



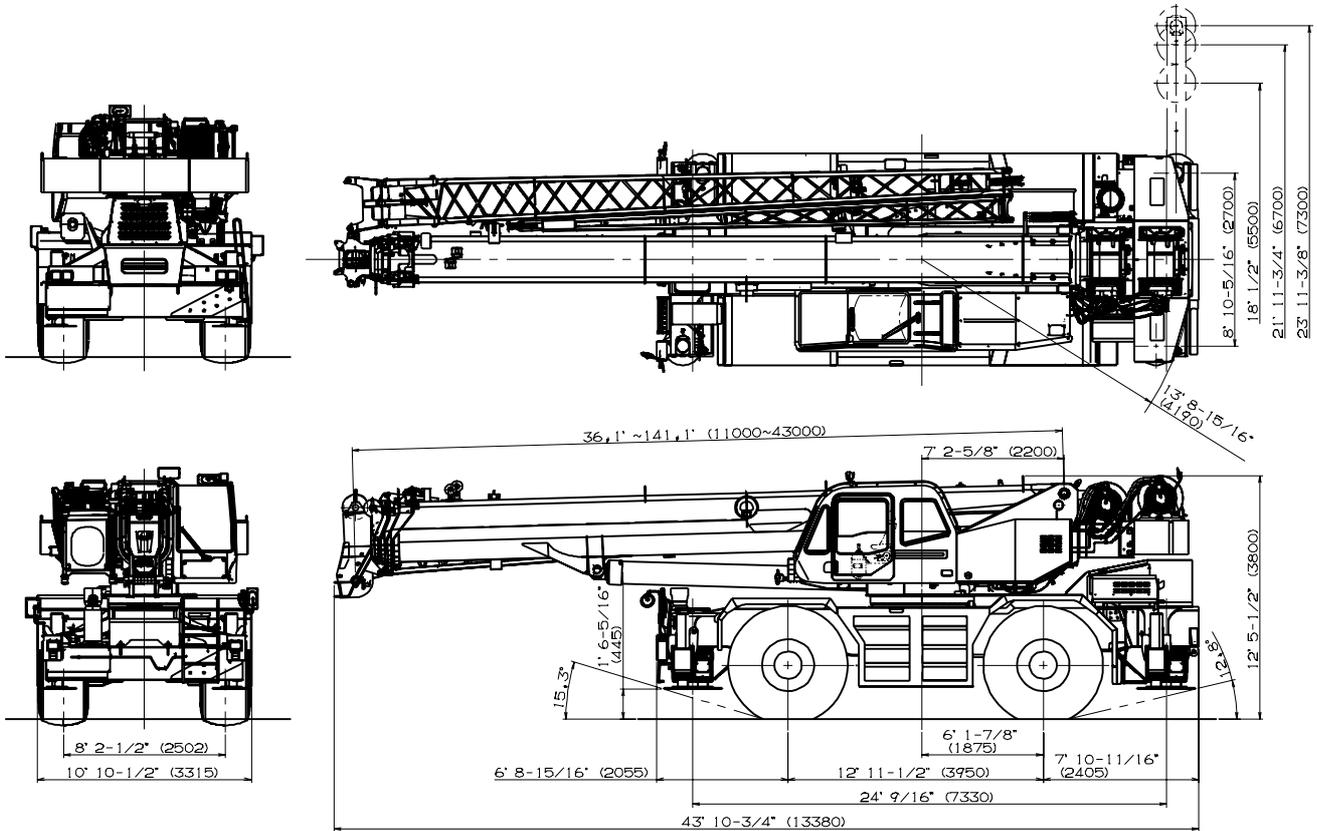
Provisional

GR-750XL-2

75 Ton Capacity (68.0 Metric Tons)

HYDRAULIC ROUGH TERRAIN CRANE

DIMENSIONS



GENERAL DIMENSIONS (29.5 X 25 Tires)

	Feet	Meters
Turning radius		
4 wheel steer	21' 11-3/4"	6.7
2 wheel steer	39' 1/2"	11.9

Specifications are subject to change without notice.

SUPERSTRUCTURE SPECIFICATIONS

BOOM

Five section full power synchronized telescoping boom, 36.1'~141.1' (11.0m~43.0m), of round box construction with six sheaves, 17-5/16" (0.440m) root diameter, at boom head. The synchronization system consists of two double acting telescope cylinders, an extension cable and retraction cable. Hydraulic cylinder fitted with holding valve. Two easily removable wire rope guards, rope dead end provided on both sides of boom head. Boom telescope sections are supported by wear pads both vertically and horizontally. Extension speed 105' in 128 seconds.

BOOM ELEVATION - By a double acting hydraulic cylinder with holding valve. Elevation -1.6°~81.4°, combination controls for hand or foot operation. Boom angle indicator. Automatic speed reduction and soft stop function. Boom raising speed 20° to 60° in 46 seconds.

JIB - Two stage bi-fold lattice type with 3.5°, 25° or 45° offset (tilt type). Single sheave, 15-5/8"(0.396m) root diameter, at the head of both jib sections. Stored alongside base boom section. Jib length is 33.1' (10.1m) or 58.1' (17.7m). Assist cylinders for mounting and stowing are controlled at right side of superstructure. Self stowing jib mounting pins.

AUXILIARY LIFTING SHEAVE (SINGLE TOP)
Single sheave, 15-5/8"(0.396m) root diameter. Mounted to main boom head for single line work (stowable).

ANTI-TWO BLOCK - Pendant type over-winding cut out device with audio-visual (FAILURE lamp/BUZZER) warning system.

SWING

Hydraulic axial piston motor driven through planetary swing speed reducer. Continuous 360° full circle swing on ball bearing turntable at 2.4rpm. Equipped with manually locked/released swing brake. A 360° positive swing lock for pick and carry and travel modes, manually engaged in cab. Twin swing System: Free swing or lock swing controlled by selector switch on front console.

HOIST

MAIN HOIST - Variable speed type with grooved drum driven by hydraulic axial piston motor through winch speed reducer. Power load lowering and raising. Equipped with automatic brake (neutral brake) and counterbalance valve. Controlled independently of auxiliary hoist. Equipped with cable follower and drum rotation indicator.

DRUM - Grooved 15-3/4"(0.40m) root diameter x 22-7/8" (0.580m) wide. Wire rope: 797' of 3/4" diameter rope (243m of 19mm). Drum capacity: 1,074' (327.5m) 7 layers. Maximum single line pull : 1st layer 16,200 lbs (7,350kg). Maximum permissible line pull :15,600 lbs (7,084kg).

AUXILIARY HOIST - Variable speed type with grooved drum driven by hydraulic axial piston motor through winch speed reducer. Power load lowering and raising. Equipped with automatic brake (neutral brake) and counterbalance valve. Controlled independently of main hoist. Equipped with cable follower and drum rotation indicator.

DRUM - Grooved 15-3/4"(0.40m) root diameter x 22-7/8" (0.580m) wide. Wire rope: 436' of 3/4" diameter rope (133m of 19mm). Drum capacity: 1,074' (327.5m) 7 layers. Maximum single line pull : 1st layer 16,200 lbs (7,350kg). Maximum permissible line pull :15,600 lbs (7,084kg).

WIRE ROPE - Warrington seal wire, extra improved plow steel, preformed, independent wire rope core, right regular lay. 3/4"(19 mm) 6X37 class

HOOK BLOCKS

75 ton (68.0 metric ton) - 7 sheaves with swivel hook and safety latch, for 3/4"(19mm) wire rope.(OPTIONAL)
6.2 ton (5.6 metric ton) - Weighted hook with swivel and safety latch, for 3/4"(19mm) wire rope.

HYDRAULIC SYSTEM

PUMPS - Two variable piston pumps for crane functions. Tandem gear pump for steering, swing and optional equipment. Powered by carrier engine. Pump disconnect for crane is engaged/ disengaged by rotary switch from operator's cab.

CONTROL VALVES - Multiple valves actuated by pilot pressure with integral pressure relief valves.

RESERVOIR - 224 gallon (840 lit.) capacity. External sight level gauge.

FILTRATION - BETA10=10 return filter, full flow with bypass protection, located inside of hydraulic reservoir. Accessible for easy replacement.

OIL COOLER - Air cooled fan type.

CAB AND CONTROLS

Both crane and drive operations can be performed from one cab mounted on rotating superstructure.

Left side, 1 man type, steel construction with sliding door access and tinted safety glass windows opening at side. Door window is powered control. Windshield glass window and roof glass window are shatter-resistant. Tilt-telescoping steering wheel. Adjustable control lever stands for swing, boom hoist, boom telescoping, auxiliary hoist and main hoist. Control lever stands can change neutral positions and tilt for easy access into cab. 3 way adjustable operator's seat with high back, headrest and armrest. Engine throttle knob. Foot operated controls: boom hoist, boom telescoping, service brake and engine throttle. Hot water cab heater and air conditioning.

