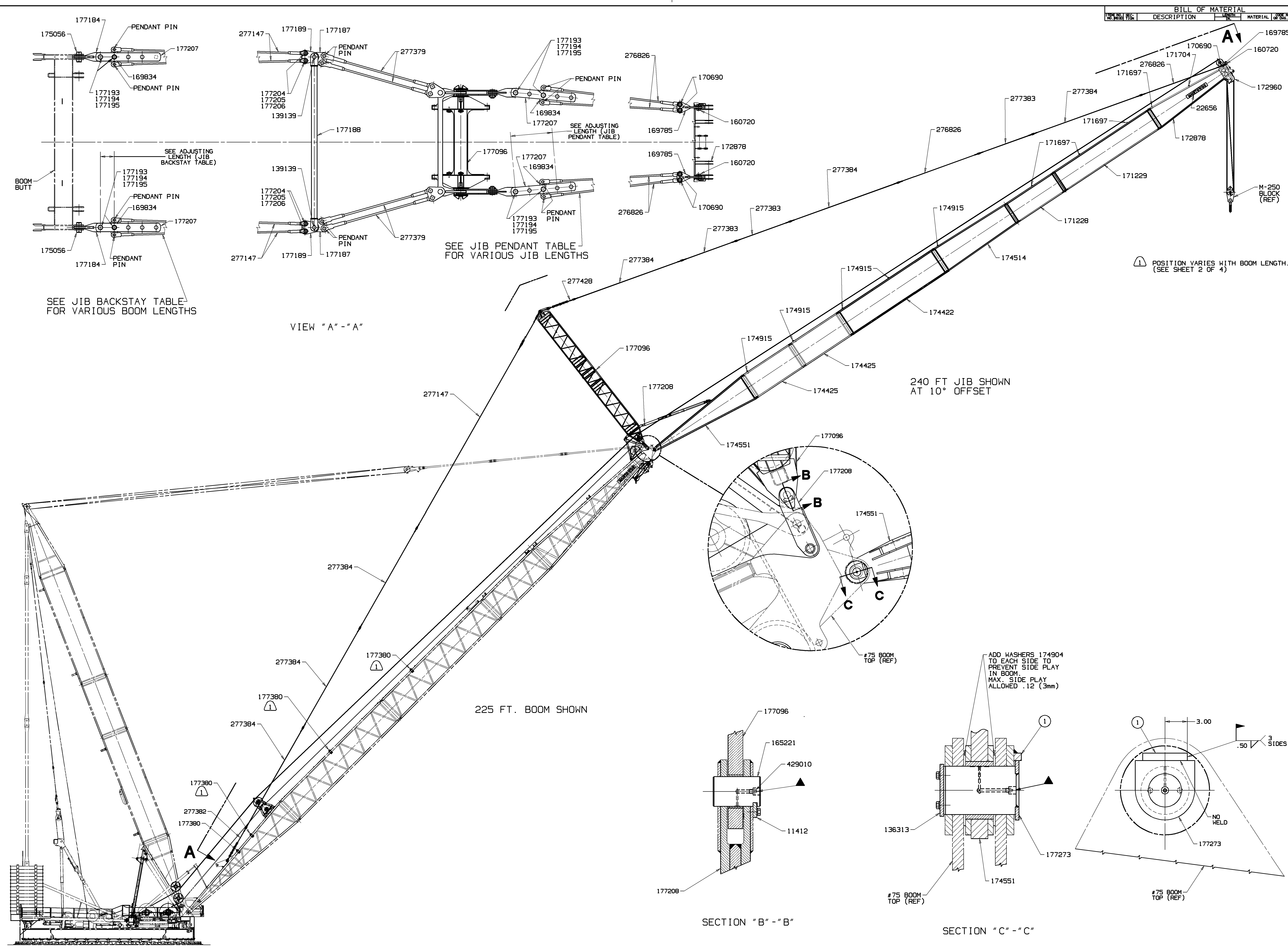


C



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

REVISIONS	
9-27-95	CRP HAS SHT 1 OF 4
11-20-95	CRP VIEWS UPDATED

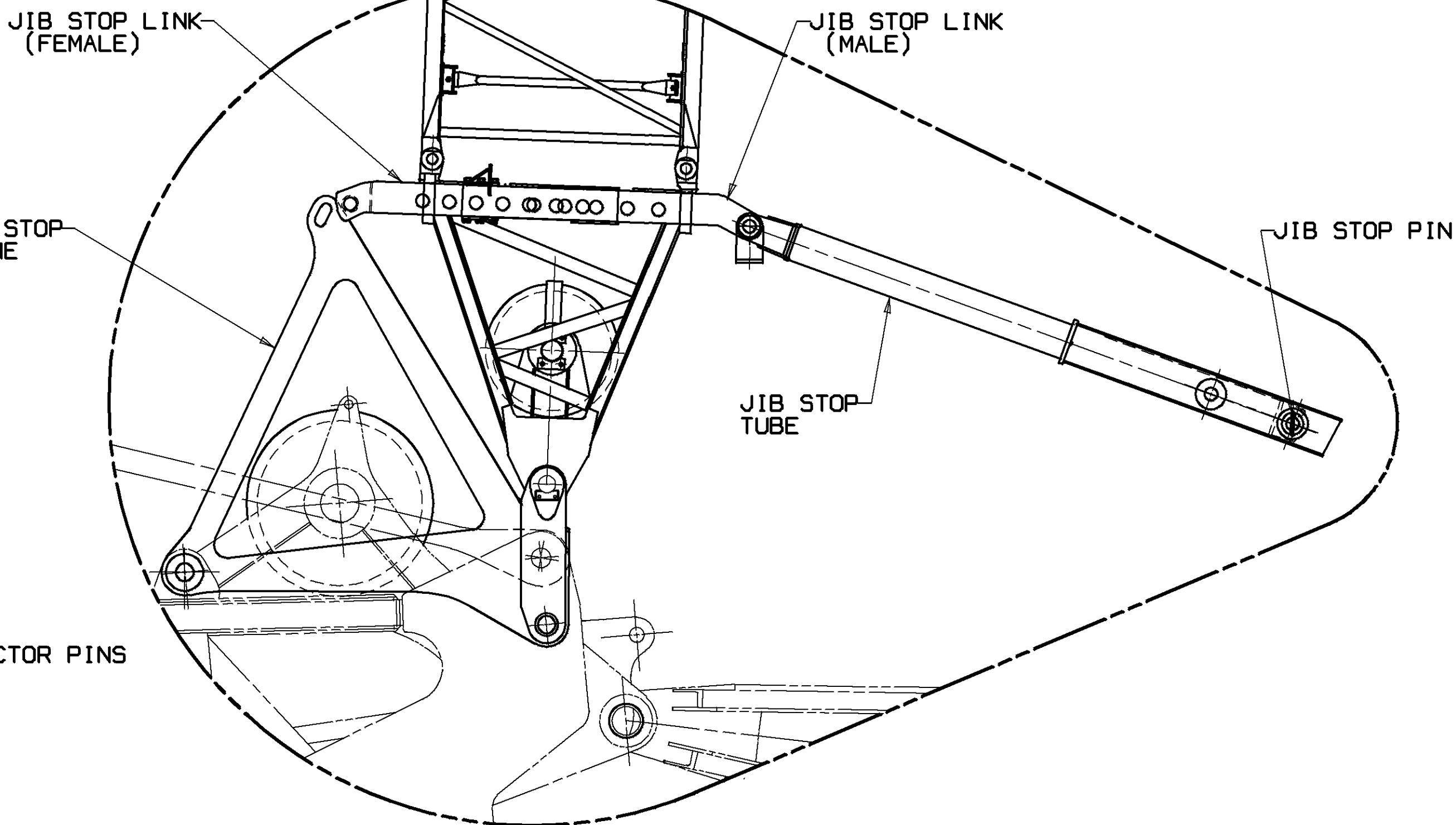
DATE	BY	CHK	APP	REV
9-5-95				

PART NO.		JIB ASSEMBLY	
177023	SHT 1 OF 4	177023	SHT 1 OF 4

TOLERANCE UNLESS OTHERWISE SPECIFIED	
DECIMAL PLACES	FABRICATION
(1) PLACE 0.0	± 10 FEET ± 10 FEET
(2) PLACE 0.00	± 1.00 ± 1.00
(3) PLACE 0.000	± 0.015 ± 0.015
ANGLES	± 1.00 ± 1.00

