

824 P

Wheel Loader



JOHN DEERE





PRIMED FOR PRODUCTIVITY



SEE IT LIKE NEVER BEFORE

New Advanced Vision System includes two digital cameras mounted on the rearview-mirror platforms that integrate with the rearview camera for a single display on the in-cab monitor. Overlaid within the monitor's rear-camera view, dynamic reversal projected-path lines help operators visualize the loader's anticipated reversal path based on its articulation, for sight lines to people or objects directly within the path.

LARGE AND IN CHARGE

READY TO DO THE HEAVY LIFTING.

Combining serious performance with fuel efficiency, customer-inspired components, and intuitive controls, our 824 P-tier provides the muscle operators need to work productively and comfortably. Enhancements include increased horsepower, an ergonomically reimagined cab, and simplified service points. With its rugged EPA Final Tier 4/EU Stage V-compliant John Deere PowerTech™ diesel, high-capacity heavy-duty axles, and a wealth of proven options, this large-scale wheel loader is built rock solid for the long haul.

Step up your game

With standard advantages such as an updated 9.0L engine and after-treatment, a fuel-efficient lockup torque converter, and a dedicated steering pump, the 824 P-tier can heap heavier and haul more.

Outsized comfort

Cab boasts three more inches of legroom than previous models. Standard premium heated/ventilated seat, updated HVAC system with automatic temperature control, and redesigned sealed-switch module are placed for ergonomic comfort and convenience. A 79-percent-wider door than on previous series models makes getting in and out easier.

Make the shift

Smooth-shifting transmission delivers impressive acceleration and cycle times. Design optimizes power and fuel efficiency during transport, roading, and ramp climbing.

It's easy to take control

Easier and more intuitive to operate than the controls on previous models, seat-mounted right-hand hydraulic controls feature two programmable multifunction buttons with electro-hydraulic (EH) controls.

Time saver

Easier access to the engine oil dipstick cuts routine service time in half.

Precision Construction

This suite of construction technology delivers **Productivity Solutions** to help you get more done, more efficiently. In-base JDLink™ connectivity provides machine location, utilization data, and alerts to help you maximize productivity and efficiency. To maximize uptime and lower costs, JDLink also enables **John Deere Connected Support™**. Dealers use Expert Alerts based on data from thousands of connected machines to proactively address conditions that may otherwise likely lead to downtime. Your dealer can also monitor machine health and leverage remote diagnostics and programming capability to further diagnose problems and even update machine software without a time-consuming trip to the jobsite.*

*Availability varies by region. Options not available in every country.



**UPDATED 9.0L ENGINE BOOSTS
RELIABILITY & DURABILITY**





**OPTIONAL AUTO-LUBE SYSTEM
SAVES TIME & HASSLE**



824 P

WHEEL LOADER

YOU THOUGHT OF EVERYTHING IT'S IN THE DETAILS.

Your best ideas have helped our large wheel loaders stand out on the jobsite and in the industry. These are just some of the purpose-built details that add up to push our 824 P-tier — and your operation — to the next level.



Heavy-duty durability

Large, high-capacity, heavy-duty axles with standard axle cooling and filtration increase durability in demanding conditions compared to previous models.



Reliable redesign

Routing of the electrical and hydraulic systems has been significantly simplified to minimize friction, improving reliability and easing maintenance.



Buckle up

A seat-belt minder sends an alert to JDLink if the safety belt isn't latched within 30 seconds after the parking brake is released.



On the winning side

All daily service points including fuel are conveniently grouped on the left side of the machine for easy access.



Keep your cool

Quad-Cool™ system design places coolers in a unique boxed configuration that's isolated from engine heat, for increased efficiency and durability. Standard hydraulic reversing fan automatically reverses at predetermined intervals, or can be programmed through the monitor, to eject debris from the cooler cores.

824 P-TIER WHEEL LOADER SPECIFICATIONS

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

Engine		824 P-TIER	
Manufacturer and Model	John Deere PowerTech™ PSS 6090		
Non-Road Emission Standard	EPA Final Tier 4/EU Stage V		
Cylinders	6		
Valves per Cylinder	4		
Displacement	9.0 L (548 cu. in.)		
Net Peak Power (ISO 9249)	256 kW (343 hp) at 1,600 rpm		
Net Peak Torque (ISO 9249)	1627 Nm (1,200 lb.-ft.) at 1,300 rpm		
Net Torque Rise	57%		
Fuel System	High-pressure common rail		
Lubrication	Full-flow spin-on filter and integral cooler		
Aspiration	Series turbocharged, charge air cooled		
Air Cleaner	Under-hood, dual-element dry type, restriction indicator in cab monitor for service		
Cooling			
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers		
Electrical			
Electrical System	24 volt with 150-amp alternator		
Batteries (2 – 12 volt)	1,400 CCA (each)		
Transmission System			
Type	Countershaft-type PowerShift™ with lockup torque converter		
Torque Converter	Single stage, dual phase with freewheeling stator with lockup clutch		
Shift Control	Electronically modulated, adaptive, load and speed dependent		
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; Quick-Shift button on hydraulic lever		
Shift Modes	Manual/auto (1st–5th or 2nd–5th); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and 4 settings for clutch cutoff		
Maximum Travel Speeds (with 26.5 R 25, 1 Star L3 tires)	Standard 5-Speed With Lockup Torque Converter		
	Forward	Reverse	
Range 1	7.1 km/h (4.4 mph)	7.1 km/h (4.4 mph)	
Range 2	13.3 km/h (8.3 mph)	13.3 km/h (8.3 mph)	
Range 3	20.3 km/h (12.6 mph)	29.0 km/h (18.0 mph)	
Range 4	29.0 km/h (18.0 mph)	N/A	
Range 5	40.0 km/h (24.9 mph)	N/A	
Axles/Brakes			
Final Drives	Heavy-duty inboard-mounted planetary		
Differentials	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional		
Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires)	26 deg. (13 deg. each direction)		
Brakes (conform to ISO 3450)			
Service	Hydraulically actuated, spring released, inboard, sun-gear mounted, pressure oil cooled, self-adjusting, single disc		
Parking	Automatic spring applied, hydraulically released, oil cooled, multi disc		
Tires/Wheels			
(see page 12 for complete tire adjustments)			
	Tread Width	Width Over Tires	
Michelin 26.5 R 25, 1 Star L3	2298 mm (90.5 in.)	3084 mm (121.4 in.)	
Serviceability			
Refill Capacities			
Fuel Tank With Lockable Cap	477 L (126 gal.)		
Diesel Exhaust Fluid (DEF)	26.3 L (6.9 gal.)		
Cooling System	48 L (50.7 qt.)		
Engine Oil With Vertical Spin-On Filter	34 L (36 qt.)		
Transmission Reservoir With Vertical Filter	28 L (29.5 qt.)		
Axle Oil (front and rear, each)	55.3 L (58.4 qt.)		
Hydraulic Reservoir and Filter	142 L (37.5 gal.)		
Park Brake Oil (wet disc)	0.7 L (24 oz.)		

