS	
DECIMAL PLACES	±	±	±	±	±	±	±	±	±
(1) PLACE	0.0	0.12	0.18	0.05	0.05	0.05	0.05	0.05	0.05
(2) PLACE	0.00	0.08	0.12	0.015	0.015	0.015	0.015	0.015	0.015
(3) PLACE	0.000	0.008	0.012	0.002	0.002	0.002	0.002	0.002	0.002
ANGLES		11.3°	11.3°	0°30'	0°30'	0°30'	0°30'	0°30'	0°30'

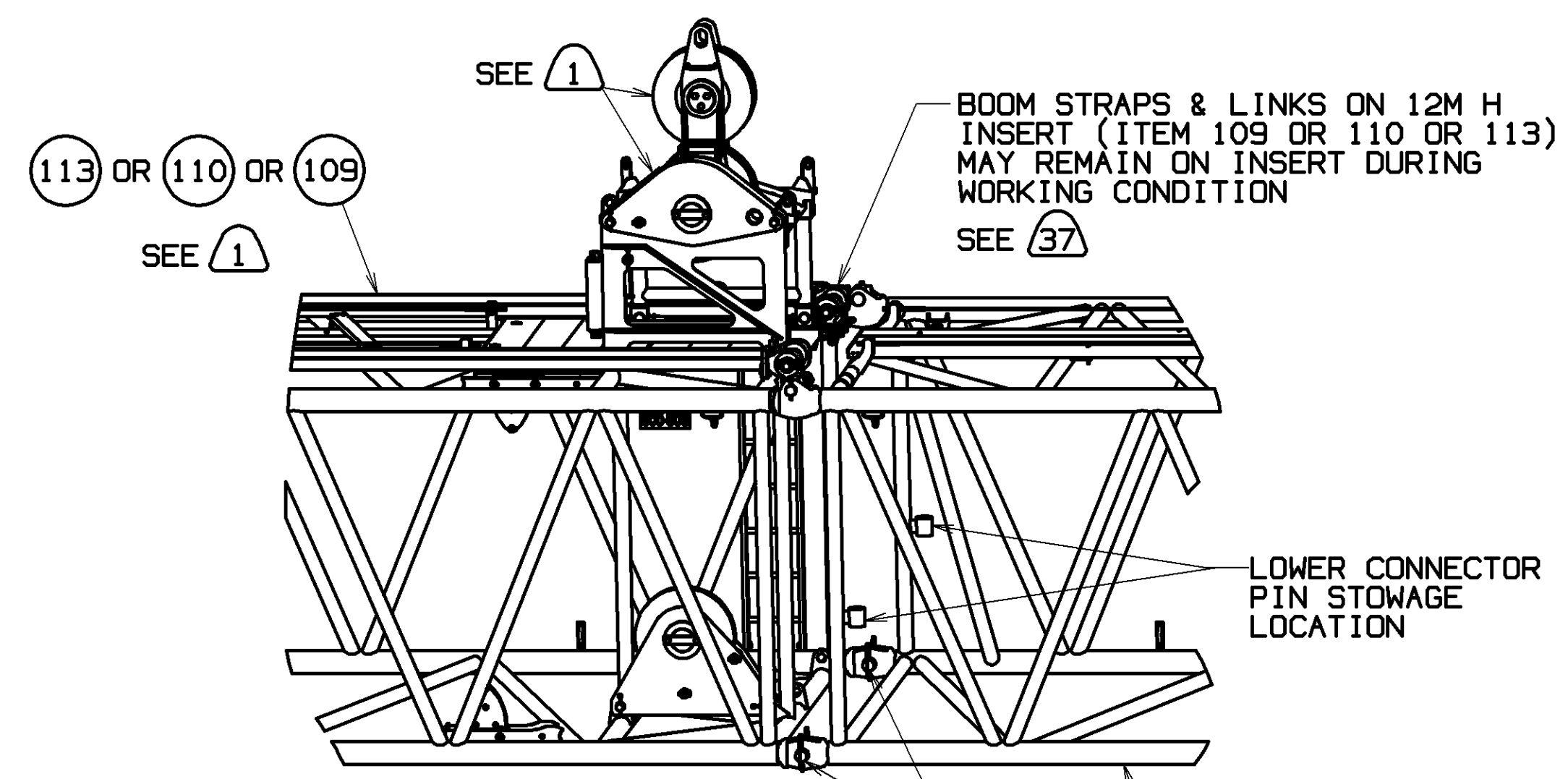
PRIVATE LABELING
REQUIREMENT TO
CONFORM TO
ENGINEERING
SPECIFICATION
6829103794 FOR
COMPONENTS LISTED
IN 68290-05-026
DATE
05-05-22
REV. LTV.
A

80134737
SHT 6 OF 13

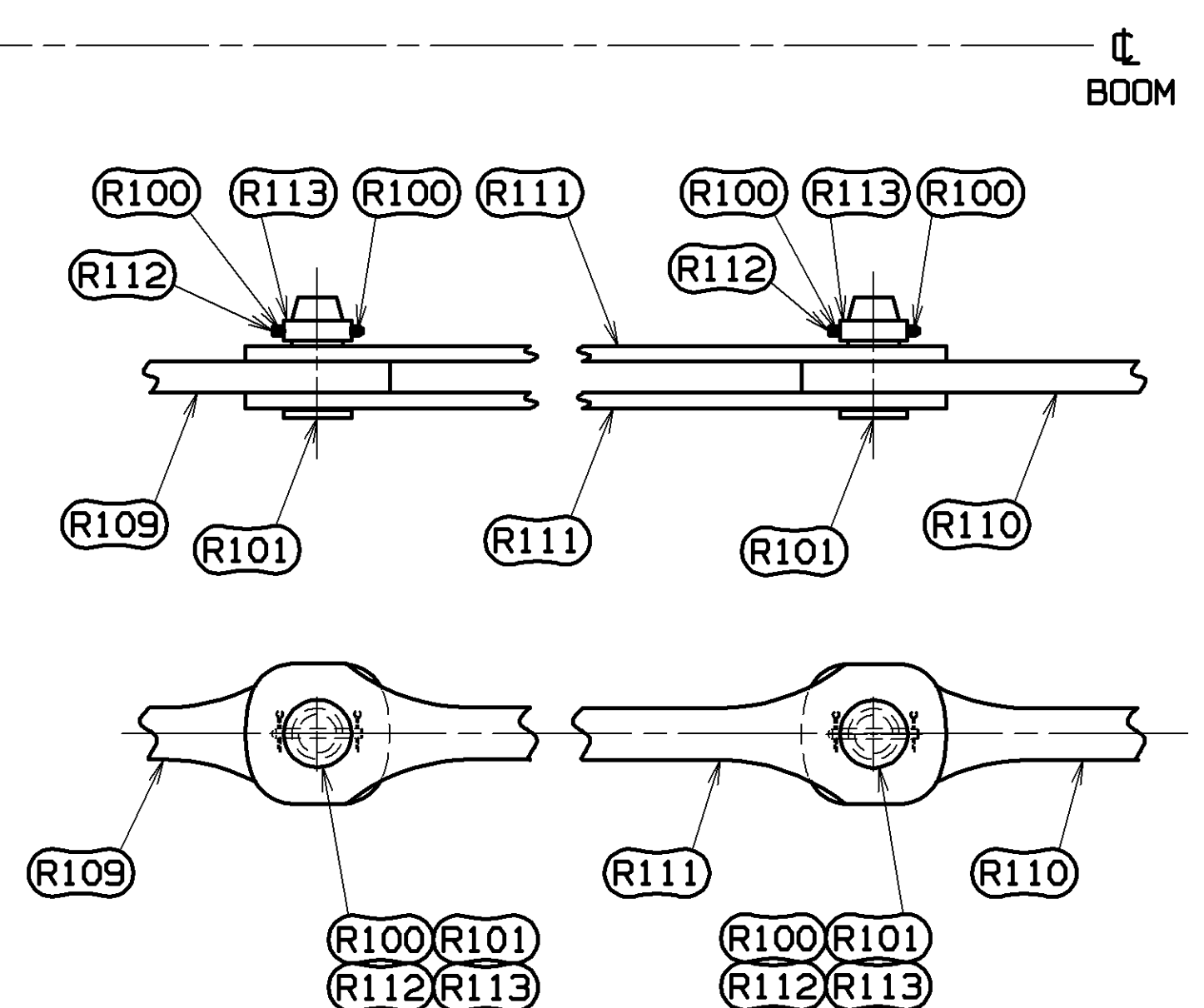
SEE DETAIL G



- 500 (3)
ID 81028037
- 500-505 SEE 1
109 ID 80126330
OR
110 ID 80126392
OR
113 ID 80126414
OR
ID 80136021



DETAIL G
SEE DELTA NOTE 37
SCALE 0.030



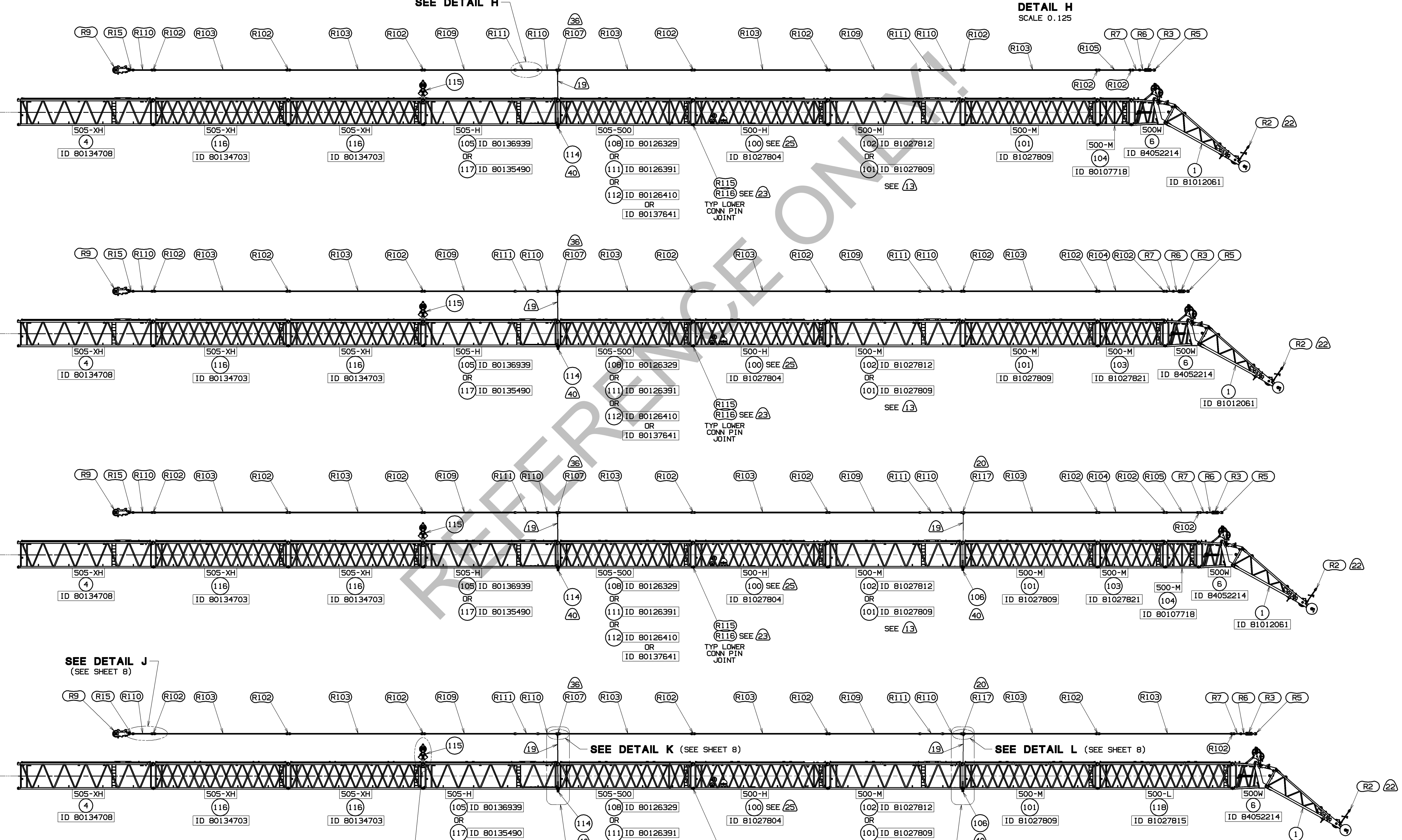
DETAIL H
SCALE 0.125

122.0 M
(400.3 FT)

125.0 M
(410.1 FT)

128.0 M
(419.9 FT)

131.0 M
(429.8 FT)



SEE DETAIL J
(SEE SHEET 8)

SEE DETAIL K (SEE SHEET 8)

SEE DETAIL L (SEE SHEET 8)

RECOMMENDED BOOM MAKEUP
FOR TYP STRAP PIN JOINT SEE SECTION B-B
AND DETAILS H, J, K & L

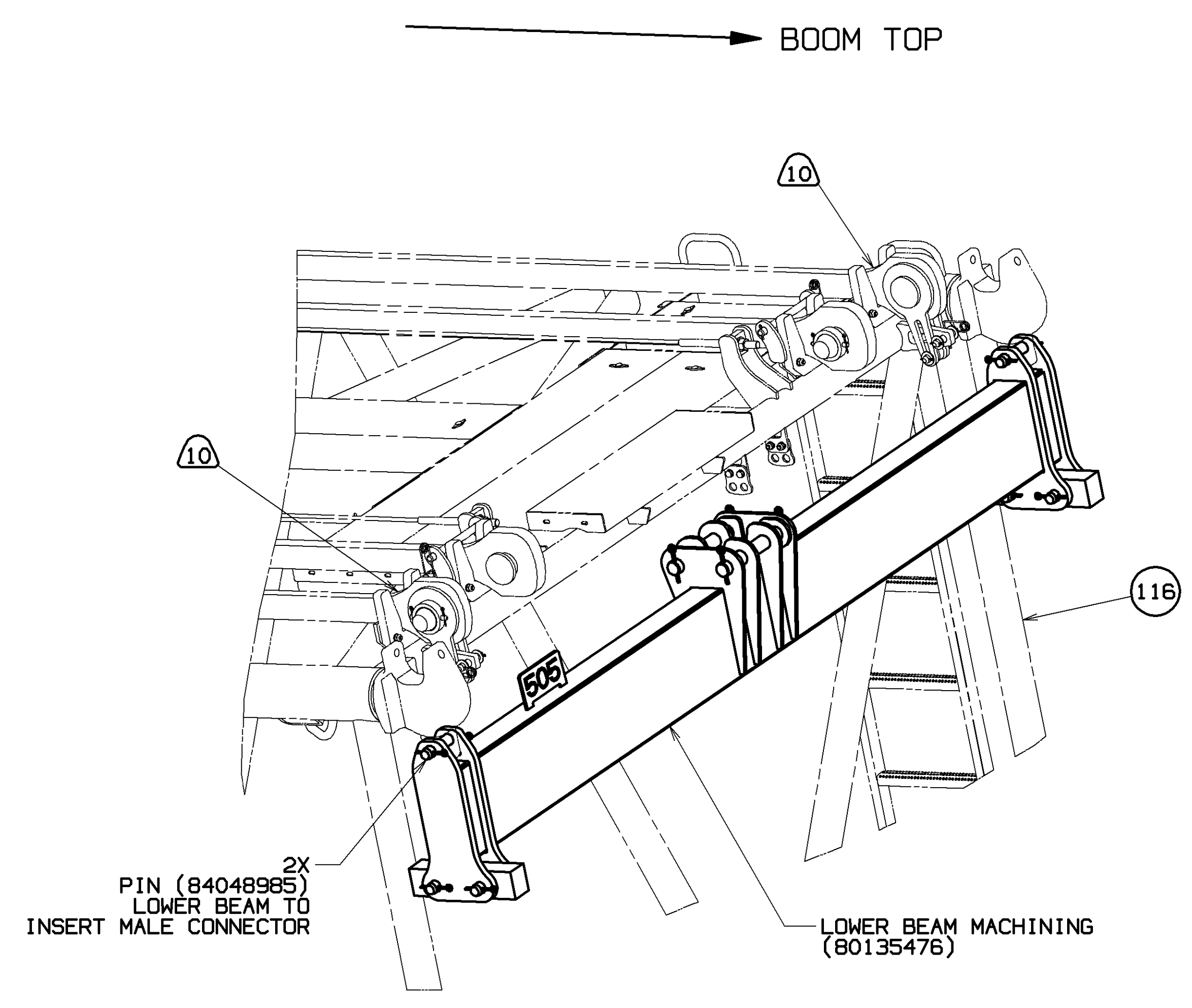
SEE DETAIL Z
(SEE SHEET 8)

SEE DETAIL T
(SEE SHEET 12)

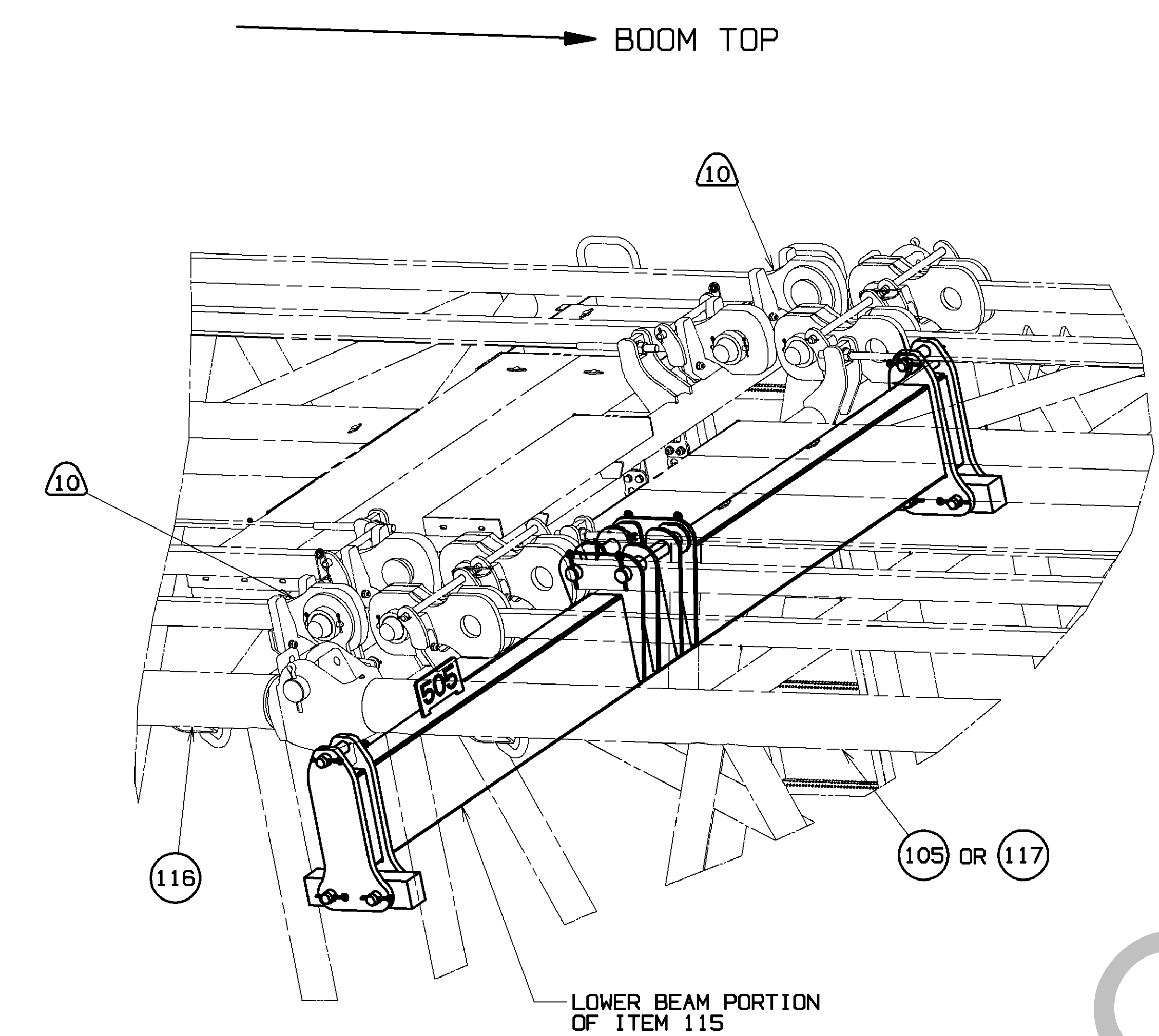
SEE DETAIL CC
(SEE SHEET 13)

