

- 1 FRONT DRUM OR BOOM BUTT AUX DRUM MAY BE USED FOR LUFFING.
- 2 REQUIRES 6.0 METER INSERT W/AUX SHEAVES WHEN USING AUX DRUM.
- 3 MAX NUMBER OF 3.05M (10FT) JIB INSERTS 180136 (ITEM 202) = 1. 3.05M (10FT) JIB INSERT (WHEN INSTALLED) MUST BE ADJACENT TO JIB BUTT.
- 4 MAX NUMBER OF 6.10M (20FT) JIB INSERTS 180137 (ITEM 203) = 2. 6.10M (20FT) JIB INSERT (WHEN INSTALLED) MUST BE ADJACENT TO JIB BUTT AND ADAPTER FRAME ASSY 177493 (ITEM 29) OR THE 3.05M (10FT) JIB INSERT WHEN INSTALLED.
- 5 INSTALL WITH HEAD OF PENDANT PIN 137919 (ITEM 4) AND 170690 (ITEM 300) TO THE INSIDE. SEE VIEW C-C & D-D ON SHEET 3 AND VIEW F-F & G-G ON SHEET 4.
- 6 REFER TO SPECIFIC CAPACITY CHART FOR APPROPRIATE BOOM AND JIB COMBINATIONS.
- 7 SEE SHEET 3 FOR BOOM BACKSTAY PENDANT MAKE UP.
- 8 SEE SHEET 4 FOR JIB/JIB PENDANT MAKE-UP.
- 9 NO. REQ'D FOR ITEMS 300, 301 & 302 ARE SUM OF QUANTITIES PER BOOM & JIB LENGTH TABLES.
- 10 ON DRAWING A01891.
- 11 ON DRAWING A02331.
- 12 ON DRAWING A16684.
- 13 ON DRAWING A03603.
- 14 ON DRAWING A03150.
- 15 SEE DELTA 7 & 14.
- 16 SEE DELTA 3, 8, 14 & 25
- 17 SEE DELTA 4, 8, 14 & 25
- 18 SEE DELTA 8, 14 & 25
- 19 JIB BUTT WELDMENT I.D. TAG #177053.
- 20 JIB TOP WELDMENT I.D. TAG #177560.
- 21 12.19 METER (40FT) INSERT WELDMENT I.D. TAG #048204-4
- 22 3.05 METER (10FT) INSERT WELDMENT I.D. TAG #180136
- 23 6.10 METER (20FT) INSERT WELDMENT I.D. TAG #180137
- 24 TIGHTEN BEARING LOCKNUT 225105 (ITEM 42) SUFFICIENTLY TO CLAMP BEARING INNER RACE.
- 25 PENDANT SUBSTITUTION:  
 PENDANT 10FT-0.00 (3.05M) 276823 FOR  
 PENDANT 10FT-1.00 (3.07M) 277382  
 PENDANT 20FT-0.00 (6.10M) 276825 FOR  
 PENDANT 20FT-1.50 (6.13M) 277383  
 PENDANT 40FT-0.00 (12.19M) 276892 FOR  
 PENDANT 40FT-3.00 (12.27M) 277384  
 DO NOT MIX PENDANTS OF DIFFERENT LENGTHS.  
 PENDANTS MUST BE INSTALLED IN MATCHED SETS.  
 (PENDANTS ON ONE SIDE OF BOOM/JIB MUST MATCH LENGTH OF PENDANTS ON OTHER SIDE OF BOOM/JIB)  
 FAILURE TO OBSERVE THIS PRECAUTION WILL CAUSE MAST/STRUT TO TWIST EXCESSIVELY WHEN BOOM/JIB IS RAISED.  
 STRUCTURAL DAMAGE TO MAST/STRUT OR BOOM/JIB WILL OCCUR.
- 26 ADDS SHIMS A00038 (ITEM 63) AS REQUIRED (IN AREA SHOWN SHEET 5 SECTION X-X), TO LIMIT LATERAL MOVEMENT OF JIB BUTT. USE AN EQUAL AMOUNT OF SHIMS ON BOTH SIDES TO CENTER JIB BUTT WITH BOOM TOP
- 27 TIGHTEN EACH SIDE OF 174844 (ITEM 11) EQUALLY TO PROVIDE AN EQUAL GAP. TORQUE 612691 (ITEM 58) TO 120 FT-LBS AND ADD A SECOND 546058 (ITEM 48) AS A LOCKNUT. SEE SHEET 5 SECTION N-N.
- 28 REFER TO LUFFING JIB RAISING PROCEDURE FOR RAISING AND LOWERING BOOM AND JIB
- 29 BOLT TORQUE: (WITH LOCTITE #271) APPLY LOCTITE #271 (MCC #622292) TO THREADS OF CAPSCREWS WITH GUIDE WIRE ROPE ASSY 179379 (ITEM 38) TORQUE TO 180 FT-LBS. SEE DETAIL S ON SHEET 6.
- 30 MAIN STRUT WELDMENT I.D. TAG #177439. 81008884 CAN BE USED IN PLACE OF 177439
- 31 EACH ITEM 64 (81012433) REQUIRES A MINIMUM OF 10 SETS OF 66, 67, & 68.
- 32 JIB STRUT WELDMENT I.D. TAG #177443.
- 33 WIRE ROPE - 26MM X 210M FOR AUX DRUM OR 26MM X 310MM FOR FRONT DRUM KASAR EUROLIFT 1960 BREAKING STRENGTH OF 614.9 KN
- 34 WIRE ROPE - 26MM X 210M FOR AUX DRUM OR 26MM X 310MM FOR FRONT DRUM VERPOE VERTOP 1960 BREAKING STRENGTH OF 618.0 KN
- 35 WIRE ROPE - 26MM X 210M FOR AUX DRUM OR 26MM X 310MM FOR FRONT DRUM BRIDON DYFROM 34XL BREAKING STRENGTH OF 658.0 KN
- 36 CALLED FOR ON ROLLER ASSEMBLY (ITEM 20) AS OPTION 1.

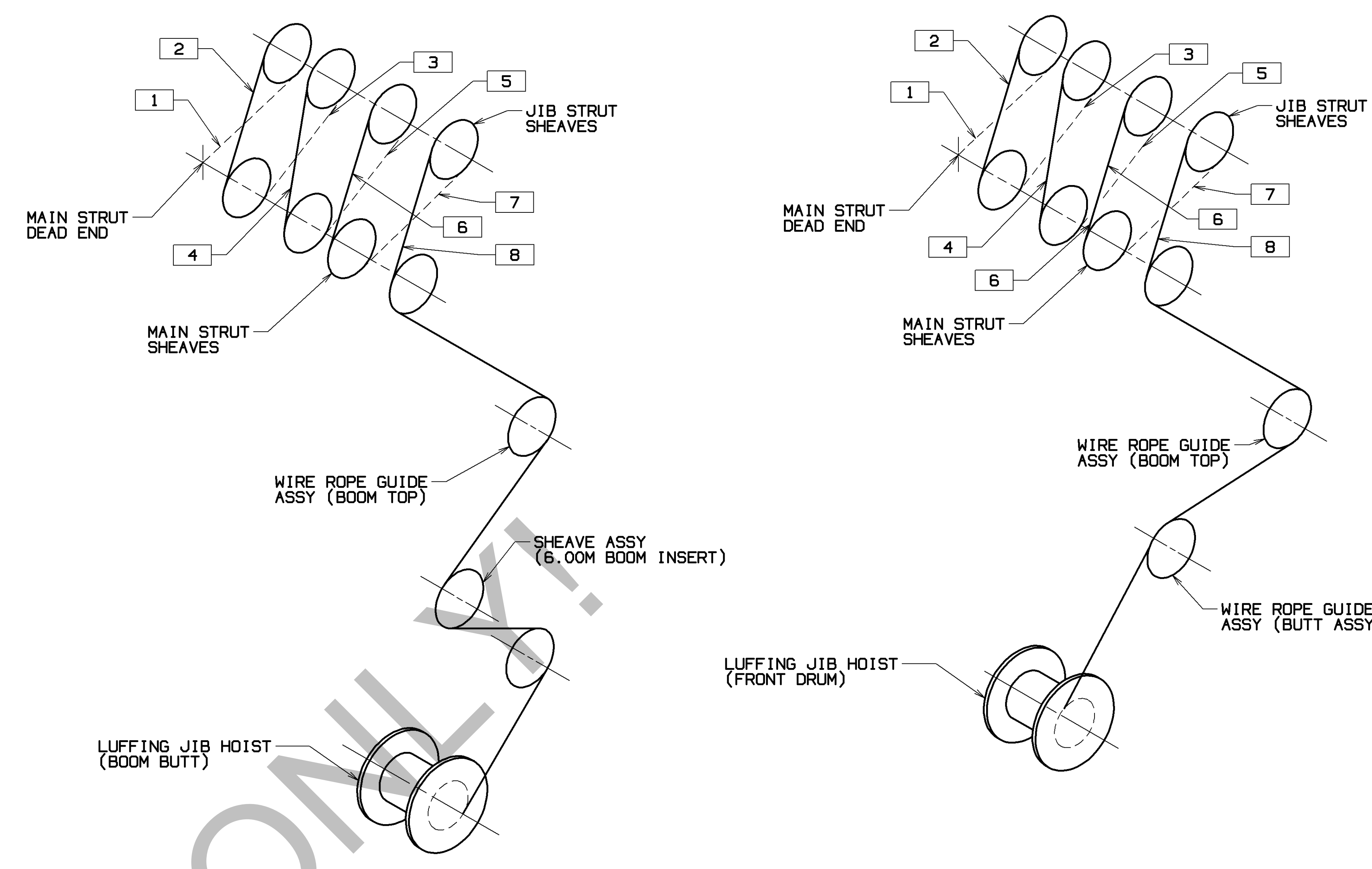
BILL OF MATERIAL		DESCRIPTION	MATERIAL	QTY	ASSEMBLY USED ON
LUFFING JIB RIGGING #135 FOR #74A BOOM					
1	1	PIN 2 HOLE 2.00 DIA X 5.47 LG	013368		
2	2	PIN 2 HOLE 1.50 DIA X 3.24 LG	014902		
3	1	PIN 1 HOLE W/HD 1.88 DIA X 3.80 LG	075368		
4	2	PIN 1 HOLE W/HD 2.75 DIA X 3.83 LG	137919	5	
5	2	PIN 2 HOLE 3.50 DIA X 4.34 LG	143491		
6	6	PIN KEEPER 0.50 THICK	169810	10	
7	4	SPACER 6.50 OD X 4.50 ID X 1.188	170677		
8	2	SPACER TUBE 5.755 OD X 5.005 ID X 1.25 LG	171554		
9	8	SHEAVE ASSEMBLY 27.00 DIA 1.00 ROPE	171693		
10	4	PIN 1 HOLE W/HD 1.50 DIA X 1.92 LG	172937		
11	9	CLAMP SHEAVE	174844		
12	2	PIN 2 HOLE 3.00 DIA 3.75 LG	176155		
13	2	SHEAVE ASSEMBLY 27.00 1.125	176799		
14	1	BUTT WELD #135, 27 FT	177053	19	
15	10	SLEEVE 7.90 OD X 4.50 ID	177107		
16	10	WASHER 5.78 ID X 8.00 OD	177108		
17	1	ROPE GUARD CLAMP	177223		
18	1	STRUT WELDMENT MAIN- #135 LUFF JIB	177439	30	
19	1	STRUT WELDMENT JIB - #135 LUFF JIB	177443	32	
20	1	JIB POINT ROLLER ASSEMBLY- 2 SHEAVE	177448		
21	1	SHAFT 5.116 OD X 3.750 ID X 53.94 LG	177455		
22	1	SHAFT 5.116 DIA X 4.500 ID X 52.53 LG	177456		
23	1	SHAFT 5.000 DIA X 3.250 ID X 26.52 LG	177457		
24	1	SHAFT 5.000 DIA X 3.000 ID X 39.55 LG	177458		
25	1	SPACER TUBE 5.76 OD X 5.01 ID X 5.59 LG	177471		
26	1	SPACER TUBE 5.76 OD X 5.01 ID X 6.00 LG	177472		
27	2	PIN KEEPER 4.00 DIA X 6.12 LG	177479		
28	1	LINK ASSEMBLY	177481		
29	1	ADAPTER FRAME ASSY #135 FOLD UNDER	177493		
30	1	TOP WELDMENT #135 23 FT	177560	20	
31	1	JIB STOP ASSEMBLY FOR #135 LUFFING JIB	177561		
32	1	LINK ASSEMBLY	177565		
33	2	STRUT STOP LUFFING JIB #135	177590		
34	2	STRUT	177634		
35	1	LINK	177639		
36	1	SHAFT 1.900 DIA X 1.500 ID X 26.06 LG	178149		
37					
38	1	FRAME ASSY WIRE ROPE GUIDE	179379	29	
39	1	GUIDE WIRE ROPE ASSY SINGLE SHEAVE BRACKET	179380		
40	1	LINK ASSEMBLY	179958		
41	2	BAR FLAT - 1.00 X 1.00	221009		
42	4	BEARING LOCKNUT AN-24	225105	24	
43	2	BEARING LOCKWASHER W-24	225111		
44	1	PENDANT 11 FT - 3.00 (3.43M)	277241	11	
45	2	PENDANT 25 FT - 11.00 (7.90M)	277437	12	
46	2	PENDANT 12 FT - 3.00 (3.73M)	277439	13	
47	2	FITTING GREASE 0.25 NPT	429010		
48	20	NUT ST. HEX .625-11 UNC	546058	27	
49	5	PIN COTTER 0.38 X 3.00 LG	562150		
50	2	PIN COTTER 0.50 X 4.00 LG	562172		
51	4	PIN COTTER 0.50 X 4.50 LG	562174		
52	4	PIN COTTER 0.50 X 5.00 LG	562178		
53	4	PIN SAFETY .25X1.75 LG	563823		
54	4	PIN WIRE LOCK .38 DIA X 2.25 LG	563803		
55	4	PIN HITCH .88 X 7.00 LG	563699		
56	3	ROLLER 2.01 ID X 7.00 OD	602162		
57	1	ROLLER 2.08 4.00 23.63 CAST NYLON	602170		
58	10	SCREW CAP .625-11 UNC X 6.50 LG	612691		
59	12	SCREW CAP HEX HD 0.75-10 X 1.50 G5	612715		
60	1	WEDGE SOCKET	646246		
61	10	WASHER LOCK 0.625	710307		
62	12	LOCK WASHER 0.75	710308		
63	10	SHIM .059 THK	A00038	26	
64	2	SIGN BOOM MANITOWOC 521 X 2026	81012433	31	
65	2	PENDANT 17 FT - 8.60 (5.40M)	81034315	15	
66	32	SCR MB X 30, 4.8 ZINC PLT	7121171301	31	
67	32	NUT HEX M8-1.25 10 PLN	7661170004	31	
68	32	WASHER LOCK M8	7951170210	31	
NO. REQ'D FOR THE FOLLOWING ITEMS ARE IN BOOM LENGTH TABLE (SHEET 2) 7					
100	1	LINK PENDANT 39.00	177569		
101	1	PENDANT 10 FT - 0.00 (3.05M)	276823	15	
102	1	PENDANT 19 FT - 8.22 (6.00M)	A18492	15	
103	1	PENDANT 39 FT - 7.50 (12.08M)	A18936	15	
NO. REQ'D FOR THE FOLLOWING ITEMS ARE IN JIB LENGTH TABLE (SHEET 2) 8					
200	1	INSERT 40 FT #135 LUFF JIB	048208-4	21	
201	1	PIN 2 HOLE 1.75 DIA X 3.41 LG	070366		
202	1	INSERT 10 FT #135 LUFF JIB	180136	3,22	
203	1	INSERT 20 FT #135 LUFF JIB	180137	4,23	
204	1	PENDANT 10FT - 1.00 (3.07M)	277382	16	
205	1	PENDANT 20FT - 1.50 (6.13M)	277383	17	
206	1	PENDANT 40FT - 3.00 (12.27M)	277384	18	
207	1	PIN COTTER .375 X 6.00	562158		
208	1	HHCS 5/8-11UNC X 5.00 GR 5	612685		
209	1	WASHER FLAT STEEL SAE 5/8 PLAIN	709747		
210	1	TIMBER 55.0 LG X 3.50 W	81017735		
211	1	NUT LOCK NUT 5/8-11UNC Gr5.2	7660201801		
NO. REQ'D FOR THE FOLLOWING ITEMS ARE IN JIB LENGTH TABLE (SHEET 2) 9					
300	1	PIN 1 HOLE W/HD 2.75 DIA X 4.36 LG	170690	5,9	
301	1	LINK PENDANT 24.00	177553	9	
302	1	PIN COTTER 0.50 X 5.00 LG	562158	9	
OPTIONAL JIB PARTS ASSEMBLY LIST					
500	1	UNIV WIRE ROPE ANCHOR JOINT ASSEMBLY	092046		
501	1	HOK & WEIGHT BALL 15 TON (13.6 MTON)	218214		
502	1	BLOCK HOOK 60 TON (55 MTON)	237084		



ITEMS REQ'D FOR VARIOUS JIB LENGTHS (6) (8)

