

444K/524K/544K LOADERS

92–121 kW (124–163 net hp)



JOHN DEERE





Do. More.

Got a material-handling app that demands extra agility and ability? There's a John Deere loader for that. In fact, there are three of them. Built on the highly reliable platform of their predecessors, these enhanced K-Series utility versions are loaded with even more customer-inspired productivity- and uptime-increasing features. Their EPA Final Tier 4 (FT4)/EU Stage IV PowerTech™ diesel engines enable them to work, everywhere there's work, even in nonattainment areas. Daily checks and maintenance access are even easier. And the top-of-the-line 544K comes with a new standard five-speed transmission that delivers even more power- and fuel-efficient performance. Plus, you'll continue to profit from unique advantages such as our one-of-a-kind Quad-Cool™ design for best-in-class service ease. And a solid-state electrical system with sealed-switch module for unsurpassed reliability and fingertip control of numerous machine functions. Get more in our K-Series.



K-Series Specifications	444K	524K	544K
Net Peak Power	92 kW (124 hp)	105 kW (141 hp)	121 kW (163 hp)
Bucket Capacity Range	1.5–3.1 m ³ (2.0–4.0 cu. yd.)	1.9–3.4 m ³ (2.5–4.5 cu. yd.)	1.9–4.0 m ³ (2.5–5.25 cu. yd.)
Z-Bar:			
Tipping Load (40-deg. full turn, no tire deflection)	8080 kg (17,813 lb.)	9168 kg (20,212 lb.)	9637 kg (21,246 lb.)
Breakout Force	7960 kg (17,549 lb.)	9060 kg (19,974 lb.)	10 115 kg (22,300 lb.)
Operating Weight	11 350 kg (25,022 lb.)	12 668 kg (27,928 lb.)	13 217 kg (29,138 lb.)

Long days made shorter.

Time flies when you're getting things done. And what operator wouldn't be more productive in the high-back air-ride seat of a K-Series Loader? Up-front, an enhanced multifunction monitor displays operating, diagnostic, and maintenance info on a color LCD screen with easy-on-the-eyes clarity. Generous tinted glass and a low-profile console allow a commanding view of the work ahead. The spacious and quiet cab boasts plenty of legroom and fatigue-beating ergonomics, including convenience features such as seat-mounted loader controls. And sealed-switch module (SSM) with keyless start and effortless push-button operation of numerous machine functions. For more productivity without extra effort.

Adjustable automotive-style louvers provide effective airflow to keep the glass clear and the pressurized cab comfortable.

Entertainment/information choices include an AM/FM/WB/XM Satellite Radio™ with remote auxiliary and USB ports and Bluetooth® connectivity.

Keyless-start security system requires a numeric pass code (when enabled). Helps prevent unauthorized machine operation.

Available premium heated air-ride armchair seat adjusts multiple ways for extra comfort and cushioning.

Conveniently positioned brake and throttle pedals allow plenty of legroom for easy entrance and exit.



Multi-language color LCD monitor provides push-button access to a wealth of machine info and control:

- A. Vital and general operating info**, including transmission mode, gear, engine rpm, ground speed, fuel level, and fluid temps.
- B. Enhanced onboard diagnostics** with speed, pressure, and temperature readings and real-time switch status.
- C. Customized machine settings** such as Quick Shift, Auto-to-1st, and Ride Control let you match operating characteristics to specific jobs and conditions.
- D. Optional embedded payload scale** weighs each bucket load, helping fill trucks to the max.





1. Cooler compartment and beverage holder provide plenty of room to stow your stuff.

2. Optional rearview camera and radar object-detection system or rearview camera only displays the activity behind the machine on the LCD screen. Emits an audible alert for extra awareness in tight quarters and high-traffic areas.

3. Backlit touchpad in the SSM controls keyless start and 24 other machine functions. Enables the operator to adjust boom-height kick-out and return-to-carry, and activate return-to-dig from the seat.



More power and control mean more productivity.

If you want maximum productivity, a K-Series Loader should be on your jobsite. It's not just their big torque reserves that make them such impressive performers. Single-lever joystick or two-lever fingertip controls provide smooth effortless control. Excavator-style hydraulics sense the load and deliver the flow needed for smooth combined functions and fast work cycles. PowerShift™ torque-converter transmission on the 444K and 524K employs Smart-Shift™ technology to continuously evaluate speed and load conditions, and adjusts clutch-pack engagement to suit. 544K's new standard five-speed transmission with lockup torque converter in gears 2–5 increases acceleration, speeds cycles, and optimizes power and fuel efficiency during transport, roading, and ramp climbing. You won't find a smoother-shifting loader.

Boom-height kick-out and return-to-carry functions help speed production in repetitive loading applications. On Powerllec™-equipped loaders, the touchpad has two presets for added convenience when frequent attachment changeover is required.

Engine/hydraulic match maintains good boom and bucket power into and out of the pile. For big loads, even in wet or packed materials.

Responsive steering and full 80-deg. articulation increase maneuverability in tight quarters, for faster cycle times and fewer three-point turns.

Optional spin control boosts productivity by improving traction in troublesome material or underfoot conditions. Reduces tire wear, fuel costs, and operator fatigue, too.

Hydraulic system provides only the power required, so there's no wasted horsepower or fuel.

Smart-Shift ensures that gear changes are smooth as silk, regardless of whether the bucket is empty or fully loaded.





1. Choose single-lever joystick or two-lever fingertip pilot-operated hydraulic controls. Joystick F-N-R selector provides convenient direction and full-range gear changes. Both include innovative Quick-Shift feature for push-button gear changes, one gear at a time.
2. Hinged panel tilts away for quick ground-level access to both the fuel and diesel exhaust fluid (DEF) tanks, making refills convenient and easy.
3. Programmable clutch cutoff increases productivity in all kinds of terrain. Simply select the slope of your dumpsite — level, small, or steep. Depressing the brake pedal disconnects the transmission while maintaining engine speed for fast boom cycles.



Parallel lift that's unparallelled.

Powerlled loaders deliver both powerful digging forces and parallel lift. Their innovative design allows load forces to work with, not against, the boom. For big breakout force, even in difficult digging. Impressive torque throughout the entire dump and rollback range enables Powerlled loaders to excel at a wide variety of material-handling tasks. But don't just look for these John Deere advantages in the numbers on a spec sheet. The best way to fully appreciate them is on your jobsite. Whatever the task, whatever the load, you'll discover parallel lift that's without parallel.



1. 444K and 544K Powerl1el Loaders deliver outstanding breakout throughout the entire bucket and angle range. To conquer tough tasks such as loading logs.

2. John Deere Worksite Pro™ couplers increase versatility and make attachment switchover push-button easy. Hi-Vis coupler picks up a broad range of Deere and other attachments so you can do more with one machine.

Powerl1el’s unique design separates the bell crank from the cross tube, attaching instead to the loader frame via a Y-shaped link. This “free-floating” bell-crank design allows load forces to work with, not against, the boom. For powerful breakout in tough digging.

Hi-Vis coupler fastens the attachment close to the machine to optimize stability with heavy loads.

Unique Y-link, low-mounted boom cylinders, and Hi-Vis coupler provide clear visibility to the work tool and throughout the lift arc.

Tire and axle options let you equip your Powerl1el loader for material-handling work on a wide variety of terrain.

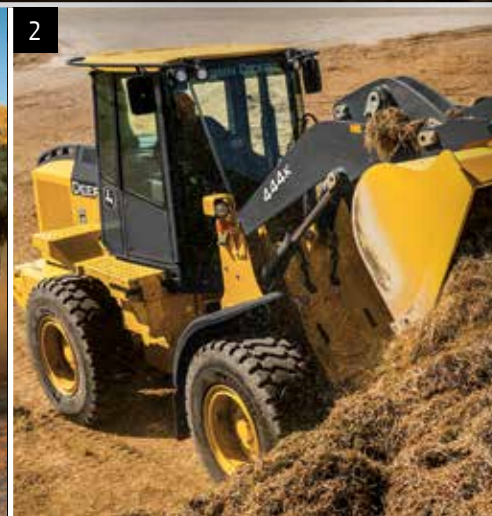


Purpose-built for a wide variety of purposes.

K-Series Loaders come equipped with plenty of production-boosting features to help you handle almost anything you throw their way. But if yours isn't just any application, we've got you covered with a wide variety of factory- or dealer-installed options. So you can equip your loader with exactly what you need to maximize your efforts and expand your opportunities. Not all options are available on all loaders, so see your dealer for specific details.

1. With ride control, the lift cylinders act as shock absorbers, cushioning bumps to allow these loaders to navigate rough ground more quickly without losing their loads. Auto-actuation travel speed is adjustable from 1.5 to 24.0 km/h (1.0 to 15.0 mph) in increments of 0.5 units.

2. Automatic differential lock engages as soon as a tire begins to slip. It's ideal for inexperienced operators or applications requiring high traction, such as stockpiling silage, plowing snow, and handling pipe.



Embedded payload scale enables you to fill each truck to its legal limit for maximum productivity. It's available on all Z-Bar and High-Lift loaders.

General-purpose or excavating buckets are available in pin-on or coupler configurations from 1.9–2.3 m³ (2.5–3.0 cu. yd.). Or opt for forks with 1.22- and 1.52-m (48 and 60 in.) tines, depending on model.



Full-tire front and rear fenders and flaps help keep the machine free of mud and debris.

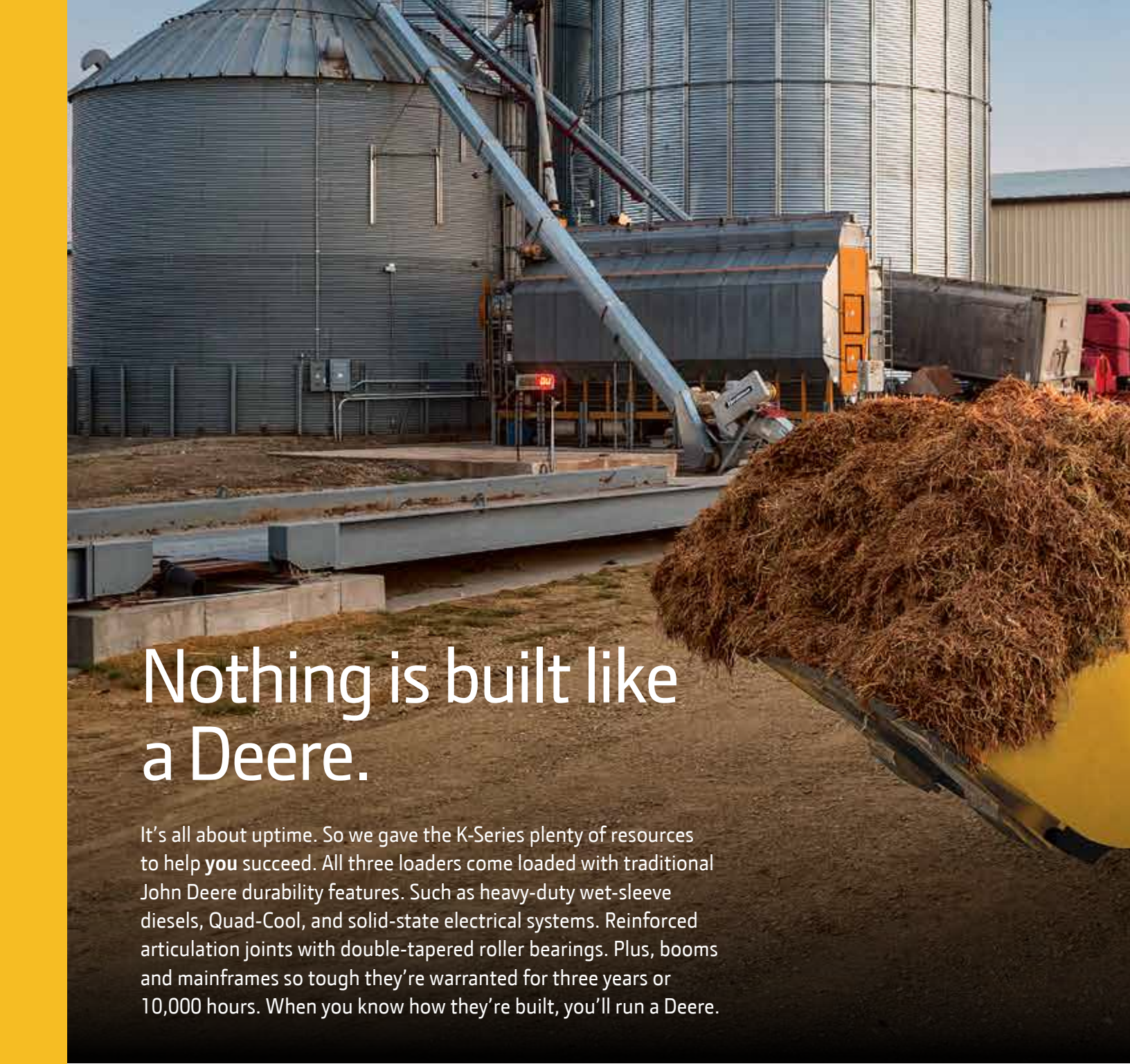
Rear-axle disconnect on the 524K and 544K disengages power when not needed. Reduces fuel consumption and tire wear, and helps smooth the ride during roading or transport.

