



## **2384 B-Series Knuckleboom Loader**



*Built Better Than It Needs To Be*





The new Prentice 2384 B-Series Knuckleboom Loader combines high production and low fuel use. The enhanced engine and hydraulic power system, a choice of operating modes and an automatic idle system work together to give today's logger the best of both worlds – high production and low fuel consumption.

#### **Improved Fuel Economy & Performance**

A choice of 3 work modes is available at the flip of a switch: Power Mode for unmatched productivity in the most demanding applications; Run Mode for top fuel efficiency in lighter applications; and new Intermediate Mode for added flexibility. A new Automatic Idle Down feature, as well as enhanced engine and hydraulic systems, add even greater fuel efficiency in all modes. A 100-gallon removable fuel tank allows you to work up to 2-1/2 days without refueling when operating in Run Mode.

#### **Solid Structure**

The 32 ft. purpose-built delimbing boom features steel castings at the base end, mid-boom and main-stick end for supreme reliability and longevity. The sub-frame design is simple and clean, but engineered for long life providing a rock solid base for optimum stability.

#### **Improved Operators Module**

Upgrades to the line of sight control panel allows operators to call up a diagnostic screen with data on fuel hydraulic oil level, engine and hydraulic oil temperature and other machine vital signs. A new SAE J1939 diagnostic connection has been added for fast troubleshooting by trained mechanics.

The new B-Series loader includes a stronger and quieter operator cab module with a larger heating and air conditioning system. Other improvements to the cab include improved air flow venting to provide heat and cooling where needed most. A tachometer cup holder and coat hook come standard and XM radio is optional.

#### **Powerful System**

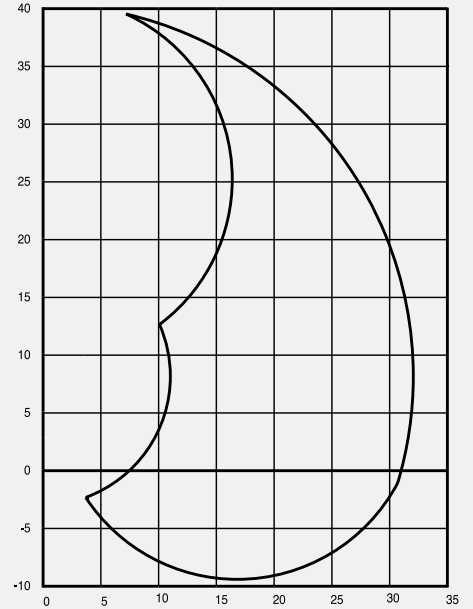
The custom-engineered, industry first, excavator-type hydraulic system forms the heart of the 2384 B-Series. The system is designed for fast cycle times, smooth operation and maximum reliability in delimbing and loading operations. Swing torque of 47,700 ft. lbs. and swing speed of 11 RPM increases loading and delimbing efficiency.

## 2384 B-SERIES LIFT CAPACITY

Lift Capacity Chart per SAE J2417 · Boom Type: Knuckleboom w/o Heel · Boom length: 32'

Do not attempt to lift or hold any load that is greater than these rated values at their specified lift point and height. The weight of the grapple and all lifting accessories must be deducted from the lift capacities shown.

