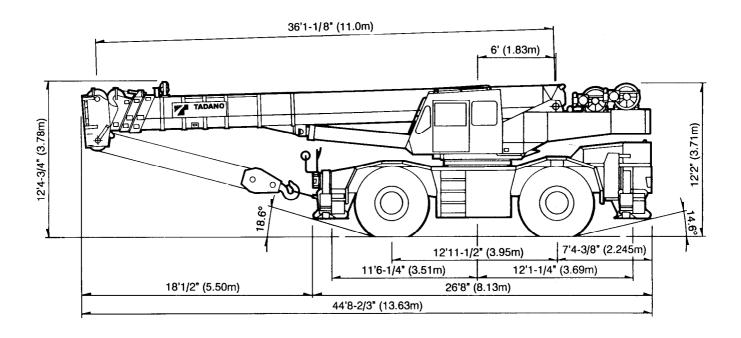


TR-600XL-3

60 Ton Capacity (54.4 Metric Tons)

HYDRAULIC ROUGH TERRAIN CRANE

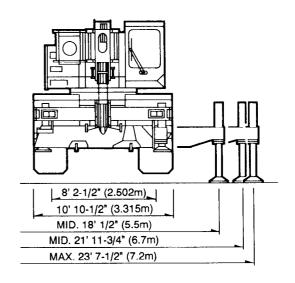
DIMENSIONS



Note: Dimension is with boom angle at -1.5° .

GENERAL DIMENSIONS (29.5×25 Tires)

	Feet	Meters
Turning radius: 4 wheel steer	21' 11-3/4"	6.7
2 wheel steer	39' 1/2"	11.9
Tail swing of counterweight	13' 6-1/4"	4.12



CRANE SPECIFICATIONS

BOOM

Four section full power partially synchronized telescoping boom of hexagonal box construction 36.1'~114.8' (11.0m~35.0m) with five sheaves, 17-1/4" (0.438m) root diameter, at boom head. The synchronization system consists of two telescope cylinders fitted with holding valves, an extension cable and retraction cable. Two easily removable wire rope guards, rope dead end provided on right side of boom head. Boom telescope sections are supported by wear pads both vertically and horizontally.

BOOM ELEVATION - By a double acting hydraulic cylinder with holding valve. Elevation -1.5°~80°, combination controls for hand or foot operation. Boom angle indicator.

JIB - Box top section telescopes from lattice type base section which stores alongside base boom section. 5° or 30° offset (tilt type). Single sheave, 17-1/4" (0.438m) root diameter, at jib head. Jib length is 32.2' (9.8m) or 56.1' (17.1m).

AUXILIARY LIFTING SHEAVE (SINGLE TOP) - Single sheave, 17-1/4" (0.438m) 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 swing lock (360° positive swing lock) for pick and carry and travel modes, manually engaged in cab.

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" (0.400m) root diameter × 22-3/4" (0.578m) wide. Wire rope: 672' of 3/4" diameter rope (205m of 19mm). Drum capacity: 905' (276m) 6 layers. Maximum line pull (permissible): 14,272lbs. (6,474kg)*. Maximum line speed: 525FPM (160m/min).

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 from main hoist. Equipped with cable follower and drum rotation indicator.

DRUM - Grooved 15-3/4" (0.400m) root diameter × 22-3/4" (0.578m) wide. Wire rope: 380' of 3/4" diameter rope (116m of 19mm). Drum capacity: 905' (276m) 6 layers. Maximum line pull (permissible): 14,272lbs. (6,474kg)*. Maximum line speed: 525FPM (160m/min).

* Maximum permissible line pull may be affected by wire rope strength.

WIRE ROPE - Filler wire, extra improved plow steel, preformed, independent wire rope core, right regular lay. 3/4" (19mm) 6 × 37 class

HOOK BLOCKS -

- 1. 60 ton (54.4 metric ton) 5 sheaves with swivel hook and safety latch, for 3/4" (19mm) wire rope.
- 2. 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 hand levers with integral pressure relief valves.

RESERVOIR - 195 gallon (740 lit.) capacity. External sight level gauge.

FILTRATION - 26 micron 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 safety glass windows opening at side, rear and roof. Windshield glass window is shatter-resistant. Tilt-telescoping steering wheel. Adjustable control levers for swing, boom hoist, boom telescoping, auxiliary hoist and main hoist. Control levers for swing and auxiliary hoist can change neutral positions and tilt for easy access to cab. Engine throttle knob. Foot operated controls: boom hoist, boom telescoping, service brake and engine throttle.