824 P-TIER WHEEL LOADER SPECIFICATIONS

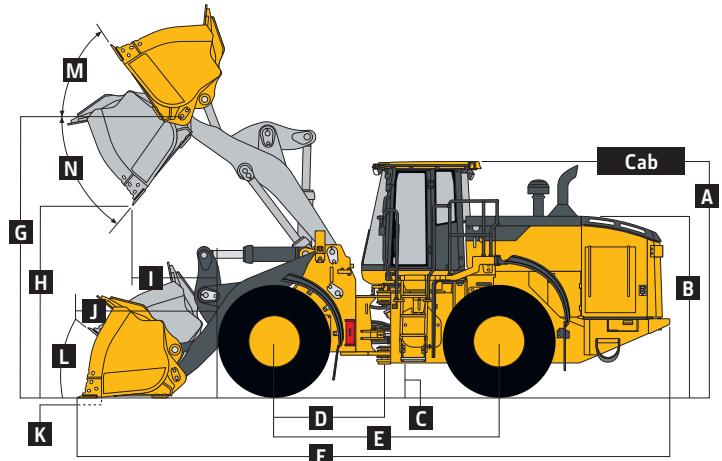
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Hydraulic System/Steering		824 P-TIER
Loader Pumps	2 variable-displacement, load-sensing axial-piston pumps; closed-center system	
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,250 rpm	484.5 L/m (128 gpm)	
System Relief Pressure (loader and steering)	24 900 kPa (3,610 psi)	
Steering Pump	1 variable-displacement, load-sensing axial-piston pump; closed-center system	
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,250 rpm	161.5 L/m (43 gpm)	
System Relief Pressure (loader and steering)	24 900 kPa (3,610 psi)	
Loader Controls	2-function valve; single- or dual-lever controls; control lever lockout feature; optional 3rd- and 4th-function valve with auxiliary levers	
Steering (conforms to ISO 5010)		
Type	Power, fully hydraulic	
Articulation Angle	80-deg. arc (40 deg. each direction)	
Turning Radius (measured to centerline of outside tire)	5.92 m (19 ft. 5 in.)	
Hydraulic Cycle Times	Standard-Lift	
Raise	5.9 sec.	
Dump	1.3 sec.	
Lower (float down)	2.5 sec.	
Total	9.7 sec.	
Dimensions and Specifications With Pin-On Bucket		

The diagram illustrates the articulation of the backhoe loader's boom and bucket. It shows the machine from a side profile, with the cab labeled 'Cab' and the bucket labeled 'A'. The articulation points are marked with 'M' and 'N', and the articulation angles are indicated by curved arrows. A control lever is shown with a 'G' label. The diagram also shows the 'Pin-On Bucket' configuration.



824 P-TIER STANDARD-LIFT AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	High-Lift	High-Lift
	4.7-m ³ (6.1 cu. yd.) general-purpose			4.8-m ³ (6.25 cu. yd.) general-purpose enhanced performance			5.2-m ³ (6.75 cu. yd.) material-handling enhanced performance		4.7-m ³ (6.1 cu. yd.) general-purpose	
Dimensions With Bucket	bolt-on edge	teeth and segments	JAGZ™	bolt-on edge	teeth and segments	JAGZ	bolt-on edge	JAGZ	bolt-on edge	teeth and segments
A Height to Top of Cab	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)
B Hood Height	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)
C Ground Clearance	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)
D Length From Centerline to Front Axle	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)
E Wheelbase	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)
F Overall Length, Bucket on Ground	9.28 m (30 ft. 5 in.)	9.49 m (31 ft. 2 in.)	9.28 m (30 ft. 5 in.)	9.38 m (30 ft. 9 in.)	9.59 m (31 ft. 6 in.)	9.37 m (30 ft. 9 in.)	9.44 m (31 ft. 0 in.)	9.44 m (31 ft. 0 in.)	9.78 m (32 ft. 1 in.)	9.99 m (32 ft. 9 in.)
G Height to Hinge Pin, Fully Raised	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.85 m (15 ft. 11 in.)	4.85 m (15 ft. 11 in.)
H Dump Clearance, 45 deg., Full Height	3.19 m (10 ft. 6 in.)	3.06 m (10 ft. 0 in.)	3.20 m (10 ft. 6 in.)	3.12 m (10 ft. 3 in.)	2.98 m (9 ft. 9 in.)	3.13 m (10 ft. 3 in.)	3.08 m (10 ft. 1 in.)	3.08 m (10 ft. 1 in.)	3.64 m (11 ft. 11 in.)	3.51 m (11 ft. 6 in.)
I Reach, 45-deg. Dump, Full Height	1.28 m (4 ft. 2 in.)	1.42 m (4 ft. 8 in.)	1.28 m (4 ft. 2 in.)	1.33 m (4 ft. 4 in.)	1.47 m (4 ft. 10 in.)	1.33 m (4 ft. 4 in.)	1.38 m (4 ft. 6 in.)	1.38 m (4 ft. 6 in.)	1.64 m (5 ft. 5 in.)	1.79 m (5 ft. 10 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	2.05 m (6 ft. 9 in.)	2.12 m (6 ft. 11 in.)	2.05 m (6 ft. 9 in.)	2.08 m (6 ft. 10 in.)	2.15 m (7 ft. 1 in.)	2.09 m (6 ft. 10 in.)	2.11 m (6 ft. 11 in.)	2.11 m (6 ft. 11 in.)	2.50 m (8 ft. 2 in.)	2.58 m (8 ft. 5 in.)
K Maximum Digging Depth	116 mm (4.6 in.)	135 mm (5.3 in.)	112 mm (4.4 in.)	123 mm (4.8 in.)	143 mm (5.6 in.)	119 mm (4.7 in.)	129 mm (5.1 in.)	126 mm (5.0 in.)	229 mm (9.0 in.)	249 mm (9.8 in.)
L Maximum Rollback at Ground Level	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	41.5 deg.	41.5 deg.
M Maximum Rollback, Boom Fully Raised	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	53.1 deg.	53.1 deg.
N Maximum Bucket Dump Angle, Fully Raised	44.3 deg.	44.3 deg.	44.3 deg.	44.8 deg.	44.8 deg.	44.8 deg.	44.8 deg.	44.8 deg.	40.0 deg.	40.0 deg.
Loader Clearance Circle, Bucket Carry Position	14.14 m (46 ft. 5 in.)	14.26 m (46 ft. 9 in.)	14.13 m (46 ft. 4 in.)	14.20 m (46 ft. 7 in.)	14.34 m (47 ft. 1 in.)	14.20 m (46 ft. 7 in.)	14.24 m (46 ft. 9 in.)	14.24 m (46 ft. 9 in.)	14.27 m (46 ft. 10 in.)	14.35 m (47 ft. 1 in.)

