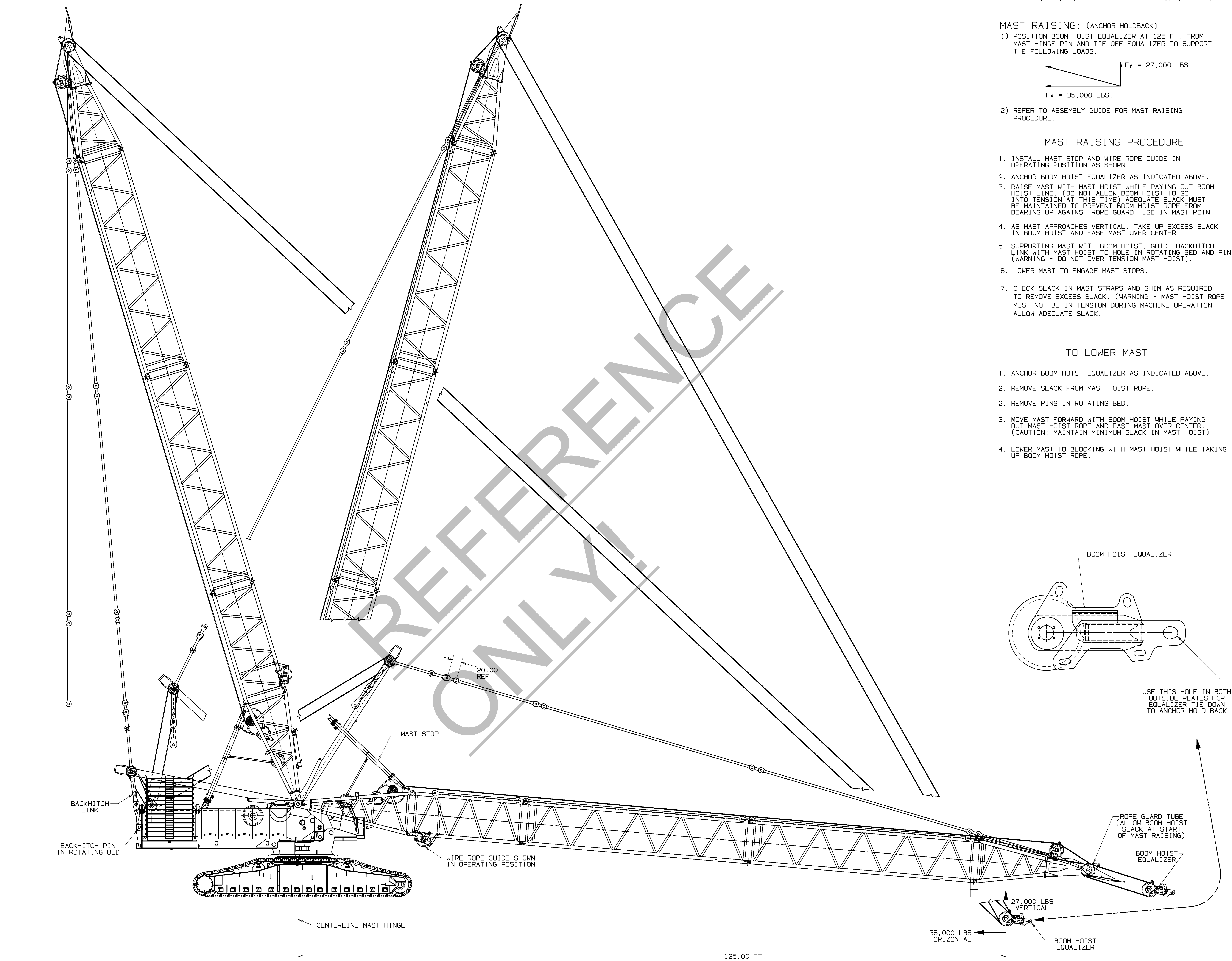
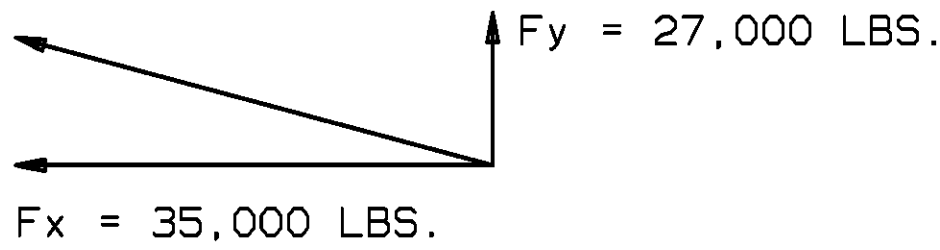