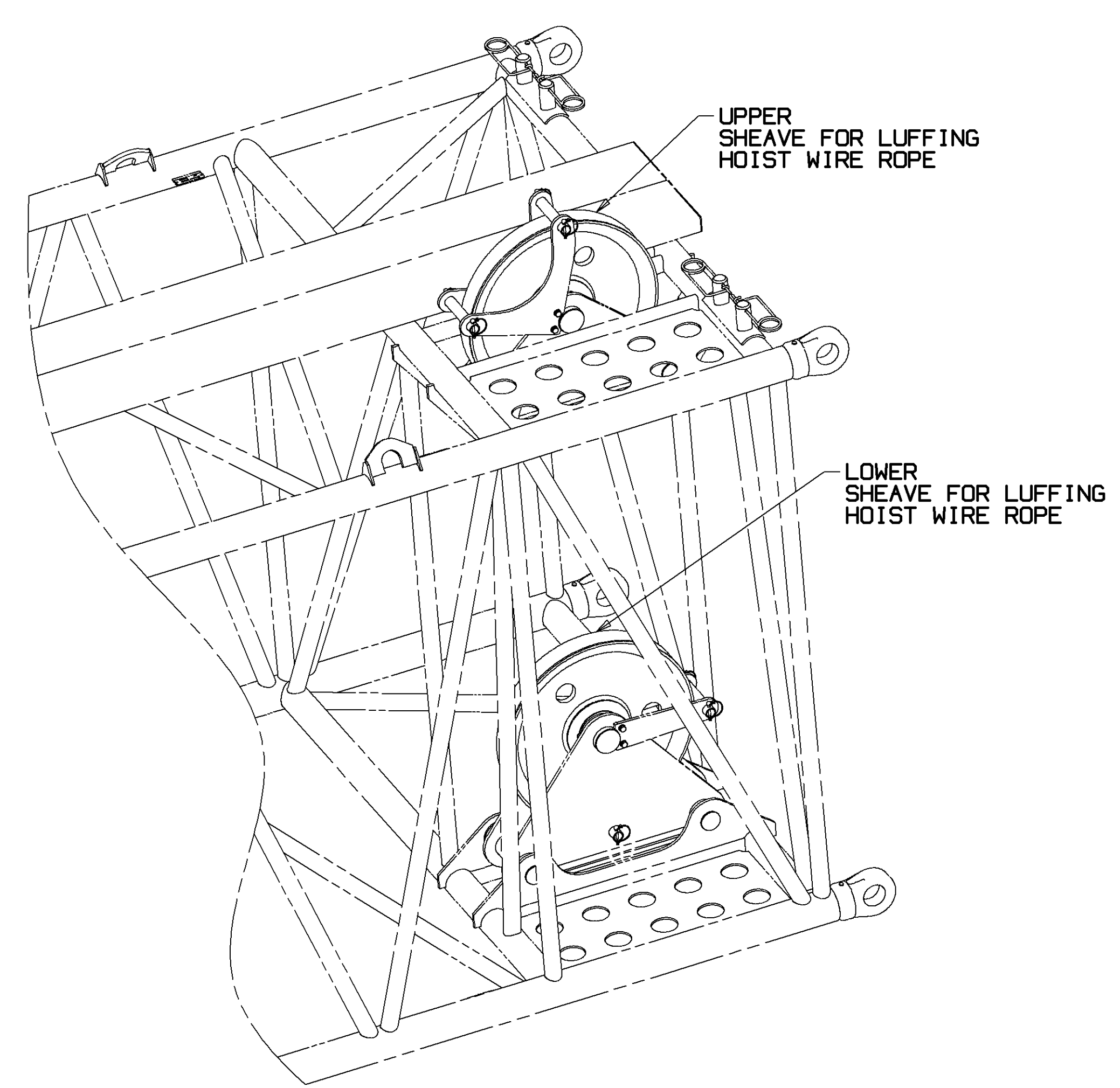
BILL OF MATERIAL				ASSEMBLIES USED IN
QTY	DESC	MATERIAL	QTY	NO.

ITEM NO.	#135 INSERTS			PENDANTS			TIMBER & TIMBER HARDWARE				LINK	PIN		COTTER		
	202	203	200	204	205	206	210	208	209	211	301	201	300	207	302	
JIB LENGTH	INSERT 3.05M (10FT) ASSY	INSERT 6.00M (20FT) ASSY	INSERT 12.08M (40FT) ASSY	PENDANT 3.05M (10FT-1.0) ASSY	PENDANT 6.00M (20FT-1.5) ASSY	PENDANT 12.08M (40FT-3.0) ASSY	TIMBER	HEX HEAD CAP SCREW	F WASHER SHIM	HEX LOCK NUT	LINK 609.6MM (24.00IN)	PIN 2 HOLE	PIN 1 HOLE W/HD	COTTER .375 X 6.00	COTTER .50 X 5.0	
METERS	FEET															
21.3	70	0	1	0	0	4	0	1	4	4	4	2	4	2	8	2
24.4	80	1	1	0	2	4	0	2	8	8	8	2	8	2	16	2
27.4	90	OR 0	2	0	0	6	0	2	8	8	8	2	8	2	16	2
		0	0	1	0	2	2						4		8	
30.5	100	OR 1	2	0	2	6	0	3	12	12	12	2	12	2	24	2
		1	0	1	2	2	2						8		16	
33.5	110	0	1	1	0	4	2	3	12	12	12	0	8	0	16	0
36.6	120	1	1	1	2	4	2	4	16	16	16	0	12	0	24	0
39.6	130	OR 0	2	1	0	6	2	4	16	16	16	0	12	0	24	0
		0	0	0	2	4	4						8		16	
42.7	140	OR 1	2	1	2	6	2	5	20	20	20	0	16	0	32	0
		1	0	2	2	2	4						12		24	
45.7	150	0	1	2	0	4	4	5	20	20	20	0	12	0	24	0
48.8	160	1	1	2	2	4	4	6	24	24	24	0	16	0	32	0
51.8	170	OR 0	2	2	0	6	4	6	24	24	24	0	16	0	32	0
		0	0	3	0	6	6						12		24	

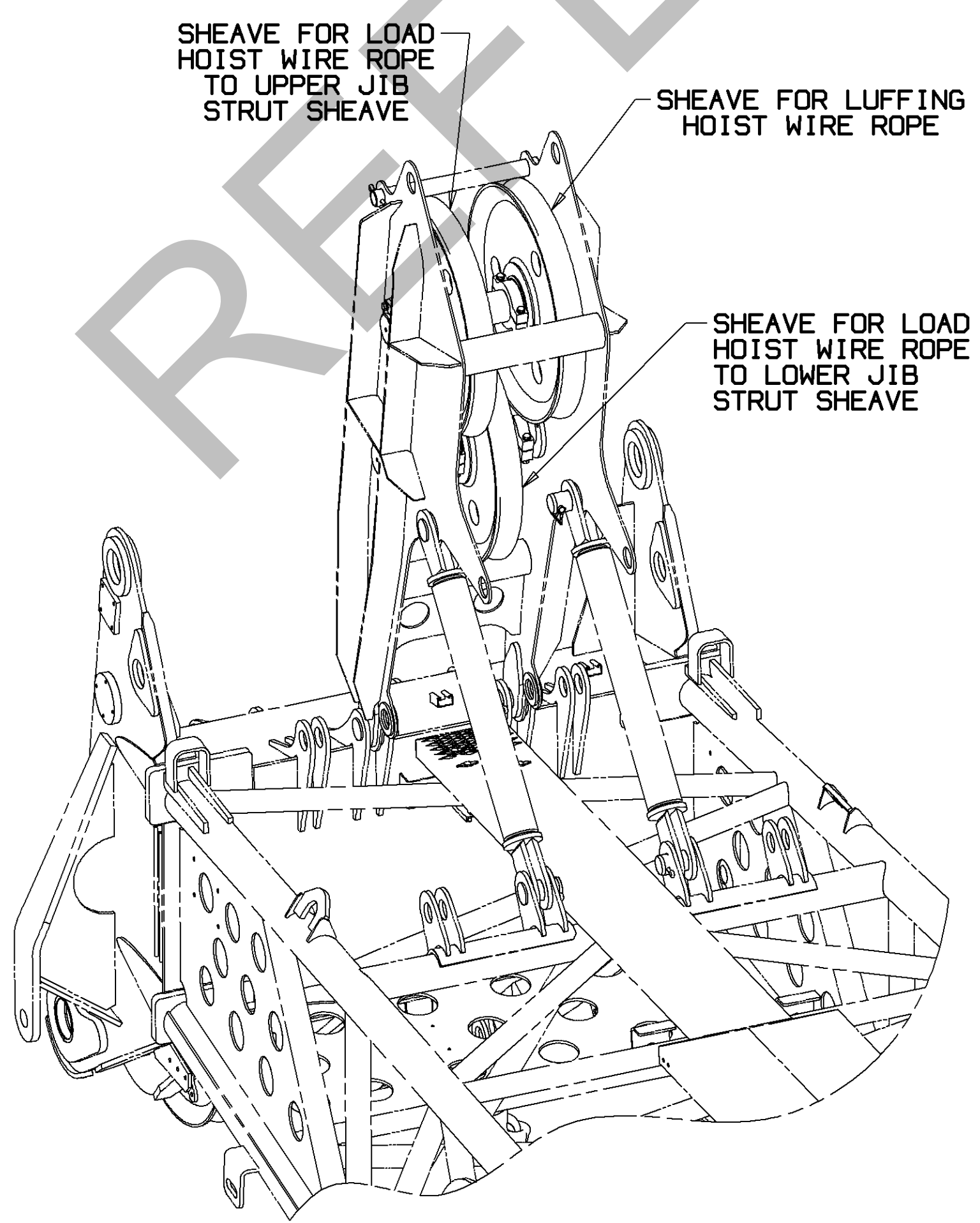


ITEMS REQ'D FOR VARIOUS BOOM LENGTHS (6) (7)

ITEM NO.	PENDANTS			LINKS		PIN	COTTER	
	101	102	103	100	301	300	302	
BOOM LENGTH	PENDANT 3.05M (10FT-0.0)	PENDANT 6.00M (19FT-8.2)	PENDANT 12.08M (39FT-7.5)	LINK 990.6 MM (39.00 IN)	LINK 609.6 MM (24.00 IN)	PIN 1 HOLE W/HD	COTTER .50 X 5.0	
METERS	FEET							
21	68.9	0	2	0	2	0	2	2
24	78.7	2	2	0	2	0	2	2
27	88.6	OR 0	0	2	0	2	2	2
		0	4	0				
30	98.4	OR 2	0	2	0	2	2	2
		2	4	0				
33	108.3	0	2	2	0	2	2	2
36	118.1	2	2	2	0	2	2	2
39	128.0	OR 0	0	4	0	2	2	2
		0	4	2				
42	137.8	OR 2	0	4	0	2	2	2
		2	4	2				
45	147.6	0	2	4	0	0	0	0
48	157.5	2	2	4	0	0	0	0
51	167.3	OR 0	0	6	0	0	0	0
		0	4	4				



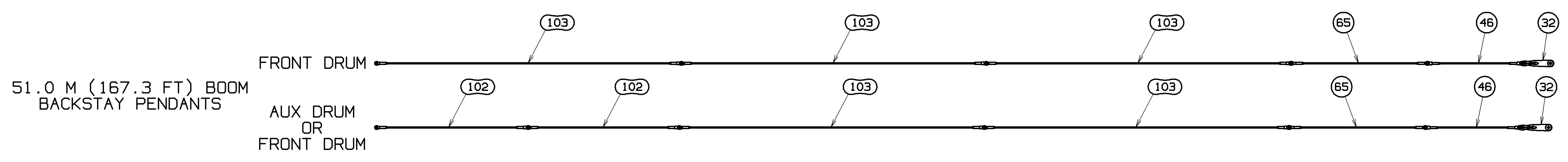
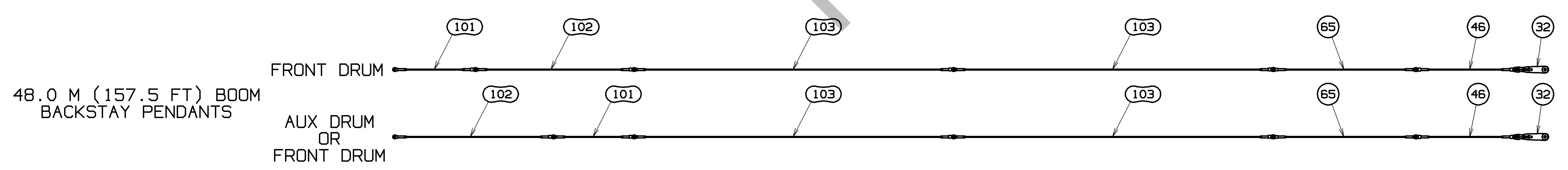
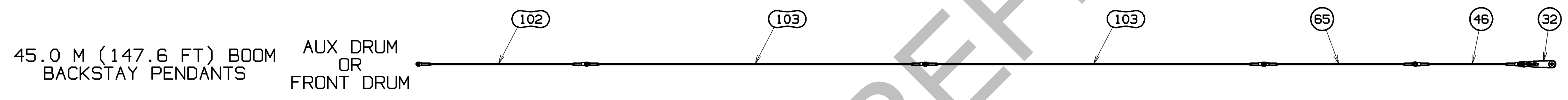
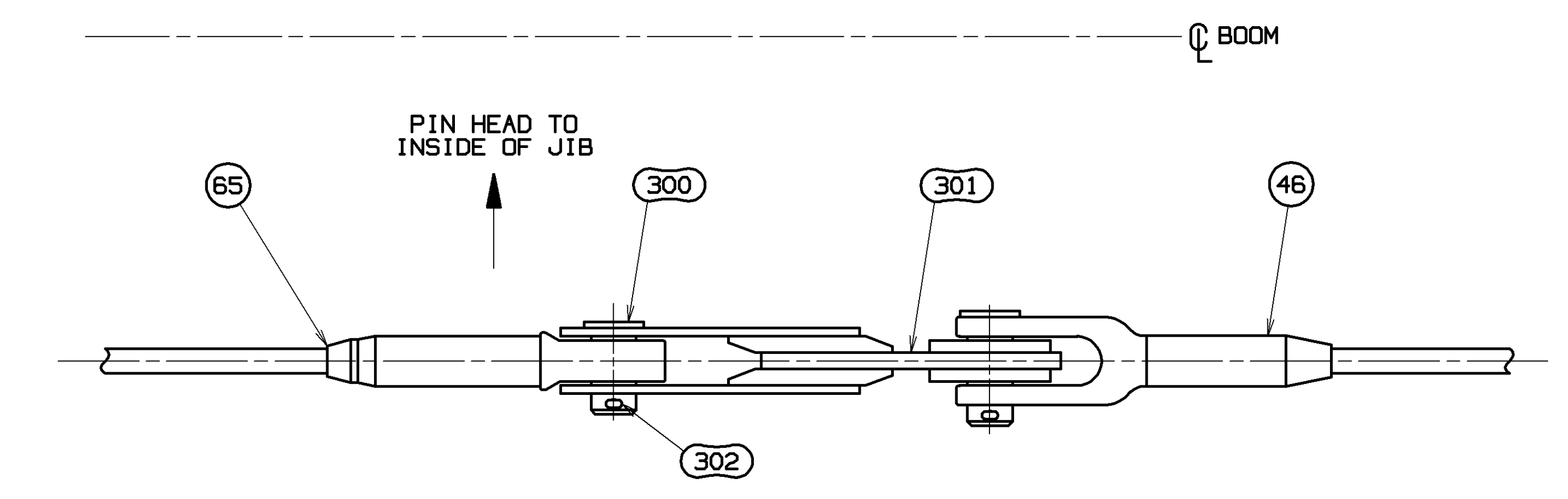
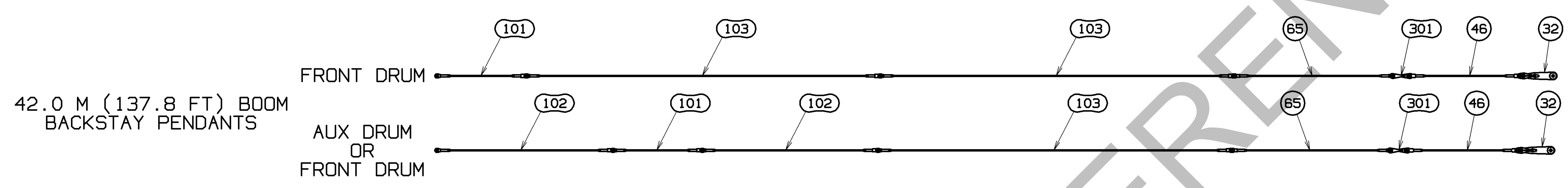
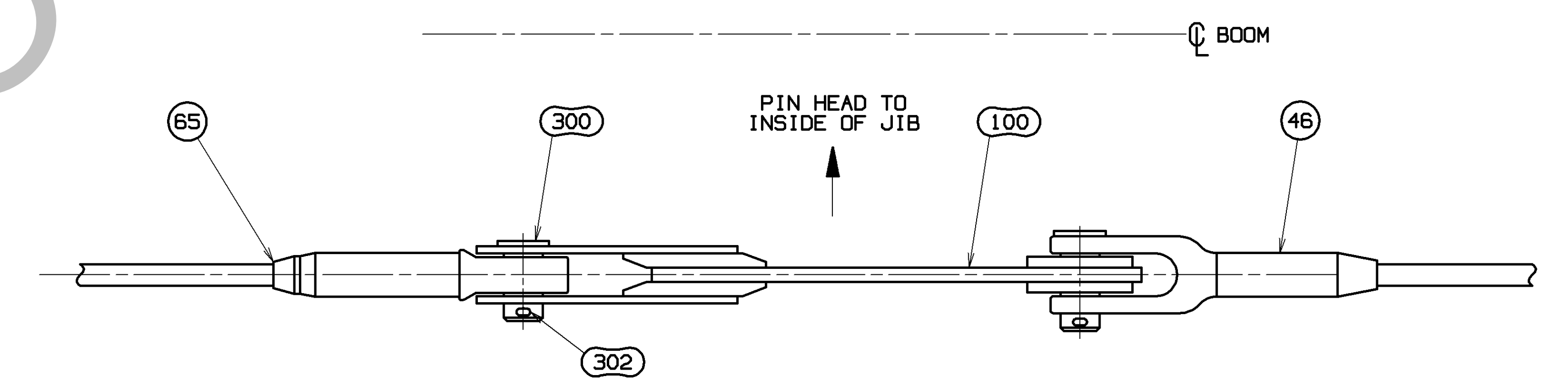
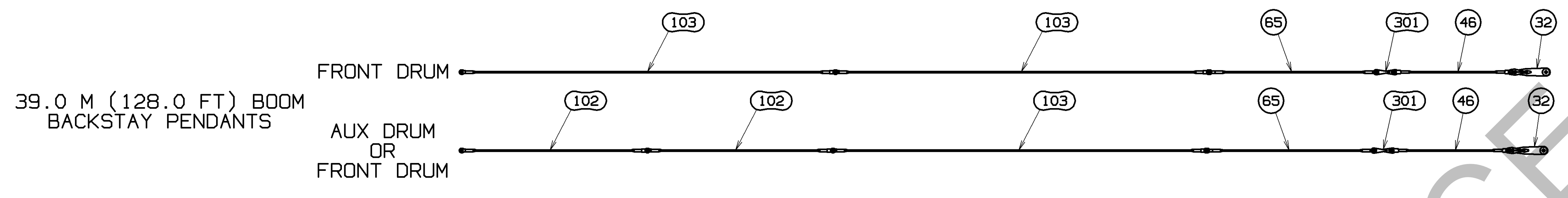
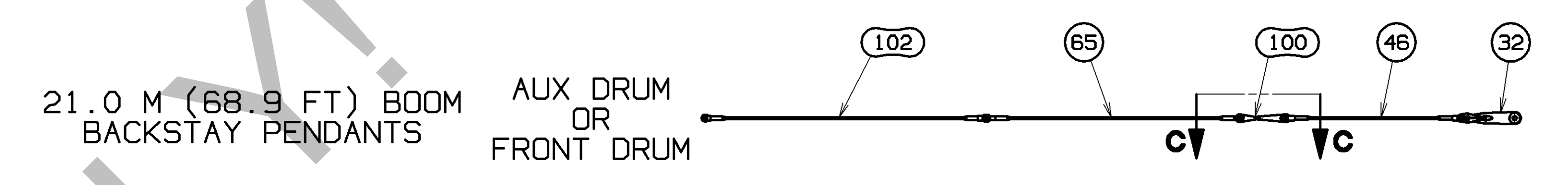
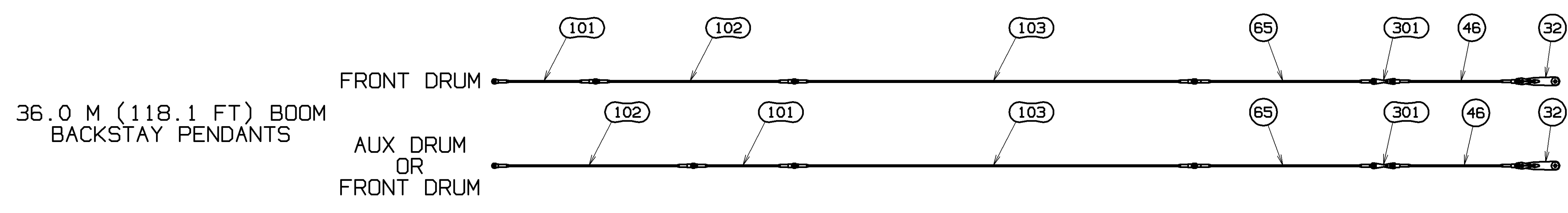
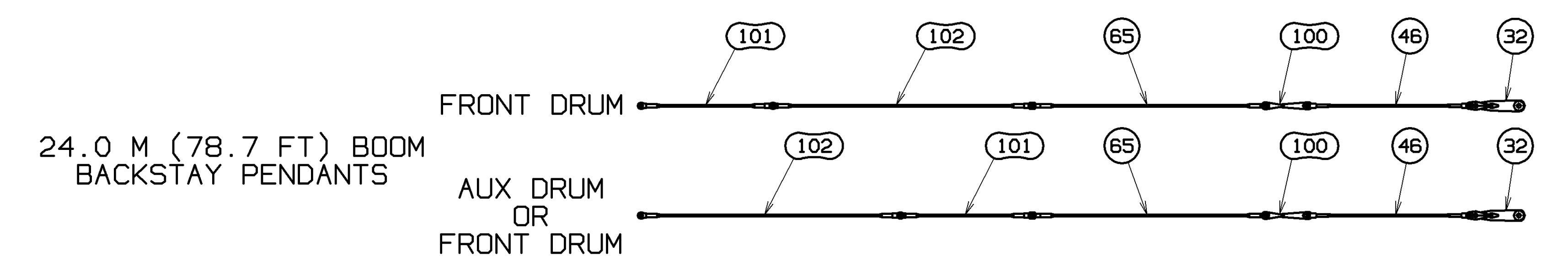
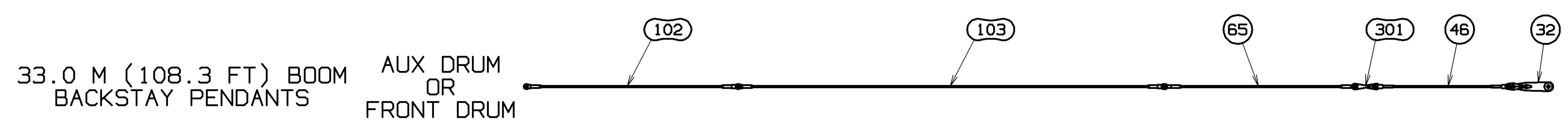
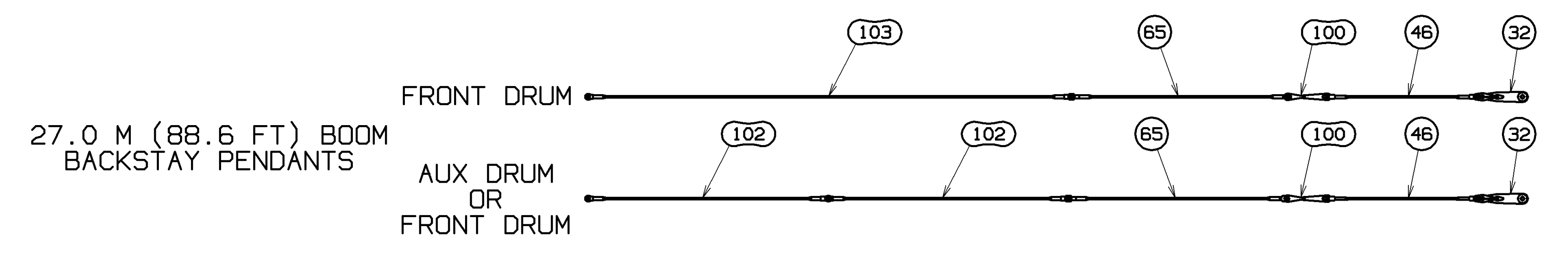
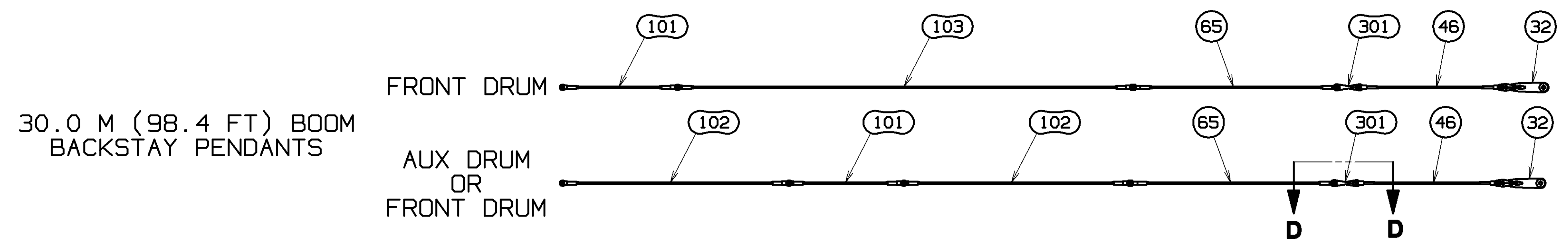
**DETAIL Y**  
SHEAVE ASSY  
(6.00 M BOOM INSERT W/SHEAVES)  
(FROM SHEET 1)  
SCALE 0.083



