



GROVE
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AT700B Series

All-Terrain Hydraulic Crane Specifications



Superstructure specifications

Boom	35 ft. to 110 ft. (10.6m - 33.5m) four section trapezoidal full power boom. Telescoping is sequenced-synchronized with single lever control. Telescopic sections slide on replaceable Nylatron wear pads. Maximum Tip Height: 118 ft. (35.9m).
Telescopic Swingaway Extension	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 base boom section when not in use. Maximum Tip Height - 173 ft. (52.7m).
Optional Fixed Swingaway Extension	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 - 149 ft. (45.4m).
Boom Nose	Four sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. *Optional removable auxiliary boom nose with removable pin type rope guard.
Boom Elevation	One double acting hydraulic cylinder with integral holding valve provides elevation from -3° to 78°.
Load Moment & Anti-Two Block System	Standard load moment and anti-two block system with audio-visual warning and control lever lockout to alert operator of impending two-block condition. Electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load and load indication is provided.
Cab	Full vision, all steel fabricated with accoustical lining and tinted safety glass throughout. Deluxe seat incorporates armrest mounted hydraulic joystick controls. Dash panel incorporates gauges for all engine functions. Front steer indicator and rear steer lock indicator. Other standard features include: telescoping tilt steering wheel, sliding side and rear windows, electric windshield wash/wipe, circulating air fan, opening skylight with electric skylight wiper, fire extinguisher, seat belt, and ashtray and complete driving controls.
Swing	Ball bearing swing circle with 360° continuous rotation. Grove planetary glide-swing with foot applied multi-disc wet brake. Spring applied hydraulically released parking brake and plunger type, 2 position, mechanical house lock operated from cab. Maximum speed: 2.5 RPM.
Counterweight	Integral with superstructure.

HYDRAULIC SYSTEM	
Pumps	6 section, combined capacity 193 G.P.M. (730 lpm) driven by carrier engine through P.T.O. Standard pump disconnect for travel.
Valves	Precision four way double acting pilot operated control valves, 3 individual valve banks permit simultaneous control of multiple crane functions.
Filter	Return line type, full flow with bypass protection and service indicator. Replaceable cartridge with micron filtration rating of 5/12/16.
Reservoir	218 gallon (825 L) with spin-on breather filter, external sight gauge, oil temperature gauge, clean out access, strap mounted to frame.
Oil Cooler	Remote mounted with thermostatically controlled electric motor driven fan.
Pressure Check Panel	System pressure test panel with quick release type fittings.

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

		Main and *Auxiliary Hoist Grove HO30D-16	
Make/Model		High Range	Low Range
Maximum single line speed	Bottom layer	470 FPM (143m/min)	235 FPM (72m/min)
	Intermediate layer	510 FPM (155m/min)	255 FPM (78m/min)
	Top layer	560 FPM (171m/min)	280 FPM (85m/min)
Maximum single line pull	Bottom layer	7,818 lbs. (3546 kg)	15,636 lbs. (7092 kg)
	Intermediate layer	6,832 lbs. (3099 kg)	13,664 lbs. (6198 kg)
	Top layer	5,986 lbs. (2715 kg)	11,972 lbs. (5430 kg)
Maximum permissible single line pull		12,920 lbs. (5860 kg)	
w/5:1 Strength Factor		3/4 in. (19mm) 18x19 class	
Maximum rope stowage	Note: 500 ft. (152.4m) length of wire rope supplied with basic standard unit.	508 ft. (155m)	
		3/4 in. (19mm)	

*Denotes optional equipment.

