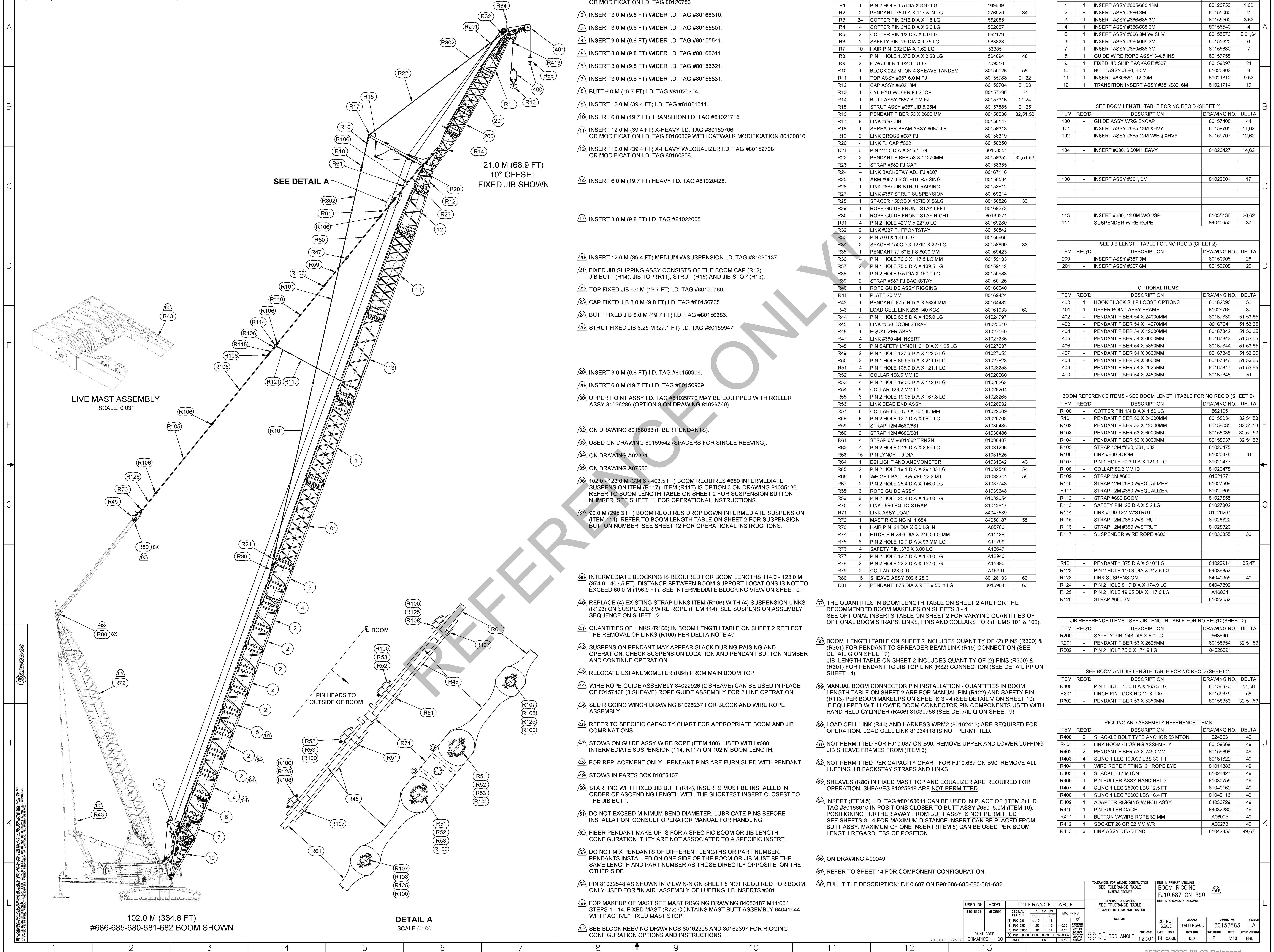
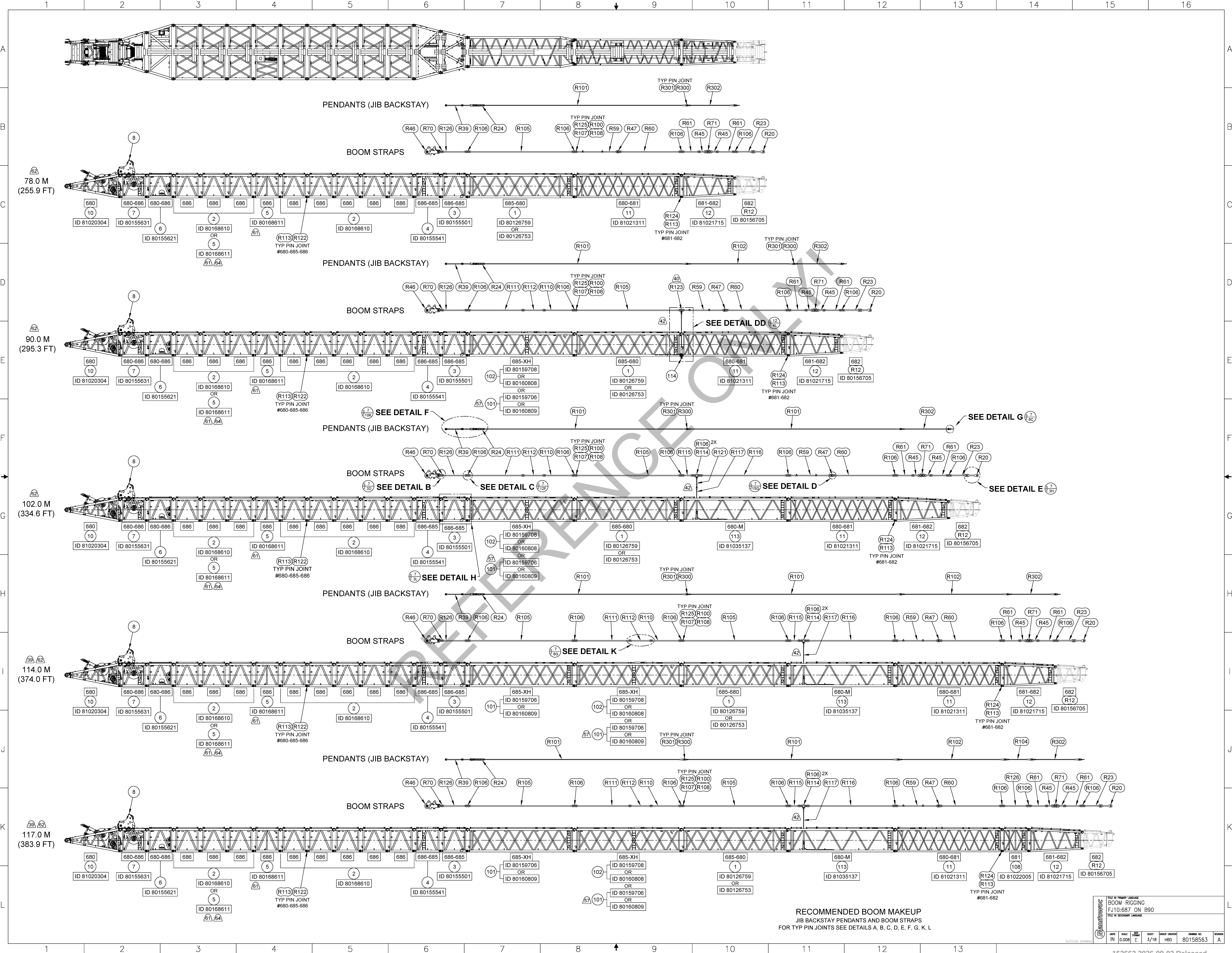






RECOMMENDED BOOM MAKEUP
JIB BACKSTAY PENDANTS AND BOOM STRAPS
FOR TYP PIN JOINTS SEE DETAILS A, B, C, D, E, F, G, K, L

TITLE IN PRIMARY LANGUAGE BOOM RIGGING FJ10:687 ON B90 TITLE IN SECONDARY LANGUAGE									
UNITS IN	SCALE 0.008	SHEET E	DATE 3/18	GROUP HBD	PROJECT 80158563	REVISION A			

120.0 M
(393.7 FT)

123.0 M
(403.5 FT)

PENDANTS (JIB BACKSTAY)

BOOM STRAPS

SEE DETAIL L

PENDANTS (JIB BACKSTAY)

BOOM STRAPS

SEE DETAIL P

SEE DETAIL AA

SEE DETAIL BB

RECOMMENDED BOOM MAKEUP
JIB BACKSTAY PENDANTS AND BOOM STRAPS
FOR TYP PIN JOINTS SEE DETAILS A, B, C, D, E, F, G, K, L

TITLE IN PRIMARY LANGUAGE		BOOM RIGGING		FJ10:687 ON B90		TITLE IN SECONDARY LANGUAGE	
UNITS	SCALE	DATE	SHEET	GROUP	ORIGIN	DRAWING NO.	REVISION
IN	0.007	E	4/18	HBD		80158563	A

AUTOCAD DRAWING

REFERENCE ONLY!

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TITLE IN PRIMARY LANGUAGE BOOM RIGGING FJ10:687 ON B90 TITLE IN SECONDARY LANGUAGE									
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IN	0.007	E	5/18	HBO		80158563	A		

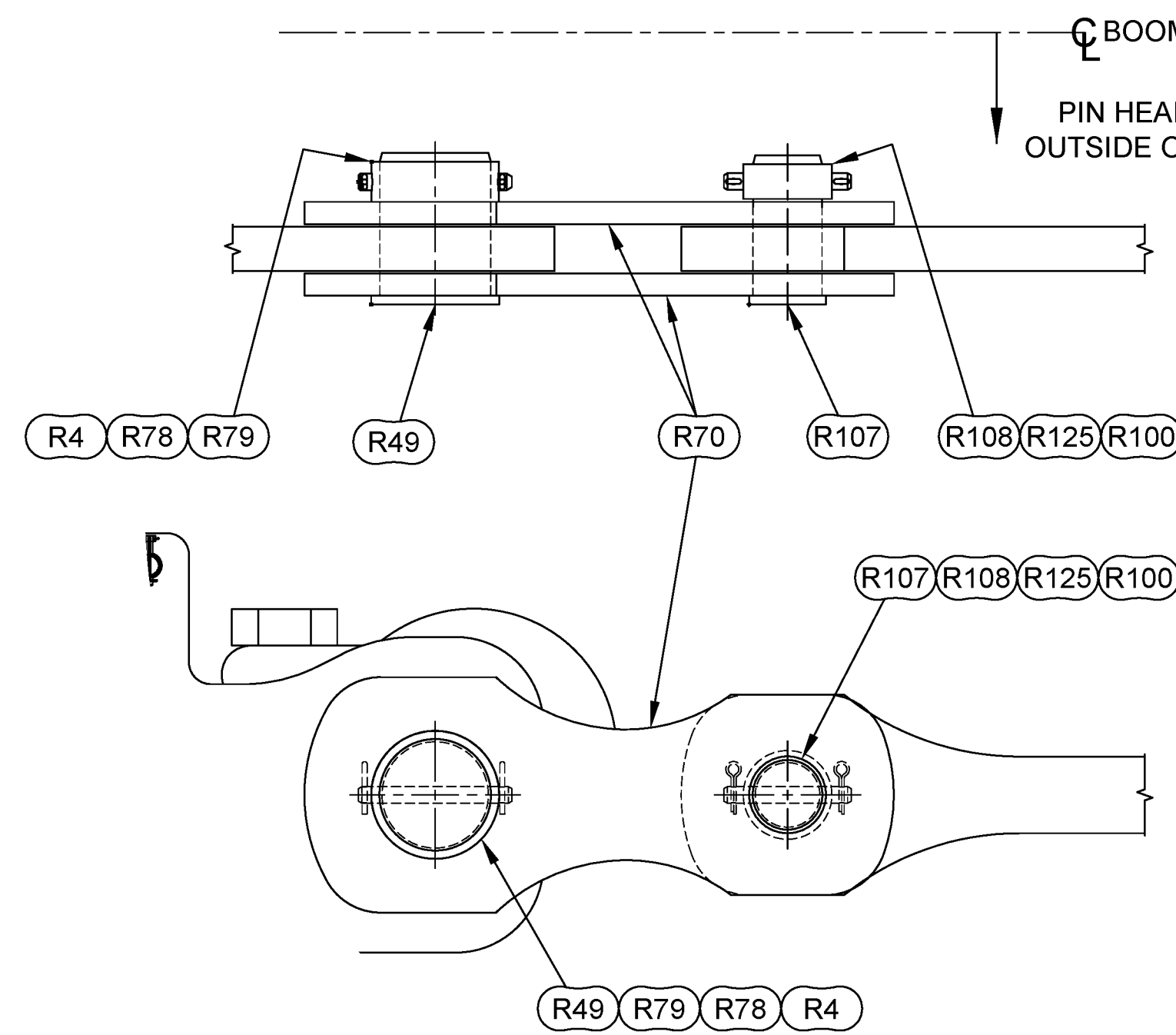
AUTOCAD DRAWING

REFERENCE ONLY!

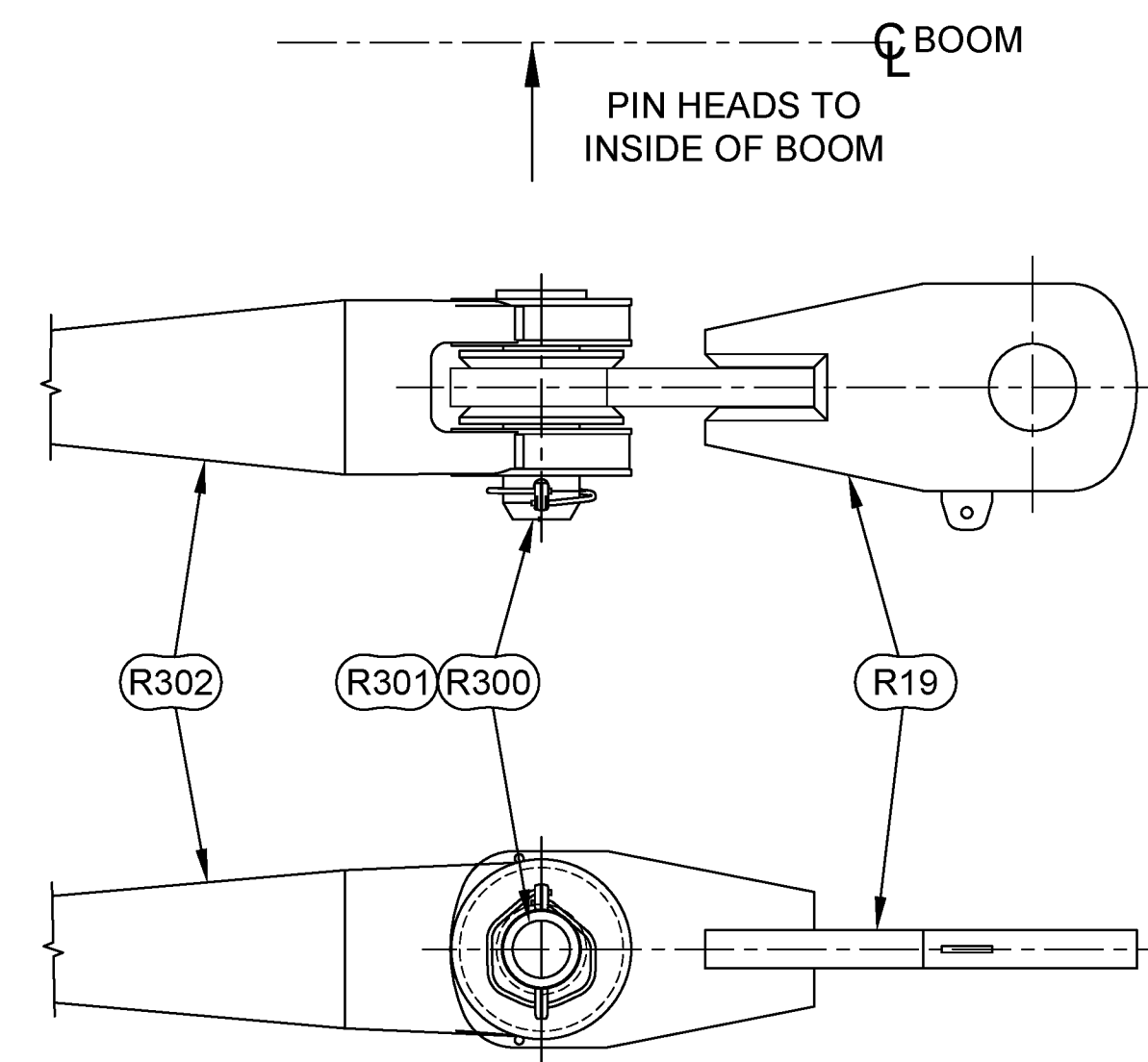
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IN	0.007	E	6/18	HBO		80158563	A		

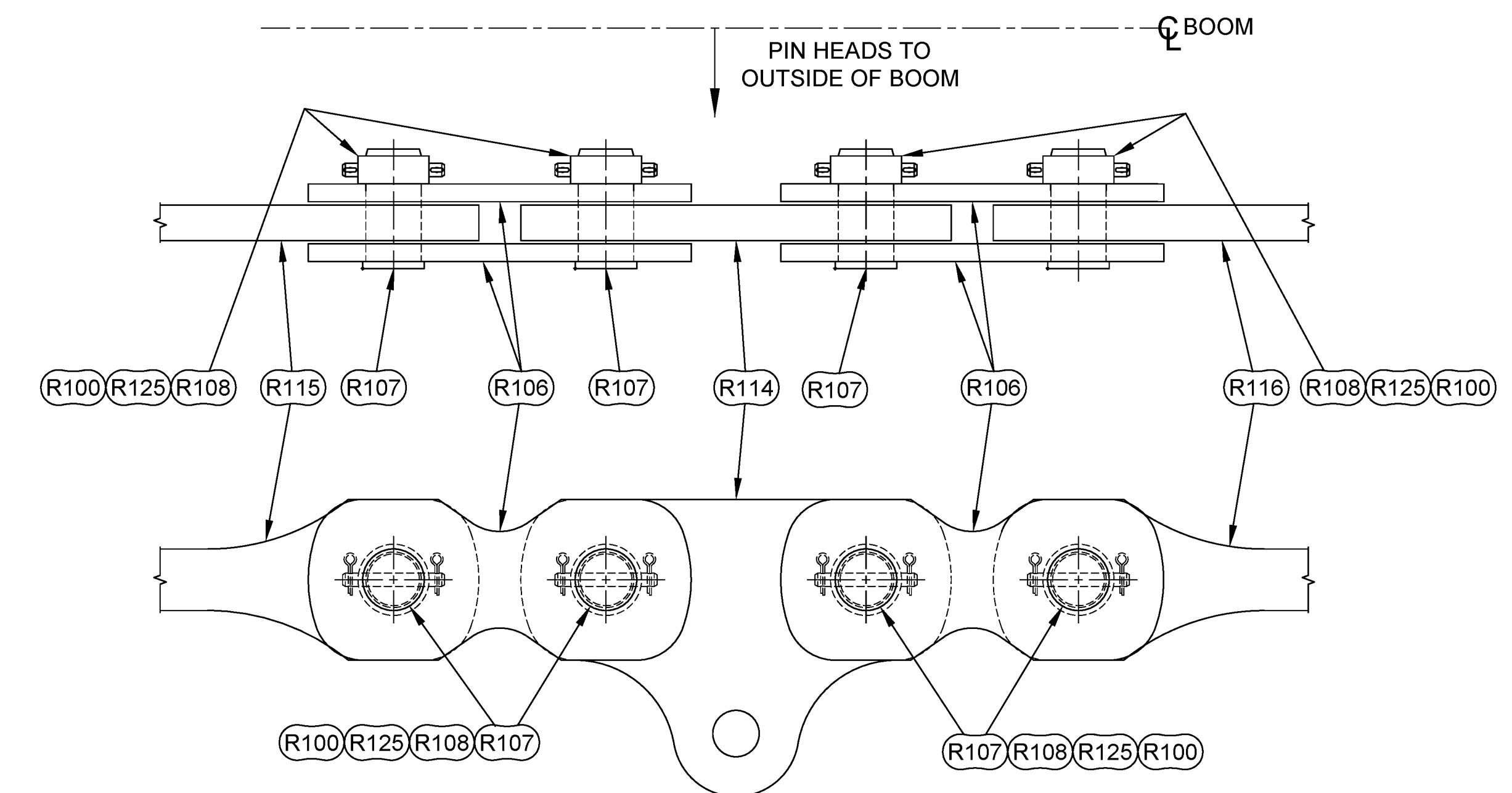
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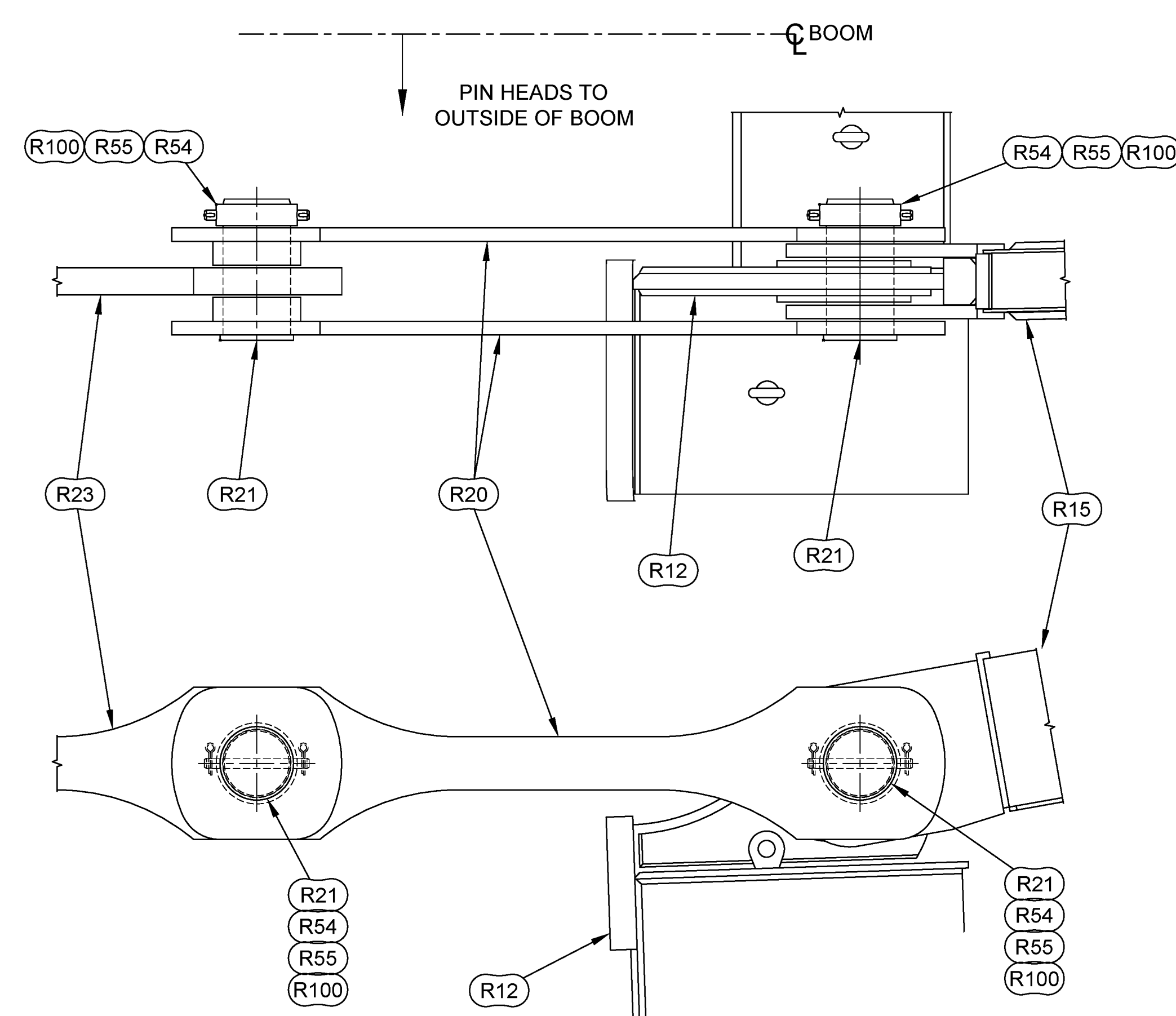
DETAIL B
SCALE 0.150



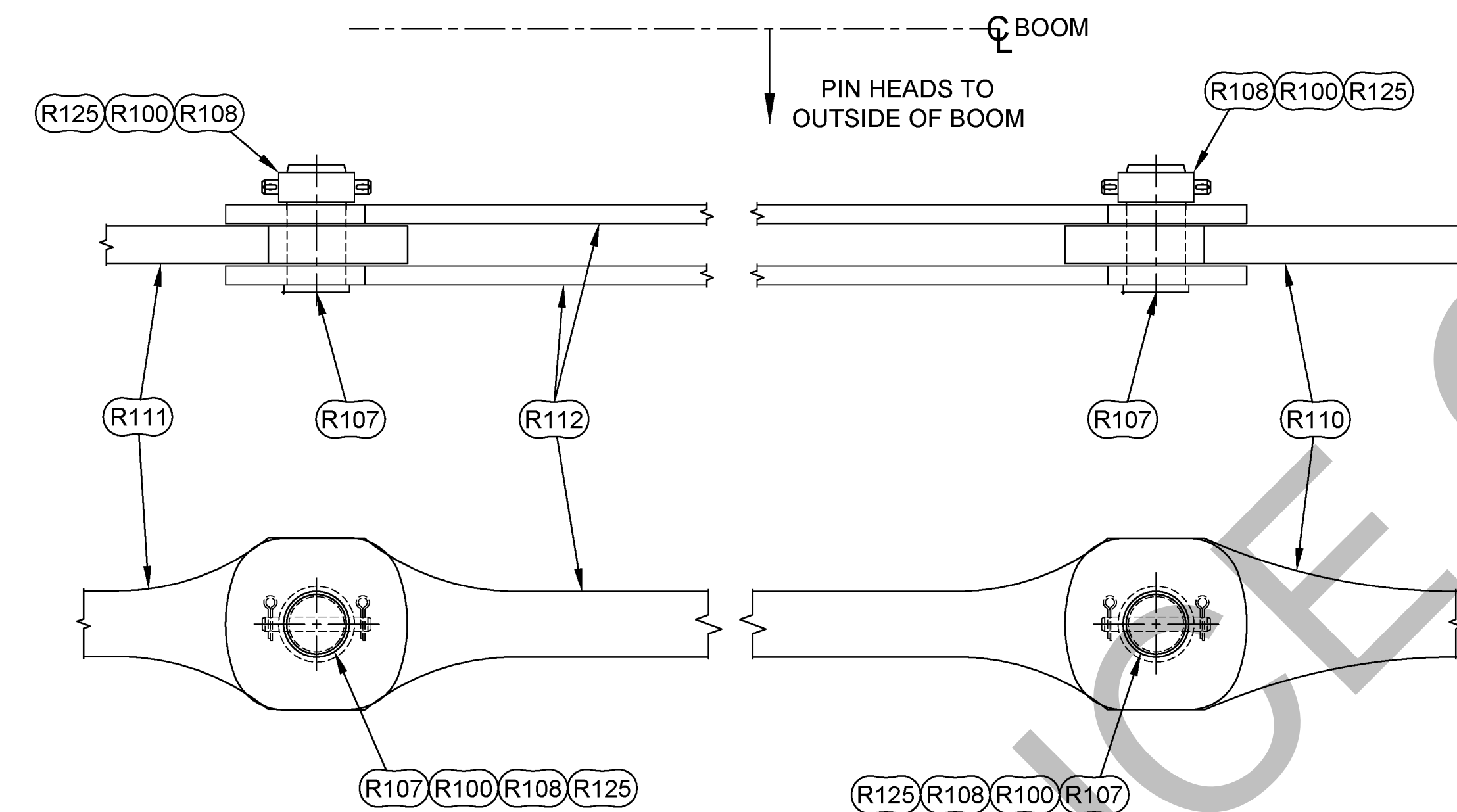
DETAIL G
PENDANT TO SPREADER BEAM LINK
SCALE 0.150