Mine Safety and Health Administration (MSHA)-compliant self-cleaning steps and convenient handrails provide right-side access to the skid-resistant platform for cleaning windows.

Corrosion package shields electrical components and connections to help prevent corrosive materials from short-circuiting productivity.

Powered cab pre-cleaner is a smart addition in high airborne-debris environments.

Heated mirrors prevent fog and ice from obstructing visibility and impacting productivity.



Nothing is built like a Deere.

It's all about uptime. So we gave the K-Series plenty of resources to help **you** succeed. All three loaders come loaded with traditional John Deere durability features. Such as heavy-duty wet-sleeve diesels, Quad-Cool, and solid-state electrical systems. Reinforced articulation joints with double-tapered roller bearings. Plus, booms and mainframes so tough they're warranted for three years or 10,000 hours. When you know how they're built, you'll run a Deere.

Four steel plates support the loader tower, extending pin life and protecting the boom-cylinder hoses.

Sealed-switch module keeps out dust, moisture, and debris, and virtually never wears out. Proven marine-grade touchpad eliminates rocker switches and nearly 100 wires, and unsealed connections provide even longer life.

Ever have an operator burn up a starter attempting to fire-up a machine that was out of fuel? Standard starter protection limits cranking time and requires cool-down periods between attempts.

Inboard planetary final drives and self-adjusting wet-disc brakes on 524K and 544K are virtually maintenance-free.

Electrical-distribution center employs highly reliable circuit-board technology and solid-state switches that eliminate numerous wiring harnesses, fuses, relays, and connectors. Sealed gold-pin electrical connectors resist corrosion for superior long-term integrity.

Hydraulically driven fan runs only as needed for efficient cooling. Helps conserve precious fuel, too.

Standard features such as bypass-start protection, automatic park brake, convenient handholds, and slip-resistant steps help keep the operator out of harm's way.

Auto-idle applies the brakes and automatically reduces engine speed to help conserve fuel after an operator-determined period of inactivity. Auto shutdown turns off the engine after extended idleness.



1. 524K and 544K planetary final drives are mounted inboard. Hydraulic wet-disc brakes on all models self-adjust.

2. Quad-Cool places the radiator, air-conditioner condenser, intercooler, and hydraulic, transmission, and optional axle coolers in a unique boxed configuration that's isolated from engine heat. For increased efficiency and durability.

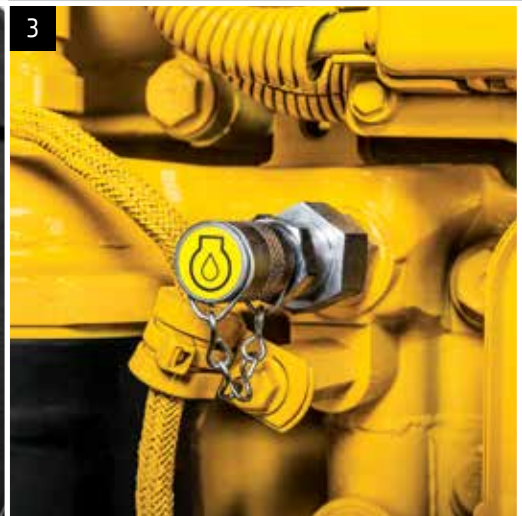
3. Optional programmable fan automatically reverses at predetermined intervals, ejecting debris from the radiator and cooler cores. Or set your own cleaning cycles through the monitor.



Stretches your dollars, not your service techs.

Controlling daily owning and operating costs shouldn't be a reach — and it's not on a K-Series Loader. Same-side ground-level service points make quick work of the daily routine. Unique Quad-Cool system provides wide-open access to both sides of the coolers for easy cleanout. Extended service intervals let you work longer between changes. And because no maintenance beats low maintenance, standard self-adjusting serpentine engine belts and wet-disc brakes seldom, if ever, require attention. That's just for starters. The list of K-Series maintenance-minimizing features goes on and on. And so will the owning and operating cost savings you'll enjoy.

1. Vertical spin-on filters allow quick, no-spill changes. 500-, 2,000-, and 4,000-hour engine, transmission, and hydraulic oil-change intervals help reduce operating costs.
2. If something goes wrong, the easy-to-navigate LCD monitor displays diagnostic messages, and even offers possible solutions to help get you back up and running quickly.
3. Color-coded fluid-sample and diagnostic test ports help speed preventative maintenance and troubleshooting. Noninvasive design helps keep out contaminants.
4. Conveniently located, easy-to-read sight gauges and see-through reservoirs let you check transmission, hydraulic, coolant, and windshield washer fluid levels at a glance.
5. Lockable master electrical-disconnect switch, cab circuit breaker, and remote-start terminals are enclosed beneath the right-side step for ground-level convenience.





500-, 2,000-, and 4,000-hour engine, transmission, and hydraulic oil and filter service intervals mean more uptime.

3-mm (0.12 in.) side-shield perforations block most airborne debris. Unlike stacked coolers, Quad-Cool cores resist plugging and are easily accessible from either side for quick and easy cleanout.

All daily service points including fuel are grouped on the left side of the machine for quick and convenient access.

Greasing is less messy, with centralized lube banks providing easy access to difficult-to-reach zerks. Periodic lube and maintenance chart conveniently ensures that nothing gets overlooked.

Large-mouth fuel tank and nearby diesel exhaust fluid (DEF) reservoir make ground-level refilling fast and easy. Increased capacities let you work longer between fill-ups.

John Deere WorkSight™ is an exclusive suite of telematics solutions that increases uptime while lowering operating costs. At its heart, JDLink™ Ultimate machine monitoring provides real-time utilization data and alerts to help you maximize productivity and efficiency while minimizing downtime. Remote diagnostics enable your dealer to read codes, record performance data, and even update software without a trip to the jobsite.

Ultimate Uptime, featuring John Deere WorkSight, is a customizable support solution available exclusively from your John Deere dealer. This flexible offering maximizes equipment availability with standard John Deere WorkSight capabilities that can help prevent future downtime and speed repairs when needed. In addition to the base John Deere WorkSight features, our dealers work with you to build an uptime package that meets the specific needs of your machine, fleet, project, and business, including customized maintenance and repair agreements, onsite parts availability, extended warranties, fluid sampling, response-time guarantees, and more.



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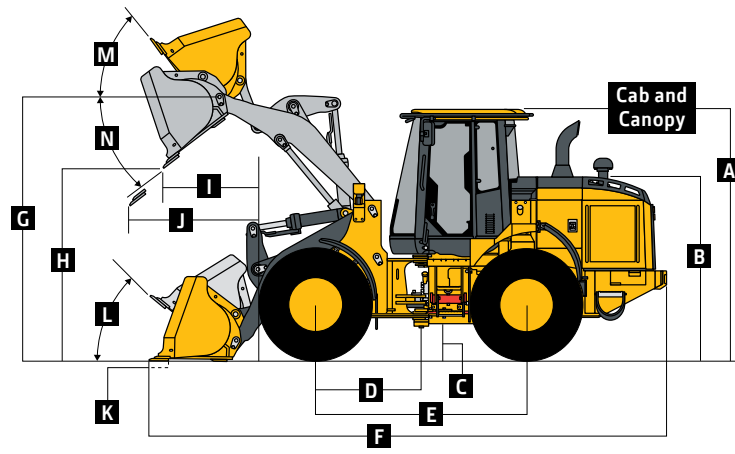
444K

Engine		
444K Z-BAR / HIGH-LIFT / POWERLEL™		
Manufacturer and Model	John Deere PowerTech™ PSS 4045	John Deere PowerTech™ E 4045H
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Cylinders	4	4
Valves Per Cylinder	4	2
Displacement	4.5 L (276 cu. in.)	4.5 L (276 cu. in.)
Net Peak Power (ISO 9249)	92 kW (124 hp) at 2,100 rpm	92 kW (124 hp) at 2,100 rpm
Net Peak Torque (ISO 9249)	507 Nm (374 lb.-ft.) at 1,000 rpm	507 Nm (374 lb.-ft.) at 1,000 rpm
Net Torque Rise	34%	36%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air cooled	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 100-amp (130-amp optional) alternator	24 volt with 80-amp (100-amp optional) alternator
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)
Transmission System		
Type	Countershaft-type PowerShift™	
Torque Converter	Single stage, single phase	
Shift Control	Electronically modulated, adaptive, load and speed dependent	
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; kick-down button on hydraulic lever	
Shift Modes	Manual/auto (1st–D or 2nd–D); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and 3 adjustable clutch-cutoff settings	
Maximum Travel Speeds (with 17.5 R 25 tires)	<i>Forward</i>	<i>Reverse</i>
Range 1	7.3 km/h (4.5 mph)	7.6 km/h (4.7 mph)
Range 2	12.1 km/h (7.5 mph)	13.0 km/h (8.1 mph)
Range 3	23.1 km/h (14.4 mph)	24.2 km/h (15.0 mph)
Range 4	36.0 km/h (22.4 mph)	N/A
Axles/Brakes		
Final Drives	Heavy-duty midboard planetary	
Differentials	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional	
Rear Axle Oscillation, Stop to Stop (with 17.5 R 25 tires)	24 deg. (12 deg. each direction)	
Service Brakes (conform to ISO 3450)	Outboard, forced oil cooled, multi disc	
Parking Brakes (conform to ISO 3450)	Automatic spring applied, hydraulically released, driveline mounted, sealed wet multi disc	
Tires/Wheels (see page 20 for complete tire adjustments)		
	<i>Tread Width</i>	<i>Width Over Tires</i>
Michelin 17.5 R 25, 1 Star L-3	1900 mm (74.8 in.)	2415 mm (95.1 in.)
Serviceability		
Refill Capacities	EPA FT4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Fuel Tank (with lockable cap)	220 L (60 gal.)	220 L (60 gal.)
Cooling System	19 L (20 qt.)	19 L (20 qt.)
Diesel Exhaust Fluid (DEF)	19 L (20 qt.)	N/A
Engine Oil with Vertical Spin-On Filter	14.5 L (15.3 qt.)	17.5 L (18.5 qt.)
Transmission Reservoir with Vertical Filter	18.5 L (19.5 qt.)	18.5 L (19.5 qt.)
Axle Oil (front and rear, each)	22 L (23 qt.)	22 L (23 qt.)
Hydraulic Reservoir and Filter	118.7 L (31.4 gal.)	92 L (24.3 gal.)
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)
Hydraulic System/Steering		
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system	
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	140 L/m (37 gpm)	
System Relief Pressure (loader and steering)	24 821 kPa (3,600 psi)	
Loader Controls	2-function valve; joystick control or fingertip controls; hydraulic-function enable/disable; optional 3rd- and 4th-function valve with auxiliary lever	
Steering (conforms to ISO 5010)	Steering-column-mounted, twist-grip shift lever; Quick-Shift button on hydraulic lever	
Type	Power, fully hydraulic	
Articulation Angle	80-deg. arc (40 deg. each direction)	
Turning Radius (measured to centerline of outside tire)	4.74 m (15 ft. 7 in.)	



