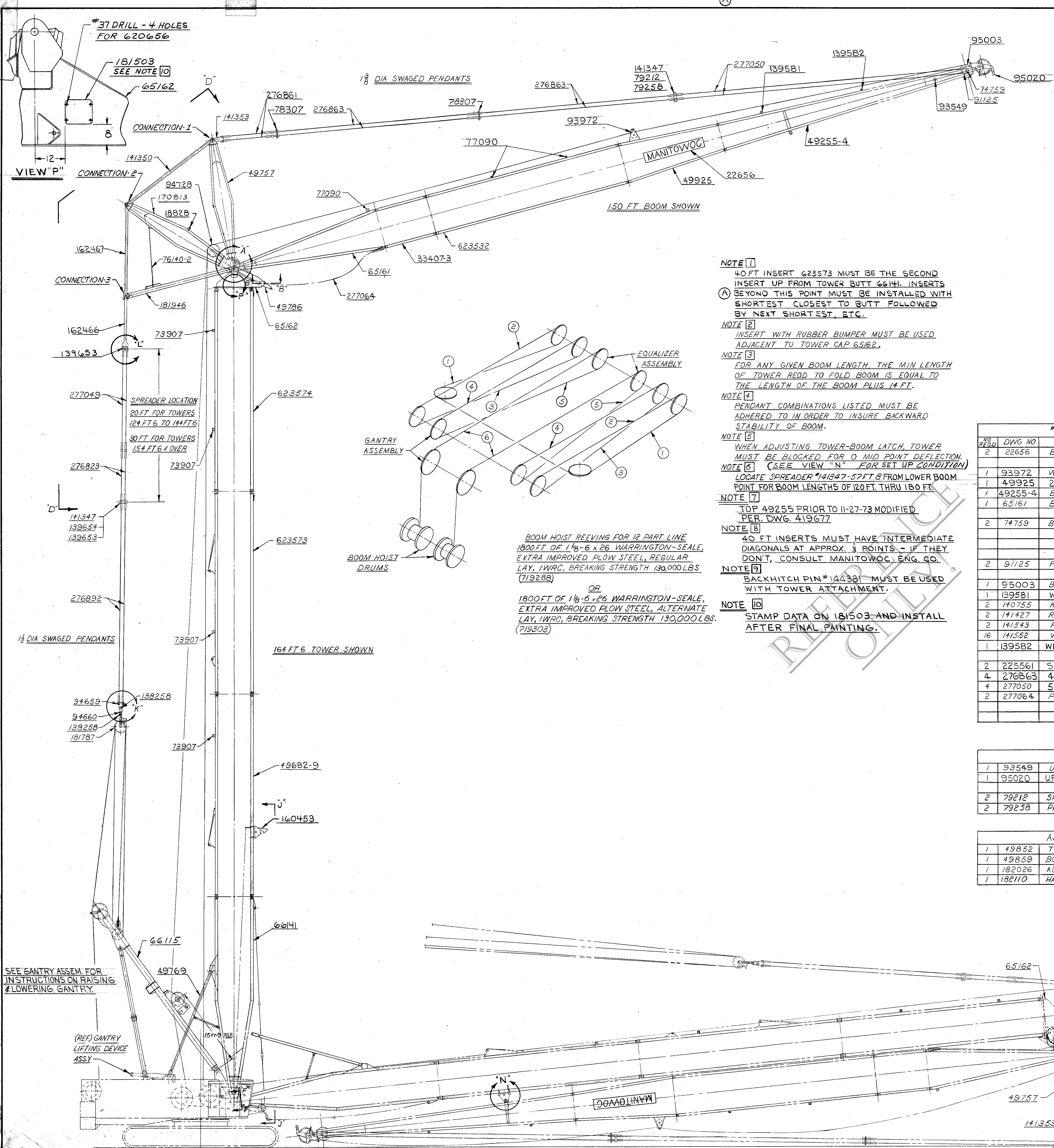




#27B TOWER - RECOMMENDED FOR VARIOUS TOWER LENGTHS									
DWG NO	181367-9	181366-9	623574 DWG 49360	276823 DWG 7845	276825 DWG 7845	276892 DWG 7845	73907	WIRE ROPE ROLLER GUIDE ASSY	
TOWER LENGTH SEE NOTE 3	10 FT INSERT	20 FT INSERT	40 FT INSERT SEE NOTE 8	10 FT PENDANT	20 FT PENDANT	40 FT PENDANT			
124 FT 6	0	0	0	0	0	0	4		
134 FT 6	1	0	0	4	0	0	4		
144 FT 6	0	1	0	0	4	0	5		
154 FT 6	1	1	0	4	4	0	5		
164 FT 6	0	0	1	0	0	4	6		
174 FT 6	1	0	1	4	0	4	6		
184 FT 6	0	1	1	0	4	4	7		
194 FT 6	1	1	1	4	4	4	7		

