

# GROVE. TMS700E







## features

Optional 20 ft. (6.1 m) or 40 ft. (12.2 m) swingaway extension inserts offer excellent capacities with an unprecedented tip height of up to 212 ft.



Standard front & rear air ride suspension provides comfortable ride at max speed of 65 mph (105 Km/h)



Cummins ISM 450 diesel carrier engine delivers horsepower and torque needed to negotiate tough jobsites and achieve highway travel speeds





36 - 110 ft. (11 - 33.5 m) four section full power sequenced synchronized MEGAFORM™ boom designed for maximum vertical and lateral strength







## specifications

#### Superstructure



#### Boom

36 ft. - 110 ft. (11 m - 33.5 m) four section, full power sequenced synchronized boom Maximum Tip Height: 118 ft. (35.9 m).



#### Folding Lattice Extension

33 ft. - 56 ft. (10.1 m - 17.1 m) folding lattice swingaway extension offsettable at 0°, 25° or 45°. Stows alongside base boom section. Maximum Tip Height: 172.5 ft. (52.6 m)



#### \*Optional Lattice Extension

33 ft. (10.1 m) lattice swingaway extension, offsettable at 0°, 25° or 45°. Stows alongside base boom section. Maximum Tip Height: 148 ft. (45.1 m).



#### \*Optional 20 ft. (6.1 m) or 40 ft. (12.2 m) Swingaway **Extension Inserts**

Installs between boom nose and extension, non-stowable. Maximum Tip Height: 192 ft. (58.5 m) - 20 ft. (6.1 m) insert 212 ft. (64.6 m) - 40 ft. (12.2 m) insert



#### Boom Nose

Quick reeving type boom nose with 3 nylatron sheaves (4 for 60 ton rating) mounted on heavy duty tapered roller bearings with removable pin-type rope guards. Removable auxiliary boom nose with removable pin type rope guard.



#### Boom Elevation

One double acting hydraulic cylinder with integral holding valve provides elevation from -3' to 78'.



#### ▲ Load Moment & Anti-Two Block System

Standard "Graphics Display" load moment and anti-two block system with audio-visual warning and control lever lockout. These systems provide electronic display of boom angle, boom length, radius, tip height, relative load moment, maximum permissible load, load indication and warning of impending twoblock 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.



High visibility, all steel cab with acoustical lining and tinted safety glass throughout. Deluxe seat with armrest mounted hydraulic single axis controls. Dash panel incorporates gauges for all engine functions. Other standard features include: sliding side and rear windows, hot water heat, electric windshield wash/wipe, circulating air fan, sliding skylight with sunscreen and electric skylight wiper, fire extinguisher, cup holder.

Planetary swing with foot applied multi-disc wet brake. Spring applied, hydraulically released parking brake. Two position plunger type and 360° mechanical house locks operated from

Maximum speed: 2.0 RPM.

#### Counterweight

11,000 lbs. (4 990 kg) consisting of (2) 5,500 lb. (2 495 kg) sections. \*Optional "Heavy Lift" package consisting of (1) additional 5,500 lb. (2 495 kg) section, for a total of 16,500 lb. (7 484 kg). Hydraulic installation/removal.



#### Hydraulic System

Four main gear pumps with a combined capacity of 135.4 GPM (513 L/m). Individual post pressure compensated valve banks. Maximum operating pressure: 4000 psi (27.6 Mpa). Return line type filter with full flow by-pass protection and service indicator. Replaceable cartridge with beta rating of 5/12/16.

170 gallons (643 L) reservoir. Remote mounted oil cooler with thermostatically controlled electric motor driven fan.



#### **Hoist Specifications** Main and Auxiliary Hoists-Model HO3OG-16G

Planetary reduction with integral automatic brake, electronic hoist drum rotation indicator, and hoist drum cable follower. Grooved drum.

Single Line Pull: 1st Layer: 18,134 lb. (8 226 kg)

3rd Layer: 15,420 lb. (6 995 kg) 5th Layer: 13,413 lb. (6 084 kg)

580 FPM (177 m/min) Maximum Single Line Speed:

Maximum Permissible Line Pull: 16,800 lb. (7 620kg) w/standard 6 x 37 class rope

16,800 lb. (7 620 kg) w/optional 35 x 7 class rope

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

Rope Length: 500 ft. (152 m)

Rope Type: 6 x 36 WS non-rotation resistant

Optional 35 x 7 rotation resistant

Maximum Rope Stowage: 695 ft. (212 m)





## specifications

## 4

#### Carrier

#### Chassis

Triple box section, four-axle carrier, fabricated from highstrength, low alloy steel with towing and tie-down lugs.

### Utrigger System

Four hydraulic telescoping, single stage, double box beam outriggers with inverted jack and integral holding valves. Quick release type steel outrigger floats 24 in. (610 mm) diameter. Three position setting with fully extended, intermediate (50%) extended and fully retracted capacities.

## Gutrigger Controls

Located in the superstructure cab and on the left side (umbilical design), requires two hand operation. Crane level indicator (sight bubble) on right side console. "Optional controls in lighted boxes, mounted on both sides of chassis.

#### Engine

Cummins ISM 450 diesel, six cylinders, after cooled, 661 cu. in. (10.8 L), 450 bhp (336 kW) @ 1800 RPM. Maximum torque 1,450 ft. lb. (1966 Nm) @ 1200 RPM. Equipped with engine brake, engine block heater, cold start aid (less canister) and audiovisual engine distress system.

#### Fuel Tank Capacity

100 gallons (379 L).

#### O Transmission

Roadranger 11 speeds forward, 3 reverse.

#### Drive

Drive 8 x 4 x 4.

#### \* Steering

Front axle, single circuit, mechanical steering with hydraulic assist.

#### - Axles

Front: (2) beam-type steering axles, 83.3 in. (2.1 m) track. Rear: (2) single reduction drive axles, 75.1 in. (1.9 m) track. Inter-axle differential lock.

#### O Brakes

Dual air, split system operating on all wheels. S-cam brakes on the front and wedge brakes on the rear. Spring-applied, air released parking brake acting on rear axles. Air dryer.

#### Suspension

Front: Walking beam with air bags and shock absorbers. Rear: Walking beam with air bags and shock absorbers.

#### ☐ Tires

Front: 445/65R 22.5 Goodyear G286, tubeless, mounted on aluminum disc wheels.

Rear: 315/80R 22.5 Goodyear G286, tubeless, mounted on aluminum disc wheels.

#### GROVE.

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Front: 445/65R 22.5 Bridgestone M844F, tubeless. 445/65R 22.5 Michelin XZY (WB), tubeless. Rear: 315/80R 22.5 Bridgestone M843, tubeless. 315/80R 22.5 Michelin XZY-2 tubeless.

#### **■** Lights

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

#### **₽** Ca

One man design, all steel fabricated with acoustical lining and tinted safety glass throughout. Deluxe fabric covered, fully adjustable air ride seat. Complete driving controls and engine instrumentation including tilt telescope steering wheel, tachometer, speedometer, voltmeter, water temp., oil pressure, fuel level, air pressure gauge with A/V warning and engine high temp./low oil pressure A/V warning. Other standard items include hot water heater/defroster, electric windshield wash/wipe, fire extinguisher, seat belt and door lock.

#### Electrical System

Two 12V, 2150 CCA maintenance free batteries. 12V lighting/starting. Battery disconnect standard equipment.

#### Maximum Speed

65 MPH (104 kph)

## Gradeability (Theoretical)

70%

#### Miscellaneous Standard Equipment

Aluminum fenders with rear storage compartments; dual rear view mirrors; electronic back-up alarm; pump disconnect; tire inflation kit; air cleaner restriction indicator; block and ball stowage; and chrome package which includes aluminum wheels.

#### \*Optional Equipment

- \*Flashing Light Package includes amber strobe for both cabs \*Trailing Boom Package – includes trailer air and electrical disconnects and trailing boom kit with no spin differential (less dolly)
- \*Hookblocks
- \*Air conditioning
- \*Rear pintle hook
- \*Aluminum outrigger pads
- \*Cross axle differential locks
- \*LMI calibration for on-rubber
- \*LMI light bar
- \*LMI data logger
- \*Air horn

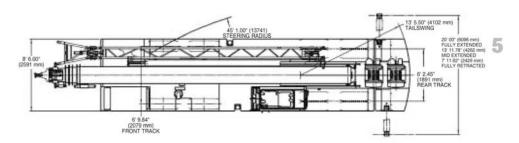
\*Denotes optional equipmen

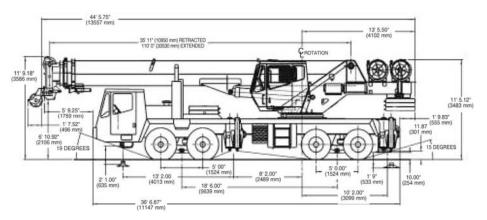


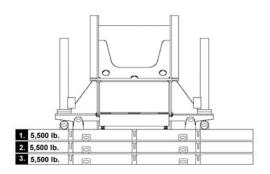




## dimensions







1	2	3
•		
•	•	
•	•	
	•	•

ı	oad	Chart	Configuration	- 360°

	16,500 lb.	11,000 lb.	5,500 lb.	0 lb.
Main Boom	× Ⅲ ⊕ 🗆	* E 0 [	× = 0 =	× II 0 🗆
33 ft. Swingaway	ж Ш	36 III	M III	26 III
56 ft. Swingaway	×III	× III	×B	× II
76 ft. Boom extension (56 ft. + 20 ft. insert)	ж	30	ж	ж
96 ft. Boom extension (56 ft. + 40 ft. insert)	×	ж	ж	ж