Dash-mounted engine start/stop, monitor lamps, cigarette lighter, ashtray, drive selector switch, parking brake switch, steering mode select switch, power window switch, pump engaged/ disengaged switch, swing brake switch, telescoping/auxiliary winch select switch, outrigger controls, main winch/auxiliary winch selector switch, free swing / lock swing selector switch.

Instruments - Torque converter oil temperature, engine water temperature, air pressure, fuel, speedometer, tachometer and hour meter. Hydraulic oil pressure is monitored and displayed on the AML-C display panel.

Tadano electronic LOAD MOMENT INDICATOR system (AML-C) including:

- Control lever lockout function with audible and visual pre-warning
- Boom position indicator
- Outrigger state indicator
- Boom angle / boom length / jib offset angle / load radius / rated lifting capacities / actual loads read out
- Ratio of actual load moment to rated load moment indication
- Automatic Speed Reduction and Soft Stop function on boom elevation and swing
- Working condition register switch
- Load radius / boom angle / tip height / swing range preset function
- External warning lamp
- Tare function

TADANO AML-C monitors outrigger extended length and automatically programs the corresponding "RATED LIFTING CAPACITIES" table.

CARRIER SPECIFICATIONS

TYPE - Rear engine, left hand steering, driving axle 2-way selected type by manual switch, 4x2 front drive, 4x4 front and rear drive.

FRAME - High tensile steel, all welded mono-box construction.

TRANSMISSION - Electronically controlled full automatic transmission. Torque converter driving full powershift with driving axle selector. 6 forward and 2 reverse speeds, constant mesh.

- 3 speeds - high range - 2 wheel drive; 4 wheel drive
- 3 speeds - low range - 4 wheel drive

TRAVEL SPEED - 23 mph (37 km/h)

AXLE - Front: Full floating type, steering and driving axle with planetary reduction. Rear: Full floating type, steering and driving axle with planetary reduction and non-spin rear differential.

STEERING- Hydraulic power steering controlled by steering wheel. Four steering modes available: 2 wheel front, 2 wheel rear, 4 wheel coordinated and 4 wheel crab .

Operator's right hand console includes transmission gear selector and sight level bubble. Upper console includes working light switch, roof washer and wiper switch, emergency outrigger set up key switch, drum indicator switch, jib equipped/removed select switch, boom emergency telescoping switch (2nd and 3rd - top) and air conditioning control switch. Swing lock lever.

NOTE : Each crane motion speed is based on unladen conditions.

SUSPENSION - Front: Rigid mounted to frame. Rear: Pivot mounted with hydraulic lockout device.

BRAKE SYSTEMS - Service: Air over hydraulic disc brakes on all 4 wheels. Parking/Emergency: Spring applied-air released brake acting on input shaft of front axle. Auxiliary: Electro-pneumatic operated exhaust brake.

TIRES - 29.5-25 22PR(OR) or 29.5-25 28PR(OR)

OUTRIGGERS - Four hydraulic, beam and jack outriggers. Vertical jack cylinders equipped with integral holding valve. Each outrigger beam and jack is controlled independently from cab. Beams extend to 23' 11-3/8" (7.3 m) center-line and retract to within 10' 10-1/2" (3.315 m) overall width with floats. Outrigger jack floats are attached thus eliminating the need of manually attaching and detaching them. Controls and sight bubble located in superstructure cab. Four outrigger extension lengths are provided with corresponding "RATED LIFTING CAPACITIES" for crane duty in confined areas.

- Min. Extension 8' 10-5/16" (2.7m) center to center
- Mid. Extension 18' 1/2" (5.5m) center to center
- Mid. Extension 21' 11-3/4" (6.7m) center to center
- Max. Extension 23' 11-3/8" (7.3m) center to center

Float size(Diameter) 1' 11-5/8" (0.6m)

ENGINE

Model	Mitsubishi 6M60-TLA3B
Type	Direct injection diesel
No. of cylinders	6
Combustion	4 cycle, turbo charged and after cooled
BoreXStroke, in.(mm)	4.646 X 4.528 (118X115)
Displacement, cu. in (liters)	460 (7.54)
Air inlet heater	24 volt preheat
Air cleaner	Dry type, replaceable element
Oil filter	Full flow with replaceable element
Fuel filter	Full flow with replaceable element
Fuel tank, gal.(liters)	79.2 (300), right side of carrier
Cooling	Liquid pressurized, recirculating by-pass

Radiator	Fin and tube core, thermostat controlled
Fan, in.(mm)	Suction type, 6-blade, 23.6 (600) dia.
Starting	24 volt
Charging	24 volt system, negative ground
Battery	2-120 amp. Hour
Compressor, air, CFM(l /min)	29 CFM (830) at 2,600rpm
Horsepower (kW)	Gross 267 (200) at 2,600rpm
Torque, Max. ft-lb (kgm)	579 (80) at 1,400rpm
Capacity, gal.(liters)	
Cooling water	3.4 (13)
Lubrication	3.4-4.0 (13-15)
Fuel	79.2 (300)

STANDARD EQUIPMENT

- Five section full power partially synchronized boom 36.1'-141.1' (11.0 m~43.0 m)
- 33.1' or 58.1' (10.1 m or 17.7 m) bi-fold lattice jib (tilt type) with 3.5°, 25° or 45° pinned offsets and self storing pins.
- Auxiliary lifting sheave (single top) stowable
- Variable speed main hoist with grooved drum, cable follower and 797' of 3/4" cable.
- Variable speed auxiliary hoist with grooved drum, cable follower and 436' of 3/4" cable.
- Drum rotation indicator (thumper type) main and auxiliary hoist
- Anti-Two block device (overwind cutout)
- Boom angle indicator
- Tadano electronic load moment indicator system (AML-C)
- Outrigger extension length detector
- Electronic crane monitoring system
- Tadano twin swing system and 360° positive swing lock
- Self centering finger control levers with pilot control
- Control pedals for boom hoist and boom telescoping
- 3 way adjustable cloth seat with armrests, high back and seat belt
- Tilt-telescoping steering wheel
- Tinted safety glass and sun visor
- Front windshield wiper and washer
- Roof window wiper and washer
- Power window (cab door)
- Rear view mirrors (right and left side)
- Mirror for main and auxiliary hoists
- Cigarette lighter and ashtray
- Cab floor mat
- Pump disconnect in operator's cab
- Hydraulic oil cooler
- Hot water cab heater and air conditioner
- Telecommunications terminal (HELLO-NET Owner's Site)
- Positive control
- Quick reeving type bi-fold jib
- Independently controlled outriggers
- Four outrigger extension positions
- Self-storing outrigger pads
- Outrigger hose protection
- Mitsubishi 6M60-TLA3B turbo charged after cooled engine (267HP) with exhaust brake
- Electronic controlled automatic transmission driven by torque converter
- 4 X 4 X 4 drive/steer
- Non-spin rear differential
- Automatic rear axle oscillation lockout system
- 29.5-25 22PR (OR) tires or 29.5-25 28PR (OR) tires
- Disc brakes
- Fenders
- Air dryer
- Water separator with filter(high filtration)
- Engine over-run alarm
- Back-up alarm
- Low oil pressure/high water temp. warning device (visual)
- Rear steer centering light
- Air cleaner dust indicator
- Full instrumentation package
- Complete highway light package
- Work lights
- Tool storage compartment
- Tire inflation kit
- 24 volt electric system
- 6.2 ton (5.6 metric ton) hook with swivel
- Towing hooks-Front and rear
- Lifting eyes
- Hook block tie down (front bumper)
- Weighted hook storage compartment
- Fuel consumption monitor and economy mode
- Halogen head lamp

OPTIONAL EQUIPMENT

- 75 ton (68.0 metric ton) 7 sheave with swivel hook and safety latch for 3/4"(19mm) wire rope

HOISTING PERFORMANCE

LINE SPEEDS AND PULLS

Layer	Speed	Main or auxiliary hoist - 15'-3/4" (0.4m) drum			
		Line speeds ¹		Line pulls Available ²	
		F.P.M	m/min	Lbs.	kgf
1st	High	358	109	16,200	7,350
2nd	High	387	118	14,800	6,710
3rd	High	417	127	13,600	6,180
4th	High	446	136	12,600	5,720
5th	High	475	144	11,700	5,330
6th	High	504	153	11,000	4,990
7th ³	High	533	162	10,300	4,680

- Line speeds based only on hook block, not loaded.
- Developed by machinery with each layer of wire rope, but not based on rope strength or other limitation in machinery or equipment.
- Seventh layer of wire rope are not recommended for hoisting operations.
- Permissible line pull may be affected by wire rope strength.

