

PRENTICE

**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 delimiting 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

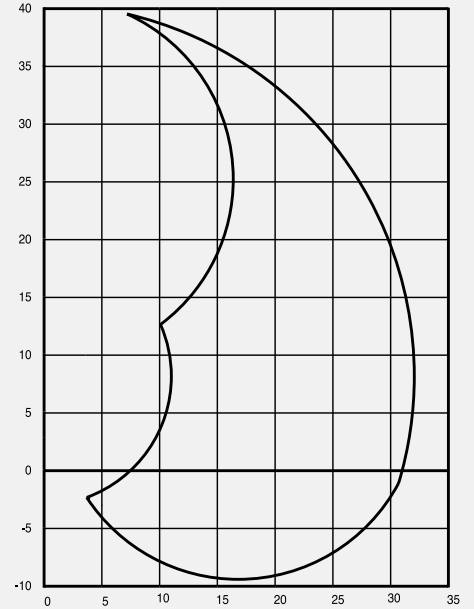
The custom-engineered, industry first, excavator-type hydraulic system forms the heart of the 2384 B-Series. The system is designed for fast cycle times, smooth operation and maximum reliability in delimiting and loading operations. Swing torque of 47,700 ft. lbs. and swing speed of 11 RPM increases loading and delimiting 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 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 Over End Over Side
					10355	4696.9								
					10355	4696.9								
25'/7.6m					12414	5630.9	10433	4732.4						100% Hyd Over End Over Side
					10800	4898.8	9077	4117.3						
					10800	4898.8	9077	4117.3						
20'/6.1m			12538	5687.1	12679	5751.1	11317	5133.3						100% Hyd Over End Over Side
			10908	4947.8	11031	5003.6	9846	4466.1						
			10908	4947.8	11031	5003.6	9846	4466.1						
15'/4.6m			16017	7265.2	14539	6594.8	12333	5594.2	9221	4182.6	5877	2665.8		100% Hyd Over End Over Side
			13935	6320.8	12649	5737.5	10730	4867.1	8022	3638.7	5113	2319.2		
			13935	6320.8	12649	5737.5	10730	4867.1	8007*	3631.9	5113	2319.2		
10'/3m			20075	9105.9	15864	7195.8	13109	5946.1	9822	4455.2	5933	2691.2		100% Hyd Over End Over Side
			17465	7921.9	13802	6260.5	11405	5173.6	8522	3875.9	5162	2341.4		
			17465	7921.9	13802	6260.5	10851*	5173.6	7897	3582.2	5162	2341.4		
5'/1.5m			22300	10155.1	16737	7591.8	13262	6015.5	9377	4253.4	6168	2797.8		100% Hyd Over End Over Side
			19401	8800.2	14561	6604.8	11538	5233.5	8158	3700.5	5366	2433.9		
			19401	8800.2	14561	6604.8	10530*	4776.4	7775*	3526.7	5366	2433.9		
0 0.0	18187	8249.5	22682	10288.4	16653	7553.7	12695	5758.4	8170	3705.9				100% Hyd Over End Over Side
	15823	7177.2	19733	8950.8	14488	6571.7	11045	5009.9	7108	3224.2				
	15823	7177.2	19733	8950.8	14488	6571.7	10290*	4667.5	7108	3224.2				
-5'/-1.5m	18116	8217.3	20463	9281.9	14953	6782.6	10737	4870.2						100% Hyd Over End Over Side
	15761	7149.1	17803	8075.4	13009	5900.8	9341	4237						
	15761	7149.1	17803	8075.4	13009	5900.8	9341	4237						



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 ¹ , 2 Boom lights ²	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 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
Tumble mounting:	Centered tumble	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
Hydraulic:	80 Gallons

Unit Weight

32,200 (wet, less options, carrier and grapple)



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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.