Outrigger Span 20 ft. = ★ 14 ft. = ■ 8 ft. = ● Rubber P&C = □

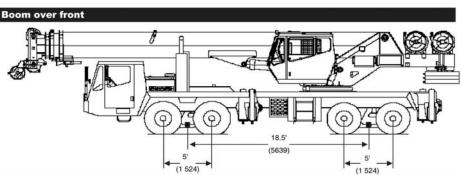
TIMS 700



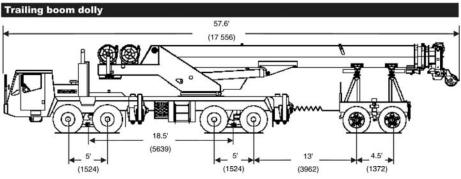


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# travel proposals



( /	(1324)						
Jnit Configuration lb. (kg)	Gro	Gross		Front		ear	
Basic machine including 110 ft. (33.5 m) main boom, main and auxiliary hoists with cable, driver and no counterweight.	74,712 (	33 889)	37,097	(16 827)	37,615	(17 062)	
Additions:							
5,500 lb. (2 495 kg.) counterweight pinned on superstructure	5,500	(2495)	-2,214	(1004)	7,714	(3499)	
11,000 lb. (4 990 kg.) counterweight pinned on superstructure	11,000 (	(4 990)	-4,428	(2009)	15,428	(6.998)	
16,500 lb. (7 485 kg.) counterweight pinned on superstructure	16,500	(7 484)	-6,642	(3 013)	23,142	(10 497)	
5,500 lb. (2 495 kg.) counterweight stowed on carrier deck	5,500 (	(2 495)	4,692	(2 128)	808	(367)	
11,000 lb. (4 990 kg.) counterweight stowed on carrier deck	11,000 (	(4 990)	9,384	(4 257)	1,616	(733)	
Swingaway carrier brackets	330	(150)	282	(128)	48	(22)	
33 ft. (10.1 m) swingaway	1,730	(785)	1,972	(895)	-242	(-110)	
33 - 56 ft. (10.1 - 17.1 m) swingaway	2,480 (	(1 125)	2,502	(1 135)	-22	(-10)	
Auxiliary boom nose	130	(59)	251	(114)	-121	(-55)	
40 ton (35 mt) hookblock stowed in trough	800	(363)	1,142	(518)	-342	(-155)	
50 ton (45 mt) hookblock stowed in trough	1,000	(454)	1,428	(648)	-428	(-194)	
60 ton (55 mt) hookblock stowed in trough	1,250	(567)	1,785	(810)	-535	(-243)	
8.3 ton (7.5 mt) headache ball stowed in trough	371	(168)	530	(240)	-159	(-72)	
Air conditioning superstructure cab	285	(129)	10	(5)	275	(125)	
Air conditioning chassis cab	88	(40)	115	(52)	-27	(-12)	



TWS 700E

Unit Configuration lb. (kg.)		Gross		ont	Rear		Dolly	
Basic machine including 110 ft. (33.5 m) main boom, main and auxiliary hoists with cable, driver, no counterweight and 6,000 lb. (2 722 kg.) tandem axle dolly.	80,737	(36 622)	33,479	(15 186)	29,275	(13 279)	17,983	(8 157
Additions: 5,500 lb. (2 495 kg.) counterweight stowed on carrier deck.	5,500	(2 495)	4,692	(2 128)	808	(367)	0	(0)
11,000 lb. (4 990 kg.) counterweight stowed on carrier deck.	11,000	(4 990)	9,384	(4 257)	1,616	(733)	0	(0)
33 ft. (10.1 m) swingaway with brackets.	2,060	(934)	281	(128)	239	(108)	1,540	(699)
33 - 56 ft. (10.1 - 17.1 m) swingaway with brackets.	2,810	(1 275)	384	(174)	326	(148)	2,100	(953)
Auxiliary boom nose.	130	(59)	-24	(-11)	-20	(-9)	174	(79)
40 ton (35 mt) hookblock hanging at boom nose.	800	(363)	-126	(-57)	-107	(-49)	1,033	(469)
50 ton (45 mt) hookblock hanging at boom nose.	1,000	(454)	-157	(-71)	-134	(-61)	1,291	(586)
60 ton (55 mt) hookblock hanging at boom nose.	1,250	(567)	-197	(-89)	-167	(-76)	1,614	(732)
8.3 ton (7.5 mt) headache ball hanging at boom nose.	371	(168)	-58	(-26)	-50	(-23)	479	(217)

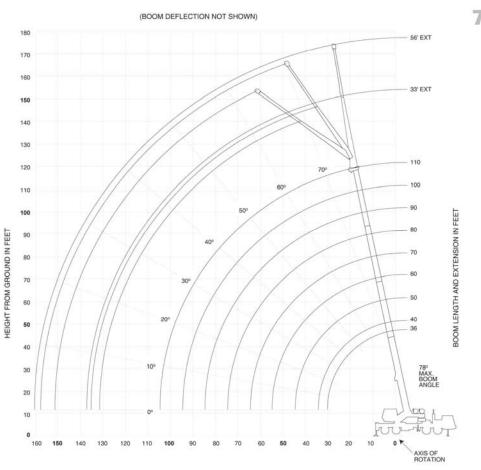






# working range

#### 36-110' main boom + 33-56' lattice 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.

TMS **700**E

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.







8

110 ft.	16,500 lbs.	1005		20°					
7					#0001				
G C	1000	0.000	1702	**60	Main Boom Length	n Feet 80	90	100	7742
10	35 120,000	40 84,400	50 80,200	*62.500	70	80	90	100	110
	100,000	(72) 84.400	80,200	(78) 62,500	*36.800				
12	(65.5) 87,300	(68.5) 62.700	(73.5) 80.200	(77) 61,000	(78) 36.800	*36.800	*31.000		
15	(59.5) 68.250	(63.5) 65.000	(70) 64.300	(74) 50.650	(76.5) 36.800	(78) 36.800	(78) 31.000	*29.100	*24.000
20	(49)	(55)	(63.5)	(69)	(72)	(75)	(77)	(78)	(78)
25	54,900 (36)	53,100 (45)	52,000 (56.5)	41,800 (63.5)	36,800	34,000 (71)	30,000 (73.5)	27,000 (76)	24,000 (77.5)
30		39,350 (31.5)	38,700 (48.5)	37,850 (57,5)	33,400 (63)	29,000 (67)	25,300 (70.5)	24,200 (72.5)	22,000 (75)
35			29,400 (40)	28,400 (51.5)	28,700 (58)	25,000 (63)	22,200 (67)	21,750 (69.5)	20,000
40			23.050	22,100	22,750	22,000	20,200	19,000	18,500
45			(20)	17,550	18,250	18,800 (54.5)	17,800	17,300	17,300
50				(37) 14,050	(47.5) 14,850	15.600	(59.5) 16.000	(63) 16,000	16,000
55				(26.5)	(41) 12,200	(49.5) 12.950	(55.5)	(60) 14,100	(63.5)
					(33.5)	(44.5) 10.850	(51) 11.600	(56.5)	12 200
60					(24)	(38.5)	(47) 0.900	(52.5) 10.250	(57) 10,600
65						(31.5)	(42)	(48.5)	(53.5)
70						7,650 (22.5)	8.450 (36.5)	8.820 (44.5)	9,000
75							7.210 (30)	7,580 (40)	7,800 (46.5)
80							6,150	6,490	6,600 (42.5)
85								5,550 (28.5)	5,800 (38)
90								4,730 (20.5)	5,000
95								(20.5)	4,270
100									(27.5)
100		Minimum bo	om angle (deg.) for	indicated length (r	no loadi				(19.5)
		Maximum boo	m length (ft.) at 0 de						110
operating of	angles are in degre ode. Refer to LMI r based on maximus	manual for instructi	ons.						
			Lifting Capaciti	es at Zero Degree					
loom ungle	35	40	50	**60	om Length in Feet 70	80	90	100	110
0"	29,050 (29.8)	24,450 (34.2)	17,050 (44.2)	51,600 (54.6)	8.570 (64.2)	6,610 (74.2)	5,380 (84.2)	4,120 (94.2)	3,110