**SECTION Z-Z**  
GUIDE WIRE ROPE ASSY  
(BOOM TOP)  
(FROM SHEET 1)  
SCALE 0.083

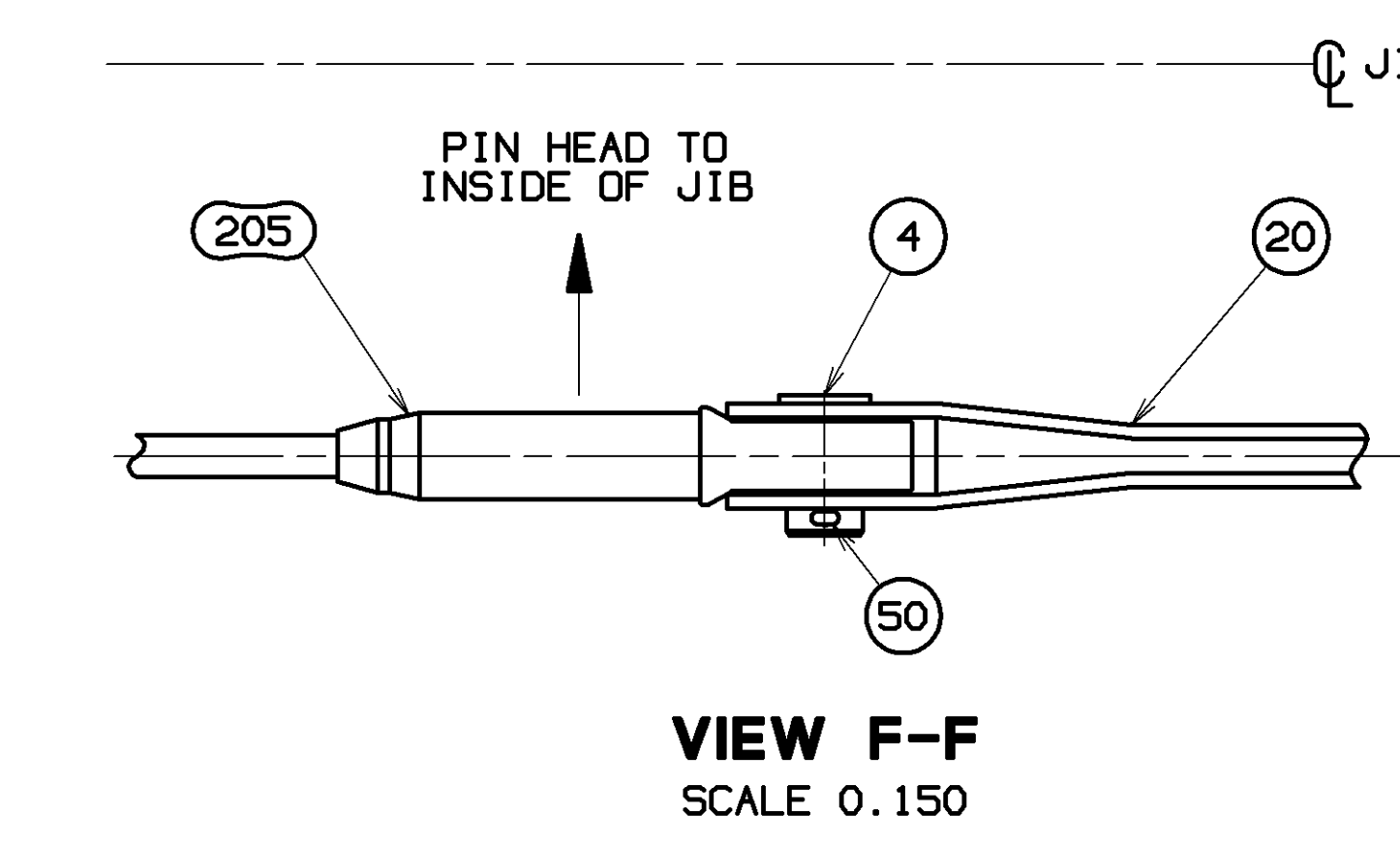
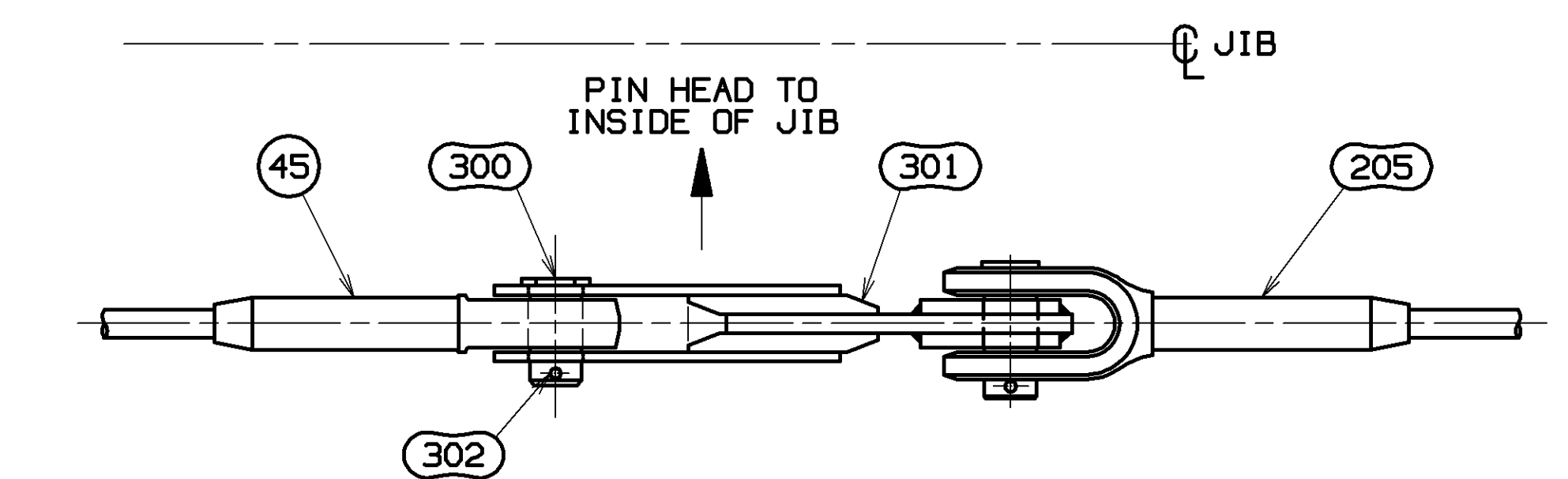
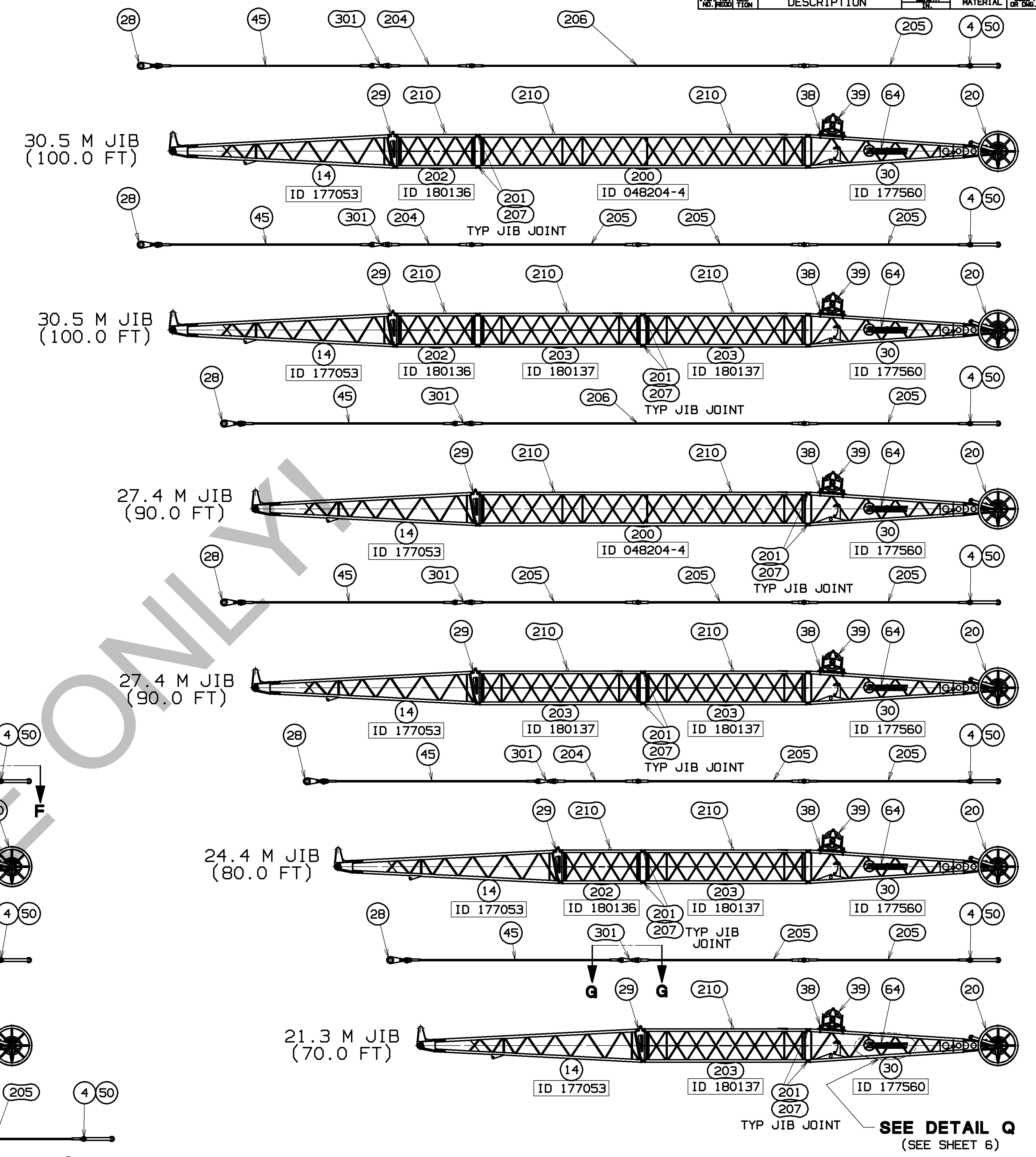
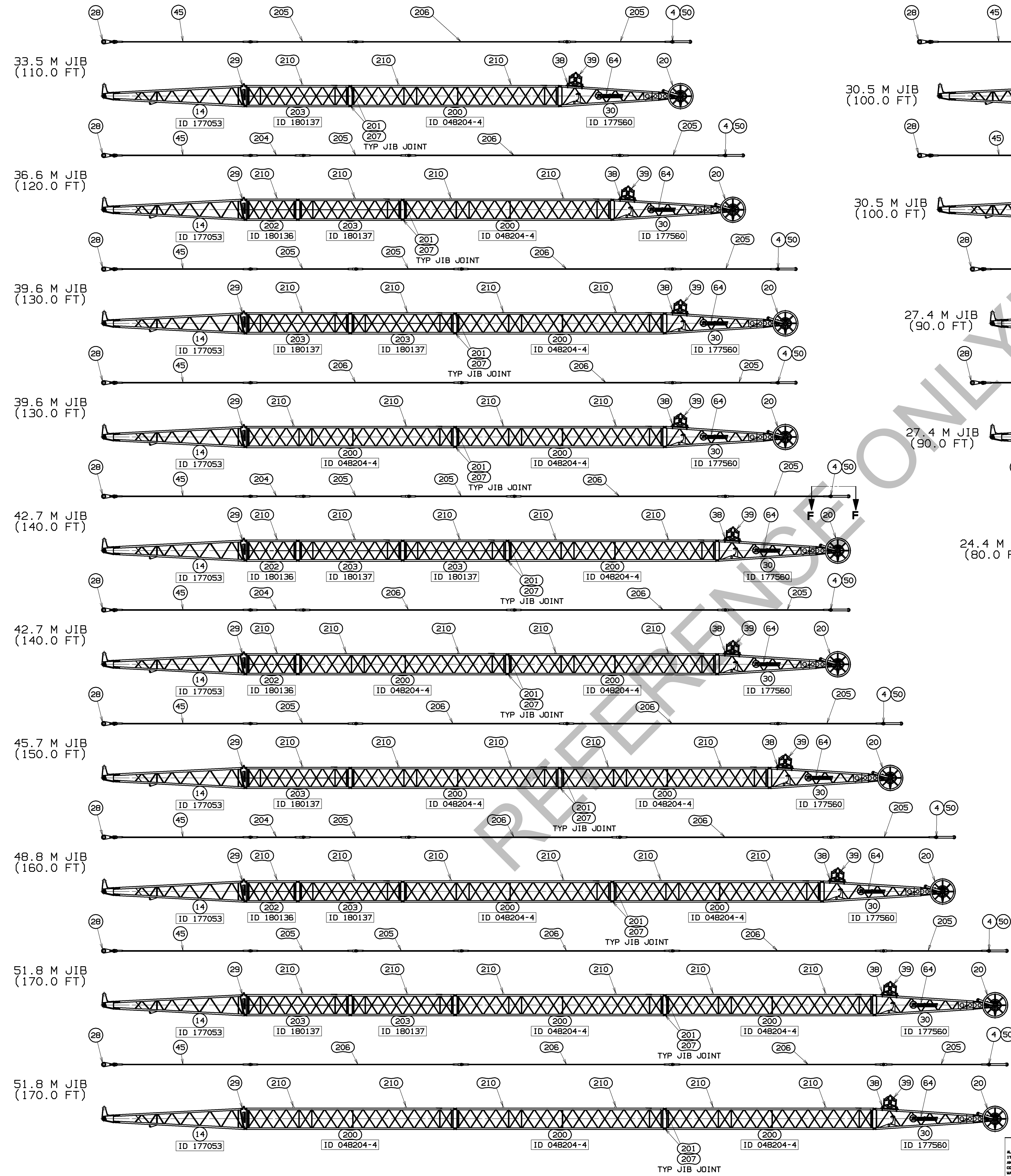
TOLERANCE UNLESS OTHERWISE SPECIFIED		DATE	BY	APP	CHK	APP	DATE
DECIMAL PLACES	FABRICATION	11-20	AJB	BNN	RHV		11-12-15
(1) PLACE 0.5	±.12 ±.18 ±.03						
(2) PLACE 0.00	±.08 ±.12 ±.015						
(3) PLACE 0.000	±.008 ±.008 ±.008						
ANGLES	±1.30						

