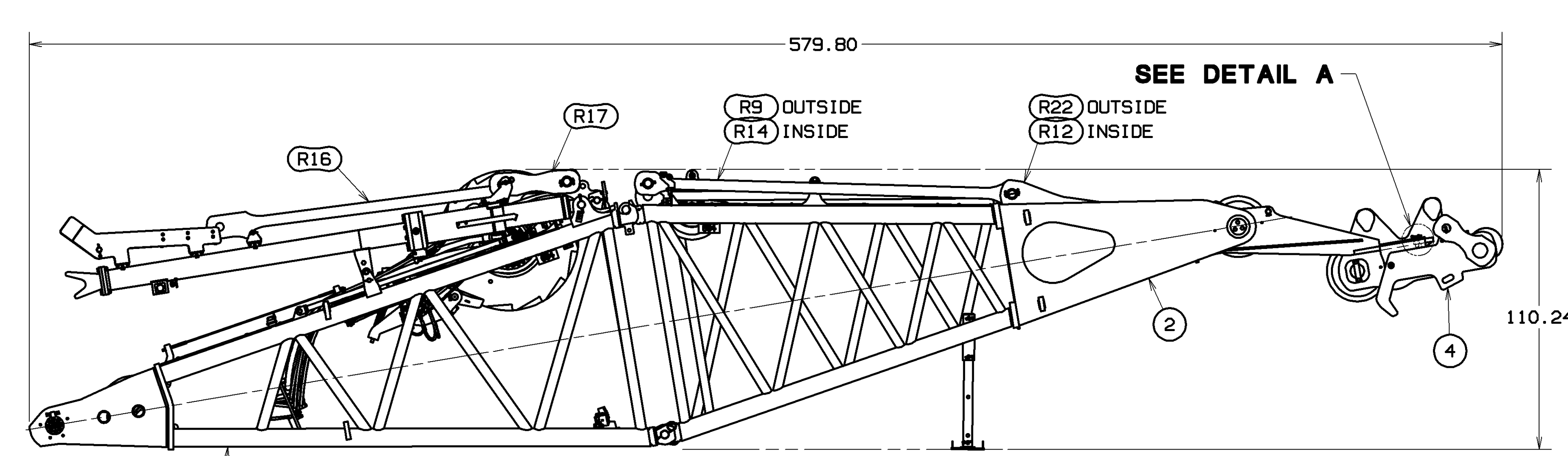
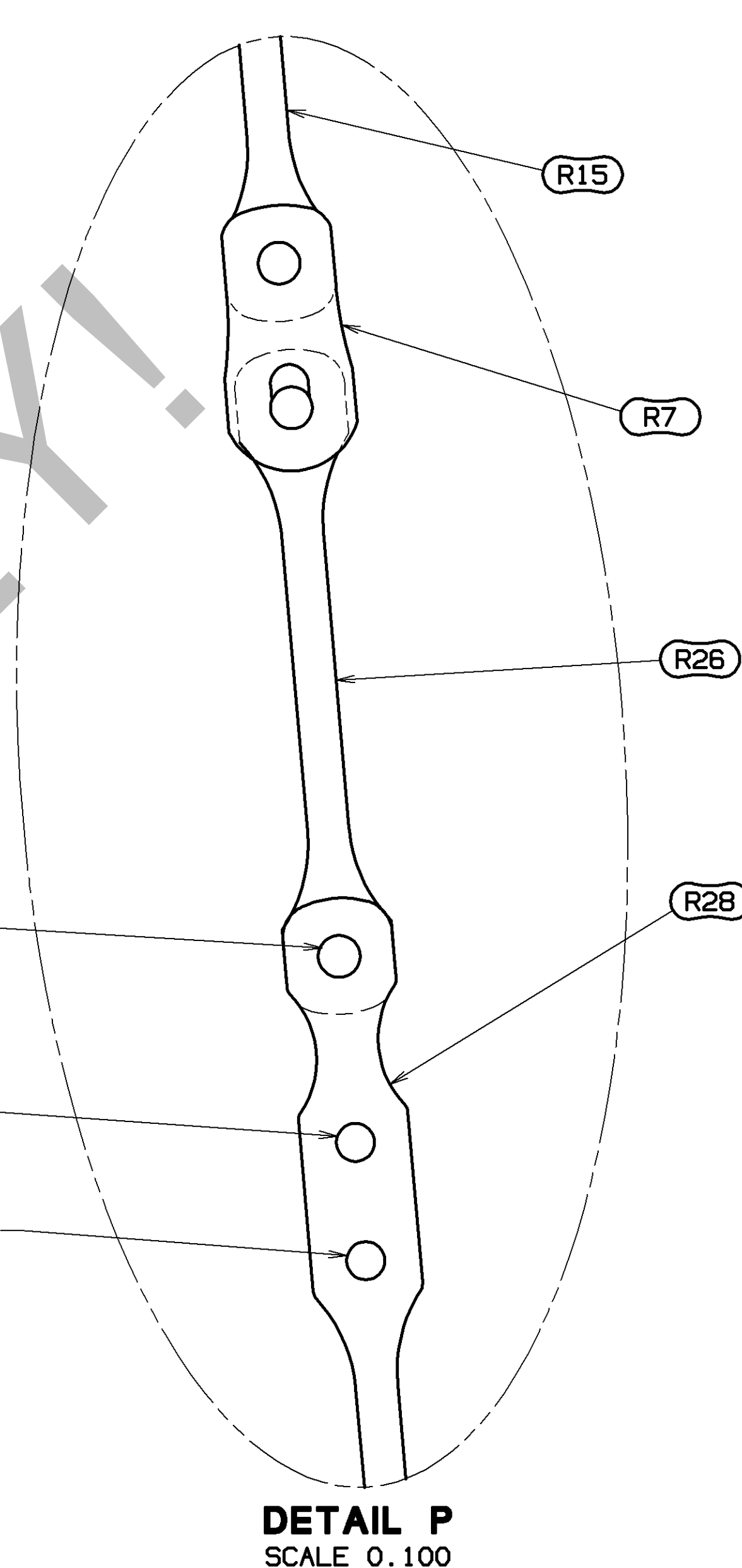
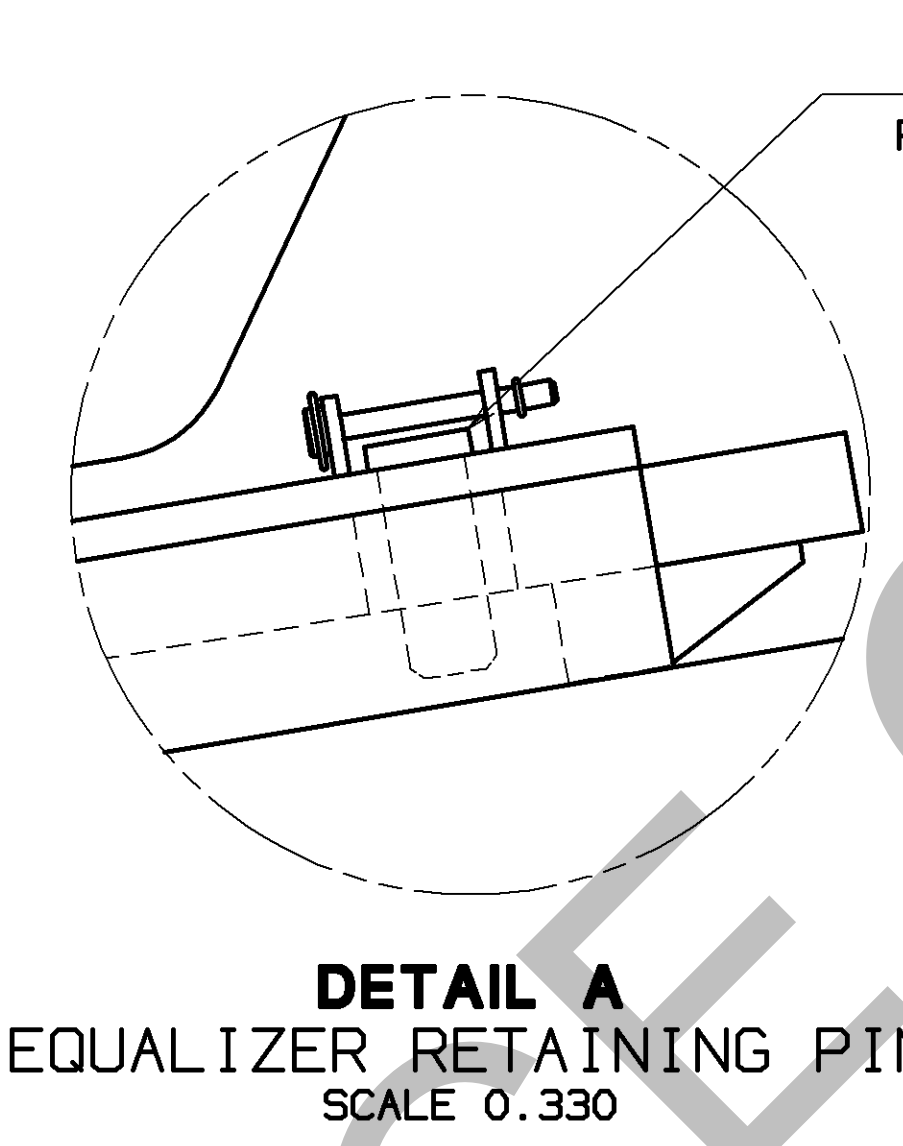
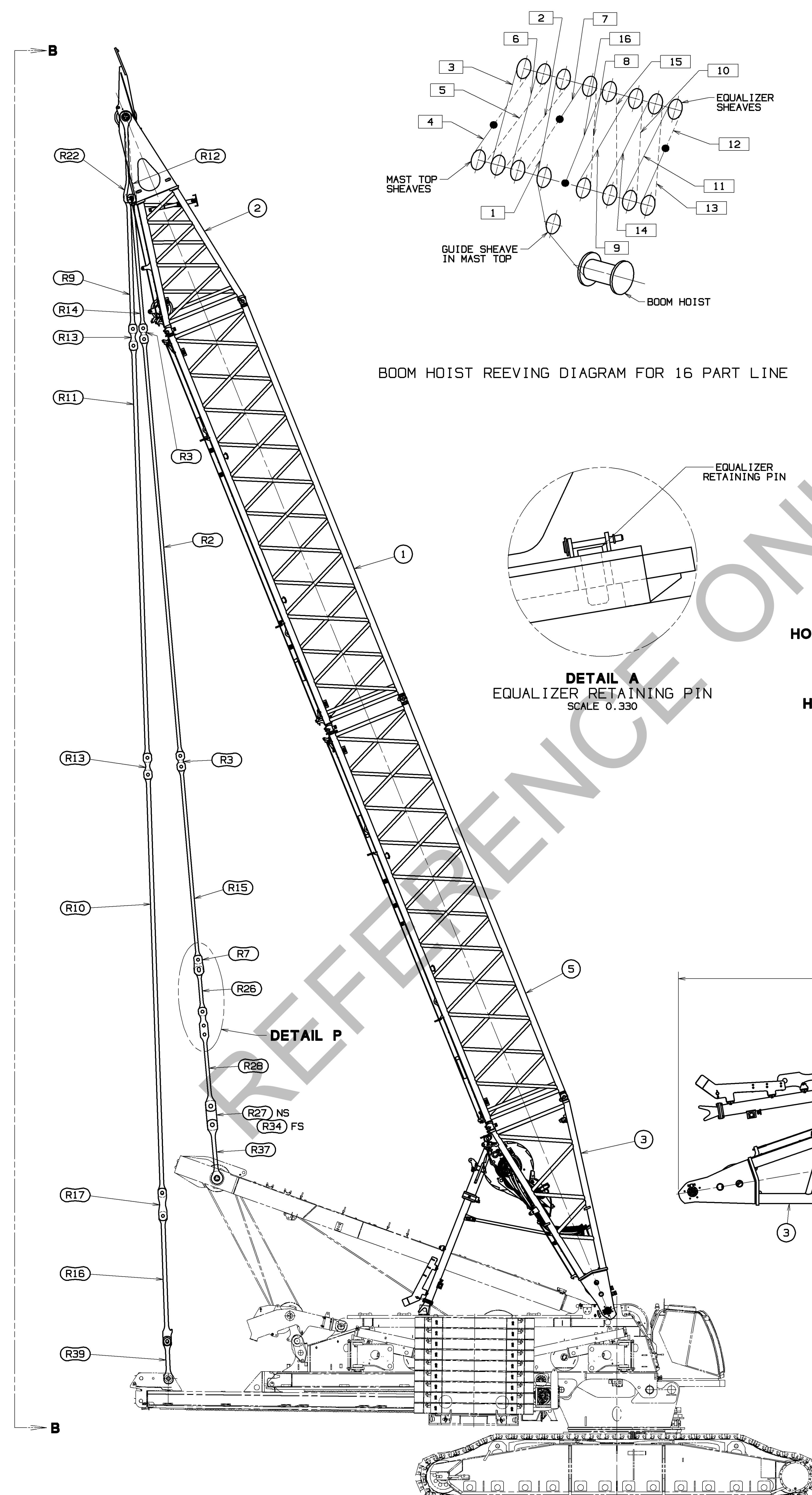
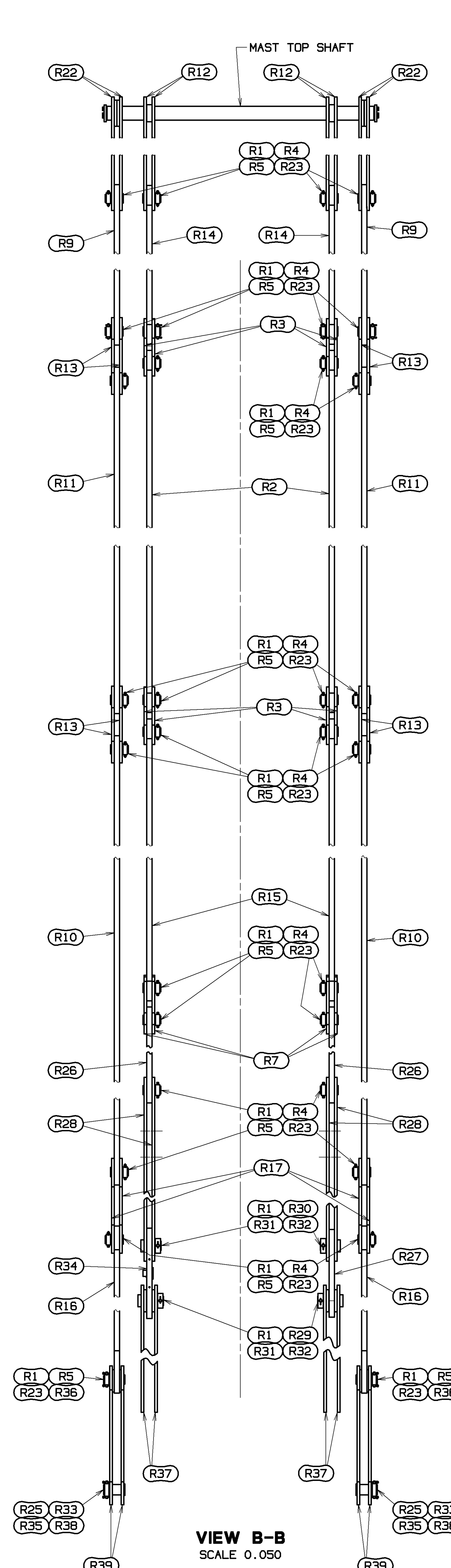




