

GROVE[®]
worldwide

TMS300B

Truck-mounted hydraulic crane

- Capacity 40 tons (37,500 kg)
- Standard fifth jack for 360° duties
- Maximum on-board tip height 164 ft. (50m)
- Optional 32 ft. - 56 ft. (9.8-17m) telescopic swingaway offsets 0°, 15° and 30°



Superstructure specifications

Boom	34 ft. to 104 ft. (10.4m - 31.7m) four section Trapezoidal† power pinned boom. Telescopic sections slide on adjustable and replaceable nylatron pads. Maximum tip height: 109 ft. (33.2m).
Swingaway Extension	32 ft. (9.8m) lattice swingaway boom extension stows alongside base boom section when not in use. Maximum tip height: 140 ft. (42.7m).
*Optional Telescopic Swingaway	32 ft. to 56 ft. (9.8m-17m) telescopic lattice swingaway extension with offset links, offsettable at 0°, 15° or 30°. Stows alongside base boom when not in use. Maximum tip height: 164 ft. (50.0m).
*Optional Offsettable Swingaway	32 ft. (9.8m) lattice swingaway. Boom extension stows alongside base boom section when not in use. Offsettable at 0°, 15° or 30°. Maximum tip height: 140 ft. (42.7m).
Boom Nose	Four sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. *Optional removable auxiliary boom nose with removable pin type rope guard.
Boom Elevation	Two double acting hydraulic cylinders with integral holding valve provides elevation from -3° to 76°.
Load Moment & Anti-Two Block System	Standard 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 conditions.
Cab	Full vision, all steel fabricated with acoustical lining and tinted safety glass throughout. Dash panel incorporates gauges for all engine functions. Other standard features include: hinged skylight, sliding left side door and sliding right side window, electric windshield wash-wipe, circulating air fan, heater, swing horn, fire extinguisher, seat belt. *Optional items: electric skylight wiper and air conditioning (Special Order).
Swing	Ball bearing swing circle with 360° continuous rotation. Grove "glide swing" with foot actuated disc brake, spring applied hydraulically released park brake and 360° positive turntable lock. Combination controls provided for hand or foot operation. Swing speed 2.6 RPM.
Counterweight	Fixed position pinned to turntable. Weight varies depending on hoist configuration.

HYDRAULIC SYSTEM

Pumps	Four main gear pumps powered by carrier engine. Manual pump disconnect. Combined capacity 146 GPM (553 LPM).
Valves	Precision four way double acting control valves, 4 individual valve banks permit simultaneous control of multiple crane functions.
Filter	Return line type, full flow with by-pass protection and filter by-pass indicator, replaceable cartridge, 15/30/38 filtration rating.
Reservoir	127 gallons (481 L) with spin-on breather filter, external sight gauge, clean out access, strap mounted to frame.
Oil Cooler	Full flow, fin and tube, oil to air.

HOIST SPECIFICATIONS

Series parallel circuitry and two motors provide both high line pull and speed ranges. Power up and down, equal speed, planetary reduction with integral automatic brake and electronic hoist drum rotation indicator.

Make/Model		Main Hoist HO30B-16 or *Auxiliary Hoist HO30B-16	
		High Range	Low Range
Maximum single line speed	Bottom layer	396 FPM (121m/min)	198 FPM (60 m/min)
	Intermediate layer	460 FPM (140m/min)	230 FPM (70 m/min)
	Top layer	526 FPM (160m/min)	263 FPM (80 m/min)
Maximum single line pull	Bottom layer	8,161 lbs. (3701 kg)	16,322 lbs. (7404 kg)
	Intermediate layer	7,028 lbs. (3188 kg)	14,056 lbs. (6376 kg)
	Top layer	6,172 lbs. (2799 kg)	12,344 lbs. (5599 kg)
Maximum permissible line pull w/5:1 Strength Factor		12,920 lbs. (5861 kg) w/std. wire rope	
Maximum rope stowage		Main/Aux. 508 ft. of 3/4" dia. rope (155m of 19mm)	
Note: 500 ft. (152m of 19mm) supplied with basic unit for main hoist.			