824 P-TIER

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Dimensions and Specifications										
With Pin-On Bucket (continued)										
	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	High-Lift	High-Lift
	824 P-TIER									
	4.7-m ³ (6.1 cu. yd.) general-purpose			4.8-m ³ (6.25 cu. yd.) general-purpose enhanced performance			5.2-m ³ (6.75 cu. yd.) material-handling enhanced performance		4.7-m ³ (6.1 cu. yd.) general-purpose	
	bolt-on edge	teeth and segments	JAGZ™	bolt-on edge	teeth and segments	JAGZ	bolt-on edge	JAGZ	bolt-on edge	teeth and segments
Capacity, Heaped	4.7 m ³ (6.1 cu. yd.)	4.7 m ³ (6.1 cu. yd.)	4.7 m ³ (6.1 cu. yd.)	4.8 m ³ (6.25 cu. yd.)	4.8 m ³ (6.25 cu. yd.)	4.8 m ³ (6.25 cu. yd.)	5.2 m ³ (6.75 cu. yd.)	5.2 m ³ (6.75 cu. yd.)	4.7 m ³ (6.1 cu. yd.)	4.7 m ³ (6.1 cu. yd.)
Capacity, Heaped at 110% Fill Factor	5.1 m ³ (6.7 cu. yd.)	5.1 m ³ (6.7 cu. yd.)	5.1 m ³ (6.7 cu. yd.)	5.3 m ³ (6.88 cu. yd.)	5.3 m ³ (6.88 cu. yd.)	5.3 m ³ (6.88 cu. yd.)	5.7 m ³ (7.43 cu. yd.)	5.7 m ³ (7.43 cu. yd.)	5.1 m ³ (6.7 cu. yd.)	5.1 m ³ (6.7 cu. yd.)
Capacity, Struck	4.0 m ³ (5.3 cu. yd.)	4.0 m ³ (5.3 cu. yd.)	4.0 m ³ (5.3 cu. yd.)	4.1 m ³ (5.36 cu. yd.)	4.1 m ³ (5.36 cu. yd.)	4.1 m ³ (5.36 cu. yd.)	4.4 m ³ (5.8 cu. yd.)	4.4 m ³ (5.8 cu. yd.)	4.0 m ³ (5.3 cu. yd.)	4.0 m ³ (5.3 cu. yd.)
Bucket Weight With Bolt-On Cutting Edge	2437 kg (5,373 lb.)	2561 kg (5,646 lb.)	2460 kg (5,423 lb.)	2464 kg (5,432 lb.)	2587 kg (5,703 lb.)	2486 kg (5,481 lb.)	2505 kg (5,523 lb.)	2527 kg (5,571 lb.)	2437 kg (5,373 lb.)	2561 kg (5,646 lb.)
Bucket Width	3.28 m (10 ft. 9 in.)	3.31 m (10 ft. 10 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)	3.31 m (10 ft. 10 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)
Breakout Force	18 878 kg (41,619 lb.)	16 636 kg (36,676 lb.)	18 905 kg (41,678 lb.)	17 776 kg (39,189 lb.)	15 755 kg (34,734 lb.)	17 798 kg (39,238 lb.)	17 054 kg (37,598 lb.)	17 077 kg (37,648 lb.)	17 695 kg (39,011 lb.)	15 591 kg (34,372 lb.)
Tipping Load, Straight, No Tire Deflection	21 056 kg (46,420 lb.)	20 890 kg (46,055 lb.)	21 028 kg (46,359 lb.)	20 786 kg (45,825 lb.)	20 618 kg (45,455 lb.)	20 757 kg (45,761 lb.)	20 623 kg (45,466 lb.)	20 597 kg (45,409 lb.)	17 809 kg (39,262 lb.)	17 649 kg (38,909 lb.)
Tipping Load, Straight, With Tire Deflection	19 659 kg (43,341 lb.)	19 494 kg (42,977 lb.)	19 632 kg (43,281 lb.)	19 413 kg (42,798 lb.)	19 248 kg (42,435 lb.)	19 386 kg (42,739 lb.)	19 254 kg (42,448 lb.)	19 227 kg (42,388 lb.)	18 099 kg (39,901 lb.)	17 898 kg (39,458 lb.)
Tipping Load, 37-deg. Partial Turn	18 525 kg (40,841 lb.)	18 359 kg (40,475 lb.)	18 497 kg (40,779 lb.)	18 281 kg (40,303 lb.)	18 113 kg (39,932 lb.)	18 252 kg (40,239 lb.)	18 131 kg (39,972 lb.)	18 105 kg (39,915 lb.)	15 603 kg (34,399 lb.)	15 443 kg (34,046 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	18 116 kg (39,939 lb.)	17 949 kg (39,571 lb.)	18 088 kg (39,877 lb.)	17 875 kg (39,408 lb.)	17 708 kg (39,039 lb.)	17 847 kg (39,346 lb.)	17 728 kg (39,084 lb.)	17 702 kg (39,026 lb.)	15 246 kg (33,612 lb.)	15 086 kg (33,259 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	16 293 kg (35,920 lb.)	16 131 kg (35,563 lb.)	16 266 kg (35,860 lb.)	16 083 kg (35,457 lb.)	15 918 kg (35,093 lb.)	16 056 kg (35,397 lb.)	15 939 kg (35,139 lb.)	15 912 kg (35,080 lb.)	15 126 kg (33,347 lb.)	14 925 kg (32,904 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	8147 kg (17,961 lb.)	8066 kg (17,782 lb.)	8133 kg (17,930 lb.)	8042 kg (17,730 lb.)	7959 kg (17,547 lb.)	8028 kg (17,699 lb.)	7970 kg (17,571 lb.)	7956 kg (17,540 lb.)	7563 kg (16,674 lb.)	7463 kg (16,453 lb.)
Operating Weight	26 460 kg (58,334 lb.)	26 584 kg (58,608 lb.)	26 483 kg (58,385 lb.)	26 487 kg (58,394 lb.)	26 610 kg (58,665 lb.)	26 509 kg (58,442 lb.)	26 528 kg (58,484 lb.)	26 550 kg (58,533 lb.)	26 840 kg (59,172 lb.)	26 963 kg (59,443 lb.)

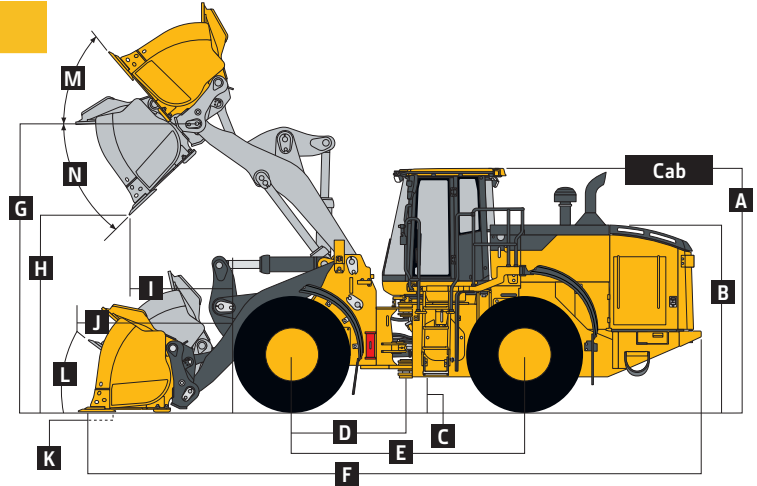
Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSS 6090 (EPA Final Tier 4/EU Stage V) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

*Rated operating capacity based on Deere attachments only.

