

# GROVE®

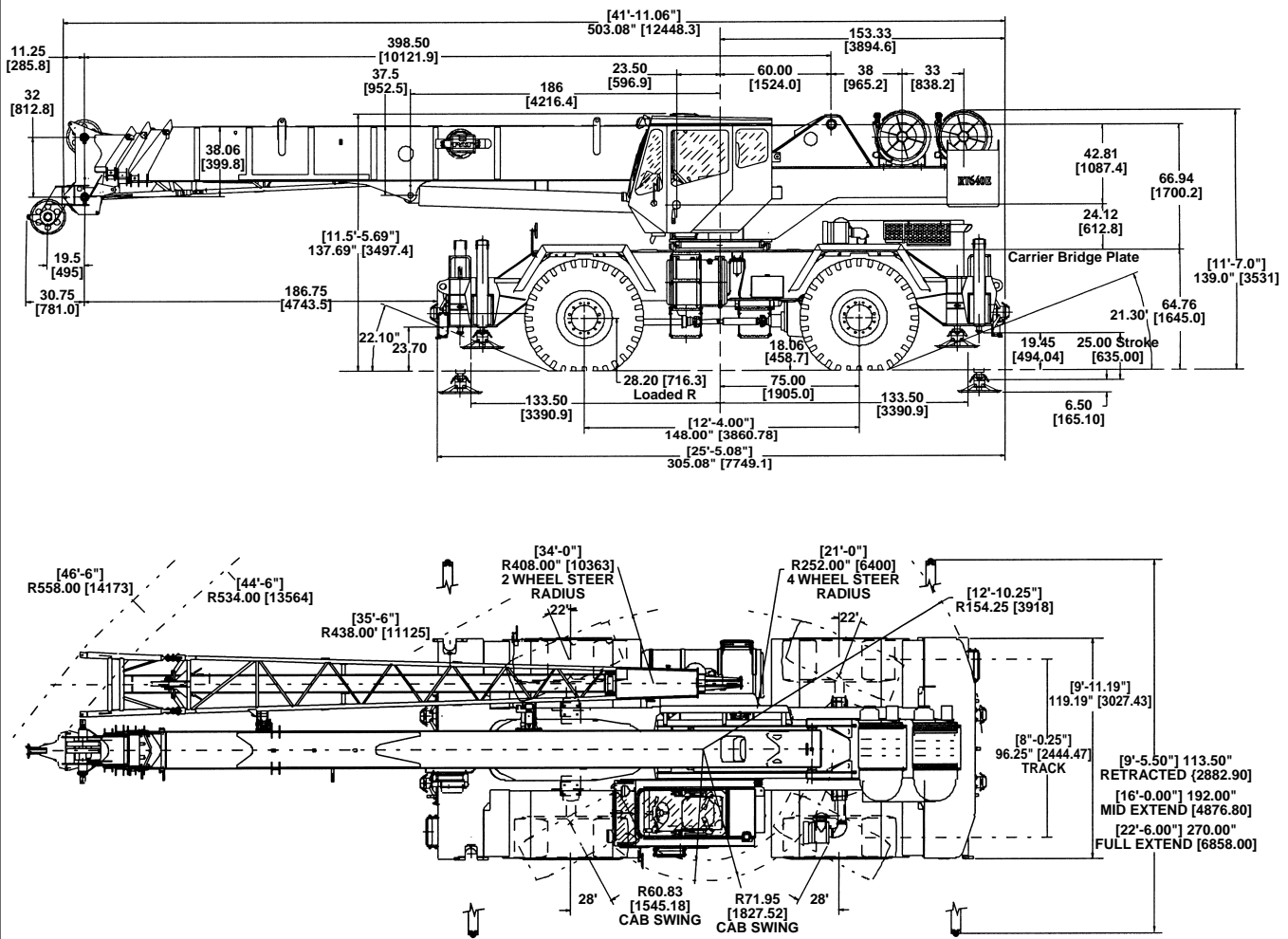
## **RT600E SERIES**



ROUGH TERRAIN  
HYDRAULIC CRANE



# Dimensions



Note: ( ) Reference dimensions in mm

## Weights

	GVW		Front		Rear	
	lbs	kg	lbs	kg	lbs	kg
<b>RT600E Basic Machine</b>	71,084	32,244	32,602	14,788	38,482	17,455
<b>ADD: 29 - 51 ft Tele swingaway</b>	2,109	957	3,456	1,568	-1,347	-611
<b>ADD: 29 ft Swingaway</b>	1,493	677	2,506	1,137	-1,013	-459
<b>ADD: Aux hoist w/rope</b>	655	297	-247	-112	902	409
<b>ADD: Aux boom nose</b>	131	59	358	162	-227	-103
<b>ADD: 40 ton (35mt) 3-sheave block (stowed in trough)</b>	800	363	822	373	-22	-10
<b>ADD: 50 ton (45mt) 3-sheave block (stowed in trough)</b>	900	408	924	419	-24	-11
<b>ADD: 8.3 ton (7.5mt) headache ball (hanging from aux nose)</b>	347	157	603	274	-256	-116
<b>Remove: Counterweight</b>	11,250	5,103	4,570	2,073	-15,820	-7,176

# Working Range



33 - 105 ft.  
(10.1 - 32 m)

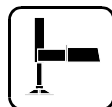


29 - 51 ft.  
(8.8 - 15.5 m)