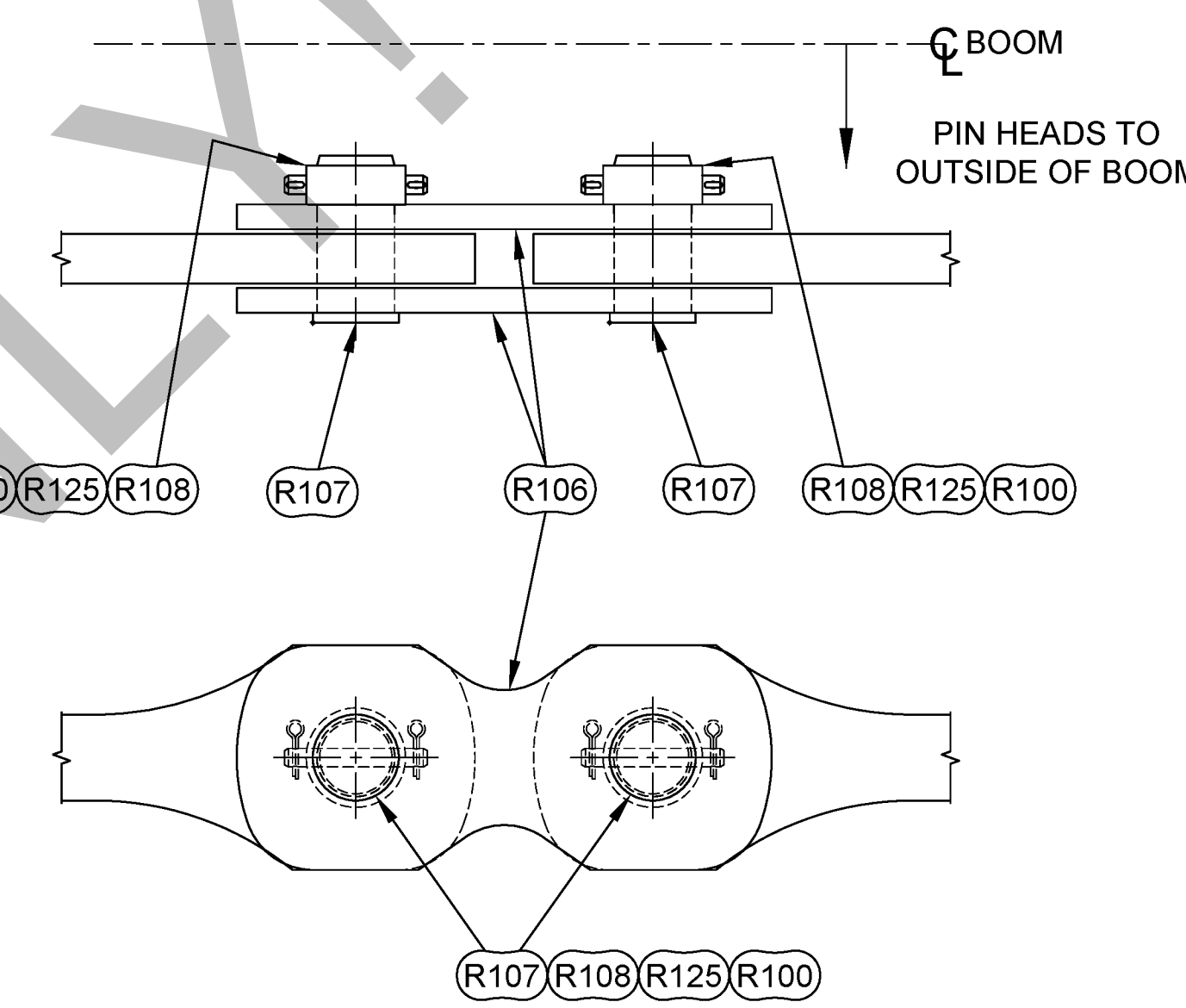
DETAIL L
SCALE 0.150



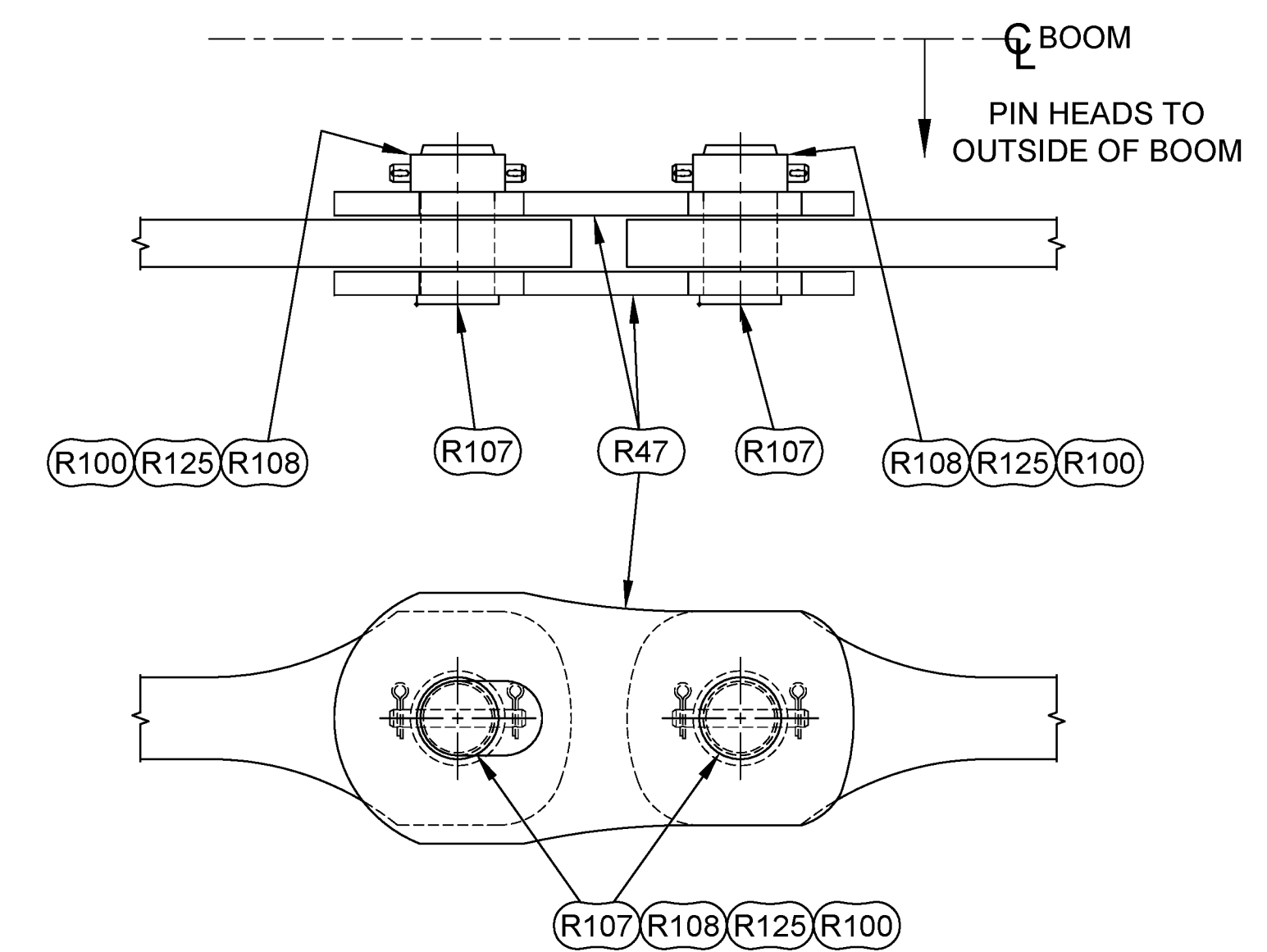
DETAIL E
SCALE 0.125



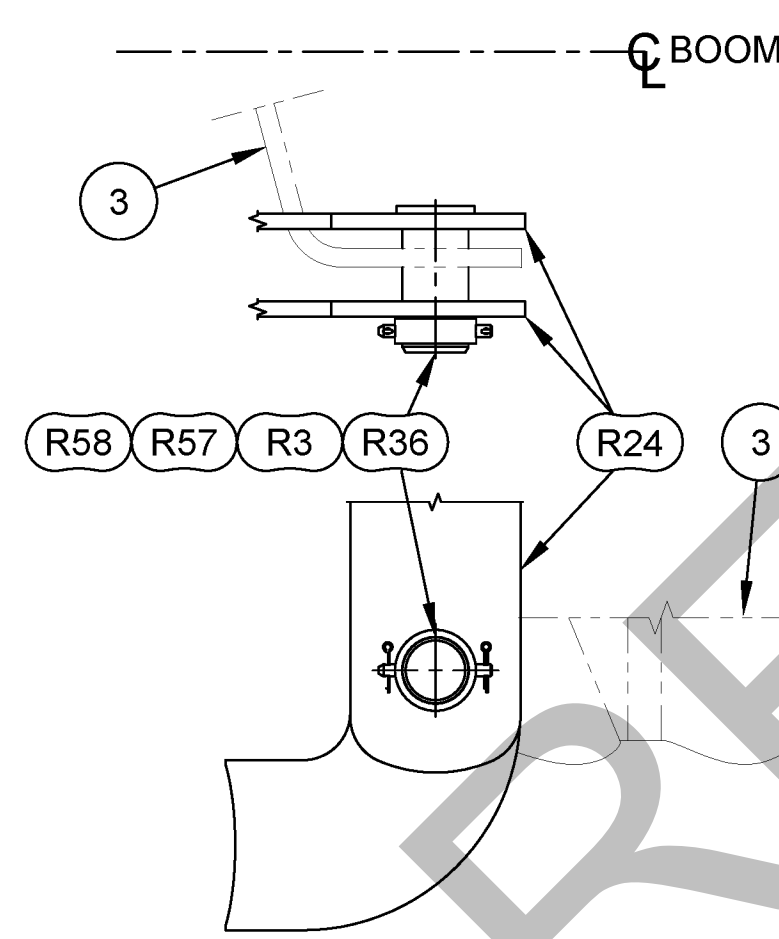
DETAIL K
SCALE 0.150



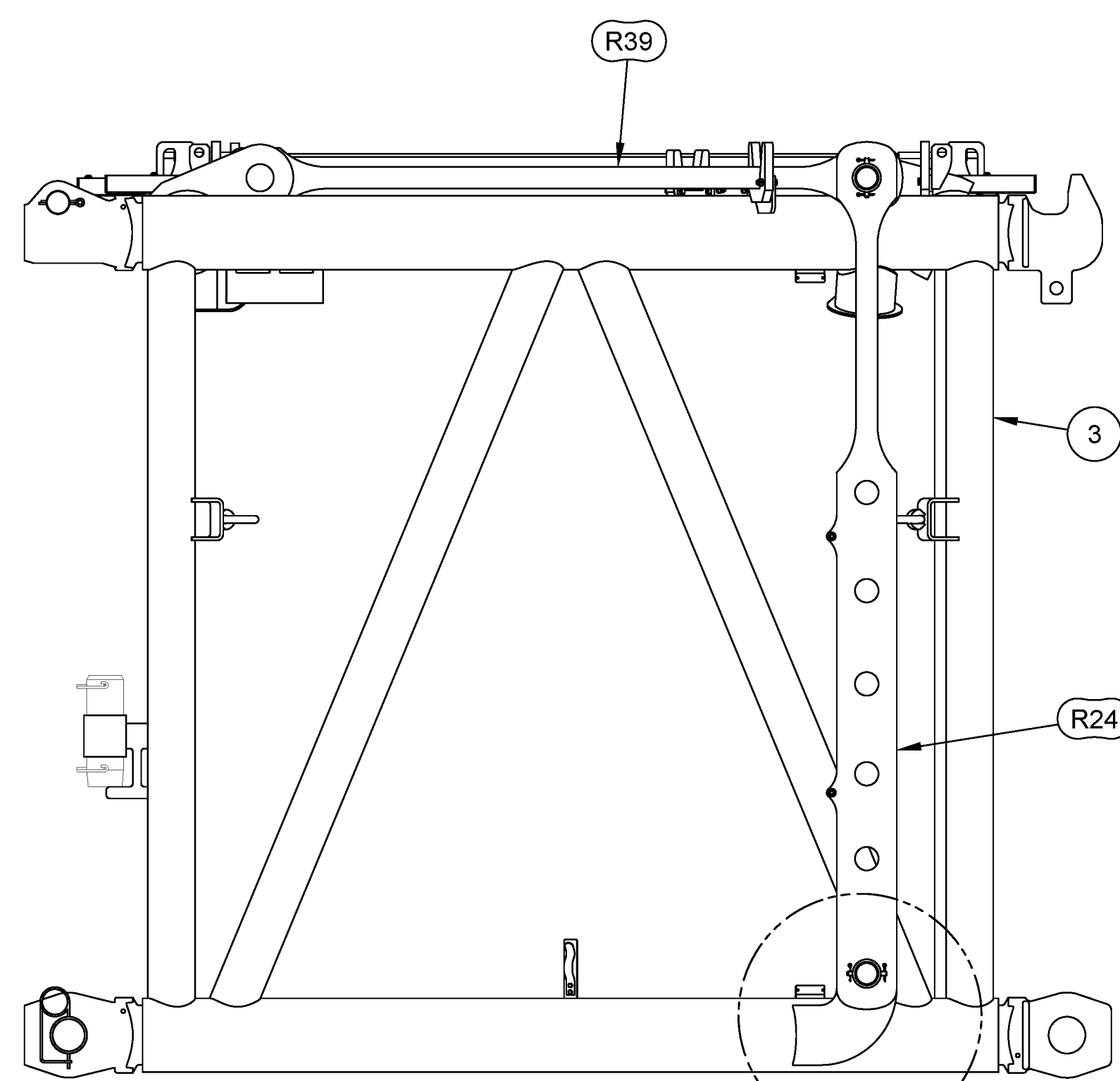
DETAIL C
SCALE 0.150



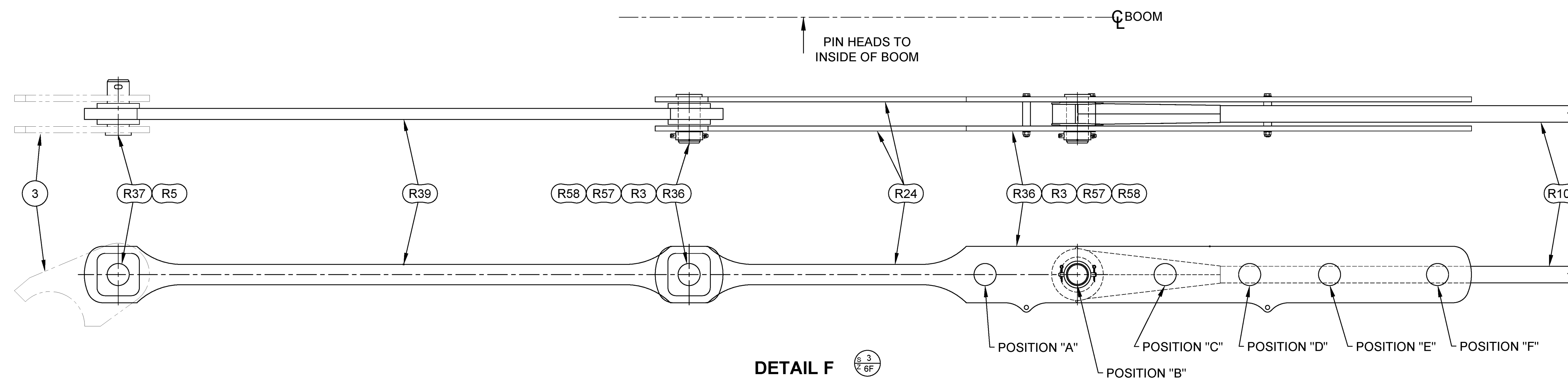
DETAIL D
SCALE 0.150



DETAIL J
SCALE 0.125



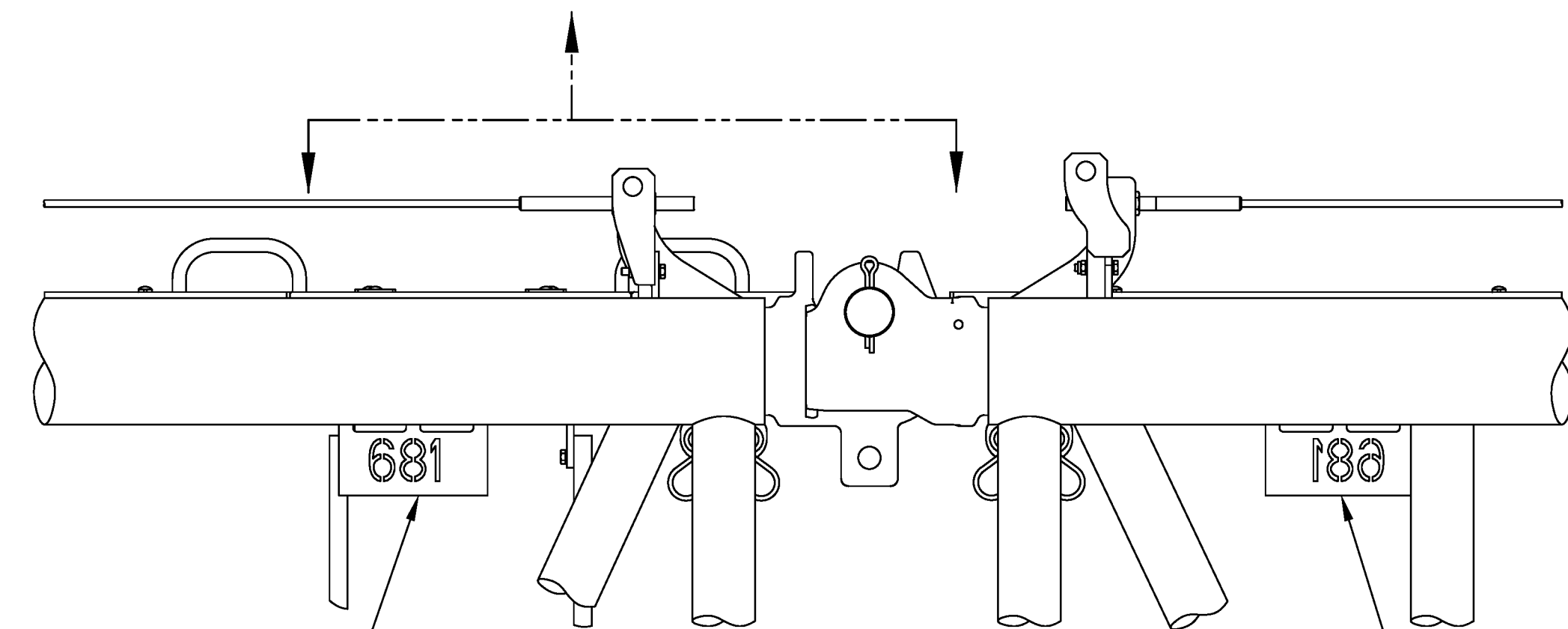
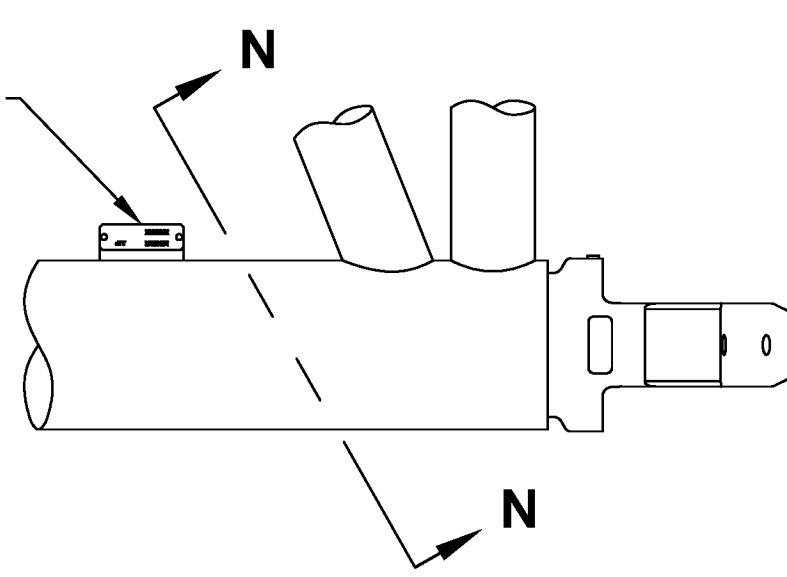
DETAIL H
(STRAP - LINK STOWAGE)
SCALE 0.063



DETAIL F
(STRAP - LINK WORKING)
SEE TABLE FOR LINK HOLE POSITION
SCALE 0.125

JIB BACKSTAY LINK CONFIGURATION DRAWING 80167116 (R24)					
BOOM LENGTHS		LINK HOLE POSITION 10" OFFSET	LINK HOLE POSITION 15" OFFSET	LINK HOLE POSITION 20" OFFSET	
METERS	FEET				
78.0	255.9	B	D	F	
90.0	295.3	B	D	F	
102.0	334.6	B	D	F	
114.0	374.0	B	D	F	
117.0	383.9	A	C	E	
120.0	393.7	A	C	E	
123.0	403.5	A	C	E	

ID TAG LOCATED ON EACH
OF 4 CHORDS AT MALE
CONNECTOR END OF INSERTS

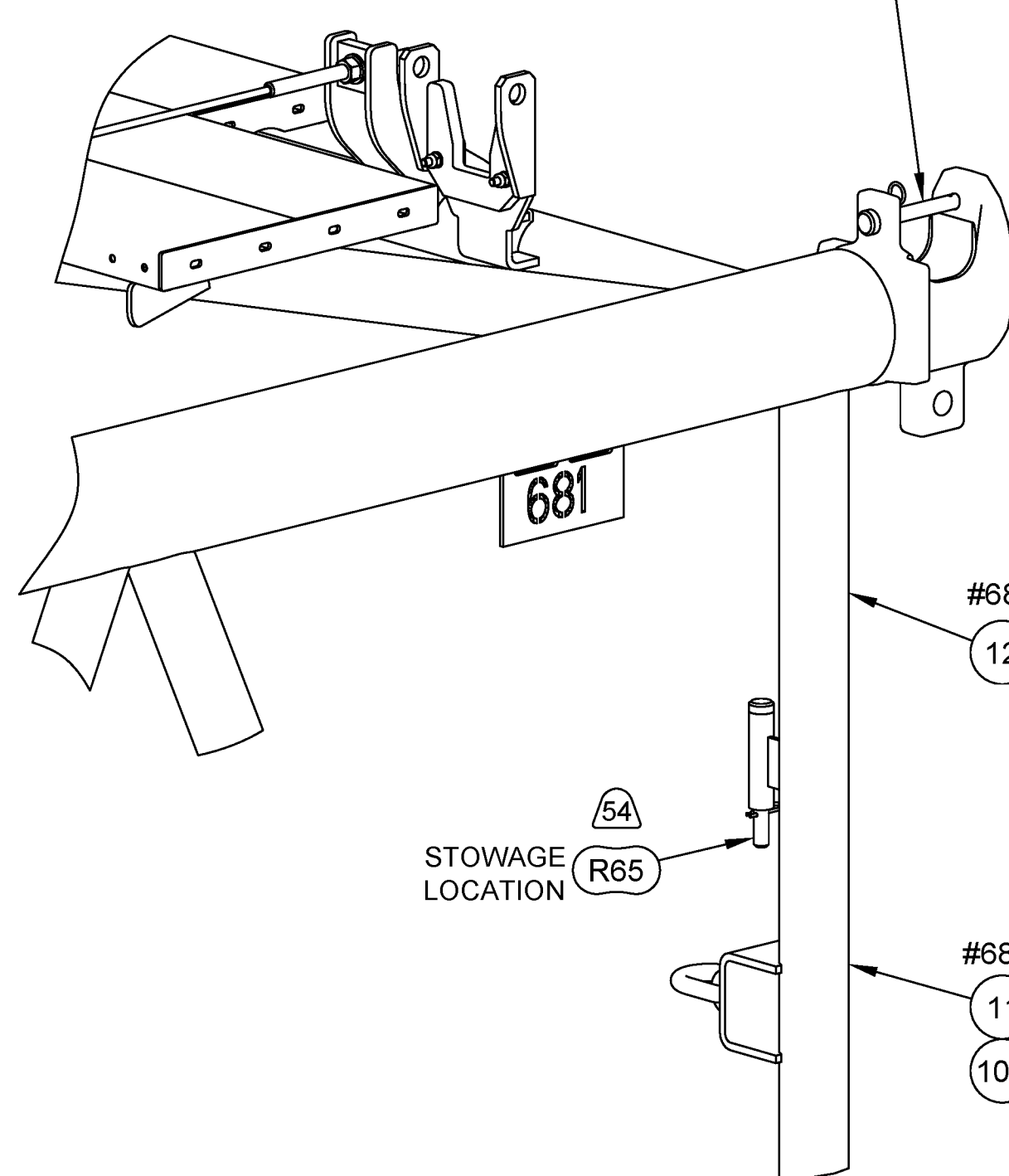


CHORD IDENTIFICATION
PLATE AT NEAR SIDE
OF INSERT TOP CHORD

**TYPICAL LOCATION OF BOOM
CHORD ID PLATE AND INSERT ID TAGS**
SCALE 0.150

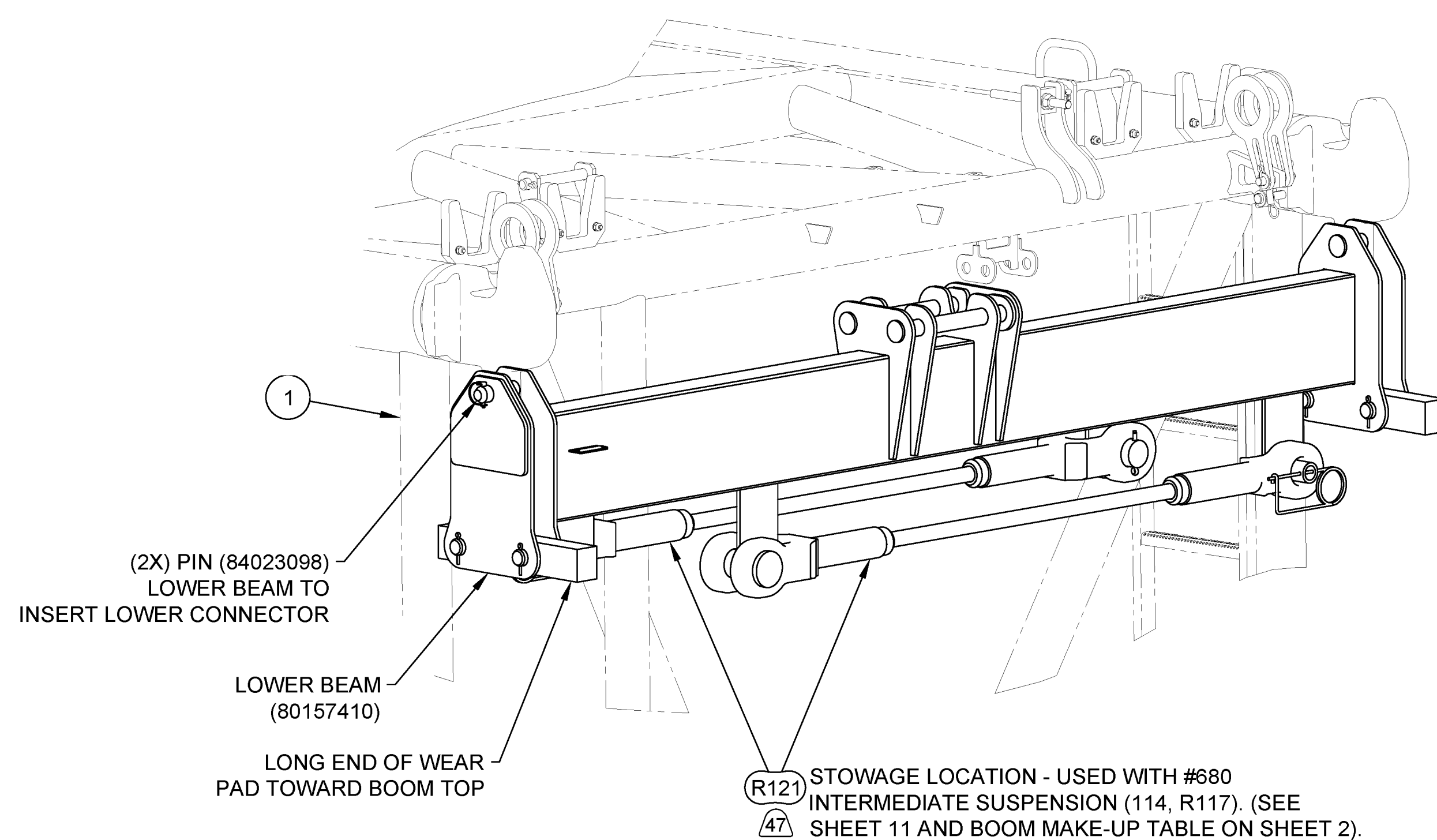
CHORD IDENTIFICATION
PLATE AT FAR SIDE
OF INSERT TOP CHORD

PINS (R65) ARE NOT REQUIRED FOR BOOM FJ10:687 ON B90.
THEY ARE ONLY REQUIRED WHEN USED FOR IN
AIR ASSEMBLY OF #681 - #682 LUFFING JIB



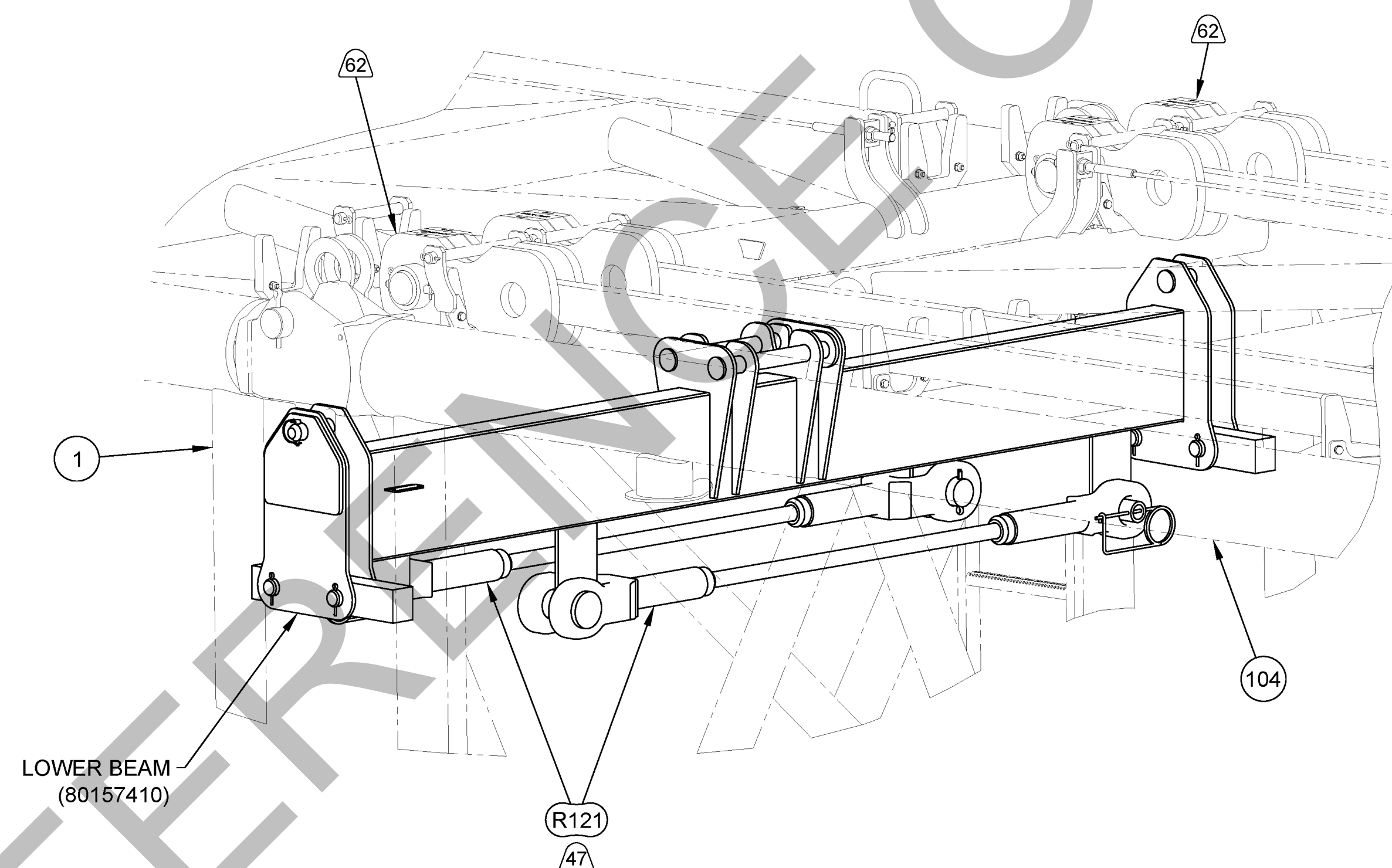
VIEW N-N
UPPER MALE CONNECTOR PIN HOLE
FOR "IN AIR" ASSEMBLY OF #681 OR #682
LUFFING JIB INSERTS
SCALE 0.150

BOOM TOP



STEP 1 - ITEM 100
LOWER BEAM TO INSERT ASSEMBLY
SCALE 0.100

BOOM TOP



STEP 2 - ITEM 100
INSERT INSTALLATION
(ITEMS 11, 104, 109, 112)
SCALE 0.100

UPPER GUIDE ASSY
(80157412)

BOOM TOP

(2X)
UPPER GUIDE
HINGE PIN
(84024271)

LOWER GUIDE ASSY
(80157414)

PIN (84024271) STOWAGE LOCATION
WHEN HINGING UPPER GUIDE (80157412)
FOR ROPE INSTALLATION OR REMOVAL
AT LOWER ROPE GUIDE
(POSITION TOWARD BOOM TOP)

LOWER BEAM
(80157410)

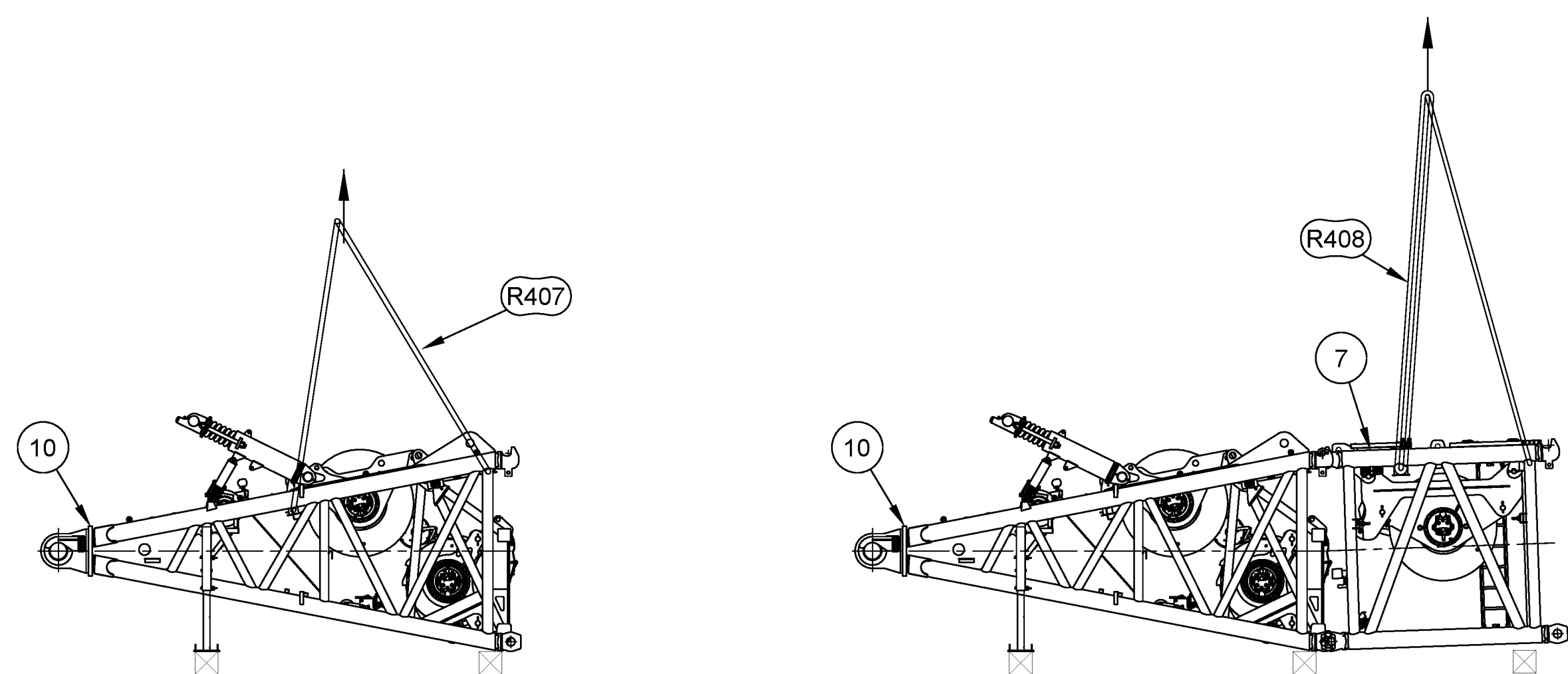
PIN (80157409)
SHEAVE ASSY TO LOWER BEAM

(R12)
(47)

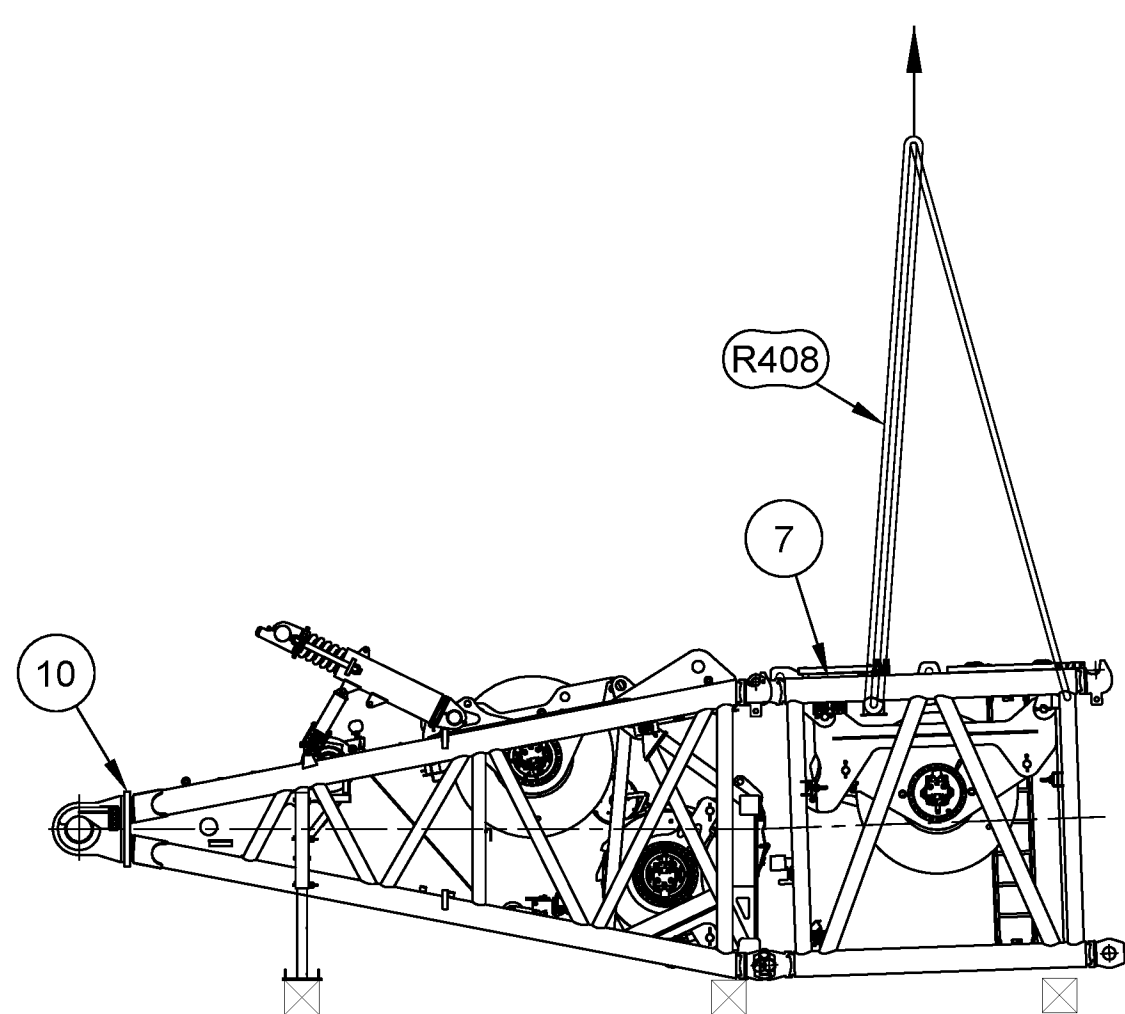
STEP 3 - ITEM 100
SHEAVE ASSEMBLY INFORMATION (44)

DETAIL P
ENCAPSULATING SHEAVE (ITEM 100) INSTALLATION
SCALE 0.100

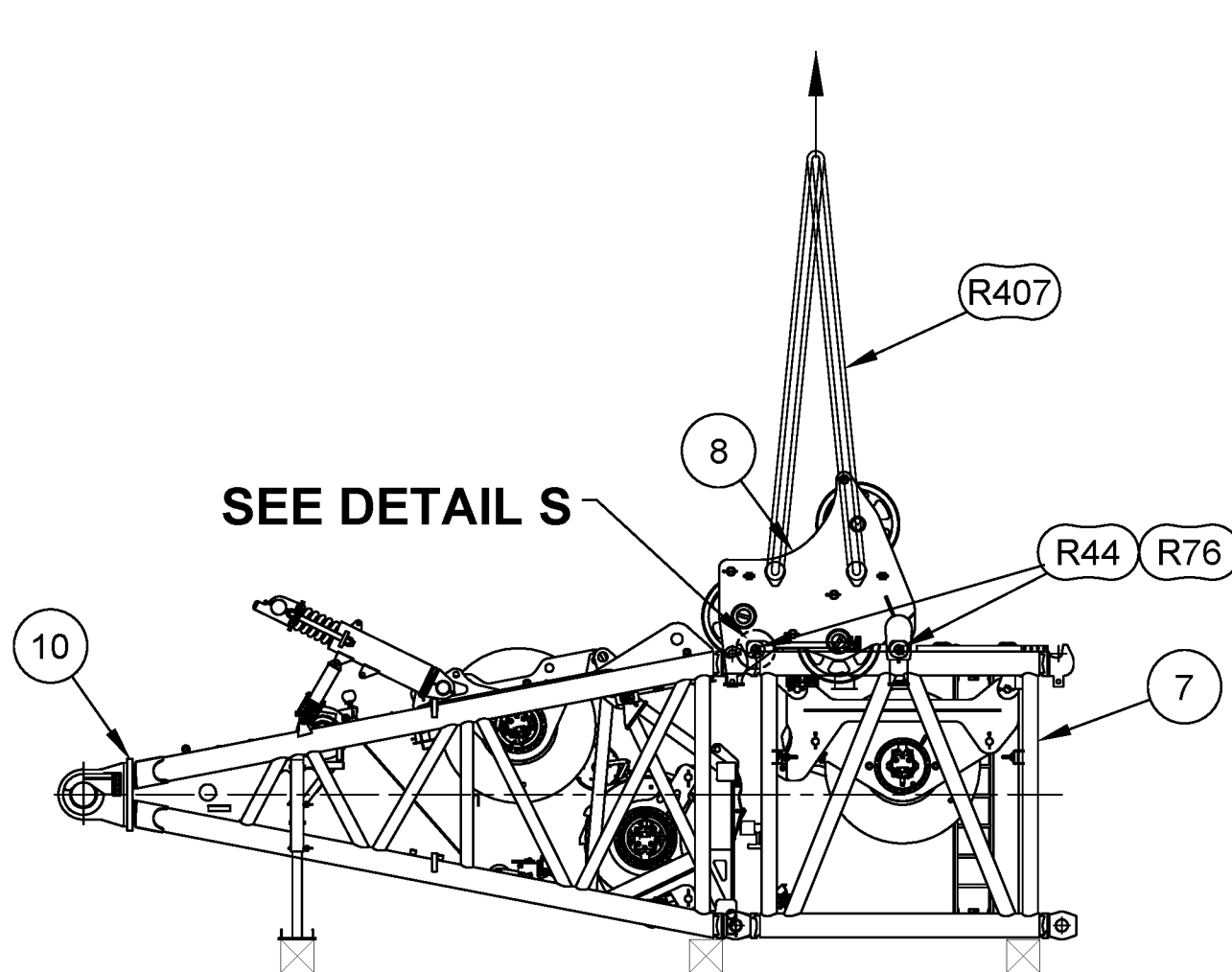
- STEP 1) INSTALL LOWER BEAM PORTION OF (ITEM 100) TO MALE CONNECTOR FIXTURE HOLES ON 12 M INSERT (ITEM 1) OR 6 M INSERT (ITEM 104) WITH LOWER BEAM PINS (84023098). (POSITION LONG END OF WEAR PADS TOWARD BOOM TOP).
- STEP 2) ASSEMBLE #680 12 M INSERT (ITEM 1) OR 6 M INSERT (ITEM 104) TO #680 INSERT (ITEM 11) OR 6 M INSERT (ITEM 104) PER TYPICAL INSERT INSTALLATION. INSTALL LOWER BOOM CONNECTOR PINS. (SEE DETAIL Q ON SHEET 9 OR DETAIL V ON SHEET 10).
- STEP 3) INSTALL UPPER (80157412) AND LOWER (80157414) SHEAVE ASSEMBLY TO LOWER BEAM (80157410) AND ATTACH WITH PINS (80157409). (POSITION LOWER GUIDE ASSY WITH PIN STOWAGE HOLDERS TOWARD BOOM TOP).



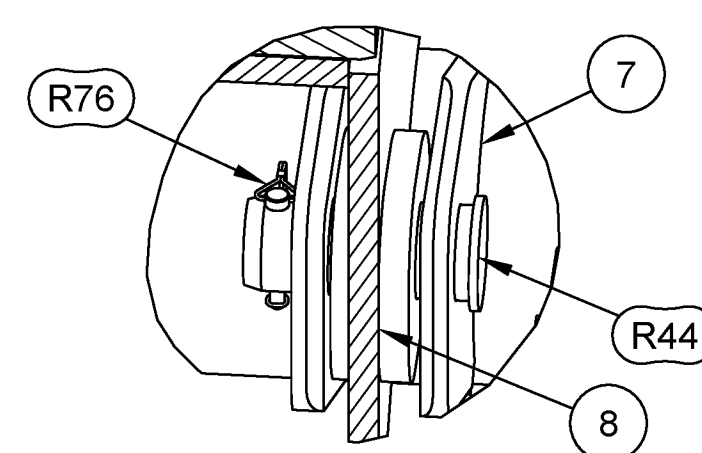
BOOM - STEP 1
BOOM BUTT
BLOCK AND POSITION BOOM BUTT (ITEM 10)
WITH SUPPORT PEDESTAL DEPLOYED.
SCALE 0.020



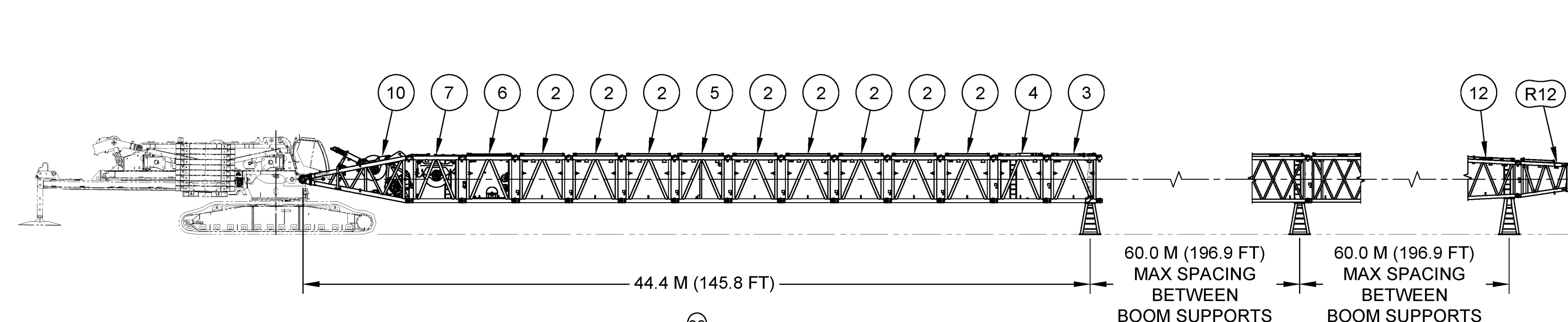
BOOM - STEP 2
3M INSERT TO BOOM BUTT
ATTACH 3M INSERT (ITEM 7) TO BOOM BUTT (ITEM 10)
USING SLINGS (R408) ON SLING POSTS.
SCALE 0.020



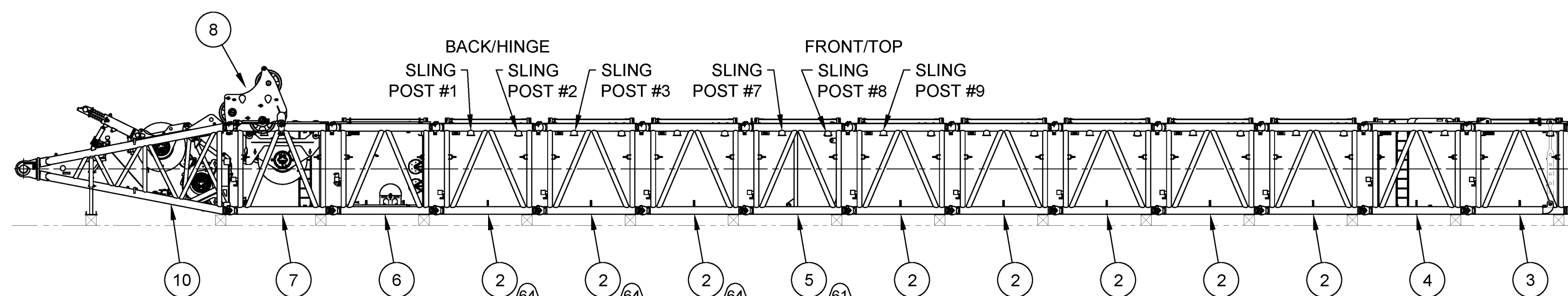
BOOM - STEP 3
WIRE ROPE GUIDE TO INSERT
ATTACH WIRE ROPE GUIDE (ITEM 8)
TO INSERT (ITEM 7) USING PINS (R44) - (SEE DETAIL S).
SCALE 0.020



