

GROVE[®]

TMS500E

product guide

features

- 40 ton (40 mt) Capacity
- 29 ft.-95 ft. (8.8-29 m) 4 section, full power sequenced synchronized boom
- 26 ft.-45 ft. (7.9-13.7 m) offsettable telescopic swingaway extension
- Optional 26 ft. (7.9 m) lattice swingaway extension
- Optional 8,460 lb. (3837 kg) heavy counterweight package
- Rear air suspension with shock absorbers
- 330 bhp (246 kw) Cummins diesel engine



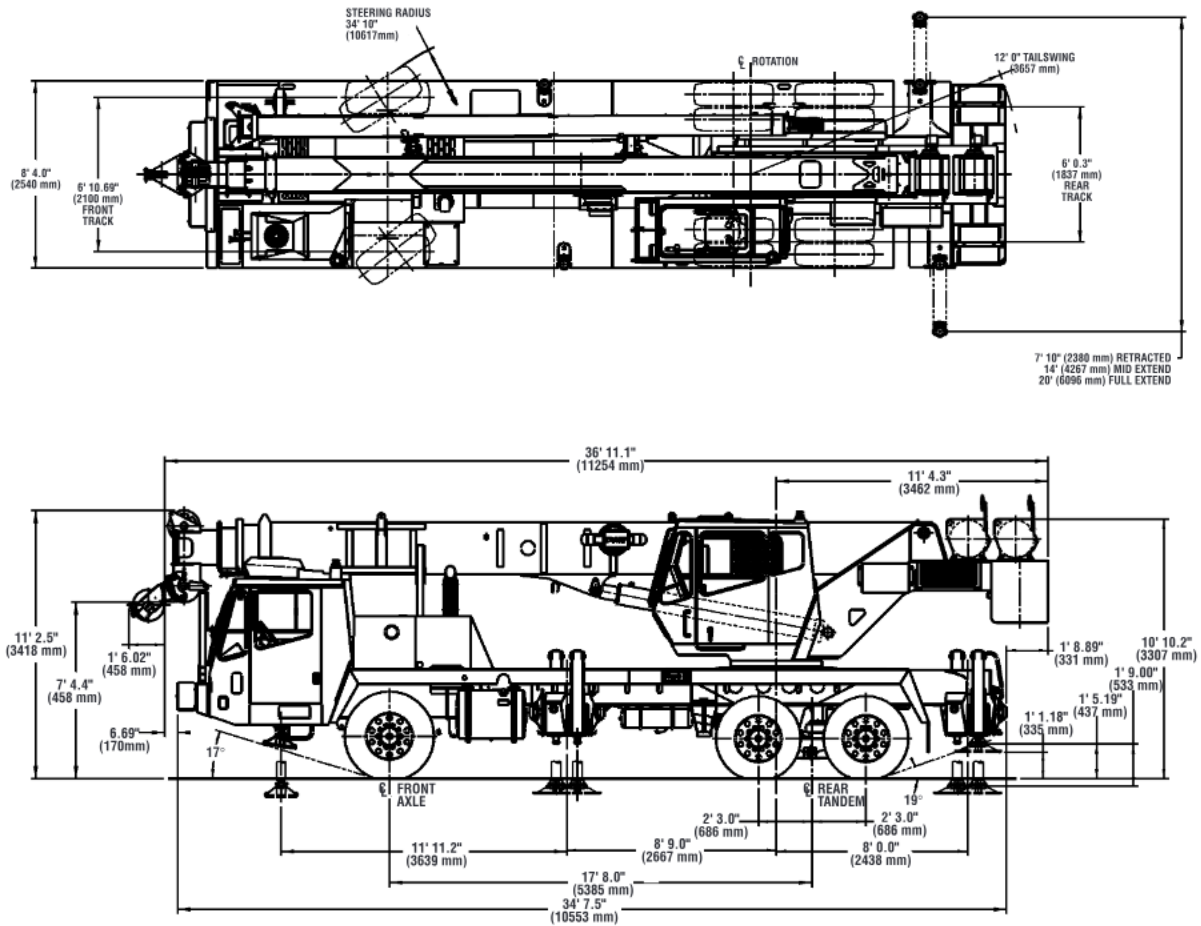
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Truck Mounted Crane