#22B BOOM - RECOMMENDED FOR VARIOUS BOOM LENGTHS									
DWG NO	33407-3	33426-3	623532 DWG 50608	276861 DWG 76280	276862 DWG 76280	276863 DWG 76280	77090	141347	78307
BOOM LENGTH	10 FT INSERT	20 FT INSERT	40 FT INSERT	10 FT PENDANT	20 FT PENDANT	40 FT PENDANT			
100 FT	0	0	0	0	0	0	1	0	2
110 FT	1	0	0	4	0	0	1	0	4
120 FT	0	1	0	0	4	0	2	1	2
130 FT	1	1	0	4	4	0	2	1	4
140 FT	0	0	1	0	0	4	3	1	2
150 FT	1	0	1	4	0	4	3	1	4
160 FT	0	1	1	0	4	4	4	1	4
170 FT	1	1	1	4	4	4	4	1	6
180 FT	0	0	2	0	0	8	5	1	4

NOTE 1
40 FT INSERT 623573 MUST BE THE SECOND INSERT UP FROM TOWER BUTT 66141. INSERTS BEYOND THIS POINT MUST BE INSTALLED WITH SHORTEST CLOSEST TO BUTT FOLLOWED BY NEXT SHORTEST, ETC.

NOTE 2
INSERT WITH RUBBER BUMPER MUST BE USED ADJACENT TO TOWER CAP 65162.

NOTE 3
FOR ANY GIVEN BOOM LENGTH, THE MIN LENGTH OF TOWER REED TO FOLD BOOM IS EQUAL TO THE LENGTH OF THE BOOM PLUS 14 FT.

NOTE 4
PENDANT COMBINATIONS LISTED MUST BE ADHERED TO IN ORDER TO INSURE BACKWARD STABILITY OF BOOM.

NOTE 5
WHEN ADJUSTING TOWER-BOOM LATCH, TOWER MUST BE BLOCKED FOR 0 MID POINT DEFLECTION.

NOTE 6 (SEE VIEW "N" FOR SET UP CONDITION)
LOCATE SPREADER 141347-57 FT 8 FROM LOWER BOOM POINT FOR BOOM LENGTHS OF 120 FT THRU 180 FT.

NOTE 7
TOP 49255 PRIOR TO 11-27-73 MODIFIED PER DWG 419677

NOTE 8
40 FT INSERTS MUST HAVE INTERMEDIATE DIAGONALS AT APPROX. 3 POINTS - IF THEY DON'T, CONSULT MANITOWOC ENG. CO.

NOTE 9
BACKHITCH PIN #144381 MUST BE USED WITH TOWER ATTACHMENT.

NOTE 10
STAMP DATA ON 181503 AND INSTALL AFTER FINAL PAINTING.

#22B BOOM - BASIC PARTS			
NO	DWG NO	DESCRIPTION	REMARKS
2	22656	BOOM SIGN	
1	93972	WIRE ROPE GUIDE ASSEMBLY	
1	49925	20 FT TAPERED INSERT	
1	49255-4	BOOM TOP - SEE NOTE 7	50 FT
1	65161	BOOM BUTT - (FOR FITTING SEE VIEW "M")	30 FT
2	74759	BUSHING	
2	91125	PENDANT LINK	
1	95003	BOOM POINT SHAFT ASSEMBLY	
1	139581	WIRE ROPE ROLLER GUIDE ASSEMBLY	
2	140755	KEEPER PLATE	
2	141427	RETAINING PLATE	
2	141543	PIN	
16	141552	WASHER	
1	139582	WIRE ROPE ROLLER GUIDE ASSEMBLY	
2	225561	SELF-ALIGNING BUSHING	
4	276863	40 FT PENDANT (DWG 76280)	BASIC
4	277050	56 FT 10 5/8 PENDANT (DWG 140773)	
2	277064	PENDANT - 29 FT 8 5/8	DWG 141439

OPTIONAL PARTS			
1	93549	UNIVERSAL WIRE ROPE ANCHOR JOINT ASSY	
1	95020	UPPER BOOM POINT SHAFT ASSY	
2	79212	SPREADER BRACKET	USE WITH SPREADER #141347
2	79238	PIN	