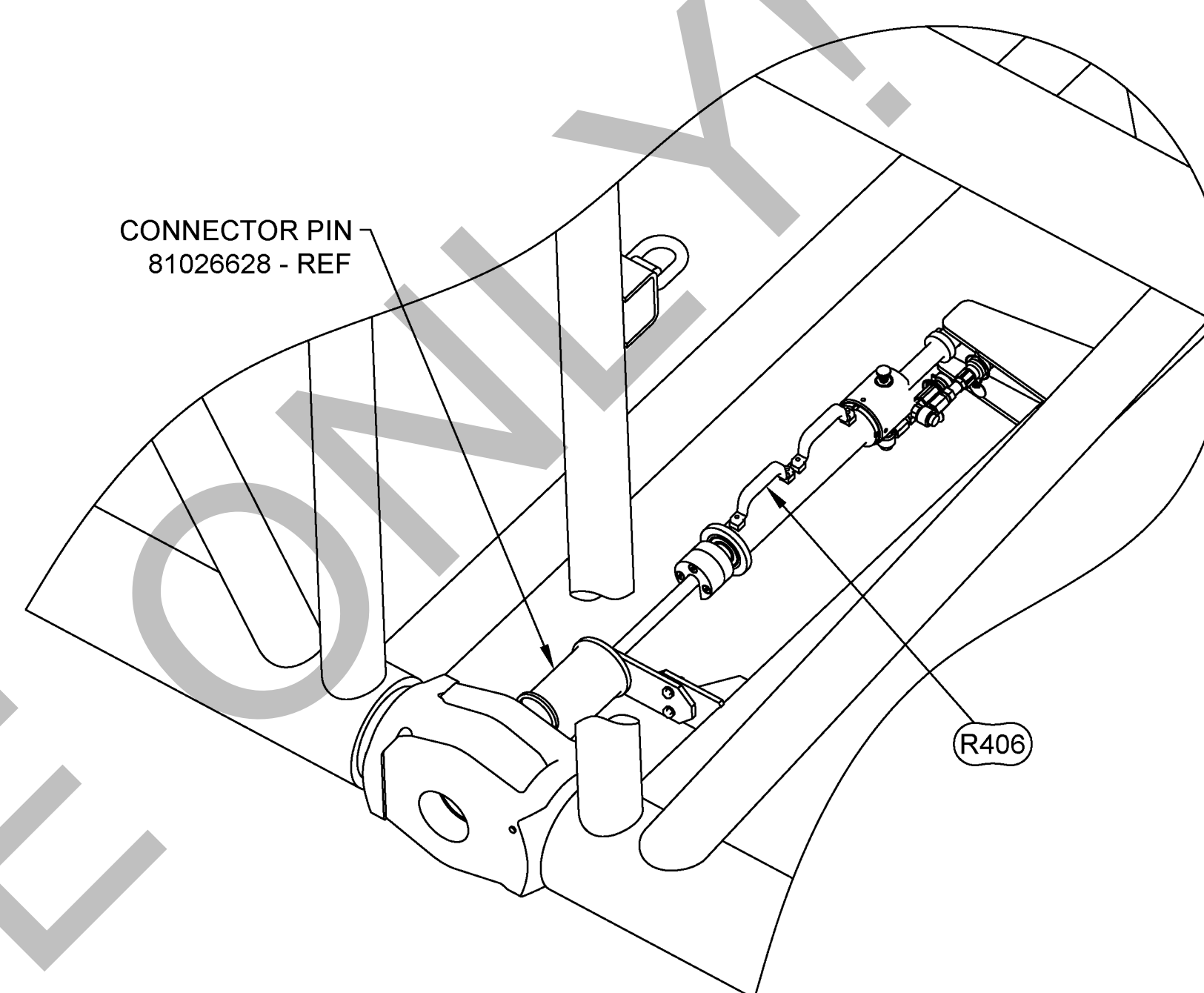
DETAIL S
(4) PLACES
SCALE 0.200



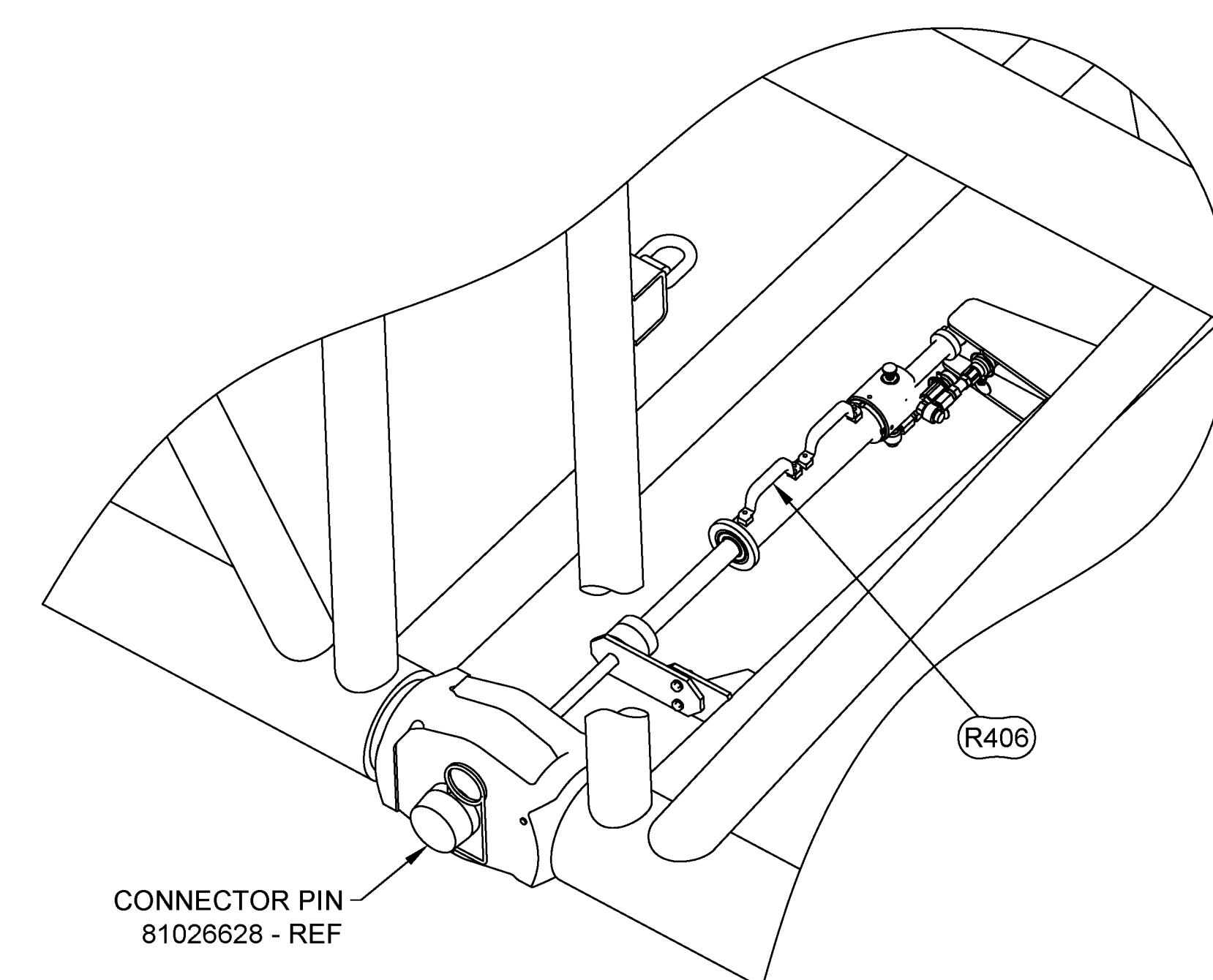
INTERMEDIATE BLOCKING IS REQUIRED FOR
BOOM LENGTHS 114.0 M (374.0 FT) AND GREATER
SEE STEP 6 ON SHEET 10 FOR BOOM CLOSING INSTRUCTIONS
SCALE 0.005



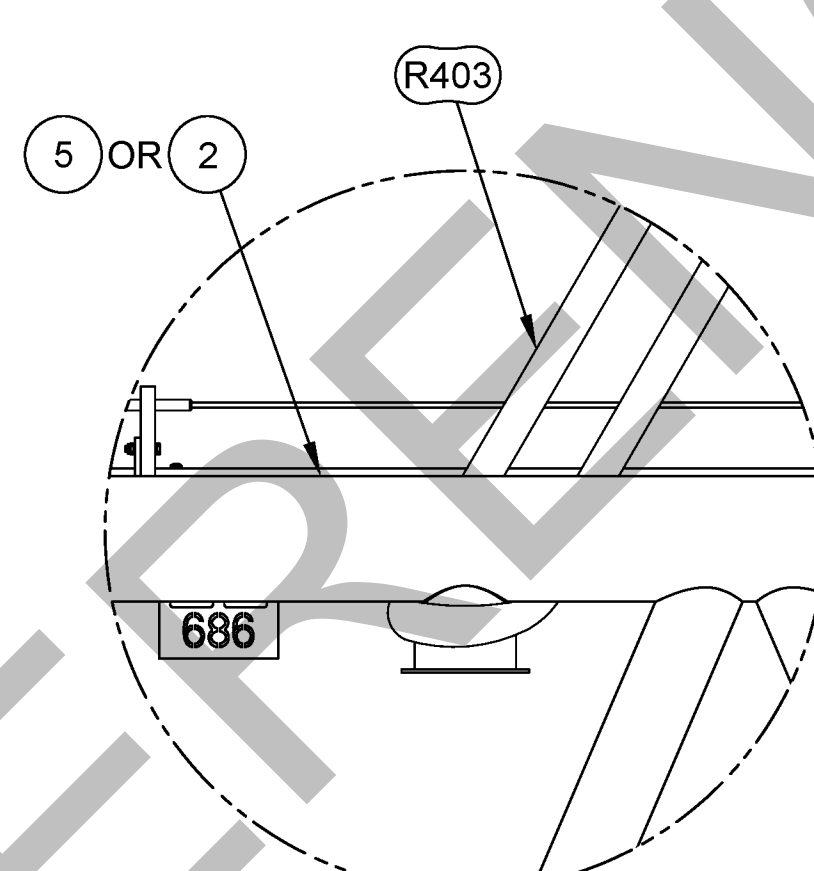
BOOM - STEP 4
BOOM BUTT TO #686 BOOM INSERT ASSY
CONTINUE TO ASSEMBLE BOOM INSERTS (ITEMS 2, 3, 4, 5, 6) TO INSERT (ITEM 7).



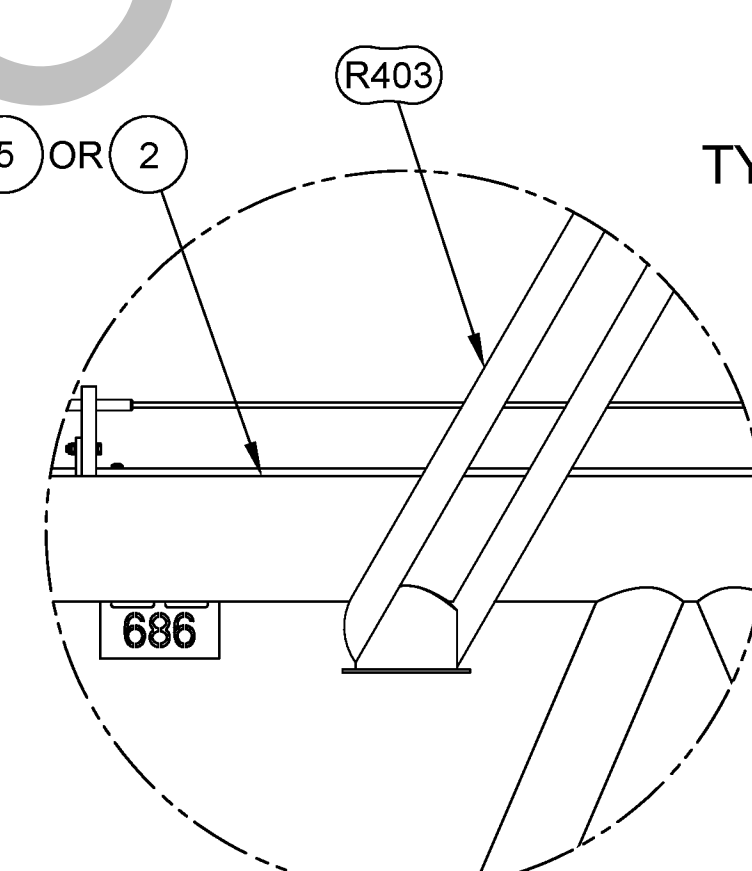
DETAIL Q
TYPICAL LOWER BOOM CONNECTOR
HYDRAULIC PIN INSTALLATION
PIN PULLER (R406) RETRACTED
SCALE 0.100



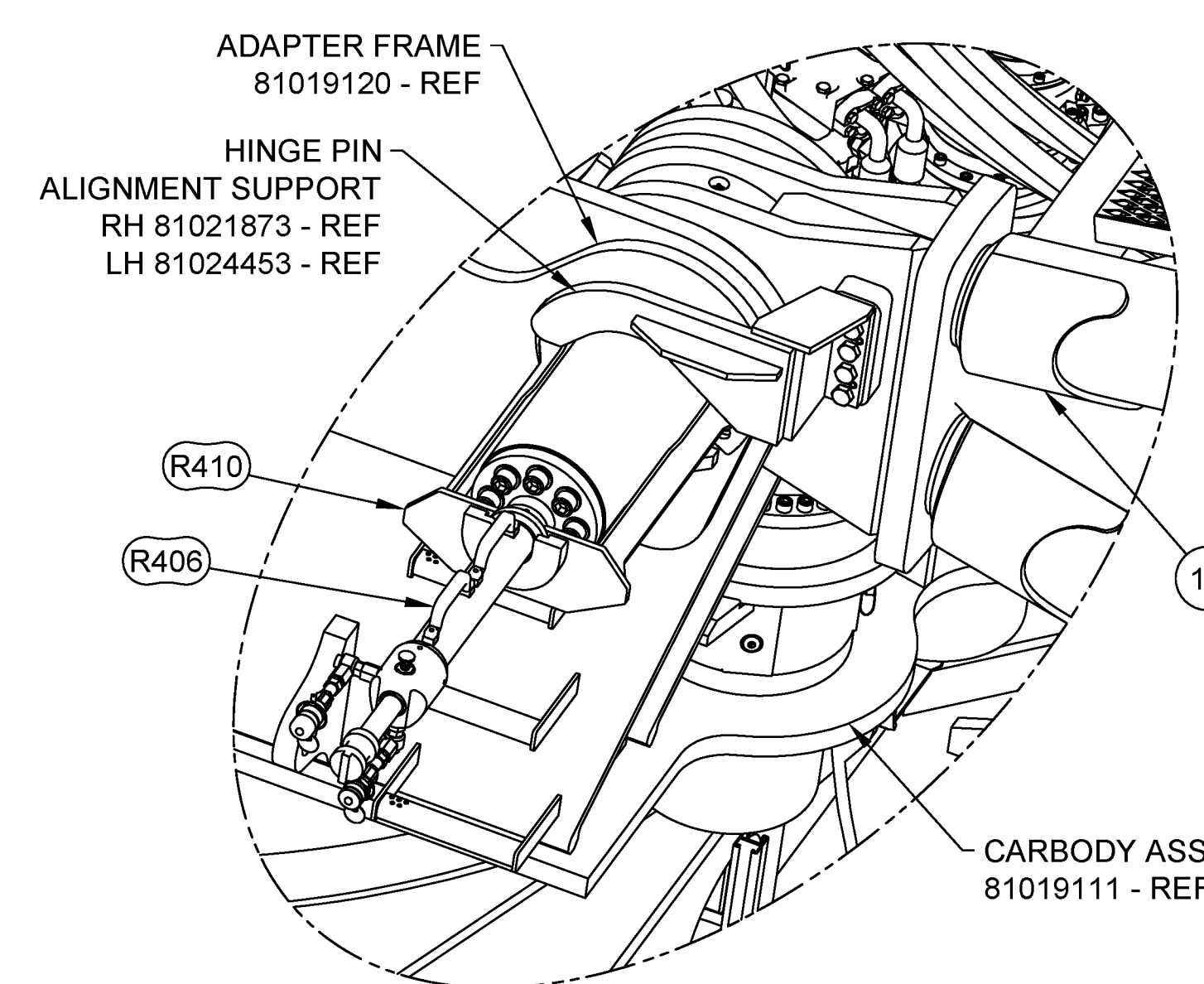
DETAIL Q
TYPICAL LOWER BOOM CONNECTOR
HYDRAULIC PIN INSTALLATION
PIN PULLER (R406) EXTENDED
SCALE 0.100



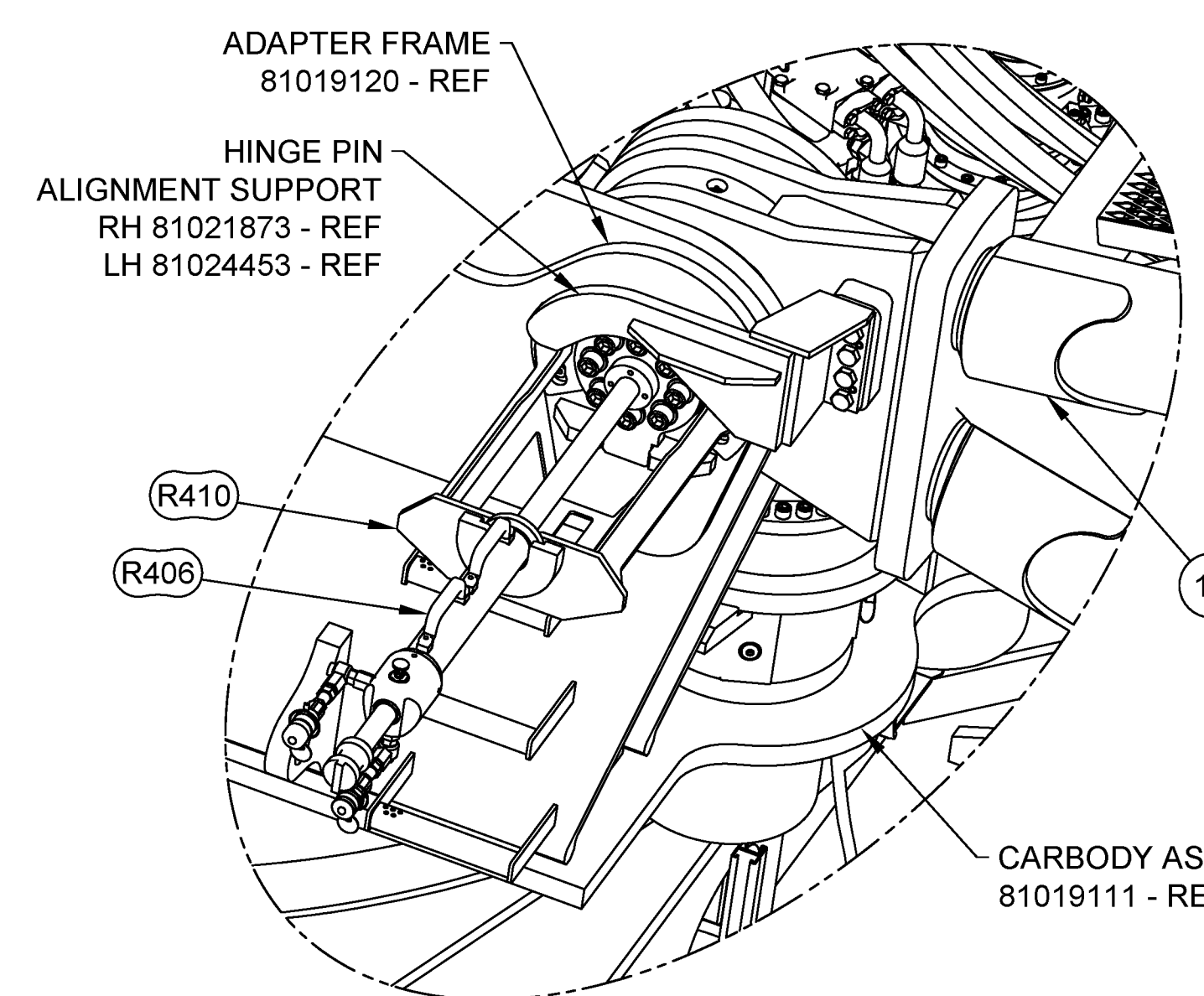
DETAIL SSS
SLING AROUND
INSIDE OF CHORD
SCALE 0.075



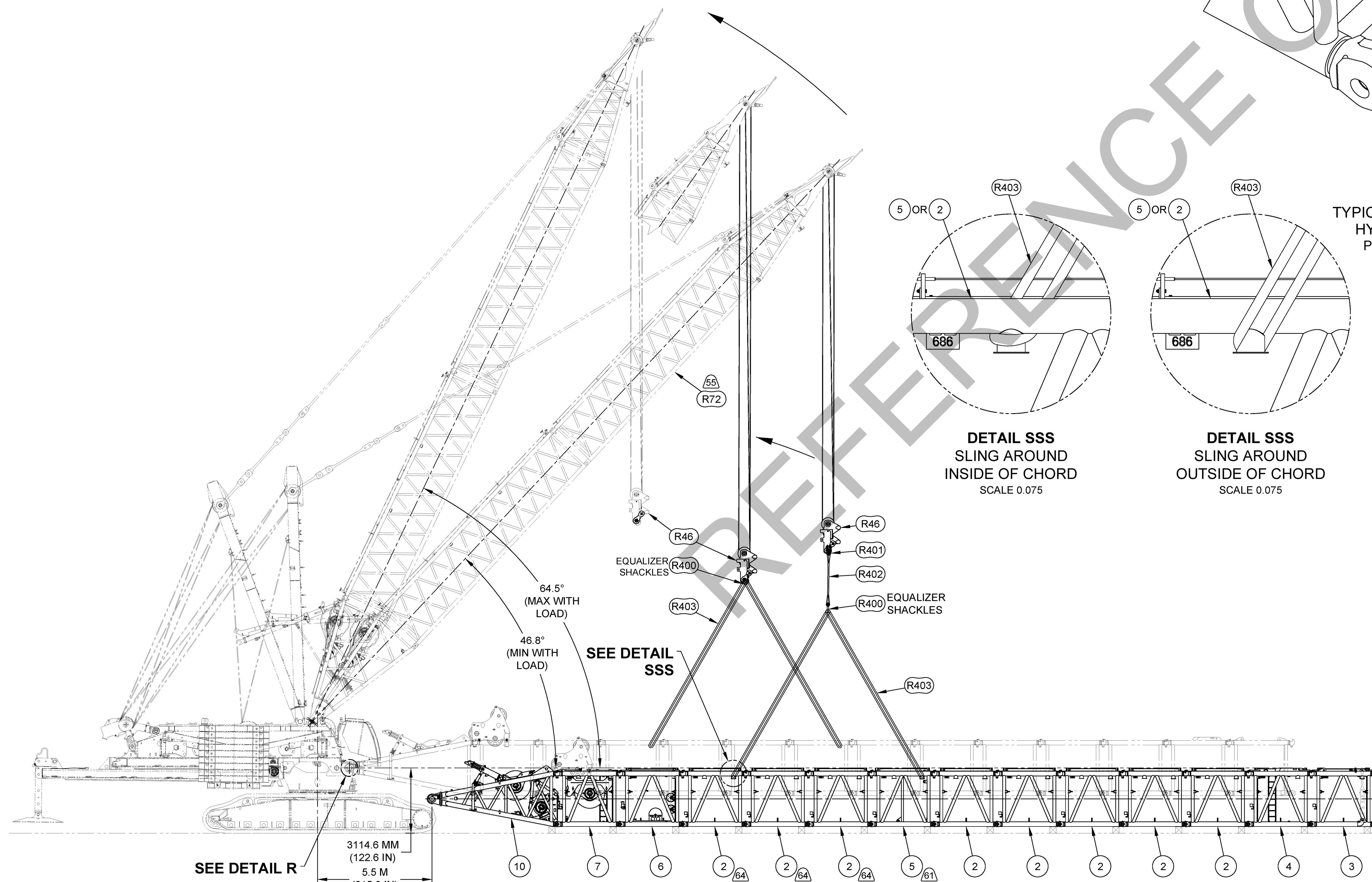
DETAIL SSS
SLING AROUND
OUTSIDE OF CHORD
SCALE 0.075



DETAIL R
PIN PULLER (R406) RETRACTED
SCALE 0.100



DETAIL R
PIN PULLER (R406) EXTENDED
SCALE 0.100



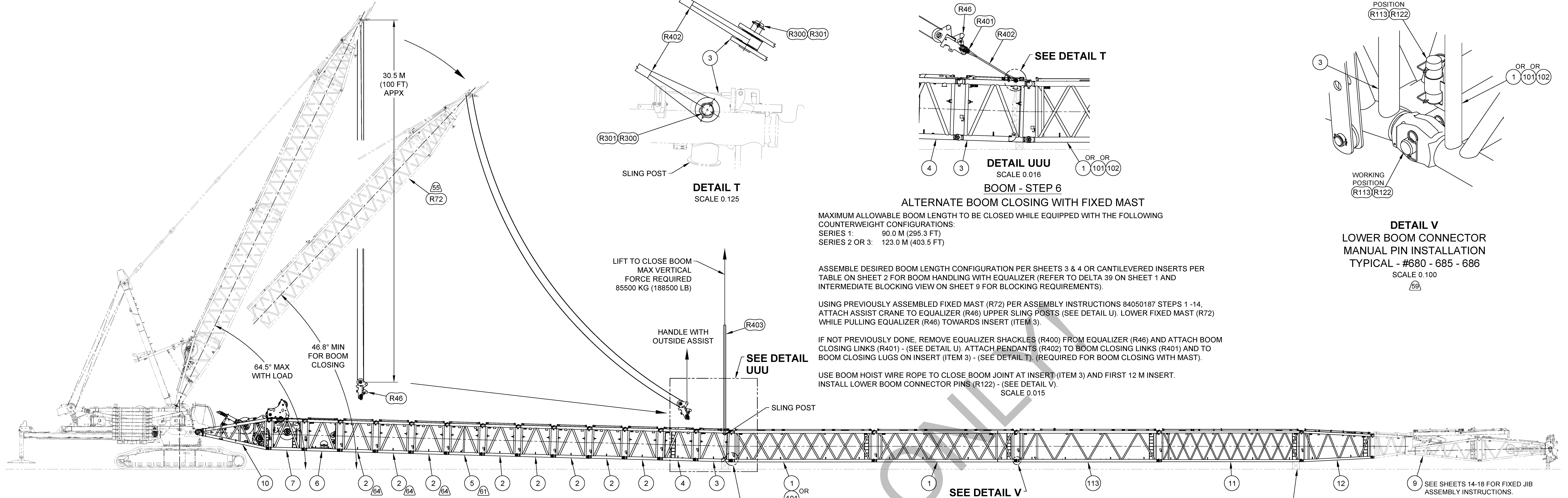
SEE DETAIL R

SEE DETAIL SSS

BOOM - STEP 5
BUTT AND #686 ASSY TO ADAPTER FRAME HINGE USING FIXED MAST

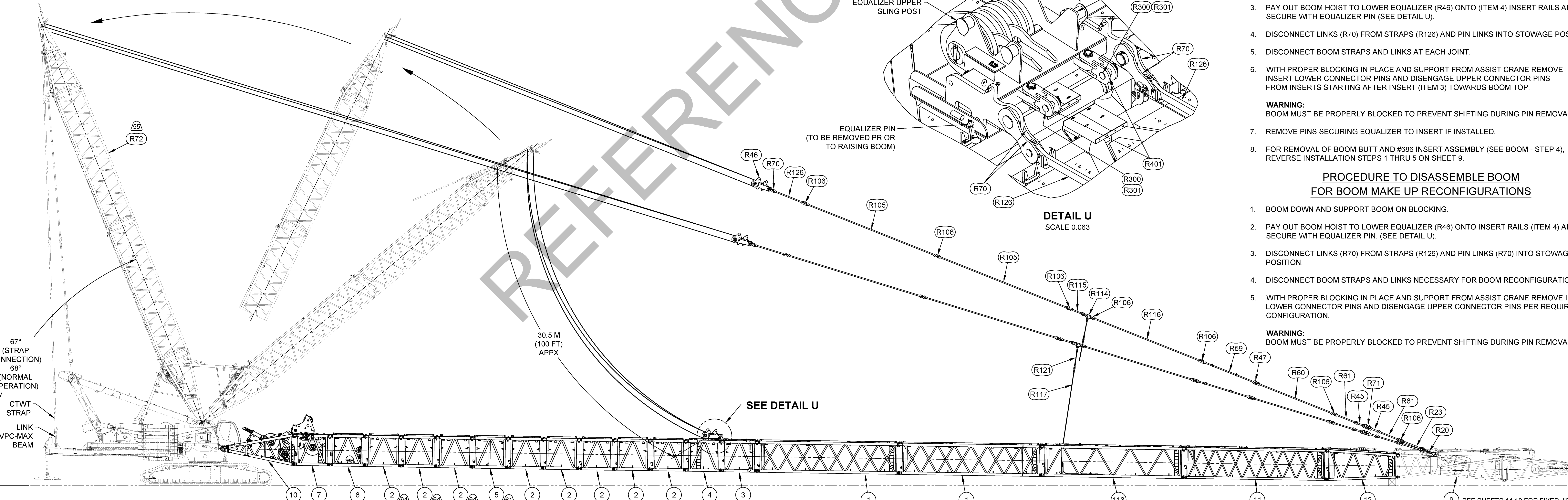
REMOVE EQUALIZER SHACKLES (R400) FROM EQUALIZER (R46) AND ATTACH BOOM CLOSING LINKS (R401) - (SEE DETAIL U ON SHEET 10). ATTACH PENDANTS (R402) AND SHACKLES (R400) TO CLOSING LINKS (R401) AS SHOWN (REQUIRED FOR BOOM CLOSING WITH MAST IN STEP 6).
ATTACH (4) SLINGS (R403) FROM EQUALIZER SHACKLES (R400) TO SLING POSTS ON 3 M INSERTS PER PARTIAL BOOM LIFT TABLE ON THE RIGHT.
RUN SLINGS AROUND THE INSIDE OR OUTSIDE OF THE CHORD AS NEEDED TO LEVEL THE BOOM, PROVIDED NOTHING ON THE INSERT INTERFERES WITH THE SLING (SEE DETAIL SSS).
OPTIONAL: ATTACH (4) SLINGS (R403) DIRECTLY TO EQUALIZER (R46) SHACKLES (R400). (CANNOT BE USED FOR BOOM CLOSING IN BOOM - STEP 6).
USING PREVIOUSLY ASSEMBLED FIXED MAST (R72) PER ASSEMBLY INSTRUCTIONS 84050187 STEPS 1 -14, ASSEMBLE THE BUTT AND #686 INSERT ASSEMBLY (BOOM - STEP 4) TO ADAPTER FRAME HINGE. POSITION HINGE PIN ALIGNMENT SUPPORT ON PIN (SEE DETAIL R).
POSITION PIN PULLER ASSY (R406) INTO PIN PULLER CAGE WELDMENT (R410) AND ACTIVATE CYLINDER TO INSTALL HINGE PIN INTO BUTT (SEE DETAIL R).
FIXED MAST OPERATING RANGE WHEN ASSEMBLING BOOM IS 46.8° TO 64.5°
LOWER BOOM ONTO BLOCKING AND DISCONNECT SLINGS (R403) FROM 3 M INSERTS.

PARTIAL BOOM LIFT TABLE								
CONFIGURATION	INSERT CONFIGURATION						SLING POST (SEE BOOM - STEP 4)	
	DRUM 1 W/ROPE	DRUM 2 W/ROPE	WIRE ROPE GUIDE	LUFFING HOIST W/ROPE	LUFFING SHEAVES	LUFFING BACKSTAYS	BACK/HINGE	FRONT/TOP
1	X	-	-	-	-	-	3	9
2	X	X	X	-	-	-	2	8



BOOM - STEP 6
BOOM CLOSING WITH OUTSIDE ASSIST

ASSEMBLE DESIRED BOOM LENGTH CONFIGURATION PER SHEETS 3 & 4 OR CANTILEVERED INSERTS PER TABLE ON SHEET 2 FOR BOOM HANDLING WITH EQUALIZER.
(REFER TO DELTA 39 ON SHEET 1 AND INTERMEDIATE BLOCKING VIEW ON SHEET 9 FOR BLOCKING REQUIREMENTS).
USING OUTSIDE ASSIST AND SLINGS (R403) TO CLOSE BOOM. LIFT UP ON INSERT (ITEM 3) AT SLING POSTS (SEE DETAIL T).
INSTALL LOWER BOOM CONNECTOR PINS (R122) - (SEE DETAIL V).
ATTACH ASSIST CRANE TO EQUALIZER (R46) UPPER SLING POSTS (SEE DETAIL U). LOWER FIXED MAST (R72) WHILE PULLING EQUALIZER (R46) TOWARDS INSERT (ITEM 4).

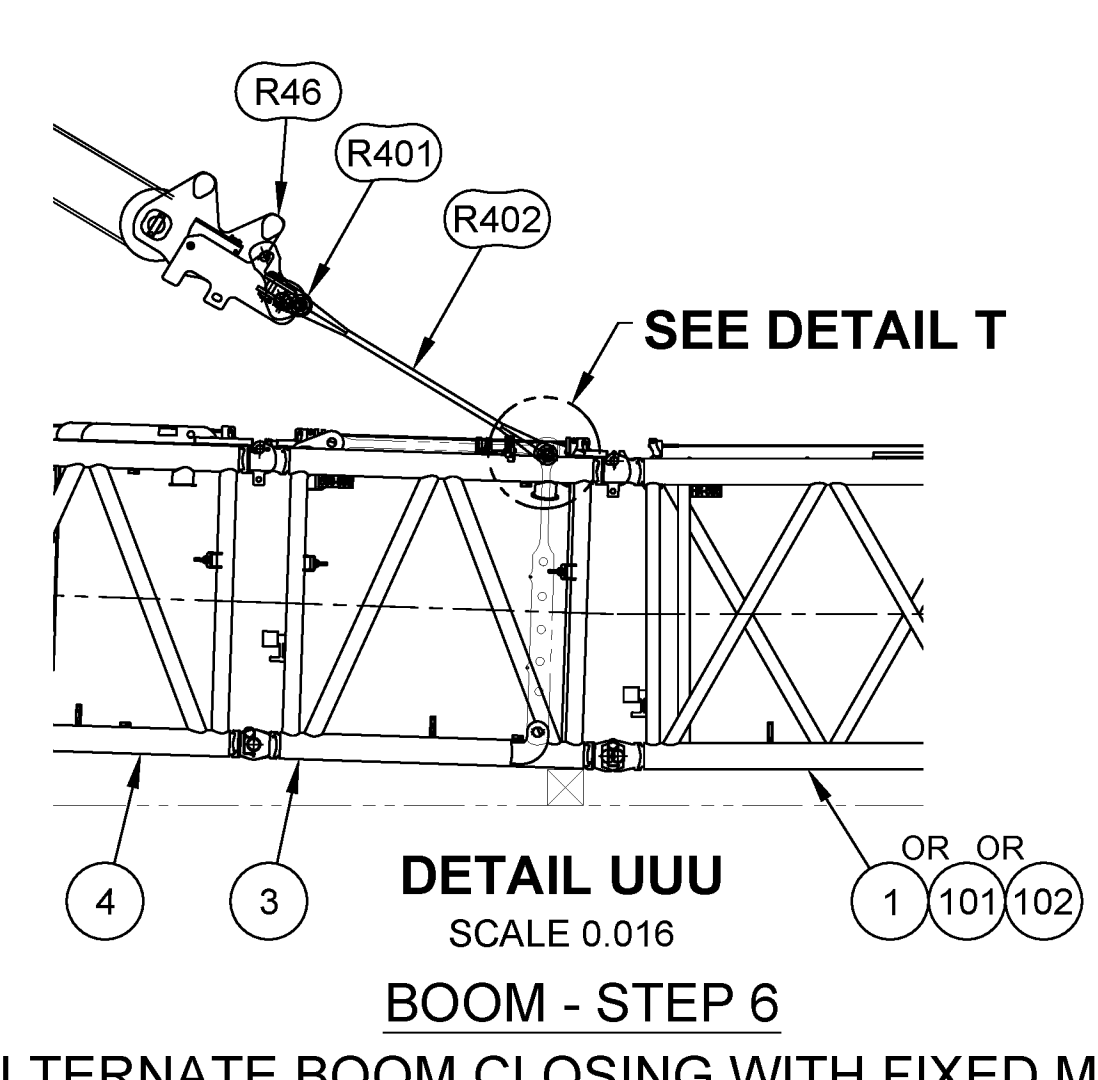
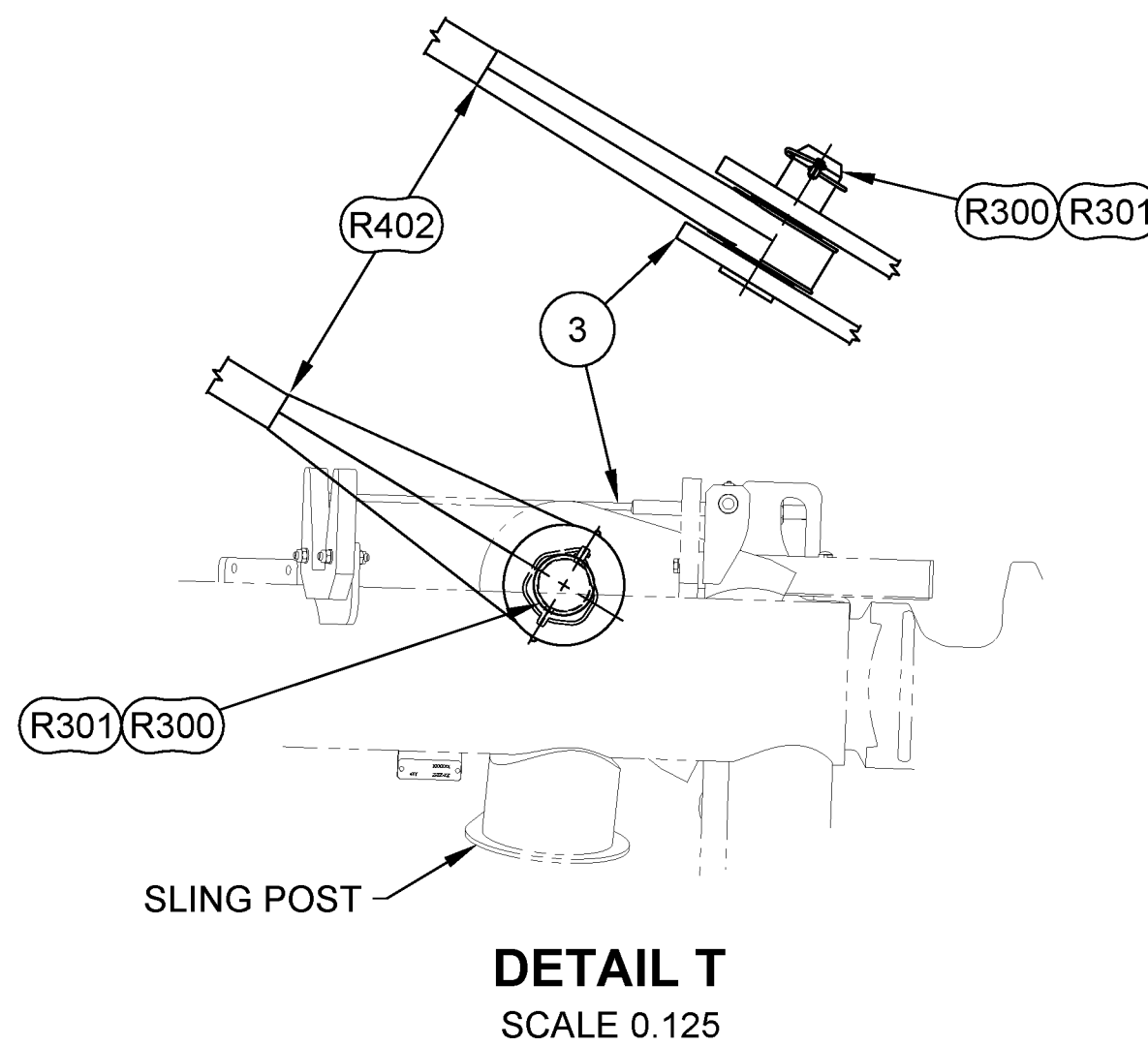


BOOM - STEP 7
EQUALIZER TO STRAPS ASSEMBLY

LOWER EQUALIZER (R46) ONTO RAILS OF INSERT (ITEM 4).
NOTE: IF USING ALTERNATE BOOM CLOSING WITH FIXED MAST, DETACH PENDANTS (R402) FROM BOOM CLOSING LINKS (R401) AND INSERT (ITEM 3) LUGS. CLOSING LINKS (R401) MAY REMAIN ATTACHED TO EQUALIZER.
NOTE: SEE FIXED JIB ASSEMBLY (ITEM 9) SET-UP SHEETS 14-18. FIXED JIB ASSEMBLY MUST BE INSTALLED BEFORE BOOM STRAPS CAN BE CONNECTED.

CAUTION: IF BOOM STRAPS ARE CONNECTED BEFORE COMPLETING FIXED JIB - STEP 5 (SEE SHEET 16), THEY MUST BE LOWERED AND LAYING ON BOOM INSERTS OR INTERFERENCE BETWEEN BOOM STRAPS AND FIXED JIB STRUT HINGE WILL OCCUR CAUSING STRUCTURAL DAMAGE.

