## GROVE

## YВ 4415 ҮYB4415xiय



## INDUSTRIAL GRANE

## Dimensions

$\begin{array}{lll}\text { Turning Radius } & 20 \\ & 11^{\prime}, 10-1 /{ }^{\prime \prime}(6.4 \mathrm{~m}) & 2 \text { Wheel Steer } \\ & (3.6 \mathrm{~m}) & 4 \text { Wheel Steer }\end{array}$


Note: ( ) Reference dimensions in mm

|  | $40^{\prime}(12.2 \mathrm{~m})$ BOOM | $52^{\prime}(15.6 \mathrm{~m})$ BOOM |
| :--- | :--- | :---: |
| A | $17^{\prime} 0^{\prime \prime}(5182)$ | $21^{\prime} 5^{\prime \prime \prime}(6528)$ |
| B | $5^{\prime} 3^{\prime \prime}(1603)$ | $10^{\prime} 2^{\prime \prime}(3099)$ |
| C | $20^{\prime} 9-5 / 8^{\prime \prime}(6340)$ | $25^{\prime} 2-1 / 2^{\prime \prime}(7684)$ |



Working Range


GROVE YB4415/YB4415XT
Courtesy of Crane.Market

## Superstructure Specifications

## Boom

$17 \mathrm{ft} .-40 \mathrm{ft}$. ( $5.1 \mathrm{~m}-12.2 \mathrm{~m}$ ) three-section full power boom. Maximum tip height: 47 ft . (14.4 m).
Speeds: 32 seconds (ext.); 19 seconds (retract).

## *Optional Boom

21 ft . - 52 ft . ( $6.5 \mathrm{~m}-15.6 \mathrm{~m}$ ) three-section full power boom. Maximum tip height: 59 ft . (18.0 m).
Speeds: 43 seconds (ext.); 25 seconds (retract).
*Fixed Boom Extension (non-offsettable)
15 ft . (4.6 m) swingaway extension w/single metallic sheave in point. Stows alongside base boom section for travel. Extends tip heights to 62 ft . $(18.9 \mathrm{~m})$ or 74 ft . $(22.5 \mathrm{~m})$ with the 40 ft . ( 12.2 m ) and 52 ft . ( 15.6 m ) booms respectively.

## *Offsettable Boom Extension

15 ft . (4.6 m) swingaway extension w/single metallic sheave in point. Stows alongside base boom section for travel. Extends tip heights to 62 ft . $(18.9 \mathrm{~m}$ ) or 74 ft . ( 22.5 m ) with the 40 ft . ( 12.2 m ) and 52 ft . ( 15.6 m ) booms respectively. Can be offset at $0^{\circ}$ or $45^{\circ}$ to increase up and over reach.

## Boom Nose

Two (2) position low profile and quick reeve design with two metallic sheaves mounted on tapered roller bearings and quick removable pin-type rope guards. Head pivots forward (up) to the low profile position (1-2 parts of line only \& max $70^{\circ}$ boom elevation) for minimizing head space requirements or rearward (down) to the conventional position for maximum lifts that exceed 2 parts of line reeving or approximately $18,000 \mathrm{lbs} .(8165 \mathrm{~kg})$.

## Boom Elevation

Twin double acting hydraulic cylinders with integral holding valves provide elevation from $0^{\circ}$ to $80^{\circ}$. Mechanical boom angle indicator. Speeds: 20 seconds (ext.) 14 seconds (retract).

Anti-Two Block Device - The standard low profile type anti-two block device, when activated, provides an audible-visual warning to the crane operator and disengages all crane functions whose movement can cause two-blocking.

## *Rated Capacity Limiter (RCL)

A simple, effective and easy to use overload protection system in conjunction with a low profile type anti-two block (A2B) device assists the operator in the efficient operation of the unit. The RCL system constantly monitors actual lifting conditions versus allowable capacity ratings to assist in preventing an overload condition. It provides the operator with a visual pre-warning at approximately $90 \%$ of the rated capacity and an audible-visual warning in combination with automatic lockout at approximately $100 \%$ of rated capacity.

## Swing

Ball bearing swing circle with $360^{\circ}$ continuous rotation. Hydraulic motor driven worm and gear reducer.
Maximum speed: 2.0 RPM.

## Counterweight

4,300 lbs. (1950 kg) w/40 ft. (12.2 m) boom; 4,800 lbs. (2177 kg) $\mathrm{w} / 52 \mathrm{ft}$. ( 15.6 m ) boom; bolted to the turntable.

## Hydraulic System

Three (3) section main gear pumps driven off torque converter through PTO.

Combined capacity: 75 GPM (285 LPM).
Maximum system operating pressure: 3,500 psi (241 bar).
Three valve banks mounted on top of dash panel with direct mechanical linkage low effort lever controls.

Return line type filter with full flow by-pass protection and service indicator. 10 micron rated replaceable cartridges.

54 gallon (205L) reservoir with sight level gauge and steel plate to guard against side impact damage.
*Remote-mounted oil cooler with thermostatically controlled electric motor driven fan.

System pressure and flow test ports with quick release type fittings for each circuit.

## HOIST SPECIFICATIONS - Model HP12-13G

Planetary reduction with automatic spring applied multi-wet-disc brake and grooved hoist drum. *Cable follower available.


## Chassis Specifications

## Frame

High strength alloy steel construction with integral outrigger housings; front/rear lifting, towing and tie down lugs and recessed lifting points in all four corners of deck top. Carry deck constructed of 1/4" (6 $\mathrm{mm})$ thick plate steel w/surface area of $66 \mathrm{sq} . \mathrm{ft} .\left(6.1 \mathrm{~m}^{2}\right)$ and anti-skid deck treatment.

## Outriggers

Front and rear oblique type beams at all four corners with integral holding valves. Outrigger pads form an integral part of the beam and have a surface area of 103 sq . in. ( $665 \mathrm{~cm}^{2}$ ).
Maximum outrigger pad load: 26,539 lbs. (12 038 kg ).

## Outrigger Controls, Synchronized

Controls are located on dash panel and operate beams in pairs from side to side. Two hand sequence minimizes unintentional actuation.
Sight leveling bubbles located inside operator's compartment.
*Independent control of each individual beam is available.

## Engine, Dual Fuel (Gas/LPG)

General Motors 4.3 L , six cylinder, dual fuel (LPG/gas) engine, 115 bhp ( 85
kW) (Gross) @ 2,500 RPM. 100 amp alternator.
Maximum torque: 275 ft . Ibs. (373 Nm) @ 2,200 RPM.

## *Engine, Diesel

Cummins 4BT3.9 L turbo-charged diesel, four cylinder, 110 bhp ( 82 kW ) (Gross) @ 2,500 RPM. Maximum torque: 293 ft . Ibs. (397 Nm) @ 1,500 RPM.

## Operator's Control Station

The frame mounted, open air style control station with overhead canopy includes all crane function and driving controls. Other standard equipment includes a durable nylon cushion seat with lap belt; hourmeter; sight level bubble and fire extinguisher. The dash panel includes engine oil pressure gauge; engine water temperature gauge; voltmeter; all critical engine monitoring instruments; engine/transmission A/V distress system; outrigger controls; *A2B warning indicators; parking/emergency brake toggle switch with warning light and hooded panel light. The dash panel also includes an RCL panel and RCL warning indicators when the machine is equipped with the *RCL. All control valves are mounted on top of dash area for ease of operation and increased leg room.

## Overhead Canopy

Tubular steel construction with steel mesh covering on top and right side grill type guard. Not available with enclosed cab option.

## *Cab, Enclosed

Fully enclosed galvannealed sheet metal structure replaces standard overhead canopy. Includes hot water forced air heater/defroster, safety glass throughout, hinged removable door, sliding left and right side glass for cross ventilation, door lock, electric windshield wiper/ washer, fixed skylight glass, circulating air fan, rear deck storage shelf area behind operator's seat.

## Fuel Tank Capacity

46 gallon ( 175 L ) all steel construction w/steel plate to guard against side impact damage.

## Electrical System

One 12 V - maintenance free battery. 875 CCA. Includes standard 12 V remote slave receptacle wired directly to the starter to facilitate jump starting. Automotive type color coded fuses, number coded wiring and water tight connectors.

## Drive

$4 \times 2$ - Front axle drive only with planetary hubs and limited slip differential.
*4 x 4 (YB4415XT) - Front and rear drive/steer axles with planetary hubs and limited slip differentials.

## Steering

All wheel (4 wheel), full hydraulic power via steering wheel permits two modes of operation: 2 wheel (rear only) or four-wheel coordinated. Inside dashmounted selector switch to select steering mode.

## Transmission

Remote mounted Clark 3 speed forward and reverse full powershift w/engine mounted torque converter and stalk type shift control mounted to the steering column. Controls permit quick and easy shuttle control between forward and reverse travel.

## Axles

Front: Planetary drive/steer with internal multi-wet-disc brakes and limited slip differential.
Rear: (4 x 2) Fabricated steer axle with internal wet disc brakes. ( $4 \times 4$ drive) Planetary drive/steer with internal wet disc brakes and limited slip differential.

## Tires

Standard 385/65R22.5-18 PR tubeless radial traction tread.

## Suspension

Front: Mounted rigid to frame.
Rear: Mounted on rubber blocks to permit oscillation for operation on semiunimproved terrain.

## Brakes

Hydraulic actuated internal wet-disc service brakes acting on all four wheels. A dash mounted toggle switch activates the dry disc parking brake on the transmission output yoke with a dash mounted warning light. Parking brake acts on both front wheels of 2 wheel drive models and on all 4 wheels of *4 wheel drive (XT) models.

## Lights

Recessed mounted behind grill type frame cutouts and includes head, tail, turn signals, brake and 4-way hazard warning lights.

## Maximum Speed <br> 19 MPH (30 kph)

## Gradeability (Theoretical)

75\% (Based on 27,000 lbs. [12 247 kg ] GVW).

## *Tow Winch

Hydraulic winch mounted behind the front bumper area and operated from within the operator's compartment using the Swing/Tow winch control lever via selector switch. Hydraulic powered unit has a bare drum pull of $6,000 \mathrm{lbs}$. (2722 kg) at $48 \mathrm{ft} . / \mathrm{min}$. ( $14.6 \mathrm{~m} / \mathrm{min}$.) single line speed. Includes 100 ft . ( 30.5 m) length of $3 / 8^{\prime \prime}$ diameter $6 \times 25$ EIPS IWRC wire rope, hook and thimble, 4 way roller guide and winch mounted drum release lever to permit free spooling the rope from the drum. Winch is not designed for any type of vertical lifting.

## Miscellaneous Standard Equipment

Hookblock tiedown sling, electronic combination two-tone back-up and outrigger motion alarm, front and rear running lights, tool stowage well, 15 ton ( 15 MT ) capacity two sheave quick reeve hookblock, powertrain audio-visual distress warning system, 12 V remote slave receptacle for jump starting, R/S convex rearview mirror.