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	DECIMAL PLACES	F. TO FEET	I. TO FEET	Manitowoc, Wisconsin
	(1) PLACE 0.5	+0.12	+0.18	DR. DLG
	(2) PLACE 0.00	+0.08	+0.12	APP. JRR
(3) PLACE 0.000	+0.008	+0.015		
ANGLES	11.3°	11.3°		

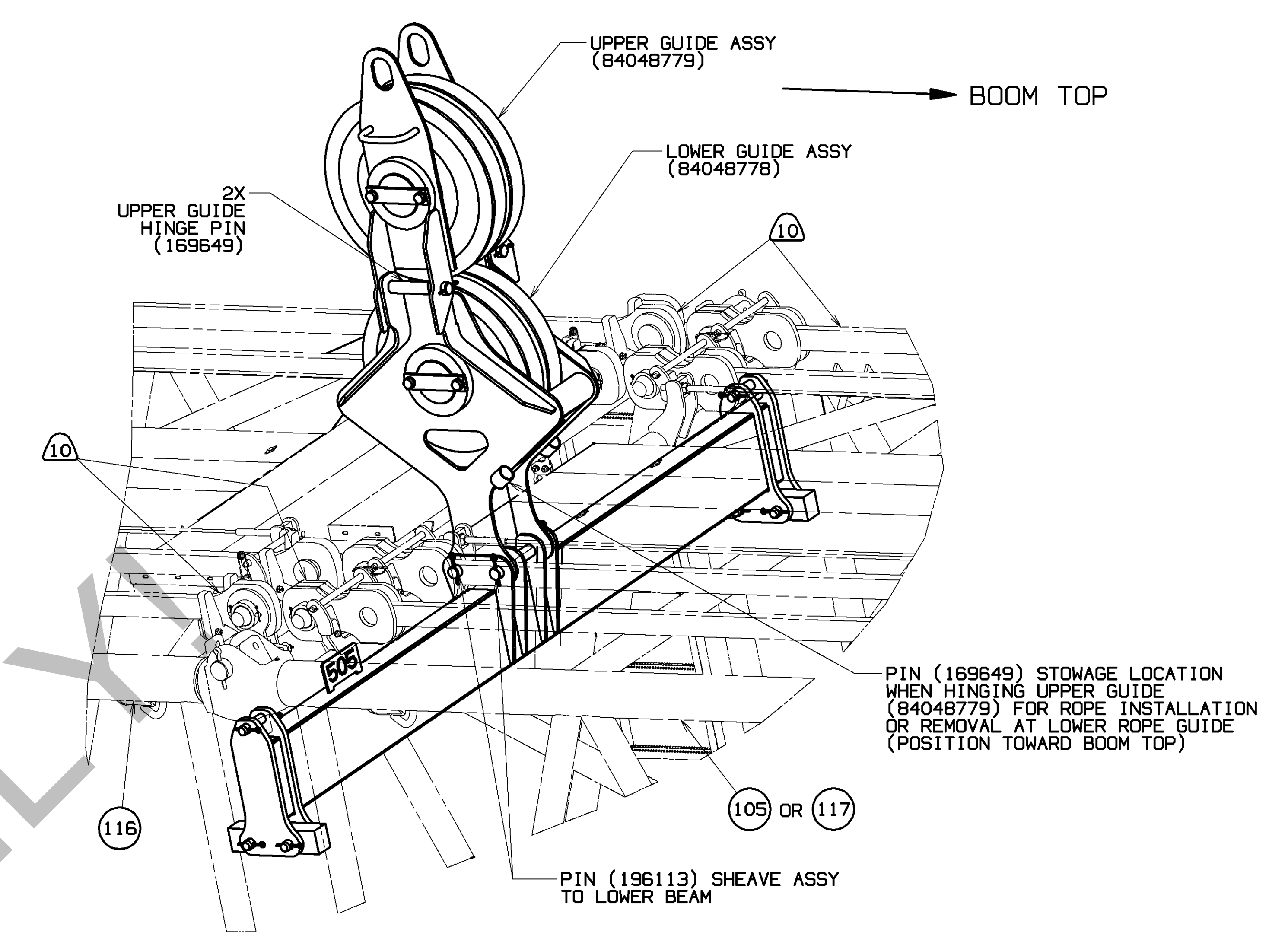
DATE	05-05-22
REV. LIT.	A
PROJECT NO.	80134737
SHEET NO.	SHT 7 OF 13



STEP 1 - LOWER BEAM TO INSERT ASSY
 INSTALL LOWER BEAM PORTION OF ITEM 115 TO MALE CONNECTOR FIXTURE HOLES ON #505 12M XH INSERT (ITEM 116) WITH LOWER BEAM PINS (84048985).

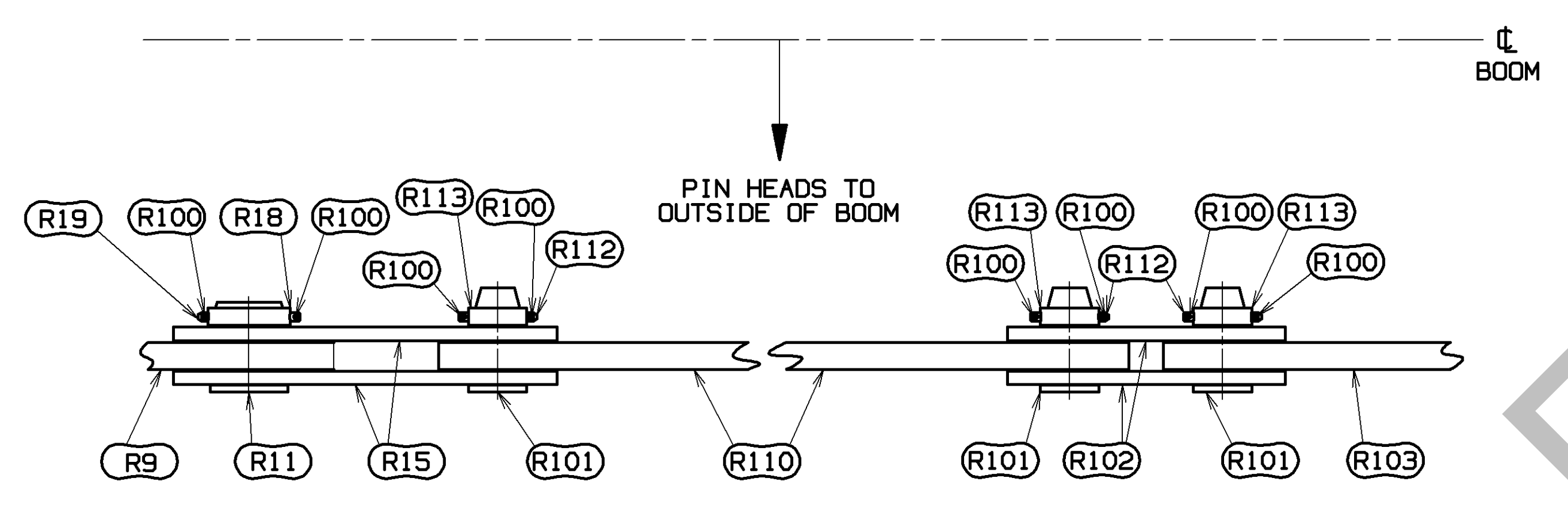


STEP 2 - #505 BOOM INSERT (ITEM 105 OR 117) INSTALLATION
 ASSEMBLE #505 12M H INSERT (ITEM 105 OR 117) TO #505 12M XH INSERT (ITEM 116) PER TYPICAL INSERT INSTALLATION. INSTALL LOWER BOOM CONNECTOR PINS. (SEE DETAIL M ON SHEET 10).

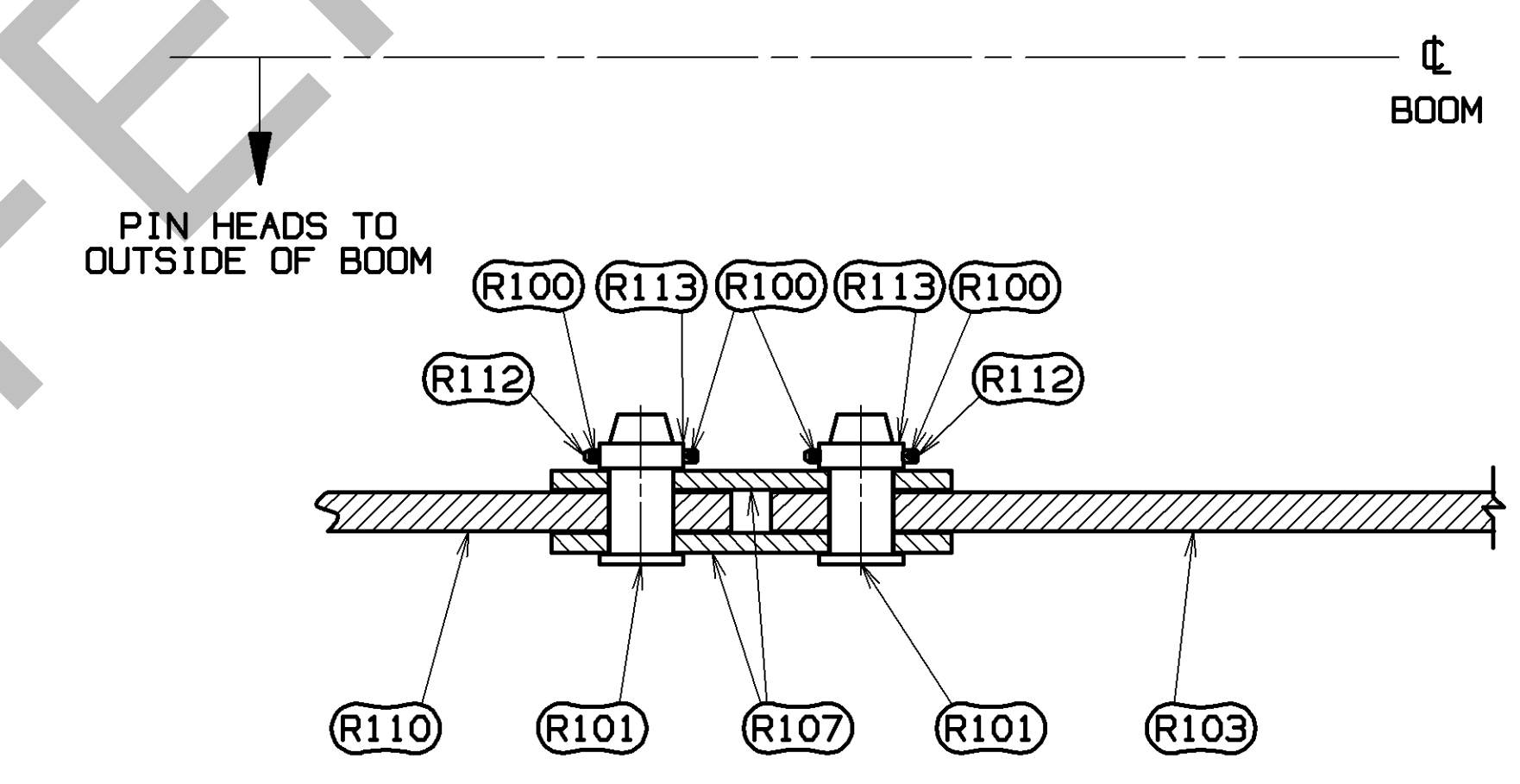


STEP 3 - UPPER AND LOWER GUIDE ASSEMBLY INSTALLATION
 INSTALL UPPER (84048779) AND LOWER (84048778) SHEAVE ASSEMBLY TO LOWER BEAM (80135476) AND ATTACH WITH PINS (196113). (POSITION LOWER GUIDE ASSY WITH PIN STORAGE HOLDERS TOWARD BOOM TOP).

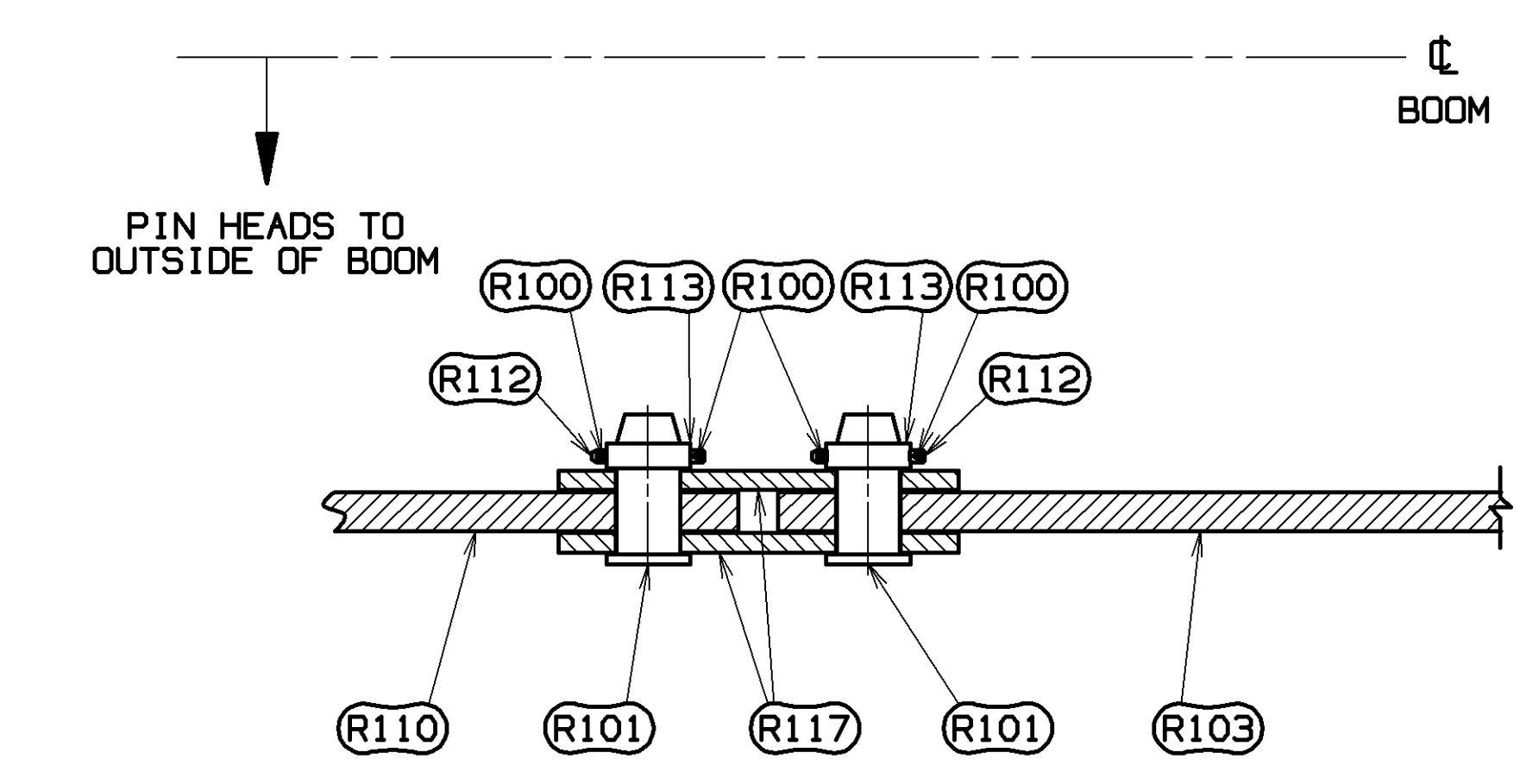
DETAIL Z
 ENCAPSULATING SHEAVE (ITEM 115) INSTALLATION
 (FROM SHEET 7)
 SCALE 0.100



DETAIL J
 SCALE 0.150
 (FROM SHEET 7)



DETAIL K
 SCALE 0.150
 (FROM SHEET 7)



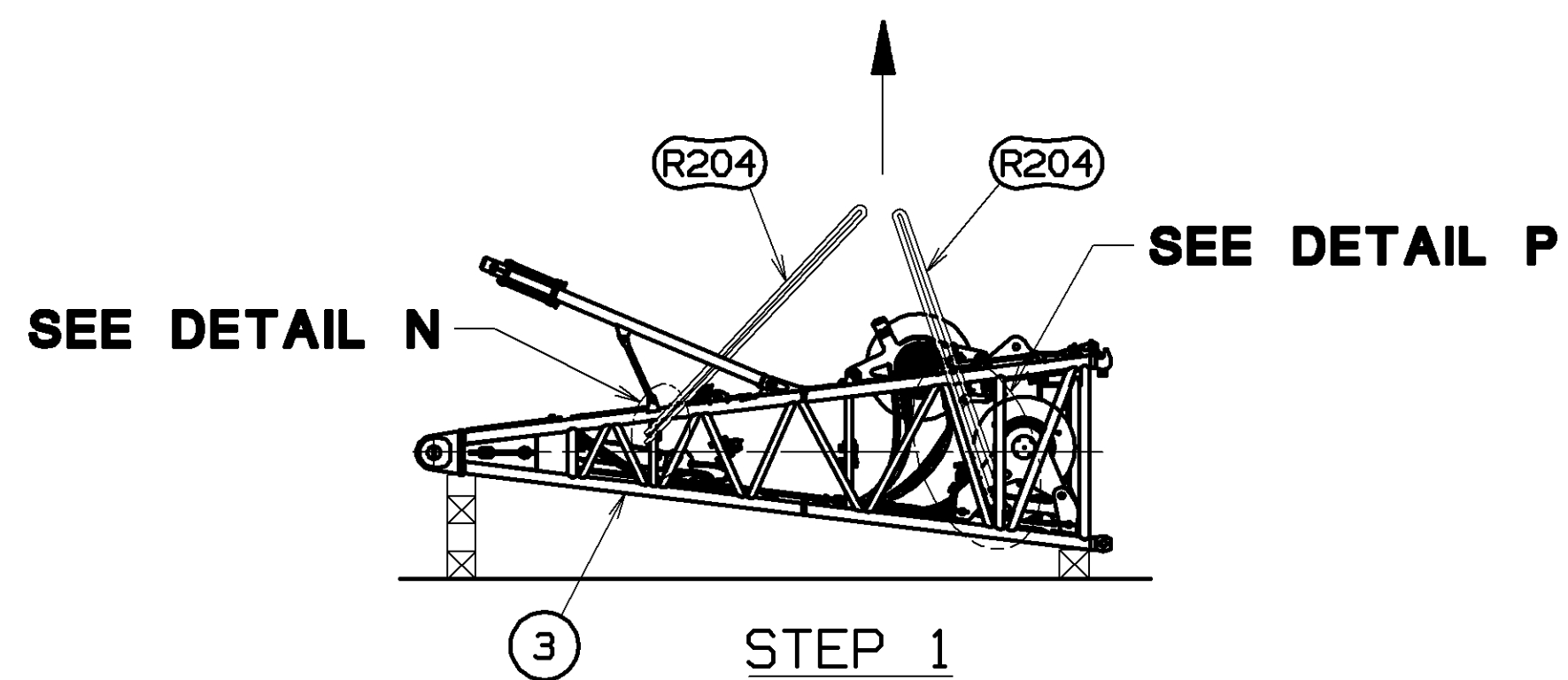
DETAIL L
 SCALE 0.150
 (FROM SHEET 7)