Hydraulic System/Steering <i>(continued)</i>	444K Z-BAR / HIGH-LIFT / POWERLIFT	
Hydraulic Cycle Times	Z-Bar / High-Lift	Powerlift
Raise	5.9 sec.	5.3 sec.
Dump	1.0 sec.	1.1 sec.
Lower (float down)	2.4 sec.	1.9 sec.
Total	9.3 sec.	8.3 sec.

Dimensions and Specifications with Pin-On Bucket



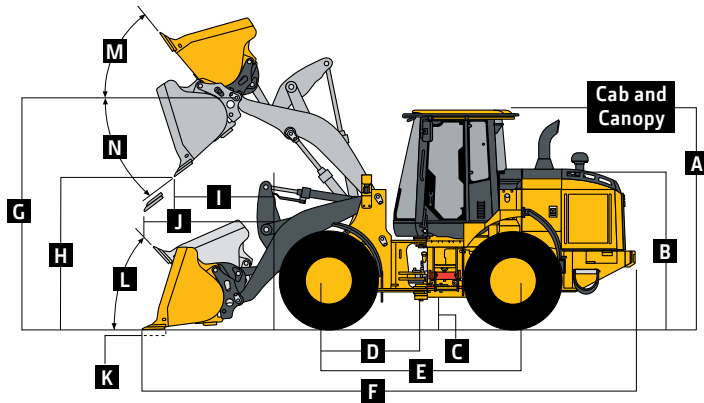
444K Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

	Z-Bar	High-Lift
Dimensions with Bucket	1.9-m ³ (2.5 cu. yd.) general-purpose with bolt-on edge	1.9-m ³ (2.5 cu. yd.) general-purpose with bolt-on edge
A Height to Top of Cab and Canopy	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)
B Hood Height	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)
C Ground Clearance	393 mm (15.5 in.)	393 mm (15.5 in.)
D Length from Centerline to Front Axle	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)
E Wheelbase	2.76 m (9 ft. 6 in.)	2.76 m (9 ft. 6 in.)
F Overall Length, Bucket on Ground	6.86 m (22 ft. 6 in.)	7.20 m (23 ft. 7 in.)
G Height to Hinge Pin, Fully Raised	3.60 m (11 ft. 10 in.)	3.99 m (13 ft. 1 in.)
H Dump Clearance, 45 deg., Full Height	2.67 m (8 ft. 9 in.)	3.03 m (9 ft. 11 in.)
I Reach, 45-deg. Dump, Full Height	1.04 m (3 ft. 5 in.)	1.04 m (3 ft. 5 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.44 m (4 ft. 9 in.)	1.74 m (5 ft. 9 in.)
K Maximum Digging Depth	105 mm (4.1 in.)	105 mm (4.1 in.)
L Maximum Rollback at Ground Level	41 deg.	41 deg.
M Maximum Rollback, Boom Fully Raised	55 deg.	50 deg.
N Maximum Bucket Dump Angle, Fully Raised	50 deg.	45 deg.
Loader Clearance Circle, Bucket Carry Position	11.07 m (36 ft. 4 in.)	11.39 m (37 ft. 5 in.)
Specifications with Bucket		
Capacity, Heaped	1.9 m ³ (2.5 cu. yd.)	1.9 m ³ (2.5 cu. yd.)
Capacity, Struck	1.6 m ³ (2.1 cu. yd.)	1.6 m ³ (2.1 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	888 kg (1,958 lb.)	888 kg (1,958 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.54 m (8 ft. 4 in.)
Breakout Force	7960 kg (17,549 lb.)	7345 kg (16,193 lb.)
Tipping Load, Straight, No Tire Deflection	9263 kg (20,421 lb.)	7955 kg (17,538 lb.)
Tipping Load, Straight, with Tire Deflection	8736 kg (19,260 lb.)	7545 kg (16,634 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	8080 kg (17,813 lb.)	6914 kg (15,243 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	7437 kg (16,396 lb.)	6399 kg (14,107 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	4040 kg (8,907 lb.)	3457 kg (7,621 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	3718 kg (8,197 lb.)	3199 kg (7,053 lb.)
Operating Weight	11 350 kg (25,022 lb.)	11 538 kg (25,360 lb.)

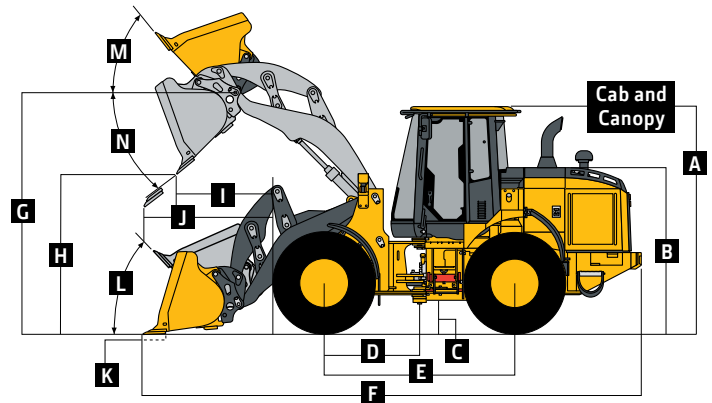
Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSS 4045 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

*Rated operating capacity based on Deere attachments only.

Dimensions and Specifications with Hi-Vis Coupler and Hook-On Bucket **444K Z-BAR / HIGH-LIFT / POWERLLEL**



444K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET



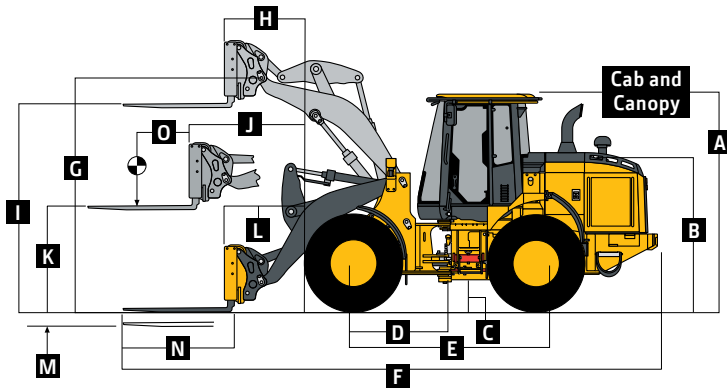
444K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET

	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllep	Powerllep
Dimensions with Bucket	1.9-m ³ (2.5 cu. yd.) general-purpose with bolt-on edge	3.1-m ³ (4.0 cu. yd.) light-material with bolt-on edge	1.9-m ³ (2.5 cu. yd.) general-purpose with bolt-on edge	3.1-m ³ (4.0 cu. yd.) light-material with bolt-on edge	1.9-m ³ (2.5 cu. yd.) general-purpose with bolt-on edge	3.1-m ³ (4.0 cu. yd.) light-material with bolt-on edge
A Height to Top of Cab and Canopy	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)
B Hood Height	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)
C Ground Clearance	393 mm (15.5 in.)	393 mm (15.5 in.)	393 mm (15.5 in.)	393 mm (15.5 in.)	393 mm (15.5 in.)	393 mm (15.5 in.)
D Length from Centerline to Front Axle	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)
E Wheelbase	2.76 m (9 ft. 6 in.)	2.76 m (9 ft. 1 in.)	2.76 m (9 ft. 6 in.)	2.76 m (9 ft. 1 in.)	2.76 m (9 ft. 6 in.)	2.76 m (9 ft. 1 in.)
F Overall Length, Bucket on Ground	7.05 m (23 ft. 1 in.)	7.31 m (23 ft. 11.8 in.)	7.38 m (24 ft. 3 in.)	7.63 m (25 ft. 0 in.)	7.15 m (23 ft. 5 in.)	7.40 m (24 ft. 3 in.)
G Height to Hinge Pin, Fully Raised	3.60 m (11 ft. 10 in.)	3.60 m (11 ft. 10 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)	3.67 m (12 ft. 0 in.)	3.67 m (12 ft. 0 in.)
H Dump Clearance, 45 deg., Full Height	2.54 m (8 ft. 4 in.)	2.34 m (7 ft. 8 in.)	2.90 m (9 ft. 6 in.)	2.71 m (8 ft. 11 in.)	2.58 m (8 ft. 5 in.)	2.36 m (7 ft. 9 in.)
I Reach, 45-deg. Dump, Full Height	1.15 m (3 ft. 9 in.)	1.23 m (4 ft. 0 in.)	1.15 m (3 ft. 9 in.)	1.26 m (4 ft. 2 in.)	1.14 m (3 ft. 9 in.)	1.32 m (4 ft. 4 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.47 m (4 ft. 10 in.)	1.41 m (4 ft. 7.5 in.)	1.78 m (5 ft. 10 in.)	1.75 m (5 ft. 9 in.)	1.51 m (4 ft. 11 in.)	1.52 m (5 ft. 0 in.)
K Maximum Digging Depth	139 mm (5.0 in.)	258 mm (10.0 in.)	148 mm (5.8 in.)	258 mm (10.0 in.)	119 mm (4.7 in.)	260 mm (10.2 in.)
L Maximum Rollback at Ground Level	41 deg.	41 deg.	41 deg.	40 deg.	43 deg.	43 deg.
M Maximum Rollback, Boom Fully Raised	55 deg.	56 deg.	49 deg.	51 deg.	51 deg.	53 deg.
N Maximum Bucket Dump Angle, Fully Raised	50 deg.	49 deg.	45 deg.	45 deg.	50 deg.	48 deg.
Loader Clearance Circle, Bucket Carry Position	11.19 m (36 ft. 9 in.)	11.65 m (38 ft. 3 in.)	11.47 m (37 ft. 7 in.)	11.93 m (39 ft. 2 in.)	11.23 m (36 ft. 10 in.)	11.78 m (38 ft. 8 in.)
Specifications with Bucket						
Capacity, Heaped	1.9 m ³ (2.5 cu. yd.)	3.1 m ³ (4.0 cu. yd.)	1.9 m ³ (2.5 cu. yd.)	3.1 m ³ (4.0 cu. yd.)	1.9 m ³ (2.5 cu. yd.)	3.1 m ³ (4.0 cu. yd.)
Capacity, Struck	1.6 m ³ (2.1 cu. yd.)	2.59 m ³ (3.4 cu. yd.)	1.6 m ³ (2.1 cu. yd.)	2.59 m ³ (3.4 cu. yd.)	1.6 m ³ (2.1 cu. yd.)	2.59 m ³ (3.4 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1290 kg (2,844 lb.)	1627 kg (3,587 lb.)	1290 kg (2,844 lb.)	1627 kg (3,587 lb.)	1262 kg (2,782 lb.)	1638 kg (3,611 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)	2.54 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)	2.54 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)
Breakout Force	6659 kg (14,681 lb.)	5451 kg (12,017 lb.)	6136 kg (13,528 lb.)	5063 kg (11,162 lb.)	6056 kg (13,352 lb.)	5562 kg (12,262 lb.)
Tipping Load, Straight, No Tire Deflection	8320 kg (18,342 lb.)	7792 kg (17,178 lb.)	7136 kg (15,732 lb.)	6634 kg (14,625 lb.)	7272 kg (16,032 lb.)	6708 kg (14,788 lb.)
Tipping Load, Straight, with Tire Deflection	7839 kg (17,282 lb.)	7314 kg (16,125 lb.)	6756 kg (14,894 lb.)	6252 kg (13,783 lb.)	6879 kg (15,166 lb.)	6321 kg (13,935 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	7209 kg (15,893 lb.)	6701 kg (14,773 lb.)	6151 kg (13,561 lb.)	5668 kg (12,496 lb.)	6270 kg (13,823 lb.)	5733 kg (12,639 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	6615 kg (14,584 lb.)	6108 kg (13,466 lb.)	5676 kg (12,513 lb.)	5196 kg (11,455 lb.)	5778 kg (12,738 lb.)	5250 kg (11,574 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	3604 kg (7,945 lb.)	3350 kg (7,385 lb.)	3076 kg (6,781 lb.)	2834 kg (6,248 lb.)	3135 kg (6,911 lb.)	2867 kg (6,321 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	3307 kg (7,291 lb.)	3054 kg (6,733 lb.)	2838 kg (6,257 lb.)	2598 kg (5,728 lb.)	2889 kg (6,369 lb.)	2625 kg (5,787 lb.)
Operating Weight	11 752 kg (25,909 lb.)	12 088 kg (26,649 lb.)	11 940 kg (26,323 lb.)	12 277 kg (27,066 lb.)	12 412 kg (27,364 lb.)	12 748 kg (28,104 lb.)