†Patented Grove feature or patent pending
*Denotes optional equipment

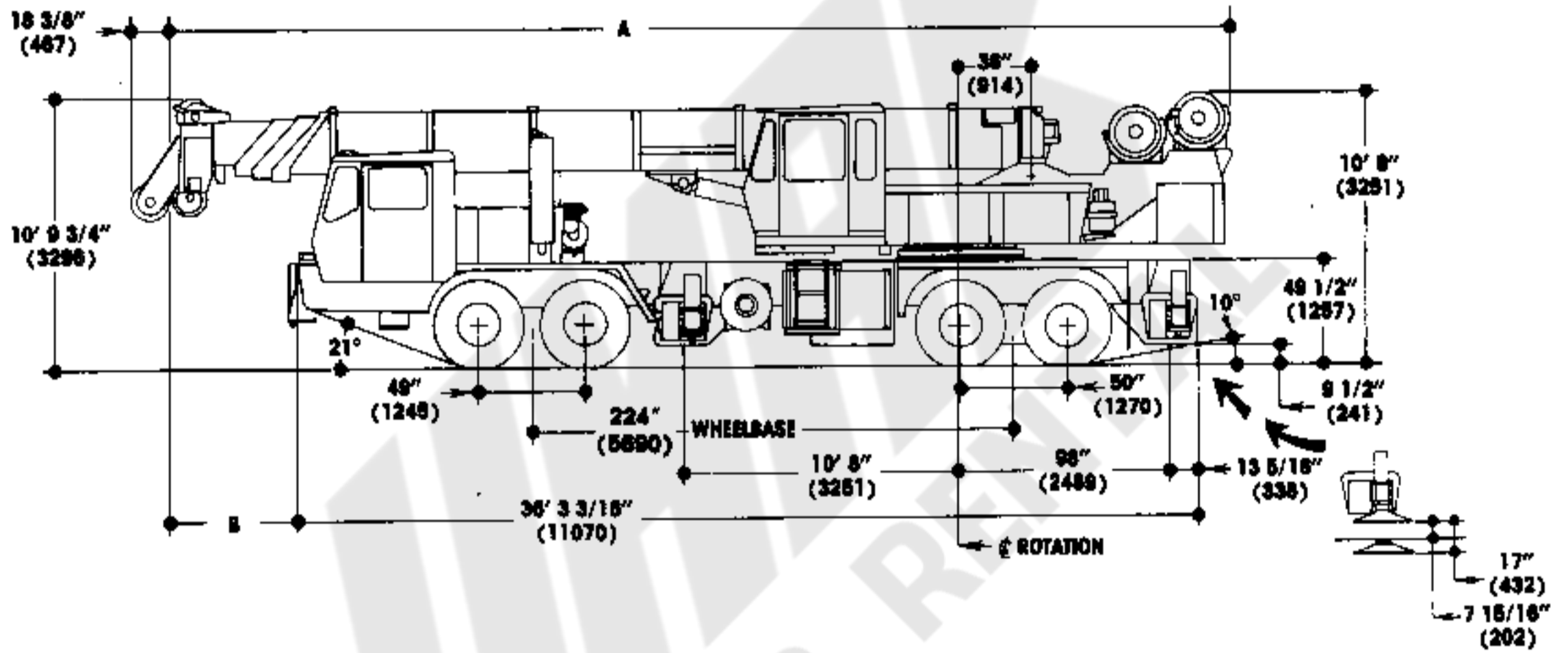
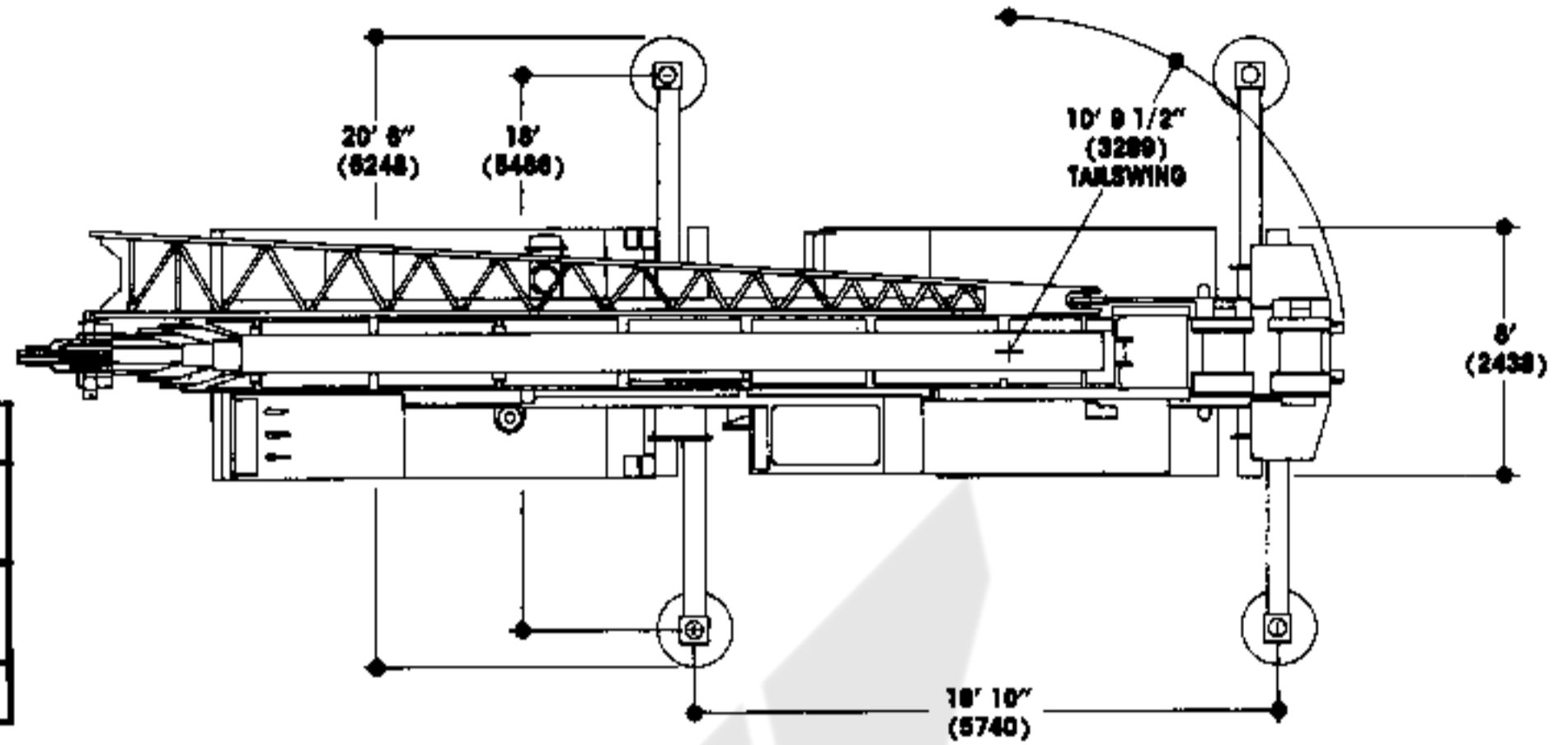
Carrier specifications

Frame	High strength alloy steel all welded box-type construction with integral outrigger boxes and front/rear lifting, towing and tie down lugs.
Outrigger System	Hydraulic single stage double box telescopic beam and jack outriggers with integral holding valves. All steel fabricated quick release type outrigger floats 24" (610mm) diameter. Standard fifth front stabilizer for 360° duties.
Outrigger Controls	Located in superstructure cab. Push button controls requiring two-handed operation for safety. Crane level indicator (sight bubble) adjacent to controls.
Engine	Detroit diesel 6-71N six cylinder, naturally aspirated water cooled diesel, 426 cu. in. (7 L) 230 bhp (172 kw) (Gross) @ 2100 RPM. Maximum torque 611 ft. lbs. (84.5 kg/m) @ 1600 RPM.
Fuel Tank Capacity	(1) 90 gallon (341 L)
Electrical System	Four 12 volt - maintenance free batteries, 24 volt starting.
Drive	8 x 4
Steering	Front axle steering, cam and lever type with hydraulic assist.
Transmission	Manual with 13 speeds forward and 3 reverse.
Axles	Front: Rockwell beam type steer axles. Rear: Rockwell SSHD drive tandem, with inter-axle differential and dash mounted control.
Suspension	Front axles (1 & 2) spring mounted tandem. Rear axles (3 & 4) solid mount tandem with equalizing beam and solid steel saddles.
Tires	Front: 15.00x22.5-16PR duplex highway tread tubeless singles. Rear: 11:00x20-14PR highway tread tube type duals.
Optional Tires	Front: 16.5x22.5-16PR duplex highway tread tubeless and 12:00x20-18PR Michelin radial tube type. Rear: 11:00x20-14PR highway tread SRL-1 or HCT tube type radial and 12:00x20-18PR radial tube type.
Brakes	Full air on all wheels. Air dryer provided to preclude moisture accumulation. Spring set emergency brake on both rear axles with emergency release.

Lights	Full lighting including head, tail, braking, reversing, directional and hazard warning lights.
Cab	One man design, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe fabric covered fully adjustable seat. Complete driving controls and engine instrumentation including tachometer, speedometer, voltmeter, water temp. oil pressure, fuel level, air pressure gauge. Other standard items include hot water heater/defroster, electric windshield wash/wipe, fire extinguisher, seat belt and door and window locks.
Maximum Speed	51.5 MPH (82.9 kph)
Gross Vehicle Weight & Axle Loads	BASIC STANDARD MACHINE Front Tandem: 28,743 lbs. (13,038 kgs) Rear Tandem: 43,884 lbs. (19,906 kgs) G.V.W.: 72,627 lbs. (32,944 kgs) (includes 32 ft. swingaway)
Miscellaneous Standard Equipment	Dual rear view mirrors, hookblock tiedown sling, electronic back-up alarm, light package.
Optional Equipment	<ul style="list-style-type: none"> * Immersion engine block heater * Hookblocks/Headache balls * Spare wheel assembly * Pintle hook front and rear * Working lights * Engine low oil pressure, high water temperature audio/visual warning system * 360° rotating beacon * Tool kit * Dual base boom mounted floodlights

†Patented Grove feature or patent pending.
*Denotes optional equipment.

