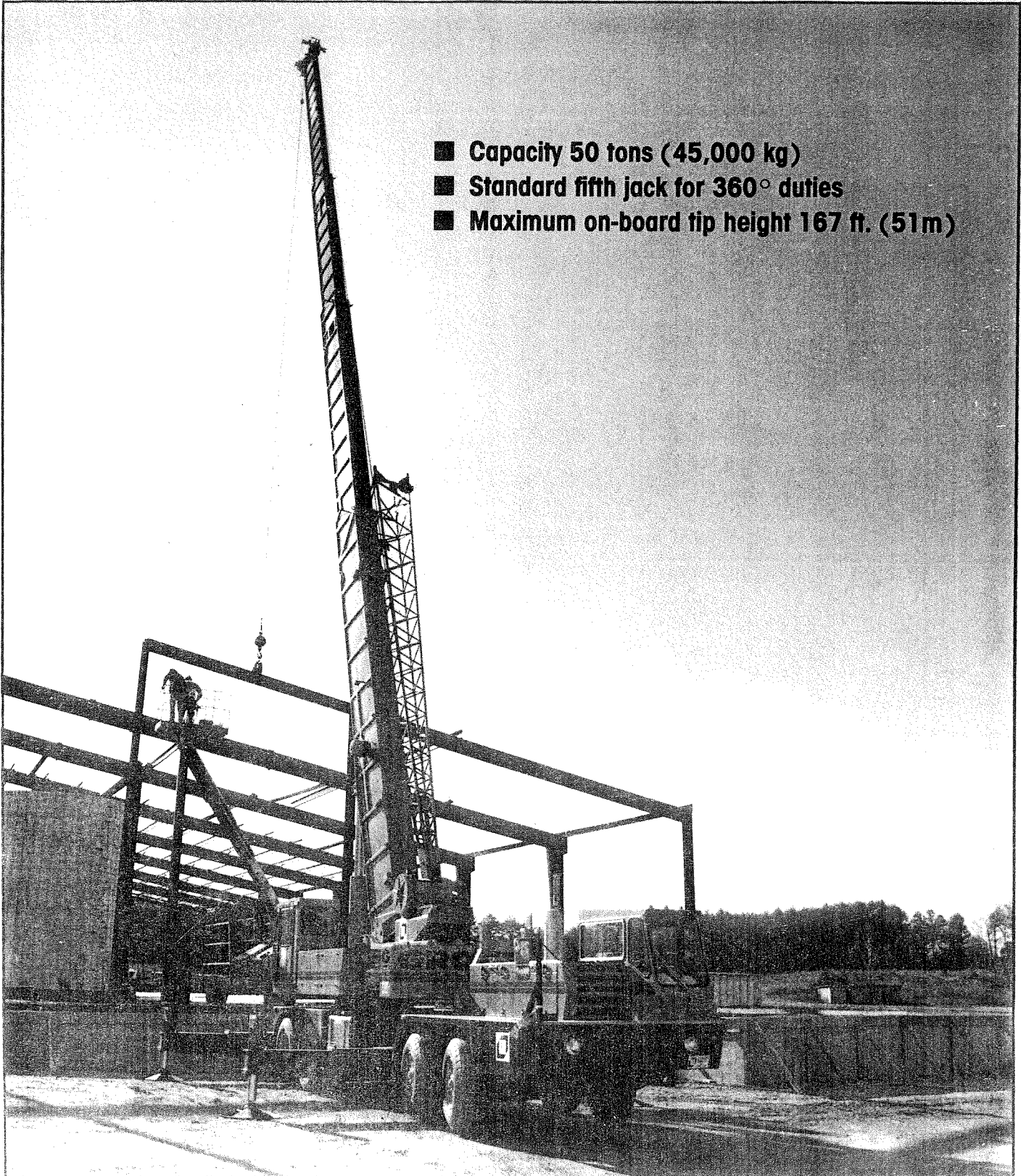




# TMS475

Truck-mounted hydraulic crane



- Capacity 50 tons (45,000 kg)
- Standard fifth jack for 360° duties
- Maximum on-board tip height 167 ft. (51m)