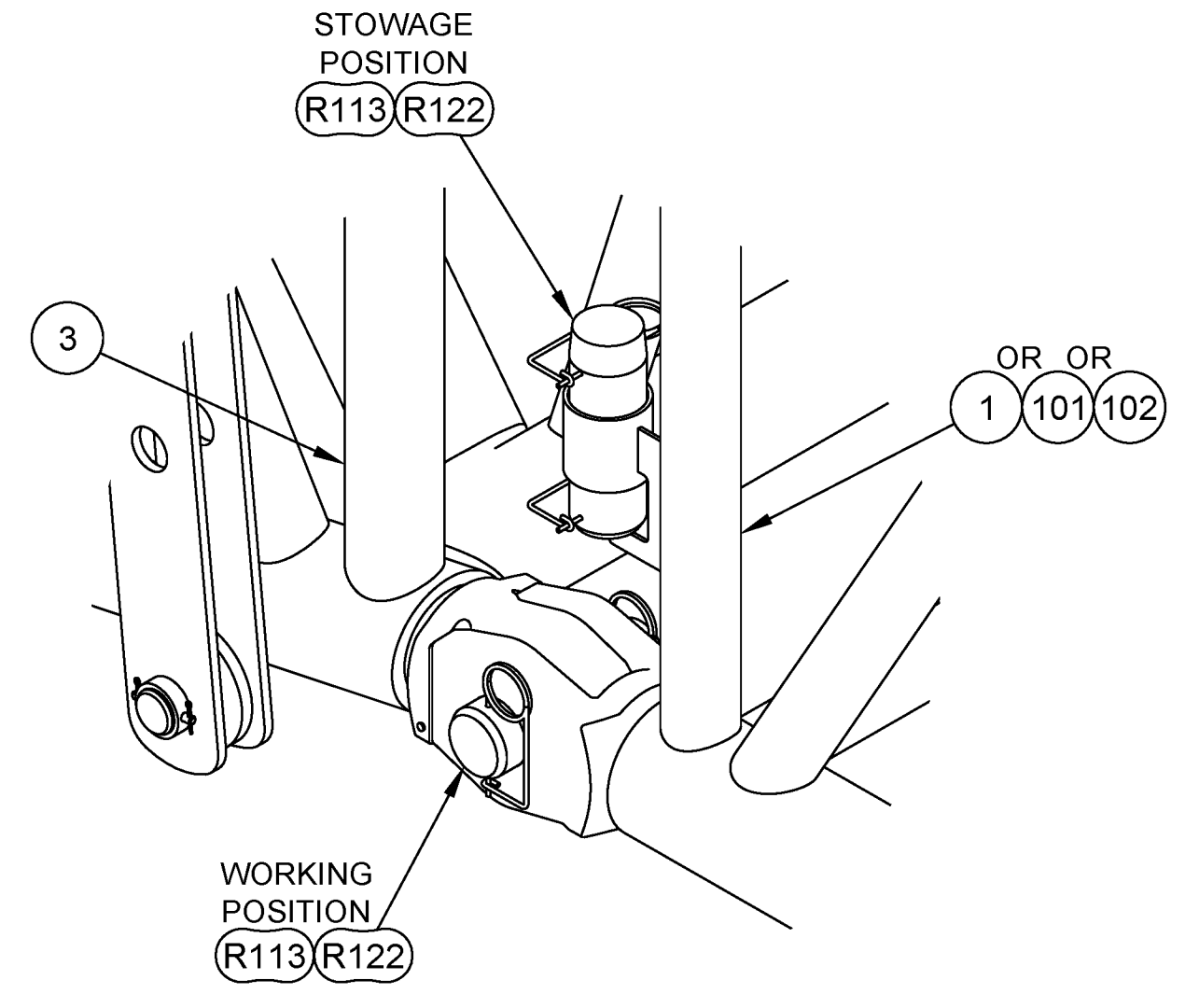
CONNECT BOOM STRAPS AND LINKS STARTING FROM FIXED JIB SHIPPING ASSY (ITEM 9) TO INSERT (ITEM 3). CONNECT EQUALIZER LINKS (R70) TO BOOM STRAPS (R126). REMOVE PINS SECURING EQUALIZER TO INSERT IF INSTALLED. PINS SECURING EQUALIZER TO INSERT (SEE DETAIL U) ARE ONLY REQUIRED WHEN CHANGING BOOM LENGTHS AND THE EQUALIZER IS NOT SUPPORTED BY AN ASSIST CRANE OR CONNECTED TO THE BOOM STRAPS.
RAISE FIXED MAST (R72) TO 67° (NORMAL OPERATING ANGLE IS 68°) TO CONNECT MAST COUNTERWEIGHT STRAPS TO LINKS ON VPC-MAX BEAM. SEE FIXED MAST RIGGING 84050187 SHEET 1 VIEW BB FOR STRAP AND LINK CONNECTIONS.
BOOM UP TO DESIRED ANGLE.



ALTERNATE BOOM CLOSING WITH FIXED MAST

MAXIMUM ALLOWABLE BOOM LENGTH TO BE CLOSED WHILE EQUIPPED WITH THE FOLLOWING COUNTERWEIGHT CONFIGURATIONS:
SERIES 1: 90.0 M (295.3 FT)
SERIES 2 OR 3: 123.0 M (403.5 FT)

ASSEMBLE DESIRED BOOM LENGTH CONFIGURATION PER SHEETS 3 & 4 OR CANTILEVERED INSERTS PER TABLE ON SHEET 2 FOR BOOM HANDLING WITH EQUALIZER (REFER TO DELTA 39 ON SHEET 1 AND INTERMEDIATE BLOCKING VIEW ON SHEET 9 FOR BLOCKING REQUIREMENTS).
USING PREVIOUSLY ASSEMBLED FIXED MAST (R72) PER ASSEMBLY INSTRUCTIONS 84050187 STEPS 1 -14. ATTACH ASSIST CRANE TO EQUALIZER (R46) UPPER SLING POSTS (SEE DETAIL U). LOWER FIXED MAST (R72) WHILE PULLING EQUALIZER (R46) TOWARDS INSERT (ITEM 3).
IF NOT PREVIOUSLY DONE, REMOVE EQUALIZER SHACKLES (R400) FROM EQUALIZER (R46) AND ATTACH BOOM CLOSING LINKS (R401) - (SEE DETAIL U). ATTACH PENDANTS (R402) TO BOOM CLOSING LINKS (R401) AND TO BOOM CLOSING LUGS ON INSERT (ITEM 3) - (SEE DETAIL T). (REQUIRED FOR BOOM CLOSING WITH MAST).
USE BOOM HOIST WIRE ROPE TO CLOSE BOOM JOINT AT INSERT (ITEM 3) AND FIRST 12 M INSERT.
INSTALL LOWER BOOM CONNECTOR PINS (R122) - (SEE DETAIL V).
SCALE 0.015



DETAIL V
LOWER BOOM CONNECTOR
MANUAL PIN INSTALLATION
TYPICAL - #680 - 685 - 686
SCALE 0.100

SEE DETAIL V

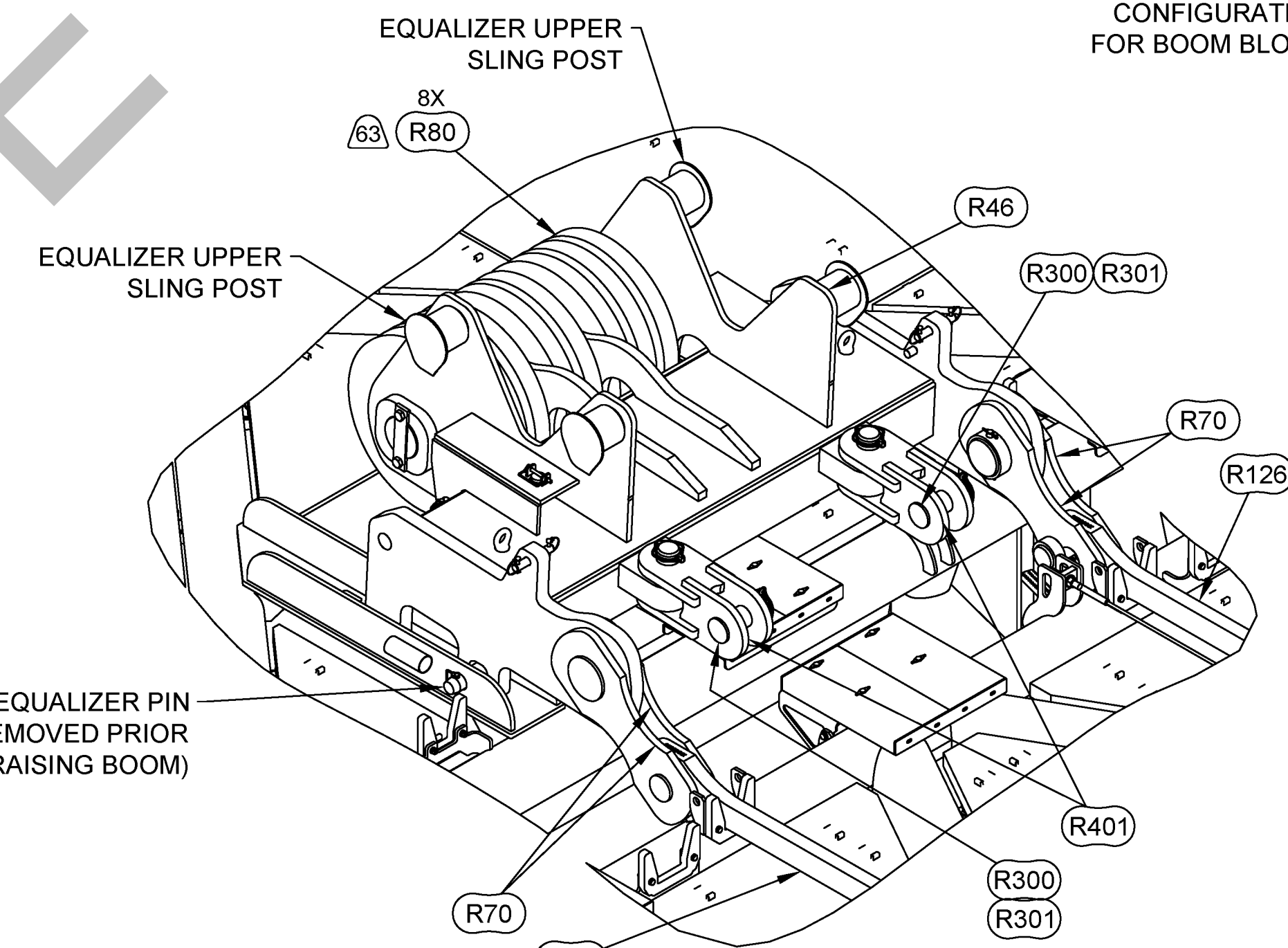
SEE DELTA NOTE 39 (SHEET 1) AND RECOMMENDED BOOM MAKEUP CONFIGURATIONS (SHEETS 4, 5 & 6) FOR BOOM BLOCKING RESTRICTIONS

PROCEDURE TO DISASSEMBLE BOOM

1. BOOM DOWN AND SUPPORT BOOM ON BLOCKING.
2. BOOM FIXED MAST (R72) 1° TOWARD MAST STOPS AND DISCONNECT MAST COUNTERWEIGHT STRAPS FROM LINKS ON VPC-MAX BEAM.
3. PAY OUT BOOM HOIST TO LOWER EQUALIZER (R46) ONTO (ITEM 4) INSERT RAILS AND SECURE WITH EQUALIZER PIN (SEE DETAIL U).
4. DISCONNECT LINKS (R70) FROM STRAPS (R126) AND PIN LINKS INTO STOWAGE POSITION.
5. DISCONNECT BOOM STRAPS AND LINKS AT EACH JOINT.
6. WITH PROPER BLOCKING IN PLACE AND SUPPORT FROM ASSIST CRANE REMOVE INSERT LOWER CONNECTOR PINS AND DISENGAGE UPPER CONNECTOR PINS FROM INSERTS STARTING AFTER INSERT (ITEM 3) TOWARDS BOOM TOP.
- WARNING:** BOOM MUST BE PROPERLY BLOCKED TO PREVENT SHIFTING DURING PIN REMOVAL.
7. REMOVE PINS SECURING EQUALIZER TO INSERT IF INSTALLED.
8. FOR REMOVAL OF BOOM BUTT AND #686 INSERT ASSEMBLY (SEE BOOM - STEP 4), REVERSE INSTALLATION STEPS 1 THRU 5 ON SHEET 9.

PROCEDURE TO DISASSEMBLE BOOM FOR BOOM MAKE UP RECONFIGURATIONS

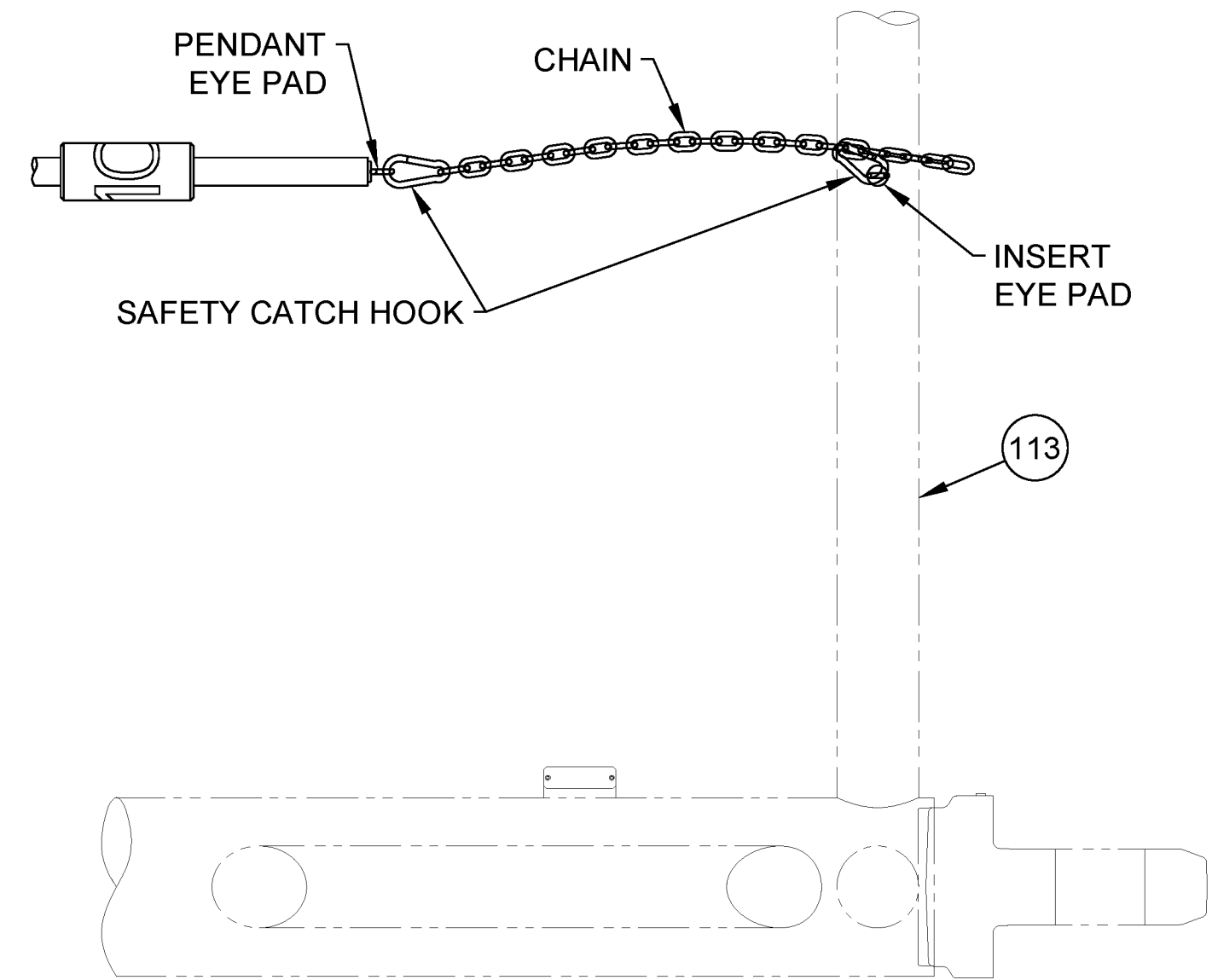
1. BOOM DOWN AND SUPPORT BOOM ON BLOCKING.
2. PAY OUT BOOM HOIST TO LOWER EQUALIZER (R46) ONTO INSERT RAILS (ITEM 4) AND SECURE WITH EQUALIZER PIN. (SEE DETAIL U).
3. DISCONNECT LINKS (R70) FROM STRAPS (R126) AND PIN LINKS (R70) INTO STOWAGE POSITION.
4. DISCONNECT BOOM STRAPS AND LINKS NECESSARY FOR BOOM RECONFIGURATION.
5. 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.



SEE DETAIL U

TITLE IN PRIMARY LANGUAGE		BOOM RIGGING		FJ10:687 ON B90		TITLE IN SECONDARY LANGUAGE	
UNITS	SCALE	DATE	SHEET	GROUP	ORIGIN	DRAWING NO.	REVISION
IN	0.008	E	10/18	HBD		80158563	A

102.0 M (334.6 FT)
#686-685-680-681-682 BOOM SHOWN

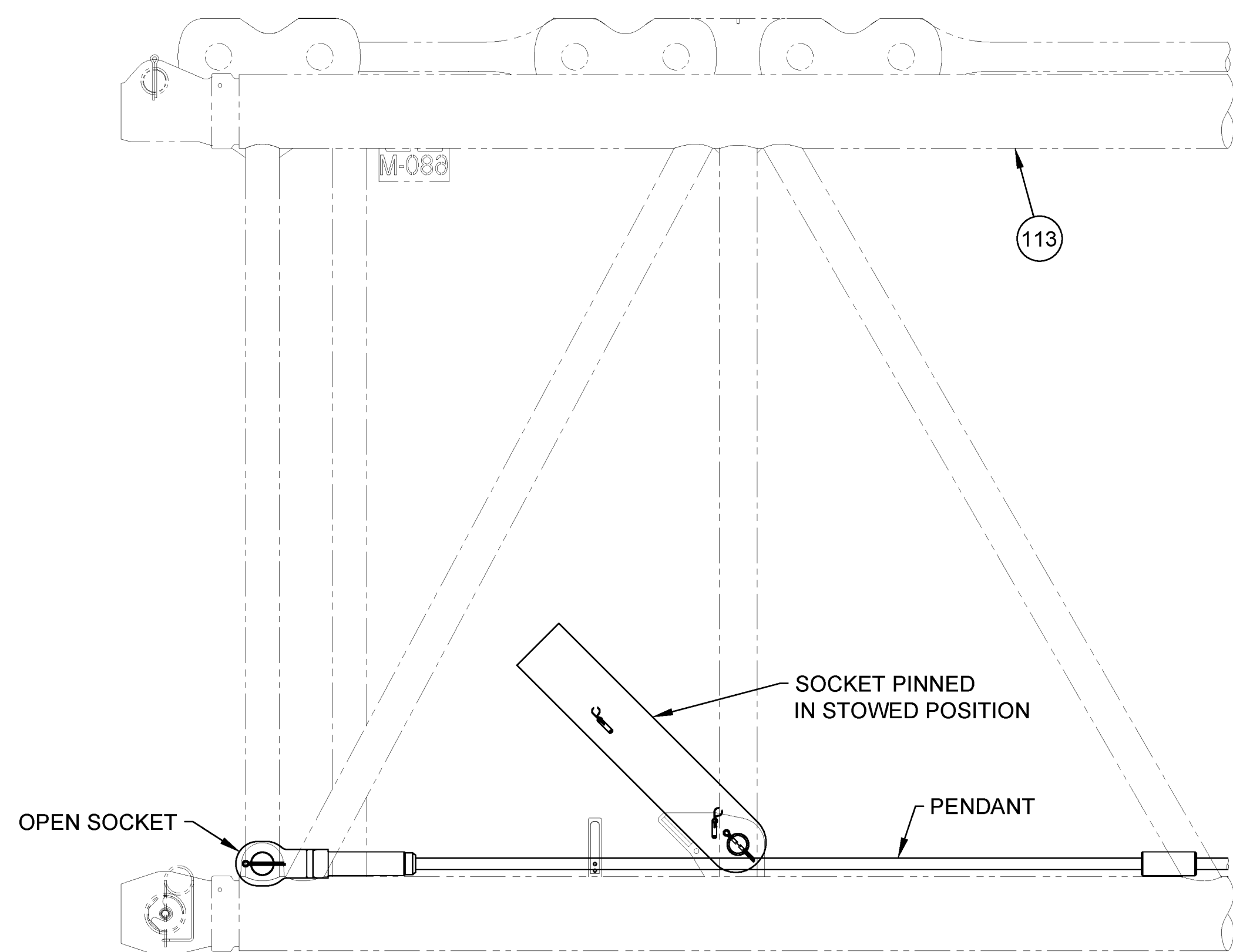


#680 INTERMEDIATE SUSPENSION (R117) INSTALLATION

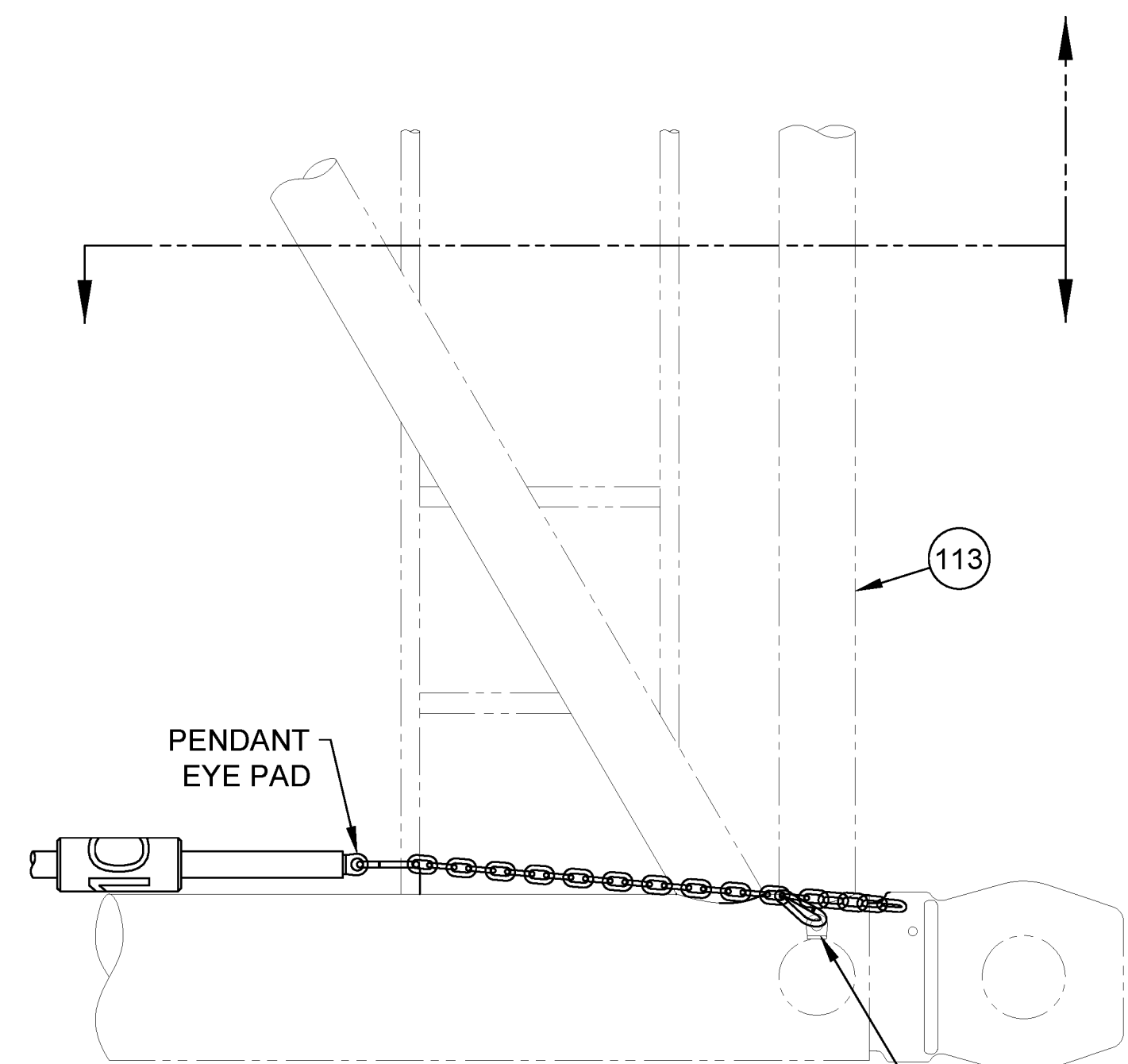
SEE BOOM MAKEUP VIEWS ON SHEETS 3 & 4 AND BOOM LENGTH TABLE ON SHEET 2 FOR REQUIRED SUSPENSION AND WIRE ROPE BUTTON IDENTIFICATION LOCATION.

- FOR BOOM LENGTHS 102 M
REMOVE BOTH PENDANTS (R121) FROM STOWAGE LOCATION ON LOWER BEAM WELDMENT OF GUIDE ASSY-WIRE ROPE (ITEM 100).
- FOR BOOM LENGTHS 102 M
ATTACH OPEN SOCKET END OF PENDANTS (R121) TO CONNECTING LINKS (R114) AT TOP OF INSERT - (SEE DETAIL AA-PREPARED NON-WORKING).
- REMOVE MULTI-BUTTON PENDANTS FROM STOWED SHIPPING POSITION. (SEE DETAIL Y & Z)
- a) FOR BOOM LENGTHS 102 M
ATTACH OPEN SOCKET END OF BUTTON PENDANTS (84022845) TO CLOSED SOCKET END OF PENDANTS (R121). (SEE DETAIL AA-PREPARED NON-WORKING)
b) FOR BOOM LENGTHS 114 - 123 M:
ATTACH OPEN SOCKET END OF BUTTON PENDANTS (84022845) TO CONNECTING LINKS (R114) AT TOP OF INSERT. (SEE DETAIL AA-PREPARED NON-WORKING)
- SLOWLY RAISE BOOM. AS THE STRAPS RISE, GUIDE THE INTERMEDIATE SUSPENSION PENDANTS THROUGH THE OPENINGS IN THE BOOM INSERT. STOP THE BOOM RAISING PROCEDURE WHEN THE REQUIRED PENDANT BUTTON NEARS THE SOCKET. FROM STOWED POSITION 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 AA-PREPARED NON-WORKING)
- RELOCATE SOCKET LOCKING HITCH PIN FROM SOCKET AND UPPER BRACKET HOLE TO LOWER BRACKET HOLE. (SEE DETAIL AA-WORKING)
- ATTACH PENDANT EYE PAD TO INSERT EYE PADS USING A SAFETY CATCH HOOK AT EACH END OF CHAIN. ADJUST PENDANT TENSION BY POSITIONING SAFETY CATCH HOOK IN APPROPRIATE CHAIN LINK. (SEE DETAIL BB)
- CONTINUE TO BOOM UP SLOWLY AS PENDANT BECOMES TIGHT AND SOCKET PIVOTS INTO WORKING POSITION. (SEE DETAIL AA-WORKING)

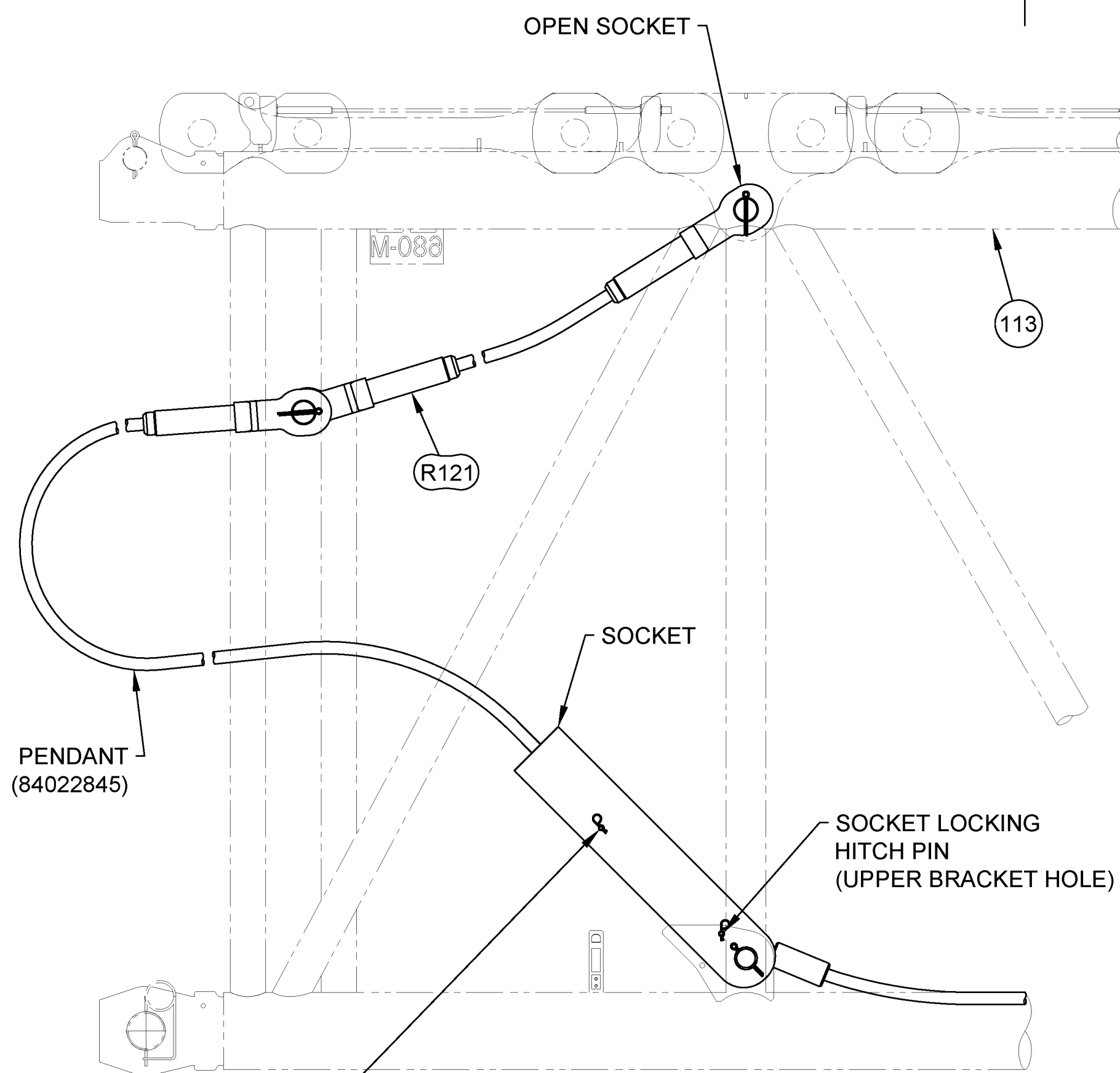
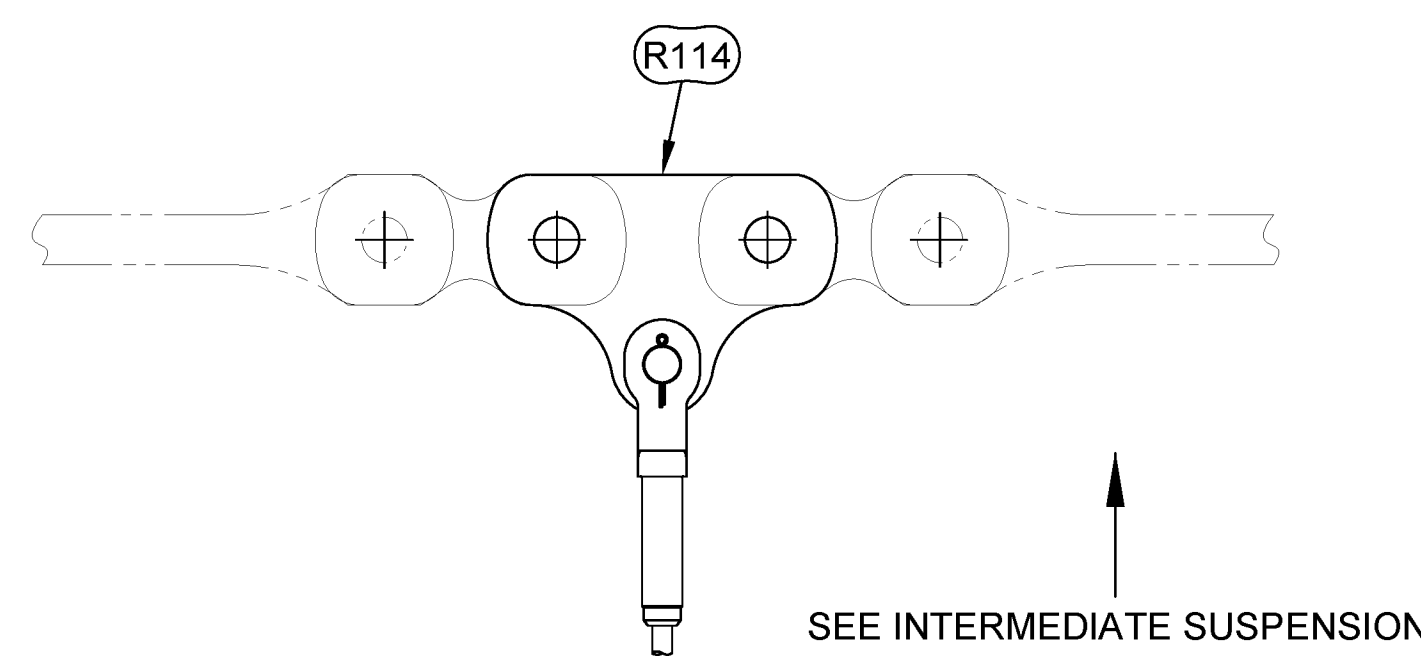
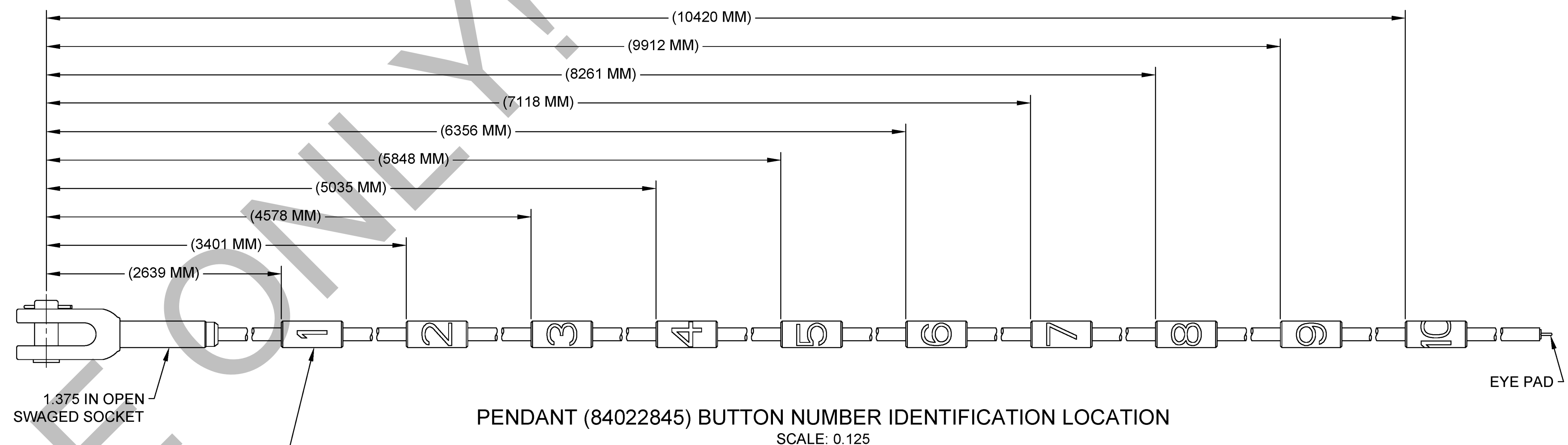
FOR REMOVAL OF INTERMEDIATE SUSPENSION REVERSE INSTALLATION STEPS 1 THRU 8, ASSURING SOCKET PIVOTS TOWARD STOWAGE POSITION.
VERIFY THAT SLACK IN PENDANT CHAIN ALLOWS FOR SOCKET TO PIVOT INTO STOWED POSITION.



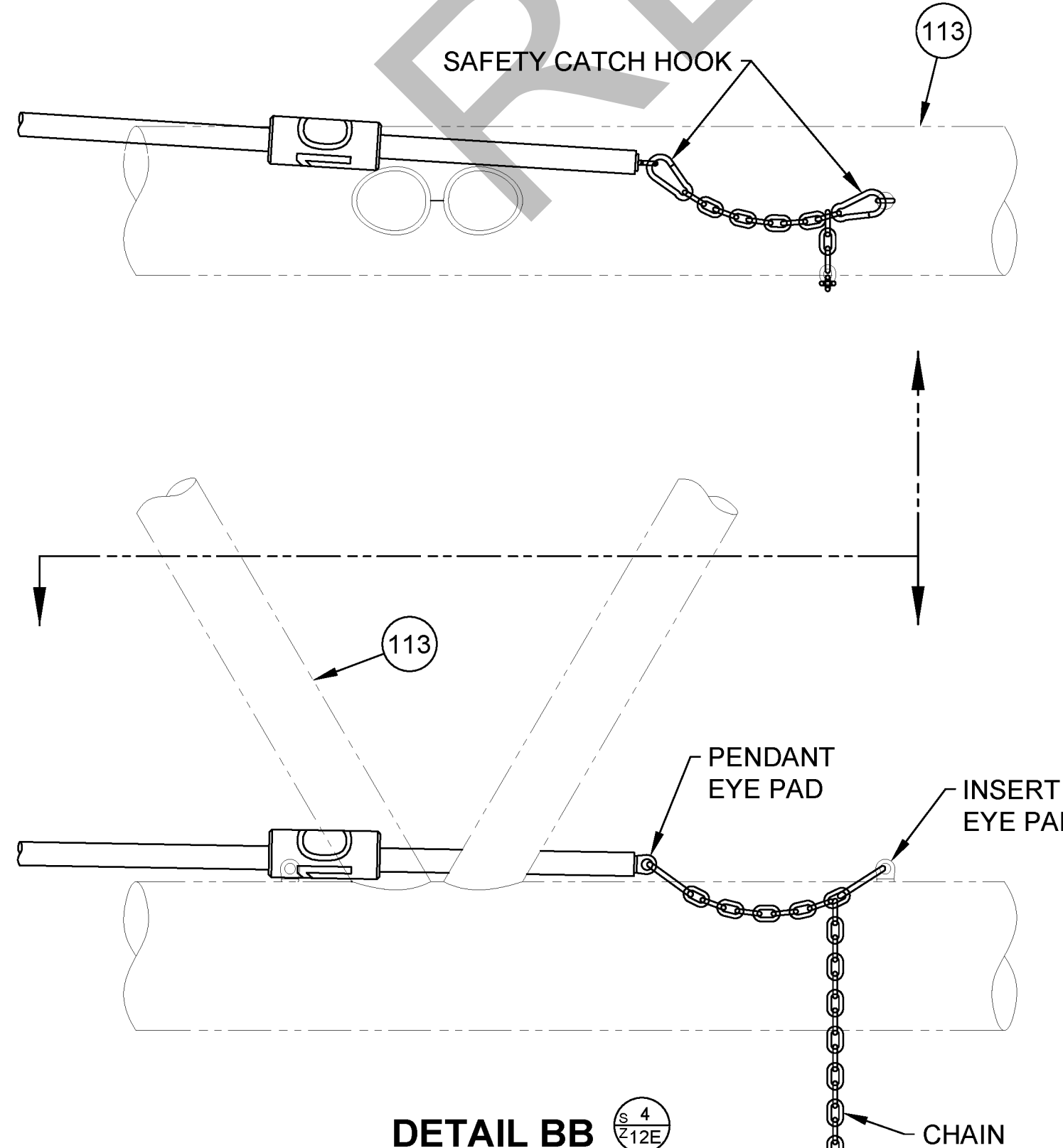
DETAIL Y - STOWED SHIPPING
SUSPENSION WIRE ROPE #680
ITEM R117, 81036355
SUSPENSION PENDANTS STOWED POSITION FOR SHIPPING OR WHEN INSERT WORKING W/O SUSPENSION
SCALE 0.075



DETAIL Z - STOWED SHIPPING
SUSPENSION WIRE ROPE #680
ITEM R117, 81036355
SUSPENSION PENDANTS STOWED POSITION FOR SHIPPING OR WHEN INSERT WORKING W/O SUSPENSION
SCALE 0.125

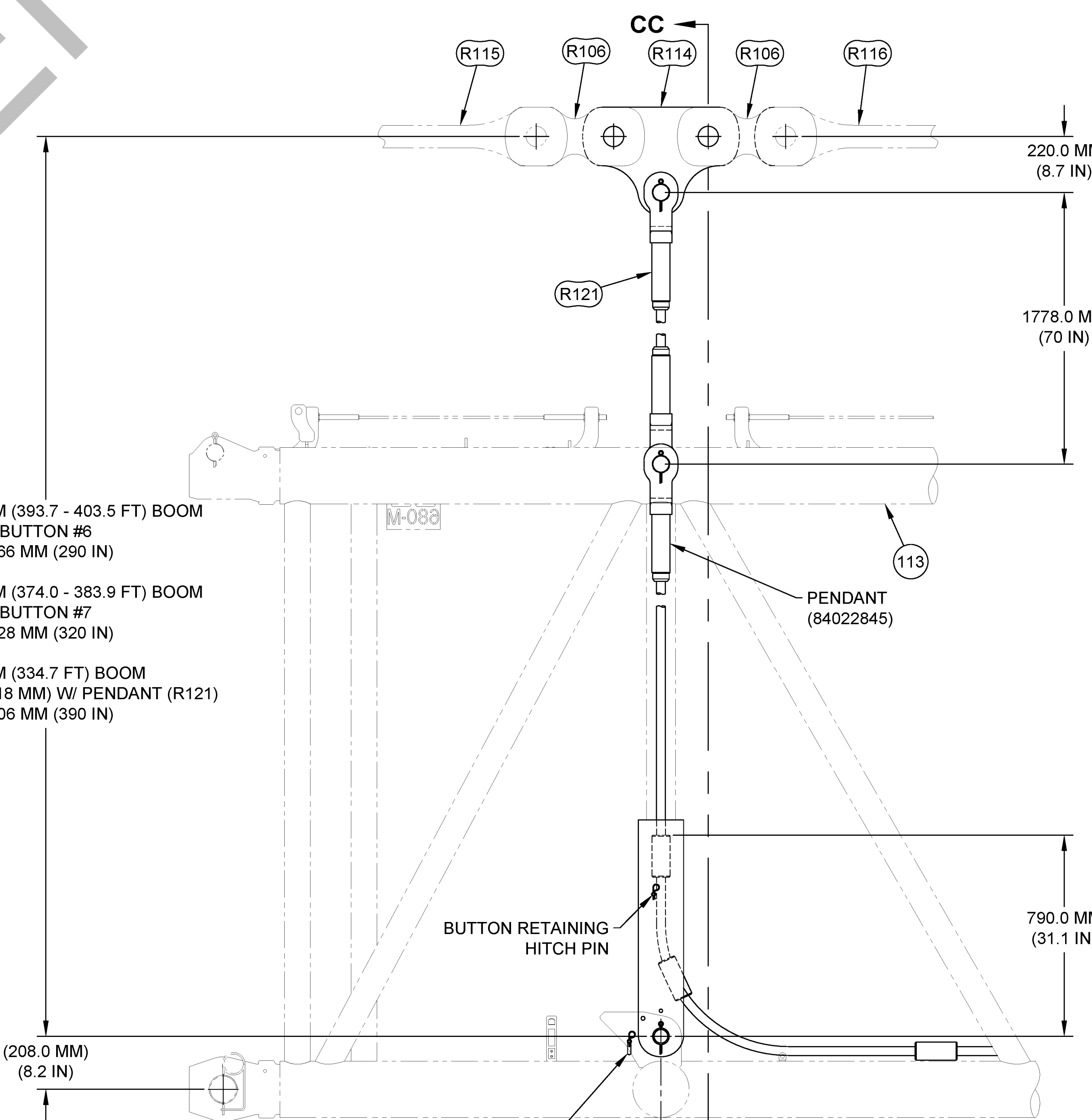


DETAIL AA - PREPPED NON-WORKING
SUSPENSION WIRE ROPE #680
ITEM R117, 81036355
SUSPENSION SOCKET AND ROPE LOCATION FOR PREPPED NON-WORKING BOOM LENGTHS 102 - 123 M (334.6 - 403.5 FT)
SCALE 0.075