	3 SEC. BOOM	4 SEC. BOOM
A	41'3 7/8" (12595)	42'4 3/8" (12913)
B	60 1/16" (1526)	72 9/16" (1843)
Turning Radius:		42'



GROVE
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Constant improvement and engineering progress makes 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.

Distributed By:

TMS300B

40 TON CAPACITY
34 ft. - 136 ft. BOOM

(POWER PINNED)
85% OF TIPPING
PCSA CLASS 10-114

JIB CAPACITIES IN POUNDS
24 ft. JIB and 32 ft. EXT. Combination

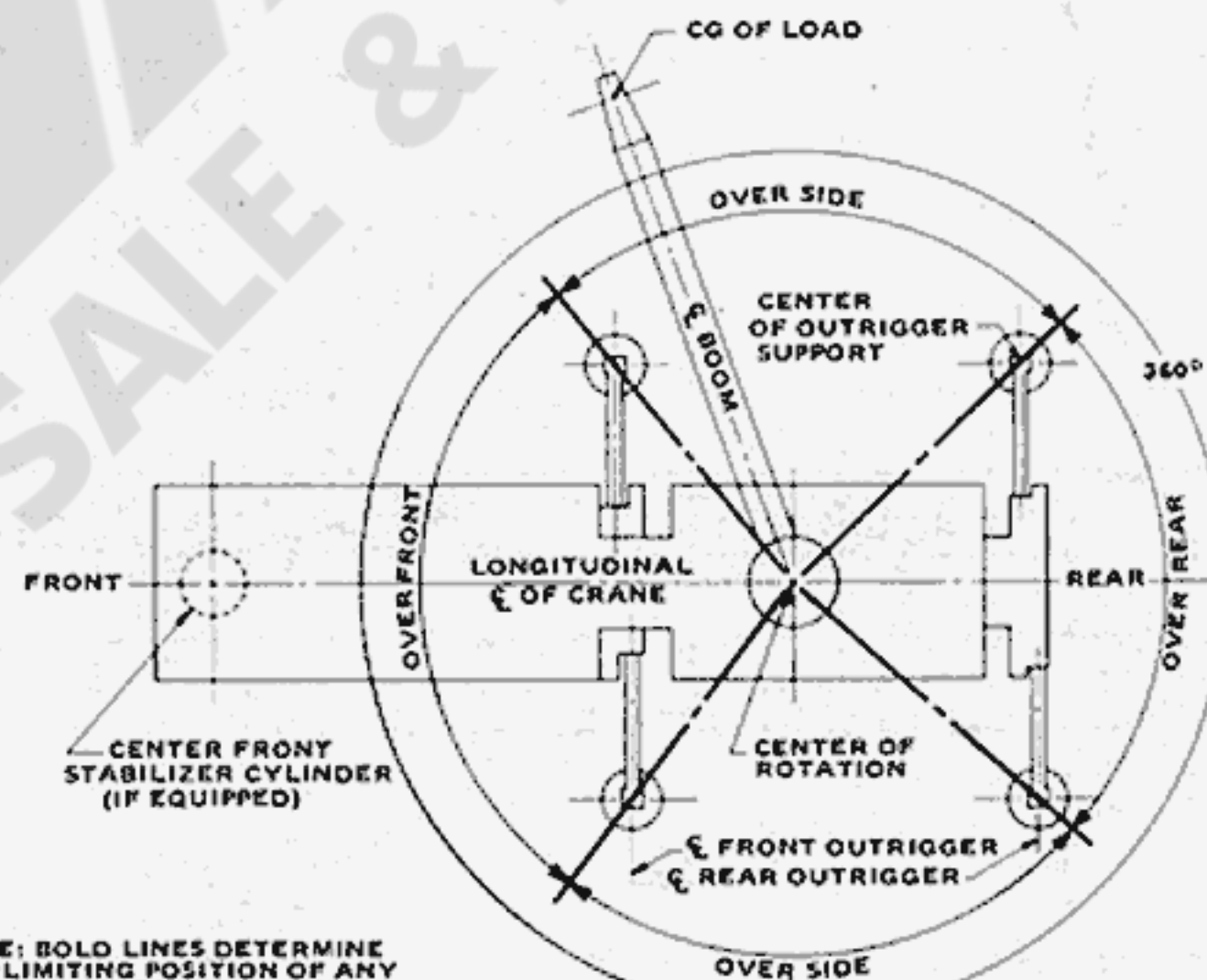
Main Boom Angle	Min. 5° Offset	17° Offset	Max. 30° Offset
76°	6,000	5,200	4,600
70	4,300	3,940	3,650
65	3,430	3,200	3,010
60	2,760	2,600	2,470
55	2,220	2,110	2,020

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NOTES FOR JIB CAPACITIES

- 24 ft. jib and 32 ft. boom extension combination may be used for single line lifting crane service only. Capacities are based on structural strength of 24 ft. jib and 32 ft. boom extension combination at given main boom angle regardless of main boom length. When lifting with 24 ft. jib and 32 ft. boom extension, capacities must not exceed structural capacity of jib combination at given main boom angle or stability capacity of applicable boom length listed in boom capacity chart for actual working radius, whichever is less. Capacities comply with structural requirements of SAE J-987 or SAE J-1063.
- Maximum total length of boom including 32 ft. boom extension for purpose of erecting 24 ft. jib below 10° elevation is 92 ft.
- WARNING:** Operation of machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with jib occurs rapidly and without advance warning.
- 24 ft. JIB WARNING:** For total boom length including 32 ft. boom extension greater than 92 ft. with 24 ft. jib in working position the boom angle must not be less than 50° since loss of stability will occur causing a tipping condition.
- Lifting over front of machine with 24 ft. jib is strictly prohibited.
(NOTE: Not applicable to units equipped with front outrigger jack)