- 1 TOP 6M I.D. TAG #81025379
- 2 INSERT 12M (81025376) I.D. TAG #81025377
- 3 INSERT 12M (81034593) I.D. TAG #81035741
- 4 BUTT 6M I.D. TAG #84041643
- 5 STRAPS/LINKS AND HARDWARE SHIPS WITH MAST ASSEMBLY 81022688.
- 6 LINKS AND HARDWARE SHIPS WITH VPCMAX BEAM ASSEMBLY 81031411.
- 7 FOR ASSEMBLY AND RIGGING PURPOSE ONLY. STOWS IN STORAGE BOX 81028467.
- 8 FOR ASSEMBLY AND RIGGING PURPOSE ONLY. STOWS ON MAST BUTT (ITEM 3). SEE DETAIL U ON SHEET 2.

BILL OF MATERIAL					ASSEMBLIES USED IN	
ITEM NO.	REC. NO.	DESCRIPTION	QTY. IN	MATERIAL	QTY. ON OR. NO.	
MAST RIGGING M11:684						81018138
1	1	INSERT ASSY #684, 12M		81025376	2	
2	1	MAST ASSY #684, 6M TOP		81025378	1	
3	1	MAST ASSY #684, 6M BUTT		84041644	4	
4	1	EQUALIZER ASSY		81027149		
5	1	INSERT ASSY #684, 12M		81034593	3	
BASIC REFERENCE ITEMS						
R192		PIN COTTER 1/4 DIA X 1.50 LG		562105		
R2		STRAP 12M #680, 681, 682		81020475		
R3		LINK #680 BOOM		81020476		
R430		PIN 1 HOLE W/HD 79.3 DIA X 121.1 LG		81020477		
R532		COLLAR 80.2MM I.D.		81020478		
R6		SHACKLE 17 MTON		81024427	7	
R7		LINK #680, 4M INSERT		81027236		
R8		SHACKLE 40MT ALLOY		81030038	7	
R9		STRAP TOP #684 MAST 50.8 X 109.0		81034595		
R10		STRAP 12M #684 MAST 50.8 X 109.0		81034597		
R11		STRAP 12M #684 MAST 50.8 X 109.0		81034598		
R12		LINK STRAP		81034600		
R13		LINK STRAP		81034602		
R14		STRAP 6M #684 MAST TOP		81036855		
R15		STRAP 12M #684 MAST		81036856		
R16		STRAP 3.7M MAST 50.8 X 108.6		81036999		
R17		LINK		81037000		
R18		SLING LIFTING 100,000 LBSX10.83 FT		81038731	7	
R19		SLING LIFTING 20,000 LBSX5.25 FT		81038797	7	
R20		BUSHING 100X53X75.8		81038828	8	
R21		SLING 70000 LBS 16.4 FT		81042116	7	
R22		LINK ASSY		81042471		
R2332		PIN 2 HOLE 19.05 DIA X 117.0 LG		A16804		
R24						
R25		PIN COTTER 3/16 DIA X 1.50 LG		562085		
R26		STRAP 4M #680		81022539	5	
R27		LINK LIVE MAST		81026646	5	
R28		LINK LIVE MAST		81026647	5	
R29		PIN 1 HOLE W/HD 105.7 DIA X 170.0 LG		81028072		
R30		PIN 1 HOLE W/HD 105.7 DIA X 120.0 LG		81028073		
R31		COLLAR 139.7 X 106.0 ID X 50 LG		81028074		
R32		PIN 2 HOLE 25.4 DIA X 157.0 LG		81028216		
R33		COLLAR 131.0 MM ID		81033386		
R34		LOAD CELL LINK 238,140 KGS		81034118	5	
R35		PIN 2 HOLE 12.7 DIA X 167.0 LG		81039284		
R36		PIN 1 HOLE W/HD 79.3 DIA X 153.1 LG		81039569		
R37		LINK ASSY		81042456	5	
R38		PIN 1 HOLE 130.0 X 175.0 LG		81020965		
R39		LINK ASSY		84020978	6	
R40						
R41		PIN PULLER ASSY HAND HELD		81030756	7	
R42		PIN PULLER CAGE WELDMENT		81040833	7	
R43						
R44						
R45						

10-05-17 AUB
B1 DETAIL V
UPDATED (SHT 3)
B2 NEW ASSY NOTE
13 ADDED (SHT 3)
B3 ASSY NOTE 14
HAS 13 (SHT 3)
B4 NOTE ADDED
(SHT 3)