## *Optional Equipment

* Worklight package - consists of three 12 V , ball mounted, manually adjustable worklights (2-cab/canopy mounted and 1 boom mounted)
* $360^{\circ}$ amber flashing light wired to ignition switch
* Ether injection \& block heater cold weather starting kit (less canister) for diesel only
* Engine block heater only (Dual Fuel Engine)
* Pintle hooks front/rear
* Carry deck posts
* Spark arrestor muffler(s) (Dual Fuel only)
* Sound suppression package for under 90 dBa cab noise levels
* Dual rearview west coast mirrors
* Hydraulic system oil cooler
* Quick Reeve Overhaul weight with 5 ton (4.5 MT) hook
* Engine tachometer, dash mounted
* Deluxe operator's fabric seat w/spring suspension and dual armrests
*Denotes optional equipment


## RATED LIFTING CAPACITIES IN POUNDS ON OUTRIGGERS FULLY EXTENDED - $360^{\circ}$

17 FT. - 40 FT. BOOM

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | *17 (18.4) | *20 (21.4) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) |
| 6 | 30,000 | 28,950 | 28,200 | 27,850 | 27,650 |  |
| 8 | 28,050 | 28,100 | 28,150 | 27,800 | 26,400 | 23,750 |
| 10 | 23,000 | 23,100 | 23,150 | 23,200 | 22,450 | 20,650 |
| 12 | 18,100 | 18,250 | 18,350 | 18,450 | 18,500 | 17,550 |
| 14 |  | 14,750 | 14,850 | 14,900 | 14,950 | 14,950 |
| 16 |  | 12,300 | 12,450 | 12,450 | 12,500 | 12,500 |
| 18 |  |  | 10,600 | 10,650 | 10,700 | 10,700 |
| 20 |  |  | 9,070 | 9,070 | 9,070 | 9,070 |
| 22 |  |  |  | 7,760 | 7,760 | 7,760 |
| 24 |  |  |  | 6,740 | 6,740 | 6,740 |
| 26 |  |  |  | 5,930 | 5,930 | 5,930 |
| 28 |  |  |  |  | 5,260 | 5,260 |
| 30 |  |  |  |  | 4,710 | 4,710 |
| 32 |  |  |  |  |  | 4,240 |
| 34 |  |  |  |  |  | 3,840 |
| 36 |  |  |  |  |  | 3,490 |
| Minimum boom angle ( ${ }^{\circ}$ ) for indicated length (no load) |  |  |  |  |  | 0 |
| Maximum boom length (ft.) at 0 degree boom angle (no load) |  |  |  |  |  | 40 |
| Lifting Capacity at Zero Degree Boom Angle On Outriggers Fully Extended $360^{\circ}$ |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |
|  | *17 (18.4) | *20 (21.4) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) |
| $0^{\circ}$ | $\begin{aligned} & 9,080 \\ & (13.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 8,100 \\ & (16.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 5,940 \\ & (21.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 4,600 \\ & (26.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3,720 \\ & (31.3) \\ & \hline \end{aligned}$ | $\begin{array}{r} 3,070 \\ (36.3) \\ \hline \end{array}$ |

Note: ( ) Reference radii in feet. (Applicable to boom nose sheaves in down position only.)

A6-829-100221B
*Boom length varies between boom nose sheaves in down position (in bold), or up \& out position (in parenthesis).

1. Capacities do not exceed $85 \%$ of tipping loads as determined by test in accordance with SAE J765.
2. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
3. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to $70^{\circ}$.

RATED LIFTING CAPACITIES IN POUNDS ON RUBBER
STATIONARY - $360^{\circ}$

| Radius <br> in <br> Feet | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | *17 (18.4) | *20 (21.4) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) |
| 6 | 14,700 | 14,700 | 14,700 | 14,700 | 14,700 |  |
| 8 | 11,500 | 11,500 | 11,500 | 11,500 | 11,500 | 11,500 |
| 10 | 8,930 | 8,930 | 9,050 | 9,050 | 9,050 | 9,050 |
| 12 | 6,900 | 7,020 | 7,020 | 7,020 | 7,020 | 7,020 |
| 14 |  | 5,400 | 5,540 | 5,620 | 5,680 | 5,780 |
| 16 |  | 4,320 | 4,510 | 4,540 | 4,600 | 4,600 |
| 18 |  |  | 3,600 | 3,740 | 3,850 | 3,850 |
| 20 |  |  | 2,990 | 3,120 | 3,150 | 3,200 |
| 22 |  |  |  | 2,590 | 2,650 | 2,650 |
| 24 |  |  |  | 2,110 | 2,170 | 2,200 |
| 26 |  |  |  | 1,740 | 1,820 | 1,820 |
| 28 |  |  |  |  | 1,440 | 1,560 |
| 30 |  |  |  |  | 1,280 | 1,280 |
| 32 |  |  |  |  |  | 1,060 |
| 34 |  |  |  |  |  | 860 |
| 36 |  |  |  |  |  | 770 |
| Minimum boom angle ( ${ }^{\circ}$ ) for indicated length (no load) |  |  |  |  |  | 0 |
| Maximum boom length (ft.) at 0 degree boom angle (no load) |  |  |  |  |  | 40 |
| Lifting Capacity at Zero Degree Boom Angle On Rubber $360^{\circ}$ |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |
|  | *17 (18.4) | *20 (21.4) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) |
| $0^{\circ}$ | $\begin{aligned} & 5,990 \\ & (13.3) \end{aligned}$ | $\begin{aligned} & 4,230 \\ & (16.3) \end{aligned}$ | $\begin{aligned} & 2,430 \\ & (21.3) \end{aligned}$ | $\begin{aligned} & 1,680 \\ & (26.3) \end{aligned}$ | $\begin{aligned} & 1,130 \\ & (31.3) \end{aligned}$ | $\begin{gathered} 770 \\ (36.3) \\ \hline \end{gathered}$ |
| Note: ( ) Reference radii in feet. (Applicable to boom nose sheaves in down position only.)A6-829-100222B |  |  |  |  |  |  |
| *Boom length varies between boom nose sheaves in down position (in bold), or up \& out position (in parenthesis). |  |  |  |  |  |  |

1. Capacities are in pounds and do not exceed $75 \%$ of tipping loads as determined by test in accordance with SAE J765.
2. Capacities are applicable to machines equipped with 385/65R22.5(J) Firestone T839 tires at 140 psi cold inflation pressure.
3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine.
4. Capacities are applicable only with machine on firm level surface.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
6. For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine. When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speed*. 2.5 m.p.h. capacities are permissible on main boom only, NOT on boom extension.
*Creep - not over 200 ft . of movement in any 30 minute period and not exceeding 1 mph
7. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to $70^{\circ}$

PICK \& CARRY AND STATIONARY - DEFINED ARC OVER FRONT

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | *17 (18.4) | *20 (21.4) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) |
| 6 | 18,700 | 18,700 | 18,700 | 18,700 | 18,700 |  |
| 8 | 15,050 | 15,050 | 15,050 | 15,050 | 15,050 | 15,050 |
| 10 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 | 12,500 |
| 12 | 10,600 | 10,600 | 10,600 | 10,600 | 10,600 | 10,600 |
| 14 |  | 9,190 | 9,190 | 9,190 | 9,190 | 9,190 |
| 16 |  | 8,040 | 8,040 | 8,040 | 8,040 | 8,040 |
| 18 |  |  | 6,870 | 6,870 | 6,870 | 6,870 |
| 20 |  |  | 5,760 | 5,760 | 5,760 | 5,760 |
| 22 |  |  |  | 4,910 | 4,910 | 4,910 |
| 24 |  |  |  | 4,250 | 4,250 | 4,250 |
| 26 |  |  |  | 3,620 | 3,710 | 3,710 |
| 28 |  |  |  |  | 3,270 | 3,270 |
| 30 |  |  |  |  | 2,800 | 2,880 |
| 32 |  |  |  |  |  | 2,580 |
| 34 |  |  |  |  |  | 2,110 |
| 36 |  |  |  |  |  | 1,620 |
| Minimum boom angle ( ${ }^{\circ}$ ) for indicated length (no load) |  |  |  |  |  | 0 |
| Maximum boom length (ft.) at 0 degree boom angle (no load) |  |  |  |  |  | 40 |
| Lifting Capacity at Zero Degree Boom Angle On Rubber - Defined Arc and Pick \& Carry |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |
|  | *17 (18.4) | *20 (21.4) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) |
| $0^{\circ}$ | $\begin{aligned} & 9,690 \\ & (13.3) \end{aligned}$ | $\begin{aligned} & 7,920 \\ & (16.3) \end{aligned}$ | $\begin{aligned} & 5,210 \\ & (21.3) \end{aligned}$ | $\begin{aligned} & 3,610 \\ & (26.3) \end{aligned}$ | $\begin{aligned} & 2,630 \\ & (31.3) \end{aligned}$ | $\begin{aligned} & 1,520 \\ & (36.3) \end{aligned}$ |
| Note: ( ) Reference radii in feet. (Applicable to boom nose sheaves A6-829-100223Bin down position only.) |  |  |  |  |  |  |
| *Boom length varies between boom nose sheaves in down position (in bold), or up \& out position (in parenthesis). |  |  |  |  |  |  |

## 15 FT. EXTENSION <br> RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - $360^{\circ}$

| Radius | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feet | 17 | 20 | 25 | 30 | 35 | 40 |
| 6 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |
| 8 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 |
| 10 | 8,850 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 |
| 12 | 7,860 | 8,450 | 9,080 | 9,080 | 9,080 | 9,080 |
| 14 | 7,060 | 7,610 | 8,480 | 9,080 | 9,080 | 9,080 |
| 16 | 6,410 | 6,590 | 7,730 | 9,080 | 9,080 | 8,900 |
| 18 | 5,870 | 6,340 | 7,100 | 8,390 | 8,330 | 8,090 |
| 20 | 5,410 | 5,850 | 6,570 | 7,750 | 7,640 | 7,420 |
| 22 | 5,020 | 5,440 | 6,110 | 7,260 | 7,040 | 6,840 |
| 24 | 4,680 | 5,070 | 5,710 | 6,720 | 6,530 | 6,340 |
| 26 | 4,380 | 4,760 | 5,360 | 6,140 | 6,070 | 5,900 |
| 28 | 3,740 | 4,380 | 5,050 | 5,480 | 5,480 | 5,480 |
| 30 |  | 4,190 | 4,770 | 4,930 | 4,930 | 4,930 |
| 32 |  |  | 4,410 | 4,470 | 4,470 | 4,470 |
| 34 |  |  | 3,790 | 4,070 | 4,070 | 4,070 |
| 36 |  |  | 2,730 | 3,730 | 3,730 | 3,730 |
| 38 |  |  |  | 3,420 | 3,420 | 3,420 |
| 40 |  |  |  | 3,160 | 3,160 | 3,160 |
| 45 |  |  |  |  | 2,610 | 2,610 |
| 50 |  |  |  |  |  | 2,190 |
| Lifting Capacity at Three Degree Boom Angle On Outriggers Fully Extended - $360^{\circ}$ |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |
|  | 17 | 20 | 25 | 30 | 35 | 40 |
| $3^{\circ}$ | $\begin{gathered} 2,700 \\ (29) \\ \hline \end{gathered}$ | $\begin{gathered} 2,450 \\ (32) \\ \hline \end{gathered}$ | $\begin{gathered} 1,990 \\ (37) \\ \hline \end{gathered}$ | $\begin{gathered} 1,560 \\ (42) \\ \hline \end{gathered}$ | $\begin{gathered} 1,240 \\ (47) \\ \hline \end{gathered}$ | $\begin{gathered} 1,000 \\ (52) \\ \hline \end{gathered}$ |

Note: ( ) Ref. radii in feet.
A6-829-100224D
NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $85 \%$ of tipping loads on outriggers in accordance with SAE J765.
2. 15 ft . boom extension may be used for single line lifting service only.
3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
4. Capacities listed are with fully extended outriggers only.
5. No load stability on outriggers fully extended $360^{\circ}$ with 15 ft . extension installed:
a. Minimum boom angle for 40 ft . main boom $=0^{\circ}$
b. Maximum main boom length at $0^{\circ}$ main boom angle $=40 \mathrm{ft}$.
6. When lifting loads the minimum allowable boom angle is $3^{\circ}$.

