PRENTICE

# 2410 • 2414 Knuckleboom Loaders



Built Better Than It Needs To Be





## **System Versatility**

Various factory installed hydraulic packages are available including bar saw slasher, delimber, carrier, and grapple saw, as well as the popular TMS II package.

### **High Visibility**

Excellent visibility of the work area is provided through large tinted cab windows. Overhead visibility is maximized through the large, tinted Lexan skylight. Operator protection is afforded by the front guard. This swingout guard is designed for quick and simple access for front window cleaning.

### **Superior Operator Station**

Prentice loader cabs are designed with operator comfort in mind. The spacious cabs feature a large, fully adjustable suspension seat with lumbar support. Fold-up armrests are fully adjustable to allow adjustment of the joystick controls to match the operator.

No matter what logging job you're on, PRENTICE has the loader to make your day productive, profitable and comfortable. PRENTICE loaders are built using advanced boom design technology, for the strength and reliability needed to meet the demands of high production delimbing and loading. Advanced features such as smooth and responsive joystick controls, and quiet, comfortable cabs, contribute to making the name PRENTICE synonymous with quality.



#### **Prentice Loader Booms**

Prentice loader booms are built tough with welded high-strength steel. Delimbing booms feature heavy steel castings at the base end, stick end, and cylinder junctions with the main boom.

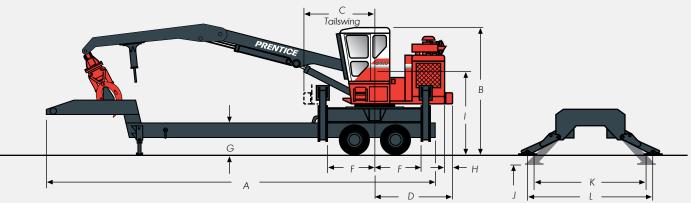
#### **High Performance**

Prentice loaders feature swing torque ratings up to nearly 80,000 ft-lbs. Combined with swing speeds up to 9 RPM, Prentice loaders provide excellent performance in all applications from shortwood loading, to drag loading, and pull-through delimbing.

#### **Engineered Stability**

Prentice heavy-duty subframes are engineered for high reliability. Lock valves integrated into the stabilizer circuit reduce cylinder movement and increase stability. Wide stabilizer leg spread, large pad size and deep below grade reach provide a stable base.

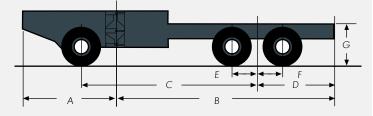
# 2410 & 2414 DIMENSIONS



Machine Dimensions	241	0	2414				
Α	1219.20 cm	480.00"	1219.20 cm	480.00"			
В	398.78 cm	157.00"	398.78 cm	157.00"			
С	248.92 cm	98.00"	248.92 cm	98.00"			
D	238.13 cm	93.75"	238.13 cm	93.75"			
E	152.40 cm	60.00"	152.40 cm	60.00"			
F	152.40 cm	60.00"	152.40 cm	60.00"			
G	99.06 cm	39.00"	99.06 cm	39.00"			
Н	27.31 cm	10.75"	27.31 cm	10.75"			
1	269.24 cm	106.00"	269.24 cm	106.00"			
J	39.37 cm	15.50"	39.37 cm	15.50"			
К	454.66 cm	179.00"	454.66 cm	179.00"			
L	495.30 cm	195.00"	495.30 cm	195.00"			

#### Dimensions of the "SPA" Self-Propelled Articulated Carrier

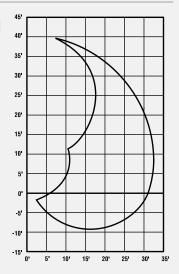
Shown (not to scale):	Α	269.24 cm	106.00"
PRENTICE "SPA" Self-Propelled Articulated	В	477.52 cm	188.00"
Carrier with 9.00x20 tires. Carrier is	С	411.48 cm	162.00"
designed for PRENTICE 2410 & 2414	D	162.56 cm	64.00"
loaders.	E & F	68.58 cm	27.00"
	G	101.60 cm	40.00"