MANTOWOC CRANES, INC.	
CRP	Mantowoc, Wisconsin
CRP	MODEL M-1200R
APP	RJW

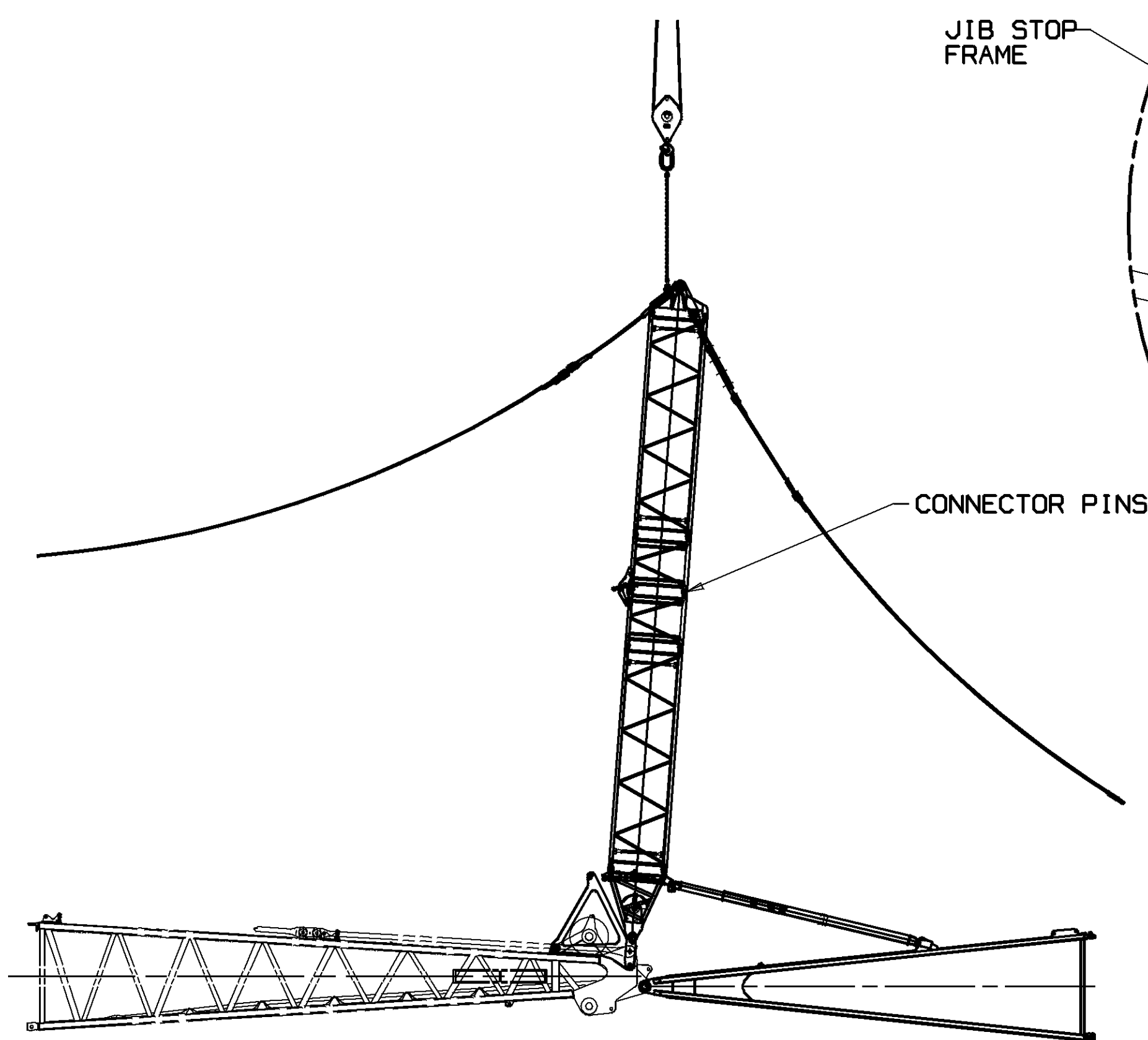
C



STEP 7

WORKING ADJUSTMENT OF JIB STOP

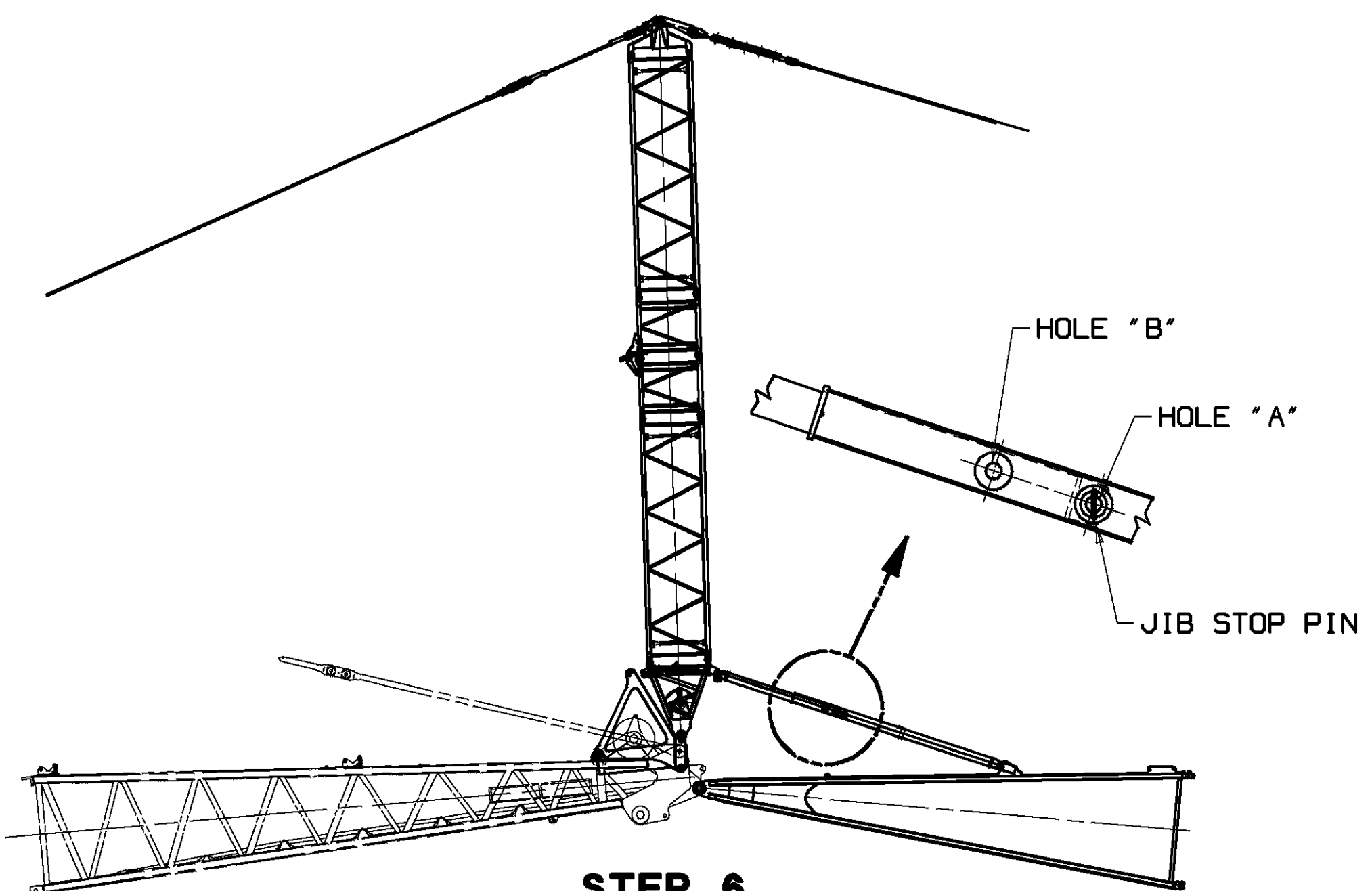
1. REMOVE PIN FROM JIB STOP LINKS.
2. ADJUST JIB STOP LINKS TIGHT AGAINST JIB STOP FRAME AND JIB STOP TUBE TIGHT AGAINST JIB STOP PIN.
3. PIN JIB STOP LINKS TOGETHER IN HOLE WITH MIN. AMOUNT OF PLAY. (BOTH SIDES MUST BE SET IDENTICAL)