84050187
SHT 1 OF 4

PRIVATE LABELING REQUIREMENT TO CONFORM TO SPECIFICATION 8629103794 FOR COMPONENTS LISTED IN 8629103794-05-056

DATE 12-19-16

REV. LYN B

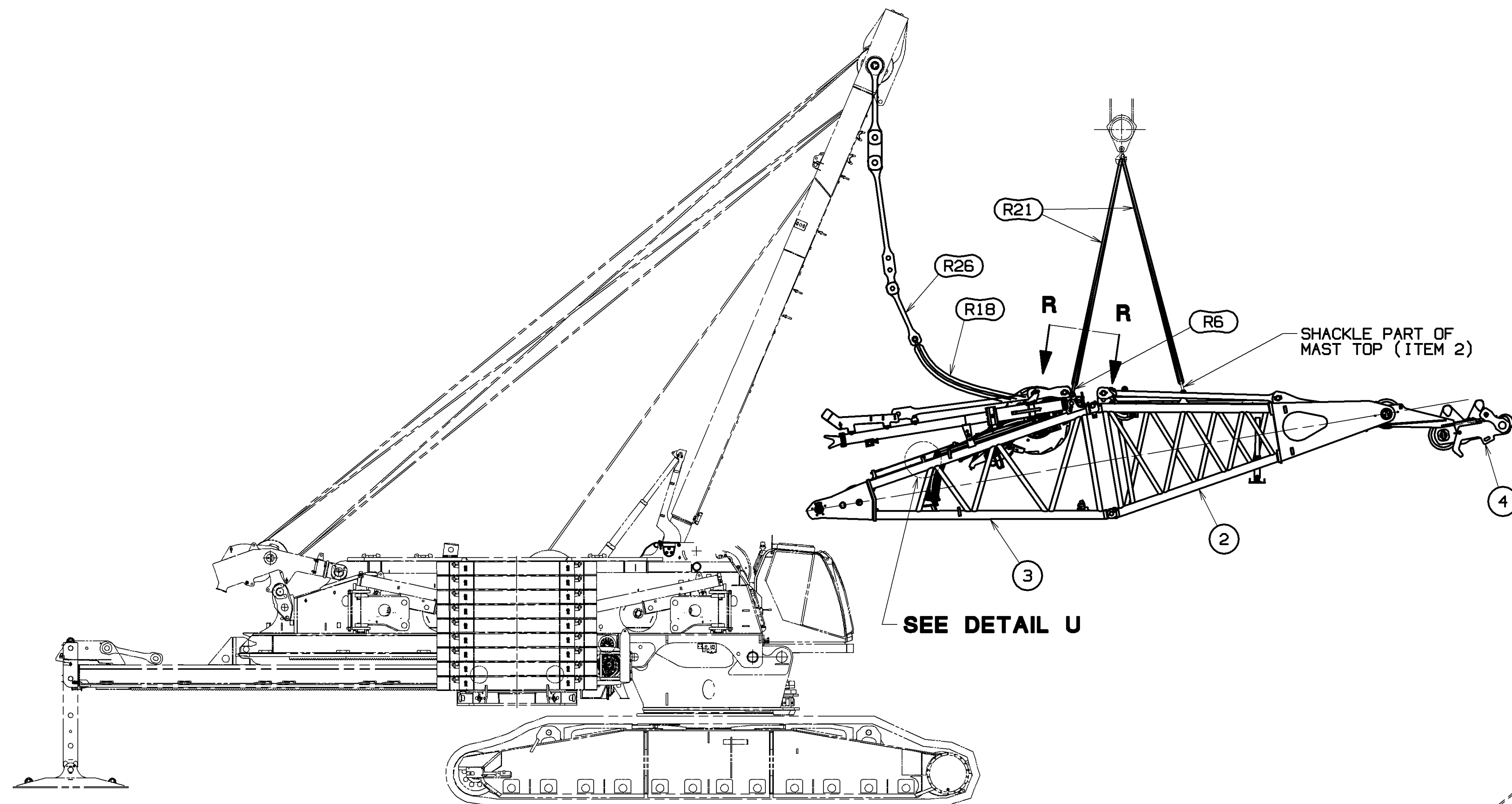
84050187

SHT 1 OF 4

DO NOT SCALE THIS DRAWING

MAST ASSEMBLY PROCEDURE

- 1) ASSEMBLE VPC-MAX BEAM, AUXILIARY MEMBER, AND SERIES 1, 2, OR 3 COUNTERWEIGHTS.
- 2) ATTACH LIFTING SLINGS AND SHACKLES TO LIVE MAST LINKS (R26) AND FIXED MAST BUTT (ITEM 3) AS SHOWN IN VIEW G-G.
- 3) ATTACH ASSIST CRANE TO MAST BUTT/TOP ASSEMBLY USING (4) SLINGS (R21) AND AN ADDITIONAL (2) SHACKLES (R6). (SEE VIEW R-R).
- 4) RAISE LIVE MAST WHILE LIFTING FIXED MAST BUTT/TOP INTO PLACE. LIFTING SLINGS FROM LIVE MAST SHOULD REMAIN SLACK WHILE ASSEMBLING FIXED MAST BUTT/TOP (SEE VIEW C).
- 5) ALIGN MAST BUTT HINGE PIN HOLES WITH ROTATING BED PIN HOLES. POSITION PIN PULLER (R41) INTO PIN PULLER CAGE WELDMENT (R42) AND ACTIVATE CYLINDER TO INSTALL MAST HINGE PIN INTO ROTATING BED (SEE DETAIL S).
- 6) POSITION LIVE MAST BETWEEN 107° AND 113° AND ENGAGE MAST HOIST DRUM PAWL. LOWER FIXED MAST BUTT/TOP ASSEMBLY WITH ASSIST CRANE UNTIL THE LIVE MAST IS SUPPORTING THE ASSEMBLY.
WARNING: LIVE MAST ANGLES GREATER THAN 113° WILL DAMAGE COMPONENTS
- 7) DISCONNECT SLINGS (R21) FROM MAST BUTT (ITEM 3) AND ATTACH THEM TO THE LINK ON THE MAST TOP SHAFT (SEE VIEW F-F). THE ASSIST CRANE WILL BE USED TO SEPARATE THE MAST TOP (ITEM 2) FROM THE BUTT.
- 8) REMOVE THE LOWER PIN CONNECTING THE MAST BUTT AND TOP. SEPARATE THE MAST TOP FROM THE BUTT (SEE VIEW D).
- 9) ASSEMBLE MAST INSERTS (ITEM 1 AND 5). BOTH INSERTS CAN BE CANTILVERED FROM THE MAST BUTT (SEE VIEW E). (FOR LOWER CONNECTOR PIN INSTALLATION SEE DETAIL T).

