



ASSEMBLIES NOT SHOWN		
1	TWIST INDICATOR ASSY. (FOR #22A TOWER)	48256
1	BOOM ANGLE INDICATOR ASSY. (W/OUT UNIV. CAB) FOR #22A TOWER & CABS W/FRONT MTD. CONTROLS	49614
1	AUTOMATIC BOOM STOP ASSEMBLY	190171
1	BOOM ANGLE INDICATOR ASSY. (W/UNIV. CAB) FOR #22A TOWER & CABS W/SIDE MTD. CONTROLS	190486

- 1 40 FT. INSERT 623545 MUST BE USED ADJACENT TO BOOM BUTT 48705-4.
- 2 40 FT. INSERT 623535 MUST BE USED ADJACENT TO TOWER CAP 48233.
- 3 INTERMEDIATE SUSPENSION REQUIRED FOR BOOM LENGTHS OF 110 FT. & OVER W/INTERMEDIATE FALL #48208-9 AND 130 FT. & OVER W/OUT INTERMEDIATE FALL.
- 4 FOR ANY GIVEN BOOM LENGTH, THE MIN. LENGTH OF TOWER REQ'D. TO FOLD BOOM IS EQUAL TO THE LENGTH OF THE BOOM PLUS 13 FT.
- 5 PENDANT COMBINATIONS LISTED MUST BE ADHERED TO IN ORDER TO INSURE BACKWARD STABILITY OF BOOM.
- 6 FOR TOWER LENGTHS OF 193 FT. & OVER, 1-40 FT. INSERT 623526 IS REQ'D. TO ATTACH OUTSIDE ASSIST.
- 7 CAN BE USED, WITH A MAX. ROPE DIA. OF 1.00, ON BOOMS OF 110 FT. & OVER, SEE CHART FOR CAPACITIES AND OTHER LIMITATIONS.
- 8 INTERMEDIATE SUSPENSION LENGTHS FOR S/N 41003 & S/N 41023 ONLY, ARE AS FOLLOWS:
130 FT. TO 150 FT. BOOMS - 62' 11"
160 FT. BOOM - 72' 5"
170 FT. BOOM - 82' 0"
- 9 IN VIEW "D", IF DIMENSION IS 11.44, ADD SPACER 138256 TO OBTAIN 14.06 DIMENSION.
- 10 STAMP REQ'D. DATA ON 181503 AND INSTALL AFTER FINAL PAINTING.

**BOOM HOIST LINE - 12 PART
16.00 WIDTH BOOM HOIST DRUMS**

1200 FT. OF .875 - 6 X 26 HARRINGTON-SEALE, EXTRA IMPROVED PLOW STEEL, ALTERNATE LAY, IWRC, (719094) OR 1200 FT. OF .875 - 6 X 26 HARRINGTON-SEALE, EXTRA IMPROVED PLOW STEEL, REGULAR LAY, IWRC, (719035) B.S.79,600 LBS.

10.00 WIDTH BOOM HOIST DRUMS

1150 FT. OF .75" - 6 X 26 HARRINGTON-SEALE EXTRA IMPROVED PLOW STEEL, ALTERNATE LAY, IWRC, (719096) OR 1150 FT. OF .75" - 6 X 26 HARRINGTON-SEALE, EXTRA IMPROVED PLOW STEEL, REGULAR LAY, IWRC, (719029) BREAKING STRENGTH 58,800 LBS.