STEP 5

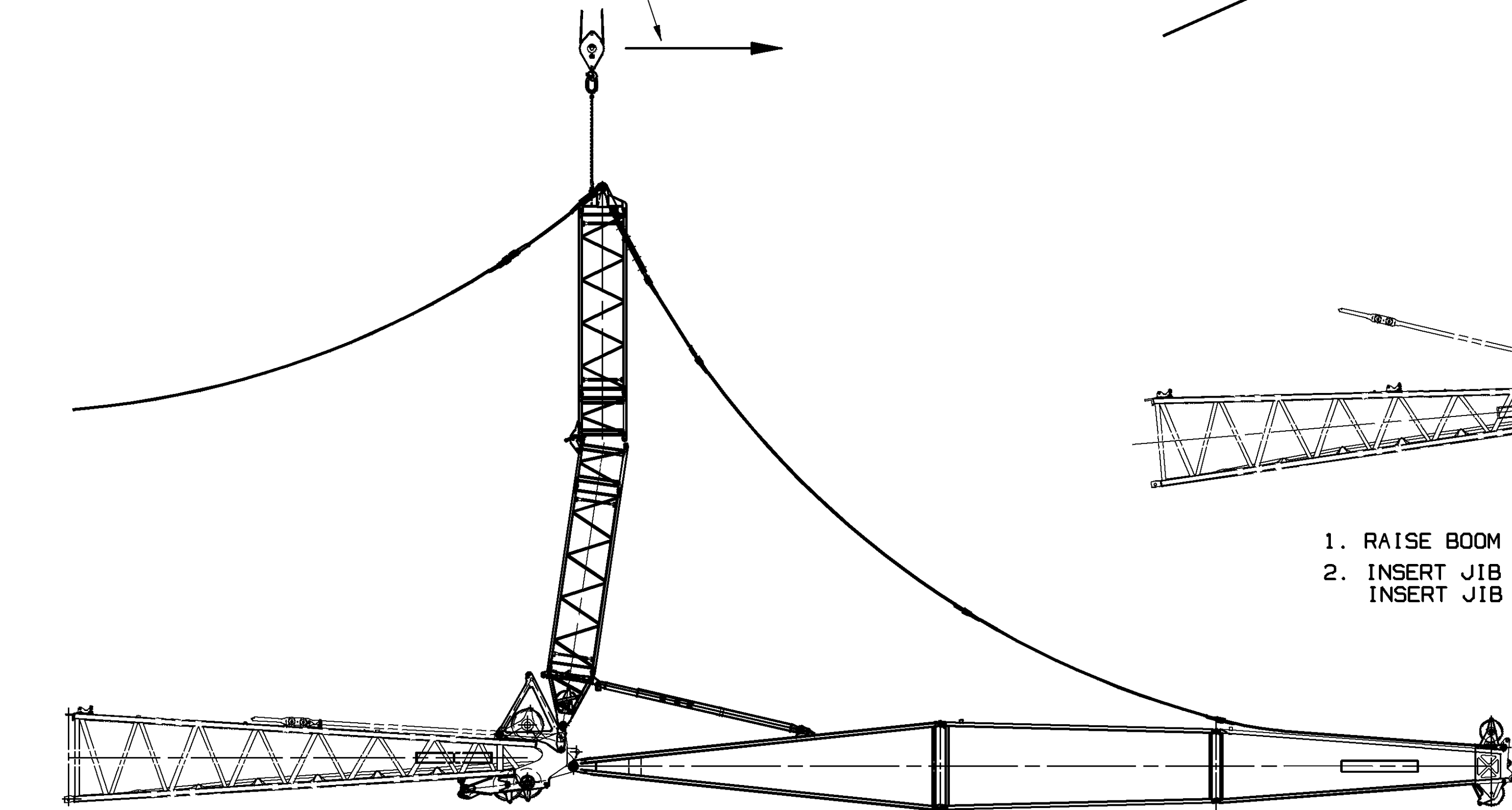
1. INSTALL CONNECTOR PINS.
2. REMOVE ASSIST CRANE.

NOTE:
FOR LONG BOOMS - SHORT JIB COMBINATIONS, STRUT MAY TRY TO CLOSE PAST VERTICAL. ASSIST CRANE MAY NEED TO MOVE STRUT TOP FORWARD AS IT IS RAISED TO PREVENT GOING OVER CENTER WHEN IT CLOSSES.



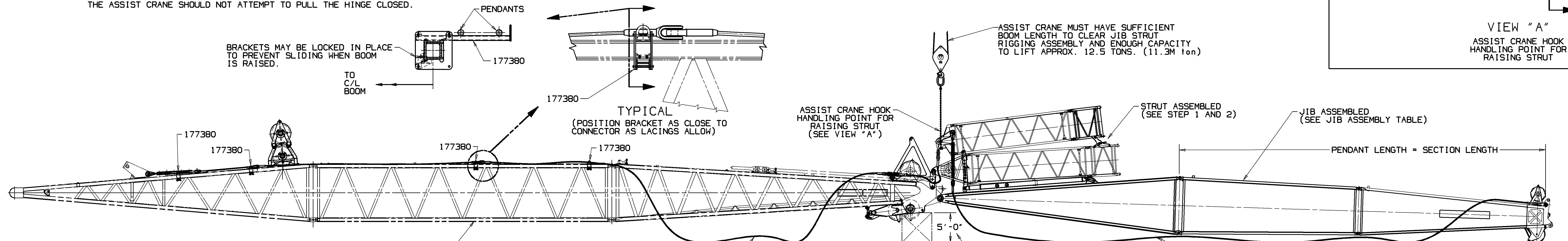
STEP 6

1. RAISE BOOM UNTIL JIB IS CLEAR OF GROUND.
2. INSERT JIB STOP PIN IN HOLE 'A' FOR 10" OFFSET OR INSERT JIB STOP PIN IN HOLE 'B' FOR 20" OFFSET



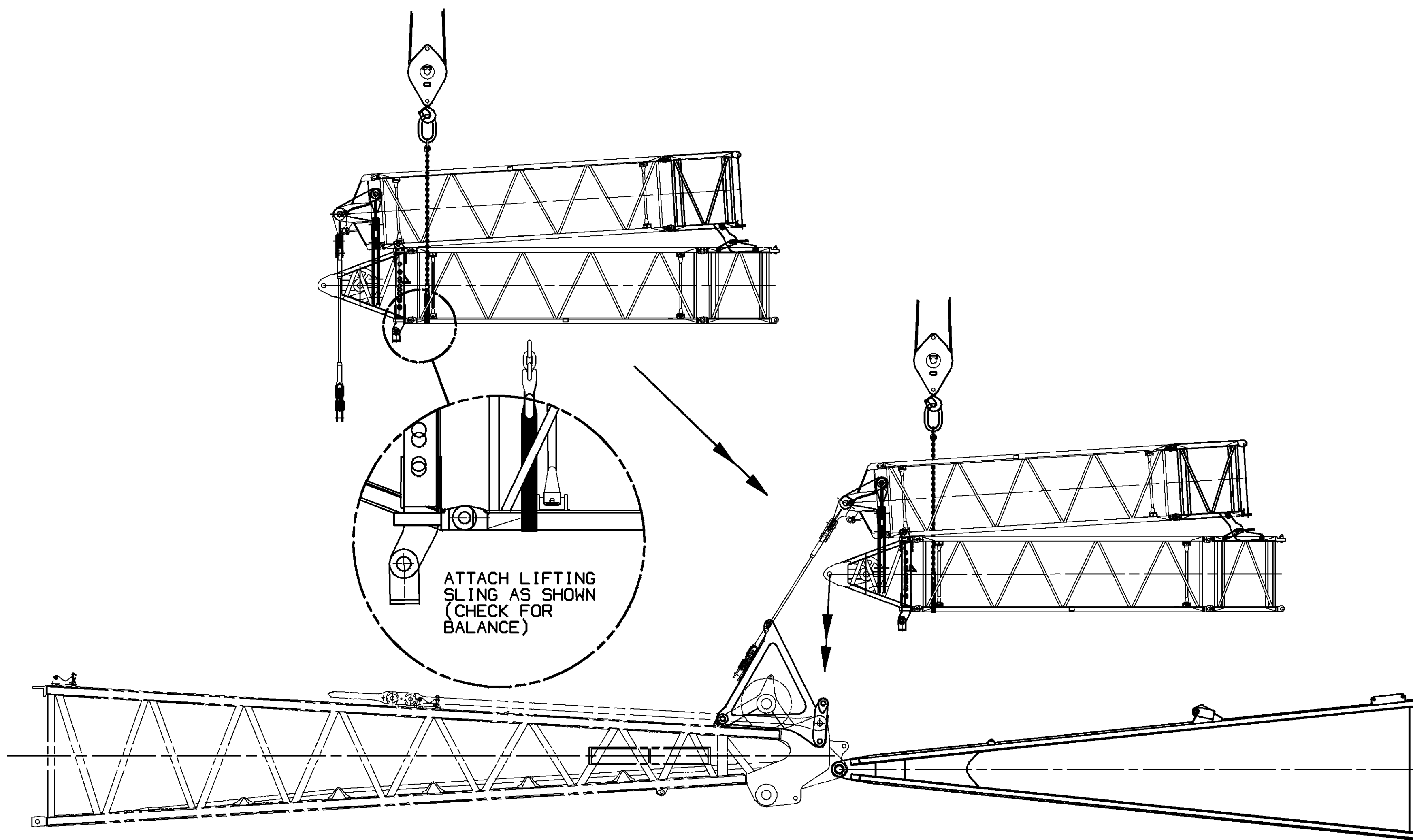
STEP 4

USE AN ASSIST CRANE TO SLOWLY RAISE THE STRUT IN A VERTICAL DIRECTION (CHECKING THAT ALL PENDANTS ARE FREE OF STRUCTURE) UNTIL THE WEIGHT OF THE STRUT CAREFULLY SNAPS THE HINGE CLOSED. THE ASSIST CRANE SHOULD NOT ATTEMPT TO PULL THE HINGE CLOSED.



