

Chapter 7 Technical specifications and lifting load tables

7-1 Information for using the load charts

7-1-1 Explanations

1. Confirm the units used of lifting load in the tables.
2. The working radius is the horizontal gravity center distance of the load from the rotational axis of the crane superstructure measured at the ground. The radius stated is valid under load conditions, i.e. including boom flexure.
3. Boom positions and lengths where there is no capacity listed in the tables are not permitted.
4. The boom may only be maneuvered into those areas specified in the load chart, even if no load is suspended, otherwise there is a risk of the crane tipping.
5. The stated load capacities contain the weights of the load bearing, lifting and slinging tackle. The possible weight for the load to be lifted is therefore reduced according to the weights of the aforementioned tackle.
6. The max. wind force for crane operation is grade 5 (instantaneous wind speed is 14.1 m/s, wind pressure is 125 N/m²).
 - 1) The boom may be operated, when the wind speed:
is or less than 14.1 m/s for the boom of 20 m or less;
is or less than 12.8 m/s for the boom of 30 m or less.
is or less than 11.1 m/s for the boom of 60 m or less.
is or less than 9 m/s for the boom of more than 60 m.
 - 2) Jib may be operated, when the wind speed:
is or less than 9 m/s.

7-1-2 Crane operating mode "Crane supported"

1. The outrigger beams must be extended (to a uniform length on both sides) to the distance stated in the applied load capacity table.
2. The outrigger beams must be secured by pins.
3. It may be necessary to add cribbing and pads under the outrigger pads to decrease the ground bearing pressure to what can be supported.
4. All wheels must be raised clear off the ground except the tires of front axle.
5. Use the control unit to raise and level the crane. The level of the crane must also be checked from time to time and adjusted as necessary. Note, the outriggers should not be adjusted when the crane is supporting a load

7-1-3 Dangerous operations

1. The upper and boom are rotated from the transport position before the outriggers are set up and the crane leveled.
2. The outriggers are not all set properly and with the load equalized among them.
3. Operating the crane too close to landfills, basements, slopes, or over underground features.
4. The loads and /or the working radius in the load capacity charts corresponding to the jib length are exceeded.
5. The outrigger beams are not slid out to the exact measurement specified in the load capacity charts (on both sides).
6. The outrigger beams are not secured with pins.
7. The load begins swinging due to improper handling.

7-1-4 Telescopic boom

1. The lifting capacity of the telescopic boom with its extendable telescopic sections is limited. The loads stated in the load capacity tables must not be exceeded.
2. The specifications for the telescopic sections to be extended according to load and required boom length must be observed under all circumstances.
3. As a general rule, the boom should first be extended to the required length, and then loaded.
4. Even without a load, the telescopic boom may only be moved within the working radius ranges for which values are listed in the load capacity table.

7-1-5 Rope winches

1. Winch

According to design purpose, max. tensile force of winch wire rope is 11023 lbs. The rope tension must not be exceeded under any circumstances. Accordingly, the minimum number of hoisting rope lines (rope reeving) should be selected according to the weight of the load to be lifted.

2. Prevention of rope slack formation

When retracting the telescopic boom, the winch must be operated in the direction of lifting simultaneously, in order to prevent the hook block from descending to the ground and creating rope slack. The speed of the hoisting rope movement should be matched to that used for retraction! The rope guides on the winches must be supervised by a member of the workforce during changing the reeving.

7-1-6 Hoisting rope reeving

1. The hoisting rope must be reeved in between boom head and hook block in accordance with the maximum rope tension of the winch and the recommendations on the load charts for the load to be lifted.

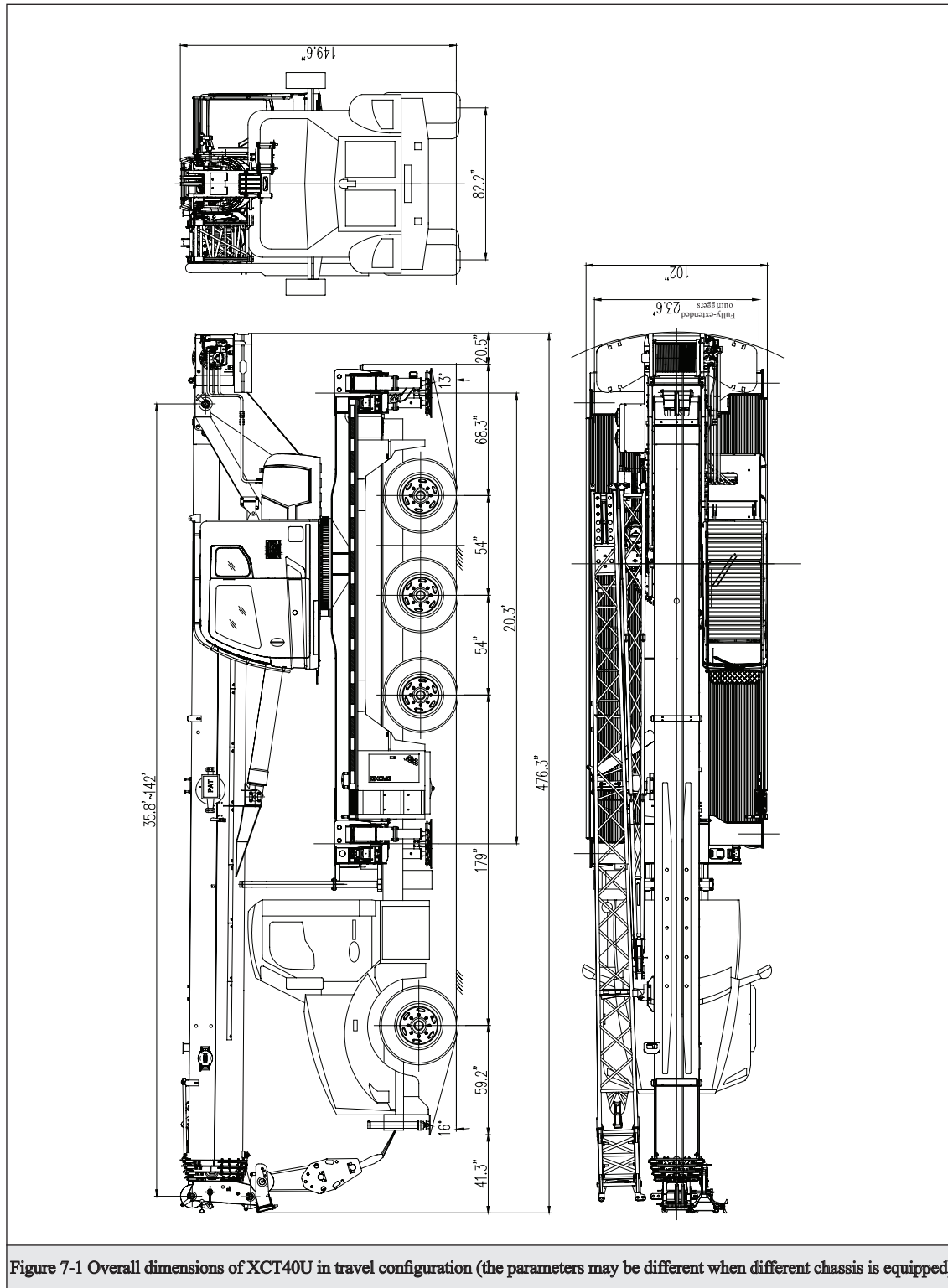
2. If multi-strand wire rope has been installed, the friction between rope and pulley may result in decrease of net weight of load. For example: tensile force of wire rope is 23589 lbs, 10-strand rope (235890 lbs) can only lift 218698.6 lbs.