Tele-Swingaway



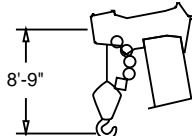
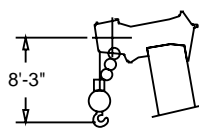
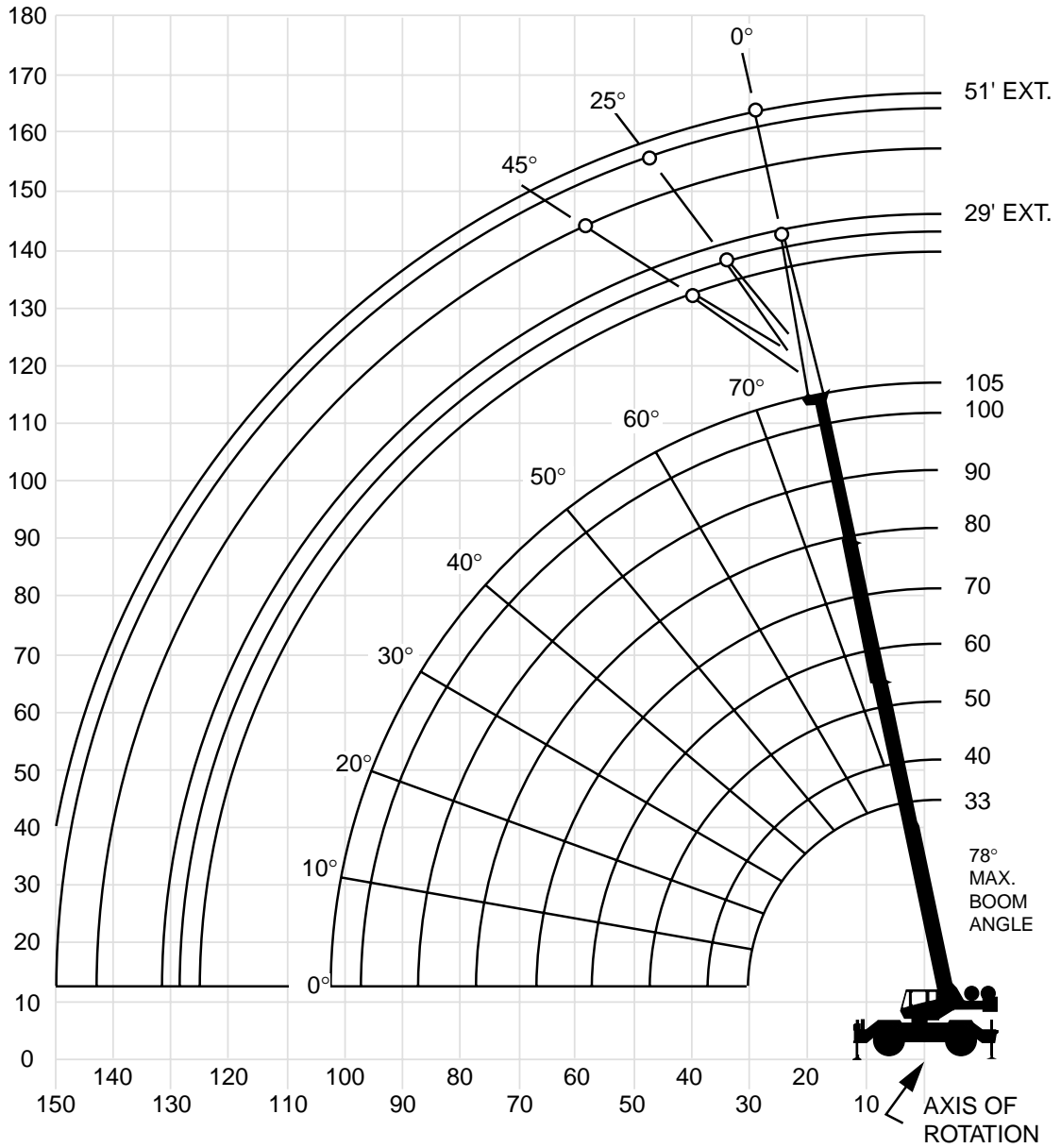
11,250 lbs.  
(5103 kg)



100%



360°



DIMENSIONS ARE FOR LARGEST GROVE FURNISHED HOOK BLOCK AND HEADACHE BALL, WITH ANTI-TWO BLOCK ACTIVATED.

# Superstructure Specifications

## Boom

33 ft. - 105 ft. (10.1 m - 32 m) four-section, full-power synchronized boom.

Maximum tip height: 112 ft. (34.1 m).

### \*Optional Fixed Swingaway Extension

29 ft. (8.8 m) offsettable lattice swingaway extension. Offsettable at 0°, 25° and 45°. Stows alongside base boom section. Maximum tip height: 141.5 ft. (43.1 m).

### \*Optional Telescopic Swingaway Extension

29 ft. - 51 ft. (8.8 m - 15.5 m) telescoping lattice swingaway extension. Offsettable at 0°, 25° and 45°. Stows alongside base boom section. Maximum tip height: 162 ft. (49.3 m).

## Boom Nose

Three nylatron sheaves mounted on heavy-duty tapered roller bearings with removable pin-type rope guards.

\*(Four sheaves with optional 18 x 19 wire rope.) 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 -2° to 78°.

## Load Moment & Anti-Two Block System

Standard "Graphic Display" 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 condition. The system defaults to 360° on rubber chart. The standard Work Area Definition System allows the operator to pre-select and define working areas. If the crane approaches the pre-set limits, audio-visual warnings aid the operator in avoiding job-site obstructions.