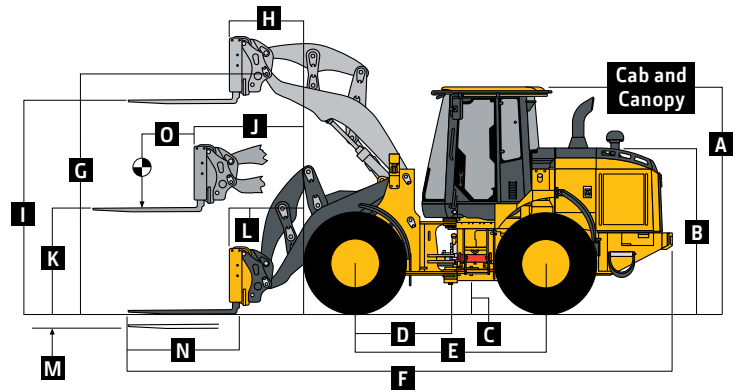
Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSS 4045 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

*Rated operating capacity based on Deere attachments only.

Dimensions and Specifications with Hi-Vis Coupler and Construction Forks 444K Z-BAR / HIGH-LIFT / POWERLLEL



444K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS



444K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS

	Z-Bar 1.22-m (48 in.) tine length	Z-Bar 1.52-m (60 in.) tine length	High-Lift 1.22-m (48 in.) tine length	High-Lift 1.52-m (60 in.) tine length	Powerllel 1.22-m (48 in.) tine length	Powerllel 1.52-m (60 in.) tine length
Dimensions with Forks						
A Height to Top of Cab and Canopy	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)	3.17 m (10 ft. 5 in.)
B Hood Height	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)	2.27 m (7 ft. 5 in.)
C Ground Clearance	393 mm (15.5 in.)	393 mm (15.5 in.)	393 mm (15.5 in.)	393 mm (15.5 in.)	393 mm (15.5 in.)	393 mm (15.5 in.)
D Length from Centerline to Front Axle	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)	1.37 m (4 ft. 6 in.)
E Wheelbase	2.76 m (9 ft. 6 in.)	2.76 m (9 ft. 6 in.)	2.76 m (9 ft. 6 in.)	2.76 m (9 ft. 6 in.)	2.76 m (9 ft. 6 in.)	2.76 m (9 ft. 6 in.)
F Overall Length, Forks on Ground	7.45 m (24 ft. 5 in.)	7.77 m (25 ft. 6 in.)	7.79 m (25 ft. 7 in.)	8.09 m (26 ft. 6 in.)	7.52 m (24 ft. 8 in.)	7.82 m (25 ft. 8 in.)
G Height to Hinge Pin, Fully Raised	3.60 m (11 ft. 10 in.)	3.60 m (11 ft. 10 in.)	3.99 m (13 ft. 1 in.)	3.99 m (13 ft. 1 in.)	3.67 m (12 ft. 0 in.)	3.67 m (12 ft. 0 in.)
H Reach, Fully Raised	0.86 m (34 in.)	0.86 m (34 in.)	0.86 m (34 in.)	0.86 m (34 in.)	0.86 m (34 in.)	0.86 m (34 in.)
I Fork Height, Fully Raised	3.44 m (11 ft. 3 in.)	3.44 m (11 ft. 3 in.)	3.79 m (12 ft. 5 in.)	3.79 m (12 ft. 5 in.)	3.51 m (11 ft. 6 in.)	3.51 m (11 ft. 6 in.)
J Maximum Reach, Fork Level	1.57 m (5 ft. 2 in.)	1.57 m (5 ft. 2 in.)	1.84 m (6 ft. 0 in.)	1.84 m (6 ft. 0 in.)	1.63 m (5 ft. 4 in.)	1.63 m (5 ft. 4 in.)
K Fork Height, Maximum Reach	1.69 m (5 ft. 6 in.)	1.69 m (5 ft. 6 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.73 m (5 ft. 8 in.)	1.73 m (5 ft. 8 in.)
L Reach, Ground Level	0.97 m (3 ft. 2 in.)	0.97 m (3 ft. 2 in.)	1.31 m (4 ft. 4 in.)	1.31 m (4 ft. 4 in.)	0.96 m (3 ft. 2 in.)	0.96 m (3 ft. 2 in.)
M Depth Below Ground	107 mm (4.2 in.)	107 mm (4.2 in.)	16 mm (0.6 in.)	16 mm (0.6 in.)	2 mm (0.1 in.)	2 mm (0.1 in.)
N Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)
O Load Position, 50% Tine Length	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)
Specifications with Forks						
Tipping Load, Straight, No Tire Deflection	6162 kg (13,585 lb.)	5806 kg (12,800 lb.)	5567 kg (12,273 lb.)	5263 kg (11,603 lb.)	5796 kg (12,778 lb.)	5472 kg (12,064 lb.)
Tipping Load, Straight, with Tire Deflection	5979 kg (13,181 lb.)	5637 kg (12,427 lb.)	5409 kg (11,925 lb.)	5118 kg (11,283 lb.)	5613 kg (12,374 lb.)	5301 kg (11,687 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	5360 kg (11,817 lb.)	5044 kg (11,120 lb.)	4823 kg (10,633 lb.)	4554 kg (10,040 lb.)	5022 kg (11,072 lb.)	4734 kg (10,437 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	5115 kg (11,277 lb.)	4818 kg (10,622 lb.)	4611 kg (10,165 lb.)	4359 kg (9,610 lb.)	4791 kg (10,562 lb.)	4512 kg (9,947 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1 and SAE J1197)*	2557 kg (5,637 lb.)	2409 kg (5,311 lb.)	2305 kg (5,082 lb.)	2179 kg (4,804 lb.)	2395 kg (5,280 lb.)	2256 kg (4,977 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	3069 kg (6,766 lb.)	2891 kg (6,374 lb.)	2767 kg (6,100 lb.)	2615 kg (5,765 lb.)	2874 kg (6,336 lb.)	2707 kg (5,968 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	4092 kg (9,021 lb.)	3854 kg (8,497 lb.)	3689 kg (8,133 lb.)	3487 kg (7,687 lb.)	3833 kg (8,450 lb.)	3610 kg (7,959 lb.)
Operating Weight	11 450 kg (25,243 lb.)	11 493 kg (25,338 lb.)	11 638 kg (25,657 lb.)	11 681 kg (25,752 lb.)	12 121 kg (26,722 lb.)	12 164 kg (26,817 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSS 4045 (EPA Final Tier 4/EU Stage IV) 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

444K Z-BAR / HIGH-LIFT / POWERLLEL

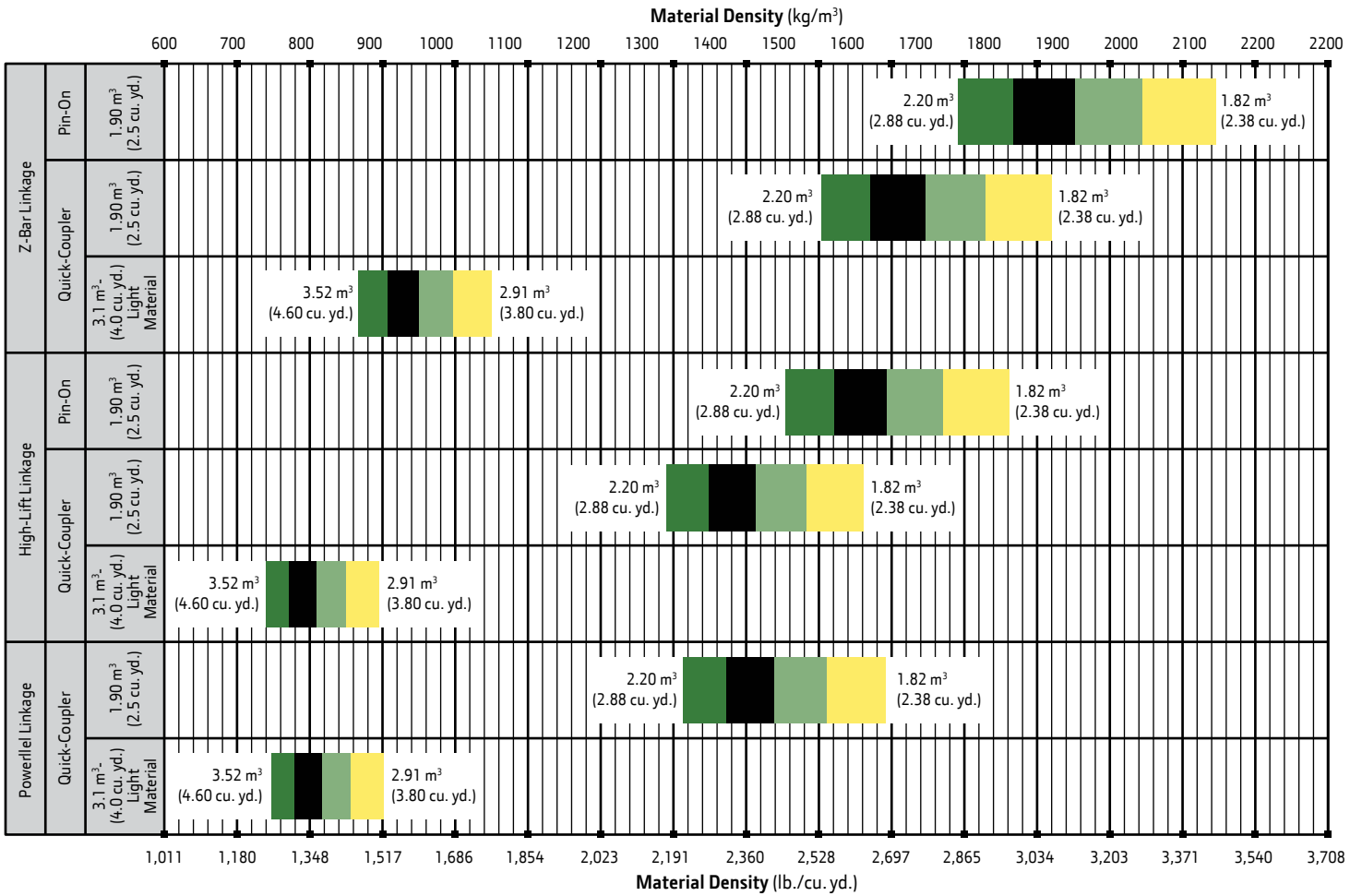
Adjustments to operating weights, tipping loads, and tires are based on Z-Bar machine with pin-on 1.9-m³ (2.5 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator*

