

# **GROVE<sup>®</sup>**

**FULL HYDRAULIC  
SELF-PROPELLED CRANE**

**MODEL  
RT63S**  
30 Ton Capacity

## **FEATURES**

- \* 60,000 lbs. Capacity at 12'
- \* Hook Height 137 ft. maximum
- \* Turntable-Mounted Control Cab
- \* 4-Wheel Drive, 4-Wheel Steer  
4-Wheel Power-Assist Brakes
- \* Hoist Speeds To 360 fpm
- \* Front and rear hydraulic double-box telescoping beam outriggers and enclosed vertical jacks are independently controlled from cab. Maximum outrigger extension is 16' 11", center of jacks.





# SPECIFICATIONS

**BOOMS** — 24 ft.-60 ft., 3 section, full power telescoping.

\*32 ft.-80 ft., 3 section, full power telescoping.

\*29 ft.-92 ft., 4 section, power telescoping.

Two full power sections, fly section power extended and retracted from pinned position. Pendulum boom angle indicator. Boom telescope sections are individually controlled. Each boom section supported on graphite impregnated nylon wear pads.

**BOOM NOSE** — Fixed boom nose with integral rope guards. Four sheaves mounted on anti-friction bearings. Rope dead ends on each side of boom nose.

**BOOM ELEVATION** — Dual double-acting hydraulic cylinders with integral holding valves; 0° to 75° elevation.

**\*JIBS** — 20 ft. "Stowaway" for all booms.

24 ft. "Stowaway" for 32 ft.-80 ft. or 29 ft.-92 ft. booms.

24 ft.-40 ft. "Stowaway" telescoping for 32 ft.-80 ft. or 29 ft.-92 ft. booms.

All jibs have self-equalizing suspension and jib backstops.

**SWING** — Grove Planetary Swing, 360° continuous rotation ball bearing swing circle. Speed 2.5 RPM, automatic swing brake. Manual turntable lock (plunger type) for road travel.

**CAB** — Turntable mounted, full vision enclosed steel cab with safety glass throughout. Skylight folds back for additional cab ventilation. Gasoline heater, tachometer, windshield wiper, fire extinguisher and left hand door with door lock. Includes all engine instruments, controls for driving and crane function controls.

**OUTRIGGERS** — Hydraulic double-box integral with main frame; telescoping beams, enclosed vertical jacks with integral check valves and mechanical pin locks, beams extend to 16 ft. 11 in. centerline to centerline, retract to 9 ft. 8 in. overall width. Independent or simultaneous control in-out-up-and-down. Outrigger controls in operator's cab. Sequence control arrangement eliminates accidental actuation.

**MAIN FRAME** — All welded construction with full depth longitudinal and crossmembers. Frame reinforced at critical points to insure a rigid turntable mounting.

**TRANSMISSION AND TORQUE CONVERTER** — Engine mounted converter. 3.00:1 stall ratio with PTO for hydraulic pumps. Remote mounted full powershift transmission with rear axle disconnect.

**SPEEDS** — 4 forward and 4 reverse.

**TURNING RADIUS** — 20 ft.

**AXLES** — Front: Planetary drive with dual steering cylinders mounted rigid to frame.

Rear: Planetary drive with dual steering cylinders mounted to allow 0 in. to 12 in. oscillation.

**OSCILLATION LOCKOUTS** — Automatic hydraulic on rear axle. Allows oscillation only with superstructure over front.

**SERVICE BRAKES** — Full air on all four wheels.  
Size: 20 in. x 5 in.

**PARKING BRAKES** — Front axle equipped with spring set emergency and parking brakes.

**STEERING** — Front: Power assist hydraulic control.

Rear: Full hydraulic, tiller bar control.

Independent front and rear steer control allows maximum "On the Move" maneuverability.

**TIRES** — 21.00x25- 24 ply Wide Base Earthmover tubeless.

\*18.00x25-28 ply Excavator tubeless.

\*26.5x25-20 ply Wide Base Earthmover tubeless.

## HYDRAULIC SYSTEM:

**RESERVOIR** — 180 gallon capacity, all steel welded construction with integral baffles, clean-out access and level check.