BILL OF MATERIAL				ASSEMBLIES USED ON	
ITEM NO.	QTY.	DESCRIPTION	LEGEND	MATERIAL	QTY. NO.

MAST RAISING: (ANCHOR HOLDBACK)

1) POSITION BOOM HOIST EQUALIZER AT 125 FT. FROM MAST HINGE PIN AND TIE OFF EQUALIZER TO SUPPORT THE FOLLOWING LOADS.



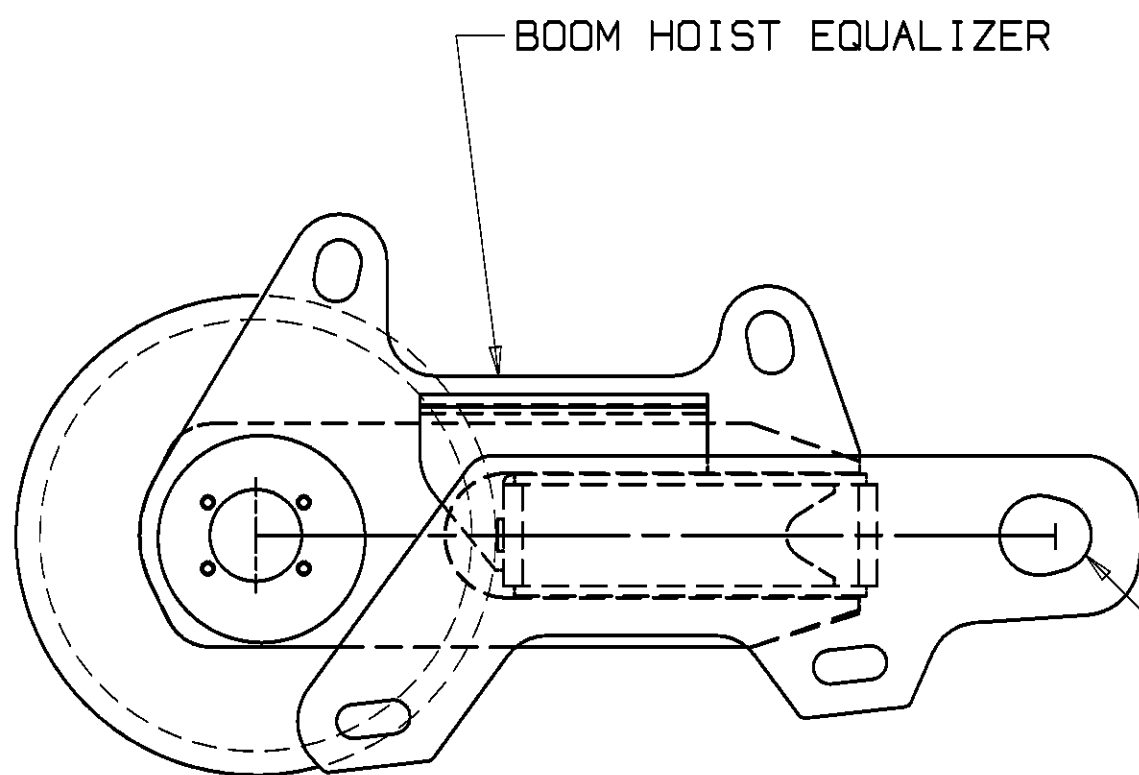
2) REFER TO ASSEMBLY GUIDE FOR MAST RAISING PROCEDURE.