(2); 8.89 cm (3 1/2") Bore, 5.08 cm (2") rod  Forward and Reverse, Low Range 5.23 km/h (3 1/4 mph), High Range 10.86 km/h (6 3/4 mph)  Welded 30.48 cm (12") I-beam, boxed in critical areas. Loader can be removed from carrier to facilitate service.
Welded 30.48 cm (12") I-beam, boxed in critical areas. Loader can be removed from carrier to facilitate service.
00 (00   150 000    10   11   1   1   1   1   1   1
22,680 kg (50,000 lbs.) Rated live tandem (reconditioned)
10,433 kg (23,000 lbs.) Rated Timken (reconditioned hubs)
9.00x20, 10 ply, 10.00x20, 10 ply, 11.00x20, 10 ply
Rear-dual 10 hole Budd discs with 50.8 cm (20") rims Front-10 hole reversed Budd discs with 50.8 cm (20") rims. Rims will accept tire
sizes up to 11.00x20
Spring-actuated brakes lock all four drive wheels; hydraulically released.
Hydraulically actuated brakes for all four drive wheels.
(2) Pins, 7.62 cm (3") diameter special alloy steel
Five-piston radial two-speed drive motor with shift control located in loader cab.
Mechanical lockout link provided to freeze the articulation joint during transit or maintenance.
Special "float" valve in loader swing control permits articulation while boom and grapple rest on front section of carrier frame.
Lockout ensures that "float" valve may ONLY be activated while carrier is in "DRIVE" mode.
17.6%
Approximately 8,391 kg (18,500 lbs.) Less tires
9.45 meters (31 feet)
Black
411.48 cm (162")

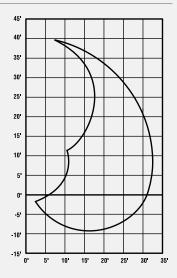
#### Lift Capacity Chart PRENTICE 2410 · Boom Type: Knuckleboom · Boom length: 32' 6"

						Ra	dius						
	10%	3m	15'/-	4.6m	20′/	6.1m	251	7.6m	30′/	9.1m	Max R	each	
	kg.	lbs.	kg.	lbs.	kg.	lbs.	kg.	lbs.	kg.	lbs.	kg.	lbs.	
35′/10.6m			5286.7	11655									100% Hyd
			4599.5	10140									Over End
			4599.5	10140									Over Side
30′/9.1m					4972.9	10963							100% Hyd
					4326.4	9538							Over End
					4326.4	9538							Over Side
25′/7.6m					5758.4	12695	4410.8	9724					100% Hyd
					5010	11045	3937.4	8460					Over End
					5010	11045	3937.4	8460					Over Side
20′/6.1m					6363.5	14029	5428.7	11968	2767.9	6102			100% Hyd
					5536.2	12205	4722.9	10412	2408.2	5309			Over End
					5536.2	12205	4722.9	10412	2408.2	5309			Over Side
15'/4.6m			7299.3	16092	6877.5	15162	6073.2	13389	3974	8761	2324.2	5124	100% Hyd
			6350.4	14000	5983.4	13191	5283.5	11648	3457.3	7622	2022.1	4458	Over End
			6350.4	14000	5983.4	13191	5283.5	11648	3457.3	7622	2022.1	4458	Over Side
10′/3m			9814.5	21637	8452.4	18634	6934.2	15287	4668.4	10292	2366	5216	100% Hyd
			8538.6	18824	7353.8	16212	6032.9	13300	4061.5	8954	2058.4	4538	Over End
			8538.6	18824	7353.8	16212	6032.9	13300	4061.5	8954	2058.4	4538	Over Side
5′/1.5m	18436.1	40644	12083.4		9112.8	20090	7295.7	16084	4947.4	10907	2480.3	5468	100% Hyd
	16039.3	35360	10512.6		7928	17478	6347.2	13993	4304.2	9489	2157.8	4757	Over End
	16039.3	35360	10512.6		7928	17478	6347.2	13993	4304.2	9489	2157.8	4757	Over Side
0 0.0	10192.8	22471	12622.8		9241.6	20374	7086.8	15644	4361.8	9616			100% Hyd
	8867.9	19550	10981.6		8040.1	17725	6173.5	13610	3794.8	8366			Over End
	8867.9	19550	10981.6		8040.1	17725	6173.5	13610	3794.8	8366			Over Side
-5'/-1.5m	9419.5	20766	11628.5		8447.8	18624	6120.4	13493					100% Hyd
	8194.7	18066	10116.6		7349.7	16203	5324.8	11739					Over End
	8194.7	18066	10116.6	22303	7349.7	16203	5324.8	11739					Over Side



