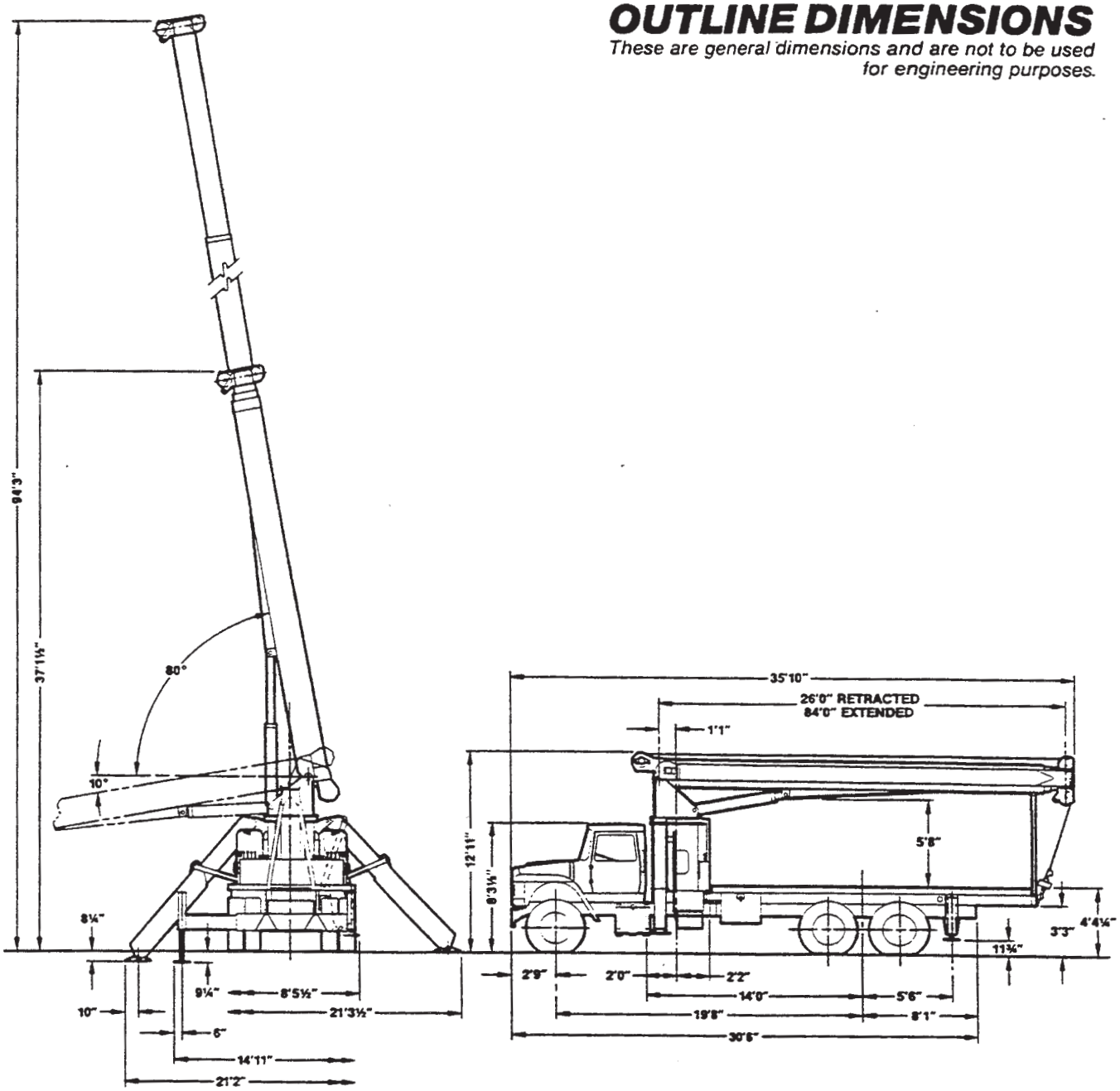
19 TON BOOM TRUCK

Notes:

OUTLINE DIMENSIONS

These are general dimensions and are not to be used for engineering purposes.



WEIGHTS

Pounds

Model 1984 consists of:
4-section, 84′ boom with anti-two block warning and shutdown system; hydraulic winch with 300′ of 9/16″ wire rope; rotation bearing and swing system; hydraulic fluid; turret; boom luffing cylinder; pedestal with outriggers; control console with operator's platform; sub-frame; rear stabilizers; and boom rest

TOTAL MACHINE WEIGHT 18,200

Additions:

26′ fixed-length jib	850
46′ telescopic jib	1,250
5-ton hook	120
Single-sheave block	260
Double-sheave block	350
Auxiliary sheave for 5-part line	50
20′ steel bed	1,950

