



2384C/2484C KNUCKLEBOOM LOADERS



	2384C	2484C
Engine	Cat® C6.6 ACERT™ Tier 4 Interim	Cat C6.6 ACERT Tier 4 Interim
Gross Power @ 1,800 rpm	129.5 kW (174 hp)	129.5 kW (174 hp)
Standard Knuckleboom Reach to Pin	9.8 m (32 ft)	9.8 m (32 ft)
Operating Weight (less grapple)	15 500 kg (34,100 lb)	16 582 kg (36,480 lb)

More Loads, Less Fuel

More Productive

Lift capacity at full reach has been increased 25% to 35%, depending on model. Plus, the new Prentice™ C Series is more fuel efficient and productive than the previous models. With the lift capacity, productivity boost and fuel savings, you can move more wood and lower your cost per ton.

Fuel Efficient

Three operating modes give you the flexibility to match hydraulic power to the job. For normal loading operations, the Economy Mode provides fast cycle times and the most fuel economy. The Run Mode allows more hydraulic power for more demanding jobs and the Power Mode provides the most muscle for heavy duty delimbing, slashing and loading applications.

Upgraded Hydraulics

Multi-functioning is fast and smooth. The new excavator-style Negacon piston pump hydraulic system is robust and reliable with a simple valve design and bigger spools to allow fluid to pass through more easily.

Reliable

Larger condenser, solid state controls, Cat ToughGuard™ hoses and O-ring face seals, and beefy boom tube clamps increase reliability.

Contents

Hydraulics3

Power Train4

Operator Station5

Electronics6

Structure and Subframe6

Boom and Stick7

Grapples8

Timber Merchandising System9

Owning and Operating Costs10

Serviceability11

Customer Support12

Sustainability12

Specifications13

Standard Equipment17

Optional Equipment18

Prentice knuckleboom loaders are known for superior multifunction capability, excellent visibility and heavy-duty booms and structures. Now the Prentice C Series knuckleboom loaders feature a new more fuel efficient power system, an upgraded hydraulic system for greater reliability and significantly more lift at full reach than previous models. Like the smaller model, the Prentice 2484C, now has a right-side operator’s cab with a walk-up platform and enlarged doorway for enhanced access to the cab.



Hydraulics

Continuous, Reliable and Responsive Control

Powerful System

The custom-engineered hydraulic system forms the heart of the C Series. The system is designed for fast cycle times, smooth operation and maximum reliability in delimbing and loading operations.

Hydraulic Pump is Powerful, Responsive, and Quiet

Designed for continuous, efficient and reliable operation, the loader’s axial piston hydraulic pump meets stringent requirements for noise, efficiency, controllability and durability.

Semi-monoblock Valve System

The valve system has proven reliability in forestry applications with its fuel efficient negative control system providing precise control of individual functions. Each section is tuned for optimized flow and pressure of the function, therefore increasing machine functionality and fuel efficiency.

Operating Modes

Three operating modes allow the operator to tailor the machine’s performance to match the job requirements. The “economy” mode provides the best combination of fuel efficiency and performance; an intermediate “run” position provides additional flow capabilities when higher production is required, and a “power” mode allows the full potential of the machine to come on-line to handle large timber and the heaviest delimbing requirements. All of the operating modes provide the best multi-function ability, function response, control and fast cycle times.

Automated Control System

The Cat ECM provides best in class diagnostics, operator setup capability, and adjustment of attachment flows.

Electric Hydraulic Oil Fill Pump

The hydraulic oil sight gauge makes it easy to know when oil needs to be added. Adding hydraulic oil is fast and easy with the on-board service hose and electric fill pump. Hydraulic oil is pumped through the filtering system and into the tank, maintaining cleanliness requirements.

Power Train

Exceptional Power and Fuel Efficiency

Cat C6.6 ACERT Engine

The Cat C6.6 engine with ACERT Technology gives exceptional power and fuel efficiency, while meeting U.S. Environmental Protection Agency (EPA) Tier 4 Interim, EU Stage IIIB emission standards. This engine includes electronic governing, cold mode start strategy, automatic altitude compensation, electronic diagnostics and fault monitoring.

Exceptional Cooling Capability

An enlarged side by side engine coolant, hydraulic, and charge air cooling package allows efficient heat rejection. Individually isolated cooling cores eliminating core to core thermal stresses to greatly increase durability.