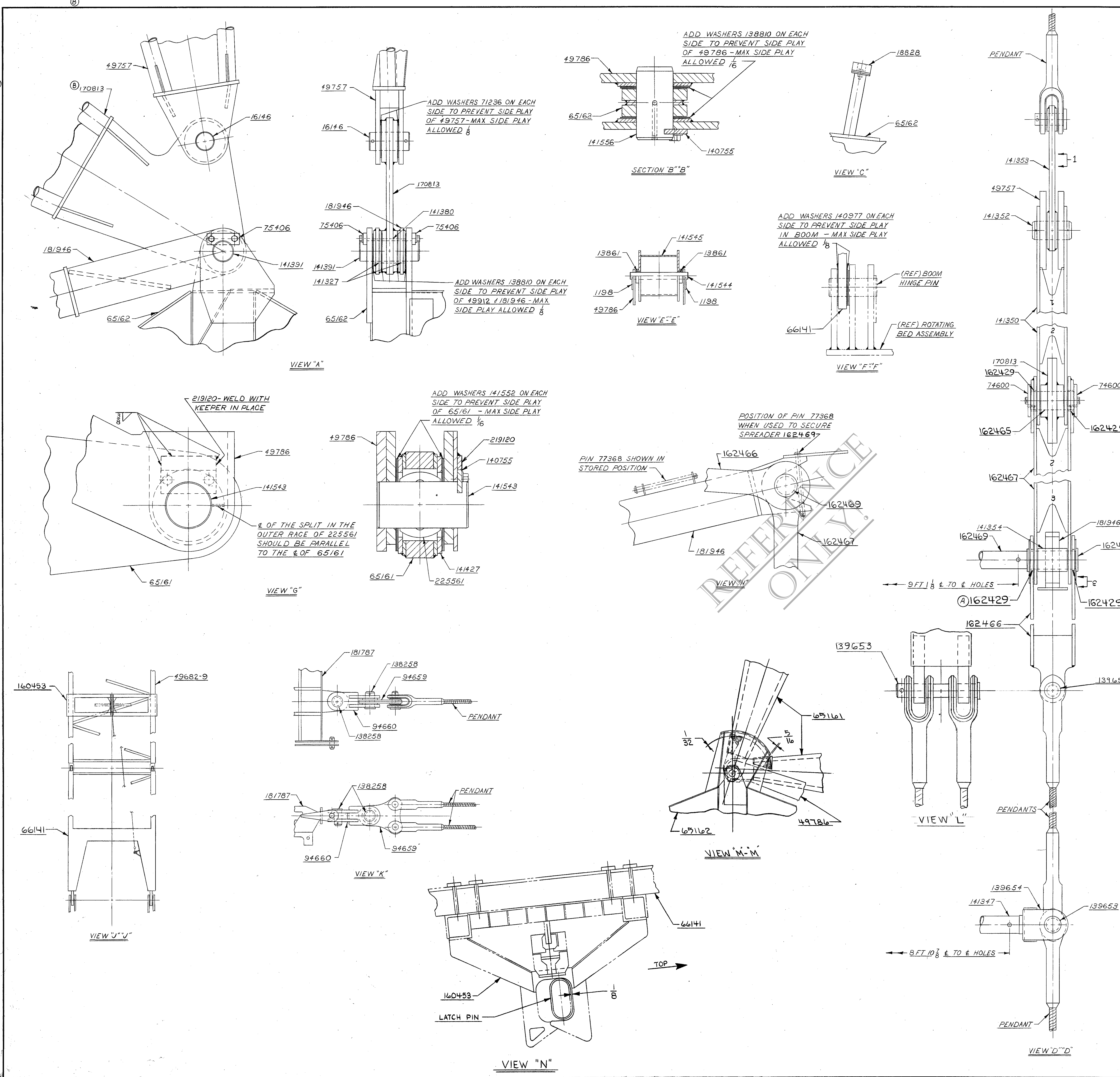
ASSEMBLIES NOT SHOWN			
1	49852	TWIST INDICATOR ASSEMBLY	FOR #27B TOWER
1	49859	BOOM ANGLE INDICATOR ASSEMBLY	FOR #27B TOWER
1	182026	AUTOMATIC BOOM STOP ASSEMBLY	
1	182110	HANDLING ARRANGEMENT	