PRIVATE LABELING REQUIREMENT TO CONFORM TO ENGINEERING SPECIFICATION 8829103794 FOR COMPONENTS LISTED IN SECTION 08-036  
DATE 11-12-15  
REV. LTR. A



REFERENCE ONLY!





SEE DETAIL Q  
(SEE SHEET 6)

DECIMAL PLACES	FRACTION	F. TO FEET	I. TO FEET	FINISHING	WELDING	DR. AUB	DR. RHW	MODEL	APP. BNN
1	1/8	±.015	±.015	AS SHOWN	AS SHOWN				
2	1/16	±.008	±.012	AS SHOWN	AS SHOWN				
3	1/32	±.004	±.008	AS SHOWN	AS SHOWN				

THIS DRAWING IS THE PROPERTY OF MARITOWE CRANES, INC. ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL AND IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF MARITOWE CRANES, INC.

DATE: 11-12-15  
REV. LTR. A

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

DATE: 11-12-15  
REV. LTR. A

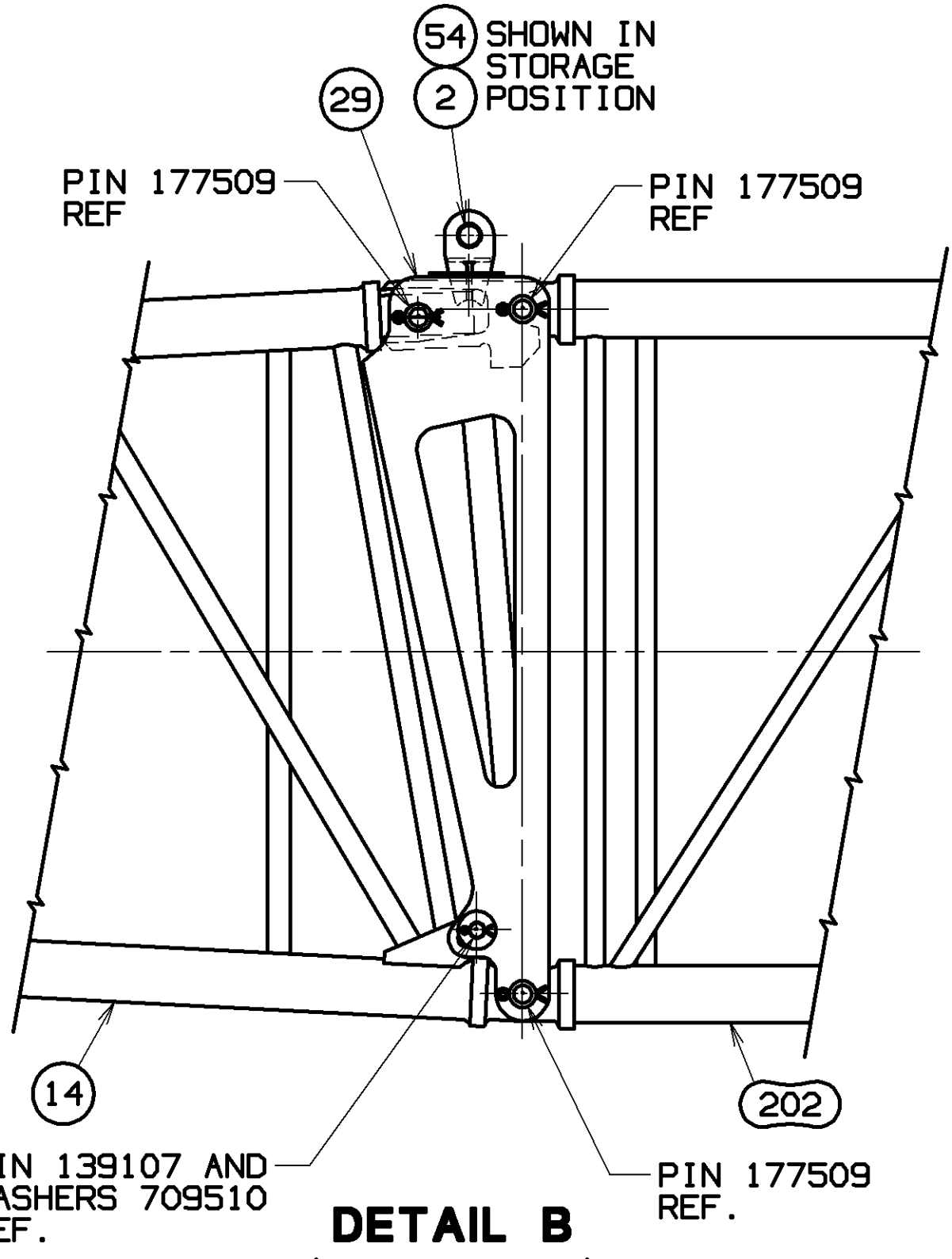
81042733



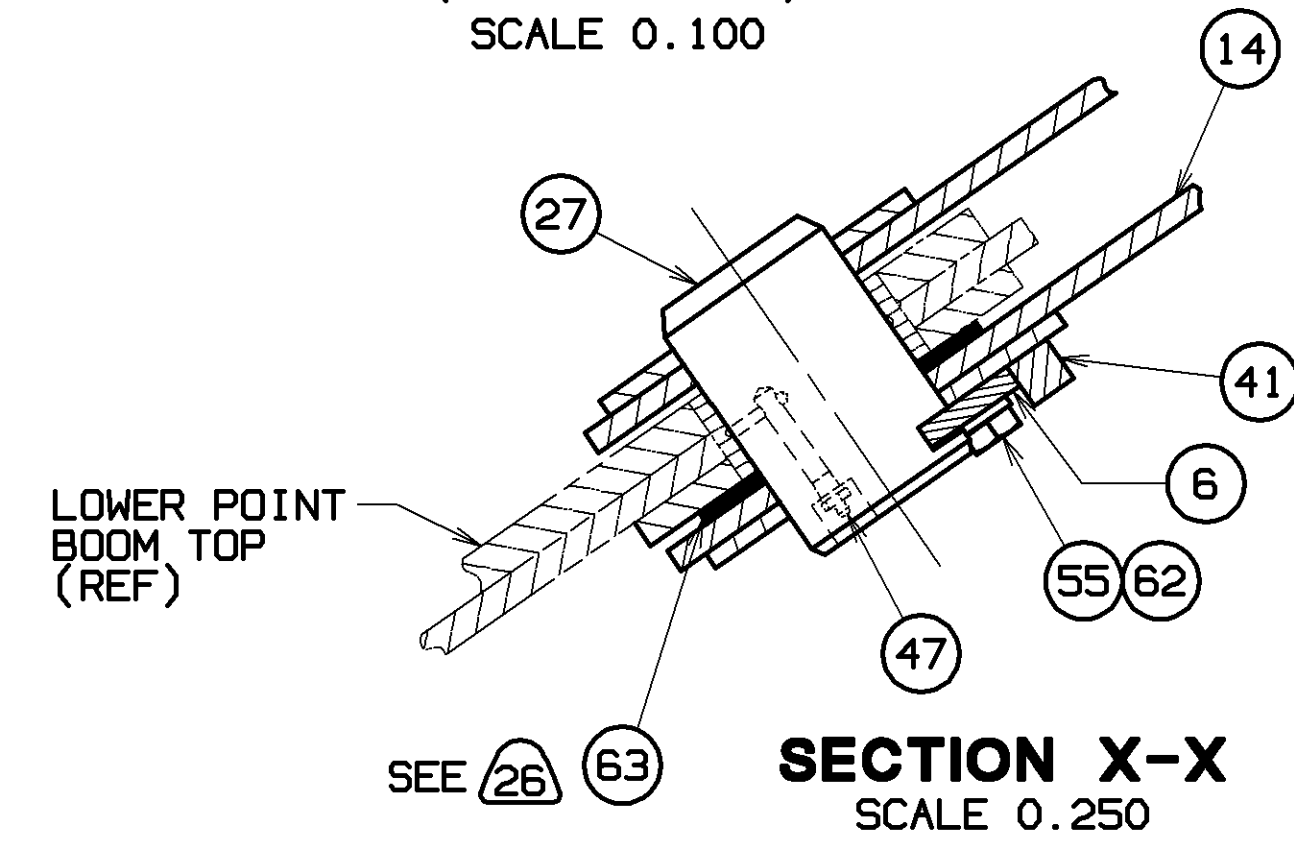
### MAIN STRUT ERECTION PROCEDURE

**DANGER:** DO NOT STAND UNDER MAIN STRUT DURING ERECTION. MAKE SURE JIB STRUT IS PINNED TO THE JIB BUTT BEFORE ATTEMPTING MAIN STRUT ERECTION.

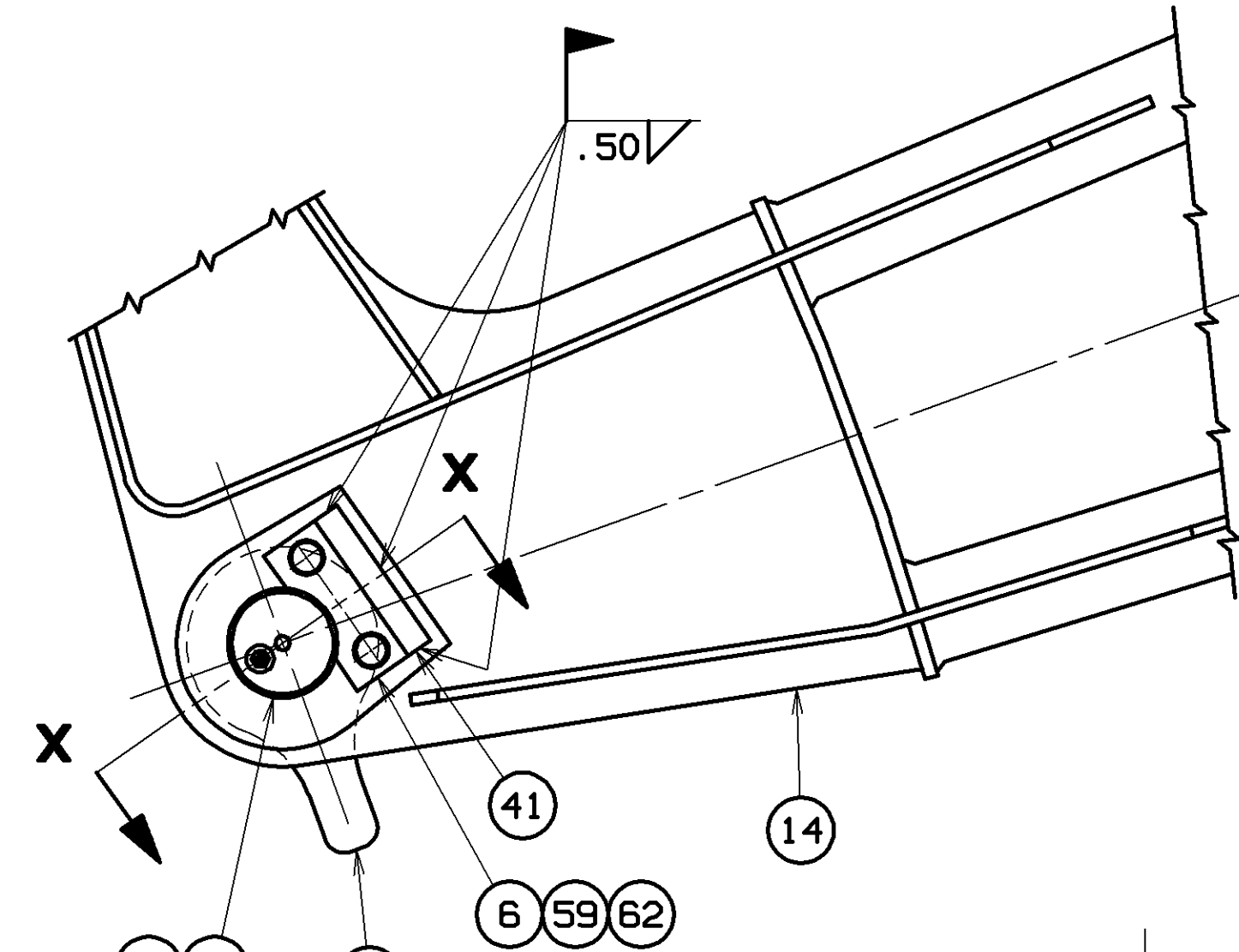
- ASSEMBLE HEAD SECTION OF MAIN STRUT (ITEM 18) - SEE SECTION L-L. ATTACH BASIC BACKSTAY PENDANTS (ITEMS 46) TO LINK SUB-ASSEMBLY (ITEM 32) - SEE VIEW J-J. USE PINS (073045 REF.) TO ATTACH FEMALE END OF STRUT STOP TUBE ASSEMBLIES (ITEMS 33) TO MAIN STRUT. REMOVE PINS (563912 REF.) AND INSTALL IN STORAGE LOCATION - SEE VIEW P-P. FULLY EXTEND INNER TUBES (APPROX. 14.50 INCHES) AND ALLOW THEM TO REST ON TOP OF THE STRUT STOP TUBE STORAGE LUGS ON THE MAIN STRUT.
- RUN A 26mm WIRE ROPE FROM THE REAR DRUM THRU GROOVE OF UPPER SHEAVE ON WIRE ROPE GUIDE ASSEMBLY ON BOOM BUTT. (TEMPORARILY REMOVE EXISTING WIRE ROPE GUARD AT SHEAVE BEFORE RAISING MAIN STRUT WITH LOAD LINE). CONTINUE RUN OF WIRE ROPE AND ATTACH TO WEDGE SOCKET (075298 REF.) USING WEDGE (075447 REF.) CALLED FOR ON JIB POINT ROLLER ASSEMBLY (ITEM 20). - SEE SECTION W-W ON SHEET 6.
- WITH PENDANT (ITEM 44) ATTACHED TO THE MAIN STRUT AND LINK (ITEM 35), UNPIN LINK FROM THE MAIN STRUT AND ATTACH TO THE WEDGE SOCKET (075298 REF.) WITH PIN (ITEM 3).
- RAISE MAIN STRUT WITH LOAD LINE WHILE PAYING OUT LUFFING JIB HOIST LINE (DO NOT ALLOW LUFFING JIB HOIST LINE TO GO INTO TENSION UNTIL MAIN STRUT IS NEAR VERTICAL).
- RAISE THE MAIN STRUT TO A POSITION WHERE THE MALE LUG END OF THE STRUT STOP TUBE ASSEMBLIES (ITEMS 33) ARE NEAR THEIR PINNING POSITION ON THE BOOM TOP LUGS. ADJUST TUBE LENGTH AS NECESSARY TO PIN TO THE BOOM TOP LUGS USING PINS (073045 REF.)
- LOWER MAIN STRUT WITH LUFFING JIB HOIST LINE UNTIL SUPPORTED BY THE RETRACTED STRUT STOP TUBE ASSEMBLIES (ITEMS 33). REINSTALL PINS (563912 REF.) IN THE STRUT ERECTION AND POSITIONING LOCATION - SEE VIEW P-P.
- CONNECT ALL BACKSTAY PENDANTS AND LINKS.
- DISCONNECT WEDGE SOCKET (075298 REF.) FROM LINK (ITEM 35) AND CONNECT LINK ALONG WITH PENDANT (ITEM 44) TO STORAGE LUGS ON MAIN STRUT WITH PIN (ITEM 3) - SEE VIEW J-J.
- REMOVE PINS (177571 REF.) IN STRUT STOP TUBE ASSEMBLIES (ITEMS 33) - SEE VIEW P-P. RAISE MAIN STRUT WITH LUFFING JIB HOIST LINE UNTIL OPERATING POSITION PIN HOLES IN TUBE ASSEMBLIES ARE IN LINE AND INSTALL PINS (177571 REF.) - SEE DETAIL H.
- RELAX LUFFING JIB HOIST LINE AND REMOVE PINS (563912 REF.) FROM STRUT STOP TUBE ASSEMBLIES (ITEMS 33) AND STORE IN LOCATION SHOWN - SEE VIEW P-P.
- REVERSE PROCEDURE FOR LOWERING MAIN STRUT (ITEM 18).