Dimensions and Specifications

With Coupler and Hook-On Bucket

824 P-TIER



824 P-TIER STANDARD-LIFT AND HIGH-LIFT LOADERS WITH COUPLER AND HOOK-ON BUCKET

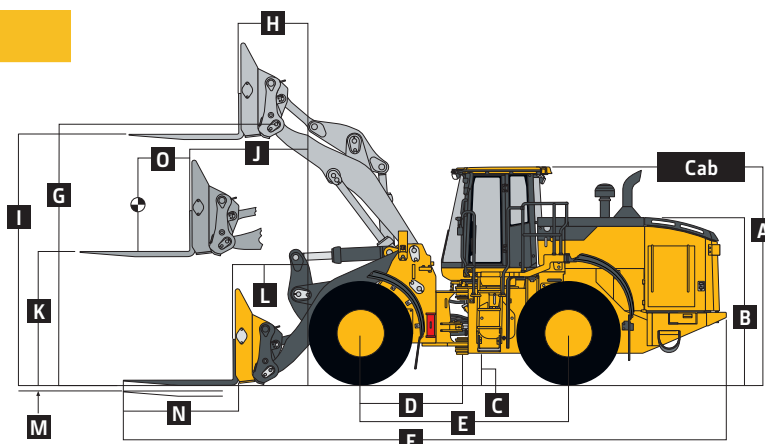
	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	High-Lift
	3.8-m³ (5.0 cu. yd.) general-purpose (GP) enhanced performance (EP)	3.8-m³ (5.0 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.0-m³ (5.25 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.0-m³ (5.25 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.4-m³ (5.75 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.4-m³ (5.75 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.6-m³ (6.0 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.6-m³ (6.0 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.6-m³ (6.0 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.6-m³ (6.0 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.6-m³ (6.0 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.6-m³ (6.0 cu. yd.) general-purpose (GP) enhanced performance (EP)	4.4-m³ (5.75 cu. yd.) GP EP
Dimensions With Bucket	bolt-on edge	teeth and segments	JAGZ	bolt-on edge	teeth and segments	JAGZ	bolt-on edge	teeth and segments	JAGZ	bolt-on edge	teeth and segments	JAGZ	bolt-on edge
A Height to Top of Cab	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)
B Hood Height	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)
C Ground Clearance	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)
D Length From Centerline to Front Axle	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)
E Wheelbase	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)
F Overall Length, Bucket on Ground	9.30 m (30 ft. 6 in.)	9.51 m (31 ft. 3 in.)	9.30 m (30 ft. 6 in.)	9.32 m (30 ft. 7 in.)	9.53 m (31 ft. 3 in.)	9.31 m (30 ft. 11 in.)	9.41 m (30 ft. 7 in.)	9.62 m (31 ft. 10 in.)	9.40 m (30 ft. 1 in.)	9.46 m (31 ft. 9 in.)	9.67 m (31 ft. 1 in.)	9.46 m (31 ft. 1 in.)	9.91 m (32 ft. 6 in.)
G Height to Hinge Pin, Fully Raised	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.85 m (15 ft. 11 in.)	4.85 m (15 ft. 11 in.)	4.85 m (15 ft. 11 in.)	4.48 m (14 ft. 9 in.)
H Dump Clearance, 45 deg., Full Height	3.17 m (10 ft. 5 in.)	3.03 m (9 ft. 11 in.)	3.18 m (10 ft. 5 in.)	3.16 m (10 ft. 5 in.)	3.02 m (9 ft. 11 in.)	3.17 m (10 ft. 5 in.)	3.10 m (10 ft. 2 in.)	2.96 m (9 ft. 9 in.)	3.11 m (10 ft. 2 in.)	3.07 m (10 ft. 1 in.)	2.93 m (9 ft. 7 in.)	3.07 m (10 ft. 1 in.)	3.57 m (11 ft. 9 in.)
I Reach, 45-deg. Dump, Full Height	1.32 m (4 ft. 4 in.)	1.45 m (4 ft. 9 in.)	1.32 m (4 ft. 4 in.)	1.32 m (4 ft. 4 in.)	1.46 m (4 ft. 9 in.)	1.32 m (4 ft. 4 in.)	1.39 m (4 ft. 7 in.)	1.52 m (5 ft. 0 in.)	1.39 m (4 ft. 7 in.)	1.41 m (4 ft. 8 in.)	1.55 m (5 ft. 1 in.)	1.41 m (4 ft. 8 in.)	1.77 m (5 ft. 10 in.)
J Reach, 45-deg. Dump, 213-m (7 ft. 0 in.) Clearance	2.10 m (6 ft. 11 in.)	2.17 m (7 ft. 1 in.)	2.10 m (6 ft. 11 in.)	2.10 m (6 ft. 11 in.)	2.17 m (7 ft. 1 in.)	2.10 m (6 ft. 11 in.)	2.14 m (7 ft. 0 in.)	2.20 m (7 ft. 3 in.)	2.14 m (7 ft. 0 in.)	2.15 m (7 ft. 1 in.)	2.21 m (7 ft. 3 in.)	2.15 m (7 ft. 1 in.)	2.59 m (8 ft. 6 in.)
K Maximum Digging Depth	85 mm (3.3 in.)	105 mm (4.1 in.)	82 mm (3.2 in.)	90 mm (3.6 in.)	110 mm (4.3 in.)	87 mm (3.4 in.)	94 mm (3.7 in.)	114 mm (4.5 in.)	92 mm (3.6 in.)	105 mm (4.1 in.)	124 mm (4.9 in.)	101 mm (4.0 in.)	208 mm (8.2 in.)
L Maximum Rollback at Ground Level	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	45.4 deg.	41.6 deg.
M Maximum Rollback, Boom Fully Raised	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	52.0 deg.	53.1 deg.
N Maximum Bucket Dump Angle, Fully Raised	44.0 deg.	44.0 deg.	44.0 deg.	44.0 deg.	44.0 deg.	44.0 deg.	44.0 deg.	44.0 deg.	44.0 deg.	44.0 deg.	44.0 deg.	44.0 deg.	40.0 deg.
Loader Clearance Circle, Bucket Carry Position	14.15 m (46 ft. 5 in.)	14.31 m (46 ft. 11 in.)	14.16 m (46 ft. 5 in.)	14.16 m (46 ft. 5 in.)	14.32 m (46 ft. 0 in.)	14.16 m (46 ft. 6 in.)	14.21 m (46 ft. 8 in.)	14.37 m (47 ft. 2 in.)	14.22 m (46 ft. 8 in.)	14.24 m (46 ft. 9 in.)	14.40 m (47 ft. 3 in.)	14.24 m (46 ft. 9 in.)	14.40 m (47 ft. 3 in.)