DRUM WIRE ROPE CAPACITIES

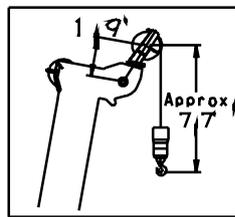
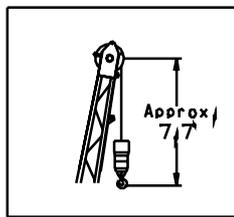
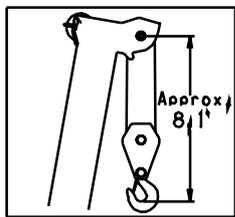
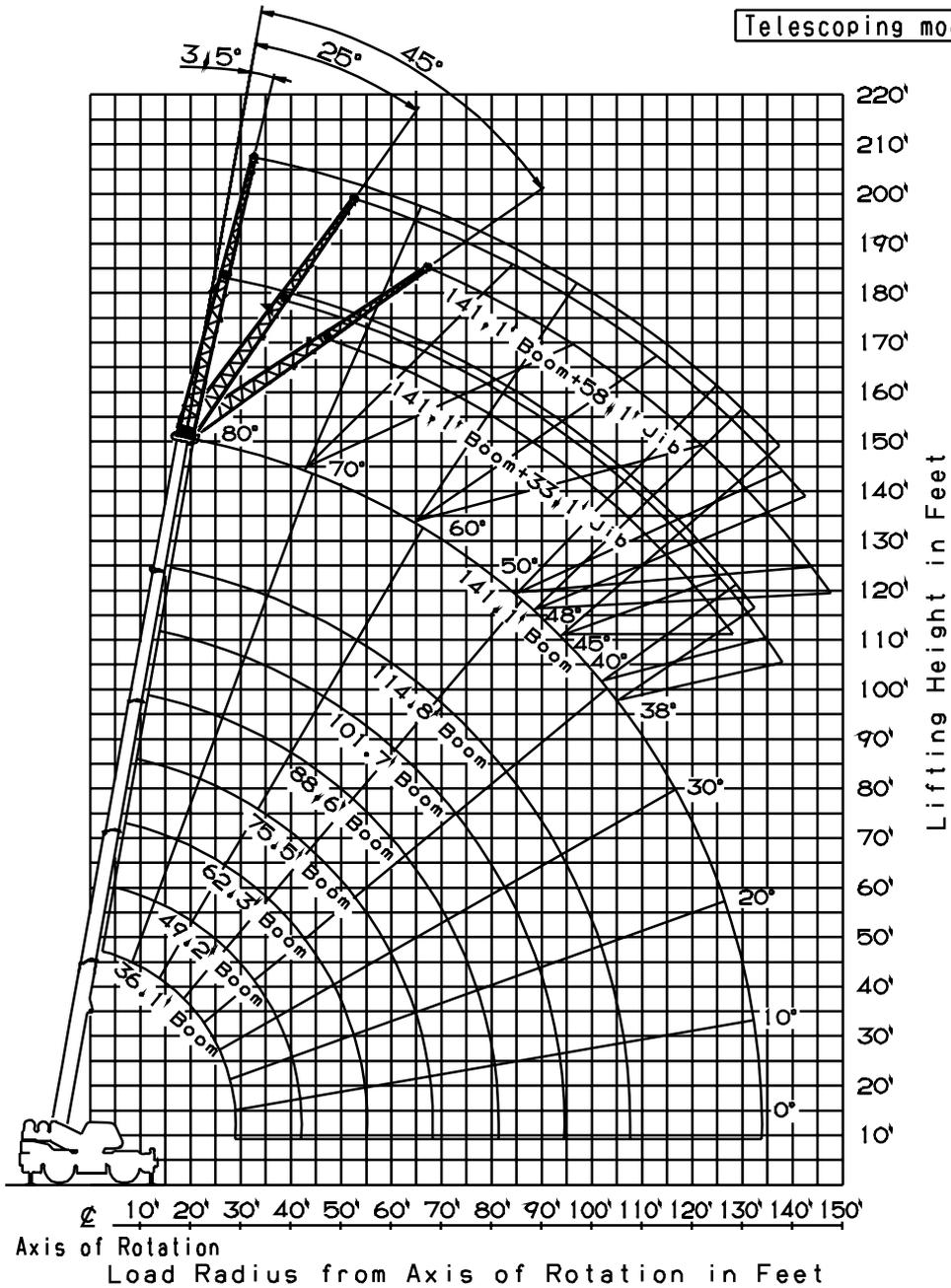
Wire rope layer	Main and auxiliary drum grooved lagging			
	3/4" (19mm) wire rope			
	Rope per layer		Total wire rope	
	Feet	Meters	Feet	Meters
1	123.3	37.6	123.3	37.6
2	133.5	40.7	256.8	78.3
3	143.3	43.7	400.2	122.0
4	153.5	46.8	553.8	168.8
5	163.3	49.8	717.1	218.6
6	173.8	53.0	891.0	271.6
7	183.3	55.9	1074.4	327.5

DRUM DIMENSIONS

	Inch	mm
Root diameter	15-3/4"	400
Length	23/9/16"	599
Flange diameter	27-3/8"	695

GR-750XL WORKING RANGE CHART

Telescoping mode I



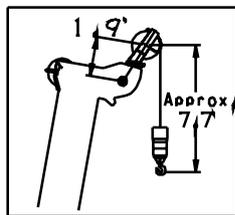
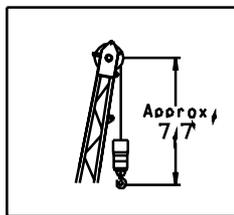
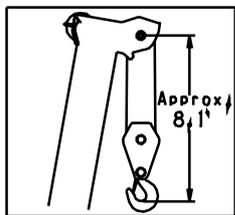
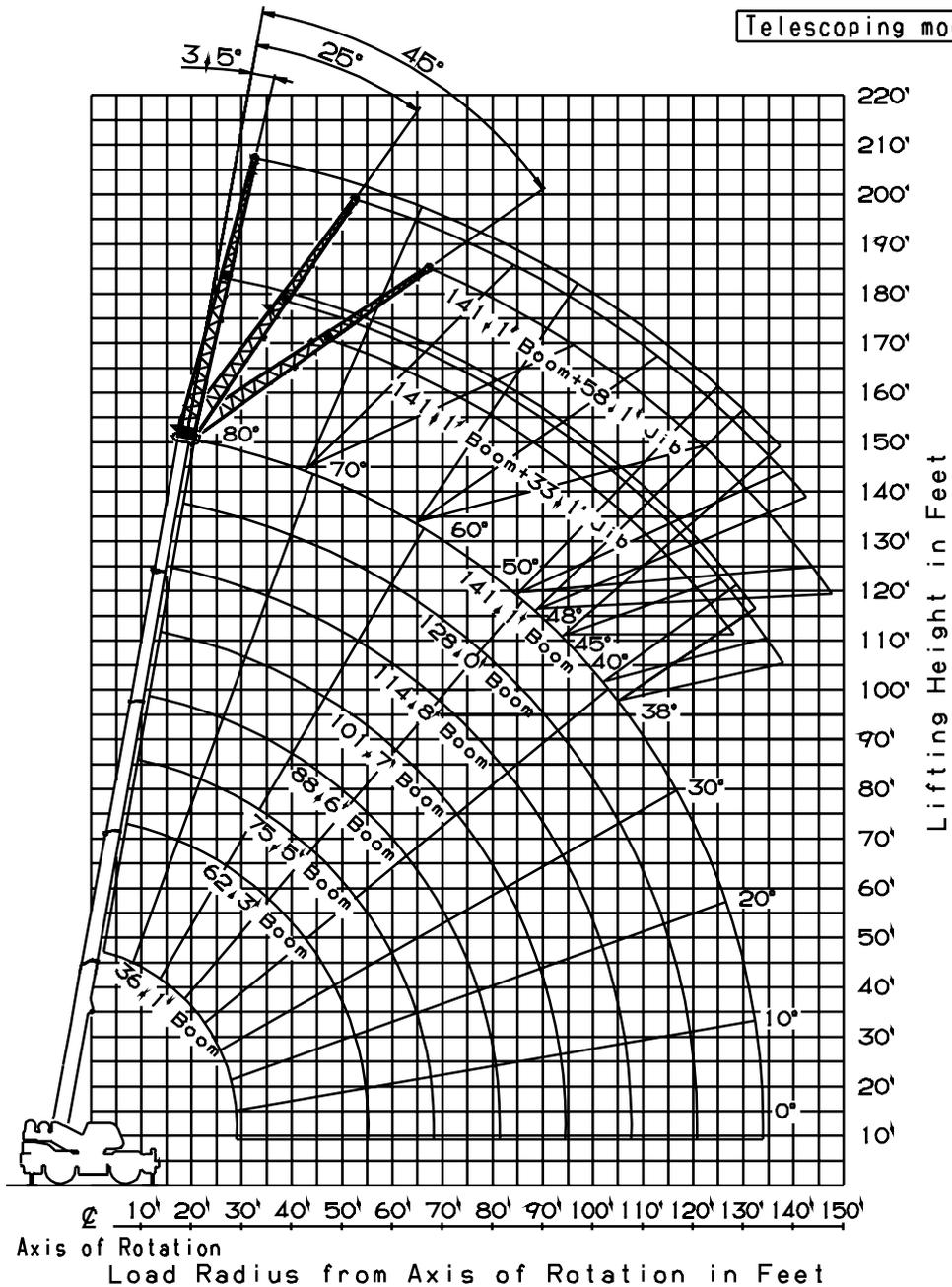
NOTE: 1, Boom and jib geometry shown are for unloaded condition and machine standing level on firm supporting surface, Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook,