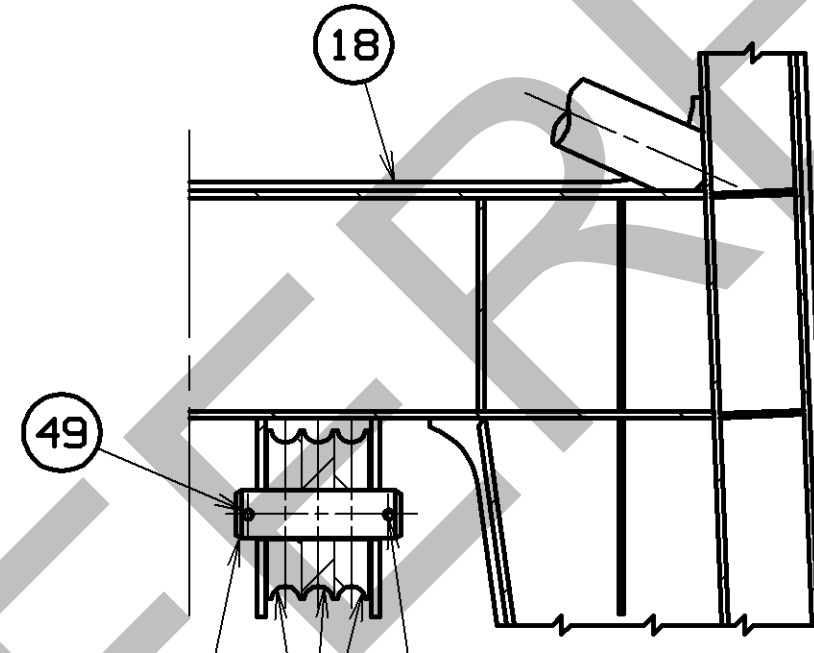
**DETAIL B**  
(FROM SHEET 1)  
SCALE 0.100



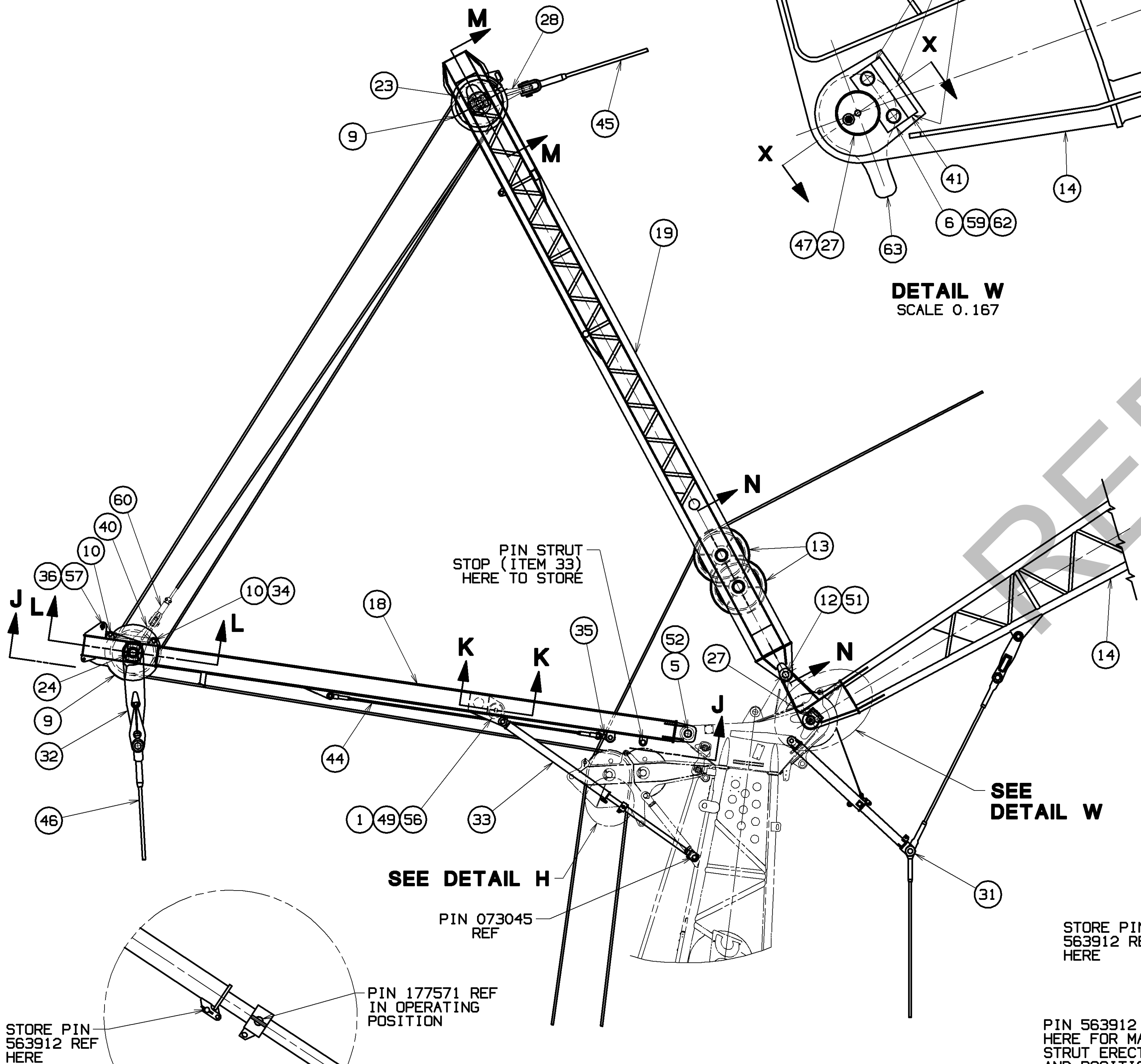
**SECTION X-X**  
SCALE 0.250



**DETAIL W**  
SCALE 0.167



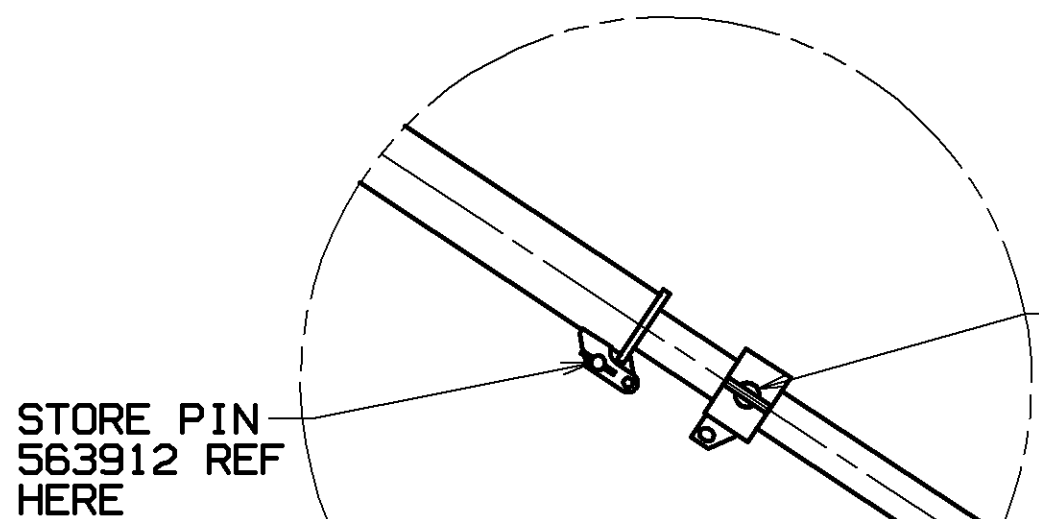
**SECTION K-K**  
SCALE 0.125



SEE DETAIL H

PIN 073045 REF.

**DETAIL A**  
(FROM SHEET 1)  
SCALE 0.031



**DETAIL H**  
SCALE 0.100

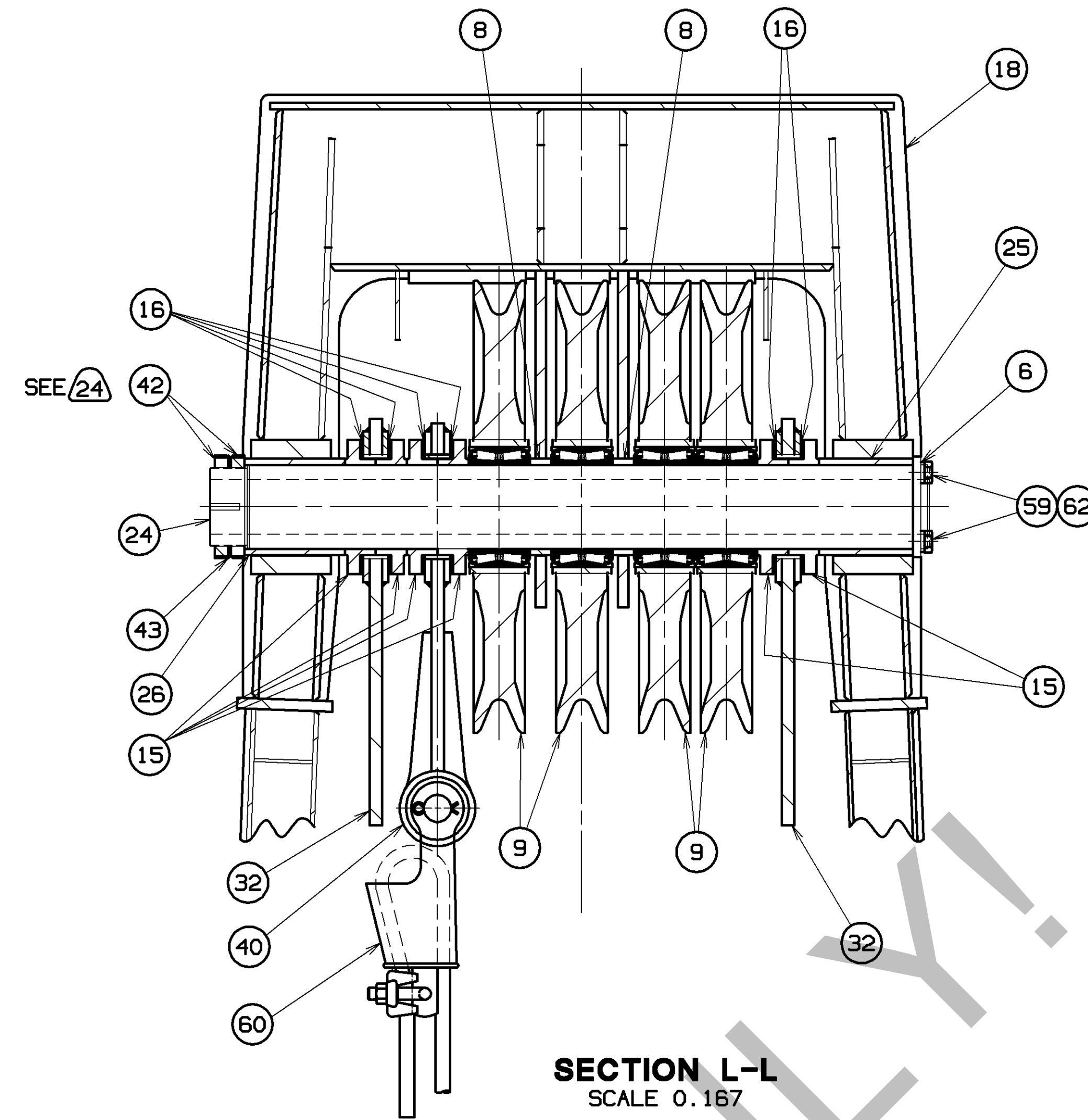
STORE PIN 563912 REF. HERE

PIN 563912 REF. HERE FOR MAIN STRUT ERECTION AND POSITIONING

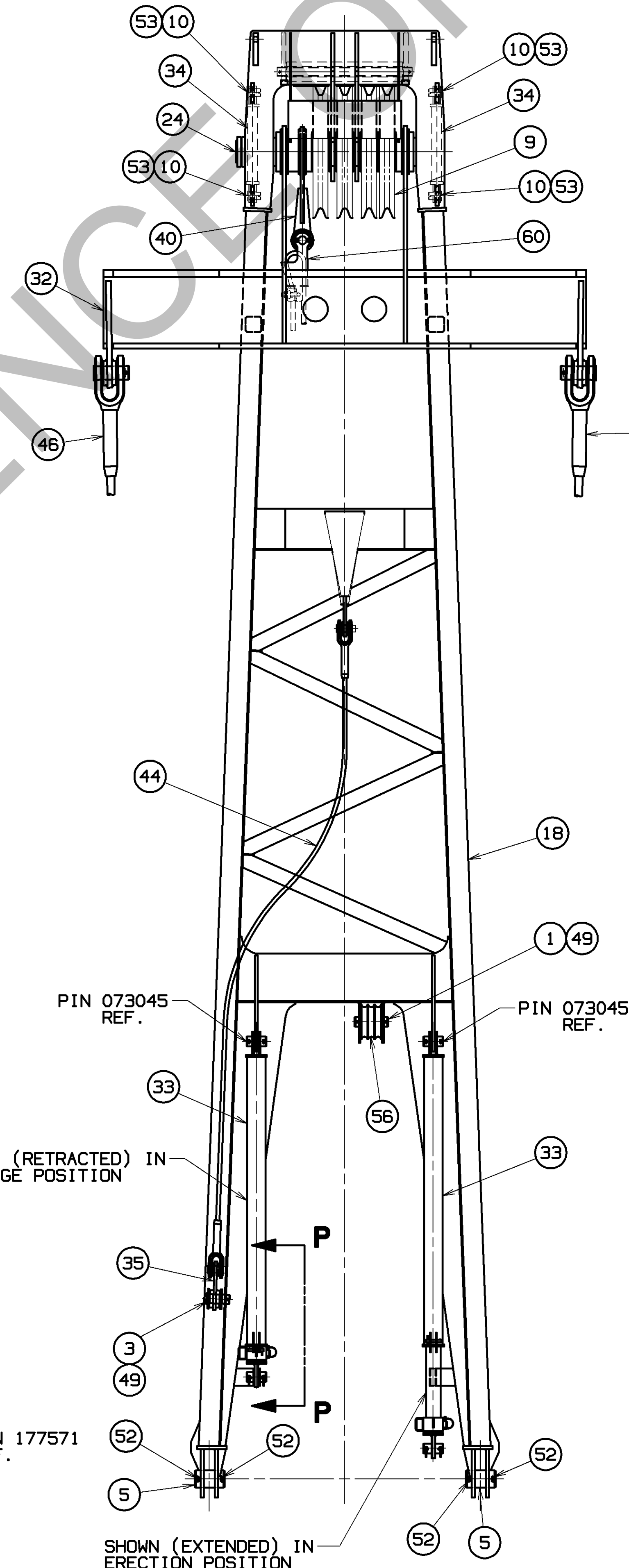
PIN 177571 REF.

PIN 073045 REF.

