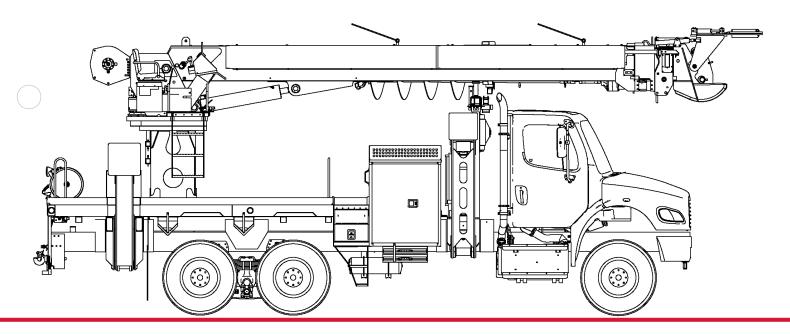


GENERAL LOAD CHART



NO. 200









WARNING



Injection Hazard

Fluid escaping under pressure can penetrate skin and result in death or serious injury.



Relieve pressure before disconnecting hydraulic lines

Stay clear of leaks and pin holes. Use a piece of cardboard or wood to search for leaks. Do not use hand.

Fluid injected into skin must be surgically removed within a few hours by a doctor familiar with this type of injury, or gangrene will result.



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DANGER

Failure to obey the instructions and safety rules in the appropriate Operator's Manual and Service Manual for your machine will result in death or serious injury.

Many of the hazards identified in the Operator's Manual are also safety hazards when maintenance and repair procedures are performed.

DO NOT PERFORM MAINTENANCE UNLESS:

- ✓ You are trained and qualified to perform maintenance on this machine.
- √ You read, understand and obey:
 - manufacturer's instructions and safety rules
 - employer's safety rules and worksite regulations
 - applicable governmental regulations
- √ You have the appropriate tools, lifting equipment and a suitable workshop.

The information contained in this Tech Tip is a supplement to the Service Manual. Consult the appropriate Service Manual of your machine for safety rules and hazards.

CONTENTS

TECH TIP#200

TOC





INTRODUCTION
Use the load chart below to answer the following questions.

DIGGER DERRICK	General TM WINCH	Sample	CALITION MILITIDI C DADTI INCS ADE	REQUIRED FOR LOADS ABOVE 8820 LBS.	-SYNTHETIC OR ROTATION RESISTANT WIRE	ROPE MUST HAVE 48200 LB. BREAKING STEENGTH AND 3 89% MAYIMIN STRETCH AT	9640 LB SAFE WORKING LOAD.	-WIRE ROPE OTHER THAN ROTATION	RESISTANT MUST HAVE 33740 LB. BREAKING STRENGTH	-CAPACITIES ARE BASED ON AN UNLOADED	VEHICLE WEIGHT OF NOT LESS THAN 46760	OUTRIGGERS MUST BE EXTENDED AND SET	THE DERRICK DERRICK MIST BE MOUNTED	10000	INSTALLATION INSTRUCTIONS.	4 1010			REF:	OPTIONS: STL HYD 3RD & 4TH, ESK,	AUG 24, TRANS TPP, X-BOOST
TEREX TELELECT		ZONE ZONE	X	トレー		WARNING:	IF DERRICK IS MODIFIED IN ANY WAY OR	AS CAPACITIES SHOWN MAY BE AFFECTED.			2ND, 3RD, & 4TH EXT	LOAD SHEAVE LOAD CAPACITIES RADIUS IN HEIGHT IN	FEET FEET ZONE A ZONE B	12.0 81.1 16150 16150	17.9 79.8 11470 11470	35.6 72.6 5490 5490	50.2 61.4 2990 2990	61.3 46.7 2090 2090	68.3 29.7 1480 1480	70.6 11.4 900 900	69.5 -0.8 400 400
2ND SECTION EXTENDED	SHEAVE LOAD CAPACITIES	FEET	7.0 51.2 21710 21710	10.5 50.4 20880 20880	20.2 46.2 10870 10870	28.5 39.7 6730 6730	34.9 31.3 5030 5030	38.9 21.5 3940 3940	40.2 11.0 2900 2900	39.5 4.0 2020 2020	2ND EXT, 3RD & 4TH HALF EXT	SHEAVE LOAD CAPACITIES HEIGHT IN	FEET ZONE A ZONE B	9.4 66.4 20850 20850	14.0 65.3 15180 15180	1.1 59.7 7360 7360	39.6 50.8 4120 4120	48.3 39.2 2950 2950	53.8 25.8 2180 2180	55.6 11.4 1440 1440	7 1.8 810 810
	LOAD CAPACITIES LOAD RADIUS	ZONEB	35280 35280	35280 35280 10	19830 19830 20	13170 13170 28	10550 10550 34	38 0588 38	7340 7340 40	5920 5920 39	_	LOAD CAPACITIES LOAD RADIUS	ZONE A ZONE B	20850 20850	20850 20850 14	12050 12050 28.1	7390 7390 35	5720 5790 48	4650 4650 53	3610 3610 55	2750 2750 54.7
FULLY RETRACTED	LOAD SHEAVE RADIUS IN HEIGHT IN	FEET FEET	4.4 36.4	6.6 35.9	12.7 33.3	17.9 29.1	21.9 23.8	24.4 17.6	25.2 11.0	24.7 6.6	2ND RET, 3RD & 4TH HALF EXT	LOAD SHEAVE RADIUS IN HEIGHT IN	FEET FEET	6.8 51.6	10.1 50.8	19.5 46.7	29.0 40.2	35.3 31.7	39.3 21.9	40.6 11.4	39.9 4.4
	BOOM ANGLES	IN DEGNEES	80	75	09	45	30	15	0	-20		BOOM ANGLES	IN DEGREES	08	22	09	45	30	15	0	-20

