



# TM890

Truck mounted hydraulic crane/12x6 Carrier

- Capacity 90 tons (81,650 kg)
- Maximum on-board boom and jib length 172 ft. (52.4m)
- Optional 33 ft.-58 ft. (10m-17.7m) Telescopic Swingaway offsets to 30°
- Maximum tip height 207 ft. (63.1m)





# Superstructure specifications

<b>Boom</b>	36 ft. to 114 ft. (11.0m - 34.7m) four section Trapezoidal† power pin or optional full power boom. Each full power boom section has individually controlled telescope sections supported on graphite impregnated nylatron wear pads. Maximum tip height: 124 ft. (37.8m).
<b>Swingaway Extension</b>	33 ft. (10.1m) lattice swingaway boom extension stows alongside base boom section when not in use, offsettable at 2°, 15° or 30°. Maximum tip height: 157 ft. (47.9m).
<b>Optional Telescopic Swingaway</b>	33 ft. to 48 ft. to 58 ft. (10.1m-14.6m-17.7m) telescopic lattice swingaway extension with offset links offsettable at 2°, 15° or 30°. Stows alongside base boom when not in use. Maximum tip height: 178 ft. (54.3m).
<b>Optional Jib Extension</b>	14 ft. (4.3m) lattice sections combine with a 32 ft. (9.8m) tip section to make jib lengths of 46 ft. (14.0m), 60 ft. (18.3m), 74 ft. (22.6m) or 88 ft. (26.8m). Maximum tip height: 206 ft. (62.8m).
<b>Boom Nose</b>	Seven 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 -4° to 80°.
<b>LMI and Anti-Two Block</b>	Audio visual (light/buzzer) warning system and control lever lockout with electronic display of: boom angle, length, radius, boom tip height, relative load moment, rated load and actual load indication.
<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 (Spec. Order).
<b>Swing</b>	Ball bearing swing circle with 360° continuous rotation. Grove planetary "glide swing" with foot actuated disc brake, spring applied hydraulically released park brake and 360° position positive turntable lock. Combination controls provided for hand or foot operation. Swing speed 1.8 RPM.
<b>Counterweight</b>	Hydraulically extendable counterweight. Power installation and removal system. Weight varies depending on hoist configuration.

**Engine** Detroit 8.2L eight cylinder turbo-charged water cooled diesel, 200 bhp (149 kw) (Gross) @ 2800 RPM. Maximum net torque: 408 ft. lbs. (56.4 kg/m) @ 1700 RPM.

**Optional Engine** Cummins V-555 eight cylinder water cooled diesel. 215 bhp (160 kw) (Gross) @ 3000 RPM. Maximum net torque: 412 ft. lbs. (57 kg/m) @ 1800 RPM.

## HYDRAULIC SYSTEM

**Pumps** Five main gear pumps powered by superstructure engine. Manual pump disconnect. Combined capacity 289 GPM (1094 LPM).

**Valves** Precision four way double acting control valves, five individual valve banks permit simultaneous control of multiple crane functions.

**Filter** Full flow return line type with by-pass protection and filter by-pass indicator, replaceable cartridge, 7/17/22 filtration Beta rating.

**Reservoir** 305 gallons (1155 l) with spin-on breather filter, external sight gauge, clean out access.

**Oil Cooler** 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.

		Main Hoist H030B-26	
		High Range	Low Range
<b>Maximum single line speed</b>	Bottom layer	437 FPM (133m/min)	219 FPM (67m/min)
	Intermediate layer	508 FPM (155m/min)	254 FPM (77m/min)
	Top layer	579 FPM (176m/min)	290 FPM (88m/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. (2800 kg)	12,344 lbs. (5599 kg)
<b>Maximum permissible line pull w/5:1 F.O.S.</b>		14,720 lbs. (6677 kg) w/Casar rope	
<b>Maximum rope stowage</b>		832 ft. (254m) 3/4" (19mm)	
		Note: 702 ft. (214m) of wire rope supplied with standard unit.	