110 ft.	16,500 lbs.	100%		rer					
<b>3</b>	400000000	20' 0'	R	par	#0001				
G) L					Main Boom Length	in Feet			
Feet	35	40	50	**60	70	80	90	100	110
10	120,000 (69)	84,400 (72)	80,200 (76)	*62,500 (78)					
12	100,000	84,400 (68.5)	80.200 (73.5)	62,500	*36,800 (78)				
15	87,300 (59.5)	82,700 (63.5)	80,200 (70)	61,000	36,800 (76.5)	*36,800 (78)	*31,000 (78)		
20	68,250 (49)	65,000	64,300 (63.5)	50,650	36,800 (72)	36,600	31,000	*29,100 (78)	*24,000
25	55,650	53,100	52,000	41,800	36,800	34,000	30,000	27,000	24,000
30	(30)	(45) 44,100	(56.5) 39.600	(63.5) 38,000	(68) 33,400	(71) 29,000	(73.5) 25.300	(76) 24,200	(77.5) 22.000
35		(31.5)	(48.5)	(57.5) 29,750	(63) 28,700	(67) 25,000	(70.5) 22,200	(72.5) 21,750	20,000
			(40) 26.050	(51,5) 25,500	(58)	(63)	(67)	(89.5) 19.000	18,500
40			(28)	(45) 20,000	(53) 19,700	(59) 18.800	(63) 17,800	(66.5) 17,300	(69) 17,300
45				(37)	(47.5)	(54.5)	(59.5)	(63)	(66.5)
50				17,850 (26.5)	16,800 (41)	16,500 (49.5)	16,000 (55.5)	16,000	16,000 (63.5)
55					14,900	14,650 (44.5)	14,100 (51)	14,100 (56.5)	14,100
60					13,050	12.800 (38.5)	12,200	12.200 (52.5)	12.200
65						11,450 (31.5)	10,800 (42)	10,600 (48.5)	10,600
70						10,100	9,450	9,000	9,000
75						(22.5)	8,290 (30)	7,800	7.800 (46.5)
80							7,140	6.600	6.600
85							(21,5)	(34.5) 5.800	(42.5) 5,800
90								(28.5)	5,000
								(20.5)	(33)
95									(27.5)
100									3,880
			om angle (deg.) for n length (ft.) at 0 de						110
operating of	angles are in degree ode. Refer to LMI m	is. anual for instruction		gree boom angle	no ioad)				110
s capaCity is	based on maximum	ocom angle.	Lifting Capacitle	s at Zero Degree	Boom Angle				
Boom					om Length in Feet				
Angle or	35 29,050 (29,8)	40 24,450 (34.2)	50 17,050 (44.2)	**60 11,950 (54.6)	70 9.640 (64.2)	7,810 (74.2)	90 6,390 (84.2)	4,770 (94.2)	3,350 (104.2

TIMS 700

GROVE.





36 - 110 ft.	33 -	- 56 ft.	16,500 lb		100% 20' 0"	36
			Po	unds		
-		33 ft. LENGT	Н		56 ft. LENGT	
$\Theta$	#0021 0°	#0022 25°	#0023 45°	#0041 0°	#0042 25°	#0043 45°
Feet	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET	OFFSE
30	12,900 (78)					
35	12,900 (76)			*8,330 (78)		
40	12,900 (74)	*10,850 (78)		8,330 (77.5)		
45	12,900 (72)	10,450	*7,410 (78)	8,330 (76)		
50	12,100	10,000 (74.5)	7,200 (77.5)	8,330 (74.5)		
55	11,100	9,220	6,990	8,250	*5,300	
00	(68) 10,100	(72.5) 8,550	(75) 6,800	(73) 7,540	(78) 5,140	
60	(66)	(70.5)	(72.5)	(71)	(77)	*2.000
65	9,130 (63.5)	7,930 (68)	6,650 (70.5)	7,160 (69)	5,100 (75)	*3,860 (78)
70	8,460 (61.5)	7,380 (65.5)	6,490 (68)	6,820 (67.5)	5,100 (73)	3,790 (77.5)
75	7,840 (59)	6,900 (63)	6,370 (65.5)	6,300 (65.5)	4,800 (71)	3,660 (75)
80	7,230 (56.5)	6,470 (60.5)	6,110 (62.5)	5,810 (63.5)	4,580 (69)	3,550 (73)
85	6,470 (54)	6,070 (58)	5,780	5,370 (61.5)	4,470 (67.5)	3,450 (71)
90	5,670 (51)	5,720 (55.5)	5,480 (57)	4,980 (59.5)	4,330 (65.5)	3,410 (68.5)
95	4,970 (48.5)	5,400 (52.5)	5,200 (54)	4,630 (57)	4,070 (63)	3,300 (66.5)
100	4,350 (45.5)	4,840 (49.5)	4,950	4,320 (55)	3,830 (61)	3,260 (64)
105	3,790 (42.5)	4,210 (46.5)	4,470 (47.5)	4,040 (52.5)	3,620 (58.5)	3,220
110	3,290	3,640	(41.0)	3,760	3,410	3,180
115	(39.5)	(43) 3,130		(50.5)	(56) 3,230	(59.5)
	(36)	(39.5) 2,660		(48) 2,860	(53.5) 3,050	(56.5) 2,940
120	(32)	(35)		(45.5)	(51)	(53.5)
125	2,040 (27.5)	(30.5)		2,470 (42.5)	2,890 (48.5)	2,800 (50.5)
130	1,700 (22)			2,120 (39.5)	2,590 (45.5)	
135				1,790 (36.5)	2,200 (42.5)	
140				1,480	1,840 (38.5)	
145				1,200 (29.5)	1,500	
		No Li	oad Stability I	provide the second	1557.	
Min. boom angle for indicated length	210	250	450	280	280	450
Max. boom length at 0° boom angle		100 ft.			90 ft.	

\*This capacity is based upon maximum boom angle.

NOTE: ( ) Boom angles are in degrees.

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



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

NOTES:

- structural strength of boom extension.

  2. 33 ft. and 56 ft. boom extension lengths may be used for single line lifting service.
- 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.
- 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.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- Capacities listed are with outriggers properly extended and vertical jacks set only.



