Grove RT540E

Product Guide



1-877-MAX-LIFT maximcrane.com



Features

- 35 t (40 USt) capacity
- 9,8 m 31 m (32 ft 102 ft) 4-section full power boom
- 7,9 m 13,7 m (26 ft 45 ft) offsettable telescopic swingaway extension
- Dual-axis electric joystick controllers
- Full frame decking
- Rounded cab design
- 119 kW (160 hp) Cummins diesel engine (Tier III)



Features

Boom shape

The RT540E incorporates a rectangular boom shape made from 100 k.s.i. steel which eliminates weight and maximizes structural capacities.





Engine Cummins QSB 6.7 L diesel engine provides plenty of power at the job site and meets current emission standards.



Tip height Maximum tip height of 47 m (154 ft) with 13,7 m (45 ft) telescopic extension.



Cab Rounded st

Rounded steel cab design provides aesthetic appeal.

Control panel

Automotive-style dash control panel is designed to offer a less cluttered look while still offering full instrumentation.





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Specifications

Superstructure

Boom Boom

9,8 m - 31 m (32 ft - 102 ft) four-section, synchronized full power boom.

Maximum tip height: 33,6 m (110 ft).

* Optional fixed swingaway extension

7,9 m (26 ft) offsettable fixed swingaway extension. Offsets at 0° and 30° . Stows alongside base boom section.

Maximum tip height 41,1 m (135 ft).

____ * Optional telescopic swingaway extension

7,9 m - 13,7 m (26 ft - 45 ft) offsettable telescopic lattice swingaway extension. Offsets at 0°, 15° and 30°. Stows alongside base boom section.

Maximum tip height 47 m (154 ft).



Boom nose

Four nylatron sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. Quick reeve type boom nose.



Boom elevation

One double-acting hydraulic cylinder with integral holding valve provides elevation from -3° to $+78^{\circ}$.



Load moment and 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 standard Work Area Definition System allows the operator to pre-select and define safe working areas. If the crane approaches the pre-set limits, audio-visual warnings aid the operator in avoiding job-site obstructions.



Full vision, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe seat incorporates armrest-mounted electric dual-axis controllers. Dash panel incorporates gauges for all engine functions. Other standard features include: tilt steering wheel, hot water heater, air conditioning, cab circulating air fan, sliding side and rear windows, sliding skylight with electric wiper and sunscreen, electric windshield wash/wipe, fire extinguisher and seat belt.



Single speed, planetary swing drive with foot applied multi-disc wet brake. Spring applied, hydraulically released swing brake. Single position mechanical house lock, operated from cab.

Maximum speed: 2 rpm.

Counterweight

4305 kg (9490 lb) pinned to superstructure.

Hydraulic system

Two main pumps, one (1) piston and one (1) gear with a combined capacity of 316,5 LPM (83.6 GPM). Maximum operating pressure: 275,7 bar (4000 psi). Three section pressure compensated valve bank. Return line type filter with full flow by-pass protection and service indicator. Replaceable cartridge with micron filtration rating of 5/12/16. 396 L (104.6 gal) hydraulic reservoir. System pressure test ports.

Hoist specifications (HP15CO-17G) main and auxiliary hoist

Planetary reduction with automatic spring applied multi-disk wet brake. Electronic hoist drum rotation indicators, and hoist drum cable followers.

Maximum single line pull:

1st layer: 5280 kg (11,640 lb) 3rd layer: 4323 kg (9530 lb)

5th layer: 3656 kg (8060 lb)

Maximum permissible line pull:

5280 kg (11,640 lb) with 6 x 37 class rope

5280 kg (11,640 lb) with 35 x 7 class rope

Maximum single line speed: 136 m-min (445 fpm) Rope construction:

6 x 36 EIPS IWRC, Special Flexible

35 x 7 Flex-X, Rotation Resistant

Rope diameter: 16 mm (5/8 in)

Rope length:

Main hoist: 137 m (450 ft) Auxiliary hoist: 137 m (450 ft) Maximum rope stowage: 181 m (596 ft)

Carrier



Chassis

Box section frame fabricated from high-strength, low alloy steel. Combination lift/tie-down/towing lugs.