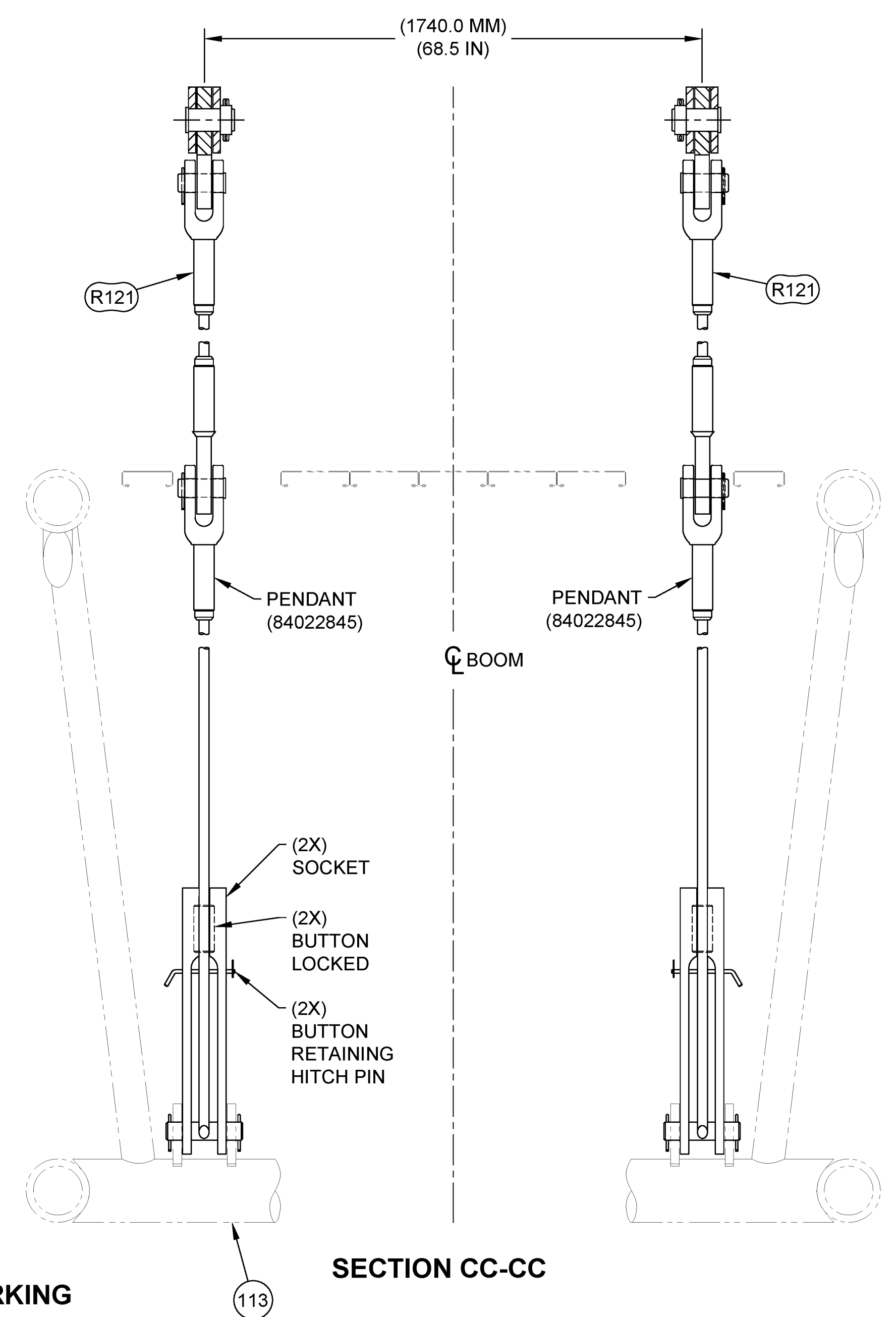


DETAIL BB
SUSPENSION WIRE ROPE #680
ITEM R117, 81036355
SCALE 0.125

120.0 - 123.0 M (393.7 - 403.5 FT) BOOM
BUTTON #6
7366 MM (290 IN)
114.0 - 117.0 M (374.0 - 383.9 FT) BOOM
BUTTON #7
8128 MM (320 IN)
102.0 M (334.7 FT) BOOM
BUTTON #7 (7118 MM) W/ PENDANT (R121)
9906 MM (390 IN)

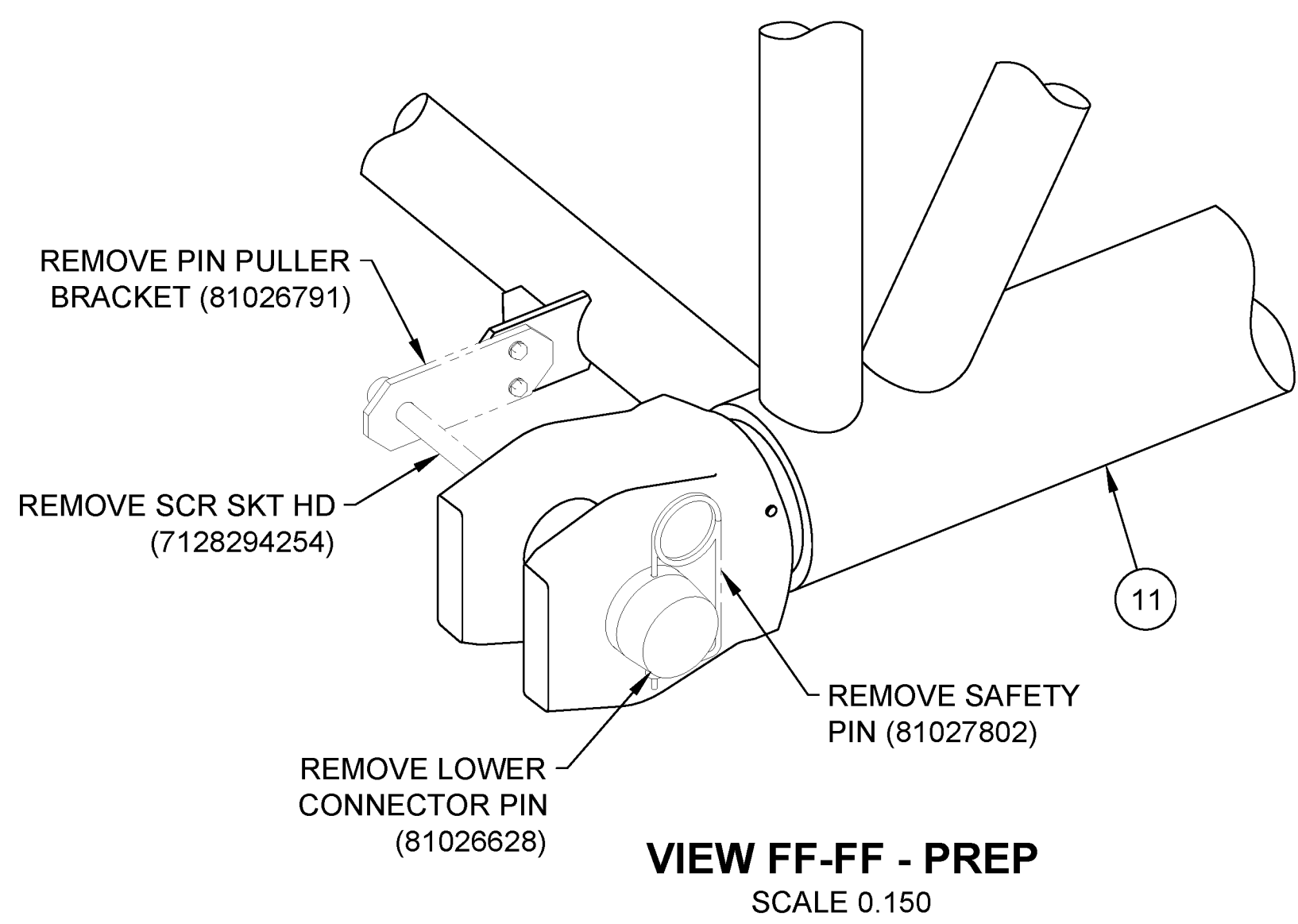


DETAIL AA - WORKING
SUSPENSION WIRE ROPE #680
ITEM R117, 81036355
SUSPENSION SOCKET AND ROPE LOCATION FOR WORKING BOOM LENGTHS 102 - 123 M (334.6 - 403.5 FT)
SCALE 0.075

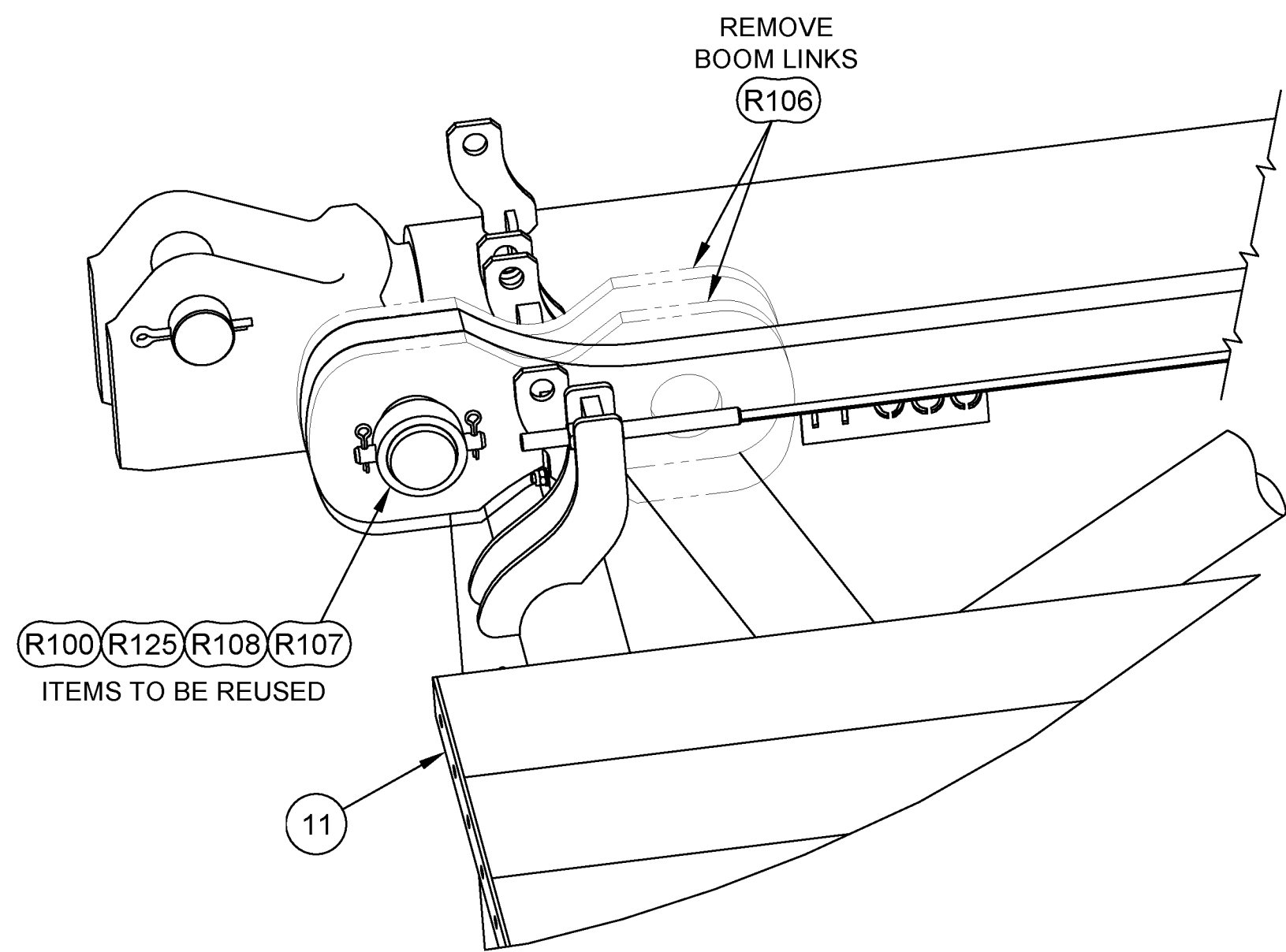


SECTION CC-CC

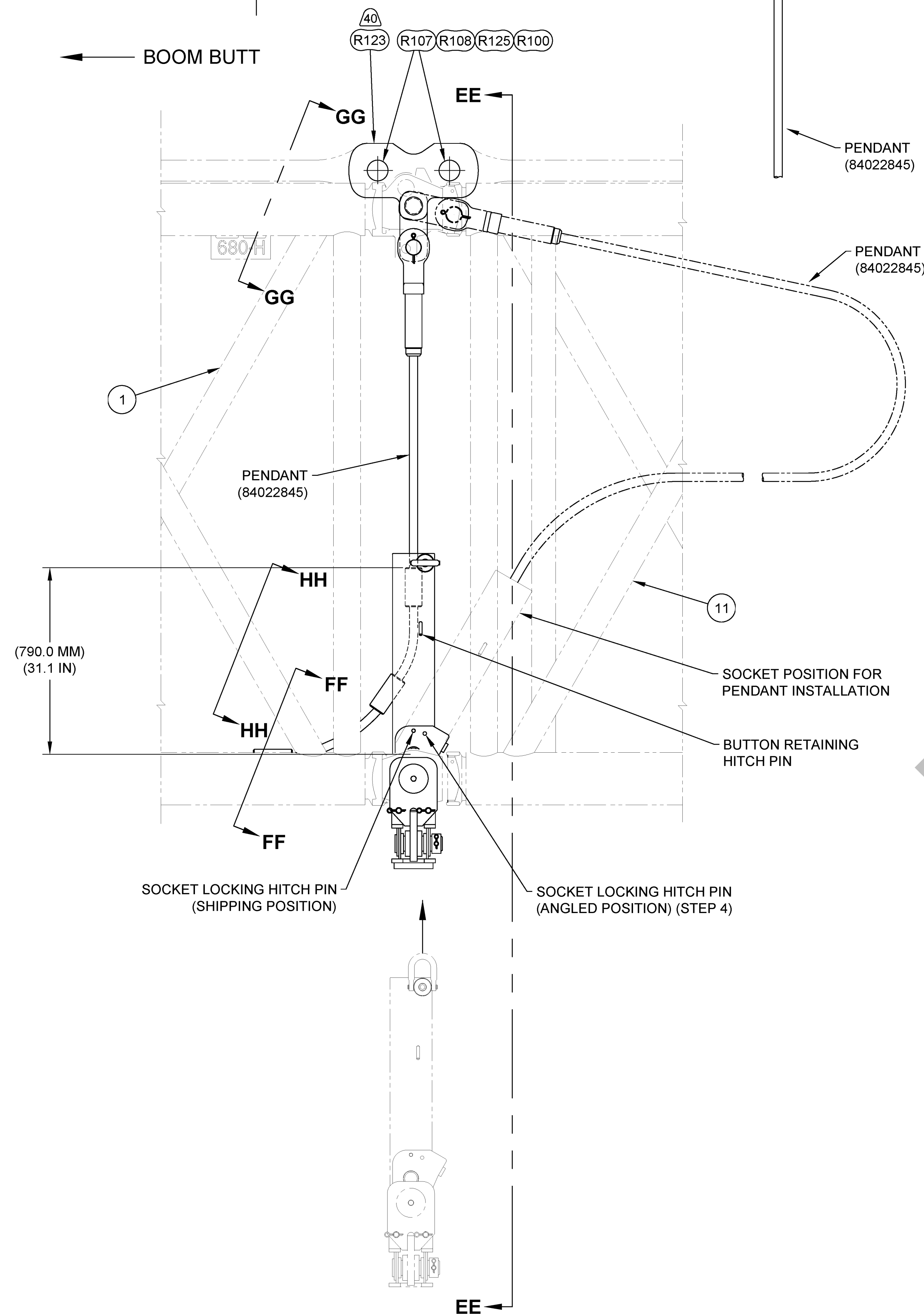
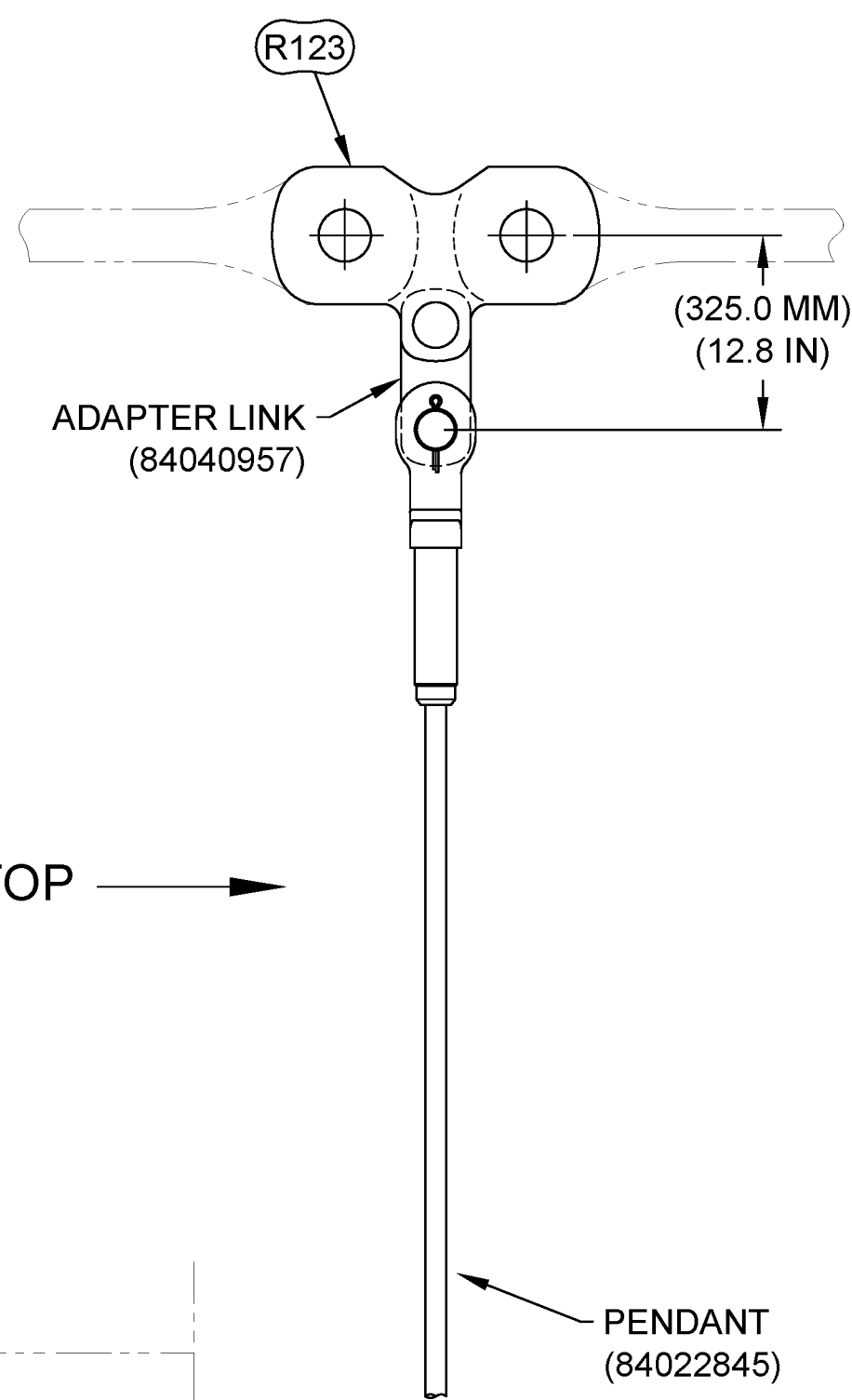
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UNITS IN	SCALE 0.075	DATE 11/18	SHEET HBD	GROUP ORIGIN	DRAWING NO. 80158563	REVISION A			



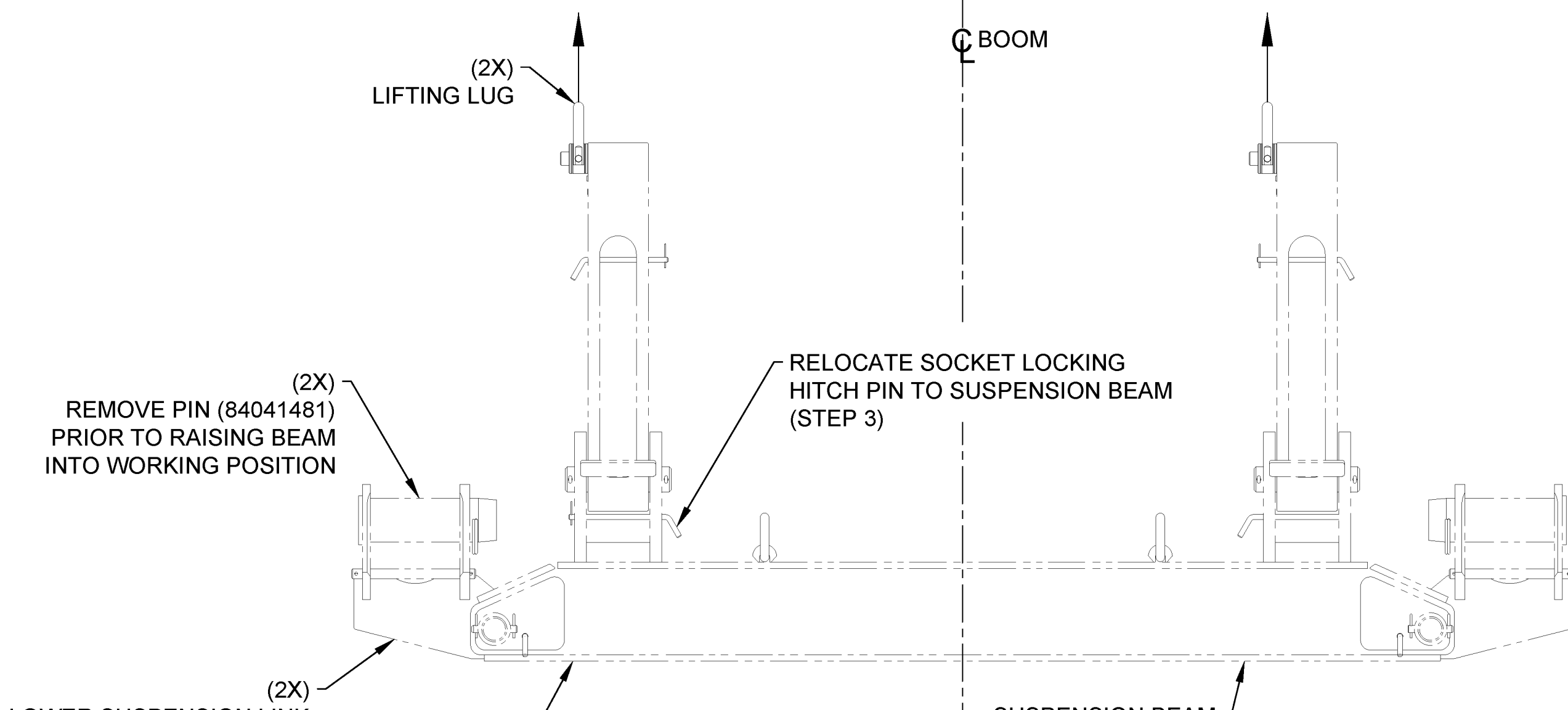
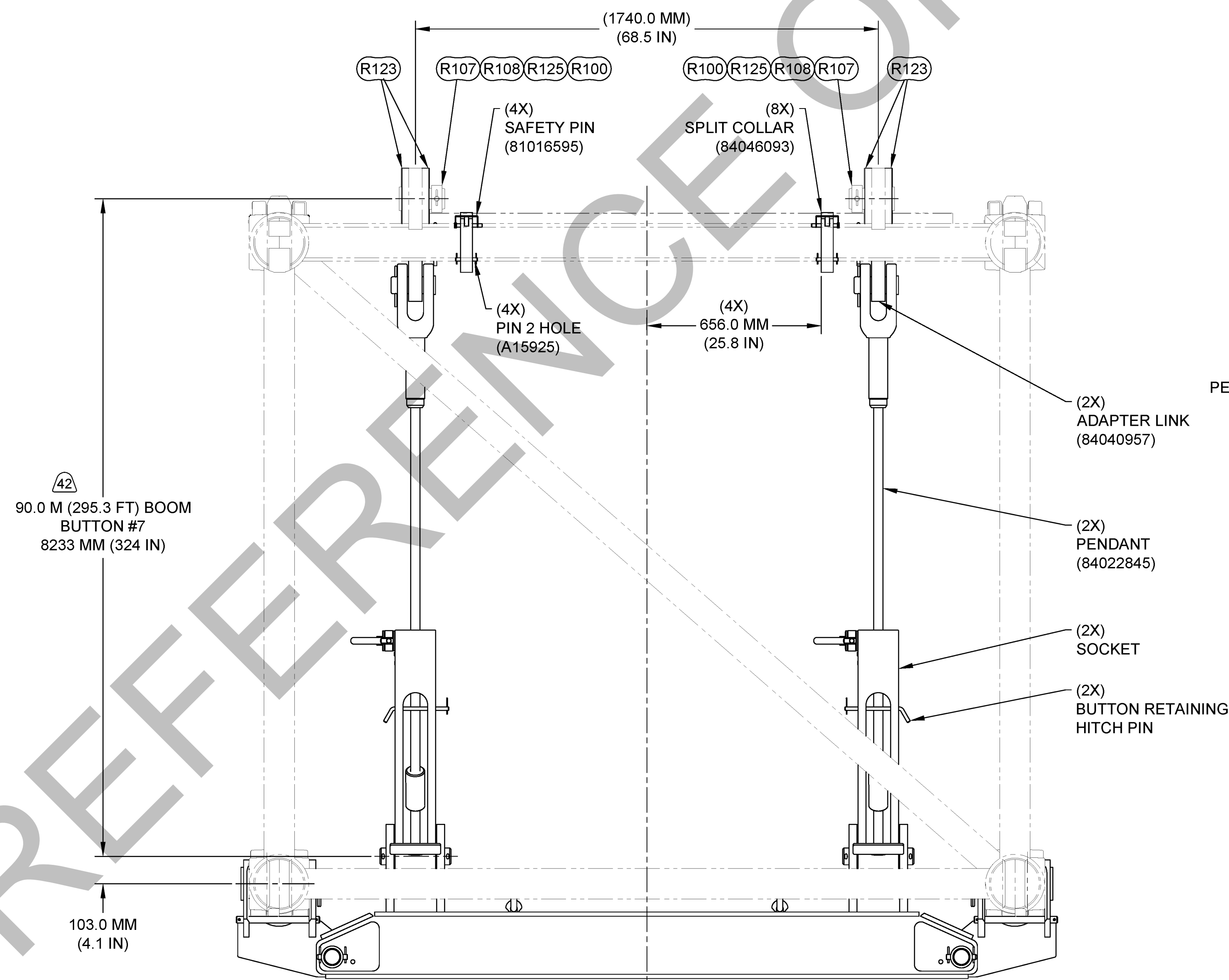
VIEW FF-FF - PREP
SCALE 0.150



VIEW GG-GG - PREP
SCALE 0.150



DETAIL DD
SUSPENSION WIRE ROPE
(ITEM 114) 84040952
SCALE 0.085



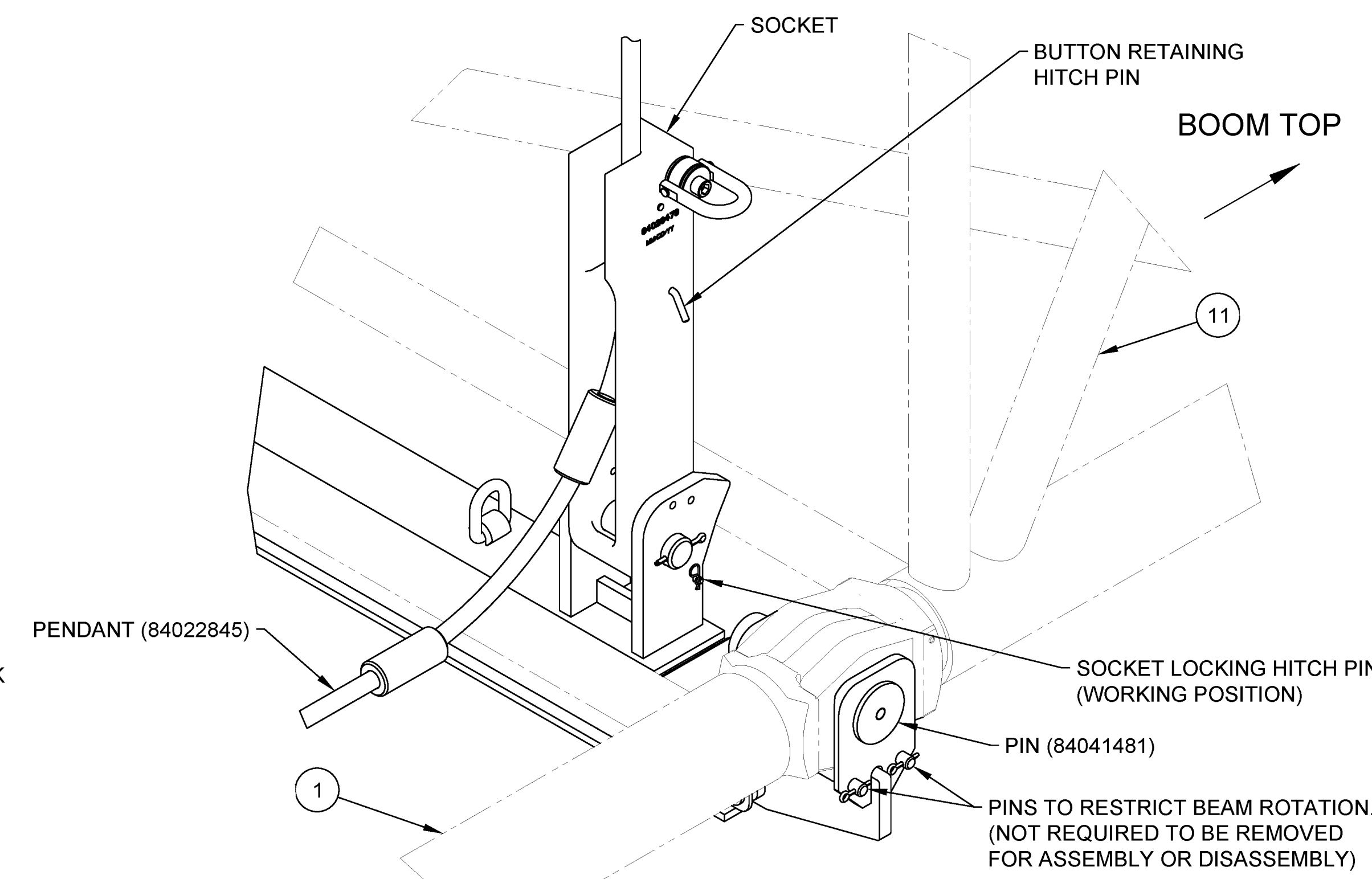
SECTION EE-EE
SCALE 0.085

#680 INTERMEDIATE (DROP DOWN) SUSPENSION (ITEM 114) INSTALLATION

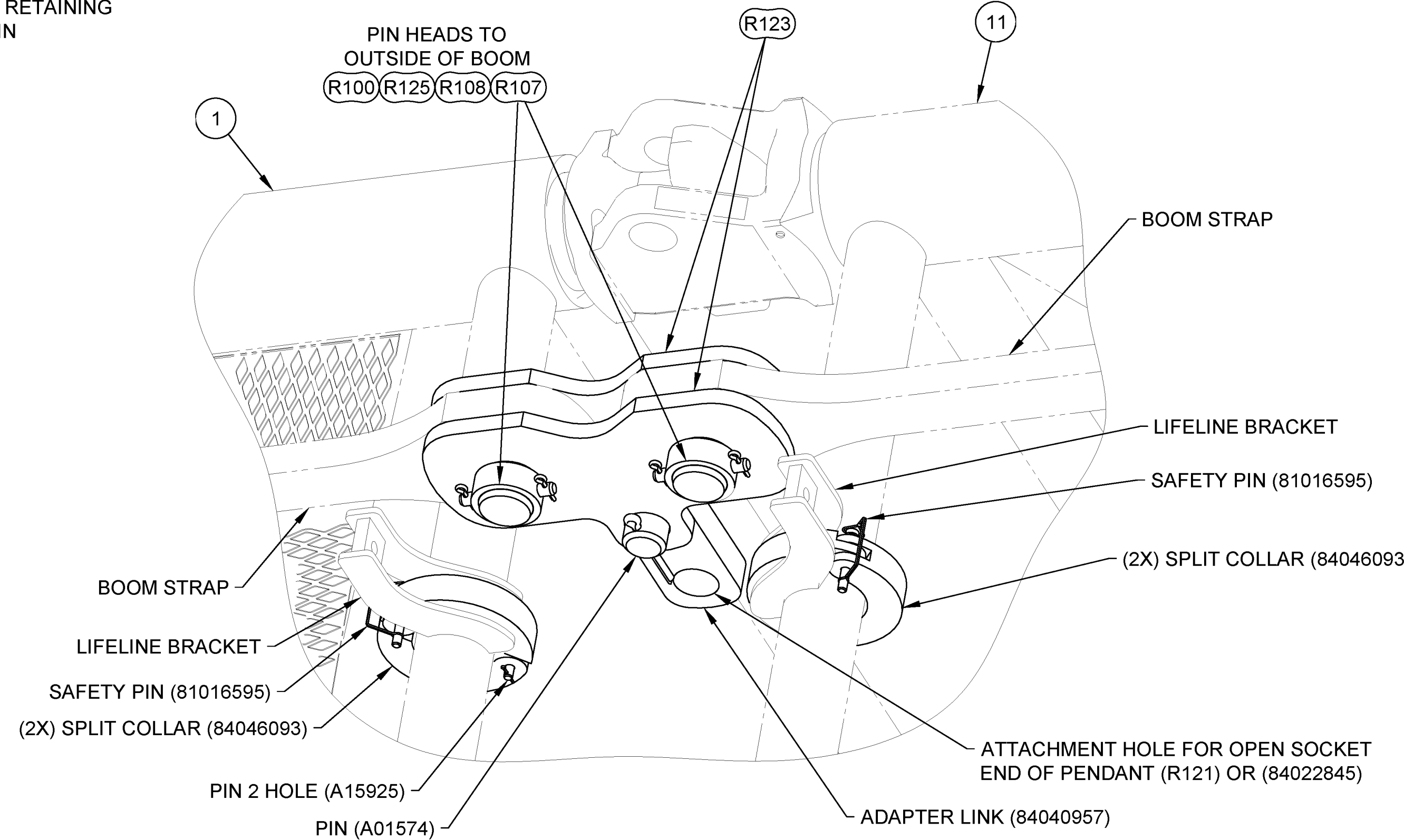
SEE BOOM MAKEUP VIEWS ON SHEETS 3 & 4 AND BOOM LENGTH TABLE ON SHEET 2
FOR REQUIRED SUSPENSION AND WIRE ROPE BUTTON IDENTIFICATION LOCATION.
REFERENCE SUSPENDER WIRE ROPE ASSY (84040952) FOR ADDITIONAL INFORMATION.
(REFER TO SHEET 11 FOR BUTTON NUMBER IDENTIFICATION LOCATION ON PENDANT 84022845).

- FROM MATING INSERT TOWARD BOOM TOP (ITEM 104), REMOVE LOWER BOOM CONNECTOR PINS AND COMPONENTS USED WITH HAND HELD CYLINDER. (SEE VIEW FF-FF - PREP).
- FROM SAME MATING INSERT ABOVE, REMOVE (4) BOOM LINKS (R106) AND STORE IN PARTS BOX 81028467. PIN/COLLAR/PIN COMPONENTS (ITEMS R107, R108, R125 & R100) WILL BE REUSED WITH SUSPENSION LINKS PER STEP 5 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. RELOCATE THE SOCKET LOCKING HITCH PINS FROM THE SOCKET AND UPPER MOST BRACKET HOLE (SHIPPING POSITION) TO THE SUSPENSION BEAM TO ALIGN THE LOWER SUSPENSION LINKS. (SEE SECTION EE-EE) WITH SUSPENSION LINK PINS 84041481 REMOVED, USE AN ASSIST CRANE TO RAISE SUSPENSION BEAM ASSY TO ALIGN LOWER CONNECTOR AND LOWER SUSPENSION LINK HOLES. REINSTALL PIN 84041481. (SEE DETAIL DD & SECTION EE-EE).
- PIVOT SOCKET INTO 30° POSITION AND REINSTALL SOCKET LOCKING PIN THROUGH BRACKET AND SOCKET (ANGLED POSITION). (SEE DETAIL DD).
- ATTACH INSERT BOOM STRAPS WITH DOUBLE LINKS (R123) USING EXISTING PIN/COLLAR/PIN COMPONENTS (ITEMS R107, R108, R125 & R100) REMOVED IN VIEW GG-GG - PREP. ATTACH ADAPTER LINK (84040957) TO DOUBLE LINKS (R123).
- FOR BOOM LENGTHS 90 M (295.3 FT) ATTACH OPEN SOCKET END OF PENDANTS (84022845) TO ADAPTER LINKS (84040957) - (SEE DETAIL DD).
- THIS STEP INTENTIONALLY LEFT BLANK**
- THIS STEP INTENTIONALLY LEFT BLANK**
- BETWEEN THE (4) LIFELINE BRACKET SIDE PLATES NEAR THE SUSPENSION, ASSEMBLE THE SPLIT COLLARS (84046093) WITH THE SAFETY PIN (81016595) UPWARDS TOWARD BRACKET SIDE PLATES AND 2 HOLE PIN (A15925) AND COTTER TOWARD SUSPENSION PENDANTS. (SEE VIEW GG-GG - WORKING).
- WITH SOCKET LOCKED IN 30° 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 BUTTON NEARS THE SOCKET. REMOVE BUTTON RETAINING HITCH PIN FROM SOCKET. POSITION THE IDENTIFIED PENDANT BUTTON OF THE MULTI-BUTTON PENDANT 84022845 INTO SOCKET AND REINSTALL BUTTON RETAINING HITCH PIN INTO SOCKET, LOCKING PENDANT IN POSITION. (SEE DETAIL DD).
- PRIOR TO CONTINUATION OF BOOM RAISING, REMOVE SOCKET LOCKING HITCH PIN FROM 30° POSITIONED SOCKET AND BRACKET. STOW IN LOWEST BRACKET HOLE (WORKING 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 114) REVERSE INSTALLATION STEPS 1 THRU 9, ASSURING SOCKET PIVOTS TOWARD 30° POSITION WHEN LOWERING BOOM STRAPS.