MAST RAISING PROCEDURE

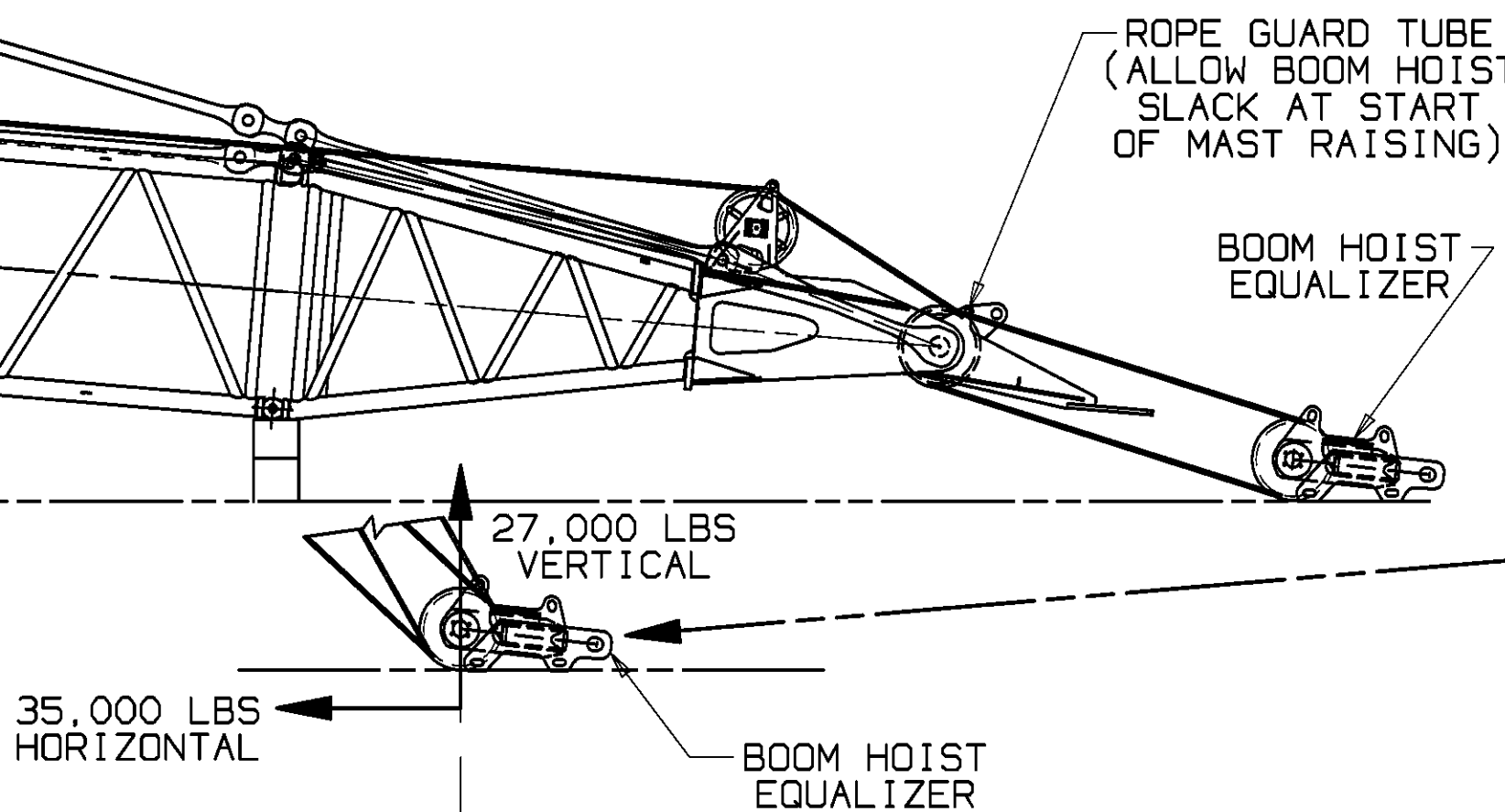
1. INSTALL MAST STOP AND WIRE ROPE GUIDE IN OPERATING POSITION AS SHOWN.
2. ANCHOR BOOM HOIST EQUALIZER AS INDICATED ABOVE.
3. RAISE MAST WITH MAST HOIST WHILE PAYING OUT BOOM HOIST LINE (DO NOT ALLOW BOOM HOIST TO GO INTO TENSION AT THIS TIME). ADEQUATE SLACK MUST BE MAINTAINED TO PREVENT BOOM HOIST ROPE FROM BEARING UP AGAINST ROPE GUARD TUBE IN MAST POINT.
4. AS MAST APPROACHES VERTICAL, TAKE UP EXCESS SLACK IN BOOM HOIST AND EASE MAST OVER CENTER.
5. SUPPORTING MAST WITH BOOM HOIST, GUIDE BACKHITCH LINK WITH MAST HOIST TO HOLE IN ROTATING BED AND PIN. (WARNING - DO NOT OVER TENSION MAST HOIST).
6. LOWER MAST TO ENGAGE MAST STOPS.
7. CHECK SLACK IN MAST STRAPS AND SHIM AS REQUIRED TO REMOVE EXCESS SLACK. (WARNING - MAST HOIST ROPE MUST NOT BE IN TENSION DURING MACHINE OPERATION. ALLOW ADEQUATE SLACK.

