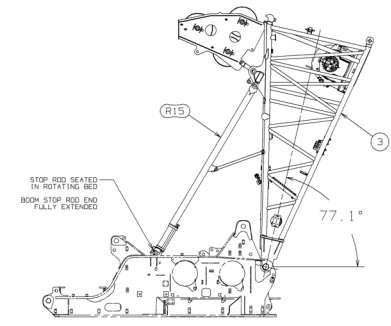


ITEMS REQ'D FOR VARIOUS BOOM LENGTHS - SEE SHEETS 3, 4 & 5 FOR BOOM MAKE-UP

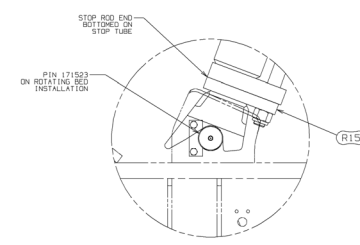
ITEM NO.		#76 INSERTS (18, 19)				CONNECTOR PINS		STRAPS			LINKS	LINK/STRAP CONNECTION				STRUT
		100	101	102 (11)	103 (12)	R108	R105	R109	R107	R106	R103	R100	R101	R102	R104	105
METERS	FEET	INSERT 3.0M (9.8FT) ASSY	INSERT 6.0M (19.7FT) ASSY	INSERT 12.0M (39.4FT) ASSY	INSERT 12.0M (39.4FT) ASSY W/BSY	PIN TAPERED 1 HOLE	COTTER	STRAP 3.0M (9.8FT)	STRAP 6.0M (19.7FT)	STRAP 12.0M (39.4FT)	LINK 174.6mm (6.9in)	COLLAR SEE (24)	PIN W/HEAD SEE (24)	PIN CLEVIS SEE (24)	COTTER SEE (24)	INTER- MEDIATE STRUT SEE (23)
		20.0	65.6	0	0	0	0	4	4	0	0	0	4	14	12	14
23.0	75.5	1	0	0	0	6	6	2	0	0	8	18	16	18	44	0
26.0	85.3	0	1	0	0	6	6	0	2	0	8	18	16	18	44	0
29.0	95.1	1	1	0	0	8	8	2	2	0	12	22	20	22	52	0
32.0	105.0	0	0	0	1	6	6	0	0	2	8	18	16	18	44	0
35.0	114.8	1	0	0	1	8	8	2	0	2	12	22	20	22	52	0
38.0	124.7	0	1	0	1	8	8	0	2	2	12	22	20	22	52	0
41.0	134.5	1	1	0	1	10	10	2	2	2	16	26	24	26	60	0
44.0	144.4	0	0	1	1	8	8	0	0	4	12	22	20	22	52	0
47.0	154.2	1	0	1	1	10	10	2	0	4	16	26	24	26	60	0
50.0	164.0	0	1	1	1	10	10	0	2	4	16	26	24	26	60	0
53.0	173.9	1	1	1	1	12	12	2	2	4	20	30	28	30	68	0
56.0	183.7	0	0	2	1	10	10	0	0	6	16	26	24	26	60	0
59.0	193.6	1	0	2	1	12	12	2	0	6	20	30	28	30	68	0
62.0	203.4	0	1	2	1	12	12	0	2	6	20	30	28	30	68	0
65.0	213.3	1	1	2	1	14	14	2	2	6	24	34	32	34	76	0
68.0	223.1	0	0	3	1	12	12	0	0	8	20	30	28	30	68	1-SHORT
71.0	232.9	1	0	3	1	14	14	2	0	8	24	34	32	34	76	1-SHORT
74.0	242.8	0	1	3	1	14	14	0	2	8	24	34	32	34	76	1-SHORT
77.0	252.6	1	1	3	1	16	16	2	2	8	28	38	36	38	84	1-SHORT
80.0	262.5	0	0	4	1	14	14	0	0	10	24	34	32	34	76	1-SHORT
83.0	272.3	1	0	4	1	16	16	2	0	10	28	38	36	38	84	1-LONG
86.0	282.2	0	1	4	1	16	16	0	2	10	28	38	36	38	84	1-LONG
89.0	292.0	1	1	4	1	18	18	2	2	10	32	42	40	42	92	1-LONG

REFERENCE ONLY!

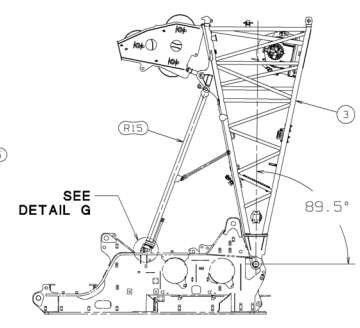
BILL OF MATERIAL				ASSEMBLY CHECK IN
NO.	QTY.	DESCRIPTION	MATERIAL	DATE



BOOM STOP CUSHION
SCALE 0.025

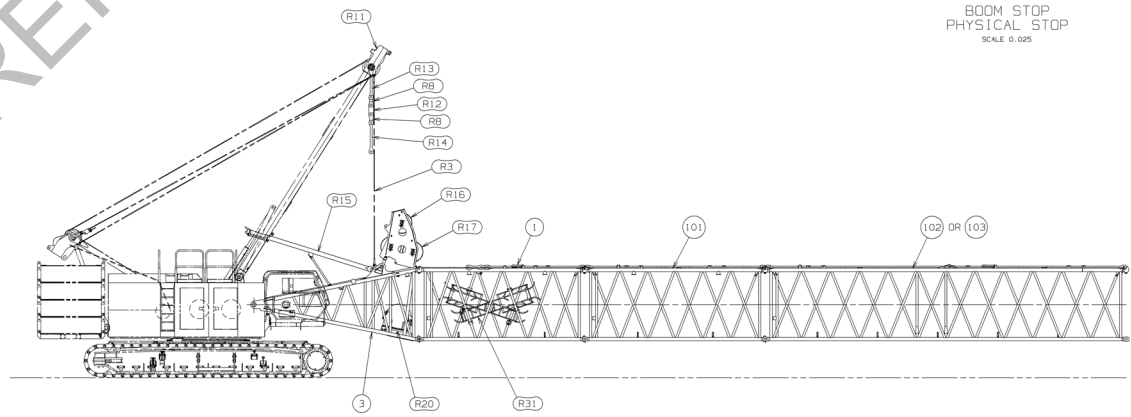


DETAIL G
SCALE 0.200



BOOM STOP PHYSICAL STOP
SCALE 0.025

BOOM HANDLING WITH MAST				
WITH BOOM HANDLING PENDANTS ON MAST ATTACHED TO LUG ON BOOM BUTT: MAXIMUM BOOM THAT CAN BE CANTILEVERED IS AS FOLLOWS.				
LENGTH	5.5M (18.0FT) 80146300	3.0M (9.8FT) 80149425	6.0M (19.7FT) 80149426	12.0M (39.4FT) 80149427 OR 80149428
5.5 M (18.0 FT)	1	0	0	0
8.5 M (27.9 FT)	1	1	0	0
11.5 M (37.7 FT)	1	0	1	0
14.5 M (47.6 FT)	1	1	1	0
17.5 M (57.4 FT)	1	0	0	1
20.5 M (67.3 FT)	1	1	0	1
23.5 M (77.1 FT)	1	0	1	1