Outrigger system

Four hydraulic telescoping single-stage double box beam outriggers with inverted jacks and integral holding valves. Three position setting, 0%, 50% and fully extended. All steel fabricated quick release type outrigger floats, 362 mm (14.25 in) square.

Maximum outrigger pad load 26 300 kg (58,000 lb).



Outrigger controls

Controls and crane level indicator located in cab



Engine (Tier III)

Cummins QSB 6.7 L diesel, six cylinders, 119 kW (160 bhp) (Gross) @ 2500 rpm.

Maximum torque: 732 Nm (540 ft-lb) @ 1500 rpm.



Fuel tank capacity

219 L (58 gal)



Transmission

Range-shift 6-speed (3 speeds x 2 range, both forward and reverse). Front axle disconnect for 4 x 2 travel.



Electrical system

Two 12 V-maintenance free batteries. 12 V starting and lighting. Battery disconnect. CanBus Diagnostic System.



4 x 4



Steering

Fully independent power steering.

Front: full hydraulic steering wheel controlled.

Rear: Full hydraulic switch controlled.

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

Rear steer indicator.

Outside turning radius: 5,8 m (19.1 ft)

Inside turning radius: 4 m (13.1 ft)



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 permits 25,4 cm (10 in) oscillation only with boom centered over the front.



Brakes

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



Standard 20.5 x 25-24 bias ply



Lights

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



Maximum speed

40 km/h (25 mph) @ 2500 rpm



Specifications

Specifications

Carrier continued



119% (at engine stall).

(Based on 28 365 kg [62,532 lb] GVW) 20.5 x 25 tires 31 m (102 ft) main boom, plus 13,7 m (45 ft) telescopic swingaway, 4305 kg (9490 lb) counterweight, 35 t (40 USt) hookblock and 6,8 t (7.5 USt) headache ball.

Miscellaneous standard equipment

Full width steel fenders, full length steel decking with anti-skid, dual rear view mirrors, hook-block tiedown, electronic back-up alarm, light package, front stowage well, tachometer/hourmeter, rear wheel position indicator, 36,000 Btu hot water cab heater, 28,500 Btu air conditioning, hoist mirrors, engine distress A/V warning system, combination lift/tie-down/towing lugs, coolant sight level indicator.

* Optional equipment

Auxiliary Hoist Package: Includes model HP15C-17G auxiliary hoist with electronic hoist drum rotation indicator, hoist drum cable follower, 137 m (450 ft) of 16 mm (5/8 in) 35 x 7 class wire rope and auxiliary sheave boom nose.

Auxiliary Light and Convenience Package: Includes cab mounted amber flashing light, hoist mounted work lights, and dual base boom mounted floodlights, LMI light bar (in cab), rubber mat for stowage trough.

≥ 360° NYC style mechanical swing lock

Rear Pintle hook

Cab-controlled cross axle differential locks (front and rear)

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Dimensions and weights

Dimensions

	Tire size	A	В	С	D	E	F	G	Н	J	К	L	м
2 wheel	20.5 x 25	13 563 mm	13 328 mm	10 899 mm	10 236 mm	10 007 mm	8138 mm	7021 mm	2055 mm	25.0°	22.5°	17.3°	2606 mm
steer	16.0 x 25	13 563 mm	13 328 mm	10 899 mm	10 185 mm	9981 mm	8138 mm	7021 mm	2093 mm	26.0°	23.5°	18.3°	2536 mm
4 wheel	20.5 x 25	9797 mm	9490 mm	6732 mm	6061 mm	5832 mm	4000 mm	3498 mm	2055 mm	25.0°	22.5°	17.3°	2606 mm
steer	16.0 x 25	9797 mm	9490 mm	6732 mm	6010 mm	5806 mm	4000 mm	3498 mm	2093 mm	26.0°	23.5°	18.3°	2536 mm