| Lift Point<br>Height | Lift Point Radius |        |       |         |       |        |        |        |       |        |      |        |           |
|----------------------|-------------------|--------|-------|---------|-------|--------|--------|--------|-------|--------|------|--------|-----------|
|                      | 10'               | 3m     | 15'   | 4.6m    | 20'   | 6.1m   | 25'    | 7.6m   | 30'   | 9.1m   | 32'  | 9.8m   |           |
|                      | lbs.              | kg.    | lbs.  | kg.     | lbs.  | kg.    | lbs.   | kg.    | lbs.  | kg.    | lbs. | kg.    |           |
| 35'/10.6m            |                   |        |       |         |       |        |        |        |       |        |      |        | 100% Hyd  |
|                      |                   |        |       |         |       |        |        |        |       |        |      |        | Over End  |
|                      |                   |        |       |         |       |        |        |        |       |        |      |        | Over Side |
| 30'/9.1m             |                   |        |       |         | 11902 | 5398.7 |        |        |       |        |      |        | 100% Hyd  |
|                      |                   |        |       |         | 10355 | 4696.9 |        |        |       |        |      |        | Over End  |
|                      |                   |        |       |         | 10355 | 4696.9 |        |        |       |        |      |        | Over Side |
| 25'/7.6m             |                   |        |       |         | 12414 | 5630.9 | 10433  | 4732.4 |       |        |      |        | 100% Hyd  |
|                      |                   |        |       |         | 10800 | 4898.8 | 9077   | 4117.3 |       |        |      |        | Over End  |
|                      |                   |        |       |         | 10800 | 4898.8 | 9077   | 4117.3 |       |        |      |        | Over Side |
| 20'/6.1m             |                   |        | 12538 | 5687.1  | 12679 | 5751.1 | 11317  | 5133.3 |       |        |      |        | 100% Hyd  |
|                      |                   |        | 10908 | 4947.8  | 11031 | 5003.6 | 9846   | 4466.1 |       |        |      |        | Over End  |
|                      |                   |        | 10908 | 4947.8  | 11031 | 5003.6 | 9846   | 4466.1 |       |        |      |        | Over Side |
| 15'/4.6m             |                   |        | 16017 | 7265.2  | 14539 | 6594.8 | 12333  | 5594.2 | 9221  | 4182.6 | 5877 | 2665.8 | 100% Hyd  |
|                      |                   |        | 13935 | 6320.8  | 12649 | 5737.5 | 10730  | 4867.1 | 8022  | 3638.7 | 5113 | 2319.2 | Over End  |
|                      |                   |        | 13935 | 6320.8  | 12649 | 5737.5 | 10730  | 4867.1 | 8007* | 3631.9 | 5113 | 2319.2 | Over Side |
| 10'/3m               |                   |        | 20075 | 9105.9  | 15864 | 7195.8 | 13109  | 5946.1 | 9822  | 4455.2 | 5933 | 2691.2 | 100% Hyd  |
|                      |                   |        | 17465 | 7921.9  | 13802 | 6260.5 | 11405  | 5173.6 | 8522  | 3875.9 | 5162 | 2341.4 | Over End  |
|                      |                   |        | 17465 | 7921.9  | 13802 | 6260.5 | 10851* | 5173.6 | 7897  | 3582.2 | 5162 | 2341.4 | Over Side |
| 5'/1.5m              |                   |        | 22300 | 10155.1 | 16737 | 7591.8 | 13262  | 6015.5 | 9377  | 4253.4 | 6168 | 2797.8 | 100% Hyd  |
|                      |                   |        | 19401 | 8800.2  | 14561 | 6604.8 | 11538  | 5233.5 | 8158  | 3700.5 | 5366 | 2433.9 | Over End  |
|                      |                   |        | 19401 | 8800.2  | 14561 | 6604.8 | 10530* | 4776.4 | 7775* | 3526.7 | 5366 | 2433.9 | Over Side |
| 0 0.0                | 18187             | 8249.5 | 22682 | 10288.4 | 16653 | 7553.7 | 12695  | 5758.4 | 8170  | 3705.9 |      |        | 100% Hyd  |
|                      | 15823             | 7177.2 | 19733 | 8950.8  | 14488 | 6571.7 | 11045  | 5009.9 | 7108  | 3224.2 |      |        | Over End  |
|                      | 15823             | 7177.2 | 19733 | 8950.8  | 14488 | 6571.7 | 10290* | 4667.5 | 7108  | 3224.2 |      |        | Over Side |
| -5'/-1.5m            | 18116             | 8217.3 | 20463 | 9281.9  | 14953 | 6782.6 | 10737  | 4870.2 |       |        |      |        | 100% Hyd  |
|                      | 15761             | 7149.1 | 17803 | 8075.4  | 13009 | 5900.8 | 9341   | 4237   |       |        |      |        | Over End  |
|                      | 15761             | 7149.1 | 17803 | 8075.4  | 13009 | 5900.8 | 9341   | 4237   |       |        |      |        | Over Side |



### NOTES:

Do not attempt to lift or hold any load that is greater than the rated values over the end or side at their specified lift point and height. The weight of the grapple and all lifting accessories must be deducted from lift capacities shown.

1. The over end capacities and over side capacities do not exceed 87% of hydraulic limited capacity or 75% of stability limited capacity. Stability limited capacities are indicated with an asterisk (\*).
2. The lift point is located at the boom pivot pin.
3. Lift capacities are based on the machine standing on firm, uniform supporting surface. User must make allowances for job site conditions.
4. Operator should be fully acquainted with the Operator's Manual and all safety instructions furnished by Caterpillar® Forest Products prior to operating the machine.
5. Lift capacities are in compliance with SAE J2417, "Lift Capacity Calculation Method--Knuckleboom Log Loaders and Certain Forestry Equipment".