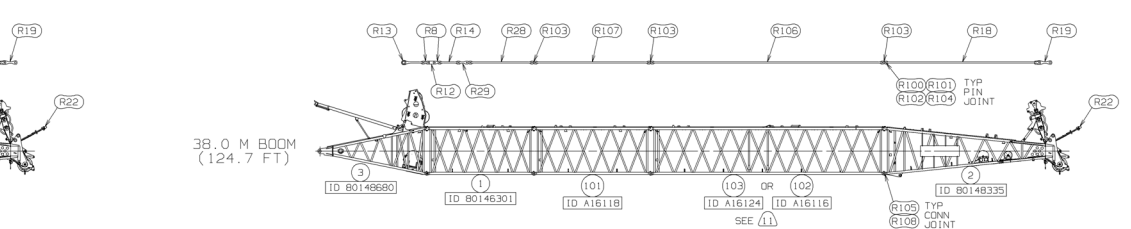
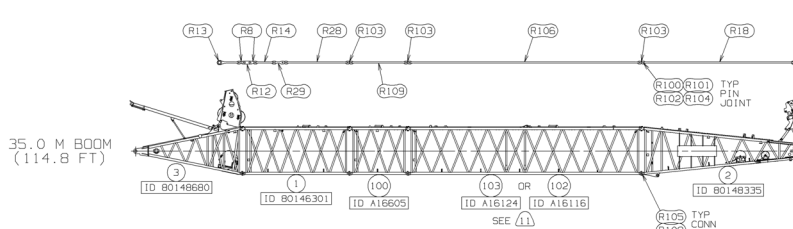
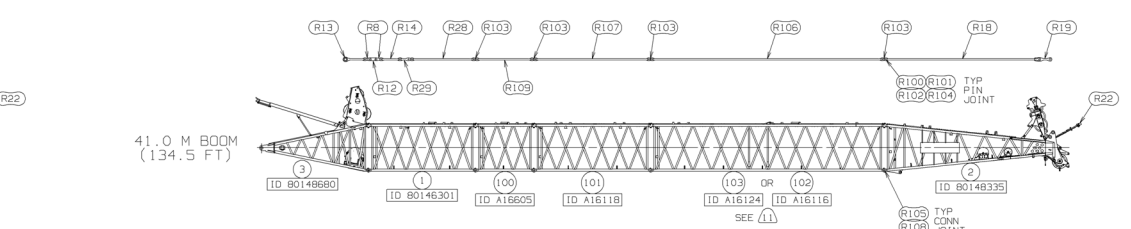
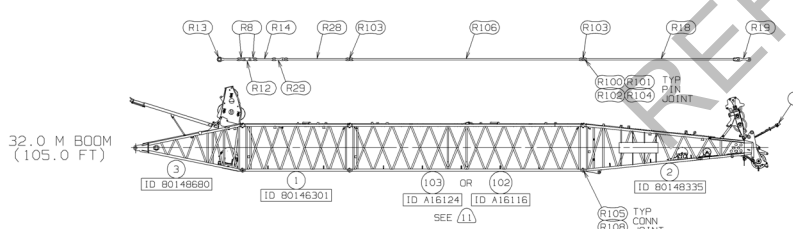
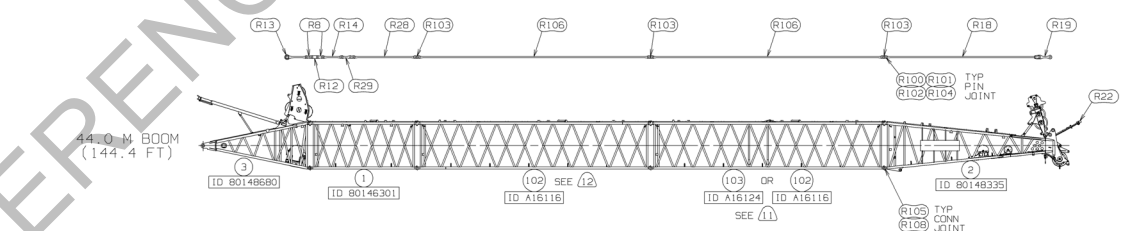
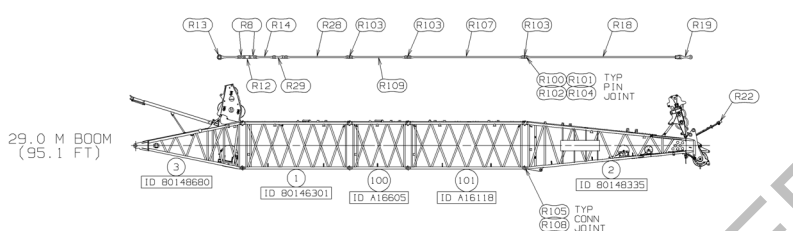
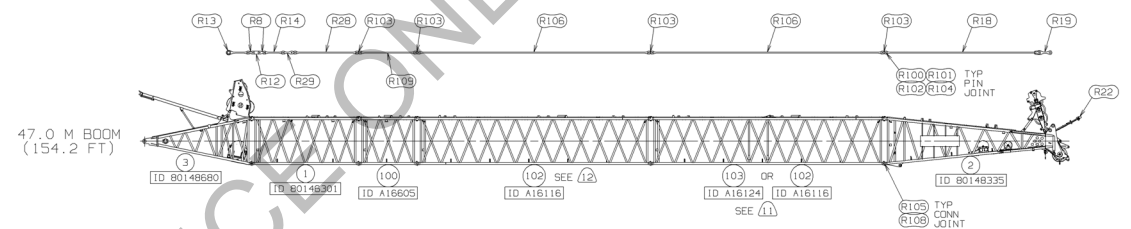
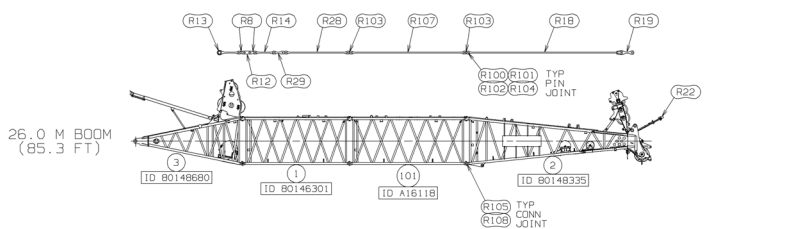
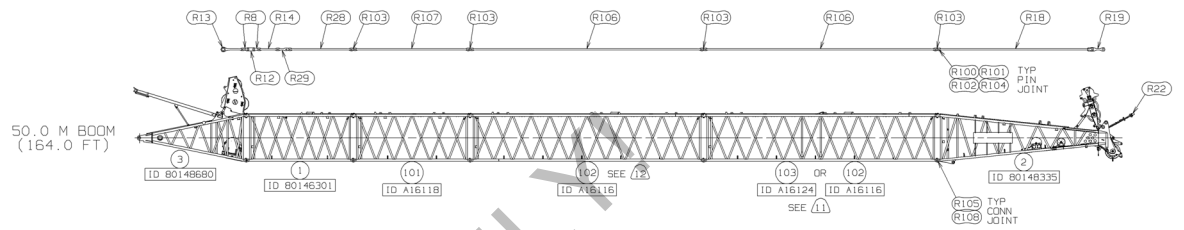
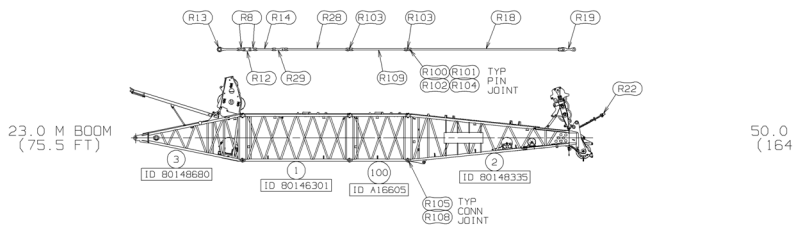
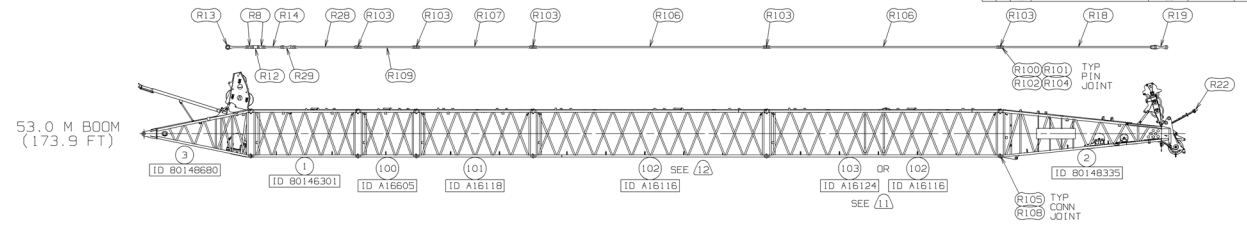
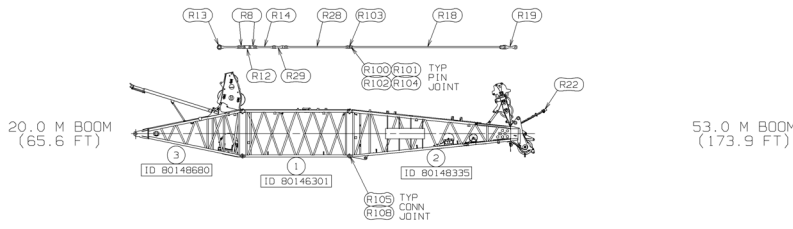


BOOM HANDLING WITH MAST
SCALE 0.017

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REQUIRE LABELING
REQUIREMENT TO
CONFORM TO
ENGINEERING
SPECIFICATION
66201017M FOR
COMPONENTS LISTED
IN 002500-05-035
- 0017