dimensions

5



Weights

	Gross		Front Axle		Rear Axles	
Axle Allowable	62,000	(28 123)	21,000	(9 525)	41,000	(18 598)
Unit Configuration lb. (kg.)						
Basic machine including 95 ft. main boom, main hoist with cable, Cummins/Eaton drivetrain, driver and light counterweight package.	47,472	(21 533)	17,651	(8 006)	29,821	(13 527)
Additions:						
Standard counterweight package (includes IPO)	1,812	(822)	-883	(-401)	2,695	(1 222)
Heavy counterweight package (includes IPO)	7,972	(3 616)	-1,035	(-470)	9,007	(4 086)
25 ton (22 mt) hookblock (front stowage)	550	(250)	755	(342)	-205	(-93)
7.5 ton (6.8 mt) headache ball (front stowage)	300	(136)	413	(187)	-113	(-51)
7.5 ton (6.8 mt) headache ball (rear stowage, includes mount)	325	(147)	-144	(-65)	469	(213)
Swingaway carrier brackets	85	(39)	40	(18)	45	(20)
26 ft. (7.9 m) swingaway	1,300	(590)	1,006	(456)	294	(133)
26 - 45 ft. (7.9 - 13.7 m) telescoping swingaway	1,790	(812)	1,351	(613)	439	(199)
Auxiliary boom nose	114	(52)	165	(75)	-51	(-23)
Auxiliary hoist with rope	339	(154)	-163	(-74)	502	(228)
Air conditioning superstructure cab	205	(93)	-47	(-21)	252	(114)
Air conditioning chassis cab	81	(37)	94	(43)	-13	(-6)

