LOAD CHART

MANTIS Model 15010

75 ton Hydraulic Crawler Crane

as originally manufactured and equipped by Tadano Mantis Corporation

with Standard 111.6 ft Main Boom

Capacity Limitations and General Conditions.

This **MANTIS CRANE** as manufactured by Tadano Mantis Corporation meets the requirements of **ASME B30.5**. Structure and stability have been tested in accordance **with SAE J1063** and **SAE J765**, respectively. Lifting capacities as determined by boom length, angle or radius, apply only to machines as originally equipped by manufacturer and in a properly maintained condition. Capacities given are maximum covered by the manufacturers warranty and are based on a freely suspended load with **NO** allowance for factors as out-of-level operation, supporting surface conditions, hazardous surroundings, experience of personnel, etc. The operator shall establish practical working loads based on prevailing operating conditions, such as, but not limited to the above.

When making lifts where capacities may be within a zone limited by structural strength, the operator shall determine that the weight of the load is known within plus or minus (+/-) ten percent (10%) before making lift. **DO NOT** lift load or extend boom without counterweight in place. Deductions from rated capacities must be made for the weight of the hook block, hook/ball, slings, spreader bar, or other suspended equipment.

Side pull on boom is extremely dangerous and must be avoided.

DO NOT exceed manufacturers maximum specified reeving.

DO NOT use this chart if wind speed exceeds 20 mph. Consult the manufacturer for specialized load ratings.

Load radius is defined as the horizontal distance from the axis of rotation (with no load) to the center of the lifting device after load is applied.

Boom angle is the included angle between the Longitudinal axis of the boom base section and the Horizontal axis, after lifting load. The boom angle before lifting should be slightly greater than desired to account for boom deflection.

Boom angle/boom length relationships given are an approximation of the resulted load radius, which should be an accurate measurement.

Boom height dimensions are measured from ground to center of lower boom head sheave.

It is permissible to attempt to telescope boom with a load within the limits of rated capacities. However, boom angle system hydraulic pressure, and/or boom lubrication may affect operation.

It is permissible to travel with loads within the rated capacity of the crane. Travel speeds should be greatly reduced to reflect terrain limitations and minimize dynamic loads applied to the crane structure.

MANTIS Model 15010 111.6 ft STANDARD BOOM

LOAD CHART SELECTION & LOAD MOMENT INDICATOR SETTING INFORMATION

Each Load Chart in this document corresponds to a particular crane configuration. The Load Moment Indicator system must be set to match the configuration in use. If it is set improperly, the crane may function poorly or not at all

The chart below shows the Operating Modes and corresponding crane configurations available.

NOTE:

If you are certain that a load is within load chart limits but the crane will not lift it, check the selected reeving and crane configuration.