Boom Length in Feet

- 36, 1' (11m)
- 49, 2' (15m)
- 62, 3' (19m)
- 75, 5' (23m)
- 88, 6' (27m)
- 101, 7' (31m)
- 114, 8' (35m)
- 141, 1' (43m)

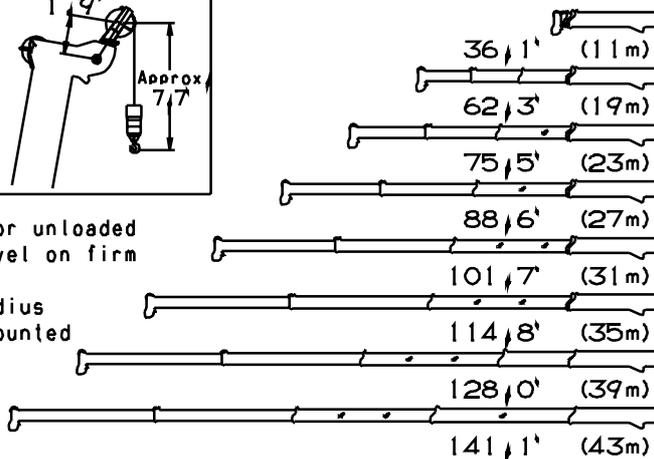
GR-750XL WORKING RANGE CHART

Telescoping mode II



NOTE: Boom and jib geometry shown are for unloaded condition and machine standing level on firm supporting surface. Boom deflection and subsequent radius and boom angle change must be accounted for when applying load to hook.

Boom Length in Feet



GR-750XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS FULLY EXTENDED 23' 11-1/2"(7.3m) SPREAD																
360° ROTATION																
A B	36.1'		49.2'		62.3'(19m)		75.5'(23m)		88.6'(27m)		101.7'(31m)		114.8'(35m)		128.0'	141.1'
	C	(11m)	C	(15m)	C	C	C	C	C	C	C	C	C	C	(39m)	(43m)
8	150000		89900													
10	132300		89900		70500	44100										
12	117100		89900		70500	44100	44100	44100								
15	98000		89900		70500	44100	44100	44100	44100	37500						
20	75600		75100		69600	44100	44100	44100	42400	37100	36600	31700				
25	60000		59400		59100	44100	44100	43300	39100	32600	32400	28100	28500	24600	22000	
30			45900		45000	44100	44100	37200	38800	29500	31500	25200	26300	22200	22000	19800
35			33900		32900	38300	34600	32400	34700	25900	30600	23500	25600	20100	20300	18500
40			26100		25300	30200	26800	28500	27700	23100	27700	20900	24900	18700	18700	17200
45					19900	24600	21300	24800	22200	20900	22800	18800	22700	17400	17700	16900
50					15900	20500	17300	20700	18100	19000	18700	17100	19100	15600	17100	16500
55					11100	14000	14200	17500	15000	17400	15500	15500	16000	14000	15600	16100
60							11700	15000	12500	15200	13100	14000	13400	12700	14200	13900
65							9700	13000	10500	13200	11000	12800	11400	11600	12500	11900
70									8900	11500	9400	11600	9800	10600	10900	10300
75									7500	10100	8000	10300	8400	9700	9500	8800
80									6300	9000	6800	9100	7200	9000	8300	7700
85											5800	8000	6200	8100	7200	6600
90											5000	7200	5300	7200	6300	5700
95												4500	6400	5600	4900	4900
100												3900	5800	4900	4300	4300
105												3300	5200	4300	3700	3700
110														3800	3100	3100
115														3300	2600	2600
120														2900	2200	2200
125															1800	1800
130																1500
135																
140																
D	0°															
Telescoping conditions (%)																
Telescoping mode	I, II	I	I	II	I	II	I	II	I	II	I	II	I	II	I, II	I, II
2nd boom	0	50	100	0	100	0	100	0	100	0	100	0	100	0	50	100
3rd boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100	100	100
4th boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100	100	100
Top boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100	100	100

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS FULLY EXTENDED																												
23' 11-1/2"(7.3m) SPREAD 360° ROTATION																												
A C	36.1'		49.2'		62.3'		62.3'		75.5'		75.5'		88.6'		88.6'		101.7'		101.7'		114.8'		114.8'		128.0'		141.1'	
	B	(11m)	B	(15m)	B	(19m)	B	(19m)	B	(23m)	B	(23m)	B	(27m)	B	(27m)	B	(31m)	B	(31m)	B	(35m)	B	(35m)	B	(39m)	B	(43m)
0°	[Red shaded cells]																											
Telescoping mode	I, II	I	I	II	I	II	I	II	I	II	I	II	I	II	I, II	I, II												

- A : Boom length in feet
- B : Load radius in feet
- C : Loaded boom angle (deg.)
- D : Minimum boom angle (deg.) for indicated length (no load)

GR-750XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS FULLY EXTENDED 23' 11-1/2"(7.3m) SPREAD						
360° ROTATION						
C	141.1' (43.0m) Boom + 33.2' (10.1m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W
80°		9,300		8,800		7,500
79°		9,300		8,500		7,300
78°		9,300		8,200		7,100
77°		9,300		8,000		6,900
76°		9,300		7,800		6,700
75°		9,300		7,500		6,600
73°		9,100		7,200		6,300
70°		8,200		6,700		5,900
68°		7,800		6,400		5,700
65°		7,200		6,000		5,400
63°		6,700		5,800		5,200
60°		5,800		5,200		4,900
58°		5,100		4,600		4,300
55°		4,100		3,800		3,500
53°		3,600		3,300		3,100
50°		2,900		2,700		2,600
48°		2,500		2,300		2,200
45°		2,000		1,900		1,800
43°		1,700		1,600		
40°		1,300		1,200		
38°		1,100		1,000		

C	141.1' (43.0m) Boom + 58.1' (17.7m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W
80°		5,700		5,200		3,900
79°		5,700		5,000		3,800
78°		5,700		4,900		3,700
77°		5,700		4,700		3,700
76°		5,700		4,600		3,600
75°		5,700		4,400		3,500
73°		5,700		4,100		3,400
70°		5,600		3,800		3,200
68°		5,300		3,600		3,000
65°		4,700		3,300		2,900
63°		4,400		3,200		2,800
60°		3,900		3,000		2,600
58°		3,500		2,800		2,600
55°		2,800		2,300		2,100
53°		2,300		1,900		1,700
50°		1,800		1,400		1,300
48°		1,400		1,200		1,100
45°		1,000				

ON OUTRIGGERS FULLY EXTENDED 23' 11-1/2"(7.3m) SPREAD						
360° ROTATION						
C	128.0'(39.0m) Boom(telescoping mode II) + 33.2' (10.1m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W
80°		10,100		9,500		7,700
79°		10,100		9,200		7,500
78°		10,100		8,900		7,300
77°		10,100		8,600		7,200
76°		10,100		8,400		7,000
75°		10,100		8,200		6,800
73°		10,000		7,700		6,500
70°		9,100		7,100		6,100
68°		8,600		6,800		5,800
65°		7,900		6,300		5,500
63°		7,600		6,000		5,300
60°		6,700		5,600		5,000
58°		6,200		5,400		4,900
55°		5,500		4,900		4,700
53°		5,100		4,700		4,500
50°		4,700		4,300		4,100
48°		4,300		3,900		3,800
45°		3,700		3,400		3,300
43°		3,300		3,100		
40°		2,900		2,700		
38°		2,600		2,400		
35°		2,300		2,100		
33°		2,100		1,900		
30°		1,800		1,700		
25°		1,500		1,400		
20°		1,200				
15°		1,000				