Dimensions and Specifications With Coupler and Hook-On Bucket (continued)													
	824 P-TIER												
	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	Standard-Lift	High-Lift
Specifications With Bucket	3.8-m³ (5.0 cu. yd.) general-purpose (GP) enhanced performance (EP)			4.0-m³ (5.25 cu. yd.) general-purpose (GP) enhanced performance (EP)			4.4-m³ (5.75 cu. yd.) general-purpose (GP) enhanced performance (EP)			4.6-m³ (6.0 cu. yd.) general-purpose (GP) enhanced performance (EP)			4.4-m³ (5.75 cu. yd.) GP EP
Cutting Edge Type	bolt-on edge	teeth and segments	JAGZ	bolt-on edge	teeth and segments	JAGZ	bolt-on edge	teeth and segments	JAGZ	bolt-on edge	teeth and segments	JAGZ	bolt-on edge
Capacity, Heaped	3.8 m³ (5.0 cu. yd.)	3.8 m³ (5.0 cu. yd.)	3.8 m³ (5.0 cu. yd.)	4.0 m³ (5.25 cu. yd.)	4.0 m³ (5.25 cu. yd.)	4.0 m³ (5.25 cu. yd.)	4.4 m³ (5.75 cu. yd.)	4.4 m³ (5.75 cu. yd.)	4.4 m³ (5.75 cu. yd.)	4.6 m³ (6.0 cu. yd.)	4.6 m³ (6.0 cu. yd.)	4.6 m³ (6.0 cu. yd.)	4.4 m³ (5.75 cu. yd.)
Capacity, Heaped at 110% Fill Factor	4.2 m³ (5.5 cu. yd.)	4.2 m³ (5.5 cu. yd.)	4.2 m³ (5.5 cu. yd.)	4.4 m³ (5.75 cu. yd.)	4.4 m³ (5.75 cu. yd.)	4.4 m³ (5.75 cu. yd.)	4.8 m³ (6.33 cu. yd.)	4.8 m³ (6.33 cu. yd.)	4.8 m³ (6.33 cu. yd.)	4.6 m³ (6.0 cu. yd.)	4.6 m³ (6.0 cu. yd.)	4.6 m³ (6.0 cu. yd.)	4.8 m³ (6.33 cu. yd.)
Capacity, Struck	3.25 m³ (4.25 cu. yd.)	3.25 m³ (4.25 cu. yd.)	3.25 m³ (4.25 cu. yd.)	3.4 m³ (4.5 cu. yd.)	3.4 m³ (4.5 cu. yd.)	3.4 m³ (4.5 cu. yd.)	3.8 m³ (4.97 cu. yd.)	3.8 m³ (4.97 cu. yd.)	3.8 m³ (4.97 cu. yd.)	4.0 m³ (5.25 cu. yd.)	4.0 m³ (5.25 cu. yd.)	4.0 m³ (5.25 cu. yd.)	3.8 m³ (4.97 cu. yd.)
Bucket Weight With Bolt-On Cutting Edge	2499 kg (5,509 lb.)	2625 kg (5,788 lb.)	2522 kg (5,560 lb.)	2586 kg (5,701 lb.)	2712 kg (5,980 lb.)	2609 kg (5,752 lb.)	2672 kg (5,890 lb.)	2735 kg (6,031 lb.)	2695 kg (5,941 lb.)	2730 kg (6,019 lb.)	2857 kg (6,298 lb.)	2753 kg (6,070 lb.)	2672 kg (5,890 lb.)
Bucket Width	3.28 m (10 ft. 9 in.)	3.31 m (10 ft. 10 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)	3.31 m (10 ft. 10 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)	3.31 m (10 ft. 10 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)	3.31 m (10 ft. 10 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)
Breakout Force	18 001 kg (39,685 lb.)	15 908 kg (35,071 lb.)	18 025 kg (39,738 lb.)	17 834 kg (39,317 lb.)	15 767 kg (34,760 lb.)	17 856 kg (39,366 lb.)	16 768 kg (36,967 lb.)	14 905 kg (32,860 lb.)	16 787 kg (37,009 lb.)	16 266 kg (35,860 lb.)	14 494 kg (31,954 lb.)	16 283 kg (35,898 lb.)	15 681 kg (34,571 lb.)
Tipping Load, Straight, No Tire Deflection	20 051 kg (44,205 lb.)	19 885 kg (43,839 lb.)	20 023 kg (44,143 lb.)	20 064 kg (44,233 lb.)	19 897 kg (43,865 lb.)	20 037 kg (44,174 lb.)	19 828 kg (43,713 lb.)	19 658 kg (43,338 lb.)	19 800 kg (43,651 lb.)	19 582 kg (43,171 lb.)	19 412 kg (42,796 lb.)	19 553 kg (43,107 lb.)	16 726 kg (36,874 lb.)
Tipping Load, Straight, With Tire Deflection	18 669 kg (41,158 lb.)	18 504 kg (40,794 lb.)	18 642 kg (41,099 lb.)	18 672 kg (41,165 lb.)	18 507 kg (40,801 lb.)	18 645 kg (41,105 lb.)	18 441 kg (40,655 lb.)	18 273 kg (40,285 lb.)	18 411 kg (40,589 lb.)	18 204 kg (40,133 lb.)	18 036 kg (39,763 lb.)	18 174 kg (40,067 lb.)	16 968 kg (37,408 lb.)
Tipping Load, 37-deg. Partial Turn	17 537 kg (38,662 lb.)	17 370 kg (38,294 lb.)	17 509 kg (38,601 lb.)	17 539 kg (38,667 lb.)	17 372 kg (38,299 lb.)	17 511 kg (38,605 lb.)	17 319 kg (38,182 lb.)	17 149 kg (37,807 lb.)	17 290 kg (38,118 lb.)	17 095 kg (37,688 lb.)	16 925 kg (37,313 lb.)	17 067 kg (37,626 lb.)	14 525 kg (32,022 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	17 130 kg (37,765 lb.)	16 963 kg (37,397 lb.)	17 102 kg (37,703 lb.)	17 131 kg (37,767 lb.)	16 963 kg (37,397 lb.)	17 103 kg (37,706 lb.)	16 912 kg (37,285 lb.)	16 743 kg (36,912 lb.)	16 884 kg (37,223 lb.)	16 692 kg (36,800 lb.)	16 523 kg (36,427 lb.)	16 664 kg (36,738 lb.)	14 169 kg (31,237 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	15 318 kg (33,770 lb.)	15 153 kg (33,407 lb.)	15 291 kg (33,711 lb.)	15 306 kg (33,744 lb.)	15 144 kg (33,387 lb.)	15 279 kg (33,684 lb.)	15 093 kg (33,274 lb.)	14 925 kg (32,904 lb.)	15 066 kg (33,215 lb.)	14 883 kg (32,811 lb.)	14 718 kg (32,448 lb.)	14 856 kg (32,752 lb.)	13 992 kg (30,847 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	7659 kg (16,885 lb.)	7577 kg (16,704 lb.)	7646 kg (16,857 lb.)	7653 kg (16,872 lb.)	7572 kg (16,693 lb.)	7640 kg (16,843 lb.)	7547 kg (16,638 lb.)	7463 kg (16,453 lb.)	7533 kg (16,607 lb.)	7442 kg (16,407 lb.)	7359 kg (16,224 lb.)	7428 kg (16,376 lb.)	6996 kg (15,424 lb.)
Operating Weight	27 549 kg (60,735 lb.)	27 675 kg (61,013 lb.)	27 572 kg (60,786 lb.)	27 633 kg (60,920 lb.)	27 760 kg (61,200 lb.)	27 656 kg (60,971 lb.)	27 722 kg (61,116 lb.)	27 848 kg (61,394 lb.)	27 745 kg (61,167 lb.)	27 778 kg (61,240 lb.)	27 904 kg (61,518 lb.)	27 801 kg (61,291 lb.)	28 101 kg (61,952 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSS 6090 (EPA Final Tier 4/EU Stage V) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

*Rated operating capacity based on Deere attachments only.