## 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: hot water heater/defroster, cab circulating air fan, sliding side and rear windows, sliding skylight with electric wiper and sunscreen, electric windshield wash/wipe, fire extinguisher, seat belt and circuit breakers.

## Swing

Planetary swing with foot-applied multi-disc brake. Spring applied, hydraulically-released swing brake and plunger-type, one position, mechanical house lock operated from cab. \*Optional 360° mechanical swing lock. Maximum speed: 2.5 RPM.

## Counterweight

11,250 lbs. (5 103 kg) pinned to superstructure.

## Hydraulic System

Three main gear pumps with combined capacity of 103 GPM (391 L/min), 135 GPM (511 L/min) with optional air conditioning.

Maximum operating pressure: 3500 psi (26.2 MPa)

Return line type filter with full flow by-pass protection and service indicator. Replaceable cartridge with micron filtration rating of 5/12/16. 134 gallon (509 L) reservoir. Hydraulic oil cooler (integral with engine radiator). System pressure test ports.

## Hoist Specifications Main and Auxiliary Hoist: Grove Model HO30G-16G

Planetary reduction with automatic spring applied multi-disc brake. Grooved drum. Electronic hoist drum rotation indicator and hoist drum cable followers.

Maximum Single Line Pull: 18,180 lbs  
(8 246 kg)

Maximum Single Line Speed: 588 FPM  
(179 m/min)

Maximum Permissible Line Pull:  
16,800 lbs. (7 620 kg) w/standard 6 x 37 class rope  
12,920 lbs. (5 860 kg) w/optional 18 x 19 class rope

Rope Diameter: 3/4 in. (19 mm)

Rope Length: 450 ft. (137 m)

Rope Type: 6 x 37 Class EIPS IWRC  
Optional: 18 x 19 class rotation resistant

Maximum Rope Stowage: 694 ft. (211 m)

# Carrier Specifications

## Chassis

Box section frame fabricated from high-strength, low alloy steel. Integral outrigger housings and front/rear towing and tie down lugs.

## Outrigger System

Four hydraulic telescoping single-stage double box beam outriggers with inverted jacks and integral holding valves. Three position setting. All steel fabricated, quick-release type round outrigger floats, 24 in. (610 mm) diameter. Maximum outrigger pad load: 64,549 lbs. (29 278 kg).

## Outrigger Controls

Controls and crane level indicator located in cab.

## Engine

Cummins 6BT 5.9L diesel, six cylinders, turbocharged, 165 bhp (123 kW) (Gross) @ 2,500 rpm. Maximum torque: 414 ft. lbs. (561 Nm) @ 1,600 RPM.

## Fuel Tank Capacity

60 gallons (227 L)

## Transmission

Full powershift with 6 forward and 3 reverse speeds. Front axle disconnect for 4 x 2 travel.

## Electrical System

Two 12-volt maintenance free batteries. 12-volt starting and lighting, circuit breakers. \*Optional battery disconnect switch.

## Drive

4 x 4

## Steering

Fully independent power steering:

Front: Full hydraulic, steering wheel controlled.

Rear: Full hydraulic, switch controlled.

Provides infinite variations of 4 main steering modes: front only, rear only, crab and coordinated.

"Rear steer centered" indicating light.

4 wheel turning radius - 20 ft. (6.1m)

## Axles

Front: Drive/steer with differential and planetary reduction hubs rigid-mounted to frame.

Rear: Drive/steer with differential and planetary reduction hubs pivot-mounted to frame.

## Oscillation Lockouts

Automatic full hydraulic lockouts on rear axle permit oscillation only with boom centered over the front.

## Brakes

Full hydraulic split circuit disc-type brakes operating on all wheels. Spring-applied, hydraulically released transmission-mounted parking brake.

## Tires

23.5 x 25 - 20PR bias earthmover type.

\*23.5R25 radial earthmover type.

## Lights

Full lighting package including turn indicators, head, tail, brake and hazard warning lights.

## Maximum Speed

24 MPH (39 km/h).

## Gradeability (Theoretical)

78% (Based on 75,000 lbs. [34 020 kg] GVW) 23.5 x 25 tires, pumps engaged, 105 ft. (32 m) boom, and tele-swingaway.

## Miscellaneous Standard Equipment

Full width steel fenders, dual rear view mirrors, hookblock tiedown, electronic back-up alarm, light package, front stowage well, tachometer, rear wheel position indicator, 36,000 BTU hot water heater, hoist mirrors, engine distress A/V warning system. Auxiliary hoist control valve arrangement (less hoist). Ether injection cold start aid (less canister) and immersion type engine block heater, 120V 1500 watt.

## \*Optional Equipment

\*VALUE PACKAGE: includes 29-51 ft. (8.8-15.5 m) offsettable telescoping swingaway, 360° NYC style swing lock, and auxiliary hoist package.

\*AUXILIARY HOIST PACKAGE (includes Model HO30G-16G auxiliary hoist with electronic hoist drum rotation indicator, hoist drum cable follower, 450 ft. (137m) of 3/4 in.(19mm) 18 X 19 class wire rope, auxiliary single sheave boom nose.)

\*AUXILIARY LIGHTING PACKAGE (includes cab mounted, 360° rotation spotlight, cab mounted amber flashing light, and dual base boom mounted floodlights.)