TO LOWER MAST

1. ANCHOR BOOM HOIST EQUALIZER AS INDICATED ABOVE.
2. REMOVE SLACK FROM MAST HOIST ROPE.
2. REMOVE PINS IN ROTATING BED.
3. MOVE MAST FORWARD WITH BOOM HOIST WHILE PAYING OUT MAST HOIST ROPE AND EASE MAST OVER CENTER (CAUTION: MAINTAIN MINIMUM SLACK IN MAST HOIST)
4. LOWER MAST TO BLOCKING WITH MAST HOIST WHILE TAKING UP BOOM HOIST ROPE.



USE THIS HOLE IN BOTH OUTSIDE PLATES FOR EQUALIZER TIE DOWN TO ANCHOR HOLD BACK



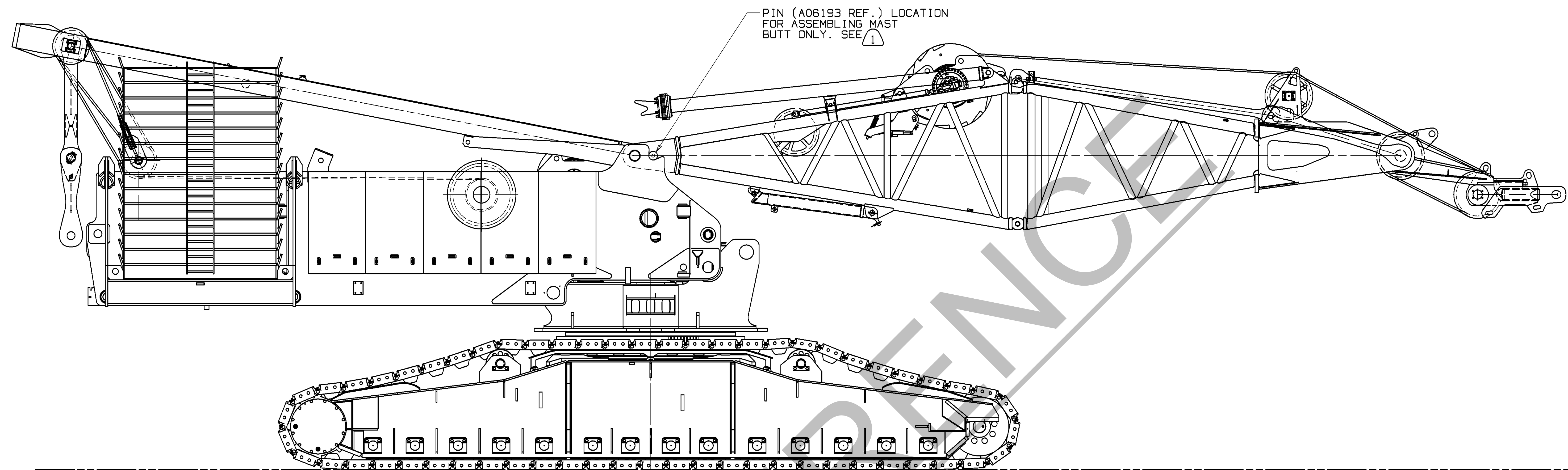
MAST RAISING/LOWERING

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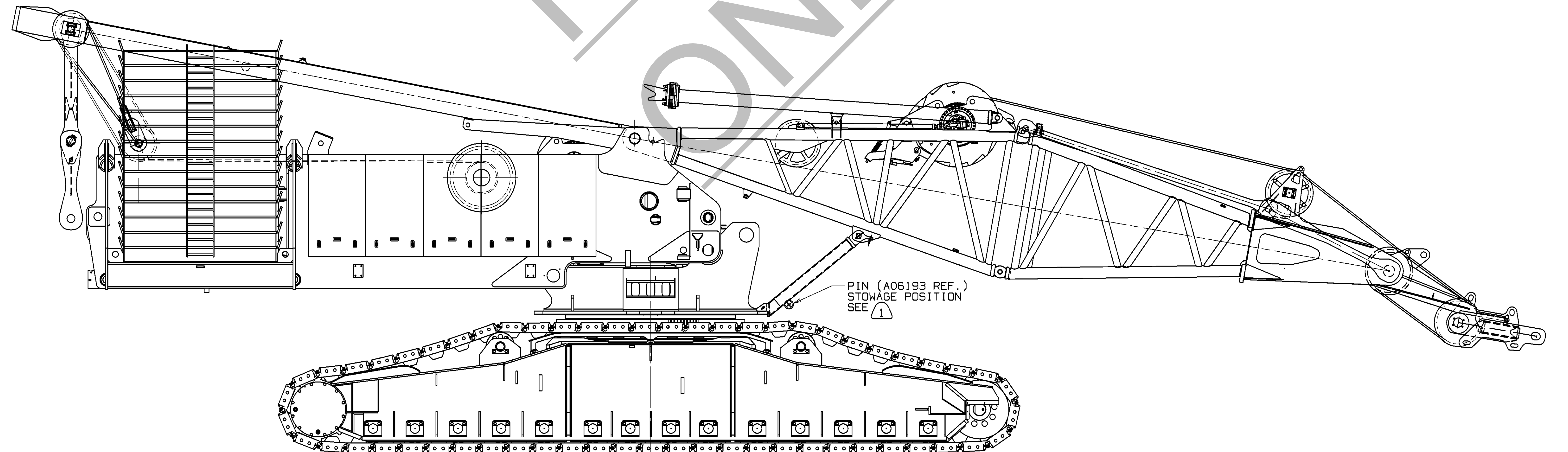
BILL OF MATERIAL				
ITEM NO.	REF.	DESCRIPTION	QTY.	UNIT
1		PIN (A06193 REF.) USED FOR MAST BUTT INSTALLATION ONLY. ONCE MAST HINGE PINS ARE ENGAGED, PINS MUST BE RETURNED TO STOWAGE POSITION ON STRUT ASSEMBLY BEFORE ASSEMBLING REST OF MAST.		