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A6-829-101337









10

- 110 ft.	11,000 lbs.	100%	3	60"					
3					80101				
Feet	35	40	50	**60	Main Boom Length in 70	n Feet 80	90	100	110
10	120,000 (89)	64,400 (72)	80,200 (76)	*62,500 (78)	- 10	2016	170	- 100	- 10
12	100,000	84,400	80,200	62,500	*36,800 (78)				
15	87,300 (39.5)	82,700 (63.5)	80,200 (70)	61,000 (74)	36,800 (76.5)	*36,600 (78)	*31,000 (78)		
20	68,250	65,000	64,300	50,650	36,800	36,800 (75)	31,000	*29,100 (78)	*24,000 (78)
25	48,550 (36)	48,350 (45)	47,650 (56.5)	50,650 (69) 41,800 (63.5)	36,800	36,800 (75) 34,000 (71)	30,000	27,000	24,000 (77.5)
-30		34.300 (31.5)	33.650 (48.5)	32,800 (57.5)	33,400 (63) 25,000 (58)	29,000 (67)	25,300 (70.5)	24,200 (72.5)	22,000
35			25.250 (40)	24,350 (51.5)	25,000	25,000 (63)	22,200 (67) 20,200	21,750 (69.5)	20,000 (72)
40			19,500	18,700	19,350	20,050 (59)	20,200	19,000	18,500
45				14,650 (37)	15.350 (47.5)	16,050 (54.5)	(63) 16,750 (59.5)	17,300 (63)	17,300 (66.5)
50				11,550 (26.5)	12.350 (41)	13,050 (49.5)	13,750	14,300	14,850
55					9,960	10,700	11,450	11,900 (56.5)	12,400
60					8,040 (24)	8,850 (38.5)	9,590 (47)	10,000 (52.5)	10,400 (57)
65						7,280	8,070	8,450	8,830
70						5,970 (22.5)	6,760	7,140 (44.5)	7,480 (50)
75						100 110 110	5,660 (30) 4,710 (21.5)	6,020 (40) 5,050 (34.5)	6,350 (46.5)
80							4,710	5,050 (34.5)	5,370
85								4,200 (28.5)	4,510
90								3,460	3,750 (33)
95									3,080
100									2.480 (19.5)
		Minimum bo	om angle (deg.) fo	r indicated length ( legree boom angle	no load) (no load)				0
OTE: ( ) Boom MI operating o his capacity is	angles are in degree code. Refer to LMI m based on maximum	s. anual for instructio boom angle.	ins.	ies at Zero Degree					3.100
Boom Angle		7.00	Entry Gapter	Main Bo	oom Length in Feet				
Angle (p)	35 29,050 (29.8)	40 24,450 (34,2)	16,000 (44.2)	9,340 (54.6)	70 6,710 (64.2)	5,030 (74.2)	90 4,020 (64.2)	100 2,920 (94.2)	2,030 (104.2)
50 ft. boom ler	moe radii in feet. ngth is with inner-mid		-					AG	829-101320
00 ft. boom ler	noe radi in feet. ngth is with inner-mid	extended and out	[	over bear				AG	101.360
50 ft. boom ler	ngth is with inner-mid	-	[	Diver tear	#0101	n East		A6	923-101300
60 ft. boom ler	11,000 lbs.	100% 20° 0°	50	Diver tear	#0101 Main Boom Length is 70	n Feet 80	90	100	110
60 ft. boom ler	11,000 lbs.	100% 20° 0°	50 80,200	Pover rear ***60 **2.500 **2.7781	Main Boom Length is 70	n Feet 80	90		
50 ft. boom ler 6 - 110 ft. Feet 10	11,000 lbs. 11,000 lbs. 35 120,000 (95,5)	100% 20° 0° 40 84,400 (72) 84,400 (88,5)	50 80,200 (76) 60,200	**60 **2,500 (78) 62,500 (77)	Main Boom Length in 70 *36,800 (78)	80			
50 ft. boom ler 6 - 110 ft. Feet 10 12 15	11,000 lbs.  11,000 lbs.  35 120,000 (85) 10,000 (85,5) 87,300 (96,5)	40 84,400 (72) 84 400 (68.5) 82,700 (53.5)	50 80,200 (75) 80,200 (73.5) 80,200	Pivet relation 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 T36,800 (78) 36,800 (76.5)	80		100	110
50 ft. boom ler	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 84,400 (72) 84 400 (68.5) 82,700 (55),59 65,000	50 80,200 (76) 60,200 (73.5) 80,200 (70) 64,300	**60 1 **60 1 **2.500 (77) 62,500 (77) 61,000 (74) 50,650	70 T36,800 (78) 36,800 (76.5) 36,800 (77)	*36,800 (78) 36,800	*31,000 (78) 31,000	100	110
60 ft. boom lee 6 - 110 ft. Feet 10 12 15 20 25	11,000 lbs. 11,000 lbs. 35 120,000 (85.5) 87,900 (99.5) 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (76) 60,200 (73.5) 80,200 (63.5) 52,000 (56.5)	Pyver toar 160 (78) 62,500 (77) 61,000 (78) 50,650 (69) 41,800 (83.5)	70 To 10 To	*36,800 (78) 36,800 (75) 34,000 (71)	*31,000 (78) 31,000 (77) 30,000 (73,5)	100 *29,100 (78) 27,000	110 *24,000 (78) 24,000 (77,5)
60 ft. boom lee  6 - 110 ft.  Feet  10  12  15  20  25  30	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 84,400 (72) 84 400 (68.5) 82,700 (55),59 65,000	50 80.200 (76) 60.200 (72.5) 80.200 (70) 64.300 (56.5) 52.000 (56.5) 39.600 (48.5)	Power (168) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	736,800 (76) 36,800 (76) 36,800 (72) 36,800 (72) 36,800 (68) 31,400 (63)	*36,800 (78) 36,800 (75) 34,000 (71) 29,000 (67)	"31,000 (78) 31,000 (77) 30,000 (73.5) 25,300 (70.5)	100 29,100 (78) 27,000 (76) 24,200 (72.5)	724,000 (78) 24,000 (77.5) 2,000 (77.5)
60 ft. boom lee  6 - 110 ft.  Feet  10  12  15  20  25  30  35	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	**************************************	Vain Boom Length e 70 (76) 36,800 (76) 36,800 (76) 36,800 (68) 33,400 (68) 33,400 (63) 28,700	*36,800 (78) 36,800 (75) 34,000 (71) 29,000 (67) 25,000	"31,000 (78) 31,000 (77) 38,000 (73.5) 25,300 (70.5) 22,200 (20.5)	100 *29,100 (78) 27,000 (78) 24,200 (72,5) 21,550	110 *24,000 (78) 24,000 (77.5) 20,000 (75.5) 20,000
80 ft. boom lee  6 - 110 ft.  Feet  10  12  15  20  25  30  35  40	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80.200 (76) 60.200 (72.5) 80.200 (70) 64.300 (56.5) 52.000 (56.5) 39.600 (48.5)	Pyrer retear 1 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Vain Boom Length e 70 136,800 (76) 36,800 (76.8) 36,800 (72) 36,800 (68) 33,400 (68) 33,400 (63) 28,700 (55) 28,700 (55)	*36.800 (78) 36.800 (75) 34.000 (71) 29.000 (67) 25.000 (63) 22.000 (59)	*31,000 (78) 31,000 (77) 30,000 (70,5) 25,300 (70,5) 22,200 (67) 20,200 (63)	100 *29,100 (78) (78) (42) (71,5) (68,8) (98,8) (19,00)	110  *24,5000 (78) 24,5000 (775) 20,0000 (75) 20,0000 (75) 20,0000 (75)
80 ft. boom lee  6 - 110 ft.  Feet  10  12  15  20  25  30  40  45	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	**************************************	Vain Boom Length e 70 136,800 (76,5) 36,800 (76,5) 36,800 (77,3) 36,800 (68) 33,400 (53) 28,700 (55) 28,700 (55) 19,700 (47,5)	*36,800 (78) 36,800 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (54,5)	"31,000 (78) 31,000 (77) 30,000 (72,5) 25,000 (70,5) 22,200 (63) 17,800 (98,5)	100 *29,100 (78) 27,000 (72,5) (66,5) 19,000 (66,5) 17,000 (73,5)	"24,000 (78) 24,000 (77.5) 22,000 (79) 30,000 (79) 14,000 (79) 17,300 (85.5) (86.5)
60 ft. boom lee 6 - 110 ft. Feet 10 12 15 20 25 40 45 50	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pyrer retear 1 100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Vain Boom Length et 70 (76) (76) (76) (76) (76) (76) (76) (76)	*36,800 (78) 36,800 (75) 34,000 (71) 29,000 (63) 22,000 (54,5) 16,500 16,500	"31,000 (78) 31,000 (77) 30,000 (73,5) 22,300 (77) 20,200 (67) 20,200 (59,5) 16,000	*29,100 (78) (78) (24,00) (7.2.5) (2.1,760) (1.0.5) (1.0.5) (1.0.5) (1.0.5)	724,000 (78) 24,000 (77.5) 22,000 (77.5) 20,000 (77.2) 15,500 (69) 17,300 (66.8) 16,000 (66.8)
60 ft. boom lee  6 - 110 ft.  Feet  10  12  15  20  25  40  45  50  55	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pover (100 ) (10	Vain Boom Length et 70 (78) (78) (78) (78) (78) (78) (78) (78)	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (68) 16,500 (49.5) 16,500 (49.5) 14,850 (49.5) 14,850 (44.5)	*31,000 (78) 31,000 30,000 (77) 30,000 (72,5) (25,300 (70,5) (70,5) (70,5) (70,5) (71,800 (71,	100 (78) 27,000 (72) 27,000 (72,0) (72,0) (72,0) (73,0) (7	74,000 (78) 24,000 (77.5) 2,000 (77.5) 16,500 (85.5) 16,500 (83.5)
60 ft. boom lee  Feet  10  12  15  20  25  30  40  45  50  60	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pover (100 ) (10	Vain Boom Length et 70 (76) (76) (76) (76) (76) (76) (76) (76)	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,850 (49.5)	*31,000 (78) 31,000 30,000 (25,30) (25,30) (25,30) (27) 20,200 (50) (50) (50) (50) (50) (50) (50) (5	700 100 (79) 27 700 (77) 100 (77) 100 (77) 100 (77) 100 (77.25) 100 (77.25) 17.700 (76.5) 17.700 (76	74,000 (78) 24,000 (77.5) 2,000 (75.5) 16,500 (65.5) 16,500 (63.5) 14,600 (63.5) 14,600 (63.5)
60 ft. boom lee  6 - 110 ft.  Feet  10  12  15  20  25  40  45  50  65  60  68	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pover (100 ) (10	Vain Boom Length et 70 (78) (78) (78) (78) (78) (78) (78) (78)	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,850 (49.5)	*31,000 (78) 31,000 30,000 (25,30) (25,30) (25,30) (27) 20,200 (50) (50) (50) (50) (50) (50) (50) (5	100 (78) 27,000 (78) 24,200 (68.5) 17,200 (68.5) 17,200 17,200 (69.5) 17,200 (69.5) 17,200 (69.5) 17,200 (69.5) 17,200 (79.5)	74,000 (78) 24,000 (77.5) 22,000 (67.5) 15,500 (68.5) 16,000 (57.7) 15,500 (69.5) 15,000 (57.7) 15,500 (57.7) 15,500 (57.7) 15,500 (57.7) 15,500 (57.7)
60 ft. boom ler 6 - 110 ft. Feet 10 12 15 20 25 30 35 40 45 50 55 60 65 70	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pover (100 ) (10	Vain Boom Length et 70 (78) (78) (78) (78) (78) (78) (78) (78)	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (68) 16,500 (49.5) 16,500 (49.5) 14,850 (49.5) 14,850 (44.5)	"\$1,000 (78) \$1,000 (78) \$1,000 (77) \$3,000 (77) \$3,000 (78.5) \$2,500 (79.5) \$2,500 (98.5) \$1,500 (98.5) \$1,500 (98.5) \$1,200 (98.5) \$1,200 (47) \$1,000 (48.5) \$1,000 (48.	100 100 100 100 100 100 100 100	74,500 (78) 24,000 (77.5) 22,000 (69) 17,200 (69) 17,200 (63,5) 14,100 (63,5) 12,000 (53,5) 19,500 (53,5)
60 ft. boom for feet feet feet feet feet feet feet fee	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 87,300 87,300 68,250	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pover (100 ) (10	Vain Boom Length et 70 (78) (78) (78) (78) (78) (78) (78) (78)	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,850 (49.5)	"31,000 (78) 31,10	100 100 100 100 100 100 100 100	74,500 (78) 24,000 (77,8) 22,000 (75) 20,000 (86,8) 14,100 (86,9) 14,100 (86,9) 15,500 (86,9) 15,500
60 ft. boom les 6 - 110 ft. Feet 10 12 15 20 25 30 40 45 50 66 67 70	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 62,300 65,50 62,500	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 65,000 (55,5) 52,200 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pover (100 ) (10	Vain Boom Length et 70 (78) (78) (78) (78) (78) (78) (78) (78)	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,850 (49.5)	"\$1,000 (78) \$1,000 (78) \$1,000 (77) \$3,000 (77) \$3,000 (78.5) \$2,500 (79.5) \$2,500 (98.5) \$1,500 (98.5) \$1,500 (98.5) \$1,200 (98.5) \$1,200 (47) \$1,000 (48.5) \$1,000 (48.	100 (78) 100 (78) 27 000 (78) 27 000 (78) 27 000 (75.5) 27 150 (75.5) 27 150 (75.5) 27 150 (75.5) 28	74,000 (78) 24,000 (77) 22,000 (77) 30,000 (77,300 (86,5) 10,5) 11,00 (86,5) 10,5) 10,5) 10,5) 10,5) 10,5) 10,5)
60 ft. boom for 6 s-110 ft.  Feet 10 12 15 20 25 40 45 50 66 66 70 75 50 85	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 62,300 65,50 62,500	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 52,700 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pover (100 ) (10	Vain Boom Length et 70 (78) (78) (78) (78) (78) (78) (78) (78)	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,850 (49.5)	"31,000 (78) 31,10	100 (78) (78) (78) (78) (78) (77) (77) (77)	74,500 (78) 24,000 (775) 22(75) 27(75) 27(75) 27(75) 27(75) 21,000 (72,500) (85,50) 44,100 (85,50) (85,50) (85,50) (85,50) (85,50) (85,50) (85,50) (85,50)
Feet 10 10 th. boom lest 6 + 110 th. 10 th.	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 62,300 65,50 62,500	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 52,700 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pover (100 ) (10	Vain Boom Length et 70 (78) (78) (78) (78) (78) (78) (78) (78)	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,850 (49.5)	"31,000 (78) 31,10	100 (78) 100 (78) 27 000 (78) 27 000 (78) 27 000 (75.5) 27 150 (75.5) 27 150 (75.5) 27 150 (75.5) 28	*24.5000 (78) (20,000) (77.5) (20,000) (77.5) (72.00) (86.5) (86.
Feet 10 8, 110 8	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 62,300 65,50 62,500	40 40 84,400 (72) 64,400 (66,5) 65,000 (55,5) 52,700 (48)	50 80,200 (78) 60,200 (77) 80,200 (70) 64,300 (66,3) 39,500 (46,3) 39,500 (44,3)	Pover (100 ) (10	Vain Boom Length et 70 (78) (78) (78) (78) (78) (78) (78) (78)	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,850 (49.5)	"31,000 (78) 31,10	100 (78) (78) (78) (78) (78) (77) (77) (77)	74,000 (77,00)
Feet 10 10 th. boom lest 6 + 110 th. 10 th.	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 62,300 65,50 62,500	40 64.62 (72) (72) (60.5) (60.5) (60.5) (60.5) (60.5) (60.5) (60.5) (60.5) (60.5) (60.5) (60.5) (60.5) (70.5)	90 80,200 (76) (77,30) (77,30) (77,30) (77,30) (40,30)	Porter team 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	olan Boon Length # 100 (100 )   100	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,850 (49.5)	"31,000 (78) 31,10	100 (78) (78) (78) (78) (78) (77) (77) (77)	*24.5000 (78) (20,000) (77.5) (20,000) (77.5) (72.00) (86.5) (86.
Feet 100 ft. boom led 6 + 110 ft. Feet 100 f	11,000 lbs.  11,000 lbs.  120,000 100,	109-109-109-109-109-109-109-109-109-109-	50 0000 (70) (70) (70) (70) (70) (70) (70	Pover (100 ) (10	other Boom Length is 100 to 10	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800	"31,000 (78) 31,10	100 (78) (78) (78) (78) (78) (77) (77) (77)	74,000 (77,00)
Feet 100 ft. boom led 6 + 110 ft. Feet 100 f	11,000 lbs. 11,000 lbs. 35 120,000 (95,5) 62,300 65,50 62,500	109-109-109-109-109-109-109-109-109-109-	90 80,200 (76) (77) (77) (77) (77) (73) (73) (73) (73) (73) (73) (73) (73) (73) (73) (74) (73) (74) (74) (74) (75) (76)	Power Rear 1 100 1 100 100 100 100 100 100 100 10	olan Boon Length # 1	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800	"31,000 (78) 31,10	100 (78) (78) (78) (78) (78) (77) (77) (77)	110  24,5000 (78) (78) (2,000) (77.5) (20,000) (77.5) (72) (15,500) (86.5) (86.
Feet 100 ft. boom led 6 + 110 ft. Feet 100 f	11,000 lbs.  11,000 lbs.  120,000 100,	109-109-109-109-109-109-109-109-109-109-	90 80,200 (76) (77) (77) (77) (77) (73) (73) (73) (73) (73) (73) (73) (73) (73) (73) (74) (73) (74) (74) (74) (75) (76)	Power Read 1  **00 1  **00 2,500 (77.1)  51,000 (89.0)  52,500 (99.0)  52,500 (99.0)  53,500 (99.0)  53,500 (99.0)  54,500 (99.0)  55,500 (99.0)  56,500 (99.0)  56,500 (99.0)  57,500 (99.0)  58,500 (99.0)  58,500 (99.0)  58,500 (99.0)  58,500 (99.0)  58,500 (99.0)  59,500 (99.0)  50,500 (99	olan Boon Length # 1	*36,800 (78) 36,500 (75) 34,000 (71) 29,000 (67) 25,000 (63) 22,000 (63) 52,000 (49.5) 14,550 (49.5) 14,550 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 12,800 (49.5) 13,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800 (49.5) 14,800	"31,000 (78) 31,10	100 (78) (78) (78) (78) (78) (77) (77) (77)	110  24,5000 (78) (78) (2,000) (77.5) (20,000) (77.5) (72) (15,500) (86.5) (86.

