

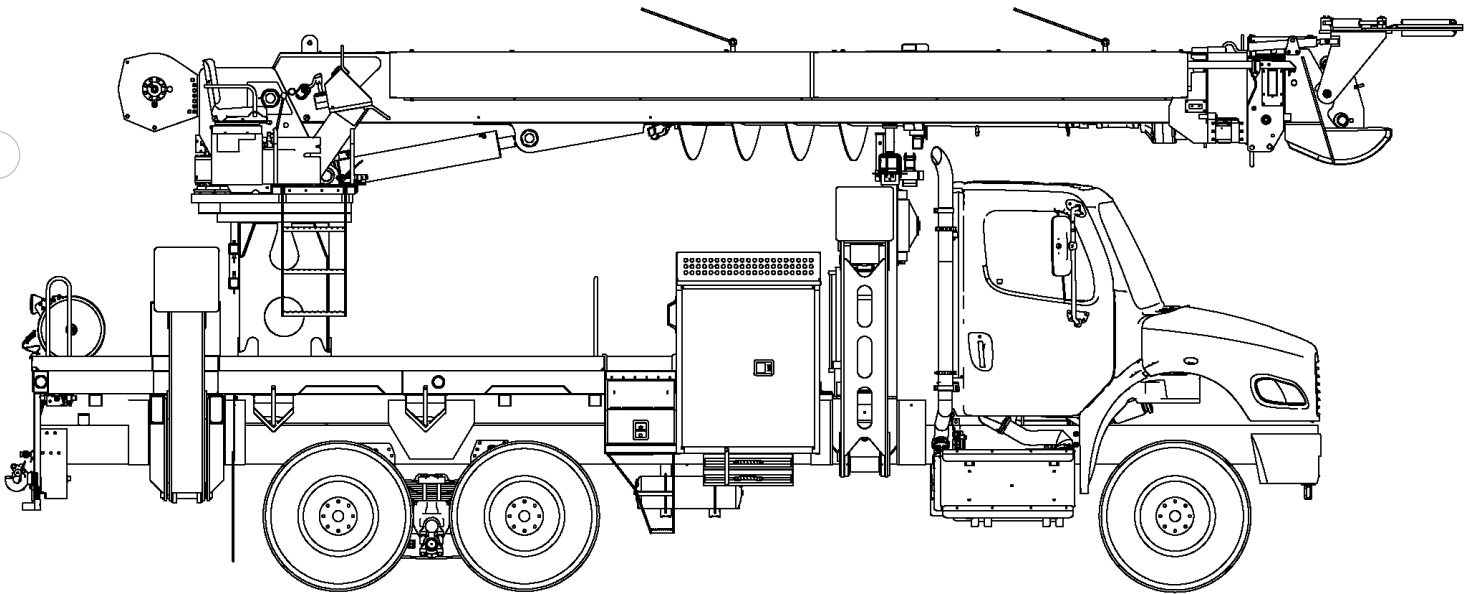


TEREX®

TECH TIPS

GENERAL LOAD CHART

NO. 221



**SERVICE CALL:
GENERAL LOAD CHART**




**MODEL(S):
GENERAL DD**




**TOOLS NEEDED:
NONE**

TEREX UTILITIES TECHNICAL SUPPORT TEAM

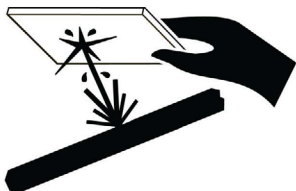
PHONE: 1-844-TEREX4U (1-844-837-3948) | EMAIL: UTILITIES.SERVICE@TEREX.COM


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.



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.



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CONTENTS

TECH TIP#221

TOC

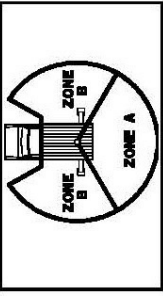
5 EXAMPLE 1

7 EXAMPLE 2

INTRODUCTION

Use the load chart below to answer the following questions.

TEREX TELELECT



WARNING:
IF DERRICK IS MODIFIED IN ANY WAY OR
REMOUNTED, TEREX TELELECT MUST BE NOTIFIED
AS CAPACITIES SHOWN MAY BE AFFECTED.

FULLY RETRACTED				
BOOM ANGLES IN DEGREES	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES	
			ZONE A	ZONE B
80	4.4	36.7	40660	40660
75	6.5	36.2	28810	28810
60	12.3	33.6	16620	16620
45	17.3	29.4	12000	12000
30	21.0	24.1	9690	9690
15	24.8	17.9	7800	7800
0	25.6	11.3	6310	6310
-20	25.1	6.9	5050	5050

2ND SECTION EXTENDED			
LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES	
		ZONE A	ZONE B
7.0	51.5	24830	24830
10.3	50.7	17140	17140
20.8	46.5	8540	8540
29.1	40.0	5730	5730
35.4	31.6	4270	4270
39.3	21.8	3320	3320
40.6	11.3	2450	2450
39.9	4.3	1670	1670