			1	
	Track Position			Load
Configuration				Chart
		(di)		Number
			Lille)	
Main Boom	Fully Extended	35,000	1 to 10	1
Main Boom	Fully Extended	17,500	1 to 10	2
Main Room	Fully Extended	NO	1 to 10	3
Main Boom	Tully Exterioca	CWT	1 10 10	3
Main Boom	Retracted	35,000	1 to 10	4
Main Boom	Retracted	17,500	1 to 10	5
Auxiliary Boom	Fully Extended	35,000	1	6
Nose Sheave				
Auxiliary Boom	Fully Extended	17,500	1	7
Nose Sheave	•			
Auxiliary Boom	Fully Extended	NO	1	8
Nose Sheave	,	CWT	-	· ·
Auxiliary Boom	Retracted	35,000	1	9
	Netracted	33,000	'	3
	5	47.500		
	Retracted	17,500	1	10
30ft Extension	Fully Extended	35,000	1 or 2	11
30ft Extension	Fully Extended	17,500	1 or 2	12
20ft Jib -	Fully Extended	35,000	1	13
0° Offset	-			
20ft Jib -	Fully Extended	35.000	1	13
15° Offset		,3	-	
20ft Jib -	Fully Extended	35,000	1	13
30° Offset	,,	,		-
20ft Jib -	Fully Extended	17,500	1	13
0° Offset	•	_		
	Main Boom Main Boom Main Boom Main Boom Main Boom Auxiliary Boom Nose Sheave 20ft Jib - 0° Offset 20ft Jib - 15° Offset 20ft Jib - 30° Offset 20ft Jib -	Main Boom Fully Extended Main Boom Fully Extended Main Boom Fully Extended Main Boom Retracted Main Boom Retracted Auxiliary Boom Nose Sheave Auxiliary Boom Nose Sheave Auxiliary Boom Nose Sheave Auxiliary Boom Retracted Auxiliary Boom Nose Sheave Auxiliary Boom Retracted Auxiliary Boom Retracted Ose Sheave Auxiliary Boom Retracted Auxiliary Boom Retracted Tully Extended Auxiliary Boom Retracted Fully Extended Tully Extended	Main Boom Fully Extended 35,000 Main Boom Fully Extended 17,500 Main Boom Fully Extended NO CWT Main Boom Retracted 35,000 Main Boom Retracted 17,500 Auxiliary Boom Nose Sheave Fully Extended NO CWT Auxiliary Boom Nose Sheave Fully Extended NO CWT Auxiliary Boom Nose Sheave Fully Extended NO CWT Auxiliary Boom Nose Sheave Retracted 35,000 Auxiliary Boom Nose Sheave Retracted 35,000 Auxiliary Boom Nose Sheave Fully Extended NO CWT Auxiliary Boom Nose Sheave Retracted 35,000 30ft Extension Fully Extended 35,000 30ft Extension Fully Extended 35,000 20ft Jib - Fully Extended 35,000	Configuration weight (lb) Reeving (Parts of Line) Main Boom Fully Extended 35,000 1 to 10 Main Boom Fully Extended 17,500 1 to 10 Main Boom Retracted 35,000 1 to 10 Main Boom Retracted 17,500 1 to 10 Main Boom Retracted 17,500 1 to 10 Auxiliary Boom Fully Extended 35,000 1 Auxiliary Boom Nose Sheave Fully Extended NO CWT 1 Auxiliary Boom Nose Sheave Retracted 35,000 1 Auxiliary Boom Nose Sheave Retracted 17,500 1 Auxiliary Boom Nose Sheave Retracted 17,500

34	20ft Jib - 15° Offset	Fully Extended	17,500	1	13
35	20ft Jib - 30° Offset	Fully Extended	17,500	1	13
36	Work Platform on Main Boom	Fully Extended	35,000	NA	See Operating Range Chart
37	Work Platform on 30ft Extension	Fully Extended	35,000	NA	See Operating Range Chart

MANTIS Model 15010 111.6 ft STANDARD BOOM

LIFTING CAPACITY DEDUCTIONS FOR LOAD HANDLING DEVICES

MANTIS Model 15010

75 ton Crawler Crane

as originally manufactured and equipped by Tadano Mantis Corporation.

Weight Reductions for Load Han	dling Devices
Hookblocks	
75 Ton - 5 Sheave	1750 lb
12 Ton Overhaul Ball w/Swivel	440 lb
Optional Load Handling Devices	
30ft Extension - Stowed*	400 lb
30ft Extension - Erected*	2000 lb
30ft Ext. and 20ft Jib - Stowed*	850 lb
30ft Ext. and 20ft Jib - Erected*	3500 lb
Auxiliary Nose Sheave*	250 lb
Auger Ready Package*	220 lb
Auger Package Complete - Stowed*	450 lb
Auger Package Complete - Erected*	1120 lb
*D	
*Reduction of main boom capacities	

NOTE:

All values shown apply to original equipment as supplied by Tadano Mantis Corporation. The above deductions should be taken into account when calculating the load to be lifted. If lifting devices other than those supplied by the manufacturer are used, deductions should be made based the weights of those components.