TMS 700

GROVE.





11

## 36 - 110 ft.









G Feet						
Feet		33 ft. LENGT	Н		56 ft. LENGTI	Н
Feet	#0121	#0122	#0123	#0141	#0142	#0143
	0° OFFSET	25° OFFSET	45° OFFSET	OFFSET	OFFSET	0FFSET
30	12,900 (78)					
35	12,900 (76)			*8,330 (78)		
40	12,900 (74)	*10,850 (78)		8,330 (77.5)		
45	12,900 (72)	10,450 (77)	*7,410 (78)	8,330 (76)		
50	12,100 (70)	10,000 (74.5)	7,200 (77.5)	8,330 (74.5)		
55	11,100 (68)	9,220 (72.5)	6,990 (75)	8,250 (73)	*5,300 (78)	
60	10,100 (66)	8,550 (70.5)	6,800 (72.5)	7,540 (71)	5,140 (77)	
65	9,130 (63.5)	7,930 (68)	6,650 (70.5)	7,160 (69)	5,100 (75)	*3,860 (78)
70	7,960 (61.5)	7,380 (65.5)	6,490 (68)	6,820 (67.5)	5,100 (73)	3,790 (77.5)
75	6,870 (59)	6,900 (63)	6,370 (65.5)	6,300 (65.5)	4,800 (71)	3,660 (75)
80	5,930 (56.5)	6,470 (60.5)	6,110 (62.5)	5,810 (63.5)	4,580 (69)	3,550 (73)
85	5,120 (54)	5,880 (58)	5,780 (60)	5,370 (61.5)	4,470 (67.5)	3,450 (71)
90	4,410 (51)	5,070 (55.5)	5,440 (57)	4,960 (59.5)	4,330 (65.5)	3,410 (68.5)
95	3,780 (48.5)	4,350 (52.5)	4,680 (54)	4,310 (57)	4,070 (63)	3,300 (66.5)
100	3,230 (45.5)	3,710 (49.5)	4,010 (51)	3,730 (55)	3,830 (61)	3,260 (64)
105	2,730 (42.5)	3,140 (46.5)	3,410 (47.5)	3,210 (52.5)	3,620 (58.5)	3,220 (62)
110	2,280 (39.5)	2,630 (43)		2,750 (50.5)	3,410 (56)	3,180 (59.5)
115	1,870 (36)	2,170 (39.5)		2,330 (48)	3,020 (53.5)	3,060 (56.5)
120	1,500 (32)	1,750 (35)		1,940 (45.5)	2,550 (51)	2,800 (53.5)
125	1,170 (27.5)	1,360 (30.5)		1,590 (42.5)	2,130 (48.5)	2,330 (50.5)
130	Anna			1,270 (39.5)	1,740 (45.5)	1
135				- Andrew	1,390 (42.5)	
140					1,060 (38.5)	
		No L	oad Stability	Data	45557	
Min. boom angle for indicated length	250	25°	45°	330	36°	450
Max. boom length at 0° boom angle		90 ft.			80 ft.	

NOTE: ( ) Boom angles are in degrees.

\*This capacity is based upon maximum boom angle. #LMI operating code, Refer to LMI manual for instructions.

#### NOTES:

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

  2. 33 ft. and 56 ft. boom extension lengths may be used for single line lifting service.
- 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.
- 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.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- Capacities listed are with outriggers properly extended and vertical jacks set only.

TWS 700E

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.