TRUCK CHASSIS DATA

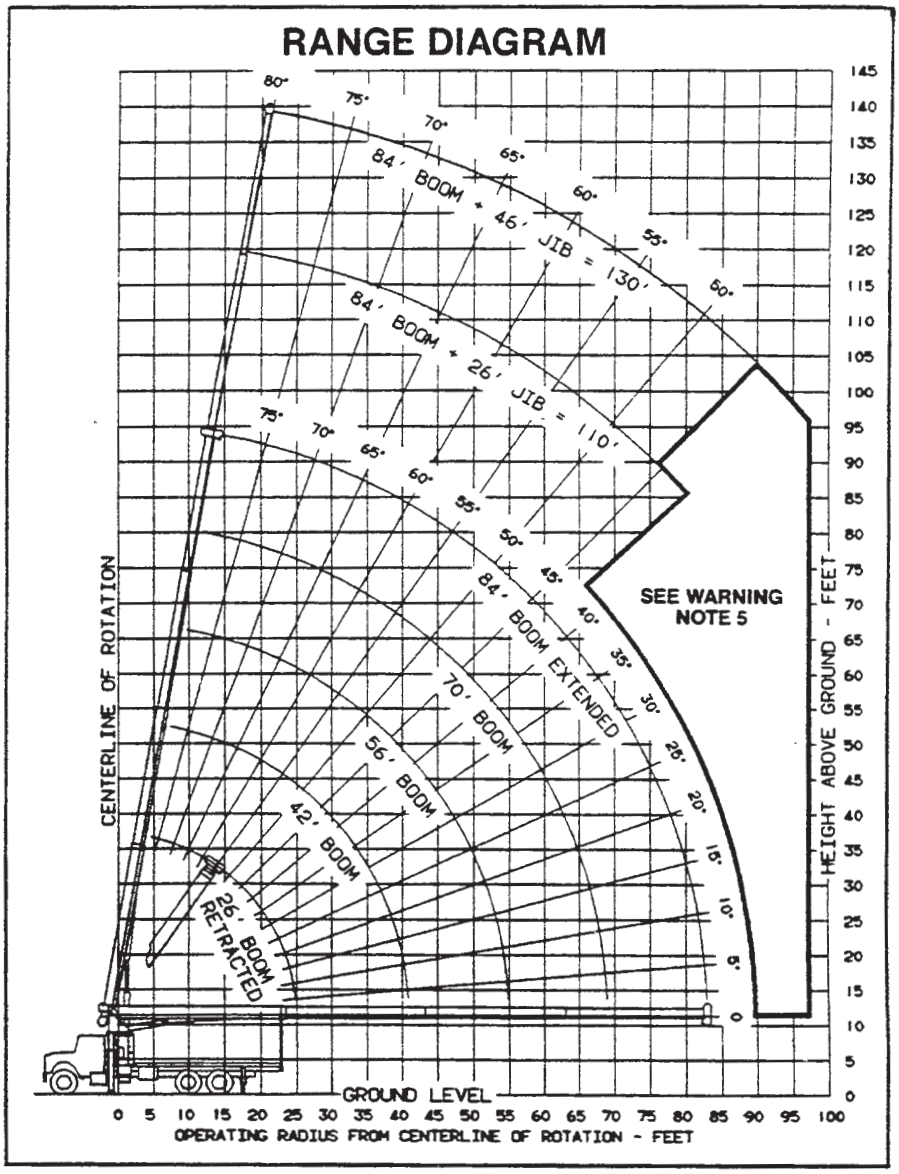
FOR MANITEX MODEL 1984

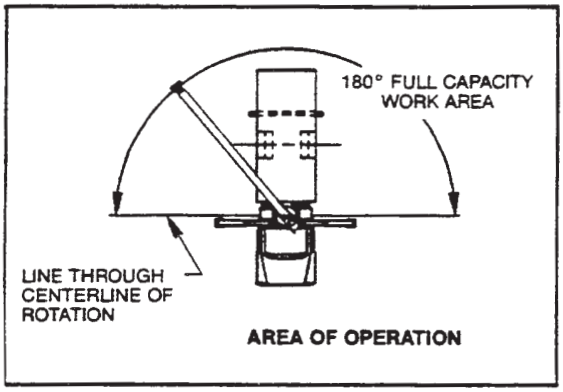
Wheelbase	238″
Cab to axle	168″
Front gross axle weight rating†	14,000 Lbs
Rear gross axle weight rating	38,000 Lbs
Truck frame section modulus	20.0 in³ (110,000 PSI)

†Some trucks with larger engines may require larger front gross axle weight ratings (GAWR).

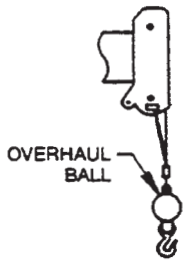
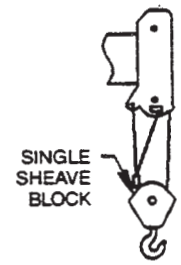
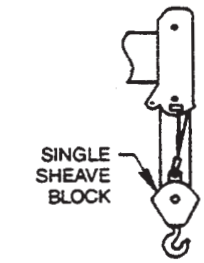
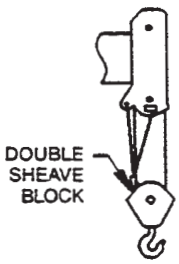
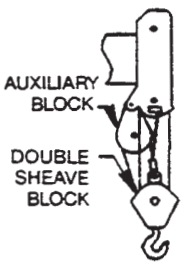
DO NOT OPERATE A MANITEX BOOM TRUCK OR ACCESSORIES WITHIN 10′ OF LIVE POWER LINES.