3. The number of parts of line reeved must be set on the controller of overload protective device.

4. If the block hook is operated with a higher reeve number than necessary for the respective boom length loads, then the block hook weight will not be sufficient to overhaul the rope from the winch, which can lead to damage to the cable.

7-2 Technical specifications

7-2-1 Dimension



7-2-2 Main technical specifications

Table 7-1 Main technical data of XCT40U Boom Truck in travel configuration

(The parameters may be different when different chassis is equipped)

(Subject to technical improvement)

Category	Item		Unit	Parameter	
Dimension	Overall length		in	476.3	
	Overall width		in	102	
	Overall height		in	149.6	
	Axle spacing	1st and 2nd Axle		in	179
		2nd and 3rd Axle		in	54
		3rd and 4th Axle		in	54
Track		in	82.2/84.4/73.3/73.3		
Weight	Max. permissible weight		lb	68300	
	Axle load	1st axle	lb	19300	
		2nd axle	lb	11300	
		3rd axle and 4th axle (in tandem)	lb	37700	
Power	Engine	Chassis engine model	--	MX-13	
		Rated power	HP/(rpm)	455/1700	
		Max. torque	lb-ft/(rpm)	1650/(1000-1500)	
Travel	Max. travel speed		mph	65	
	Turning diameter	Min. turning diameter	in	945	
		Min. turning diameter of boom head	in	1024	
	Min. ground clearance		in	12	
	Approach angle/departure angle		°	16/13	

Table 7-2 Main technical data of XCT 40_U Boom Truck in lifting operation

(Subject to technical improvement)

Category	Item		Unit	Parameter	
Main Performance	Max. total rated lifting capacity		ust	40	
	Max. rated lifting torque		ft-lb	708000	
	Min. rated working radius		ft	5	
	Turning radius at turntable tail (counterweight)		ft	10.43	
	Max. rated load moment	Base boom		ft-lb	708000
		Fully-extended boom		ft-lb	393000
		Fully-extended boom + Jib		ft-lb	112000
	Outrigger span	Longitudinal		ft	20.3
		Lateral		ft	23.6
	Hoist height	Base boom		ft	37
		Fully-extended boom		ft	141
		Fully-extended boom + Jib		ft	197
	Boom length	Base boom		ft	35.8
		Fully-extended boom		ft	142
Fully-extended boom + Jib		ft	195.5		
Jib offset angle			°	0/15/30	
Working Speed	Boom raising time		s	35	
	Boom fully-extended time		s	70	
	Slewing speed		rpm	2	
	Outrigger extending and retracting time	Outrigger beam	Extending simultaneously	s	≤35
			Retracting simultaneously	s	≤35
		Outrigger jack	Extending simultaneously	s	≤40
			Retracting simultaneously	s	≤40
Speed (single line, 3rd layer)	Winch system	No load	fpm	443	

7-3 Rated lifting load tables

A. Illustrations for the lifting load tables:

1. Total rated load shown in the tables is the maximum lifting capacity when the crane is set up on firm and level ground.
2. The total rated load includes the weight of the hook block and slings. The weight of the wire rope per meter is 0.86 lb. The weight of the wire rope shall be calculated as follows: (the number of parts of line +1) × lifting height × 0.9.
3. The working radius shown in the tables are the radius when the loads are lifted off ground, they are the actual values including loaded boom deflection, therefore boom deflection should be taken into consideration before lifting.
4. A lifting operation is permissible only when the wind force is below grade 5 (instantaneous wind speed is 14.1 m/s, wind pressure is 125 N/m²).
5. Boom angle and lifting height in the tables are reference values, take working radius as standard.
6. The operator must select proper working condition after understanding load weight and working range before lifting, it is forbidden to exceed the values in the table. When the radius and boom length are between two adjacent values, the smaller value should be selected to confirm lifting operation.
7. Data listed in the tables are rated lifting capacity without jib attached, when jib is installed on boom head, the rated lifting capacity of boom should minus 1200kg (2646lb).
8. The max. outrigger counter-force is 62986 lbs (the diameter of outrigger float is 15.7in).
9. Do not extend the boom into areas of the load chart where the crane does not have capacity beyond the angles shown in the range diagrams, or tipping may occur.
10. The total rated load for single top is the same as that for the boom, and the max. lifting load should not exceed 3000kg (6614lb).
11. In the load charts for boom, the lifting loads above the bold line depend on the structural member strength of the crane and those below the bold line depend on the stability of the crane. In the load charts for jib, the lifting loads in the bold line box depend on the stability of the crane.