80134737
 SHT 8 OF 13

REFERENCE ONLY

TOLERANCE UNLESS OTHERWISE SPECIFIED		DATE	REV. LIT.
DECIMAL PLACES	FABRICATION	05-05-22	A
(1) PLACE 0.5	± 0.12 ± 0.18 ± 0.05		
(2) PLACE 0.00	± 0.08 ± 0.12 ± 0.015		
(3) PLACE 0.000	± 0.008 ± 0.006 ± 0.003		
ANGLES	± 1° ± 30'		
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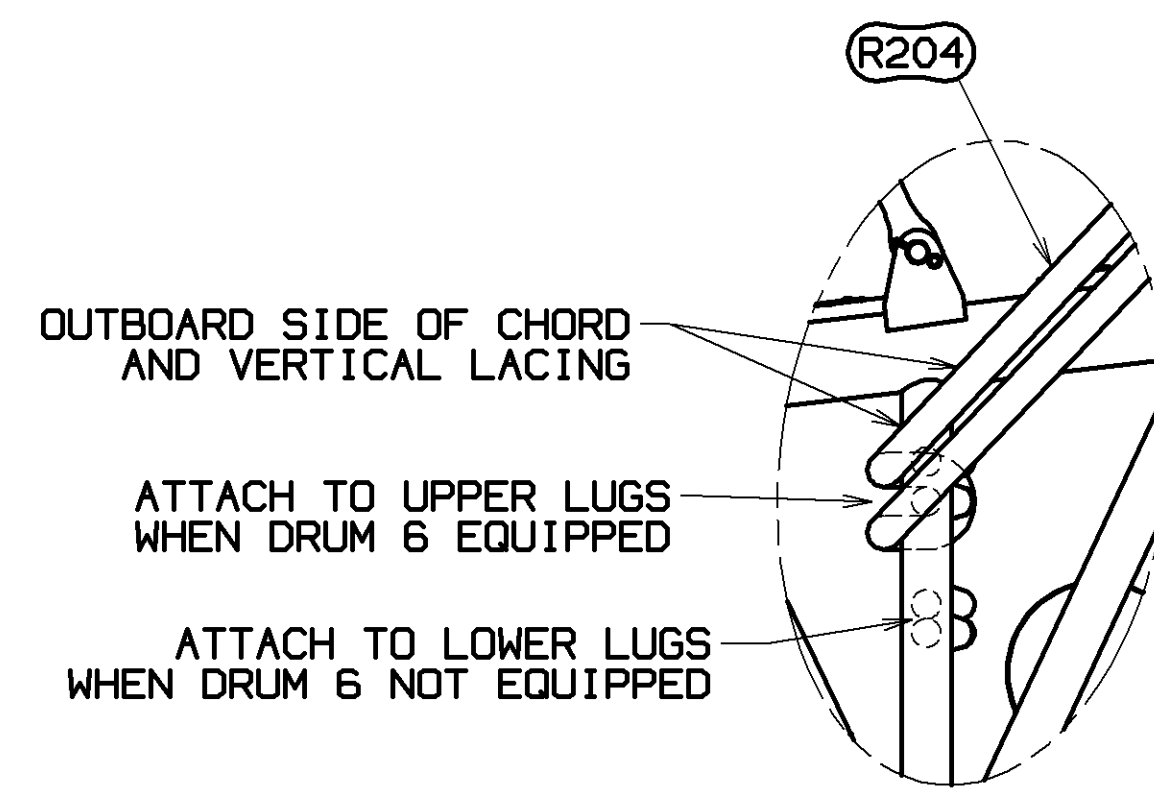
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 862900-05-006



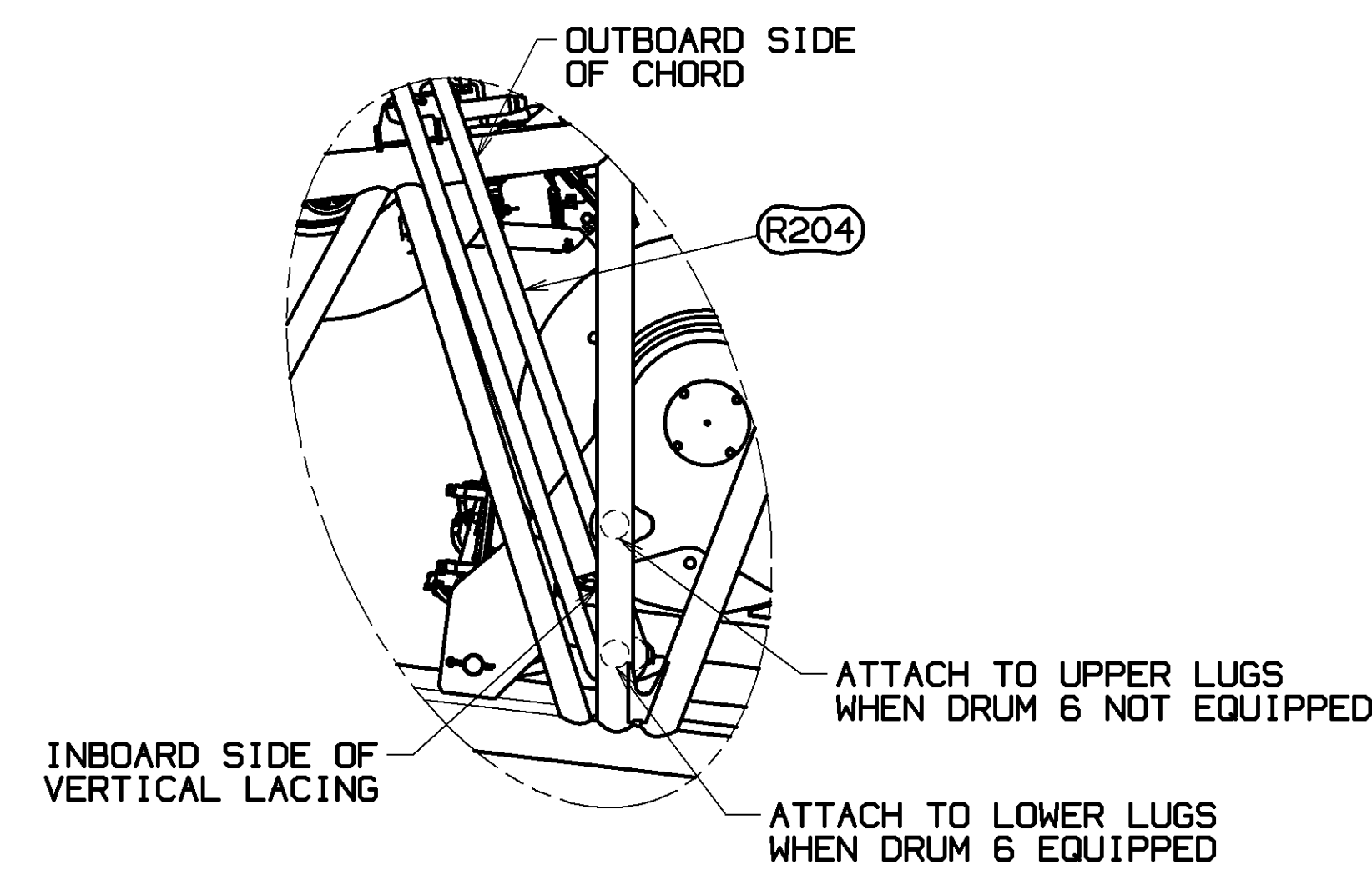
STEP 1
BOOM BUTT PREP

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

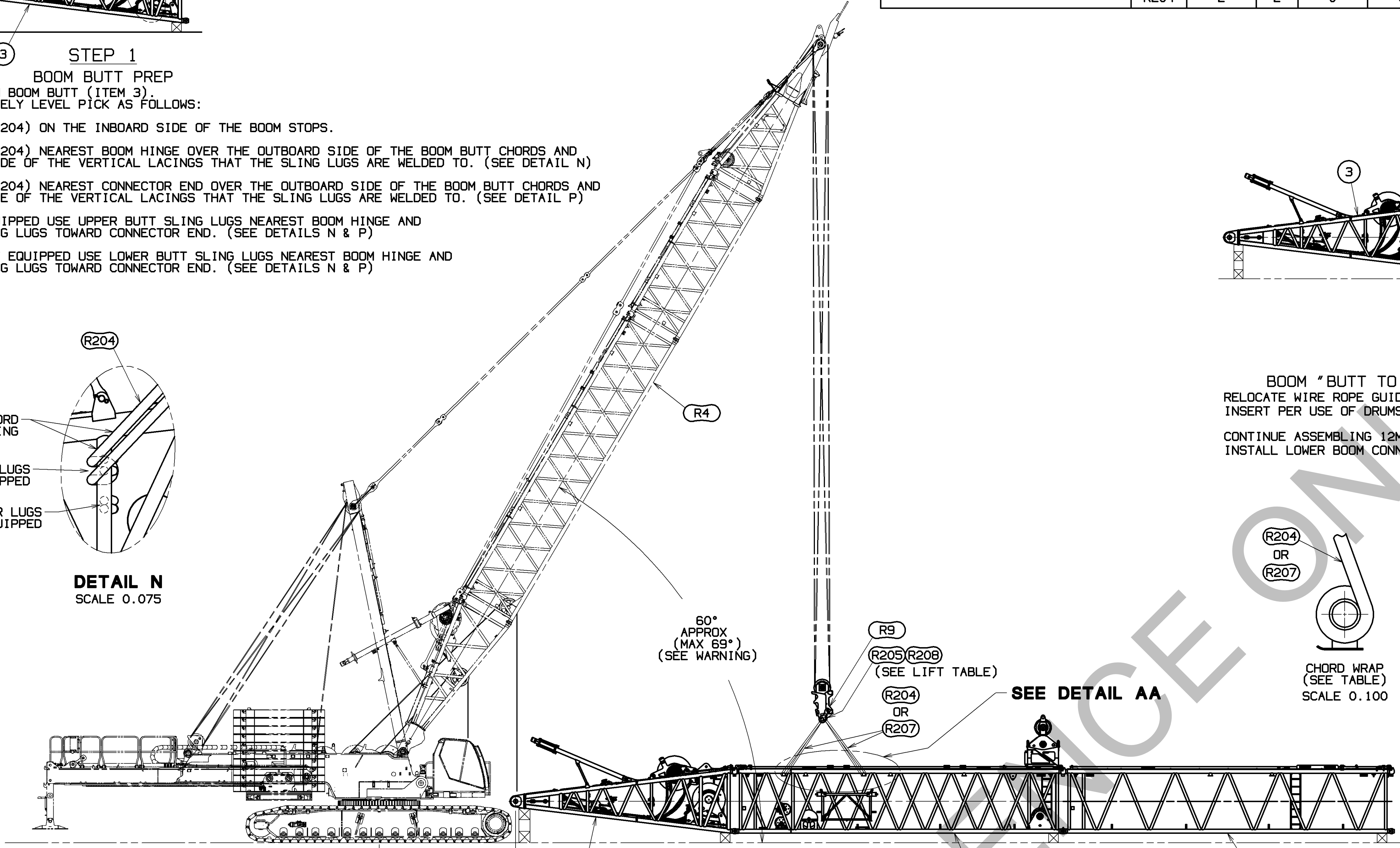
- ROUTE SLINGS (R204) ON THE INBOARD SIDE OF THE BOOM STOPS.
- ROUTE SLINGS (R204) NEAREST BOOM HINGE OVER THE OUTBOARD SIDE OF THE BOOM BUTT CHORDS AND THE OUTBOARD SIDE OF THE VERTICAL LACINGS THAT THE SLING LUGS ARE WELDED TO. (SEE DETAIL N)
ROUTE SLINGS (R204) NEAREST CONNECTOR END OVER THE OUTBOARD SIDE OF THE BOOM BUTT CHORDS AND THE INBOARD SIDE OF THE VERTICAL LACINGS THAT THE SLING LUGS ARE WELDED TO. (SEE DETAIL P)
- WHEN DRUM 6 EQUIPPED USE UPPER BUTT SLING LUGS NEAREST BOOM HINGE AND LOWER BUTT SLING LUGS TOWARD CONNECTOR END. (SEE DETAILS N & P)
WHEN DRUM 6 NOT EQUIPPED USE LOWER BUTT SLING LUGS NEAREST BOOM HINGE AND UPPER BUTT SLING LUGS TOWARD CONNECTOR END. (SEE DETAILS N & P)



DETAIL N
SCALE 0.075

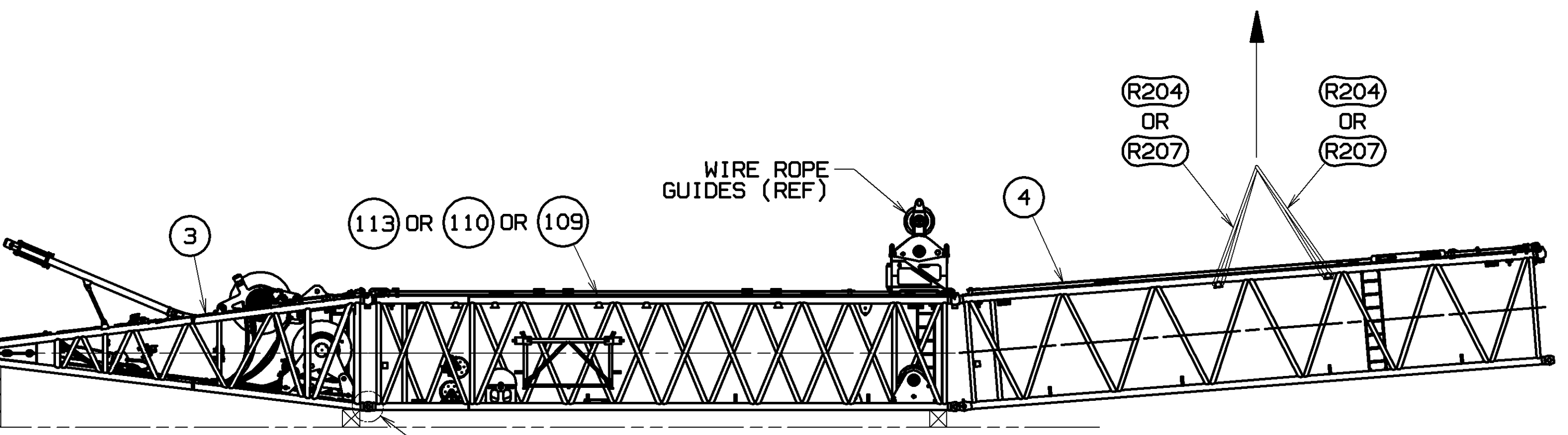


DETAIL P
SCALE 0.050



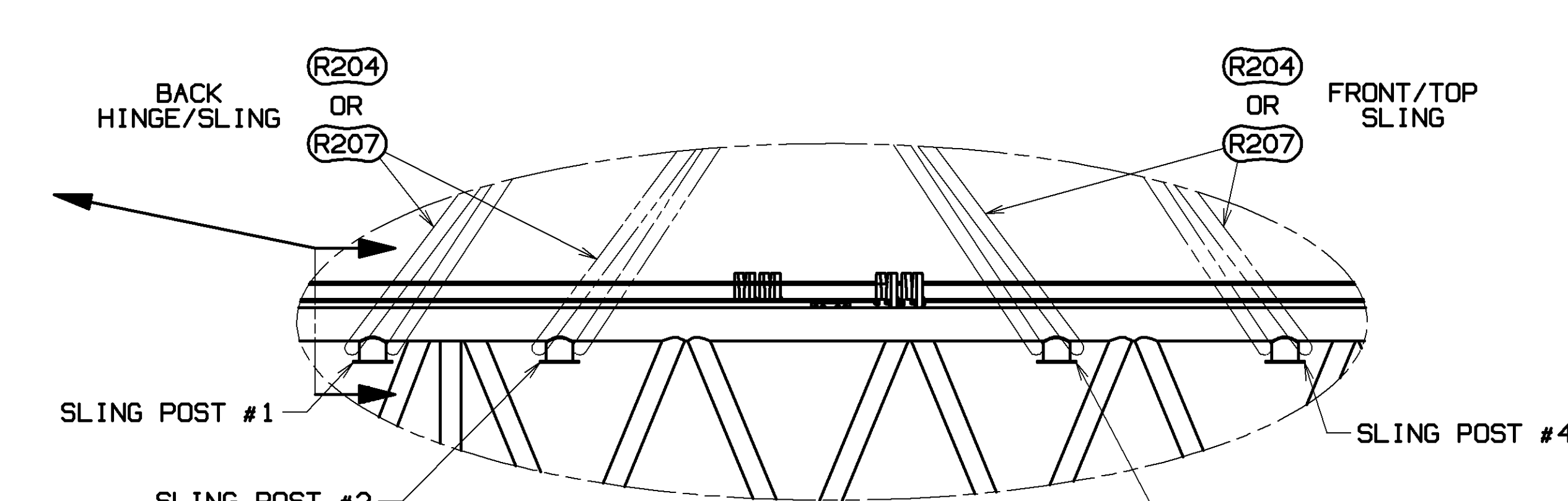
STEP 3A
BOOM HANDLING WITH FIXED MAST

USING PREVIOUSLY ASSEMBLED FIXED MAST (R4) PER ASSEMBLY INSTRUCTIONS 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 109 OR 110 OR 113). (LIFTING POINTS AND COMPONENTS VARY ON 12M INSERT (ITEM 109 OR 110 OR 113) PER WITH DRUM 6 OR WITHOUT DRUM 6. SEE DETAIL AA AND PARTIAL BOOM LIFT TABLE).