BILL OF MATERIAL		ASSEMBLY
ITEM NO.	DESCRIPTION	QUANTITY

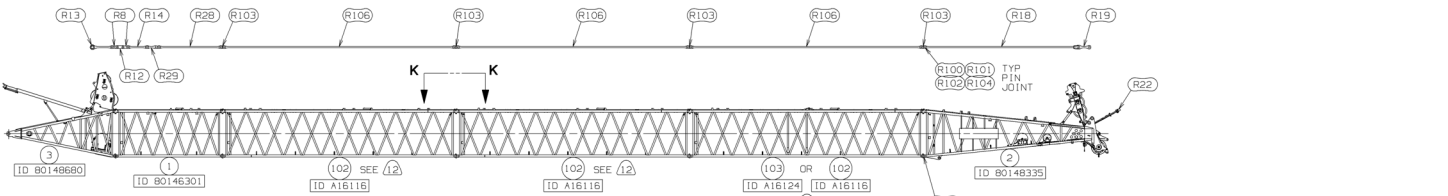


RECOMMENDED BOOM MAKE-UP
FOR TYP PIN JOINTS SEE DETAILS A, C, H AND J

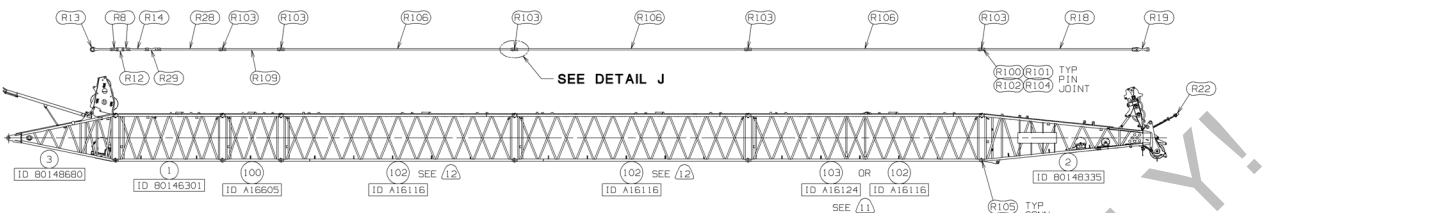
<p>THIS PRINT REMAINS THE PROPERTY OF MANTOWOC CRANES, INC. ALL INFORMATION CONTAINED HEREIN IS CONFIDENTIAL, IT IS LOANED, SUBJECT TO RETURN UPON DEMAND. THE USER AGREES TO HOLD MANTOWOC CRANES, INC. HARMLESS FROM ANY AND ALL LIABILITY, INCLUDING REASONABLE ATTORNEY'S FEES, ARISING FROM ANY MANTOWOC DOCUMENTS TO OUR CUSTOMERS.</p>	<p>TOLERANCE UNLESS OTHERWISE SPECIFIED</p> <table border="1"> <tr> <td>FINISH</td> <td>AS FURNISHED</td> </tr> <tr> <td>SIZE</td> <td>AS FURNISHED</td> </tr> <tr> <td>ANGLE</td> <td>AS FURNISHED</td> </tr> <tr> <td>PERFORATIONS</td> <td>AS FURNISHED</td> </tr> <tr> <td>WELDING</td> <td>AS FURNISHED</td> </tr> <tr> <td>DRILLING</td> <td>AS FURNISHED</td> </tr> <tr> <td>THREADS</td> <td>AS FURNISHED</td> </tr> <tr> <td>SPRINGS</td> <td>AS FURNISHED</td> </tr> <tr> <td>ROPS</td> <td>AS FURNISHED</td> </tr> <tr> <td>HOLES</td> <td>AS FURNISHED</td> </tr> <tr> <td>WELDS</td> <td>AS FURNISHED</td> </tr> </table>	FINISH	AS FURNISHED	SIZE	AS FURNISHED	ANGLE	AS FURNISHED	PERFORATIONS	AS FURNISHED	WELDING	AS FURNISHED	DRILLING	AS FURNISHED	THREADS	AS FURNISHED	SPRINGS	AS FURNISHED	ROPS	AS FURNISHED	HOLES	AS FURNISHED	WELDS	AS FURNISHED	<p>DATE: 12-16-24 BY: JAH CHK: JAH APP: JAH</p>	<p>Mantowoc Cranes, Inc. Mantowoc, Wisconsin</p>	<p>BOOM RIGGING B10:76A</p>	<p>12-16-24 B10:76A</p>
FINISH	AS FURNISHED																										
SIZE	AS FURNISHED																										
ANGLE	AS FURNISHED																										
PERFORATIONS	AS FURNISHED																										
WELDING	AS FURNISHED																										
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SPRINGS	AS FURNISHED																										
ROPS	AS FURNISHED																										
HOLES	AS FURNISHED																										
WELDS	AS FURNISHED																										

BILL OF MATERIAL		ASSEMBLY	
NO.	DESCRIPTION	MATERIAL	QTY

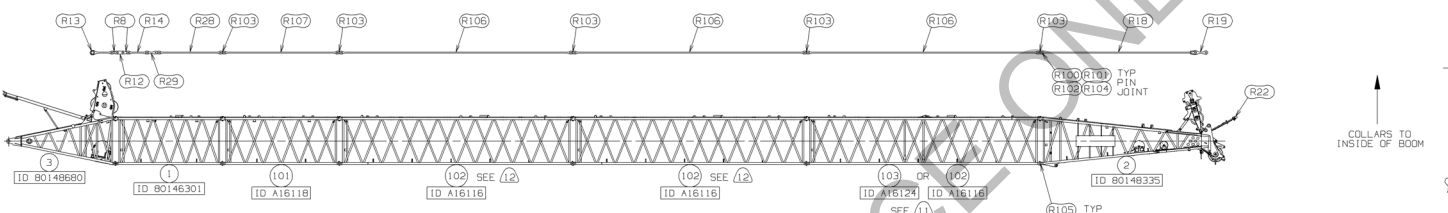
56.0 M BOOM
(183.7 FT)



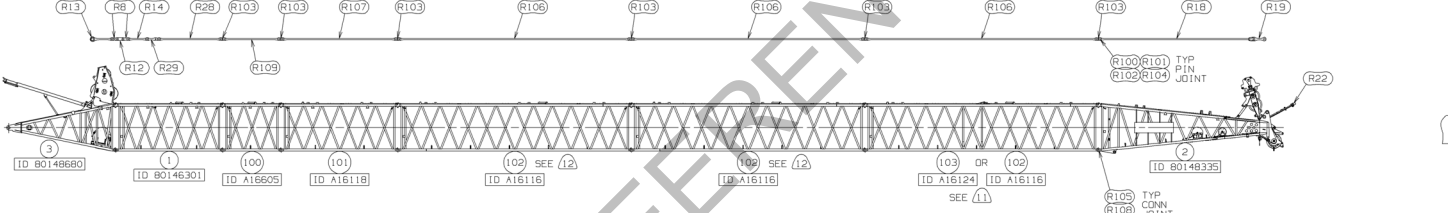
59.0 M BOOM
(193.6 FT)



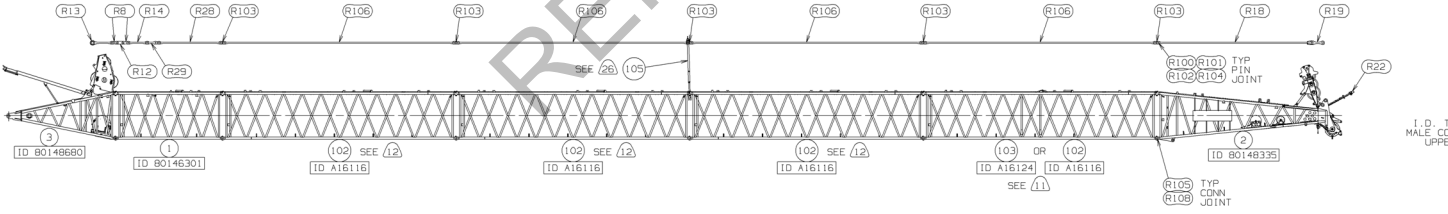
62.0 M BOOM
(203.4 FT)



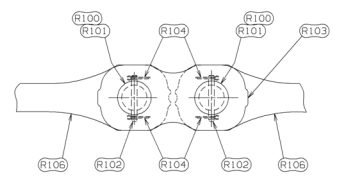
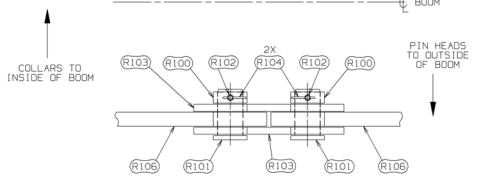
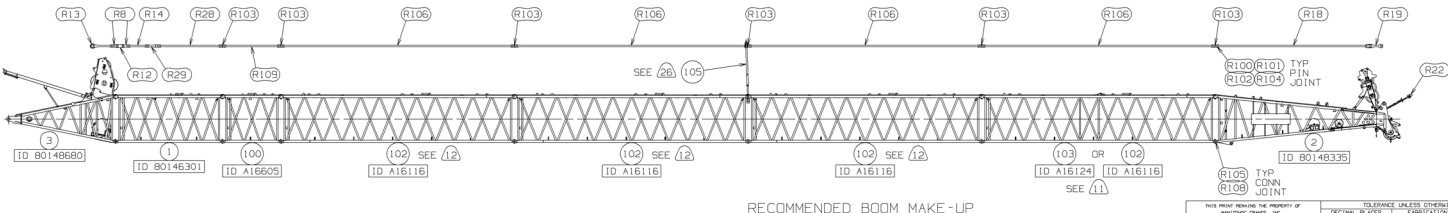
65.0 M BOOM
(213.3 FT)