LIFTING AREA DIAGRAM

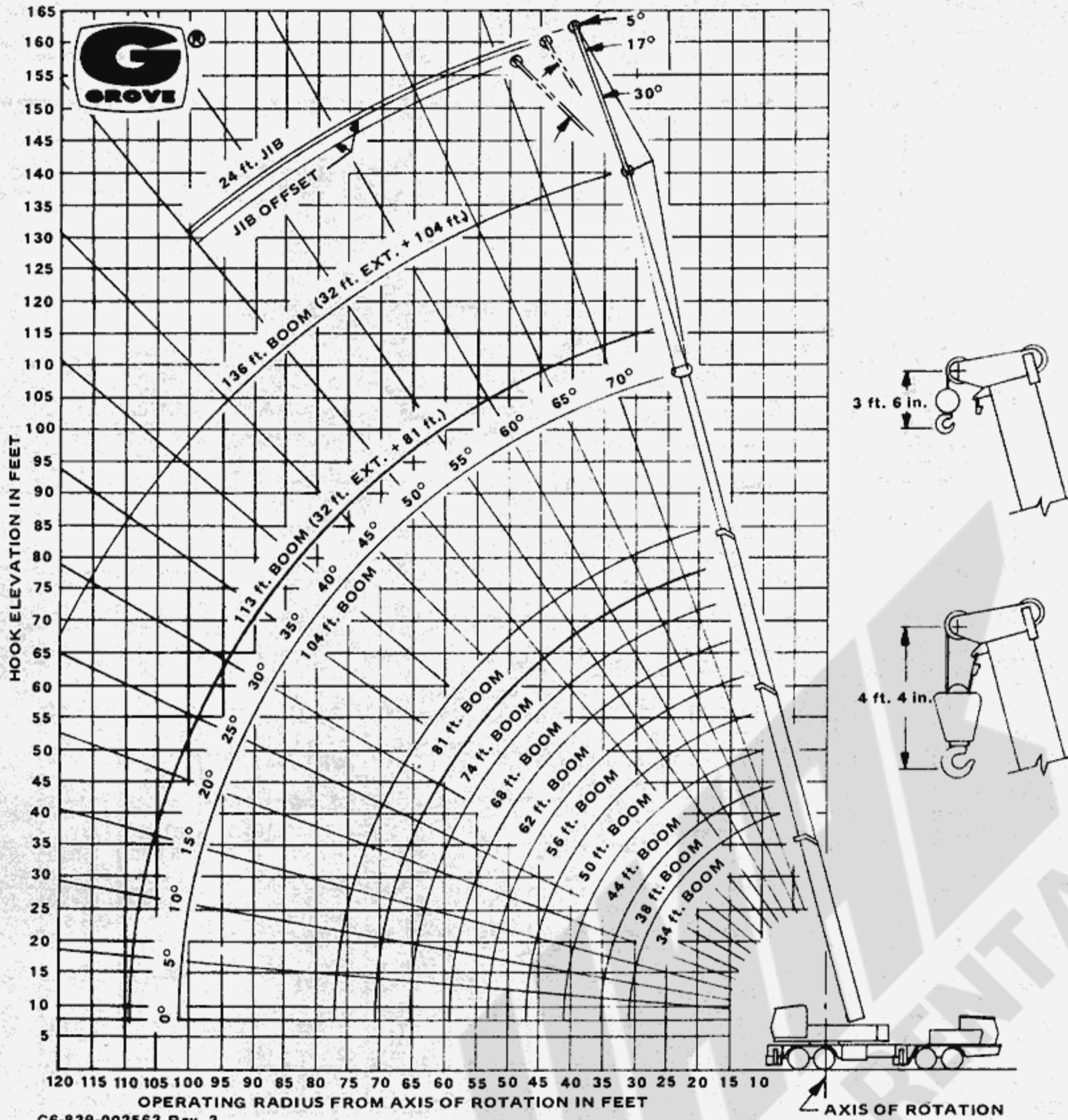


NOTE: BOLD LINES DETERMINE THE LIMITING POSITION OF ANY LOAD FOR OPERATION WITHIN WORKING AREAS INDICATED.

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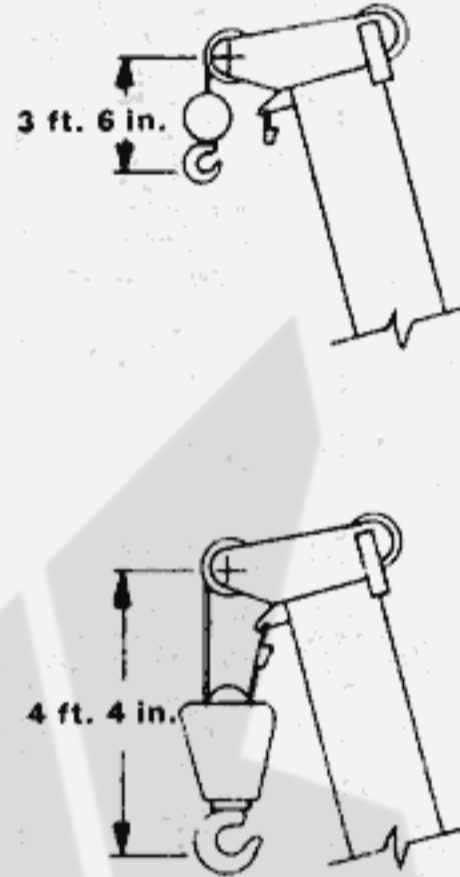
GROVE® TMS300B

RANGE DIAGRAM



NOTES FOR LIFTING CAPACITIES

- Do not exceed any rated lifting capacity. Rated lifting capacities are based on freely suspended loads with the machine leveled and standing on a firm supporting surface. Ratings with outriggers are based on outriggers being extended to their maximum position and tires raised free of crane weight before extending the boom or lifting loads.
- Practical working loads for each particular job shall be established by the user depending on operating condition to include: the supporting surface, wind and other factors affecting stability, hazardous surroundings, experience of personnel, handling of load, etc. No attempt must be made to move a load horizontally on the ground in any direction.
- Operating radius is the horizontal distance from the axis of rotation before loading to the centerline of the vertical hoist line or tackle with loads applied.
- "On Rubber" lifting (if permitted) depends on proper tire inflation, capacity and condition. "On Rubber" loads may be transported at a maximum vehicle speed of 2.5 mi/hr (4 Km/hr) on a firm and level surface under conditions specified.
- Jibs may be used for lifting crane service only. Jib capacities are based on structural strength of jib or main boom and on main boom angle.
- Operation is not intended or approved for any conditions outside of those shown hereon. Handling of personnel from the boom is not authorized except with equipment furnished and installed by Grove Manufacturing Company.
- For clamshell or concrete bucket operation, weight of bucket and load must not exceed 80% of rated lifting capacities.
- Power-telescoping boom sections must be extended equally at all times. Long cantilever booms can create a tipping condition when in extended and lowered position.
- The maximum load which may be telescoped is limited by hydraulic pressure, boom angle, boom lubrication, etc. It is safe to attempt to telescope any load within the limits of rated lifting capacity chart.
- With certain boom and hoist tackle combinations, maximum capacities may not be obtainable with standard cable lengths.
- With certain boom and load combinations, raising of load with boom lift cylinders may not be possible. Operational safety is not affected by this condition.
- Keep load handling devices a minimum of 12 inches (30 cm) below boom head when lowering or extending boom.
- If actual boom length and/or radius is between values listed, use lifting capacity for the next longer rated length and/or radius.
- All load handling devices and boom attachments are considered part of the load and suitable allowances must be made for their combined weights.
- Operation of this equipment in excess of rating charts or disregard of the instructions is hazardous and voids the warranty and manufacturer's liability.



WEIGHT REDUCTION FOR LOAD HANDLING DEVICES

32 ft. BOOM EXTENSION	
†STOWED	430 lbs.
†ERECTED	2,985 lbs.
24 ft. JIB & 32 ft. EXT. COMB.	
†STOWED	479 lbs.
†ERECTED	7,210 lbs.
††ERECTED	1,739 lbs.

†Reduction of main boom capacities.
††Reduction of 32 ft. Ext. capacities.

HOOK BLOCK	
40 Ton, 3 Sheave	640 lbs.
15 Ton, 1 Sheave	310 lbs.
Auxiliary Boom Head	190 lbs.
5 Ton Headache Ball	150 lbs.
7 1/2 Ton Headache Ball	300 lbs.
10 Ton Headache Ball	500 lbs.

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.