# Carrier specifications

<b>Frame</b>	High strength alloy steel all welded box-type construction with integral outrigger boxes and front/rear lifting, towing and tie down lugs.
<b>Outrigger System</b>	Hydraulic double stage double box telescopic beam and jack outriggers with integral holding valves. All steel fabricated quick release type outrigger floats 30" (762mm) diameter. Standard fifth front stabilizer for 360° duties.
<b>Outrigger Controls</b>	Located in superstructure cab. Push button controls requiring two-handed operation for safety. Crane level indicator (sight bubble) adjacent to controls.
<b>Engine</b>	6-71N six cylinder, naturally aspirated water cooled diesel, 426 cu. in. (7 L) 230 bhp (172 kw) (Gross) @ 2100 RPM. Maximum torque 611 ft. lbs. (84.5 kg/m) @ 1600 RPM.
<b>Fuel Tank Capacity</b>	(1) 90 gallon (341 L)
<b>Electrical System</b>	Four 12 volt - maintenance free batteries, 24 volt starting.
<b>Drive</b>	8 x 4
<b>Steering</b>	Front axle steering, cam and lever type with hydraulic assist.
<b>Transmission</b>	Manual with 13 speeds forward and 3 reverse.
<b>Axles</b>	Front: Rockwell beam type steer axles. Rear: Rockwell SSHD drive tandem, with inter-axle differential and dash mounted control.
<b>Suspension</b>	Front axles (1 & 2) spring mounted tandem. Rear axles (3 & 4) solid mount tandem with equalizing beam and solid steel saddles.
<b>Tires</b>	Front: 15.00x22.5-16PR duplex highway tread tubeless singles. Rear: 11.00x20-14PR highway tread tube type duals.
<b>Optional Tires</b>	Front: 16.5x22.5-16PR duplex highway tread tubeless and 12.00x20-18PR Michelin radial tube type. Rear: 11.00x20-14PR highway tread SRL-1 or HCT tube type radial and 12.00x20-18PR radial tube type.
<b>Brakes</b>	Full air on all wheels. Air dryer provided to preclude moisture accumulation. Spring set emergency brake on both rear axles with emergency release.

<b>Lights</b>	Full lighting including head, tail, braking, reversing, directional and hazard warning lights.
<b>Cab</b>	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 tachometer, speedometer, voltmeter, water temp. oil pressure, fuel level, air pressure gauge. Other standard items include hot water heater/defroster, electric windshield wash/wipe, fire extinguisher, seat belt and door and window locks.
<b>Maximum Speed</b>	51.5 MPH (82.9 kph)
<b>Gross Vehicle Weight &amp; Axle Loads</b>	BASIC STANDARD MACHINE Front Tandem: 32,830 lbs. (14,892 kgs) Rear Tandem: 44,170 lbs. (20,098 kgs) G.V.W.: 77,000 lbs. (34,927 kgs) (includes 32 ft. swingaway)
<b>Miscellaneous Standard Equipment</b>	Dual rear view mirrors, hookblock tiedown sling, electronic back-up alarm, light package.
<b>Optional Equipment</b>	Immersion engine block heater, engine low oil pressure/high water temperature, audio visual warning. Jacobs engine brake, tire inflation kit.

†Patented Grove feature or patent pending.

\*Denotes optional equipment.

# Superstructure specifications

<b>Boom</b>	34 ft. to 84 ft. (10.4m - 25.6m) three section Trapezoidal† full power boom. Telescopic sections slide on adjustable and replaceable nylon pads. Maximum tip height: 90 ft. (27.4m).
<b>Optional Boom</b>	35 ft. to 110 ft. (10.7m - 33.5m) four section Trapezoidal† power pinned boom. Telescopic sections slide on adjustable and replaceable nylon pads. Maximum tip height: 115 ft. (35m).
<b>Swingaway Extension</b>	32 ft. (9.8m) lattice swingaway boom extension stows alongside base boom section when not in use. Maximum tip height: 120 ft. (36.5m).
<b>Optional Jib</b>	24 ft. (7.3m) "A" Frame Jib used with standard 32 ft. (9.8m) swingaway extension. Stowable on deck for travel purposes.
<b>Boom Nose</b>	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.
<b>Boom Elevation</b>	Two double acting hydraulic cylinders with integral holding valve provides elevation from -6° 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 to alert operator of impending two-block condition. Electronic display of boom angle, length, radius, tip height, relative load moment, maximum permissible load and actual load indication is provided.
<b>Cab</b>	Full vision, all steel fabricated with accoustical lining and tinted safety glass throughout. Dash panel incorporates gauges for all engine functions. Other standard features include: hinged skylight, sliding left side door and sliding right side window, electric windshield wash-wipe, circulating air fan, heater, swing horn, fire extinguisher, seat belt. *Optional items: electric skylight wiper and air conditioning.(Special Order).
<b>Swing</b>	Ball bearing swing circle with 360° continuous rotation. Grove "glide swing" with foot actuated disc brake, spring applied hydraulically released park brake and 360° positive turntable lock. Combination controls provided for hand or foot operation. Swing speed 2.6 RPM.
<b>Counterweight</b>	Turntable mounted power installed and removed, hydraulically extended to working position and retracted to travel position. Weight varies depending on hoist configuration.

## HYDRAULIC SYSTEM

<b>Pumps</b>	Four main gear pumps powered by carrier engine. Manual pump disconnect. Combined capacity 146 GPM (553 LPM).
<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 by-pass protection and filter by-pass indicator, replaceable cartridge, 15/30/38 filtration rating.
<b>Reservoir</b>	127 gallons (481 L) with spin-on breather filter, external sight gauge, clean out access, strap mounted to frame.
<b>Oil Cooler</b>	Full flow, fin and tube, oil to air.