15 FT. EXTENSION
RATED LIFTING CAPACITIES IN POUNDS ON RUBBER
STATIONARY $360^{\circ}$

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | 20 | 25 | 30 | 35 | 40 |
| 6 | 8,070 | 8,070 | 8,070 | **8,070 |  |  |
| 8 | 8,070 | 8,070 | 8,070 | 8,070 | **7,550 |  |
| 10 | 8,070 | 8,070 | 8,070 | 8,070 | 7,550 | 7,040 |
| 12 | 7,850 | 7,840 | 7,710 | 7,710 | 7,550 | 7,040 |
| 14 | 6,400 | 6,300 | 6,200 | 6,000 | 5,890 | 5,890 |
| 16 | 5,250 | 5,130 | 5,030 | 5,030 | 5,030 | 5,030 |
| 18 | 4,470 | 4,420 | 4,420 | 4,420 | 4,310 | 4,210 |
| 20 | 3,790 | 3,790 | 3,650 | 3,650 | 3,620 | 3,590 |
| 22 | 3,260 | 3,260 | 3,120 | 3,120 | 3,010 | 3,010 |
| 24 | 2,820 | 2,760 | 2,640 | 2,610 | 2,610 | 2,570 |
| 26 | 2,460 | 2,430 | 2,340 | 2,300 | 2,300 | 2,300 |
| 28 | 2,170 | 2,100 | 2,040 | 1,980 | 1,980 | 1,980 |
| 30 |  | 1,880 | 1,820 | 1,720 | 1,690 | 1,690 |
| 32 |  |  | 1,560 | 1,530 | 1,470 | 1,440 |
| 34 |  |  | 1,390 | 1,330 | 1,250 | 1,250 |
| 36 |  |  | 1,150 | 1,150 | 1,060 | 1,060 |
| 38 |  |  |  | 960 | 880 | 880 |
| 40 |  |  |  | 830 | 700 | 700 |
| 45 |  |  |  |  | 520 | 520 |
| Lifting Capacity at Three Degree Boom Angle On Rubber Stationary - $360^{\circ}$ |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |
|  | 17 | 20 | 25 | 30 | 35 |  |
| $3^{\circ}$ | $\begin{gathered} 2,110 \\ (29) \\ \hline \end{gathered}$ | $\begin{gathered} 1,760 \\ (32) \\ \hline \end{gathered}$ | $\begin{gathered} 1,100 \\ (37) \\ \hline \end{gathered}$ | $\begin{aligned} & 750 \\ & (42) \\ & \hline \end{aligned}$ | $\begin{aligned} & 490 \\ & (47) \end{aligned}$ |  |

Note: () Ref. radii in feet.
A6-829-100225D

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765.
2. 15 ft . boom extension may be used for single line lifting service only.
3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with $385 / 65$ R22.5(J) Firestone T 839 tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
6. 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.
7. No load stability on rubber $360^{\circ}$ with 15 ft . extension installed:
a. Minimum boom angle for 40 ft . main boom $=30^{\circ}$
b. Maximum main boom length at $0^{\circ}$ main boom angle $=35 \mathrm{ft}$.
8. When lifting loads the minimum allowable boom angle is $3^{\circ}$.

## 15 FT. EXTENSION

RATED LIFTING CAPACITIES IN POUNDS ON RUBBER
stationary - defined arc over front

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | 20 | 25 | 30 | 35 | 40 |
| 6 | 8,070 | 8,070 | 8,070 | **8,070 |  |  |
| 8 | 8,070 | 8,070 | 8,070 | 8,070 | 7,550 |  |
| 10 | 8,070 | 8,070 | 8,070 | 8,070 | 7,550 | 7,550 |
| 12 | 7,850 | 8,070 | 8,070 | 8,070 | 7,550 | 7,550 |
| 14 | 7,060 | 7,610 | 8,070 | 8,070 | 7,550 | 7,550 |
| 16 | 6,410 | 6,590 | 7,730 | 8,070 | 7,550 | 7,550 |
| 18 | 5,870 | 6,340 | 7,100 | 7,760 | 7,550 | 7,550 |
| 20 | 5,410 | 5,850 | 6,520 | 6,520 | 6,520 | 6,520 |
| 22 | 5,020 | 5,440 | 5,580 | 5,580 | 5,580 | 5,580 |
| 24 | 4,680 | 4,840 | 4,840 | 4,840 | 4,840 | 4,840 |
| 26 | 4,240 | 4,240 | 4,240 | 4,240 | 4,240 | 4,240 |
| 28 | 3,740 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 |
| 30 |  | 3,330 | 3,330 | 3,330 | 3,330 | 3,330 |
| 32 |  |  | 2,980 | 2,980 | 2,980 | 2,980 |
| 34 |  |  | 2,680 | 2,680 | 2,680 | 2,680 |
| 36 |  |  | 2,410 | 2,410 | 2,410 | 2,410 |
| 38 |  |  |  | 2,180 | 2,180 | 2,180 |
| 40 |  |  |  | 1,970 | 1,970 | 1,970 |
| 45 |  |  |  |  | 1,550 | 1,550 |
| 50 |  |  |  |  |  | 1,220 |
| Lifting Capacity at Three Degree Boom Angle On Rubber - Defined Arc Over Front |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |
|  | 17 | 20 | 25 | 30 | 35 | 40 |
| $3^{\circ}$ | $\begin{gathered} 2,700 \\ (29) \\ \hline \end{gathered}$ | $\begin{gathered} 2,450 \\ (32) \\ \hline \end{gathered}$ | $\begin{gathered} 1,990 \\ (37) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 1,560 \\ & (42) \\ & \hline \end{aligned}$ | $\begin{gathered} 1,240 \\ (47) \end{gathered}$ | $\begin{gathered} 1,000 \\ (52) \\ \hline \end{gathered}$ |

NOTES

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765.
2. 15 ft . boom extension may be used for single line lifting service only.
3. Defined Arc-Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with $385 / 65$ R22.5(J) Firestone $T 839$ tires at 140 psi cold inflation pressure.
5. Capacities are applicable to machines equipped with $385 / 65$ R22.5(J)
6. Capacities are applicable only with machine on firm level surface. . All rubber lifting depends on proper tire inflation, capacity and condition.
7. 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.
8. No load stability on rubber $360^{\circ}$ with 15 ft . extension installed:
a. Minimum boom angle for 40 ft . main boom $=40^{\circ}$
b. Maximum main boom length at $0^{\circ}$ main boom angle $=30 \mathrm{ft}$.
9. When lifting loads the minimum allowable boom angle is $3^{\circ}$.

15 FT. OFFSETTABLE EXTENSION AT $0^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS

| Radius | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feet | 17 | 20 | 25 | 30 | 35 | 40 |
| 6 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |
| 8 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | *9,080 |
| 10 | 8,180 | 8,820 | 9,080 | 9,080 | 9,080 | 9,080 |
| 12 | 7,240 | 7,830 | 8,760 | 9,080 | 9,080 | 9,080 |
| 14 | 6,500 | 7,030 | 7,890 | 8,690 | 9,080 | 9,080 |
| 16 | 5,840 | 6,390 | 7,170 | 7,920 | 8,630 | 9,080 |
| 18 | 5,200 | 5,780 | 6,580 | 7,280 | 7,940 | 8,560 |
| 20 | 4,700 | 5,210 | 6,070 | 6,730 | 7,350 | 7,940 |
| 22 | 4,270 | 4,740 | 5,520 | 6,260 | 6,840 | 7,400 |
| 24 | 3,910 | 4,340 | 5,060 | 5,780 | 6,400 | 6,940 |
| 26 | 3,600 | 4,000 | 4,660 | 5,310 | 6,000 | 6,460 |
| 28 | 3,330 | 3,700 | 4,320 | 4,940 | 5,480 | 5,480 |
| 30 |  | 3,440 | 4,020 | 4,600 | 4,930 | 4,930 |
| 32 |  |  | 3,760 | 4,300 | 4,470 | 4,470 |
| 34 |  |  | 3,530 | 4,040 | 4,070 | 4,070 |
| 36 |  |  | 3,310 | 3,730 | 3,730 | 3,730 |
| 38 |  |  |  | 3,380 | 3,380 | 3,380 |
| 40 |  |  |  | 3,080 | 3,080 | 3,080 |
| 45 |  |  |  |  | 2,460 | 2,460 |
| 50 |  |  |  |  |  | 1,980 |
| Lifting Capacity at Three Degree Boom Angle On Outriggers Fully Extended - 360; |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |
|  | 17 | 20 | 25 | 30 | 35 | 40 |
| $3{ }^{\circ}$ | $\begin{gathered} 3,260 \\ (29) \\ \hline \end{gathered}$ | $\begin{array}{r} 3,260 \\ (32) \\ \hline \end{array}$ | $\begin{gathered} 3,260 \\ (37) \\ \hline \end{gathered}$ | $\begin{gathered} 2,810 \\ (42) \end{gathered}$ | $\begin{gathered} \hline 2,250 \\ (47) \end{gathered}$ | $\begin{gathered} 1,820 \\ (52) \\ \hline \end{gathered}$ |
| () Ref. radil in feet. A6-829-1007 |  |  |  |  |  |  |

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $85 \%$ of tipping loads on outriggers in accordance with SAE J765.
2. 15 ft . boom extension may be used for single line lifting service only.
3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning
4. Capacities listed are with fully extended outriggers only.
5. No load stability on outriggers fully extended $360^{\circ}$ with 15 ft . extension installed at $0^{\circ}$ offset:
a. Minimum boom angle for 40 ft . main boom $=0^{\circ}$
b. Maximum main boom length at $0^{\circ}$ main boom angle $=40 \mathrm{ft}$.
6. When lifting loads the minimum allowable boom angle is $3^{\circ}$ at $0^{\circ}$ offset.

15 FT. OFFSETTABLE EXTENSION AT $45^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - $360^{\circ}$

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | 20 | 25 | 30 | 35 | 40 |
| 12 | 4,310 |  |  |  |  |  |
| 14 | 4,140 | 4,210 | 4,300 |  |  |  |
| 16 | 4,000 | 4,070 | 4,170 | 4,240 | 4,300 |  |
| 18 | 3,890 | 3,950 | 4,050 | 4,130 | 4,200 | 4,260 |
| 20 | 3,810 | 3,860 | 3,960 | 4,040 | 4,110 | 4,170 |
| 22 | 3,740 | 3,800 | 3,880 | 3,960 | 4,030 | 4,090 |
| 24 |  | 3,740 | 3,820 | 3,890 | 3,960 | 4,020 |
| 26 |  |  | 3,780 | 3,830 | 3,900 | 3,960 |
| 28 |  |  | 3,720 | 3,790 | 3,850 | 3,900 |
| 30 |  |  |  | 3,760 | 3,810 | 3,850 |
| 32 |  |  |  |  | 3,780 | 3,820 |
| 34 |  |  |  |  | 3,740 | 3,790 |
| 36 |  |  |  |  | 3,710 | 3,730 |
| 38 |  |  |  |  |  | 3,380 |
| Lifting Capacity at Forty Eight Degree Boom Angle On Outriggers Fully Extended - $360^{\circ}$ |  |  |  |  |  |  |
| Boom | Main Boom Length in Feet |  |  |  |  |  |
| Angle | 17 | 20 | 25 | 30 | 35 | 40 |
| $48^{\circ * *}$ | $\begin{aligned} & 3,710 \\ & (23.5) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3,710 \\ & (25.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3,710 \\ & (29.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3,710 \\ & (32.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3,670 \\ & (36.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 3,110 \\ & (39.8) \\ & \hline \end{aligned}$ |

Note: () Ref. radii in feet.
** Radii are with the extension at horizontal.
A6-829-100725
NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $85 \%$ of tipping 1. All capacities above the bold line are wased loads on outriggers in accordance with SAE J765.
2. 15 ft . boom extension may be used for single line lifting service only.
3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping
with boom extension occurs rapidly and without advance warning.
4. Capacities listed are with fully extended outriggers only.
5. No load stability on outriggers fully extended $360^{\circ}$ with 15 ft . extension installed at $45^{\circ}$ offset
a. Minimum boom angle for 40 ft . main boom $=45^{\circ}$
6. When. Maximum main boom length at $45^{\circ}$ main boom angle $=40 \mathrm{ft}$.