\*CONVENIENCE PACKAGE (includes in cab LMI light bar)

\*Air Conditioning

\*Full-length aluminum decking

\*Pintle hook - rear

\*360 degree positive swing lock

\*Battery disconnect switch

\*Cab-controlled cross axle differential lock (front and rear)

\*Manual hydraulic pump disconnect

\*PAT datalogger

\*Rubber mat for stowage trough

*\*Denotes optional equipment*

**RT650E RATED LIFTING CAPACITIES IN POUNDS**  
**33 FT. - 105 FT. BOOM**  
**ON OUTRIGGERS FULLY EXTENDED - 360°**

Radius in Feet	#0001								
	Main Boom Length in Feet								
	33	40	50	60	70	80	90	100	105
10	100,000 (69.5)	80,550 (73.5)	67,250 (77)						
12	87,100 (65.5)	79,150 (70.5)	64,200 (75)	*56,100 (78)					
15	69,050 (59.5)	69,550 (65.5)	59,950 (71)	51,800 (75)	45,200 (77.5)				
20	50,500 (47.5)	50,950 (57)	51,400 (64.5)	44,500 (69.5)	38,550 (73)	34,450 (75.5)	*31,400 (78)		
25	38,300 (32)	38,850 (47)	39,350 (58)	39,650 (64.5)	37,100 (68.5)	29,850 (72)	27,250 (74.5)	21,000 (76.5)	18,350 (77.5)
30		30,700 (34.5)	31,200 (50.5)	31,500 (58.5)	31,700 (64)	26,350 (68)	24,100 (71)	21,000 (73.5)	18,350 (74.5)
35			25,450 (41.5)	25,750 (52.5)	26,000 (59)	23,650 (64)	21,500 (67.5)	19,150 (70)	18,350 (71.5)
40			20,850 (30.5)	21,200 (46)	21,600 (54)	21,350 (59.5)	19,400 (64)	16,650 (67)	17,300 (68.5)
45				17,100 (38)	17,350 (48.5)	17,300 (55)	17,300 (60)	14,650 (64)	15,750 (65.5)
50				13,950 (28)	14,150 (42.5)	14,200 (50.5)	14,200 (56)	13,000 (60.5)	14,300 (62.5)
55					11,700 (35)	11,750 (45.5)	11,850 (52)	11,900 (57)	12,000 (59)
60					9,730 (26)	9,870 (39.5)	9,980 (47.5)	10,100 (53.5)	10,150 (55.5)
65						8,300 (33)	8,440 (42.5)	8,600 (49.5)	8,680 (52)
70						6,960 (24.5)	7,170 (37.5)	7,340 (45.5)	7,430 (48.5)
75							6,080 (31)	6,290 (40.5)	6,390 (44.5)
80							5,130 (23)	5,380 (35.5)	5,490 (40)
85								4,580 (29.5)	4,720 (35)
90								3,880 (22)	4,020 (29)
95									3,400 (21.5)
Minimum boom angle (°) for indicated length (no load)									0
Maximum boom length (ft.) at 0° boom angle (no load)									105

NOTE: ( ) Boom angles are in degrees.  
 #LMI operating code. Refer to LMI manual for operating instructions.  
 \*This capacity is based on maximum boom angle.

Lifting Capacities at Zero Degree Boom Angle On Outriggers Fully Extended - 360°									
Boom Angle	Main Boom Length in Feet								
	33	40	50	60	70	80	90	100	
0°	16,250 (28.2)	12,500 (35)	8,780 (45)	6,290 (55)	4,510 (65)	3,160 (75)	2,110 (85)	1,260 (95)	

NOTE: ( ) Reference radii in feet.

A6-829-100936

**RT640E RATED LIFTING CAPACITIES IN POUNDS**  
**33 FT. - 105 FT. BOOM**  
**ON OUTRIGGERS FULLY EXTENDED - 360°**

Radius in Feet	#0001								
	Main Boom Length in Feet								
	33	40	50	60	70	80	90	100	105
10	80,000 (69.5)	73,500 (73.5)	67,200 (77)						
12	77,750 (65.5)	69,500 (70.5)	62,300 (75)	*56,100 (78)					
15	69,050 (59.5)	65,550 (65.5)	57,300 (71)	51,800 (75)	45,200 (77.5)				
20	50,500 (47.5)	50,950 (57)	51,400 (64.5)	44,500 (69.5)	38,550 (73)	34,450 (75.5)	*31,400 (78)		
25	38,300 (32)	38,850 (47)	39,350 (58)	39,650 (64.5)	37,100 (68.5)	29,850 (72)	27,250 (74.5)	21,000 (76.5)	18,350 (77.5)
30		30,700 (34.5)	31,200 (50.5)	31,500 (58.5)	31,700 (64)	26,350 (68)	24,100 (71)	21,000 (73.5)	18,350 (74.5)
35			25,450 (41.5)	25,750 (52.5)	26,000 (59)	23,650 (64)	21,500 (67.5)	19,150 (70)	18,350 (71.5)
40			20,850 (30.5)	21,200 (46)	21,600 (54)	21,350 (59.5)	19,400 (64)	16,650 (67)	17,300 (68.5)
45				17,100 (38)	17,350 (48.5)	17,300 (55)	17,300 (60)	14,650 (64)	15,750 (65.5)
50				13,950 (28)	14,150 (42.5)	14,200 (50.5)	14,200 (56)	13,000 (60.5)	14,300 (62.5)
55					11,700 (35)	11,750 (45.5)	11,850 (52)	11,900 (57)	12,000 (59)
60					9,730 (26)	9,870 (39.5)	9,980 (47.5)	10,100 (53.5)	10,150 (55.5)
65						8,300 (33)	8,440 (42.5)	8,600 (49.5)	8,680 (52)
70						6,960 (24.5)	7,170 (37.5)	7,340 (45.5)	7,430 (48.5)
75							6,080 (31)	6,290 (40.5)	6,390 (44.5)
80							5,130 (23)	5,380 (35.5)	5,490 (40)
85								4,580 (29.5)	4,720 (35)
90								3,880 (22)	4,020 (29)
95									3,400 (21.5)
Minimum boom angle (°) for indicated length (no load)									0
Maximum boom length (ft.) at 0° boom angle (no load)									105