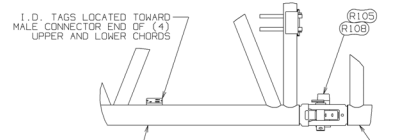
68.0 M BOOM
(223.1 FT)



71.0 M BOOM
(232.9 FT)



DETAIL J
SCALE 0.250

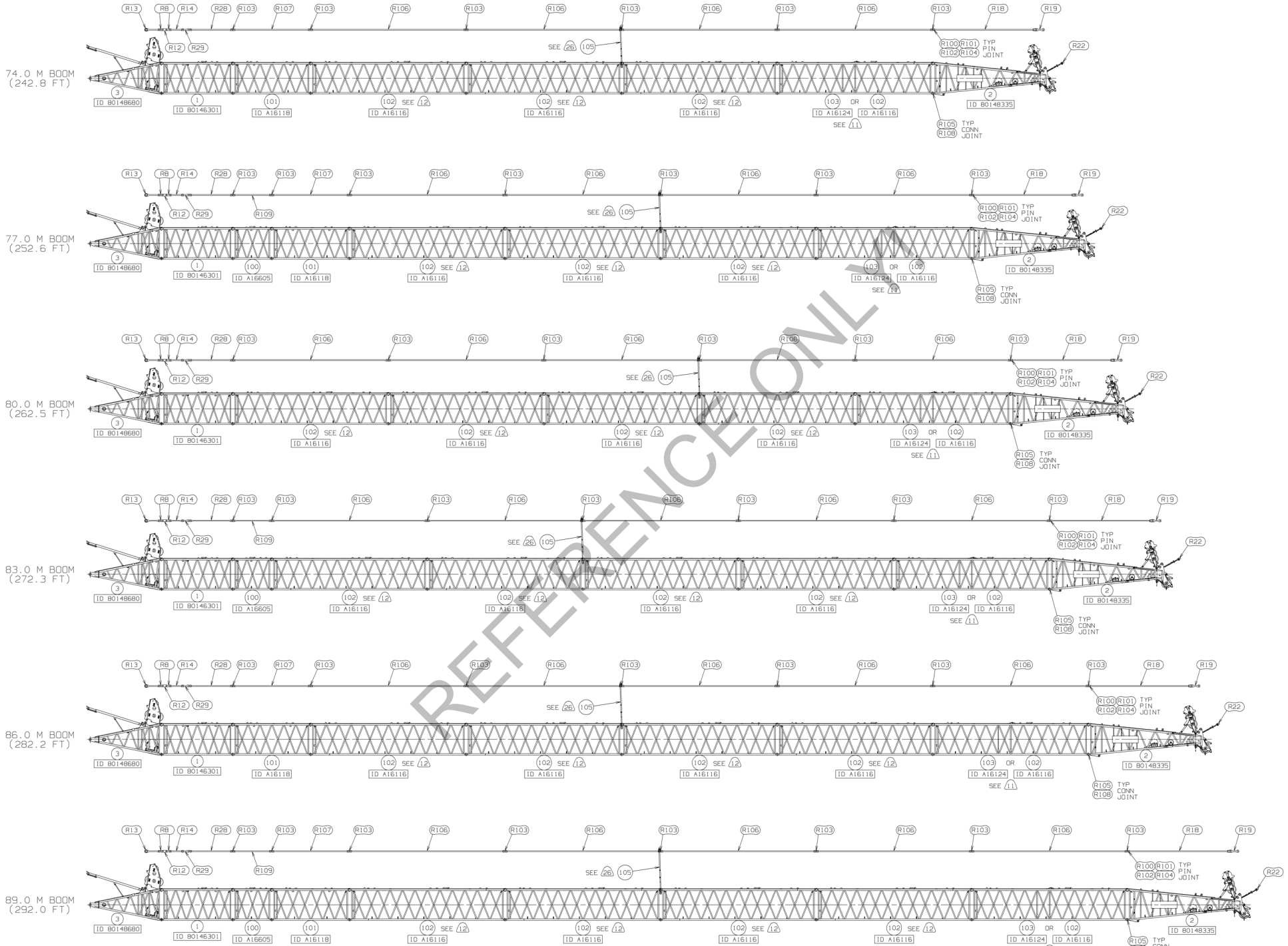


VIEW K-K
TYPICAL LOCATION OF
INSERT IDENTIFICATION TAGS
SCALE 0.100

RECOMMENDED BOOM MAKE-UP
FOR TYP PIN JOINTS SEE DETAILS A, C, H AND J

TOLERANCE UNLESS OTHERWISE SPECIFIED		MATERIAL		FINISH	
SIZE	TOLERANCE	DESCRIPTION	FINISH	DESCRIPTION	FINISH
0.000 - 0.001	±0.001	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
0.001 - 0.002	±0.002	ALUMINUM	AS SUPPLIED	PAINT	AS SUPPLIED
0.002 - 0.005	±0.005	BRASS	AS SUPPLIED	PAINT	AS SUPPLIED
0.005 - 0.010	±0.010	COPPER	AS SUPPLIED	PAINT	AS SUPPLIED
0.010 - 0.020	±0.020	INCONEL	AS SUPPLIED	PAINT	AS SUPPLIED
0.020 - 0.050	±0.050	TITANIUM	AS SUPPLIED	PAINT	AS SUPPLIED
0.050 - 0.100	±0.100	STAINLESS STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
0.100 - 0.200	±0.200	ALUMINUM	AS SUPPLIED	PAINT	AS SUPPLIED
0.200 - 0.500	±0.500	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
0.500 - 1.000	±1.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
1.000 - 2.000	±2.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
2.000 - 5.000	±5.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
5.000 - 10.000	±10.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
10.000 - 20.000	±20.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
20.000 - 50.000	±50.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
50.000 - 100.000	±100.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
100.000 - 200.000	±200.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
200.000 - 500.000	±500.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED
500.000 - 1000.000	±1000.000	STEEL	AS SUPPLIED	PAINT	AS SUPPLIED

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74.0 M BOOM
(242.8 FT)

77.0 M BOOM
(252.6 FT)

80.0 M BOOM
(262.5 FT)

83.0 M BOOM
(272.3 FT)

86.0 M BOOM
(282.2 FT)

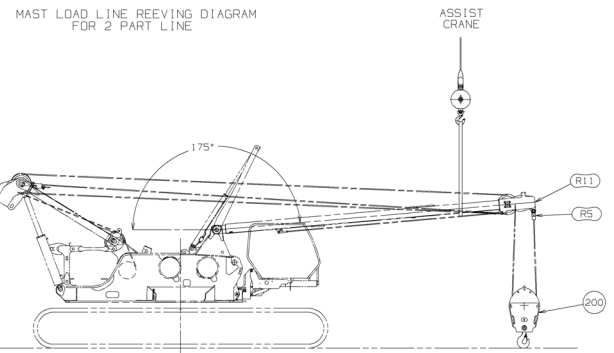
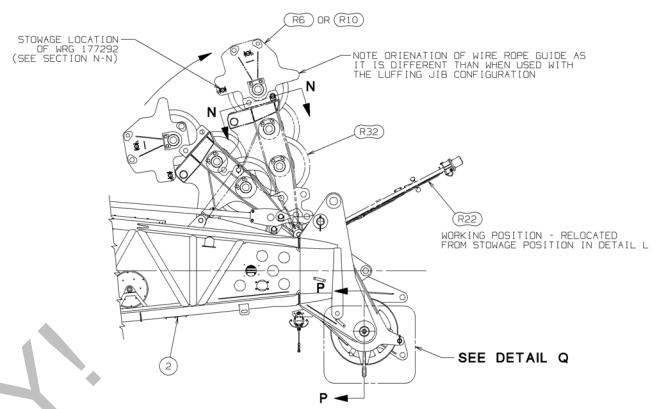
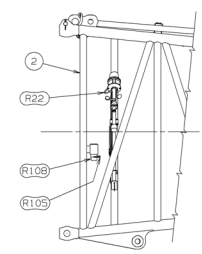
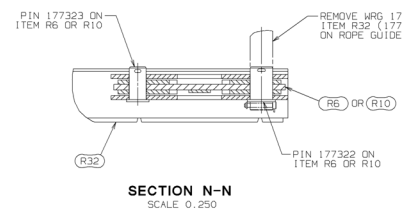
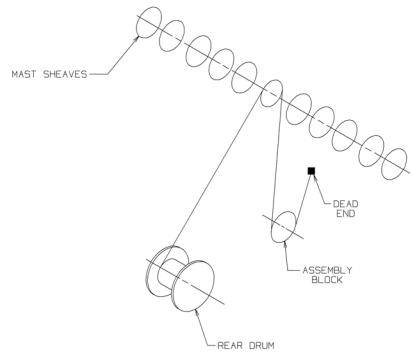
89.0 M BOOM
(292.0 FT)

