

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



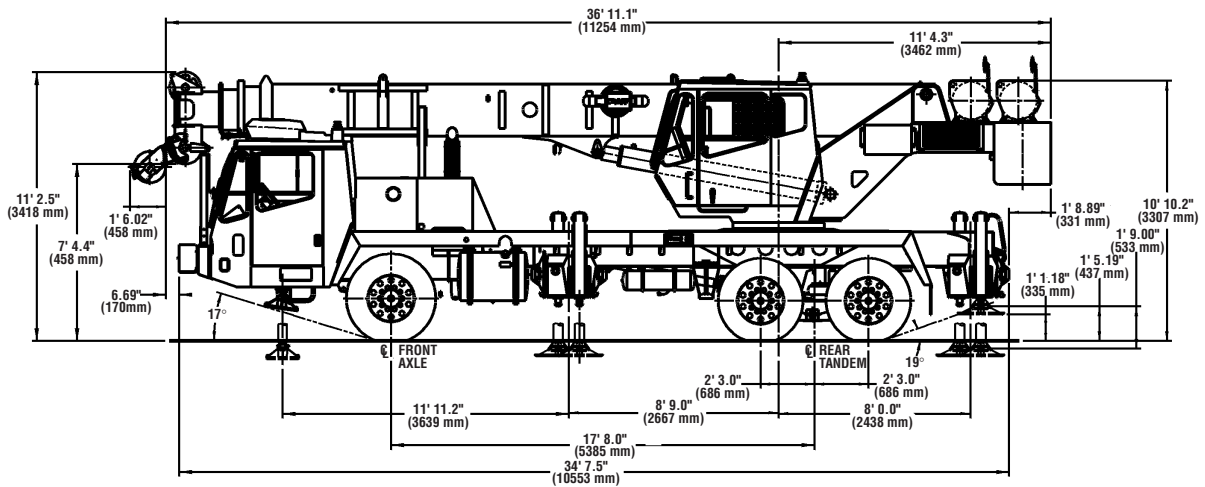
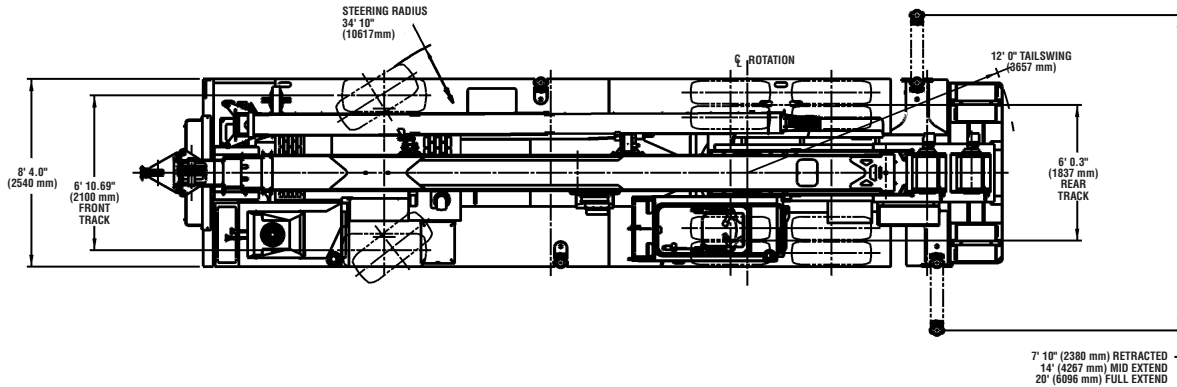
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Truck Mounted Crane

