



GROVE
CRANE

A GROVE WORLDWIDE COMPANY



RT630C

Rough-Terrain Hydraulic Crane Specifications

Superstructure specifications

Boom	32 ft. - 95 ft. (9.8-29m) four section Trapezoidal full power boom. Telescoping is sequenced-synchronized with single lever control. Telescoping sections slide on adjustable and replaceable low friction wear pads. Maximum Tip Height: 104 ft. (32m).
Fixed Swingaway Extension	25 ft. (7.6m) fixed length non-offsettable lattice swingaway boom extension. Stows alongside base boom section when not in use. Maximum Tip Height: 129 ft. (39.3m).
*Optional Fixed Swingaway Extension	25 ft. (7.6m) lattice swingaway boom extension with integral offset mechanism, offsettable at 0° or 30°. Stows alongside base boom section when not in use. Maximum Tip Height: 129 ft. (39.3m).
*Optional Telescopic Swingaway Extension	25-43 ft. (7.6-13m) telescoping lattice swingaway extension with integral offset mechanism, offsettable at 0° or 30°. Stows alongside base boom section when not in use. Maximum Tip Height: 147 ft. (44.8m).
Boom Nose	Four steel sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. Quick reeve type boom nose. *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. 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.
Cab	Full vision, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe seat incorporates armrest mounted hydraulic single-axis controllers. Dash panel incorporates gauges for all engine functions. Other standard features include: Propane heater, telescoping tilt wheel, sliding side and rear windows, opening skylight, skylight sunscreen, electric windshield wash-wipe, electric skylight wiper, fire extinguisher, seat belt and ashtray.
Swing	Ball bearing swing circle with 360° continuous rotation. Grove planetary glide-swing with foot applied multi-disc wet brake. Spring applied hydraulically released swing brake and plunger type, 1 position, mechanical house lock operated from cab, 360° mechanical swing lock. Maximum speed: 2.5 RPM.
Counterweight	Integral with superstructure. 2500 lbs. (1134 kg), 800 lbs. (363 kg) slab I.P.O. auxiliary hoist.
HYDRAULIC SYSTEM	
Pumps	4 main gear pumps, combined capacity 119 GPM (451 LPM) driven by carrier engine through P.T.O. Standard pump disconnect with engine jogging switch.

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	103 gallon (390 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 hydraulic motor driven fan.
Pressure Check Panel	System pressure test panel with quick release type fittings for each circuit.

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 followers.

Main and *Auxiliary Hoist Grove HO15H-20G		
Make/Model		
Maximum single line speed	1st Layer	335 FPM (102m/min)
	2nd Layer	364 FPM (111m/min)
	3rd Layer	394 FPM (120m/min)
	4th Layer	423 FPM (129m/min)
	5th Layer	453 FPM (138m/min)
	6th Layer	482 FPM (147m/min)
Maximum single line pull	1st Layer	9,326 lbs. (4230 kg)
	2nd Layer	8,569 lbs. (3886 kg)
	3rd Layer	7,928 lbs. (3596 kg)
	4th Layer	7,376 lbs. (3345 kg)
	5th Layer	6,896 lbs. (3128 kg)
	6th Layer	6,475 lbs. (2937 kg)
Maximum permissible line pull		9,080 lbs. (4118 kg)
w/5:1 strength factor	5/8 in. (16mm) 18x19 class	
Maximum rope stowage	756 ft. (230m) 5/8 in. (16mm) Note: 450 ft. (137m) length of wire rope supplied with basic standard unit.	

*Denotes optional equipment

Carrier specifications

Frame	High strength alloy steel all welded 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 type outrigger with inverted jack and integral holding valves. Three position setting with fully extended, intermediate (50%) extended and fully retracted capacities. Intermediate extension is manually pinned. All steel fabricated quick release type outrigger floats, 24" (610mm) diameter. Maximum outrigger pad load 55,322 lbs. (25094 kg).
Outrigger Controls	Located in cab on front dash panel requires two hand operation. Crane level indicator located in cab.
Engine	Cummins 6BT 5.9 six cylinder turbocharged water cooled diesel-5.9L 152 bhp (116 kw) (Gross) @ 2,500 RPM. Maximum torque 400 ft. lbs. (553 kg/m) @ 1,600 RPM. Remote mounted fuel filter.
*Optional Engine	Caterpillar 3116 T six cylinder, turbo-charged water cooled diesel 160 bhp (119kw) (Gross) @ 2,500 RPM. Maximum torque 441 ft. lbs. (610 kg/m) @ 1,650 RPM. Remote mounted fuel filter.
Fuel Tank Capacity	60 gallons (227 L)
Electrical System	Two 12-volt - maintenance free batteries, 815 CCA @ 0 degree F. 12 volt starting/lighting.
Drive	4 x 4
Steering	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 steer indicating gauge.
Transmission	Engine mounted full powershift with 6 forward and 3 reverse speeds. Front axle disconnect for 4x2 travel.
Axles	Front: Drive-steer with differential and planetary reduction hubs rigid mounted to the chassis frame. *Optional no-spin differential. Rear: Drive-steer with differential and planetary reduction hubs pivot mounted at the center of chassis frame providing up to 12" oscillation (305mm).
Oscillation Lockouts	Automatic full hydraulic lockouts on rear axle permits oscillation only with boom centered over the front. *Optional oscillation lockout override control.
Brakes	Full hydraulic, split circuit operating on all wheels. Spring-applied, hydraulically released front axle mounted parking brake.
Tires	23.5R25Radial Earthmover type, tubeless.
Lights	Full lighting including turn indicators, head, tail, brake and hazard warning lights.
Maximum Speed	24 MPH (39 kph)

Maximum Gradeability	74% (Theoretical based on 59,630 lbs. [27047 kg] GVW). 23.5R25 tires, pumps disengaged, 95 ft. (29m) boom, plus 25 ft. (7.6m) swingaway.
Gross Vehicle Weight & Axle Loads	STANDARD MACHINE Front: 33,808 lbs. (15335 kg) Rear: 25,822 lbs. (11712 kg) G.V.W.: 59,630 lbs. (27047 kg)
Miscellaneous Standard Equipment	Full width steel fenders, dual rear view mirrors, hookblock tiedown, electronic back-up alarm, light package, front stowage well, tachometer, cold start aid (less canister), rear wheel position indicator, Propane heater, hoist mirrors, engine distress A/V warning system. Auxiliary hoist control valve arrangement (less hoist), 360° positive swing lock.
*Optional Equipment	* Auxiliary hoist * Boom mounted worklights * 360° flashing light * Cab spotlight * Engine block heater * Hookblocks (Quick reeve type) * Tow winch - front mounted-maximum pull 15,000 lbs. (6804 kg); maximum speed - 92 ft/min. (28m/min) * Spare wheel assembly * Tool kit * Pintle hook front/rear * High Speed Glide† system * Air conditioning * Dual axis joystick controllers * Hydraulic oil cab heater * Auxiliary oil cooler * LMI light bar * Emergency steer pump

*Denotes optional equipment

†Patented Grove feature