RANGE DIAGRAM





HOIST REEVING DIAGRAM

1-PART LINE	2-PART LINE	3-PART LINE	4-PART LINE	5-PART LINE
				
8,500 LBS.	17,000 LBS.	25,500 LBS.	34,000 LBS.	38,000 LBS.
7,400 LBS.	14,800 LBS.	22,200 LBS.	29,600 LBS.	37,000 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.

WIRE ROPE
9/16" — 6 x 25 IWRC (3.5:1 S.F.) 29,750 LBS. Breaking Strength
9/16" Rotation Resistant (5.0:1 S.F.) 37,000 LBS. Breaking Strength

Drawing No. 7300015 Dated 7-21-88

MANITEX INC.
A Subsidiary of The Manitowoc Company, Inc.
McAllen, Texas 78503

MEETS ANSI B30.5 REQUIREMENTS

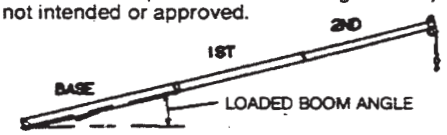
MODEL 1984 LOAD RATING CHART — *WITH CAPACITY ALERT SYSTEM*

LOAD RATINGS IN LBS. WITH OUTRIGGERS AND STABILIZERS EXTENDED											JIB LOAD RATINGS IN LBS. WITH OUTRIGGERS AND STABILIZERS EXTENDED					
Operating Radius: Feet	Loaded Boom Angle: Degrees	Boom Length 26 Feet	Loaded Boom Angle: Degrees	Boom Length 42 Feet	Loaded Boom Angle: Degrees	Boom Length 56 Feet	Loaded Boom Angle: Degrees	Boom Length 70 Feet	Loaded Boom Angle: Degrees	Boom Length 84 Feet	Operating Radius: Feet	Loaded Boom Angle: Degrees	26' Jib For All Boom Lengths See Warning Note 4	Operating Radius: Feet	Loaded Boom Angle: Degrees	46' Jib For All Boom Lengths See Warning Note 4
5	79	38,000									25	79	4,510	25		
8	72	27,800									30	76	3,890	30	79	3,100
10	67	23,350	77	20,000							35	74	3,350	35	77	2,800
12	62	20,200	74	17,860	79	16,400					40	71	2,900	40	75	2,520
14	57	17,780	71	15,660	76	14,400	80	13,320			45	68	2,500	45	72	2,240
16	51	15,870	68	13,930	74	12,780	78	11,770			50	65	2,170	50	70	1,980
20	38	12,800	62	11,400	70	10,400	75	9,570	78	8,900	55	62	1,870	55	67	1,750
25			54	9,230	64	8,400	70	7,710	74	7,180	60	59	1,520	60	65	1,550
30			44	7,630	58	7,000	66	6,410	71	5,910	65	56	1,240	65	63	1,370
35			33	6,260	52	5,910	61	5,410	67	4,980	70	52	980	70	60	1,210
40			14	4,500	45	5,040	56	4,630	63	4,260	75	49	760	75	57	1,050
45					37	4,260	51	4,000	59	3,670	80	45	570	80	54	850
50					26	3,470	45	3,460	55	3,190	85			85	51	680
55							39	2,960	51	2,770	90			90	48	520
60							31	2,430	46	2,390	95			95		
65							21	1,920	41	2,010	100			100		
70									35	1,620						
75									27	1,300						
80									19	990						
	650 LBS.		400 LBS.		300 LBS.		250 LBS.		200 LBS.		DEDUCTIONS FOR STOWED JIB					

DEDUCTIONS FROM RATED LOADS
FOR MANITEX SUPPLIED LOAD HANDLING DEVICES

Auxiliary block	50 Lbs.
Overhaul ball	120 Lbs.
Single sheave load block	260 Lbs.
Double sheave load block	350 Lbs.
Hose reel	140 Lbs.
Swing-around jib (stowed)	See load chart

WARNING
Lifting off the main boom point while the swing around jib is erected is not intended or approved.



WARNINGS

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 load 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. Do not rely on capacity alert system when lifting from 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. For load 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.

INFORMATION

1. Deductions must be made from rated loads for stowed jib, optional attachments, hooks and load blocks (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. Main boom load ratings are based on a constant hoist cylinder pressure and do not exceed 85% of tipping. Jib load ratings above the heavy line are based on the machine structural competence and not on machine stability.

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 "Loaded Boom Angle: Degrees", is the included angle between the horizontal and longitudinal axes of the boom base after lifting rated load at rated radius.

Continued on reverse side.