Speed Modulated Viscous Fan

The large 864 mm (34 in) diameter electronically controlled variable speed fan is speed modulated to provide cooling only as required, resulting in reduced noise levels and lower fuel consumption.

Operator Station

Comfort and Convenience to Keep People Productive

Enhanced Entry System

The walk up platform includes skid resistant deck and stair components. An enlarged doorway provides easy cab entry.

Front Window Guard

The HD front window guard provides an extra level of protection while handling large trees and building high wood piles.

Clear Visibility

The reverse slope front window stays clean while accumulated moisture and dust can be removed with the front window wiper/washer.

High Back Comfort Seat

The suspension seat features lumbar support and head rest that provide optimum comfort. Armrests are adjustable and cupped for better arm support.

Ergonomic Machine Controls

Hydraulic pilot actuated joystick controls with foot pedal swing for easy operator control of all functions.

Climate Controlled Cab

A high capacity air conditioning and heater system includes channeled air flow to louvered vents for full coverage of the operator and defrosting/defogging of windows.

Molded Consoles and Headliner

The molded console with storage trays eliminates cab clutter. The headliner helps reduce noise in the cab and houses HVAC louvers that allow the operator to adjust air flow. Two 12-volt power points and a factory installed CB mounting bracket, antenna cable, and power harness provide flexibility for additional electric and electronic equipment.



Electronics

Durable and Reliable

Information Display

A premium gauge cluster includes LED indicators and a digital display which provides information about machine operation, control activation, system diagnostics and operator adjustable settings.

Solid State Controls

Standard industry relays are replaced by solid state controls in high cycle applications to provide substantially longer service life.

Structure and Subframe

Built to Work in Rugged Applications



Performance

High swing torque, swing speed and lift capacity of Prentice knuckleboom loaders reduce cycle times and lower cost per ton.

Durability

The heavy-duty structures of these loaders makes them the right choice for high production, high cycle applications or when handling big hardwoods.

The rugged upper frame includes cross plate head side reinforcement for severe delimbing applications.

Subframe Design

Simple, clean and engineered for long life providing a rock solid base for optimum stability.

Stabilizers

Wide stance stabilizer legs and cylinder mounted lock valves resist side pulling and provide 360 degree stability for heavy lifting.



Boom and Stick

Made for Heavy Lifting and Long Service Life

Durability

Reliable, heavy-duty booms increase uptime and reduce repair costs.

Strength

The main booms are constructed in a box design with thick walls and strong welds.

Cast Pin Points

The ends and middle of the main booms are cast, which is stronger and lighter than fabricating.

Steel Tube Lines

Steel tube hydraulic lines provide extended life and effectively dissipate heat.



Grapples

Work Tool Options to Meet Your Needs

- From log loading to pull through delimbing, a selection of grapple styles are available, including:
- TW (tapered wedge) jaw designs for easily grabbing trees from a pile and aggressively gripping trees for delimbing.
 - SN (straight, narrow) jaw designs for easy log handling in loading and millyard applications.

High Tensile Steel

Grapple jaws are constructed of special high-tensile wear resistant steel. Critical areas of the jaws are reinforced and designed to protect the cylinder rods and hoses.

Optimum Configurations

Cylinder size and jaw configuration provide holding forces for large multi-stem loads as well as the ability to handle single logs.

Rounded Jaw Tips

Rounded jaw tips minimize damage to individual logs.

Heavy-duty Rotators

Heavy-duty rotators include high-pressure swivels for demanding applications. Each head assembly is constructed of high-tensile steel with heavy-duty bearings and hardened gears.



Timber Merchandising System

A Complete Factory Installed System

The Timber Merchandising System (TMS) is a complete factory installed delimer/slasher package consisting of a knuckleboom loader and grapple, trailer with trailer-mounted delimer and ground saw slasher connections. The structural design on these loaders is proven to provide long life in punishing, pull-through delimbing applications.

The package contains either a three-knife CTR 320 or a four-knife CTR 426 pull-through delimer to match application requirements. These delimers are designed to allow quick, easy loading of trees and produce clean, delimbed stems in a flash. These delimers also have central lubrication banks and ground level oil fill for quick, easy service. An automatic chain tensioner simplifies maintenance and extends bar and chain life.