Dash-mounted engine start/stop, monitor lamps, cigarette lighter, parking brake switch, steering mode select switch, pump engaged/ disengaged switch, swing brake switch, and telescoping correction switches.

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

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

- Control lever lockout function
- · Working radius and/or boom angle preset function (warning only)
- Warning buzzer
- · Boom angle/boom length/jib offset angle/working radius/rated loads/actual loads read out
- · Ratio of actual load moment to rated load moment indication
- · Working condition register switch
- External warning lamp

Operator's right hand console includes transmission gear selector, outrigger controls, sight level bubble, drive selector switch, swing free-lock selector switch, working light switch and ashtray. Swing lock lever and 4 way adjustable seat with high back and seat belt.

NOTE: Each crane motion speed is based on unladen

CARRIER SPECIFICATIONS

TYPE - Rear engine, left hand steering, driving axle 2-way selected type by manual switch, 4×2 front drive, 4×4 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 - 25mph (40km/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. Three steering modes available: 2 wheel front, 4 wheel coordinated and 4 wheel crab.

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

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.

TIRES - 29.5-25-22PR (OR)

Radiator

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' 7-1/2" (7.2m) center-line and retract to within 10' 10-1/2" (3.315m) 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 upper structure cab.

ENGINE

Model Mitsubishi 6D16-TLEA Type Direct injection diesel No. of cylinders 4 cycle, turbo charged and after cooled Combustion Bore × stroke, in. (mm) 4.646 ×4.528 (118 × 115) Displacement, cu. in (liters) 460 (7.545) 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

Fin and tube core, thermostat controlled Fan, in. (mm) Suction type, 6-blade, 23.6 (600) dia. Starting 24 volt system, negative ground Charging Battery 2-120 amp. hour Compressor, air, CFM (ℓ /min) 10.6 CFM (301) at 2,000 rpm Horsepower (kw) Gross 247 (184) at 2,800 rpm Torque, max. ft-lb (kgm) 521 (72) at 1,400 rpm Capacity, gal. (liters) Cooling water 3.4 (13) Lubrication $3.7 \sim 4.2 (14 \sim 16)$ 79.2 (300) Fuel

STANDARD EQUIPMENT

- Four section full power partially synchronized boom 36.1' ~114.8' (11.0m ~ 35.0m)
- Two stage stowable telescoping jib 32.2' (9.8m) or 56.1' (17.1m) with 5° or 30° pinned offset (tilt type) with self storing pins
- Auxiliary lifting sheave (single top) stowable
- Boom hoist foot control
- Boom telescoping foot control
- Boom angle indicator
- Variable speed main hoist with cable follower
- Variable speed auxiliary hoist with cable follower
- Drum rotation indicator (thumper type) main and auxiliary hoist
- Tadano twin swing system
- 4 × 4 × 4 drive
- Automatic rear axle oscillation lockout system
- Independently controlled outriggers
- Self-storing outrigger pads
- Electronic controlled automatic transmission driven by torque converter
- Complete highway light package
- Anti two block device (overwind cutout)
- Electronic crane monitoring system
- Tadano electronic load moment indicator system (AML-L)
- Outrigger extension length detector
- Front windshield wiper and washer
- Roof window wiper and washer
- Roof window lock warning
- Rear view mirrors (right and left side)
- 4 way adjustable seat with high back and seat belt
- Tilt-telescoping steering wheel
- Neutral position adjustable control lever (swing and auxiliary hoist)

- Cab floor mat
- Electric fan in cab
- Back-up alarm
- Low oil pressure/high water temperature warning device (visual)
- Rear steer centering light
- Fenders
- Air cleaner dust indicator
- Towing hooks front and rear
- Lifting eyes
- Tool storage compartment
- Full instrumentation package
- Pump disconnect in operator's cab
- Air dryer
- Water separator with filter
- Flood lights
- Tire inflation kit
- Outrigger hose protection
- 24 volt electric system
- Hydraulic oil cooler
- Non-spin rear differential
- 60 ton (54.4 metric ton) 5 sheave hook block
- 6.2 ton (5.6 metric ton) hook with swivel