ASSEMBLIES USED ON

REVISIONS
01-30-06 CDC
A WAS SHEET
3 OF 3

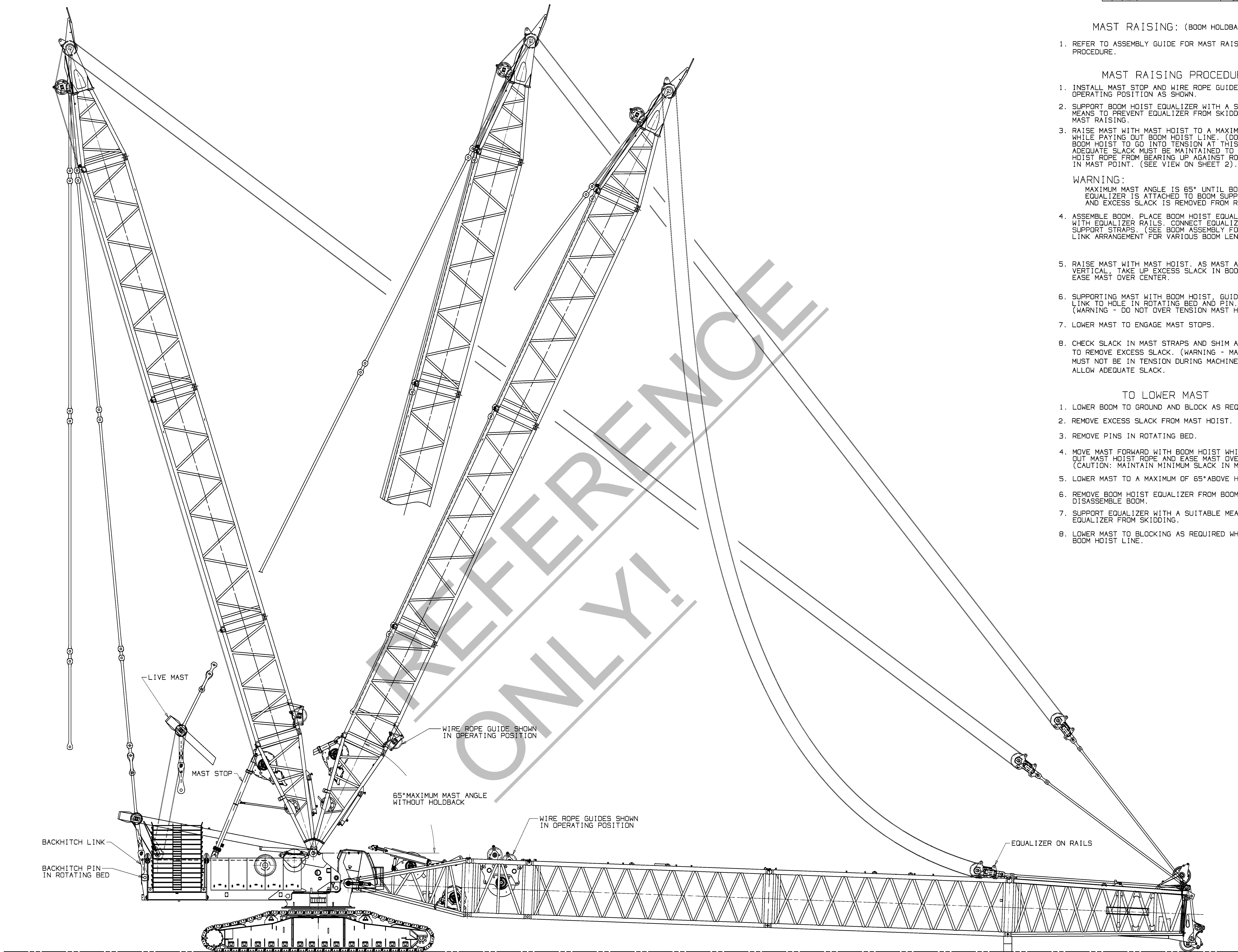


MAST TRANSPORTATION PACKAGE INSTALLATION



MAST TRANSPORTATION PACKAGE SELF SUPPORTED

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DECIMAL PLACES				FABRICATION				MACHINING				Manitowoc, Wisconsin			
(1) FUSE 0.0				± 0.12				± 0.18				± 0.05			
(2) PLACE 0.00				± 0.06				± 0.12				± 0.015			
(3) PLACE 0.000				± 0.003				± 0.006				± 0.003			
ANGLES				± 1° 30'				± 0° 30'				± 0° 30'			
DATE				05-05-03				PATTERN NO.				A05378			
DR. CRP				MAST ASSEMBLY				#56 MAST 140 FT				FOR MAXER			
CK. RJW				MODEL 18000											
APP. RJW															