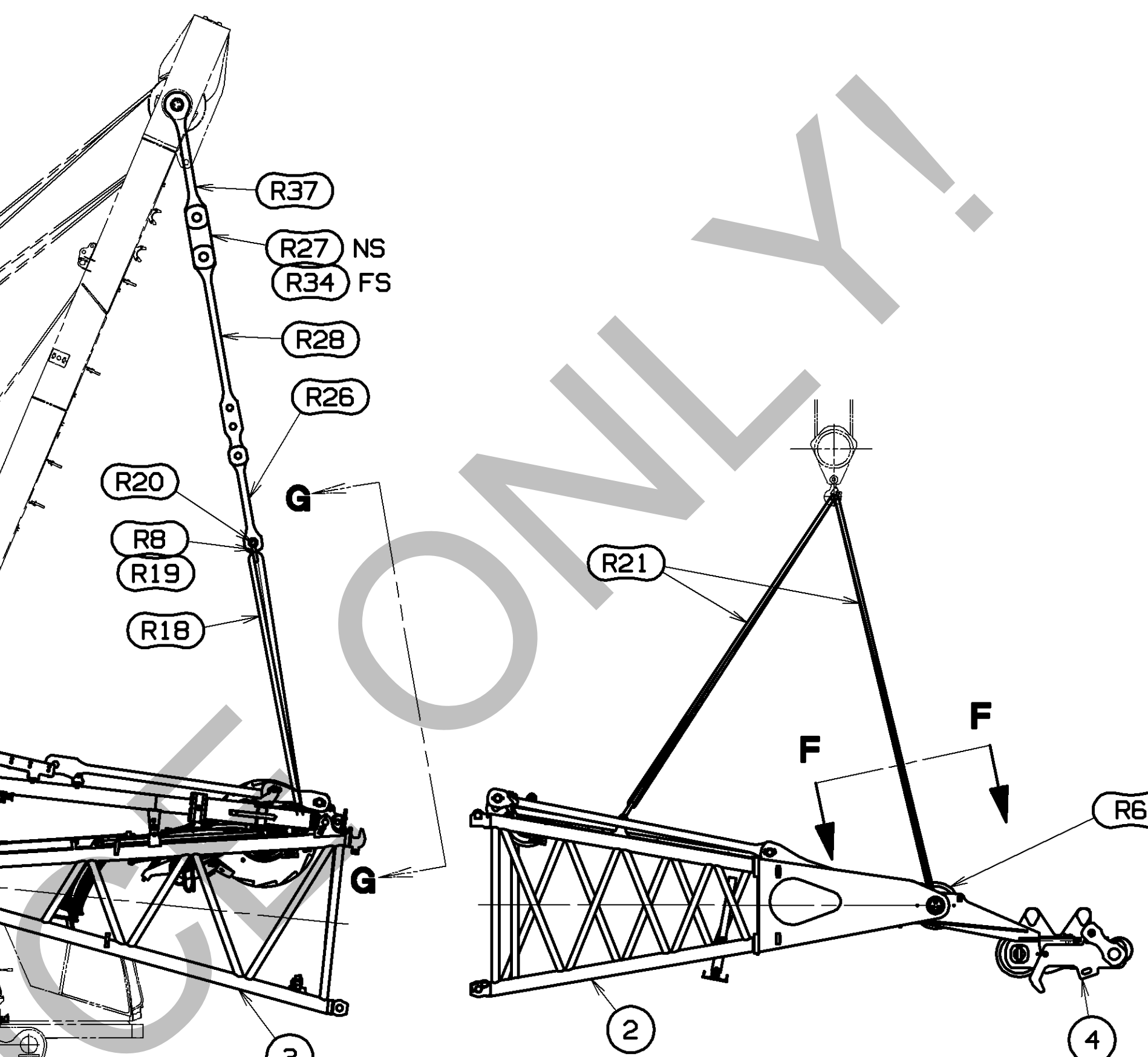


VIEW C
HANDLING OF MAST BUTT/TOP ASSEMBLY

2X
SHACKLE PART OF MAST
BUTT FOR USE WITH
SLING (R18) PER VIEW G-G

VIEW R-R
SCALE 0.125

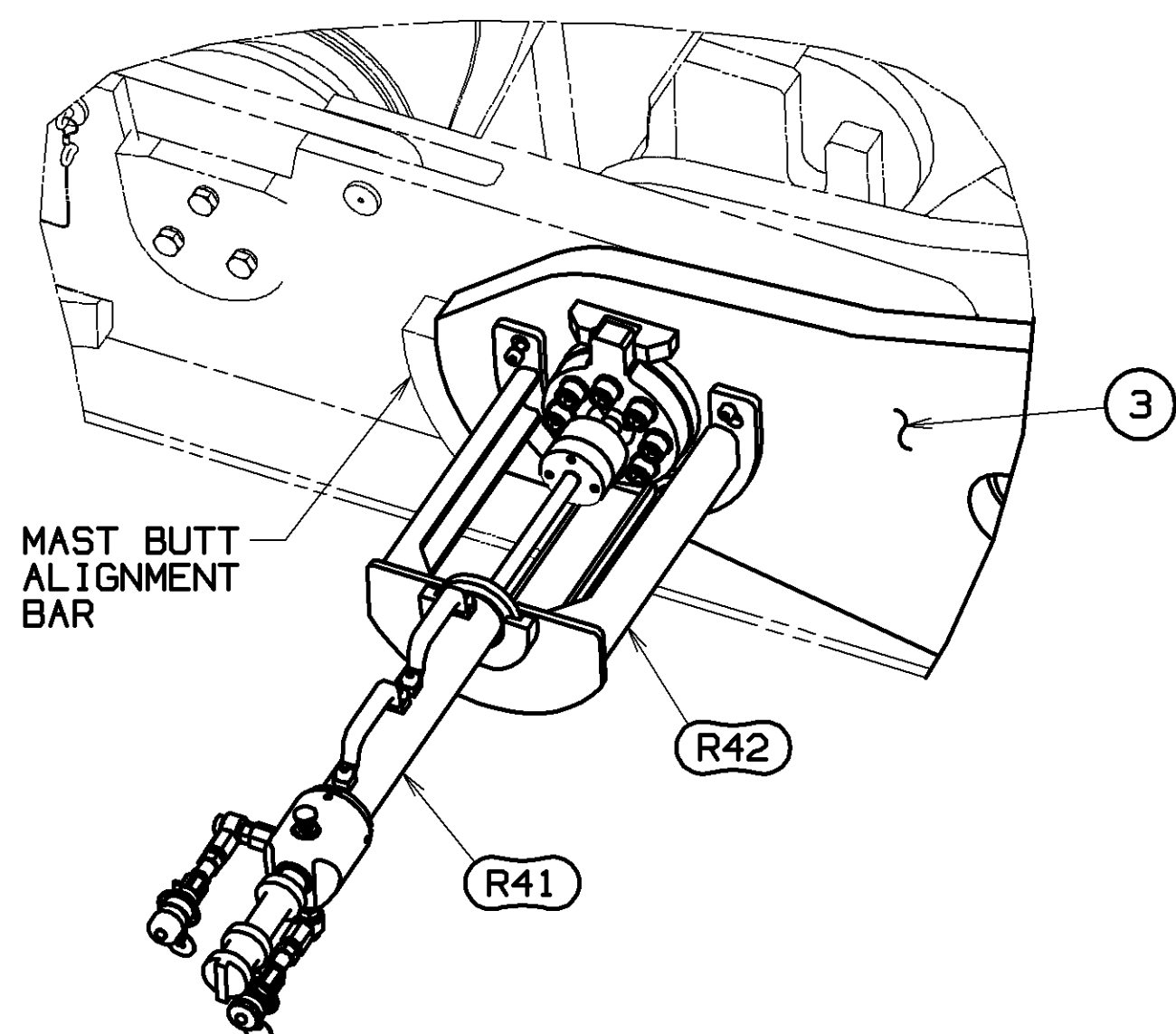
2X
MAST BUTT HANDLING BRACKET
FOR ATTACHING SHACKLE (R6)
AND SLING (R21)