No allowance is made for such factors as effects of swinging loads, tackle weight, wind, degree of machine level, ground conditions, inflations of tires, and operating speed.

B. Illustration of the symbols in the tables

No.	Symbol	Explanation	Remarks
1		Working radius (m)/(ft)	Please select proper working radius according to actual working condition.
2		Boom length (m)/(ft)	Please select proper boom length according to actual working condition.
3		Extending percentage of each boom section	0 indicates this boom section is fully retracted, 100 indicates this boom section is fully extended;
4		Boom angle (°)	Please select proper boom angle according to actual working condition.
5		Min. boom angle (°)	The minimum angle that boom can be elevated to in actual working condition.











6		Max. boom angle (°)	The maximum angle that boom can be elevated to in actual working condition.
7		Fully-extended outrigger	Please select outrigger length according to actual working condition, outrigger beams must be extended to the position specified in corresponding lifting load tables.
8		Half-extended outrigger	Please select outrigger length according to actual working condition, outrigger beams must be extended to the position specified in corresponding lifting load tables.
9		Counterweight	Please select counterweight according to actual working condition. Make sure that outrigger span conforms to requirements in lifting load tables before the erection of counterweight.
10		With the fifth outrigger, 360° all slewing	With the fifth outrigger in actual working condition, 360° all slewing can be available
10*	Over side and over rear operation 	Fifth jack over side and over rear operation	No fifth outrigger in actual working conditions , over side and over rear operation.
11	n	Parts of line of winch rope	Please select proper parts of line of winch rope according to actual working condition.
12		Hook block	Please select proper hook block according to actual working condition.
13		Wind speed (m/s)	Max. instantaneous wind speed allowed in current working condition
14		Use fixed jib	 It indicates fixed jib length is 14m It indicates offset angle of fixed jib is 20°

7-3-1 Rated lifting load tables for boom

Table 7-3 Rated lifting load table (metric)

	2t		7.2m × 6.2m		Over side and over rear		360°		ISO		
	10.9m-43.3m										
	10.9	14.95	19		23.04						
1.5	36.3									1.5	
2	32									2	
2.5	28									2.5	
3	25	14	20	14	12.8	18				3	
3.5	24.5	14	20	14	12.8	18				3.5	
4	22.5	14	19.9	14	12.8	18	12.8	8.6	14	4	
4.5	21	14	19.8	14	12.8	18	12.8	8.6	14	4.5	
5	19.6	14	18.4	14	12.8	17.5	12.8	8.6	14	5	
5.5	17.7	14	17.2	14	12.8	16.2	12.8	8.6	14	5.5	
6	15.8	14	15.9	14	12.8	15.2	12.8	8.6	14	6	
6.5	14.4	13.5	14	14	12.8	14	12.8	8.6	13.8	6.5	
7	13.2	13.2	13	13.5	12.8	12.4	12.8	8.6	13.1	7	
8	11	12	11	11.5	12	10.5	11.8	8.6	11.2	8	
9		10.2	9.3	10	10.3	9	10	8.6	9	9	
10		9.3	8.2	8.8	9.3	7.9	9.2	8.6	8.5	10	
11		8	6.9	7.5	7.9	6.5	7.7	8.4	7	11	
12		6.8	5.8	6.3	6.8	5.5	6.7	7.3	6	12	
13				5.5	5.8	4.7	5.8	6.4	5.1	13	
14				4.7	5.1	3.9	5.1	5.6	4.4	14	
15				4.1	4.5	3.3	4.4	5	3.8	15	
16				3.6	4	2.8	3.9	4.5	3.2	16	
18							3	3.6	2.4	18	
n	8	3	5	3	3	4	3	2	3	n	
	2	0%	0%	50%	50%	0%	100%	50%	0%	100%	
	3	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%	
	4	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%	
	5	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%	
	24.6° ~ 73.8°	21° ~72.3°		18.8° ~72.6°		30.5° ~76.1°					
	40 USt hook (360kg)	27.5 USt hook (200kg)									
	14.1	14.1				12.8					

Continued Table 7-3 Rated lifting load table (metric)

	2t		7.2m × 6.2m		Over side and over rear		360°		ISO		
	10.9m-43.3m										
	27.09			31.14				35.19			
4.5	8.6	6.3	12.8							4.5	
5	8.6	6.3	12.5							5	
5.5	8.6	6.3	12.2							5.5	
6	8.6	6.3	11.5							6	
6.5	8.6	6.3	11	6.3	4.7	8.6				6.5	
7	8.6	6.3	10.6	6.3	4.7	8.2	4.7	3.8	6.3	7	
8	8.6	6.3	9.9	6.3	4.7	7.6	4.7	3.8	6.3	8	
9	8.6	6.3	9.2	6.3	4.7	7.1	4.7	3.8	6	9	
10	8.6	6.3	8.2	6.3	4.7	6.7	4.7	3.8	5.9	10	
11	8.1	6.3	7.5	6.3	4.7	6.4	4.7	3.8	5.8	11	
12	7	6.3	6.5	6.3	4.7	6.1	4.7	3.8	5.7	12	
13	6	6.3	5.5	6	4.7	5.7	4.7	3.8	5.3	13	
14	5.3	5.8	4.8	5.5	4.7	5	4.7	3.8	4.9	14	
15	4.7	5.2	4.2	4.9	4.7	4.4	4.7	3.8	4.4	15	
16	4.1	4.6	3.7	4.3	4.6	3.8	4.4	3.8	4	16	
18	3.2	3.7	2.7	3.4	3.8	3	3.5	3.5	3.1	18	
20	2.6	3.1	2.1	2.7	3.2	2.3	2.9	3.2	2.5	20	
22	2.1	2.5	1.5	2.2	2.5	1.8	2.3	2.7	1.9	22	
24				1.8	2.2	1.3	1.9	2.3	1.5	24	
26				1.4	1.7	0.9	1.5	1.9	1.1	26	
28							1.2	1.6	0.7	28	
30							0.9	1.2	0.5	30	
n	2	2	3	2	1	2	1	1	2	n	
	2	50%	0%	100%	50%	0%	100%	50%	0%	100%	
	3	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%	
	4	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%	
	5	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%	
	28.2° ~ 77.1°			26.4° ~ 75.1°			24.9° ~ 76°				
	27.5 USt hook (200kg)										
	12.8			11.1			11.1				