A6-829-101338







12

s capacity is based on maximum boom angle.  Lifting Capacities at Zero Degree Boom Angle Boom Main Boom Length in Feet Angle 55 40 50 100 100 100 100 100 100 100 100 100	360°	
10	#0201	
10 (69) (72) (78) (78) (78) (78) (78) (78) (78) (78	Main Boom Length in Feet. "160 70 80 90 100	110
12	*62,500 (78)	
15		
25 (4.0) (6.0) (6.5) (6.5) (6.5) (7.2) (7.6) (7.2) (7.6) (7.2) (7.6) (7.2) (7.6) (7.2) (7.6) (7.2) (7.6) (7.2) (7.6) (7.2) (7.6) (7.2) (7.6) (7.2) (7.6) (7.2) (7.	5 61,000 36,600 *36,800 *31,000	
### ### ### ### #### #################	50,650 38,800 38,800 31,000 *29,100	*24,00 (78
30	3 40,150 36,800 34,000 30,000 27,000	24,00
20,790	27,750 28,450 29,000 25,300 24,200	22.00 (75
46 (5,000 15,900 16,900 16,700 17,900	20,300 21,000 21,750 22,200 21,750	20,00
46 13790 12,000 13,000 13,000 14,000 16,000 16,000 16,000 17,000 17,000 17,000 17,000 18,000 16,000	0 15,350 16,050 16,750 17,500 17,900	18,30
Section   Sect		14,70
95	9,040 9,850 10,550 11,250 11,650	12,00
65 6.310 7.260 7.260 7.260 7.260 6.310 7.260 7.2	7,720 8,500 9,210 9,570	9,94
65   S.410   6.190   6.540   6	6.010 6.810 7.550 7.900	8,26
70	5,410 6,190 6,540	6,88
75 (20) (4.00) (	4,250 5,020 5,400	5,74
10	4.030 4.420	4,371
2,835   2,24	3.190 3.570	3,94
50 2.180 (20.5)  96 (20.5)  100 Minimum boom angle (dea) for indicated length (no load)  **E. ( ) Boom angles are in degrees.  E. ( ) Boom	2.830	3,20
95 100 Minimum boom angle (dea) for indicated length (no load)  Maximum boom length (ft.) at 0 degree boom angle (no load)  Et () Boom angles are in degrees.  Equenting code, finder to LM manual for instructions, copyright of the code of maximum boom angle.  Lifting Capacities at Zero Degree Boom Angle  Boom  Main Boom Length in Feet  Angle  35 40 50 90 100 90 100	2.180	(38 2,55
100  Minimum boom length (sigs) for indicated length (no load)  Maximum boom length (t) at 0 degree boom angle (no load)  15: ( ) Boom angles are in degrees.  s capacity is based on maximum boom angle.  Lifting Capacities at Zero Degree Boom Angle  Boom  Main Boom Length in Feet  Angle  35  40  50  **00  80  90  100	(20.5)	1,98 (27.5
E: () Boom angles are in degrees.  Ecopating code, finder to LM meanual for instructions.  Ecopating code, finder to LM meanual for instructions.  Litting Capacities at Zero Degree Boom Angle  Litting Capacities at Zero Degree Boom Angle  Boom  Angle 35 40 50 **00 80 90 100		1,47
Et. () Boom angles are in degrees.    Capacity is based on maximum boom angle   Lifting Capacities at Zero Degree Boom Angle   Lifting Capacities at Zero Degree Boom Angle   Lifting Capacities at Zero Degree Boom Angle   Soom   Main Boom Length in Feet	ag.) for indicated length (no load)	(19.5
Litting Capacities at Zero Degree Boom Angle	at 0 degree boom angle (no load)	110
Angle 35 40 50 **60 70 80 90 100		
		11
9° 28.850 21.800 12.500 7.080 4.830 3.410 2.570 1.710 (94.2) (74.2) (84.2) (94.2) (94.2)	0 7,080 4,830 3,410 2,570 1,710	1,08

110 ft.	5,500 lbs.	100%	C						
-	0,000 100.	20' 0"	Re	ar	#0201				
G L				-	Main Boom Length	- Marie			
eet	35	40	50	**60	viain Boom Length	80 BD	90	100	110
10	120,000 (69)	84,400	80,200 (76)	*62,500 (78)					
12	100,000	84.400	80.200	62.500	*36,800				
	(65.5)	(66.5)	(73.5)	(77)	(78)				
15	87,300 (59.5)	82,700 (63.5)	80,200 (70)	61,000	36,600 (76.5)	*36,800	*31,000 (78)		
20	66,000	65,000 (55)	64.300 (63.5)	50,650	36,800 (72)	36,800	31,000 (77)	*29,100 (78)	*24,000 (78)
25	50.050	49.850	49 500	41,800	36,800	34.000	30.000	27,000	24,000
	(36)	(45)	(56.5)	(63.5)	(68)	(71) 29.000	(73.5) 25.300	(76)	(77.5)
30		(31.5)	(48.5)	(57.5)	(63)	(67)	(70.5)	(72.5)	(75)
35			28,700 (40)	28,600 (51.5)	28,700	25,000	22,200 (67)	21,750 (69.5)	20,000
40			22,200	22,200	23,000	22,000	20,200	19.000	18.500
			(28)	(45) 17,600	(53) 18,400	(59) 18,800	(63) 17,800	(66.5) 17,300	(69) 17,300
45				(37)	(47.5)	(54.5)	(59.5)	(63)	(66.5)
50				14,100 (26.5)	14,950 (41)	15,750 (49.5)	16,000 (55.5)	16,000	16,000
55					12,250 (33.5)	13,050	13.800	14,100 (56.5)	14,100
					10,050	10,900	(51) 11,650	12.000	(60)
60					(24)	(38.5)	(47)	(52.5)	(57)
65						9,100	9,890 (42)	10.200 (48.5)	(53.5)
70						7,590 (22.5)	8,380 (36.5)	8,740 (44.5)	9,000
75						(22.5)	7,100	7.480	7,800
							(30)	(40) 6,370	(46.5)
80							(21.5)	(34.5)	(42.5)
85								5,410 (28.5)	5,770 (38)
90								4.570	4.920
								(20.5)	(33) 4,180
95									(27.5)

GROVE.





13

## 36 - 110 ft.









30 - 110 11.	33	- 50 10.	3,300 10.		20" 0"	300
			Po	ounds		
		33 ft. LENGT	Н	1	56 ft. LENGT	Н
Ō	#0221	#0222	#0223	#0241	#0242	#0243
Feet	0° OFFSET 12.900	25° OFFSET	45° OFFSET	OFFSET	OFFSET	45° OFFSET
30	(78)					
35	12,900 (76)			*8,330 (78)		
40	12,900 (74)	*10,850 (78)		8,330 (77.5)		
45	12,900 (72)	10,450 (77)	*7,410 (78)	8,330 (76)		
50	12,100 (70)	10,000 (74.5)	7,200 (77.5)	8,330 (74.5)		
55	10,450 (68)	9,220 (72.5)	6,990 (75)	8,250 (73)	*5,300 (78)	
60	8,780 (66)	8,550 (70.5)	6,800 (72.5)	7,540 (71)	5,140 (77)	
65	7,420 (63.5)	7,930 (68)	6,650 (70.5)	7,160 (69)	5,100 (75)	*3,860 (78)
70	6,280 (61.5)	7,260 (65.5)	6,490 (68)	6,820 (67.5)	5,100 (73)	3,790 (77.5)
75	5,310 (59)	6,180 (63)	6,370 (65.5)	6,030 (65.5)	4,800 (71)	3,660 (75)
80	4,490 (56.5)	5,250 (60.5)	5,840 (62.5)	5,150 (63.5)	4,580 (69)	3,550 (73)
85	3,770 (54)	4,450 (58)	4,950 (60)	4,400 (61.5)	4,470 (67.5)	3,450 (71)
90	3,150 (51)	3,750 (55.5)	4,180 (57)	3,730 (59.5)	4,330 (65.5)	3,410 (68.5)
95	2,590 (48.5)	3,130 (52.5)	3,490 (54)	3,140 (57)	4,070 (63)	3,300 (66.5)
100	2,100 (45.5)	2,580 (49.5)	2,890 (51)	2,620 (55)	3,590 (61)	3,260 (64)
105	1,660 (42.5)	2,080 (46.5)	2,340 (47.5)	2,160 (52.5)	3,030 (58.5)	3,220 (62)
110	1,270 (39.5)	1,640 (43)		1,740 (50.5)	2,520 (56)	2,880 (59.5)
115		1,240 (39.5)		1,360 (48)	2,050 (53.5)	2,360 (56.5)
120				1,010 (45.5)	1,640 (51)	1,890 (53.5)
125				4.5.5	1,250 (48.5)	1,450 (50.5)
		No L	oad Stability	Data	to be to make	10.000
Min. boom angle for indicated length	370	370	450	450	460	480
Max, boom length at 0°		80 ft.			60 ft.	

NOTE: ( ) Boom angles are in degrees.

A6-829-10133

\*This capacity is based upon maximum boom angle.
#LMI operating code. Refer to LMI manual for instructions.

#### NOTES:

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

  2. 33 ft. and 56 ft. boom extension lengths may be used for single line lifting service.
- 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.
- 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.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- Capacities listed are with outriggers properly extended and vertical jacks set only.