A properly calibrated and maintained Load Moment Indicating (LMI) system will indicate boom mounted and other suspended equipment.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

	MAIN BOOM with TRACKS FULLY EXTENDED											
			35,000	lb COU	NTERWI	EIGHT						
RADIUS			MAIN	ВООМ	LENGTI	H (ft)			RADIUS			
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)			
10	154.0	107.5	105.0	103.0					10			
12	136.5	104.0	100.0	90.0					12			
15	114.0	102.0	94.0	82.0	64.5				15			
20	81.8	81.0	79.0	68.0	59.0	51.0	46.0		20			
25	59.7	59.4	59.0	58.7	50.0	42.0	38.5	36.0	25			
30	44.2	44.0	43.7	43.4	44.5	36.8	33.2	31.0	30			
35		34.2	33.9	33.7	34.8	34.3	29.0	26.7	35			
40		27.5	27.2	27.0	28.0	28.6	25.5	23.0	40			
45			22.3	22.0	23.1	23.6	24.0	21.9	45			
50				18.3	19.3	19.8	20.4	19.7	50			
55				15.3	16.3	16.8	17.4	17.5	55			
60					13.9	14.4	15.0	15.0	60			
65					12.0	12.4	13.0	13.0	65			
70						10.8	11.3	11.4	70			
75						9.3	9.9	9.9	75			
80						8.1	8.6	8.7	80			
85							7.6	7.6	85			
90							6.6	6.7	90			
95							5.8	5.9	95			
100								5.1	100			
105								4.5	105			
Parts of line	10	8	7	7	5	4	4	3	Parts of line			

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

	N	IAIN BO	OOM wit	th TRAC	CKS FU	LLY EX	TENDE	D	
			17,500	lb COU	NTERW	EIGHT			
RADIUS			MAII	N BOOM	LENGTI	H (ft)			RADIUS
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)
10	154.0	107.5	105.0	103.0					10
12	136.5	104.0	100.0	90.0					12
15	114.0	102.0	94.0	82.0	64.5				15
20	63.6	64.1	63.9	63.3	59.0	51.0	46.0		20
25	42.3	42.7	42.6	42.1	43.9	42.0	38.5	36.0	25
30	30.5	30.9	30.8	30.4	32.1	33.2	33.2	31.0	30
35		23.5	23.4	23.0	24.6	25.7	26.2	26.5	35
40		18.3	18.3	17.9	19.4	20.5	20.9	21.3	40
45			14.5	14.1	15.6	16.7	17.1	17.4	45
50				11.3	12.7	13.8	14.2	14.5	50
55				9.0	10.5	11.5	11.9	12.2	55
60					8.6	9.6	10.0	10.3	60
65					7.1	8.1	8.5	8.8	65
70						6.8	7.2	7.5	70
75						5.7	6.1	6.4	75
80						4.8	5.2	5.4	80
85							4.4	4.6	85
90							3.6	3.9	90
95							3.0	3.3	95
100								2.7	100
105								2.2	105
Parts of line	10	8	7	7	5	4	4	3	Parts of line

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

	N	IAIN BO	OOM wi	th TRAC	CKS FU	LLY EX	TENDE	D	
			NO	COUNT	ERWEIG	НТ			
RADIUS			MAII	N BOOM	LENGTI	H (ft)			RADIUS
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)
10	143.0	107.5	105.0	103.0					10
12	119.0	104.0	100.0	90.0					12
15	80.0	79.6	79.3	78.8	64.5				15
20	43.5	43.3	43.1	42.7	44.1	44.9	45.8		20
25	28.2	28.0	27.9	27.6	28.7	29.4	30.3	31.0	25
30	19.8	19.6	19.5	19.3	20.3	20.9	21.7	22.4	30
35		14.3	14.2	14.0	15.0	15.6	16.3	16.9	35
40		10.6	10.6	10.4	11.3	11.9	12.6	13.2	40
45			7.9	7.7	8.6	9.1	9.8	10.4	45
50				5.7	6.5	7.1	7.7	8.3	50
55				4.0	4.9	5.4	6.1	6.6	55
60					3.6	4.1	4.8	5.3	60
65					2.5	3.0	3.7	4.2	65
70						2.1	2.7	3.3	70
75						1.3	2.0	2.5	75
80						NR	1.3	1.8	80
85							NR	1.2	85
90							NR	NR	90
95							NR	NR	95
100								NR	100
105								NR	105
Parts of line	10	8	7	7	5	4	4	3	Parts of line