STEP 3

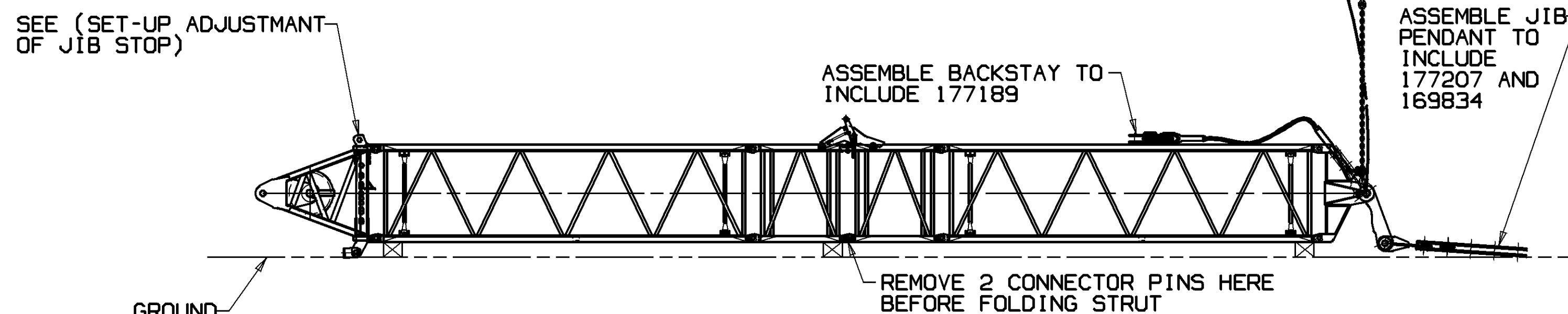
VIEW PRIOR TO RAISING JIB STRUT
(BASIC 150 FT BOOM AND BASIC
100 FT JIB SHOWN)



STEP 2

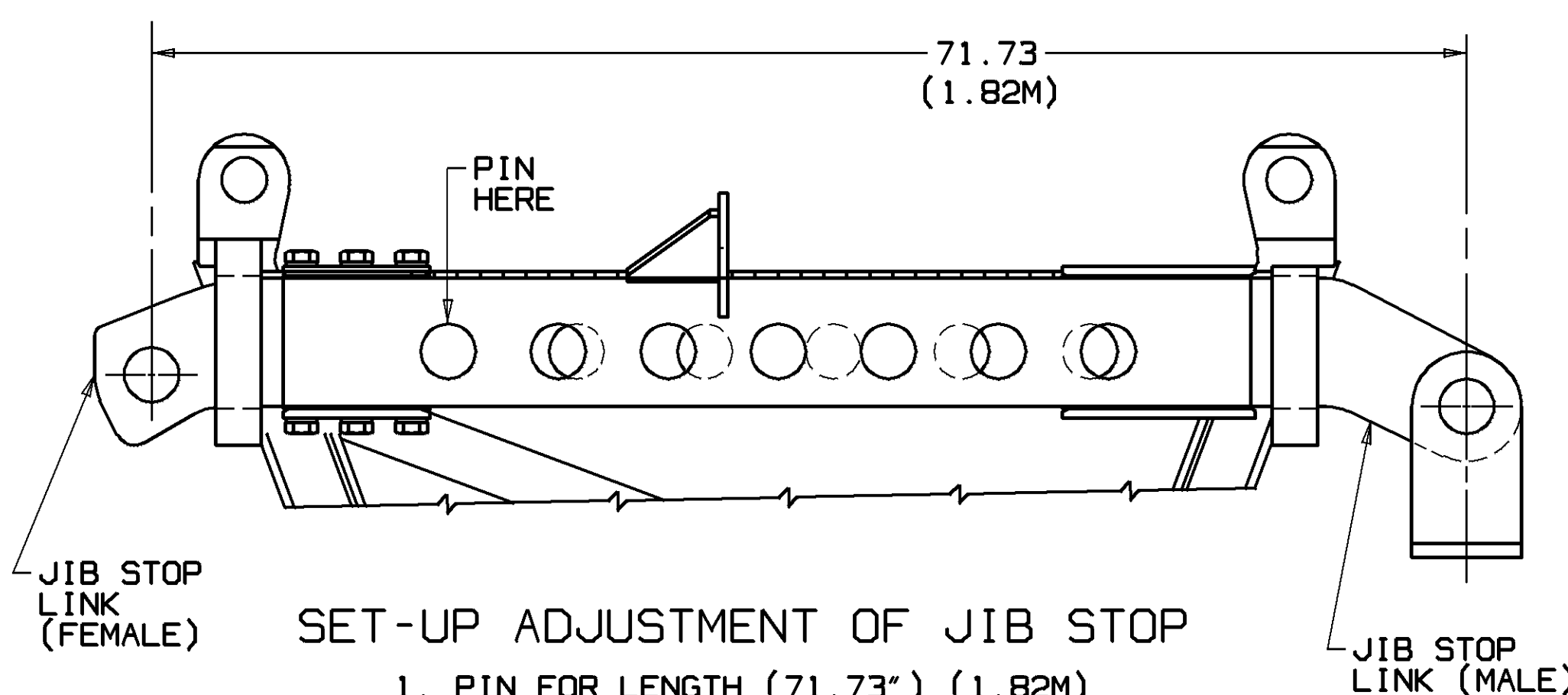
ATTACHING FOLDED STRUT ASSEMBLY TO BOOM

- 1 - LOWER STRUT ASSEMBLY AS SHOWN AND PIN TO TOP.
- 2 - INSTALL JIB STOP TUBES.
- 3 - ATTACH REMAINING JIB BACKSTAY AND JIB PENDANTS.