RECOMMENDED BOOM MAKE-UP
 FOR TYP PIN JOINTS SEE DETAILS A, C, H AND J

TOLERANCE UNLESS OTHERWISE SPECIFIED		MATERIAL		FINISH	
SIZE	TOLERANCE	DESCRIPTION	GRADE	PAINT	NOTES
ALL DIMENSIONS	±0.25	STEEL	A36	PRIMER	
WELDS	±0.25	WELDS	E70	PRIMER	
DRILL HOLES	±0.125	DRILL HOLES	A36	PRIMER	
ROUNDS	±0.125	ROUNDS	A36	PRIMER	
ANGLES	±0.125	ANGLES	A36	PRIMER	

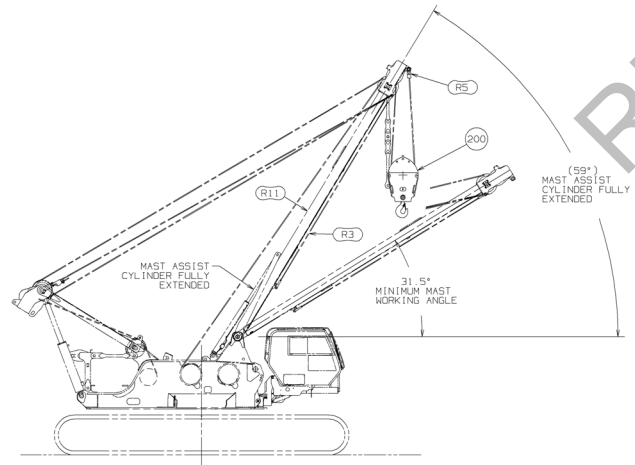
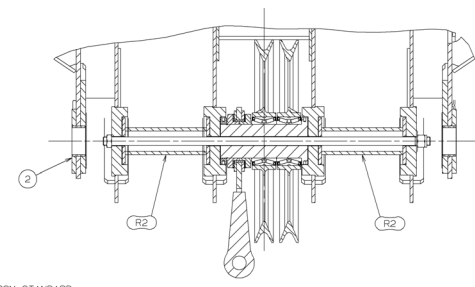
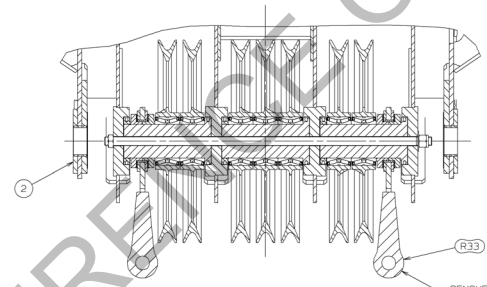
DATE	12-16-24	BY	MMH
APP'D		CHK'D	MMH
REV		REV	
1	ISSUE FOR BOOM RIGGING	1	ISSUE FOR BOOM RIGGING

BILL OF MATERIAL				ASSEMBLY DESCRIPTION
ITEM NO.	DESCRIPTION	MATERIAL	QTY	

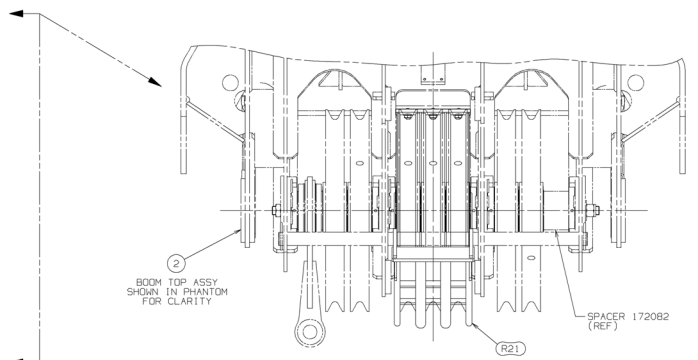
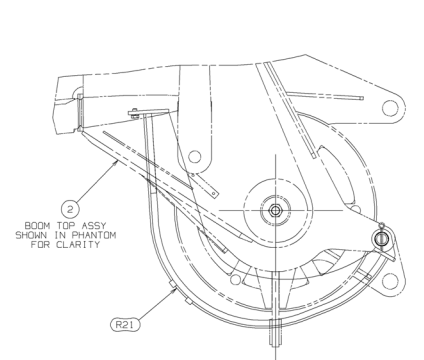


BOOM DOWN MAST (R11) TO 175° MAXIMUM AND INSTALL BLOCK.
WARNING: DO NOT BOOM DOWN MAST BEYOND 175° WITHOUT ATTACHING ASSIST CRANE OR MAST CAN FALL.

TO ATTACH ASSEMBLY BLOCK WITH ASSIST CRANE
 ATTACH ASSIST CRANE WITH SLING TO MAST (R11)
 LOWER MAST WITH ASSIST CRANE WHILE BOOMING DOWN WITH BOOM HOIST TO LOWER MAST TO HORIZONTAL AND INSTALL BLOCK.
 RAISE MAST WITH ASSIST CRANE WHILE BOOMING UP WITH BOOM HOIST TO RAISE MAST TO 175° OR LESS.
 DISCONNECT ASSIST CRANE AND STOW SLING.



WARNING: MAST RAISING CYLINDER IS TO BE FULLY EXTENDED AT ALL TIMES MAST IS USED FOR MAKING LIFTS.



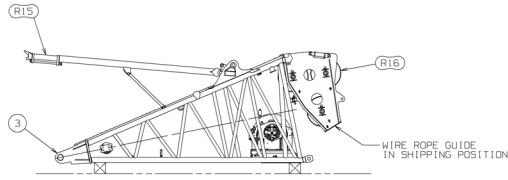
DO NOT SCALE THIS DRAWING

TOLERANCES UNLESS OTHERWISE SPECIFIED		FINISH		MATERIAL		MANUFACTURE	
DIMENSIONS	TOLERANCES	TEXT	FINISH	TEXT	FINISH	TEXT	FINISH
ALL DIMENSIONS	UNLESS OTHERWISE SPECIFIED	ALL DIMENSIONS	UNLESS OTHERWISE SPECIFIED	ALL DIMENSIONS	UNLESS OTHERWISE SPECIFIED	ALL DIMENSIONS	UNLESS OTHERWISE SPECIFIED

REQUIRE LABELING REQUIREMENTS TO CONFORM TO ENGINEERING SPECIFICATION 66291017M FOR COMPONENTS LISTED IN 020500-05-035

80149429

SHT 6 OF 9



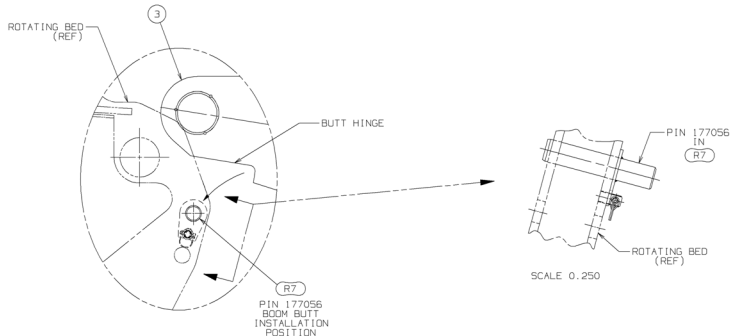
BOOM BUTT SHIPPING CONFIGURATION

BOOM ASSEMBLY PROCEDURE

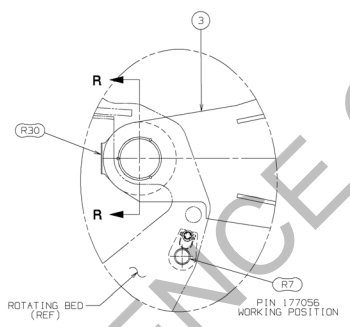
(MAST CAN BE USED TO ASSEMBLE ALL RIGGING COMPONENTS)

STEP 1

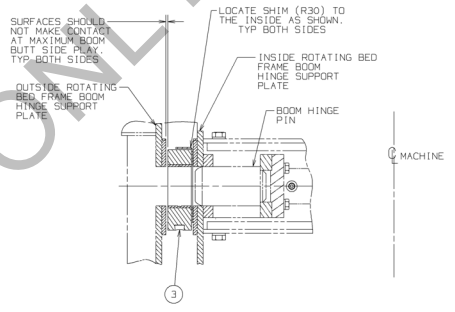
ASSEMBLE BOOM COMPLETE, WITHOUT BUTT.
 ATTACH ROPE GUIDES, STRAPS, LINKS, AND PINS AS REQUIRED.
 (SEE TYPICAL STRAP/LINK/PIN JOINTS - DETAIL A, C, & H ON SHEET 1 AND DETAIL J ON SHEET 4).
 (SEE BOOM TOP DETAILS L AND M ON SHEET 6).
 (SEE UPPER CONNECTOR PIN JOINT DETAIL V ON SHEET 8).
 (SEE LOWER CONNECTOR PIN JOINT DETAIL W ON SHEET 8).