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

		MAIN	воом	with TF	RACKS	RETRA	CTED		
			35,000	lb COU	NTERW	EIGHT			
RADIUS			MAII	N BOOM	LENGTI	H (ft)			RADIUS
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)
10.0	*	*	*	*					10.0
12.0	*	*	100.0	90.0					12.0
15.0	85.0	84.0	83.4	82.0	64.5				15.0
20.0	53.8	53.0	52.4	52.1	53.4	51.0	46.0		20.0
25.0	38.1	37.4	37.0	36.6	37.8	38.7	38.5	36.0	25.0
30.0	28.8	28.1	27.7	27.4	28.5	29.3	29.9	30.3	30.0
35.0		21.9	21.5	21.2	22.3	23.1	23.6	24.1	35.0
40.0		17.4	17.1	16.8	17.9	18.6	19.2	19.6	40.0
45.0			13.7	13.5	14.5	15.3	15.8	16.2	45.0
50.0				10.9	11.9	12.7	13.2	13.6	50.0
55.0				8.8	9.9	10.6	11.1	11.5	55.0
60.0					8.2	8.9	9.4	9.8	60.0
65.0					6.8	7.5	8.0	8.4	65.0
70.0						6.3	6.8	7.2	70.0
75.0						5.2	5.7	6.1	75.0
80.0						4.3	4.9	5.2	80.0
85.0							4.1	4.5	85.0
90.0							3.4	3.8	90.0
95.0							2.8	3.2	95.0
100.0								2.6	100.0
105.0								2.1	105.0
Parts of line	7	7	7	7	5	4	4	3	Parts of line

WARNING

WITH TRACKS RETRACTED AND BOOM POSITIONED "OVER THE SIDE", THIS EQUIPMENT IS LIMITED BY BACKWARD STABILITY!

BACKWARD STABILITY OF THIS EQUIPMENT IS ITS ABILITY TO RESIST OVERTURNING IN THE DIRECTION OPPOSITE THE BOOM POINT WHILE IN THE <u>UNLOADED</u> CONDITION.

BOOM POSTIONS MARKED WITH AN * ON THE CHART INDICATE AN AREA LIMITED BY BACKWARD STABILITY. IF THE CRANE IN THIS CONFIGURATION WITH BOOM UNLOADED THE ESTABLISHED LIMITS OF BACKWARD STABILITY WILL BE EXCEEDED AND BACKWARD OVERTURNING MAY OCCUR !!!!

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

		MAIN	воом	with TF	RACKS	RETRA	CTED				
	17,500 Ib COUNTERWEIGHT										
RADIUS			MAII	N BOOM	LENGTI	H (ft)			RADIUS		
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)		
10.0	130.5	107.5	105.0	103.0					10.0		
12.0	90.6	89.5	88.8	88.2					12.0		
15.0	60.8	59.9	59.3	58.8	60.3				15.0		
20.0	37.7	36.9	36.4	36.0	37.2	38.1	38.8		20.0		
25.0	26.1	25.4	24.9	24.6	25.7	26.5	27.1	27.6	25.0		
30.0	19.2	18.5	18.1	17.8	18.8	19.6	20.2	20.6	30.0		
35.0		13.9	13.5	13.2	14.2	15.0	15.5	16.0	35.0		
40.0		10.6	10.2	10.0	10.9	11.6	12.2	12.6	40.0		
45.0			7.8	7.5	8.5	9.2	9.7	10.1	45.0		
50.0				5.6	6.6	7.2	7.8	8.2	50.0		
55.0				4.1	5.0	5.7	6.2	6.6	55.0		
60.0					3.8	4.4	5.0	5.4	60.0		
65.0					2.7	3.4	3.9	4.3	65.0		
70.0						2.5	3.0	3.4	70.0		
75.0						1.7	2.3	2.7	75.0		
80.0						1.1	1.6	2.0	80.0		
85.0							1.0	1.4	85.0		
90.0							NR	NR	90.0		
95.0							NR	NR	95.0		
100.0								NR	100.0		
105.0								NR	105.0		
Parts of line	10	8	7	7	5	3	3	3	Parts of line		