Weights

	G١	W	Fre	ont	Re	ear
	kg	(Ib)	kg	(Ib)	kg	(Ib)
RT540E basic machine: Including 31 m (102 ft) main boom, main hoist with 137 m (450 ft) of rope, full counterweight + IPO 6,8 t (7.5 USt) headache ball, and 35 t (40 USt) hookblock	27 273	(60, 126)	13 012	(28,686)	14 261	(31,440)
Add: Auxiliary hoist + 137 m (450 ft) of 35 x 7 hoist cable and auxiliary boom nose ILO IPO C/W	27 500	(60,625)	13 089	(28,855)	14 411	(31,770)
Add: Fixed 7,9 m (26 ft) offsettable boom extension + extension hangers	28 196	(62,161)	14 345	(31,624)	13 852	(30,537)
Or add: 7,9 m - 13,7 m (26 ft - 45 ft) telescopic boom extension + extension hangers	28 365	(65,532)	14 539	(32,052)	13 826	(30,480)



Working range

102 ft main boom + 26 ft - 45 ft extension



Operating radius in feet from axis of rotation



Dimensions are for largest Grove furnished hook block and headache ball, with anti-two block activated.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE. The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane 32 ft - 102 ft

Θ

9490 Ib

Feet				ain boom length			
1000	32	40	50	60	70	80	90
8	80,000 (69)						
10	72,200 (65)	50,700 (70.5)	48,500 (75)				
12	61,000 (61)	50,700 (67.5)	48,500 (72.5)	*46,400 (76)			
15	47,950 (54)	48,400 (62.5)	48,500 (69)	44,300 (73)	*38,700 (76)		
0	34,550 (41)	35,000 (53.5)	35,400 (62.5)	35,300 (67.5)	31,000 (71.5)	29,700 (74)	*22,000 (76)
5	26,300 (20.5)	26,800 (43.5)	27,200 (55.5)	27,400 (62.5)	25,800 (67)	24,600 (70.5)	22,000 (73)
)		21,250 (30)	21,650 (47.5)	21,850 (56.5)	21,800 (62.5)	20,800 (66.5)	18,350 (69.5)
5			17,650 (38.5)	17,900 (50.5)	18,050 (57.5)	17,800 (62.5)	15,600 (66)
C			14,400 (26.5)	14,450 (43.5)	14,650 (52.5)	14,800 (58.5)	13,500 (62.5)
15				11,650 (35)	11,800 (46.5)	11,900 (54)	11,750 (59)
C				9480 (24.5)	9680 (40.5)	9770 (49)	9780 (55)
5					7970 (33)	8080 (44)	8110 (51)
0					6600 (23)	6720 (38)	6770 (46.5)
55						5590 (31)	5670 (42)
70						4640 (21.5)	4740 (36)
5							3940 (29.5)
0							3250 (21)
85							
90							
95							
inimum b	oom angle (°) for	r indicated length	n (no load)				

Q 360°

Main boom length in feet

Pounds

F

100% 23 ft 4 in spread

Maximum boom length (ft) at 0° boom angle (no load) NOTE: () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for operating instructions. "This capacity is based on maximum boom angle.

	L	ifting capacities a	at zero degree bo	om angle					
Boom	Main boom length in feet								
angle	32	40	50	60 .	70	80	90	102	
0°	24,950 (26)	18,100 (33.8)	12,150 (43.8)	8 180 (53.8)	5740 (63.8)	4030 (73.8)	2800 (83.8)	1760 (95.5)	
NOTE: () R	NOTE: () Reference radii in feet. A6-829-104278								

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Load chart

102

*18,500 (76) 17,500 (73)

(75) 15,200 (70) 13,200 (66.5) 11,600 (63.5) 9790 (60.5) 8130 (57) 6800 (53.5) 5710 (49.5) 4800 (45.5)

4040 (41) 3360 (36)