dimensions

5



Weights

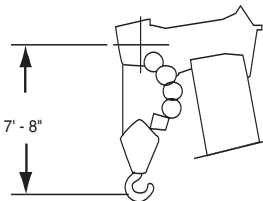
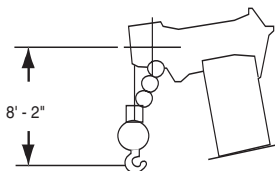
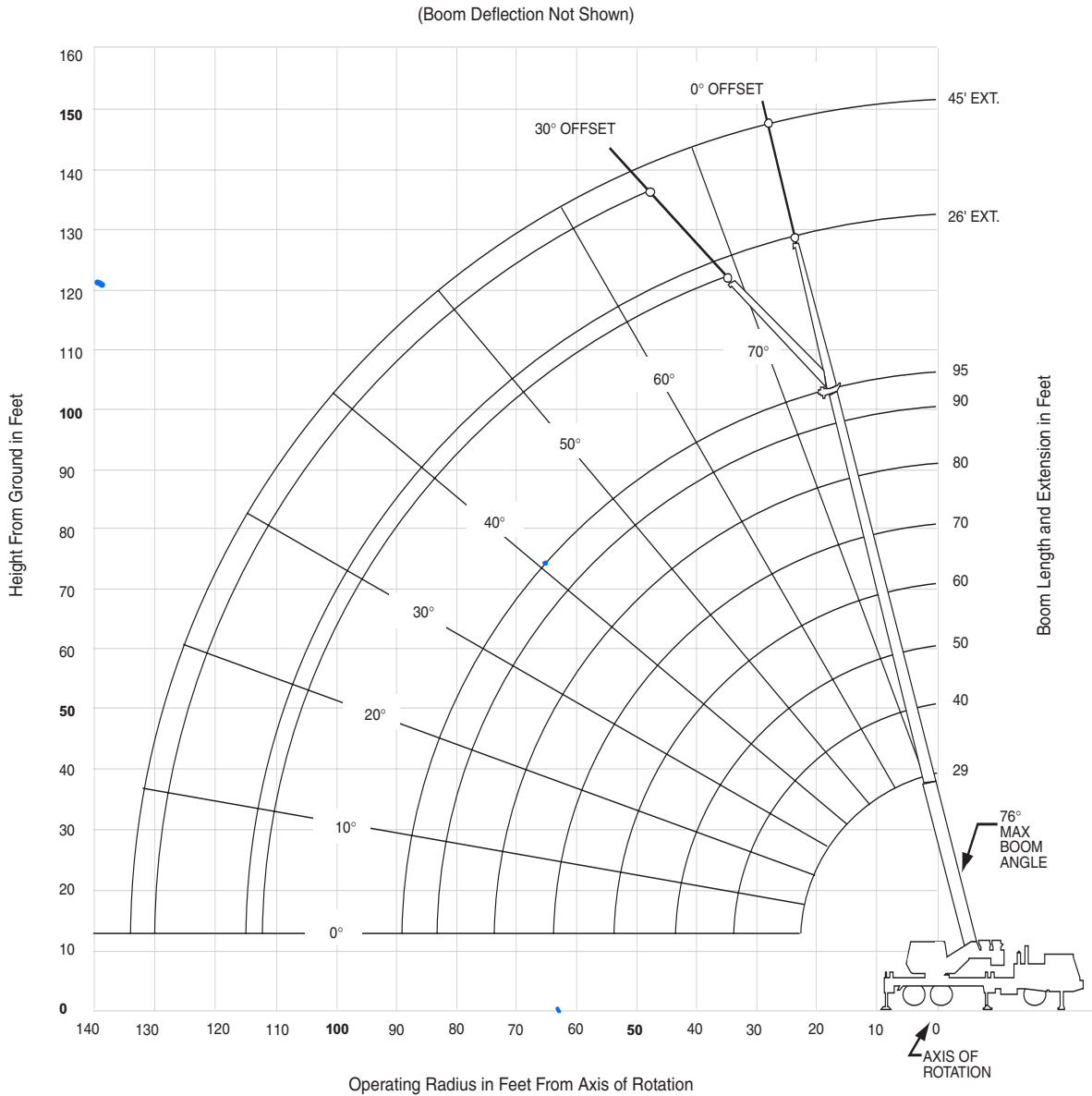
| | Gross | | Front Axle | | Rear Axles | |
|--|--------|----------|------------|---------|------------|----------|
| Axle Allowable | 62,000 | (28 123) | 21,000 | (9 525) | 41,000 | (18 598) |
| Unit Configuration lb. (kg.) | | | | | | |
| Basic machine including 95 ft. main boom, main hoist with cable, 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) |

TMS500E

working range

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

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

TMS500E



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GROVE

load charts

8

 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. A6-829-102810

 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

| Boom Angle | Main Boom Length in Feet | | | | | | | |
|------------|--------------------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|---------------|
| | 29 | 40 | 50 | 60 | 70 | 80 | 90 | 95 |
| 0° | 26,150 (22.8) | 15,850 (33.8) | 11,100 (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. A6-829-102811

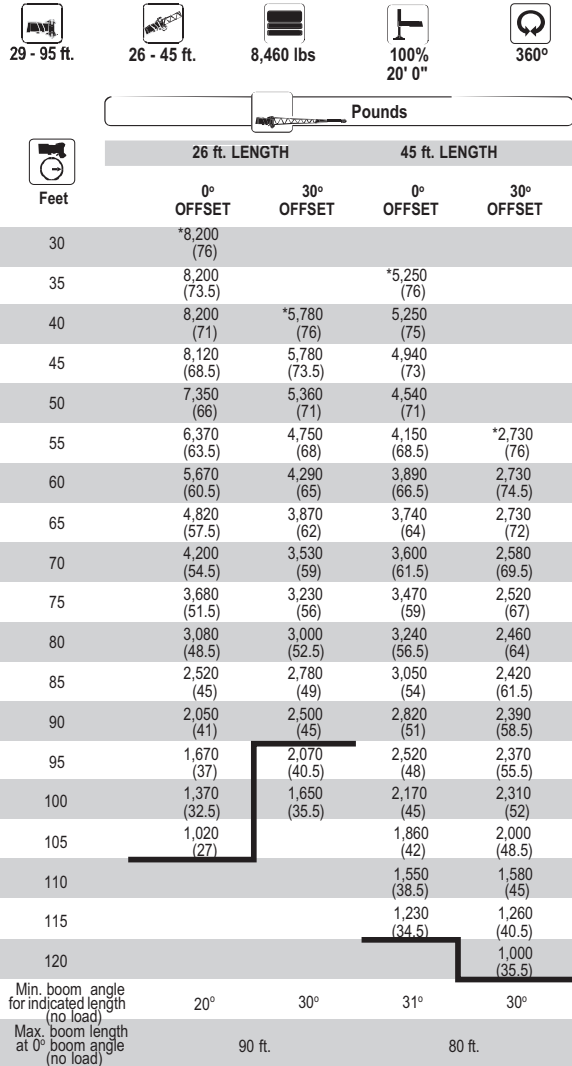
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GROVE

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load charts

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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.

load charts

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| Feet | 26 ft. LENGTH | | 45 ft. LENGTH | |
|--|-----------------|-----------------|-----------------|-----------------|
| | 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) | 2,100 (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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