



**GROVE**  
**CRANE**

A GROVE WORLDWIDE COMPANY



Rough-Terrain Hydraulic Crane Specifications

# RT630C



# Superstructure specifications

<b>Boom</b>	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).
<b>Fixed Swingaway Extension</b>	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).
<b>*Optional Fixed Swingaway Extension</b>	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).
<b>*Optional Telescopic Swingaway Extension</b>	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).
<b>Boom Nose</b>	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.
<b>Boom Elevation</b>	One double acting hydraulic cylinder with integral holding valve provides elevation from -3° to 78°.
<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. 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.
<b>Swing</b>	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.
<b>Counterweight</b>	Integral with superstructure. 2500 lbs. (1134 kg), 800 lbs. (363 kg) slab I.P.O. auxiliary hoist.

## HYDRAULIC SYSTEM

<b>Pumps</b>	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.
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<b>Valves</b>	Precision four way double acting pilot operated control valves, 3 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 5/12/16.
<b>Reservoir</b>	103 gallon (390 L) with spin-on breather filter, external sight gauge, oil temperature gauge, clean out access, strap mounted to frame.
<b>Oil Cooler</b>	Remote mounted with thermostatically controlled hydraulic motor driven fan.
<b>Pressure Check Panel</b>	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.

		<b>Main and *Auxiliary Hoist Grove HO15H-20G</b>
<b>Make/Model</b>		
<b>Maximum single line speed</b>	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)
<b>Maximum single line pull</b>	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)
<b>Maximum permissible line pull</b>		9,080 lbs. (4118 kg)
<b>w/5:1 strength factor</b>		5/8 in. (16mm) 18x19 class
<b>Maximum rope stowage</b>		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

<b>Frame</b>	High strength alloy steel all welded box section design with integral outrigger housings and front/rear lifting, towing and tie down lugs.
<b>Outrigger System</b>	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).
<b>Outrigger Controls</b>	Located in cab on front dash panel requires two hand operation. Crane level indicator located in cab.
<b>Engine</b>	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.
<b>*Optional Engine</b>	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.
<b>Fuel Tank Capacity</b>	60 gallons (227 L)
<b>Electrical System</b>	Two 12-volt - maintenance free batteries, 815 CCA @ 0 degree F. 12 volt starting/lighting.
<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 steer indicating gauge.
<b>Transmission</b>	Engine mounted full powershift with 6 forward and 3 reverse speeds. Front axle disconnect for 4x2 travel.
<b>Axles</b>	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).
<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>Brakes</b>	Full hydraulic, split circuit operating on all wheels. Spring-applied, hydraulically released front axle mounted parking brake.
<b>Tires</b>	23.5R25 Radial Earthmover type, tubeless.
<b>Lights</b>	Full lighting including turn indicators, head, tail, brake and hazard warning lights.
<b>Maximum Speed</b>	24 MPH (39 kph)

<b>Maximum Gradeability</b>	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.
<b>Gross Vehicle Weight &amp; Axle Loads</b>	STANDARD MACHINE Front: 33,808 lbs. (15335 kg) Rear: 25,822 lbs. (11712 kg) G.V.W.: 59,630 lbs. (27047 kg)
<b>Miscellaneous Standard Equipment</b>	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.
<b>*Optional Equipment</b>	<ul style="list-style-type: none"> <li>* Auxiliary hoist</li> <li>* Boom mounted worklights</li> <li>* 360° flashing light</li> <li>* Cab spotlight</li> <li>* Engine block heater</li> <li>* Hookblocks (Quick reeve type)</li> <li>* Tow winch - front mounted-maximum pull 15,000 lbs. (6804 kg); maximum speed - 92 ft/min. (28m/min)</li> <li>* Spare wheel assembly</li> <li>* Tool kit</li> <li>* Pintle hook front/rear</li> <li>* High Speed Glide† system</li> <li>* Air conditioning</li> <li>* Dual axis joystick controllers</li> <li>* Hydraulic oil cab heater</li> <li>* Auxiliary oil cooler</li> <li>* LMI light bar</li> <li>* Emergency steer pump</li> </ul>