The delimbing trailers are built with structural reinforcing in critical areas for durability. Non suspension or single point tandem axle suspension is available and all trailers feature hydraulically adjustable landing gear that is adjustable from in-cab controls. This feature allows the operator to quickly position the loader in a proper operating position and make adjustments to maintain a stable base under the delimer.



Owning and Operating Costs

Proven Best Investment

More Productive

The new Prentice C Series is more fuel efficient and productive than the previous models. In controlled lab tests, the 2384C was 22% more productive than the 2384B. You can move more wood and lower your cost per ton.

Fuel Efficient

A choice of operating modes give you the flexibility to match hydraulic power to the job. For normal loading operations, the Economy Mode provides fast cycle times and the most fuel-efficient performance.

Designed for Logging Applications

The booms and base structures are specifically designed for loading and delimbing applications, providing the strength and durability that allows for a long service life.

Product Link™

Allows tracking of operational parameters to ensure optimum utilization and on time service intervals.

Automatic Idle Down

The loader control system includes an automatic engine idle down feature to reduce fuel consumption during periods of inactivity.

Serviceability

Easy to Maintain. Easy to Service.

Ground Level Filter Access

Easy changing of engine, fuel, pilot and case drain filters.

Outer-Tank Capsule Filter Assembly

Eliminates contamination backflow during filter changes.

Eco-Valves

Allows capturing of fluids for easy draining without spillage.

Easy Fluid Changes

An electric refill pump to add oil into the hydraulic tank maintains system cleanliness by passing all oil through the filtering system.

Electric Fuel Priming Pump

Easy priming of the fuel system after a service interval, eliminating the potential of fuel contamination.

Swivel, Collector and Swing Motor Access

Large access openings provide easy serviceability of fittings and connectors. Oil level check is accessed on the platform.

Isolated Cooling Cores

Isolated cooling cores can be individually removed, reducing service times.



Customer Support

Ready to Help. Anytime. Anywhere.



Your local Prentice dealer is your forestry consultant who can recommend the machines, work tools and services to maximize your operation and provide the support to keep you at top productivity.

- 24-hour parts availability, where and when you need them, to minimize expensive downtime.
- Remanufactured parts that carry the same warranty as new parts at a reduced cost.
- Operator training to get the most out of your Prentice equipment.
- Field services to provide on-site help when needed.
- Timely repair and replacement services.
- Customer Support Agreements to lower your operating costs.
- Financing programs for buying, renting or leasing Prentice equipment.
- Prentice Insurance to cover equipment losses from theft, collision, flood, upset or overturn, fire, vandalism and more.
- Product Link to manage your equipment fleet through remote monitoring.

For more information on Prentice products, dealer services and industry solutions, visit us at www.prenticeforestry.com.

Sustainability

Reducing Environmental Impacts

Structures

Major structures and components are built to be rebuilt, reducing waste and replacement costs.

ACERT Engines

ACERT Technology reduces engine emissions at point of combustion with less moving parts for lower operating costs.

Engine

2384C		
Engine Model	Cat C6.6 ACERT	
Gross Power @ 1,800 rpm	129.3 kW	173 hp

2484C		
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Gross Power @ 1,800 rpm	129.3 kW	173 hp

Weights

2384C		
Operating Weight without grapple	15 500 kg	34,100 lb
Counterweight	0 kg	0 lb

2484C		
Operating Weight without grapple	16 582 kg	36,480 lb
Counterweight	653 kg	1,440 lb

Hydraulic System

2384C		
Hydraulic Oil Flow @ 1,800 rpm	230/174 L	60/46 gal
Hydraulic Pressure – System	24 131 kPa	3,500 psi
Hydraulic Pressure – Swing	24 131 kPa	3,500 psi
Cylinders – Main	two	
Cylinders – Stick	one	
Cylinders – Stabilizers	four	

2484C		
Hydraulic Oil Flow @ 1,800 rpm	230/230 L	60/60 gal
Hydraulic Pressure – System	24 131 kPa	3,500 psi
Hydraulic Pressure – Swing	24 131 kPa	3,500 psi
Cylinders – Main	two	
Cylinders – Stick	one	
Cylinders – Stabilizers	four	

Operating Specifications

2384C		
Maximum Reach (standard boom)	9.8 m	32.0 ft
Swing Torque	66 870 N·m	49,173 lbf-ft
Swing Speed	11 rpm	
Tailswing	2692 mm	106 in
Swing Bearing Diameter (ball path)	1105 mm	43.5 in