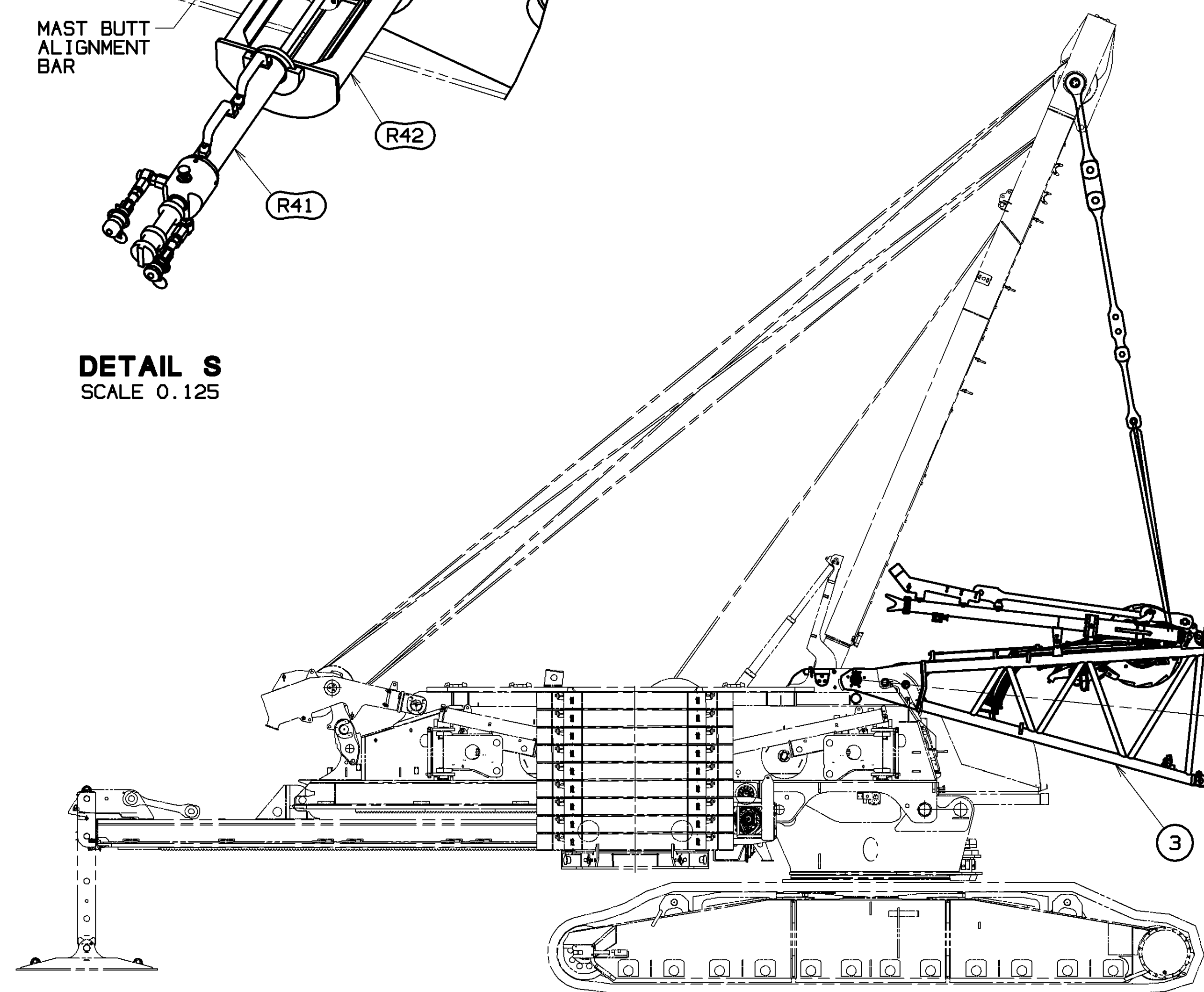
SEE DETAIL S

BUSHING (R20)
STORAGE
LOCATION

DETAIL U
SCALE 0.125



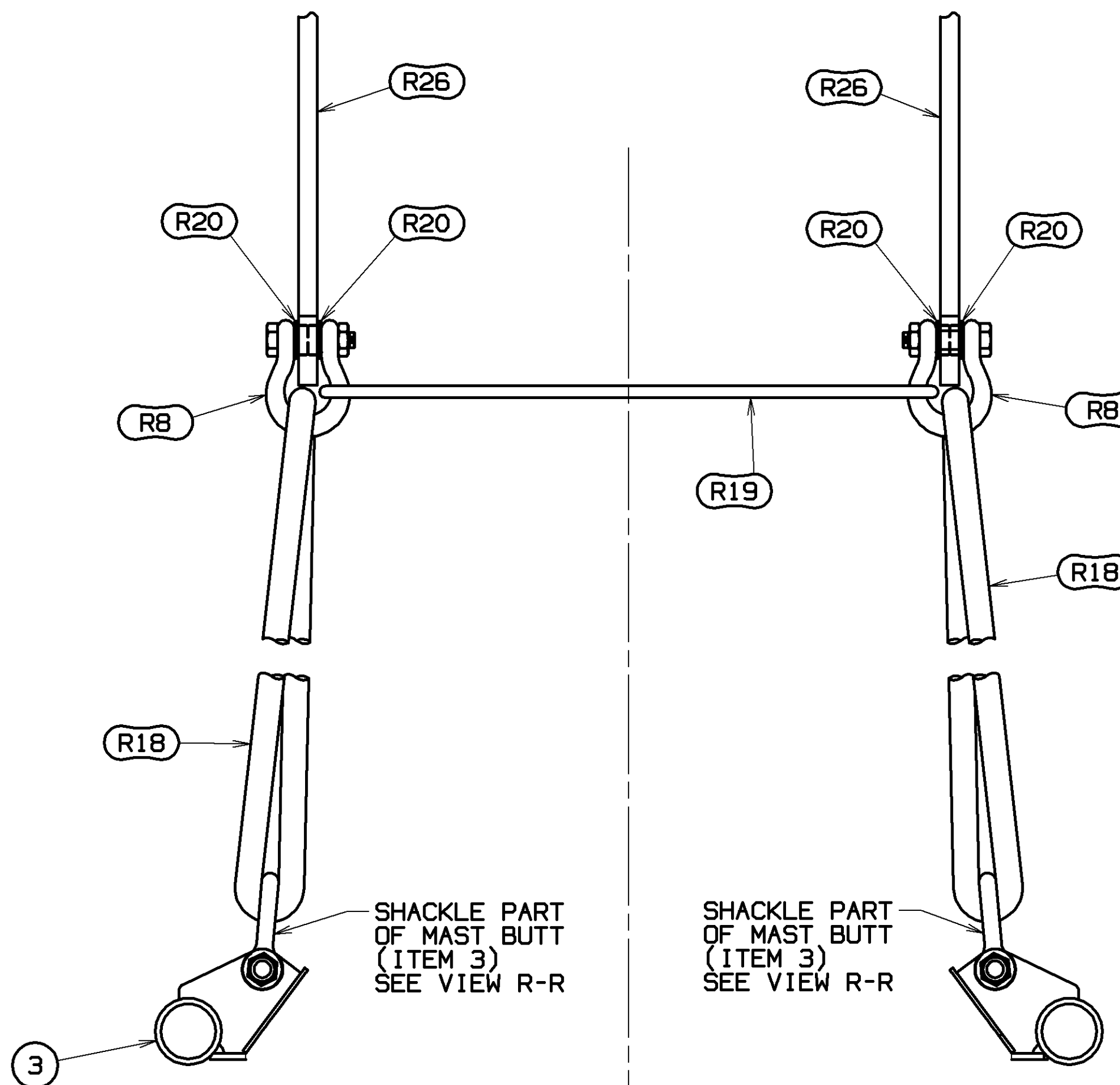
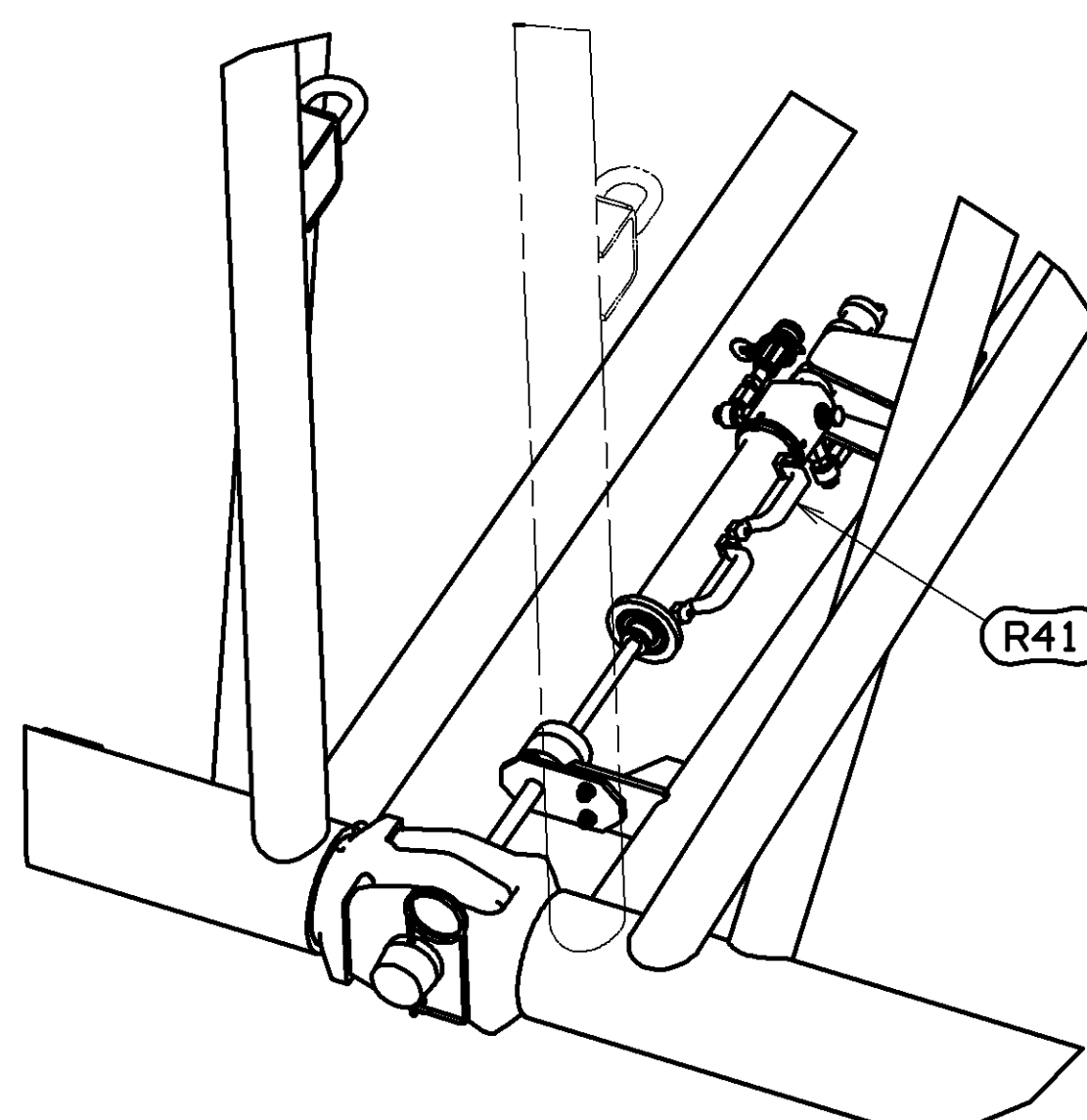
DETAIL S
SCALE 0.125