2ND & 3RD SEC. EXTENDED			
LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES	
		ZONE A	ZONE B
9.8	66.3	17590	17590
14.5	65.2	11440	11440
28.3	59.5	5610	5610
39.7	50.6	3610	3610
48.4	39.1	2390	2390
53.8	25.7	1760	1760
55.6	11.3	1250	1250
54.6	1.7	680	680

3RD SEC. EXT. -2ND SEC. RET.				
BOOM ANGLES IN DEGREES	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES	
			ZONE A	ZONE B
80	7.2	51.5	24930	24930
75	10.6	50.7	17460	17460
60	20.3	46.5	9120	9120
45	29.1	40.0	6500	6500
30	35.4	31.6	5070	5070
15	39.3	21.8	4100	4100
0	40.6	11.3	3210	3210
-20	39.9	4.3	2430	2430

DIGGER DERRICK

General
TM WINCH
Sample

-CAUTION: MULTIPLE-PART LINES ARE REQUIRED FOR LOADS ABOVE 8820 LBS.
-SYNTHETIC OR ROTATION RESISTANT WIRE ROPE MUST HAVE 48200 LB. BREAKING STRENGTH AND 2.8% MAXIMUM 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 22660 LBS. AND ARE 85% OF TIPPING LOADS. ALL OUTRIGGERS MUST BE EXTENDED AND SET FIRMLY ON THE GROUND BEFORE OPERATING THE DERRICK. DERRICK MUST BE MOUNTED ACCORDING TO TEREX TELELECT INSTALLATION INSTRUCTIONS.
-WARNING: ALWAYS REFER TO UPPER CONTROL LOAD CHART FOR OPERATION FROM BOOM TIP CONTROLS.

4TH SEC. EXTENDED

LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES	
		ZONE A	ZONE B
NOT APPLICABLE			

REF: _____
OPTIONS: FBG HYD 3RD, MKIII,
AUG 18, TRANS STL HEAD

TECH TIP 221 | RELEASED 01.29.2025 | VERSION 1.0

FORM 63405F 1

PAGE 4 OF 9

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	40°	Radius	N/A
Rigging:	100 lbs.	Load Weight	N/A
2nd Section	Retracted	Third Section	Half Extended
4th Section	N/A		

STEP 1

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

3RD SEC. EXT. -2ND SEC. RET.				
BOOM ANGLES IN DEGREES	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES	
			ZONE A	ZONE B
80	7.2	51.5	24930	24930
75	10.6	50.7	17460	17460
60	20.3	46.5	9120	9120
45	29.1	40.0	6500	6500
30	35.4	31.6	5070	5070
15	39.3	21.8	4100	4100
0	40.6	11.3	3210	3210
-20	39.9	4.3	2430	2430

STEP 2

According to the table, the boom angle is 40°. Since 40° is not listed on the load chart, move to the next lower angle of 30°.

Boom Angle	40°	Radius	N/A
Rigging:	100 lbs.	Load Weight	N/A
2nd Section	Retracted	Third Section	Half Extended
4th Section	N/A		


3RD SEC. EXT. -2ND SEC. RET.				
BOOM ANGLES IN DEGREES	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES	
			ZONE A	ZONE B
80	7.2	51.5	24930	24930
75	10.6	50.7	17460	17460
60	20.3	46.5	9120	9120
45	29.1	40.0	6500	6500
30	35.4	31.6	5070	5070
15	39.3	21.8	4100	4100
0	40.6	11.3	3210	3210
-20	39.9	4.3	2430	2430

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 5070 lbs.

The net capacity is the gross capacity - rigging = 5070 - 100 = 4970 lbs.

FULLY RETRACTED					2ND SECTION EXTENDED				TEREX TELELECT		DIGGER DERRICK		
BOOM ANGLES IN DEGREES	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES		LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES			<p>WARNING: IF DERRICK IS MODIFIED IN ANY WAY OR REMOUNTED, TEREX TELELECT MUST BE NOTIFIED AS CAPACITIES SHOWN MAY BE AFFECTED.</p>	General	Sample	
			ZONE A	ZONE B			ZONE A	ZONE B					
80	4.4	36.7	40660	40660	7.0	51.5	24830	24830					
75	6.5	36.2	28810	28810	10.3	50.7	17140	17140					
60	12.3	33.6	16620	16620	20.8	46.5	8540	8540					
45	17.3	29.4	12000	12000	29.1	40.0	5730	5730					
30	21.0	24.1	9690	9690	35.4	31.6	4270	4270					
15	24.8	17.9	7800	7800	39.3	21.8	3320	3320					
0	25.6	11.3	6310	6310	40.6	11.3	2450	2450					
-20	25.1	6.9	5050	5050	39.9	4.3	1670	1670					
3RD SEC. EXT. -2ND SEC. RET.				2ND & 3RD SEC. EXTENDED				4TH SEC. EXTENDED					
BOOM ANGLES IN DEGREES	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES		LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES		LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES		
			ZONE A	ZONE B			ZONE A	ZONE B			ZONE A	ZONE B	
80	7.2	51.5	24930	24930	9.8	66.3	17590	17590					
75	10.6	50.7	17460	17460	14.5	65.2	11440	11440					
60	20.3	46.5	9120	9120	28.3	59.5	5610	5610					
45	29.1	40.0	6500	6500	39.7	50.6	3610	3610					
30	35.4	31.6	5070	5070	48.4	39.1	2390	2390					
15	39.3	21.8	4100	4100	53.8	25.7	1760	1760					
0	40.6	11.3	3210	3210	55.6	11.3	1250	1250					
-20	39.9	4.3	2430	2430	54.6	1.7	680	680					
										NOT APPLICABLE			
REF:													
OPTIONS: FBG HYD 3RD, MKIII, AUG 18, TRANS STL HEAD													