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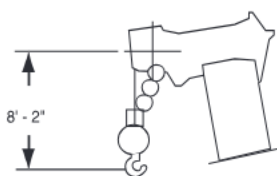
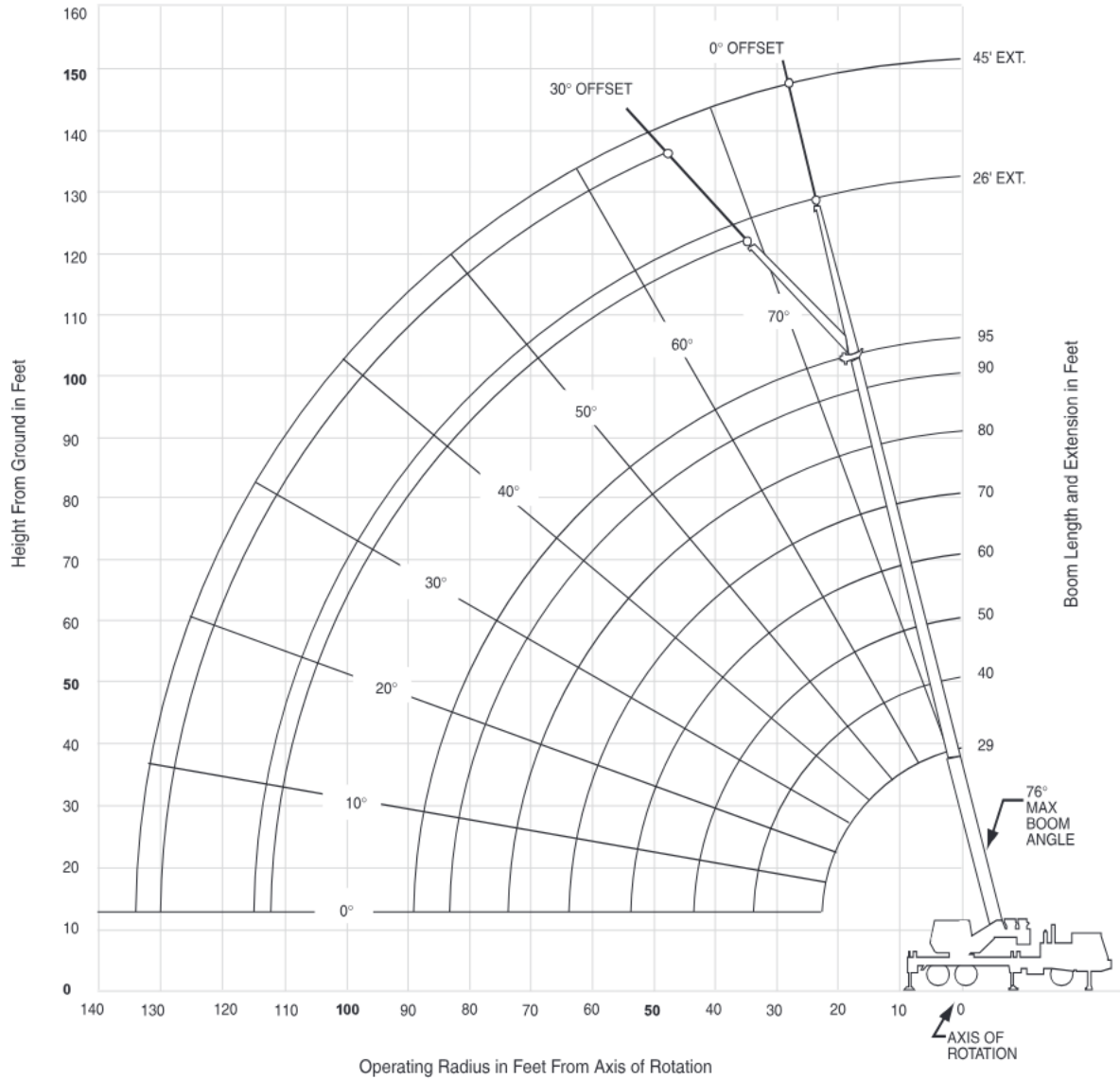
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working range

29-95' main boom + 26-45' lattice extension

(Boom Deflection Not Shown)



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

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load charts

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	29 - 95 ft.		8,460 lbs		100% 20' 0"		360°	
				Pounds				
	Main Boom Length in Feet							
Feet	29	40	50	60	70	80	90	95
9	80,000 (63)							
10	60,850 (61)	50,100 (69.5)	46,950 (74.5)					
12	55,050 (56)	50,100 (66.5)	44,950 (72)	38,850 (75.5)				
15	46,300 (48)	45,050 (61.5)	41,050 (68)	36,000 (72.5)	29,450 (75)	*22,450 (76)		
20	32,750 (30)	31,900 (52.5)	34,100 (61.5)	29,500 (67)	27,400 (71)	22,450 (73.5)	*18,550 (76)	*15,500 (76)
25		24,000 (42.5)	25,800 (54.5)	24,800 (61.5)	23,100 (66.5)	19,250 (70)	16,500 (72.5)	15,300 (74)
30		18,800 (29)	20,300 (47)	20,600 (56)	19,600 (61.5)	16,850 (66)	14,400 (69)	13,200 (70.5)
35			15,550 (38)	15,850 (49.5)	16,000 (57)	14,850 (62)	12,700 (65.5)	11,500 (67.5)
40			12,800 (26)	13,050 (42.5)	13,200 (51.5)	13,250 (57.5)	11,000 (62)	10,000 (64)
45				10,900 (34.5)	10,900 (46)	10,900 (53)	9,630 (58)	9,060 (60.5)
50				8,990 (23.5)	9,020 (39.5)	9,030 (48)	8,740 (54.5)	7,990 (57)
55					7,550 (32)	7,560 (43)	7,670 (50)	7,100 (53)
60					6,350 (22)	6,380 (37)	6,470 (45.5)	6,320 (49)
65						5,410 (30)	5,490 (40.5)	5,530 (44.5)
70						4,580 (20.5)	4,670 (35)	4,700 (40)
75							3,970 (28.5)	4,000 (34.5)
80							3,360 (19.5)	3,400 (28)
85								2,860 (19.5)
Minimum boom angle (°) for indicated length (no load)								0
Maximum boom length (ft.) at 0° boom angle (no load)								95
NOTE: () Boom angles are in degrees.								
*This capacity is based on maximum boom angle.								
Lifting Capacities at Zero Degree Boom Angle								
Boom Angle	Main Boom Length in Feet							
	29	40	50	60	70	80	90	95
0°	26,150 (22.8)	15,850 (33.8)	11,000 (43.8)	7,790 (53.8)	5,570 (63.8)	4,030 (73.8)	2,940 (83.8)	2,480 (89)
NOTE: () Reference radii in feet.								
								A6-829-10281

