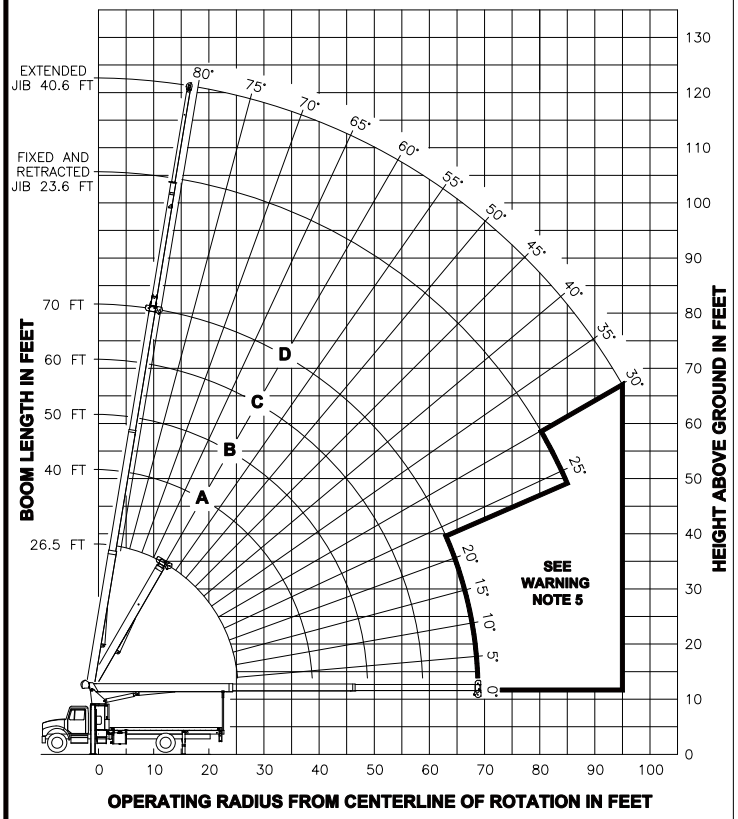
RANGE DIAGRAM



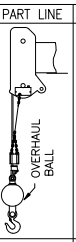
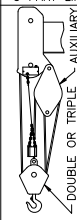
LMI OPERATING CODES

SETTING	CRANE CONFIGURATION
#1	MAIN BOOM
#2	FIXED JIB
#3	TELE JIB – RETRACTED
#4	TELE JIB – EXTENDED

SETTING	CRANE WITH PERSONNEL LIFTING PLATFORM
#5	PERSONNEL LIFTING PLATFORM ON MAIN BOOM
#6	PERSONNEL LIFTING PLATFORM ON FIXED JIB
#7	PERSONNEL LIFTING PLATFORM ON TELE JIB – RETRACTED

WARNING: LIFTING PERSONNEL FROM EXTENDED JIB IS NOT APPROVED

ALLOWABLE LINE PULL

1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE
				
8500 LBS	17000 LBS	25500 LBS	34000 LBS	38000 LBS
7700 LBS	15400 LBS	23100 LBS	30800 LBS	38000 LBS

WARNING

ANTI–TWO–BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE. REFER TO OWNER'S MANUAL.

KEEP AT LEAST 3 WRAPS OF LOAD LINE ON DRUM AT ALL TIMES.

9/16" – 6X25 IWRC (3.5:1 S.F.) 29750 LBS. BREAKING STRENGTH

9/16" ROT RESISTANT (5.0:1 S.F.) 38800 LBS. BREAKING STRENGTH

DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITEX

OVERHAUL BALL	SEE OVERHAUL BALL MFGR. NAMEPLATE
LOAD BLOCKS	SEE BLOCK MFGR. NAMEPLATE
HOSE REEL	160 LBS
SWING AROUND JIB	SEE LOAD CHART

WARNING

LIFTING OFF THE MAIN BOOM POINT WHILE THE JIB IS ERECTED IS NOT INTENDED OR APPROVED.

LOAD RATINGS IN LBS WITH OUTRIGGERS AND STABILIZERS EXTENDED

LMI CODE #1

OPERATING RADIUS FT	LOADED BOOM ANGLE ∠	BOOM LENGTH AND MARKER 26.5 FT	A ∠	A 40 FT	B ∠	B 50 FT	C ∠	C 60 FT	D ∠	D 70 FT
5	79	38000								
8	73	27010	79	24000						
10	68	22330	76	21100	80	18000				
12	63	18410	73	18230	77	16320	80	13420		
15	55	14420	69	14600	74	13940	77	11900	80	9400
20	40	10350	61	10540	68	10600	72	9810	76	8180
25	12	7830	52	8070	61	8130	67	8170	71	7000
30			41	6400	54	6470	62	6510	67	6050
35			28	5160	47	5240	56	5280	62	5280
40					37	4200	50	4260	58	4300
45					25	3360	43	3420	52	3460
50							35	2790	47	2820
55							24	2290	40	2330
60									33	1930
65									23	1600
70										
75										
80										
85										
90										
95										
	0	6650	0	3820	0	2700	0	1960	0	1370
		350 LBS		240 LBS		190 LBS		160 LBS		140 LBS
		530 LBS		350 LBS		280 LBS		240 LBS		200 LBS