NOTE: ( ) Boom angles are in degrees.

#LMI operating code. Refer to LMI manual for operating instructions.

\*This capacity is based on maximum boom angle.

<b>Lifting Capacities at Zero Degree Boom Angle On Outriggers Fully Extended - 360°</b>									
Boom Angle	Main Boom Length in Feet								
	33	40	50	60	70	80	90	100	105
0°	16,250 (28.2)	12,500 (35)	8,780 (45)	6,290 (55)	4,510 (65)	3,160 (75)	2,110 (85)	1,260 (95)	

NOTE: ( ) Reference radii in feet.

A6-829-100832A

# RT600E SERIES 29 FT. - 51 FT. TELE OFFSETTABLE BOOM EXTENSION ON OUTRIGGERS FULLY EXTENDED - 360°

Radius in Feet	**29 ft. LENGTH			51 ft. LENGTH		
	#0021	#0022	#0023	#0041	#0042	#0043
	0° OFFSET	25° OFFSET	45° OFFSET	0° OFFSET	25° OFFSET	45° OFFSET
30	*9,000 (78)					
35	9,000 (77)			*6,000 (78)		
40	9,000 (74.5)	8,000 (77.5)		6,000 (77)		
45	9,000 (72.5)	7,560 (76)	*5,660 (78)	6,000 (76)		
50	8,760 (70)	7,170 (74)	5,600 (76)	6,000 (74)		
55	8,030 (67.5)	6,820 (71.5)	5,500 (73.5)	6,000 (72)	*4,120 (78)	
60	7,380 (65)	6,500 (69)	5,300 (71)	6,000 (70)	3,900 (77)	
65	6,770 (62.5)	6,210 (66.5)	5,180 (68.5)	6,000 (68)	3,710 (75)	*2,740 (78)
70	6,210 (60)	5,950 (64)	4,890 (66)	5,620 (66)	3,530 (72.5)	2,660 (76.5)
75	5,710 (57.5)	5,710 (61.5)	4,620 (63)	5,210 (64)	3,370 (70.5)	2,580 (74)
80	5,250 (55)	5,500 (58.5)	4,370 (60.5)	4,860 (61.5)	3,220 (68.5)	2,520 (72)
85	4,790 (52)	5,300 (56)	4,100 (57.5)	4,540 (59.5)	3,080 (66)	2,460 (69.5)
90	4,090 (49)	4,650 (53)	3,820 (54)	4,260 (57)	2,960 (63.5)	2,410 (67)
95	3,480 (46)	3,960 (49.5)		4,000 (55)	2,850 (61.5)	2,360 (64.5)
100	2,930 (42.5)	3,350 (46)		3,770 (52.5)	2,750 (59)	2,330 (62)
105	2,440 (39)	2,810 (42.5)		3,360 (50)	2,660 (56)	2,300 (59)
110	2,000 (35)	2,320 (38.5)		2,910 (47.5)	2,570 (53.5)	2,280 (56)
115	1,610 (30.5)			2,500 (44.5)	2,500 (50.5)	
120	1,250 (25.5)			2,120 (41.5)	2,430 (47.5)	
125				1,780 (38.5)	2,250 (44.5)	
130				1,470 (35)	1,820 (40.5)	
135				1,180 (31)	1,420 (36.5)	
Min. boom angle for indicated length (no load)	24°	32°	45°	25°	35°	45°
Max. boom length at 0° boom angle (no load)	90 ft.			90 ft.		

### NOTES:

1. All capacities above the bold line are based on structural strength of boom extension.
2. 29 ft. and 51 ft. boom extension lengths may be used for single line lifting service.
3. Radii listed are for a fully extended boom with the boom extension erected. For main boom lengths less than fully extended, the rated loads are determined by boom angle. Use only the column which corresponds to the boom extension length and offset for which the machine is configured. For boom angles not shown, use the rating of the next lower boom angle.  
  
**WARNING:** Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
4. Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
5. Capacities listed are with outriggers fully extended and vertical jacks set

NOTE: ( ) Boom angles are in degrees. A6-829-100845A  
 #LMI operating code. Refer to LMI manual for instructions.  
 \*This capacity based on maximum boom angle.  
 \*\*29 ft. capacities are also applicable to fixed offsettable ext. However, the LMI codes will change to #0051, #0052 and #0053 for 0°, 25° and 45° offset, respectively.