FORM C-3861 1

Example 2

Using the load chart on Page 4 and the information below, what is the maximum radius that a transformer weighing 3100 lbs. can be placed off the side of the truck?

Boom Angle	N/A	Radius	N/A
Rigging:	100 lbs.	Load Weight	3100 lbs.
2nd Section	N/A	Third Section	N/A
4th Section	N/A		

STEP 1

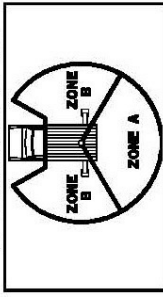
The net load is the total weight of the load + rigging. In this case the net load is:

$$3100 + 100 = 3200 \text{ lbs.}$$

Lifting off the side of the truck puts the load in Zone B. 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 extended.

TEREX TELELECT



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AS CAPACITIES SHOWN MAY BE AFFECTED.

DIGGER DERRICK
 General
 TM WINCH
 Sample

-CAUTION: MULTIPLE-PART LINES ARE REQUIRED FOR LOADS ABOVE 8820 LBS.
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 -WIRE ROPE OTHER THAN ROTATION RESISTANT MUST HAVE 33740 LB. BREAKING STRENGTH.
 -CAPACITIES ARE BASED ON AN UNLOADED VEHICLE WEIGHT OF NOT LESS THAN 22660 LBS. AND ARE 85% OF TIPPING LOADS. ALL OUTRIGGERS MUST BE EXTENDED AND SET FIRMLY ON THE GROUND BEFORE OPERATING THE DERRICK. DERRICK MUST BE MOUNTED ACCORDING TO TEREX TELELECT INSTALLATION INSTRUCTIONS.
 -WARNING: ALWAYS REFER TO UPPER CONTROL LOAD CHART FOR OPERATION FROM BOOM TIP CONTROLS.

BOOM ANGLES IN DEGREES	FULLY RETRACTED			2ND SECTION EXTENDED			4TH SEC. EXTENDED		
	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES ZONE A ZONE B	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES ZONE A ZONE B	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES ZONE A ZONE B
80	4.4	36.7	40660 40660	7.0	51.5	24830 24830			
75	6.5	36.2	28810 28810	10.3	50.7	17140 17140			
60	12.3	33.6	16620 16620	20.8	46.5	8540 8540			
45	17.3	29.4	12000 12000	29.1	40.0	5730 5730			
30	21.0	24.1	9690 9690	35.4	31.6	4270 4270			
15	24.8	17.9	7800 7800	39.3	21.8	3320 3320			
0	25.6	11.3	6310 6310	40.6	11.3	2450 2450			
-20	25.1	6.9	5050 5050	39.9	4.3	1670 1670			

BOOM ANGLES IN DEGREES	3RD SEC. EXT. -2ND SEC. RET.			2ND & 3RD SEC. EXTENDED			4TH SEC. EXTENDED		
	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES ZONE A ZONE B	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES ZONE A ZONE B	LOAD RADIUS IN FEET	SHEAVE HEIGHT IN FEET	LOAD CAPACITIES ZONE A ZONE B
80	7.2	51.5	24930 24930	9.8	66.3	17590 17590			
75	10.6	50.7	17460 17460	14.5	65.2	11440 11440			
60	20.3	46.5	9120 9120	28.3	59.5	5610 5610			
45	29.1	40.0	6500 6500	39.7	50.6	3610 3610			
30	35.4	31.6	5070 5070	48.4	39.1	2390 2390			
15	39.3	21.8	4100 4100	53.8	25.7	1760 1760			
0	40.6	11.3	3210 3210	55.6	11.3	1250 1250			
-20	39.9	4.3	2430 2430	54.6	1.7	680 680			

REF: _____

OPTIONS: FBG HYD 3RD, MKIII,
AUG 18, TRANS STL HEAD

FORM #3405F 1



FOR FURTHER ASSISTANCE,
CONTACT THE TEREX UTILITIES TECHNICAL SUPPORT TEAM
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