C	128.0'(39.0m) Boom(telescoping mode II) + 58.1' (17.7m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W
80°		6,200		5,500		4,100
79°		6,200		5,300		3,900
78°		6,200		5,100		3,900
77°		6,200		4,900		3,800
76°		6,200		4,800		3,700
75°		6,200		4,600		3,600
73°		6,200		4,300		3,400
70°		6,000		3,900		3,200
68°		5,500		3,700		3,100
65°		4,900		3,400		2,900
63°		4,600		3,300		2,800
60°		4,100		3,000		2,700
58°		3,900		2,900		2,600
55°		3,500		2,800		2,500
53°		3,400		2,600		2,400
50°		3,100		2,500		2,400
48°		2,800		2,400		2,300
45°		2,400		2,000		1,900
43°		2,100		1,800		
40°		1,700		1,500		
38°		1,500		1,300		
35°		1,200		1,100		
33°		1,100		900		

ON OUTRIGGERS FULLY EXTENDED 23' 11-1/2"(7.3m) SPREAD						
360° ROTATION						
C	114.8'(35m) Boom(telescoping mode I) + 33.2' (10.1m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W
80°		12,300		11,300		8,700
79°		12,300		10,400		8,300
78°		12,300		10,400		8,300
77°		12,300		10,400		8,200
76°		12,300		10,100		8,000
75°		12,300		9,900		7,800
73°		12,300		9,300		7,600
70°		11,400		8,600		7,200
68°		10,800		8,200		6,900
65°		10,100		7,700		6,600
63°		9,600		7,300		6,400
60°		9,000		6,900		6,200
58°		8,300		6,700		6,000
55°		7,000		6,200		5,800
53°		6,300		5,600		5,300
50°		5,300		4,800		4,600
48°		4,800		4,300		4,200
45°		4,100		3,700		3,600
43°		3,700		3,400		
40°		3,200		3,000		
38°		2,900		2,700		
35°		2,500		2,300		
33°		2,300		2,100		
30°		2,000		1,900		
25°		1,600		1,500		
20°		1,300				
15°		1,100				

C	114.8'(35m) Boom(telescoping mode I) + 58.1' (17.7m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W
80°		7,100		6,200		4,500
79°		7,100		5,600		4,200
78°		7,100		5,600		4,200
77°		7,100		5,600		4,200
76°		7,100		5,500		4,200
75°		7,100		5,400		4,100
73°		7,100		5,000		4,000
70°		7,100		4,700		3,800
68°		6,800		4,500		3,600
65°		6,100		4,200		3,500
63°		5,700		4,000		3,400
60°		5,200		3,800		3,300
58°		4,900		3,600		3,200
55°		4,500		3,400		3,100
53°		4,300		3,400		3,100
50°		3,600		3,100		2,800
48°		3,200		2,700		2,500
45°		2,700		2,300		2,100
43°		2,300		2,000		
40°		1,900		1,700		
38°		1,700		1,500		
35°		1,400		1,200		
33°		1,200		1,100		
30°		1,000				

C :Loaded boom angle (deg)
R :Load radius in feet
W :Rated lifting capacity in pounds

GR-750XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS MID EXTENDED 21' 11-3/4"(6.7m) SPREAD																
360° ROTATION																
A B	36.1'		49.2'		62.3'(19m)		75.5'(23m)		88.6'(27m)		101.7'(31m)		114.8'(35m)		128.0'	141.1'
	C	(11m)	C	(15m)	C	(19m)	C	(23m)	C	(27m)	C	(31m)	C	(35m)	C (39m)	C (43m)
8	150000		89900													
10	130000		89900		70500	44100										
12	113600		89900		70500	44100	44100	44100								
15	94800		89900		70500	44100	44100	44100	44100	37500						
20	72700		72200		69600	44100	44100	44100	42400	37100	36600	31700				
25	54300		52700		51700	44100	44100	43300	39100	32600	32400	28100	28500	24600	22000	
30			36200		35300	40900	37100	37200	38100	29500	30600	25200	26300	22200	22000	19800
35			26500		25700	30800	27300	31300	28200	25900	28900	23500	24600	20100	20300	18500
40			20100		19500	24300	20900	24800	21800	23100	22500	20900	23000	18700	18700	17200
45					15000	19600	16400	20100	17300	20400	17900	18800	18300	17400	17500	16400
50					11700	16100	13100	16600	13900	16900	14500	17100	14900	15600	16300	15500
55					9100	13400	10500	14000	11400	14300	11900	14400	12300	14000	13600	12900
60							8400	11800	9300	12100	9800	12300	10200	12400	11500	10800
65							6700	10100	7600	10400	8100	10600	8500	10700	9800	9000
70									6200	8900	6700	9100	7100	9200	8400	7600
75									5000	7700	5600	7900	5900	8000	7200	6400
80									4000	6700	4500	6900	4900	7000	6200	5400
85											3700	6000	4100	6100	5300	4500
90											2900	5200	3300	5300	4500	3800
95													2600	4600	3800	3100
100													2000	4000	3200	2500
105													1500	3500	2700	2000
110															2200	1500
115															1800	
120															1500	
125																
130																
135																
140																
D	0°															
Telescoping conditions (%)																
Telescoping mode	I, II	I	I	II	I	II	I	II	I	II	I	II	I	II	I, II	
2nd boom	0	50	100	0	100	0	100	0	100	0	100	0	100	0	50	100
3rd boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100	100	100
4th boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100	100	100
Top boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100	100	100

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS MID EXTENDED																												
21' 11-3/4"(6.7m) SPREAD 360° ROTATION																												
A C	36.1'		49.2'		62.3'		62.3'		75.5'		75.5'		88.6'		88.6'		101.7'		101.7'		114.8'		114.8'		128.0'		141.1'	
	B	(11m)	B	(15m)	B	(19m)	B	(19m)	B	(23m)	B	(23m)	B	(27m)	B	(27m)	B	(31m)	B	(31m)	B	(35m)	B	(35m)	B	(39m)	B	(43m)
0°	[Redacted]																											
Telescoping mode	I, II	I	I	II	I	II	I	II	I	II	I	II	I	II	I, II													

- A : Boom length in feet
- B : Load radius in feet
- C : Loaded boom angle (deg.)
- D : Minimum boom angle (deg.) for indicated length (no load)

GR-750XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS MID EXTENDED 21' 11-3/4"(6.7m) SPREAD							360° ROTATION						
C	141.1' (43.0m) Boom + 33.2' (10.1m) Jib						C	141.1' (43.0m) Boom + 58.1' (17.7m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt			3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W		R	W	R	W	R	W
80°		9,300		8,800		7,500	80°		5,700		5,200		3,900
79°		9,300		8,500		7,300	79°		5,700		5,000		3,800
78°		9,300		8,200		7,100	78°		5,700		4,900		3,700
77°		9,300		8,000		6,900	77°		5,700		4,700		3,700
76°		9,300		7,800		6,700	76°		5,700		4,600		3,600
75°		9,300		7,500		6,600	75°		5,700		4,400		3,500
73°		9,100		7,200		6,300	73°		5,700		4,100		3,400
70°		8,200		6,700		5,900	70°		5,600		3,800		3,200
68°		7,800		6,400		5,700	68°		5,300		3,600		3,000
65°		6,100		5,200		4,800	65°		4,100		3,200		2,800
63°		5,200		4,500		4,100	63°		3,400		2,600		2,300
60°		4,000		3,500		3,200	60°		2,500		1,900		1,700
58°		3,300		2,900		2,700	58°		2,000		1,500		1,300
55°		2,500		2,200		2,000	55°		1,300		1,000		900
53°		2,000		1,800		1,600	53°		900				
50°		1,400		1,200		1,100							
48°		1,100		900		900							

ON OUTRIGGERS MID EXTENDED 21' 11-3/4"(6.7m) SPREAD							360° ROTATION						
C	128.0'(39.0m) Boom(telescoping mode II) + 33.2' (10.1m) Jib						C	128.0'(39.0m) Boom(telescoping mode II) + 58.1' (17.7m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt			3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W		R	W	R	W	R	W
80°		10,100		9,500		7,700	80°		6,200		5,500		4,100
79°		10,100		9,200		7,500	79°		6,200		5,300		3,900
78°		10,100		8,900		7,300	78°		6,200		5,100		3,900
77°		10,100		8,600		7,200	77°		6,200		4,900		3,800
76°		10,100		8,400		7,000	76°		6,200		4,800		3,700
75°		10,100		8,200		6,800	75°		6,200		4,600		3,600
73°		10,000		7,700		6,500	73°		6,200		4,300		3,400
70°		9,100		7,100		6,100	70°		6,000		3,900		3,200
68°		8,600		6,800		5,800	68°		5,500		3,700		3,100
65°		7,900		6,300		5,500	65°		4,900		3,400		2,900
63°		7,400		6,000		5,300	63°		4,600		3,300		2,800
60°		6,000		5,200		4,900	60°		4,100		3,000		2,700
58°		5,200		4,600		4,300	58°		3,500		2,800		2,500
55°		4,300		3,800		3,600	55°		2,800		2,200		2,000
53°		3,700		3,300		3,200	53°		2,300		1,900		1,700
50°		3,000		2,700		2,600	50°		1,800		1,400		1,300
48°		2,600		2,400		2,300	48°		1,500		1,200		1,100
45°		2,100		1,900		1,800	45°		1,000		900		
43°		1,800		1,700			43°		900				
40°		1,400		1,300									
38°		1,200		1,100									
35°		900		900									