Continued Table 7-3 Rated lifting load table (metric)
































	2t	7.2m × 6.2m	Over side and over rear	360°	ISO	
						
	10.9m-43.3m					
	39.23		43.28			
7	3.8		4.7			7
8	3.8		4.7	3.8		8
9	3.8		4.7	3.8		9
10	3.8		4.7	3.8		10
11	3.8		4.7	3.8		11
12	3.8		4.7	3.8		12
13	3.8		4.7	3.8		13
14	3.8		4.6	3.7		14
15	3.8		4.2	3.6		15
16	3.6		3.9	3.4		16
18	3.5		3.3	2.9		18
20	3		2.6	2.7		20
22	2.4		2.1	2.2		22
24	2		1.6	1.7		24
26	1.6		1.2	1.3		26
28	1.3		0.9	1		28
30	0.9		0.6	0.7		30
32	0.7		0.4	0.5		32
34	0.5			0.3		34
n	1		1	1		n
	2	50%	100%	100%		
	3	100%	83.3%	100%		
	4	100%	83.3%	100%		
	5	100%	83.3%	100%		
	23.7° ~77.5°		34.2° ~77.3°			
	5.5 USt hook (100kg)					
	11.1					

Table 7-3a Rated lifting load table (imperial)

	4409lbs 23.6ft x 20.3ft Over side and over rear 360° 85%									
	35.8ft-142ft									
	35.8	49	62.3		75.6					
5	80020									5
7	70540									7
8	61720									8
10	55110	30860	44090	30860	28210	39680				10
11	55110	30860	44090	30860	28210	39680				11
13	49600	30860	43870	30860	28210	39680	28210	18950	30860	13
15	46290	30860	43650	30860	28210	39680	28210	18950	30860	15
16	43210	30860	40560	30860	28210	38580	28210	18950	30860	16
18	39020	30860	37910	30860	28210	35710	28210	18950	30860	18
20	34830	30860	35050	30860	28210	33500	28210	18950	30860	20
21	31740	29760	30860	30860	28210	30860	28210	18950	30420	21
23	29100	29100	28650	29760	28210	27330	28210	18950	28880	23
26	24250	26450	24250	25350	26450	23140	26010	18950	24690	26
30		22480	20500	22040	22700	19840	22040	18950	19840	30
33		20500	18070	19400	20500	17410	20280	18950	18730	33
36		17630	15210	16530	17410	14320	16970	18510	15430	36
39		14990	12780	13880	14990	12120	14770	16090	13220	39
43				12120	12780	10360	12780	14100	11240	43
46				10360	11240	8590	11240	12340	9700	46
49				9030	9920	7270	9700	11020	8370	49
52				7930	8810	6170	8590	9920	7050	52
59							6610	7930	5290	59
n	8	3	5	3	3	4	3	2	3	n
	2	0%	0%	50%	50%	0%	100%	50%	0%	100%
	3	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%
	4	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%
	5	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%
	24.6° ~ 73.8°	21° ~72.3°		18.8° ~72.6°			30.5° ~76.1°			
	40 USt hook (794lbs)	27.5 USt hook (440 lbs)								
	46	46				42				

Continued Table 7-3a Rated lifting load table (imperial)

	4409lbs		23.6ft x 20.3ft		Over side and over rear		360°		85%		
	35.8ft-142ft										
	88.9			102.1				115.4			
15	18950	13880	28210								15
16	18950	13880	27550								16
18	18950	13880	26890								18
20	18950	13880	25350								20
21	18950	13880	24250	13880	10360	18950					21
23	18950	13880	23360	13880	10360	18070	10360	8370	13880		23
26	18950	13880	21820	13880	10360	16750	10360	8370	13880		26
30	18950	13880	20280	13880	10360	15650	10360	8370	13220		30
33	18950	13880	18070	13880	10360	14770	10360	8370	13000		33
36	17850	13880	16530	13880	10360	14100	10360	8370	12780		36
39	15430	13880	14320	13880	10360	13440	10360	8370	12560		39
43	13220	13880	12120	13220	10360	12560	10360	8370	11680		43
46	11680	12780	10580	12120	10360	11020	10360	8370	10800		46
49	10360	11460	9250	10800	10360	9700	10360	8370	9700		49
52	9030	10140	8150	9470	10140	8370	9700	8370	8810		52
59	7050	8150	5950	7490	8370	6610	7710	7710	6830		59
66	5730	6830	4620	5950	7050	5070	6390	7050	5510		66
72	4620	5510	3300	4850	5510	3960	5070	5950	4180		72
79				3960	4850	2860	4180	5070	3300		79
85				3080	3740	1980	3300	4180	2420		85
92							2640	3520	1540		92
98							1980	2640	1100		98
n	2	2	3	2	1	2	1	1	2	n	
	2	50%	0%	100%	50%	0%	100%	50%	0%	100%	
	3	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%	
	4	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%	
	5	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%	
	28.2° ~77.1°			26.4° ~75.1°			24.9° ~76°				
	27.5 USt hook (440 lbs)										
	42			36.4							

Continued Table 7-3a Rated lifting load table (imperial)



















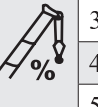

















	 4409lbs	 23.6ft x 20.3ft	 Over side and over rear	 360°	
	 35.8ft-142ft			 85%	
	128.7		142		
23	8370	10360		23	
26	8370	10360	8370	26	
30	8370	10360	8370	30	
33	8370	10360	8370	33	
36	8370	10360	8370	36	
39	8370	10360	8370	39	
43	8370	10360	8370	43	
46	8370	10140	8150	46	
49	8370	9250	7930	49	
52	7930	8590	7490	52	
59	7710	7270	6390	59	
66	6610	5730	5950	66	
72	5290	4620	4850	72	
79	4400	3520	3740	79	
85	3520	2640	2860	85	
92	2860	1980	2200	92	
98	1980	1320	1540	98	
105	1540	880	1100	105	
112	1100		660	112	
n	l	l	l	n	
	2	50%	100%	100%	
	3	100%	83.3%	100%	
	4	100%	83.3%	100%	
	5	100%	83.3%	100%	
	23.7° ~ 77.5°		34.2° ~ 77.3°		
	5.5 USt hook (220 lbs)				
	36.4				