2770 (30.5) 2250 (23) 1800 (9.5) 0

102



Load chart

32 ft - 102 ft 26 f	t 9490 lb	100%	Q 360°
	Ροι	inds	
	26 ft LEN	GTH	
Feet	#0051 0° OFFSET	#0053 30° OFFSET	
35	*8200 (76)		
40	8200 (72.5)		
45	8200 (70)	*5780 (76)	
50	8150 (67.5)	5780 (72.5)	
55	7500 (65)	5450 (70)	
60	6440 (62.5)	4910 (67.5)	
65	5460 (60)	4450 (64.5)	
70	4620 (57.5)	4050 (62)	
75	3900 (54.5)	3670 (59)	
80	3260 (51.5)	3350 (56)	
85	2710 (48.5)	3100 (53)	
90	2210 (45)	2580 (49.5)	
95	1770 (41.5)	2080 (46)	
100	1380 (38)	1620 (41.5)	
105	1020 (33.5)	1200 (37)	
Min. boom angle for indicated length (no load) Max. boom length	32°	36°	_
at 0° boom angle (no load)	8	0 ft	
NOTE: () Boom angles a	re in degrees.	A6-829-10-	4329

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

instructions. * This capacity based on maximum boom angle.

Boom extension capacity notes:

1. All capacities above the bold line are based on structural strength of boom extension.

- 2. 26 ft fixed 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 only.
- 6. When lifting over the main boom nose with 26 ft fixed extension erected, the outriggers must be fully extended or 50% extended (14 ft spread).

32 ft - 102 ft	<u> </u>	26 ft - 45 ft 9		90 lb	100%	Q 360°		
				Pounds				
	26	ft LENGT	н	45	ft LENGT	Н		
Feet	#0021 0° OFFSET	#0022 15° OFFSET	#0023 30° OFFSET	#0041 O° OFFSET	#0042 15° OFFSET	#0043 30° OFFSET		
35	*10,200 (76)	U.I.DEI	UNUE	UTIDET	UT DET	CITCLI		
40	9460 (72.5)	*7770 (76)		*5250 (76)				
45	8760 (70)	7370 (72)	*6030 (76)	5250 (73.5)				
50	8150 (67.5)	6870 (69.5)	5780 (72.5)	5050 (71.5)	3660 (76)			
55	7510 (65)	6050 (67)	5520 (70)	4650 (69.5)	3540 (72.5)			
60	6700 (62.5)	5350 (64.5)	5290 (67.5)	4290 (67)	3430 (70.5)	*3000 (76)		
65	5990 (60)	4740 (62)	4810 (64.5)	4000 (65)	3320 (68.5)	2890 (72.5)		
70	5240 (57.5)	4210 (59)	4270 (62)	3800 (63)	3220 (66)	2790 (70.5)		
75	4400 (54.5)	3750 (56)	3800 (59)	3650 (60.5)	3130 (64)	2700 (68)		
80	3670 (51.5)	3330 (53.5)	3380 (56)	3520 (58.5)	3000 (61.5)	2620 (65.5)		
85	3050 (48.5)	2960 (50.5)	3010 (53)	3360 (56)	2880 (59)	2550 (63)		
90	2500 (45)	2590 (47)	2670 (49.5)	3030 (53.5)	2770 (56.5)	2480 (60.5)		
95	2020 (41.5)	2130 (43.5)	2270 (46)	2640 (51)	2680 (54)	2410 (57.5)		
100	1590 (38)	1680 (40)	1790 (41.5)	2270 (48)	2570 (51.5)	2380 (55)		
105	1200 (33.5)	1280 (35.5)	1360 (37)	1930 (45.5)	2260 (48.5)	2310 (52)		
110				1630 (42.5)	1890 (45.5)	2030 (48.5)		
115				1330 (39)	1550 (42)	1700 (45)		
120				1040 (35.5)	1240 (38.5)	1400 (41)		
125						1080 (36.5)		
Min. boom angle for indicated length	29°	30.5°	36°	34°	34.5°	35°		

(no load) Max. boom length at 0° boom angle (no load) 80 ft MOTE: () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for instructions. "This capacity based on maximum boom angle.

80 ft

A6-829-104322

Boom extension capacity notes:

1. All capacities above the bold line are based on structural strength of boom extension.

- 2. 26 ft and 45 ft tele 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 only.
- 6. When lifting over the main boom nose with 26 ft or 45 ft tele extension erected, the outriggers must be fully extended or 50% extended (14 ft spread).