NOTE: () Reference radii in feet.

A6-829-102810

	29 - 95 ft.			8,460 lbs			100% 20' 0"			Over Rear	
						Pounds					
			Main Boom Length in Feet								
Feet	29	40	50	60	70	80	90	95			
9	80,000 (63)										
10	60,850 (61)	50,100 (69.5)	46,950 (74.5)								
12	55,050 (56)	50,100 (66.5)	44,950 (72)	38,850 (75.5)							
15	46,300 (48)	45,050 (61.5)	41,050 (68)	36,000 (72.5)	29,450 (75)	*22,450 (76)					
20	32,750 (30)	31,900 (52.5)	34,100 (61.5)	29,500 (67)	27,400 (71)	22,450 (73.5)	*18,550 (76)	*15,500 (76)			
25		24,000 (42.5)	25,800 (54.5)	24,800 (61.5)	23,100 (66.5)	19,250 (70)	16,500 (72.5)	15,300 (74)			
30		18,800 (29)	20,300 (47)	20,600 (56)	19,600 (61.5)	16,850 (66)	14,400 (69)	13,200 (70.5)			
35			15,550 (38)	15,850 (49.5)	16,000 (57)	14,850 (62)	12,700 (65.5)	11,500 (67.5)			
40			12,800 (26)	13,050 (42.5)	13,200 (51.5)	13,250 (57.5)	11,000 (62)	10,000 (64)			
45				10,900 (34.5)	11,100 (46)	11,200 (53)	9,630 (58)	9,060 (60.5)			
50				9,240 (23.5)	9,410 (39.5)	9,530 (48)	8,740 (54.5)	7,990 (57)			
55					8,030 (32)	8,150 (43)	7,760 (50)	7,100 (53)			
60					6,870 (22)	7,000 (37)	6,920 (45.5)	6,320 (49)			
65						6,020 (30)	6,110 (40.5)	5,650 (44.5)			
70						5,190 (20.5)	5,280 (35)	5,080 (40)			
75							4,560 (28.5)	4,570 (34.5)			
80							3,930 (19.5)	3,960 (28)			
85								3,410 (19.5)			
Minimum boom angle (°) for indicated length (no load)									0		
Maximum boom length (ft.) at 0° boom angle (no load)									95		
NOTE: () Boom angles are in degrees.											
*This capacity is based on maximum boom angle.											
Lifting Capacities at Zero Degree Boom Angle											
Main Boom Length in Feet											
Boom Angle	29	40	50	60	70	80	90	95			
0°	26,150 (22.8)	15,850 (33.8)	11,100 (43.8)	8,140 (53.8)	6,100 (63.8)	4,620 (73.8)	3,490 (83.8)	3,000 (89)			
NOTE: () Reference radii in feet.											
A6-829-1028-11											

NOTE: () Reference radii in feet.