15 FT. OFFSETTABLE EXTENSION AT $0^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY $360^{\circ}$

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | 20 | 25 | 30 | 35 | 40 |
| 6 | 8,070 | 8,070 | 8,070 | *8,070 |  |  |
| 8 | 8,070 | 8,070 | 8,070 | 8,070 | *7,550 |  |
| 10 | 8,070 | 8,070 | 8,070 | 8,070 | 7,550 | 7,040 |
| 12 | 7,240 | 7,710 | 7,710 | 7,710 | 7,550 | 7,040 |
| 14 | 6,400 | 6,300 | 6,200 | 6,000 | 5,780 | 5,780 |
| 16 | 4,970 | 4,920 | 4,920 | 4,620 | 4,570 | 4,570 |
| 18 | 4,170 | 4,170 | 4,120 | 3,900 | 3,900 | 3,860 |
| 20 | 3,660 | 3,660 | 3,440 | 3,390 | 3,390 | 3,180 |
| 22 | 3,110 | 3,060 | 2,960 | 2,790 | 2,680 | 2,680 |
| 24 | 2,680 | 2,580 | 2,490 | 2,430 | 2,330 | 2,330 |
| 26 | 2,330 | 2,280 | 2,160 | 2,000 | 2,000 | 2,000 |
| 28 | 2,070 | 2,050 | 2,040 | 1,910 | 1,810 | 1,700 |
| 30 |  | 1,810 | 1,750 | 1,610 | 1,560 | 1,440 |
| 32 |  |  | 1,440 | 1,390 | 1,340 | 1,230 |
| 34 |  |  | 1,260 | 1,190 | 1,080 | 1,030 |
| 36 |  |  | 1,110 | 1,060 | 950 | 950 |
| 38 |  |  |  | 860 | 810 | 690 |
| 40 |  |  |  | 830 | 700 | 600 |
| Lifting Capacity at Three Degree Boom Angle On Rubber - $360^{\circ}$ |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |
|  | 17 | 20 | 25 | 30 |  |  |
| $3^{\circ}$ | $\begin{gathered} 1,940 \\ (29) \\ \hline \end{gathered}$ | $\begin{gathered} 1,660 \\ (32) \\ \hline \end{gathered}$ | $\begin{gathered} 1,080 \\ (37) \\ \hline \end{gathered}$ | $\begin{aligned} & 750 \\ & (42) \end{aligned}$ |  |  |
| Note: ( ) Ref. radii in feet. <br> *This capacity based on maximum boom angle. |  |  |  |  |  | A6-829-100726 |

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765
2. 15 ft . boom extension may be used for single line lifting service only.
3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with 385/65R22.5(J) Firestone $T 839$ tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface.
. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
5. 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.
6. No load stability on rubber $360^{\circ}$ with 15 ft . extension installed at $0^{\circ}$ offset:
a. Minimum boom angle for 40 ft . main boom $=38^{\circ}$; for 35 ft . main boom $=20^{\circ}$
b. Maximum main boom length at $0^{\circ}$ main boom angle $=30 \mathrm{ft}$.
7. When lifting loads the minimum allowable boom angle is $3^{\circ}$ at $0^{\circ}$ offset.

15 FT. OFFSETTABLE EXTENSION AT $45^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY $360^{\circ}$

| STATIONARY $360{ }^{\circ}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Main Boom Length in Feet |  |  |  |  |  |
| Feet | 17 | 20 | 25 | 30 | 35 | 40 |
| 12 | 4,310 |  |  |  |  |  |
| 14 | 4,140 | 4,210 | 4,300 |  |  |  |
| 16 | 4,000 | 4,070 | 4,170 | 4,240 | *4,300 |  |
| 18 | 3,890 | 3,950 | 4,050 | 4,130 | 4,200 | 4,260 |
| 20 | 3,700 | 3,700 | 3,700 | 3,700 | 3,700 | 3,700 |
| 22 | 3,160 | 3,160 | 3,160 | 3,160 | 3,160 | 3,160 |
| 24 |  | 2,730 | 2,730 | 2,730 | 2,730 | 2,730 |
| 26 |  |  | 2,370 | 2,370 | 2,370 | 2,370 |
| 28 |  |  | 2,070 | 2,070 | 2,030 | 2,030 |
| 30 |  |  |  | 1,760 | 1,760 | 1,760 |
| 32 |  |  |  | 1,570 | 1,570 | 1,570 |
| 34 |  |  |  |  | 1,320 | 1,270 |
| 36 |  |  |  |  |  | 1,040 |
| 38 |  |  |  |  |  | 860 |
| Lifting Capacity at Forty Eight Degree Boom Angle On Rubber - $360^{\circ}$ |  |  |  |  |  |  |
| Boom | Main Boom Length in Feet |  |  |  |  |  |
| Angle | 17 | 20 | 25 | 30 | 35 | 40 |
| $48^{\circ}$ ** | $\begin{aligned} & 2,830 \\ & (23.5) \end{aligned}$ | $\begin{aligned} & 2,425 \\ & (25.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,920 \\ & (29.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,530 \\ & (32.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,100 \\ & (36.3) \\ & \hline \end{aligned}$ | $\begin{gathered} 670 \\ (39.8) \\ \hline \end{gathered}$ |

*This capacity based on maximum boom angle.
** Radii are with the extension at horizontal.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765
2. 15 ft . boom extension may be used for single line lifting service only.
3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with 385/65R22.5(J) Firestone T839 tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation
pressures. Damaged tires are hazardous to safe operation of crane.
6. 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.
7. No load stability on rubber $360^{\circ}$ with 15 ft . extension installed at $45^{\circ}$ offset:
a. Minimum boom angle for 40 ft . main boom $=45^{\circ}$
b. Maximum main boom length at $45^{\circ}$ main boom angle $=40 \mathrm{ft}$.
8. When lifting loads the minimum allowable boom angle is $48^{\circ}$ at $45^{\circ}$ offset.

15 FT. OFFSETTABLE EXTENSION AT $0^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - DEFINED ARC OVER FRONT

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | 20 | 25 | 30 | 35 | 40 |
| 6 | 8,070 | 8,070 | 8,070 | *8,070 |  |  |
| 8 | 8,070 | 8,070 | 8,070 | 8,070 | 7,550 |  |
| 10 | 8,070 | 8,070 | 8,070 | 8,070 | 7,550 | 7,550 |
| 12 | 7,240 | 7,830 | 8,070 | 8,070 | 7,550 | 7,550 |
| 14 | 6,500 | 7,030 | 7,890 | 8,070 | 7,550 | 7,550 |
| 16 | 5,840 | 6,390 | 7,170 | 7,920 | 7,550 | 7,550 |
| 18 | 5,200 | 5,780 | 6,580 | 7,280 | 7,550 | 7,550 |
| 20 | 4,700 | 5,210 | 6,070 | 6,520 | 6,520 | 6,520 |
| 22 | 4,270 | 4,740 | 5,520 | 5,580 | 5,580 | 5,580 |
| 24 | 3,910 | 4,340 | 4,840 | 4,840 | 4,840 | 4,840 |
| 26 | 3,600 | 4,000 | 4,240 | 4,240 | 4,240 | 4,240 |
| 28 | 3,330 | 3,700 | 3,750 | 3,750 | 3,750 | 3,750 |
| 30 |  | 3,300 | 3,300 | 3,300 | 3,300 | 3,300 |
| 32 |  |  | 2,930 | 2,930 | 2,930 | 2,930 |
| 34 |  |  | 2,600 | 2,600 | 2,600 | 2,600 |
| 36 |  |  | 2,320 | 2,320 | 2,320 | 2,320 |
| 38 |  |  |  | 2,070 | 2,070 | 2,070 |
| 40 |  |  |  | 1,850 | 1,850 | 1,850 |
| 45 |  |  |  |  | 1,400 | 1,400 |
| 50 |  |  |  |  |  | 1,050 |
| Lifting Capacity at Three Degree Boom Angle On Rubber - Defined Arc Over Front |  |  |  |  |  |  |
| Boom | Main Boom Length in Feet |  |  |  |  |  |
| Angle | 17 | 20 | 25 | 30 | 35 | 40 |
| $3^{\circ}$ | $\begin{gathered} 2,700 \\ (29) \\ \hline \end{gathered}$ | $\begin{gathered} 2,450 \\ (32) \\ \hline \end{gathered}$ | $\begin{gathered} 1,990 \\ (37) \\ \hline \end{gathered}$ | $\begin{aligned} & \hline 1,560 \\ & (42) \end{aligned}$ | $\begin{gathered} 1,240 \\ (47) \\ \hline \end{gathered}$ | $\begin{aligned} & 930 \\ & \hline(52) \end{aligned}$ |

Note: () Ref. radii in feet.
This capacity based on maximum boom angle. A6-829-100728

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765.
2. 15 ft . boom extension may be used for single line lifting service only.
3. Defined Arc-Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with $385 / 65$ R22.5 (J) Firestone $T 839$ tires at 140 psi cold inflation pressure
5. Capacities are applicable only with machine on firm level surface.
6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
7. 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.
8. No load stability on rubber (defined arc) with 15 ft . extension installed at $0^{\circ}$ offset:
a. Minimum boom angle for 40 ft . main boom $=0^{\circ}$
b. Maximum main boom length at $0^{\circ}$ main boom angle $=40 \mathrm{ft}$.
9. When lifting loads the minimum allowable boom angle is $3^{\circ}$ at $0^{\circ}$ offset.