2484C		
Maximum Reach (standard boom)	9.8 m	32.0 ft
Swing Torque	100 360 N·m	73,800 lbf-ft
Swing Speed	9.5 rpm	
Tailswing	2750 mm	108.2 in
Swing Bearing Diameter (ball path)	1105 mm	43.5 in

Service Refill Capacities

2384C		
Fuel Tank	378 L	100 gal
Hydraulic Tank	302 L	80 gal
Engine Oil	15 L	4 gal
Cooling System	29 L	7.5 gal
Swing Drive	4 L	1.0 gal

2484C		
Fuel Tank	378 L	100 gal
Hydraulic Tank	302 L	80 gal
Engine Oil	15 L	4 gal
Cooling System	29 L	7.5 gal
Swing Drive	10 L	2.6 gal

Dimensions

2384C		
Height to Top of Cab	4002 mm	157.6 in
Stabilizer Spread at Grade	4758 mm	187.3 in
Stabilizer Spread at Maximum Down Reach	4237 mm	166.8 in
Stabilizer Reach Below Grade	433 mm	17 in
Stabilizer Pad Size	508 × 711 mm	20 × 28 in

2484C		
Height to Top of Cab	4112 mm	161.9 in
Stabilizer Spread at Grade	4670 mm	183.8 in
Stabilizer Spread at Maximum Down Reach	4237 mm	166.8 in
Stabilizer Reach Below Grade	324 mm	12.8 in
Stabilizer Pad Size	508 × 711 mm	20 × 28 in

- 2384C dimensions are on non suspension trailer.
- 2484C dimensions are on suspension trailer.

Standards

2384C		
OFPS	cab meets SAE J2267	

2484C		
OFPS	cab meets SAE J2267	

Shipping Dimensions (mounted trailer)

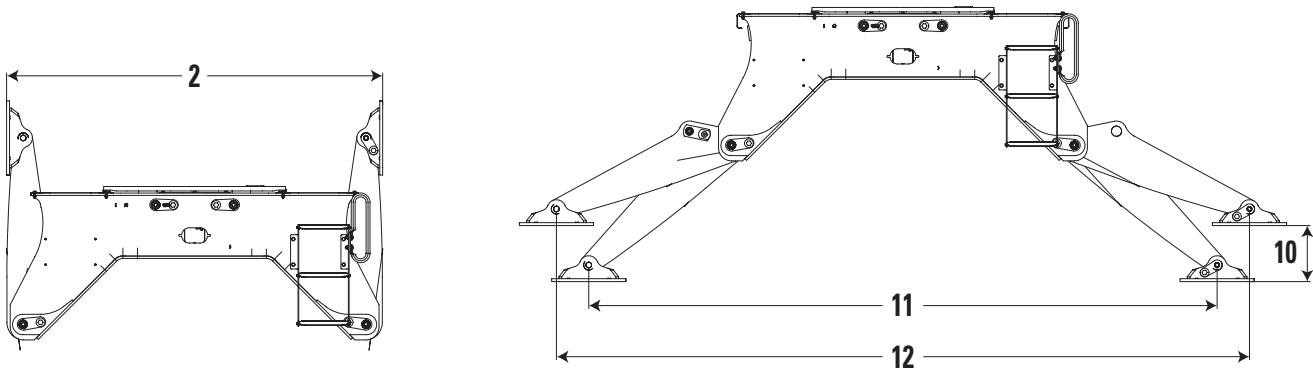
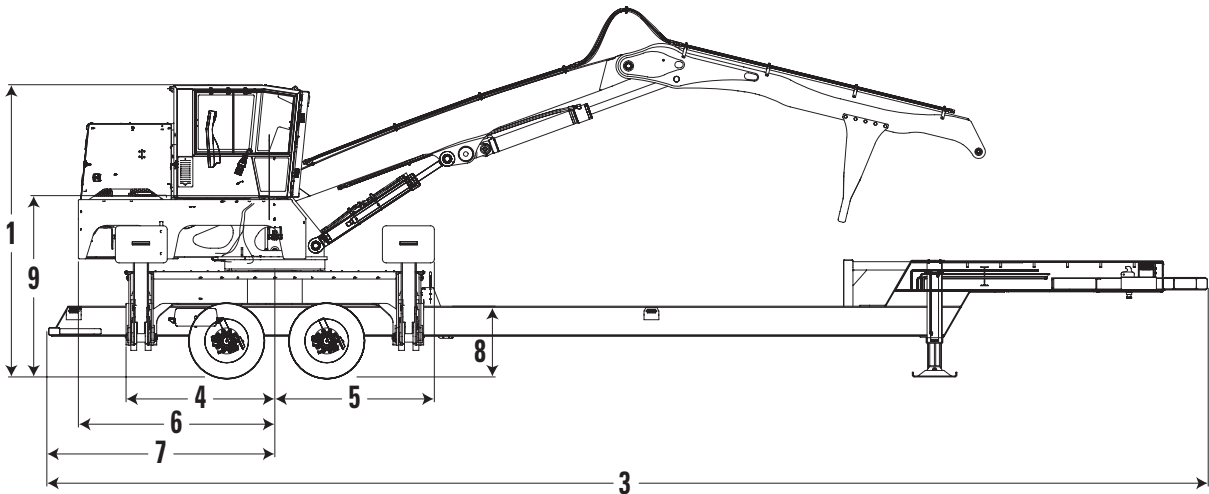
2384C		
Width	2573 mm	101.3 in
Height	4002 mm	157.6 in