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

AUX	ILIARY	воом	NOSE S	HEAVE	with T	RACKS	FULLY	EXTEN	DED
			35,000	lb COU	NTERW	EIGHT			
RADIUS			MAII	и воом	LENGTI	H (ft)			RADIUS
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)
10	11.0	11.0	11.0	11.0					10
12	11.0	11.0	11.0	11.0					12
15	11.0	11.0	11.0	11.0	11.0				15
20	11.0	11.0	11.0	11.0	11.0	11.0	11.0		20
25	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	25
30	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	30
35		11.0	11.0	11.0	11.0	11.0	11.0	11.0	35
40		11.0	11.0	11.0	11.0	11.0	11.0	11.0	40
45			11.0	11.0	11.0	11.0	11.0	11.0	45
50				11.0	11.0	11.0	11.0	11.0	50
55				11.0	11.0	11.0	11.0	11.0	55
60					11.0	11.0	11.0	11.0	60
65					11.0	11.0	11.0	11.0	65
70						10.6	11.0	11.0	70
75						9.1	9.7	9.7	75
80						7.9	8.4	8.5	80
85							7.4	7.4	85
90							6.4	6.5	90
95							5.6	5.7	95
100								4.9	100
105								4.3	105
Parts of line	1	1	1	1	1	1	1	1	Parts of line

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

AUX	ILIARY	воом	NOSE S	HEAVE	with T	RACKS	FULLY	EXTEN	DED
			17,500	lb COU	NTERW	EIGHT			
RADIUS			MAII	N BOOM	LENGTI	H (ft)			RADIUS
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)
10	11.0	11.0	11.0	11.0					10
12	11.0	11.0	11.0	11.0					12
15	11.0	11.0	11.0	11.0	11.0				15
20	11.0	11.0	11.0	11.0	11.0	11.0	11.0		20
25	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	25
30	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	30
35		11.0	11.0	11.0	11.0	11.0	11.0	11.0	35
40		11.0	11.0	11.0	11.0	11.0	11.0	11.0	40
45			11.0	11.0	11.0	11.0	11.0	11.0	45
50				11.0	11.0	11.0	11.0	11.0	50
55				8.8	10.3	11.0	11.0	11.0	55
60					8.4	9.4	9.8	10.1	60
65					6.9	7.9	8.3	8.6	65
70						6.6	7.0	7.3	70
75						5.5	5.9	6.2	75
80						4.6	5.0	5.2	80
85							4.2	4.4	85
90							3.4	3.7	90
95							2.8	3.1	95
100								2.5	100
105								2.0	105
Parts of line	1	1	1	1	1	1	1	1	Parts of line

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

AUX	ILIARY	воом	NOSE S	SHEAVE	with T	RACKS	FULLY	EXTEN	DED
			NO	COUNT	ERWEIG	HT			
RADIUS			MAII	и воом	LENGTI	H (ft)			RADIUS
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)
10	11.0	11.0	11.0	11.0					10
12	11.0	11.0	11.0	11.0					12
15	11.0	11.0	11.0	11.0	11.0				15
20	11.0	11.0	11.0	11.0	11.0	11.0	11.0		20
25	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	25
30	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	30
35		11.0	11.0	11.0	11.0	11.0	11.0	11.0	35
40		10.4	10.4	10.2	11.0	11.0	11.0	11.0	40
45			7.7	7.5	8.4	8.9	9.6	10.2	45
50				5.5	6.3	6.9	7.5	8.1	50
55				3.8	4.7	5.2	5.9	6.4	55
60					3.4	3.9	4.6	5.1	60
65					2.3	2.8	3.5	4.0	65
70						1.9	2.5	3.1	70
75						1.1	1.8	2.3	75
80						NR	1.1	1.6	80
85							NR	1.0	85
90							NR	NR	90
95							NR	NR	95
100								NR	100
105								NR	105
Parts of line	1	1	1	1	1	1	1	1	Parts of line