VIEW HH-HH - WORKING
SCALE 0.125



VIEW GG-GG - WORKING
SCALE 0.175

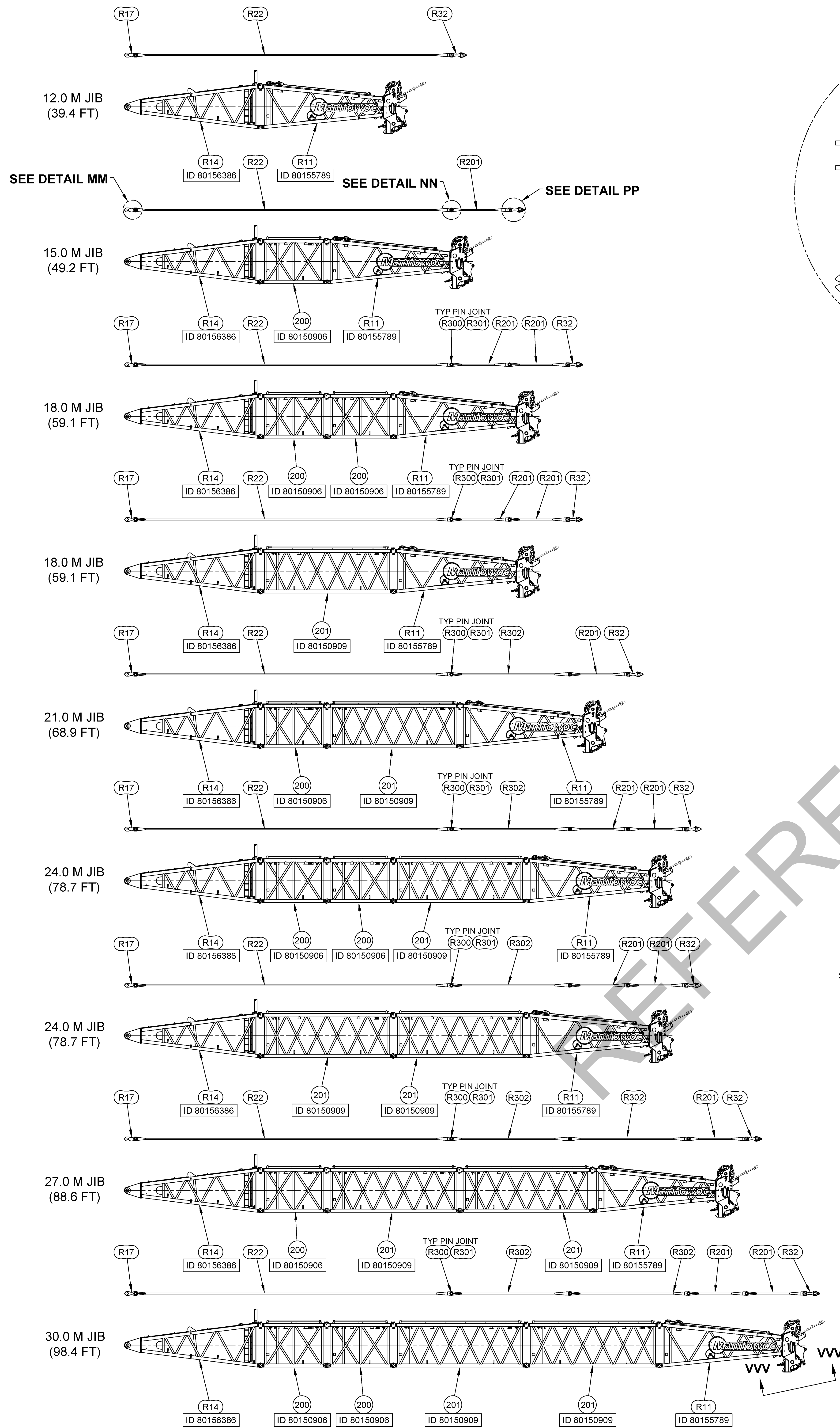
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IN	0.085	E	12/18	HBD		80158563	A		

REFERENCE ONLY!

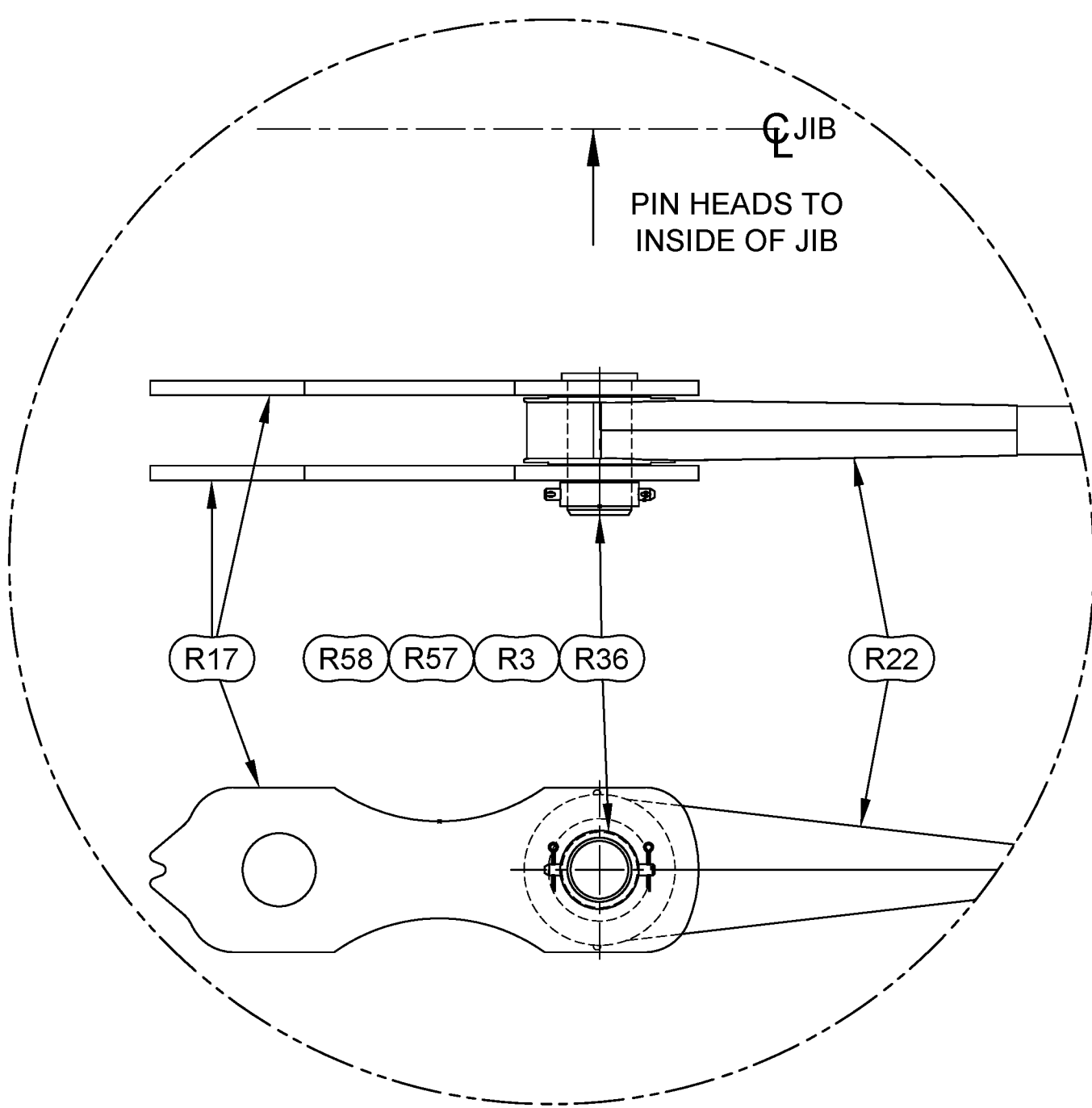
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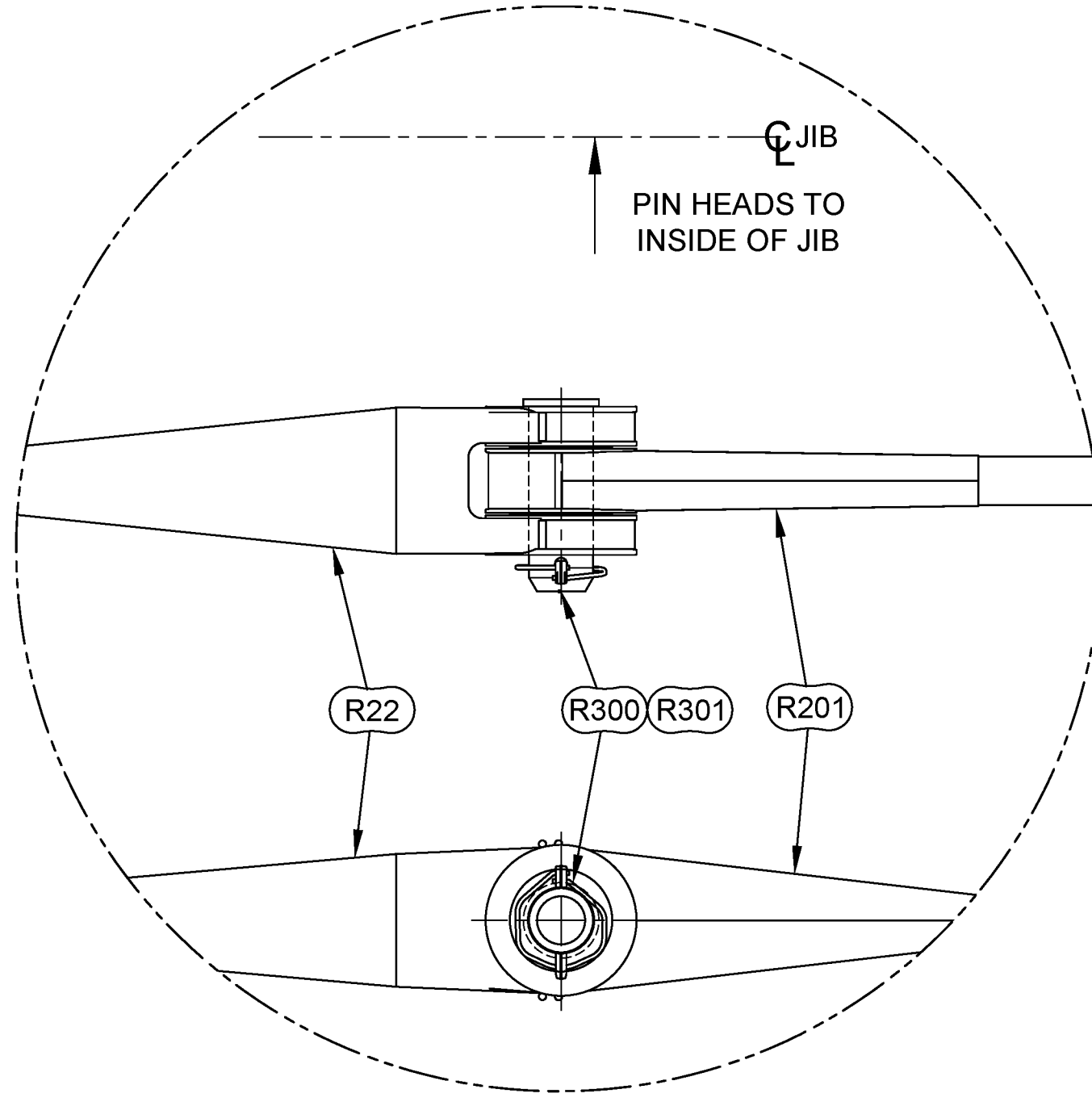
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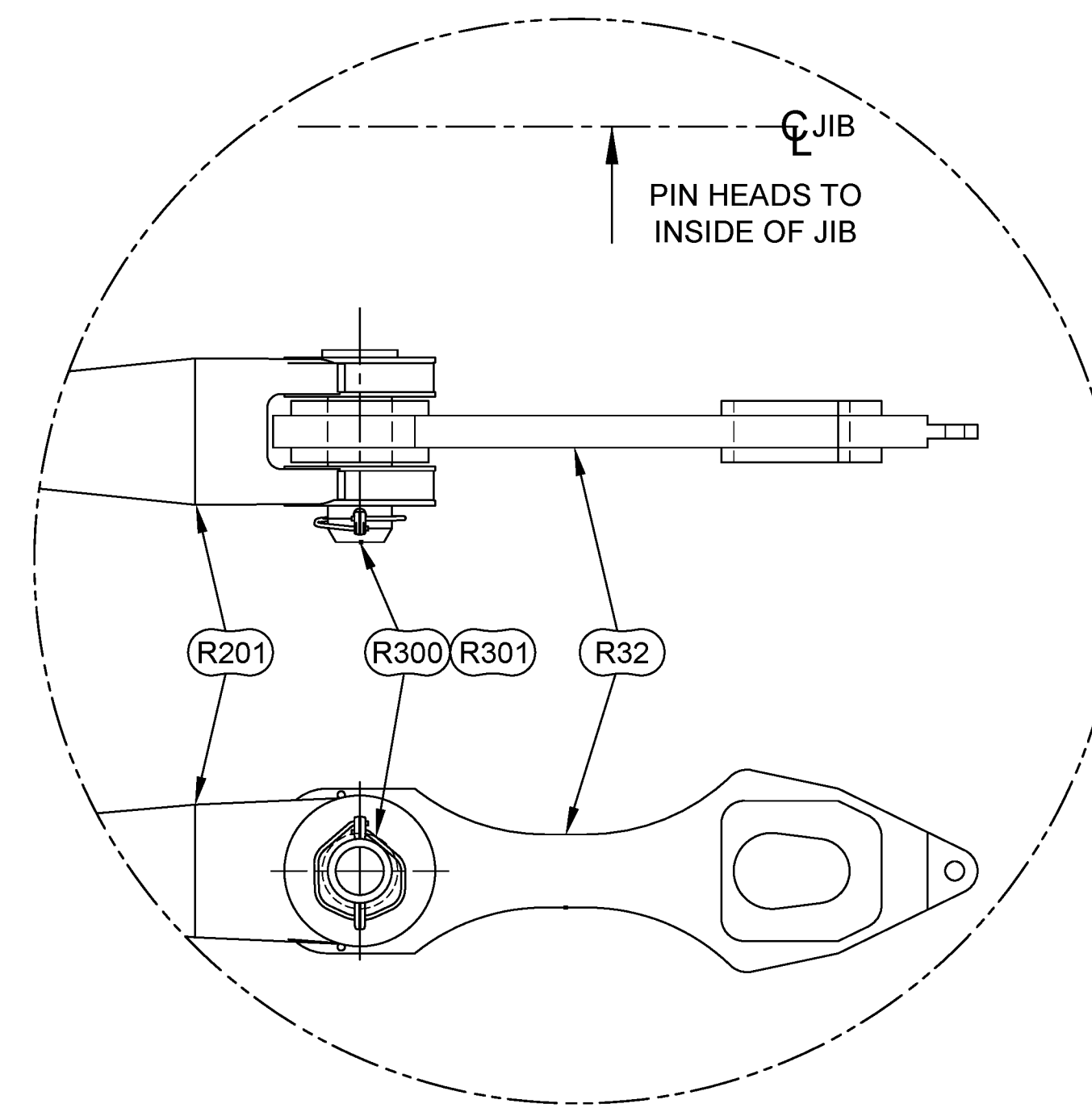
RECOMMENDED JIB MAKEUP



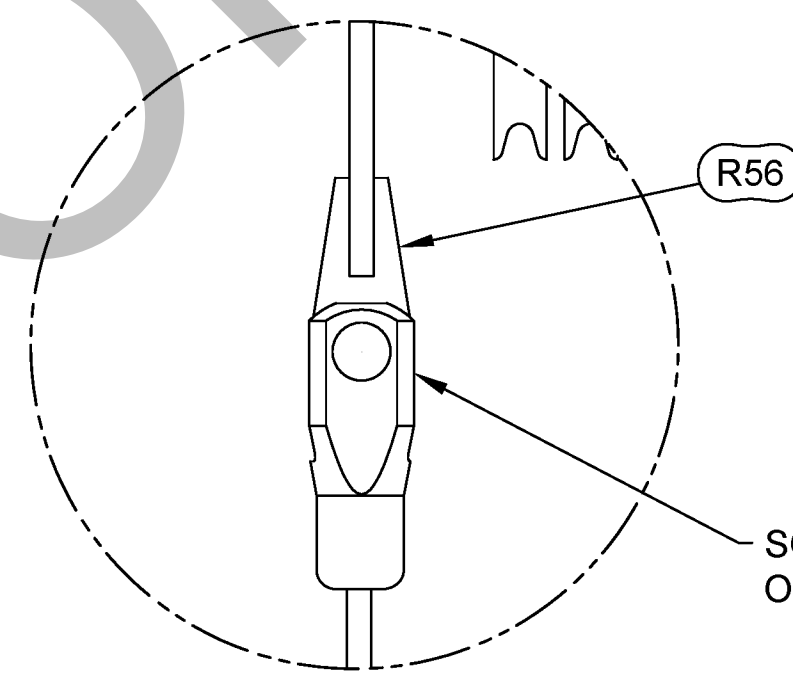
DETAIL MM
STRUT LINK TO PENDANT CONNECTION
SCALE 0.150



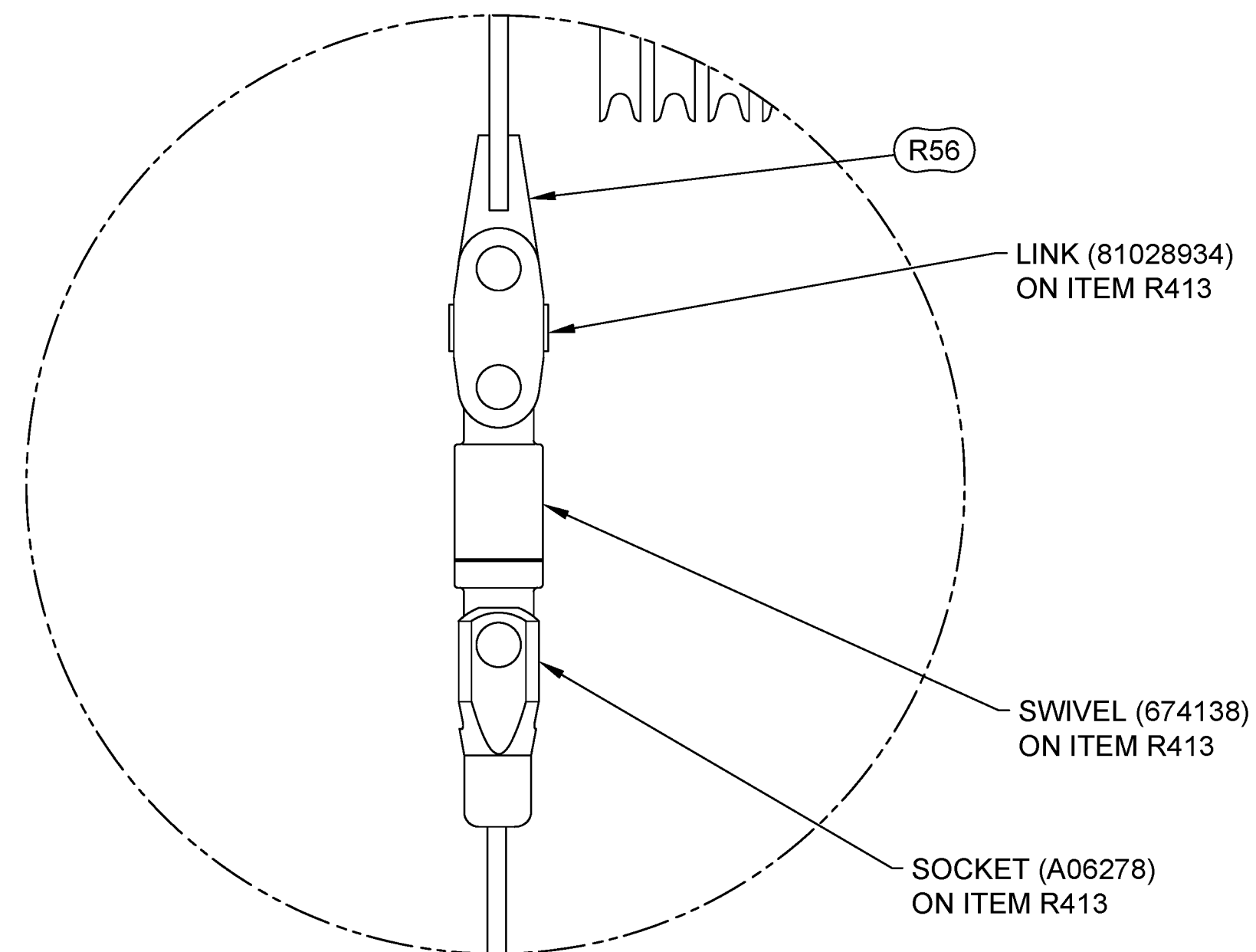
DETAIL NN
PENDANT TO PENDANT CONNECTION - TYP
SCALE 0.150



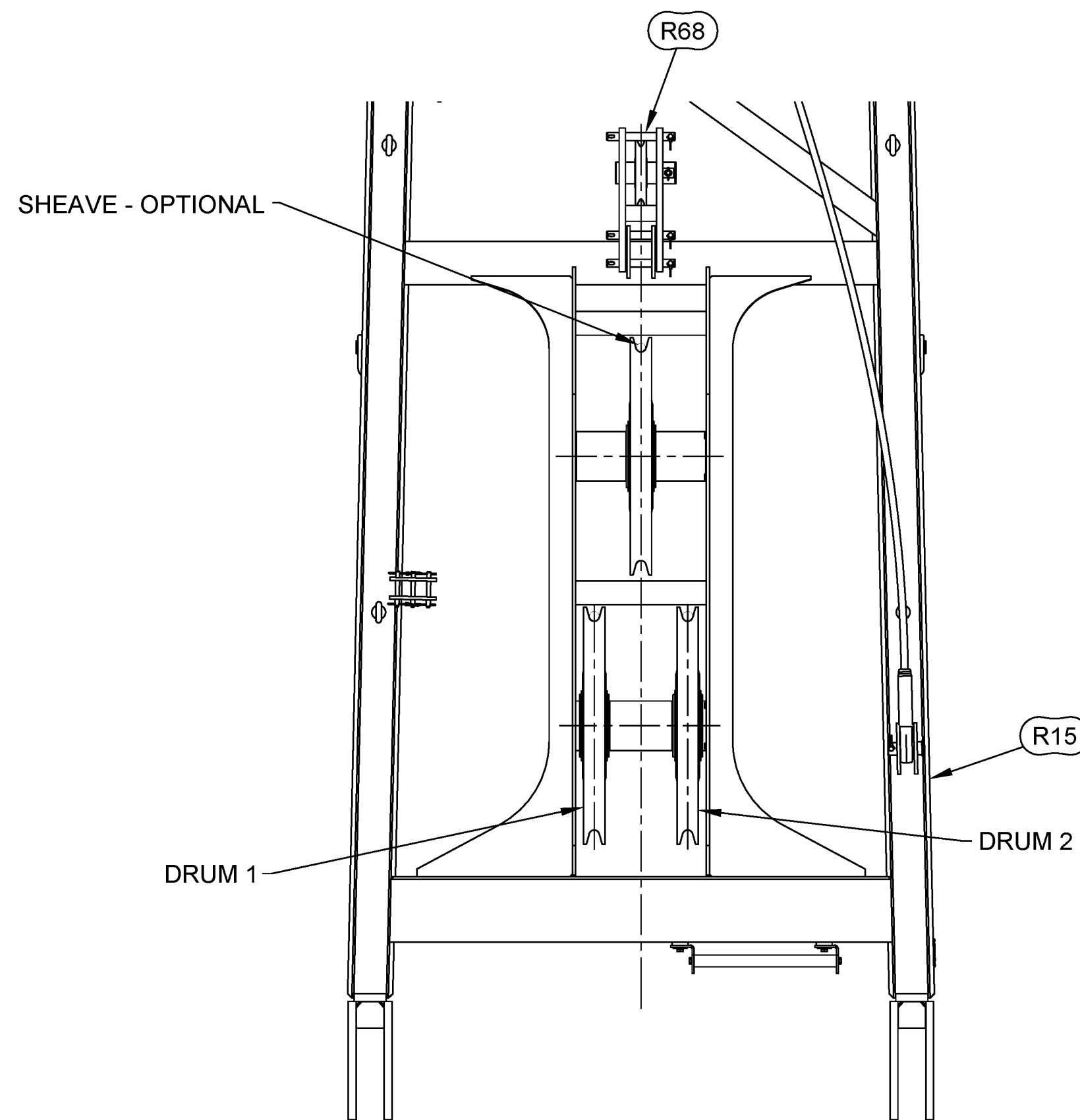
DETAIL PP
PENDANT TO JIB TOP LINK CONNECTION
SCALE 0.150



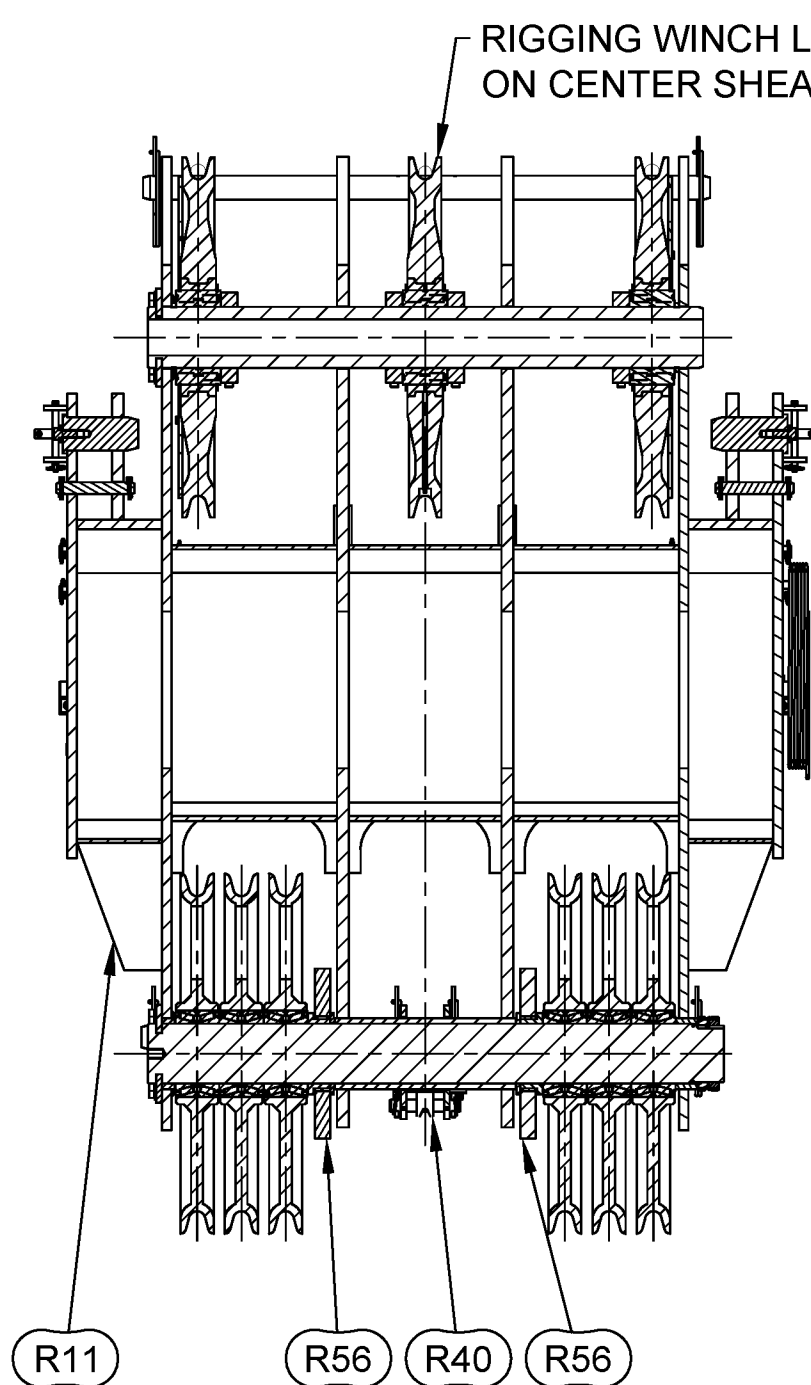
VIEW VVV-VVV
ITEM R413
DEAD END W/O SWIVEL
SCALE 0.100



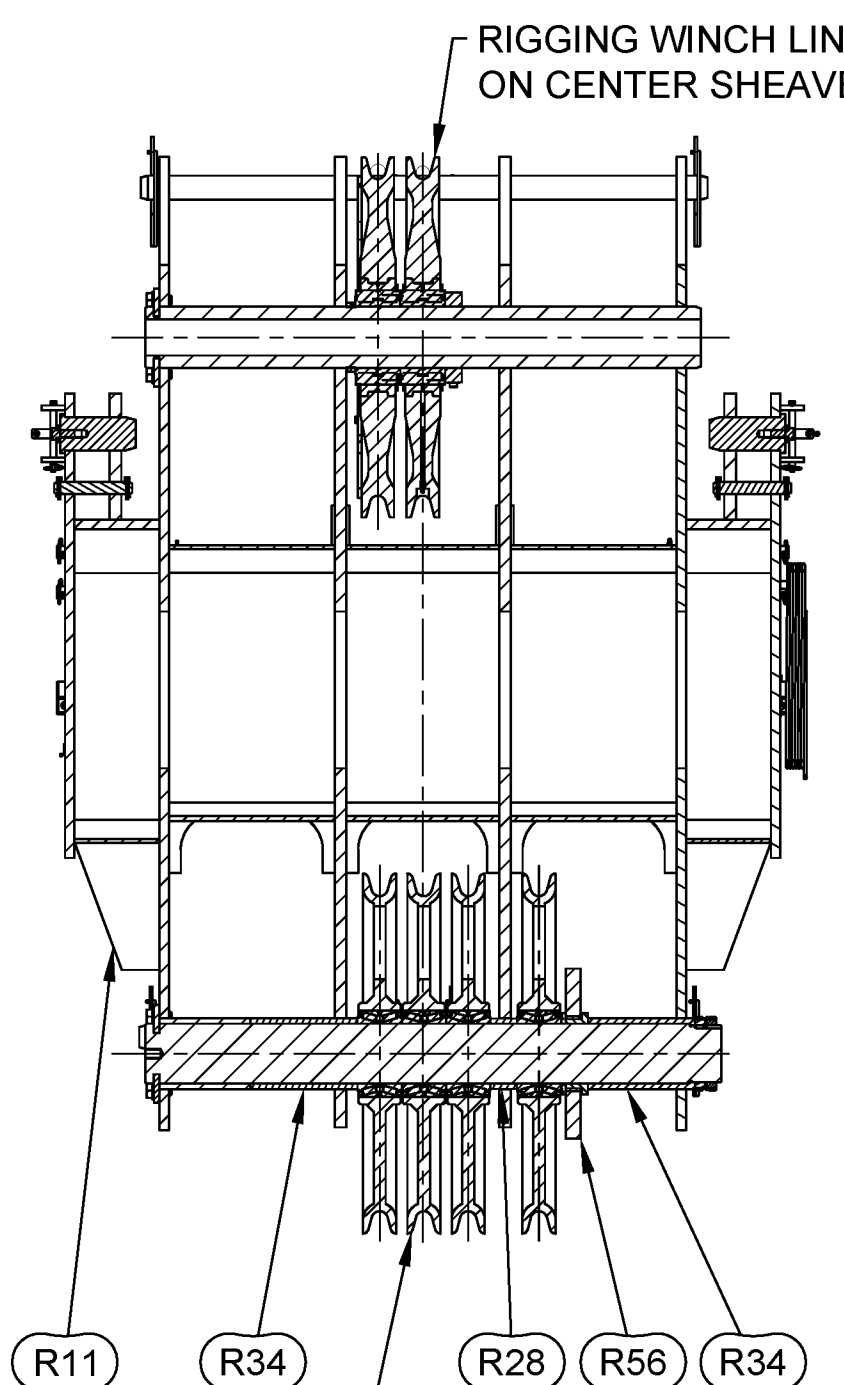
VIEW VVV-VVV
ITEM R413
DEAD END W/SWIVEL
SCALE 0.100



SECTION QQ-QQ
(FROM CAB LOOKING UP BOOM)
SCALE: 0.063

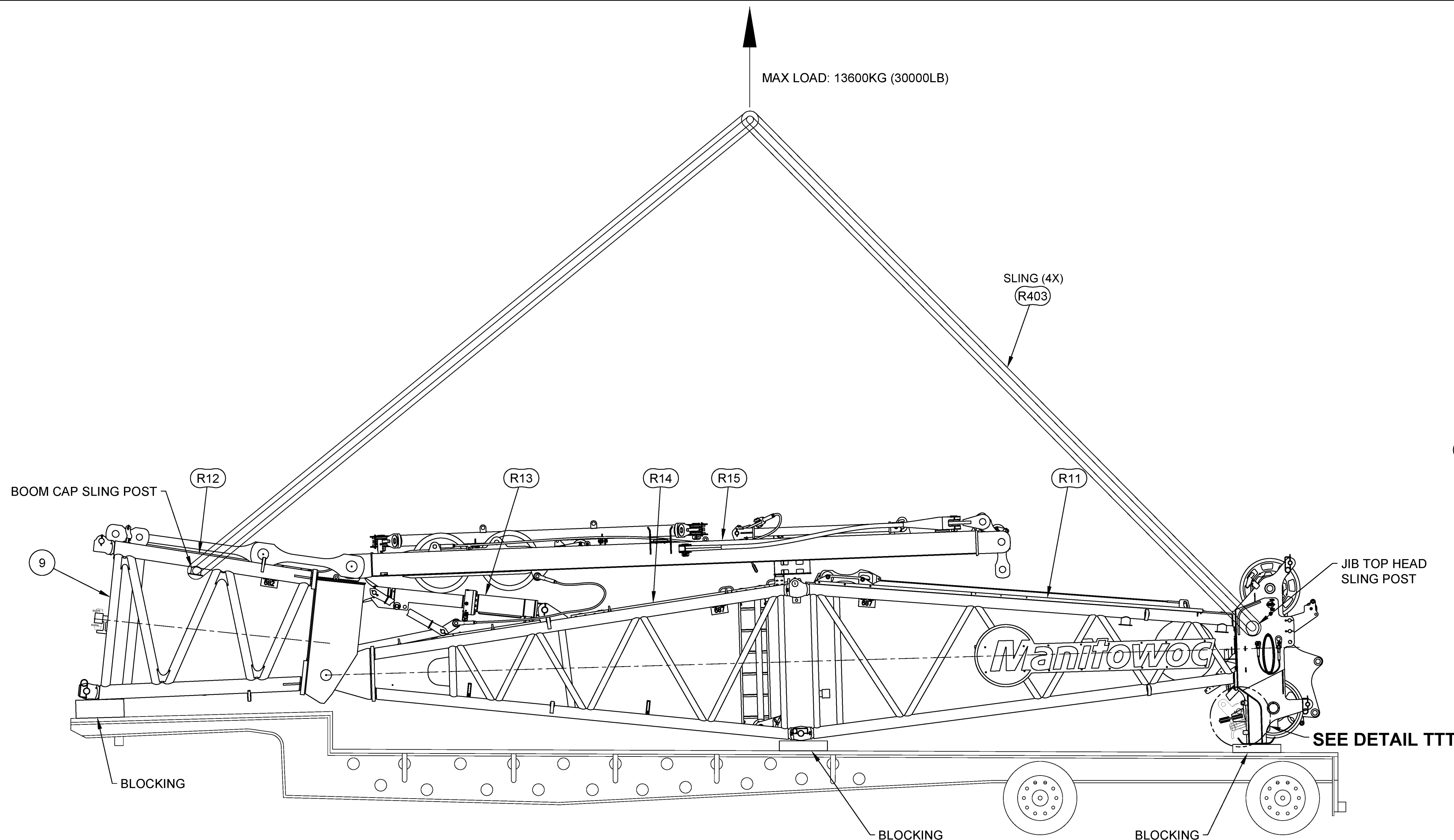


SECTION RR-RR
TANDEM REEVING CONFIGURATION
(FROM CAB LOOKING UP BOOM)
SCALE: 0.063



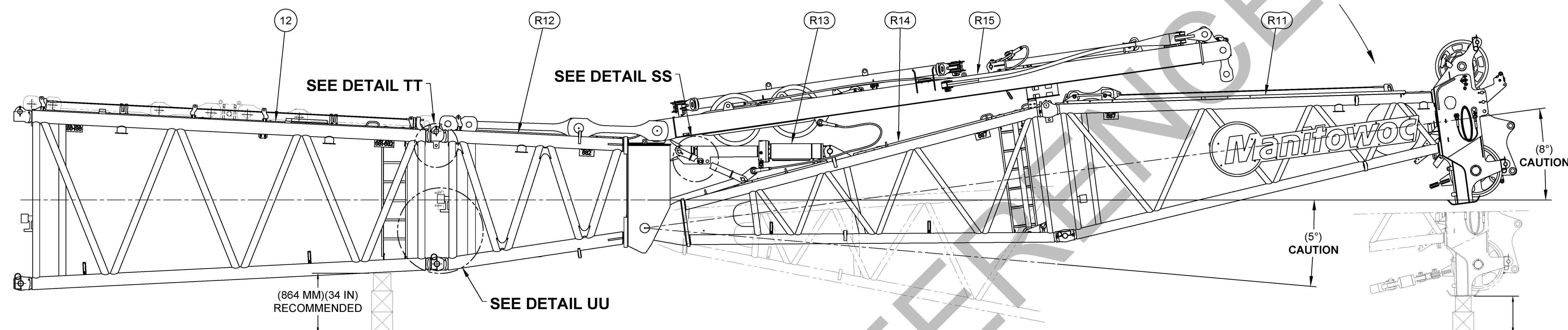
SECTION RR-RR
SINGLE REEVING CONFIGURATION
(FROM CAB LOOKING UP BOOM)
SCALE: 0.063

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UNITS	SCALE	SHEET	GROUP	ORIGIN	DRAWING NO.	REVISION	
IN	0.013	E	14/18	HBD	80158563	A	



FIXED JIB SHIPPING ASSEMBLY - ITEM 9

SHIPPING ASSEMBLY CONSISTS OF THE BOOM CAP (R12), JIB BUTT (R14), JIB TOP (R11), STRUT (R15) AND JIB STOP (R13).



FIXED JIB - STEP 1

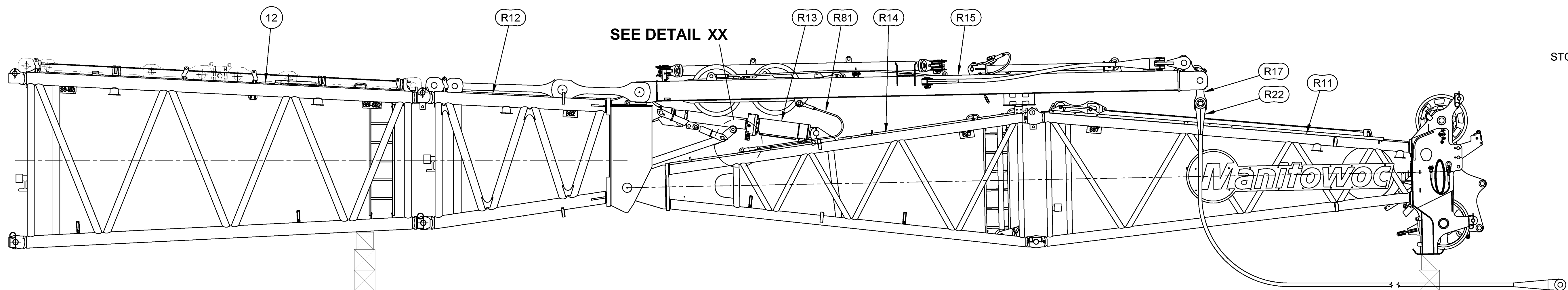
ATTACH FIXED JIB SHIPPING ASSEMBLY TO BOOM

CAUTION: BEFORE ATTACHING SHIPPING ASSEMBLY TO BOOM, PIN (R1) IN JIB STOP (R13) MUST BE REMOVED AND PLACED IN STOWAGE HOLE OR DAMAGE TO JIB STOP MAY OCCUR. (SEE DETAIL SS).

USING ASSIST CRANE, ATTACH (4) LIFTING SLINGS (R403) TO BOOM CAP SLING POSTS AND JIB TOP HEAD SLING POSTS. BEFORE LIFTING SHIPPING ASSEMBLY (ITEM 9) REMOVE JIB STOP PIN (R1) AND PLACE IN STOWAGE HOLE (SEE DETAIL SS). IF JIB STOP PIN (R1) CANNOT BE REMOVED, LIFT ONLY ENOUGH FOR PIN TO BECOME LOOSE. LIFT SHIPPING ASSEMBLY (ITEM 9) INTO POSITION AND ALIGN AND SET BOOM CAP UPPER CONNECTOR PINS (R50) ONTO MALE BOOM CONNECTORS. CONTINUE LOWERING SHIPPING ASSEMBLY TO ALIGN LOWER CONNECTOR HOLES AND INSTALL PINS (R124) AND SAFETY PINS (R113) - (SEE DETAIL UU).