15 FT. OFFSETTABLE EXTENSION AT $45^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER STATIONARY - DEFINED ARC OVER FRONT

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 17 | 20 | 25 | 30 | 35 | 40 |
| 12 | 4,310 |  |  |  |  |  |
| 14 | 4,140 | 4,210 | 4,300 |  |  |  |
| 16 | 4,000 | 4,070 | 4,170 | 4,240 | 4,300 |  |
| 18 | 3,890 | 3,950 | 4,050 | 4,130 | 4,200 | 4,260 |
| 20 | 3,810 | 3,860 | 3,960 | 4,040 | 4,110 | 4,170 |
| 22 | 3,740 | 3,800 | 3,880 | 3,960 | 4,030 | 4,090 |
| 24 |  | 3,740 | 3,820 | 3,890 | 3,960 | 4,020 |
| 26 |  |  | 3,780 | 3,830 | 3,900 | 3,960 |
| 28 |  |  | 3,720 | 3,750 | 3,750 | 3,750 |
| 30 |  |  |  | 3,310 | 3,310 | 3,310 |
| 32 |  |  |  | 2,930 | 2,930 | 2,930 |
| 34 |  |  |  |  | 2,610 | 2,610 |
| 36 |  |  |  |  |  | 2,320 |
| 38 |  |  |  |  |  | 2,080 |
| Lifting Capacity at Forty Eight Degree Boom Angle On Rubber - Defined Arc Over Front |  |  |  |  |  |  |
| Boom | Main Boom Length in Feet |  |  |  |  |  |
| Angle | 17 | 20 | 25 | 30 | 35 | 40 |
| $48^{\circ}$ ** | $\begin{aligned} & 3,710 \\ & (23.5) \end{aligned}$ | $\begin{aligned} & 3,710 \\ & (25.7) \end{aligned}$ | $\begin{aligned} & 3,470 \\ & (29.2) \end{aligned}$ | $\begin{aligned} & 2,810 \\ & (32.7) \end{aligned}$ | $\begin{aligned} & 2,280 \\ & (36.3) \end{aligned}$ | $\begin{aligned} & 1,880 \\ & (39.8) \end{aligned}$ |

Ref. radil in feet.

* Radii are with the extension at horizontal.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765
2. 15 ft . boom extension may be used for single line lifting service only
3. Defined Arc-Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with 385/65R22.5(J) Firestone T839tires at 140 psi cold inflation pressure
5. Capacities are applicable only with machine on firm level surface
6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation
pressures. Damaged tires are hazardous to safe operation of
pressures. Damaged tires are hazardous to safe operation of crane.
7. 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.
8. No load stability on rubber (defined arc) with 15 ft . extension installed at $45^{\circ}$ offset:
a. Minimum boom angle for 40 ft . main boom $=45^{\circ}$
b. Maximum main boom length at $45^{\circ}$ main boom angle $=40 \mathrm{ft}$.
9. When lifting loads the minimum allowable boom angle is $48^{\circ}$ at $45^{\circ}$ offset.



## RATED LIFTING CAPACITIES IN POUNDS ON OUTRIGGERS FULLY EXTENDED - $360^{\circ}$

| Radius | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feet | *21 (22.8) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) | *45 (46.4) | *52 (53.4) |
| 6 | 30,000 | 25,450 | 25,100 | 24,900 | **24,200 |  |  |
| 8 | 27,600 | 25,450 | 25,100 | 24,900 | 24,200 | **21,800 |  |
| 10 | 22,350 | 22,450 | 22,550 | 22,600 | 22,650 | 21,800 | **18,500 |
| 12 | 18,200 | 18,300 | 18,400 | 18,500 | 18,500 | 18,550 | 18,300 |
| 14 | 15,150 | 15,250 | 15,300 | 15,400 | 15,400 | 15,450 | 15,500 |
| 16 | 12,550 | 12,700 | 12,750 | 12,800 | 12,850 | 12,900 | 12,900 |
| 18 |  | 10,750 | 10,850 | 10,900 | 10,950 | 10,950 | 11,000 |
| 20 |  | 9,270 | 9,400 | 9,450 | 9,490 | 9,500 | 9,500 |
| 22 |  |  | 8,090 | 8,090 | 8,090 | 8,090 | 8,090 |
| 24 |  |  | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 |
| 26 |  |  | 6,130 | 6,130 | 6,130 | 6,130 | 6,130 |
| 28 |  |  |  | 5,410 | 5,410 | 5,410 | 5,410 |
| 30 |  |  |  | 4,820 | 4,820 | 4,820 | 4,820 |
| 32 |  |  |  |  | 4,310 | 4,310 | 4,310 |
| 34 |  |  |  |  | 3,880 | 3,880 | 3,880 |
| 36 |  |  |  |  | 3,510 | 3,510 | 3,510 |
| 38 |  |  |  |  |  | 3,180 | 3,180 |
| 40 |  |  |  |  |  | 2,890 | 2,890 |
| 44 |  |  |  |  |  |  | 2,410 |
| 48 |  |  |  |  |  |  | 2,020 |
| Minimum boom angle ( $0^{\circ}$ ) for indicated length (no load) |  |  |  |  |  |  | 0 |
| Maximum boom length (ft.) at $0^{\circ}$ boom angle (no load) |  |  |  |  |  |  | 52 |
| Lifting Capacity at Zero Degree Boom Angle On Outriggers Fully Extended $360^{\circ}$ |  |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |  |
|  | *21 (22.8) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) | *45 (46.4) | *52 (53.4) |
| $0^{\circ}$ | $\begin{aligned} & \hline 7,190 \\ & (17.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 5,970 \\ & (21.3) \end{aligned}$ | $\begin{aligned} & 4,740 \\ & (26.3) \end{aligned}$ | $\begin{aligned} & 3,850 \\ & (31.3) \end{aligned}$ | $\begin{aligned} & 3,170 \\ & (36.3) \end{aligned}$ | $\begin{aligned} & 2,630 \\ & (41.3) \end{aligned}$ | $\begin{aligned} & 1,990 \\ & (48.3) \end{aligned}$ |

Note: ( ) Reference radii in feet. (Applicable to boom nose sheaves in down position only.)
*Boom length varies between boom nose sheaves in down position (in bold), or up \& out position (in parenthesis).
${ }^{* *}$ Capacity based on maximum boom angle.

1. Capacities do not exceed $85 \%$ of tipping loads as determined by test in accordance with SAE J765.
2. Capacities appearing above the bold line are based on structural strength and tipping should not be relied upon as a capacity limitation.
3. With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to $70^{\circ}$.

STATIONARY - $360^{\circ}$

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | *21 (22.8) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) | *45 (46.4) | *52 (53.4) |
| 6 | 16,400 | 16,400 | 16,400 | 16,400 | **16,400 |  |  |
| 8 | 11,900 | 11,900 | 11,900 | 11,900 | 11,900 | **11,900 |  |
| 10 | 9,190 | 9,190 | 9,190 | 9,190 | 9,190 | 9,190 | **9,150 |
| 12 | 7,350 | 7,350 | 7,350 | 7,350 | 7,350 | 7,350 | 7,270 |
| 14 | 5,540 | 5,690 | 5,690 | 5,690 | 5,690 | 5,740 | 5,740 |
| 16 | 4,360 | 4,360 | 4,360 | 4,360 | 4,360 | 4,360 | 4,360 |
| 18 |  | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 |
| 20 |  | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 | 3,000 |
| 22 |  |  | 2,590 | 2,590 | 2,590 | 2,590 | 2,590 |
| 24 |  |  | 2,030 | 2,030 | 2,030 | 2,030 | 2,030 |
| 26 |  |  | 1,790 | 1,790 | 1,790 | 1,790 | 1,790 |
| 28 |  |  |  | 1,500 | 1,500 | 1,500 | 1,500 |
| 30 |  |  |  | 1,290 | 1,290 | 1,290 | 1,290 |
| 32 |  |  |  |  | 1,170 | 1,170 | 1,170 |
| 34 |  |  |  |  | 820 | 820 | 820 |
| Minimum boom angle ( $0^{\circ}$ ) for indicated length (no load) |  |  |  |  |  | 24 | 38 |
| Maximum boom length (ft.) at $0^{\circ}$ boom angle (no load) |  |  |  |  |  |  | 40 |
| Lifting Capacity at Zero Degree Boom Angle On Rubber $\mathbf{3 6 0}{ }^{\circ}$ |  |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |  |
|  | *21 (22.8) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) |  |  |
| $0^{\circ}$ | $\begin{aligned} & 3,700 \\ & (17.7) \end{aligned}$ | $\begin{aligned} & 2,660 \\ & (21.3) \end{aligned}$ | $\begin{aligned} & 1,600 \\ & (26.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,050 \\ & (31.3) \\ & \hline \end{aligned}$ | $\begin{gathered} 640 \\ (36.3) \\ \hline \end{gathered}$ |  |  |

1. Capacities are in pounds and do not exceed $75 \%$ of tipping loads as determined by test in accordance with SAE J765.
2. Capacities are applicable to machines equipped with $385 / 65$ R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure 3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine.
3. Capacities are applicable only with machine on firm level surface.
4. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.

Note. () Reference radii in feet. (Applicable to boom nose sheaves
Boom length varies between boom nose sheaves in down position (in bold), or up \& out position (in
6. For pick and carry operation, the boom, using the shortest practical boom length, must be centered over front of machine When handling loads in the structural range with capacities close to maximum ratings, travel should be reduced to creep speed*. 2.5 m.p.h. capacities are permissible on main boom only, NOT on boom extension.
parenthesis)
**Capacity based on maximum boom angle
*Creep - not over 200 ft . of movement in any 30 minute period and not exceeding 1 mph
With boom nose sheaves down (in lower position), single, 2-part or 4-part line may be used. With boom nose sheaves up and out (low profile position), single or 2-part line may be used, with maximum boom angle limited to $70^{\circ}$.

RATED LIFTING CAPACITIES IN POUNDS ON RUBBER
PICK \& CARRY AND STATIONARY - DEFINED ARC OVER FRONT

| Radius | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feet | *21 (22.8) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) | *45 (46.4) | *52 (53.4) |
| 6 | 19,350 | 19,350 | 19,350 | 19,350 | **19,350 |  |  |
| 8 | 15,500 | 15,500 | 15,500 | 15,500 | 15,500 | **15,500 |  |
| 10 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | 12,800 | **12,800 |
| 12 | 10,800 | 10,800 | 10,800 | 10,800 | 10,800 | 10,800 | 10,800 |
| 14 | 9,310 | 9,310 | 9,310 | 9,310 | 9,310 | 9,310 | 9,310 |
| 16 | 8,100 | 8,100 | 8,100 | 8,100 | 8,100 | 8,100 | 8,100 |
| 18 |  | 7,070 | 7,070 | 7,070 | 7,070 | 7,070 | 7,070 |
| 20 |  | 6,150 | 6,150 | 6,150 | 6,150 | 6,150 | 6,150 |
| 22 |  |  | 5,230 | 5,230 | 5,230 | 5,230 | 5,230 |
| 24 |  |  | 4,500 | 4,500 | 4,500 | 4,500 | 4,500 |
| 26 |  |  | 3,910 | 3,910 | 3,910 | 3,910 | 3,910 |
| 28 |  |  |  | 3,430 | 3,430 | 3,430 | 3,430 |
| 30 |  |  |  | 3,020 | 3,020 | 3,020 | 3,020 |
| 32 |  |  |  |  | 2,680 | 2,680 | 2,680 |
| 34 |  |  |  |  | 2,380 | 2,380 | 2,380 |
| 36 |  |  |  |  | 2,120 | 2,120 | 2,120 |
| 38 |  |  |  |  |  | 1,890 | 1,890 |
| 40 |  |  |  |  |  | 1,690 | 1,690 |
| 44 |  |  |  |  |  |  | 1,350 |
| 48 |  |  |  |  |  |  | 1,070 |
| Minimum boom angle ( $0^{\circ}$ ) for indicated length (no load) |  |  |  |  |  |  | 0 |
| Maximum boom length (ft.) at $0^{\circ}$ boom angle (no load) |  |  |  |  |  |  | 52 |
| Lifting Capacity at Zero Degree Boom Angle On Rubber - Defined Arc and Pick \& Carry |  |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |  |
|  | *21 (22.8) | *25 (26.4) | *30 (31.4) | *35 (36.4) | *40 (41.4) | *45 (46.4) | *52 (53.4) |
| $0^{\circ}$ | $\begin{aligned} & \hline 7,190 \\ & (17.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 5,550 \\ & (21.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 3,850 \\ & (26.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2,800 \\ & (31.3) \end{aligned}$ | $\begin{aligned} & 2,090 \\ & (36.3) \end{aligned}$ | $\begin{aligned} & 1,580 \\ & (41.3) \end{aligned}$ | $\begin{aligned} & 1,060 \\ & (48.3) \end{aligned}$ |

Note: () Reference radii in feet. (Applicable to boom nose sheaves A6-829-10074
*Boom length varies between boom nose sheaves in down position (in bold), or up \& out position (in parenthesis).
**Capacity based on maximum boom angle.