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

Α	UXILIAI	RY BOC	M NOS	E SHE	VE witl	h TRAC	KS RET	RACTE	D
			35,000) Ib COU	NTERW	EIGHT			
RADIUS			MAII	и воом	LENGT	H (ft)			RADIUS
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)
10	*	*	*	*					10
12	*	*	11.0	11.0					12
15	11.0	11.0	11.0	11.0	11.0				15
20	11.0	11.0	11.0	11.0	11.0	11.0	11.0		20
25	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	25
30	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	30
35		11.0	11.0	11.0	11.0	11.0	11.0	11.0	35
40		11.0	11.0	11.0	11.0	11.0	11.0	11.0	40
45			11.0	11.0	11.0	11.0	11.0	11.0	45
50				10.7	11.0	11.0	11.0	11.0	50
55				8.6	9.7	10.4	10.9	11.0	55
60					8.0	8.7	9.2	9.6	60
65					6.6	7.3	7.8	8.2	65
70						6.1	6.6	7.0	70
75						5.0	5.5	5.9	75
80						4.1	4.7	5.0	80
85							3.9	4.3	85
90							3.2	3.6	90
95							2.6	3.0	95
100								2.4	100
105								1.9	105
Parts of line	1	1	1	1	1	1	1	1	Parts of line

WARNING

WITH TRACKS RETRACTED AND BOOM POSITIONED "OVER THE SIDE", THIS EQUIPMENT IS LIMITED BY BACKWARD STABILITY!

BACKWARD STABILITY OF THIS EQUIPMENT IS ITS ABILITY TO RESIST OVERTURNING IN THE DIRECTION OPPOSITE THE BOOM POINT WHILE IN THE <u>UNLOADED</u> CONDITION.

BOOM POSTIONS MARKED WITH AN * ON THE CHART INDICATE AN AREA LIMITED BY BACKWARD STABILITY. IF THE CRANE IN THIS CONFIGURATION WITH BOOM UNLOADED THE ESTABLISHED LIMITS OF BACKWARD STABILITY WILL BE EXCEEDED AND BACKWARD OVERTURNING MAY OCCUR !!!!

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

А	AUXILIARY BOOM NOSE SHEAVE with TRACKS RETRACTED								
	17,500 lb COUNTERWEIGHT								
RADIUS	MAIN BOOM LENGTH (ft)								RADIUS
(ft)	37.5	45.4	53.3	61.2	73.8	86.4	99.0	111.6	(ft)
10	11.0	11.0	11.0	11.0					10
12	11.0	11.0	11.0	11.0					12
15	11.0	11.0	11.0	11.0	11.0				15
20	11.0	11.0	11.0	11.0	11.0	11.0	11.0		20
25	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	25
30	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0	30
35		11.0	11.0	11.0	11.0	11.0	11.0	11.0	35
40		10.4	10.0	9.8	10.7	11.0	11.0	11.0	40
45			7.6	7.3	8.3	9.0	9.5	9.9	45
50				5.4	6.4	7.0	7.6	8.0	50
55				3.9	4.8	5.5	6.0	6.4	55
60					3.6	4.2	4.8	5.2	60
65					2.5	3.2	3.7	4.1	65
70						2.3	2.8	3.2	70
75						1.5	2.1	2.5	75
80						0.9	1.4	1.8	80
85							0.8	1.2	85
90							NR	NR	90
95							NR	NR	95
100								NR	100
105								NR	105
Parts of line	1	1	1	1	1	1	1	1	Parts of line

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.

Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

CHARTS #11 & 12

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

30' EXTENSION with TRACKS FULLY EXTENDED						
35,000 lb COUNTERWEIGHT			17,500 Ib COUNTERWEIGHT			
			Total Boo			
Boom Angle	All Boom Lengths		67.5' to 129'	> 129'	Boom Angle	
78º	18.0*		18.0*	18.0*	78º	
75°	13.6		13.6	13.6	75º	
72º	11.5		11.5	11.5	72º	
70°	10.1		10.1	10.1	70°	
68º	8.9		8.9	8.9	68º	
65°	8.0		8.0	8.0	65°	
62º	7.2		7.2	7.2	62º	
60°	6.7		6.7	6.7	60°	
58°	6.1		6.1	6.1	58°	
55°	5.8		5.8	5.8	55°	
52º	5.3		5.3	5.3	52º	
50°	5.1		5.1	4.8	50°	
48º	4.9		4.9	4.2	48º	
45º	4.6		4.6	3.5	45°	

^{* 2} part reeving required

NOTE:

Capacities appearing above the bold line are based on structural strength; tipping should not be relied upon as a capacity limitation.
Capacities appearing below the bold line are based on stability and do not exceed 75% of tipping.

MANTIS Model 15010

as originally manufactured and equipped by Tadano Mantis Corporation.

360 DEGREE RATING - LOADS IN Ib x 1000

30' EXTENSION + 20' JIB with TRACKS FULLY EXTENDED 35,000 lb or 17,500 lb COUNTERWEIGHT							
20' JIB Room Jib Offset Angles Room							
Boom		Boom					
Angle	0°	15°	30°	Angle			
78º	6.6	4.0	2.2	78º			
75°	6.3	4.0	2.1	75°			
72º	5.6	3.5	2.0	72º			
70°	5.1	3.2	1.9	70°			
68º	4.6	3.0	1.8	68º			
65º	4.2	2.8	1.8	65º			
62º	3.9	2.6	1.7	62º			
60°	3.5	2.4	1.7	60°			
58°	3.2	1.9	1.4	58º			
55°	2.6	1.3	1.0	55°			
52º	2.0	0.6	NR	52º			
50°	1.5	NR	NR	50°			

NOTE:

All capacities are based on structural strength; tipping should not be relied upon as a capacity limitation.

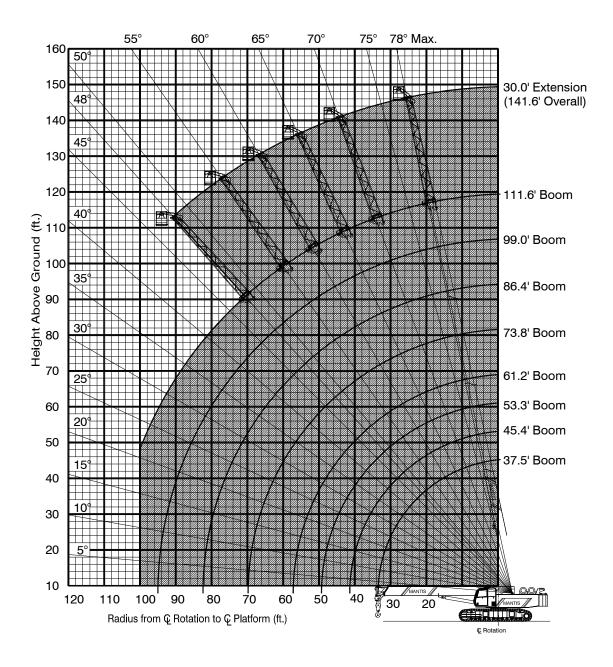
Never use jib without rearmost counterweight in place.

MANTIS Model 15010 111.6 ft STANDARD BOOM

RANGE CHART 750 WORK PLATFORM

Installed on MANTIS MODEL 15010

as originally manufactured and equipped by Tadano Mantis Corporation



Limits of operation: Maximum load capacity = 750 lb Maximum radius when mounted on main boom = 100 ft Minimum boom angle when mounted on 30 ft extension = 48°

RANGE CHART MANTIS MODEL 15010

as originally manufactured and equipped by Tadano Mantis Corporation