### Lift Capacity Chart PRENTICE 2414 $\cdot$ Boom Type: Knuckleboom $\cdot$ Boom length: 32' 6"

						Ra	dius						
	10%	3m	15'/4	4.6m	201/	6.1m	25'/	7.6m	30′/	9.1m	Max F	leach	
	kg.	lbs.	kg.	lbs.	kg.	lbs.	kg.	lbs.	kg.	lbs.	kg.	lbs.	
35′/10.6m			<b>6514.1</b> 5667.3 5667.3	14361 12494 12494									100% Hyd Over End Over Side
30′/9.1m					<b>6142.2</b> 5343.8 5343.8	<b>13541</b> 11781 11781							100% Hyd Over End Over Side
25′/7.6m					6077.8 5287.6 5287.6	13399 11657 11657	<b>5470.4</b> 4759.2 4759.2	12060 10492 10492					100% Hyd Over End Over Side
20′/6.1m					<b>6246.1</b> 5434.1 5434.1	13770 11980 11980	<b>5763</b> 5013.6 5013.6	12705 11053 11053	<b>3497.7</b> 3043.2 3043.2	<b>7711</b> 6709 6709			100% Hyd Over End Over Side
15′/4.6m			<b>7689.4</b> 6689.7 6689.7	16952 14748 14748	7085.2 6164 6164	15620 13589 13589	6041 5255.9 5255.9	13318 11587 11587	<b>4944</b> 4306.9 4306.9	10914 9495 9495	<b>2967</b> 2581.4 2581.4	<b>6541</b> 5691 5691	100% Hyd Over End Over Side
10′/3m			10201 8874.7 8874.7	<b>22489</b> 19565 19565	<b>9232.1</b> 8031.9 8031.9	<b>20353</b> 17707 17707	<b>7230.4</b> 6290.5 6290.5	15940 13868 13868	<b>5247.7</b> 4565.5 4565.5	11569 10065 10065	3019.2 2626.8 2626.8	<b>6656</b> 5791 5791	100% Hyd Over End Over Side
5′/1.5m	21356.8 18580.4 18580.4	<b>47083</b> 40962 40962	14054.3 12227.2 12227.2	<b>30984</b> 26956 26956	10646.4 9262.5 9262.5	23471 20420 20420	<b>8611.6</b> 7452.6 6731	18885 16430 14839*	5083.1 4428 4428	11221 9762 9762	<b>3164.3</b> 2752.9 2752.9	<b>6976</b> 6069 6069	100% Hyd Over End Over Side
0 0.0	10070.8 8761.7 8761.7	22202 19316 19316	14724.3 12810.1 12810.1	<b>32461</b> 28241 28241	10824.7 9417.6 9417.6	23864 20762 20762	<b>8356.2</b> 7269.8 6630.3	18422 16027 14617*	<b>4487</b> 3903.7 3903.7	<b>9892</b> 8606 8606			100% Hyd Over End Over Side
-5'/-1.5m	<b>9314.2</b> 8103.6 8103.6	<b>20534</b> 17865 17865	13622.5 11851.7 11851.7		<b>9940.6</b> 8648.3 8648.3	<b>21915</b> 19066 19066	<b>7256.7</b> 6313.2 6313.2	15998 13918 13918					100% Hyd Over End 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 rated 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 Blount, Inc. 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".

