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# RT745

Rough-Terrain Hydraulic Crane Specifications

# Superstructure specifications

<b>Boom</b>	34 ft. to 104 ft. (10.4m - 31.7m) four section trapezoidal boom consisting of a base section, two full power sections and one power pinned section. Telescopic sections slide on adjustable and replaceable Nylatron wear pads. Maximum Tip Height: 112 ft. (34.1m).
<b>Optional Boom</b>	33 ft. to 80 ft. (10.1m-24.4m) three section trapezoidal full power boom consisting of a base section and two full power sections. Telescopic sections slide on adjustable and replaceable Nylatron wear pads. Maximum Tip Height: 88 ft. (26.8m)
<b>Swingaway Extension (4 section boom)</b>	32 ft. (9.8m) lattice swingaway boom extension with integral offset mechanism, offsettable at 0°, 15° or 30°. Stows alongside base boom section when not in use. Maximum Tip Height: 142 ft. (43.3m).
<b>Swingaway Extension (3 section boom)</b>	32 ft. (9.8m) lattice swingaway boom extension stows alongside base boom section. Maximum Tip Height: 120 ft. (36.6m).
<b>Telescopic Swingaway Extension (4 section boom)</b>	32 ft. to 44 ft. or 56 ft. (9.8m to 13.4m or 17.1m) telescopic lattice swingaway extension with integral offset mechanism, offsettable at 0°, 15° or 30°. Stows alongside of base boom section. Maximum Tip Height: 165 ft. (50.3m).
<b>Boom Nose</b>	Four steel sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. *Optional auxiliary boom nose.
<b>Boom Elevation</b>	Dual, double acting hydraulic cylinders with integral holding valves provides elevation from -4° to 76°.
<b>Load Moment &amp; Anti-Two Block System</b>	Standard load moment and anti-two block system with audio-visual warning and control lever lockout. These systems provide electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending two-block conditions.
<b>Cab</b>	Full vision, all steel fabricated with acoustical lining and tinted safety glass throughout. Complete driving controls and engine instrumentation. Dash mounted control levers for all craning functions. Other standard features include: hinged skylight, sliding left side door and sliding right side window, electric windshield washer-wiper, propane heater, circulating air fan, fire extinguisher, seat belt.
<b>Swing</b>	Ball bearing swing circle with 360° continuous rotation. Grove planetary glide-swing with foot applied multi-disc brake. Spring applied hydraulically released parking brake and plunger type one-position mechanical house lock operated from cab. Maximum speed: 2.6 RPM.
<b>Counterweight</b>	Integral with turntable mast. 11,000 lbs. (4989 kg) with main hoist only. 9,250 lbs. (4195 kg) with main and auxiliary hoists.

## HYDRAULIC SYSTEM

<b>Pumps</b>	4 main gear pumps, combined capacity 146 GPM (553 LPM) driven by carrier engine through P.T.O. Standard pump disconnect.
<b>Valves</b>	Precision four way double acting control valves, 4 individual valve banks permit simultaneous control of multiple crane functions.
<b>Filter</b>	Return line type, full flow with bypass protection and service indicator. Replaceable cartridge, with micron filtration rating of 15/30/38.
<b>Reservoir</b>	154 gallons (583 L) with spin-on breather filter, external sight gauge, clean out access, strap mounted to frame.
<b>Oil Cooler</b>	Remote mounted with Cummins and radiator mounted with Caterpillar.
<b>Pressure Check Panel</b>	System pressure test panel permits easy verification of circuit pressures.

## HOIST SPECIFICATIONS

Power up and down equal speed, planetary reduction with automatic spring applied multi-disc brake. Electronic hoist drum rotation indicator and hoist drum cable follower.

### Main and \*Auxiliary Hoist Grove HO30B-16

Make/Model		High Range	Low Range
<b>Maximum single line speed</b>	Bottom layer	386 FPM (118m/min)	193 FPM (59m/min)
	Intermediate layer	448 FPM (137m/min)	224 FPM (68m/min)
	Top layer	510 FPM (155m/min)	255 FPM (78m/min)
<b>Maximum single line pull</b>	Bottom layer	8,161 lbs. (3702 kg)	16,322 lbs. (7402 kg)
	Intermediate layer	7,028 lbs. (3187 kg)	14,056 lbs. (6375 kg)
	Top layer	6,172 lbs. (2799kg)	12,344 lbs. (5598 kg)
<b>Maximum permissible line pull</b>		12,920 lbs. (5860 kg)	
<b>w/5:1 strength factor</b>		3/4 in. (19mm) 18x19 class	
<b>Maximum rope stowage</b>		508 ft. (155m)	3/4 in (19mm)
		Note: 500 ft. (152.4m) of wire rope supplied with standard unit.	