**FILTER** — Return line replaceable cartridge with by-pass protection.

**PUMPS** — 3 main gear pumps, 120 GPM capacity.  
Steer pump 15 GPM.

**CONTROL VALVES** — Precision four-way double-acting with integral load check, main and circuit relief valves. Three banks permitting multiple control of crane functions. Operating pressure 2250 PSI maximum.

**OIL COOLER** — Full flow, fin and tube, oil to air.

**POWER DISTRIBUTION** — (Main hoist, auxiliary hoist); (Boom elevation, telescope mid, rear steer); (Telescope fly, outriggers, swing); (Front steer).

## HOIST SPECIFICATIONS

DESCRIPTION: Power up and down, equal speed, planetary reduction, with integral automatic brake.				
HOIST DATA	MAIN HOIST X	*MAIN HOIST (Free Fall)	*AUXILIARY HOIST X	*AUXILIARY HOIST (Free Fall)
Drum Dimensions	Model 5090 MECR 14.5 in. diameter 16 in. length 22.3 in. diameter flange	Model 5090 MGECR 14.5 in. diameter 16 in. length 22.3 in. diameter flange	Model 40 SECR 9 in. diameter 8 in. length 17.5 in. diameter flange	Model 40 SGECR 9 in. diameter 8 in. length 17.5 in. diameter flange
Performance	Single line speed 360 FPM (Max.) Single line pull 11,700 lbs. (Max.)	Same as 5090 MECR with Free Fall	Single line speed 290 FPM (Max.) Single line pull 9,000 lbs. (Max.)	Same as 40 SECR with Free Fall
Rope Capacity	690 ft. of 5/8 in. rope	690 ft. of 5/8 in. rope	400 ft. of 1/2 in. rope	400 ft. of 1/2 in. rope
Permissible single Line Rope Pull	5/8 in. 6x37 - 9,700 lbs. 5/8 in. 19x7 - 8,700 lbs.	5/8 in. 6x37 - 9,700 lbs. 5/8 in. 19x7 - 8,700 lbs.	1/2 in. 6x37 - 7,200 lbs. 1/2 in. 19x7 - 6,150 lbs.	1/2 in. 6x37 - 7,200 lbs. 1/2 in. 19x7 - 6,150 lbs.

## ENGINE SPECIFICATIONS

MAKE	Cummins Diesel V-504	*Detroit Diesel 6V-53N	*Caterpillar D-3150 Diesel
TYPE	8 cylinder O.H.V.	6 cylinder O.H.V.	8 cylinder
BORE & STROKE	4.625 in. x 3.75 in.	3.875 in. x 4.50 in.	4.5 in. x 4.5 in.
DISPLACEMENT	504 cu. in.	318.4 cu. in.	573 cu. in.
HORSEPOWER (NET)	166 @ 2600 RPM	178 @ 2500 RPM	140 @ 2750 RPM
GOVERNED RPM	2600 RPM	2600 RPM	2800 RPM
TORQUE (NET)	287 lbs. ft. @ 2600 RPM	436 lbs. ft. @ 1200 RPM	385 lbs. ft. @ 1550 RPM
ELECTRICAL SYSTEM	12-volt	12-volt	12-volt
COMBUSTION SYSTEM	4 cycle	2 cycle, with blower	4-cycle, naturally aspirated
COOLING	Water cooled	Water cooled	Water cooled
FUEL CAPACITY	93 gallons	93 gallons	93 gallons





# SPECIFICATIONS

## SPEED & GRADEABILITY

TRANSMISSION RANGE	MPH @ 2600 RPM	% OF GRADEABILITY @ 2600 RPM	% OF GRADEABILITY AT STALL SPEED	TRACTIVE EFFORT AT STALL (lbs.)
1st Forward	3.46	15.3	54.	32,000
2nd Forward	6.77	6.8	27.2	16,300
3rd Forward	12.89	2.6	14.4	8,700
4th Forward	25.48	.35	8.7	4,300

NOTE: All performance data is based on standard machine and may vary plus or minus 10% due to variations in engine performance.