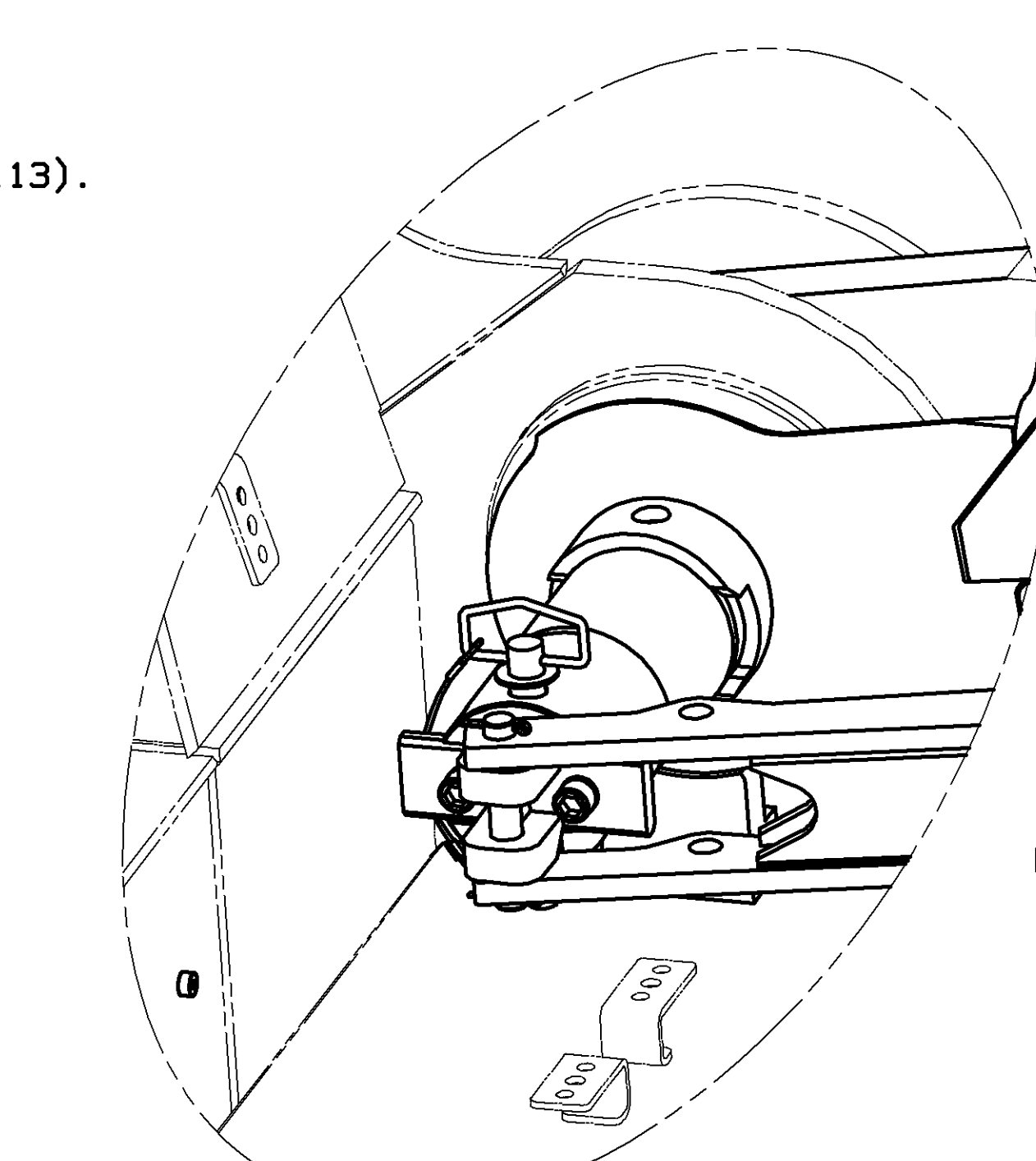


STEP 2
BOOM "BUTT TO EQUALIZER INSERT" ASSEMBLY

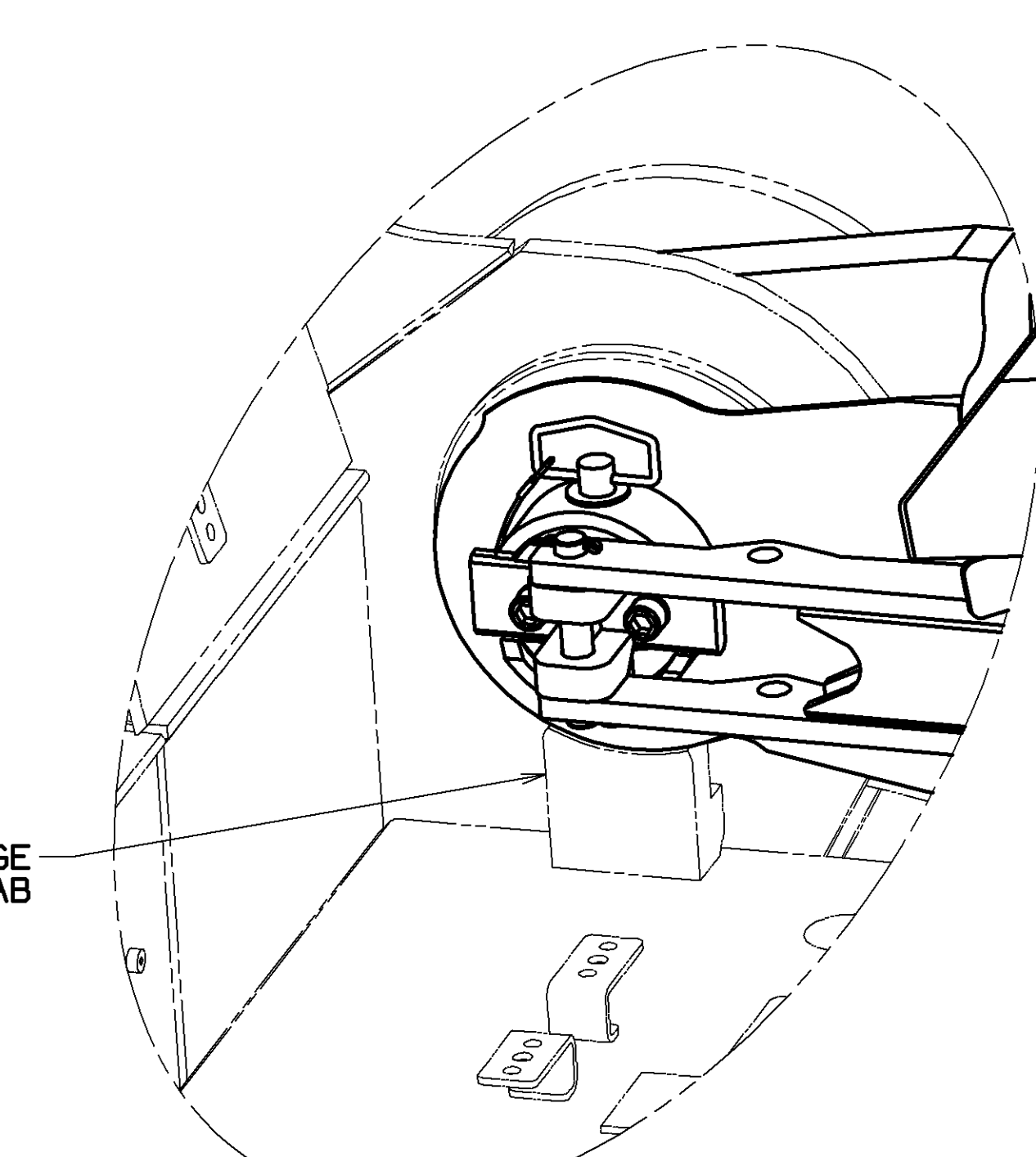
RELOCATE WIRE ROPE GUIDES IN 12M INSERT (ITEM 109 OR 110 OR 113) TO TOP OF INSERT PER USE OF DRUMS 2, 3 AND 6. (SEE SECTION D-D ON SHEET 3)
CONTINUE ASSEMBLING 12M INSERTS (ITEM 109 OR 110 OR 113 AND 4) TO BUTT (ITEM 3) USING (4) EQUAL LENGTH LIFTING SLINGS (R207 OR R204). INSTALL LOWER BOOM CONNECTOR PINS. (SEE DETAIL M ON SHEET 10).



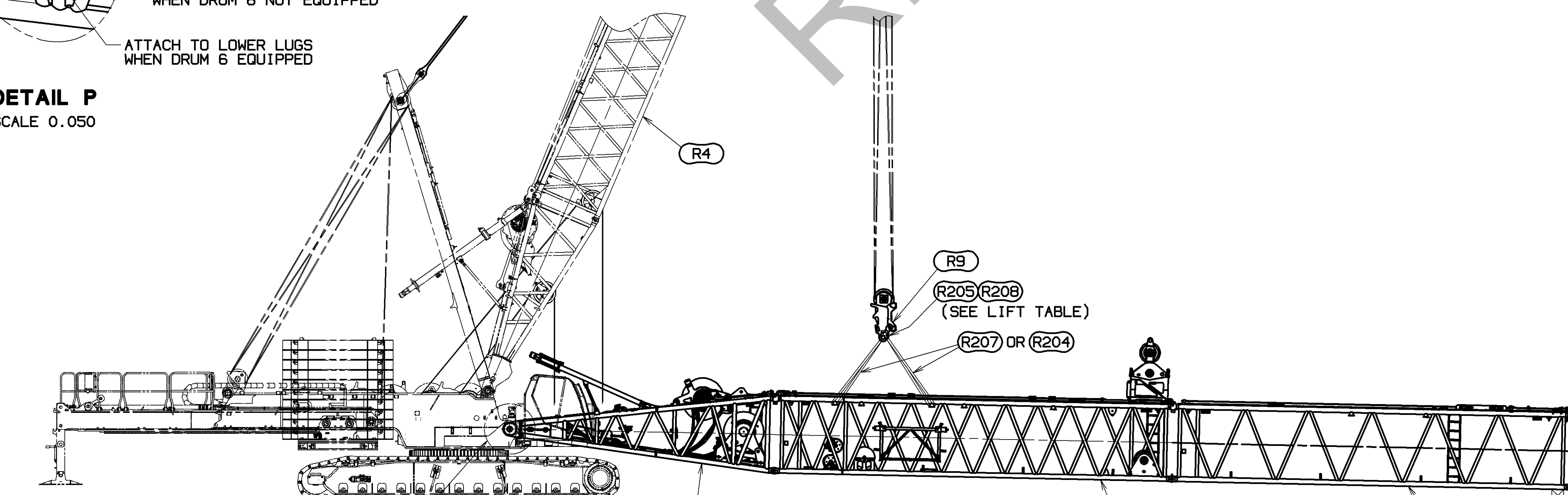
DETAIL AA
SCALE 0.050
SEE PARTIAL BOOM LIFT TABLE FOR VARIOUS INSERT CONFIGURATIONS



DETAIL Q
BOOM HINGE INSTALLATION
PIN PULLER RETRACTED
(VIEW LOOKING FROM CENTERLINE
BOOM TOWARD FAR SIDE HINGE PIN)
SCALE 0.200



DETAIL Q
BOOM HINGE INSTALLATION
PIN PULLER EXTENDED
(VIEW LOOKING FROM CENTERLINE
BOOM TOWARD FAR SIDE HINGE PIN)
SCALE 0.200



STEP 3B
INSTALL PARTIAL BOOM

RAISE PARTIAL BOOM AND SET INNER PLATE OF BUTT HINGE ON ALIGNMENT TAB OF ROTATING BED. (SEE DETAIL Q). 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 109 OR 110 OR 113).

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

BILL OF MATERIAL				ASSEMBLIES USED ON
QTY	ITEM NO	DESCRIPTION	MATERIAL	REV

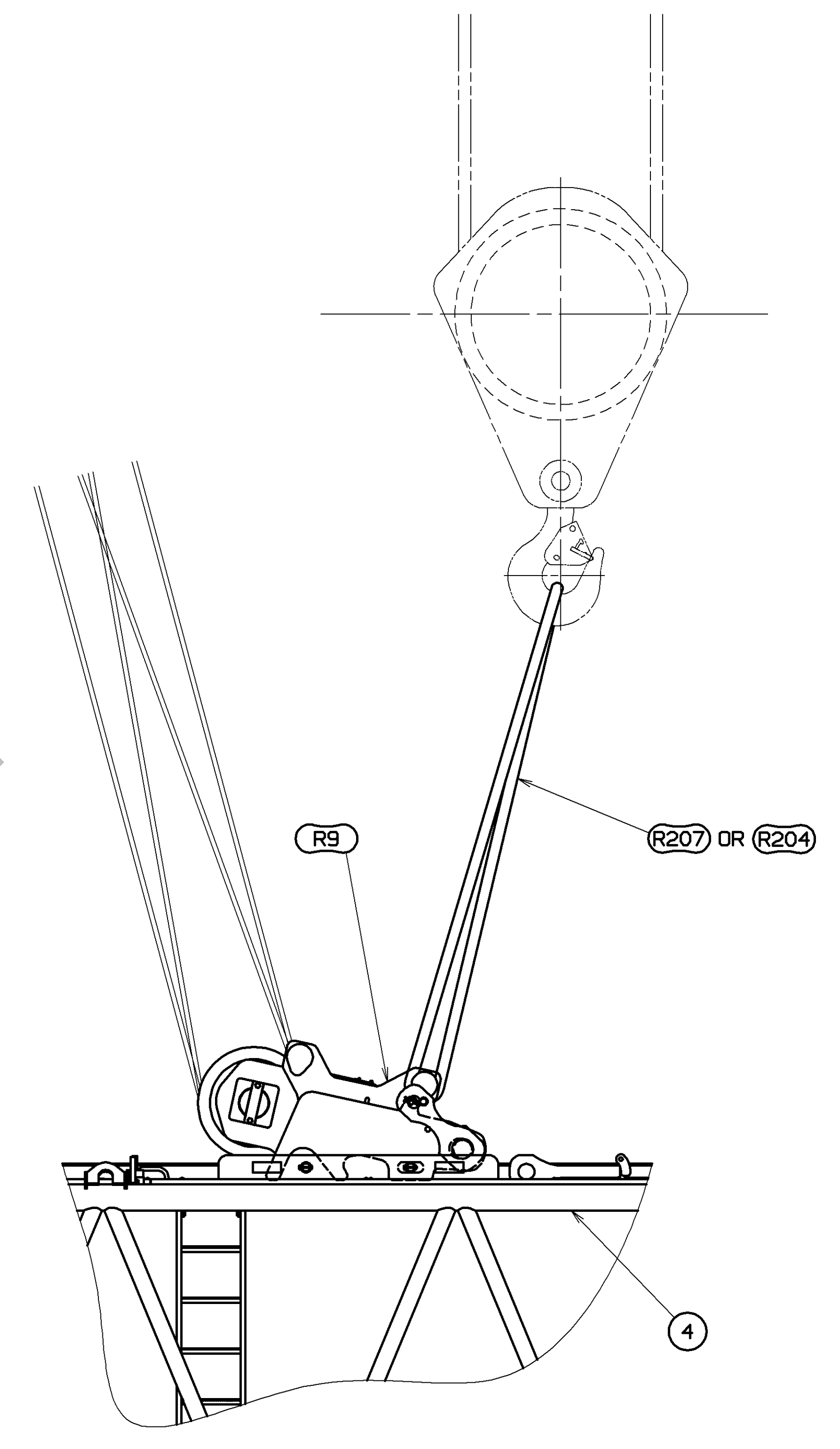
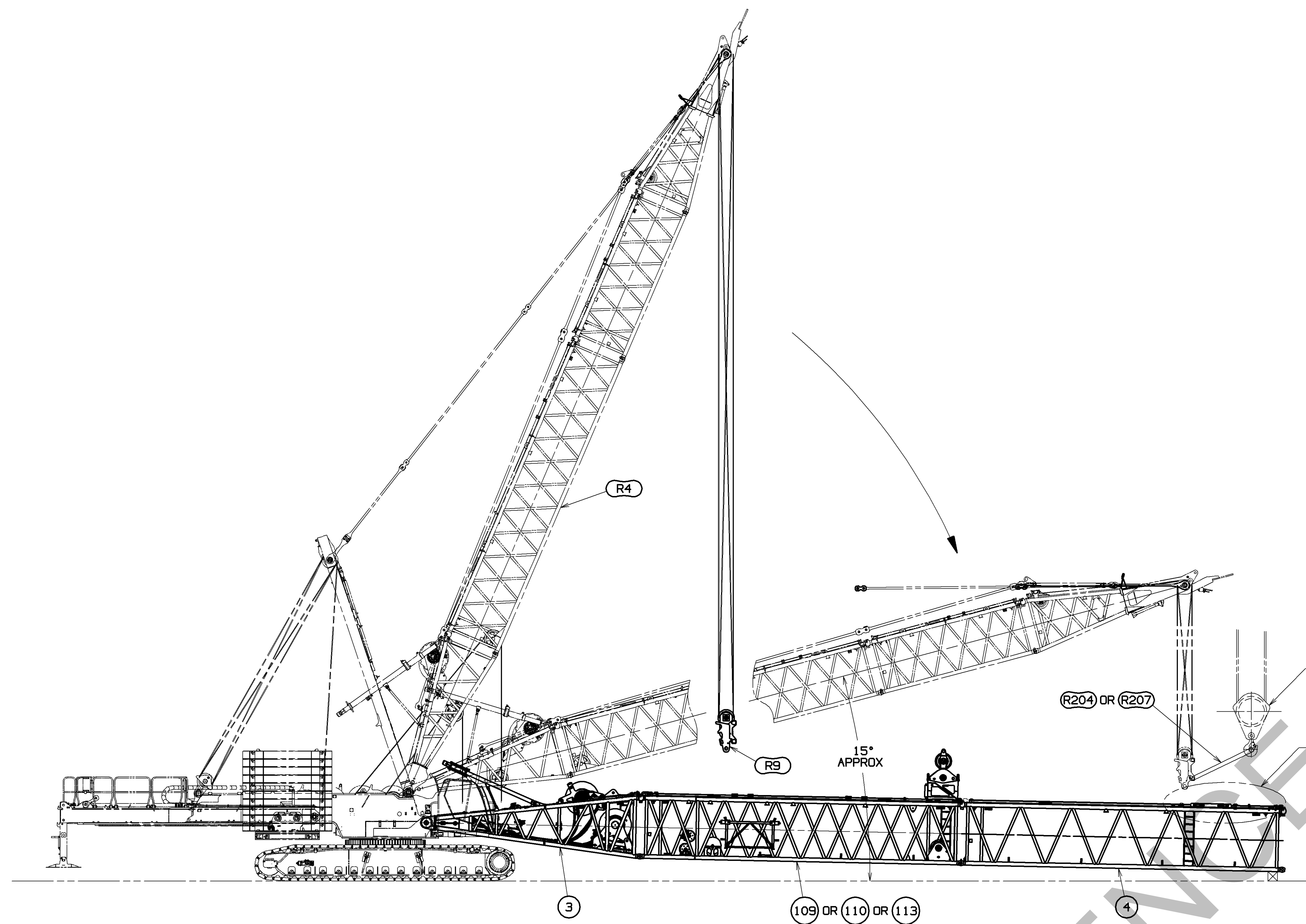
80134737
SHT 9 OF 13

PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 05200-05-026
DATE 05-05-22
REV: 1
A

THIS PRINT REMAINS THE PROPERTY OF HINTECH CRANES, INC. IF IT IS LOANED, SUBJECT TO RETURN WITHIN 30 DAYS, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER DETRIMENTAL TO OUR INTERESTS.	TOLERANCE UNLESS OTHERWISE SPECIFIED	DECIMAL PLACES	FABRICATION	MACHINING	WELDING	DR: RHY	CK: DLG	APP: JRR	MANITOWOC CRANES, INC.	BOOM RIGGING	B87:505-500
		F. 10 FEET > 10 FEET							Manitowoc, Wisconsin		
		(1) PLACE 0.5	±.12	±.18	±.03						
		(2) PLACE 0.00	±.08	±.12	±.015						
		(3) PLACE 0.000	±.006	±.006	±.006						
		ANGLES	±1.30°	±0.90°							