Load chart

32 ft - 60 ft	9490 lb		() Stationary	Q 360°	32 ft - 60 ft	9490
			Pounds		ſ	
		#	9005			
Faat		Main boon	:	Θ		
Feet	32 24,050	40 24,100	50 23,000	60	Feet	32
10	(65)	(70.5)	(76)		10	27,150 (65)
12	21,600 (61)	22,050 (67.5)	21,600 (72.5)		12	23,350 (61)
15	15,250 (54)	15,550 (62.5)	16,100 (68.5)	13,900 (72.5)	15	18,950
20	9110 (41)	9380 (53.5)	9860 (62)	9860 (67.5)	20	(54) 13,700
25	5790 (20)	6050 (43)	6400 (55)	6510 (62)	25	(41) 10,100
30	(20)	3970 (29.5)	4240 (47.5)	4370 (56)	30	(20)
35		(29.3)	2770	2900		
40			(38) 1,690	(50) 1840	35	
			(26)	(43) 1030	40	
45				(34.5)	45	
Minimum boo length (no loa	id)			33	50	
Maximum bo angle (no load	d) (b	•		50	Minimum boo	m angle (°) f
NOTE: () Boo #LMI operation operating ins	na cođe. Refe	in degrees. er to LMI manua	al for		length (no loa Maximum boo angle (no load	om length (ft)
			legree boom ar	igle	NOTE: () Booi #LMI operatir	m angles are
Boom angle	Mai 32	n boom length 40	in feet 50		operating inst	ructions. acities at zer
0°	5290 (26)	2850 (33.8)	1060 (43.8)		Boom	Mai 32
NOTE: () Refe	erence radii ir	n feet.		A6-829-104281	0°	9520

32 ft - 60 ft	9490 lb	(Ma	and carry x. 2.5 mph) x 25 tires	Defined arc over front
(Pounds	
		#9	0006	
G	M			
Feet	32	40	50	60
10	27,150 (65)	26,900 (70.5)		
12	23,350 (61)	23,250 (67.5)		
15	18,950 (54)	19,100 (62.5)	19,400 (69)	
20	13,700 (41)	14,200 (53.5)	14,500 (62.5)	14,550 (67.5)
25	10,100 (20)	10,750 (43.5)	11,150 (55.5)	11,200 (62)
30		8290 (30)	8620 (47.5)	8790 (56.5)
35			6710 (38.5)	6890 (50)
40			5210 (26.5)	5390 (43)
45				4180 (35)
50				3190 (24)
length (no loa				0
angle (no loa				60
#LMI operation operation operations		o LMI manu		
	acities at zero Main I	oom length	2	
Boom Angle	32	40	50	60
0°	9520 (26)	6830 (33.8)	4280 (43.8)	2560 (53.8)
NOTE: () Refe	erence radii in fe	eet.		A6-829-104282

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 20.5 x 25 (24 ply) tires at 75 psi cold inflation pressure, and 16.00 x 25 (28 ply) tires at 100 psi cold inflation pressure.

3.Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.

4.Capacities are applicable only with machine on firm level surface.

5.On rubber lifting with boom extensions not permitted.

6.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.

7.Axle lockouts must be functioning when lifting on rubber.

8.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.

9.Creep - Not over 200 ft of movement in any 30 minute period and not exceeding 1 mph.