Example 1

Using the load chart on Page 4 and the information below, what is the gross and net capacity when lifting off the side of the truck?

Boom Angle	50°	Radius	N/A
Rigging:	100 lbs.	Load Weight	N/A
2nd Section	Extended	Third Section	Half Extended
4th Section	Half Extended		

STEP 1

Determine which section of the load chart is used. According to the table, the 2nd Section is extended and the 3rd and 4th sections are half extended. We will be using this section of the load chart.

2ND EX	KT, 3RD & 4	TH HALF	EXT
LOAD RADIUS IN FEET	SHEAVE HEIGHT IN	LOAD CAI	PACITIES
INFEE	FEET	ZONE A	ZONE B
9.4	66.4	20850	20850
14.0	65.3	15180	15180
28.1	59.7	7360	7360
39.6	50.8	4120	4120
48.3	39.2	2950	2950
53.8	25.8	2180	2180
55.6	11.4	1440	1440
54.7	1.8	810	810

STEP 2

According to the table, the boom angle is 50°. Since 50° is not listed on the load chart, move to the next lower angle of 45°.

Boom Angle	50°	Radius	N/A
Rigging:	100 lbs.	Load Weight	N/A
2nd Section	Extended	Third Section	Half Extended
4th Section	Half Extended		

	2ND RE	T, 3RD & 4	TH HALF	EXT	2ND E	XT, 3RD & 4	TH HALF	EXT
BOOM ANGLES	LOAD RADIUS IN	SHEAVE HEIGHT IN	LOAD CA	LOAD CAPACITIES		SHEAVE HEIGHT IN	LOAD CA	PACITIES
IN DEGREES	FEET	FEET	ZONE A	ZONE B	IN FEET	FEET	ZONE A	ZONE B
80	6.8	51.6	20850	20850	9.4	66.4	20850	20850
75	10.1	50.8	20850	20850	14.0	65.3	15180	15180
60	19.5	46.7	12050	12050	28.1	59.7	7360	7360
45	29.0	40.2	7390	7390	39.6	50.8	4120	4120
30	35.3	31.7	5720	5790	48.3	39.2	2950	2950
15	39.3	21.9	4650	4650	53.8	25.8	2180	2180
0	40.6	11.4	3610	3610	55.6	11.4	1440	1440
-20	39.9	4.4	2750	2750	54.7	1.8	810	810

STEP 3

The question indicated we are lifting off the side of the truck. This means we will be lifting in Zone B.

The gross capacity as shown on the load chart is 4120 lbs.

The net capacity is the gross capacity - rigging = 4120 - 100 = 4020 lbs.