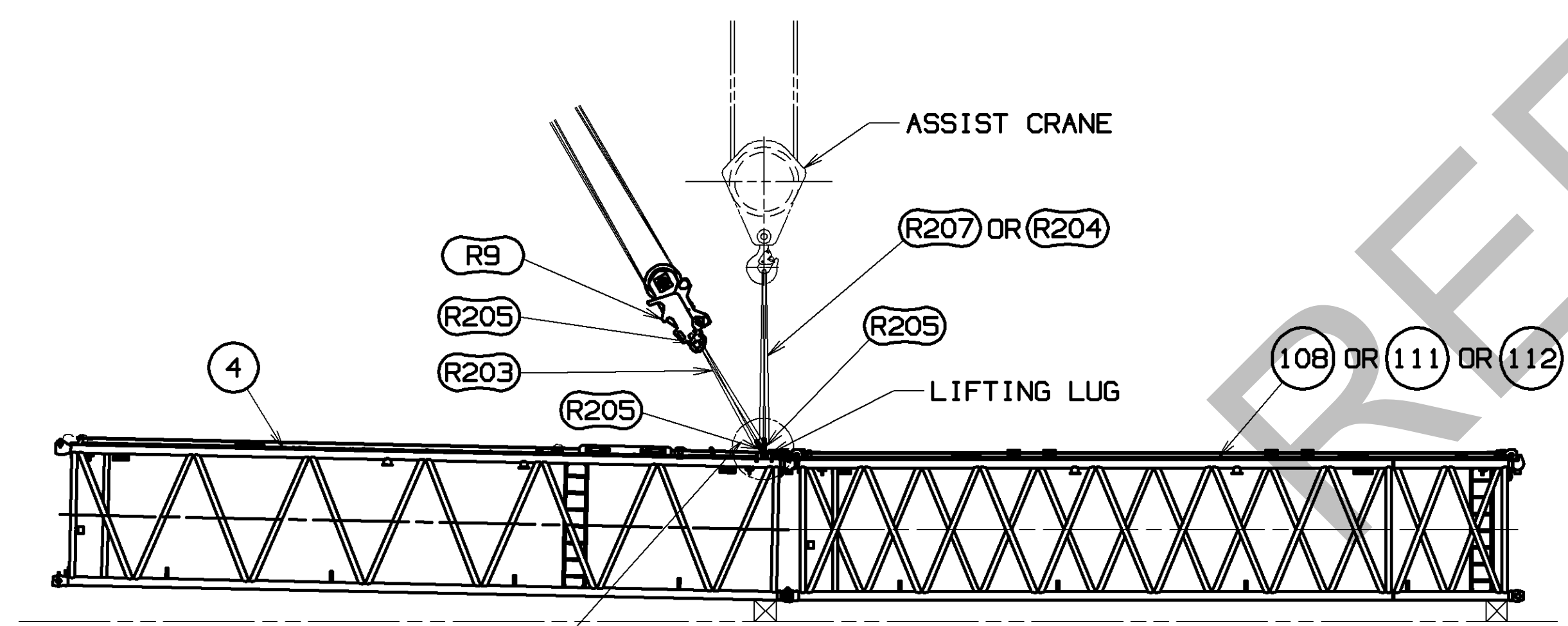
BILL OF MATERIAL				ASSEMBLIES USED ON
QTY	PKG	DESCRIPTION	MATERIAL	QTY

REVISIONS

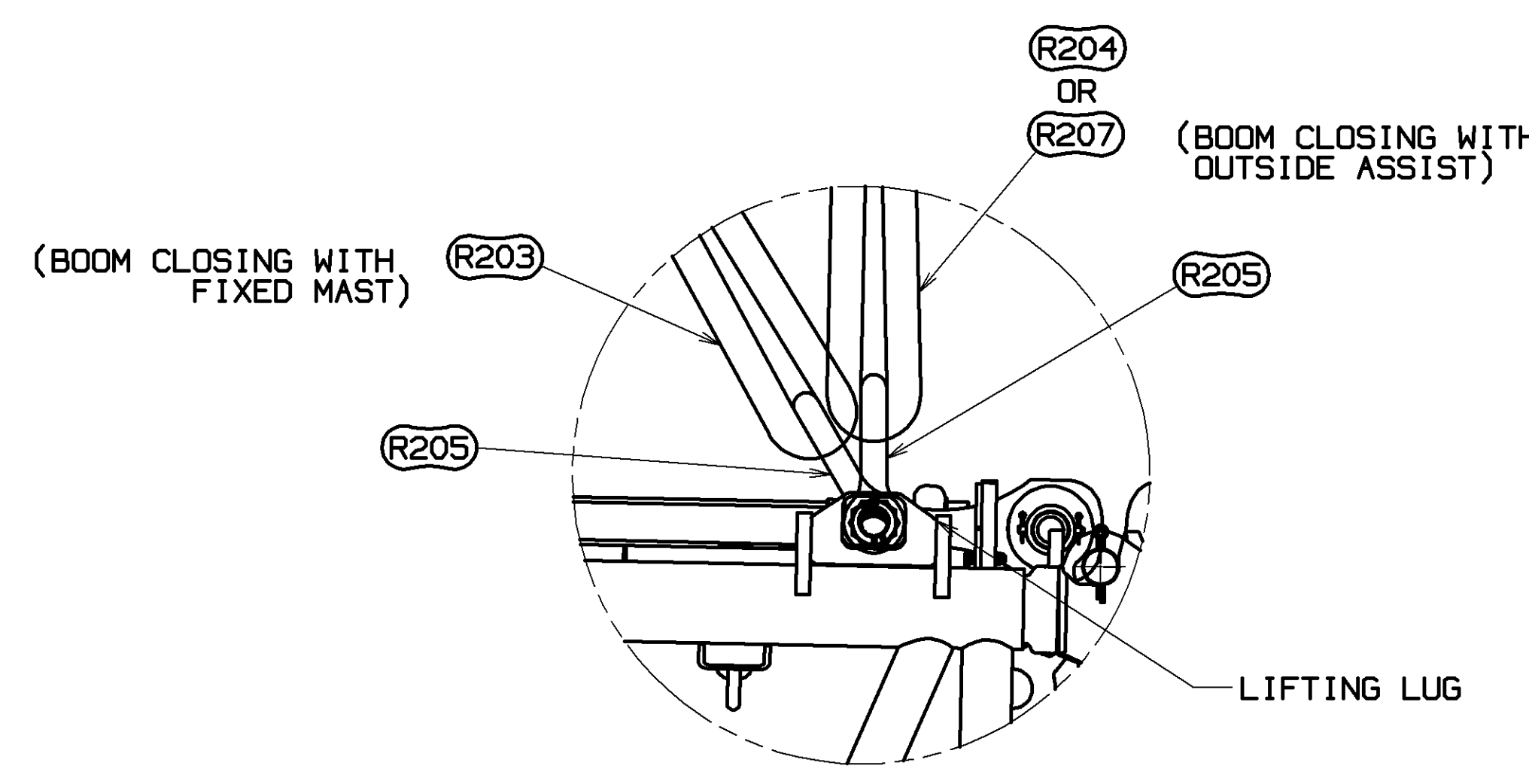


STEP 4A
EQUALIZER TO INSERT ALIGNMENT
 LOWER FIXED MAST TO APPROXIMATELY 15° WITH EQUALIZER (R9) SLIGHTLY ABOVE EQUALIZER INSERT (ITEM 4).
 ATTACH ASSIST CRANE TO EQUALIZER (R9) LOWER SLING POSTS WITH LIFTING SLINGS (R207 OR R204).

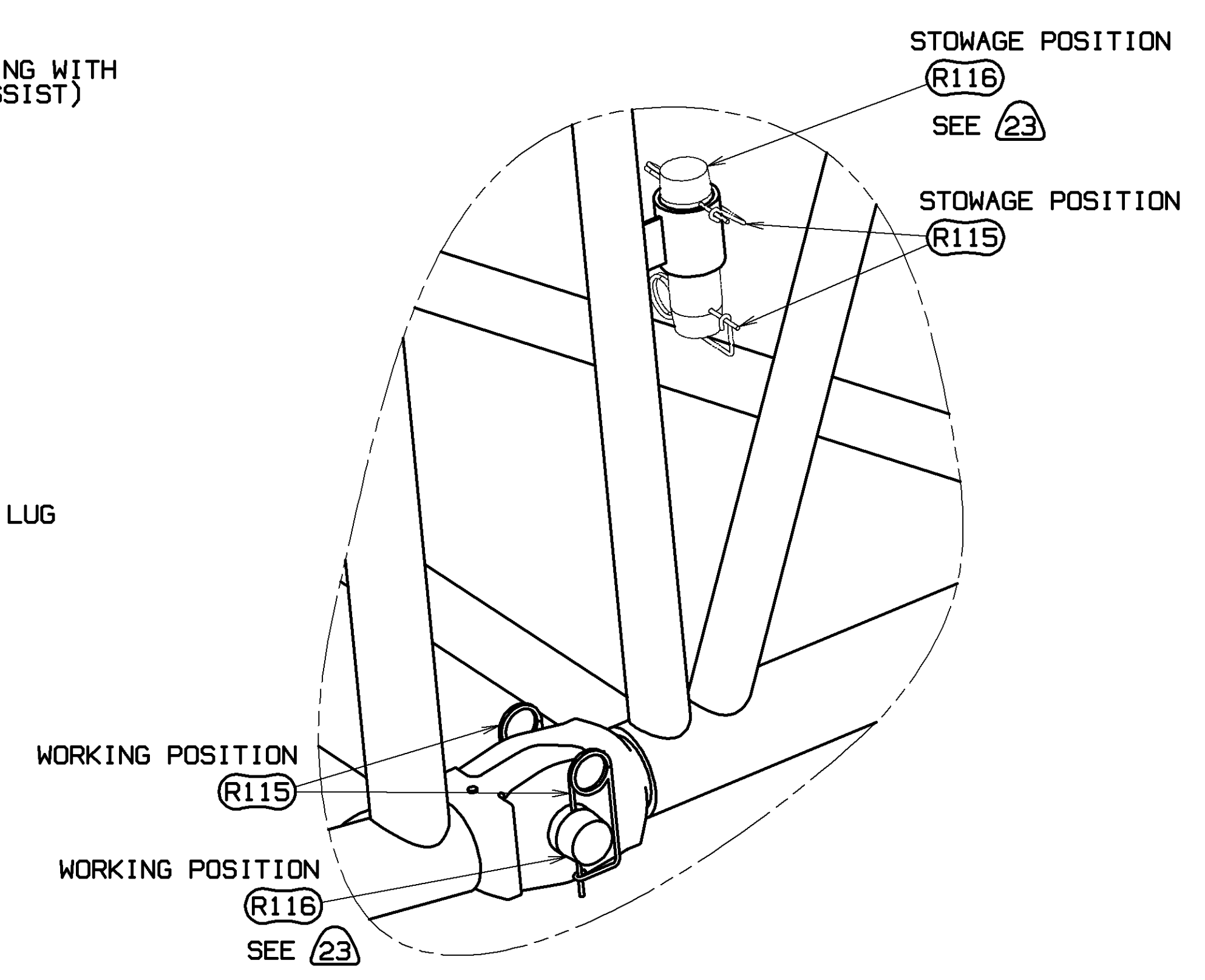
STEP 4B
 RELOCATE REAR ALIGNMENT PINS FROM STORAGE TUBES TO THE REAR OF THE EQUALIZER RAILS. (SEE DETAIL S ON SHEET 11).
 USE ASSIST CRANE TO POSITION EQUALIZER (R9) HORIZONTALLY.
 LOWER EQUALIZER ONTO RAILS OF EQUALIZER INSERT (ITEM 4) AND SECURE WITH FRONT EQUALIZER PINS. (SEE DETAIL S ON SHEET 11).
 REMOVE SLINGS (R207 OR R204) FROM EQUALIZER LOWER SLING POSTS.
 SCALE 0.050



STEP 5
BOOM CLOSING
 ASSEMBLE DESIRED BOOM LENGTH CONFIGURATION PER SHEETS 4 THRU 7 OR CANTILEVERED INSERTS VIEW ON SHEET 3 FOR BOOM HANDLING WITH EQUALIZER.



DETAIL R
 SCALE 0.100



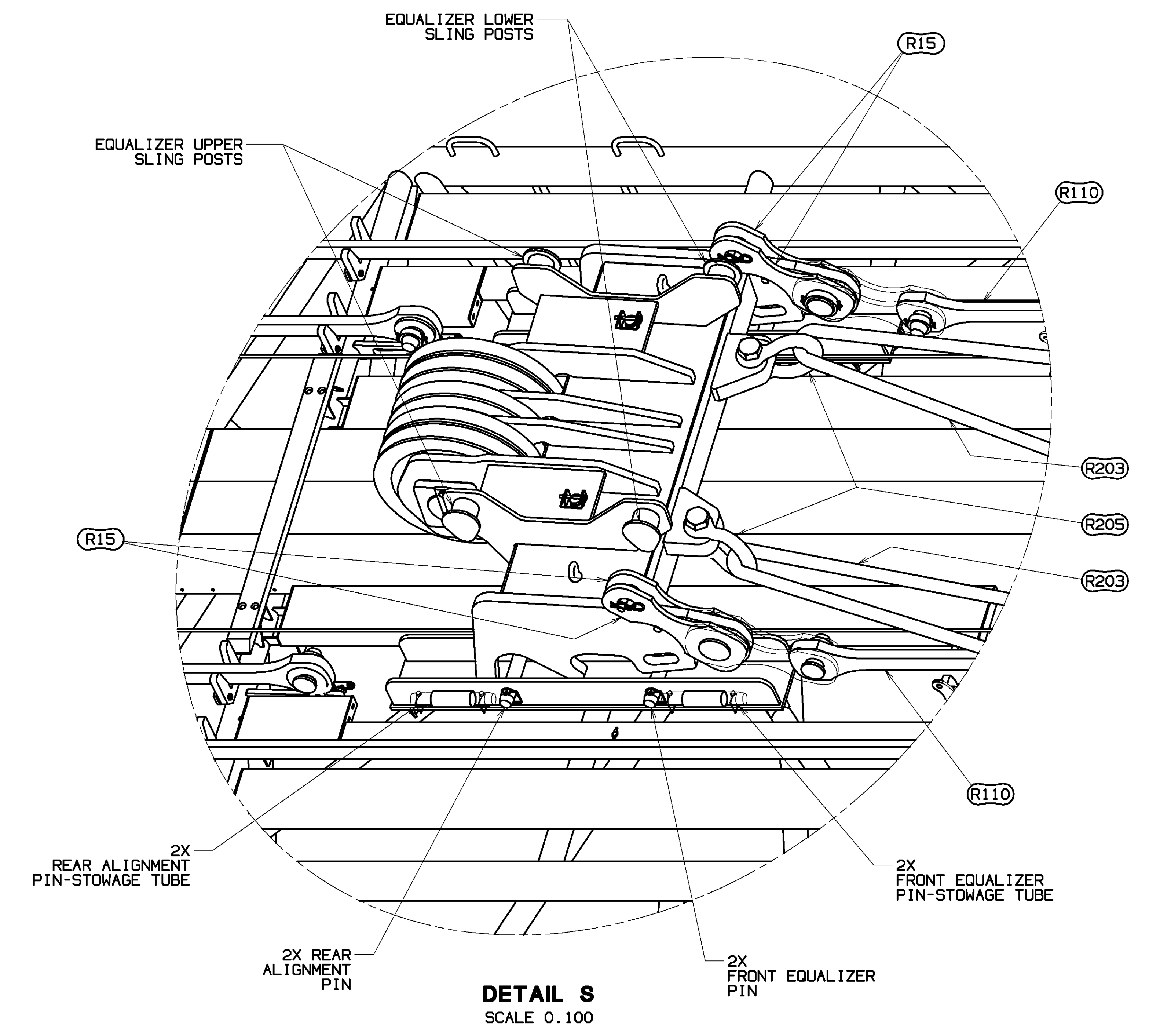
DETAIL M
 SCALE 0.150
 (FROM SHEET 9)

BOOM CLOSING WITH OUTSIDE ASSIST
 ATTACH ASSIST CRANE TO LIFTING LUGS ON EQUALIZER INSERT (ITEM 4) USING EQUAL LENGTH LIFTING SLINGS (R207 OR R204) AND SHACKLES (R205). (SEE DETAIL R)
 LIFT UP ON EQUALIZER INSERT AND INSTALL LOWER BOOM CONNECTOR PINS (R116 OR R114) AND SAFETY PINS (R115). (SEE DETAIL M).
 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 ON SHEET 10 AND DETAIL S ON SHEET 11)
 POSITION MAST AT 28° ABOVE HORIZONTAL.
 REMOVE FRONT EQUALIZER PINS SECURING EQUALIZER TO INSERT RAILS. (SEE DETAIL S ON SHEET 11)
 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 (R116) AND SAFETY PINS (R115). (SEE DETAIL M)
 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 ON SHEET 11).

TOLERANCE UNLESS OTHERWISE SPECIFIED		FABRICATION		FINISHING		MATERIAL	
DECIMAL PLACES	FRACTIONS	FRACTIONS	FRACTIONS	FINISH	FINISH	DESCRIPTION	QTY
(1) PLACE 0.5	±.12	±.18	±.05				
(2) PLACE 0.00	±.08	±.12	±.015				
(3) PLACE 0.000	±.008	±.010	±.005				

PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 6829103794 FOR COMPONENTS LISTED IN 68290-05-005
 DATE 05-05-22
 REV. LTR. A



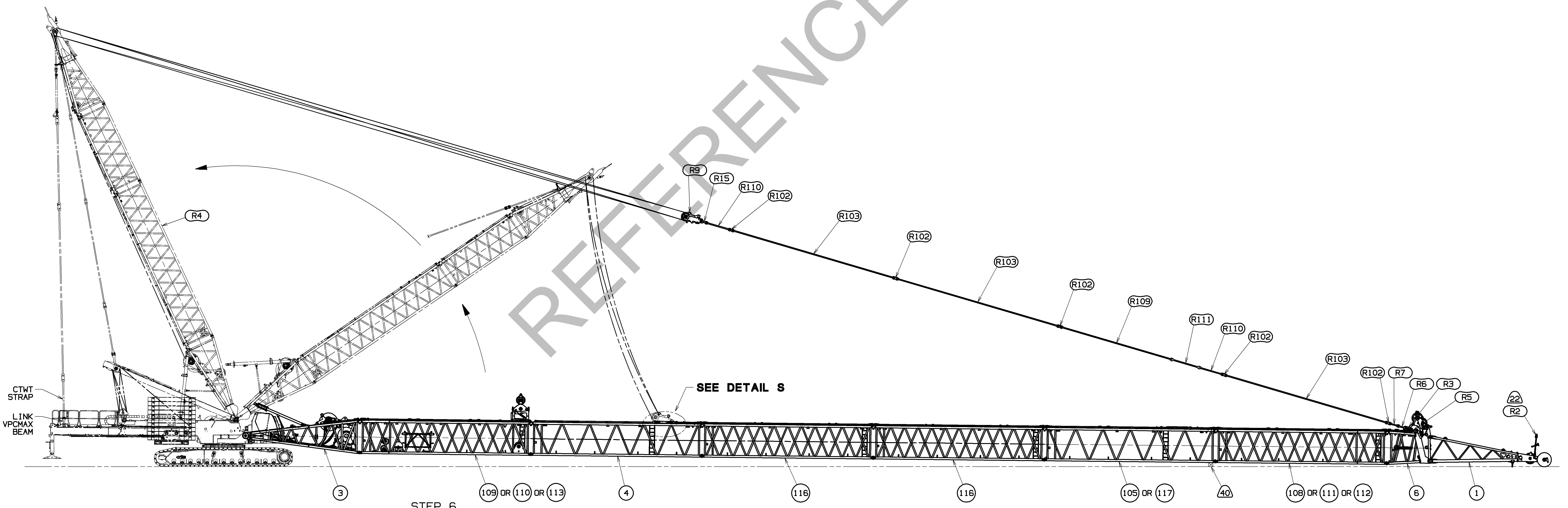
DETAIL S
SCALE 0.100

PROCEDURE TO DISASSEMBLE BOOM

1. BOOM DOWN AND SUPPORT BOOM ON BLOCKING.
2. BOOM FIXED MAST (R4) 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 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 (R110) 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 9.