Add (+) or deduct (–) kg (lb.) as indicated for loaders with 3-piece rims	Operating Weight	Tipping Load,		Tread Width	Width Over Tires	Vertical Height
		Straight	40-deg. Full Turn			
John Deere PowerTech PSS 4045	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech E 4045H						
Z-Bar	+63 kg (+139 lb.)	+277 kg (+610 lb.)	+222 kg (+489 lb.)	N/A	N/A	N/A
High-Lift	+24 kg (+53 lb.)	+157 kg (+346 lb.)	+123 kg (+271 lb.)	N/A	N/A	N/A
Michelin 17.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Michelin 17.5 R 25, 1 Star L-2	–100 kg (–220 lb.)	–71 kg (–157 lb.)	–64 kg (–141 lb.)	0 mm (0 in.)	+10 mm (+0.4 in.)	–4 mm (–0.2 in.)
Bridgestone 17.5 R 25, 1 Star L-2	+32 kg (+71 lb.)	+23 kg (+50 lb.)	+20 kg (+44 lb.)	0 mm (0 in.)	+10 mm (+0.4 in.)	–4 mm (–0.2 in.)
Titan 17.5 R 25, 1 Star L-2	–32 kg (–71 lb.)	–23 kg (–50 lb.)	–20 kg (–44 lb.)	0 mm (0 in.)	+10 mm (+0.4 in.)	–4 mm (–0.2 in.)
Firestone 17.5-25, 12 PR L-3	–184 kg (–406 lb.)	–130 kg (–287 lb.)	–118 kg (–260 lb.)	0 mm (0 in.)	–9 mm (–0.4 in.)	+6 mm (+0.2 in.)
Firestone 17.5-25, 12 PR L-2	–176 kg (–388 lb.)	–125 kg (–275 lb.)	–113 kg (–249 lb.)	0 mm (0 in.)	–9 mm (–0.4 in.)	+5 mm (+0.2 in.)
Firestone 20.5-25, 12 PR L-2 [§]	+56 kg (+123 lb.)	+40 kg (+88 lb.)	+36 kg (+79 lb.)	+50 mm (+2 in.)	+124 mm (+4.9 in.)	+66 mm (+2.6 in.)
Titan 20.5-25, 12 PR L-2 [§]	+96 kg (+212 lb.)	+68 kg (+150 lb.)	+61 kg (+134 lb.)	+50 mm (+2 in.)	+124 mm (+4.9 in.)	+66 mm (+2.6 in.)
Michelin 20.5 R 25, 1 Star L-2 [§]	+204 kg (+450 lb.)	+145 kg (+320 lb.)	+130 kg (+287 lb.)	+50 mm (+2 in.)	+118 mm (+4.6 in.)	+58 mm (+2.3 in.)
Bridgestone 20.5 R 25, 1 Star L-2 [§]	+296 kg (+653 lb.)	+211 kg (+464 lb.)	+189 kg (+417 lb.)	+50 mm (+2 in.)	+118 mm (+4.6 in.)	+58 mm (+2.3 in.)
Titan 20.5 R 25, 1 Star L-2 [§]	+276 kg (+608 lb.)	+196 kg (+433 lb.)	+176 kg (+388 lb.)	+50 mm (+2 in.)	+118 mm (+4.6 in.)	+58 mm (+2.3 in.)
Michelin 20.5 R 25 L2 Sno-Plus [§]	+260 kg (+573 lb.)	+185 kg (+408 lb.)	+163 kg (+359 lb.)	+50 mm (+2 in.)	+86 mm (+3.4 in.)	+63 mm (+2.5 in.)
CaCl ₂ in 17.5-25 Rear Tires, 75% Fill	+537 kg (+1,183 lb.)	+639 kg (+1,409 lb.)	+564 kg (+1,243 lb.)	N/A	N/A	N/A

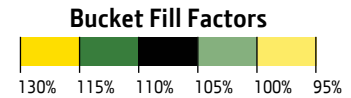
*May change based on vehicle configuration, weight, or tire-pressure adjustments.

[§]CaCl₂ not recommended.

[§]Requires 8-deg. rear axle stops.



LOOSE MATERIALS	kg/m³	lb./cu. yd.	LOOSE MATERIALS	kg/m³	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 (1.5 to 3.5") size	1442	2,430
Granite, broken	1538	2,592	Stone or gravel, 18.75-mm (3/4") size	1602	2,700
Gypsum	2275	3,834			



524K

Engine		
524K Z-BAR / HIGH-LIFT		
Manufacturer and Model	John Deere PowerTech™ PVS 6068	John Deere PowerTech™ E 6068H
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Cylinders	6	6
Valves Per Cylinder	4	2
Displacement	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)
Net Peak Power (ISO 9249)	105 kW (141 hp) at 1,700 rpm	110 kW (146 hp) at 2,000 rpm
Net Peak Torque (ISO 9249)	623 Nm (459 lb.-ft.) at 1,200 rpm	607 Nm (448 lb.-ft.) at 1,600 rpm
Net Torque Rise	50%	47%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air cooled	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 100-amp (130-amp optional) alternator	24 volt with 80-amp (100-amp optional) alternator
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)
Transmission System		
Type	Countershaft-type PowerShift™	
Torque Converter	Single stage, single phase	
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–D or 2nd–D); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and 3 adjustable clutch-cutoff settings	
Maximum Travel Speeds (with 20.5 R 25 tires)	<i>Forward</i>	<i>Reverse</i>
Range 1	7.0 km/h (4.4 mph)	7.3 km/h (4.5 mph)
Range 2	12.0 km/h (7.5 mph)	12.6 km/h (7.8 mph)
Range 3	23.0 km/h (14.3 mph)	24.1 km/h (15.0 mph)
Range 4	36.0 km/h (22.4 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 20.5 R 25 tires)	24 deg. (12 deg. each direction)	
Service Brakes (conform to ISO 3450)	Hydraulically actuated, inboard sun-shaft mounted, oil cooled, single disc	
Parking Brakes (conform to ISO 3450)	Automatic spring applied, hydraulically released, driveline mounted, sealed wet multi disc	
Tires/Wheels (see page 26 for complete tire adjustments)		
	<i>Tread Width</i>	<i>Width Over Tires</i>
Michelin 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2546 mm (100.2 in.)
Serviceability		
Refill Capacities	EPA FT4/EU Stage IV	EPA Tier 3/EU Stage IIIA
Fuel Tank (with lockable cap)	220 L (58 gal.)	220 L (58 gal.)
Cooling System	23.5 L (24.8 qt.)	22.5 L (23.8 qt.)
Diesel Exhaust Fluid (DEF)	19 L (20 qt.)	N/A
Engine Oil with Vertical Spin-On Filter	19.5 L (20.6 qt.)	19 L (20 qt.)
Transmission Reservoir with Vertical Filter	21.5 L (22.7 qt.)	21.5 L (22.7 qt.)
Axle Oil (front and rear, each)	17 L (18 qt.)	17 L (18 qt.)
Hydraulic Reservoir and Filter	118.7 L (31.4 gal.)	92 L (24.3 gal.)
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)
Hydraulic System/Steering		
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system	
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	165 L/m (44 gpm)	
System Relief Pressure (loader and steering)	24 994 kPa (3,625 psi)	
Loader Controls	2-function valve; joystick control or fingertip controls; hydraulic-function enable/disable; optional 3rd- and 4th-function valve with auxiliary lever	
Steering (conforms to ISO 5010)	Steering-column-mounted, twist-grip shift lever; Quick-Shift button on hydraulic lever	
Type	Power, fully hydraulic	
Articulation Angle	80-deg. arc (40 deg. each direction)	
Turning Radius (measured to centerline of outside tire)	5.0 m (16 ft. 5 in.)	

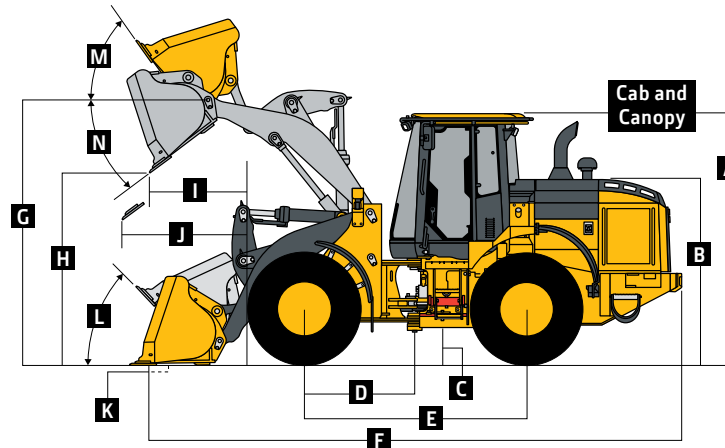
524K

Hydraulic System/Steering *(continued)*

524K Z-BAR / HIGH-LIFT

Hydraulic Cycle Times	Z-Bar / High-Lift
Raise	6.1 sec.
Dump	1.4 sec.
Lower (float down)	3.0 sec.
Total	10.5 sec.

Dimensions and Specifications with Pin-On Bucket

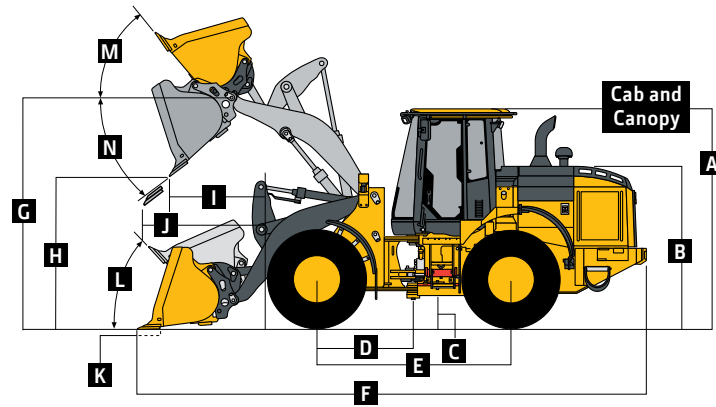


524K Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

	Z-Bar	High-Lift
Dimensions with Bucket	2.1-m ³ (2.75 cu. yd.) general-purpose with bolt-on edge	2.1-m ³ (2.75 cu. yd.) general-purpose with bolt-on edge
A Height to Top of Cab and Canopy	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)
B Hood Height	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Bucket on Ground	7.34 m (24 ft. 1 in.)	7.67 m (25 ft. 2 in.)
G Height to Hinge Pin, Fully Raised	3.77 m (12 ft. 5 in.)	4.12 m (13 ft. 6 in.)
H Dump Clearance, 45 deg., Full Height	2.77 m (9 ft. 1 in.)	3.12 m (10 ft. 3 in.)
I Reach, 45-deg. Dump, Full Height	0.98 m (3 ft. 2 in.)	0.99 m (3 ft. 3 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.44 m (4 ft. 9 in.)	1.73 m (5 ft. 8 in.)
K Maximum Digging Depth	97 mm (3.8 in.)	222 mm (8.7 in.)
L Maximum Rollback at Ground Level	41 deg.	41 deg.
M Maximum Rollback, Boom Fully Raised	55 deg.	50 deg.
N Maximum Bucket Dump Angle, Fully Raised	51 deg.	47 deg.
Loader Clearance Circle, Bucket Carry Position	11.60 m (38 ft. 1 in.)	11.90 m (39 ft. 1 in.)
Specifications with Bucket		
Capacity, Heaped	2.1 m ³ (2.75 cu. yd.)	2.1 m ³ (2.75 cu. yd.)
Capacity, Struck	1.7 m ³ (2.27 cu. yd.)	1.7 m ³ (2.27 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1013 kg (2,233 lb.)	1013 kg (2,233 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.54 m (8 ft. 4 in.)
Breakout Force	9060 kg (19,974 lb.)	8371 kg (18,455 lb.)
Tipping Load, Straight, No Tire Deflection	10 540 kg (23,237 lb.)	9071 kg (19,998 lb.)
Tipping Load, Straight, with Tire Deflection	10 014 kg (22,077 lb.)	8664 kg (19,101 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	9168 kg (20,212 lb.)	7862 kg (17,333 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	8496 kg (18,730 lb.)	7335 kg (16,171 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	4584 kg (10,106 lb.)	3931 kg (8,666 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	4248 kg (9,365 lb.)	3667 kg (8,084 lb.)
Operating Weight	12 668 kg (27,928 lb.)	12 877 kg (28,389 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) 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.