Dimensions and Specifications With Coupler and Hook-On Construction Forks 824 P-TIER



824 P-TIER STANDARD-LIFT AND HIGH-LIFT LOADERS WITH HOOK-ON CONSTRUCTION FORKS

	Standard-Lift	Standard-Lift	High-Lift
Dimensions With Forks	<i>1.83-m (72 in.) tine length</i>	<i>2.44-m (96 in.) tine length</i>	<i>1.83-m (72 in.) tine length</i>
A Height to Top of Cab	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)
B Hood Height	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)
C Ground Clearance	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)
D Length From Centerline to Front Axle	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)
E Wheelbase	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)
F Overall Length, Forks on Ground	9.96 m (32 ft. 8 in.)	10.57 m (34 ft. 8 in.)	10.49 m (34 ft. 5 in.)
G Height to Hinge Pin, Fully Raised	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)	4.48 m (14 ft. 9 in.)
H Reach, Fully Raised	0.81 m (32 in.)	0.81 m (32 in.)	1.05 m (3 ft. 5 in.)
I Fork Height, Fully Raised	3.45 m (11 ft. 4 in.)	3.45 m (11 ft. 4 in.)	3.79 m (12 ft. 5 in.)
J Maximum Reach, Fork Level	1.87 m (6 ft. 2 in.)	1.87 m (6 ft. 2 in.)	2.29 m (7 ft. 6 in.)
K Fork Height, Maximum Reach	1.29 m (4 ft. 3 in.)	1.29 m (4 ft. 3 in.)	1.29 m (4 ft. 3 in.)
L Reach, Ground Level	1.14 m (3 ft. 9 in.)	1.14 m (3 ft. 9 in.)	1.67 m (5 ft. 6 in.)
M Depth Below Ground	55 mm (2.2 in.)	55 mm (2.2 in.)	59 mm (2.3 in.)
N Tine Length	1.83 m (72 in.)	2.44 m (96 in.)	1.83 m (72 in.)
O Load Position, 50% Tine Length	0.92 m (36 in.)	1.22 m (48 in.)	0.92 m (36 in.)
Specifications With Forks			
Tipping Load, Straight, No Tire Deflection	14 275 kg (31,471 lb.)	12 992 kg (28,642 lb.)	12 442 kg (27,430 lb.)
Tipping Load, Straight, With Tire Deflection	13 827 kg (30,483 lb.)	12 603 kg (27,785 lb.)	12 069 kg (26,608 lb.)
Tipping Load, 37-deg. Partial Turn, No Tire Deflection	12 554 kg (27,677 lb.)	11 402 kg (25,137 lb.)	10 895 kg (24,019 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	12 276 kg (27,064 lb.)	11 145 kg (24,570 lb.)	10 645 kg (23,468 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	11 649 kg (25,682 lb.)	10 596 kg (23,360 lb.)	10 119 kg (22,309 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	5825 kg (12,842 lb.)	5298 kg (11,680 lb.)	5060 kg (11,155 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	6989 kg (15,408 lb.)	6358 kg (14,017 lb.)	6071 kg (13,384 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	9319 kg (20,545 lb.)	8477 kg (18,689 lb.)	8095 kg (17,846 lb.)
Operating Weight	26 481 kg (58,381 lb.)	26 654 kg (58,762 lb.)	26 860 kg (59,216 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSS 6090 (EPA Final Tier 4/EU Stage V) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

*Rated operating capacity based on Deere attachments only.

Adjustments to Operating Weights and Tipping Loads With Buckets

824 P-TIER

Adjustments to operating weights, tipping loads, and tires are based on Standard-Lift machine with pin-on 4.6-m³ (6.0 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator*

Add (+) or deduct (–) kg (lb.) as indicated for loaders with 3-piece rims	Operating Weight	Tipping Load, Straight	Tipping Load, 37-deg. Partial Turn	Tipping Load, 40-deg. Full Turn	Tread Width	Width Over Tires	Vertical Height
Michelin 26.5 R 25, 2 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Titan 26.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	–7 mm (–0.27 in.)	+4 mm (+0.16 in.)
Goodyear 26.5 R 25, 1 Star L-3	–56 kg (–123 lb.)	–39 kg (–86 lb.)	–35 kg (–77 lb.)	–35 kg (–77 lb.)	0 mm (0 in.)	+1 mm (+0.04 in.)	+4 mm (+0.16 in.)
Firestone 26.5-25, 20-Ply L-3	–360 kg (–794 lb.)	–254 kg (–560 lb.)	–228 kg (–503 lb.)	–224 kg (–494 lb.)	0 mm (0 in.)	–28 mm (–1.10 in.)	+39 mm (+1.53 in.)
Firestone 26.5-25, 20-Ply L-5 [§]	+312 kg (+688 lb.)	+220 kg (+485 lb.)	+197 kg (+434 lb.)	+194 kg (+428 lb.)	0 mm (0 in.)	–18 mm (–0.70 in.)	+63 mm (+2.48 in.)
Michelin 29.5 R 25, 2 Star L-3 [§]	+604 kg (+1,332 lb.)	+426 kg (+939 lb.)	+382 kg (+842 lb.)	+375 kg (+827 lb.)	0 mm (0 in.)	+82 mm (+3.23 in.)	+69 mm (+2.71 in.)
Titan 29.5 R 25, 1 Star L-3 [§]	+664 kg (+1,464 lb.)	+468 kg (+1,032 lb.)	+420 kg (+926 lb.)	+412 kg (+908 lb.)	0 mm (0 in.)	+58 mm (+2.30 in.)	+80 mm (+3.10 in.)
Bridgestone 29.5 R 25, 1 Star L-3 [§]	+720 kg (+1,587 lb.)	+508 kg (+1,120 lb.)	+456 kg (+1,005 lb.)	+447 kg (+985 lb.)	0 mm (0 in.)	+71 mm (+2.80 in.)	+78 mm (+3.00 in.)
Michelin 775/65 R29, 1 Star L-3 [§]	+726 kg (+1,601 lb.)	+512 kg (+1,129 lb.)	+459 kg (+1,012 lb.)	+451 kg (+994 lb.)	0 mm (0 in.)	+104 mm (+4.09 in.)	+23 mm (+0.91 in.)
Bridgestone 775/65 R29, 1 Star L-3 [§]	+876 kg (+1,931 lb.)	+618 kg (+1,362 lb.)	+554 kg (+1,221 lb.)	+554 kg (+1,199 lb.)	0 mm (0 in.)	+99 mm (+3.90 in.)	+14 mm (+0.55 in.)
4.8-m ³ (6.25 cu. yd.) General-Purpose Bucket With Wear Liners	+264 kg (+582 lb.)	–526 kg (–1,160 lb.)	–500 kg (–1,102 lb.)	–496 kg (–1,093 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
5.2-m ³ (6.75 cu. yd.) Material-Handling Bucket With Wear Liners	+305 kg (+672 lb.)	–685 kg (–1,510 lb.)	–646 kg (–1,424 lb.)	–640 kg (–1,411 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
High-Lift Boom	+379 kg (+836 lb.)	–3247 kg (–7,158 lb.)	–2922 kg (–6,442 lb.)	–2869 kg (–6,325 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)