## 15 FT. EXTENSION RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - 360º

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| 6 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |  |
| 8 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |  |
| 10 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 |  |
| 12 | 8,370 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 |
| 14 | 7,510 | 8,150 | 8,780 | 9,080 | 9,080 | 9,080 | 9,080 |
| 16 | 6,810 | 7,400 | 8,060 | 8,410 | 8,630 | 8,980 | 9,080 |
| 18 | 6,220 | 6,770 | 7,440 | 7,810 | 8,050 | 8,430 | 8,480 |
| 20 | 5,630 | 6,240 | 6,920 | 7,500 | 7,770 | 7,940 | 8,030 |
| 22 | 5,110 | 5,690 | 6,430 | 7,030 | 7,320 | 7,510 | 7,630 |
| 24 | 4,680 | 5,210 | 5,820 | 6,180 | 6,460 | 7,120 | 7,270 |
| 26 | 4,310 | 4,800 | 5,490 | 5,840 | 6,320 | 6,760 | 6,760 |
| 28 | 4,000 | 4,450 | 5,090 | 5,730 | 5,980 | 5,980 | 5,980 |
| 30 | 3,720 | 4,140 | 4,740 | 5,330 | 5,330 | 5,330 | 5,330 |
| 32 | 3,470 | 3,870 | 4,430 | 4,780 | 4,780 | 4,780 | 4,780 |
| 34 |  | 3,630 | 4,160 | 4,310 | 4,310 | 4,310 | 4,310 |
| 36 |  | 3,410 | 3,900 | 3,900 | 3,900 | 3,900 | 3,900 |
| 38 |  |  | 3,540 | 3,540 | 3,540 | 3,540 | 3,540 |
| 40 |  |  | 3,230 | 3,230 | 3,230 | 3,230 | 3,230 |
| 45 |  |  |  | 2,590 | 2,590 | 2,590 | 2,590 |
| 50 |  |  |  |  | 2,090 | 2,090 | 2,090 |
| 55 |  |  |  |  |  | 1,690 | 1,690 |
| 60 |  |  |  |  |  |  | 1,370 |
| Minimum boom angle ( ${ }^{\circ}$ ) for indicated length (no load) |  |  |  |  |  |  | 0 |
| Maximum boom length (ft.) at $0^{\circ}$ boom angle (no load) |  |  |  |  |  |  | 52 |
| Lifting Capacity at Three Degree Boom Angle On Outriggers Fully Extended - $360^{\circ}$ |  |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |  |
|  | 21 | 25 | 30 | 35 | 40 | 45 |  |
| $3^{\circ}$ | $\begin{aligned} & 3,210 \\ & (33.4) \end{aligned}$ | $\begin{gathered} 3,210 \\ (37) \end{gathered}$ | $\begin{gathered} 2,950 \\ (42) \end{gathered}$ | $\begin{gathered} 2,370 \\ (47) \end{gathered}$ | $\begin{gathered} 1,920 \\ (52) \end{gathered}$ | $\begin{aligned} & 1,550 \\ & (57) \end{aligned}$ | $\begin{aligned} & 1,150 \\ & (64) \end{aligned}$ |

Note: ( ) Ref. radii in feet.
NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $85 \%$ of tipping loads on outriggers in accordance with SAE J765.
2. 15 ft . boom extension may be used for single line lifting service only.
3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom extension occurs rapidly and without advance warning.
4. Capacities listed are with fully extended outriggers only.
5. When lifting loads the minimum allowable boom angle is $3^{\circ}$.

15 FT. EXTENSION
RATED LIFTING CAPACITIES IN POUNDS ON RUBBER
STATIONARY $360^{\circ}$

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| 6 | 9,080 | 9,080 | **9,080 |  |  |  |  |
| 8 | 9,080 | 9,080 | 9,080 | **9,080 |  |  |  |
| 10 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |
| 12 | 7,970 | 7,970 | 7,970 | 7,910 | 7,860 | 7,860 |  |
| 14 | 6,600 | 6,600 | 6,480 | 6,480 | 6,330 | 6,330 | 6,220 |
| 16 | 5,480 | 5,380 | 5,330 | 5,280 | 5,280 | 5,230 | 5,180 |
| 18 | 4,670 | 4,550 | 4,520 | 4,520 | 4,520 | 4,340 | 4,340 |
| 20 | 3,950 | 3,830 | 3,700 | 3,700 | 3,650 | 3,650 | 3,600 |
| 22 | 3,370 | 3,270 | 3,210 | 3,210 | 3,110 | 3,110 | 3,110 |
| 24 | 2,880 | 2,850 | 2,750 | 2,700 | 2,600 | 2,550 | 2,450 |
| 26 | 2,510 | 2,410 | 2,360 | 2,250 | 2,200 | 2,200 | 2,150 |
| 28 | 2,160 | 2,160 | 2,040 | 1,940 | 1,890 | 1,890 | 1,790 |
| 30 | 1,890 | 1,840 | 1,740 | 1,690 | 1,580 | 1,580 | 1,580 |
| 32 | 1,640 | 1,580 | 1,430 | 1,430 | 1,370 | 1,370 | 1,370 |
| 34 |  | 1,370 | 1,300 | 1,220 | 1,170 | 1,120 | 1,120 |
| 36 |  | 1,230 | 1,120 | 1,070 | 970 | 920 | 920 |
| Minimum boom angle ( ${ }^{\circ}$ ) for indicated length (no load) |  |  |  | 31 | 38 | 44 | 50 |
| Maximum boom length (ft.) at $0^{\circ}$ boom angle (no load) |  |  |  | 30 |  |  |  |
| Lifting Capacity at Three Degree Boom Angle On Rubber Stationary - $360^{\circ}$ |  |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |  |
|  | 21 | 25 |  |  |  |  |  |
| $3^{\circ}$ | $\begin{array}{r} 1,510 \\ (33.4) \\ \hline \end{array}$ | $\begin{aligned} & 1,130 \\ & (37) \\ & \hline \end{aligned}$ |  |  |  |  |  |
| Note: ( ) Ref. radii in feet.. <br> **This capacity based on maximum boom angle. |  |  |  |  |  | A6-829-100755A |  |

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765
2. 15 ft . boom extension may be used for single line lifting service only.
3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with $385 / 65$ R22.5 (J) Firestone $T 839$ tires at 140 psi cold inflation pressure.
5. Capacities are applicable only with machine on firm level surface.
6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation
pressures. Damaged tires are hazardous to safe operation of crane.
7. 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.
**This capacity based on maximum boom angle.
8. When lifting loads the minimum allowable boom angle is $3^{\circ}$.

15 FT. EXTENSION
RATED LIFTING CAPACITIES IN POUNDS ON RUBBER STATIONARY - DEFINED ARC OVER FRONT

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| 6 | 9,080 | 9,080 | 9,080 | **9,080 |  |  |  |
| 8 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |  |
| 10 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | **9,080 |  |
| 12 | 8,370 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | **9,080 |
| 14 | 7,510 | 8,150 | 8,780 | 9,080 | 9,080 | 9,080 | 9,080 |
| 16 | 6,810 | 7,400 | 8,060 | 8,410 | 8,600 | 8,600 | 8,600 |
| 18 | 6,220 | 6,770 | 7,440 | 7,600 | 7,600 | 7,600 | 7,600 |
| 20 | 5,630 | 6,240 | 6,760 | 6,760 | 6,760 | 6,760 | 6,760 |
| 22 | 5,110 | 5,690 | 5,910 | 5,910 | 5,910 | 5,910 | 5,910 |
| 24 | 4,680 | 5,110 | 5,110 | 5,110 | 5,110 | 5,110 | 5,110 |
| 26 | 4,310 | 4,450 | 4,450 | 4,450 | 4,450 | 4,450 | 4,450 |
| 28 | 3,920 | 3,920 | 3,920 | 3,920 | 3,920 | 3,920 | 3,920 |
| 30 | 3,470 | 3,470 | 3,470 | 3,470 | 3,470 | 3,470 | 3,470 |
| 32 | 3,080 | 3,080 | 3,080 | 3,080 | 3,080 | 3,080 | 3,080 |
| 34 |  | 2,750 | 2,750 | 2,750 | 2,750 | 2,750 | 2,750 |
| 36 |  | 2,460 | 2,460 | 2,460 | 2,460 | 2,460 | 2,460 |
| 38 |  |  | 2,210 | 2,210 | 2,210 | 2,210 | 2,210 |
| 40 |  |  | 1,990 | 1,990 | 1,990 | 1,990 | 1,990 |
| 45 |  |  |  | 1,530 | 1,530 | 1,530 | 1,530 |
| 50 |  |  |  |  | 1,170 | 1,170 | 1,170 |
| 55 |  |  |  |  |  | 880 | 880 |
| Minimum boom angle ( ${ }^{\circ}$ ) for indicated length (no load) |  |  |  |  |  |  | 0 |
| Maximum boom length (ft.) at $0^{\circ}$ boom angle (no load) |  |  |  |  |  |  | 52 |
| Lifting Capacity at Three Degree Boom Angle On Rubber - Defined Arc Over Front |  |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |  |
|  | 21 | 25 | 30 | 35 | 40 | 45 |  |
| $3^{\circ}$ | $\begin{aligned} & 2,850 \\ & (33.4) \end{aligned}$ | $\begin{gathered} 2,330 \\ (37) \end{gathered}$ | $\begin{gathered} 1,790 \\ (42) \end{gathered}$ | $\begin{gathered} 1,370 \\ (47) \\ \hline \end{gathered}$ | $\begin{gathered} 1,050 \\ (52) \\ \hline \end{gathered}$ | $\begin{aligned} & 780 \\ & \text { (57) } \end{aligned}$ |  |

This capacity is based upon maximum boom angle.
A6-829-100756

[^0]15 FT. OFFSETTABLE EXTENSION AT $0^{\circ}$ OFFSET
RATED LIFTING CAPACITIES IN POUNDS
ONOUTRIGGERS FULLY EXTENDED-360