BILL OF MATERIAL				ASSEMBLIES USED ON	
QTY	DESCRIPTION	MATERIAL	QTY		
#22A TOWER - BASIC PARTS					
2	END PLATE		1925		
4	KEEPER PLATE		11413		
4	WASHER		12535		
2	BUSHING		13861		
2	WASHER		17790		
2	RUBBER BUMPER		18828		
1	TOWER CAP		48233		
1	BOOM BUTT (30 FT. 0.00")		48705-4		
1	GANTRY ASSY.		49278		
1	TOWER BOOM LATCH ASSY.		66193		
4	KEEPER PLATE		71176		
2	PIN		71588		
4	BUSHING		73641		
2	BUSHING		74759		
1	WIRE ROPE GUIDE ASSY.		76066		
8	END PLATE		76095		
1	WIRE ROPE ROLLER GUIDE ASSY.		76104		
1	SHAFT		76130		
2	STRUT PENDANT (11 FT 11.00 LG.)		76140-2		
4	PIN		76225		
4	BUSHING		76425		
2	BOOM JOINT PIN		76998		
2	PIN		77118		
2	PIN		77368		
2	PIN		77824		
2	PIN		79146		
2	BOOM JOINT PIN		79299		
2	PIN		79407		
2	WASHER		79637		
2	WASHER		79638		
2	LINK		91125		
2	BOOM HANDLING LINK		92572		
1	TOWER BACKSTAY		92941		
1	LIFTING BRACKET (FOR 193' & OVER TOWER)		93186		
1	WIRE ROPE GUIDE ASSY.		93972		
2	STRUT		137477		
4	LINK		137654		
2	LOWER STRAP (16' - 5.25")		137655		
2	UPPER STRAP (21' - 3.50")		137656		
4	PIN		137681		
2	PIN		137684		
4	BUSHING		137685		
2	END PLATE		137686		
2	SPACER		137687		
1	LOWER SPREADER		137688		
1	UPPER SPREADER		137689		
2	PIN		137933		
2	SPACER (SEE 9) USED ONLY W/48233 PRIOR TO REV. 11-1-71		138256		
2	SPACER		141576		
1	BOOM CARRIER		180185		
1	HOLD BACK ASSY.		180857		
1	MAIN STRUT (21' - 6")		180891		
1	INTERMEDIATE STRUT (24' - 8")		180892		
1	EQUALIZER ASSY.		181055		
1	BUILDERS PLATE (SEE 10)		181503		
1	BOOM STRUT (24' - 9.25)		182022		
2	.50 X 1.00 X 4.00 LG. FB A-36		219129		
2	BALL BUSHING		225360		
4	BASIC PENDANT DWG#140773 123'-173' TOWER		277095		
4	BASIC PENDANT DWG#140773 183' & OVER TOWER		277096		
1	COTTER PIN (.25 X 4.00)		562112		
4	#4 X .312 LG. TYPE "U" DRIVE SCREW		620656		
OPTIONAL SUB-ASSYS. & PARTS					
1	BOOM BUTT (FOR S/N41003 W/4.00 HINGE PIN)		48246-3		
#23 BOOM - BASIC PARTS					
2	BOOM SIGN		22656		
1	BOOM BUTT (27' - 0") (SEE VIEW "R")		48239		
4	BOOM JOINT PIN		70366		
1	WIRE ROPE ROLLER GUIDE ASSY.		75551		
2	RETAINING PLATE		76046		
2	HINGE PIN		79447		
1	BOOM POINT SHAFT ASSY. (1 SHEAVE)		91014		
OR	1	BOOM POINT SHAFT ASSY. (2 SHEAVE)	91017		
2	LINK (1' - 4")		137390		
2	PIN		137919		
1	WIRE ROPE GUIDE ASSY.		180150		
1	BOOM TOP (23' - 0")		177560		
2	BALL BUSHING		225356		
2	BOOM STOP PENDANT (DWG. 79152)		276860		
2	BASIC PENDANT (DWG. 137860) (110' & OVER)		276932		
OPTIONAL SUB - ASSYS. & PARTS					
1	WIRE ROPE ANCHOR JOINT ASSY. #23 BM.		92046		
INTERMEDIATE SUSPENSION PARTS					
2	PIN		79488		
2	PENDANT ATTACHMENT LUG		92023		
2	LINK (2' - 2")		137864		
2	TURNBUCKLE		138722		
2	PENDANT (DWG. 76232) FOR 170' BOOM		276930		
2	PENDANT (DWG. 76232) FOR 160' BOOM		276877		
2	PENDANT (DWG. 76232)		276931		
SUPERSEDES 50805 SHT 1 OF 2 OF 12-12-88					
SCALE	12-1FT	MANITOWOC CRANES, INC.	TOWER CRANE RIGGING ASSY.	DATE	3-28-90
DR. DG		Manitowoc, Wisconsin	#22A TOWER W/#23 BOOM	PATTERN NO.	
CR. CRP	MOD. 4100-W		1.38 SHAGED TOWER PENDANTS		
APP. TSC			12 PART RIGGING		
SHT. 1 OF 2					