ON OUTRIGGERS MID EXTENDED 21' 11-3/4"(6.7m) SPREAD							360° ROTATION						
C	114.8'(35m) Boom(telescoping mode I) + 33.2' (10.1m) Jib						C	114.8'(35m) Boom(telescoping mode I) + 58.1' (17.7m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt			3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W		R	W	R	W	R	W
80°		12,300		11,300		8,700	80°		7,100		6,200		4,500
79°		12,300		10,400		8,300	79°		7,100		5,600		4,200
78°		12,300		10,400		8,300	78°		7,100		5,600		4,200
77°		12,300		10,400		8,200	77°		7,100		5,600		4,200
76°		12,300		10,100		8,000	76°		7,100		5,500		4,200
75°		12,300		9,900		7,800	75°		7,100		5,400		4,100
73°		12,300		9,300		7,600	73°		7,100		5,000		4,000
70°		11,400		8,600		7,200	70°		7,100		4,700		3,800
68°		10,800		8,200		6,900	68°		6,800		4,500		3,600
65°		9,800		7,700		6,600	65°		6,100		4,200		3,500
63°		8,500		7,100		6,400	63°		5,700		4,000		3,400
60°		6,800		5,900		5,400	60°		4,700		3,700		3,300
58°		6,000		5,200		4,800	58°		4,000		3,200		2,800
55°		4,900		4,200		4,000	55°		3,200		2,500		2,300
53°		4,200		3,700		3,500	53°		2,700		2,200		1,900
50°		3,400		3,000		2,900	50°		2,100		1,700		1,500
48°		3,000		2,600		2,500	48°		1,700		1,400		1,200
45°		2,400		2,100		2,000	45°		1,200		1,000		900
43°		2,000		1,800			43°		900				
40°		1,600		1,400									
38°		1,300		1,200									
35°		1,000		1,000									

C :Loaded boom angle (deg.)
R :Load radius in feet
W :Rated lifting capacity in pounds

GR-750XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS MID EXTENDED 18' 1/2"(5.5m) SPREAD																
360° ROTATION																
A B	36.1'		49.2'		62.3'(19m)		75.5'(23m)		88.6'(27m)		101.7'(31m)		114.8'(35m)		128.0'	141.1'
	C	(11m)	C	(15m)	C	C	C	C	C	C	C	C	C	C	(39m)	(43m)
8	150000		89900													
10	121200		89900		70500	44100										
12	105100		89900		70500	44100	44100	44100								
15	87000		86500		70500	44100	44100	44100	44100	37500						
20	61000		60000		59200	44100	44100	44100	42400	37100	36600	31700				
25	38700		37800		37300	42900	39100	43300	39100	32600	32400	28100	28500	24600	22000	
30			26200		25700	30800	27500	31500	28500	29500	29200	25200	26300	22200	22000	19800
35			19000		18500	23300	20200	24000	21200	24400	21900	23500	22300	20100	20300	18500
40			14200		13700	18200	15300	18900	16300	19300	17000	19600	17400	18700	18700	17200
45					10200	14600	11700	15200	12700	15600	13300	15900	13800	16100	15200	14200
50					7600	11800	9100	12400	10000	12800	10600	13100	11100	13300	12400	11700
55					5600	9700	7000	10300	7800	10600	8500	10900	9000	11100	10300	9600
60							5300	8600	6200	8900	6800	9200	7200	9300	8500	7800
65							3900	7200	4800	7500	5400	7700	5800	7900	7100	6400
70									3600	6300	4200	6500	4700	6700	5900	5200
75									2700	5300	3200	5500	3700	5700	4900	4200
80									1900	4500	2400	4700	2800	4800	4000	3400
85											1700	3900	2100	4100	3300	2600
90												3300	1500	3400	2600	2000
95														2900	2100	1400
100														2400	1600	
105														2000		
110																
115																
120																
125																
130																
135																
140																
D	0°															

Telescoping conditions (%)

Telescoping mode	I, II	I	I	II	II	I, II								
2nd boom	0	50	100	0	100	0	100	0	100	0	100	0	50	100
3rd boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100
4th boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100
Top boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS MID EXTENDED

18' 1/2"(5.5m) SPREAD 360° ROTATION																
A C	36.1'		49.2'		62.3'		75.5'		88.6'		101.7'		114.8'		128.0'	141.1'
	B	(11m)	B	(15m)	B	(19m)	B	(23m)	B	(27m)	B	(31m)	B	(35m)	B	(43m)
0°																
Telescoping mode	I, II	I	I	II	I	II	I	II	I	II	I	II	I	II	II	I, II

- A : Boom length in feet
- B : Load radius in feet
- C : Loaded boom angle (deg.)
- D : Minimum boom angle (deg.) for indicated length (no load)

GR-750XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS MID EXTENDED 18' 1/2"(5.5m) SPREAD 360° ROTATION												
C	141.1' (43.0m) Boom + 33.2' (10.1m) Jib						141.1' (43.0m) Boom + 58.1' (17.7m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt		3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W	R	W	R	W	R	W
80 °		9,300		8,800		7,500		5,700		5,200		3,900
79 °		9,300		8,500		7,300		5,700		5,000		3,800
78 °		9,300		8,200		7,100		5,700		4,900		3,700
77 °		9,300		8,000		6,900		5,700		4,700		3,700
76 °		9,300		7,800		6,700		5,700		4,600		3,600
75 °		9,300		7,500		6,600		5,700		4,400		3,500
73 °		8,300		6,900		6,200		5,400		4,100		3,400
70 °		6,200		5,300		4,800		3,900		3,000		2,700
68 °		5,100		4,400		4,100		3,100		2,400		2,200
65 °		3,800		3,300		3,000		2,100		1,600		1,500
63 °		3,000		2,700		2,400		1,500		1,100		1,100
60 °		2,100		1,900		1,700						
58 °		1,600		1,400		1,300						
55 °		900										

ON OUTRIGGERS MID EXTENDED 18' 1/2"(5.5m) SPREAD 360° ROTATION												
C	128.0'(39.0m) Boom(telescoping mode II) + 33.2' (10.1m) Jib						128.0'(39.0m) Boom(telescoping mode II) + 58.1' (17.7m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt		3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W	R	W	R	W	R	W
80 °		10,100		9,500		7,700		6,200		5,500		4,100
79 °		10,100		9,200		7,500		6,200		5,300		3,900
78 °		10,100		8,900		7,300		6,200		5,100		3,900
77 °		10,100		8,600		7,200		6,200		4,900		3,800
76 °		10,100		8,400		7,000		6,200		4,800		3,700
75 °		10,100		8,200		6,800		6,200		4,600		3,600
73 °		10,000		7,700		6,500		6,200		4,300		3,400
70 °		9,100		7,100		6,100		6,000		3,900		3,200
68 °		7,700		6,400		5,800		5,100		3,700		3,100
65 °		6,000		5,100		4,700		3,900		3,100		2,700
63 °		5,100		4,400		4,000		3,300		2,600		2,200
60 °		4,000		3,400		3,200		2,400		1,900		1,700
58 °		3,300		2,900		2,700		2,000		1,500		1,300
55 °		2,500		2,200		2,100		1,300		1,000		
53 °		2,100		1,800		1,700						
50 °		1,500		1,300		1,200						
48 °		1,200		1,000		900						