#27B TOWER - BASIC PARTS			
NO	DWG NO	DESCRIPTION	REMARKS
2	1198	KEEPER PLATE	
2	13861	BUSHING	
2	16146	PIN	
4	18828	RUBBER BUMPER	
1	170813	INTERMEDIATE STRUT	
1	49757	BOOM STRUT	
1	49769	TOWER BACKSTAY & HOLD BACK ASSY	
1	49786	BOOM CARRIER	
1	66141	BOOM BUTT	40 FT 6 LG
1	66115	GANTRY ASSEMBLY	
1	65162	TOWER CAP	
8	71236	WASHER	
8	162429	BUSHING	
4	74600	SHAFT END	
4	75406	SHAFT ANCHOR	
2	76140-2	PENDANT	11 FT - 11 LG
2	77368	PIN	
2	94659	PENDANT LINK	
2	94660	PENDANT LINK	
1	94728	TOWER CAP WIRE ROPE GUIDE ASSEMBLY	
2	162470	END PLATE	
4	138258	PIN	
36	138810	WASHER	
4	139653	PIN	
2	139654	SPREADER BRACKET	
2	140755	KEEPER PLATE	
6	140977	WASHER	
4	141327	BUSHING	
1	162469	UPPER SPREADER ASSEMBLY	
1	141347	LOWER SPREADER ASSEMBLY	
2	162466	LOWER STRAP	
2	162467	LINK	
2	141350	LINK	
2	162465	PIN	
2	141352	PIN	
2	141353	PENDANT LINK	
2	141354	SPACER	
2	141380	BUSHING	
2	141391	PIN	
1	141544	PIN	
1	141545	WIRE ROPE GUIDE ROLLER	
2	141556	PIN	
1	181503	BUILDERS PLATE	SEE NOTE 10
1	181787	EQUALIZER ASSEMBLY	
1	181946	MAIN STRUT	
1	160453	TOWER-BOOM LATCH ASSEMBLY	SEE NOTE 9
2	219120	1/2 x 1 1/2 x 6 F.B. - 1020	
4	276823	10 FT PENDANT (DWG 78145)	BASIC
4	277049	20 FT PENDANT (DWG 79335)	
1	623573	40 FT INSERT - SEE NOTE 17 & 8	DWG 49360
1	196829	40 FT INSERT - SEE NOTE 8	
4	620656	1/4 x 5/16 LG. TYPE "U" DRIVE SCREW	
2	162227	PEDESTAL - BOOM CARRIER	SEE SHT. 2
6	162235	SHIM	" "

SEE GANTRY ASSEM. FOR INSTRUCTIONS ON RAISING & LOWERING GANTRY.

(REF) GANTRY LIFTING DEVICE ASSY

FORMERLY 65156-SHT. 1 OF 2



BILL OF MATERIAL						ASSEMBLY USED ON
ITEM NO.	DESCRIPTION	QUANTITY	MATERIAL	CODE NO.	REMARKS	
1	THE AREA FOR SET-UP OR THE SURFACE UPON WHICH THE UNIT WILL TRAVEL, MUST BE FIRM AND LEVEL.					
2	THE UNIT MUST BE LEVELED WITH MATS. CHECK LEVEL USING UPPER FINISHED SURFACE OF ROLLER PATH.					
3	THE MAXIMUM LENGTHS TO BE RAISED OVER THE FRONT WITHOUT AN OUTSIDE ASSIST ARE: 194 FT 6 OF *27B TOWER AND 180 FT *22B BOOM.					
GENERAL ERECTION NOTES						
ADDING OR REMOVING INSERTS (SEE VIEW "H")						
4	KEEP BOOM HOIST LINE TIGHT AND INSERT PIN 77368 IN POSITION TO RETAIN SPREADER 162469. LOOSEN HOIST LINE AND CHANGE INSERTS.					
5	AFTER CHANGING INSERTS, TIGHTEN HOIST LINE. REMOVE AND LOCK PIN 77368 IN BRACKETS ON MAIN STRUT 181946.					
ERECTING TOWER AND BOOM						
6	WITH BOOM TOP LATCHED TO TOWER AND GANTRY IN UP POSITION, RAISE TOWER WITH BOOM HOIST AND PIN TOWER BACKSTAYS TO ROCKET AT "A" FRAME. THE HOLD-BACK LINE SHOULD BE KEPT MODERATELY TIGHT AS THE TOWER APPROACHES VERTICAL POSITION.					
7	LOWER GANTRY TO TOWER OPERATING POSITION (18 3/4 TO LOWER HOLE ON BACKHITCH)					
8	RELEASE BOOM TOP FROM TOWER BY PULLING LATCH LEVER ON TOWER BUTT DOWNWARD.					
LOWERING TOWER AND BOOM						
9	RAISE BOOM USING THE BOOM HOIST.					
10	LOWER BOOM USING BOOM HOIST (BOOM TOP WILL AUTOMATICALLY LATCH TO TOWER).					
11	RAISE GANTRY TO UP POSITION (18 3/4 TO UPPER HOLE ON BACKHITCH)					
12	DISCONNECT TOWER BACKSTAYS FROM "A" FRAME AND LOWER TOWER AND BOOM USING THE BOOM HOIST.					

FORMERLY 65156-SHT.2 OF 2

MANITOWOC ENGINEERING CO.	TOWER CRANE RIGGING ASSY
MANITOWOC, WISCONSIN	*27B TOWER W/*22B BOOM-
MODEL 4600 SERIES #	DOUBLE 1 1/2 DIA SWAGED
	TOWER PENDANTS

DATE 8-19-83

PATTERN NO.

CODE NO.

CWS NO. 66235

SHT. 2 OF 2