Table 7-4 Rated lifting load table (metric)

	2t 4.9m × 6.2m Over side and over rear 360° ISO										
	10.9m-43.3m										
	10.9	15		19			23.1				
1.5	36.3									1.5	
2	32.0									2	
2.5	28.0									2.5	
3	25.0	14.0	20.0	14.0	12.8	18.0				3	
3.5	24.5	14.0	20.0	14.0	12.8	18.0				3.5	
4	22.5	14.0	19.9	14.0	12.8	18.0	12.8	8.6	14.0	4	
4.5	21.0	14.0	19.8	14.0	12.8	18.0	12.8	8.6	14.0	4.5	
5	19.6	14.0	18.4	14.0	12.8	17.5	12.8	8.6	14.0	5	
5.5	16.8	14.0	16.1	14.0	12.8	15.7	12.8	8.6	14.0	5.5	
6	14.0	14.0	13.4	14.0	12.8	13.0	12.8	8.6	13.7	6	
6.5	11.9	12.7	11.3	12.1	12.8	10.9	12.5	8.6	11.6	6.5	
7	10.3	11.0	9.7	10.4	11.1	9.3	10.8	8.6	10.0	7	
8	7.8	8.6	7.3	8.0	8.6	7.0	8.4	8.6	7.6	8	
9		6.8	5.7	6.3	6.9	5.4	6.7	7.4	5.9	9	
10		5.6	4.5	5.1	5.6	4.2	5.4	6.1	4.7	10	
11		4.6	3.5	4.1	4.6	3.2	4.5	5.1	3.8	11	
12		3.8	2.8	3.4	3.9	2.5	3.7	4.4	3.0	12	
13				2.8	3.2	1.9	3.1	3.7	2.4	13	
14				2.3	2.7	1.4	2.6	3.2	1.9	14	
15				1.8	2.3	1.0	2.2	2.8	1.5	15	
16				1.5	1.9	0.7	1.8	2.4	1.1	16	
18							1.2	1.8	0.6	18	
n	8	3	5	3	3	4	3	2	3	n	
	2	0%	0%	50%	50%	0%	100%	50%	0%	100%	
	3	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%	
	4	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%	
	5	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%	
	24.6° ~ 73.8°	21° ~72.3°		18.8° ~72.6°			30.5° ~76.1°				
	40 USt hook (360kg)	27.5 USt hook (200kg)									
	14.1	14.1					12.8				

Continued Table 7-4 Rated lifting load table (metric)

	2t		4.9m × 6.2m		Over side and over rear			360°		ISO		
	10.9m-43.3m											
	27.1			31.1				35.2				
4.5	8.6	6.3	12.8								4.5	
5	8.6	6.3	12.5								5	
5.5	8.6	6.3	12.2								5.5	
6	8.6	6.3	11.5								6	
6.5	8.6	6.3	11.0	6.3	4.7	8.6					6.5	
7	8.6	6.3	10.4	6.3	4.7	8.2	4.7	3.8	6.3		7	
8	8.6	6.3	8.0	6.3	4.7	7.6	4.7	3.8	6.3		8	
9	7.0	6.3	6.3	6.3	4.7	6.6	4.7	3.8	6.0		9	
10	5.7	6.3	5.1	5.9	4.7	5.3	4.7	3.8	5.6		10	
11	4.7	5.3	4.1	4.9	4.7	4.4	4.7	3.8	4.6		11	
12	4.0	4.5	3.4	4.1	4.6	3.6	4.3	3.8	3.8		12	
13	3.3	3.9	2.8	3.5	4.0	3.0	3.6	3.8	3.2		13	
14	2.8	3.3	2.3	3.0	3.4	2.5	3.1	3.5	2.7		14	
15	2.4	2.9	1.8	2.5	3.0	2.1	2.7	3.1	2.3		15	
16	2.0	2.5	1.5	2.2	2.6	1.7	2.3	2.7	1.9		16	
18	1.4	1.9	0.9	1.6	2.0	1.1	1.7	2.1	1.3		18	
20	1.0	1.4	0.4	1.1	1.5	0.7	1.2	1.6	0.8		20	
22	0.6	1.1		0.7	1.2		0.9	1.2	0.5		22	
24				0.4	0.8		0.6	0.9			24	
26					0.6			0.7			26	
28								0.4			28	
30											30	
n	2	2	3	2	1	2	1	1	2	n		
	2	50%	0%	100%	50%	0%	100%	50%	0%	100%		
	3	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%		
	4	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%		
	5	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%		
	28.2° ~ 77.1°			26.4° ~ 75.1°			32° ~ 76°					
	27.5 USt hook (200kg)											
	12.8			11.1			11.1					

Continued Table 7-4 Rated lifting load table (metric)



































	2t	4.9m × 6.2m	Over side and over rear	360°	ISO	
						
	10.9m-43.3m					
	39.2		43.3			
7	3.8	4.7	3.8	7		
8	3.8	4.7	3.8	8		
9	3.8	4.7	3.8	9		
10	3.8	4.7	3.8	10		
11	3.8	4.7	3.8	11		
12	3.8	4.0	3.5	12		
13	3.7	3.3	2.9	13		
14	3.2	2.8	2.5	14		
15	2.8	2.4	2.1	15		
16	2.4	2.0	1.5	16		
18	1.8	1.4	1.1	18		
20	1.3	1.0	0.7	20		
22	1.0	0.6	0.4	22		
24	0.6			24		
26	0.4			26		
n	1	1	1	n		
	2	50%	100%	100%		
	3	100%	83.3%	100%		
	4	100%	83.3%	100%		
	5	100%	83.3%	100%		
	45.1° ~ 77.5°		53.7° ~ 77.3°			
	5.5 USt hook (100kg)					
	11.1					