# RT600E SERIES ON RUBBER CAPACITIES

## STATIONARY CAPACITIES 360°

Radius in Feet	#9005				
	Main Boom Length in Feet				
	33	40	50	60	70
10	38,550 (69.5)	38,550 (73.5)			
12	32,550 (65.5)	32,550 (70.5)	32,550 (74.5)		
15	23,700 (59.5)	23,700 (65.5)	23,700 (71)	23,700 (75.5)	
20	14,450 (47.5)	14,450 (57)	14,450 (64.5)	14,450 (70)	14,450 (73.5)
25	9,640 (32)	9,640 (47)	9,640 (58)	9,640 (65)	9,640 (69.5)
30		6,840 (34.5)	6,840 (50)	6,840 (59)	6,840 (64.5)
35			4,850 (41.5)	4,850 (53)	4,850 (60)
40			3,450 (30.5)	3,450 (46.5)	3,450 (54.5)
45				2,410 (38.5)	2,410 (49)
50				1,610 (28.5)	1,610 (43)
Min. boom angle (°) for indicated length (no load)					30
Max. boom length (ft.) at 0° boom angle (no load)					60

NOTE: ( ) Boom angles are in degrees.  
#LMI operating code. Refer to LMI manual for operating instructions.

Lifting Capacities at Zero Degree Boom Angle On Rubber - 360°					
Boom Angle	Main Boom Length in Feet				
	33	40	50		
0°	7,580 (28.2)	4,850 (35)	2,410 (45)		

NOTE: ( ) Reference radii in feet. A6-829-100836A

## STATIONARY CAPACITIES DEFINED ARC OVER FRONT (See Note 3)

Radius in Feet	#9005				
	Main Boom Length in Feet				
	33	40	50	60	70
10	46,600 (69.5)	40,800 (73.5)	34,600 (77)		
12	40,800 (65.5)	40,800 (70.5)	34,600 (74.5)		
15	34,000 (59.5)	34,000 (65.5)	34,000 (71)	26,650 (75.5)	21,500 (78)
20	26,050 (47.5)	26,050 (57)	26,050 (64.5)	26,050 (70)	21,500 (73.5)
25	18,200 (32)	18,200 (47)	18,200 (58)	18,200 (65)	18,200 (69.5)
30		13,100 (34.5)	13,100 (50)	13,100 (59)	13,100 (64.5)
35			10,050 (41.5)	10,050 (53)	10,050 (60)
40			7,900 (30.5)	7,900 (46.5)	7,900 (54.5)
45				6,290 (38.5)	6,290 (49)
50				5,050 (28.5)	5,050 (43)
55					4,060 (35.5)
60					3,260 (26.5)
Min. boom angle (°) for indicated length (no load)					0
Max. boom length (ft.) at 0° boom angle (no load)					70

NOTE: ( ) Boom angles are in degrees.  
#LMI operating code. Refer to LMI manual for operating instructions.

Lifting Capacities at Zero Degree Boom Angle On Rubber - Defined Arc Over Front					
Boom Angle	Main Boom Length in Feet				
	33	40	50	60	70
0°	14,550 (28.2)	10,050 (35)	6,290 (45)	4,060 (55)	2,590 (65)

NOTE: ( ) Reference radii in feet. A6-829-100835A

## RT600E SERIES ON RUBBER CAPACITIES (cont'd.)

PICK & CARRY CAPACITIES (UP TO 2.5 MPH) -  
BOOM CENTERED OVER FRONT (See note 7)

Radius in Feet	<b>#9006</b>				
	Main Boom Length in Feet				
	33	40	50	60	70
10	30,150 (69.5)	30,150 (73.5)	17,850 (77)		
12	30,150 (65.5)	30,150 (70.5)	17,850 (74.5)		
15	29,650 (59.5)	29,650 (65.5)	17,850 (71)	17,850 (75.5)	14,750 (78)
20	22,650 (47.5)	22,650 (57)	17,850 (64.5)	17,850 (70)	14,750 (73.5)
25	17,850 (32)	17,850 (47)	17,850 (58)	17,850 (65)	14,750 (69.5)
30		13,100 (34.5)	13,100 (50)	13,100 (59)	13,100 (64.5)
35			10,050 (41.5)	10,050 (53)	10,050 (60)
40			7,340 (30.5)	7,340 (46.5)	7,340 (54.5)
45				6,020 (38.5)	6,020 (49)
50				4,940 (28.5)	4,940 (43)
55					4,030 (35.5)
60					3,260 (26.5)
Min. boom angle (°) for indicated length (no load)					0
Max. boom length (ft.) at 0° boom angle (no load)					70

NOTE: ( ) Boom angles are in degrees.  
#LMI operating code. Refer to LMI manual for operating instructions.

<b>Lifting Capacities at Zero Degree Boom Angle On Rubber - Pick &amp; Carry</b>					
Boom Angle	Main Boom Length in Feet				
	33	40	50	60	70
0°	14,550 (28.2)	10,050 (35)	6,020 (45)	4,030 (55)	2,590 (65)

NOTE: ( ) Reference radii in feet. A6-829-100837A

### NOTES TO ALL RUBBER CAPACITY CHARTS:

1. Capacities are in pounds and do not exceed 75% of tipping loads as determined by test in accordance with SAE J765.
2. Capacities are applicable to machines equipped with 23.5x25 (20 ply) tires at 85 psi cold inflation pressure.
3. Defined Arc - Over front includes 6° on either side of longitudinal centerline of machine (ref. drawing C6-829-003529).
4. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
5. Capacities are applicable only with machine on firm level surface.
6. On rubber lifting with boom extensions not permitted.
7. For pick and carry operation, boom must be centered over front of machine, mechanical swing lock engaged and load restrained from swinging. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speeds.
8. Axle lockouts must be functioning when lifting on rubber.
9. All lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. See lifting capacity chart for tire used. Damaged tires are hazardous to safe operation of crane.
10. Creep - not over 200 ft. of movement in any 30 minute period and not exceeding 1 mph.

## WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

<b>29 FT. OFFSETTABLE BOOM EXTENSION</b>	
*Erected -	4,412 lb.
<b>29 FT. - 51 FT. TELE. BOOM EXTENSION</b>	
*Erected (Retracted) -	6,611 lb.
*Erected (Extended) -	9,332 lb.

\*Reduction of main boom capacities

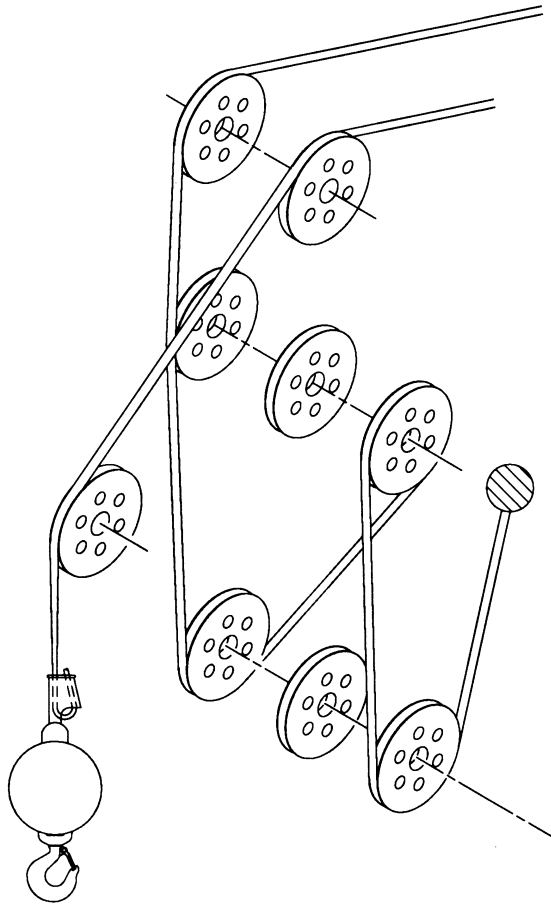
AUXILIARY BOOM NOSE	137 lb.
<b>HOOKBLOCKS and HEADACHE BALLS:</b>	
50 Ton, 4 Sheave	1075 lb.+
50 Ton, 3 Sheave*	1000 lb.+
40 Ton, 3 Sheave	785 lb.+
22 ton, 2 Sheave	800 lb.+
8.3 Ton Headache Ball (non-swivel)	350 lb.+
8.3 Ton Headache Ball (swivel)*	214 lb.+

\* DO NOT use with 18x19 class of rope.

+Refer to rating plate for actual weight.

When lifting over swingaway and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