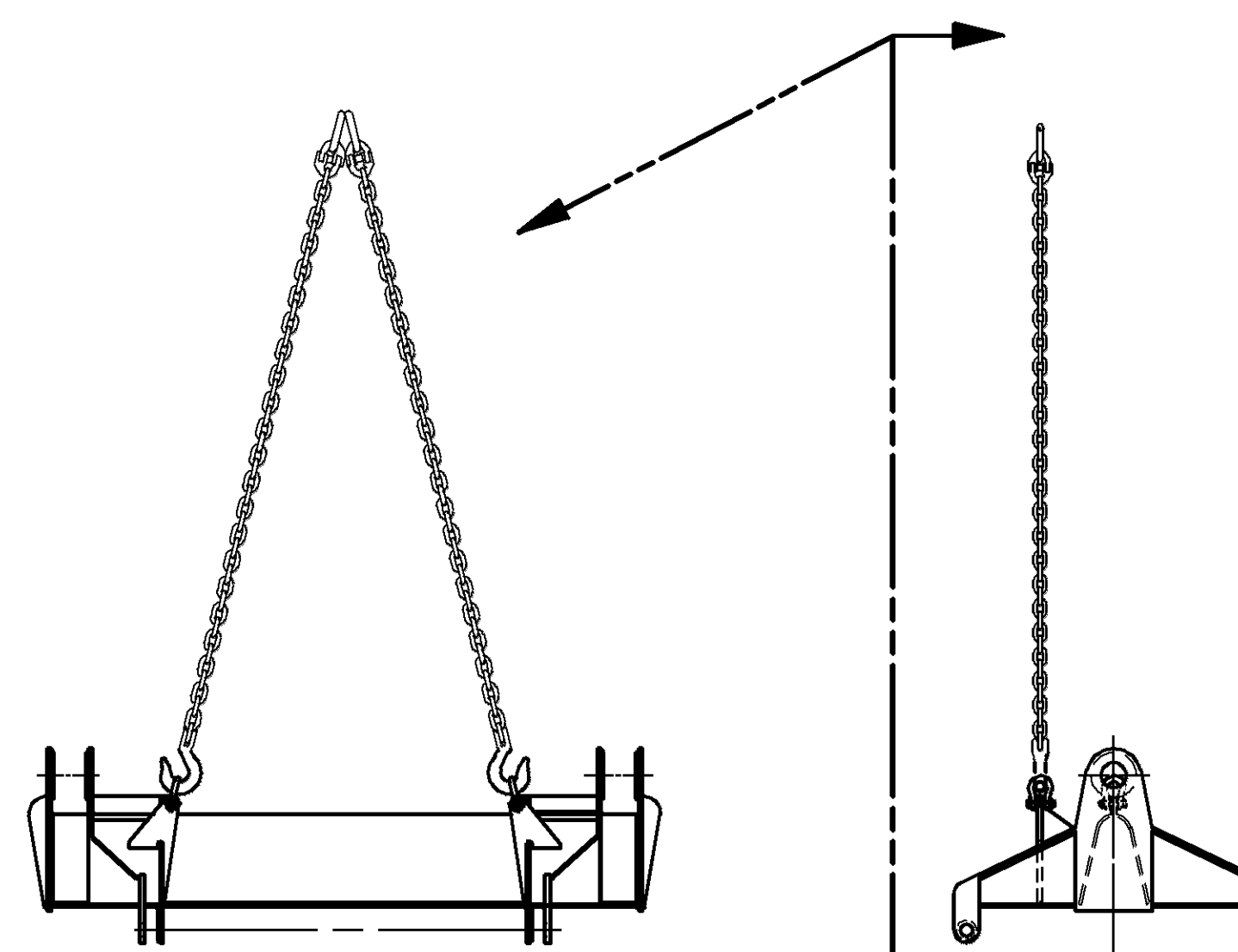
STEP 1

ASSEMBLE AND FOLD STRUT



SET-UP ADJUSTMENT OF JIB STOP

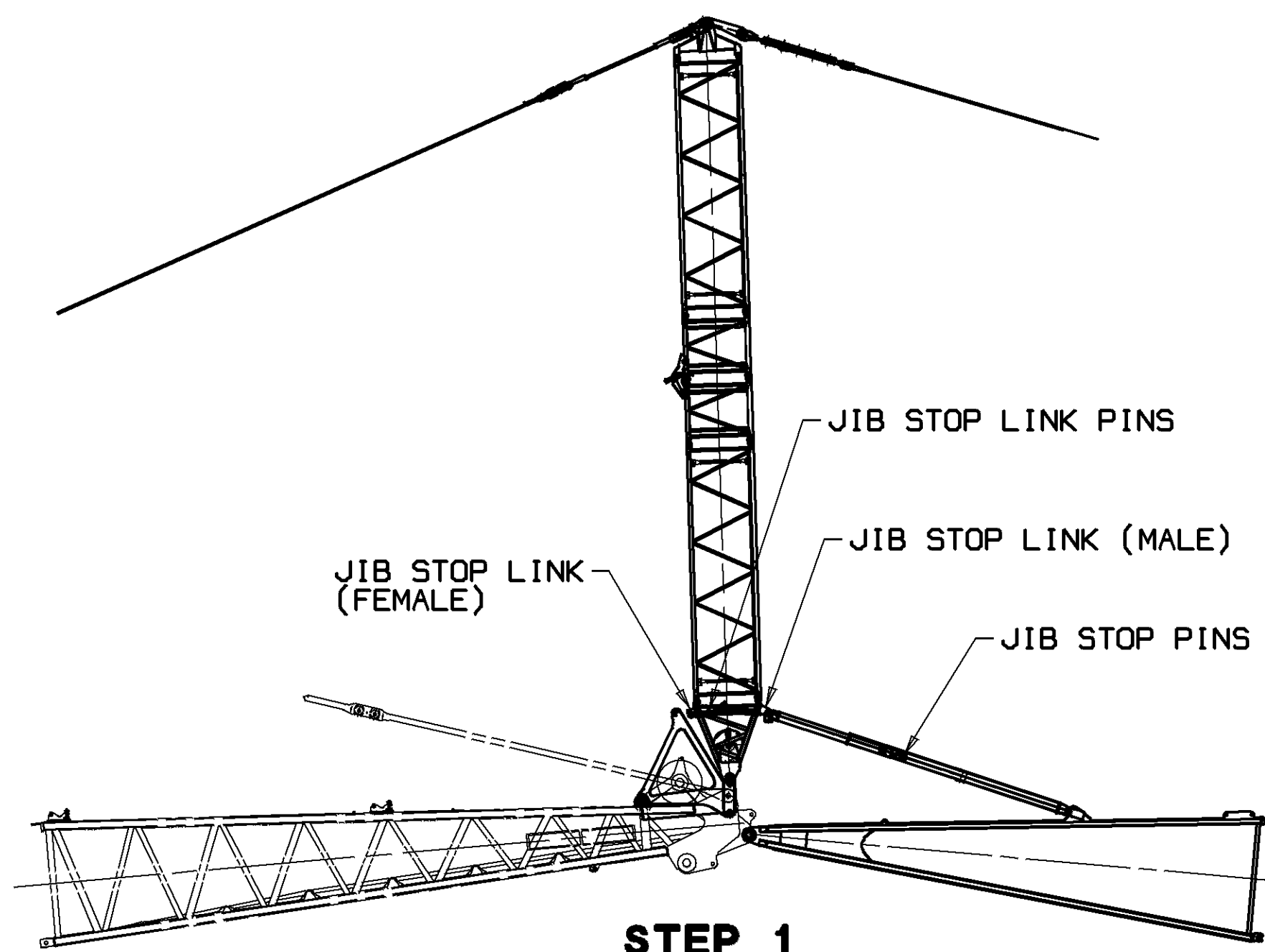
1. PIN FOR LENGTH (71.73") (1.82M)



VIEW "A"

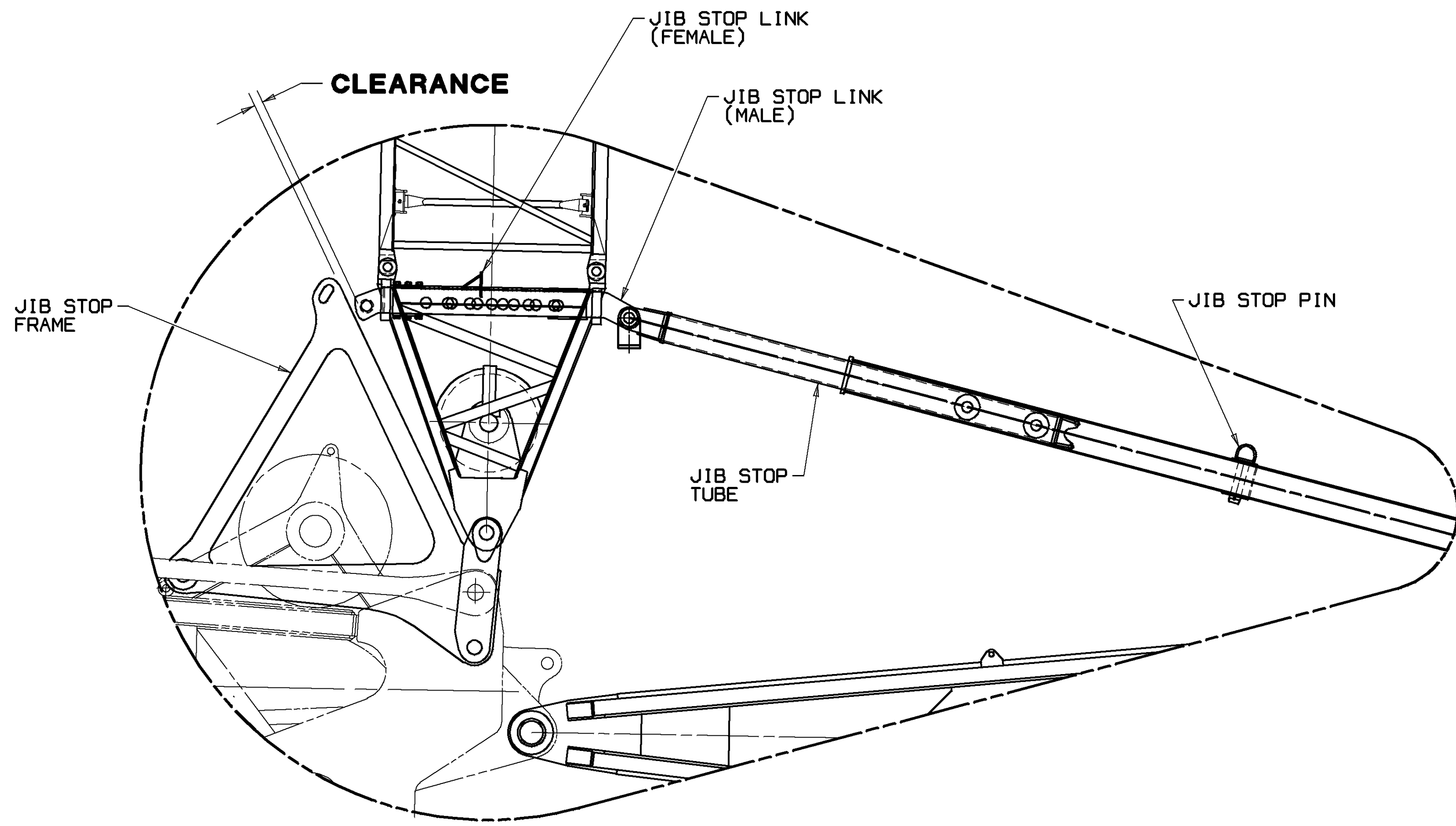
ASSIST CRANE HOOK
HANDLING POINT FOR
RAISING STRUT

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DECIMAL PLACES	± 0.005	1/16" > 1/2"	± 0.005	1/16" > 1/2"	± 0.005	1/16" > 1/2"	± 0.005	1/16" > 1/2"	± 0.005	1/16" > 1/2"	1/16" > 1/2"
(1) PLACE	0.00	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005
(2) PLACE	0.00	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005	± 0.005
(3) PLACE	0.000	± 0.0005	± 0.0005	± 0.0005	± 0.0005	± 0.0005	± 0.0005	± 0.0005	± 0.0005	± 0.0005	± 0.0005
ANGLES	± 1°	± 1°	± 1°	± 1°	± 1°	± 1°	± 1°	± 1°	± 1°	± 1°	± 1°