**VIEW P-P**  
SCALE 0.167



**SECTION L-L**  
SCALE 0.167



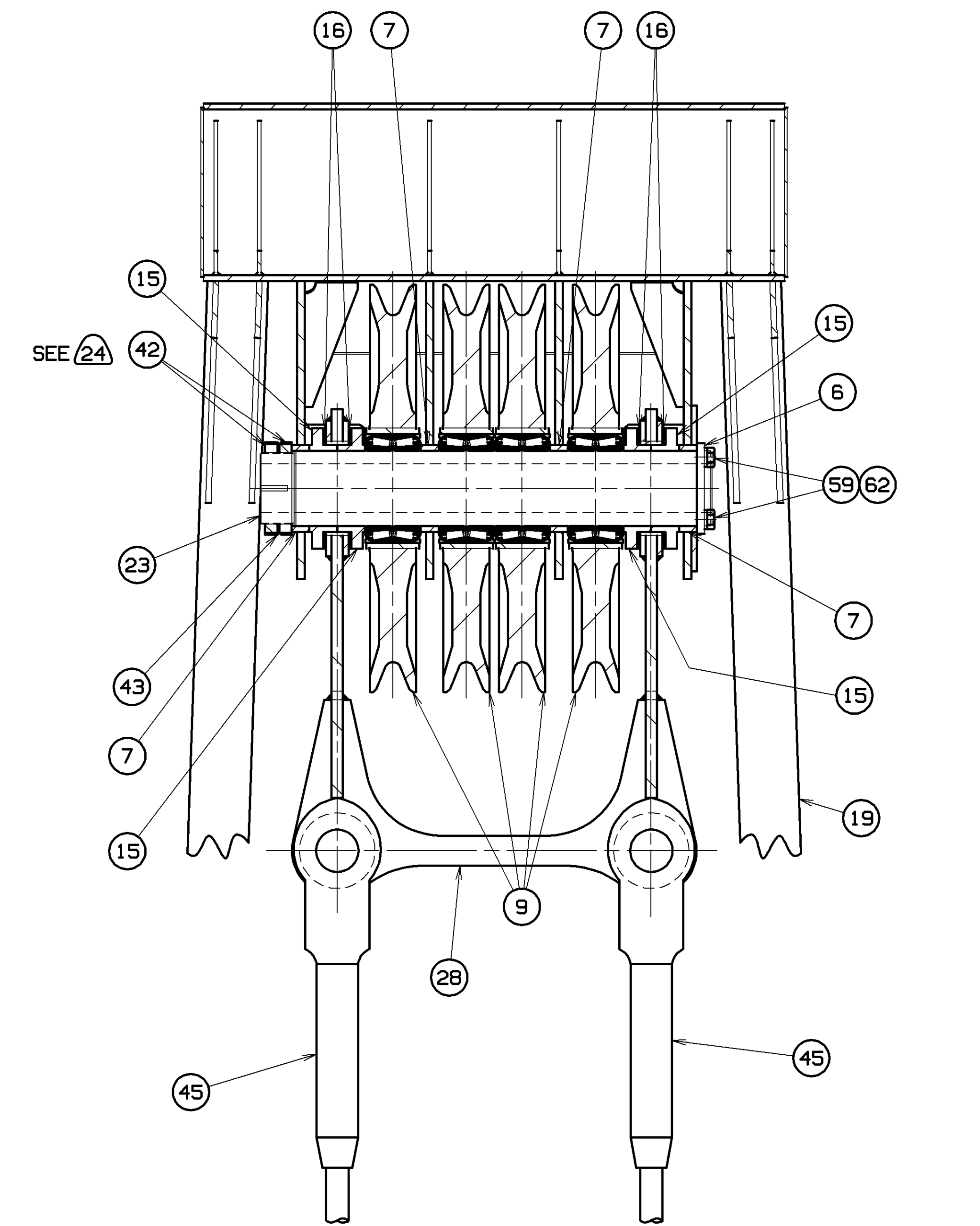
**VIEW J-J**  
SCALE 0.062

SHOWN (RETRACTED) IN STORAGE POSITION

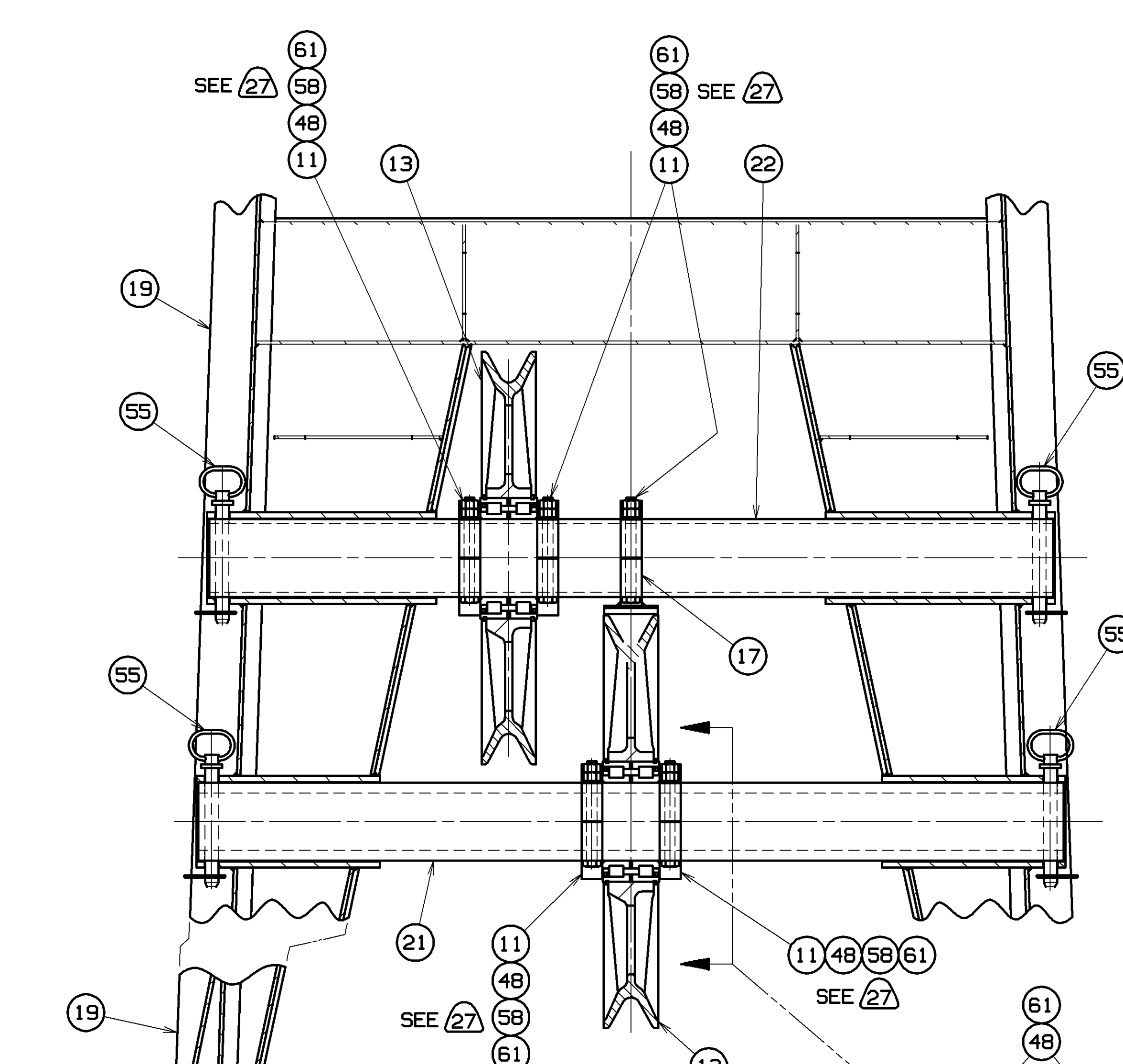
PIN 073045 REF.

PIN 073045 REF.