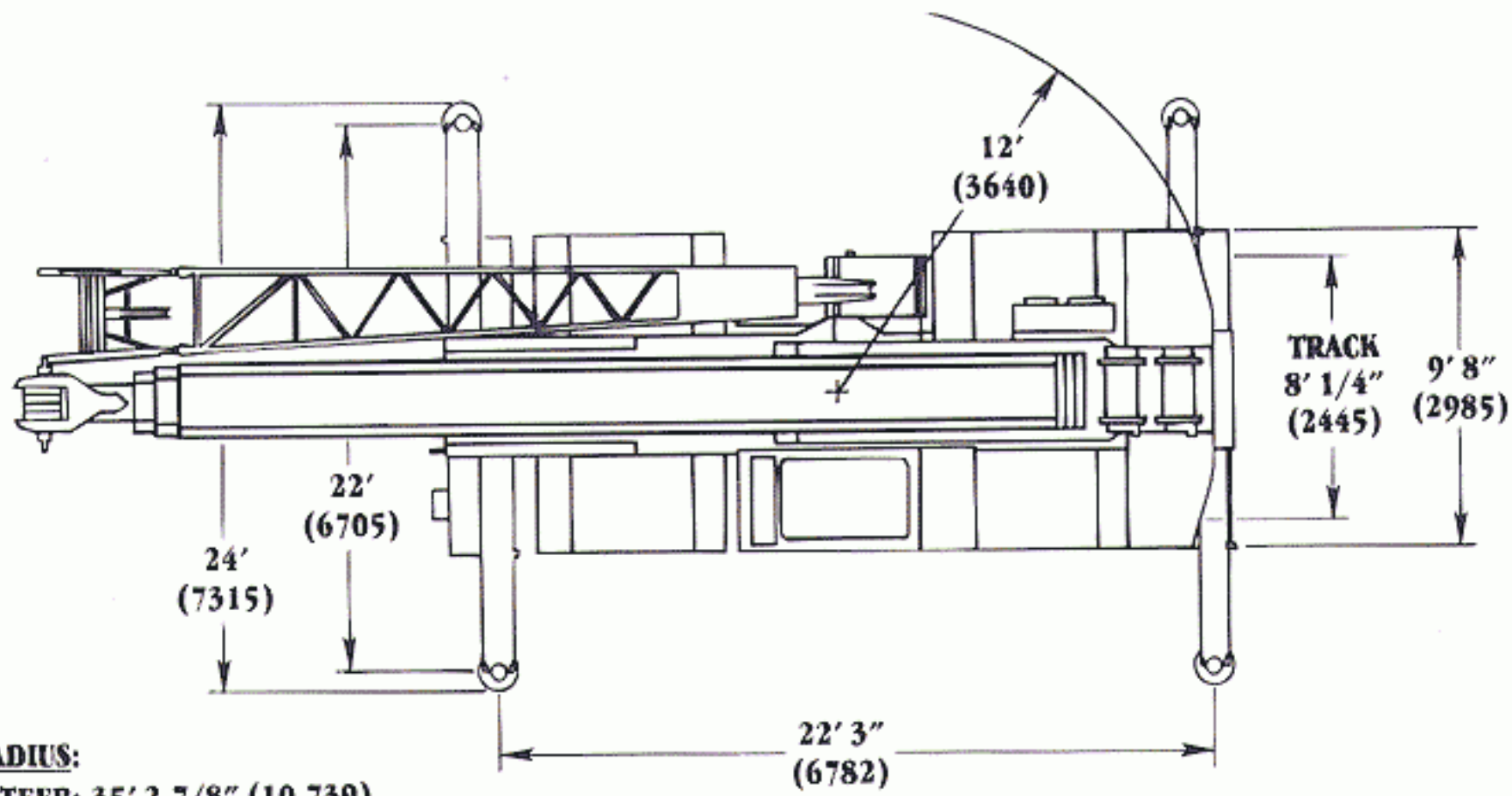
\*Denotes optional equipment

†Patented Grove feature

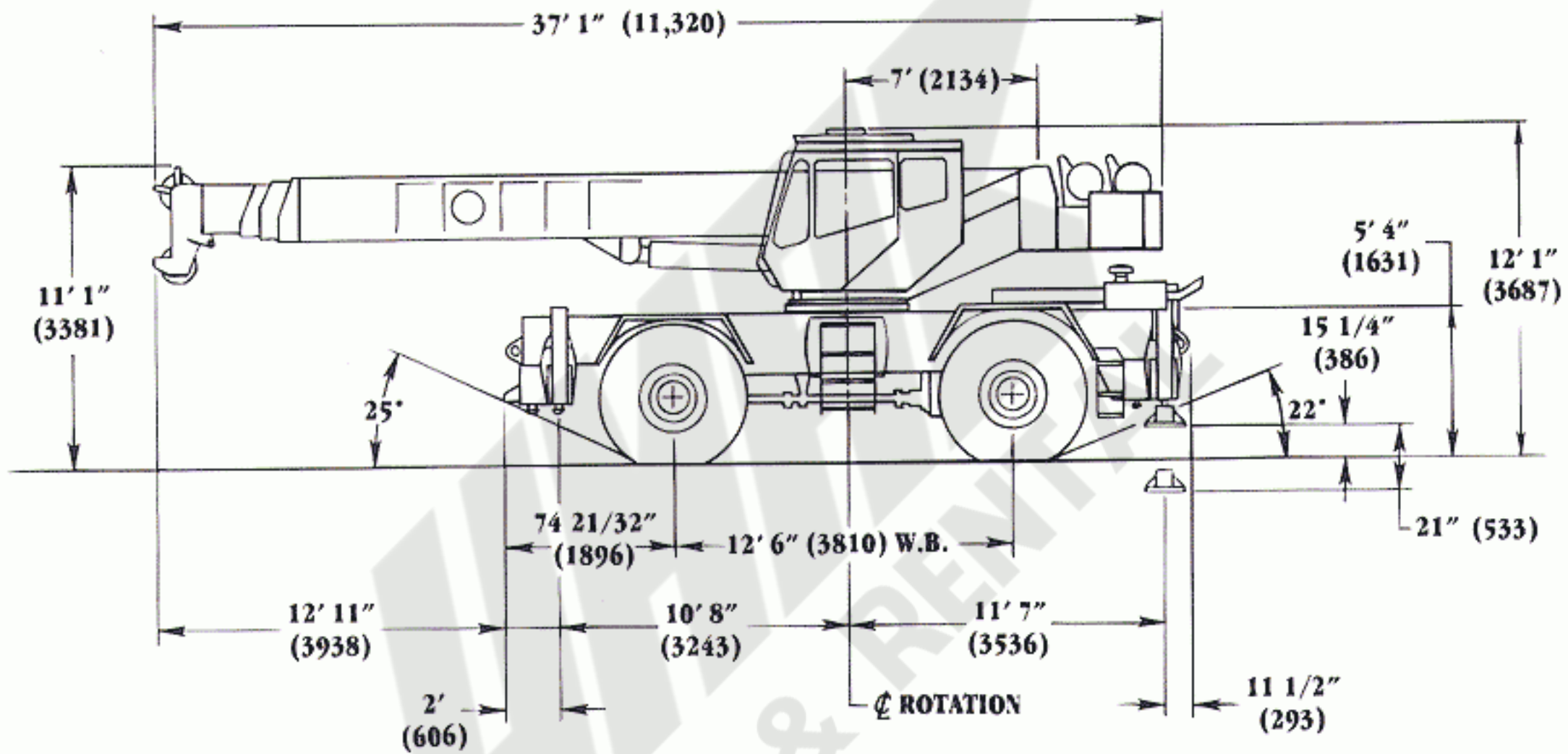


# Dimensions

# RT630C



**TURNING RADIUS:**  
 2 WHEEL STEER: 35' 2 7/8" (10,739)  
 4 WHEEL STEER: 20' 0 1/8" (6099)



Constant improvement and engineering progress make 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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