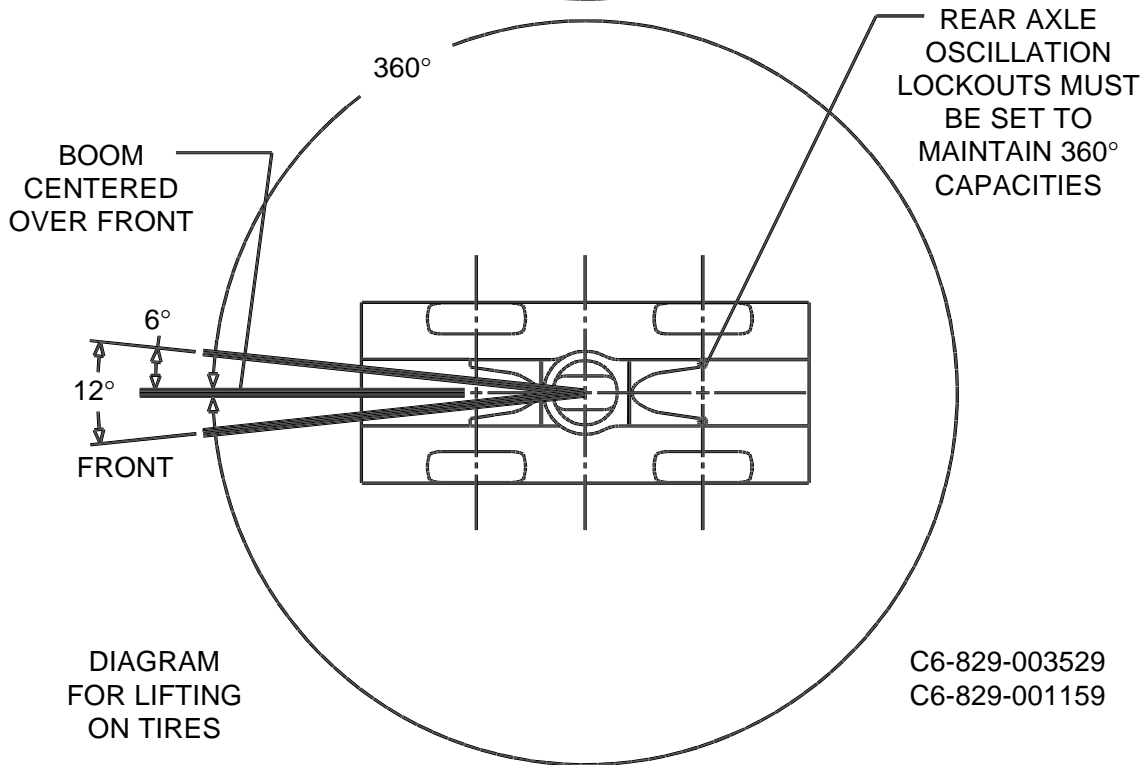
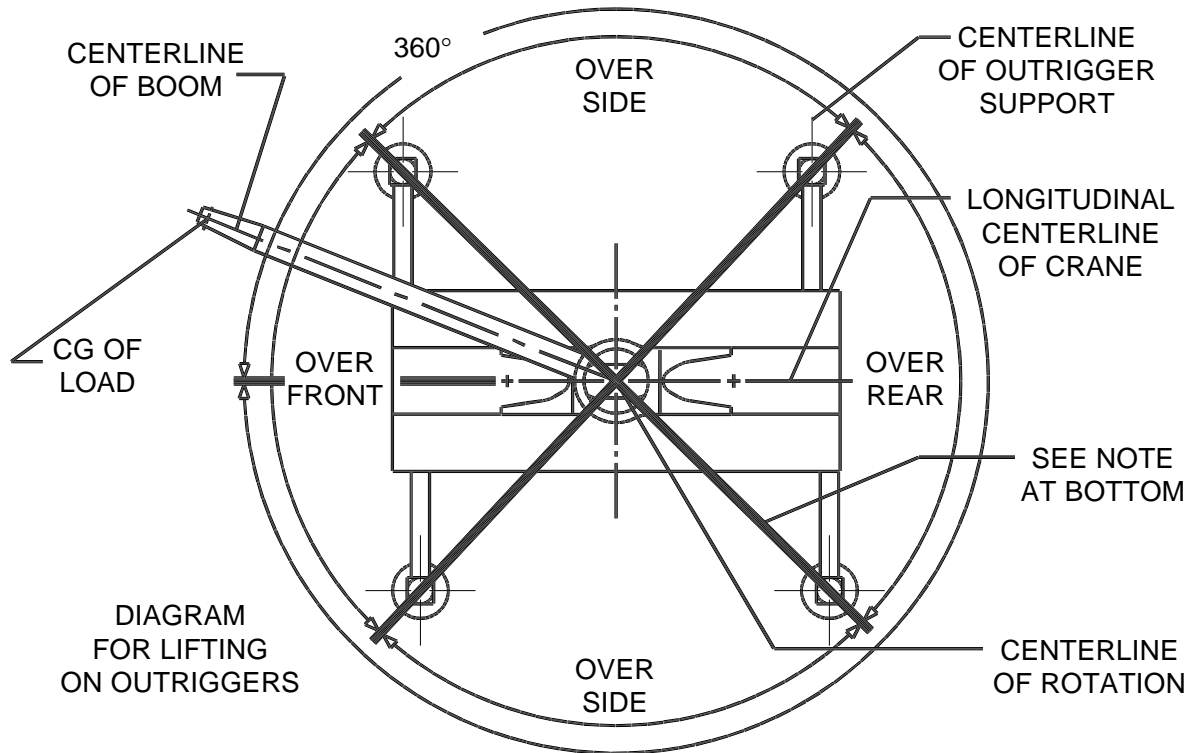
NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances **MUST BE MADE** for their combined weights. Weights are for Grove furnished equipment.



### LINE PULLS AND REEVING INFORMATION

HOISTS	CABLE SPECS.	PERMISSIBLE LINE PULLS	NOMINAL CABLE LENGTH
Main & Aux.	3/4" (19 mm) 18x19 Class Rotation Resistant Min. Breaking Str. 64,600 lb.	12,920 lb.	450 ft.
Main & Aux.	3/4" (19 mm) 6x37 Class, EIPS, IWRC Special Flexible Min. Breaking Str. 58,800 lb.	16,800 lb.	450 ft.

# WORKING AREA DIAGRAM

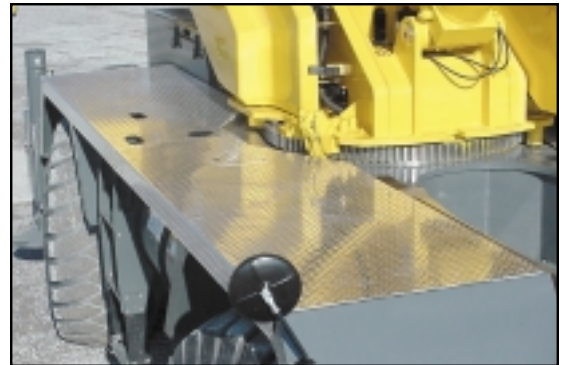


C6-829-003529  
C6-829-001159

**BOLD LINES DETERMINE THE LIMITING POSITION OF ANY LOAD FOR OPERATION WITHIN WORKING AREAS INDICATED**

## RT600E Features and Benefits

- ▶ Full vision, acoustically lined cab with tinted safety glass throughout; armrest mounted single axis controllers, hot water heater/defroster, sliding skylight with sunscreen for comfort



- ▶ Optional full-length aluminum decking for more walking surface area



- ▶ Large open stowage compartment for tools and rigging accessories

- ▶ 33-53 ft. (10 m-32 m) four section, full power synchronized boom; Maximum tip height: 112 ft. (34 m)



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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