OPTIONAL EQUIPMENT

- Propane heater
- Fire extinguisher

HOISTING SPECIFICATIONS

LINE SPEEDS AND PULLS

		Main	or auxilia	ary hoist	- 15-3/4"	(0.4m) c	drum		
Layer	Speed	Lir	ne	Line pulls					
Layer	Ороса	speeds ²		Availa	able ¹	Permis	sible ⁴		
		F.P.M	m/min	Lbs.	kgf	Lbs.	kgf		
	Low	180	55				0.477.4		
1st	High	361	110	15,698	7,121	14,272	6,474		
	Low	197	60						
2nd	High	394	120	14,647	6,644	13,315	6,040		
	Low 213 65								
3rd	High	427	130	13,520	6,133	12,292	5,576		
	Low	230	70						
4th	High	460	140	12,557	5,696	11,417	5,179		
	Low	246	75						
5th	High	492	150	11,721	5,317	10,657	4,834		
6	Low	262	80				4.500		
6th ³	High	525	160	10,989	4,985	9,991	4,532		

Developed by machinery with first layer of wire rope, but not based on rope strength or other limitation in machinery or equipment.

² Line speeds based only on hook block, not loaded.

3 Sixth layer of wire rope is not recommended for hoisting operations.

⁴ Permissible line pull may be affected by wire rope strength.

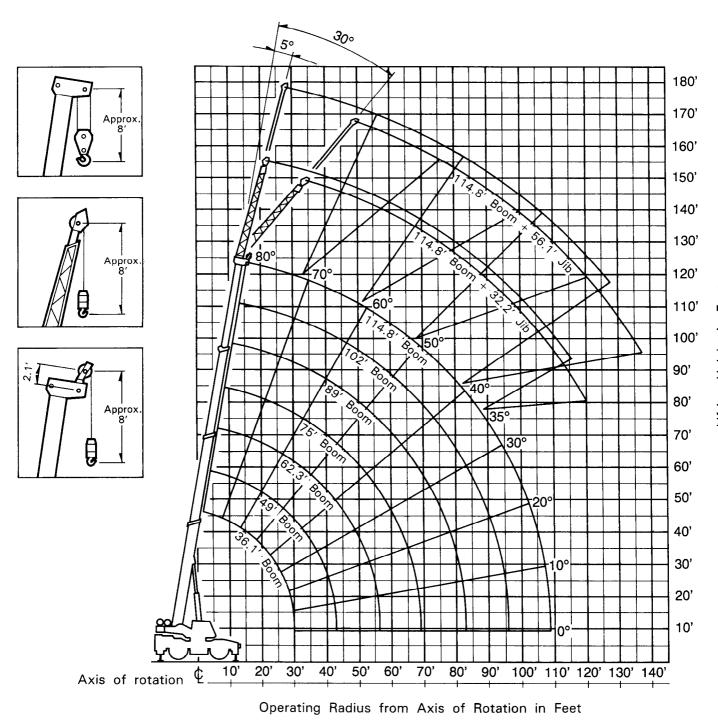
DRUM WIRE ROPE CAPACITIES

	Main a	Main and auxiliary drum grooved lagging								
Wire		3/4" (19mm) wire rope								
rope layer	Rope pe	er layer	Total wire rope							
,	Feet	Meters	Feet	Meters						
1	123.0	37.5	123.0	37.5						
2	134.2	40.9	257.2	78.4						
3	145.3	44.3	402.5	122.7						
4	156.5	47.7	559.0	170.4						
5	167.7	51.1	726.7	221.5						
6	178.8	54.5	905.5	276.0						

DRUM DIMENSIONS

	Inch	mm
Root diameter	15-3/4"	400
Length	22-3/4"	578
Flange diameter	25-3/8"	645

TR-600XL-3 OPERATING RADIUS/LIFTING HEIGHT CHART



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.

TR-600XL-3 TOTAL RATED LOAD CHART (IN POUNDS)