2484C		
Width	2573 mm	101.3 in
Height	4112 mm	161.9 in

2384C/2484C Knuckleboom Loader Specifications

Dimensions

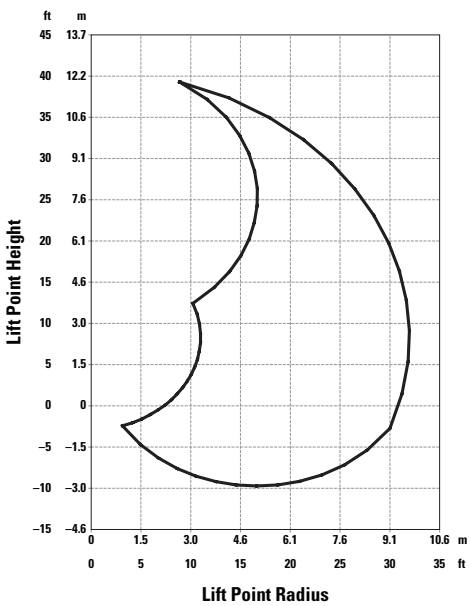
All dimensions are approximate.



	2384C		2484C	
1 Height – to Top of Cab	4002 mm	157.6 in	4112 mm	161.9 in
2 Width – in Transport Position	2573 mm	101.3 in	2573 mm	101.3 in
3 Length – Trailer Option	15.88 m	52.1 ft	15.88 m	52.1 ft
4 Distance – Center of Rotate to Front/Rear Subframe	2039 mm	80.3 in	2039 mm	80.3 in
5 Distance – Center of Rotate to Front/Rear of Stabilizer Pad	2185 mm	86.0 in	2185 mm	86.0 in
6 Distance – Center of Rotate to Rear of Loader	2692 mm	106.0 in	2750 mm	108.2 in
7 Distance – Center of Rotate to Rear of Trailer Option	3124 mm	123.0 in	3124 mm	123.0 in
8 Height – to Deck	991 mm	39.0 in	1098 mm	43.2 in
9 Height – to Main Boom Pin	2484 mm	97.8 in	2591 mm	102.0 in
10 Stabilizer Reach Below Grade	433 mm	17.0 in	324 mm	12.8 in
11 Stabilizer Spread – to Pin Center at Maximum Down Reach	4237 mm	166.8 in	4237 mm	166.8 in
12 Stabilizer Spread – to Pin Center at Grade	4758 mm	187.3 in	4670 mm	183.8 in

2384C dimensions are on non suspension trailer.
2484C dimensions are on suspension trailer.