STEP 1

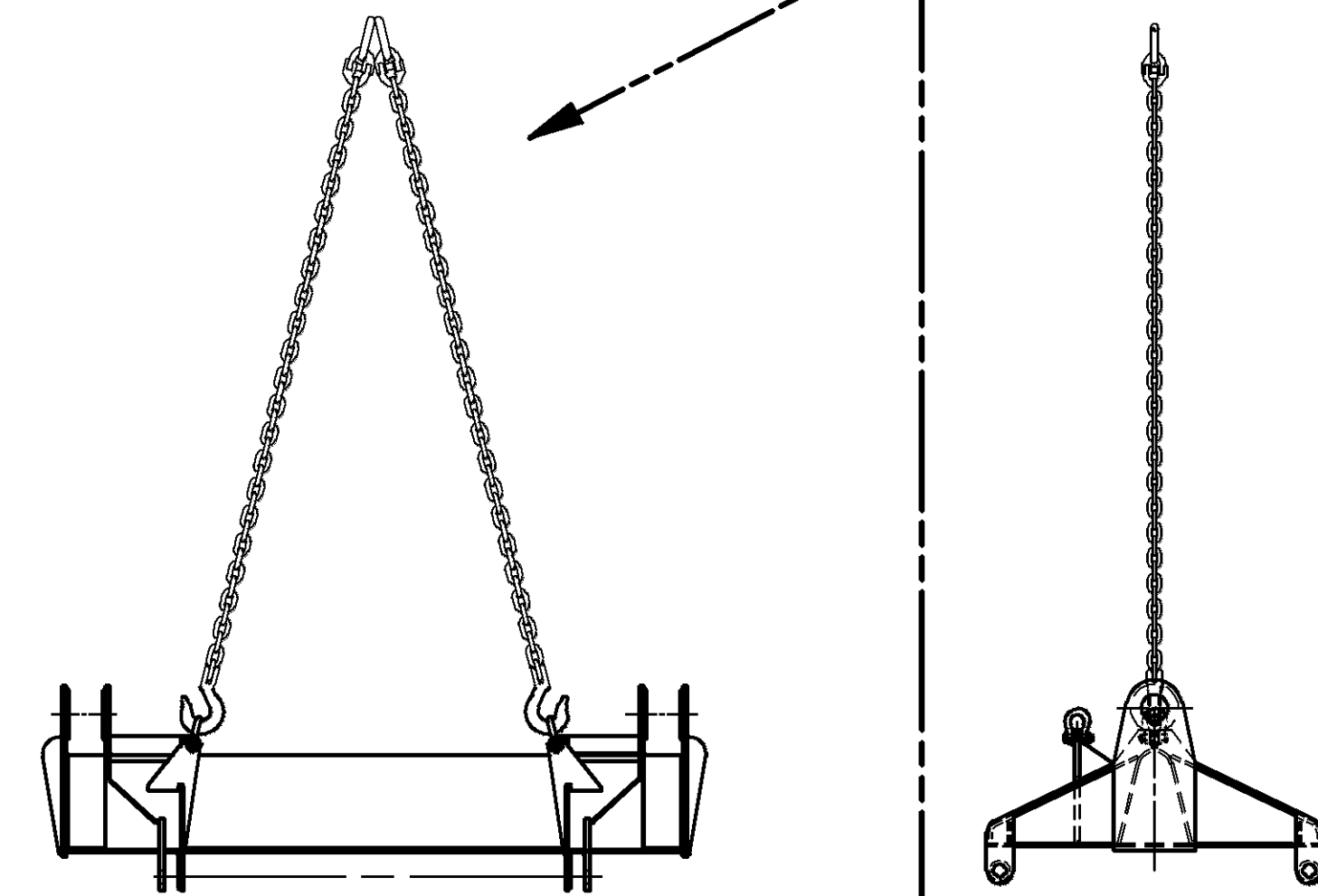
1. LOWER BOOM UNTIL JIB IS JUST CLEAR OF GROUND.
2. REMOVE JIB STOP PINS. (CAUTION: FAILURE TO REMOVE JIB STOP PINS WILL CAUSE DAMAGE)
3. REMOVE PINS FROM JIB STOP LINKS.
4. LOWER BOOM AND JIB TO BLOCKING ON GROUND. BOOM TOP BLOCKING 5 FT.0.00 (1.52 M) MINIMUM. SEE STEP 5.



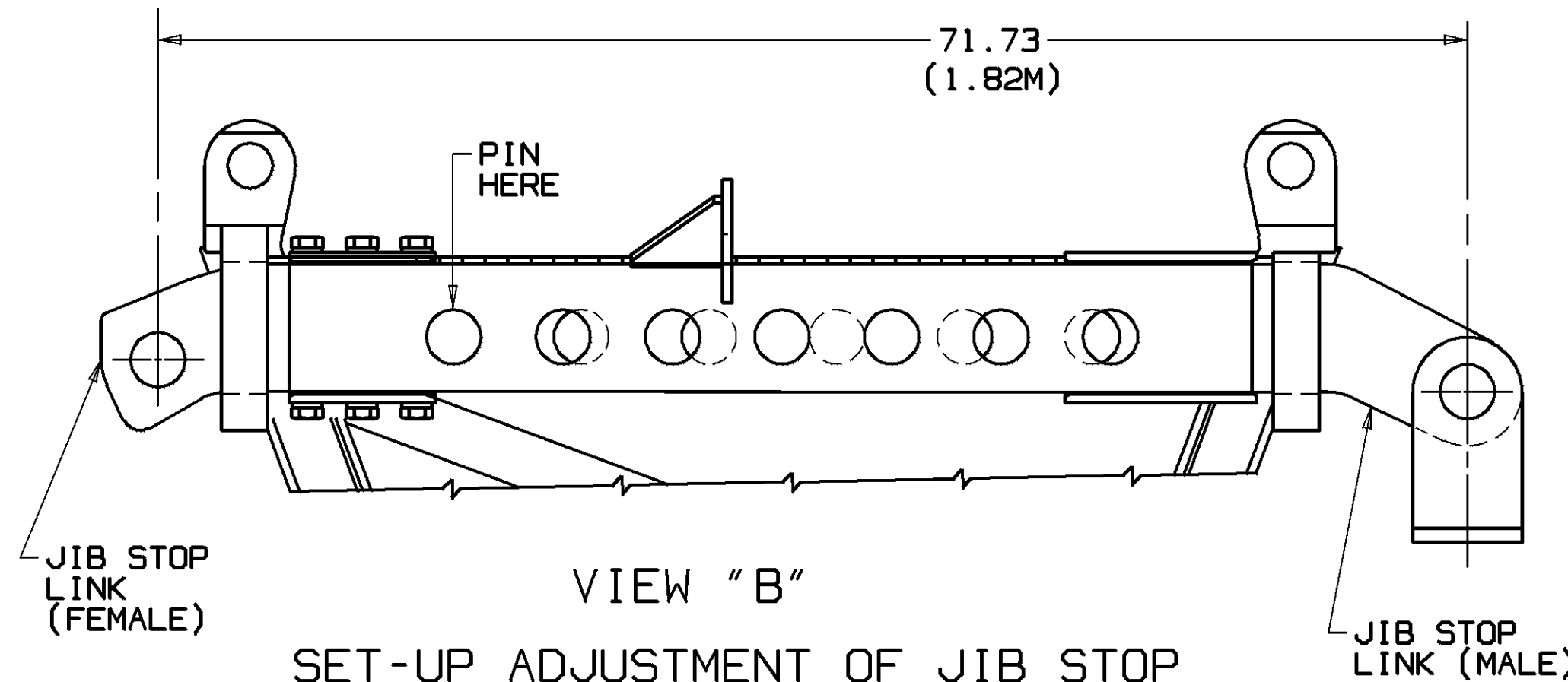
STEP 2

ADJUSTMENT OF JIB STOP PRIOR STRUT FOLDING

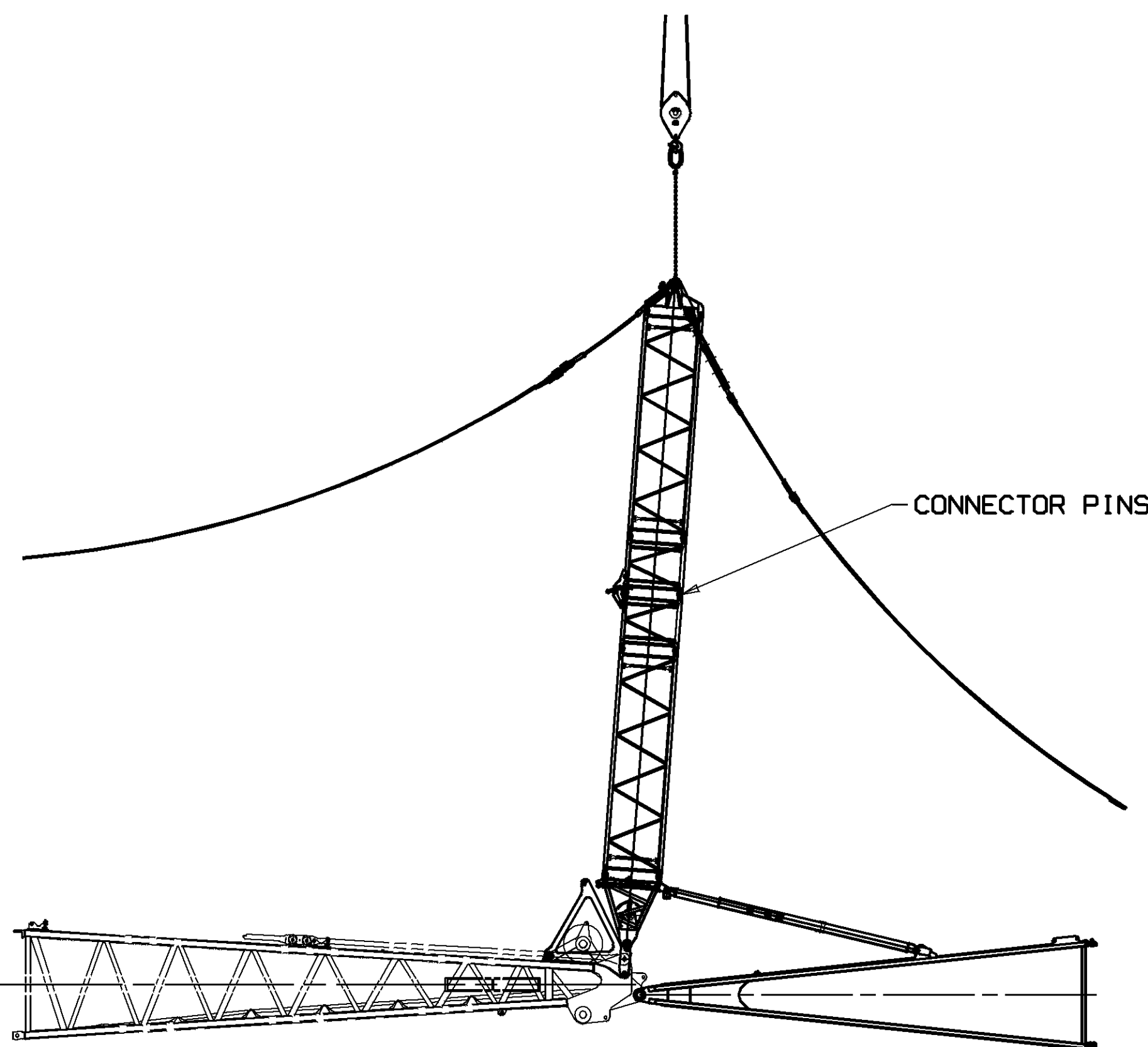
1. PIN LINKS IN SETUP POSITION (SEE VIEW "B")
CAUTION: FAILURE TO DO THIS MAY CAUSE JIB STOP TUBES TO BOTTOM DURING STRUT LOWERING CAUSING DAMAGE TO STRUT BUTT.
2. CAUTION: CHECK FOR CLEARANCE. IF NO CLEARANCE EXISTS CONNECTOR PINS ARE IN TENSION. RELOCATE POSITION OF BACKSTAY PENDANTS/JIB PENDANTS TO CREATE CLEARANCE.