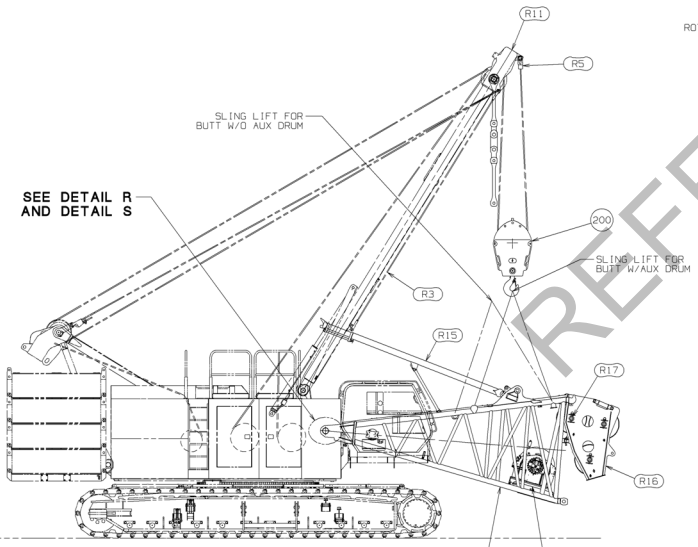
DETAIL R
BOOM BUTT HINGE PIN PREP
SCALE 0.175



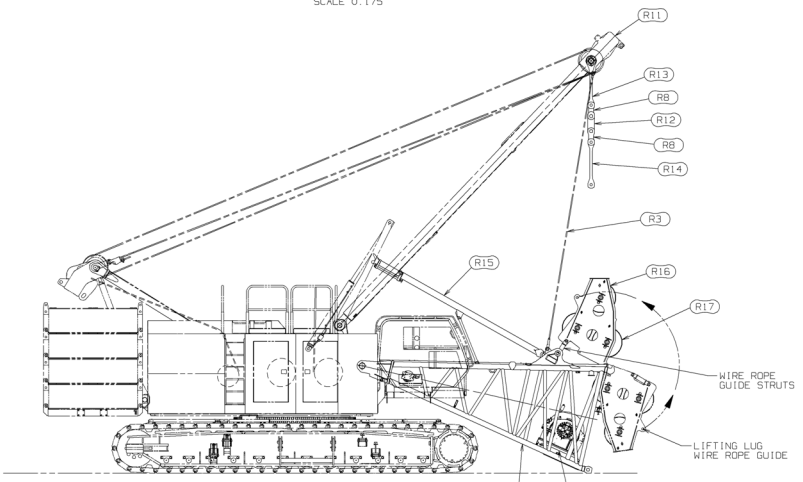
DETAIL S
BOOM BUTT HINGE PIN INSTALLATION
SCALE 0.175



SECTION T-T
SHIM (R30) LOCATION FOR BOOM BUTT INSTALLATION
SCALE 0.175



STEP 2
ATTACHING BOOM BUTT TO ROTATING BED
USING AUXILIARY BLOCK IN MAST



STEP 3
ATTACHING BOOM BUTT CLOSING PENDANTS (R3)

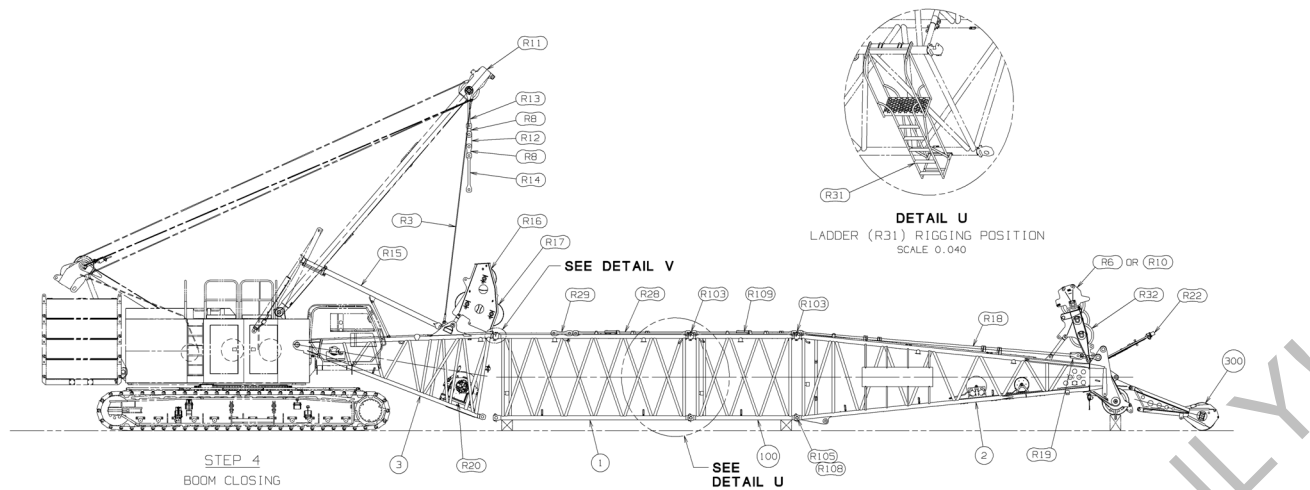
POSITION CRANE IN LINE WITH BOOM BUTT ITEM 3, USING MAST W/AUX BLOCK, ATTACH SLINGS TO BUTT LIFTING POSTS AS INDICATED PER WITH OR WITHOUT AUX DRUM TO HANG LEVEL.
 WITH BOOM HINGE PIN DISENGAGED AND GUIDE PIN 177056 IN BUTT INSTALLATION POSITION LIFT BOOM BUTT ITEM 3 AS SHOWN WITH BUTT HINGE ALIGNED OVER GUIDE PINS 177056. (SEE DETAIL R ON SHEET 7).
 USE MAST TO POSITION BOOM BUTT TO ALIGN BUTT HINGE AND ROTATING BED BOOM HINGE PIN. (SEE DETAIL S ON SHEET 7).
 USE SHIMS (R30) AS NEEDED AND ACTIVATE BOOM HINGE PIN. (SEE SECTION T-T ON SHEET 7).
 RELOCATE PIN 177056 ON R7 TO WORKING POSITION (SEE DETAIL S ON SHEET 7).
WARNING: REPOSITION LOCATING PINS 177056 AS SHOWN IN DETAIL S BEFORE OPERATING BOOM OR DAMAGE TO BUTT, ROTATING BED AND/OR LOCATING PINS WILL OCCUR.
 LOWER BUTT TO GROUND AND REMOVE AUXILIARY BLOCK UNLESS IT IS USED FOR LIFTING WIRE ROPE GUIDE ASSY (R16) (SEE STEP 3).

USING MAST W/AUX BLOCK OR AN ASSIST CRANE LIFT WIRE ROPE GUIDE ASSY (R16) TO OPERATION POSITION AND PIN WIRE ROPE GUIDE STRUTS TO BOOM BUTT AS SHOWN.
 ATTACH BOOM BUTT HANDLING PENDANTS (R3) TO LUGS ON BOOM BUTT ITEM 3.
 (SEE SHEET 2 FOR BOOM HANDLING WITH MAST).