TWS 700E

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14

10 ft.	0 lbs.	1005	. 3	O					
3			-		#0801				
2)					Main Boom Length				
	35 117,500	40 84,400	50 80,200	**60 *62.500	70	80	90	100	110
10	(69)	(72)	(76)	(78)					
12	(65.5)	84,400 (68.5)	(73.5)	62,500	*36,800 (78)				
5	87,300	82,700	80,200	81,000	36,800 (76.5)	*36,800 (78)	*31,000		
20	56,000	55,750 (55)	55,300 (63,5)	50,650	36,800	36,800	31,000	*29,100 (78)	*24,000 (78)
25	34,350	34,300	33.850	33,400	34,100	34,000	30,000	27,000	24,000
30	(36)	(45)	(56.5)	(63.5)	(68)	(71) 24,150	(73.5) 24.850	(76)	22,000
		(31.5)	(48.5) 16.650	(57.5) 16.250	(63) 16.950	(67) 17,700	(70.5) 18.400	(72.5)	(75)
35			(40)	(51.5)	(56)	(63)	(67)	(69.5)	(72)
10			12,250 (28)	12,000 (45)	12,650 (53)	13,400 (59)	14,100 (63)	14,550 (66.5)	14,950
15				8,890 (37)	9,620 (47.5)	10.300	11,050 (59.5)	11,450	11,80
50				6,510 (26,5)	7,330 (41)	8,040 (49.5)	8,750 (55.5)	9,130	9,510
56				(20.5)	5.470	6.250	6.960	7.320	7.690
50					(33.5)	4,790	(51) 5.530	(56.5) 5.880	(60)
					(24)	(38.5)	4.350	(52.5) 4.700	5.050
15						(31.5)	(42)	(48.5)	(53.5)
70						2,560 (22.5)	(36.5)	3,710 (44.5)	4,060 (50)
75							2,480	2,870 (40)	3,220
80							1,740 (21.5)	2,130 (34.5)	2,500 (42.5
15							(4.1.0)	1,480	1.850
10								(28.5)	(38)
~	16	simom honon unola	(deg.) for indicated	Leanth (so lead)				.14	(33)
			ft.) at 0 degree boo						90
perating or	ngles are in degree ide. Refer to LMI in sesed on maximum	nanual for instruction	ons.						
			Lifting Capacit	les at Zero Degree					
om gle	35	40	50	Main Bo	om Length in Feet	80	90		
0+	23,700	17,650	9,550	4.810	2,960	1.840	1,210	-	

_		20' 0	F	lver lear					
<u>5</u> ][					#0801				
eet	35	40	50	**60	Main Boom Length 70	in Feet 80	90	100	110
10	120,000	84,400	80,200	*62.500	//	- 80	.90	100	110
12	100,000	(72) 84,400	(76) 80,200	(78) 62,500	*36,600				
15	(65.5) 87.300	(68.5) 82.700	(73.5)	61,000	(78) 36,800	*36,800	*31,000		
177	(59.5) 62.400	(63.5) 62,200	(70) 61.800	(74) 50.650	(76.5)	(78) 36,800	(78)	*29,100	*24.000
20	(49)	(55)	(63.5)	(69)	(72)	(75)	(77)	(78)	(78)
25	47,250 (36)	47,050 (45)	46.700 (56.5)	41,800 (63.5)	36,800	34,000 (71)	(73.5)	27,000 (76)	24,000 (77.5)
30		32,950 (31.5)	(48.5)	(57.5)	33,400 (63)	29,000	25,300	24,200 (72.5)	22,000
35			24,600 (40)	24,500 (51.5)	25,350 (58)	25,000	22.200 (67)	21,750 (69.5)	20,000
40			18,800	18,750	19,600	20,450	20,200	19,000	18,500
45			(20)	14,650	15,500 (47,5)	16,300	17,100 (59.5)	17,300	17,300 (66.5)
50				11,550	12,400	13,200	14,000	14,350	14,750
55				(26.5)	(41) 9,990	(49.5) 10,800	(55.5)	(60) 11,900	(63.5) 12,300
					(30.5)	(44.5) 8.860	9.620	(56.5) 9.960	(60)
60					(24)	(38.5) 7.240	(47)	(52.5)	(57)
65						(31.5)	8,030 (42)	8,370 (48.5)	8,720 (53.5)
70						5,890 (22.5)	(36.5)	7,040 (44.5)	7,380
75							5,520	5,910 (40)	6,240 (46.5)
80							4,540 (21.5)	4,910 (34.5)	5,270 (42.5)
85							100000	4,050 (28.5)	4,410
90								3.300	3.650
95								(20.5)	(33)
									(27.5)
100									(19.5)
				r indicated length (r egree boom angle (					110
operating o	angles are in degre ode. Refer to LMI r based on maximum	ies. nanual for instructi		ayes com mige (	in vall				110
			Lifting Capacitie	s at Zero Degree 8					
loom logle	35	40	50	Main Bo	om Length in Feet 70	80	90	100	110
01	29,050	24,450 (34.2)	15,250 (44.2)	9.320	6,660 (64.2)	4,930 (74.2)	3,820	2.740 (94.2)	1,940
C. ( ) Defect	nce radii in feet.	(34.2)	(44.2)	(54.6)	(64.2)	(14.2)	(84.2)		(104.2) 829-101325

TIMS 700

GROVE.





**Q** 360° 36 - 110 ft. Pounds 33 ft. LENGTH Ö 56 ft. LENGTH #0822 #0823 #0841 #0842 #0843 0° OFFSET 25° OFFSET 45° OFFSET 25° OFFSET 45° OFFSET OFFSET \*8,330 (78) 35 8,330 40 8,330 (76) 8,330 (74.5) 10,450 45 50 8,250 (73) 7,540 (71) 8,510 (68) 9,220 (72.5) 55 8,330 (70.5) 6,930 (68) 6,800 (72.5) 6,650 (70.5) 6,420 (69) 5,370 (67.5) 3,790 (77.5) 70 4,770 (63) 3,870 (59) 3,130 (56.5) 4,800 (71) 4,580 5,310 (65.5) 3,660 80 2,480 (54) 3,180 (58) 3,610 (60) 3,050 (61.5) 4,110 (67.5) 3,450 (71) 85 3,450 (65.5) 2,860 (63) 2,910 (57) 2,310 (54) 100 1,870 (58.5) 1,280 (47.5) 105 110 1,060 (53.5) 1,400 (56.5) 115

No Load Stability Data

510

510

A6-829-101340

NOTE: ( ) Boom angles are in degrees.

\*This capacity is based upon maximum boom angle

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

15

#### NOTES:

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

  2. 33 ft. and 56 ft. boom extension lengths may be used for single line lifting service.
- 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.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- Capacities listed are with outriggers properly extended and vertical jacks set only.

TWS 700E





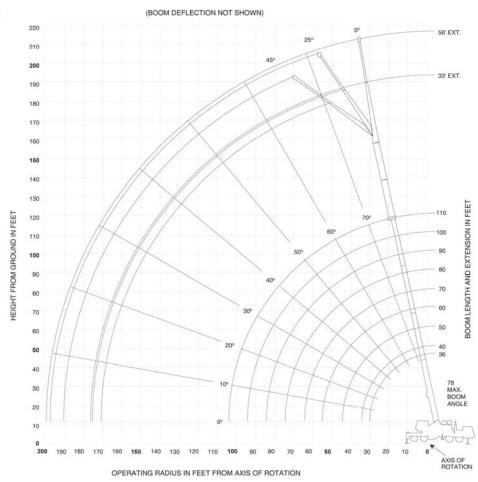




## working range

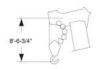
#### 36-110' main boom + 33-56' lattice extension + 20' or 40' insert





# WS 700E





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

GROVE.





17







Q
360°

			Po	ounds		
-		33 ft. LENGT	н		56 ft. LENGT	Н
Ö	#0064	#0065	#0066	#0084	#0085	#0086
Feet	OFFSET	25° OFFSET	45° OFFSET	OFFSET	25° OFFSET	45° OFFSET
35	*9,360 (78)					
40	9,360 (77.5)			*6,300 (78)		
45	8,480 (76)	*7,480 (78)		6,300 (77.5)		
50	7,680 (74)	7,070 (77,5)		6,000 (77)		
55	6,990 (72)	6,470 (76)	5,880 (78)	5,990 (75.5)		
60	6,390 (70)	5,970 (74)	5,480 (76.5)	5,980 (73.5)	*4,840 (78)	
65	5,890 (68.5)	5,570 (72.5)	5,080 (74.5)	5,510 (72)	4,840 (77.5)	
70	5,390 (66.5)	5,070 (70.5)	4,780 (72.5)	5,010 (70.5)	4,440 (76.5)	
75	4,990 (64.5)	4,770 (68.5)	4,480 (70.5)	4,560 (68.5)	4,050 (75)	*3,760 (78)
80	4,650 (62.5)	4,400 (66)	4,190 (68)	4,170 (67)	3,870 (73)	3,460 (77)
85	4,300 (60)	4,150 (64)	3,890 (66)	3,820 (65)	3,570 (71.5)	3,260 (75)
90	4,000 (58)	3,850 (62)	3,690 (63.5)	3,520 (63.5)	3,320 (69.5)	2,960 (73)
95	3,760 (56)	3,650 (59.5)	3,500 (61.5)	3,220 (61.5)	3,070 (67.5)	2,770 (71)
100	3,510 (53.5)	3,410 (57.5)	3,300 (59)	2,980 (59.5)	2,880 (66)	2,570 (69)
105	3,260 (51)	3,210 (55)	3,100 (56.5)	2,780 (58)	2,680 (64)	2,460 (67)
110	3,070 (48.5)	3,020 (52.5)	2,930 (54)	2,530 (56)	2,480 (62)	2,340 (65)
115	2,870 (46)	2,870 (50)	2,780 (51)	2,340 (54)	2,280 (60)	2,200 (63)
120	2,550 (43.5)	2,730 (47)		2,190 (52)	2,140 (57.5)	2,050 (60.5)
125	2,170 (40.5)	2,500 (44)		2,000 (49.5)	1,990 (55.5)	1,910 (58)
130	1,820 (37.5)	2,100 (41)		1,850 (47.5)	1,850 (53)	1,810 (55.5)
135	1,500 (34.5)	1,730 (37.5)		1,720 (45)	1,750 (51)	1,670 (53)
140	1,210 (30.5)	1,390 (33.5)		1,480 (42.5)	1,610 (48.5)	(-1)
145					1,520 (45.5)	
150					1,370 (43)	
100000		No Li	oad Stability I	Data		i e
Min. boom angle at 110' boom length	220	290	45°	38°	400	450
Max. boom length at 0° boom angle		100 ft.			80 ft.	