Grove RT540E



Loadchart

32 ft - 10	D2 ft 9490 lb				14	ad	Q 360°	
					Pound	s		
				#	4001			
Θ					1			
Feet	32	40	ма 50	in boom 60	70	In feet 80	90	102
8	77,000 (69)							
10	66,250 (65)	50,700 (70.5)	48,500 (75)					
12	57,950 (61)			*46,400 (76))	_		
15	46,300 (54)	44,200 (62.5)	41,800 (69)	39,550 (73)	*37,550 (76)		_	
20	27,100 (41)	27,700 (53.5)	27,050 (62.5)	25,950 (67.5)	24,950 (71.5)	24,000 (74)	*22,000 (76))
25	17,650 (20.5)	18,250 (43.5)	18,500 (55.5)	18,450 (62.5)	18,050 (67)	17,450 (70.5)	16,950 (73)	*16,350 (76)
30		12,850 (30)	13,200 (47.5)	13,300 (56.5)	13,550 (62.5)	13,250 (66.5)	12,950 (69.5)	12,500 (73)
35			9790 (38.5)	9910 (50.5)	10,150 (57.5)	10,250 (62.5)	10,100 (66)	9830 (70)
40			7400 (26.5)	7520 (43.5)	7770 (52.5)	7910 (58.5)	7950 (62.5)	7820 (66.5)
45				5760 (35)	5970 (46.5)	6150 (54)	6180 (59)	6190 (63.5)
50				4410 (24.5)	4590 (40.5)	4750 (49)	4820 (55)	4850 (60.5)
55					3500 (33)	3630 (44)	3710 (51)	3780 (57)
60					2610 (23)	2730 (38)	2810 (46.5)	2890 (53.5)
65						1980 (31)	2070 (42)	2150 (49.5)
70						1350 (21.5)	1440 (36)	1530 (45.5)
75								1000 (41)
	m boom a ım boom						21 80	36
#I MI on) Boom a erating c pacity is l	ođe Refe	er to I MI	manual	for opera	ting inst	ructions.	
inis ca				at zero d		oom an	gle	
Boom angle	32	40	Mai 50	n boom 60	length i 70	nfeet		
angic	16.300	10.150	6030	3580	2050	_		

32 ft - 10	02 ft	9490 lb		_	0% 7.8 ft spread			Q 360°
				AN Î	Pound	s		
				#8	001			
G	Main boom length in feet							
Feet	32	40	50	60	70	80	90	102
8	51,950 (69)							
10	37,800 (65)	35,900 (70.5)	33,600 (75)					
12	29,050 (61)	28,100 (67.5)	26,600 (72.5)	*25,150 (76)				
15	20,850 (54)	20,450 (62.5)	19,750 (69)	18,850 (73)	°18,000 (76)			
20	12,500 (41)	13,050 (53.5)	12,950 (62.5)	12,600 (67.5)	12,150 (71.5)	11,700 (74)	*11,250 (76)	
25	7950 (20.5)	8460 (43.5)	8700 (55.5)	8760 (62.5)	8580 (67)	8300 (70.5)	8050 (73)	*7720 (76)
30	()	5610 (30)	5890 (47.5)	6000 (56.5)	6110 (62.5)	5980 (66.5)	5840 (69.5)	5600 (73)
35		()	3980 (38.5)	4090 (50.5)	4350 (57.5)	4270 (62.5)	4200	4060 (70)
40			2600 (26.5)	2710 (43.5)	2940 (52.5)	2970 (58.5)	2940 (62.5)	2850 (66.5)
45			(20.5)	1670 (35)	1860 (46.5)	1960 (54)	1950 (59)	1890 (63.5)
50				(33)	1020 (40.5)	1160 (49)	1160 (55)	1110 (60.5)
Minimum			r	0	33	44	51	57
indicated Maximum	n boom le	ngth (ft)	at 0°			60		
boom ang NOTE: (#LMI op "This ca) Boom	angles a	re in de efer to Li on maxir	grees. MI manu num boo	ial for or om angli	erating	instruct	ions.
		fting cap	acities a	at zero d	legree b	oom an		
Boom angle	32	40	Mai 50	n boom	length i	nfeet		
0°	7230 (26)	4060 (33.8)	1790 (43.8)					
NOTE: ()							A6-82	9-104280

0° 16,300 10,150 6030 3580 2050 (26) (33.8) (43.8) (53.8) (63.8) NOTE: ()Reference radii in feet

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Load chart

32 ft - 102 ft 26 ft		50% ft spread
	Pour	
	26 ft LENG	Ή
Feet	#4051 O° OFFSET	#4053 30° OFFSET
35	*8200 (76)	_
40	7240 (72.5)	
45	5780 (70)	*5780 (76)
50	4610 (67.5)	5740 (72.5)
55	3650 (65)	4650 (70)
60	2850 (62.5)	3720 (67.5)
65	2140 (60)	2900 (64.5)
70	1540 (57.5)	2210 (62)
75	1030 (54.5)	1620 (59)
80		1100 (56)
Min. boom angle for indicated length (no load)	51.5°	53°
Max. boom length at 0° boom angle	60	ft

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

(no load)

Boom extension capacity notes:

- 1. All capacities above the bold line are based on structural strength of boom extension.
- 2. 26 ft fixed 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 properly extended and vertical jacks set only.
- 6. When lifting over the main boom nose with 26 ft fixed extension erected, the outriggers must be fully extended or 50% extended (14 ft spread).