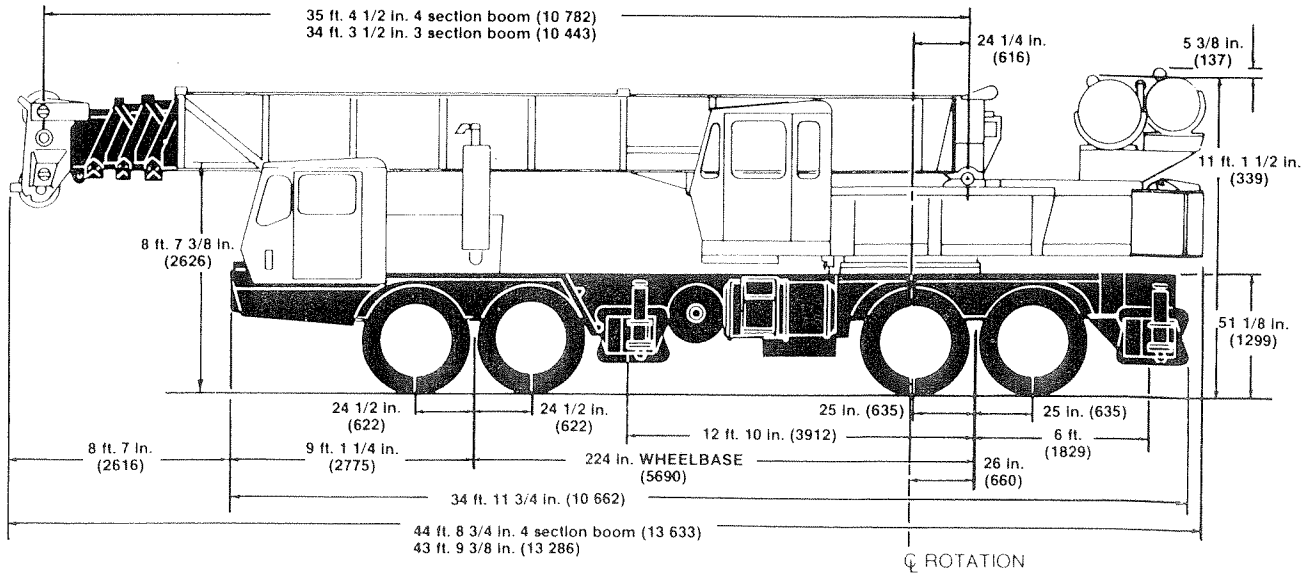
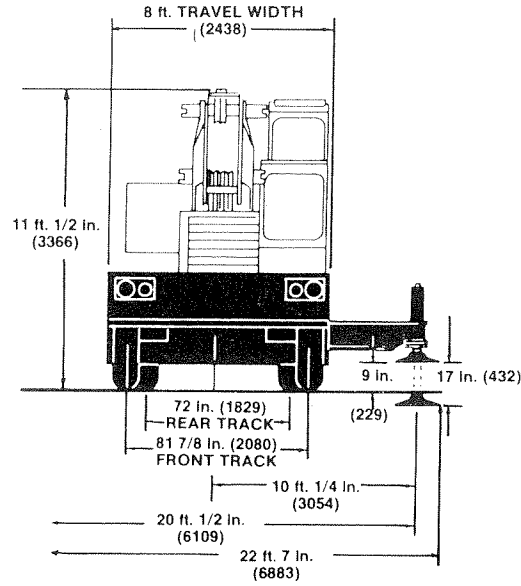
## HOIST SPECIFICATIONS

Series parallel circuitry and two motors provide both high line pull and speed ranges. Power up and down, equal speed, planetary reduction with integral automatic brake and electronic hoist drum rotation indicator.

Make/Model		Main Hoist or *Auxiliary Hoist H030B-16(H)	
		High Range	Low Range
<b>Maximum single line speed</b>	Bottom layer	396 FPM (121m/min)	198 FPM (60.5m/min)
	Intermediate layer	460 FPM (140m/min)	230 FPM (70m/min)
	Top layer	526 FPM (160m/min)	263 FPM (80m/min)
<b>Maximum single line pull</b>	Bottom layer	8,161 lbs. (3702 kg)	16,322 lbs. (7404 kg)
	Intermediate layer	7,028 lbs. (3188 kg)	14,056 lbs. (6376 kg)
	Top layer	6,172 lbs. (2799 kg)	12,344 lbs. (5599 kg)
<b>Maximum permissible line pull</b>		12,920 lbs. (5861 kg)	
<b>w/5:1 Strength Factor</b>		w/std. wire rope	

<b>Maximum rope stowage</b>	Main/Aux. 508 ft. of 3/4" dia. rope (155m of 19mm)
Note: 500 ft. (152m of 19mm) supplied with basic unit.	

†Patented Grove feature or patent pending.  
\*Denotes optional equipment.



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Constant improvement and engineering progress makes it necessary that we reserve the right to make specification, equipment, and price changes without notice. Illustrations shown may include optional equipment and accessories and may not include all standard equipment.

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