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| 6 | 9,080 | 9,080 | *9,080 |  |  |  |  |
| 8 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |  |
| 10 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | *9,080 |  |
| 12 | 8,370 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | *9,080 |
| 14 | 7,510 | 8,150 | 8,780 | 9,080 | 9,080 | 9,080 | 9,080 |
| 16 | 6,810 | 7,400 | 8,060 | 8,410 | 8,630 | 8,980 | 9,080 |
| 18 | 6,160 | 6,770 | 7,440 | 7,810 | 8,050 | 8,430 | 8,480 |
| 20 | 5,550 | 6,180 | 6,920 | 7,500 | 7,770 | 7,940 | 8,030 |
| 22 | 5,050 | 5,620 | 6,430 | 7,030 | 7,320 | 7,510 | 7,630 |
| 24 | 4,620 | 5,150 | 5,820 | 6,180 | 6,460 | 7,120 | 7,270 |
| 26 | 4,260 | 4,740 | 5,420 | 5,840 | 6,320 | 6,600 | 6,580 |
| 28 | 3,940 | 4,390 | 5,020 | 5,650 | 5,830 | 5,830 | 5,830 |
| 30 | 3,670 | 4,090 | 4,670 | 5,180 | 5,180 | 5,180 | 5,180 |
| 32 | 3,420 | 3,820 | 4,370 | 4,630 | 4,630 | 4,630 | 4,630 |
| 34 |  | 3,580 | 4,100 | 4,160 | 4,160 | 4,160 | 4,160 |
| 36 |  | 3,370 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 |
| 38 |  |  | 3,400 | 3,400 | 3,400 | 3,400 | 3,400 |
| 40 |  |  | 3,080 | 3,080 | 3,080 | 3,080 | 3,080 |
| 45 |  |  |  | 2,440 | 2,440 | 2,440 | 2,440 |
| 50 |  |  |  |  | 1,940 | 1,940 | 1,940 |
| 55 |  |  |  |  |  | 1,550 | 1,550 |
| 60 |  |  |  |  |  |  | 1,220 |
| Lifting Capacity at Three Degree Boom Angle On Outriggers Fully Extended - $360^{\circ}$ |  |  |  |  |  |  |  |
| Boom | Main Boom Length in Feet |  |  |  |  |  |  |
| Angle | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| $3^{\circ}$ | $\begin{aligned} & 3,210 \\ & (33.4) \end{aligned}$ | $\begin{gathered} 3,210 \\ (37) \end{gathered}$ | $\begin{gathered} 2,800 \\ (42) \end{gathered}$ | $\begin{gathered} \hline 2,230 \\ (47) \end{gathered}$ | $\begin{aligned} & 1,770 \\ & (52) \end{aligned}$ | $\begin{aligned} & \hline 1,410 \\ & (57) \end{aligned}$ | $\begin{gathered} 1,010 \\ (64) \end{gathered}$ |

NThis capacity based on maximum boom angle.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $85 \%$ of tipping loads on outriggers in accordance with SAE J765
2. 15 ft offsettable boom extension may be used for single line lifting service only.
3. WARNING: Operation of this machine with heavier loads than the capacities listed is strictly prohibited. Machine tipping with boom
extension occurs rapidly and without advance warning
4. No load stability on outrigers fully extended $360^{\circ}$ with 15 ft . offsettable extension installed at $0^{\circ}$ offset:
a. Minimum boom angle for 52 ft . main boom $=0^{\circ}$
b. Maximum main boom length at $0^{\circ}$ main boom angle $=52 \mathrm{ft}$
5. When lifting loads the minimum allowable boom angle is $3^{\circ}$ at $0^{\circ}$ offset.

15 FT. OFFSETTABLE EXTENSION AT $45^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS

ON OUTRIGGERS FULLY EXTENDED - $360^{\circ}$

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| 12 | 4,450 | *4,500 |  |  |  |  |  |
| 14 | 4,280 | 4,350 | *4,420 | *4,480 |  |  |  |
| 16 | 4,140 | 4,210 | 4,290 | 4,360 | *4,420 | *4,460 |  |
| 18 | 4,020 | 4,090 | 4,180 | 4,250 | 4,310 | 4,360 | 4,420 |
| 20 | 3,920 | 3,990 | 4,080 | 4,150 | 4,220 | 4,270 | 4,330 |
| 22 | 3,850 | 3,910 | 3,990 | 4,070 | 4,130 | 4,190 | 4,260 |
| 24 | 3,800 | 3,850 | 3,920 | 3,990 | 4,060 | 4,120 | 4,180 |
| 26 | 3,710 | 3,800 | 3,860 | 3,930 | 3,990 | 4,050 | 4,120 |
| 28 |  | 3,730 | 3,820 | 3,870 | 3,930 | 3,990 | 4,060 |
| 30 |  |  | 3,780 | 3,830 | 3,880 | 3,940 | 4,000 |
| 32 |  |  | 3,710 | 3,800 | 3,840 | 3,890 | 3,950 |
| 34 |  |  |  | 3,750 | 3,810 | 3,850 | 3,910 |
| 36 |  |  |  | 2,930 | 3,750 | 3,750 | 3,750 |
| 38 |  |  |  |  | 3,400 | 3,400 | 3,400 |
| 40 |  |  |  |  |  | 3,080 | 3,080 |
| 45 |  |  |  |  |  |  | 2,440 |
| Lifting Capacity at Forty Eight Degree Boom Angle On Outriggers Fully Extended - $360^{\circ}$ |  |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |  |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| $48^{\circ}$ ** | $\begin{aligned} & 3,710 \\ & (26.7) \end{aligned}$ | $\begin{array}{r} 3,710 \\ (29.2) \\ \hline \end{array}$ | $\begin{array}{r} 3,630 \\ (32.7) \\ \hline \end{array}$ | $\begin{aligned} & 2,810 \\ & (36.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 2,180 \\ & (39.8) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,680 \\ & (43.3) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,130 \\ & (48.3) \\ & \hline \end{aligned}$ |
| Note: ( ) Ref. radii in feet. <br> *This capacity based on maximum boom angle. <br> **Radii are with extension at horizontal. |  |  |  |  |  |  |  |

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $85 \%$ of tipping loads on outriggers in accordance with SAE J765.
. 15 ft . offsettable boom extension may be used for single line lifting service only
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
2. No load stability on outriggers fully extended $360^{\circ}$ with 15 ft . offsettable extension installed at $45^{\circ}$ offset:
a. Minimum boom angle for 52 ft . main boom $=45^{\circ}$
b. Maximum main boom length at $45^{\circ}$ main boom angle $=52 \mathrm{ft}$.
3. When lifting loads the minimum allowable boom angle is $48^{\circ}$ at $45^{\circ}$ offset

15 FT. OFFSETTABLE EXTENSION AT $0^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY $360^{\circ}$

| Radius | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Feet | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| 6 | 9,080 | 9,080 | *9,080 |  |  |  |  |
| 8 | 9,080 | 9,080 | 9,080 | *9,080 |  |  |  |
| 10 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |
| 12 | 7,970 | 7,970 | 7,910 | 7,910 | 7,860 | 7,860 |  |
| 14 | 6,360 | 6,360 | 6,360 | 6,360 | 6,220 | 6,220 | *6,220 |
| 16 | 5,280 | 5,280 | 5,180 | 5,180 | 5,180 | 5,180 | 5,180 |
| 18 | 4,350 | 4,350 | 4,350 | 4,350 | 4,150 | 4,100 | 4,000 |
| 20 | 3,770 | 3,720 | 3,620 | 3,500 | 3,450 | 3,450 | 3,330 |
| 22 | 3,230 | 3,130 | 3,020 | 2,910 | 2,910 | 2,830 | 2,780 |
| 24 | 2,730 | 2,680 | 2,570 | 2,520 | 2,470 | 2,370 | 2,370 |
| 26 | 2,420 | 2,310 | 2,210 | 2,160 | 2,110 | 2,010 | 2,010 |
| 28 | 2,060 | 2,010 | 1,960 | 1,840 | 1,730 | 1,730 | 1,730 |
| 30 | 1,820 | 1,690 | 1,590 | 1,540 | 1,490 | 1,490 | 1,490 |
| 32 | 1,580 | 1,470 | 1,350 | 1,300 | 1,240 | 1,240 | 1,240 |
| 34 |  | 1,250 | 1,190 | 1,120 | 1,120 | 1,010 | 1,010 |
| 36 |  | 1,100 | 1,040 | 920 | 920 | 810 | 810 |
| Lifting Capacity at Three Degree Boom Angle On Rubber - $\mathbf{3 6 0}{ }^{\circ}$ |  |  |  |  |  |  |  |
| Boom | Main Boom Length in Feet |  |  |  |  |  |  |
| Angle | 21 | 25 |  |  |  |  |  |
| $3^{\circ}$ | $\begin{aligned} & 1,430 \\ & (33.4) \\ & \hline \end{aligned}$ | $\begin{gathered} 1,090 \\ (37) \\ \hline \end{gathered}$ |  |  |  |  |  |

*This capacity based on maximum boom angle.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765.
2. 15 ft . offsettable boom extension may be used for single line lifting service only.
3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with 385/65R22.5(J) Firestone T839 tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation
pressures. Damaged tires are hazardous to safe operation of crane.
6. 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.
7. No load stability on rubber $360^{\circ}$ with 15 ft . offsettable extension installed at $0^{\circ}$ offset:
a. Minimum boom angle for 52 ft . main boom $=50^{\circ}$; for 45 ft . main boom $=43^{\circ}$; for 40 ft . main boom $=37^{\circ}$; for 35 ft . main boom = $29^{\circ}$
b. Maximum main boom length at $0^{\circ}$ main boom angle $=30 \mathrm{ft}$.
8. When lifting loads the minimum allowable boom angle is $3^{\circ}$ at $0^{\circ}$ offset.

15 FT. OFFSETTABLE EXTENSION AT $45^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY $360^{\circ}$

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| 12 | *4,450 | *4,500 |  |  |  |  |  |
| 14 | 4,280 | 4,350 | *4,420 | *4,480 |  |  |  |
| 16 | 4,140 | 4,210 | 4,290 | 4,360 | *4,420 |  |  |
| 18 | 4,020 | 4,090 | 4,180 | 4,250 | 4,310 | *4,360 |  |
| 20 | 3,860 | 3,860 | 3,860 | 3,860 | 3,860 | 3,860 | *3,860 |
| 22 | 3,290 | 3,290 | 3,290 | 3,290 | 3,290 | 3,290 | 3,290 |
| 24 | 2,820 | 2,820 | 2,820 | 2,820 | 2,820 | 2,820 | 2,820 |
| 26 | 2,430 | 2,430 | 2,430 | 2,430 | 2,430 | 2,430 | 2,430 |
| 28 |  | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 | 2,100 |
| 30 |  |  | 1,820 | 1,820 | 1,820 | 1,820 | 1,820 |
| 32 |  |  | 1,580 | 1,580 | 1,580 | 1,580 | 1,580 |
| 34 |  |  |  | 1,360 | 1,360 | 1,360 | 1,360 |
| 36 |  |  |  | 1,110 | 1,110 | 1,110 | 1,110 |
| 38 |  |  |  |  | 1,000 | 930 | 930 |
| Lifting Capacity at Forty Eight Degree Boom Angle On Rubber - $360^{\circ}$ |  |  |  |  |  |  |  |
| Boom | Main Boom Length in Feet |  |  |  |  |  |  |
| Angle | 21 | 25 | 30 | 35 | 40 |  |  |
| $48^{\circ}$ ** | $\begin{aligned} & 2,310 \\ & (26.7) \end{aligned}$ | $\begin{aligned} & 1,930 \\ & (29.2) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,500 \\ & (32.7) \\ & \hline \end{aligned}$ | $\begin{aligned} & 1,060 \\ & (36.3) \\ & \hline \end{aligned}$ | $\begin{gathered} 770 \\ (39.8) \end{gathered}$ |  |  |

Note: ( ) Ref. radii in feet.
This () Red with the on maximum boom angle.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765.
2. 15 ft . offsettable boom extension may be used for single line lifting service only.
3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with $385 / 65$ R22.5(J) Firestone $T 839$ tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
6. 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.
7. No load stability on rubber $360^{\circ}$ with 15 ft . offsettable extension installed at $45^{\circ}$ offset:
a. Minimum boom angle for 52 ft . main boom $=56^{\circ}$
b. Maximum main boom length at $45^{\circ}$ main boom angle $=45 \mathrm{ft}$.
8. When lifting loads the minimum allowable boom angle is $48^{\circ}$ at $45^{\circ}$ offset.