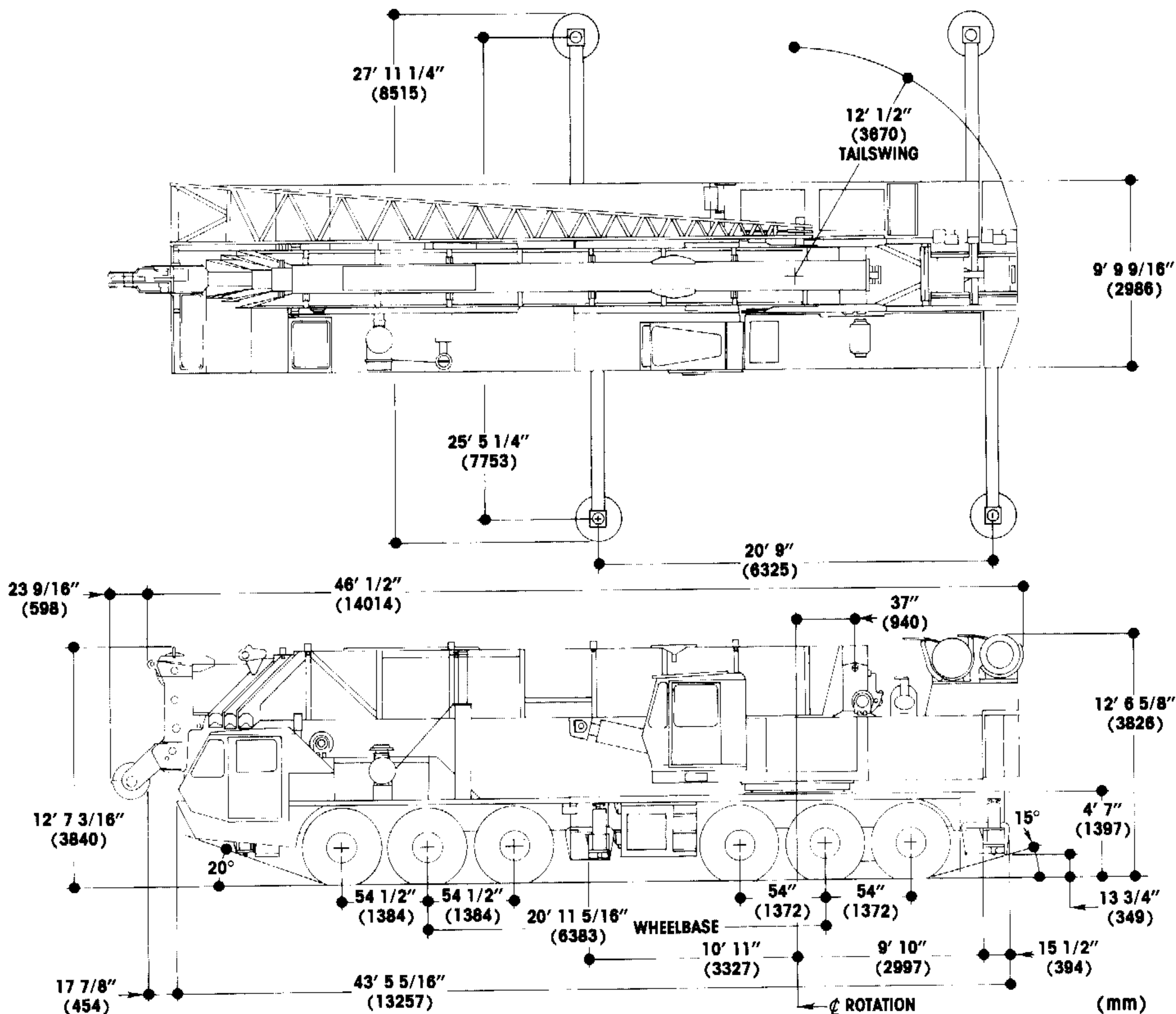
# 12x6 Carrier

		* Auxiliary Hoist H030B-26(H)	
		High Range	Low Range
<b>Maximum single line speed</b>	Bottom layer	393 FPM (120m/min)	197 FPM (60m/min)
	Intermediate layer	456 FPM (139m/min)	228 FPM (69m/min)
	Top layer	520 FPM (158m/min)	260 FPM (79m/min)
<b>Maximum single line pull</b>	Bottom layer	7,345 lbs. (3332 kg)	14,690 lbs. (6663 kg)
	Intermediate layer	6,325 lbs. (2869 kg)	12,650 lbs. (5738 kg)
	Top layer	5,555 lbs. (2520 kg)	11,110 lbs. (5039 kg)
<b>Maximum permissible line pull w/5:1 F.O.S.</b>		12,920 lbs. (5861 kg) w/Dyform 18 rope	
<b>Maximum rope stowage</b>		Same as Main Hoist	

## Carrier specifications (12x6)

<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>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 1/2" (775mm) diameter. Standard fifth front stabilizer for 360° duties.
<b>Outrigger Controls</b>	Located in superstructure cab and on both sides of the carrier frame. Push button controls requiring two-handed operation for safety. Crane level indicator (sight bubble) adjacent to each set of controls.
<b>Engine</b>	GM8V-71TA eight cylinder, turbo-charged water cooled diesel with Jacobs engine brake. 568 cu. in. (9.3 l) 370 bhp (276 kw) (Gross) @ 2100 RPM. Maximum net torque 983 ft. lbs. (136 kg/m) @ 1200 RPM.
<b>Optional Engine</b>	Cummins NTC350 six cylinder turbo-charged and after-cooled diesel with Jacobs engine brake. 855 cu. in. (14.0 l) 350 bhp (261 kw) (Gross) @ 2100 RPM. Maximum net torque 1120 ft. lbs. (155 kg/m) @ 1300 RPM.
<b>Optional Engine</b>	Caterpillar 3406TA with brake saver. Turbo-charged water cooled diesel with brake saver. 325 bhp (242 kw) @ (Gross) @ 2100 RPM. Maximum net torque: 1015 ft. lbs. (140 kg/m) @ 1200 RPM.