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



GROVE MANUFACTURING COMPANY

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Distributed by:



TMS

40 TON C
34 ft. - 136

(POWER
85% OF
PCSA CLAS

RATED LIFTING CAP

ON OUTRIGGERS FULLY EXTENDED - OVER SIDE

Radius in Feet	Main Boom Length in Feet (Power Pinned Fly Retracted)									Power Pin. Fly & 81 ft.	32 ft. Ext. & 81 ft.	32 ft. Ext. & 104 ft.	
	*34	38	44	50	56	62	68	74	81				
10	80,000 (69)	68,000 (71.5)	64,000 (74.5)	60,000 (76.5)						See Warning Note 4	See Warning Note 5	See Warning Note 6	
12	65,000 (65)	62,500 (68)	57,500 (71.5)	54,000 (74)	51,000 (76)	49,000 (77.5)							
15	57,000 (59.5)	55,000 (63)	50,000 (67.5)	46,500 (70.5)	43,900 (73)	41,900 (74.5)	40,000 (76.5)	38,600 (77.5)					
20	46,890 (48.5)	43,000 (54)	39,500 (60)	36,500 (64)	34,500 (67.5)	32,700 (70)	31,400 (72)	30,000 (73.5)	28,700 (76)				
25	29,450 (35.5)	29,450 (44)	29,450 (52)	29,450 (57.5)	28,100 (61.5)	26,500 (65)	25,300 (67.5)	24,200 (69.5)	23,100 (72)	20,000 (77)	17,500 (77.5)		
30	20,560 (14)	20,560 (31)	20,560 (43)	20,560 (50)	20,560 (55.5)	20,560 (59.5)	20,560 (62.5)	20,000 (65.5)	19,000 (68)	17,750 (74.5)	15,400 (75.5)		
35			15,450 (31.5)	15,450 (42)	15,450 (49)	15,450 (54)	15,450 (57.5)	15,450 (61)	15,450 (64.5)	15,600 (71.5)	13,700 (73)	9,600 (77.5)	
40			11,410 (13.5)	11,410 (32)	11,410 (41.5)	11,410 (47.5)	11,410 (52.5)	11,410 (56.5)	11,410 (60)	13,100 (68.5)	12,200 (70.5)	8,750 (75.5)	
45				8,450 (18)	8,450 (32.5)	8,450 (41)	8,450 (47)	8,450 (51.5)	8,450 (56)	10,990 (65.5)	10,800 (67.5)	7,900 (73)	
50					6,630 (20.5)	6,630 (33)	6,630 (40.5)	6,630 (46)	6,630 (51.5)	8,750 (62)	8,970 (64.5)	7,050 (71)	
55						5,280 (22.5)	5,280 (33)	5,280 (40)	5,280 (46.5)	7,130 (59)	7,300 (61.5)	6,350 (68.5)	
60							4,090 (24)	4,090 (33.5)	4,090 (41)	5,650 (55.5)	5,890 (58.5)	5,800 (66)	
65								3,060 (3)	3,060 (25)	3,060 (35)	4,500 (52)	4,760 (55.5)	5,190 (63.5)
70									2,150 (11.5)	2,150 (27.5)	3,600 (48)	3,780 (52.5)	4,440 (61.5)
75										1,300 (17)	2,840 (44)	3,000 (49)	3,690 (58.5)
80											2,150 (40)	2,340 (45)	2,950 (56)
85											1,550 (35)	1,740 (41)	2,370 (53.5)
90											1,020 (29.5)	1,170 (37)	1,930 (50.5)
95													1,530 (47.5)
100													1,130 (44.5)

NOTE: Boom angles are in degrees.

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NOTES FOR ON O

1. Capacities appearing above the bold line are based on structural strength and tipping shown on tipping loads as determined by test in accordance with SAE recommended practice-cranes.
2. Do not exceed any rated load when lifting regardless of whether it is based on structural strength or tipping.
3. Boom angle is the included angle between horizontal and the axis of the boom base section.
4. For boom lengths less than 104 ft. with power pinned fly extended, the rated loads are shown. For boom angles not shown, use rating of next lower boom angle.
5. For boom lengths less than 113 ft. with power pinned fly retracted and 32 ft. boom extended by 113 ft. boom. For boom angles not shown, use rating of next lower boom angle.
6. For boom lengths less than 136 ft. with power pinned fly extended and 32 ft. boom extended by 136 ft. boom. For boom angles not shown, use rating of next lower boom angle.
- *7. Capacities for the 10.3m boom length shall be lifted with boom fully retracted. If boom length.

TMS300B

40 TON CAPACITY
34 ft. - 136 ft. BOOM

(POWER PINNED)
85% OF TIPPING
PCSA CLASS 10-114

GRO

FULL HYD
CARRIER-MOU

LIFTING CAPACITIES IN POUNDS

SIDE

ON OUTRIGGERS FULLY EXTENDED - OVER REAR

Power Pin. Fly & 81 ft.	32 ft. Ext. & 81 ft.	32 ft. Ext. & 104 ft.
104 See Warning Note 4	113 See Warning Note 5	136 See Warning Note 6
20,000 (77)	17,500 (77.5)	
17,750 (74.5)	15,400 (75.5)	
15,600 (71.5)	13,700 (73)	9,600 (77.5)
13,100 (68.5)	12,200 (70.5)	8,750 (75.5)
10,990 (65.5)	10,800 (67.5)	7,900 (73)
8,750 (62)	8,970 (64.5)	7,050 (71)
7,130 (59)	7,300 (61.5)	6,350 (68.5)
5,650 (55.5)	5,890 (58.5)	5,800 (66)
4,500 (52)	4,760 (55.5)	5,190 (63.5)
3,600 (48)	3,780 (52.5)	4,440 (61.5)
2,840 (44)	3,000 (49)	3,690 (58.5)
2,150 (40)	2,340 (45)	2,950 (56)
1,550 (35)	1,740 (41)	2,370 (53.5)
1,020 (29.5)	1,170 (37)	1,930 (50.5)
		1,530 (47.5)
		1,130 (44.5)