VIEW "A"
ASSIST CRANE HOOK
HANDLING POINT FOR
LOWERING STRUT

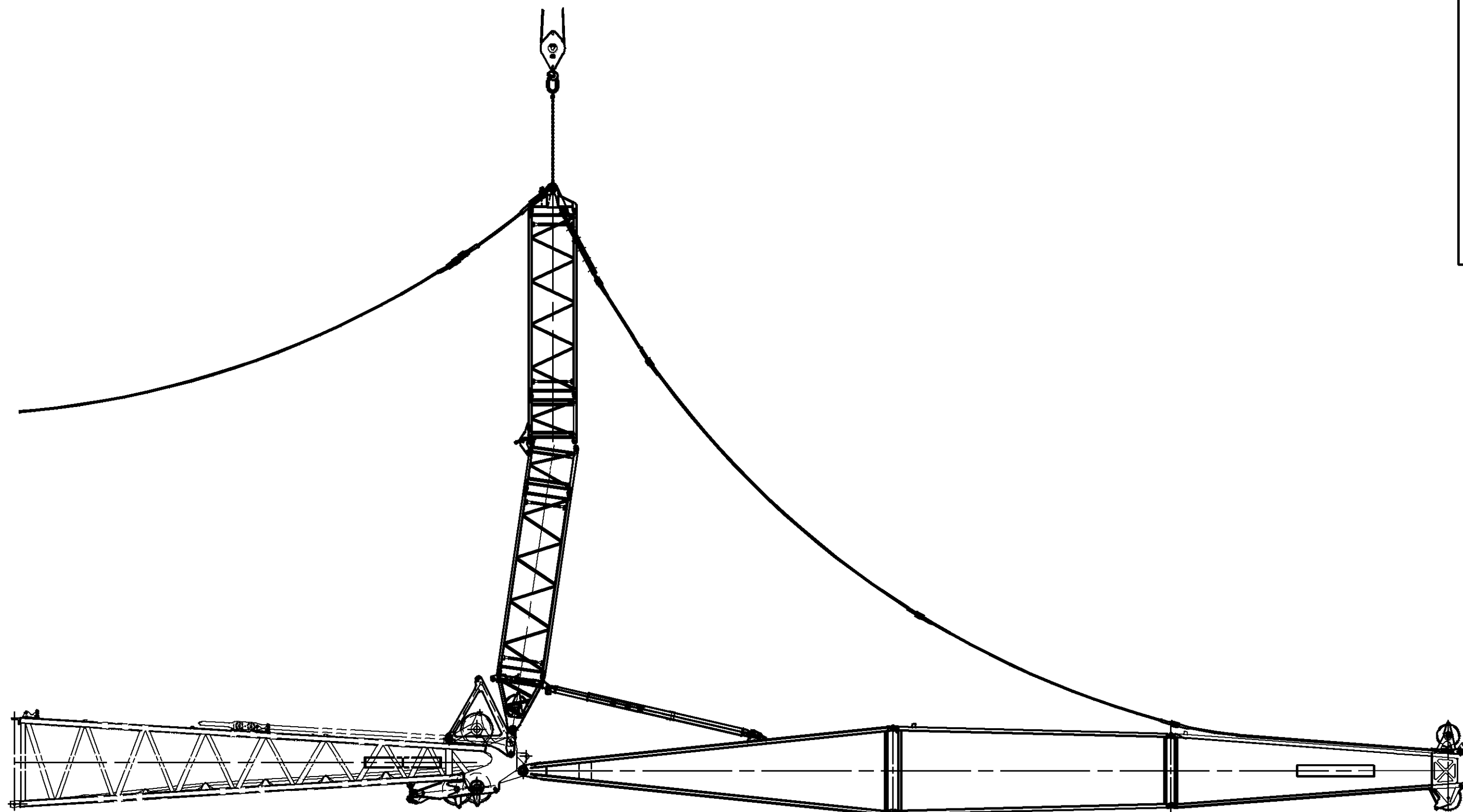


VIEW "B"
SET-UP ADJUSTMENT OF JIB STOP
1. PIN FOR LENGTH (71.73") (1.82M)



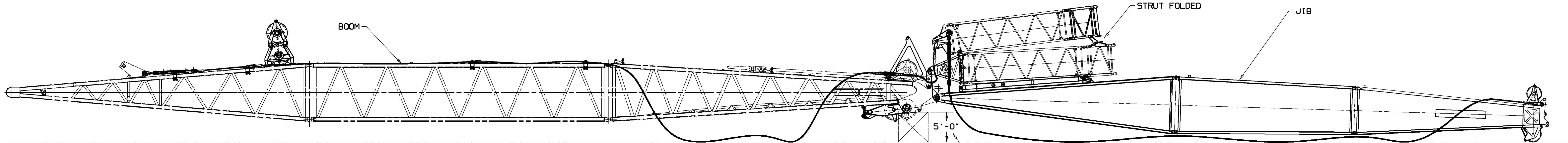
STEP 3

1. ATTACH ASSIST CRANE. (SEE HANDLING POINT FOR LOWERING STRUT VIEW "A" - USE ASSIST CRANE FOR SAFTY BUT DO NOT LIFT.)
2. WARNING: FAILURE TO CREATE CLEARANCE (STEP 2) MAY CAUSE INJURY WHEN REMOVING PINS.
3. REMOVE CONNECTOR PINS.



STEP 4

1. BY SLOWLY LIFTING ON THE HANDLING LINK UNTIL THE ASSIST CRANE HAS THE HEIGHT OF THE STRAPS AND STRUT ASSEMBLY WILL CAUSE THE HINGE TO SNAP OPEN.
2. LOWER STRUT ASSEMBLY.
3. GUIDE PENDANTS TO PREVENT DAMAGE.



