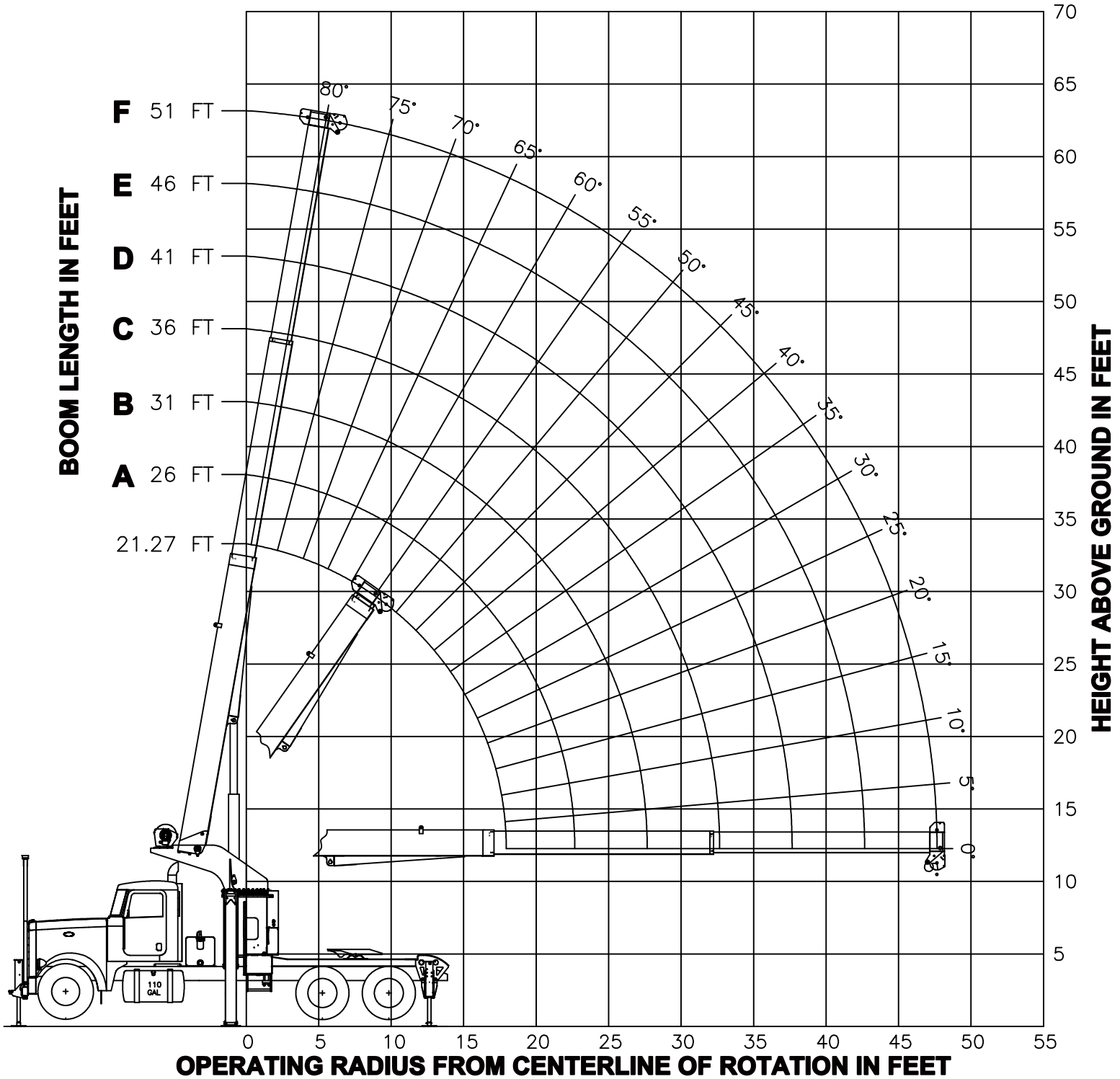
Load Rating Chart

Model 3051T

Manitex

NOTE: Additional copies of this Load Rating Chart can be purchased from your Manitex Distributor. When ordering, use the part number shown in the bottom left corner of this page.