A6-829-102811

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load charts

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29 - 95 ft.	26 - 45 ft.	8,460 lbs	100% 20' 0"	360°
Pounds				
26 ft. LENGTH 45 ft. LENGTH				
Feet	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
30	*8,200 (76)			
35	8,200 (73.5)		*5,250 (76)	
40	8,200 (71)	*5,780 (76)	5,250 (75)	
45	8,120 (68.5)	5,780 (73.5)	4,940 (73)	
50	7,350 (66)	5,360 (71)	4,540 (71)	
55	6,370 (63.5)	4,750 (68)	4,150 (68.5)	*2,730 (76)
60	5,670 (60.5)	4,290 (65)	3,890 (66.5)	2,730 (74.5)
65	4,820 (57.5)	3,870 (62)	3,740 (64)	2,730 (72)
70	4,200 (54.5)	3,530 (59)	3,600 (61.5)	2,580 (69.5)
75	3,680 (51.5)	3,230 (56)	3,470 (59)	2,520 (67)
80	3,080 (48.5)	3,000 (52.5)	3,240 (56.5)	2,460 (64)
85	2,520 (45)	2,780 (49)	3,050 (54)	2,420 (61.5)
90	2,050 (41)	2,500 (45)	2,820 (51)	2,390 (58.5)
95	1,670 (37)	2,070 (40.5)	2,520 (48)	2,370 (55.5)
100	1,370 (32.5)	1,850 (35.5)	2,170 (45)	2,310 (52)
105	1,020 (27)		1,860 (42)	2,000 (48.5)
110			1,550 (38.5)	1,580 (45)
115			1,230 (34.5)	1,260 (40.5)
120				1,000 (35.5)
Min. boom angle for indicated length (no load)	20°	30°	31°	30°
Max. boom length at 0° boom angle (no load)	90 ft.		80 ft.	

NOTE: () Boom angles are in degrees.

A6-829-101542

*This capacity based on maximum boom angle.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension.
2. 26 ft. and 45 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.
4. **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.
5. Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
6. Capacities listed are with outriggers properly extended and vertical jacks set only.

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load charts

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29 - 95 ft.	26 - 45 ft.	8,460 lbs	100% 20' 0"	Over Rear
				
Pounds				
26 ft. LENGTH		45 ft. LENGTH		
Feet	0° OFFSET	30° OFFSET	0° OFFSET	30° OFFSET
30	*8,200 (76)		*5,250 (76)	
35	8,200 (73.5)			
40	8,200 (71)	*5,780 (76)	5,250 (75)	
45	8,120 (68.5)	5,780 (73.5)	4,940 (73)	
50	7,350 (66)	5,360 (71)	4,540 (71)	
55	6,370 (63.5)	4,750 (68)	4,150 (68.5)	*2,730 (76)
60	5,670 (60.5)	4,290 (65)	3,890 (66.5)	2,730 (74.5)
65	4,820 (57.5)	3,870 (62)	3,740 (64)	2,730 (72)
70	4,200 (54.5)	3,530 (59)	3,600 (61.5)	2,580 (69.5)
75	3,680 (51.5)	3,230 (56)	3,470 (59)	2,520 (67)
80	3,080 (48.5)	3,000 (52.5)	3,240 (56.5)	2,460 (64)
85	2,520 (45)	2,780 (49)	3,050 (54)	2,420 (61.5)
90	2,050 (41)	2,500 (45)	2,820 (51)	2,390 (58.5)
95	1,670 (37)	2,100 (40.5)	2,520 (48)	2,370 (55.5)
100	1,370 (32.5)	1,650 (35.5)	2,170 (45)	2,310 (52)
105	1,020 (27)		1,860 (42)	2,000 (48.5)
110			1,550 (38.5)	1,580 (45)
115			1,230 (34.5)	1,260 (40.5)
120				1,000 (35.5)
Min. boom angle for indicated length (no load)	20°	30°	31°	30°
Max. boom length at 0° boom angle (no load)	90 ft.		80 ft.	

NOTE: () Boom angles are in degrees. A6-829-101564
*This capacity based on maximum boom angle.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension.
2. 26 ft. and 45 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.
4. **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.
5. Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
6. Capacities listed are with outriggers properly extended and vertical jacks set only.

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