	ON OUTRIGGERS FULLY EXTENDED													
		ON C		ERS FULL ROTATION		DED		ON OUT	RIGGERS	MID. EXT	ENDED 2 ROTATION	21'11-3/4"	(6.7m) SI	PREAD
A	36.1	49'	62.3'	75'	89'	102'	114.8'	36.1	49'	62.3'	75°	89'	102'	114.8
В	(11.0m)	(14.9m)	(19.0m)	(22.9m)	(27.1m)	(31.1m)	(35.0m)	(11.0m)	(14.9m)	(19.0m)	(22.9m)		(31.1m)	(35.0m
10	120,000	91,000	82,000					120,000	91,000	82,000		,	(/	
12	113,800	91,000	82,000	47,400				113,800	91,000	82,000	47,400			
15	95,200	91,000	72,000	47,400	47,400			95,200	91,000	72,000	47,400	47,400		
20	73,300	72,800	63,000	47,400	43,600	34,700		73,300	72,800	63,000	47,400	43,600	34,700	
25	58,600	58,100	55,100	43,600	38,100	31,400	28,800	49,400	49,200	51,400	43,600	38,100	31,400	28,80
30	33,500	43,100	41,100	37,300	32,900	27,500	25,500	33,500	35,300	35,700	37,300	32,900	27,500	25,50
35		32,400	32,400	32,400	28,500	24,500	22,400		26,600	26,300	27,400	28,500	24,500	22,40
40		25,000	24,800	26,300	25,100	21,700	19,700		20,400	20,300	21,200	22,700	21,700	19,70
45			19,400	20,900	21,500	19,400	17,500			16,100	17,000	18,300	19,100	17,50
50			15,700	16,900	17,800	17,500	15,800			12,800	14,000	15,100	16,100	15,80
55			12,500	13,900	14,800	15,900	14,300			10,100	11,600	12,600	13,200	13,00
60				11,500	12,300	13,100	13,000				9,300	10,500	11,000	10,90
65				9,500	10,400	11,100	11,300				7,600	8,600	9,200	9,30
70					8,800	9,400	9,900					7,100	7,600	7,90
75					7,400	8,100	8,500					5,700	6,400	6,90
80					6,300	6,900	7,300				.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4,600	5,200	5,70
85						5,900	6,300						4,400	4,80
90						4,800	5,500						3,600	4,000
95						4,100	4,800						2,900	3,300
100							4,100							2,600
105							3,200			***************************************				2,100
108							3,100				·····			1,700
С				0°							0°			<u> </u>

A: Boom Length in Feet

		0		IGGERS 360° RO		EXTEND	ED		ON OUTRIGGERS MID. EXTENDED 21'11-3/4" (6.7m) SPREAD- 360° ROTATION						PREAD	
Boom			В	oom Len	gth in Fe	et			Boom Length in Feet							
Angle in Degree	114.8' (35.0m) Boom +32.2' (9.8m) Jib 114.8' (35.0m) Boom +56.1' (17.1m) Jib			114.8' (35.0m) Boom +32.2' (9.8m) Jib					114.8' (35.0m) Boom +56.1' (17.1m) Jib							
Degree	5° c	offset	30°	offset	5° c	ffset	30°	offset	5° c	offset	30°	offset	5° c	offset	30°	offset
	R	W	R	W	R	W	R	W	R	W	R	W	R	W	R	W
80°	26.3	12,300	38.2	6,100	33.8	6,100	54.7	2,400	26.3	12,300	38.2	6,100	33.8	6,100	54.7	2,40
75°	40.0	11,000	50.9	5,500	49.5	5,000	69.5	2,200	40.0	11,000	50.9	5,500	49.5	5,000	69.5	2,20
70°	52.7	8,800	63.4	5,000	64.6	4,100	83.4	1,900	52.7	8,800	63.4	5,000	64.6	4,100	83.4	1,90⊢
65°	64.4	7,000	74.7	4,700	78.6	3,500	96.1	1,800	64.4	7,000	74.7	4,700	78.6	3,500	96.1	1,80
60°	75.9	5,700	85.4	4,400	92.3	3,000	108.0	1,700	75.9	5,700	85.4	4,400	92.3	3,000	108.0	1,70
55°	86.5	4,700	95.1	3,800	105.0	2,600	119.0	1,600	86.5	4,700	95.1	3,800	105.0	2,600	119.0	1,600
50°	96.3	3,800	104.0	3,300	116.0	2,300	129.0	1,500	96.1	3,200	104.0	2,800	116.0	2,300	129.0	1,50
45°	105.0	3,200	112.0	2,900	127.0	2,000	137.0	1,400	105.0	2,100	111.0	1,800	126.0	1,600	137.0	1,100
40°	113.0	2,400	119.0	2,200	136.0	1,700	147.0	1,300	113.0	1,200	118.0	1,100				
35°	121.0	1,700	125.0	1,600												