BOOM ANGLES IN DEGREES	RADIUS IN FEET	HEIGHT IN FEET	LOAD CA	PACITIES ZONE B	LOAD RADIUS IN FEET	HEIGHT IN FEET	LOAD CA	PACITIES ZONE B	1 /				TM WINCH Sample
80	4.4	36.4	35280	35280	7.0	51.2	21710	21710	1 (EONE	ZONE		
75	6.6	35.9	35280	35280	10.5	50.4	20880	20880	1		\searrow		-CAUTION: MULTIPLE-PART LINES ARE REQUIRED FOR LOADS ABOVE 8820 LBS.
60	12.7	33.3	19830	19830	20.2	46.2	10870	10870	8	ZONE A			-SYNTHETIC OR ROTATION RESISTANT WIRE
45	17.9	29.1	13170	13170	28.5	39.7	6730	6730	4	WARN	ING:	-	ROPE MUST HAVE 48200 LB. BREAKING STRENGTH AND 2.8% MAXIMUM STRETCH AT
30	21.9	23.8	10550	10550	34.9	31.3	5030	5030		RICK IS MODIF	IED IN ANY W		9640 LB SAFE WORKING LOAD.
15	24.4	17.6	8850	8850	38.9	21.5	3940	3940), TEREX TELE CITIES SHOWN			-WIRE ROPE OTHER THAN ROTATION
0	25.2	11.0	7340	7340	40.2	11.0	2900	2900					RESISTANT MUST HAVE 33740 LB. BREAKING STRENGTH.
-20	24.7	6.6	5920	5920	39.5	4.0	2020	2020					-CAPACITIES ARE BASED ON AN UNLOADED
4.0	2ND RE	T, 3RD & 4	TH HALF	EXT	2ND EX	(T, 3RD & 4	TH HALF	EXT	2	ND, 3RD,	& 4TH EX	(T	VEHICLE WEIGHT OF NOT LESS THAN 46760
BOOM ANGLES	LOAD RADIUS IN	SHEAVE HEIGHT IN	LOAD CA	PACITIES	LOAD RADIUS	SHEAVE HEIGHT IN	LOAD CA	PACITIES	LOAD RADIUS IN	SHEAVE HEIGHT IN	LOAD CA	PACITIES	LBS. AND ARE 85% OF TIPPING LOADS. ALL OUTRIGGERS MUST BE EXTENDED AND SET FIRMLY ON THE GROUND BEFORE OPERATING
IN DEGREES	FEET	FEET	ZONE A	ZONEB	INFEET	FEET	ZONE A	ZONE B	FEET	FEET	ZONE A	ZONE B	THE DERRICK. DERRICK MUST BE MOUNTED
80	6.8	51.6	20850	20850	9.4	66.4	20850	20850	12.0	81.1	16150	16150	ACCORDING TO TEREX TELELECT
75	10.1	50.8	20850	20850	14.0	65.3	15180	15180	17.9	79.8	11470	11470	INSTALLATION INSTRUCTIONSWARNING: ALWAYS REFER TO UPPER
60	19.5	46.7	12050	12050	28.1	59.7	7360	7360	35.6	72.6	5490	5490	CONTROL LOAD CHART FOR OPERATION FROM
45	29.0	40.2	7390	7390	39.6	50.8	4120	4120	50.2	61.4	2990	2990	BOOM TIP CONTROLS.
30	35.3	31.7	5720	5790	48.3	39.2	2950	2950	61.3	46.7	2090	2090]
	39.3	21.9	4650	4650	53.8	25.8	2180	2180	68.3	29.7	1480	1480	REF:
15	39.3	2117											
15 0	40.6	11.4	3610	3610	55.6	11.4	1440	1440	70.6	11.4	900	900	OPTIONS: STL HYD 3RD & 4TH, ESK,

Example 2

Using the load chart on Page 4 and the information below, what is the maximum radius that a transformer weighing 2900 lbs. can be placed off the back of the truck?

Boom Angle	N/A	Radius	N/A
Rigging:	100 lbs.	Load Weight	2900 lbs.
2nd Section	N/A	Third Section	N/A
4th Section	N/A		

STEP 1

The net load is the total weight of the load + rigging. It this case the net load is:

2900 + 100 = 3000 lbs.

Lifting off the back of the truck puts the load in Zone A. The load chart on the next page shows maximum radius the weight can be lifted in each configuration.

The maximum radius is 40.6 feet with the 2nd retracted and the 3rd and 4th half extended.