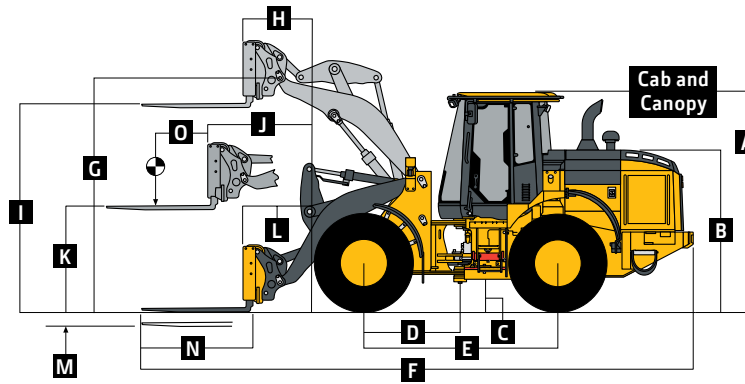


524K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET

	Z-Bar	Z-Bar	High-Lift	High-Lift
Dimensions with Bucket	<i>2.1-m³ (2.75 cu. yd.) general-purpose with bolt-on edge</i>	<i>3.1-m³ (4.0 cu. yd.) light-material with bolt-on edge</i>	<i>2.1-m³ (2.75 cu. yd.) general-purpose with bolt-on edge</i>	<i>3.1-m³ (4.0 cu. yd.) light-material with bolt-on edge</i>
A Height to Top of Cab and Canopy	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)
B Hood Height	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Bucket on Ground	7.57 m (24 ft. 10 in.)	7.73 m (24 ft. 6 in.)	7.90 m (25 ft. 11 in.)	8.05 m (25 ft. 7 in.)
G Height to Hinge Pin, Fully Raised	3.77 m (12 ft. 5 in.)	3.77 m (12 ft. 5 in.)	4.12 m (13 ft. 6 in.)	4.12 m (13 ft. 6 in.)
H Dump Clearance, 45 deg., Full Height	2.61 m (8 ft. 7 in.)	2.50 m (8 ft. 2 in.)	2.96 m (9 ft. 8 in.)	2.80 m (9 ft. 2 in.)
I Reach, 45-deg. Dump, Full Height	1.10 m (3 ft. 7 in.)	1.11 m (3 ft. 8 in.)	1.11 m (3 ft. 8 in.)	1.13 m (3 ft. 8 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.47 m (4 ft. 10 in.)	1.40 m (4 ft. 7 in.)	1.77 m (5 ft. 10 in.)	1.71 m (5 ft. 7 in.)
K Maximum Digging Depth	146 mm (5.7 in.)	225 mm (8.8 in.)	226 mm (10.3 in.)	307 mm (12.08 in.)
L Maximum Rollback at Ground Level	40 deg.	41 deg.	45 deg.	41 deg.
M Maximum Rollback, Boom Fully Raised	54 deg.	55 deg.	48 deg.	48 deg.
N Maximum Bucket Dump Angle, Fully Raised	48 deg.	51 deg.	48 deg.	47 deg.
Loader Clearance Circle, Bucket Carry Position	11.77 m (38 ft. 7 in.)	12.13 m (39 ft. 9 in.)	12.08 m (39 ft. 8 in.)	12.47 m (40 ft. 11 in.)
Specifications with Bucket				
Capacity, Heaped	2.1 m ³ (2.75 cu. yd.)	3.1 m ³ (4.0 cu. yd.)	2.1 m ³ (2.75 cu. yd.)	3.1 m ³ (4.0 cu. yd.)
Capacity, Struck	1.7 m ³ (2.27 cu. yd.)	2.59 m ³ (3.4 cu. yd.)	1.7 m ³ (2.27 cu. yd.)	2.59 m ³ (3.4 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1421 kg (3,133 lb.)	1693 kg (3,732 lb.)	1421 kg (3,133 lb.)	1693 kg (3,732 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)	2.54 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)
Breakout Force	7446 kg (16,415 lb.)	6708 kg (14,789 lb.)	6861 kg (15,126 lb.)	6219 kg (13,710 lb.)
Tipping Load, Straight, No Tire Deflection	9281 kg (20,461 lb.)	8838 kg (19,484 lb.)	8000 kg (17,637 lb.)	7582 kg (16,715 lb.)
Tipping Load, Straight, with Tire Deflection	8823 kg (19,451 lb.)	8382 kg (18,479 lb.)	7635 kg (16,832 lb.)	7221 kg (15,919 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	8020 kg (17,681 lb.)	7597 kg (16,748 lb.)	6880 kg (15,168 lb.)	6480 kg (14,286 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	7434 kg (16,389 lb.)	7014 kg (15,463 lb.)	6408 kg (14,127 lb.)	6006 kg (13,241 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	4010 kg (8,840 lb.)	3798 kg (8,373 lb.)	3440 kg (7,583 lb.)	3240 kg (7,143 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	3717 kg (8,195 lb.)	3507 kg (7,732 lb.)	3204 kg (7,064 lb.)	3003 kg (6,620 lb.)
Operating Weight	13 077 kg (28,830 lb.)	13 349 kg (29,429 lb.)	13 286 kg (29,291 lb.)	13 557 kg (29,888 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) 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.



524K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS

	Z-Bar	Z-Bar	High-Lift	High-Lift
Dimensions with Forks	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length
A Height to Top of Cab and Canopy	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)	3.25 m (10 ft. 8 in.)
B Hood Height	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Forks on Ground	7.88 m (25 ft. 10 in.)	8.18 m (26 ft. 10 in.)	8.21 m (26 ft. 11 in.)	8.51 m (27 ft. 11 in.)
G Height to Hinge Pin, Fully Raised	3.77 m (12 ft. 5 in.)	3.77 m (12 ft. 5 in.)	4.12 m (13 ft. 6 in.)	4.12 m (13 ft. 6 in.)
H Reach, Fully Raised	0.80 m (31.3 in.)	0.80 m (31.3 in.)	0.81 m (31.9 in.)	0.81 m (31.9 in.)
I Fork Height, Fully Raised	3.55 m (11 ft. 8 in.)	3.55 m (11 ft. 8 in.)	3.90 m (12 ft. 9 in.)	3.90 m (12 ft. 9 in.)
J Maximum Reach, Fork Level	1.54 m (5 ft. 1 in.)	1.54 m (5 ft. 1 in.)	1.80 m (5 ft. 11 in.)	1.80 m (5 ft. 11 in.)
K Fork Height, Maximum Reach	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)
L Reach, Ground Level	0.94 m (3 ft. 1 in.)	0.94 m (3 ft. 1 in.)	1.27 m (4 ft. 2 in.)	1.27 m (4 ft. 2 in.)
M Depth Below Ground	16 mm (0.6 in.)	16 mm (0.6 in.)	95 mm (3.7 in.)	95 mm (3.7 in.)
N Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)
O Load Position, 50% Tine Length	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)
Specifications with Forks				
Tipping Load, Straight, No Tire Deflection	7256 kg (15,997 lb.)	6849 kg (15,099 lb.)	6574 kg (14,493 lb.)	6227 kg (13,728 lb.)
Tipping Load, Straight, with Tire Deflection	7068 kg (15,582 lb.)	6681 kg (14,729 lb.)	6414 kg (14,140 lb.)	6081 kg (13,406 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	6303 kg (13,896 lb.)	5943 kg (13,102 lb.)	5690 kg (12,544 lb.)	5383 kg (11,867 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	6054 kg (13,347 lb.)	5718 kg (12,606 lb.)	5472 kg (12,064 lb.)	5175 kg (11,409 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1 and SAE J1197)*	3027 kg (6,673 lb.)	2859 kg (6,303 lb.)	2736 kg (6,032 lb.)	2587 kg (5,703 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	3632 kg (8,007 lb.)	3431 kg (7,564 lb.)	3283 kg (7,238 lb.)	3105 kg (6,845 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	4843 kg (10,677 lb.)	4574 kg (10,084 lb.)	4378 kg (9,652 lb.)	4140 kg (9,127 lb.)
Operating Weight	12 710 kg (28,021 lb.)	12 753 kg (28,115 lb.)	12 918 kg (28,479 lb.)	12 961 kg (28,574 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) 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