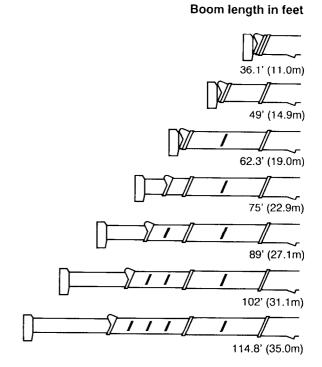
R: Operating Radius in Feet

B: Operating Radius in Feet

C: Minimum boom angle (deg.) for indicated length (no load)

W: Total Rated Load in Pounds

ON OU	TRIGGER	S MID. EX 360°	TENDED ROTATION	18'-1/2" (ON	(5.5m) SP	READ	
36.1' 1.0m)	49' (14.9m)	62.3' (19.0m)	75' (22.9m)	89' (27.1m)	102' (31.1m)	114.8' (35.0m)	A B
20,000	91,000	82,000					10
13,800	91,000	82,000	47,400				12
95,200	91,000	72,000	47,400	47,400			15
60,300	60,300	59,500	47,400	43,600	34,700		20
39,700	39,700	38,300	38,200	38,100	31,400	28,800	25
27,800	27,400	27,200	28,800	29,800	27,500	25,500	30
	20,400	20,000	21,100	22,500	23,100	22,400	35
	15,500	15,100	16,100	17,500	18,000	18,600	40
		11,300	12,500	14,000	14,300	15,000	45
		8,600	9,900	11,100	11,500	12,200	50
		6,500	7,900	8,900	9,400	10,000	55
			6,200	7,100	7,700	8,200	60
			4,800	5,700	6,200	6,700	65
				4,400	4,900	5,400	70
				3,400	4,000	4,300	75
				2,500	3,000	3,500	80
					2,300	2,800	85
					1,600	2,100	90
						1,600	95
							100
							105
							108
		0°			12°	28°	С



ON OUTRIGGERS MID. EXTENDED 18'-1/2" (5.5m) SPREAD 360° ROTATION Boom Length in Feet Boom 114.8' (35.0m) Boom Angle 114.8' (35.0m) Boom +32.2' (9.8m) Jib +56.1' (17.1m) Jib in Degree 5° offset 30° offset 5° offset 30° offset R W R W R W W R 26.3 12,300 38.2 6,100 33.8 6,100 54.7 2,400 80° 10.0 11,000 50.9 5,500 49.5 5,000 69.5 2,200 75° 52.7 8,800 63.4 5,000 64.6 4,100 83.4 1,900 70° 34.4 7,000 74.7 4,700 78.6 3,500 96.1 1,800 65° 75.5 4,600 85.2 3,800 92.3 3,000 108.0 1,700 60° 35.6 2,700 94.4 2,200 104.0 1,900 119.0 1,400 55° 5.3 1,400 103.0 1,100 50° 45° 40° 35°

NOTE: Operating radiuses for jib operation are given for reference with the boom fully extended to 114.8' (35.0m)

> 6,200 lbs. (2,800 kgs) shall be subtracted from the total rated loads of main boom, when jib is attached to main

Jib weight is 2,200 lbs. (1,000kgs)

Standard number of parts of line should be according to the following table.

 m length in t (meters)	36.1'	36.1' to 62.3'	62.3' to 114.8' (19.0 to 35.0)	Single
 of part line	10	8	4	1 top, 310

The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-L) is based on the standard number of parts of line listed in the chart.

WARNING AND OPERATING INSTRUCTIONS FOR LIFTING CAPACITIES

GENERAL

- Total rated loads on the TOTAL RATED LOAD CHART 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.
- Construction equipment can be hazardous if improperly operated or maintained. Operation and maintenance of this machine must be in compliance with the information in the operation, safety and maintenance manual supplied with machine. If this manual is missing, order replacement through the distributor.
- 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

- Total rated loads 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 load to a larger bearing surface.
- For outrigger operation, outriggers shall be properly extended with tires free of supporting surface before operating crane.