VIEW E
ASSEMBLY OF MAST INSERTS

SEE DETAIL T

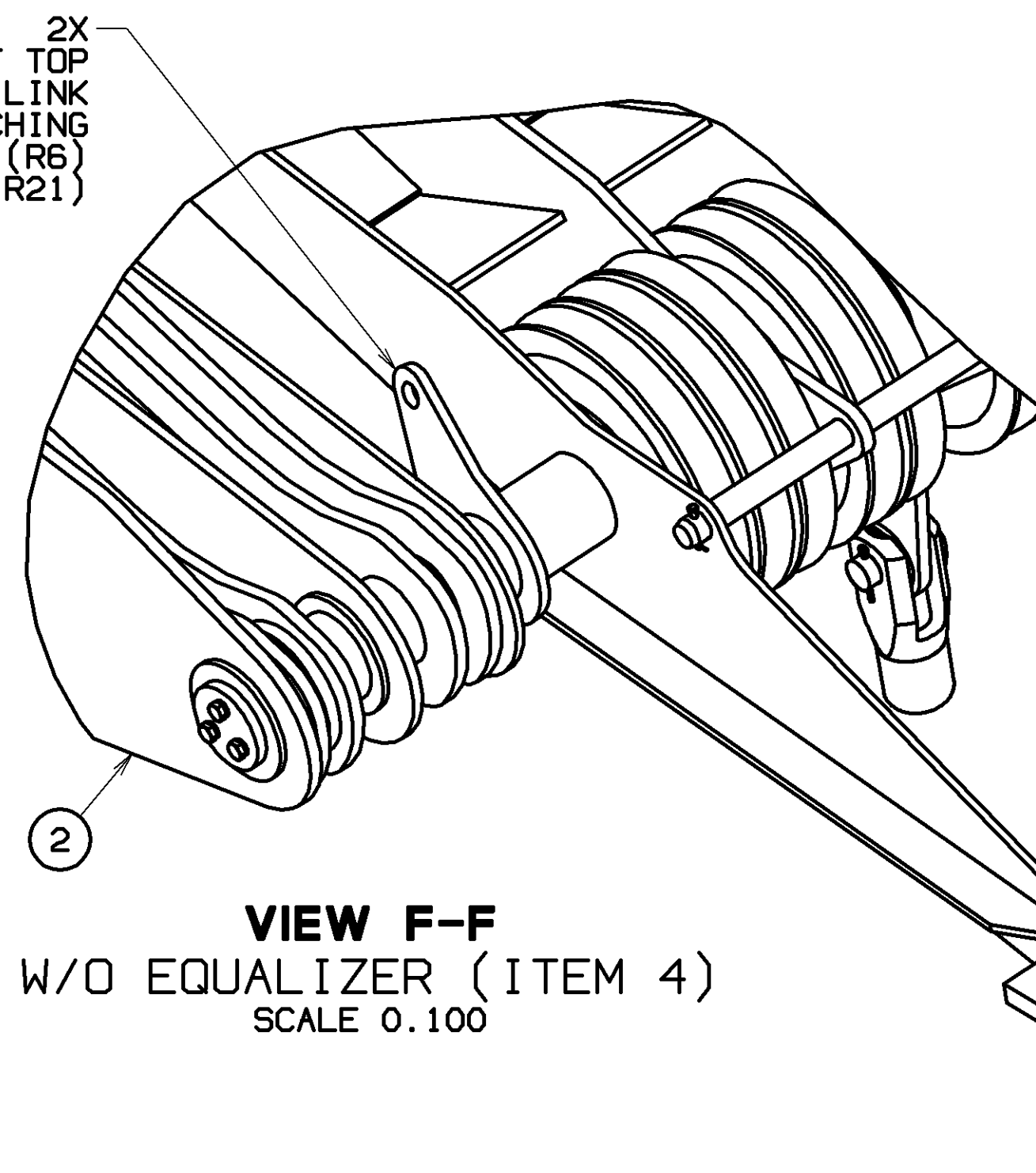
DETAIL T
TYPICAL LOWER MAST CONNECTOR
PIN INSTALLATION
SCALE 0.100



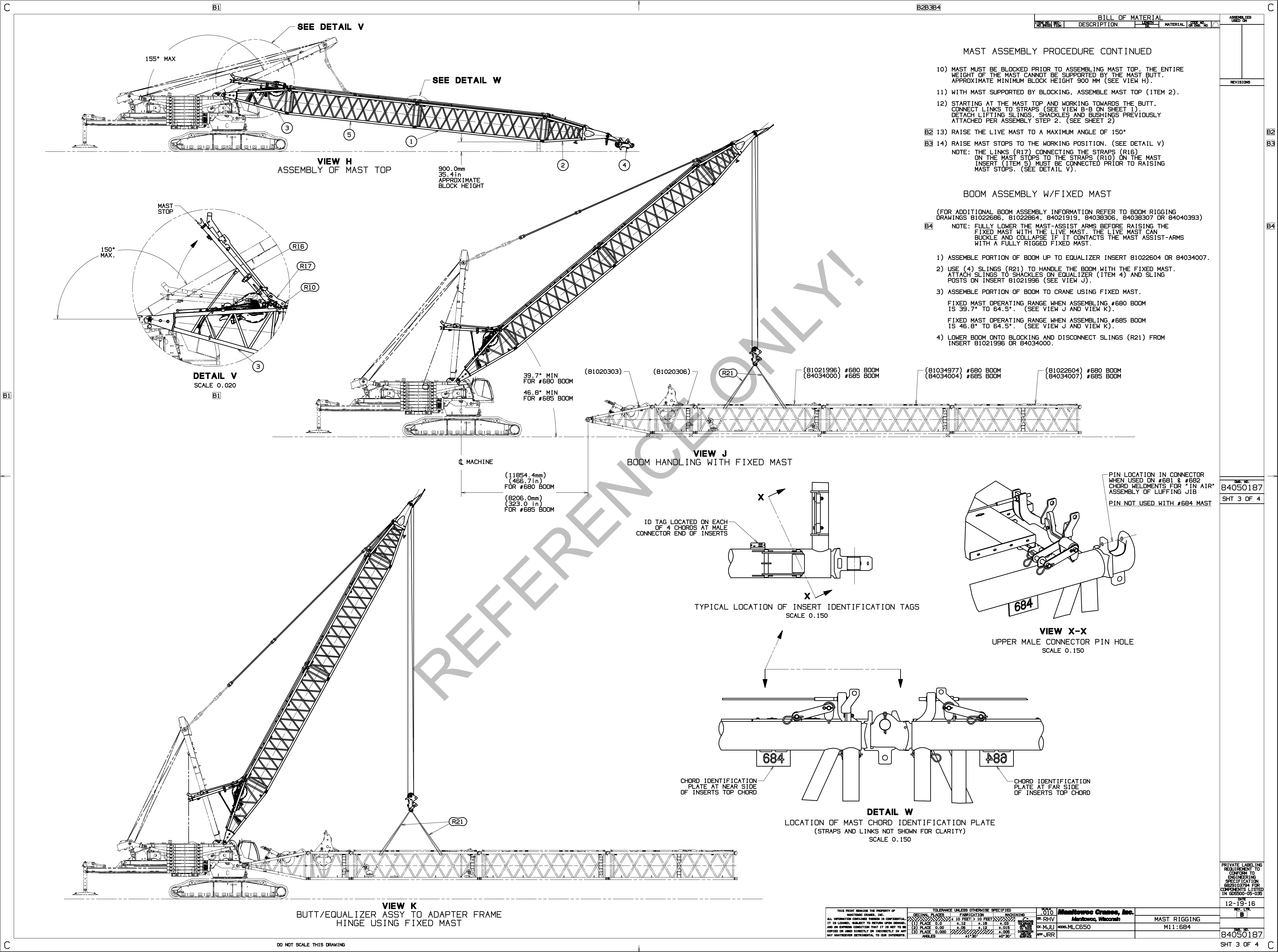
VIEW G-G
SCALE 0.080

SHACKLE PART
OF MAST BUTT
(ITEM 3)
SEE VIEW R-R

SHACKLE PART
OF MAST BUTT
(ITEM 3)
SEE VIEW R-R



VIEW F-F
W/O EQUALIZER (ITEM 4)
SCALE 0.100



MAST ASSEMBLY PROCEDURE CONTINUED

- 10) MAST MUST BE BLOCKED PRIOR TO ASSEMBLING MAST TOP. THE ENTIRE WEIGHT OF THE MAST CANNOT BE SUPPORTED BY THE MAST BUTT. APPROXIMATE MINIMUM BLOCK HEIGHT 900 MM (SEE VIEW H).
- 11) WITH MAST SUPPORTED BY BLOCKING, ASSEMBLE MAST TOP (ITEM 2).
- 12) STARTING AT THE MAST TOP AND WORKING TOWARDS THE BUTT, CONNECT LINKS TO STRAPS (SEE VIEW B-B ON SHEET 1). DETACH LIFTING SLINGS, SHACKLES AND BUSHINGS PREVIOUSLY ATTACHED PER ASSEMBLY STEP 2. (SEE SHEET 2).
- B2 13) RAISE THE LIVE MAST TO A MAXIMUM ANGLE OF 150°
- B3 14) RAISE MAST STOPS TO THE WORKING POSITION. (SEE DETAIL V)
- NOTE: THE LINKS (R17) CONNECTING THE STRAPS (R16) ON THE MAST STOPS TO THE STRAPS (R10) ON THE MAST INSERT (ITEM 5) MUST BE CONNECTED PRIOR TO RAISING MAST STOPS. (SEE DETAIL V).

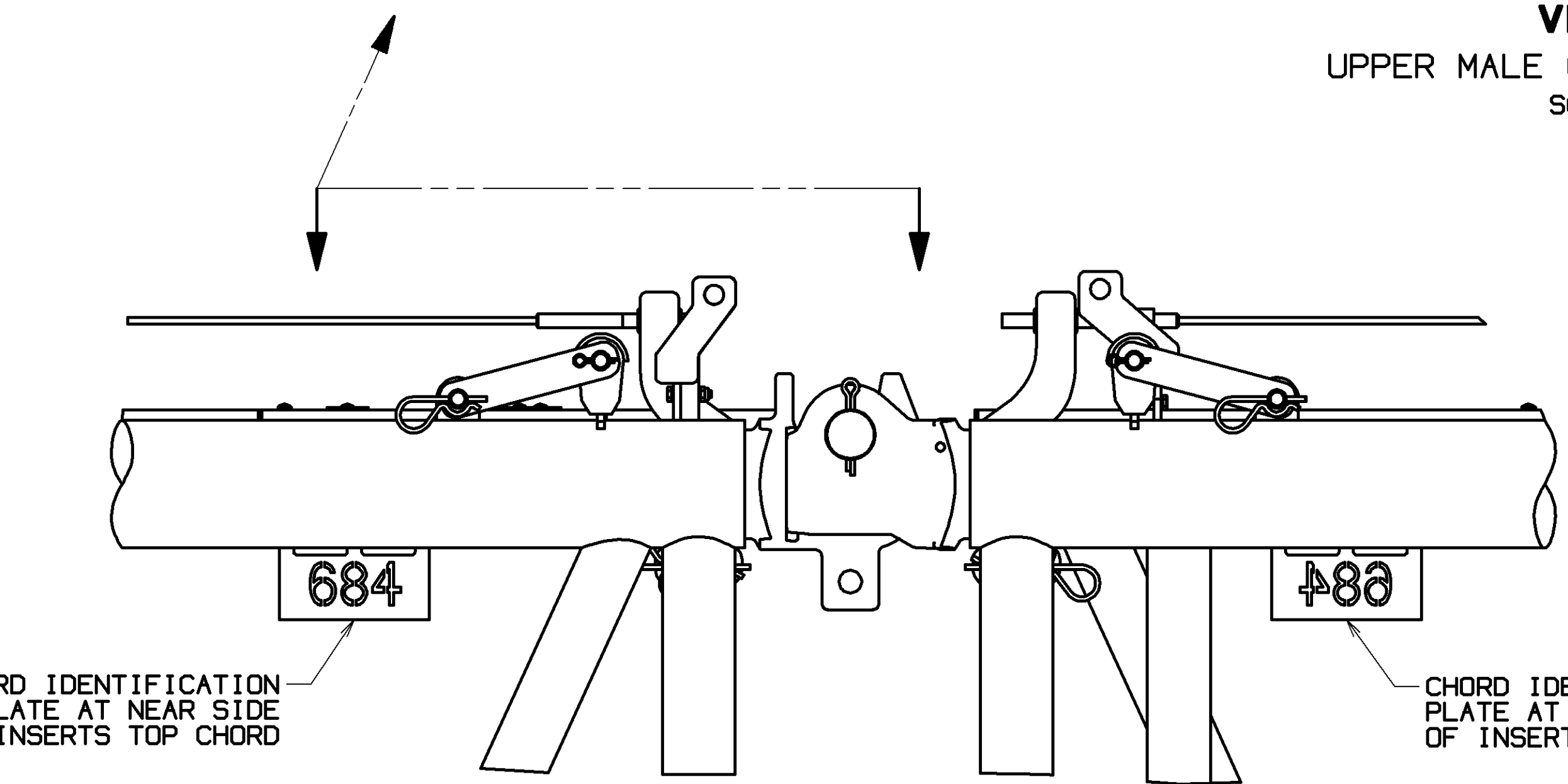
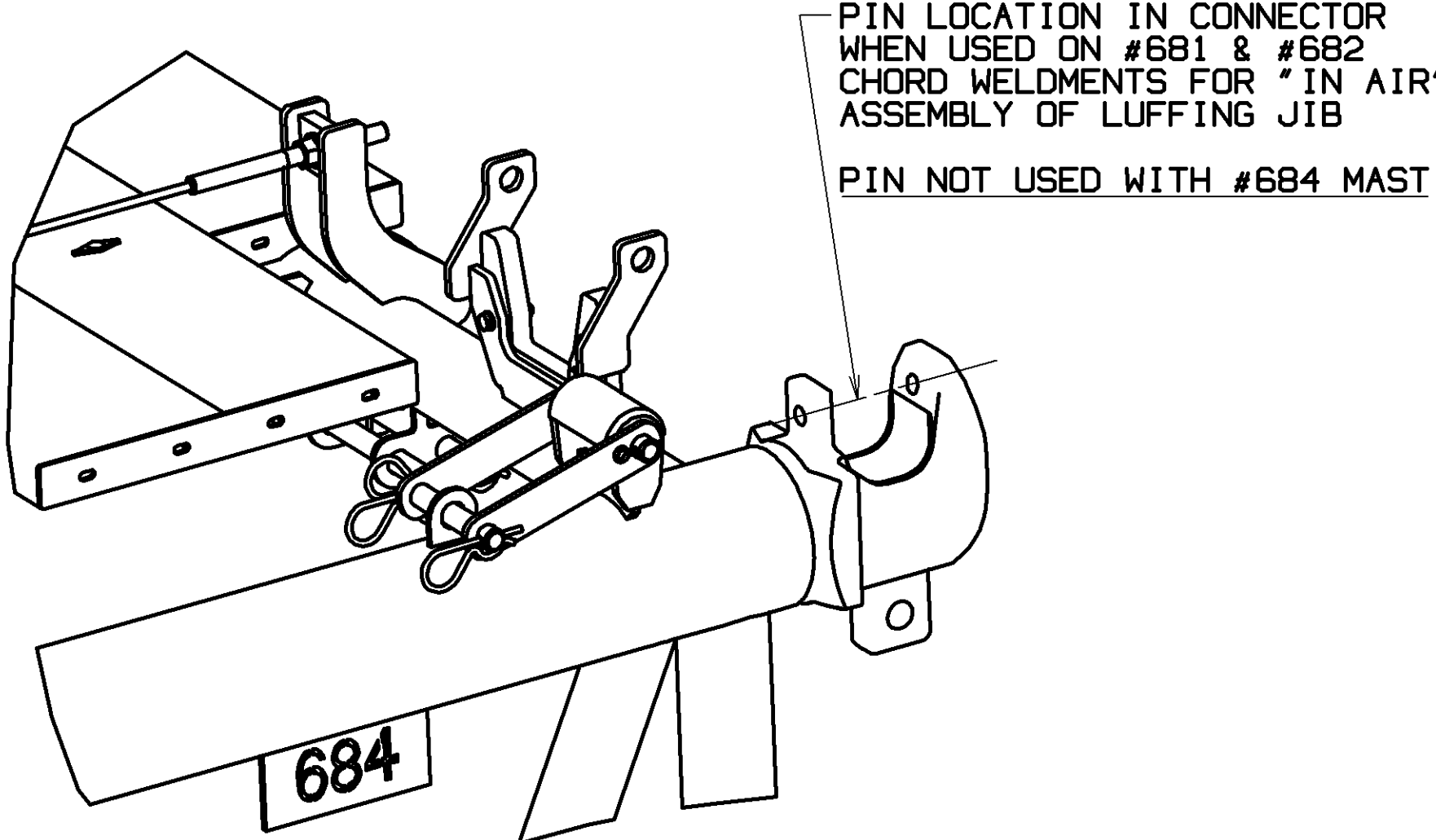
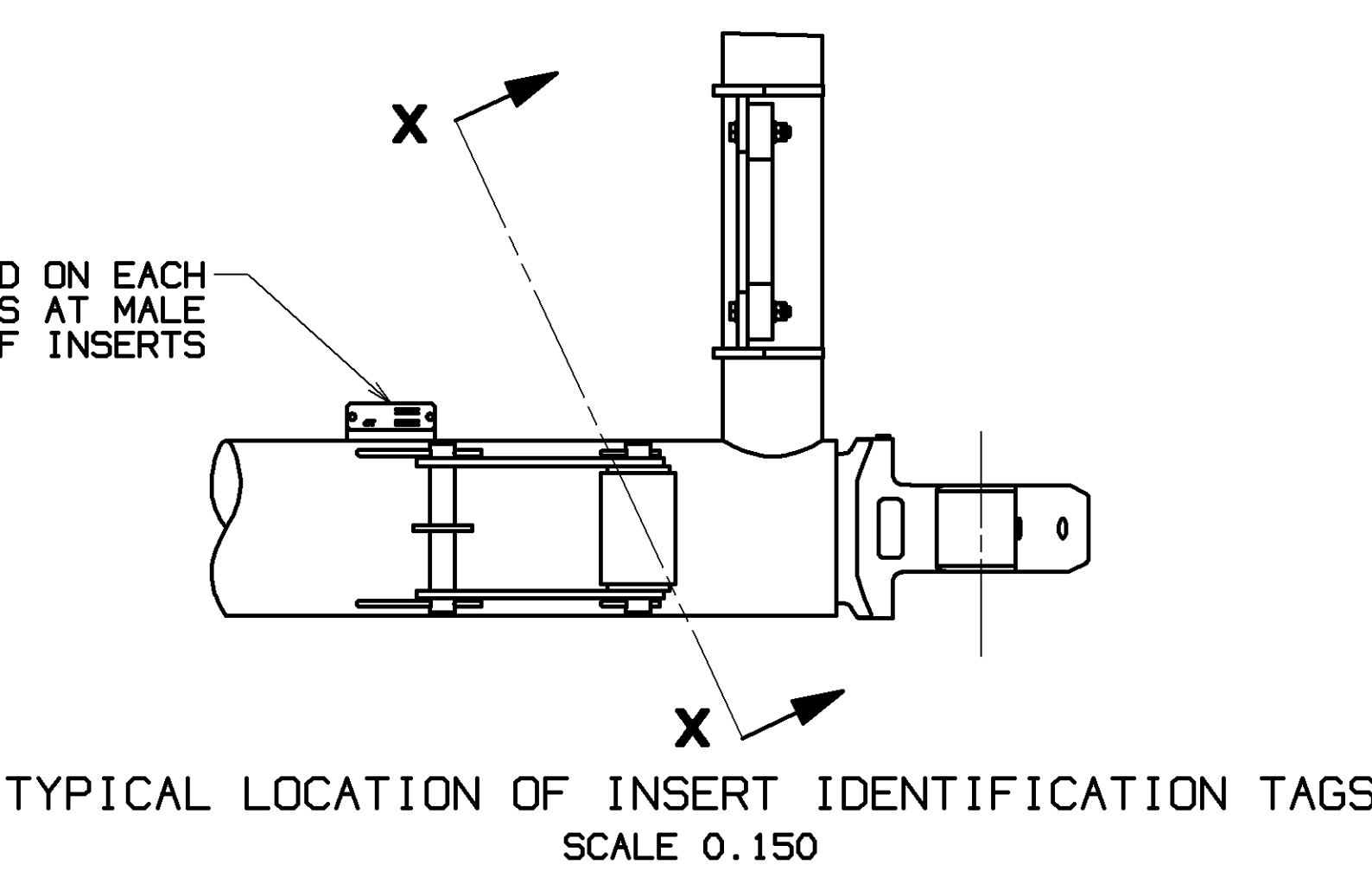
BOOM ASSEMBLY W/FIXED MAST