6-829-006311 & -002137D

Radius in Feet	Main Boom Length in Feet (Power Pinned Fly Retracted)									Power Pin Fly & 81 ft.	32 ft. Ext. & 81 ft.	32 ft. Ext. & 104 ft.	
	*34	38	44	50	56	62	68	74	81				
10	80,000 (69)	68,000 (71.5)	64,000 (74.5)	60,000 (76.5)									
12	65,000 (65)	62,500 (68)	57,500 (71.5)	54,000 (74)	51,000 (76)	49,000 (77.5)							
15	57,000 (59.5)	55,000 (63)	50,000 (67.5)	46,500 (70.5)	43,900 (73)	41,900 (74.5)	40,000 (76.5)	38,600 (77.5)					
20	47,000 (48.5)	43,000 (54)	39,500 (60)	36,500 (64)	34,500 (67.5)	32,700 (70)	31,400 (72)	30,000 (73.5)	28,700 (76)				
25	35,675 (35.5)	33,300 (44)	31,000 (52)	30,000 (57.5)	28,100 (61.5)	26,500 (65)	25,300 (67.5)	24,200 (69.5)	23,100 (72)	20,000 (77)	17,500 (77.5)		
30	25,200 (14)	25,200 (31)	25,200 (43)	25,200 (50)	23,500 (55.5)	22,100 (59.5)	21,000 (62.5)	20,000 (65.5)	19,000 (68)	17,750 (74.5)	15,400 (75.5)		
35			19,340 (31.5)	19,340 (42)	19,340 (49)	18,700 (54)	17,700 (57.5)	16,800 (61)	16,000 (64.5)	15,600 (71.5)	13,700 (73)	9,600 (77.5)	
40			15,190 (13.5)	15,190 (32)	15,190 (41.5)	15,190 (47.5)	15,190 (52.5)	14,400 (56.5)	13,600 (60)	13,100 (68.5)	12,200 (70.5)	8,750 (75.5)	
45				12,310 (18)	12,310 (32.5)	12,310 (41)	12,310 (47)	12,310 (51.5)	11,700 (56)	11,300 (65.5)	10,800 (67.5)	7,900 (73)	
50					10,000 (20.5)	10,000 (33)	10,000 (40.5)	10,000 (46)	10,000 (51.5)	9,930 (62)	9,410 (64.5)	7,050 (71)	
55						8,180 (22.5)	8,180 (33)	8,180 (40)	8,180 (46.5)	8,710 (59)	8,230 (61.5)	6,350 (68.5)	
60							6,650 (24)	6,650 (33.5)	6,650 (41)	7,680 (55.5)	7,240 (58.5)	5,800 (66)	
65								5,280 (3)	5,280 (25)	5,280 (35)	6,800 (52)	6,380 (55.5)	5,200 (63.5)
70									4,140 (11.5)	4,140 (27.5)	5,990 (48)	5,640 (52.5)	4,750 (61.5)
75										3,320 (17)	5,000 (44)	4,910 (49)	4,350 (58.5)
80											4,060 (40)	4,090 (45)	4,050 (56)
85											3,290 (35)	3,420 (41)	3,700 (53.5)
90											2,730 (29.5)	2,830 (37)	3,280 (50.5)
95											2,210 (22.5)	2,330 (32)	2,870 (47.5)
100											1,680 (10.5)	1,890 (26.5)	2,470 (44.5)
105												1,470 (19)	2,080 (41)
110													1,700 (37.5)
115													1,340 (33.5)
120													1,010 (29)

NOTE: Boom angles are in degrees.

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NOTES FOR ON OUTRIGGERS

On structural strength and tipping should not be relied upon as a capacity limitation. Capacities do not exceed 85% of SAE recommended practice-crane load stability test code - SAE J-765. Capacities are based on structural strength or stability. Capacities are based on the axis of the boom base section after lifting rated load. When boom fully extended, the rated loads are determined by boom angle only in the column headed by 104 ft. boom. For boom angles less than 30 degrees, the rated loads are determined by boom angle only in the column headed by 104 ft. boom. When boom fully retracted and 32 ft. boom ext. erected, the rated loads are determined by boom angle only in the column headed by 104 ft. boom. When boom fully extended and 32 ft. boom ext. erected, the rated loads are determined by boom angle only in the column headed by 104 ft. boom. When boom fully retracted, capacities shall not exceed those shown for the 11.6m boom.

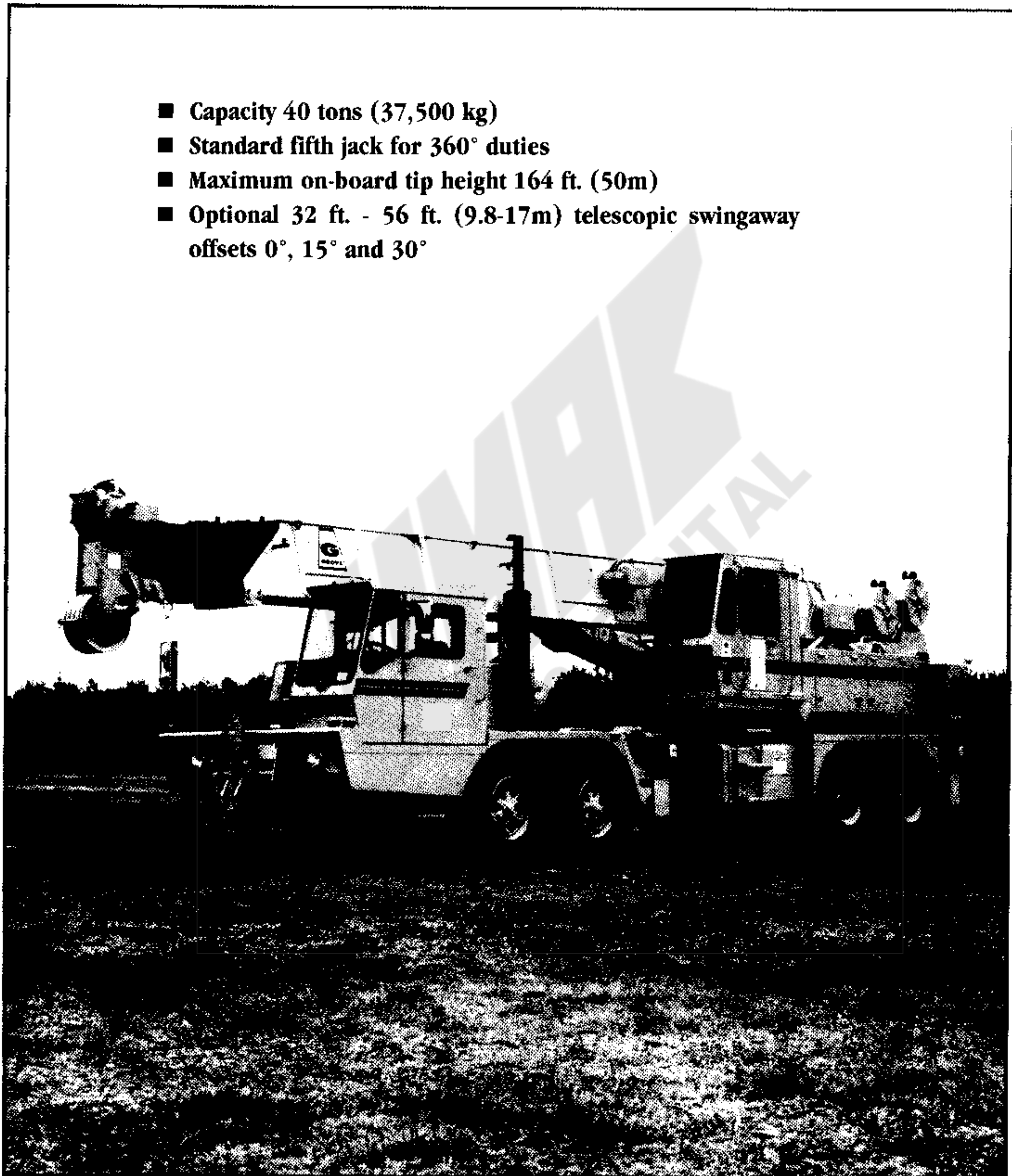


GROVE[®]
worldwide

TMS300B

Truck-mounted hydraulic crane

- Capacity 40 tons (37,500 kg)
- Standard fifth jack for 360° duties
- Maximum on-board tip height 164 ft. (50m)
- Optional 32 ft. - 56 ft. (9.8-17m) telescopic swingaway offsets 0°, 15° and 30°