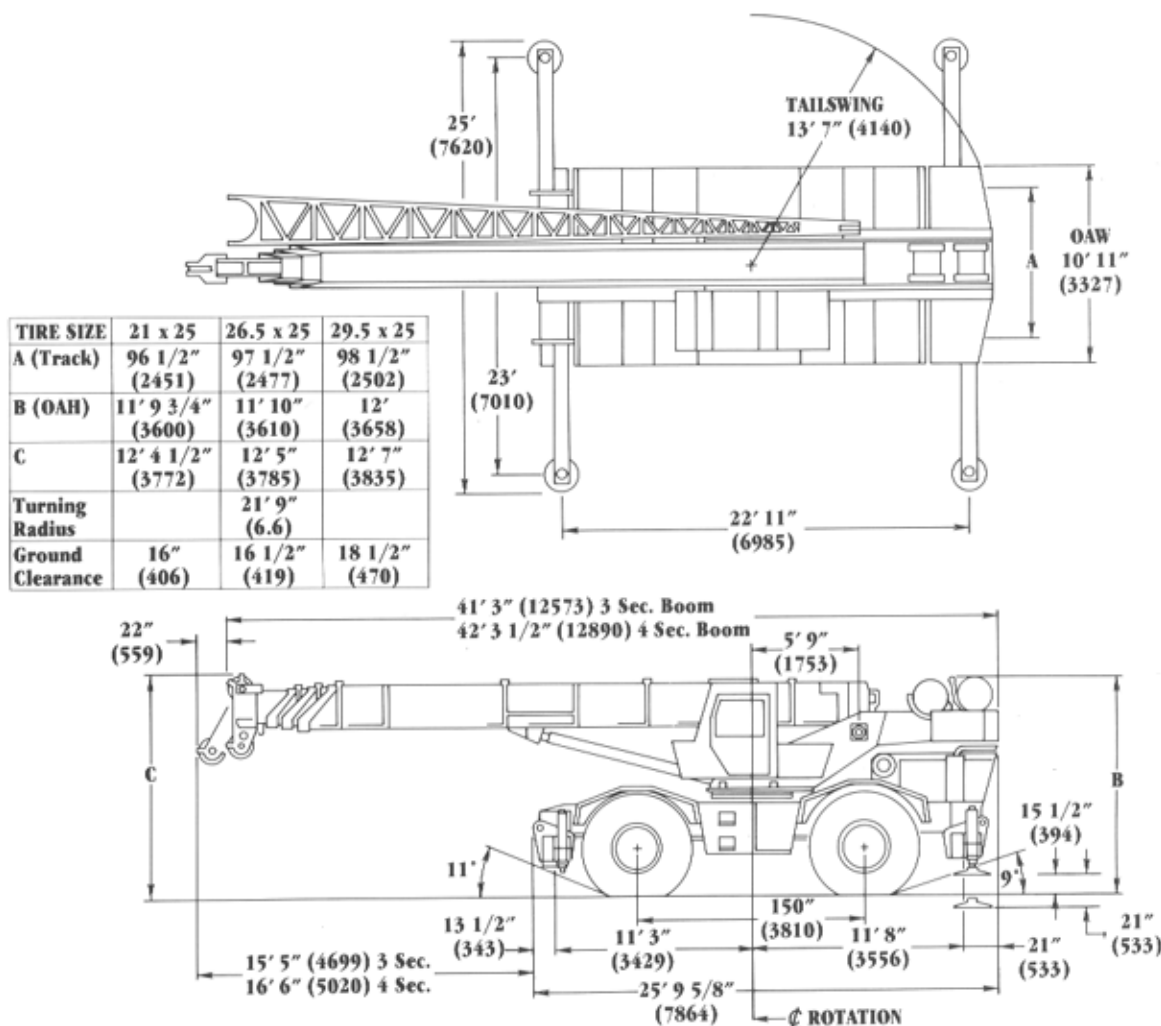
\*Denotes optional equipment

# Carrier specifications

<b>Frame</b>	High strength alloy steel all welded box-type construction with integral outrigger housings and front/rear lifting, towing and tie down lugs.	<b>Maximum Gradeability</b>	128% theoretical based on 84,500 lbs. (38,329 kg) GVW. 21.00 x 25 tires, pump disengaged, 80 ft. (24.4m) boom plus 32 ft. (9.8m) swingaway.
<b>Outrigger System</b>	Hydraulic single stage double box telescopic beam and jack outriggers with integral holding valves. All steel fabricated quick release type outrigger floats, 24" (610mm) diameter. Maximum outrigger pad load 67,539 lbs. (30,636 kg).	<b>Gross Vehicle Weight &amp; Axle Loads</b>	BASIC STANDARD MACHINE (3 Section Boom) Front: 36,845 lbs. (16,713 kgs) Rear: 41,855 lbs. (18,985 kgs) G.V.W.: 78,700 lbs. (35,698 kgs) BASIC STANDARD MACHINE (4 Section Boom) Front: 40,108 lbs. (18,193 kgs) Rear: 40,592 lbs. (18,413 kgs) G.V.W. 80,700 lbs. (36,606 kgs)
<b>Outrigger Controls</b>	Located in cab on right side console requires two hand operation. Crane level indicator located in cab.	<b>Miscellaneous Standard Equipment</b>	Full width steel fenders, dual rear view mirrors, hookblock tiedown, electronic back-up alarm, light package, front stowage well.
<b>Engine</b>	Cummins 6BTA5.9 six cylinder turbo-charged water cooled diesel - 5.9 L, 192 bhp (143 kw) (Gross) @ 2,800 RPM. Maximum torque 458 ft. lbs. (63 kg/m) @ 1,700 RPM.	<b>Optional Equipment</b>	* Auxiliary hoist * Worklights * 360° rotating beacon * Cab spotlight * Outrigger spin locks * Engine block heater * Manual skylight wiper * Hookblocks * Tow winch (front mounted-maximum single line pull - 15,000 lbs. [6804 kg]; maximum speed - 92 FPM [28.0 m/m]) * Spare wheel assembly * Tire inflation kit * Tool kit * Pintle hook front/rear * Diesel heater/defroster