Carrier specifications

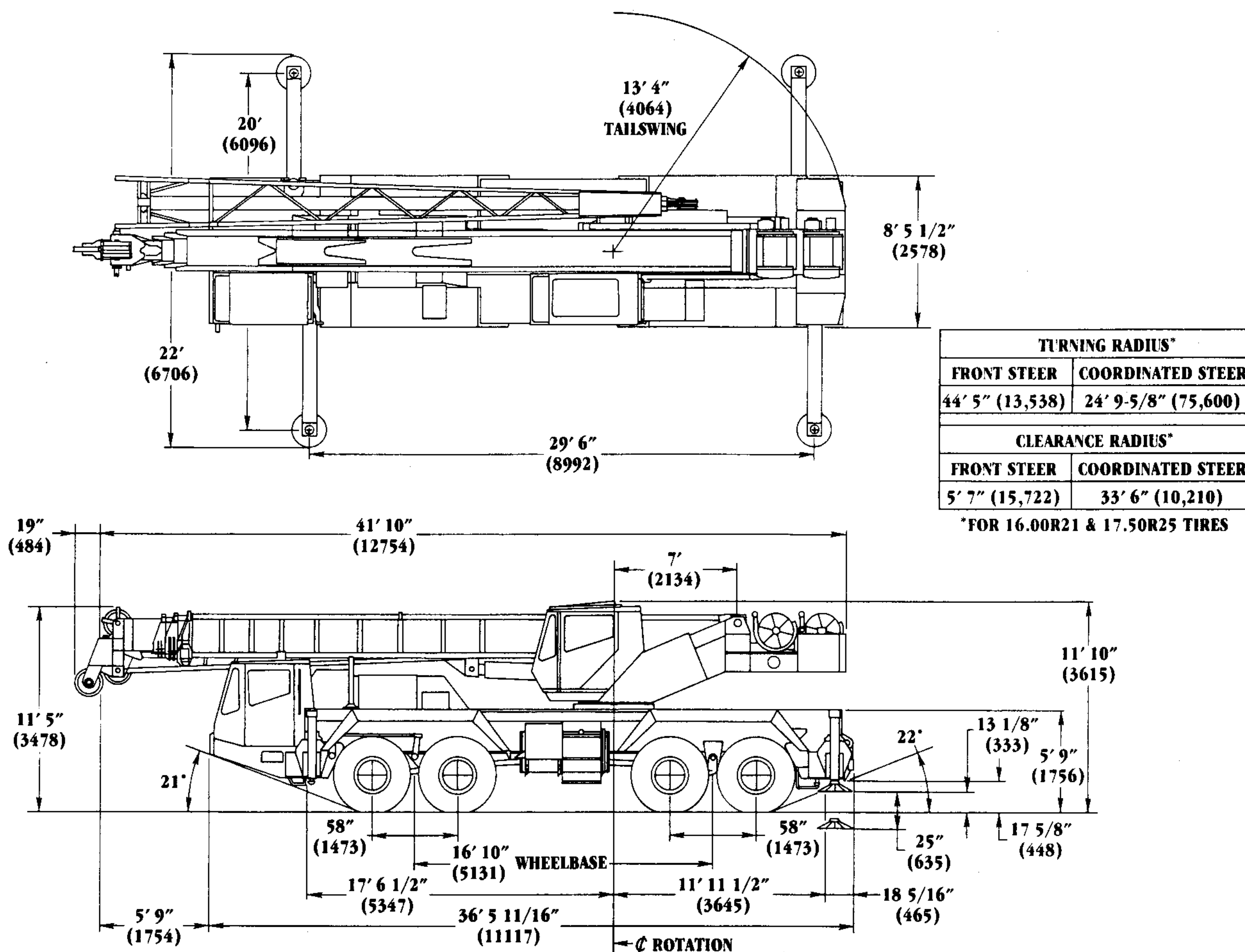
Frame	High strength alloy steel all welded parallel box section design with integral outrigger housings and front/rear lifting, towing and tie down lugs.
Outrigger System	Hydraulic single stage double box telescopic beam and 'inverted' jack outriggers with integral holding valves. Quick release type outrigger floats, 24" (610mm) diameter.
Outrigger Controls	Located in the superstructure cab on front dash panel and both sides of carrier requires two hand operation. Crane level indicator (sight bubble) adjacent.
Engine	Cummins LTA10-C325 six cylinder turbo charged and aftercooled diesel - 10 L (611 cu. in.), 325 bhp (242 kw) (Gross) @ 2,100 RPM. Maximum torque 975 ft. lbs. (1450.8 kg/m) @ 1,300 RPM.
Fuel Tank Capacity	(1) 100 gallons (379 L)
Electrical System	Two 12 volt - maintenance free batteries, 1050 CCA each. 12 volt lighting/24 volt starting.
Drive	8 x 8
Steering	Fully independent power steering: Front: Mechanical with hydraulic power assist controlled by steering wheel. (dual circuit). Rear: Full hydraulic hand lever controlled provides infinite variations of 4 main steering modes - front only, rear only, crab and coordinated. Mechanically locked for highway travel.
Transmission	Powershift with 12 forward and 6 reverse speeds. Engine mounted torque converter with lockup for highway travel. Front axle disconnect for 8x4 travel.
Axles	Front: (2) Drive-steer with differential and planetary reduction hubs and differential locks. Rear: (2) Drive-steer with differential and planetary reduction hubs and differential locks.
Brakes	Dual line air system operating on all wheels. Spring-applied, air released. Parking brake acting on rear axles. Air dryer. Jacobs engine brake.
Tires	16.00R21-22PR on/off highway radials front and rear.

Optional Tires	17.5x25 radials.
Suspension	Hydrogas front and rear, hydraulic lockout and automatic leveling system operated from cab.
Lights	Full lighting package including turn indicators, head, tail, brake and hazard warning lights.
Cab	One man design, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe fabric covered fully adjustable seat. Complete driving controls and engine instrumentation including tilt telescope steering wheel, tachometer, speedometer, voltmeter, water temp. oil pressure, transmission temp., fuel level, dual air pressure gauges with A/V warning, engine high temp./low oil pressure A/V warning, suspension controls, and rear steering control. Other standard items include hot water heater/defroster, electric windshield wash/wipe, fire extinguisher, seat belt and door and window locks.
Maximum Speed	55 MPH (90 kph)
Maximum Gradeability	50% (Theoretical based on 80,000 lb. (36,000 kg) GVW).
Gross Vehicle Weight	Basic Standard Machine: G.V.W. 81,000 lbs. (36,740 kgs).
Miscellaneous Standard Equipment	Full width steel fenders, dual rear view mirrors, electronic back-up alarm, light package, sling/tool box, pump disconnect, engine distress A/V warning, tire inflation kit, worklights, air cleaner restriction indicator.
Optional Equipment	* Auxiliary hoist * 360° rotating beacon * Cab spotlight * Engine block heater * Hookblocks * Spare wheel assembly and stowage rack * Tool kit * Pintle hook rear

*Denotes optional equipment.

Dimensions

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