524K Z-BAR / HIGH-LIFT

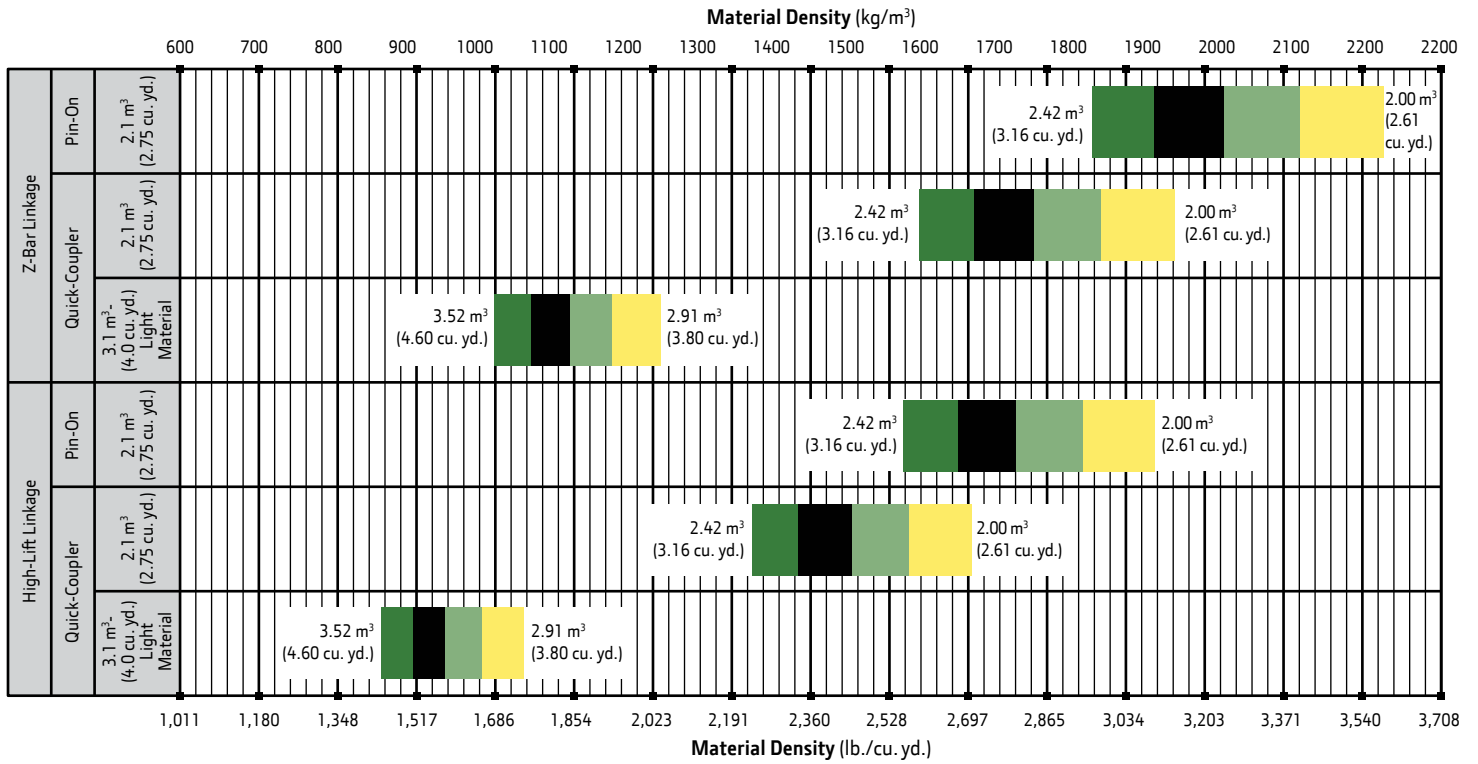
Adjustments to operating weights, tipping loads, and tires are based on Z-Bar machine with pin-on 2.1-m³ (2.75 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator*

Add (+) or deduct (-) kg (lb.) as indicated for loaders with 3-piece rims	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg. Full Turn	Tread Width	Width Over Tires	Vertical Height
John Deere PowerTech PVS 6068	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech E 6068H						
Z-Bar	-1 kg (-2.2 lb.)	+147 kg (+324 lb.)	+113 kg (+249 lb.)	N/A	N/A	N/A
High-Lift	-41 kg (-90 lb.)	+40 kg (+88 lb.)	+25 kg (+55 lb.)	N/A	N/A	N/A
Michelin 20.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Bridgestone 20.5 R 25, 1 Star L-3	+44 kg (+97 lb.)	+32 kg (+70 lb.)	+28 kg (+62 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-3	-4 kg (-9 lb.)	-3 kg (-6 lb.)	-2 kg (-5 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Michelin 20.5 R 25, 1 Star L-2	-172 kg (-379 lb.)	-125 kg (-275 lb.)	-110 kg (-242 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Bridgestone 20.5 R 25, 1 Star L-2	-80 kg (-176 lb.)	-58 kg (-128 lb.)	-51 kg (-112 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-2	-100 kg (-220 lb.)	-73 kg (-161 lb.)	-64 kg (-141 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5-25, 16 PR L-2	-260 kg (-573 lb.)	-190 kg (-419 lb.)	-167 kg (-368 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-2	-280 kg (-617 lb.)	-204 kg (-450 lb.)	-180 kg (-397 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 12 PR L-2	-316 kg (-697 lb.)	-231 kg (-509 lb.)	-203 kg (-448 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Titan 20.5-25, 12 PR L-2	-280 kg (-617 lb.)	-204 kg (-450 lb.)	-180 kg (-397 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-3	-252 kg (-556 lb.)	-184 kg (-405 lb.)	-162 kg (-357 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+9 mm (+0.4 in.)
Michelin 20.5 R 25 L2 Sno-Plus	-100 kg (-220 lb.)	-73 kg (-161 lb.)	-64 kg (-141 lb.)	0 mm (0 in.)	+7 mm (+0.28 in.)	-16 mm (-0.6 in.)
620/75R26 MegaXbib ^{6E}	-200 kg (-441 lb.)	-146 kg (-322 lb.)	-129 kg (-284 lb.)	+189 mm (+7.4 in.)	+61 mm (+2.4 in.)	+22 mm (+0.86 in.)
CaCl ₂ in 20.5-25, L-3 Rear Tires, 75% Fill	+825 kg (+1,820 lb.)	+1010 kg (+2,227 lb.)	+891 kg (+1,964 lb.)	N/A	N/A	N/A

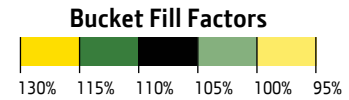
*May change based on vehicle configuration, weight, or tire-pressure adjustments.

^{6E}Equipped with 5-piece heavy-duty rims.

^{6E}Equipped with 1-piece rims.



LOOSE MATERIALS		kg/m³	lb./cu. yd.	LOOSE MATERIALS		kg/m³	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 (1.5 to 3.5") size	1442	2,430		
Granite, broken	1538	2,592	Stone or gravel, 18.75-mm (3/4") size	1602	2,700		
Gypsum	2275	3,834					



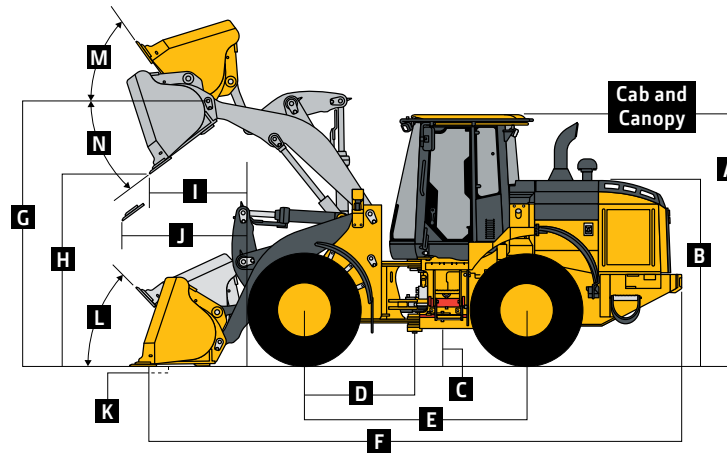
544K

Engine	544K Z-BAR / HIGH-LIFT / POWERLEL™			
Manufacturer and Model	John Deere PowerTech™ PVS 6068		John Deere PowerTech™ E 6068H	
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV		EPA Tier 3/EU Stage IIIA	
Cylinders	6		6	
Valves Per Cylinder	4		2	
Displacement	6.8 L (414 cu. in.)		6.8 L (414 cu. in.)	
Net Peak Power (ISO 9249)	121 kW (163 hp) at 1,800 rpm		125 kW (167 hp) at 1,900 rpm	
Net Peak Torque (ISO 9249)	683 Nm (504 lb.-ft.) at 1,100 rpm		673 Nm (496 lb.-ft.) at 1,600 rpm	
Net Torque Rise	37%		31%	
Fuel System (electronically controlled)	High-pressure common rail		High-pressure common rail	
Lubrication	Full-flow spin-on filter and integral cooler		Full-flow spin-on filter and integral cooler	
Aspiration	Turbocharged, charge air cooled		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 100-amp (130-amp optional) alternator		24 volt with 80-amp (100-amp optional) alternator	
Batteries (2 – 12 volt)	950 CCA (each)		950 CCA (each)	
Transmission System				
Type	Countershaft-type PowerShift™			
Torque Converter	Single stage, single phase			
Shift Control	Electronically modulated, adaptive, load and speed dependent			
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; kick-down button on hydraulic lever			
Shift Modes	Manual/auto (1st–D or 2nd–D); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and 3 adjustable clutch-cutoff settings			
	<i>Standard 5-Speed with Lockup Torque Converter</i>		<i>Optional 4-Speed</i>	
Maximum Travel Speeds (with 20.5 R 25 tires)	<i>Forward</i>	<i>Reverse</i>	<i>Forward</i>	<i>Reverse</i>
Range 1	5.8 km/h (3.6 mph)	6.3 km/h (3.9 mph)	7.0 km/h (4.4 mph)	7.2 km/h (4.5 mph)
Range 2	12.0 km/h (7.5 mph)	12.7 km/h (7.9 mph)	11.9 km/h (7.4 mph)	12.6 km/h (7.8 mph)
Range 3	18.6 km/h (11.6 mph)	29.1 km/h (18.1 mph)	22.8 km/h (14.2 mph)	24.1 km/h (15.0 mph)
Range 4	27.7 km/h (17.2 mph)	N/A	35.7 km/h (22.2 mph)	N/A
Range 5	40.0 km/h (24.9 mph)	N/A	N/A	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 20.5 R 25 tires)	24 deg. (12 deg. each direction)			
Service Brakes (conform to ISO 3450)	Hydraulically actuated, inboard sun-shaft mounted, oil cooled, single disc			
Parking Brakes (conform to ISO 3450)	Automatic spring applied, hydraulically released, driveline mounted, sealed wet multi disc			
Tires/Wheels (see page 32 for complete tire adjustments)				
	<i>Tread Width</i>	<i>Width Over Tires</i>		
Michelin 20.5 R 25, 1 Star L-3	1950 mm (76.8 in.)	2546 mm (100.2 in.)		
Serviceability				
Refill Capacities	EPA FT4/EU Stage IV		EPA Tier 3/EU Stage IIIA	
Fuel Tank (with lockable cap)	298 L (79 gal.)		325 L (86 gal.)	
Cooling System	23.5 L (24.8 qt.)		22.5 L (23.8 qt.)	
Diesel Exhaust Fluid (DEF)	19 L (20 qt.)		N/A	
Engine Oil with Vertical Spin-On Filter	19.5 L (20.6 qt.)		19 L (20 qt.)	
Transmission Reservoir with Vertical Filter	21.5 L (22.7 qt.)		18.5 L (19.5 qt.)	
Axle Oil (front and rear, each)	17 L (18 qt.)		17 L (18 qt.)	
Hydraulic Reservoir and Filter	118.7 L (31.4 gal.)		92 L (24.3 gal.)	
Park Brake Oil (wet disc)	0.3 L (10 oz.)		0.3 L (10 oz.)	
Hydraulic System/Steering				
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system			
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	189 L/m (50 gpm)			
System Relief Pressure (loader and steering)	25 166 kPa (3,650 psi)			
Loader Controls	2-function valve; joystick control or fingertip controls; hydraulic-function enable/disable; optional 3rd- and 4th-function valve with auxiliary lever			
Steering (conforms to ISO 5010)	Steering-column-mounted, twist-grip shift lever; Quick-Shift button on hydraulic lever			
Type	Power, fully hydraulic			
Articulation Angle	80-deg. arc (40 deg. each direction)			
Turning Radius (measured to centerline of outside tire)	5.0 m (16 ft. 5 in.)			



Hydraulic System/Steering <i>(continued)</i>	544K Z-BAR / HIGH-LIFT / POWERLIFT	
	Z-Bar / High-Lift	Powerlift
Raise	5.8 sec.	5.8 sec.
Dump	1.2 sec.	1.2 sec.
Lower (float down)	3.2 sec.	2.5 sec.
Total	10.2 sec.	9.5 sec.