OPERATION

- Total rated loads have been tested to and meet minimum requirements of SAE J1063—Cantilevered Boom Crane Structures— Method of Test.
- Total rated loads do not exceed 85% of the tipping loads on outriggers fully extended as determined by SAE J765— Crane Stability Test Code.
 - Total rated loads for partially extended outriggers are determined from the formula, Total Rated Load = (Tipping Load 0.1 × Tip Reaction) / 1.25.
- Total rated loads 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. Total rated loads include the weight of main hook block (1,100lbs. for 60 ton capacity), auxiliary hook ball (330lbs. for 6.2 ton capacity), sling and auxiliary lifting devices and their weights shall be subtracted from the listed capacities to obtain the net load to be lifted.
- 5. Total rated loads 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.
- Total rated loads do not account for wind on lifted load or boom. Total rated loads and boom length shall be appropriately reduced, when wind velocity is above 20mph (9m/sec.).
- Total rated loads at load radius shall not be exceeded. Do not tip the crane to determine allowable loads.
- Do not operate at boom lengths, radii, or boom angle, where no capacities are shown. Crane may overturn without any load on the hook.

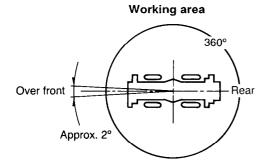
- When boom length is between values listed, refer to the total rated loads of the next longer and next shorter booms for the same radius. The lesser of the two total rated loads shall be used.
- When making lifts at a load radius not shown, use the next longer radius to determine allowable capacity.
- 11. Load per line should not exceed 11,900lbs. (5,400kg) for main winch and 12,300lbs. (5,600kg) for auxiliary winch.
- 12. The boom angle before loading should be greater to account for deflection.
- 13. The 36.1' (11.0m) boom length capacities are based on boom fully retracted. If not fully retracted [less than 49' (14.9m) boom length], use the total rated loads for the 49' (14.9m) boom length.
- 14. Extension or retraction of the boom with loads may be attempted within the limits of the TOTAL RATED LOAD CHART. The ability to telescope loads is limited by hydraulic pressure, boom angle, boom length, crane maintenance, etc.
- For lifting capacity of single top, reduce the total rated loads of relevant boom by 1,000lbs. (450kg). Capacities of single top shall not exceed 12,300lbs. (5,600kg) including main hook.
- When erecting and stowing jib, be sure to retain it by hand or by other means to prevent its free movement.
- 17. 6,200lbs. (2,800kg) shall be subtracted from the total rated loads of the main boom, when jib is attached to main boom head. Jib weight is 2,200lbs. (1,000kg).
- 18. Use Anti-two block (OVERWIND CUTOUT) disable switch when erecting and stowing the jib and stowing the hook block. While the switch is pushed, the hoist does not stop, even when overwind condition occurs.
- 19. For boom lengths with 32.2' (9.8m) jib, the total rated loads are determined by loaded boom angle only in the column headed 114.8' (35.0m) boom + 32.2' (9.8m) jib. For boom lengths with 56.1' (17.1m) jib, the total rated loads are determined by loaded boom angle only in the column headed 114.8' (35.0m) boom + 56.1' (17.1m) jib. For angles not shown, use the next lower loaded boom angle to determine allowable capacity.
- 20. 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 weight of load is within total rated load for jib.

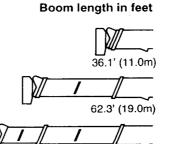
DEFINITIONS

- 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.
- Loaded Boom Angle: The angle between the boom base section and the horizontal, after lifting the total rated load 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.

TR-600XL-3 TOTAL RATED LOAD CHART (IN POUNDS)

			ON RUE	BBER TI	RE: 29.5-2	25-22PR			
			Statio	nary	······································			Creep	
\ A		Over front		360° rotation				Over front	
	Boom	Length in	Feet	Boom	Length in	Feet	Boom	Length in	Feet
В	36.1' (11.0m)	62.3' (19.0m)	89' (27.1m)	36.1' (11.0m)	62.3' (19.0m)	89' (27.1m)	36.1' (11.0m)	62.3' (19.0m)	89' (27.1m)
10	67,200			34,300			50,000		
12	58,600			32,700			45,600		
15	51,300	34,100		24,800	22,900		39,600	30,500	
20	36,000	30,000	20,700	15,400	14,900	15,600	30,600	26,500	18,300
25	25,200	24,000	20,700	9,900	9,500	10,500	23,700	22,800	18,300
30	18,100	17,200	17,600	6,000	5,900	7,000	18,100	17,200	16,300
35		12,500	13,600		3,400	4,500		12,500	13,600
40		9,200	10,800		1,600	2,900		9,200	10,800
45		6,800	8,500			1,500		6,800	8,500
50		4,900	6,900					4,900	6,900
55		3,400	5,300					3,400	5,300
60			4,000						4,000
65			2,900						2,900
70			2,100						2,100
75			1,500						1,500
С	0	0	20°	0°	42°	55°	0)°	20°





89' (27.1m)

- A: Boom Length in Feet (meters)
- B: Operating Radius in Feet
- C: Minimum boom angle (deg.) for indicated length (no load)

NOTE: Standard number of parts of line should be according to the following table.