TOLERANCE UNLESS OTHERWISE SPECIFIED		DATE	Manitowoc Cranes, Inc.
FINISH	FABRICATION	REV	Manitowoc, Wisconsin
ASSEMBLY	OPERATION	DATE	
1.00	1.00	1.00	
2.00	2.00	2.00	
3.00	3.00	3.00	
4.00	4.00	4.00	
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98.00	98.00	98.00	
99.00	99.00	99.00	
100.00	100.00	100.00	

TO DISASSEMBLE BOOM

- BOOM DOWN AND SUPPORT BOOM ON BLOCKING. UNREEVE BLOCK. IF EQUIPPED WITH UPPER BOOM POINT (ITEM 300) REMOVE LOWER CONNECTING PINS BEFORE UPPER POINT CONTACTS GROUND. (SEE DETAIL Y ON SHEET 9).
 - DISCONNECT MAST STRAPS FROM BOOM INSERT STRAPS. (REVERSE INSTALLATION STEP 5 ON SHEET 9).
 - CONNECT BOOM BUTT HANDLING PENDANTS FROM MAST TO BOOM BUTT LUGS. (SEE INSTALLATION STEP 3 ON SHEET 7).
 - BOOM UP TO REMOVE SLACK FROM MAST BUTT HANDLING PENDANTS.
- WARNING:**
DO NOT BOOM UP TO PUT EXCESSIVE TENSION INTO BUTT HANDLING PENDANTS. (ENOUGH TENSION IS REQUIRED TO SUPPORT BOOM BUTT WHEN LOWER PINS ARE REMOVED). LIFTING BOOM WITH HANDLING PENDANTS WILL DAMAGE MAST AND/OR BOOM BUTT.
- REMOVE LOWER BUTT TO INSERT PINS AND BOOM DOWN TO DISENGAGE UPPER BOOM BUTT TO INSERT PINS. (REVERSE INSTALLATION STEP 4 ON SHEET 8).
- WARNING:**
BOOM MUST BE PROPERLY BLOCKED TO PREVENT SHIFTING DURING PIN REMOVAL.
- SLOWLY BACK AWAY FROM BOOM.
 - REMOVE BOOM BUTT FROM ROTATING BED WITH MAST. (REVERSE INSTALLATION STEP 2 ON SHEET 7).
- DANGER:**
PREVENT MAST FROM COLLAPSING.
FULLY RAISE MAST ARMS BEFORE RAISING MAST TO VERTICAL.
- DISASSEMBLE BOOM WITH MAST. ONLY LOWER CONNECTOR PINS ARE REMOVED. WITH STRAPS RESTING ON INSERTS, ROTATE STRAP STORAGE LINKS TO TRANSPORT POSITION.

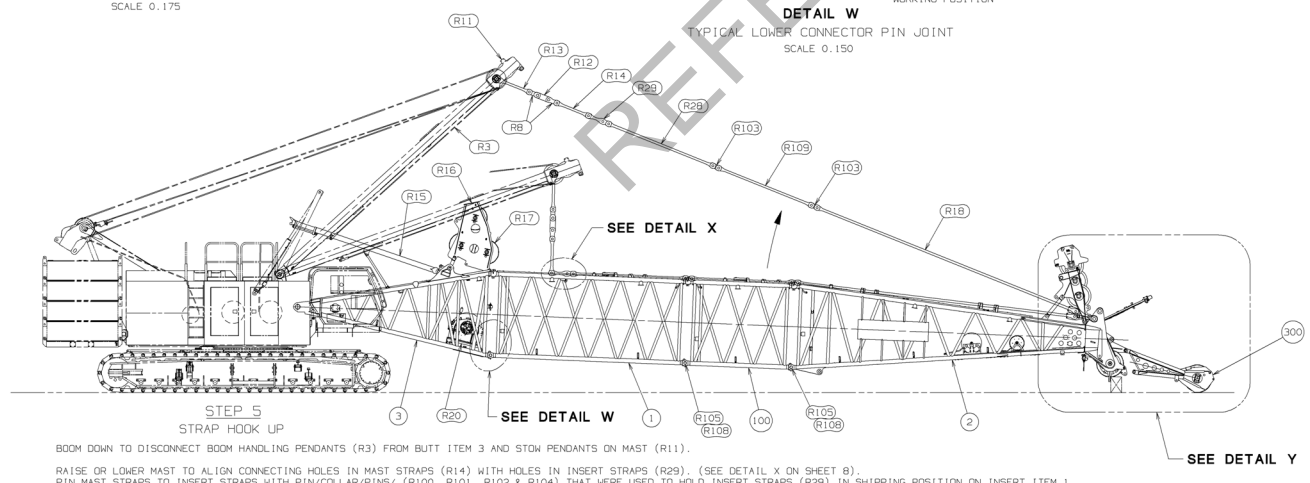
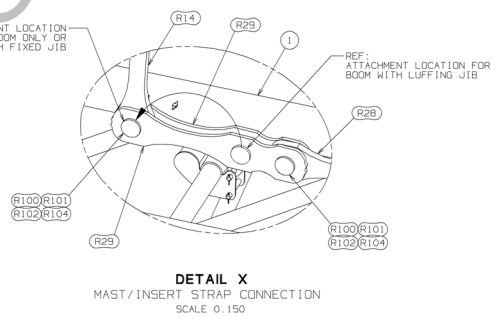
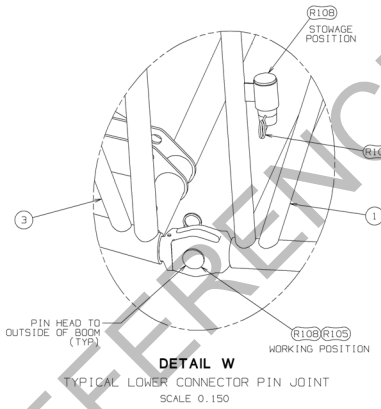
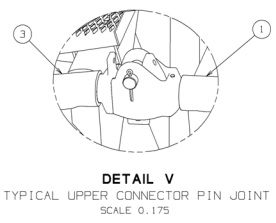


STEP 4 BOOM CLOSING

WITH THE BOOM INSERTS/TOP ASSEMBLY SUPPORTED ON BLOCKING, POSITION MACHINE TO ALIGN UPPER PIN CONNECTOR ON BOOM BUTT ITEM 3 WITH UPPER PIN CONNECTOR PINS ON FIRST BOOM INSERT ITEM 1 AND ENGAGE PINS. (SEE DETAIL V ON SHEET 8).

SLOWLY BOOM UP TO ALIGN LOWER PIN CONNECTOR HOLES ON BOOM BUTT ITEM 3 WITH LOWER PIN CONNECTOR HOLES IN FIRST BOOM INSERT ITEM 1 AND INSERT PINS WITH HEAD (R108) AND SAFETY PIN (R105) WITH TAPERED END OF PIN TOWARD BOOM CENTERLINE. (SEE DETAIL W ON SHEET 8).

WARNING: DO NOT BOOM UP PAST LOWER CONNECTOR HOLES. IF BOOMING UP CONTINUES AFTER CONNECTORS BOTTOM OUT OR AFTER PINS ARE INSERTED, DAMAGE TO MAST AND/OR BOOM BUTT WILL OCCUR.



STEP 5 STRAP HOOK UP

BOOM DOWN TO DISCONNECT BOOM HANDLING PENDANTS (R3) FROM BUTT ITEM 3 AND STOW PENDANTS ON MAST (R11).

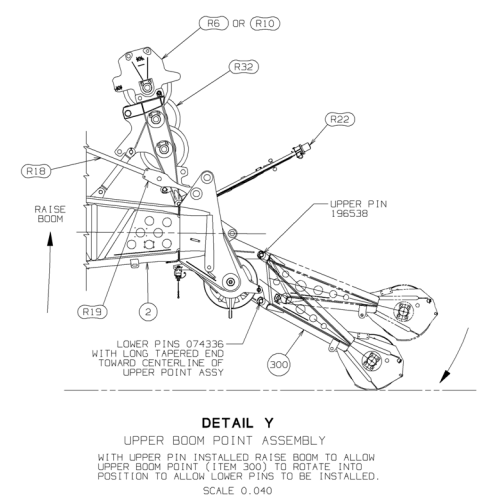
RAISE OR LOWER MAST TO ALIGN CONNECTING HOLES IN MAST STRAPS (R14) WITH HOLES IN INSERT STRAPS (R29). (SEE DETAIL X ON SHEET 8).

PIN MAST STRAPS TO INSERT STRAPS WITH PIN/COLLAR/PINS/ (R100, R101, R102 & R104) THAT WERE USED TO HOLD INSERT STRAPS (R29) IN SHIPPING POSITION ON INSERT ITEM 1. CONNECTING HOLE ALIGNMENT IS DEPENDENT ON BOOM WITH OR WITHOUT LUFFING JIB. (SEE DETAIL H ON SHEET 1 AND DETAIL X ON SHEET 8).

NOTE: UNDER SOME CONDITIONS IT MAY BE NECESSARY TO BLOCK UP STRAPS ON INSERT ITEM 1 TO AID STRAP CONNECTION.

WARNING: DO NOT BOOM DOWN MAST (R11) BEYOND 170°. DAMAGE WILL OCCUR.