(FOR ADDITIONAL BOOM ASSEMBLY INFORMATION REFER TO BOOM RIGGING DRAWINGS 81022686, 81022864, 84021919, 84038306, 84038307 OR 84040393)

- B4 NOTE: FULLY LOWER THE MAST-ASSIST ARMS BEFORE RAISING THE FIXED MAST WITH THE LIVE MAST. THE LIVE MAST CAN BUCKLE AND COLLAPSE IF IT CONTACTS THE MAST ASSIST-ARMS WITH A FULLY RIGGED FIXED MAST.
- 1) ASSEMBLE PORTION OF BOOM UP TO EQUALIZER INSERT 81022604 OR 84034007.
- 2) USE (4) SLINGS (R21) TO HANDLE THE BOOM WITH THE FIXED MAST. ATTACH SLINGS TO SHACKLES ON EQUALIZER (ITEM 4) AND SLING POSTS ON INSERT 81021996 (SEE VIEW J).
- 3) ASSEMBLE PORTION OF BOOM TO CRANE USING FIXED MAST.
- FIXED MAST OPERATING RANGE WHEN ASSEMBLING #680 BOOM IS 39.7° TO 64.5°. (SEE VIEW J AND VIEW K).
- FIXED MAST OPERATING RANGE WHEN ASSEMBLING #685 BOOM IS 46.8° TO 64.5°. (SEE VIEW J AND VIEW K).
- 4) LOWER BOOM ONTO BLOCKING AND DISCONNECT SLINGS (R21) FROM INSERT 81021996 OR 84034000.

(81021996) #680 BOOM (84034000) #685 BOOM (81034977) #680 BOOM (84034004) #685 BOOM (81022604) #680 BOOM (84034007) #685 BOOM

VIEW J
BOOM HANDLING WITH FIXED MAST



DETAIL W
LOCATION OF MAST CHORD IDENTIFICATION PLATE
(STRAPS AND LINKS NOT SHOWN FOR CLARITY)
SCALE 0.150

VIEW K
BUTT/EQUALIZER ASSY TO ADAPTER FRAME
HINGE USING FIXED MAST

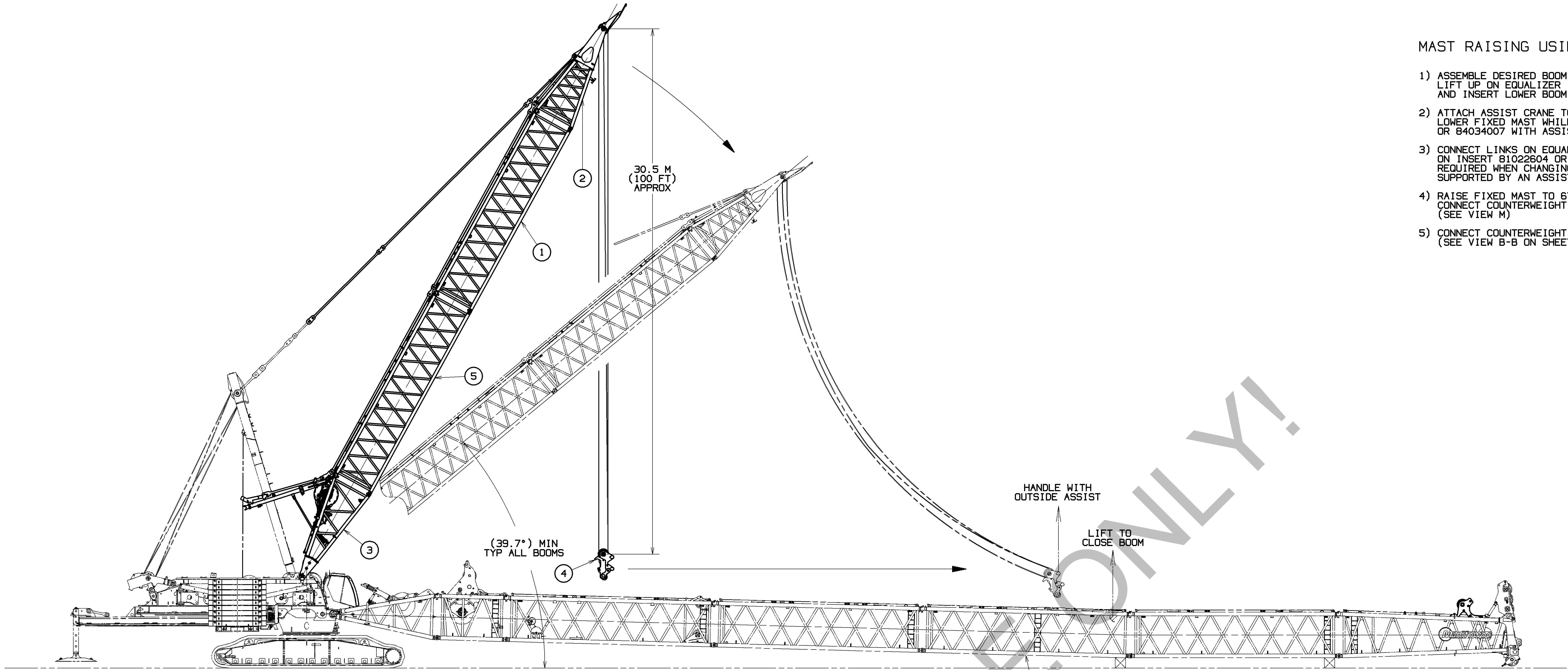
DO NOT SCALE THIS DRAWING

TOLERANCE UNLESS OTHERWISE SPECIFIED		MATERIAL		DATE	
DECIMAL PLACES	FRACTIONS	DESCRIPTION	QUANTITY	DATE	BY
(1) PLACE 0.00	1/16	81021996	1	12-19-16	B
(2) PLACE 0.00	1/8	81022604	1		
(3) PLACE 0.000	1/32	81022864	1		
ANGLES	1°	81034977	1		
		84021919	1		
		84038306	1		
		84038307	1		
		84040393	1		