STEP 5

VIEW SHOWING JIB STRUT LOWERED

SUPERSEDES 177023 OF 9-27-95

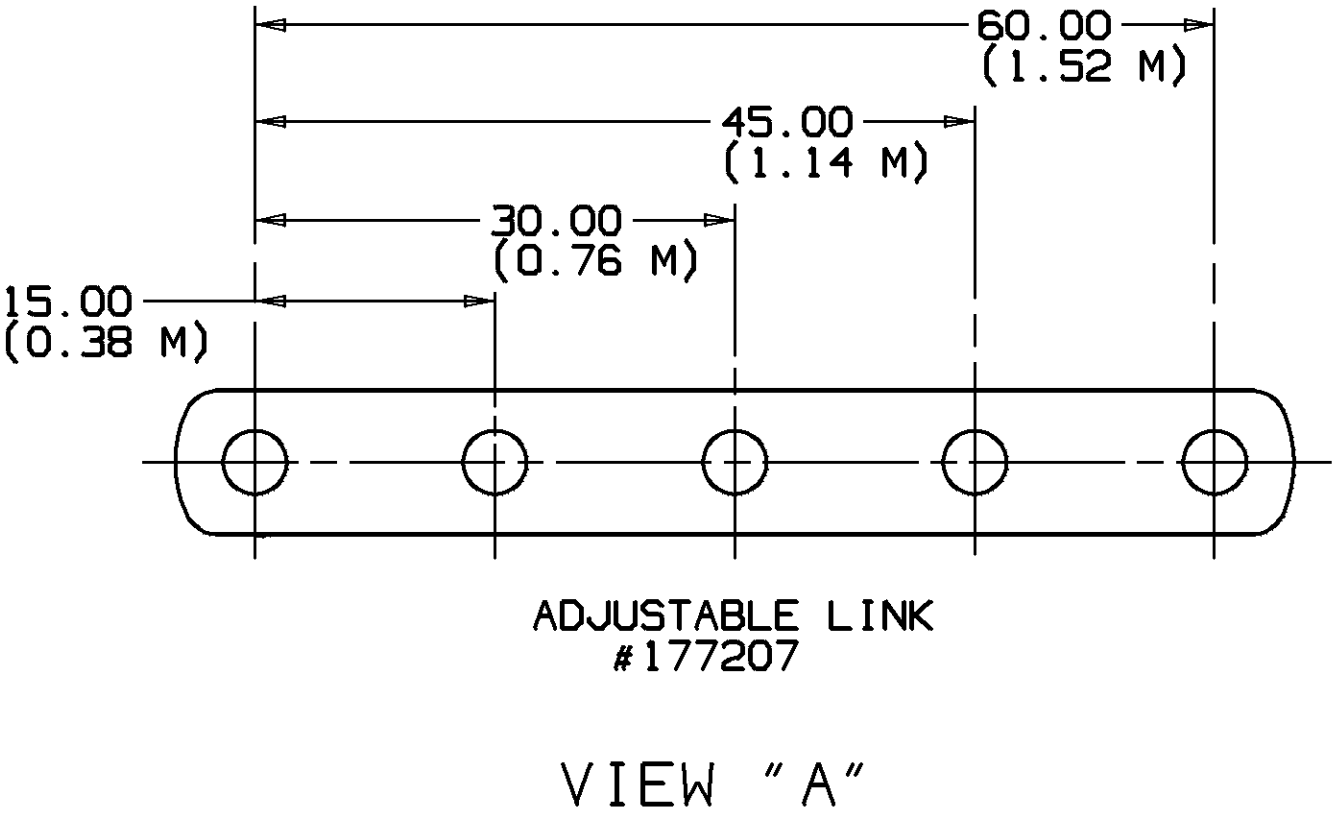
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DECIMAL PLACES	FABRICATION	MACHINING	WELDING	DECIMAL PLACES	FABRICATION	MACHINING	WELDING	DR: CRP	MODEL: M-1200R	JIB ASSEMBLY	# 49A/44
(1) PLACE 0.0	± 1.50	± 1.50	± 0.50	(1) PLACE 0.0	± 1.50	± 1.50	± 0.50	DR: CRP	MODEL: M-1200R	JIB ASSEMBLY	# 49A/44
(2) PLACE 0.00	± 0.00	± 0.00	± 0.15	(2) PLACE 0.00	± 0.00	± 0.00	± 0.15	APP: RJW	MODEL: M-1200R	JIB ASSEMBLY	# 49A/44
(3) PLACE 0.000	± 0.000	± 0.000	± 0.005	(3) PLACE 0.000	± 0.000	± 0.000	± 0.005			(STRUT LOWERING)	
ANGLES	± 1° 30'	± 1° 30'	± 0° 30'	ANGLES	± 1° 30'	± 1° 30'	± 0° 30'				

JIB ASSEMBLY										
DWG. NO.		174551	174425	174422	174514	171228	171229	172878	174915	171697
JIB LENGTH		#49A 40 FT 12.19 M BUTT	#49A 20 FT 6.10 M INSERT	#49A 40 FT 12.19 M INSERT	#49A-44 30 FT 9.14 M TRANSITION INSERT	#44 20 FT 6.10 M INSERT	#44 40 FT 12.19 M INSERT	#44 30 FT 9.14 M TOP	WIRE ROPE TIMBER	WIRE ROPE TIMBER
FEET	METERS									
100 BASIC	30.5	1	0	0	1	0	0	1	1	1
120	36.6	1	0	0	1	1	0	1	1	2
140	42.7	1	2	0	1	0	0	1	3	1
160	48.8	1	2	0	1	1	0	1	3	2
180	54.9	1	2	1	1	0	0	1	5	1
200	61.0	1	2	1	1	1	0	1	5	2
220	67.1	1	2	1	1	0	1	1	5	3
240	73.2	1	2	1	1	1	1	1	5	4

- INSERT NOTES:
- THE MAXIMUM NUMBER OF 20 FT. (6.10 M) #49A INSERTS IS 2 AND MUST BE LOCATED NEXT TO BUTT.
 - ONE 40 FT. (12.19 M) #49A INSERT MAY BE SUBSTITUTED FOR TWO 20 FT. (6.10 M) #49A INSERTS.

JIB PENDANT ASSEMBLY									
DWG. NO.			277428 DWG 78145	277382 DWG 78145	277383 DWG 78145	276826 DWG 78145	277384 DWG 78145	ADJUSTABLE LINK	
JIB LENGTH		JIB OFFSET	PENDANT 5 FT 0.50 1.54 M	PENDANT 10 FT 1.00 6.13 M	PENDANT 20 FT 1.50 6.13 M	PENDANT 30 FT 9.14 M	PENDANT 40 FT 3.00 12.27 M	177207	LENGTH 3
FEET	METERS								
100 BASIC	30.5	10°	4	4	0	8	4	4	15.00 (0.38 M)
		20°	0	0	4	8	4	4	60.00 (1.52 M)
120	36.6	10°	0	4	4	8	4	4	45.00 (1.14 M)
		20°	0	0	8	8	4	4	30.00 (0.76 M)
140	42.7	10°	0	4	8	8	4	4	30.00 (0.76 M)
		20°	0	0	12	8	4	4	15.00 (0.38 M)
160	48.8	10°	0	4	12	8	4	4	15.00 (0.38 M)
		20°	4	4	12	8	4	4	60.00 (1.52 M)
180	54.9	10°	4	0	8	8	8	4	60.00 (1.52 M)
		20°	4	4	8	8	8	4	45.00 (1.14 M)
200	61.0	10°	4	0	12	8	8	4	45.00 (1.14 M)
		20°	4	4	12	8	8	4	30.00 (0.76 M)
220	67.1	10°	4	0	8	8	12	4	30.00 (0.76 M)
		20°	4	4	8	8	12	4	30.00 (0.76 M)
240	73.2	10°	4	0	12	8	12	4	30.00 (0.76 M)
		20°	4	4	12	8	12	4	15.00 (0.38 M)

- PENDANT NOTES:
- PENDANT LENGHTS AND LOCATIONS ARE SET TO MATCH INSERTS.
 - FOUR 40 FT 3.00 PENDANTS MAY REPLACE EIGHT 20 FT 1.50 PENDANTS (REF.INSERT NOTE 2)



BILL OF MATERIAL							ASSEMBLIES USED ON	
ITEM NO.	SEC. NO.	DESCRIPTION	LENGTH IN.	MATERIAL	CODE NO. OR DWG. NO.			
BASIC PARTS								
1	2	BAR 1.00 X 1.00	6.00	CF 1018			REVISIONS	9-27-95 CRP WAS SHT 3 OF 3 DELTA 3 ADDED A) DELETED 10-24-95 CRP B) 325 FT BOOM ADDED 11-20-95 CRP C) ADDED 5-1-97 ACK D) 350 FT BOOM ADDED
	2	KEEPER PLATE			11412			
	2	BOOM SIGN			22656			
	2	END PLATE			136313			
	2	PIN			139139			
	2	PIN			160720			
	2	PIN			165221			
	2	PENDANT LINK			169785			
	4	PENDANT LINK			169834			
	4	PIN			170690			
	1	TIMBER (WIRE ROPE)			171704		A	
	1	BOOM POINT SHAFT ASSEM.			172960			
	8	SPACER			174904			
	2	PIN			175056			
	1	JIB STRUT ASSEMBLY			177096			
	1	WIRE ROPE GUIDE ASS'Y			177141			
	2	PENDANT LINK			177184			
	2	PENDANT LINK			177187			
	1	SPREADER BEAM			177188			
	4	PENDANT LINK			177189			
	8	PIN			177193		C	
	8	COLLAR			177194			
	8	PIN			177195			
	4	PIN			177204			
	4	COLLAR			177205			
	4	PIN			177206			
	1	JIB STOP ASSEMBLY			177208			
	2	PIN			177273			
	8	BRACKET ASSEMBLY			177380			
	4	PENDANT (10 FT 1.00) 3.07 M			277379	1		
	2	.25 GREASE FITTING			429010		D	

- 1 DWG. 142723
- 2 GREASE LUBRICATION:
BEFORE ASSEMBLING, MAKE SURE ALL GREASE HOLES ARE OPEN.
GREASE FITTING LOCATIONS ARE MARKED WITH THE SYMBOL ▲
USE MOBILGREASE CM-S (MEC #471205 OR EQUIVALENT).
- 3 SEE VIEW "A"

JIB BACKSTAY ASSEMBLY								
DWG. NO.		277428 DWG 78145	277382 DWG 78145	277383 DWG 78145	277384 DWG 78145	277147 DWG 78145	ADJUSTABLE LINK	
BOOM LENGTH		PENDANT 5 FT 0.50 1.54 M	PENDANT 10 FT 1.00 3.07 M	PENDANT 20 FT 1.50 6.13 M	PENDANT 40 FT 3.00 12.27 M	PENDANT 73 FT 6.00 22.40 M	177207	LENGTH 3
FEET	METERS							
150	45.72	4	4	0	4	4	4	60.00 (1.52 M)
175	53.34	0	0	0	8	4	4	45.00 (1.14 M)
200	60.96	4	0	4	8	4	4	30.00 (0.76 M)
225	68.58	0	4	0	12	4	4	15.00 (0.38 M)
250	76.20	0	4	4	12	4	4	60.00 (1.52 M)
275	83.82	4	4	0	16	4	4	60.00 (1.52 M)
300	91.44	0	0	0	20	4	4	45.00 (1.14 M)
325	99.06	4	0	4	20	4	4	30.00 (0.76 M)
350	106.68	0	4	0	24	4	4	30.00 (0.76 M)