## AXLE WEIGHT DISTRIBUTION

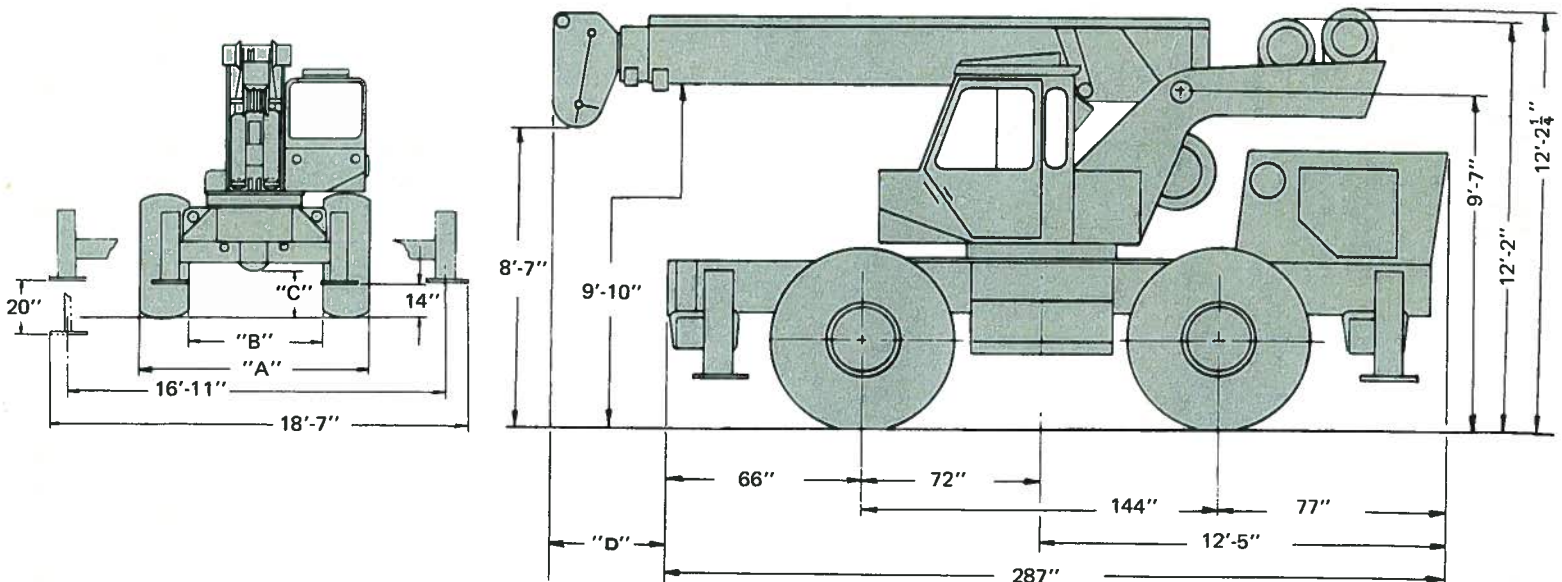
STANDARD MACHINE WITH	TOTAL WEIGHT (Lbs.)	FRONT	REAR
24'-60' Boom	62,870	31,140	31,730
32'-80' Boom	65,980	35,720	30,260
29'-92' Boom	66,730	37,850	28,880

# DIMENSIONS

TAIL SWING 11'-1"  
TURNING RADIUS 20'

FRONT VIEW TIRE SIZE	"A"	"B"	"C"
21.00 x 25	119.4"	73.6"	22"
18.00 x 25	110.4"	79.3"	20.9"
26.5 x 25	123.6"	69.8"	22.4"

SIDE VIEW	"D"
24'-60' BOOM	10'-2 $\frac{3}{8}$ "
32'-80' BOOM	16'-2 $\frac{3}{8}$ "
29'-92' BOOM	13'-9 $\frac{1}{8}$ "



\*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.

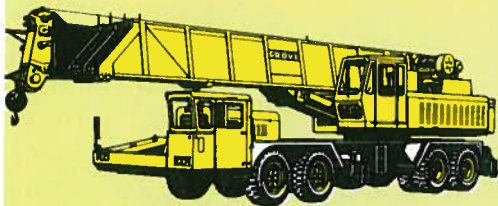


# MORE VERSATILE MORE PROFITABLE

for a wider  
variety of lifting  
& handling jobs!