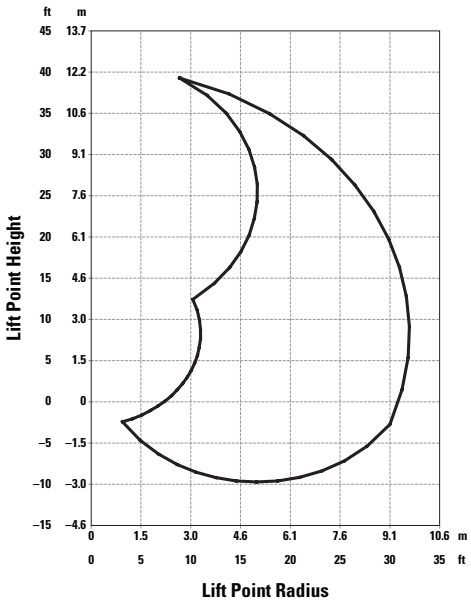
2384C Lift Chart



	3 m (10 ft)		4.6 m (15 ft)		6.1 m (20 ft)		7.6 m (25 ft)		9.1 m (30 ft)		Maximum Reach		
Height	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	
10.6 m (35 ft)			6254 5441 5441	13,805 12,011 12,011									100% Hydraulics Over End Over Side
9.1 m (30 ft)					5899 5132 5132	13,021 11,328 11,328							100% Hydraulics Over End Over Side
7.6 m (25 ft)					6090 5298 5298	13,443 11,696 11,696	5589 4569 4569	12,337 10,086 10,086					100% Hydraulics Over End Over Side
6.1 m (20 ft)					6236 5425 5425	13,765 11,976 11,976	5751 4862 4862	12,696 10,733 10,733					100% Hydraulics Over End Over Side
4.6 m (15 ft)			7850 6829 6829	17,328 15,075 15,075	6659 5793 5793	14,699 12,788 12,788	6542 5004 5004	14,441 11,046 11,046	4809 4184 3666*	10,616 9,236 8,092*			100% Hydraulics Over End Over Side
3 m (10 ft)			9118 7932 7932	20,127 17,510 17,510	7892 6866 6866	17,421 15,156 15,156	6660 5691 5018*	14,702 12,563 11,077*	4923 4283 3607*	10,867 9,454 7,962*	3579 3114 3114	7,900 6,873 6,873	100% Hydraulics Over End Over Side
1.5 m (5 ft)			11 152 9703 9703	24,619 21,419 21,419	8385 7295 7235*	18,510 16,104 15,972*	6660 5794 4853	14,702 12,791 10,712*	4749 4132 3538	10,484 9,121 7,811*			100% Hydraulics Over End Over Side
0 m (0 ft)	9419 8195 8195	20,793 18,090 18,090	11 478 9986 9986	25,338 22,044 22,044	8420 7326 6951	18,587 16,171 15,345*	6439 5602 4719	14,215 12,367 10,418*	4232 3682 3495	9,342 8,127 7,715*			100% Hydraulics Over End Over Side
-1.5 m (-5 ft)	8938 7776 7776	19,731 17,166 17,166	10 517 9150 9150	23,216 20,198 20,198	7673 6675 6512*	16,937 14,735 14,375*	5566 4843 4657*	12,287 10,690 10,281*					100% Hydraulics Over End Over Side

*Stability limited capacities.

2484C Lift Chart



	3 m (10 ft)		4.6 m (15 ft)		6.1 m (20 ft)		7.6 m (25 ft)		9.1 m (30 ft)		Maximum Reach		
Height	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	kg	lb	
10.6 m (35 ft)			7455 6486 6486	16,457 14,317 14,317									100% Hydraulics Over End Over Side
9.1 m (30 ft)					7039 6124 6124	15,539 13,519 13,519							100% Hydraulics Over End Over Side
7.6 m (25 ft)					7234 6293 6293	15,968 13,892 13,892	6281 5465 5465	13,865 12,063 12,063					100% Hydraulics Over End Over Side
6.1 m (20 ft)					7412 6449 6449	16,362 14,235 14,235	6696 5846 5846	14,781 12,860 12,860					100% Hydraulics Over End Over Side
4.6 m (15 ft)			9269 8064 8064	20,461 17,801 17,801	7929 6899 6899	17,504 15,229 15,229	6898 6001 5748*	15,228 13,248 12,646*	5762 5013 4109*	12,719 11,066 9,039*			100% Hydraulics Over End Over Side
3 m (10 ft)			10 887 9472 9472	24,034 20,909 20,909	9338 8124 8124	20,614 17,934 17,934	7783 6771 5592*	17,180 14,947 12,303*	5959 5184 4049*	13,154 11,444 8,908*	4318 3757 3609*	9,532 8,293 7,940*	100% Hydraulics Over End Over Side
1.5 m (5 ft)			13 174 11 461 11 461	29,082 25,301 25,301	9947 8655 8045*	21,959 19,105 17,699*	7941 6908 5424*	17,529 15,250 11,933*	5767 5017 3980*	12,731 11,076 8,756*			100% Hydraulics Over End Over Side
0 m (0 ft)	12 570 10 935 10 935	27,748 24,140 24,140	13 609 11 839 11 839	30,041 26,135 26,135	10 020 8718 7757*	22,120 19,244 17,066*	7703 6702 5290*	17,004 14,794 11,637*	5119 4453 3936*	11,300 9,831 8,658*			100% Hydraulics Over End Over Side
–1.5 m (–5 ft)	11 940 10 388 10 388	26,358 22,931 22,931	12 527 10 899 10 899	27,654 24,059 24,059	9175 7982 7601*	20,253 17,620 16,723*	6703 5832 5227*	14,796 12,873 11,499*					100% Hydraulics Over End Over Side