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 (R110) 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



STEP 6

EQUALIZER TO STRAPS ASSEMBLY

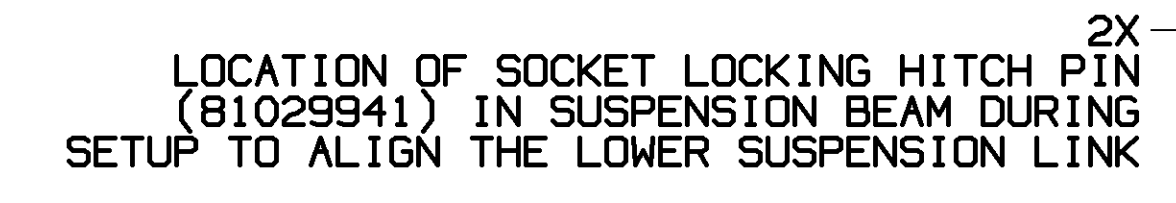
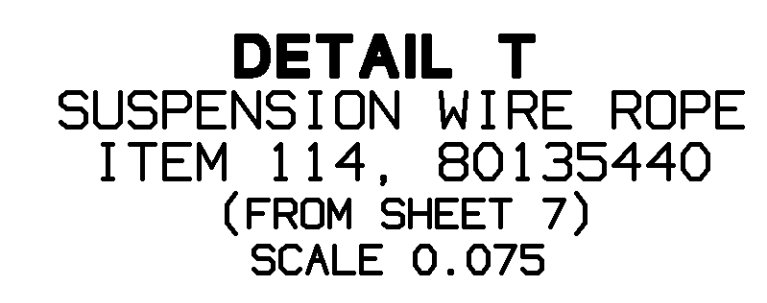
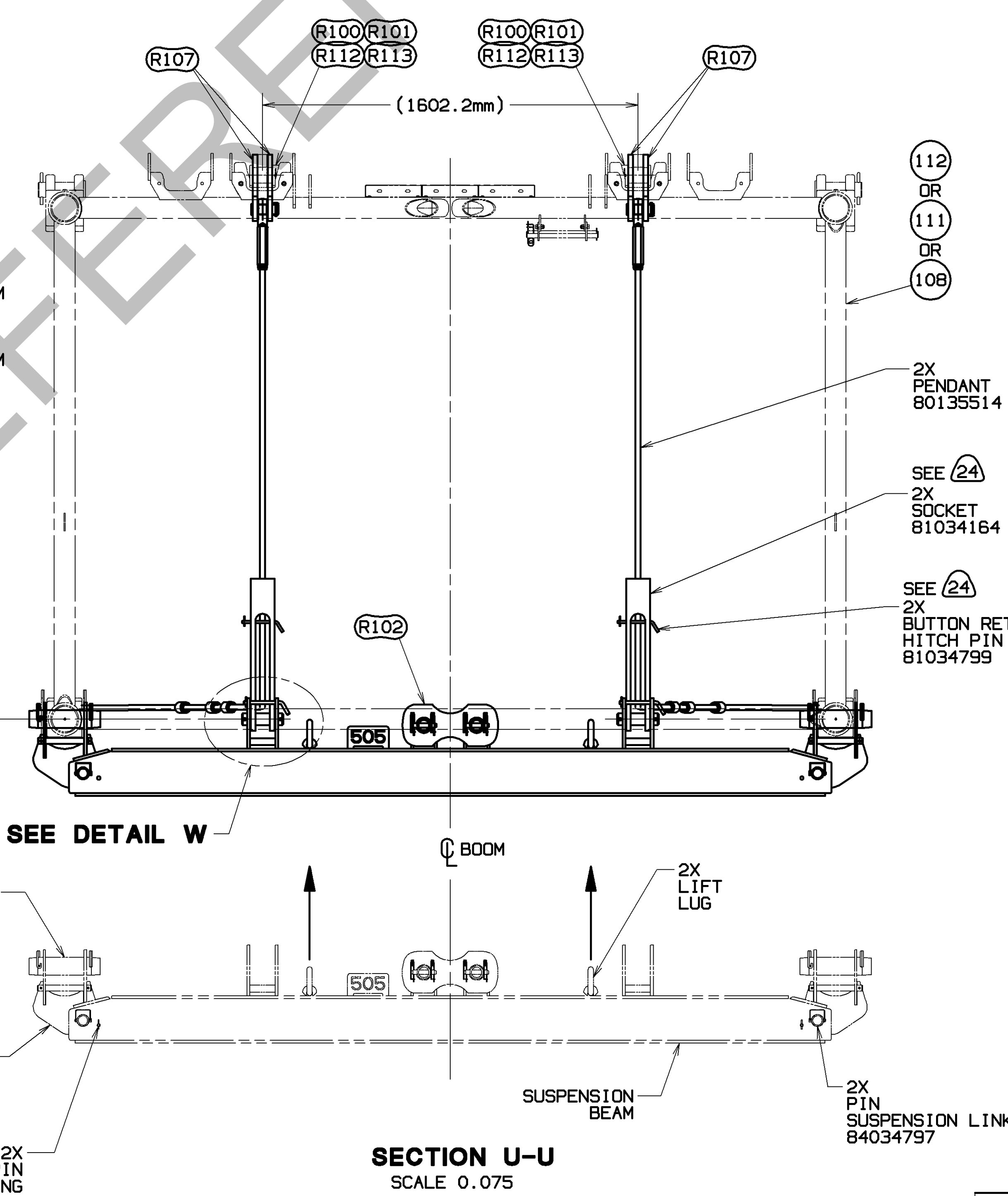
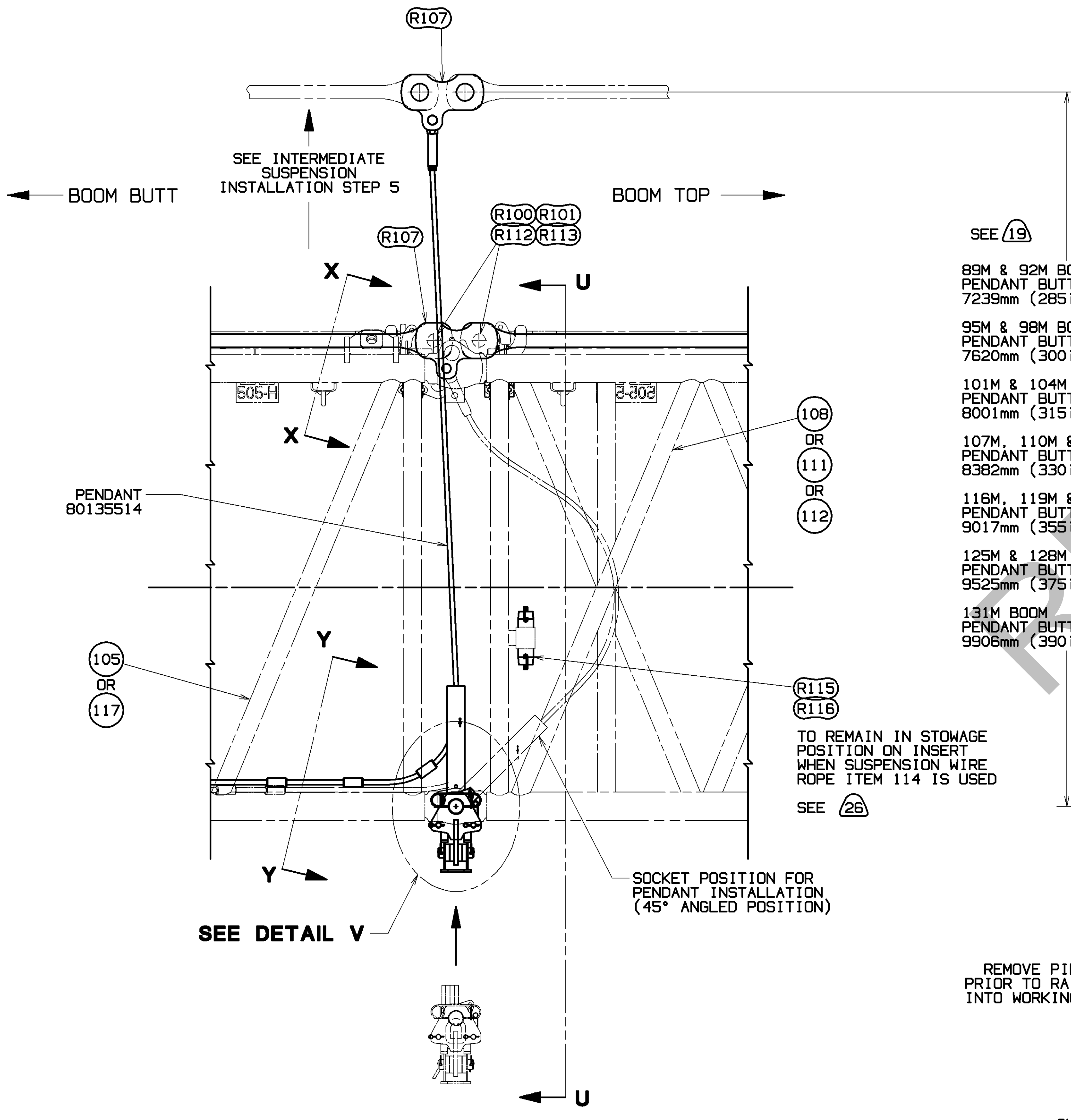
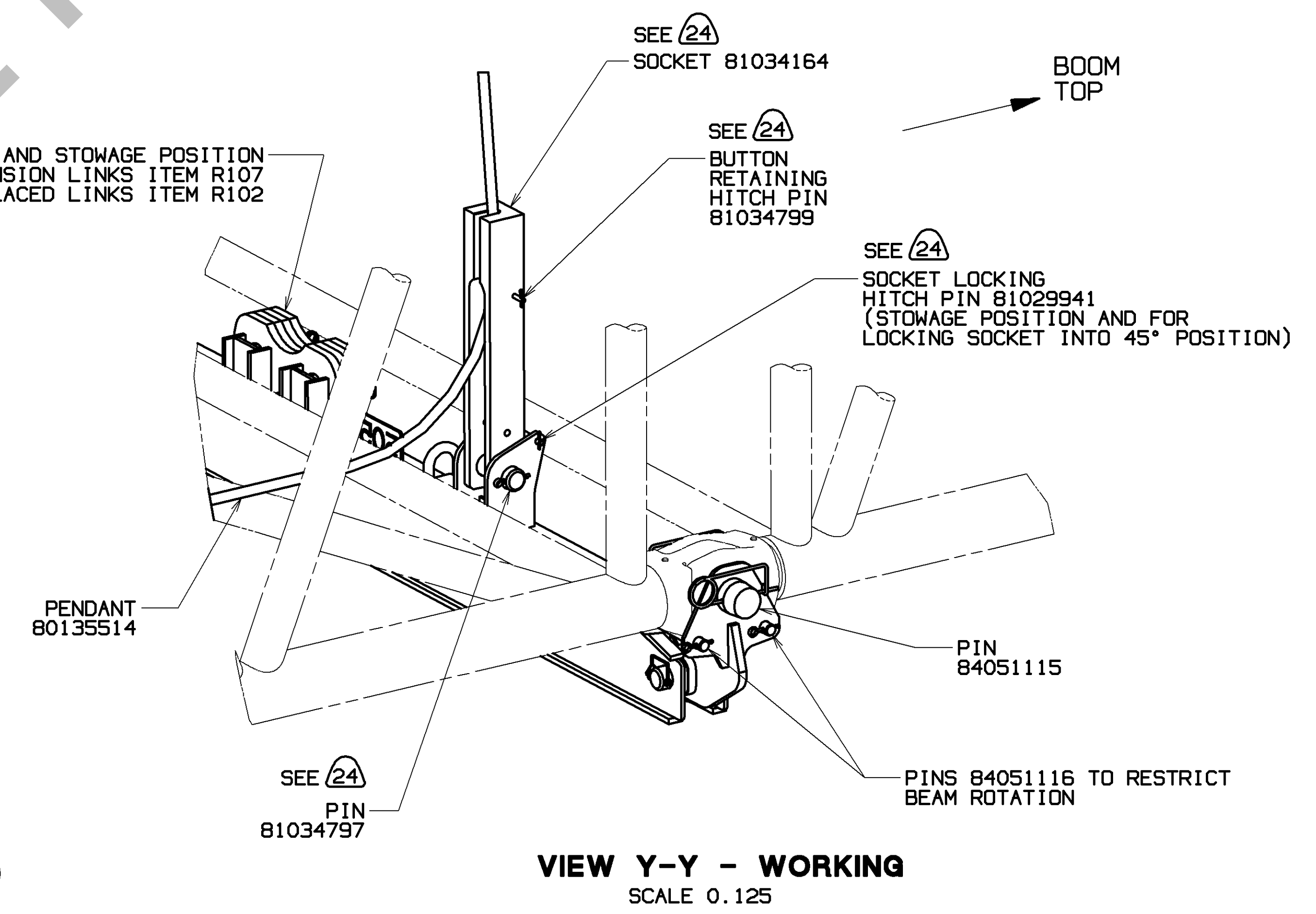
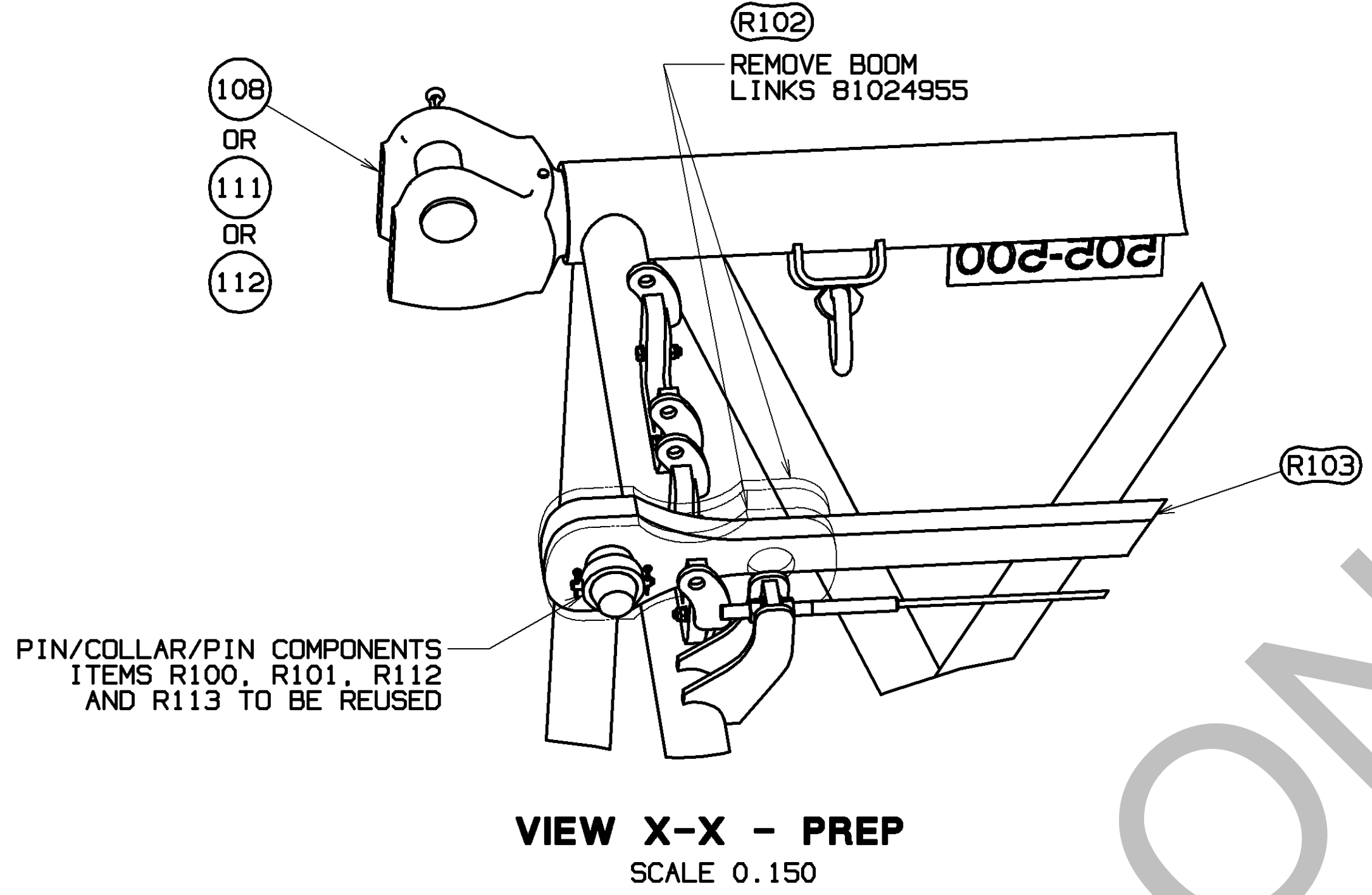
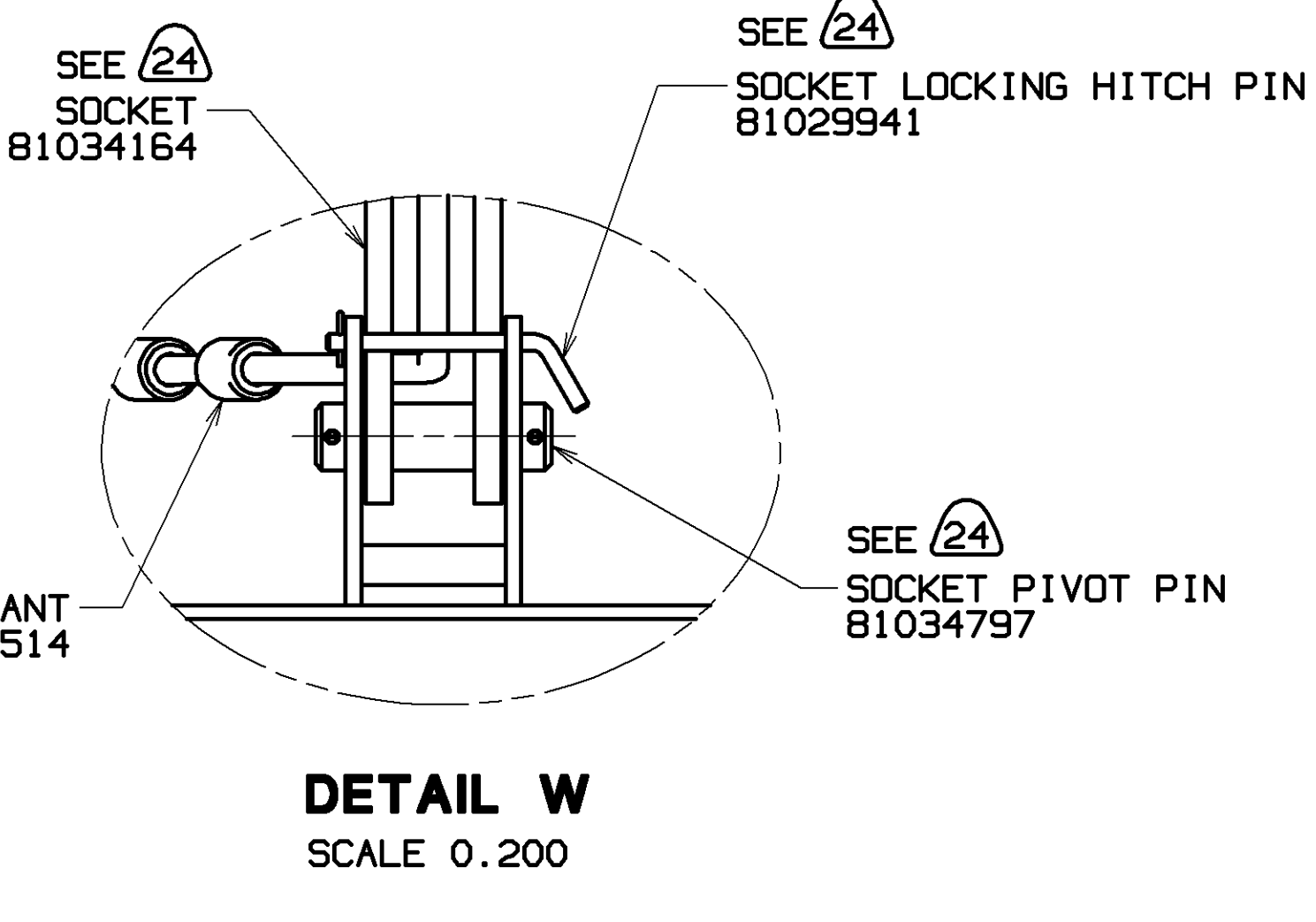
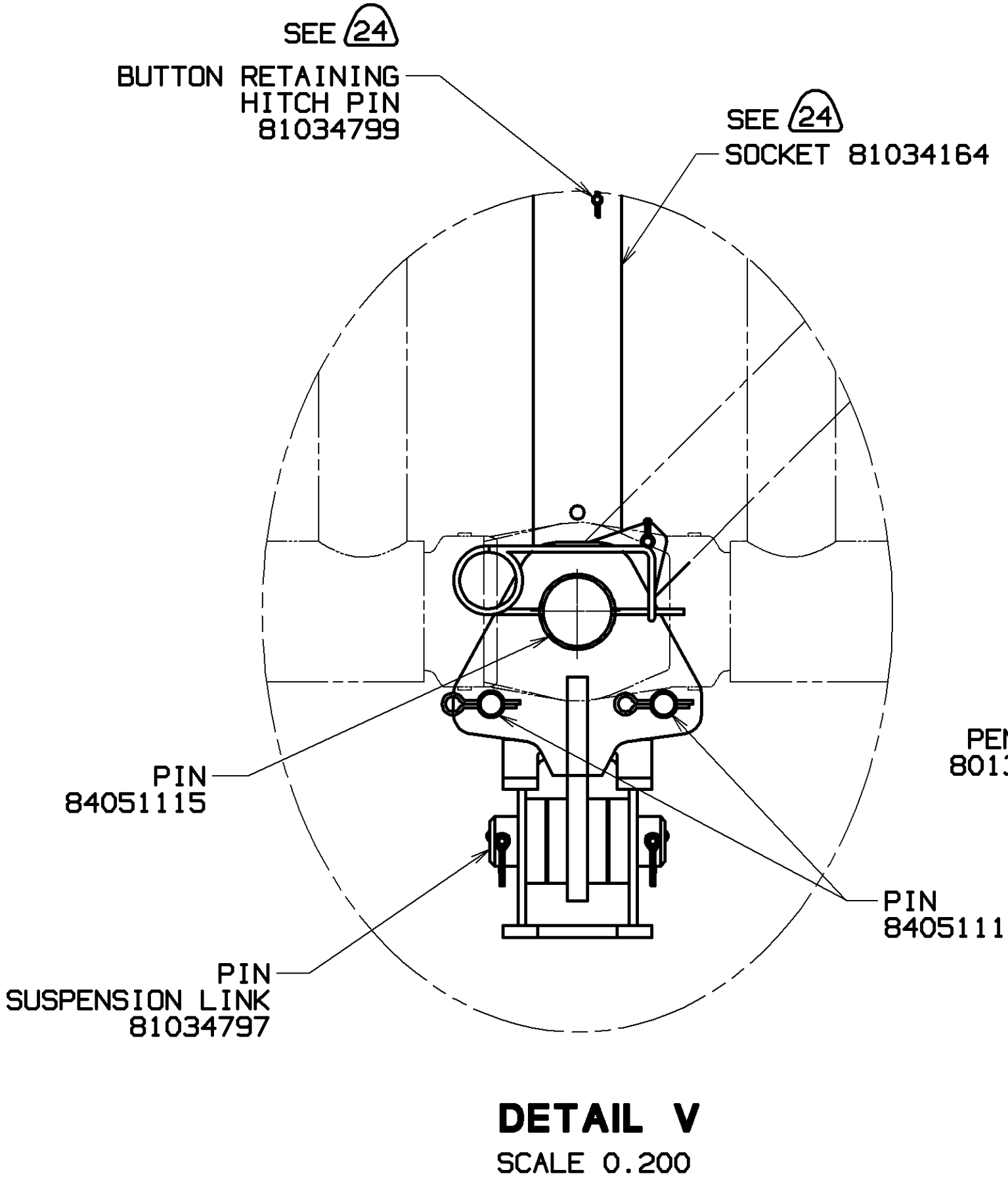
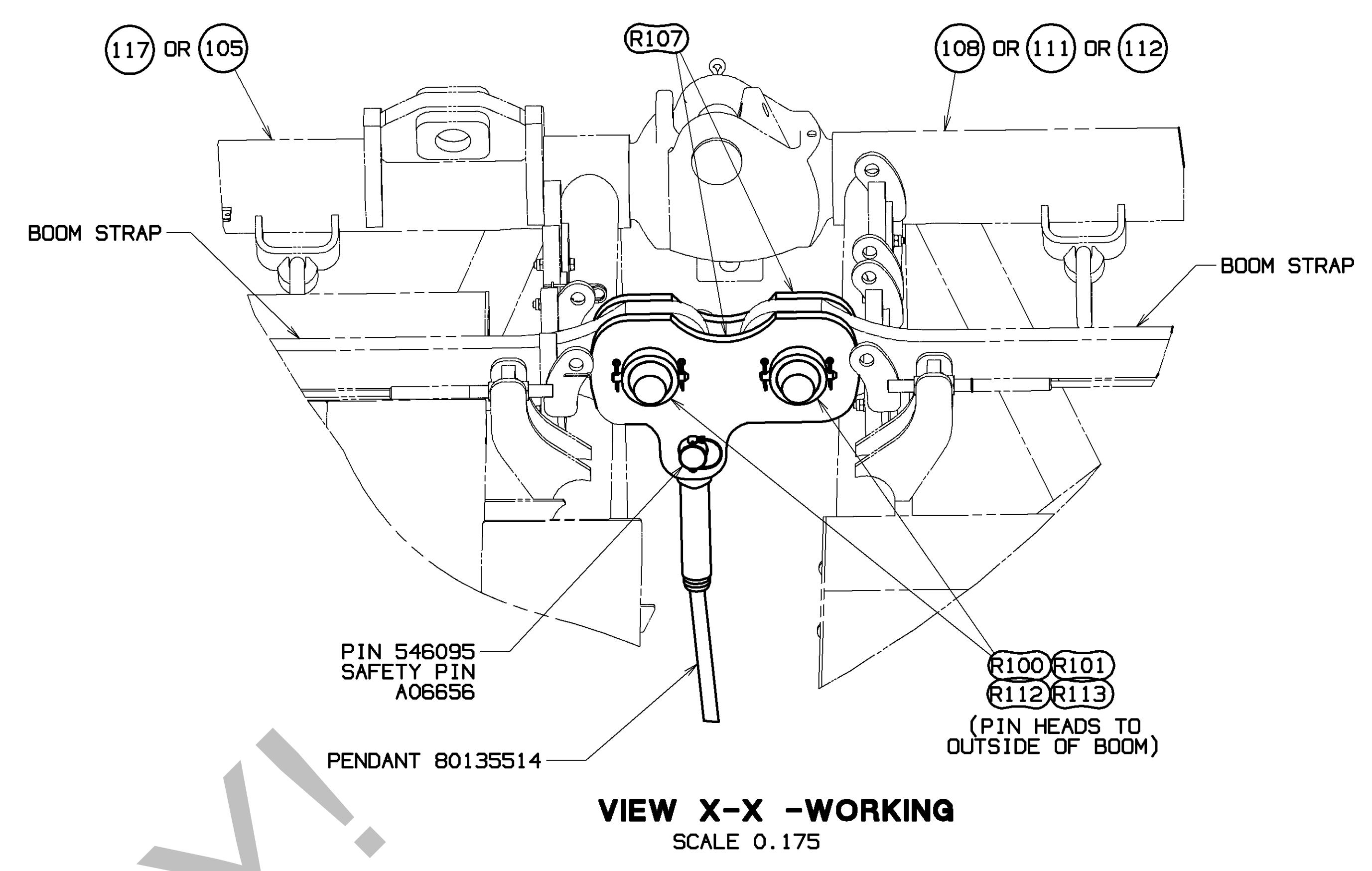
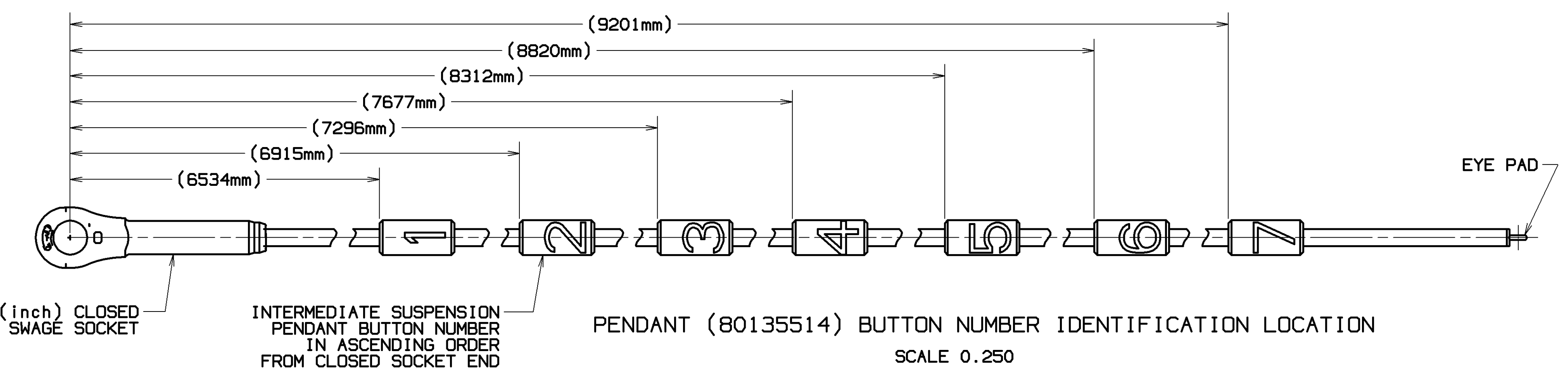
CONNECT BOOM STRAPS/LINKS FROM BOOM TOP TO EQUALIZER INSERT (ITEM 4) IF NOT PREVIOUSLY DONE.
CONNECT EQUALIZER LINKS (R15) TO BOOM STRAPS (R110). (SEE DETAIL S).
REMOVE PINS SECURING EQUALIZER (R9) TO INSERT IF INSTALLED. (SEE DETAIL S).
(PINS SECURING EQUALIZER TO INSERT ARE ONLY REQUIRED WHEN CHANGING BOOM LENGTHS AND THE EQUALIZER IS NOT SUPPORTED BY AN ASSIST CRANE OR CONNECTED TO THE BOOM STRAPS).