32 ft - 102 ft 2	6 ft - 45		490 lb	50 14 ft s		Q 360°
			///////////////////////////////////////	Pounds		
	26 ft LENGTH		45 ft LENGTH			
Feet	#4021 0° OFFSET	#4022 15° OFFSET	#4023 30° OFFSET	#4041 O° OFFSET	#4042 15° OFFSET	#4043 30° OFFSET
35	*9120 (76)					
40	7240 (72.5)	*7770 (76)		*5250 (76)		
45	5780 (70)	6460 (72)	*6030 (76)	5250 (73.5)		
50	4610 (67.5)	5200 (69.5)	5740 (72.5)	5050 (71.5)	3660 (76)	
55	3650 (65)	4180 (67)	4650 (70)	4280 (69.5)	3540 (72.5)	
60	2850 (62.5)	3320 (64.5)	3720 (67.5)	3480 (67)	3430 (70.5)	*3000 (76)
65	2140 (60)	2550 (62)	2900 (64.5)	2820 (65)	3320 (68.5)	2890 (72.5)
70	1540 (57.5)	1900 (59)	2210 (62)	2260 (63)	2880 (66)	2790 (70.5)
75	1030 (54.5)	1350 (56)	1620 (59)	1740 (60.5)	2300 (64)	2700 (68)
80			1100 (56)	1300 (58.5)	1800 (61.5)	2240 (65.5)
85					1360 (59)	1750 (63)
90						1320 (60.5)
Min. boom angle for indicated length (no load)	51.5°	53.5°	53°	56°	56.5°	57.5°
Max. boom length at 0° boom angle (no load)	1	60 ft			60 ft	

NOTE: () Boom angles are in degrees. #LMI operating code. Refer to LMI manual for instructions. A6-829-104323

*This capacity based on maximum boom angle.

Boom extension capacity notes:

- 1. All capacities above the bold line are based on structural strength of boom extension.
- 2. 26 ft and 45 ft tele 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 properly extended and vertical jacks set only.
- 6. When lifting over the main boom nose with 26 ft or 45 ft tele extension erected, the outriggers must be fully extended or 50% extended (14 ft spread).

Grove RT540E



Load handling

Weight reductions for load handling devices	
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26 ft fixed boom extension	lb
* Erected	2750
26 ft - 45 ft telescopic boom extension	
* Erected (retracted) -	3750
* Erected (extended) -	5010
Auxiliary boom nose	lb
	105
Hookblocks and headache balls	lb
35 USt, 3 sheave (14 in sheave)	623 +
35 USt, 3 sheave (12 in sheave)	599 +
35 USt, 4 sheave (CE)	774 +
7.5 USt, overhaul ball	369 +

* Reduction of main boom capacities

+ 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	Permissable line pulls	Nominal cable length		
Main	16 mm (5/8 in) 6 x 37 class EIPS, IWRC Special Flexible Min. Breaking Str. 41,200 lb	11,640 lb	450 ft		
Main and auxiliary	16 mm (5/8 in) Flex-X 35 Rotation resistant (non- rotating) Min. breaking Str. 61,200 lb	11,640 lb	450 ft		

Wire rope layer	Hoist li	performa ne pulls ed hoist	Drum rope capacity (ft)		
	Low available lb*	High available Ib*	Layer	Total	
1	11,640	7420	77	77	
2	10,480	6680	85	162	
3	9530	6070	94	256	
4	8730	5570	102	358	
5	8060	5140	111	469	
6	7490	4770	119	588	

35 x 7 class = 11,640 lb

Working area diagram



Bold lines determine the limiting position of any load for operation within working areas indicated.









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