*Stability limited capacities.

Standard Equipment

Standard equipment may vary. Consult your Prentice dealer for details.

ELECTRICAL

- 24V system
- Master disconnect
- Circuit breaker protection
- 95 Amp alternator
- Two (2) 12V maintenance free batteries
- Standard lighting package
 - Two (2) cab mounted halogen light fixtures
- Electronic engine/machine monitoring system
- Two (2) 12V power points
- 20 circuit electric swivel

OPERATOR ENVIRONMENT

- Cab with swing out front window guard (meets SAE J2267)
- Isolation mountings
- Dual joystick control (pilot hydraulic actuation) with foot pedal swing
- Electric stabilizer controls
- Integrated trailer landing gear control
- Pilot shut-off button
- Push button throttle control
- Reverse slope windshield
- Skylight
- Tinted safety glass
- Sunshade – dual position for front window/skylight
- High back suspension seat with lumbar support
- High capacity AC/heater system with outside air intake
- Defroster fan
- Windshield wiper/washer
- Dome light
- Horn
- Radio ready – includes speakers and AM/FM antennas
- CB Radio ready – includes mounting bracket, power and ground wires, antenna cable and antenna mount bracket
- Product Link ready
- Cup holder
- Fire extinguisher mounting bracket
- Diagnostic port
- Cell phone storage tray

POWER TRAIN

- Cat C6.6 ACERT engine meets U.S. EPA Tier 4 Interim/EU Stage IIIB emission standards
- Electric fuel priming pump
- Air precleaner
- 2-stage air cleaner
- Enlarged cooling package with isolated cores
- 378 L (100 U.S. gal) fuel tank
- Fuel water separator
- Variable speed fan

HYDRAULICS

- Twin 140 cm³ (8.54 in³) variable displacement pumps
- Excavator style “Negacon” system
- Bar slasher/delimer hydraulic package
- 302 L (80 U.S. gal) hydraulic tank
- Electric hydraulic oil fill pump

STRUCTURE AND SUBFRAME

- 653 kg (1,440 lb) counterweight (2484C)
- Fabricated heavy-duty, extended length center mount subframe
- Flat top subframe deck with bolt-on skid resistant fenders
- Bolt-on subframe ladder

BOOMS AND STICKS

- 9.8 m (32 ft) reach knuckleboom
- 229 mm (9 in) grapple mounting knuckle

ANTIFREEZE

- 50% concentration extended life coolant

Optional Equipment

Optional equipment may vary. Consult your Prentice dealer for details.

TMS SYSTEMS

- Non-suspension trailer with hydraulic landing gear (2384C)
- Suspension trailer with hydraulic landing gear
- CTR 320 three-knife delimber
- CTR 426 four-knife delimber

OTHER EQUIPMENT

- Product Link
- AM/FM/CD/Satellite radio receiver
- Long-range front lights on cab
- Engine compartment lights
- Additional subframe ladders
- Auxiliary light package
- Slasher port adapter fittings
- Single “V” and double “VV” bolt on heels
- Single “V” extended and double “VV” extended bolt on heels
- 305 mm (12 in) grapple mounting knuckle
- Grapples

2384C/2484C Knuckleboom Loader

For more complete information on Prentice products, dealer services, and industry solutions, visit us on the web at www.prenticeforestry.com.

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