<b>Fuel Tank Capacity</b>	(1) 100 gallon (379 l)
<b>Electrical System</b>	Four 12 volt - maintenance free batteries, 24 volt starting.
<b>Drive</b>	12 x 6.
<b>Steering</b>	Front axle steering, cam and lever type with hydraulic assist.
<b>Transmission</b>	Fuller Roadranger (RT0011613), 13 speeds forward, 2 reverse.
<b>Axles</b>	Front: (3) Rockwell tubular steering FL951 100 in. (2540mm) track. Rear: (3) Rockwell EPRC 1356 planetary drive, 85 in. (2159mm) track with dash mounted inter-axle differential control.
<b>Suspension</b>	Front axles (3) spring mounted. Rear axles (3) solid mounted with equalizing beam and solid steel saddles.
<b>Tires</b>	14.00Rx20 (G-20X) Michelin radial tube type, highway tread front and rear.
<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, fog, directional and hazard warning lights.
<b>Cab</b>	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 with A/V warning. 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>	45 mph (72.4 km/hr).
<b>Gross Vehicle Weight &amp; Axle Loads</b>	BASIC STANDARD MACHINE Front Tridem: 38,750 lbs. (17,577 kgs) Rear Tridem: 96,120 lbs. (43,600 kgs) G.V.W.: 134,870 lbs. (61,177 kgs)
<b>Equipment</b>	Dual rear view mirrors, hookblock tiedown sling, electronic back-up alarm, light package, hour-meter and ether injection starting aid (less canister).
<b>Optional Equipment</b>	Immersion engine block heater, engine low oil pressure/high water temperature, audio visual warning and tire inflation kit.



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

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 standard equipment.

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