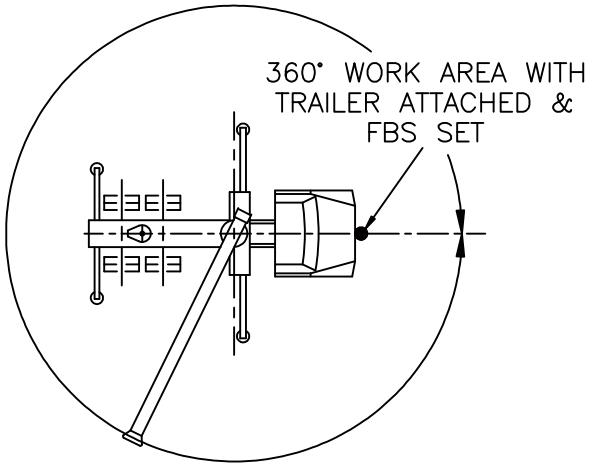
RANGE DIAGRAM



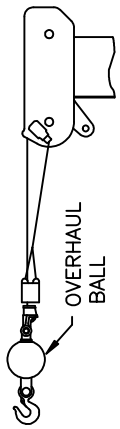
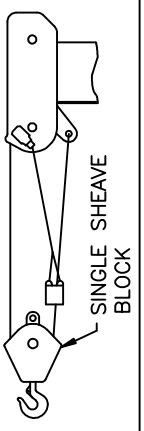
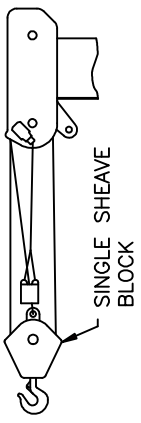
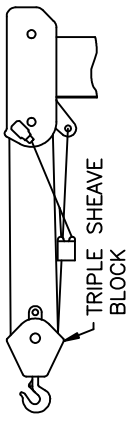
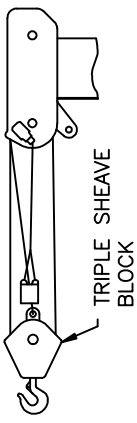
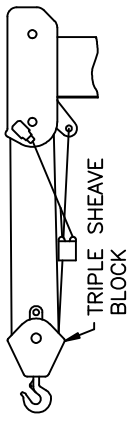
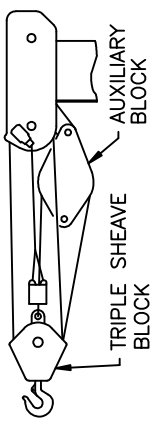
MAIN BOOM LMI CODE 1

LOAD RADIUS (FT)	21.27 FT		26 FT (A)		31 FT (B)		36 FT (C)		41 FT (D)		46 FT (E)		51 FT (F)		LOAD RADIUS (FT)
	LOADED BOOM ANGLE (DEG)	LOAD CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	CODE 1 LOAD CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LOAD CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LOAD CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LOAD CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LOAD CAPACITY (LBS)	LOADED BOOM ANGLE (DEG)	LOAD CAPACITY (LBS)	
5	70	60000													5
8	60.5	43700	66.5	41700	71	40100	74	38900	76.5	38000					8
10	54	38200	61.5	36400	67	35200	70.5	34100	73.5	33200	75.5	32200	77	28520	10
12	47	34300	56.5	32700	62.5	31200	67	30100	70.5	29250	73	28540	75	25800	12
14	38.5	30700	50.5	29440	58.5	28160	63.5	27110	67.5	26640	70.5	25940	72.5	23780	14
16	27.5	27160	44.5	26760	53.5	25990	60	25010	64	24190	67.5	23520	70.5	21820	16
18			37.5	24640	49	23840	56	22960	61	22200	65	21550	68	20190	18
20			28.5	22260	43.5	21980	52	21230	57.5	20530	62	19910	65.5	18520	20
25					26.5	17760	40.5	17770	48.5	17570	54.5	17070	58.5	15410	25
30							24.5	13170	38	13260	46	13310	51.5	12950	30
35									23	10240	36	10310	44	10350	35
40											22	8270	34.5	8320	40
45													21	6860	45
50															50

AREA OF OPERATION



ALLOWABLE LINE PULL

1 PART LINE	2 PART LINE	3 PART LINE	4 PART LINE	5 PART LINE	6 PART LINE	7 PART LINE
						
8500 LBS	17000 LBS	25500 LBS	34000 LBS	42500 LBS	51000 LBS	60000 LBS
7700 LBS	15400 LBS	23100 LBS	30800 LBS	38500 LBS	46200 LBS	53900 LBS

WARNING

ANTI–TWO–BLOCK SYSTEM MUST BE IN GOOD OPERATING CONDITION BEFORE OPERATING CRANE.

REFER TO THE OWNER'S MANUAL.

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

9/16" 6X25 IWRC (3.5:1 SF) – 29750 LBS MIN BREAKING STRENGTH	
9/16" ROT RESISTANT (5.0:1 SF) – 38500 LBS MIN BREAKING STRENGTH	

DEDUCTIONS FROM RATED LOADS FOR LOAD HANDLING DEVICES SUPPLIED BY MANITEX

AUXILIARY BLOCK	50 LBS
AUXILIARY SHEAVE	50 LBS
OVERHAUL BALL	SEE OVERHAUL BALL MANUFACTURER NAMEPLATE
LOAD BLOCK	SEE BLOCK MANUFACTURER NAMEPLATE
HOSE REEL	140 LBS
SWING AROUND JIB	SEE LOAD CHART

LMI OPERATING CODES

SETTING	CRANE CONFIGURATION	OUTRIGGER CONFIGURATION
#1	MAIN BOOM	FULLY EXTENDED
#5	PERSONNEL LIFTING PLATFORM ON MAIN BOOM	FULLY EXTENDED

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. FOR BOOM ANGLES NOT SHOWN ON JIB LOAD RATING CHART, USE RATING OF NEXT LOWER BOOM ANGLE.

6. FOR BOOM LENGTHS NOT SHOWN, USE RATING OF NEXT SHORTER OR LONGER BOOM LENGTH, WHICHEVER IS LESS. FOR RADII NOT SHOWN, USE RATING OF NEXT LONGER RADIUS.

7. 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.

WARNING (CONTINUED)

8. 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.

9. 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.

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

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. 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 $\measuredangle$, IS THE INCLUDED ANGLE BETWEEN THE HORIZONTAL AND LONGITUDINAL AXES OF THE BOOM BASE AFTER LIFTING RATED LOAD AT RATED RADIUS.