\*This capacity is based upon maximum boom angle.
#LMI operating code. Refer to LMI manual for instructions.

#### NOTES:

- 1. All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads, in accordance with SAE J-765.
- 33 ft. and 56 ft. folding boom extension lengths may be used for single line lifting service only.
- For main boom lengths less than 110 ft. with the boom extension erected, 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.

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



















			Po	ounds		
-		33 ft. LENGT	н		56 ft. LENGT	Н
Feet	#0064 0°	#0065 25°	#0066 45° OFFSET	#0084 0° OFFSET	#0085 25° OFFSET	#0086 45°
45	OFFSET 6,560	OFFSET	OFFSET	OFFSET	OFFSET	OFFSET
	(78) 5.960			4.510		
50	(76)			(78)		
55	5,360 (74.5)	5,860 (78)		4,210 (77.5)		
60	4,860 (73)	5,260 (76.5)	*5,170 (78)	3,910 (76)		
65	4,370 (71)	4,870 (75)	4,670 (77.5)	3,710 (74.5)		
70	3,970 (69.5)	4,370 (73)	4,270 (75.5)	3,410 (73)	*3,710 (78)	
75	3,670 (67.5)	4,070 (71.5)	3,980 (73.5)	3,220 (71.5)	3,420 (77.5)	
80	3,270 (66)	3,670 (69.5)	3,680 (72)	2,820 (70)	3,120 (76)	
85	2,980 (64)	3,370 (68)	3,380 (70)	2,520 (68.5)	2,820 (74.5)	2,730 (77.5)
90	2,780 (62.5)	3,080 (66)	3,080 (68)	2,320 (66.5)	2,620 (72.5)	2,530 (76)
95	2,480 (60.5)	2,880 (64)	2,890 (66)	2,030 (65)	2,330 (71)	2,340 (74.5)
100	2,290 (58.5)	2,580 (62)	2,690 (64)	1,830 (63.5)	2,130 (69.5)	2,140 (72.5)
105	2,090 (56.5)	2,390 (60)	2,390 (62)	1,630 (62)	1,930 (68)	1,940 (71)
110	1,900 (54.5)	2,190 (58)	2,200 (60)	1,440 (60)	1,730 (66)	1,740 (69)
115	1,700 (52.5)	2,000 (56)	2,100 (58)	1,240 (58.5)	1,540 (64.5)	1,550 (67)
120	1,600 (50.5)	1,800 (54)	1,910 (55.5)	1,140 (57)	1,340 (62.5)	1,450 (65)
125	1,410 (48)	1,700 (51.5)	1,710 (53)		1,240 (61)	1,260 (63.5)
130	1,310 (46)	1,510 (49.5)	1,520 (50.5)		1,050 (59)	1,160 (61.5)
135	1,120 (43.5)	1,420 (47)	1,420 (48)	25		
140	1,030 (41)	1,220 (44.5)				
145		1,070 (41.5)	ē.			
His been		No L	oad Stability	Data		
Min. boom angle at 110' boom length	40°	40°	470	56°	580	60°
Max. boom length at 0° boom angle		70 ft.			40 ft.	

NOTE: ( ) Boom angles are in degrees.
\*This capacity is based upon maximum boom angle.

\*This capacity is based upon maximum boom angle. #LMI operating code. Refer to LMI manual for instructions.

#### t. A6-829-101494

#### NOTES:

- All capacities above the bold line are based on structural strength of boom extension and do not exceed 85% of tipping loads, in accordance with SAE J-765.
- 33 ft. and 56 ft. folding boom extension lengths may be used for single line lifting service only.
- For main boom lengths less than 110 ft. with the boom extension errected, 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.
- Boom angle is the angle above or below horizontal of the longitudinal axis of the boom base section after lifting rated load.
- after lifting rated load.

  6. Capacities listed are with outriggers properly extended and vertical jacks set only.

TMS 700E







## load handling

33 ft56 ft. Folding Boom Extension	
*33 ft. Extension (Erected)	4,350 lb.
*56 ft. Extension (Erected)	9,450 lb.
Folding Ext. with 20 ft. Insert	
*33 ft. Extension (Erected)	9,410 lb.
*56 ft. Extension (Erected)	16,010 lb.
Folding Ext. with 40 ft. Insert	
*33 ft. Extension (Erected)	16,280 lb.
*56 ft. Extension (Erected)	24,390 lb.

\*Reduction of main boom capacities

(no deduct required for stowed boom extension)

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.

Auxiliary Boom Nose	137 lb.
Hookblocks and Headache Balls:	
60 Ton, 5 Sheave	1,125 lb. +
50 Ton, 5 Sheave	1,075 lb. +
40 Ton, 5 Sheave	785 lb. +
8.3 Ton Headache Ball (non-swivel)	350 lb. +
8.3 Ton Headache Ball (swivel)	370 lb. +

+ Refer to rating plate for actual weight.

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.

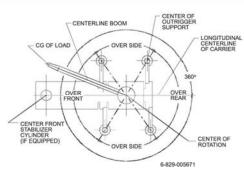
Hoists	Cable Specs.	Permissible Line Pulls	Nominal Cable Length
	3/4" (19 mm) 6x37 Class,		
Main	EIPS, IWRC Special Flexible	16,800 lb.	500 ft.
	Min. Breaking Strength 58,800 lb.		
	3/4* (19 mm) Flex-X 35		
Anin P Arms	Detation Desistant (Non retation)	46 000 lb	500 B

The approximate weight of 3/4" wire rope is 1.5 lb./ft.

Min. Breaking Strength 85,800 lb.

Wire Rope Layer	Hoist Li Two Spo Low	Drum Capaci		
	Available lb.*	High Available lb.*	Layer	Total
1	18,134	9,067	78	78
2	16,668	8,334	85	164
3	15,420	7,710	92	256
4	14,347	7,174	99	356
5	13,413	6,707	106	462
6	12,594	6,297	113	575

#### Working Area Diagram



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









# **GROVE**

#### Manitowoc Crane Group - Americas

Manitowoc, Wisconsin Facility Tel: [Int+ 001] 920 684 6621 Fax: [Int+ 001] 920 683 6277 Shady Grove, Pennsylvania Facility Tel: [Int+ 001] 717 597 8121 Fax: [Int+ 001] 717 597 4062

#### Manitowoc Crane Group - EMEA

Mantowoc Crane Group - EME Europe Middle East & Africa Tel: [Int + 33] (0) 4 72 18 20 20 Manitowoc Crane Group - UK Europe Middle East & Africa Tel: [Int + 44] (0) 191 565 6281

#### Fax: [Int + 44] (0) 191 564 0442 Manitowoc Crane Group - Germany

(Sales, Parts & Service)
Tel: [Int + 49](0) 2173 8909 0
Fax: [Int + 49] (0) 2173 8909-30

Manitowoc Crane Group - France France & Africa (Sales, Parts & Service)

Tel: [Int + 33] (0) 1 303 13150 Fax: [Int + 33] (0) 1 303 86085

#### Manitowoc Crane Group - Netherlands

(Sales, Parts & Service) Tel: [Int + 31] (0) 76 578 39 99 Fax: [Int + 31] (0) 76 578 39 78

Manitowoc Crane Group - Italy Italy & Southern Europe (Sales, Parts & Service)

Tel: [Int + 39] (0) 331 49 33 11 Fax: [Int + 39] (0) 331 49 33 30 Manitowoc Crane Group - Portugal

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Fax: [Int + 65] 6862 4040 / 4142 Manitowoc Crane Group - Shanghai

China (Sales, Parts & Service) Tel: [Int + 86] (0) 21 64955555

Fax: [Int + 86] (0) 2164852038 Manitowoc Crane Group - Beijing China (Sales, Parts & Service)

Tel: [Int + 86] (0) 10 646 71690 Fax: [Int + 86] (0) 10 646 71691

Manitowoc Crane Group - Middle East

(Sales) Tel: [Int + 971] (0) 4 348 4478 Fax: [Int + 971] (0) 4 348 4478 (Parts & Service)

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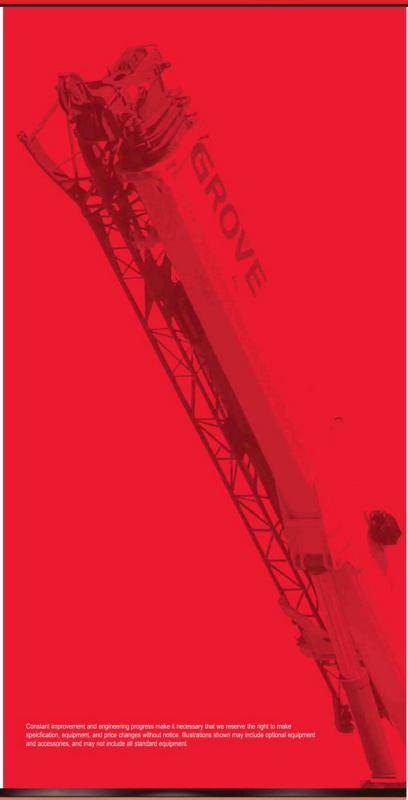








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