## 2384 B-SERIES SPECIFICATIONS

### Engines & Driveline

|  |     |
|--|-----|
| Cummins QSB 6.7 Tier 3, 160hp @ 1800 RPM   | STD |
| Cummins QSB 6.7 Tier 3, 173hp @ 2200 RPM Standard for circle saw slasher applications only | STD |
| Electrical: 12 V System  | STD |
| Circuit breaker protection   | STD |
| Master electrical disconnect switch  | STD |
| 2 Cab mounted work lights <sup>1</sup> , 2 Boom lights <sup>2</sup>                        | STD |
| Pump drive: direct   | STD |

### Operator's Cab

|  |     |
|--|-----|
| 38.5" X 56" right side mounted with isolation pads   | STD |
| Swing out operator protection guard  | STD |
| Tinted safety glass windows, Lexan skylight  | STD |
| Adjustable sun visor, windshield wiper/washer, horn, defroster fan, dome light, fire extinguisher        | STD |
| Fully adjustable seat with fold-up armrests  | STD |
| Pressurized cab with heat/air conditioning system with integral heat/AC ductwork with adjustable louvers | STD |
| Gauges - hourmeter, fuel gauge, oil pressure, volts, water temperature/SAE J1939 service diagnostic port | STD |
| Low hydraulic oil level and hydraulic filter warning system  | STD |
| Tachometer   | STD |
| 12V power point, cigarette lighter, wiring for 12V CB radio  | STD |
| Swing open door, right side sliding cab window   | STD |
| XM Radio Ready/CD Player   | OPT |

### Hydraulic System

|                       |   |     |
|-----------------------|---|-----|
| Pumps:                | Two variable displacement axial piston pumps with horsepower management control | STD |
| Flows:                | 110 GPM   | STD |
| Valves:               | Open Center/Negicon control   | STD |
| Pressure:             | 3500 PSI  | STD |
| Swing motor:          | Piston motor/planetary gear box with integral swing brake                       | STD |
| Swing speed:          | 11 RPM  | STD |
| Controls:             | Pilot joystick toggle switch controls for slasher/delimiter hydraulics          | STD |
|                       | Manual bar-up   | STD |
|                       | Single rocker type pilot swing pedal with automatic swing brake release         | STD |
|                       | Electrical stabilizer controls  | STD |
| Filtration:           | Single element in-tank return filter  | STD |
|                       | Case drain/pilot return filter  | STD |
|                       | Pilot supply filter   | STD |
|                       | Saw return filter   | STD |
| Swivel:               | Steel barrel with durabar core  | STD |
| Serviceability:       | Diagnostic service points on pumps  | STD |
| Auxiliary Hydraulics: | Bar slasher/delimiter hydraulics  | STD |
|                       | 75 GPM to ground saw, 45 GPM to topping saw                                     | STD |
|                       | Grapple saw hydraulics  | OPT |
| Cylinders:            | Main (2): 5" x 3" x 52.38"  | STD |
| Stick (1):            | 6" x 4" x 46"   | STD |
| Stabilizer            | (4): 6.5" x 4" x 22.12"   | STD |

### Structural

|                           |   |     |
|---------------------------|---|-----|
| Upper frame:              | Stress relieved upper frame with cross plate headside reinforcement | STD |
| Counterweight:            | 1,400 lbs.  | STD |
| Tailswing:                | 99.5"   | STD |
| Booms:                    | 32' knuckleboom   | STD |
| Heels:                    | Single "V" heel   | OPT |
|                           | Double "V" heel   | OPT |
|                           | 10" heel extension  | OPT |
| Grapple mounting knuckle: | 9" length   | STD |
|                           | 12" length  | OPT |
| Swing bearing:            | 51" outside diameter, external gear                                 | STD |
| Lower frame:              | Fabricated heavy duty, extended length center mount subframe        | STD |
|                           | Wide stance stabilizer legs, cylinder mounted lock valves           | STD |
|                           | Flat top subframe deck with bolt-on skid resistant fenders          | STD |
|                           | Dual bolt-on wide tread ladder                                      | STD |
| Turntable mounting:       | Centered turntable  | STD |
| Stabilizers (4):          | 186.4" Spread at grade  | STD |
|                           | 167" Spread at max down reach                                       | STD |
|                           | 16" Reach below grade   | STD |
|                           | 22" x 28" x .75" Pad size   | STD |

### Capacities

|            |             |   |
|------------|-------------|---|
| Fuel:      | 100 Gallons | Unit Weight                                     |
| Hydraulic: | 80 Gallons  |   |
|            |             | 32,200 (wet, less options, carrier and grapple) |



[www.prenticeforestry.com](http://www.prenticeforestry.com)

**Caterpillar Forest Products**  
100 S.L. White Blvd.  
LaGrange, GA 30241

We reserve the right to change specifications and to improve our products without notice or obligation.

Form No. PRKBL3-0309 · Printed in U.S.A.