SHOWN (EXTENDED) IN ERECTION POSITION



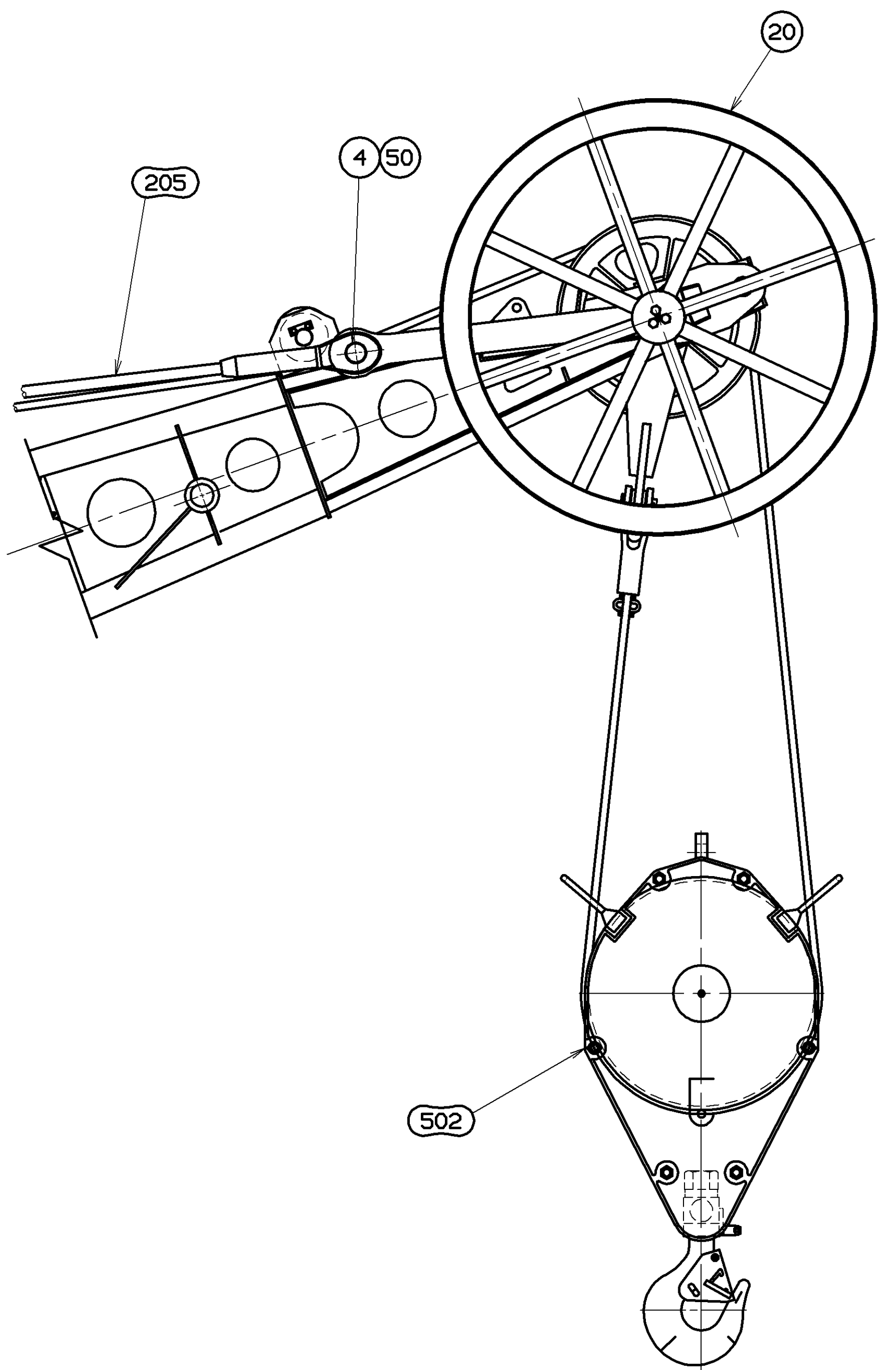
**SECTION M-M**  
SCALE 0.167



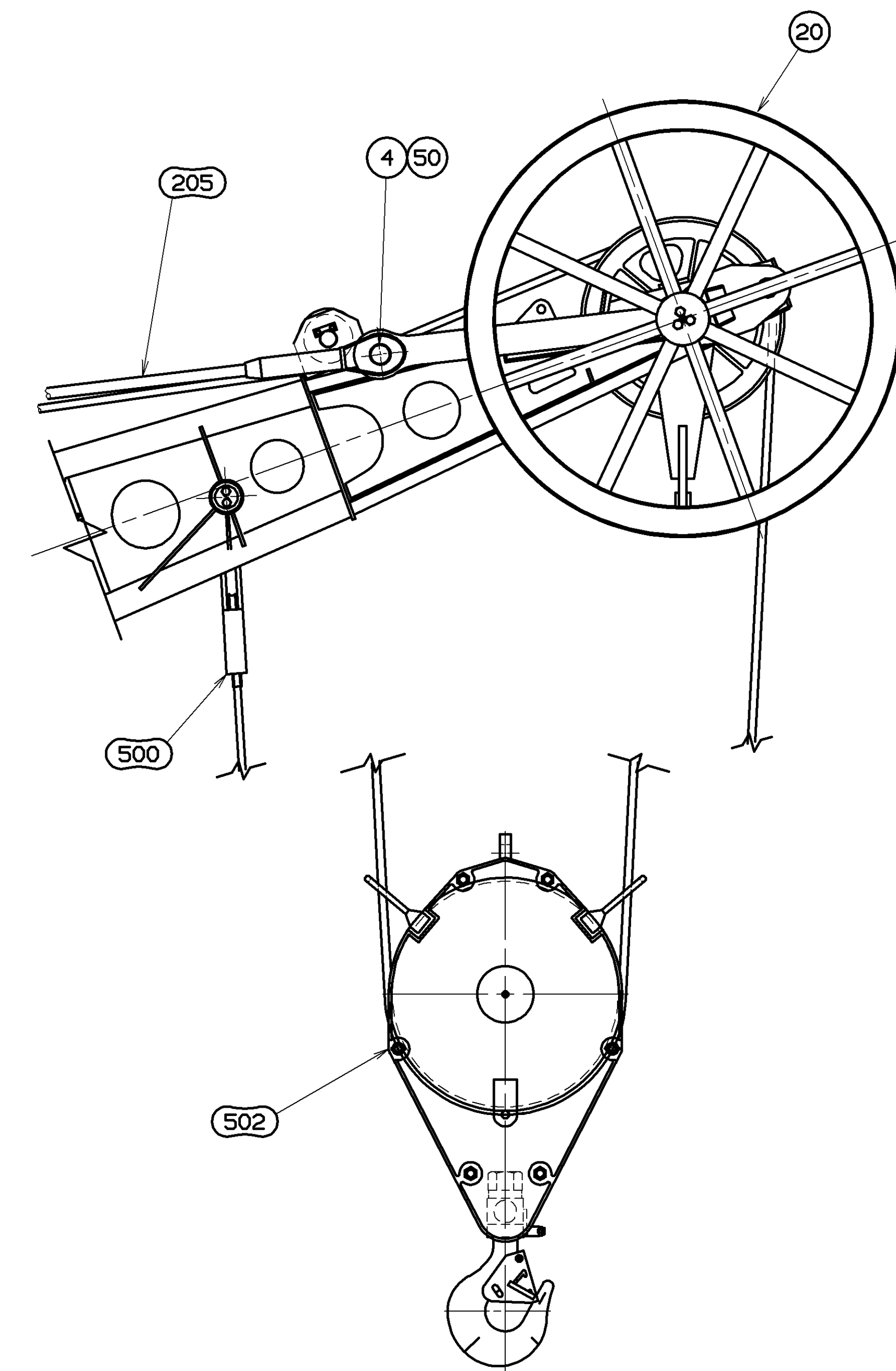
**SECTION N-N**  
SCALE 0.167

SCALE 0.250  
SEE 27

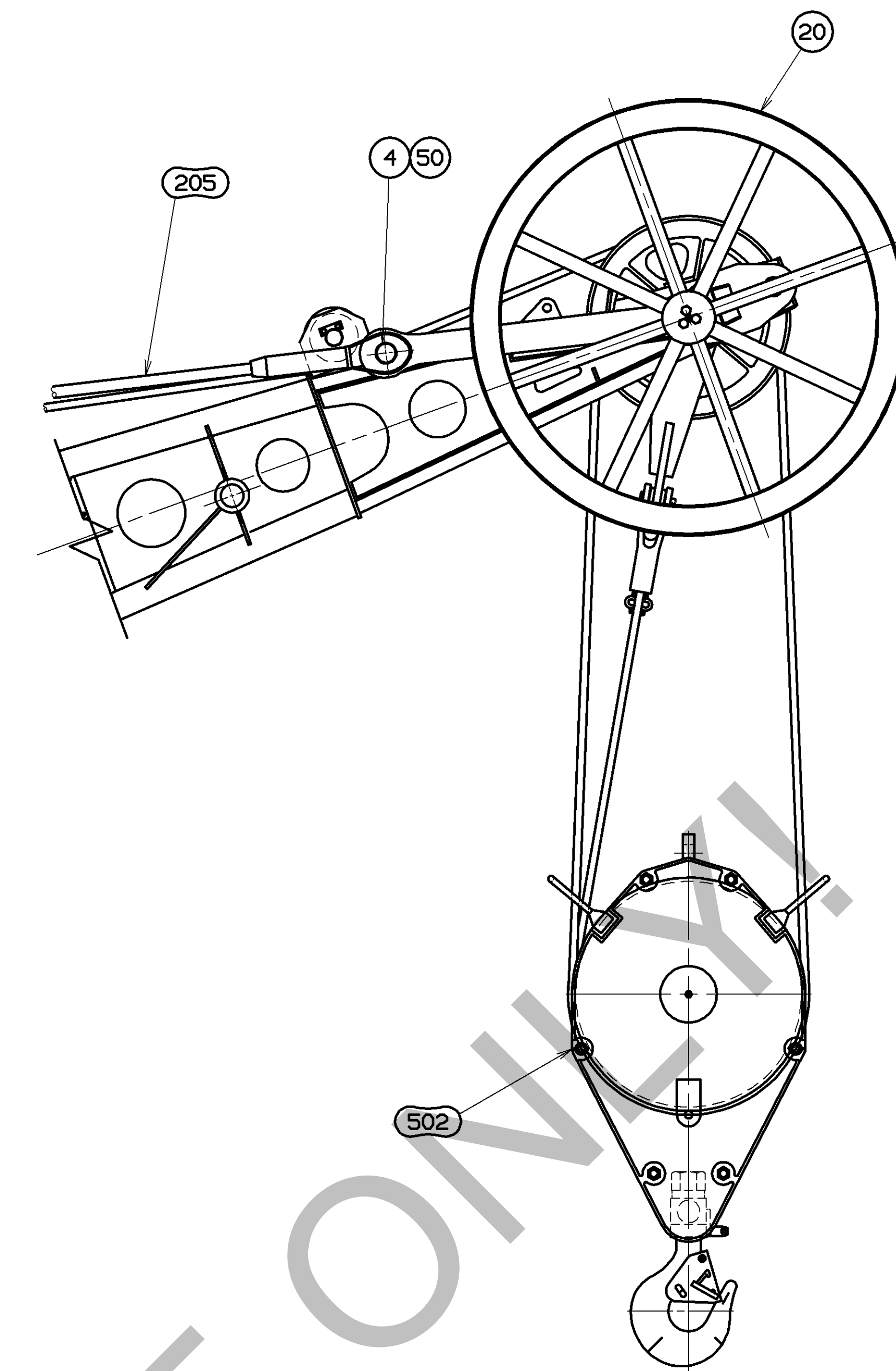




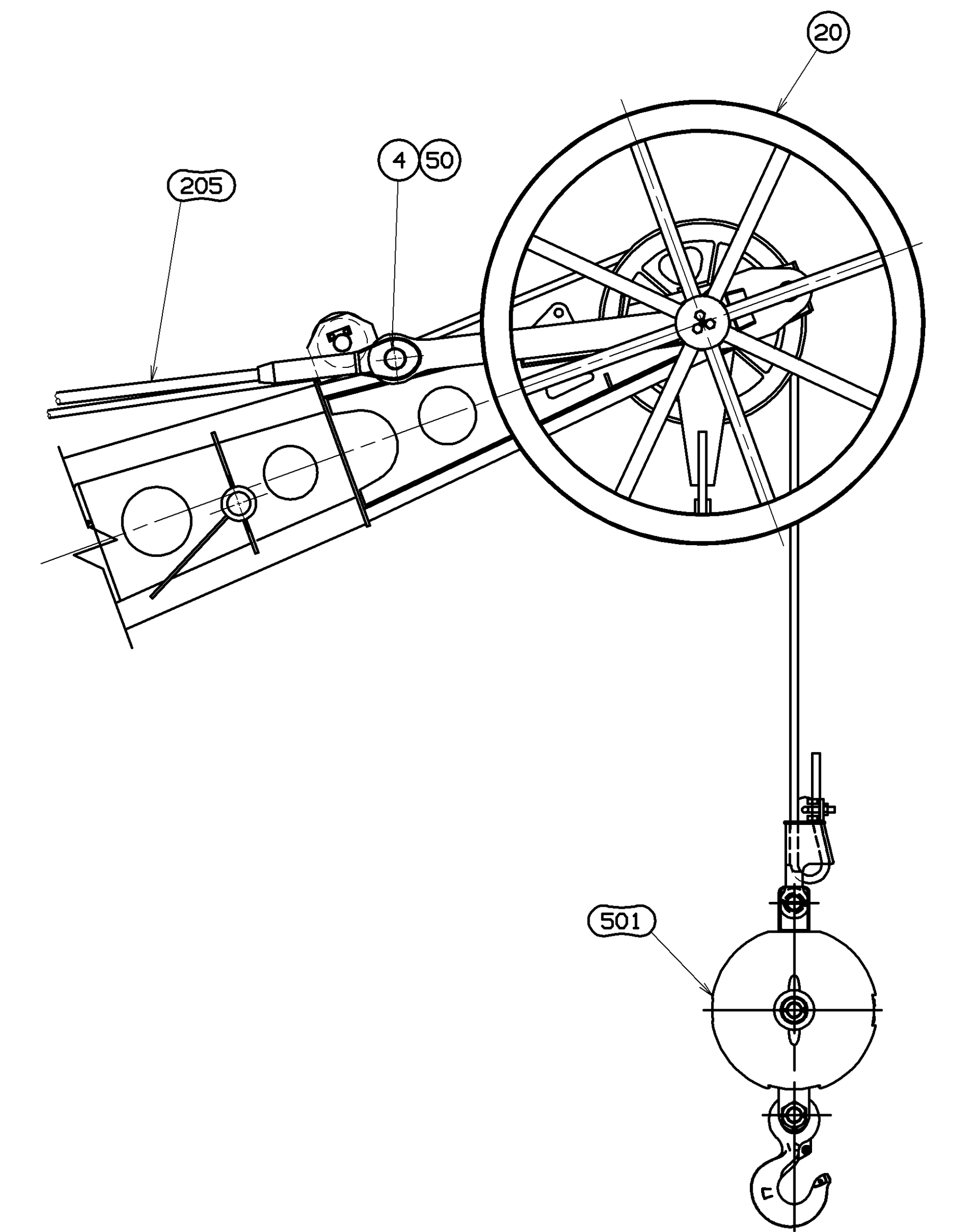
**DETAIL R**  
 TWO PART LINE W/DEAD END  
 AT CENTER SHAFT  
 (FROM SHEET 1)  
 SCALE 0.075



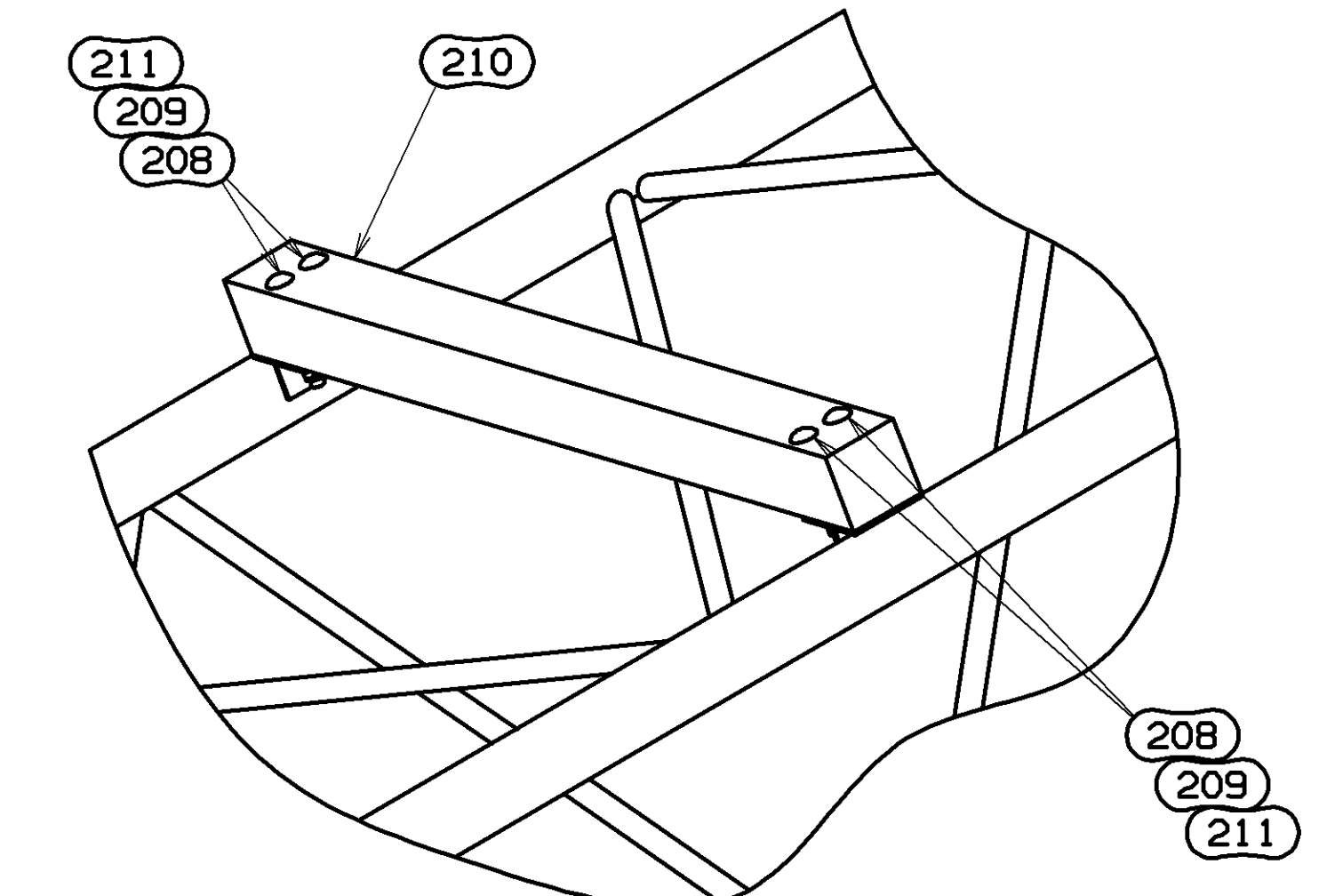
**DETAIL R**  
 TWO PART LINE W/DEAD END  
 AT ANCHOR JOINT  
 (FROM SHEET 1)  
 SCALE 0.075



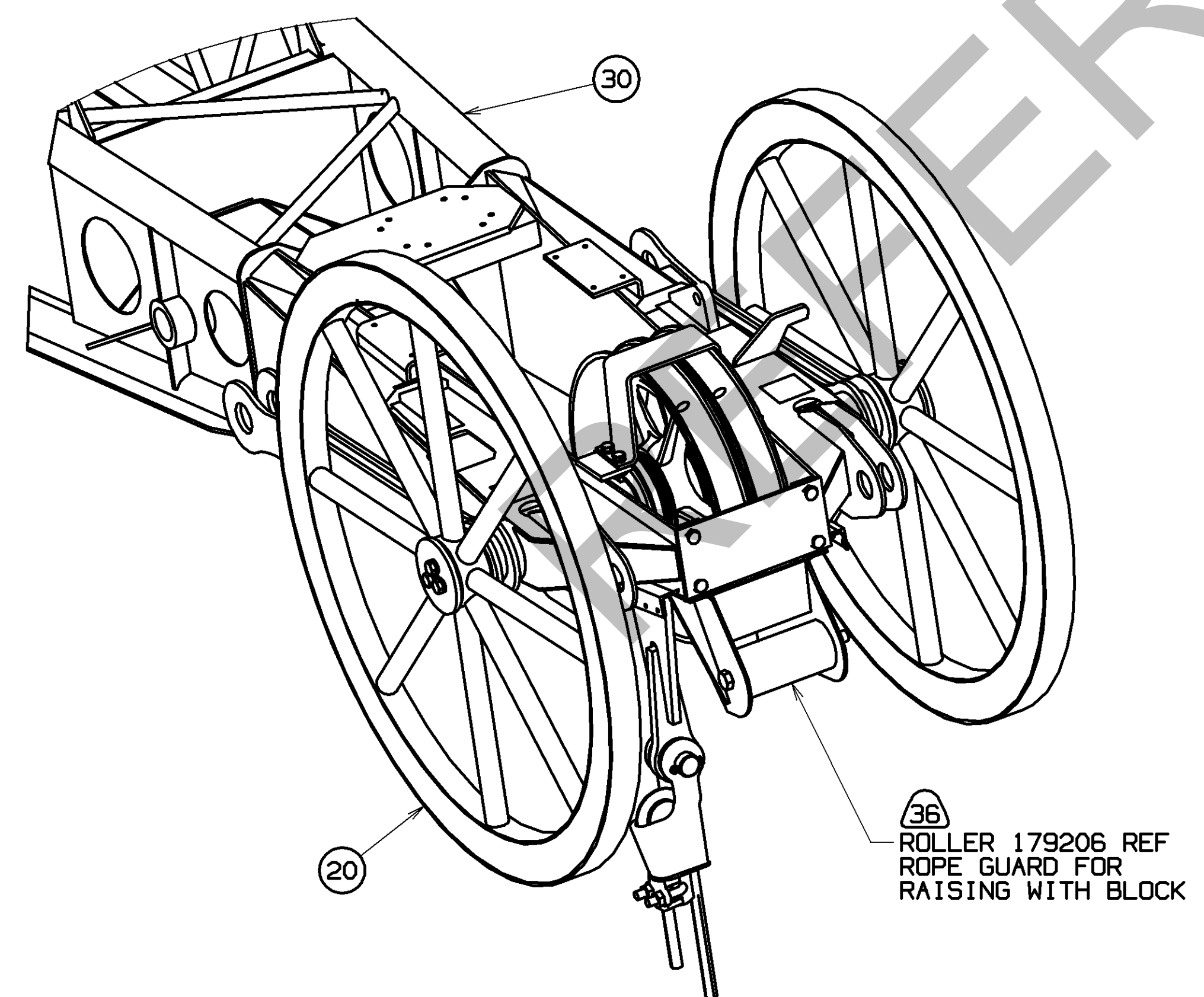
**DETAIL R**  
 FOUR PART LINE W/DEAD END  
 AT CENTER SHAFT  
 (FROM SHEET 1)  
 SCALE 0.075



**DETAIL R**  
 SINGLE PART LINE  
 (FROM SHEET 1)  
 SCALE 0.075

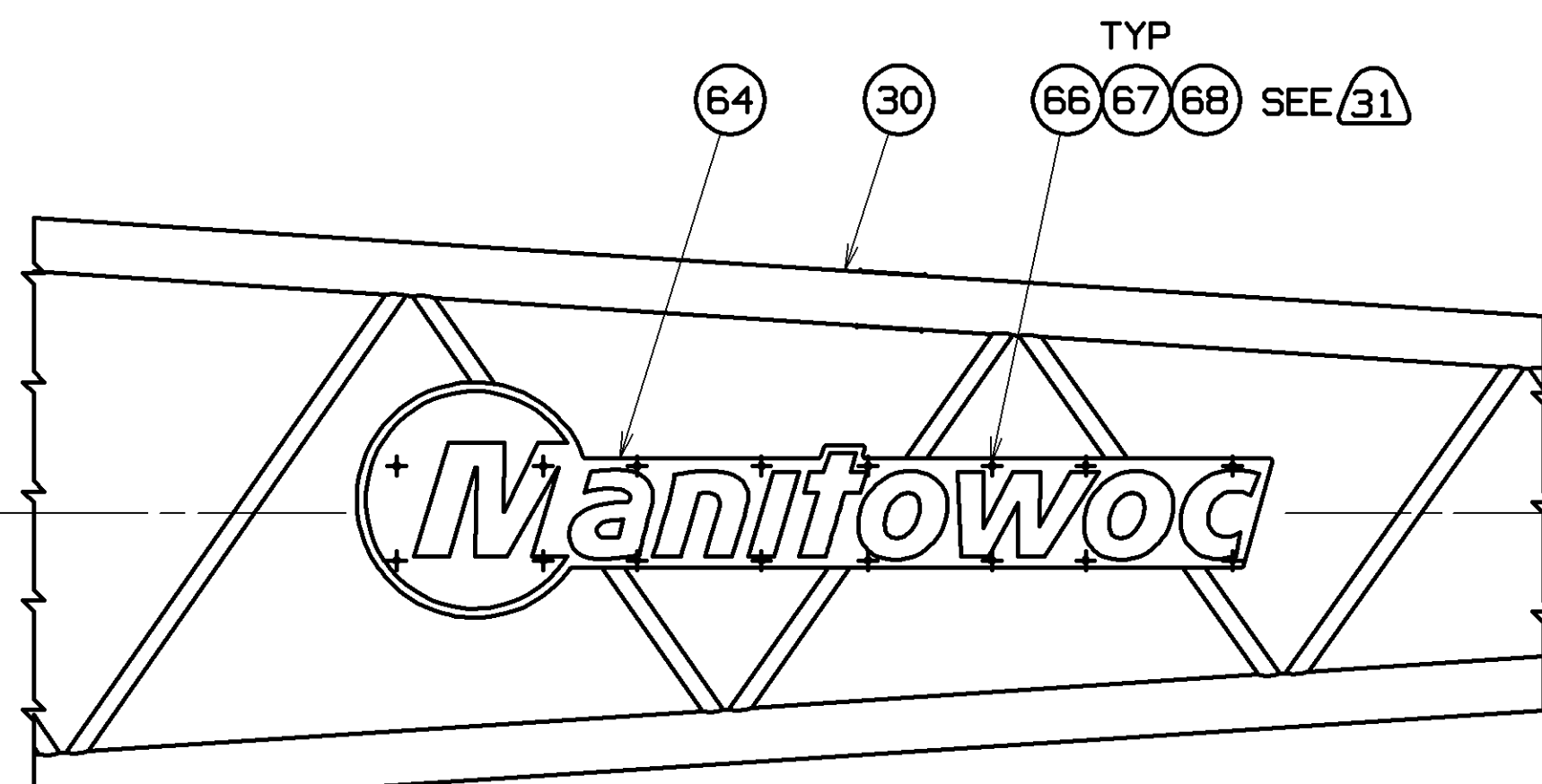


**DETAIL T**  
 TYPICAL TIMBER ATTACHMENT  
 (FROM SHEET 1)  
 SCALE 0.125

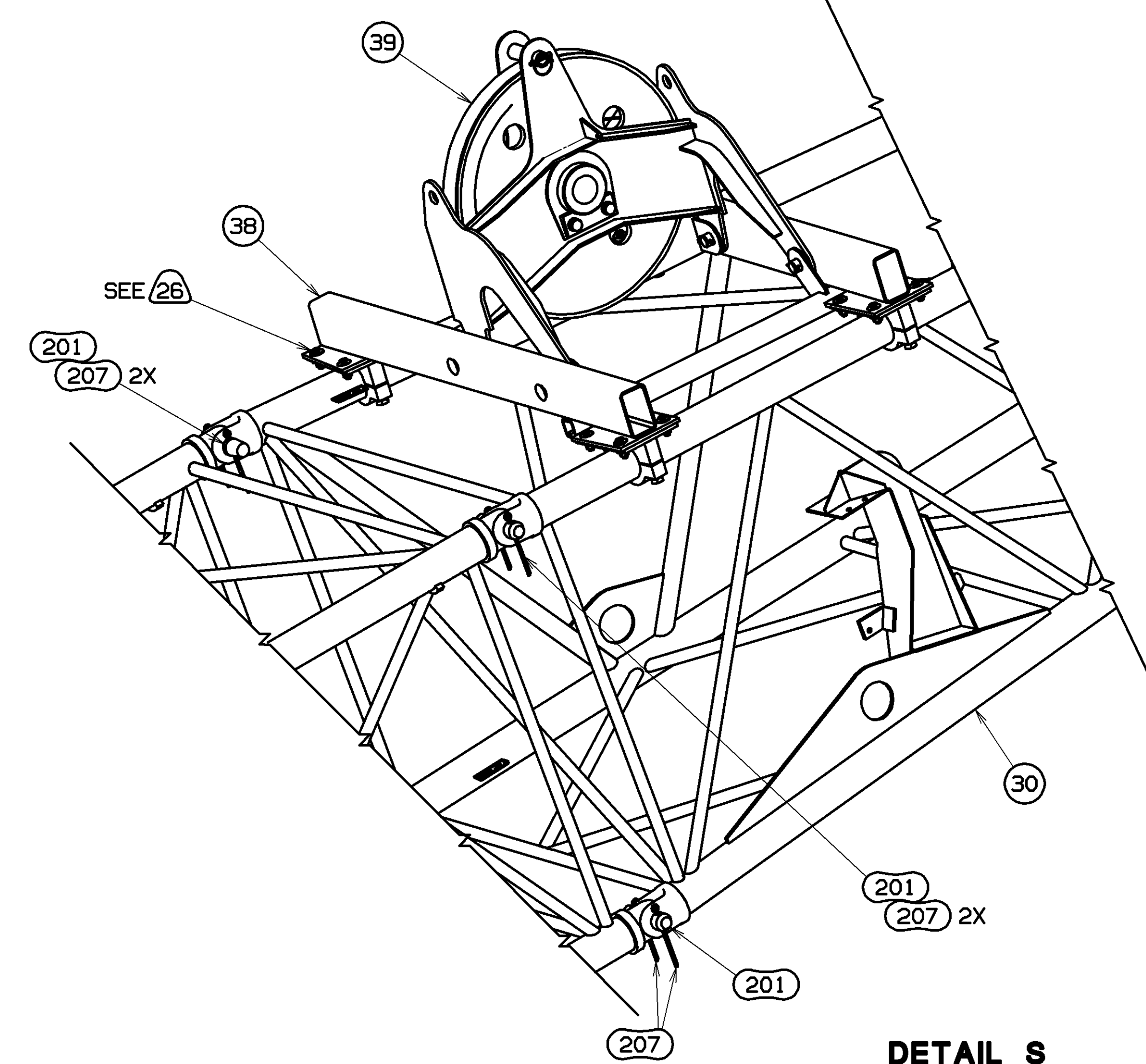


**VIEW AA-AA**  
 (FROM SHEET 1)  
 SCALE 0.100

36 ROLLER 179206 REF  
 ROPE GUARD FOR  
 RAISING WITH BLOCK



**DETAIL Q**  
 (FROM SHEET 4)  
 SCALE .083



**DETAIL S**  
 (FROM SHEET 1)  
 SCALE 0.100



LAYOUT JACK-KNIFE LUFFING JIB RAISING PROCEDURE

(SEE LUFFING JIB RAISING PROCEDURE)