Superstructure specifications

Boom	34 ft. to 104 ft. (10.4m - 31.7m) four section Trapezoidal† power pinned boom. Telescopic sections slide on adjustable and replaceable nylatron pads. Maximum tip height: 109 ft. (33.2m).
Swingaway Extension	32 ft. (9.8m) lattice swingaway boom extension stows alongside base boom section when not in use. Maximum tip height: 140 ft. (42.7m).
*Optional Telescopic Swingaway	32 ft. to 56 ft. (9.8m-17m) telescopic lattice swingaway extension with offset links, offsettable at 0°, 15° or 30°. Stows alongside base boom when not in use. Maximum tip height: 164 ft. (50.0m).
*Optional Offsettable Swingaway	32 ft. (9.8m) lattice swingaway. Boom extension stows alongside base boom section when not in use. Offsettable at 0°, 15° or 30°. Maximum tip height: 140 ft. (42.7m).
Boom Nose	Four sheaves mounted on heavy duty tapered roller bearings with removable pin-type rope guards. *Optional removable auxiliary boom nose with removable pin type rope guard.
Boom Elevation	Two double acting hydraulic cylinders with integral holding valve provides elevation from -3° to 76°.
Load Moment & Anti-Two Block System	Standard 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 conditions.
Cab	Full vision, all steel fabricated with acoustical lining and tinted safety glass throughout. Dash panel incorporates gauges for all engine functions. Other standard features include: hinged skylight, sliding left side door and sliding right side window, electric windshield wash-wipe, circulating air fan, heater, swing horn, fire extinguisher, seat belt. *Optional items: electric skylight wiper and air conditioning (Special Order).
Swing	Ball bearing swing circle with 360° continuous rotation. Grove "glide swing" with foot actuated disc brake, spring applied hydraulically released park brake and 360° positive turntable lock. Combination controls provided for hand or foot operation. Swing speed 2.6 RPM.
Counterweight	Fixed position pinned to turntable. Weight varies depending on hoist configuration.

HYDRAULIC SYSTEM

Pumps	Four main gear pumps powered by carrier engine. Manual pump disconnect. Combined capacity 146 GPM (553 LPM).
Valves	Precision four way double acting control valves, 4 individual valve banks permit simultaneous control of multiple crane functions.
Filter	Return line type, full flow with by-pass protection and filter by-pass indicator, replaceable cartridge, 15/30/38 filtration rating.
Reservoir	127 gallons (481 L) with spin-on breather filter, external sight gauge, clean out access, strap mounted to frame.
Oil Cooler	Full flow, fin and tube, oil to air.

HOIST SPECIFICATIONS

Series parallel circuitry and two motors provide both high line pull and speed ranges. Power up and down, equal speed, planetary reduction with integral automatic brake and electronic hoist drum rotation indicator.

Make/Model		Main Hoist HO30B-16 or *Auxiliary Hoist HO30B-16	
		High Range	Low Range
Maximum single line speed	Bottom layer	396 FPM (121m/min)	198 FPM (60 m/min)
	Intermediate layer	460 FPM (140m/min)	230 FPM (70 m/min)
	Top layer	526 FPM (160m/min)	263 FPM (80 m/min)
Maximum single line pull	Bottom layer	8,161 lbs. (3701 kg)	16,322 lbs. (7404 kg)
	Intermediate layer	7,028 lbs. (3188 kg)	14,056 lbs. (6376 kg)
	Top layer	6,172 lbs. (2799 kg)	12,344 lbs. (5599 kg)
Maximum permissible line pull w/5:1 Strength Factor		12,920 lbs. (5861 kg) w/std. wire rope	
Maximum rope stowage		Main/Aux. 508 ft. of 3/4" dia. rope (155m of 19mm)	
Note: 500 ft. (152m of 19mm) supplied with basic unit for main hoist.			