	F	FULLY RETRACTED	RACTED		2ND S	2ND SECTION EXTENDED	XTENDED		TEREX	TEREX TELELECT		DIGGER DERRICK
BOOM ANGLES	LOAD RADIUS IN	SHEAVE HEIGHT IN	LOAD CAPACITIES	ACITIES	LOAD RADIUS	SHEAVE HEIGHT IN	LOAD CAPACITIES	ACITIES	< _		9	General TM WINCH
IN DEGREES	FEET	FEET	ZONEA	ZONEB		FEET	ZONE A	ZONE B	amoz)	Anoz		Sample
80	4.4	36.4	35280	35280	0.7	51.2	51.2 21710 21710	21710				TOO CLIM TOO C LIGHT HAY TAO ELIAO
75	9.9	35.9	35280	35280	10.5	50.4	50.4 20880 20880	20880	<u>.</u> ر	7		REQUIRED FOR LOADS ABOVE 8820 LBS.
09	12.7	33.3	19830	19830	20.2	46.2	10870 10870	10870	'/ _		16	-SYNTHETIC OR ROTATION RESISTANT WIRE
45	17.9	29.1	13170	13170	28.5	39.7	08/9	6730		WARNING:	i ^N	ROPE MUST HAVE 48200 LB. BREAKING STRENGTH AND 3,8% MAXIMIM STRETCH AT
30	21.9	23.8	10550	10550	34.9	31.3	2030	5030	IF DERRICK IS	IF DERRICK IS MODIFIED IN ANY WAY OR	AY OR	9640 LB SAFE WORKING LOAD.
15	24.4	17.6	0588	8850	38.9	21.5	3940	3940	AS CAPACITIES	AS CAPACITIES SHOWN MAY BE AFFECTED.	ECTED.	-WIRE ROPE OTHER THAN ROTATION
0	25.2	11.0	7340	7340	40.2	11.0	2900	2900				RESISTANT MUST HAVE 33740 LB. BREAKING STRENGTH
-20	24.7	9.9	2920	5920	39.5	4.0	2020	2020				-CAPACITIES ARE BASED ON AN UNLOADED
	2ND RE	2ND RET, 3RD & 4TH HALF EXT	TH HALF	EXT	2ND EX	2ND EXT, 3RD & 4TH HALF EXT	TH HALF	EXT	2ND, 3	2ND, 3RD, & 4TH EXT	b	VEHICLE WEIGHT OF NOT LESS THAN 46760
BOOM ANGLES	LOAD RADIUS IN	SHEAVE HEIGHT IN	LOAD CAPACITIES	ACITIES	LOAD RADIUS	SHEAVE HEIGHT IN	LOAD CAPACITIES	ACITIES	LOAD SHEAVE RADIUS IN HEIGHT IN	AVE LOAD CAPACITIES	ACITIES	CUTRIGGERS MUST BE EXTENDED AND SET EIRM YON THE GRO! IND REFORE OPERATING
N DEGREES	FEET	FEET	ZONEA	ZONEB		FEET	ZONE A	ZONE B	FEET FEET	ET ZONE A	ZONE B	THE DERRICK DERRICK MUST BE MOUNTED
80	8.9	51.6	20850	20850	b .6	66.4	66.4 20850 20850	20850	12.0	81.1 16150	16150	ACCORDING TO TEREX TELELECT
75	10.1	50.8	50.8 20850	20850	14.0	65.3	65.3 15180 15180	15180	17.9	79.8 11470	11470	INSTALLATION INSTRUCTIONS.
09	19.5	46.7	12050	12050	28.1	59.7	098/	7360	7 35.6 7	72.6 5490	5490	CONTROL LOAD CHART FOR OPERATION FROM
45	29.0	40.2	0687	7390	9.68	50.8	4120	4120	50.2	61.4 2990	2990	BOOM TIP CONTROLS.
30	35.3	31.7	5720	5790	48.3	39.2	2950	2950	61.3	46.7 2090	2090	£ 3
15	39.3	21.9	4650	4650	53.8	25.8	2180	2180	68.3	29.7 1480	1480	REF:
0	40.6	11.4	3610	3610	9:55	11.4	1440	1440	70.6	11.4 900	900	OPTIONS: STL HYD 3RD & 4TH, ESK,
-20	39.9	4.4	2750	2750	54.7	1.8	810	810	- 69.5	-0.8 400	400	AUG 24, TRANS TPP, X-BOOST
	100							47				



FOR FURTHER ASSISTANCE,
CONTACT THE TEREX UTILITIES TECHNICAL SUPPORT TEAM

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