WITH BLOCKING IN PLACE CONTINUE TO SLOWLY LOWER SHIPPING ASSEMBLY (ITEM 9) UNTIL JIB TOP FOOT RESTS ON THE BLOCKING.

CAUTION: DO NOT ALLOW BOOM TO JIB ANGLE TO BE MORE THAN 5° BELOW BOOM CENTER LINE OR 8° ABOVE BOOM CENTER LINE. DAMAGE TO SHEAVES AND JIB STOP MAY OCCUR.
CAUTION: FIXED JIB MUST BE ASSEMBLED TO BOOM WITH MAXIMUM 1% (0.57") GRADE. DAMAGE TO FIXED JIB MAY OCCUR.



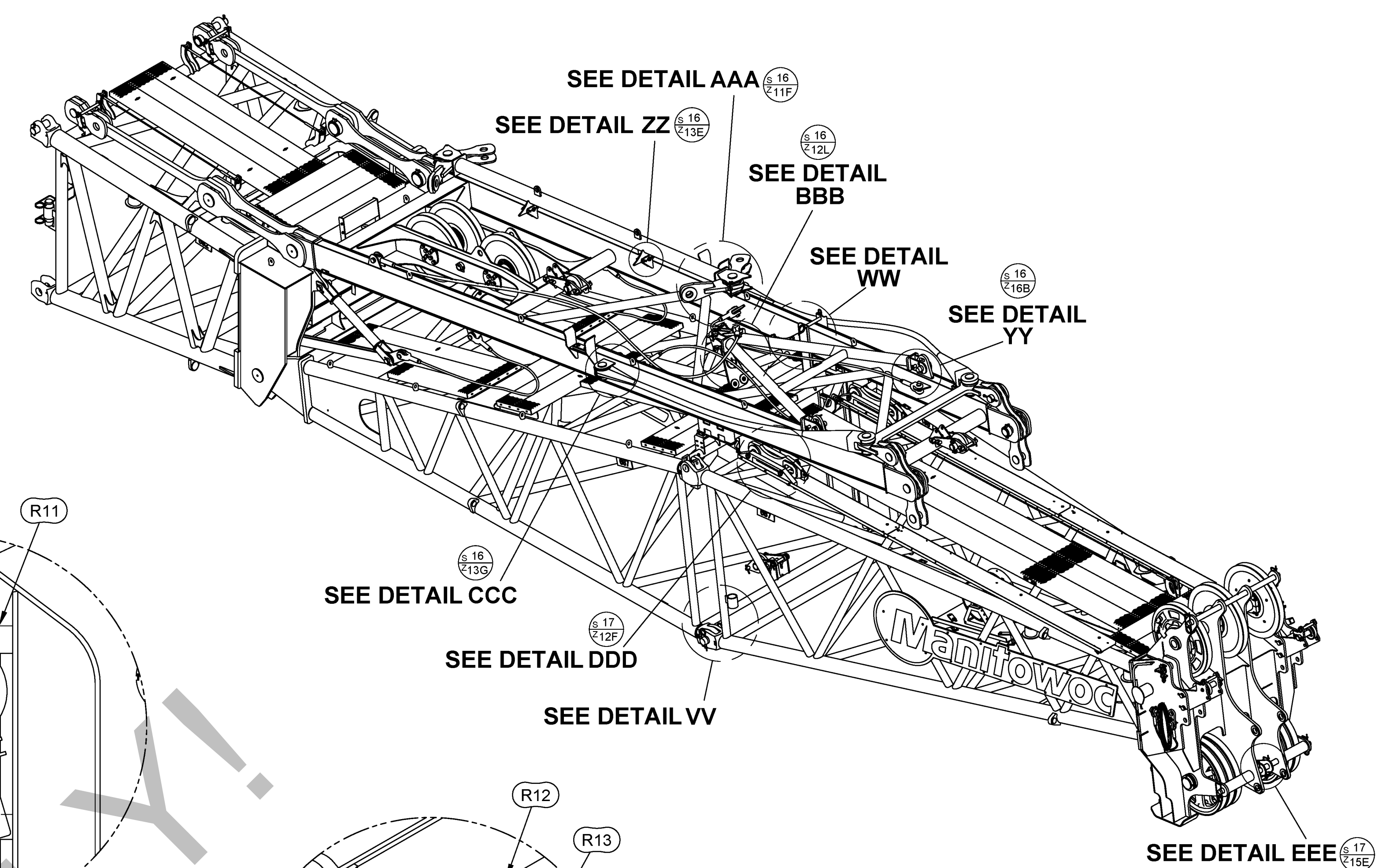
FIXED JIB - STEP 2

STRUT RAISING PREP - PENDANT CONNECTION (FRONTSTAY)

REMOVE PIN (R74) FROM JIB BUTT (R14), HOLDING STRUT (R15) IN PLACE FOR SHIPPING, AND PLACE IN STOWAGE HOLES (SEE DETAIL WW).

DETACH STRUT SUSPENSION PENDANTS (R81) FROM LINK (R27) AND LAY ON JIB BUTT (R14) - (SEE DETAIL XX).

ATTACH JIB FRONTSTAY PENDANTS (R22) TO STRUT LINKS (R17) AS SHOWN (SEE DETAIL MM ON SHEET 14). PLACE PENDANTS ON GROUND ALONG SIDE JIB.



SEE DETAIL AAA

SEE DETAIL ZZ

SEE DETAIL BBB

SEE DETAIL WW

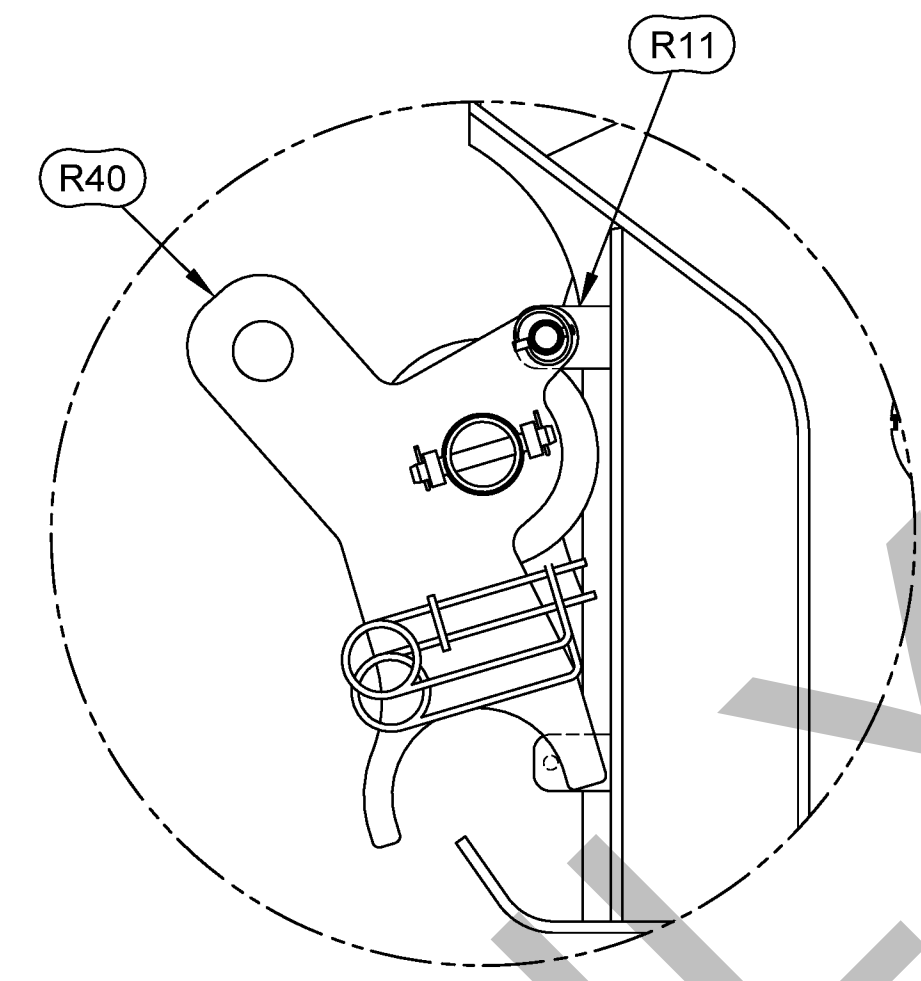
SEE DETAIL YY

SEE DETAIL CCC

SEE DETAIL DDD

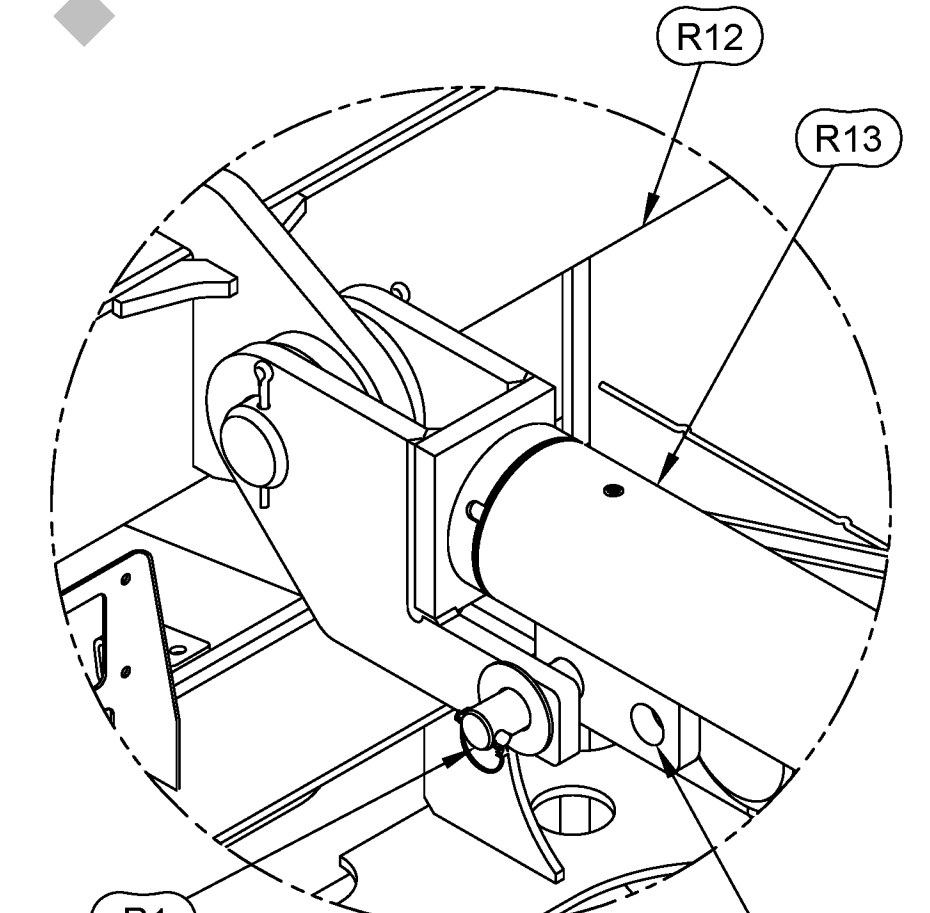
SEE DETAIL VV

SEE DETAIL EEE



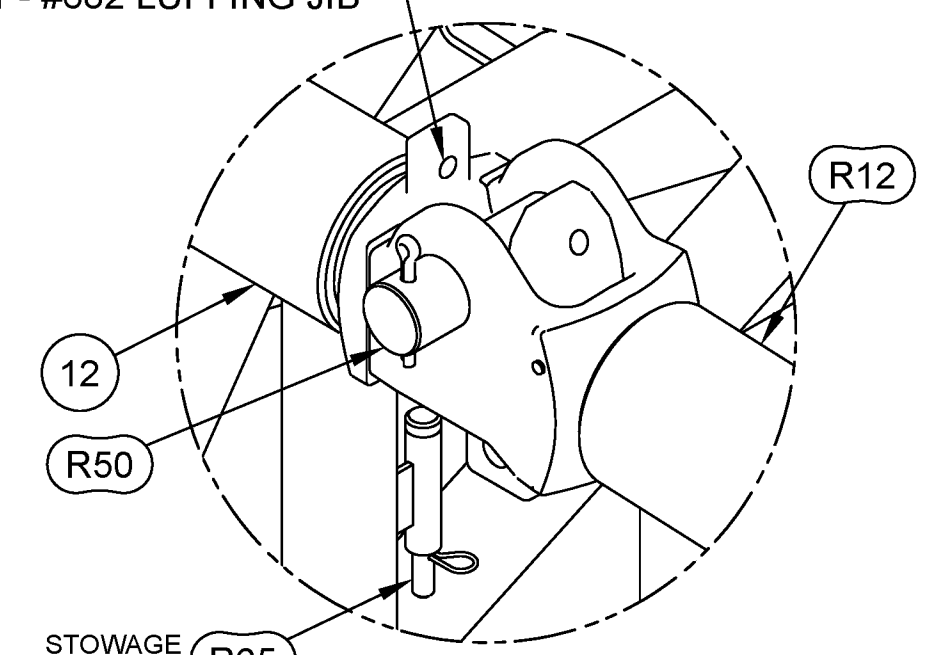
DETAIL TTT

RIGGING SHEAVE STOWAGE FOR SINGLE DRUM REEVING CONFIGURATION
SCALE 0.150



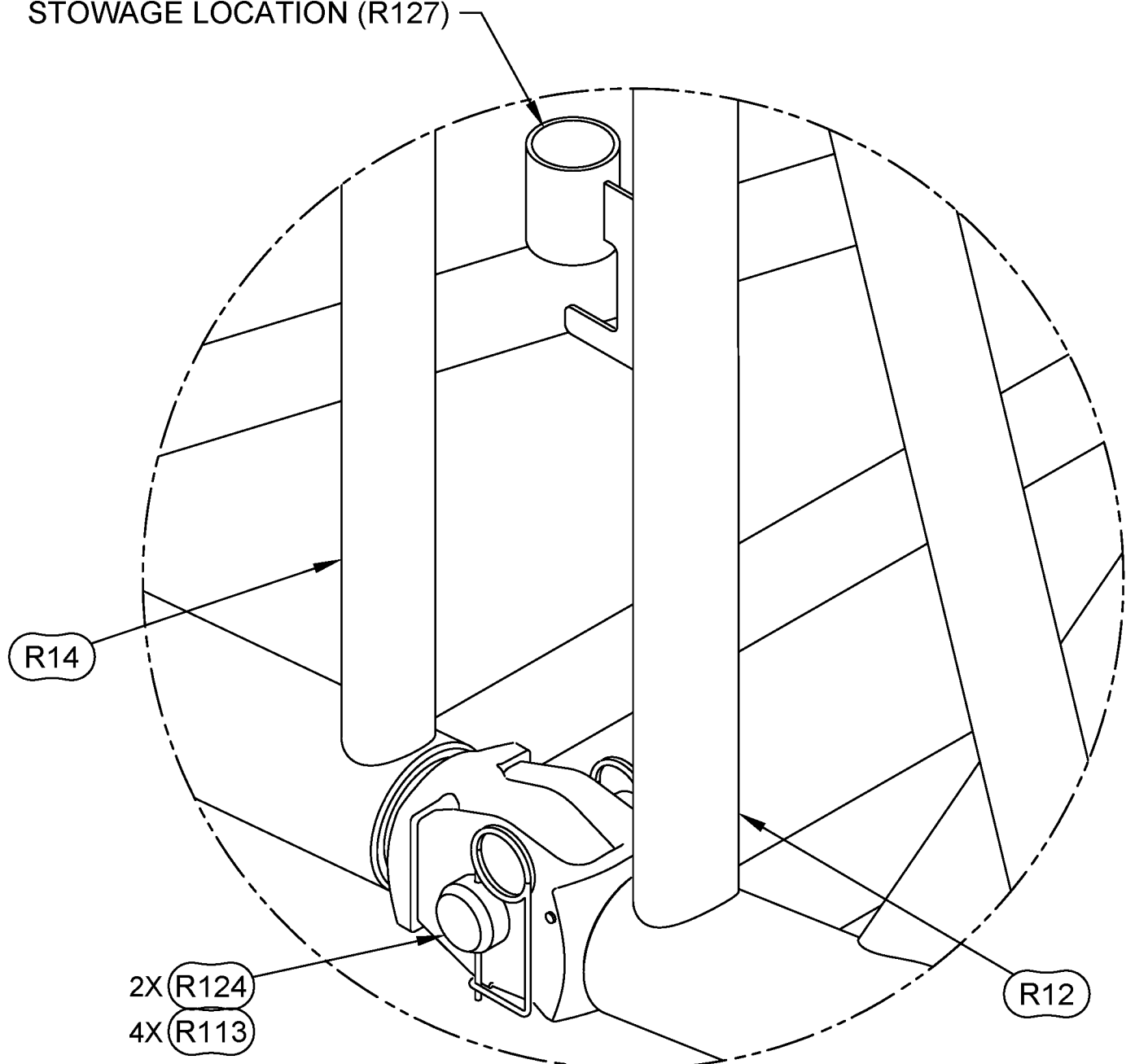
DETAIL SS

JIB STOP
SCALE 0.150



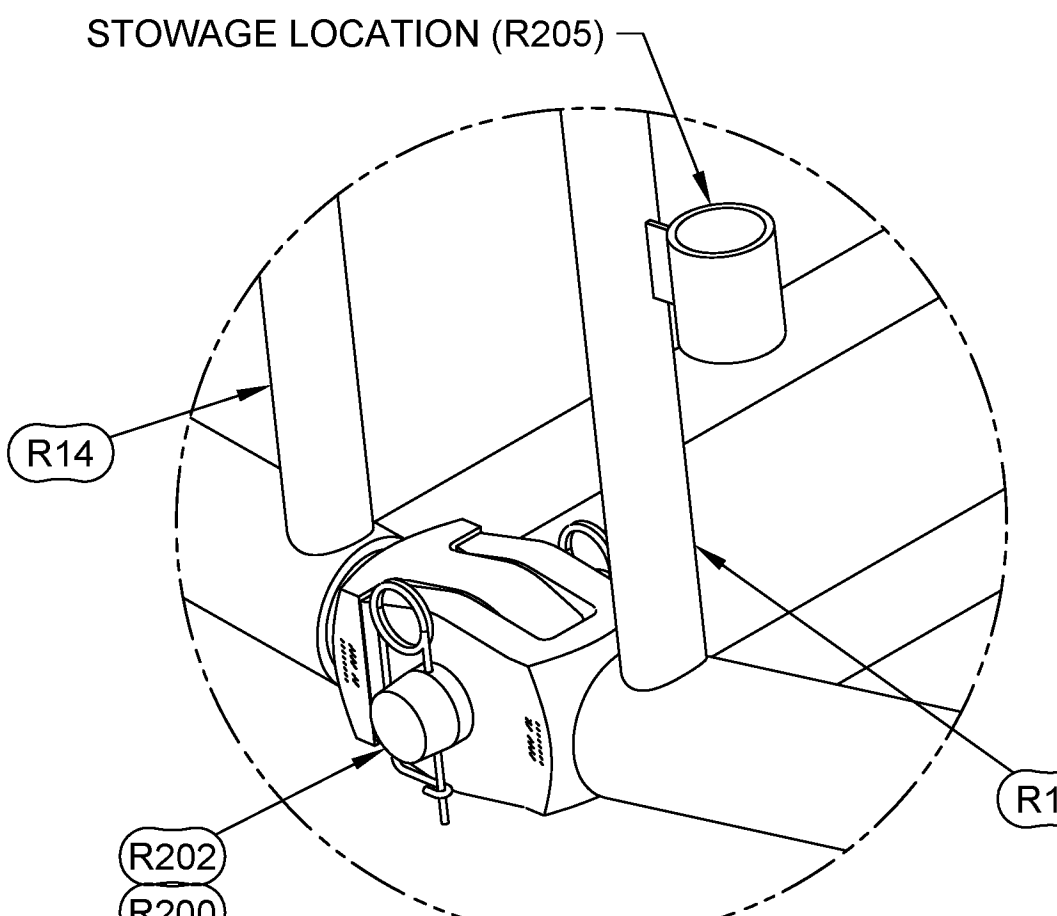
DETAIL TT

BOOM CAP UPPER CONNECTORS
SCALE 0.150



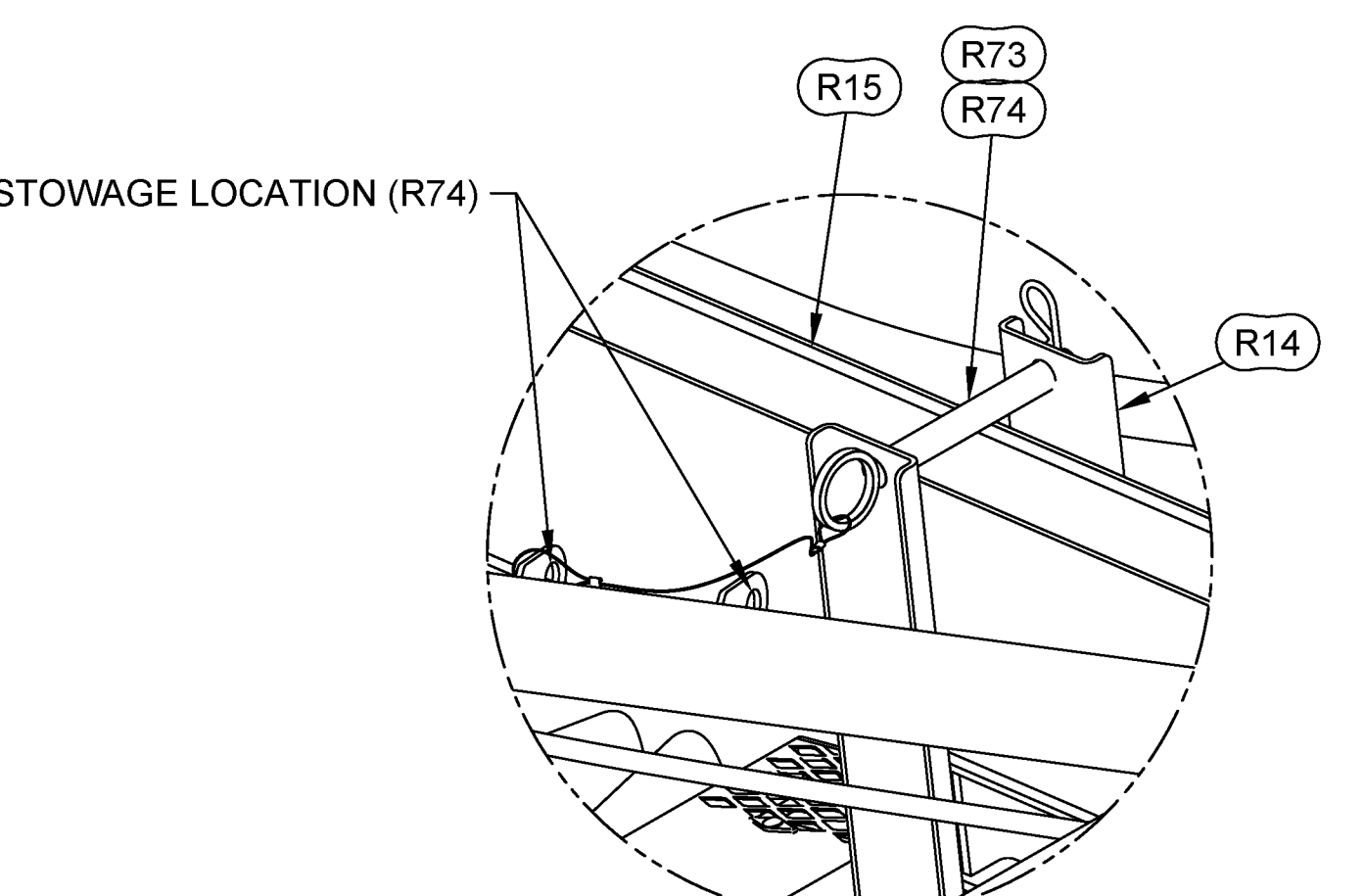
DETAIL UU

BOOM - JIB LOWER CONNECTORS
TYPICAL - #681 - 682
SCALE 0.150



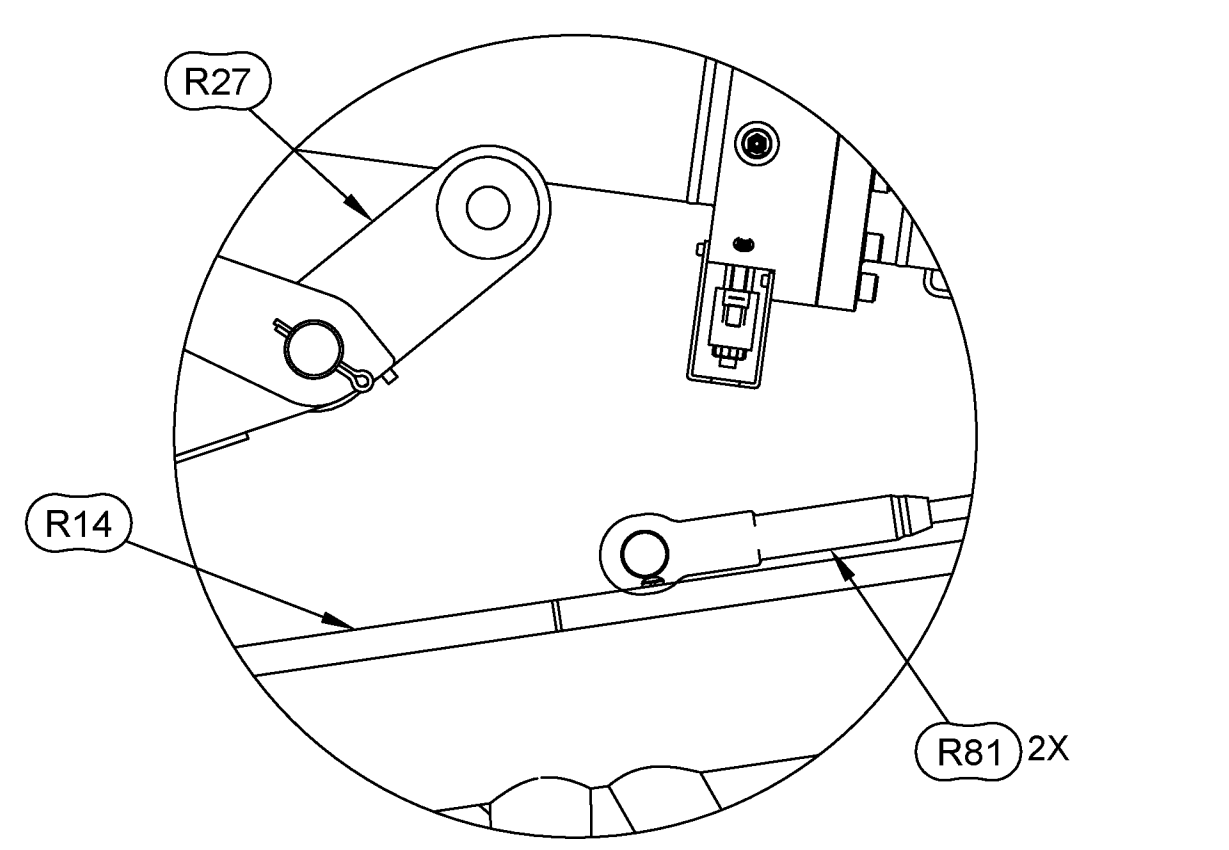
DETAIL VV

JIB LOWER CONNECTORS
TYPICAL - #687
SCALE 0.150



DETAIL WW

SCALE 0.150

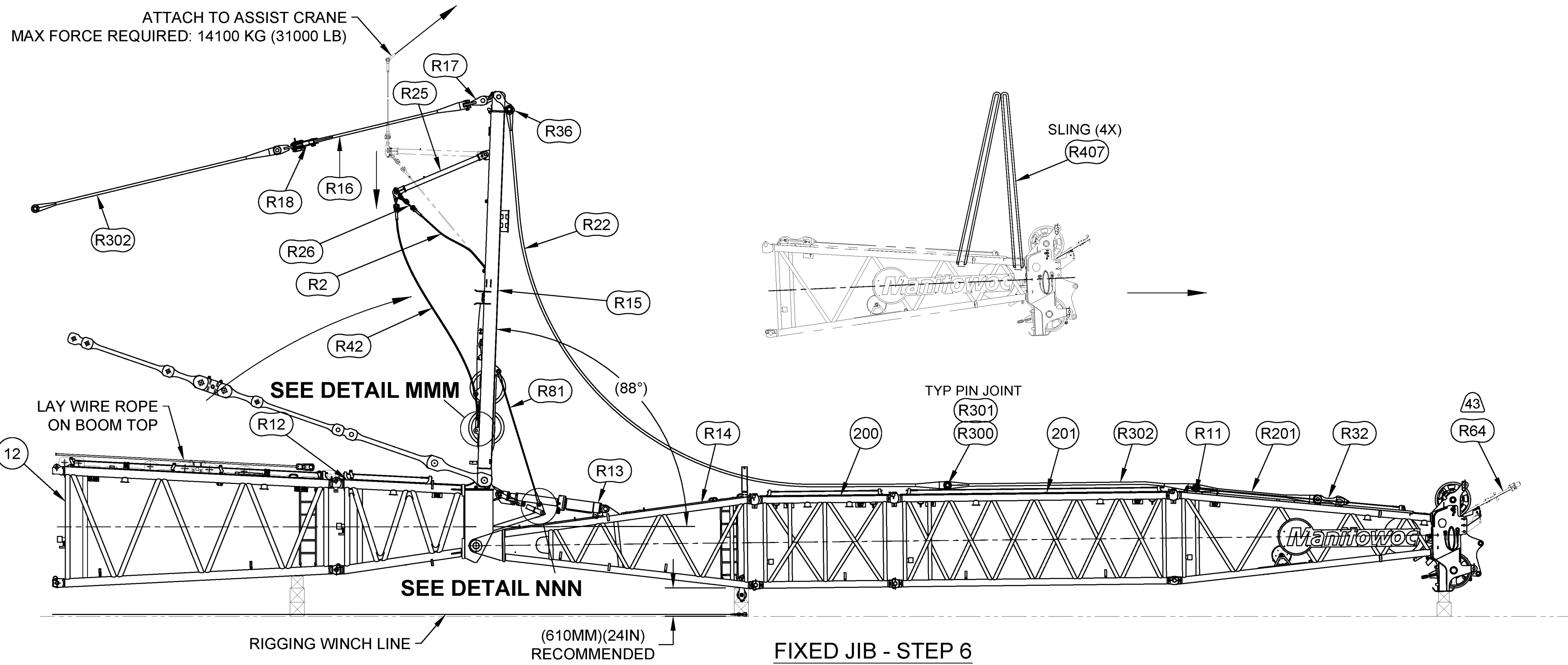


DETAIL XX

(2) PLACES
SCALE 0.150

TITLE IN PRIMARY LANGUAGE BOOM RIGGING FJ10:687 ON B90 TITLE IN SECONDARY LANGUAGE									
UNITS	SCALE	DATE	SHEET	GROUP	ORIGIN	DRAWING NO.	REVISION		
IN	.031	E	15/18	HBD		80158563	A		

AUTOCAD DRAWING



RAISE STRUT - JIB INSERTS TO JIB BUTT, JIB FRONTSTAY PENDANTS

USING ASSIST CRANE, RAISE STRUT BACK OVER CENTER TO APPROXIMATELY 88° AND REATTACH STRUT SUSPENSION PENDANTS (R81) TO LINKS (R27) ON BOOM CAP (R12) - (SEE DETAIL NNN). APPROXIMATE MAX FORCE REQUIRED TO MOVE STRUT FORWARD OVER CENTER IS 14100 KG (31000 LBS).

CAUTION: ASSIST CRANE LOAD SHOULD BE MONITORED WHILE STRUT IS RAISED. EXCEEDING THIS LOAD CAN DAMAGE JIB STRUT.

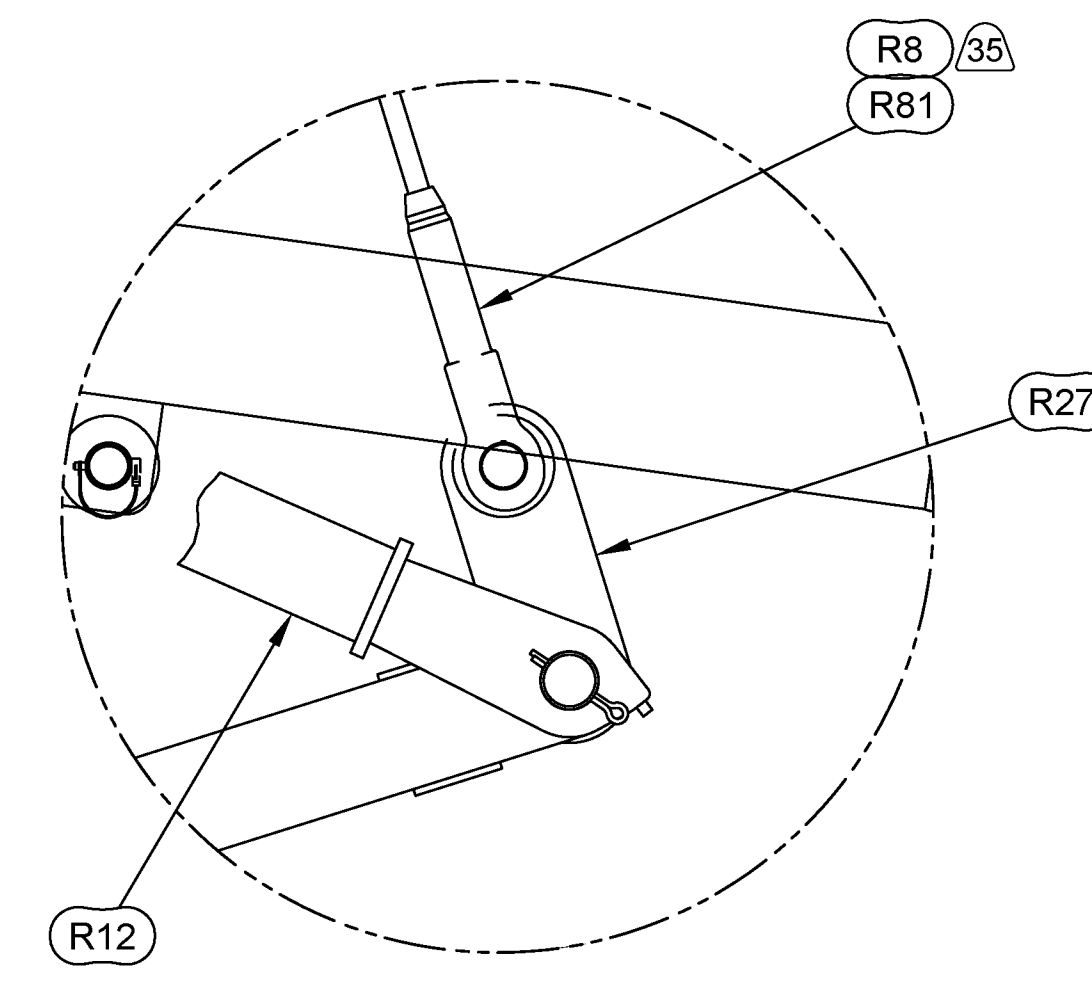
WITH STRUT SUSPENDED LOWER ASSIST CRANE UNTIL RAISING ARM (R25) REACHES WORKING POSITION OF SLOT (SEE DETAILS YY & FFF ON SHEET 16). CONTINUE TO LOWER UNTIL PENDANT (R42) IS ALL THE WAY DOWN. DISCONNECT ASSIST CRANE AND REMOVE SHACKLE (R405) FROM PENDANT. REATTACH PENDANT (R42) TO STOWAGE LUG ON STRUT (R15) - (SEE DETAIL MMM).

FOR JIBS LONGER THAN 12M, DISABLE JIB STOP CYLINDER (R13) BY TURNING IT ON (ACTIVATE ELECTRONIC VALVE), ALLOWING THE CYLINDER TO RETRACT UNDER LOAD. USE SLINGS (R407) TO SLOWLY LIFT JIB TOP UNTIL 610MM (24IN) OF BLOCKING CAN BE ADDED BENEATH JIB BUTT. LOWER JIB TOP UNTIL JIB BUTT IS RESTING ON BLOCKING. REMOVE JIB TOP (R11) AND SET ASIDE. ASSEMBLE REQUIRED JIB LENGTH CONFIGURATION PER SHEET 14, BLOCKING UNDER THE LAST INSERT ASSEMBLED. REATTACH JIB TOP WITH 530MM (21IN) OF BLOCKING BENEATH JIB TOP FOOT. REMOVE BLOCKING UNDER JIB BUTT (R14). ENABLE JIB STOP CYLINDER BY TURNING IT OFF (DEACTIVATE ELECTRONIC VALVE). ATTACH ADDITIONAL FRONTSTAY PENDANTS IN MATCHING LENGTHS AND PROPER SEQUENCE TO PENDANT (R22) - (SEE JIB LENGTH TABLE ON SHEET 2). PENDANT CONNECTIONS CAN BE DONE ON THE GROUND.

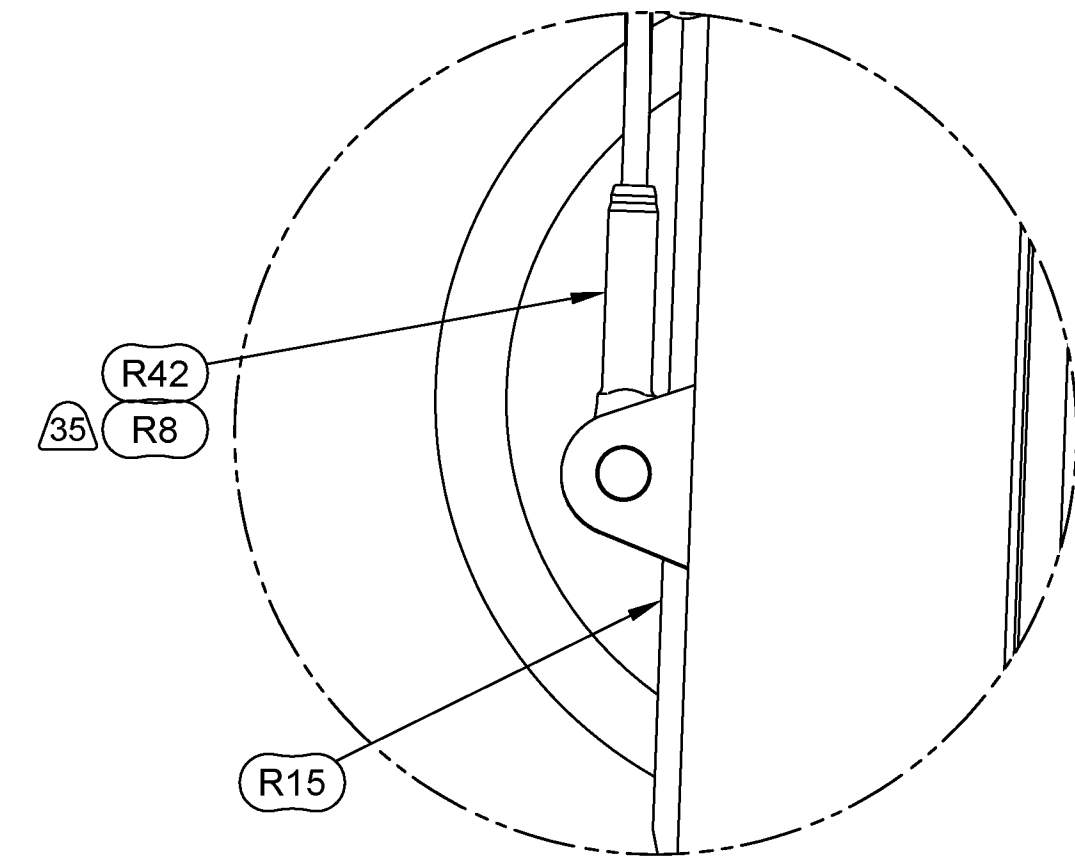
CAUTION: DO NOT RAISE FIXED JIB ASSEMBLY WITHOUT DISABLING THE JIB STOP CYLINDER (R13) BY TURNING IT ON. DO NOT EXCEED MAX LOAD OF 8150 KG (18000 LB) ON JIB TOP. STRUCTURAL DAMAGE MAY OCCUR.

CAUTION: DO NOT ALLOW BOOM TO JIB ANGLE TO BE MORE THAN 8° ABOVE BOOM CENTER LINE. DAMAGE TO JIB STOP MAY OCCUR.