ON OUTRIGGERS MID EXTENDED 18' 1/2"(5.5m) SPREAD 360° ROTATION												
C	114.8'(35m) Boom(telescoping mode I) + 33.2' (10.1m) Jib						114.8'(35m) Boom(telescoping mode I) + 58.1' (17.7m) Jib					
	3.5° Tilt		25° Tilt		45° Tilt		3.5° Tilt		25° Tilt		45° Tilt	
	R	W	R	W	R	W	R	W	R	W	R	W
80 °		12,300		11,300		8,700		7,100		6,200		4,500
79 °		12,300		10,400		8,300		7,100		5,600		4,200
78 °		12,300		10,400		8,300		7,100		5,600		4,200
77 °		12,300		10,400		8,200		7,100		5,600		4,200
76 °		12,300		10,100		8,000		7,100		5,500		4,200
75 °		12,300		9,900		7,800		7,100		5,400		4,100
73 °		12,300		9,300		7,600		7,100		5,000		4,000
70 °		10,700		8,500		7,200		7,100		4,700		3,800
68 °		9,000		7,300		6,500		6,000		4,500		3,600
65 °		6,900		5,800		5,200		4,700		3,500		3,000
63 °		5,900		4,900		4,500		3,900		2,900		2,500
60 °		4,500		3,900		3,500		2,900		2,200		1,900
58 °		3,800		3,300		3,000		2,300		1,800		1,500
55 °		2,900		2,500		2,300		1,600		1,200		1,000
53 °		2,400		2,100		1,900						
50 °		1,700		1,500		1,400						
48 °		1,300		1,100		1,100						

C :Loaded boom angle (deg.)
R :Load radius in feet
W :Rated lifting capacity in pounds

GR-750XL RATED LIFTING CAPACITIES (IN POUNDS)

ON OUTRIGGERS MIN EXTENDED 8' 10-1/4"(2.8m) SPREAD																		
360° ROTATION																		
A B	36.1'		49.2'		62.3'(19m)		75.5'(23m)		88.6'(27m)		101.7'(31m)		114.8'(35m)		128.0'	141.1'		
	C	(11m)	C	(15m)	C		C		C		C		C		C	(39m)	C	(43m)
8	128500		89900															
10	79000		77300		70500		44100											
12	55700		54200		53200		44100		44100									
15	37100		36000		35200		40700		36900		41300		38000		37500			
20	21800		21100		20400		25200		21900		25700		22800		26100		23500	26300
25	14000		13300		12900		17300		14200		17800		15100		18100		15700	18300
30			8600		8100		12300		9600		12900		10400		13200		10900	13400
35			5400		4900		9000		6300		9600		7200		9900		7700	10100
40			3100		2600		6600		4000		7200		4900		7600		5400	7800
45							4800		2200		5400		3100		5700		3700	6000
50							3400				3900		1700		4300		2300	4600
55							2300				2800				3200			3400
60											1900				2200			2500
65											1500				1700			1900
70																		
75																		
80																		
85																		
90																		
95																		
100																		
105																		
110																		
115																		
120																		
125																		
130																		
135																		
140																		
D	0°				0°													
Telescoping conditions (%)																		
Telescoping mode	I, II	I	I	II	I	II	I	II	I	II	I	II	I	II	II	II	I, II	
2nd boom	0	50	100	0	100	0	100	0	100	0	100	0	100	0	50	100	100	
3rd boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100	100	100	100	
4th boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100	100	100	100	
Top boom	0	0	0	33	16	50	33	66	50	83	66	100	100	100	100	100	100	

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON OUTRIGGERS MIN EXTENDED																												
8' 10-1/4"(2.8m) SPREAD 360° ROTATION																												
A C	36.1'		49.2'		62.3'		62.3'		75.5'		75.5'		88.6'		88.6'		101.7'		101.7'		114.8'		114.8'		128.0'		141.1'	
	B	(11m)	B	(15m)	B	(19m)	B	(19m)	B	(23m)	B	(23m)	B	(27m)	B	(27m)	B	(31m)	B	(31m)	B	(35m)	B	(35m)	B	(39m)	B	(43m)
0°	[Redacted]																											
Telescoping mode	I, II	I	I	II	I	II	II	II	II	II	II	II	II	II	I, II													

- A : Boom length in feet
- B : Load radius in feet
- C : Loaded boom angle (deg.)
- D : Minimum boom angle (deg.) for indicated length (no load)

WARNING AND OPERATING INSTRUCTIONS FOR LIFTING CAPACITIES

GENERAL

1. RATED LIFTING CAPACITIES apply only to the machine as originally manufactured and normally equipped by TADANO LTD. Modifications to the machine or use of optional equipment other than that specified can result in a reduction of capacity.
2. Construction equipment can be hazardous if improperly operated or maintained. Operation and maintenance of this machine must be in compliance with information in the operation, safety and maintenance manual supplied with machine. If these manuals are missing, order replacements through the distributor.
3. The operator and other personnel associated with this machine shall fully acquaint themselves with the latest American National Standards Institute (ANSI) safety standards for cranes.

SET UP

1. Rated lifting capacities on the chart are the maximum allowable crane capacities and are based on the machine standing level on firm supporting surface under ideal job conditions. Depending on the nature of the supporting surface, it may be necessary to have structural supports under the outrigger floats or tires to spread the loads to a larger bearing surface.
2. For outrigger operation, outriggers shall be properly extended with tires free of supporting surface before operating crane.

OPERATION

1. Rated lifting capacities have been tested to and meet minimum requirements of SAE J1063-Cantilevered Boom Crane Structures Method of Test.
2. Rated lifting capacities do not exceed 85 % of the tipping load on outriggers fully extended as determined by SAE J765-Crane Stability Test Code.
Rated lifting capacities for partially extended outriggers are determined from the formula, Rated Lifting Capacities = (Tipping Load - 0.1 x Tip Reaction)/1.25.
3. Rated lifting capacities above bold lines in the chart are based on crane strength and those below, on its stability. They are based on actual load radius increased by boom deflection.
4. The weight of handling device such as hook blocks, slings, etc., must be considered as part of the load and must be deducted from the lifting capacities.
5. Rated lifting capacities are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, inflation of tires, operating speeds, side loads, etc. Side pull on boom or jib is extremely dangerous.
6. Rated lifting capacities do not account for wind on lifted load or boom. We recommend against working under the condition that the load is out of control due to a strong wind. During boom lift, consider that the rated lifting capacity is reduced by 50% when the wind speed is 20mph (9m/s) to 27mph (12m/s) ; reduced by 70% when the wind speed is 27mph (12m/s) to 31mph (14m/s). If the wind speed is 31mph (14m/s) or over, stop operation. During jib lift, stop operation if the wind speed is 20mph (9m/s).
7. Rated lifting capacities at load radius shall not be exceeded. Do not tip the crane to determine allowable loads.
8. Do not operate at boom lengths, radii, or boom angle, where no capacities are shown. Crane may overturn without any load on the hook.

9. When boom length is between values listed, refer to the rated lifting capacities of the next longer and next shorter booms for the same radius. The lesser of the two rated lifting capacities shall be used.
10. When making lifts at a load radius not shown, use the next longer radius to determine allowable capacity.
11. Load per line should not exceed 12,300 lbs. (5,600kg) for main winch and auxiliary winch.
12. Check the actual number of parts of line with LOAD MOMENT INDICATOR (AML-C) before operation. Maximum lifting capacity is restricted by the number of parts of line of LOAD MOMENT INDICATOR (AML-C). Limited capacity is as determined from the formula, Single line pull for main winch (12,300 lbs.) x number of parts of line.
13. The boom angle before loading should be greater to account for deflection. For rated lifting capacities, the loaded boom angle and the load radius is for reference only.
14. The 36.1' (11.0m) boom length capacities are based on boom fully retracted. If not fully retracted [less than 49' (15.0m) boom length], use the rated lifting capacities for the 49' (15.0m) boom length.
15. Extension or retraction of the boom with loads may be attempted within the limits of the RATED LIFTING CAPACITIES. The ability to telescope loads is limited by hydraulic pressure, boom angle, boom length, crane maintenance, etc.
16. For lifting capacity of single top, reduce the rated lifting capacities of relevant boom according to a weight reductions for auxiliary load handling equipment. Capacities of single top shall not exceed 12,300 lbs. (5,600kg) including main hook.
17. When base jib or top jib or both jib removing, jib state switch select removed.
18. When erecting and stowing jib, be sure to retain it by hand or by other means to prevent its free movement.
19. Use "ANTI-TWO BLOCK" disable switch when erecting and stowing jib and when stowing hook block. While the switch is pushed, the hoist does not stop, even when overwind condition occurs.
20. For boom length with 33.1' (10.1m) jib, rated lifting capacities are determined by loaded boom angle only in the column headed "141.1' (43.0m) boom + 33.1' (10.1m) jib".
For boom length with 58.1' (17.7 m) jib, rated lifting capacities are determined by loaded boom angle only in the column headed "141.1' (43.0m) boom + 58.1' (17.7m) jib".
For angles not shown, use the next lower loaded boom angle to determine allowable capacity.
21. When lifting a load by using jib (aux. winch) and boom (main winch) simultaneously, do the following:
 - Enter the operation status as jib operation, not as boom operation.
 - Before starting operation, make sure that mass of load is within rated lifting capacity for jib.