Table 7-4a Rated lifting load table (imperial)

	4409lbs 16ft x 20.3ft Over side and over rear 360° 85%										
	35.8ft-142ft										
	35.8	49	62.3		75.6						
5	80020									5	
7	70540									7	
8	61720									8	
10	55110	30860	44090	30860	28210	39680				10	
11	54010	30860	44090	30860	28210	39680				11	
13	49600	30860	43870	30860	28210	39680	28210	18950	30860	13	
15	46290	30860	43650	30860	28210	39680	28210	18950	30860	15	
16	43210	30860	40560	30860	28210	38580	28210	18950	30860	16	
18	37030	30860	35490	30860	28210	34610	28210	18950	30860	18	
20	30860	30860	29540	30860	28210	28650	28210	18950	30200	20	
21	26230	27990	24910	26670	28210	24030	27550	18950	25570	21	
23	22700	24250	21380	22920	24470	20500	23800	18950	22040	23	
26	17190	18950	16090	17630	18950	15430	18510	18950	16750	26	
30		14990	12560	13880	15210	11900	14770	16310	13000	30	
33		12340	9920	11240	12340	9250	11900	13440	10360	33	
36		10140	7710	9030	10140	7050	9920	11240	8370	36	
39		8370	6170	7490	8590	5510	8150	9700	6610	39	
43				6170	7050	4180	6830	8150	5290	43	
46				5070	5950	3080	5730	7050	4180	46	
49				3960	5070	2200	4850	6170	3300	49	
52				3300	4180	1540	3960	5290	2420	52	
59							2640	3960	1320	59	
n	8	3	5	3	3	4	3	2	3	n	
	2	0%	0%	50%	50%	0%	100%	50%	0%	100%	
	3	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%	
	4	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%	
	5	0%	16.7%	0%	16.7%	33.3%	0%	33.3%	50%	16.7%	
	24.6° ~ 73.8°	21° ~72.3°		18.8° ~72.6°			30.5° ~76.1°				
	40 USt hook (794lb)	27.5 USt hook (440 lbs)									
	46	46				42					

Continued Table 7-4a Rated lifting load table (imperial)

	4409lbs		16ft x 20.3ft		Over side and over rear		360°		85%		
	35.8ft-142ft										
	88.9			102.1				115.4			
15	18950	13880	28210								15
16	18950	13880	27550								16
18	18950	13880	26890								18
20	18950	13880	25350								20
21	18950	13880	24250	13880	10360	18950					21
23	18950	13880	22920	13880	10360	18070	10360	8370	13880		23
26	18950	13880	17630	13880	10360	16750	10360	8370	13880		26
30	15430	13880	13880	13880	10360	14550	10360	8370	13220		30
33	12560	13880	11240	13000	10360	11680	10360	8370	12340		33
36	10360	11680	9030	10800	10360	9700	10360	8370	10140		36
39	8810	9920	7490	9030	10140	7930	9470	8370	8370		39
43	7270	8590	6170	7710	8810	6610	7930	8370	7050		43
46	6170	7270	5070	6610	7490	5510	6830	7710	5950		46
49	5290	6390	3960	5510	6610	4620	5950	6830	5070		49
52	4400	5510	3300	4850	5730	3740	5070	5950	4180		52
59	3080	4180	1980	3520	4400	2420	3740	4620	2860		59
66	2200	3080	880	2420	3300	1540	2640	3520	1760		66
72	1320	2420		1540	2640		1980	2640	1100		72
79				880	1760		1320	1980			79
85					1320			1540			85
92								880			92
98											98
n	2	2	3	2	1	2	1	1	2	n	
	2	50%	0%	100%	50%	0%	100%	50%	0%	100%	
	3	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%	
	4	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%	
	5	50%	66.7%	33.3%	66.7%	83.3%	50%	83.3%	100%	66.7%	
	28.2° ~77.1°			26.4° ~75.1°			24.9° ~76°				
	27.5 USt hook (440 lbs)										
	42			36.4							

Continued Table 7-4a Rated lifting load table (imperial)

	4409lbs	16ft x 20.3ft	Over side and over rear	360°		
						85%
	35.8ft-142ft					
	128.7		142			
23	8370		10360		23	
26	8370		10360	8370	26	
30	8370		10360	8370	30	
33	8370		10360	8370	33	
36	8370		10360	8370	36	
39	8370		8810	8370	39	
43	8150		7270	7710	43	
46	7050		6170	6390	46	
49	6170		5290	5510	49	
52	5290		4400	4620	52	
59	3960		3080	3300	59	
66	2860		2200	2420	66	
72	2200		1320	1540	72	
79	1320			880	79	
85	880				85	
92					92	
n	1		1	1	n	
	2	50%	100%	100%		
	3	100%	83.3%	100%		
	4	100%	83.3%	100%		
	5	100%	83.3%	100%		
	23.7° ~77.5°			34.2° ~77.3°		
	5.5 USt hook (220 lbs)					
	36.4					

7-3-2 Rated load charts for jib

Table 7-5 Rated lifting load table (metric)

	2t		7.2m × 6.2m		43.3m		ISO				
			9.3m				16.3m				
79	1700	9.8	1500	11.9	1200	13.7	1000	11.4	500	15.1	79
78	1600	11.6	1480	13.7	1200	15.4	900	13.4	480	17.1	78
75	1450	14.3	1450	16.3	1200	18.0	850	16.4	450	20.0	75
72	1400	16.8	1400	18.8	1100	20.5	750	19.3	400	22.9	72
70	1300	18.6	1300	20.5	1100	22.1	700	21.2	400	24.7	70
65	1250	22.7	1200	24.5	1100	26.0	600	25.9	350	29.2	65
60	1200	26.7	1100	28.4	1000	29.7	500	30.4	300	33.5	60
55	800	30.4	700	32.0	700	33.2	350	34.7			55
50	400	33.9									50
	5.5 USt hook (100kg)										
	9										