Elevation

Elevation

2410 & 2414	SPECIFICATIONS		
Engines & Driveline		2410	2414
Cummins	QSB 173HP TIER 3	STD	STD
Engine RPM	Full Load Governed	2200	2200
Electrical	12 V System, Circuit Breaker Protection, Master Electrical Disconnect Switch	STD	STD
Lio curicui	Electronic Monitoring System, 2 Cab Mounted Work Lights	0.5	0.5
	Boom Lights	OPT	OPT
	Block Heater	OPT	OPT
	Cold Weather Start Kit	OPT	OPT
Pump Drive	Direct	STD	STD
			*
Operator's Cab			
94 cm (37") x 127 cm	n (50") left side mounted with isolation pads, Tinted Safety Glass Windows,	STD	STD
Lexan Skylight, Sun Vi	sor, Fully adjustable Seat with Fold-up armrests, Operator protection Guard,		
Pressurized Cab with	Heat/Air Conditioning, Integral Heat/AC Ductwork		
	asher, Horn, Defroster Fan, 12V Power Point, Dome Light, Fire Extinguisher		
· ·	th Sliding Window, Sliding Cab Window		
sving open been vi	ar shalling Trindovi, oldaing eab Trindovi		
Hydraulic System			
3 in-line gear pumps		STD	
Two Variable Displac	ement Axial Piston Pumps		STD
Flows	LPM (GPM) @ 2200 RPM	216 (57), 155 (41), 125 (33)	394 (104)
Pilot Pump (Standard	with pilot joysticks)	STD	STD
Pressure	System kPa (PSI)	17,236 (2,500)	24,131 (3,500)
	Swing kPa (PSI)	17,236 (2,500)	22,063 (3,200)
Swing Motor	Axial Piston Motors	STD	STD
Swing Speed	RPM	7	9
Control	Pilot Joysticks	STD	STD
JOHUOI		SID	
	Dual Swing Pedals	OTD	STD
	Single Rocker Type Swing Pedal	STD	0.770
	Electrical Stabilizer Controls	STD	STD
iltration	Two Single Element Return Filters	STD	STD
	Case Drain Filters		STD
	Saw Return Filters		STD
Swivel	Steel Barrel with Durabar Core	STD	STD
Serviceability	Diagnostic nipples on pumps, Hand Hydraulic Oil Fill Pumps	STD	STD
Auxiliary Hydraulics	Bar Slasher/Hydraulics, Delimber Hydraulics	OPT	OPT
	Carrier Hydraulics	OPT	OPT
	Circle Saw Hydraulics		OPT
	Bar Slasher/Delimber/Carrier Hydraulics	OPT	OPT
Cylinders, Bore x Rod		15.24 cm x 10.16 cm (6"x4")	12.7 cm x 7.62 cm (5"x3")
- <u>j</u>	Stick (1)	17.78 cm x 10.16 cm (7"x4")	15.24 cm x 10.16 cm (6"x4")
	Live Heel	15.24 cm x 10.16 cm (6"x4")	12.7 cm x 7.62 cm (5"x3")
	Stabilizer(4)	15.24 cm x 10.16 cm (6"x4")	15.24 cm x 10.16 cm (6"x4"
Structural	Stabiliz 61(4)	15.24 Cili X 10.10 Cili (0 X4 )	15.24 Cm x 10.10 cm (0 x4
Jpper Frame	48.26 cm (19") Fixed Mount Cab Riser (3.7 m / 12' Eye Level)	STD	STD
эррег паше	91.44 cm (36") Hydraulic Tilt Cab Riser (4.12 m / 13'5" Eye Level)	OPT	OPT
		OPT	OPT OPT
Countonweight	139.7 cm (55") Fix Mount Cab Riser (4.57 m / 15" Eye Level)	1,392.5 (3,070)	1,392.5 (3,070)
Counterweight	kg (Lbs.) Cast Iron		
Booms	9.9 m (32'6") Knuckleboom	STD	STD
11-	10.97 m (36') Knuckleboom, 10.21 m (33'6") Live Heel Boom	OPT	OPT
Heels	Single "V" Heel, Double "W" Heel	OPT CTD	OPT OPT
rapple Mounting Ki	nuckle 22.86 cm (9") Length	STD	STD
	30.48 cm (12") Length (for use with live heel booms)	OPT	OPT
Swing Bearing	Diameter	137 cm (54") OD	137 cm (54") OD
	Gearing	External	External
ower Frame	Bolt-on Skid Resistant Fenders, Two Wide Tread Ladders	STD	STD
0. 1.1.	D. 10:	FF.00	55.00
Stabilizers V:t	Pad Size	55.88 cm x 66.04 cm (22"x26")	55.88 cm x 66.04 cm (22"x26
Installation Kit	Heavy-Duty Installation Kit	STD	STD
Stationary Electric Mo		OPT	00:5:5
Capacities	Fuel Liters (Gallons)	336.9 (89)	336.9 (89)
		0.47 (7.5)	04///5
Unit Weight	Hydraulic Liters (Gallons)  Wet, with standard boom, less options, carrier and grapple - kg (Lbs.)	246 (65) 15,422 (34,000)	246 (65) 15,422 (34,000)



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