RAISE FIXED MAST (R4) AND CONNECT MAST COUNTERWEIGHT STRAPS TO LINKS ON VPC-MAX BEAM PER FIXED MAST ASSEMBLY INSTRUCTIONS 84045340.

BOOM UP TO DESIRED ANGLE.

TOLERANCE UNLESS OTHERWISE SPECIFIED		SCALE	Manitowoc Cranes, Inc. Manitowoc, Wisconsin	BOOM RIGGING
DECIMAL PLACES	FABRICATION	0.010		
(1) PLACE 0.5	± 0.12	± 0.18	DR: RHY	
(2) PLACE 0.00	± 0.08	± 0.12	CK: DLG	
(3) PLACE 0.000	± 0.005	± 0.008	APP: JRR	
ANGLES		± 1.0°	MODEL: MLC300	B87:505-500

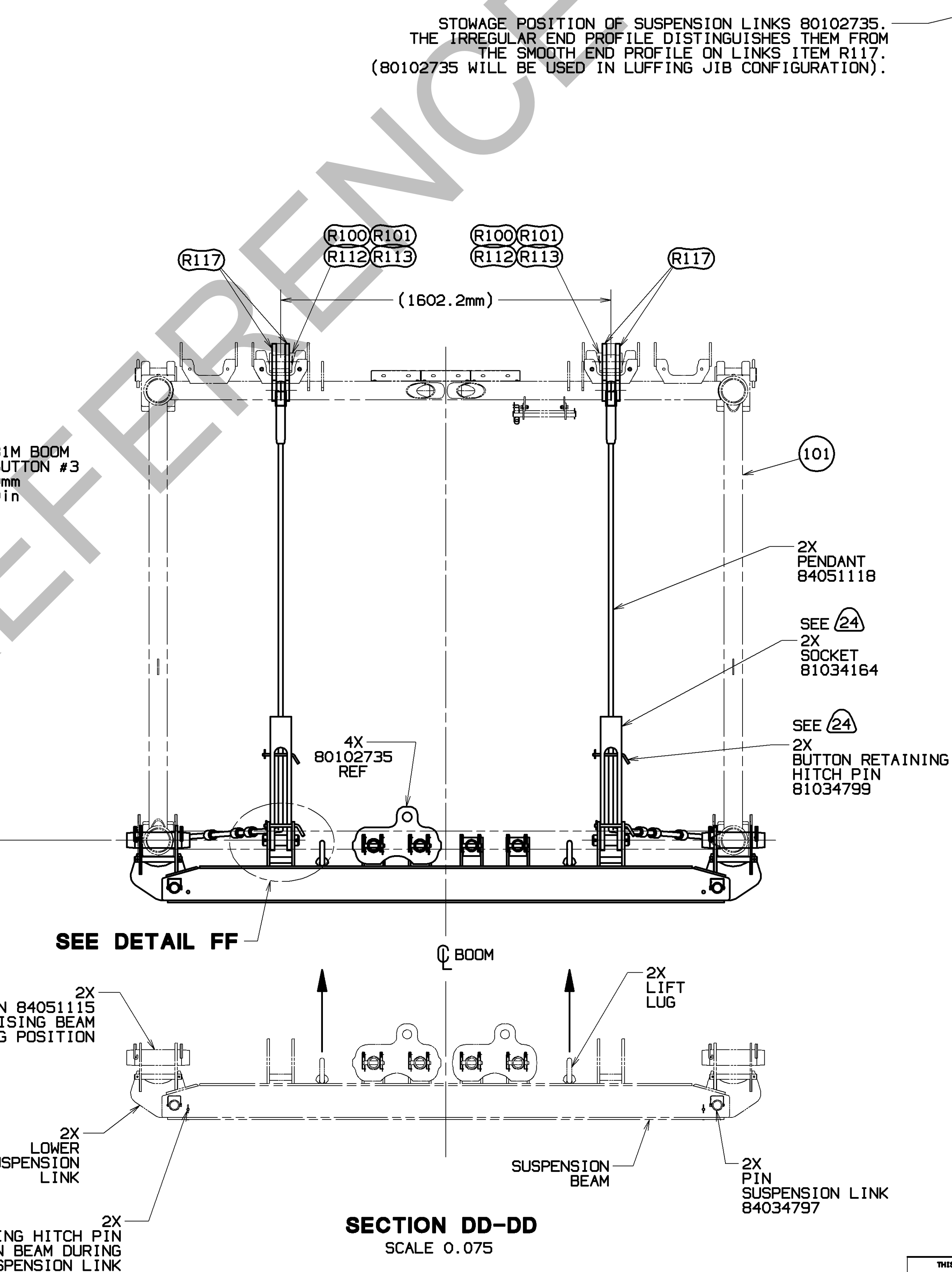
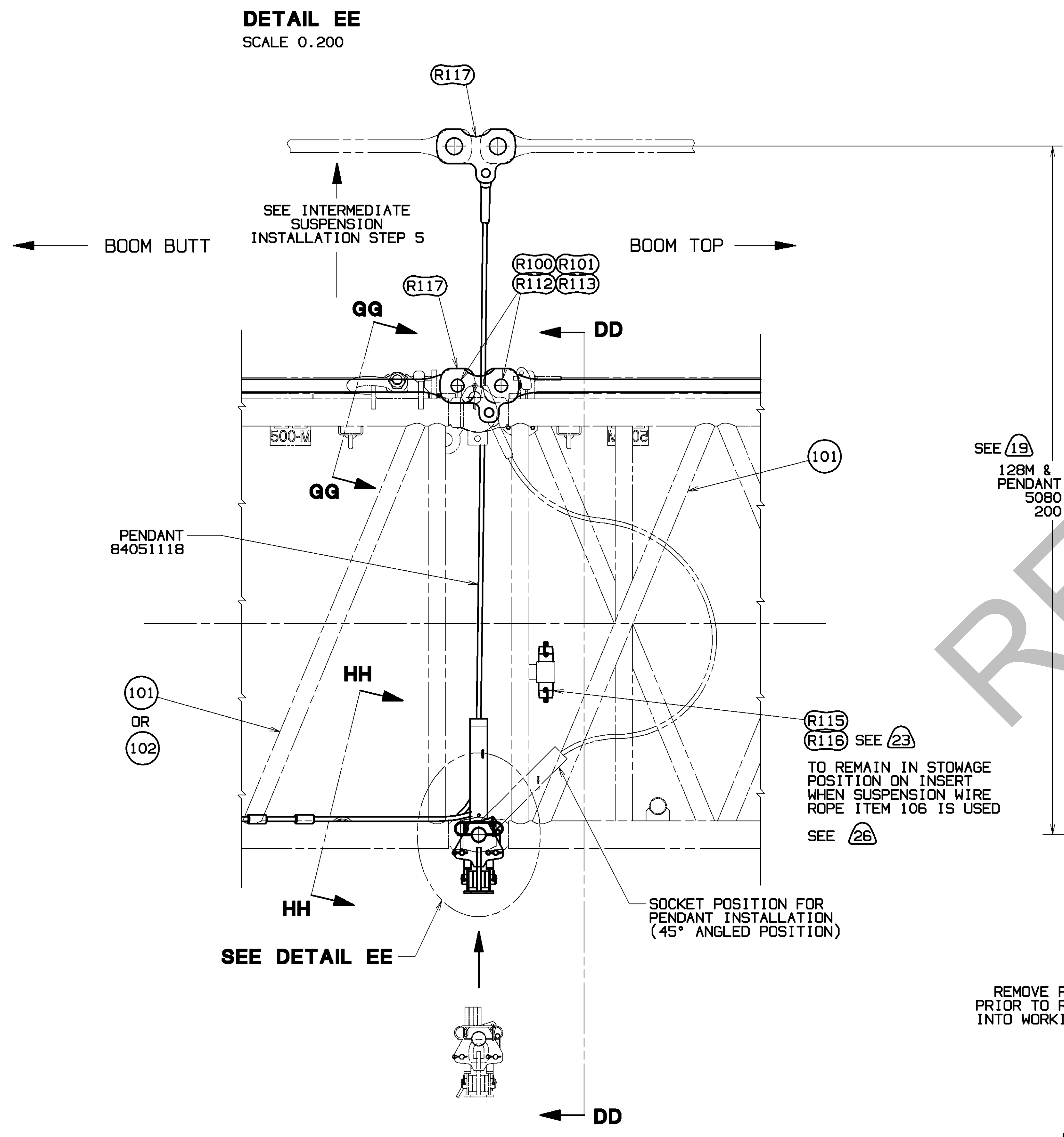
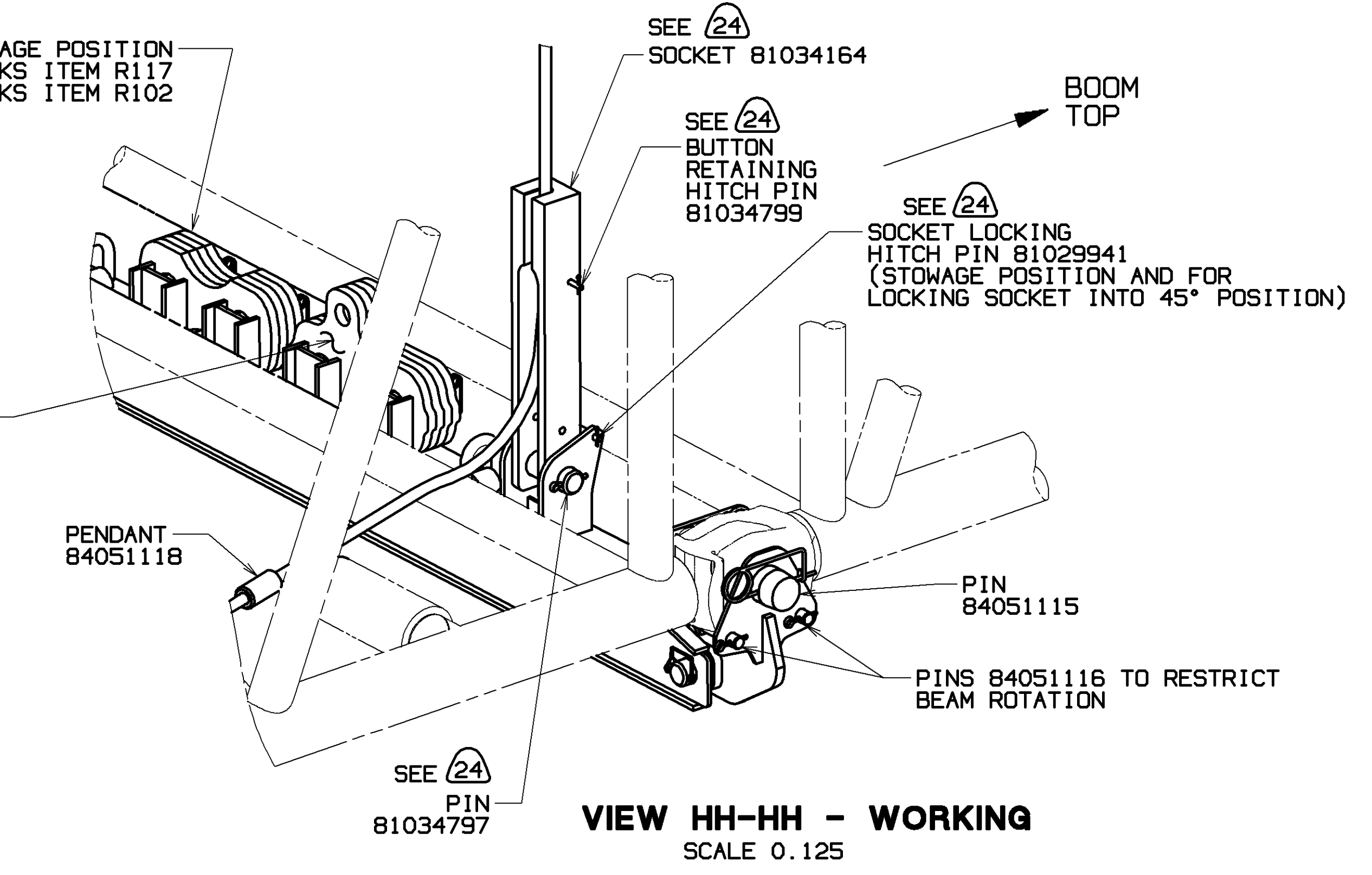
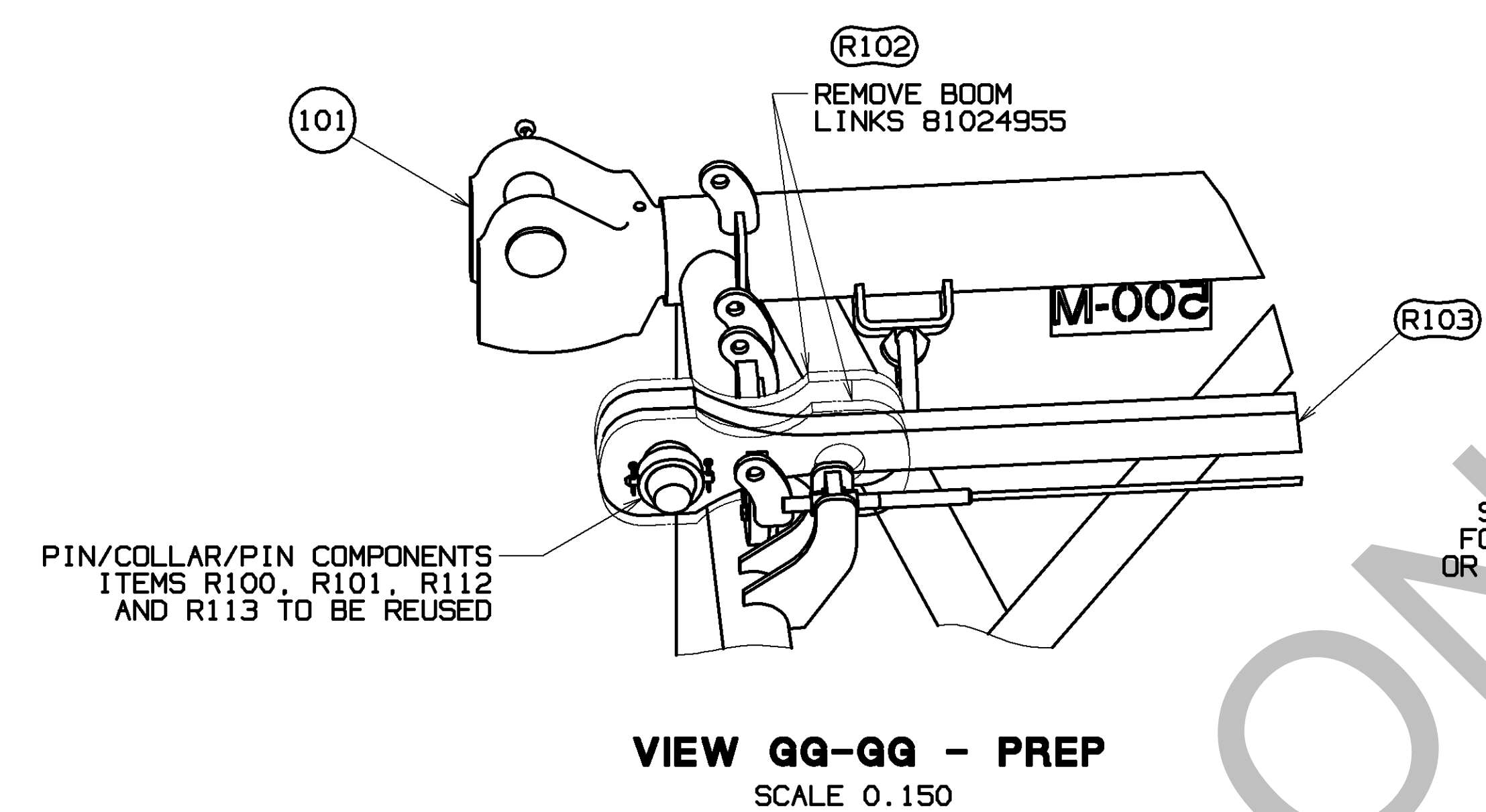
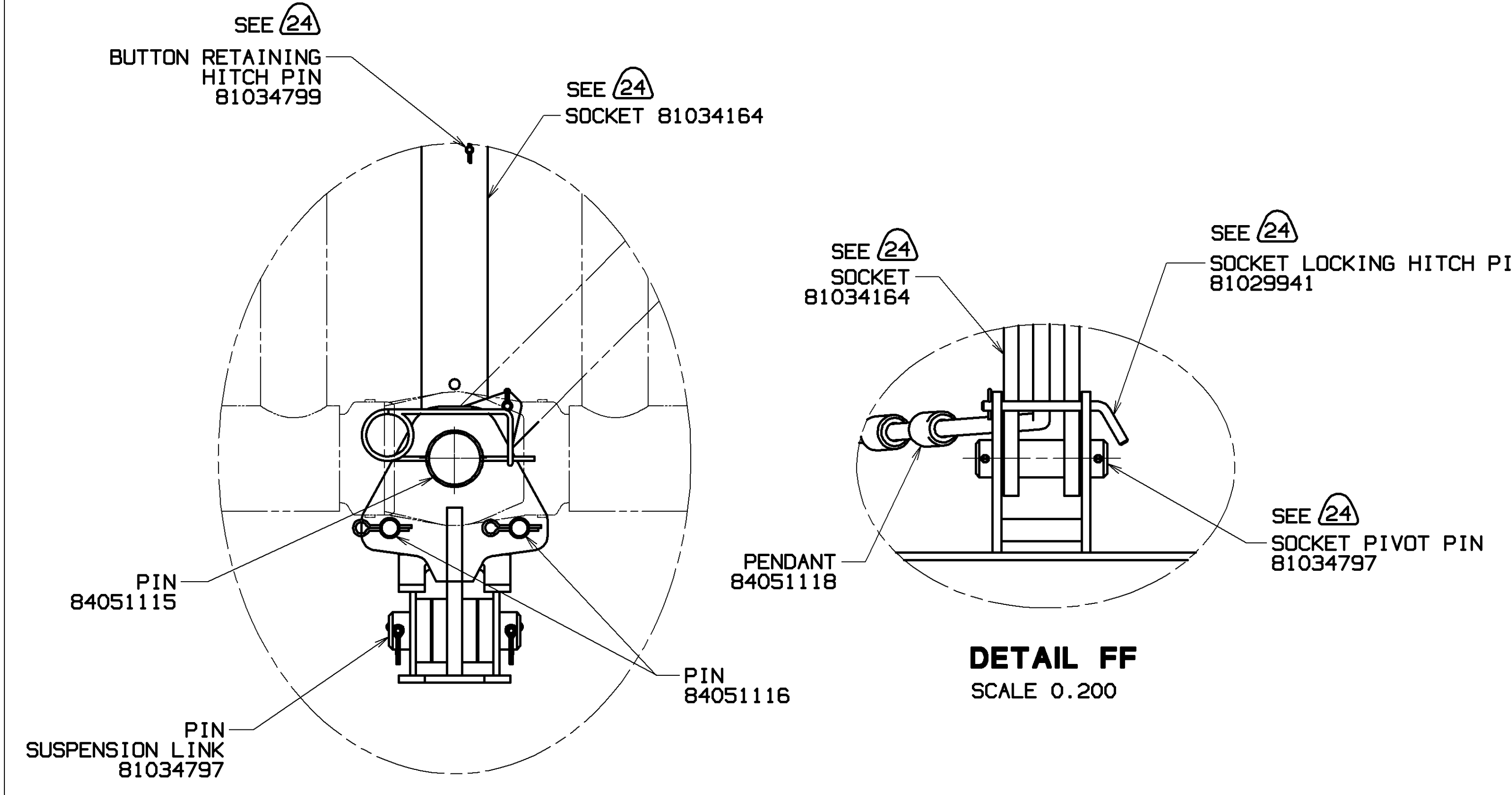
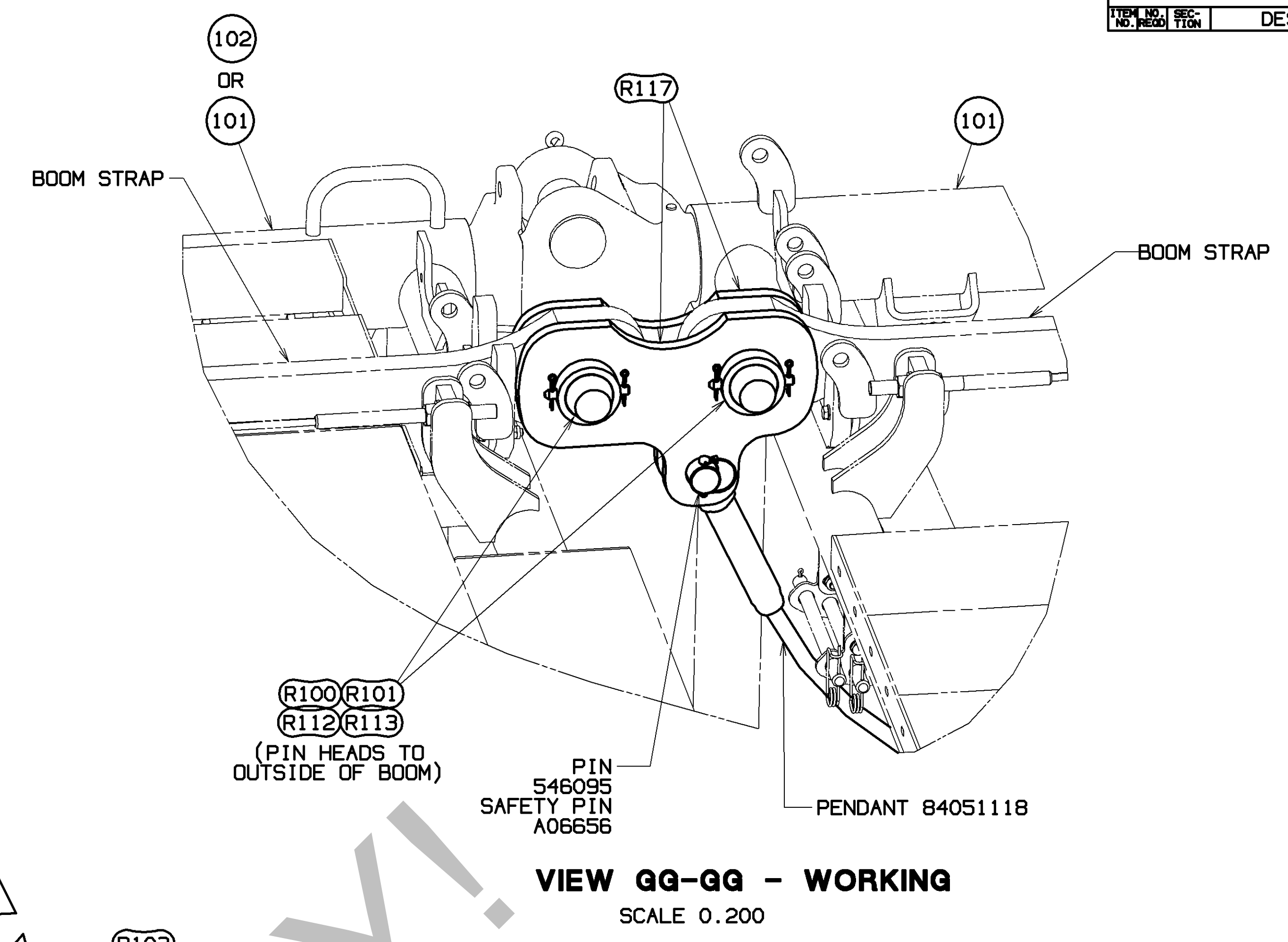
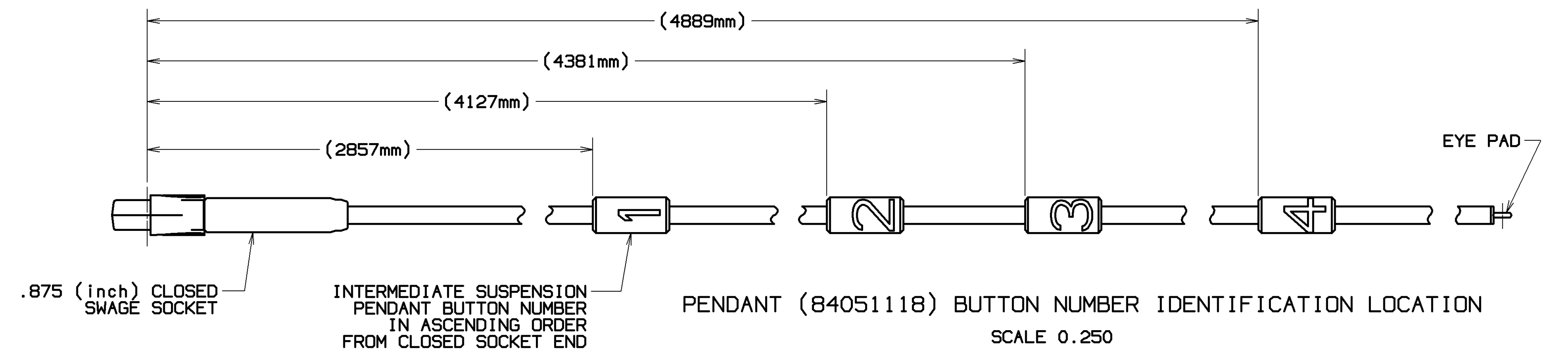
PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 862900-05-026
DATE 05-05-22
REV: LNK
A



- INTERMEDIATE SUSPENSION (ITEM 114) INSTALLATION**
- SEE BOOM MAKEUP VIEWS ON SHEETS 4, 5, 6 & 7 AND BOOM LENGTH TABLE ON SHEET 2 FOR REQUIRED SUSPENSION & WIRE ROPE BUTTON IDENTIFICATION LOCATION. REFERENCE SUSPENSION WIRE ROPE ASSY 80135440 FOR ADDITIONAL INFORMATION. (REFER TO VIEW OF PENDANT 80135514 ON THIS SHEET FOR BUTTON NUMBER I.D. LOCATION).
- FROM MATING INSERT (ITEM 108 OR 111 OR 112) TOWARD BOOM TOP, REMOVE (4) BOOM LINKS (R102) AND STORE IN PARTS BOX 81028769 OR ON SUSPENSION BEAM AFTER SUSPENSION LINKS (R107) HAVE BEEN REMOVED. (SEE Y-Y - WORKING). PIN/COLLAR/PIN COMPONENTS (ITEMS R100, R101, R112 & R113) WILL BE REUSED WITH SUSPENSION LINK PER STEP 4 BELOW. (SEE VIEW X-X - 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 8405115 BEAM FROM SUSPENSION BEAM, USE AN ASSIST TO RAISE SUSPENSION BEAM ASSEMBLY TO ALIGN LOWER CONNECTOR AND LOWER SUSPENSION LINK HOLES. REINSTALL PIN 84051115. (SEE DETAIL T AND SECTION U-U).
 - REINSTALL SOCKET INTO SUSPENSION BEAM AND PIVOT SOCKET INTO 45° POSITION. REINSTALL SOCKET LOCKING PIN THRU BRACKET AND SOCKET (ANGLED POSITION). (SEE DETAIL T).
 - ATTACH INSERT BOOM STRAPS WITH DOUBLE LINKS (R107) USING EXISTING PIN/COLLAR/PIN COMPONENTS (ITEMS R100, R101, R112 & R113) REMOVED IN VIEW X-X - PREP. ATTACH CLOSED SOCKET END OF PENDANT 80135514 TO LINKS R107. (SEE VIEW X-X - WORKING).
 - WITH SOCKET LOCKED IN 45° POSITION, SLOWLY RAISE BOOM. AS THE STRAPS RISE, GUIDE THE INTERMEDIATE SUSPENSION BEAM THROUGH THE OPENING BETWEEN THE BOOM INSERTS. STOP THE BOOM 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 80135514 INTO SOCKET AND REINSTALL BUTTON RETAINING HITCH PIN INTO SOCKET, LOCKING PENDANT IN POSITION. (SEE DETAIL T).