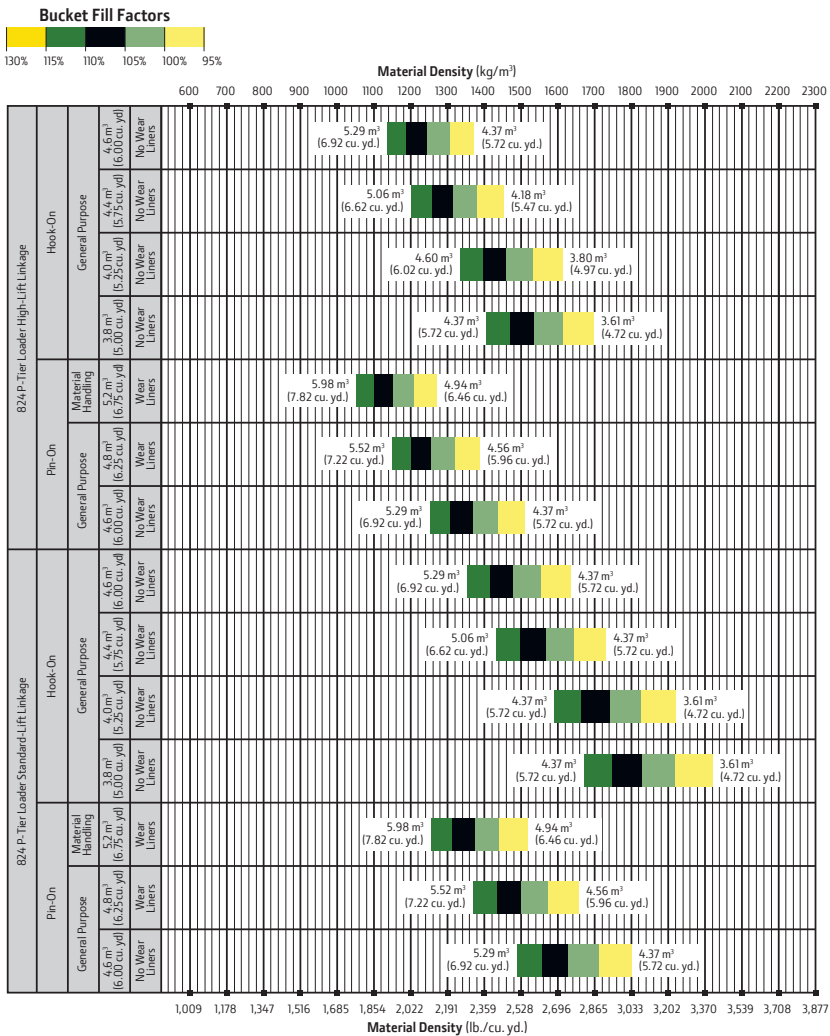
*May change based on vehicle configuration, weight, or tire-pressure adjustments.

[§]Requires 8-deg. rear axle stops.

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

Bucket Selection Guides824 P-TIER

LOOSE MATERIALS	kg/m ³	lb./cu. yd.	LOOSE MATERIALS	kg/m ³	lb./cu. yd.
Chips, pulpwood	288	486	Limestone, coarse, sized	1570	2,646
Cinders (coal, ashes, clinkers)	673	1,134	Limestone, mixed sizes	1682	2,835
Clay and gravel, dry	1602	2,700	Limestone, pulverized or crushed	1362	2,295
Clay, compact, solid	1746	2,943	Sand, damp	2083	3,510
Clay, dry in lump loose	1009	1,701	Sand, dry	1762	2,970
Clay, excavated in water	1282	2,160	Sand, voids, full of water	2083	3,510
Coal, anthracite, broken, loose	865	1,458	Sandstone, quarried	1314	2,214
Coal, bituminous, moderately wet	801	1,350	Shale, broken crushed	1362	2,295
Earth, common loam, dry	1218	2,052	Slag, furnace granulated	1955	3,294
Earth, mud, packed	1843	3,105	Stone or gravel, 37.5 to 87.5-mm		
Granite, broken	1538	2,592	(1.5 to 3.5 in.) size	1442	2,430
Gypsum	2275	3,834	Stone or gravel, 18.75-mm (0.75 in.) size	1602	2,700



Additional equipment

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

824 P Engine

- Wet-sleeve cylinder liners
- Programmable auto-idle and auto shutdown
- Selected idle adjustment from 900–1,250 rpm
- Starter excessive-cranking protection
- Automatic engine cool-down timer
- Automatic derating for exceeded system temperatures
- Serpentine drive belt for automatic tensioner
- Electrical fuel-priming pump
- Dual-stage fuel filter and water separator
- 500-hour vertical spin-on oil filter
- Engine-compartment light
- ▲ Chrome exhaust stack
- ▲ Automatic ether starting aid and engine block heater (recommended for cold starts below –12 deg. C [10 deg. F])
- Centrifugal engine air pre-cleaner
- ▲ Throttle lock

Powertrain

- Clutch cutoff with 4 operator settings: Automatic, level ground, small slope, or steep slope
- Programmable maximum high gear
- Clutch calibration engaged from monitor
- 2,000-hour vertical spin-on transmission filter
- Transmission fill tube with sight gauge
- Transmission diagnostic ports
- 5-speed transmission with lockup torque converter
- Front locking differential
- ▲ Rear locking differential
- ▲ Brake adjusters and retractors
- ▲ Automatic differential lock
- Axle oil temperature sensing
- Wheel-spin control

Quad-Cool™ Cooling System

- Heavy-duty, trash-resistant radiator and high-ambient cooling package
- 2-side access to all coolers

824 P Quad-Cool Cooling System (continued)

- Isolated from engine compartment
- Engine radiator
- Integral engine oil cooler
- Hydraulic oil cooler (oil to air)
- Transmission oil cooler (oil to air)
- Charge air cooler (air to air)
- Fuel cooler
- Coolant recovery tank with under-hood lighting
- Coolant-loss sensor
- Antifreeze, –37 deg. C (–34 deg. F)
- Cool-on-demand swing-out fan
- Enclosed fan safety guard
- Automatic reversing fan drive
- Axle and service-brake coolers