JIB LOAD RATINGS IN LBS WITH OUTRIGGERS AND STABILIZERS EXTENDED

OPERATING RADIUS FT	FIXED JIB LMI CODE #2 LOADED BOOMING ∠	FIXED JIB LMI CODE #2 JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	TELESCOPIC JIB LMI CODE #3 LOADED BOOMING ∠	TELESCOPIC JIB LMI CODE #3 JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	TELESCOPIC JIB LMI CODE #4 LOADED BOOMING ∠	TELESCOPIC JIB LMI CODE #4 JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4
	∠	23.6 FT	∠	23.6 FT	∠	40.6 FT
10						
12						
15						
20	80	4400	80	4200		
25	78	4200	78	4000	80	3000
30	75	4000	75	3800	78	2660
35	71	3600	71	3380	75	2380
40	68	3220	68	3010	72	2150
45	65	2880	65	2650	69	1940
50	61	2580	61	2340	66	1770
55	57	2310	57	2060	63	1620
60	53	2020	53	1790	60	1490
65	49	1690	49	1460	57	1380
70	45	1410	45	1180	54	1280
75	40	1180	40	950	51	1190
80	34	980	34	750	47	1030
85	27	810	27	570	43	850
90					39	700
95					34	560
DEDUCTIONS FOR STOWED FIXED JIB						
DEDUCTIONS FOR STOWED TELESCOPIC JIB						

WARNING

1. THE OPERATOR MUST READ AND UNDERSTAND THE OWNER'S MANUAL BEFORE OPERATING THIS CRANE.
2. POSITIONING OR OPERATION OF CRANE BEYOND AREAS SHOWN ON THIS CHART IS NOT INTENDED OR APPROVED EXCEPT WHERE SPECIFIED IN OWNER'S MANUAL.
3. LOADED BOOM ANGLES AT SPECIFIED BOOM LENGTHS GIVE ONLY AN APPROXIMATION OF THE OPERATING RADIUS. THE BOOM ANGLE BEFORE LOADING SHOULD BE GREATER TO ACCOUNT FOR DEFLECTIONS. DO NOT EXCEED THE OPERATING RADIUS FOR RATED LOADS.
4. THE OPERATING RADIUS SHOWN IN THE JIB RATING CHART IS FOR FULLY EXTENDED BOOM ONLY. WHEN BOOM IS NOT FULLY EXTENDED, USE ONLY LOADED BOOM ANGLE TO DETERMINE LOAD RATING OF JIB.
5. BOOM MUST BE FULLY RETRACTED WHEN JIB IS ERECTED, BEFORE LOWERING BOOM THROUGH THIS AREA.
6. FOR BOOM ANGLES NOT SHOWN ON JIB LOAD RATING CHART, USE RATING OF NEXT LOWER BOOM ANGLE.
7. FOR BOOM LENGTHS NOT SHOWN, USE RATING OF NEXT LONGER BOOM LENGTH. FOR RADII NOT SHOWN, USE RATING OF NEXT LONGER RADIUS.
8. CRANE LOAD RATINGS ON OUTRIGGERS ARE BASED ON FREELY SUSPENDED LOADS WITH THE MACHINE LEVELED AND STANDING ON A FIRM UNIFORM SUPPORTING SURFACE. NO ATTEMPT SHALL BE MADE TO MOVE A LOAD HORIZONTALLY ON THE GROUND IN ANY DIRECTION.
9. PRACTICAL WORKING LOADS DEPEND ON SUPPORTING SURFACE, WIND, AND OTHER FACTORS AFFECTING STABILITY SUCH AS HAZARDOUS SURROUNDINGS, EXPERIENCE OF PERSONNEL, AND PROPER HANDLING, ALL OF WHICH MUST BE TAKEN INTO ACCOUNT BY THE OPERATOR.
10. THE MAXIMUM LOAD WHICH MAY BE TELESCOPED IS LIMITED BY HYDRAULIC PRESSURE, BOOM ANGLE, AND BOOM LUBRICATION. IT IS SAFE TO ATTEMPT TO TELESCOPE ANY LOAD WITHIN THE LIMITS OF THE LOAD RATING CHART. BOOM MUST BE FULLY RETRACTED AGAINST BOOM STOPS AT ALL TIMES WHEN LIFTING MINIMUM BOOM LENGTH CAPACITY LOADS.

INFORMATION

1. DEDUCTIONS MUST BE MADE FROM RATED LOADS FOR STOWED JIB, OPTIONAL ATTACHMENTS, HOOKS, AND LOADBLOCKS (SEE DEDUCTION CHART). WEIGHTS OF SLINGS AND ALL OTHER LOAD HANDLING DEVICES SHALL BE CONSIDERED A PART OF THE LOAD.
2. CRANE LOAD RATINGS WITH OUTRIGGERS ARE BASED ON OUTRIGGERS AND STABILIZERS EXTENDED AND SET WITH MACHINE LEVELED.
3. LOAD RATINGS ABOVE THE HEAVY LINE ARE STRUCTURALLY LIMITED CAPACITIES. LOAD RATINGS BELOW THE HEAVY LINE ARE STABILITY LIMITED CAPACITIES AND DO NOT EXCEED 85% OF TIPPING.

DEFINITIONS

1. OPERATING RADIUS IS THE HORIZONTAL DISTANCE FROM THE AXIS OF ROTATION TO THE CENTER OF THE VERTICAL HOIST LINE OR TACKLE WITH LOAD APPLIED.
2. LOADED BOOM ANGLE AS SHOWN IN THE COLUMN HEADED BY ∠, IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.

Manitex

MODELS 1970C & 1970T

CRANE MEETS ANSI B30.5 REQUIREMENTS

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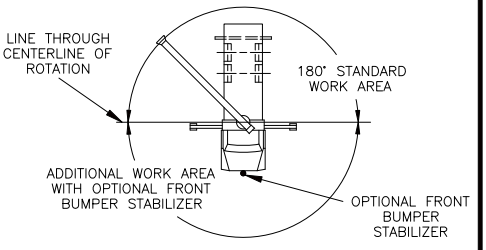

AREA OF OPERATION