Table 7-5a Rated lifting load table (imperial)
















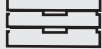





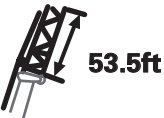









	4409lbs 		23.6ft x 20.3ft 		142ft 				ISO			
	 30.5ft						 53.5ft					
	 0°		 15°		 30°		 0°		 15°			
	lb	ft	lb	ft	lb	ft	lb	ft	lb	ft		
79	3740	32.1	3300	39	2640	44.9	2200	37.4	1100	49.5	79	
78	3520	38	3260	44.9	2640	50.5	1980	44	1050	56.1	78	
75	3190	46.9	3190	53.5	2640	59	1870	53.8	990	65.6	75	
72	3080	55.1	3080	61.7	2420	67.2	1650	63.3	880	75.1	72	
70	2860	61	2860	67.2	2420	72.5	1540	69.5	880	81	70	
65	2750	74.5	2640	80.4	2420	85.3	1320	85	770	95.8	65	
60	2640	87.6	2420	93.2	2200	97.4	1100	99.7	660	109.9	60	
55	1760	99.7	1540	105	1540	108.9	770	113.8			55	
50	880	111.2									50	
 5.5 USt hook (220 lbs)												
 29.5												

Table 7-6 Rated lifting load table (metric)

	2t		4.9m × 6.2m		43.3m		ISO				
	9.3m				16.3m						
	0°		15°		30°		0°			15°	
	kg	m	kg	m	kg	m	kg	m		kg	m
79	1700	9.8	1500	11.9	1200	13.7	1000	11.4	500	15.1	79
78	1600	11.6	1480	13.7	1200	15.4	900	13.4	480	17.1	78
75	1450	14.3	1450	16.3	1200	18.0	850	16.4	450	20.0	75
72	1400	16.8	1400	18.8	1100	20.5	750	19.3	400	22.9	72
70	1300	18.6	1200	20.5	1100	22.1	700	21.2	400	24.7	70
65	700	22.7	600	24.5	600	26.0	350	25.9		29.2	65
	5.5 USt hook (100kg)										
	9										

Table 7-6a Rated lifting load table (imperial)

	4409lbs 		16ft x 20.3ft 		142ft 				ISO				
	 30.5ft						 53.5ft						
	 0°		 15°		 30°		 0°		 15°				
	lb	ft	lb	ft	lb	ft	lb	ft	lb	ft			
79	3740	32.1	3300	39	2640	44.9	2200	37.4	1100	49.5	79		
78	3520	38	3260	44.9	2640	50.5	1980	44	1050	56.1	78		
75	3190	46.9	3190	53.5	2640	59	1870	53.8	990	65.6	75		
72	3080	55.1	3080	61.7	2420	67.2	1650	63.3	880	75.1	72		
70	2860	61	2640	67.2	2420	72.5	1540	69.5	880	81	70		
65	1540	74.5	1320	80.4	1320	85.3	770	85			65		
 5.5 USt hook (220 lbs) 													
 29.5 													

7-3-3 Rated load charts for boom angle of 0°

Table 7-7 Rated lifting load table (metric)

	2t		7.2m × 6.2m		Over side and over rear		ISO	
	10.9m–31.1m							
	10.9	15	19	23.1	27.1	31.1		
	8	4.7	2.8	1.8	1	0.5		
n	2	1	1	1	1	1	n	
	2	0%	0%	0%	0%	0%	0%	
	3	0%	16.70%	33.30%	50%	66.70%	83.30%	
	4	0%	16.70%	33.30%	50%	66.70%	83.30%	
	5	0%	16.70%	33.30%	50%	66.70%	83.30%	
	27.5 USt hook (200kg)		5.5 USt hook (100kg)					
	14.1			12.8		11.1		

Table 7-7a Rated lifting load table (imperial)

	4409lbs		23.6ft × 20.3ft		Over side and over rear		85%	
	35.8ft–102.1ft							
	35.8	49	62.3	75.6	88.9	102.1		
	17630	10360	6170	3960	2200	1100		
n	2	1	1	1	1	1	n	
	2	0%	0%	0%	0%	0%	0%	
	3	0%	16.70%	33.30%	50%	66.70%	83.30%	
	4	0%	16.70%	33.30%	50%	66.70%	83.30%	
	5	0%	16.70%	33.30%	50%	66.70%	83.30%	
	27.5 USt hook (440 lbs)		5.5 USt hook (220 lbs)					
	46			42		36.4		