BILL OF MATERIAL					ASSEMBLIES USED ON	
QTY	NO.	DESC	QTY	NO.	QTY	NO.
1	1	1	1	1	1	1

MAST RAISING: (BOOM HOLDBACK)

1. REFER TO ASSEMBLY GUIDE FOR MAST RAISING PROCEDURE.

MAST RAISING PROCEDURE

1. INSTALL MAST STOP AND WIRE ROPE GUIDE IN OPERATING POSITION AS SHOWN.
2. SUPPORT BOOM HOIST EQUALIZER WITH A SUITABLE MEANS TO PREVENT EQUALIZER FROM SKIDDING DURING MAST RAISING.
3. RAISE MAST WITH MAST HOIST TO A MAXIMUM OF 65° WHILE PAYING OUT BOOM HOIST LINE. (DO NOT ALLOW BOOM HOIST TO GO INTO TENSION AT THIS TIME) ADEQUATE SLACK MUST BE MAINTAINED TO PREVENT BOOM HOIST ROPE FROM BEARING UP AGAINST ROPE GUARD TUBE IN MAST POINT. (SEE VIEW ON SHEET 2).

WARNING:
MAXIMUM MAST ANGLE IS 65° UNTIL BOOM HOIST EQUALIZER IS ATTACHED TO BOOM SUPPORT STRAPS AND EXCESS SLACK IS REMOVED FROM REEVING.

4. ASSEMBLE BOOM. PLACE BOOM HOIST EQUALIZER ON INSERT WITH EQUALIZER RAILS. CONNECT EQUALIZER TO BOOM SUPPORT STRAPS. (SEE BOOM ASSEMBLY FOR PROPER STRAP/ LINK ARRANGEMENT FOR VARIOUS BOOM LENGTHS).

5. RAISE MAST WITH MAST HOIST. AS MAST APPROACHES VERTICAL, TAKE UP EXCESS SLACK IN BOOM HOIST AND EASE MAST OVER CENTER.

6. SUPPORTING MAST WITH BOOM HOIST. GUIDE BACKHITCH LINK TO HOLE IN ROTATING BED AND PIN. (WARNING - DO NOT OVER TENSION MAST HOIST).

7. LOWER MAST TO ENGAGE MAST STOPS.

8. CHECK SLACK IN MAST STRAPS AND SHIM AS REQUIRED TO REMOVE EXCESS SLACK. (WARNING - MAST HOIST ROPE MUST NOT BE IN TENSION DURING MACHINE OPERATION. ALLOW ADEQUATE SLACK.

TO LOWER MAST

1. LOWER BOOM TO GROUND AND BLOCK AS REQUIRED.
2. REMOVE EXCESS SLACK FROM MAST HOIST.
3. REMOVE PINS IN ROTATING BED.
4. MOVE MAST FORWARD WITH BOOM HOIST WHILE PAYING OUT MAST HOIST ROPE AND EASE MAST OVER CENTER. (CAUTION: MAINTAIN MINIMUM SLACK IN MAST HOIST)
5. LOWER MAST TO A MAXIMUM OF 65° ABOVE HORIZONTAL.
6. REMOVE BOOM HOIST EQUALIZER FROM BOOM AND DISASSEMBLE BOOM.
7. SUPPORT EQUALIZER WITH A SUITABLE MEANS TO PREVENT EQUALIZER FROM SKIDDING.
8. LOWER MAST TO BLOCKING AS REQUIRED WHILE TAKING UP BOOM HOIST LINE.

140 FT BOOM SHOWN

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DECIMAL PLACES	±	10 FEET	±	10 FEET	±	10 FEET	±	12-1/2"	CRP	Manitowoc, Wisconsin	#56 MAST 140 FT
(1) FUSE 0.0	±	0.12	±	0.18	±	0.05	±	0.015	OK RJW	MODEL 18000	FOR MAXER
(2) PLACE 0.00	±	0.06	±	0.12	±	0.015	±	0.005	OK RJW		
(3) PLACE 0.000	±	0.003	±	0.005	±	0.005	±	0.005	APP RJW		
ANGLES	±	1°	±	1°	±	1°	±	1°			