 - PRIOR TO CONTINUATION OF BOOM RAISING, REMOVE SOCKET LOCKING HITCH PIN FROM 45° POSITIONED SOCKET AND BRACKET. STOW IN BRACKET HOLE (STOWAGE POSITION) ALLOWING SOCKET TO PIVOT AS BOOM STRAPS RAISE. (SEE VIEW Y-Y - WORKING).
 - BOOM UP SLOWLY AS PENDANT BECOMES TIGHT AND SOCKET PIVOTS INTO WORKING POSITION.

FOR REMOVAL OF DROP-DOWN INTERMEDIATE SUSPENSION (ITEM 114) REVERSE INSTALLATION STEPS 1 THRU 7, ASSURING SOCKET PIVOTS TOWARD 45° POSITION WHEN LOWERING BOOM STRAPS.

TOLERANCE UNLESS OTHERWISE SPECIFIED		MATERIAL		DATE	
DECIMAL PLACES	FRACTIONS	DESCRIPTION	QUANTITY	REVISION	BY
±.12	±.12	DR. RHY	1	1	DR. RHY
(2) PLACE 0.00	±.12	CK. DLG	1	2	CK. DLG
(3) PLACE 0.000	±.12	APP. JRR	1	3	APP. JRR
ANGLES	±.12	Mantowoc Cranes, Inc.			
		Mantowoc, Wisconsin			
		MODEL MLC300			
		BOOM RIGGING			
		B87:505-500			



- INTERMEDIATE SUSPENSION (ITEM 106) INSTALLATION**
- SEE BOOM MAKEUP VIEWS ON SHEET 7 AND BOOM 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 MATING INSERT (ITEM 101) TOWARD BOOM TOP, REMOVE (4) BOOM LINKS (R102) AND STORE IN PARTS BOX 81028769 OR ON SUSPENSION BEAM AFTER SUSPENSION LINKS (R117) HAVE BEEN REMOVED. (SEE HH-HH - WORKING). PIN/COLLAR/PIN COMPONENTS (ITEMS R100, R101, R112 & R113) WILL BE REUSED WITH SUSPENSION LINK PER STEP 4 BELOW. (SEE VIEW GG-GG - 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 8405115 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 CC AND SECTION DD-DD).
 - REINSTALL SOCKET INTO SUSPENSION BEAM AND PIVOT SOCKET INTO 45° POSITION. REINSTALL SOCKET LOCKING PIN THRU BRACKET AND SOCKET (ANGLED POSITION). (SEE DETAIL CC).
 - ATTACH INSERT BOOM STRAPS WITH DOUBLE LINKS (R117) USING EXISTING PIN/COLLAR/PIN COMPONENTS (ITEMS R100, R101, R112 & R113) REMOVED IN VIEW GG-GG - PREP. ATTACH CLOSED SOCKET END OF PENDANT 84051118 TO LINKS R117. (SEE VIEW GG-GG - WORKING).
 - WITH SOCKET LOCKED IN 45° POSITION, SLOWLY RAISE BOOM. AS THE STRAPS RISE, GUIDE THE INTERMEDIATE SUSPENSION PENDANTS THROUGH THE OPENING BETWEEN THE BOOM INSERTS. STOP THE BOOM RAISING PROCEDURE WHEN THE REQUIRED PENDANT 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 CC).
 - PRIOR TO CONTINUATION OF BOOM RAISING, REMOVE SOCKET LOCKING HITCH PIN FROM 45° POSITIONED SOCKET AND BRACKET. STOW IN BRACKET HOLE (STORAGE POSITION) ALLOWING SOCKET TO PIVOT AS BOOM STRAPS RAISE. (SEE VIEW HH-HH - WORKING).
 - BOOM UP SLOWLY AS PENDANT BECOMES TIGHT AND SOCKET PIVOTS INTO WORKING POSITION.
- FOR REMOVAL OF DROP-DOWN INTERMEDIATE SUSPENSION (ITEM 106) REVERSE INSTALLATION STEPS 1 THRU 7, ASSURING SOCKET PIVOTS TOWARD 45° POSITION WHEN LOWERING BOOM STRAPS.