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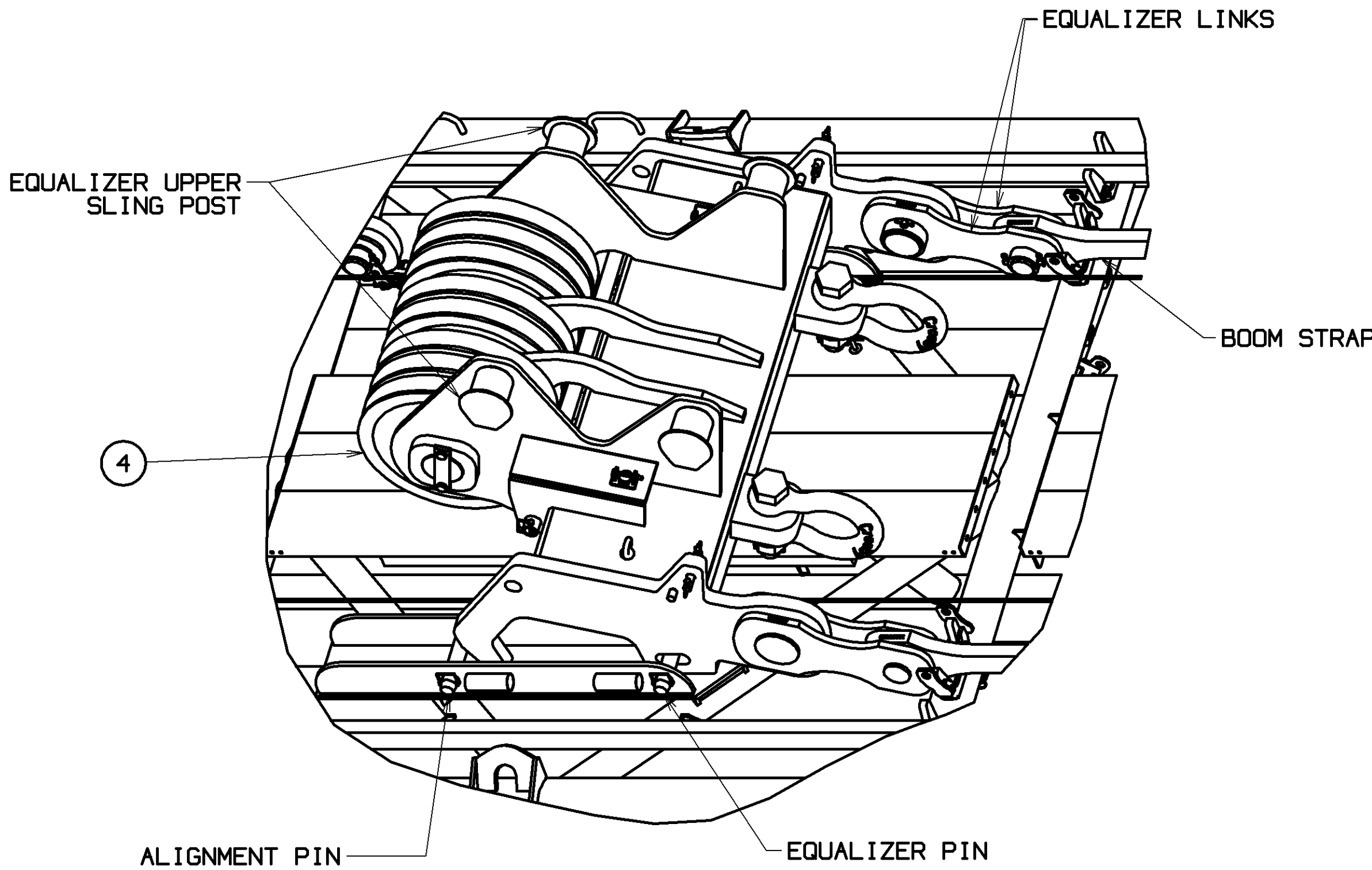
MAST RAISING USING BOOM AS HOLDBACK

- 1) ASSEMBLE DESIRED BOOM LENGTH, USING OUTSIDE ASSIST TO CLOSE BOOM, LIFT UP ON EQUALIZER INSERT (81022604 OR 84034007) AT SLING POSTS AND INSERT LOWER BOOM CONNECTOR PINS. (SEE VIEW L)
- 2) ATTACH ASSIST CRANE TO EQUALIZER (ITEM 4) UPPER SLING POSTS, LOWER FIXED MAST WHILE PULLING EQUALIZER TOWARDS INSERT 81022604 OR 84034007 WITH ASSIST CRANE. (SEE VIEW L)
- 3) CONNECT LINKS ON EQUALIZER TO BOOM STRAPS AND LOWER ONTO RAILS ON INSERT 81022604 OR 84034007. EQUALIZER PINS (SEE VIEW N) ARE REQUIRED WHEN CHANGING BOOM LENGTHS WHERE THE EQUALIZER IS NOT SUPPORTED BY AN ASSIST CRANE OR CONNECTED TO THE BOOM STRAPS.
- 4) RAISE FIXED MAST TO 67° (NORMAL OPERATING ANGLE IS 68°) TO CONNECT COUNTERWEIGHT STRAPS TO LINKS ON VPC-MAX BEAM. (SEE VIEW M)
- 5) CONNECT COUNTERWEIGHT STRAPS (R16) TO LINKS (R39) ON VPC-MAX BEAM. (SEE VIEW B-B ON SHEET 1)

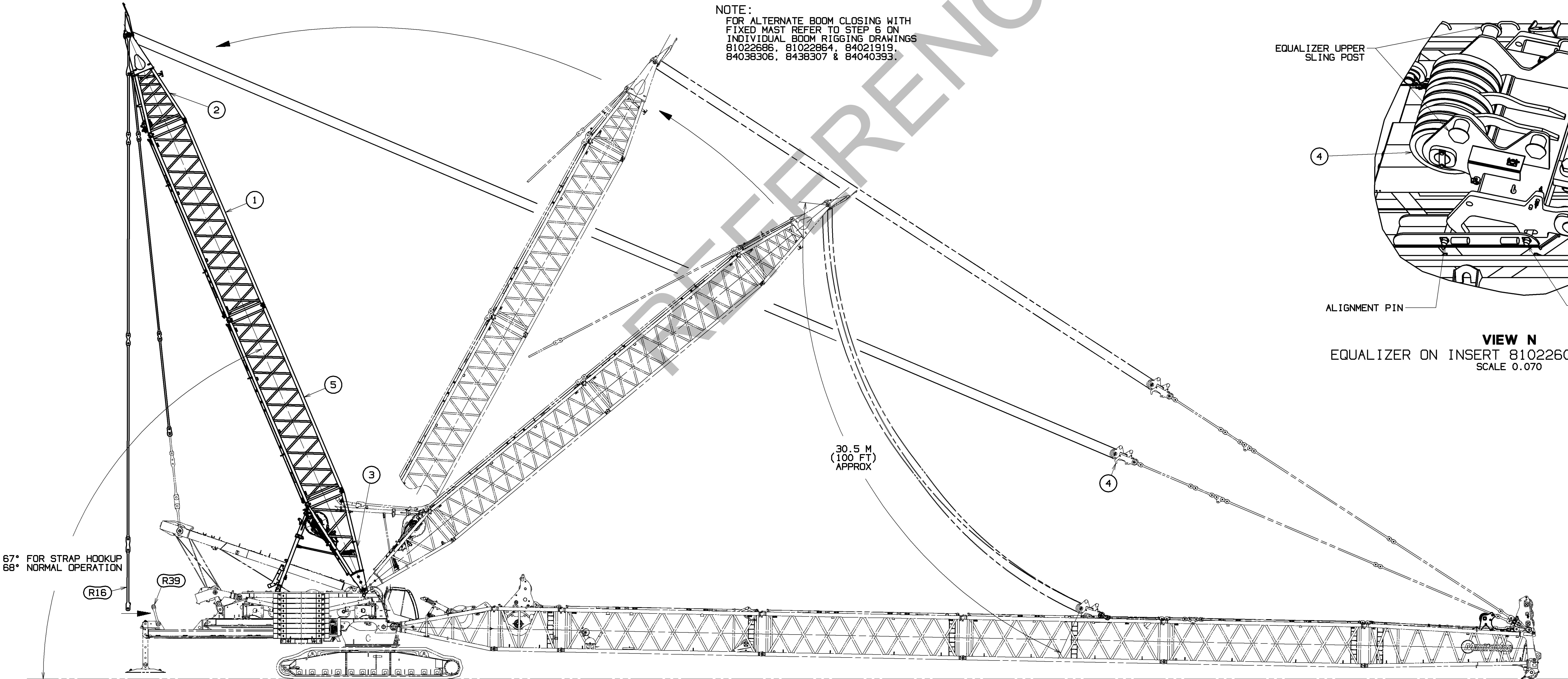


VIEW L
BOOM CLOSING WITH OUTSIDE ASSIST

NOTE:
FOR ALTERNATE BOOM CLOSING WITH
FIXED MAST REFER TO STEP 6 ON
INDIVIDUAL BOOM RIGGING DRAWINGS
81022686, 81022664, 84021919,
84038306, 8438307 & 84040393.



VIEW N
EQUALIZER ON INSERT 81022604 OR 84034007
SCALE 0.070



VIEW M
EQUALIZER TO STRAPS ASSEMBLY