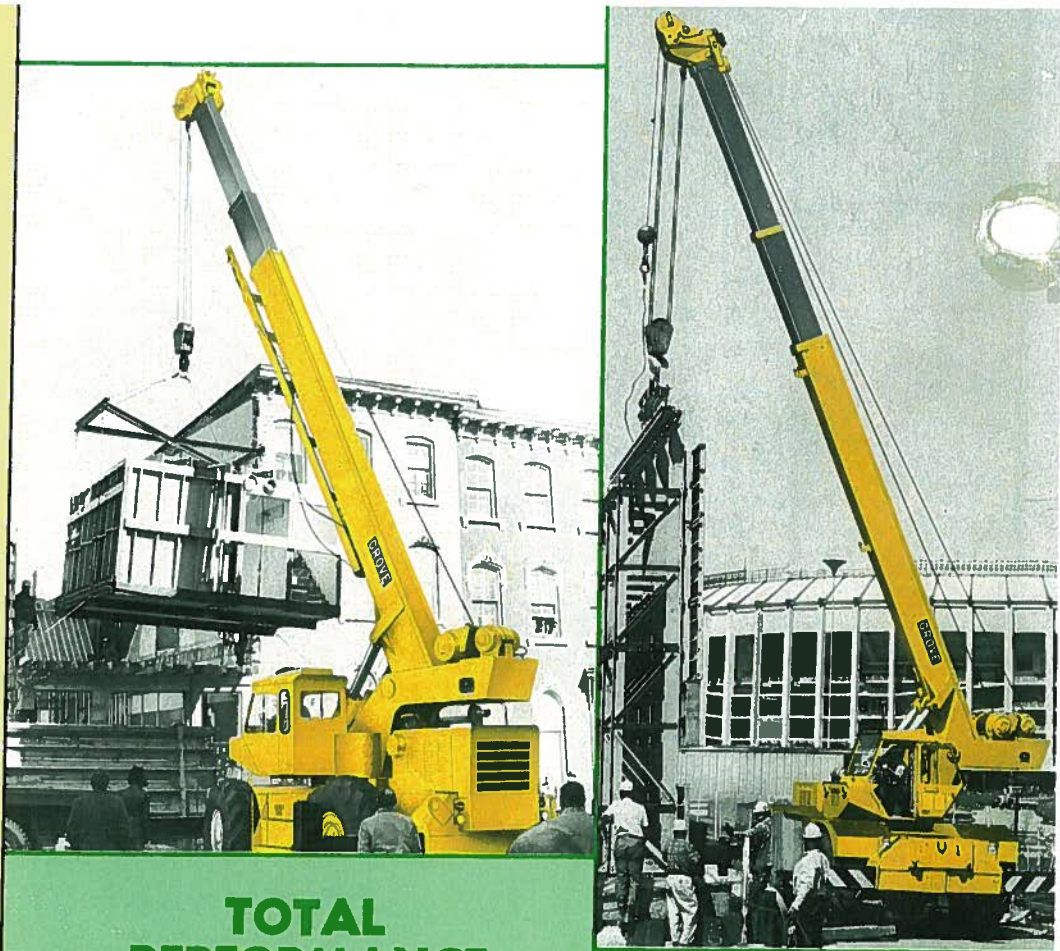
THE PREFERENCE FOR GROVE CRANES among profit-minded users reflects the users need for the versatility and advanced design engineering offered in all Grove Hydraulic Cranes. They add up to profit-making performance . . . a measurable value that tells him he is getting his money's worth on his Grove Crane investment. That's why the smart crane buyers have made Grove their NUMBER ONE CHOICE.

A FULL LINE OF HYDRAULIC CRANES . . . in addition to a full line of rough terrain cranes, Grove also offers a complete line of carrier-mounted cranes including an 80-ton model with a boom tip height of 180'. Ask your Grove Distributor for details.



## HYDRAULIC CRANES

GROVE MANUFACTURING COMPANY  
A Division of Walter Kidde & Company, Inc.  
Shady Grove, Pa. 17256



## TOTAL PERFORMANCE

GROVE is the NUMBER ONE producer of hydraulic cranes for just one reason . . . Grove cranes deliver profit-making performance. When the smart buyer puts his money on the line, he wants to know that every dollar he spends

is going to work for him every day that he owns that crane. He wants measurable value and that's why thousands of profit-minded crane users are willing to pay slightly more for the extra values found in Grove Hydraulic cranes.

