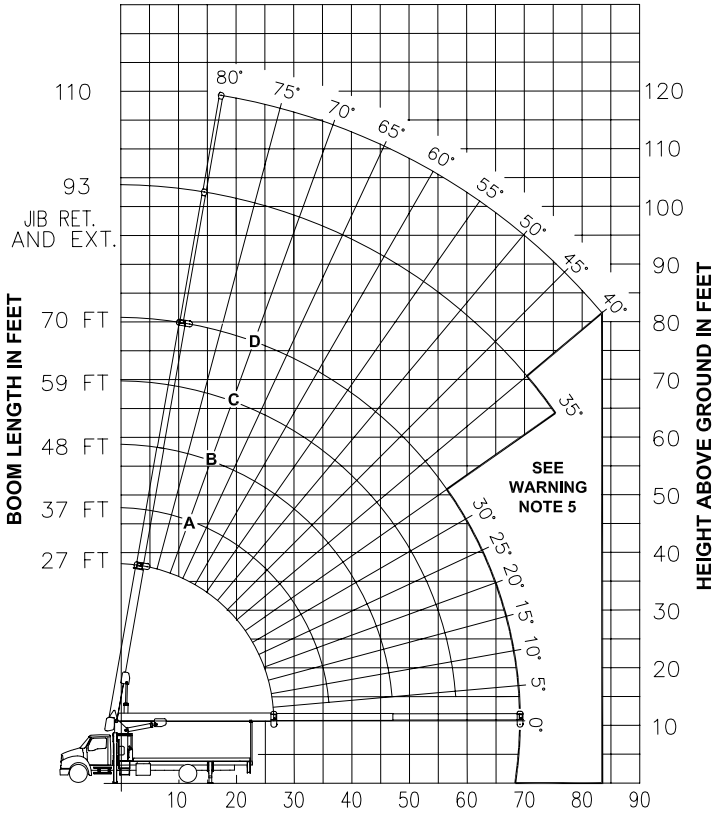
RANGE DIAGRAM



LOAD RATINGS IN LBS WITH OUTRIGGERS AND STABILIZERS EXTENDED

OPERATING RADIUS FT	LOADED BOOM ANGLE / BOOM LENGTH & MARKER	A		B		C		D	
	∠	27 FT	∠	37 FT	∠	48 FT	∠	59 FT	∠	70 FT
5	79	34000								
10	68	19000	74	17230	79	14060	80	13630		
15	56	13270	66	12280	73	9790	78	9380	80	9090
20	42	10350	57	9610	67	7530	72	7140	77	6860
25	21	7840	47	7860	60	6100	67	5750	72	5490
30			35	6510	52	5090	62	4790	68	4540
35			16	5000	44	4310	56	4070	63	3850
40					34	3630	49	3500	58	3310
45					20	2860	42	3010	53	2870
50							34	2560	47	2500
55							22	2060	41	2160
60									34	1840
65									24	1500
	290 LBS		210 LBS		170 LBS		140 LBS		120 LBS	
	450 LBS		340 LBS		260 LBS		210 LBS		180 LBS	

JIB LOAD RATINGS WITH OUTRIGGERS AND STABILIZERS EXTENDED

FIXED JIB			TELESCOPIC JIB				
LOADED BOOM ANG	JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4		LOADED BOOM ANG	JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	LOADED BOOM ANG	JIB LENGTH FOR ALL BOOM LENGTHS SEE WARNING NOTE 4	
∠	23 FT		∠	23 FT	∠	40 FT	
80	4400		80	4300			
75	3500		75	3400			
70	2800		70	2700			
65	2200		65	2100	80	2500	
60	1900		60	1800	75	1900	
55	1500		55	1400	70	1600	
50	1300		50	1200	65	1300	
45	1200		45	1000	60	1000	
40	1100		40	900	55	850	
35	900		35	700	50	750	
					45	600	
					40	550	

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. JIB RATING CHART IS BASED ON LOADED BOOM ANGLES OF MAIN BOOM AND NOT ON LOAD RADIUS.
5. BOOM MUST BE FULLY RETRACTED WHEN JIB IS ERECTED, BEFORE LOWERING BOOM THRU 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.

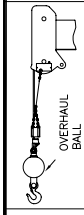
INFORMATION

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 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.

ALLOWABLE LINE PULL

1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	
				
8500 LBS	17000 LBS	25500 LBS	34000 LBS	9/16" – 6 X 37 IWRC (3.5:1 S.F.) 29,800 LBS. BREAKING STRENGTH
7400 LBS	14800 LBS	22200 LBS	29600 LBS	9/16" ROT RESISTANT (5.0:1 S.F.) 37000 LBS. BREAKING STRENGTH

WARNING

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

KEEP AT LEAST 5 WRAPS OF LOAD LINE ON DRUM AT ALL TIMES.

DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITEX.

OVERHAUL BALL – – – – – – – – – – – – – – – – – – SEE OVERHAUL BALL MFGR. NAMEPLATE
LOAD BLOCK – 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.

Manitex

MODEL 1770C

CRANE MEETS ANSI B30.5 REQUIREMENTS

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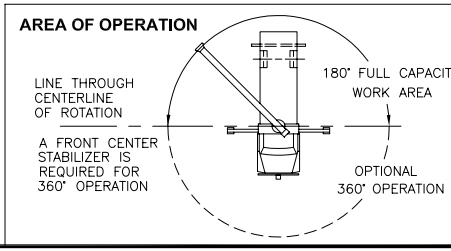
AREA OF OPERATION