<b>Optional Engine</b>	CAT 3208 eight cylinder naturally aspirated water cooled diesel, 195 bhp (145 kw) (Gross) @ 2,600 RPM. Maximum torque 489 ft. lbs. (68 kg/m) @ 1,200 RPM.		
<b>Fuel Tank Capacity</b>	60 gallons (227 L)		
<b>Electrical System</b>	Two (four with CAT) 12 volt maintenance free batteries, 625 CCA @ 0° degree F. 24 volt starting.		
<b>Drive</b>	4 x 4		
<b>Steering</b>	Fully independent power steering: Front: Full hydraulic controlled by steering wheel. Rear: Full hydraulic hand lever controlled. Provides infinite variations of 4 main steering modes - front only, rear only, crab and coordinated. Rear wheel steer indicator.		
<b>Transmission</b>	Remote mounted powershift with 6 speeds forward and 6 reverse, 3 in high range, 3 in low range. Rear axle disconnect for 4 x 2 travel.		*Denotes optional equipment.
<b>Axles</b>	Front: Drive-steer with differential and planetary reduction hubs rigid mounted to the chassis. Rear: Drive-steer with differential and planetary reduction hubs, pivot mounted at the center of chassis frame, providing up to 10" (254mm) oscillation. Optional: *No-spin differential on rear axle.		
<b>Oscillation Lockouts</b>	Automatic full hydraulic lockouts on rear axle permits oscillation only with boom centered over the front. *Optional oscillation lockout override control.		
<b>Tires</b>	Standard 21.00 x 25-24PR earthmover type tubeless.		
<b>Optional Tires</b>	*26.5 x 25-26PR earthmover type tubeless; 29.5 x 25-22PR earthmover type tubeless.		
<b>Brakes</b>	Dual braking system, full air operating on all four wheels. Spring-applied, air released parking brake operating on all four wheels.		
<b>Lights</b>	Full lighting package including turn indicators, head, tail, brake and hazard warning lights.		
<b>Maximum Speed</b>	20.3 MPH (32.7 kph)		

# Dimensions

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