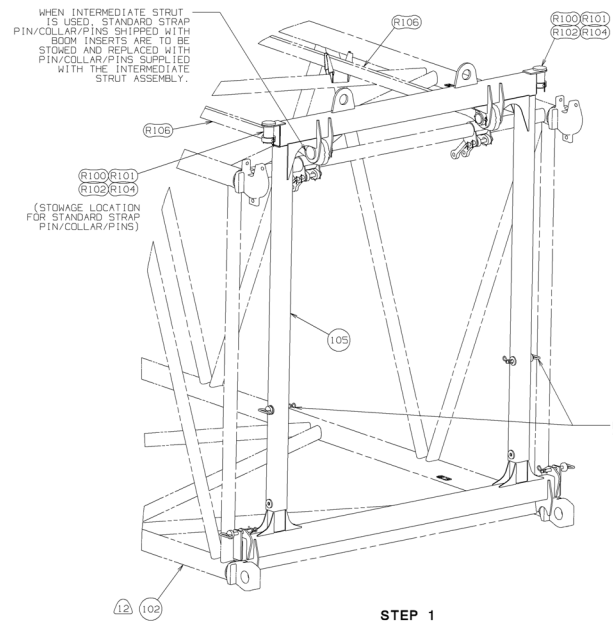
BOOM CAN NOW BE RAISED. (SEE DETAIL Y ON SHEET 8 FOR UPPER BOOM POINT ASSEMBLY ITEM 300 IF EQUIPPED).



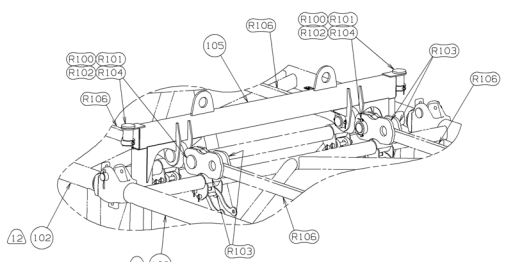
MANITOWOC	Manitowoc Cranes, Inc.	BOOM RIGGING	12-15-24
REV	Manitowoc, Wisconsin	B10:76A	REVISED
BY TJA	MAN-MLC200		
APP JRR			

PRIVATE LABELING EQUIPMENT TO CONFORM TO ENGINEERING SPECIFICATION 662910794 FOR COMPONENTS LISTED IN 020500-05-035

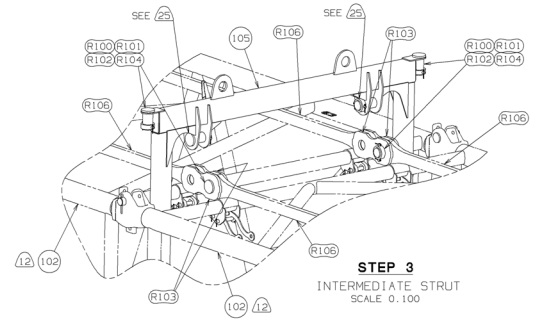
BILL OF MATERIAL				ASSEMBLY
ITEM NO.	DESCRIPTION	MATERIAL	QTY	UNIT



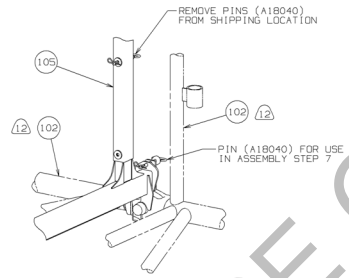
STEP 1
INTERMEDIATE STRUT
SCALE 0.100



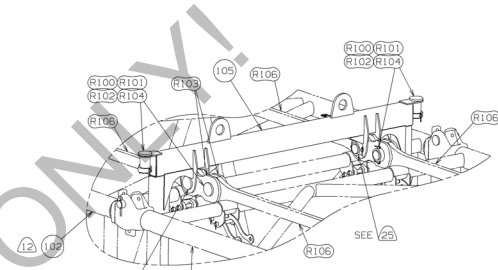
STEP 2
INTERMEDIATE STRUT
SCALE 0.100



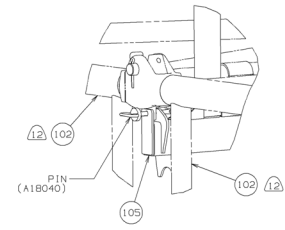
STEP 3
INTERMEDIATE STRUT
SCALE 0.100



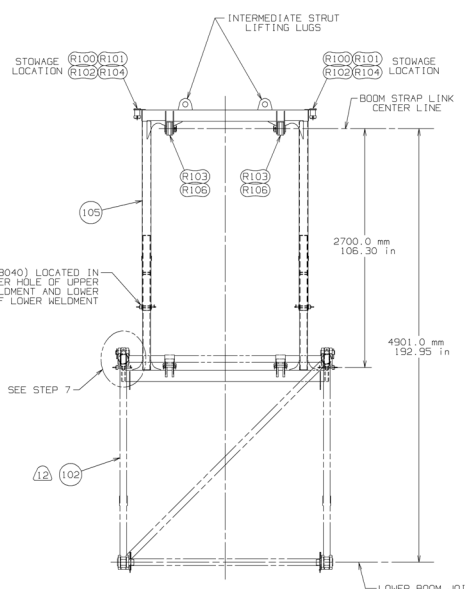
STEP 4
INTERMEDIATE STRUT
AT BOOM LOWER CONNECTOR PIN
SCALE 0.100



STEP 5
INTERMEDIATE STRUT
SCALE 0.100

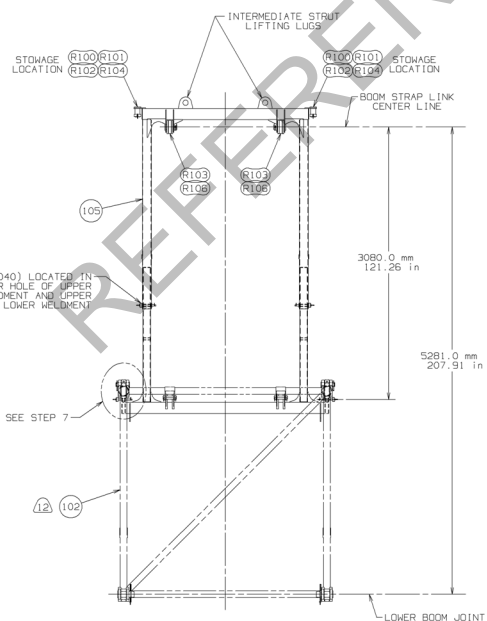


STEP 7
INTERMEDIATE STRUT
PIN ATTACHMENT
SCALE 0.150



SHORT STRUT CONFIGURATION
68M, 71M, 74M, 77M & 80M BOOM

STEP 6
SCALE 0.050



LONG STRUT CONFIGURATION
83M, 86M & 89M BOOM

INTERMEDIATE STRUT (ITEM 105) INSTALLATION

SEE BOOM MAKEUP VIEWS ON SHEETS 4 & 5 FOR INTERMEDIATE STRUT (ITEM 105) LOCATIONS FOR VARIOUS BOOM LENGTHS.

- LOCATE INTERMEDIATE STRUT (ITEM 105) IN COLLAPSED OR SHIPPED CONFIGURATION AT END OF 12 METER INSERT (ITEM 102-SEE DELTA 12). REMOVE PIN/COLLAR/PINS (ITEMS R100, R101, R102 & R104) FROM STRAP (ITEM R106) AND REPLACE WITH PIN/COLLAR/PINS PROVIDED WITH INTERMEDIATE STRUT. STOW STANDARD STRAP PIN/COLLAR/PINS IN LOCATION PROVIDED ON INTERMEDIATE STRUT UPPER WELDMENT.
- ASSEMBLE BOOM COMPLETE WITH INTERMEDIATE STRUT (ITEM 105) LOCATED BETWEEN 12 METER INSERTS (ITEMS 102-SEE DELTA 12).
- DISASSEMBLE STRAPS (ITEM R106) FROM INTERMEDIATE STRUT AND RAISE INTERMEDIATE STRUT ASSEMBLY TO ALLOW CLEARANCE TO ROTATE LINKS (ITEM R103) INTO POSITION WITH STRAPS FROM PREVIOUS 12 METER INSERT.
- LOWER INTERMEDIATE STRUT TO REST ON LOWER BOOM CONNECTOR PIN. REMOVE PINS (A18040) FROM SHIPPING LOCATION.
- POSITION INTERMEDIATE STRUT (ITEM 105) TO ALIGN WITH LINK AND STRAPS. REASSEMBLE PIN/COLLAR/PINS FROM INTERMEDIATE STRUT.
- BOOM UP SLOWLY AND INSERT PINS (A18040) IN HOLES FOR THE REQUIRED STRUT LENGTH.
- CONTINUE BOOMING UP SLOWLY AND INSERT PINS (A18040) IN UPPER MALE CONNECTOR AS SHOWN.

TOLERANCE UNLESS OTHERWISE SPECIFIED		FINISH		MATERIAL	
SIZE	TOLERANCE	TYPE	SYMBOL	DESCRIPTION	REFERENCE
ALL DIMENSIONS	±0.10	AS SUPPLIED			

REPLICATE LABELING
RESULTS TO BE
FORWARDED TO
ENGINEERING
SPECIFICATIONS
6620 CLYDE AVE.
MILWAUKEE, WI 53208
IN 00000-05-025

Manitowoc Cranes, Inc.	BOOM RIGGING	12-16-24
Manitowoc, Wisconsin	B10:76A	