Hydraulics

- Electrohydraulic control with soft stops and adjustable settings
- In-cab adjustable automatic return-to-dig bucket positioner
- In-cab adjustable automatic boom-height kickout/return to carry
- Reservoir with sight gauge and fill strainer
- Hydraulic diagnostic ports
- 4,000-hour in-tank filter
- 2 function — 2-lever fingertip controls
- ▲ 2 function — joystick
- ▲ 2 function — joystick with F-N-R (steering wheel only)
- ▲ 3 function — 3-lever fingertip controls
- ▲ 3 function — joystick with integrated 3rd-function roller
- ▲ 3 function — joystick with integrated 3rd-function roller and F-N-R (steering wheel only)
- ▲ 4 function — joystick with integrated 3rd/4th-function rollers
- ▲ 4 function — joystick with integrated 3rd/4th-function rollers and F-N-R (steering wheel only)
- 2 programmable multifunction buttons
- Adjustable and continuous auxiliary hydraulic-flow settings

824 P Hydraulics (continued)

- Programmable attachment settings
- Ride control, automatic with monitor-adjustable speed settings
- ▲ Hydraulic control system for quick-coupler locking pins
- ▲ Hydrau™ XR cold-temperature hydraulic fluid recommended below –25 deg. C (–13 deg. F)

Steering Systems

- Joystick steering with gearshift, F-N-R, and horn
- ▲ Conventional steering wheel with spinner knob
- ▲ Secondary steering

Electrical

- Solid-state electrical power-distribution system
- Lockable master electrical-disconnect switch
- Battery-terminal safety covers
- By-pass start safety cover at starter
- Remote jump-start access in battery box
- Pre-wired for beacon/strobe light
- ▲ Beacon bracket (single or dual available)
- ▲ LED strobe beacon
- Lights: Halogen driving lights with guards (2) / Front (4), rear cab (2), and rear grille (2) work lights / LEF front turn signals and flashers / LED stop- and taillights
- ▲ Premium LED work, drive, and marker lights
- Programmable courtesy lights
- Horn, electric
- Reverse warning alarm
- Multifunction/multi-language 178-mm (7 in.) LCD color monitor includes: Digital instruments — Analog display (hydraulic oil temperature, engine coolant temperature, transmission oil temperature, and engine oil pressure) / Digital display (engine rpm, transmission gear/direction indicator, hour meter, fuel level, diesel exhaust fluid [DEF] level, speedometer, odometer, and average fuel consumption)

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

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Additional equipment *(continued)*

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

824 P Electrical *(continued)*

- Integrated cycle counter with 5 categories
- Indicator lights: Standard and selected options / Amber caution and red stop
- Operator-warning messages
- Built-in diagnostics: Diagnostic-code details / Sensor values / Calibrations / Individual circuit tester
- ▲ Electrical corrosion-prevention package
- ▲ Premium AM/FM/Weather Band (WB) radio with Bluetooth®, remote auxiliary port, and remote USB port
- ▲ 24- to 12-volt, 30-amp converter with 3 in-cab power ports

Operator's Station

- Quiet Cab with air conditioning/heater (ROPS/FOPS Level 2, isolation mounted)
- Automatic temperature control
- Rear window defrost vent
- Keyless start with multiple security modes
- Sealed-switch module with function indicators
- Premium seat with high-wide back and headrest extension, heated and ventilated, leather/fabric cover, pan tilt/extend, damper adjustments, and adjustable heavy-duty air suspension
- Hydraulic controls and joystick steering integrated to seat
- High-visibility, bright-orange seat belt, 76 mm (3 in.), with retractor
- Seat-belt minder monitoring with JDLink™
- ▲ Seat-belt indicator beacon light
- Cup holder and cup/thermos holder with retaining strap
- Lunch-box/cooler holder with tie-down brackets
- LED dome and reading light
- Coat hook
- Rubber floor mat
- ▲ Dual-tilt steering column (steering wheel only)
- Operator's manual storage compartment

824 P Operator's Station *(continued)*

- Outside (2) and inside (2) rearview mirrors
- ▲ In-cab adjustable heated outside mirrors with convex lens
- Left-side operator-station access
- Front window-washing platforms with fall-arrest system anchor points tested to 2268 kg (5,000 lb.)
- Slip-resistant steps and ergonomic handholds
- Pull-down front sun visor
- ▲ Pull-down rear sun visor
- CB radio ready with 12-volt power, bracket, and antennae included
- Front and rear intermittent windshield wiper and washers
- ▲ Powered cab air pre-cleaner
- Rearview camera
- ▲ Advanced radar object-detection system
- ▲ Advanced vision system
- Payload scale ready
- ▲ Payload scale system
- ▲ Payload scale system with printer
- ▲ Fire extinguisher

Loader Linkage

- Z-Bar loader linkage
- ▲ High-Lift Z-Bar loader linkage

Buckets and Attachments

- ▲ Full line of Deere pin-on buckets, hook-on buckets, and forks
- ▲ John Deere hydraulic coupler that accepts JRB 420-pattern attachments
- ▲ Bolt-on bucket spill guard
- ▲ Bushed pin joints (including static joints) on optional Enhanced-Performance buckets

Overall Vehicle

- JDLink wireless communication system (available in specific countries; see your dealer for details)
- ▲ Auto-lube system with empty reservoir sensor and diagnostics integrated into machine diagnostics and JDLink alerts
- Front and rear tie-downs

824 P Overall Vehicle *(continued)*

- Rear cast bumper with rear hitch and locking pin
- Articulation locking bar
- Loader boom service locking bar
- 40-deg. steering articulation to each side with rubber-cushion stops on frame
- Vandal protection with lockable engine enclosures, right counterweight storage, battery box, and filler access for radiator/fuel/hydraulic transmission
- Right and left handrails, platforms, and steps
- Service steps and handholds
- Storage compartment
- Fuel-tank fill strainer
- Heavy-duty fuel-tank guard
- Ground-level fueling and DEF
- Same-side ground-level daily servicing
- Environmental drains for engine, transmission, hydraulic oils, and engine coolant
- Fluid-sampling ports for engine, transmission, hydraulic and axle oils, and engine coolant
- 26.5R25 tires on 5-piece rims
- ▲ 775/65R29 tires on 5-piece rims
- ▲ Tire-pressure monitoring system
- Level 1 sound package
- Level 2 sound package
- Transmission side-frame and bottom guards
- ▲ Fast-fuel system
- ▲ Quick fluid service (engine, transmission, hydraulic oils, and engine coolant)
- Fenders, full-coverage, front
- ▲ Fenders, full-coverage, front and rear
- ▲ Fenders, roading, full-coverage, front and rear
- Lift eyes
- ▲ Wheel-chock-mounting brackets
- ▲ License-plate bracket and light
- ▲ Special guarding for waste and forestry applications

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JOHN DEERE