7-4 Lifting height curves

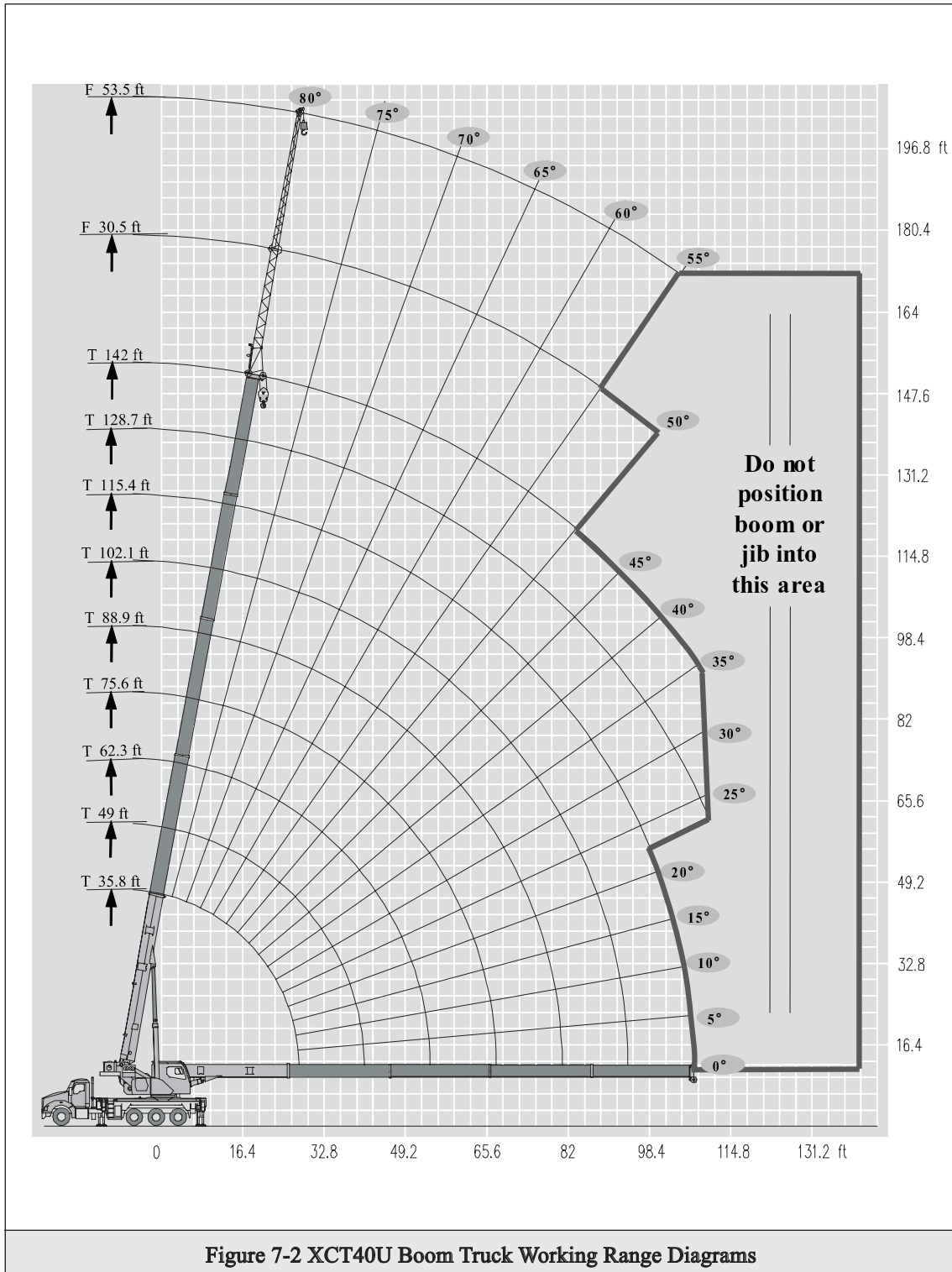


Figure 7-2 XCT40U Boom Truck Working Range Diagrams

7-5 Working areas

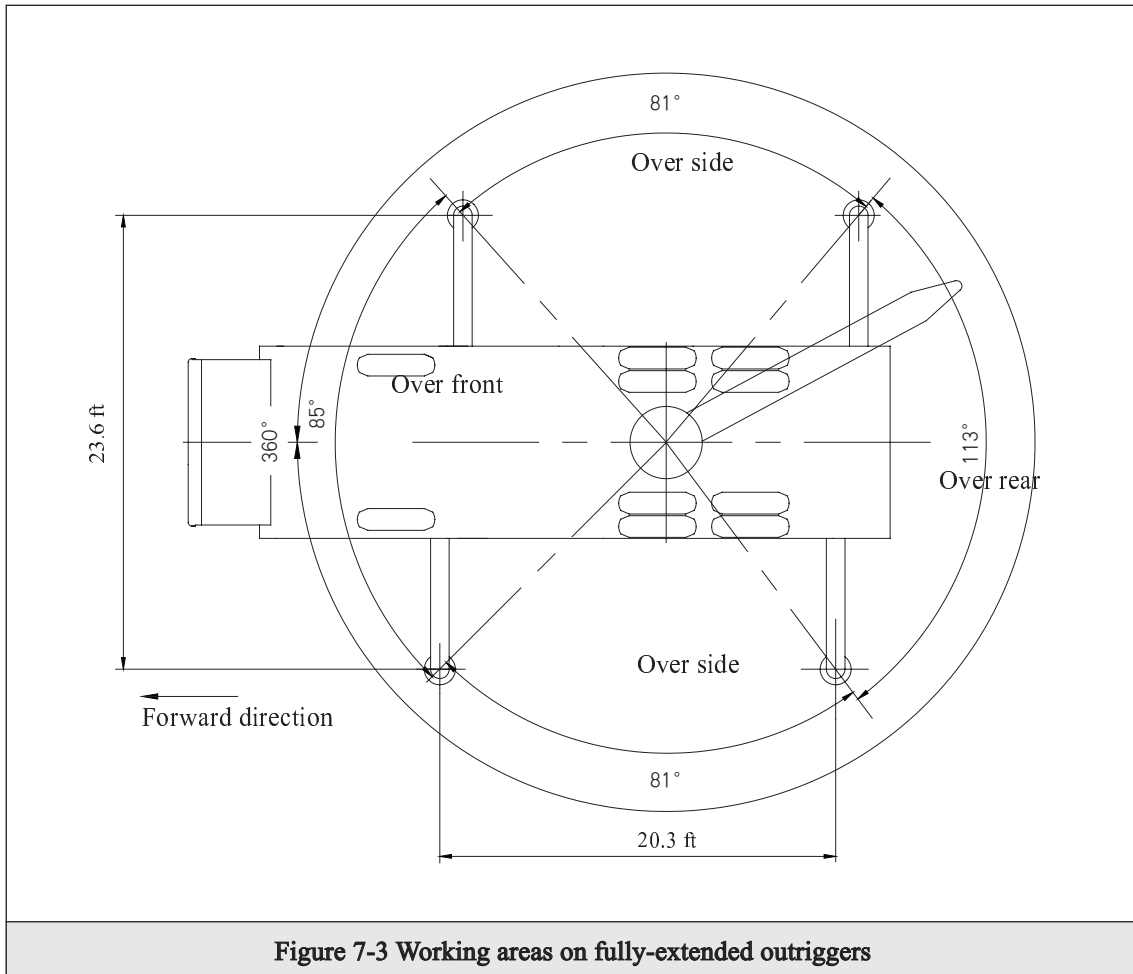


Figure 7-3 Working areas on fully-extended outriggers