15 FT. OFFSETTABLE EXTENSION AT $0^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

STATIONARY - DEFINED ARC OVER FRONT

| Radius in Feet | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| 6 | 9,080 | 9,080 | *9,080 |  |  |  |  |
| 8 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |  |
| 10 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 |  |  |
| 12 | 8,370 | 9,080 | 9,080 | 9,080 | 9,080 | 9,080 | *9,080 |
| 14 | 7,510 | 8,150 | 8,780 | 9,080 | 9,080 | 9,080 | 9,080 |
| 16 | 6,810 | 7,400 | 8,060 | 8,170 | 8,170 | 8,170 | 8,170 |
| 18 | 6,160 | 6,770 | 7,330 | 7,330 | 7,330 | 7,330 | 7,330 |
| 20 | 5,550 | 6,180 | 6,590 | 6,590 | 6,590 | 6,590 | 6,590 |
| 22 | 5,050 | 5,620 | 5,720 | 5,720 | 5,720 | 5,720 | 5,720 |
| 24 | 4,620 | 4,920 | 4,920 | 4,920 | 4,920 | 4,920 | 4,920 |
| 26 | 4,260 | 4,280 | 4,280 | 4,280 | 4,280 | 4,280 | 4,280 |
| 28 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 |
| 30 | 3,310 | 3,310 | 3,310 | 3,310 | 3,310 | 3,310 | 3,310 |
| 32 | 2,930 | 2,930 | 2,930 | 2,930 | 2,930 | 2,930 | 2,930 |
| 34 |  | 2,600 | 2,600 | 2,600 | 2,600 | 2,600 | 2,600 |
| 36 |  | 2,320 | 2,320 | 2,320 | 2,320 | 2,320 | 2,320 |
| 38 |  |  | 2,070 | 2,070 | 2,070 | 2,070 | 2,070 |
| 40 |  |  | 1,850 | 1,850 | 1,850 | 1,850 | 1,850 |
| 45 |  |  |  | 1,400 | 1,400 | 1,400 | 1,400 |
| 50 |  |  |  |  | 1,040 | 1,040 | 1,040 |
| Lifting Capacity at Three Degree Boom Angle On Rubber - Defined Arc Over Front |  |  |  |  |  |  |  |
| Boom | Main Boom Length in Feet |  |  |  |  |  |  |
| Angle | 21 | 25 | 30 | 35 | 40 | 45 |  |
| $3^{\circ}$ | $\begin{aligned} & 2,700 \\ & (33.4) \end{aligned}$ | $\begin{gathered} 2,190 \\ (37) \end{gathered}$ | $\begin{gathered} 1,650 \\ (42) \end{gathered}$ | $\begin{gathered} 1,240 \\ (47) \end{gathered}$ | $\begin{aligned} & 920 \\ & (52) \end{aligned}$ | $\begin{aligned} & 620 \\ & (57) \end{aligned}$ |  |

${ }^{*}$ This capacity based on maximum boom angle.

NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765.
2. 15 ft . offsettable boom extension may be used for single line lifting service only.
3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with $385 / 65$ R22.5 (J) Firestone $T 839$ tires at 140 psi cold inflation pressure. 5. Capacities are applicable only with machine on firm level surface
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation pressures. Damaged tires are hazardous to safe operation of crane.
6. 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.
7. No load stability on rubber (defined arc) with 15 ft . offsettable extension installed at $0^{\circ}$ offset:
a. Minimum boom angle for 52 ft . main boom $=21^{\circ}$
b. Maximum main boom length at $0^{\circ}$ main boom angle $=45 \mathrm{ft}$.
8. When lifting loads the minimum allowable boom angle is $3^{\circ}$ at $0^{\circ}$ offset

15 FT. OFFSETTABLE EXTENSION AT $45^{\circ}$ OFFSET RATED LIFTING CAPACITIES IN POUNDS ON RUBBER

Stationary - defined arc over front

| $\begin{gathered} \text { Radius } \\ \text { in } \\ \text { Feet } \end{gathered}$ | Main Boom Length in Feet |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| 12 | 4,450 | *4,500 |  |  |  |  |  |
| 14 | 4,280 | 4,350 | *4,420 | *4,480 |  |  |  |
| 16 | 4,140 | 4,210 | 4,290 | 4,360 | *4,420 |  |  |
| 18 | 4,020 | 4,090 | 4,180 | 4,250 | 4,310 | 4,360 |  |
| 20 | 3,920 | 3,990 | 4,080 | 4,150 | 4,220 | 4,270 | 4,330 |
| 22 | 3,850 | 3,910 | 3,990 | 4,070 | 4,130 | 4,190 | 4,260 |
| 24 | 3,800 | 3,850 | 3,920 | 3,990 | 4,060 | 4,120 | 4,180 |
| 26 | 3,710 | 3,800 | 3,860 | 3,930 | 3,990 | 4,050 | 4,120 |
| 28 |  | 3,730 | 3,750 | 3,750 | 3,750 | 3,750 | 3,750 |
| 30 |  |  | 3,310 | 3,310 | 3,310 | 3,310 | 3,310 |
| 32 |  |  | 2,930 | 2,930 | 2,930 | 2,930 | 2,930 |
| 34 |  |  |  | 2,600 | 2,600 | 2,600 | 2,600 |
| 36 |  |  |  | 2,320 | 2,320 | 2,320 | 2,320 |
| 38 |  |  |  |  | 2,070 | 2,070 | 2,070 |
| 40 |  |  |  |  |  | 1,850 | 1,850 |
| 45 |  |  |  |  |  |  | 1,400 |
| Lifting Capacity at Forty Eight Degree Boom Angle On Rubber - Defined Arc Over Front |  |  |  |  |  |  |  |
| Boom Angle | Main Boom Length in Feet |  |  |  |  |  |  |
|  | 21 | 25 | 30 | 35 | 40 | 45 | 52 |
| $48^{\circ}$ ** | $\begin{array}{r} 3,710 \\ (26.7) \\ \hline \end{array}$ | $\begin{aligned} & 3,480 \\ & (29.2) \end{aligned}$ | $\begin{aligned} & 2,810 \\ & (32.7) \end{aligned}$ | $\begin{aligned} & 2,280 \\ & (36.3) \end{aligned}$ | $\begin{aligned} & 1,870 \\ & (39.8) \end{aligned}$ | $\begin{aligned} & 1,540 \\ & (43.3) \end{aligned}$ | $\begin{aligned} & 1,130 \\ & (48.3) \end{aligned}$ |
| Note: ( ) Ref. radii in feet. <br> *This capacity based on maximum boom angle. |  |  |  |  |  |  | A6-829-100753A |

Thi ( Bacity fleet
** Radii are with the extension at horizontal.

## NOTES:

1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765.
2. 15 ft . offsettable boom extension may be used for single line lifting service only
3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
4. Capacities are applicable to machines equipped with 385/65R22.5(J) Firestone T839 tires at 140 psicold inflation pressure 5. Capacities are applicable only with machine on firm level surface.
5. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation
pressures. Damaged tires are hazardous to safe operation of crane.
6. 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
7. No load stability on rubber (defined arc) with 15 ft . offsettable extension installed at $45^{\circ}$ offset:
a. Minimum boom angle for 52 ft . main boom $=45^{\circ}$
b. Maximum main boom length at $45^{\circ}$ main boom angle $=52 \mathrm{ft}$.
8. When lifting loads the minimum allowable boom angle is $48^{\circ}$ at $45^{\circ}$ offset.


AREA 1
43.2 sq. ft. / $4.01 \mathrm{~m}^{2} \quad 13,195 \mathrm{lb} . / 5,985 \mathrm{~kg}$

AREA 2
23.1 sq. ft. / $2.15 \mathrm{~m}^{2} \quad 6,805 \mathrm{lb} . / 3,087 \mathrm{~kg}$

TOTAL
66.3 sq . ft. / $6.16 \mathrm{~m}^{2} \quad 20,000 \mathrm{lb} . / 9,072 \mathrm{~kg}$

1. Maximum travel speed with any or all loads - $2.5 \mathrm{MPH}(4.0 \mathrm{~km} / \mathrm{h})$
2. Loads to be transported on smooth level firm surfaces only.
3. Boom must be retracted and in center forward position.
4. Any combination or total of areas $1 \& 2$ may be used.
5. Lifting is not permitted when carry deck is loaded except for loading and unloading carry deck.
6. Rated pick and carry loads may be transported on deck area 1 provided the load is cribbed directly on the frame rails.

LINE PULLS AND REEVING INFORMATION

| HOISTS | CABLE SPECS. | PERMISSIBLE <br> LINE PULLS | NOMINAL CABLE LENGTH |
| :---: | :---: | :---: | :---: |
| Main Model PD12C | 5/8 in. (16 mm) 18x19 Class Rotation Resistant Min. Breaking Strength 45,400 lbs. | 9,080 lbs. | 250 ft ( 40 ' boom) 310 ft ( 52 l boom) |
| Main Model PD12C | 5/8 in. (16 mm) 6x37 Class <br> EIPS, IWRC Special Flexible <br> Min. Breaking Strength 41,200 lbs. | 9,080 lbs. | 250 ft. (40' boom) 310 ft ( 52 l boom) |

## WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

| 40 FT. MAIN BOOM |  |
| :---: | :---: |
| 15' FIXED (NON-OFFSETTABLE) |  |
| Erected | 870 lb . |
| Stowed | 85 lb . |
| 15' OFFSETTABLE |  |
| Erected | 1420 lb. |
| Stowed | 260 lb . |
| 52 FT. MAIN BOOM |  |
| 15' FIXED (NON-OFFSETTABLE) |  |
| Erected | 870 lb . |
| Stowed | 160 lb . |
| 15' OFFSETTABLE |  |
| Erected | 1420 lb. |
| Stowed | 350 lb . |


| HOOKBLOCKS and HEADACHE BALLS: |  |
| :--- | :---: |
| 16.5 ton (15 MT) 2 Sheave (w/o quick reeve) | 240 lb. |
| 16.5 ton (15 MT), 2 Sheave (w/quick reeve) | 241 lb. |
| 11 ton (10 MT), 1 Sheave (w/quick reeve) | 204 lb. |
| 5 ton Overhaul Ball (w/ quick reeve) | 148 lb. |

+Refer to rating plate for actual weight.

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

NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances MUST BE MADE for their combined weights. Weights are for Grove furnished equipment.

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[^0]:    NOTES:

    1. All capacities above the bold line are based on structural strength of boom extension and do not exceed $75 \%$ of tipping loads on rubber in accordance with SAE J765.
    2. 15 ft . boom extension may be used for single line lifting service only
    3. Defined Arc - Over front includes $6^{\circ}$ on either side of longitudinal centerline of machine. Pick and carry lifting NOT permitted.
    4. Capacities are applicable to machines equipped with 385/65R22.5 (J) Firestone T839 tires at 140 psi cold inflation pressure.
    5. Capacities are applicable only with machine on firm level surface
    6. All rubber lifting depends on proper tire inflation, capacity and condition. Capacities must be reduced for lower tire inflation
    pressures. Damaged tires are hazardous to safe operation of crane
    7. 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.
    8. When lifting loads the minimum allowable boom angle is $3^{\circ}$.