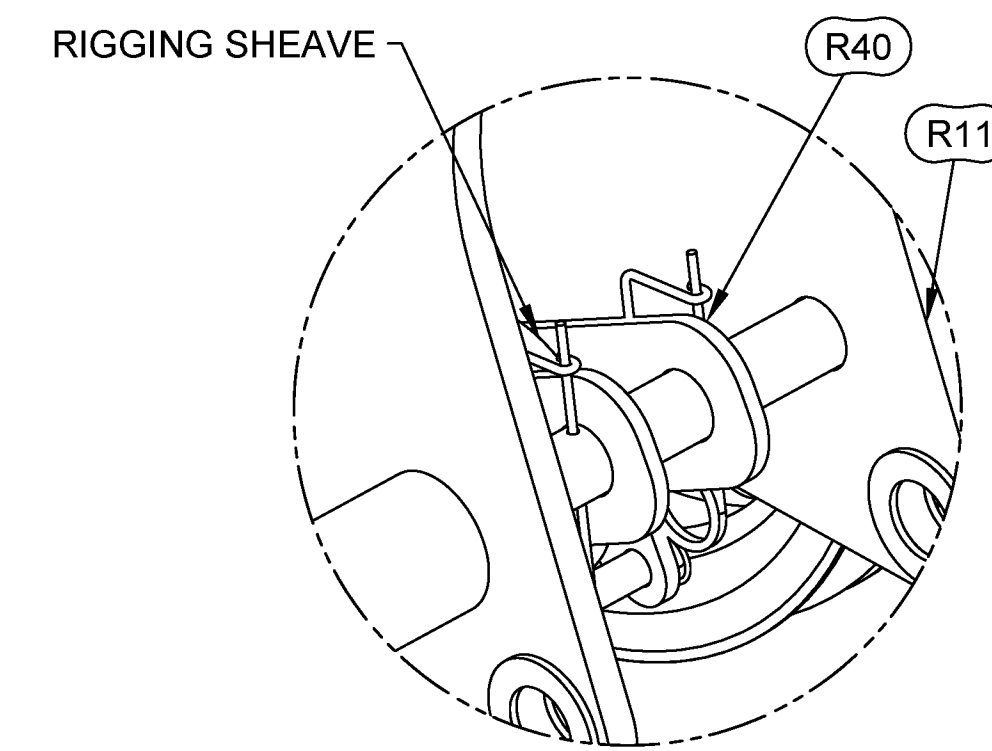
REMOVE PINS (R31) HOLDING LINKS (R32) IN PLACE ON JIB TOP (R11). SLIDE LINKS DOWN TRACK AND PLACE PINS (R31) BACK INTO HOLES (SEE DETAIL DDD). RAISE PENDANTS AND SET IN CHANNELS ON JIB TOP (R11). ATTACH LINKS (R32) TO JIB FRONTSTAY PENDANTS (SEE DETAIL PP ON SHEET 14).



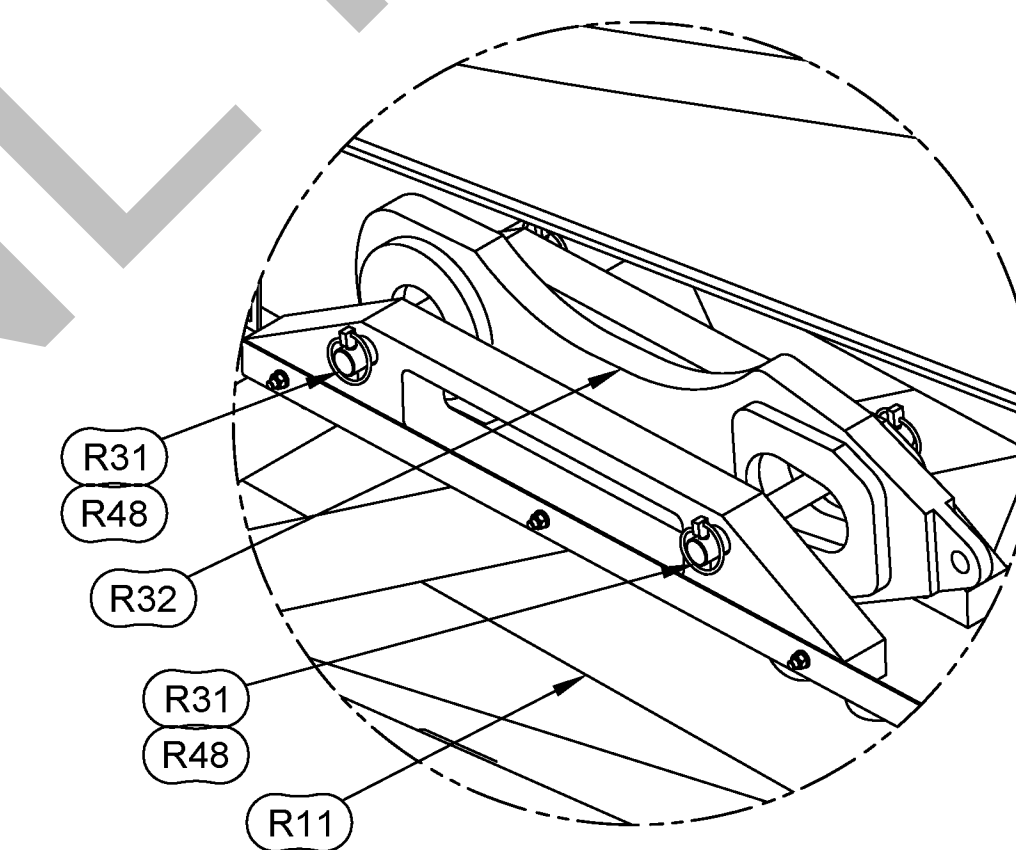
DETAIL NNN
(2) PLACES
SCALE 0.150



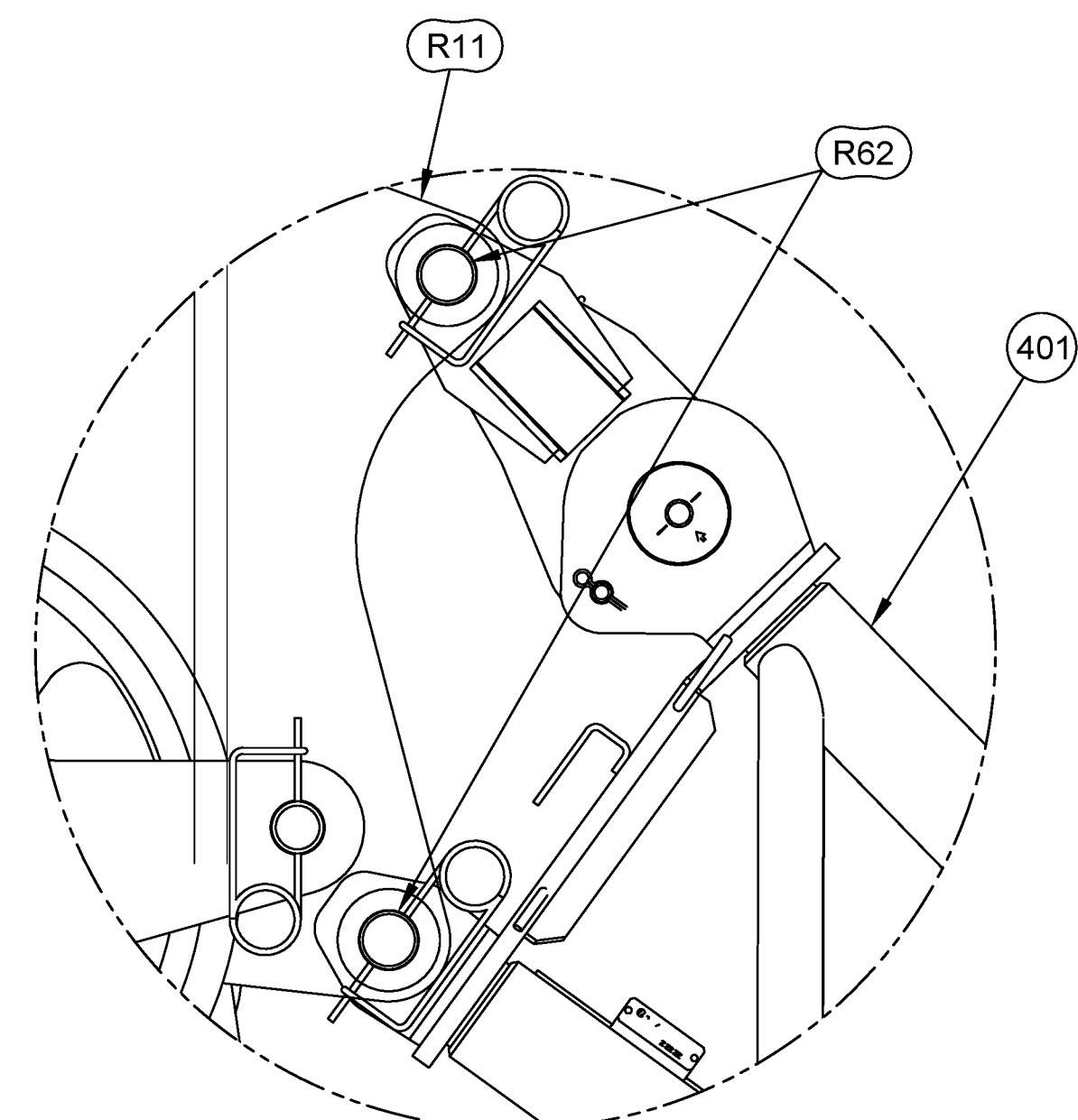
DETAIL MMM
SCALE 0.150



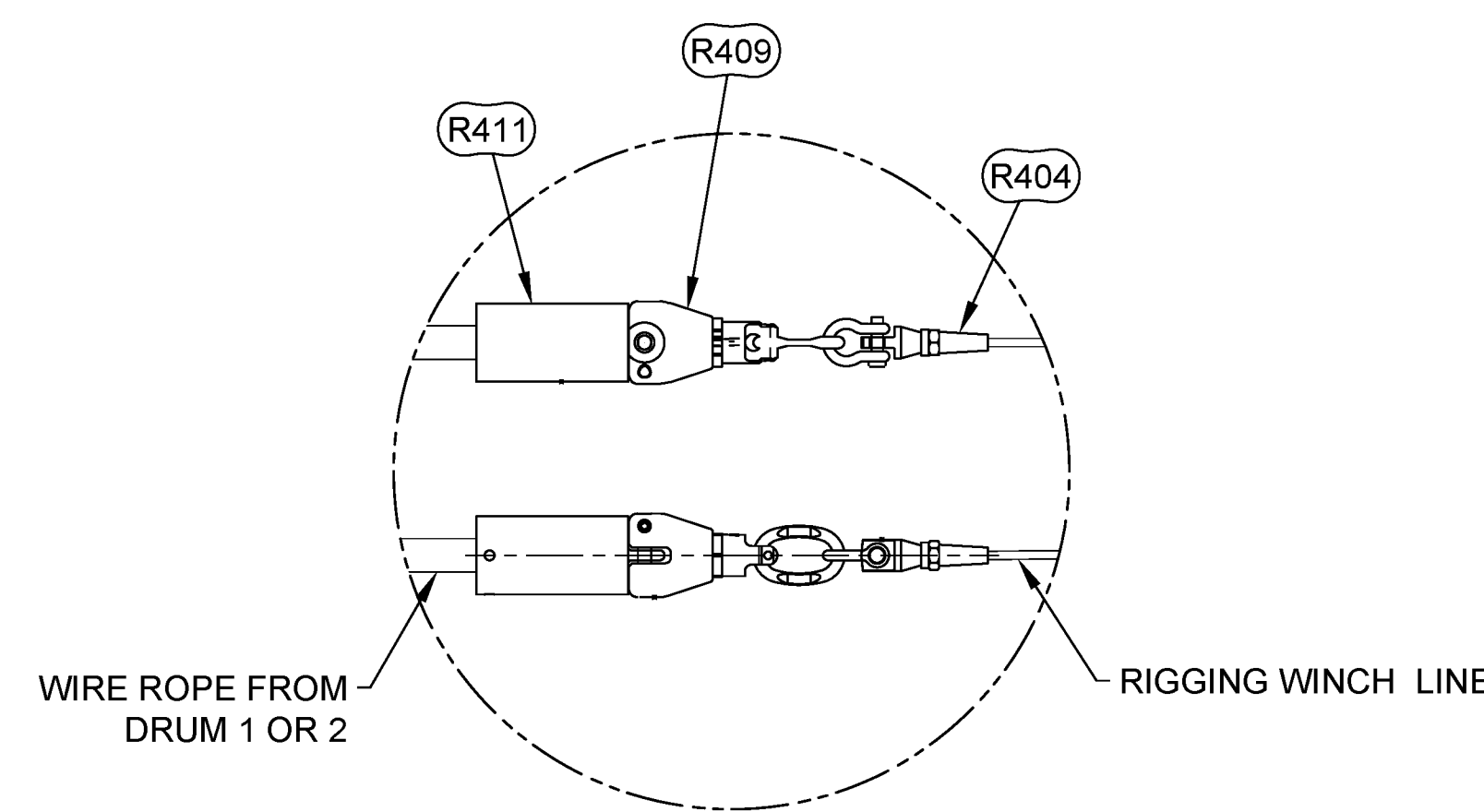
DETAIL EEE
(TANDEM REEVING)
SCALE 0.200



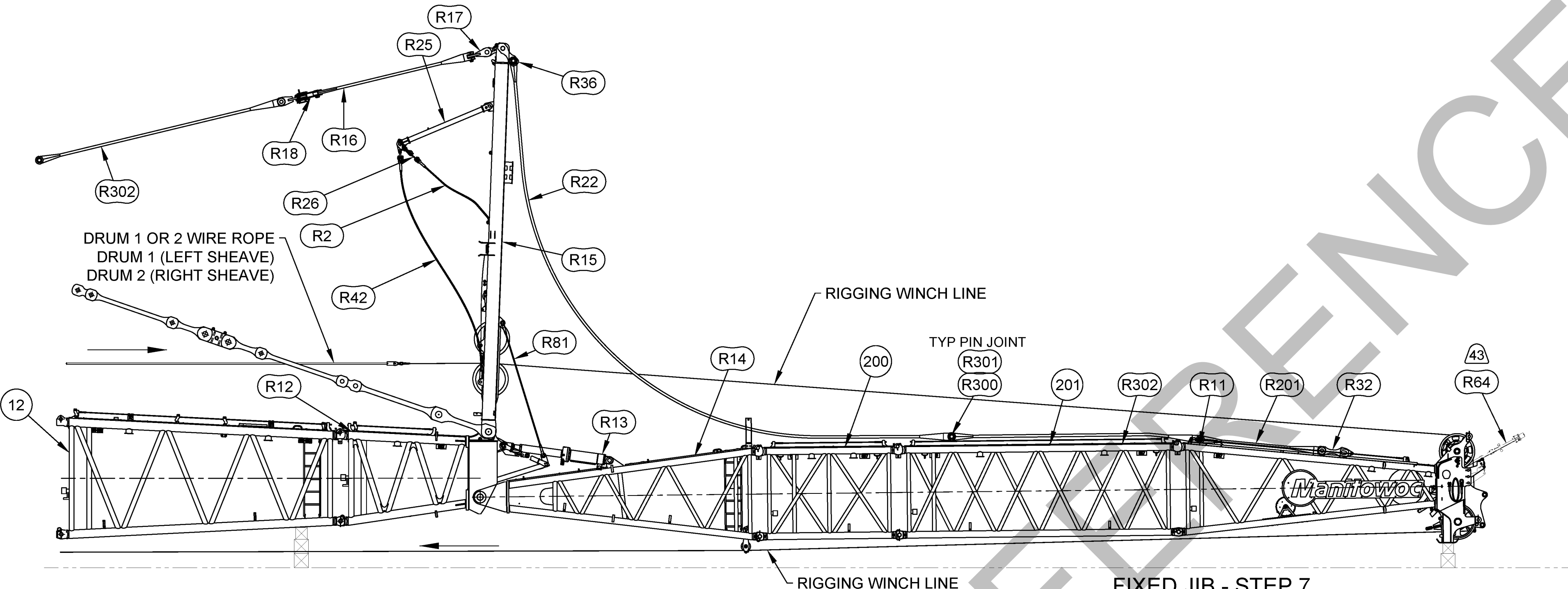
DETAIL DDD
(2) PLACES
SCALE 0.150



DETAIL RRR
SCALE 0.150



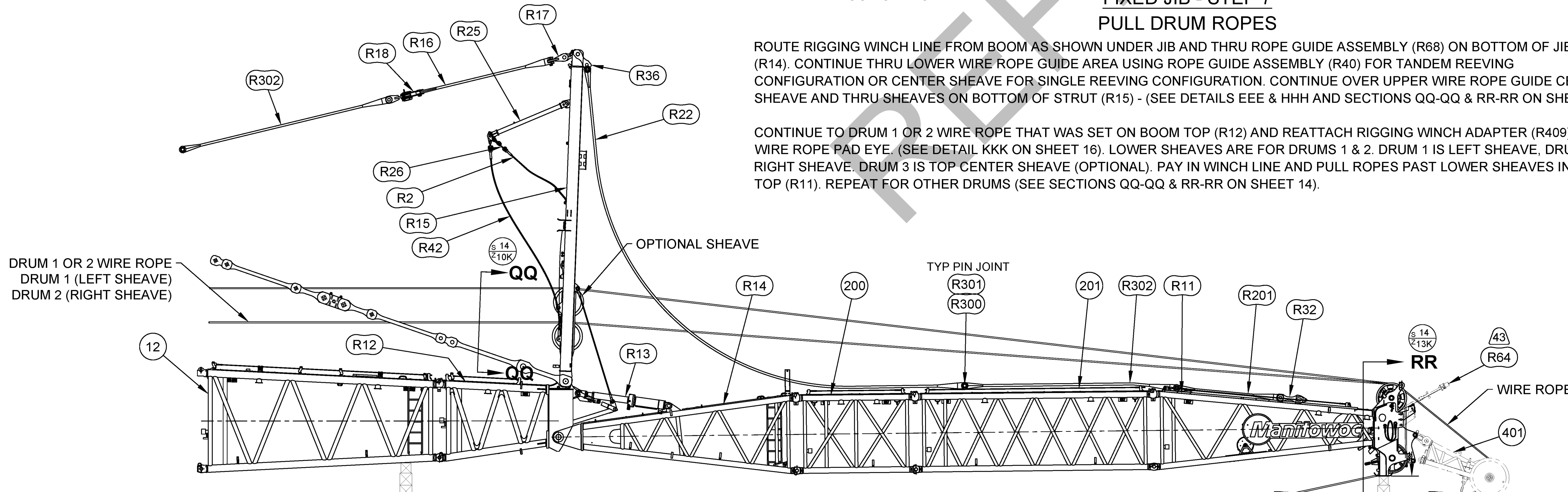
DETAIL KKK
SCALE 0.150



PULL DRUM ROPES

ROUTE RIGGING WINCH LINE FROM BOOM AS SHOWN UNDER JIB AND THRU ROPE GUIDE ASSEMBLY (R68) ON BOTTOM OF JIB BUTT (R14). CONTINUE THRU LOWER WIRE ROPE GUIDE AREA USING ROPE GUIDE ASSEMBLY (R40) FOR TANDEM REEVING CONFIGURATION OR CENTER SHEAVE FOR SINGLE REEVING CONFIGURATION. CONTINUE OVER UPPER WIRE ROPE GUIDE CENTER SHEAVE AND THRU SHEAVES ON BOTTOM OF STRUT (R15) - (SEE DETAILS EEE & HHH AND SECTIONS QQ-QQ & RR-RR ON SHEET 14).

CONTINUE TO DRUM 1 OR 2 WIRE ROPE THAT WAS SET ON BOOM TOP (R12) AND REATTACH RIGGING WINCH ADAPTER (R409) TO WIRE ROPE PAD EYE. (SEE DETAIL KKK ON SHEET 16). LOWER SHEAVES ARE FOR DRUMS 1 & 2. DRUM 1 IS LEFT SHEAVE, DRUM 2 IS RIGHT SHEAVE. DRUM 3 IS TOP CENTER SHEAVE (OPTIONAL). PAY IN WINCH LINE AND PULL ROPES PAST LOWER SHEAVES IN JIB TOP (R11). REPEAT FOR OTHER DRUMS (SEE SECTIONS QQ-QQ & RR-RR ON SHEET 14).



ATTACH OPTIONAL UPPER JIB POINT

DISABLE JIB STOP CYLINDER (R13) BY TURNING IT ON (ACTIVATE ELECTRONIC VALVE), ALLOWING THE CYLINDER TO RETRACT UNDER LOAD.

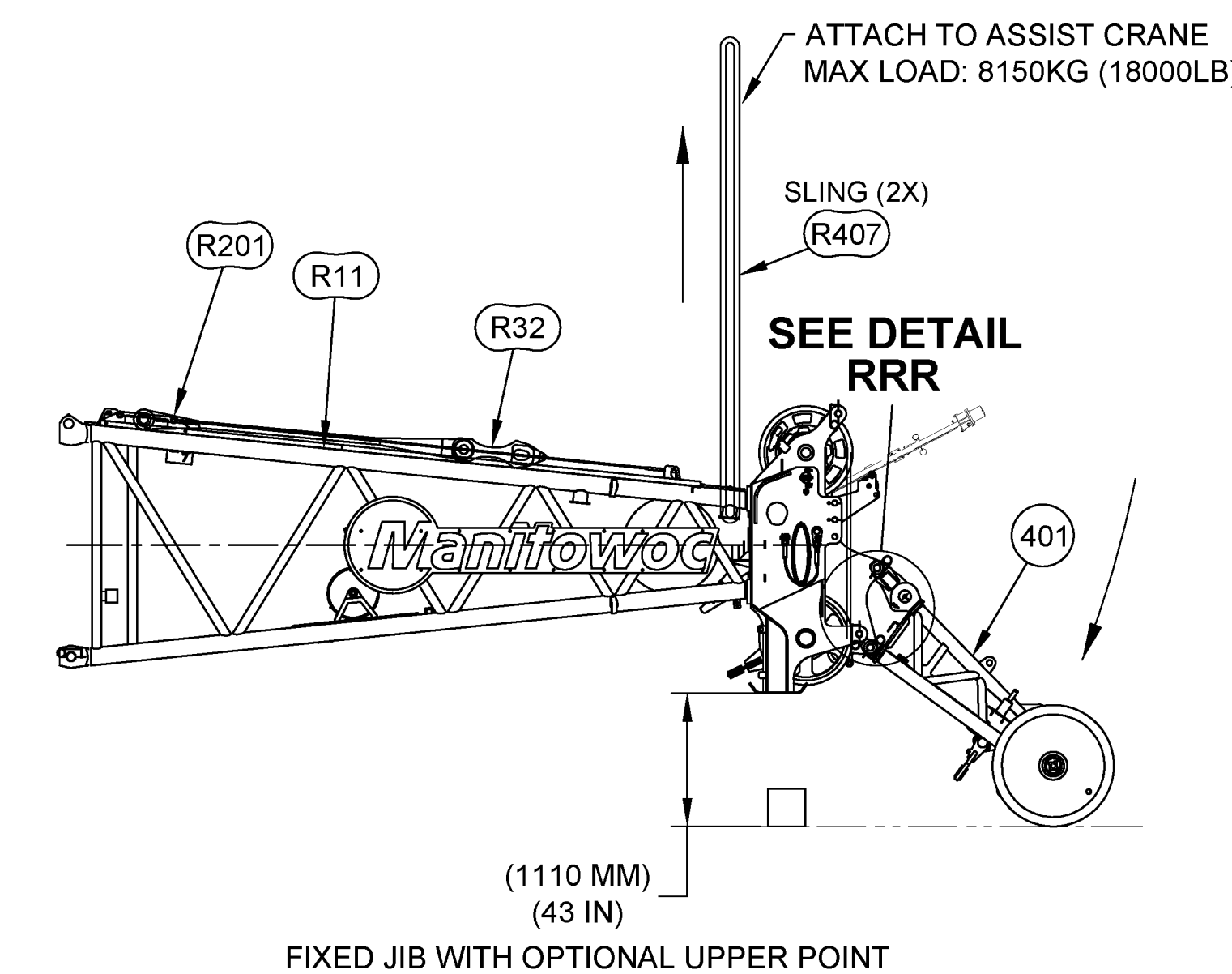
CAUTION: DO NOT RAISE FIXED JIB ASSEMBLY WITHOUT DISABLING THE JIB STOP CYLINDER (R13) BY TURNING IT ON. DO NOT EXCEED MAX LOAD OF 8150 KG (18000 LB) ON JIB TOP. STRUCTURAL DAMAGE MAY OCCUR.

CAUTION: DO NOT ALLOW BOOM TO JIB ANGLE TO BE MORE THAN 8° ABOVE BOOM CENTER LINE. DAMAGE TO JIB STOP MAY OCCUR.

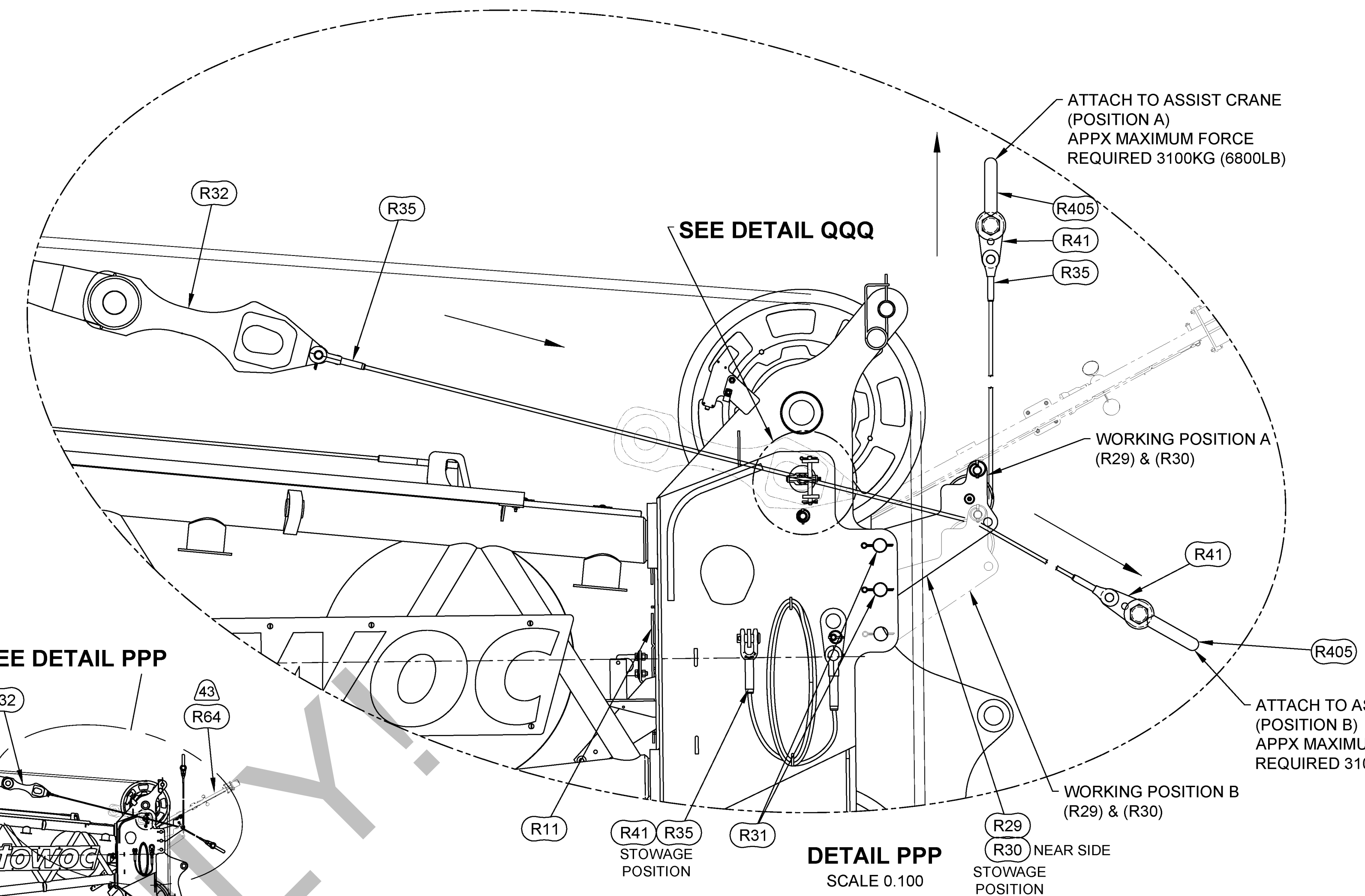
ATTACH OPTIONAL UPPER JIB POINT (ITEM 401) TO JIB TOP (R11). ALIGN UPPER HOLES IN JIB POINT (ITEM 401) WITH UPPER HOLES IN JIB TOP (R11) AND INSTALL (2) PINS (R62) AND SAFETY PINS (SEE DETAIL RRR).

USING AN ASSIST CRANE ATTACH SLINGS (R407) TO JIB TOP (R11) SLING POSTS AND LIFT TO ALIGN THE LOWER HOLES IN THE UPPER JIB POINT (ITEM 401) WITH THE LOWER HOLES IN THE JIB TOP (R11). INSTALL (2) PINS (R62) AND SAFETY PINS (SEE DETAIL RRR). LOWER JIB TOP TO ALLOW ROLLERS TO CONTACT GROUND AND REMOVE SLINGS. ENABLE JIB STOP CYLINDER BY TURNING IT OFF (DEACTIVATE ELECTRONIC VALVE).

CAUTION: DO NOT ASSEMBLE FIXED JIB FRONTSTAY WITHOUT JIB TOP SUPPORTED BY UPPER POINT OR BLOCKING. DAMAGE TO FIXED JIB MAY OCCUR.



TITLE IN PRIMARY LANGUAGE		BOOM RIGGING		FJ10:687 ON B90		TITLE IN SECONDARY LANGUAGE	
UNITS	SCALE	JOINT	SHEET	GROUP	ORIGIN	DRAWING NO.	REVISION
IN	0.02	E	17/18	HBD		80158563	A



FIXED JIB LOWERING AND DISASSEMBLY PROCEDURE

1) (REVERSE OF STEPS 8 (SHEET 17) & 10).
LOWER BOOM UNTIL UPPER JIB POINT ROLLERS OR JIB TOP (R11) ARE ABOUT 1.0 M (3 FT) FROM GROUND. DISABLE JIB STOP CYLINDER (R13) BY TURNING IT ON (ACTIVATE ELECTRONIC VALVE) ALLOWING THE CYLINDER TO RETRACT UNDER LOAD. CONTINUE TO LOWER UNTIL BOOM (SEE SHEET 9) AND JIB TOP FOOT (SEE SHEET 15) ARE RESTING ON RECOMMENDED BLOCKING. REMOVE UPPER JIB POINT (ITEM 401).
IF UPPER JIB POINT IS NOT USED, ATTACH SLINGS (R407) TO JIB TOP (R11) SLING POSTS AND USE ASSIST CRANE TO SUPPORT FIXED JIB ASSEMBLY. CONTINUE TO LOWER UNTIL BOOM AND JIB TOP FOOT ARE RESTING ON BLOCKING. THE JIB FRONTSTAY AND BACKSTAY PENDANTS WILL SLACKEN.

CAUTION: DO NOT LOWER JIB WITHOUT DISABLING JIB STOP CYLINDER (R13) BY TURNING IT ON. DO NOT EXCEED MAX LOAD OF 8150 KG (18000 LB) ON JIB TOP. STRUCTURAL DAMAGE MAY OCCUR.

CAUTION: DO NOT ALLOW BOOM TO JIB ANGLE TO BE MORE THAN 5° BELOW BOOM CENTER LINE OR 8° ABOVE BOOM CENTER LINE. DAMAGE TO SHEAVES AND JIB STOP MAY OCCUR.

2) (REVERSE OF STEPS 7 (SHEET 17) & 9).
MOVE (2) JIB FRONTSTAY PENDANT ASSIST ROPE GUIDES (R29) & (R30) ON JIB TOP (R11) TO ONE OF TWO WORKING POSITIONS A OR B. USING PENDANT (R35) AND PLATE (R41) FROM JIB TOP (R11), ROUTE THRU ROPE GUIDE (R29) OR (R30), ATTACH ONE END TO LINK (R32) AND THE OTHER END TO AN ASSIST CRANE OR VEHICLE. POSITION A WILL USE ASSIST CRANE AND PULL UP. POSITION B WILL USE ASSIST VEHICLE AND PULL OUTWARD (SEE DETAIL PPP). PULL ON PENDANT UNTIL FRONTSTAY PENDANT PIN (R33) IS FREE.
REMOVE RETAINING PLATE (R41) FROM ASSIST PENDANT PIN (R33). JIB TOP (R11) AND LOWER FRONTSTAY PENDANTS WITH LINK (R32) AND SET IN RAY ON JIB TOP (R11) PERFECT FOR OTHER SIDE. DISCONNECT PENDANT (R35) AND PLATE (R41) FROM ASSIST CRANE OR VEHICLE AND LINK (R32). RETURN SLING TO STOWAGE BRACKETS ON SIDE OF JIB TOP (R11). MOVE PENDANT ASSIST ROPE GUIDES (R29) & (R30) BACK INTO STOWAGE POSITION (SEE DETAIL PPP).

DETAIL QQQ
SCALE 0.250

3) (REVERSE OF STEP 6 ON SHEET 17).
DISCONNECT LINKS (R32) FROM PENDANTS (R201) AND RETURN TO STOWAGE POSITION (SEE DETAIL DDD ON SHEET 17). PENDANTS CAN BE LOWERED TO GROUND. DISCONNECT PENDANTS AND RETURN TO STORAGE.
RETURN JIB TO 12.0 M (39.4 FT) SHIPPING CONFIGURATION.
ATTACH LOAD LINE FROM DRUM 1 OR 2 TO JIB STRUT RAISING HOLE (SEE DETAIL LLL ON SHEET 16). ATTACH ASSIST CRANE TO THE STRUT RAISING ARM PENDANT (R42). RAISE AND MOVE STRUT FORWARD SLIGHTLY TO APPROXIMATELY 88° OR UNTIL STRUT SUSPENSION PENDANTS (R81) SLACKEN. DETACH STRUT SUSPENSION PENDANTS AND LET HANG (SEE DETAIL XX ON SHEET 15).

4) (REVERSE OF STEP 5 ON SHEET 16).
USING LOAD LINE FROM DRUM 1 OR 2, PAY IN TO BRING STRUT OVER CENTER. COORDINATE ASSIST CRANE AND LOAD LINE TO CONTROL STRUT MOVEMENT OVER CENTER. USE ASSIST CRANE TO LOWER TO APPROXIMATELY 143° WHILE PAYING IN LOAD LINE. LOAD LINE IS NOT INTENDED TO SUPPORT THE FULL WEIGHT OF THE STRUT AND SHOULD ONLY ACT TO GUIDE STRUT OVER CENTER. DETACH JIB BACKSTAY PENDANTS AND RETURN TO STORAGE

CAUTION: DO NOT EXCEED 143° ANGLE OR DAMAGE TO STRUT STOP AND BOOM CAP MAY OCCUR. IF BOOM STRAPS ARE CONNECTED THEY MUST BE LOWERED AND LAYING ON BOOM INSERTS OR INTERFERENCE BETWEEN BOOM STRAPS AND FIXED JIB STRUT HINGE WILL OCCUR CAUSING STRUCTURAL DAMAGE. BE SURE LOAD LINE IS SLACK TO AVOID INTERFERENCE WITH SPREADER BEAM.

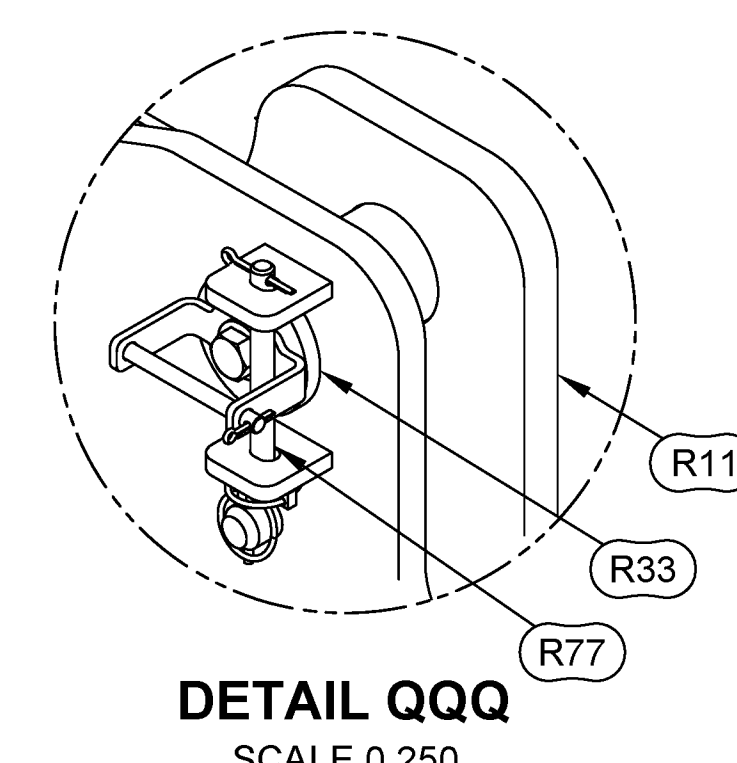
5) (REVERSE OF STEP 4 ON SHEET 16).
USING ASSIST CRANE RAISE STRUT TO NEAR VERTICAL. COORDINATE ASSIST CRANE AND LOAD LINE TO CONTROL STRUT MOVEMENT OVER CENTER AND PAY OUT LOAD LINE TO LOWER UNTIL RESTING ON JIB BUTT. LOAD LINE CAN BE DETACHED.

g) (REVERSE OF STEP 3 ON SHEET 16).
LOWER RAISING ARM (R25). REMOVE PINS (R62) FROM WORKING HOLES AND LOWER ARM TO STRUT. INSERT PINS (R62) INTO SHIPPING HOLES (SEE DETAILS YY & FFF ON SHEET 16). DETACH PENDANT (R42) FROM ASSIST CRANE AND ATTACH TO SHIPPING LUG ON STRUT (R15) - (SEE STRUT ISO VIEW ON SHEET 12). DETACH PENDANTS (R2) FROM RAISING ARM LINK (R26) AND ATTACH TO LUGS ON STRUT (R15) - (SEE DETAILS YYY & GGG ON SHEET 16). ROTATE RAISING ARM LINK (R26) INTO SHIPPING POSITION AND INSERT (2) PINS (R37) INTO SHIPPING HOLES (SEE DETAILS BBB & GGG ON SHEET 16). SET SPREADER BEAM (R18) IN BRACKETS. DETACH PENDANTS (R16) FROM BEAM LINKS (R17) AND ATTACH TO SHIPPING LUGS ON STRUT (SEE DETAILS AAA & JJJ ON SHEET 16). ROTATE BEAM LINKS (R17) & (R18) TO SHIPPING POSITION AND INSERT PINS (R37) INTO SHIPPING HOLES (SEE DETAILS AAA ON SHEET 16). REMOVE PINS (R74) FROM HOLES. RELOCATE SPREADER BEAM (R18) FROM WORKING TO SHIPPING LOCATION AND INSERT PINS (R74) BACK INTO HOLES (SEE DETAIL ZZ ON SHEET 16).

7) (REVERSE OF STEP 2 ON SHEET 15).
DETACH JIB FRONTSTAY PENDANTS (R22) FROM LINKS (R17) AND PLACE IN STORAGE. REATTACH STRUT SUSPENSION PENDANTS (R81) TO LINKS (R27).
- (SEE DETAIL NNN ON SHEET 17). INSERT PIN (R74) INTO SHIPPING HOLES TO HOLD STRUT (R15) IN PLACE (SEE DETAIL VVV ON SHEET 15).

CAUTION: DO NOT ALLOW BOOM TO JIB ANGLE TO BE MORE THAN 5° BELOW BOOM CENTER LINE OR 8° ABOVE BOOM CENTER LINE. DAMAGE TO SHEAVES AND JIB STOP MAY OCCUR.

8) (REVERSE OF STEP 1 ON SHEET 15).
REMOVE SHIPPING ASSEMBLY (ITEM 9) FROM BOOM. USING ASSIST CRANE ATTACH (4) SLINGS (R403) TO BOOM CAP SLING POSTS AND JIB TOP HEAD SLING POSTS. RAISE JIB SLOWLY ALLOWING JIB STOP CYLINDER (R13) TO RETRACT. INSERT PIN (R1) INTO JIB STOP SHIPPING HOLE (SEE DETAIL SS ON SHEET 15). CONTINUE TO RAISE AND PLACE IN STORAGE.



IF UPPER JIB POINT IS NOT AVAILABLE USE ASSIST CRANE TO SUPPORT JIB WHILE RAISING BOOM. CONTINUE TO SUPPORT JIB UNTIL ALL PENDANTS ARE TIGHT AND JIB STARTS TO RAISE ON ITS OWN.

	TITLE IN PRIMARY LANGUAGE				
	BOOM RIGGING				
	FJ10:687 ON B90				
TITLE IN SECONDARY LANGUAGE					
UNITS	SCALE	SIZE FORMAT	SHEET	GROUP/CREATOR	DRAWING NO.
IN	0.02	E	18/18	HBD	80158563