Boom length in feet (meters)	36.1' (11.0)	36.1' to 89' (11.0 to 27.1)	Single top
No. of part line	6	4	1

The lifting capacity data stored in the LOAD MOMENT INDICATOR (AML-L) is based on the standard number of parts of line listed in the chart.

WARNING AND OPERATING INSTRUCTIONS FOR ON RUBBER CAPACITIES

- Total rated loads on rubber are in pounds and do not exceed 75% of tipping loads as determined by SAE J765-Crane Stability Test Code.
- Total rated loads 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 total rated loads may not be obtainable. Bleed the cylinders according to the operation, safety and maintenance manual.
- 4. Total rated loads 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.

Tires	Air pressure
29.5-25-22PR	60 psi. (4.2kgf/cm²)

- 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 89ft. (27.1m).
- 8. 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.
- 10. Do not operate the crane while carrying the load.
- 11. Creep is motion for crane not to travel more than 200ft. (60m) in any 30 minute period and to travel at the speed of less than 1 mph (1.6km/h).
- 12. For creep operation, set drive select switch to "4-WHEEL (Lo)" and set gear shift lever to "1".

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

- 1. When operating crane on outriggers:
 - · Set P.T.O. switch to "ON".
 - Press the outrigger mode select key to register the outrigger operation. The outrigger mode indicator symbol changes from flickering to lighting.
 - Press the boom mode select key to register the boom mode. Each time the boom mode select key is pressed, the mode changes. Select the status that corresponds to the actual state of the boom.
 - · When erecting and stowing jib, select the status of jib set (jib state indicator symbol flickers).
- 2. When operating crane on rubber:
 - · Set P.T.O. switch to "ON".
 - Press the on-tire mode select key. The outrigger mode indicator symbol will disappear as the on-tire mode indicator symbol comes on. Each time the on-tire mode select key is pressed, the mode changes. To select creep operation, the on-tire mode indicator symbol should flicker.
 - Press the boom mode select key to register the boom mode.

Pay attention to the following:

- (1) 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-L) is below the 360° lifting capacity.
- (2) 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.
- A swing does not automatically stop even if the crane becomes overloaded.
- 4. During crane operation, make sure that the displays on front panel are in accordance with actual operating conditions.
- 5. The displayed values of LOAD MOMENT INDICATOR (AML-L) 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 speed, side loads, etc. For safe operation, it is recommended when extending and lowering boom or swinging, lifted loads shall be appropriately reduced.
- 6. LOAD MOMENT INDICATOR (AML-L) is intended as an aid to the operator. Under no condition should it be relied upon to replace use of capacity charts and operating instructions. Sole reliance upon LOAD MOMENT INDICATOR (AML-L) aids in place of good operating practice can cause an accident. The operator must exercise caution to assure safety.

TR-600XL-3 Axle weight distribution chart

		Pounds			Kilograms	
	GVW	Front	Rear	GVW	Front	Rear
Basic standard machine includes: 36.1' ~ 114.8' (11.0m ~ 35.0m) 4-section 32.2', 56.1' (9.8m, 17.1m) 2-stage jib Main hoist with 672ft. (205m) of 3/4" (19.6) diameter wire rope Auxiliary hoist with 380ft. (116m) of 3/4" diameter wire rope 60 ton (54.4 metric ton) hook block 6.2 ton (5.6 metric ton) hook ball Auxiliary lifting sheave (single top) Mitsubishi 6D16-TLEA 29.5-25-22PR (OR) tires	mm)	48,780	45,820	42,900	22,120	20,780
Remove: 1. 32.2', 56.1' (9.8m, 17.1m) 2-stage jib 2. 60 ton (54.4 metric ton) hook block 3. 6.2 ton (5.6 metric ton) hook ball 4. Auxiliary lifting sheave (single top) 5. 29.5-25-22PR (OR) tires	-2,200 -1,100 -330 -128 -6,990	-3,960 -2,042 +144 -359 -3,495	+1,760 +942 -474 +231 -3,495	-1,000 -500 -150 -58 -3,172	-1,798 -927 +65 -163 -1,586	+798 +427 -215 +105 -1,586