NOTE: AFTER LUFFING JIB REEVING IS COMPLETE, BUT BEFORE RAISING BOOM AND LUFFING JIB, LOCATE STRUT (ITEM 34) 177634 IN STORAGE POSITION. (SEE DETAIL E).

DISCONNECT JIB STRUT (ITEM 19) 177443 FROM ADAPTER FRAME (ITEM 29) 177493 BY REMOVING PIN (ITEM 2) 014902 (SEE DETAIL E) AND LOCATING PIN IN STORAGE POSITION (SEE SHEET 5 DETAIL B).

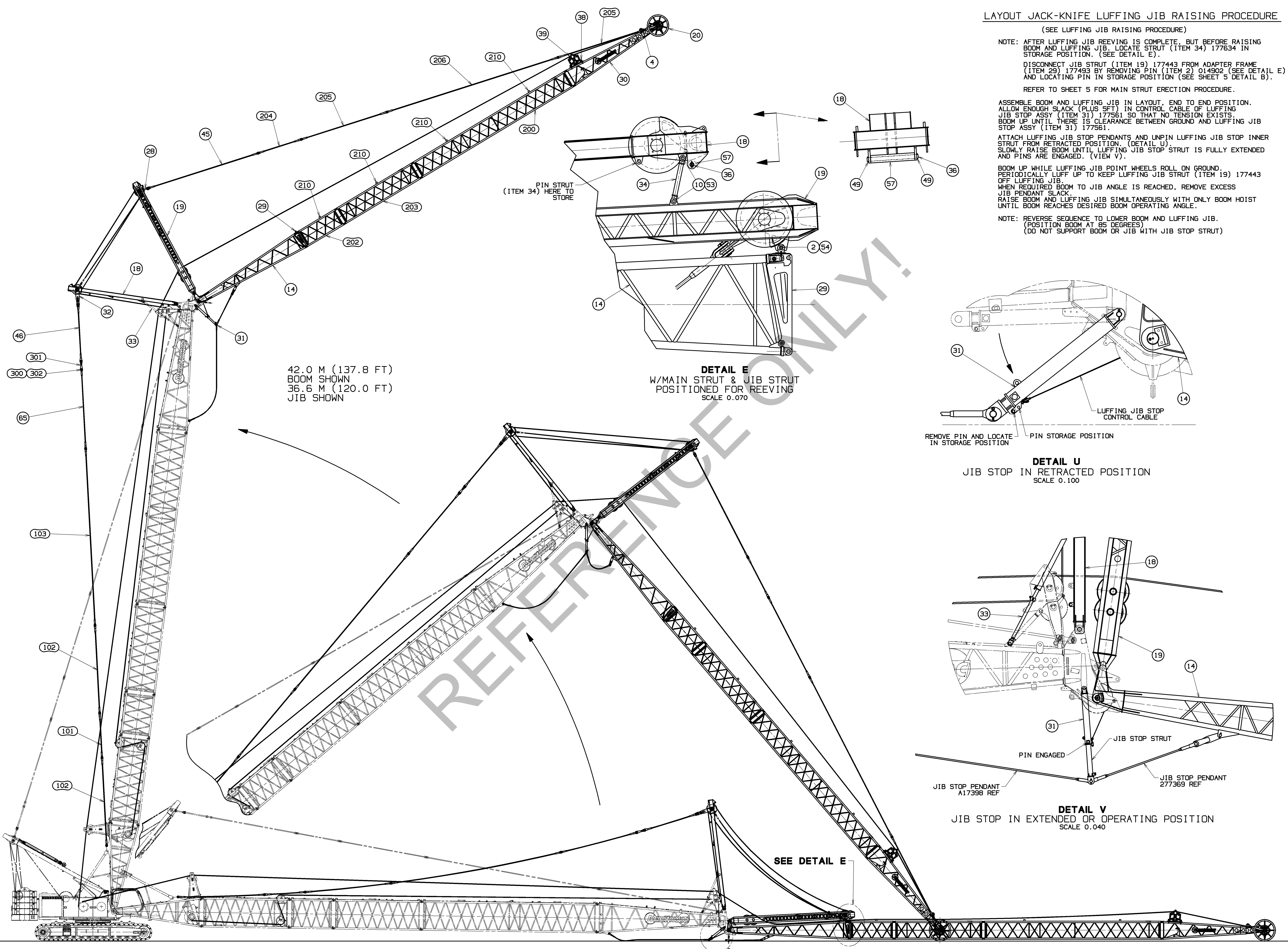
REFER TO SHEET 5 FOR MAIN STRUT ERECTION PROCEDURE.

ASSEMBLE BOOM AND LUFFING JIB IN LAYOUT. END TO END POSITION. ALLOW ENOUGH SLACK (PLUS 5FT) IN CONTROL CABLE OF LUFFING JIB STOP ASSY (ITEM 31) 177561 SO THAT NO TENSION EXISTS. BOOM UP UNTIL THERE IS CLEARANCE BETWEEN GROUND AND LUFFING JIB STOP ASSY (ITEM 31) 177561.

ATTACH LUFFING JIB STOP PENDANTS AND UNPIN LUFFING JIB STOP INNER STRUT FROM RETRACTED POSITION. (DETAIL U) SLOWLY RAISE BOOM UNTIL LUFFING JIB STOP STRUT IS FULLY EXTENDED AND PINS ARE ENGAGED. (VIEW V).

BOOM UP WHILE LUFFING JIB POINT WHEELS ROLL ON GROUND. PERIODICALLY LUFF UP TO KEEP LUFFING JIB STRUT (ITEM 19) 177443 OFF LUFFING JIB. WHEN REQUIRED BOOM TO JIB ANGLE IS REACHED, REMOVE EXCESS JIB PENDANT SLACK. RAISE BOOM AND LUFFING JIB SIMULTANEOUSLY WITH ONLY BOOM HOIST UNTIL BOOM REACHES DESIRED BOOM OPERATING ANGLE.

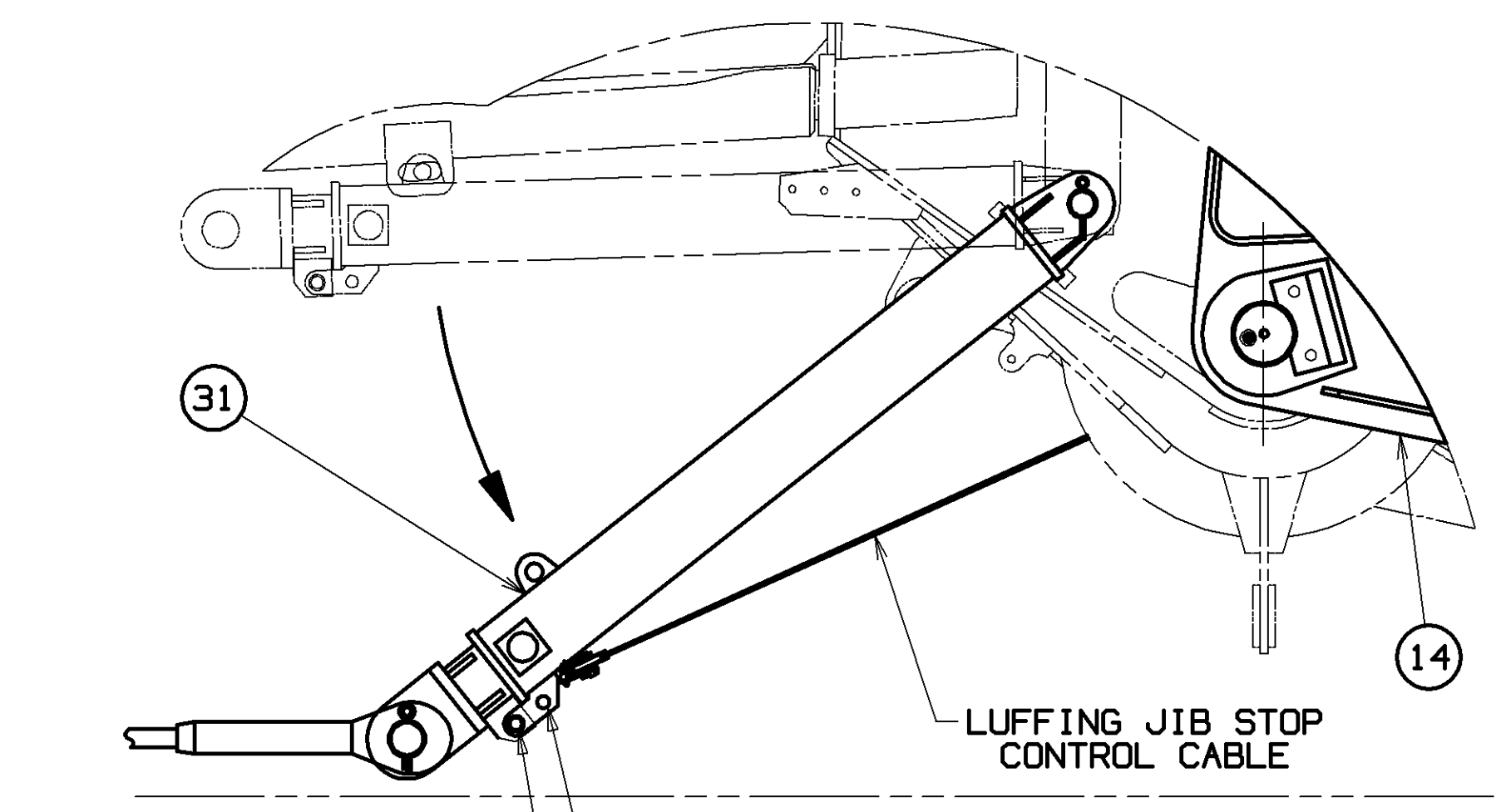
NOTE: REVERSE SEQUENCE TO LOWER BOOM AND LUFFING JIB. (POSITION BOOM AT 85 DEGREES) (DO NOT SUPPORT BOOM OR JIB WITH JIB STOP STRUT)



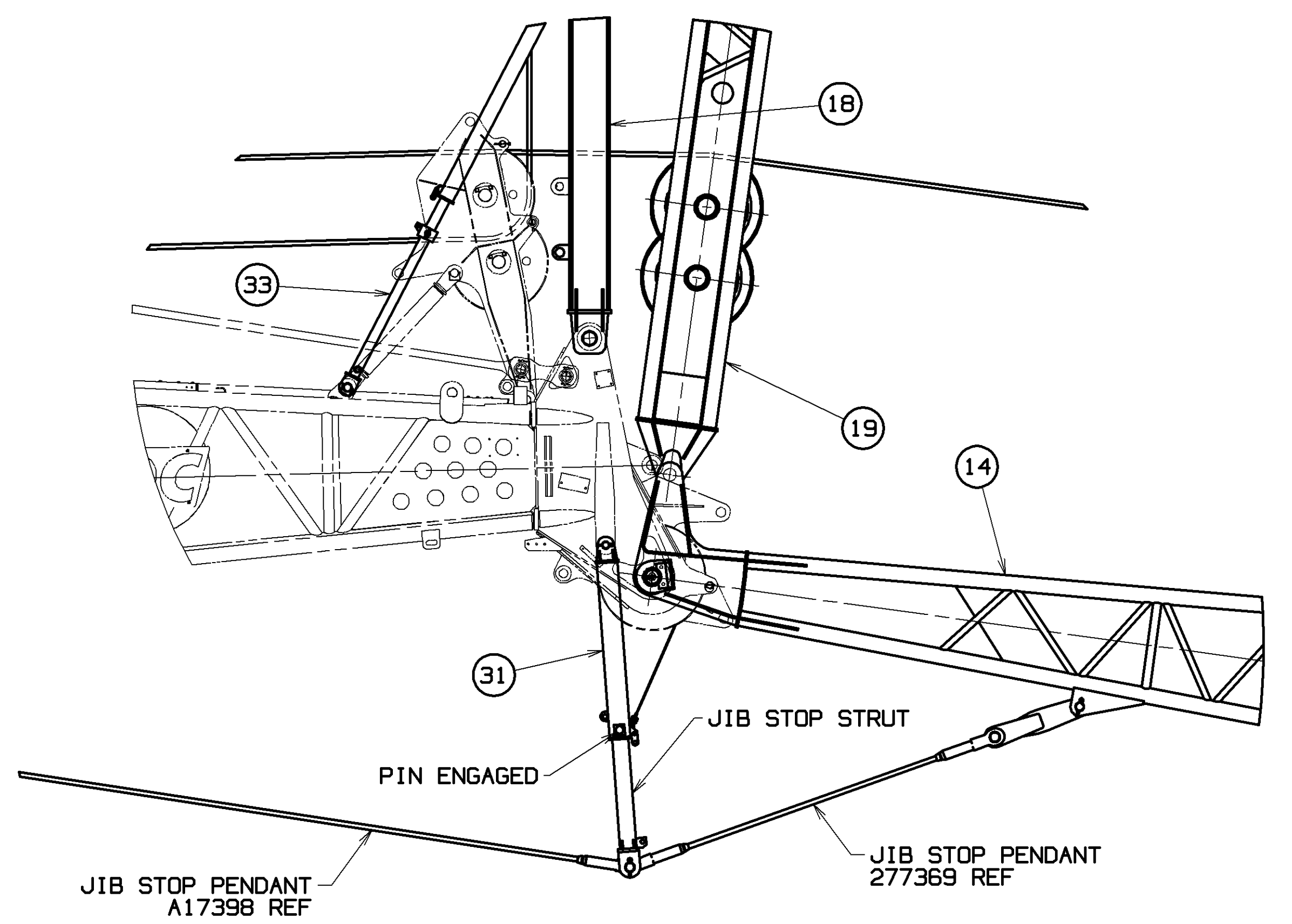
42.0 M (137.8 FT)  
 BOOM SHOWN  
 36.6 M (120.0 FT)  
 JIB SHOWN

PIN STRUT  
 (ITEM 34) HERE TO  
 STORE

**DETAIL E**  
 W/MAIN STRUT & JIB STRUT  
 POSITIONED FOR REEVING  
 SCALE 0.070



**DETAIL U**  
 JIB STOP IN RETRACTED POSITION  
 SCALE 0.100



**DETAIL V**  
 JIB STOP IN EXTENDED OR OPERATING POSITION  
 SCALE 0.040

WITH AUX DRUM OPTION  
 AND FRONT DRUM NOT USED

SEE DETAIL U  
 AND  
 SEE DETAIL V

TOLERANCE UNLESS OTHERWISE SPECIFIED		SCALE	DATE	BY	CHK	APP	REV	DESCRIPTION
DECIMAL PLACES	FRACTIONS	1:10 FEET > 10 FEET	0.012	AMJ	RHV	BNN	1	LUFFING JIB RIGGING
(1) PLACE 0.5	1/16	1:12						
(2) PLACE 0.00	1/32	1:12						
(3) PLACE 0.000	1/64	1:12						
ANGLES		1:12						
THIS DRAWING IS THE PROPERTY OF MANITOWOC CRANES, INC. IT IS LOANED, SUBJECT TO RETURN UPON DEMAND, AND ON EXPRESS CONDITION THAT IT IS NOT TO BE COPIED OR USED DIRECTLY OR INDIRECTLY IN ANY MANNER DETRIMENTAL TO OUR INTERESTS.		Manitowoc Cranes, Inc. Manitowoc, Wisconsin MODEL MLC165-1		DATE 11-12-15 REVISION A		#135 FOR #74A BOOM		81042733 SHT 7 OF 7