†Patented Grove feature or patent pending
*Denotes optional equipment

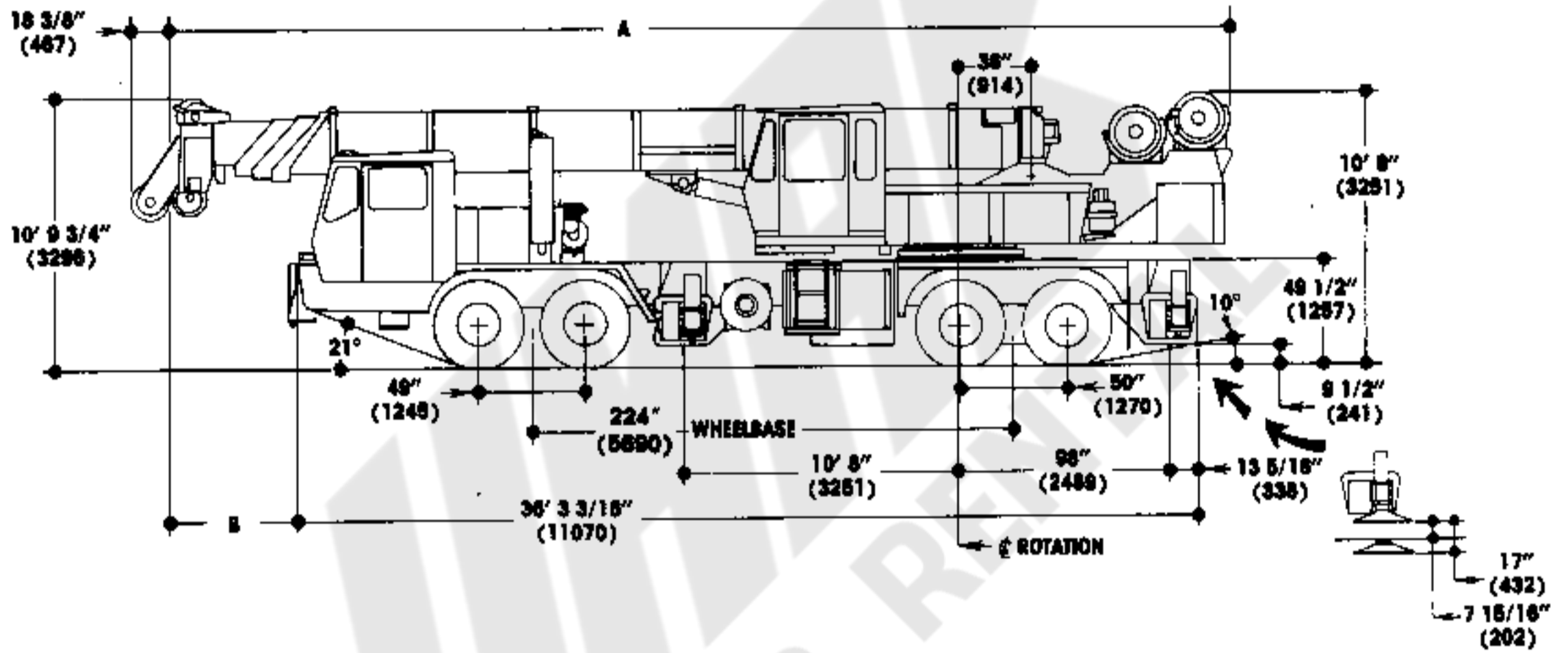
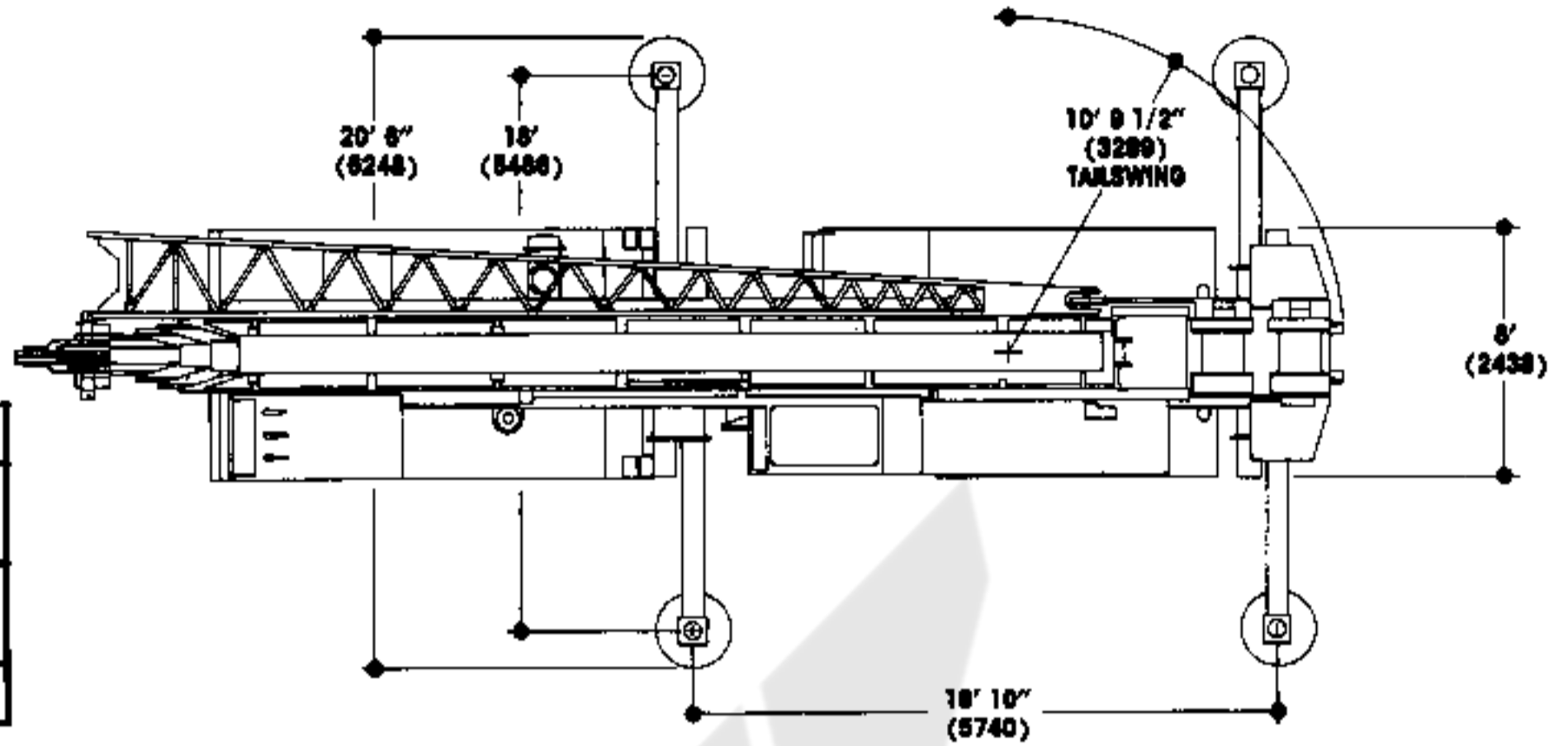
Carrier specifications

Frame	High strength alloy steel all welded box-type construction with integral outrigger boxes and front/rear lifting, towing and tie down lugs.
Outrigger System	Hydraulic single stage double box telescopic beam and jack outriggers with integral holding valves. All steel fabricated quick release type outrigger floats 24" (610mm) diameter. Standard fifth front stabilizer for 360° duties.
Outrigger Controls	Located in superstructure cab. Push button controls requiring two-handed operation for safety. Crane level indicator (sight bubble) adjacent to controls.
Engine	Detroit diesel 6-71N six cylinder, naturally aspirated water cooled diesel, 426 cu. in. (7 L) 230 bhp (172 kw) (Gross) @ 2100 RPM. Maximum torque 611 ft. lbs. (84.5 kg/m) @ 1600 RPM.
Fuel Tank Capacity	(1) 90 gallon (341 L)
Electrical System	Four 12 volt - maintenance free batteries, 24 volt starting.
Drive	8 x 4
Steering	Front axle steering, cam and lever type with hydraulic assist.
Transmission	Manual with 13 speeds forward and 3 reverse.
Axles	Front: Rockwell beam type steer axles. Rear: Rockwell SSHD drive tandem, with inter-axle differential and dash mounted control.
Suspension	Front axles (1 & 2) spring mounted tandem. Rear axles (3 & 4) solid mount tandem with equalizing beam and solid steel saddles.
Tires	Front: 15.00x22.5-16PR duplex highway tread tubeless singles. Rear: 11:00x20-14PR highway tread tube type duals.
Optional Tires	Front: 16.5x22.5-16PR duplex highway tread tubeless and 12:00x20-18PR Michelin radial tube type. Rear: 11:00x20-14PR highway tread SRL-1 or HCT tube type radial and 12:00x20-18PR radial tube type.
Brakes	Full air on all wheels. Air dryer provided to preclude moisture accumulation. Spring set emergency brake on both rear axles with emergency release.

Lights	Full lighting including head, tail, braking, reversing, directional and hazard warning lights.
Cab	One man design, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe fabric covered fully adjustable seat. Complete driving controls and engine instrumentation including tachometer, speedometer, voltmeter, water temp. oil pressure, fuel level, air pressure gauge. Other standard items include hot water heater/defroster, electric windshield wash/wipe, fire extinguisher, seat belt and door and window locks.
Maximum Speed	51.5 MPH (82.9 kph)
Gross Vehicle Weight & Axle Loads	BASIC STANDARD MACHINE Front Tandem: 28,743 lbs. (13,038 kgs) Rear Tandem: 43,884 lbs. (19,906 kgs) G.V.W.: 72,627 lbs. (32,944 kgs) (includes 32 ft. swingaway)
Miscellaneous Standard Equipment	Dual rear view mirrors, hookblock tiedown sling, electronic back-up alarm, light package.
Optional Equipment	<ul style="list-style-type: none"> * Immersion engine block heater * Hookblocks/Headache balls * Spare wheel assembly * Pintle hook front and rear * Working lights * Engine low oil pressure, high water temperature audio/visual warning system * 360° rotating beacon * Tool kit * Dual base boom mounted floodlights

†Patented Grove feature or patent pending.
*Denotes optional equipment.

	3 SEC. BOOM	4 SEC. BOOM
A	41'3 7/8" (12595)	42'4 3/8" (12913)
B	60 1/16" (1526)	72 9/16" (1843)
Turning Radius:		42'



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Constant improvement and engineering progress makes 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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