DEFINITIONS

1. Load Radius: Horizontal distance from a projection of the axis of rotation to supporting surface before loading to the center of the vertical hoist line or tackle with load applied.
2. Loaded Boom Angle: The angle between the boom base section and the horizontal, after lifting the rated lifting capacity at the load radius.
3. Working Area: Area measured in a circular arc about the centerline of rotation.
4. Freely Suspended Load: Load hanging free with no direct external force applied except by the hoist line.
5. Side Load: Horizontal side force applied to the lifted load either on the ground or in the air.

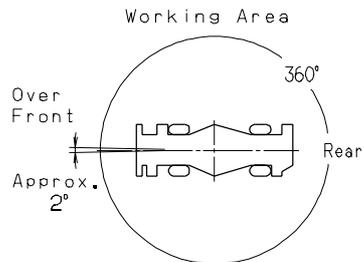
GR-750XL RATED LIFTING CAPACITIES (IN POUNDS)

ON RUBBER STATIONARY												
A	Over Front						360° Rotation					
	36.1'		62.3'		88.6'		36.1'		62.3'		88.6'	
B	C	(11m)	C	(19m)	C	(27m)	C	(11m)	C	(19m)	C	(27m)
10		65,000						41,000				
12		60,000						29,000				
15		50,000			40,000			20,000		22,000		
20		34,000			35,000			12,000		14,000		
25		23,000			25,000	25,000		7,500		9,500		10,000
30					18,000	19,000				6,500		7,000
35					14,000	15,000				4,500		5,000
40					11,000	12,000				3,000		3,500
45					8,000	9,500						2,300
50					6,000	7,500						
55					4,500	6,000						
60						5,000						
65						4,000						
70						3,000						
D												
Telescoping conditions (%)												
Telescoping mode	I, II		II		II		I, II		II		II	
2nd boom		0		0		0		0		0		0
3rd boom		0		33		66		0		33		66
4th boom		0		33		66		0		33		66
Top boom		0		33		66		0		33		66

LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON RUBBER STATIONARY											
A	Over Front						360° Rotation				
	36.1'		62.3'		88.6'		36.1'		88.6'		
C	B	(11m)	B	(19m)			B	(11m)			
0°											

ON RUBBER CREEP										
A	Over Front									
	36.1'		62.3'		88.6'					
B	C	(11m)	C	(19m)	C	(27m)				
10		51,000								
12		44,000								
15		36,000			36,000					
20		27,000			28,000					
25		21,000			22,000	22,000				
30					17,000	18,000				
35					13,000	14,000				
40					10,000	11,000				
45					7,500	9,000				
50					5,500	7,000				
55					4,000	5,500				
60						4,500				
65						3,500				
70						2,500				
D										
Telescoping conditions (%)										
Telescoping mode	I, II		II		II					
2nd boom		0		0		0				
3rd boom		0		33		66				
4th boom		0		33		66				
Top boom		0		33		66				

- A** : Boom length in feet
- B** : Load radius in feet
- C** : Loaded boom angle (deg.)
- D** : Minimum boom angle (deg.) for indicated length (no load)



LIFTING CAPACITIES AT ZERO DEGREE BOOM ANGLE ON RUBBER CREEP											
A	Over Front										
	36.1'		62.3'		88.6'						
C	B	(11m)	B	(19m)							
0°											

NOTE: The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-C) is based on the standard number of parts of line listed in the chart. Standard number of parts of line for on rubber operation should be according to the following table.

Boom length in feet (meters)	36.1' (11m)	36.1' to 88.6' (11m to 27m)	Single top
Number of parts of line	6	4	1

WARNING AND OPERATING INSTRUCTIONS FOR ON RUBBER LIFTING CAPACITIES

- Rated lifting capacities on rubber are in pounds and do not exceed 75 % of tipping loads as determined by SAE J765-Crane Stability Test Code.
- Rated lifting capacities shown in the chart are based on condition that crane is set on firm level surfaces with axle oscillation lockout applied. Those above bold lines are based on tire capacity and those below, on crane stability. They are based on actual load radius increased by tire deformation and boom deflection.
- If the axle oscillation lockout cylinders contain air, the axle will not be locked completely and rated lifting capacities may not be obtainable. Bleed the cylinders according to the operation safety and maintenance manual.
- Rated lifting capacities are based on proper tire inflation, capacity and condition. Damaged tires are hazardous to safe operation of crane.
- Tires shall be inflated to correct air pressure.
- Over front operation shall be performed within two degrees in front of chassis.
- On rubber lifting with "jib" is not permitted. Maximum permissible boom length is 88.6 ft. (27.0m).
- When making lift on rubber stationary, set parking brake.
- For creep operation, boom must be centered over front of machine, swing lock engaged, and load restrained from swinging. Travel slowly and keep the lifted load as close to the ground as possible, and especially avoid any abrupt steering, accelerating or braking.
- Do not operate the crane while carrying the load.
- Creep is motion for crane not to travel more than 200 ft. (60 m) in any 30 minute period and to travel at the speed of less than 1 mph (1.6km/h).
- For creep operation, set Drive select switch to "4-WHEEL (Lo)" and set gear shift lever to "1".

Tires	Air Pressure
29.5-25 22PR	60 psi (4.2 kgf/cm ²)
29.5-25 28PR	64 psi (4.5 kgf/cm ²)

WARNING AND OPERATING INSTRUCTIONS FOR USING THE LOAD MOMENT INDICATOR (AML-C)

- When operating crane on outriggers:
 - Set P.T.O. switch to "ON".
 - Press the outrigger mode select key to register for the outrigger operation. Press the set key, then the outrigger mode indicative symbol changes from flickering to lighting.
 - Press the boom mode select key to register the boom mode, then the boom mode indicative symbol changes from lighting to flickering. Each time the boom mode select key is pressed, the mode changes. Press the set key to select the status that corresponds to the actual state of the boom, then the boom mode indicative symbol changes from flickering to lighting.
 - When erecting and stowing jib, select the status of jib set (jib state indicative symbol flicker).
- When operating crane on rubber:
 - Set P.T.O. switch to "ON".
 - Press the outrigger mode select key. The on-tire mode indicative symbol comes on. Each time the outrigger mode select key is pressed the mode changes. Select the creep operation, the on-tire mode indicative symbol flicker.
 - Press the boom mode select key to register the boom mode. However, pay attention to the following.
 - For stationary operation.
 - The front capacities are attainable only when the over front position symbol comes on. When the boom is more than 2 degrees from centered over front of chassis, 360° capacities are in effect.
 - When a load is lifted in the front position and then swung to the side area, make sure the value of the LOAD MOMENT INDICATOR(AML-C) is below the 360° lifting capacity.
 - For creep operation.
 - The creep capacities are attainable only when boom is in the straight forward position of chassis and the over front position symbol is on. If boom is not in the straight forward position of chassis , never lift load.
- This machine is equipped with an automatic swing stopping device.(For the details,see Operation Maintenance Manual.) But, operate very carefully because the automatic swing stop does not work in the following cases.
 - When the "SWING STOP OVERRIDE" switch is turned on.
 - During on - tire operation.
 - When the "P.T.O." switch is set to "OVERRIDE" and the "OVERRIDE" key switch outside the cab is on.
- During crane operation, make sure that the displays on front panel are in accordance with actual operating conditions.
- The displayed values of LOAD MOMENT INDICATOR (AML-C) are based on freely suspended loads and make no allowance for such factors as the effect of wind, sudden stopping of loads, supporting surface conditions, inflation of tire, operating speed, side loads, etc. For safe operation, it is recommended when extending and lowering boom or swinging, lifting loads shall be appropriately reduced.
- LOAD MOMENT INDICATOR (AML-C) is intended as an aid to the operator. Under no condition should it be relied upon to replace use of capacity charts and operating instruction. Sole reliance upon LOAD MOMENT INDICATOR (AML-C) aids in place of good operating practice can cause an accident. The operator must exercise caution to assure safety.

GR-750XL Axle weight distribution chart

	Pounds			Kilograms		
	GVW	Front	Rear	GVW	Front	Rear
Base machine	97,609	49,637	47,972	44,275	22,515	21,760
Remove: 1. 6.2ton(5.6metric ton) hook ball	-291	-415	124	-132	-188	56
2. 75t hook block	-1,208	-2,147	939	-548	-974	426
3. Top jib	-719	-781	62	-326	-354	28
4. Base jib	-1,885	-3,226	1,341	-855	-1,463	608
5. Auxiliary lifting sheave	109	298	-189	49	135	-86
6. Removable Counterweight (with Auxiliary Hoist&wire)	-12,227	5,383	-17,610	-5,546	2,442	-7,988