Dimensions and Specifications with Pin-On Bucket

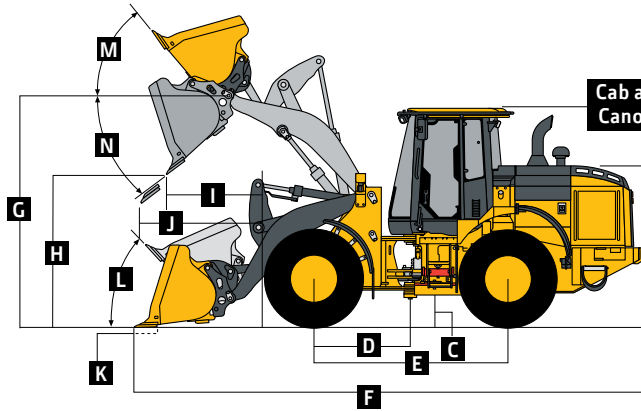


544K Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

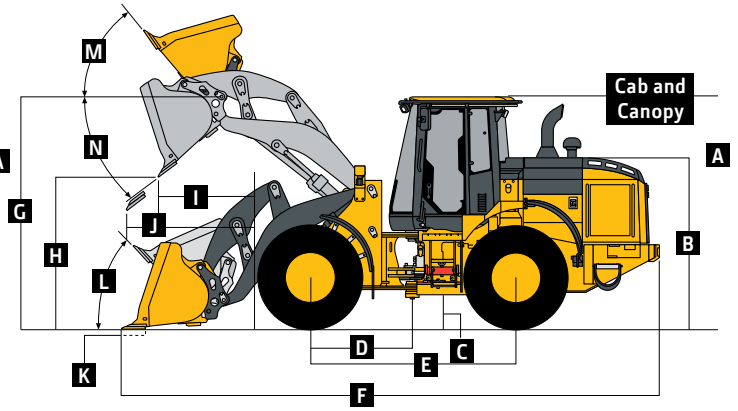
Dimensions with Bucket	Z-Bar	Z-Bar	High-Lift	High-Lift
	Narrow 2.3-m ³ (3.0 cu. yd.) general-purpose with bolt-on edge	Wide 2.3-m ³ (3.0 cu. yd.) general-purpose with bolt-on edge	Narrow 2.3-m ³ (3.0 cu. yd.) general-purpose with bolt-on edge	Wide 2.3-m ³ (3.0 cu. yd.) general-purpose with bolt-on edge
A Height to Top of Cab and Canopy	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)
B Hood Height	2.37 m (7 ft. 9 in.)	2.37 m (7 ft. 9 in.)	2.37 m (7 ft. 9 in.)	2.37 m (7 ft. 9 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Bucket on Ground	7.43 m (24 ft. 4 in.)	7.34 m (24 ft. 1 in.)	7.75 m (25 ft. 5 in.)	7.67 m (25 ft. 2 in.)
G Height to Hinge Pin, Fully Raised	3.82 m (12 ft. 6 in.)	3.82 m (12 ft. 6 in.)	4.17 m (13 ft. 8 in.)	4.17 m (13 ft. 8 in.)
H Dump Clearance, 45 deg., Full Height	2.76 m (9 ft. 1 in.)	2.82 m (9 ft. 3 in.)	3.11 m (10 ft. 3 in.)	3.17 m (10 ft. 5 in.)
I Reach, 45-deg. Dump, Full Height	0.99 m (3 ft. 3 in.)	0.93 m (3 ft. 1 in.)	0.99 m (3 ft. 3 in.)	0.93 m (3 ft. 1 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.46 m (4 ft. 10 in.)	1.44 m (4 ft. 9 in.)	1.76 m (5 ft. 9 in.)	1.73 m (5 ft. 8 in.)
K Maximum Digging Depth	95 mm (3.72 in.)	95 mm (3.72 in.)	221 mm (8.7 in.)	221 mm (8.7 in.)
L Maximum Rollback at Ground Level	42 deg.	42 deg.	37 deg.	37 deg.
M Maximum Rollback, Boom Fully Raised	55 deg.	55 deg.	50 deg.	50 deg.
N Maximum Bucket Dump Angle, Fully Raised	49 deg.	49 deg.	46 deg.	46 deg.
Loader Clearance Circle, Bucket Carry Position	11.65 m (38 ft. 3 in.)	11.72 m (38 ft. 5 in.)	11.96 m (39 ft. 3 in.)	12.03 m (39 ft. 6 in.)
Specifications with Bucket				
Capacity, Heaped	2.3 m ³ (3.0 cu. yd.)	2.3 m ³ (3.0 cu. yd.)	2.3 m ³ (3.0 cu. yd.)	2.3 m ³ (3.0 cu. yd.)
Capacity, Struck	2.0 m ³ (2.6 cu. yd.)	2.0 m ³ (2.6 cu. yd.)	2.0 m ³ (2.6 cu. yd.)	2.0 m ³ (2.6 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1066 kg (2,350 lb.)	1048 kg (2,310 lb.)	1066 kg (2,350 lb.)	1048 kg (2,310 lb.)
Bucket Width	2.54 m (8 ft. 4 in.)	2.69 m (8 ft. 10 in.)	2.54 m (8 ft. 4 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	10 115 kg (22,300 lb.)	10 869 kg (23,962 lb.)	9352 kg (20,618 lb.)	10 050 kg (22,156 lb.)
Tipping Load, Straight, No Tire Deflection	11 106 kg (24,484 lb.)	11 163 kg (24,610 lb.)	9565 kg (21,087 lb.)	9623 kg (21,215 lb.)
Tipping Load, Straight, with Tire Deflection	10 530 kg (23,215 lb.)	10 590 kg (23,347 lb.)	9120 kg (20,106 lb.)	9180 kg (20,238 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	9637 kg (21,246 lb.)	9690 kg (21,363 lb.)	8273 kg (18,239 lb.)	8325 kg (18,353 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	8895 kg (19,610 lb.)	8952 kg (19,736 lb.)	7689 kg (16,951 lb.)	7746 kg (17,077 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	4818 kg (10,622 lb.)	4845 kg (10,681 lb.)	4136 kg (9,118 lb.)	4162 kg (9,176 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	4447 kg (9,804 lb.)	4476 kg (9,868 lb.)	3844 kg (8,475 lb.)	3873 kg (8,538 lb.)
Operating Weight	13 217 kg (29,138 lb.)	13 200 kg (29,101 lb.)	13 352 kg (29,436 lb.)	13 335 kg (29,399 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) 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.



544K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER
AND HOOK-ON BUCKET



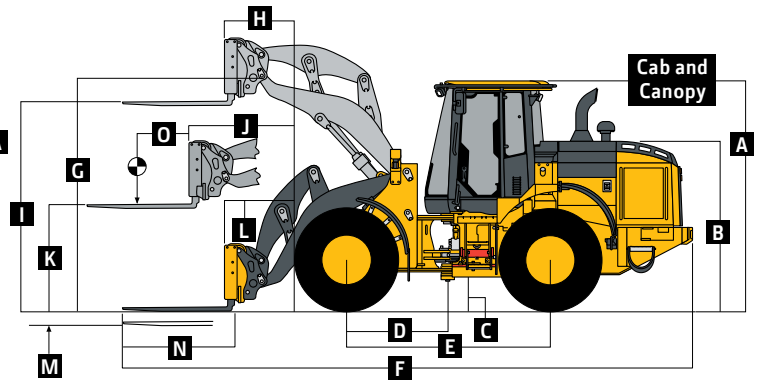
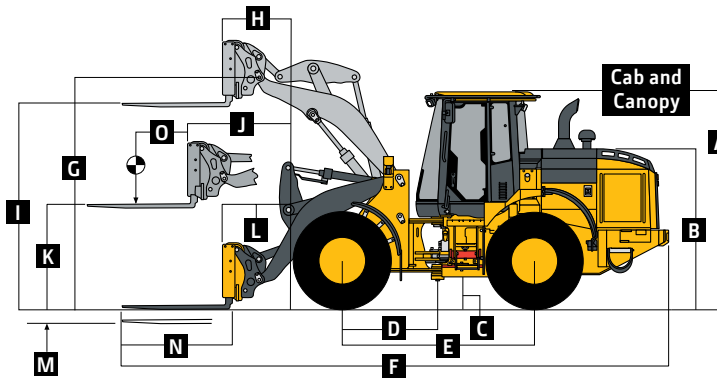
544K POWERLLEL LOADER WITH QUICK-COUPLER
AND HOOK-ON BUCKET

	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllep	Powerllep
Dimensions with Bucket	2.3-m ³ (3.0 cu. yd.) <i>general-purpose with bolt-on edge</i>	3.4-m ³ (4.5 cu. yd.) <i>light-material with bolt-on edge</i>	2.3-m ³ (3.0 cu. yd.) <i>general-purpose with bolt-on edge</i>	3.4-m ³ (4.5 cu. yd.) <i>light-material with bolt-on edge</i>	2.3-m ³ (3.0 cu. yd.) <i>general-purpose with bolt-on edge</i>	3.4-m ³ (4.5 cu. yd.) <i>light-material with bolt-on edge</i>
A Height to Top of Cab and Canopy	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)
B Hood Height	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Bucket on Ground	7.57 m (24 ft. 10 in.)	7.87 m (25 ft. 10 in.)	7.90 m (25 ft. 11 in.)	8.02 m (26 ft. 4 in.)	7.69 m (25 ft. 3 in.)	7.89 m (25 ft. 11 in.)
G Height to Hinge Pin, Fully Raised	3.81 m (12 ft. 6 in.)	3.81 m (12 ft. 6 in.)	4.13 m (13 ft. 7 in.)	4.13 m (13 ft. 7 in.)	3.85 m (12 ft. 8 in.)	3.85 m (12 ft. 8 in.)
H Dump Clearance, 45 deg., Full Height	2.66 m (8 ft. 9 in.)	2.40 m (7 ft. 10 in.)	3.01 m (9 ft. 10 in.)	2.74 m (8 ft. 11 in.)	2.68 m (8 ft. 9 in.)	2.47 m (8 ft. 1 in.)
I Reach, 45-deg. Dump, Full Height	1.05 m (3 ft. 5 in.)	1.20 m (3 ft. 11 in.)	1.05 m (3 ft. 5 in.)	1.22 m (4 ft. 0 in.)	1.09 m (3 ft. 7 in.)	1.26 m (4 ft. 2 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.46 m (4 ft. 10 in.)	1.43 m (4 ft. 8 in.)	1.77 m (5 ft. 10 in.)	1.75 m (5 ft. 9 in.)	1.51 m (5 ft. 0 in.)	1.56 m (5 ft. 1 in.)
K Maximum Digging Depth	138 mm (5.4 in.)	230 mm (9.0 in.)	227 mm (8.9 in.)	311 mm (12.2 in.)	127 mm (5.0 in.)	216 mm (8.5 in.)
L Maximum Rollback at Ground Level	41 deg.	41 deg.	41 deg.	41 deg.	42 deg.	44 deg.
M Maximum Rollback, Boom Fully Raised	54 deg.	55 deg.	48 deg.	50 deg.	51 deg.	54 deg.
N Maximum Bucket Dump Angle, Fully Raised	51 deg.	49 deg.	47 deg.	45 deg.	50 deg.	47 deg.
Loader Clearance Circle, Bucket Carry Position	11.88 m (39 ft. 0 in.)	12.24 m (40 ft. 2 in.)	12.19 m (40 ft. 0 in.)	12.58 m (41 ft. 3 in.)	12.10 m (39 ft. 8 in.)	12.35 m (40 ft. 6 in.)
Specifications with Bucket						
Capacity, Heaped	2.3 m ³ (3.0 cu. yd.)	3.4 m ³ (4.5 cu. yd.)	2.3 m ³ (3.0 cu. yd.)	3.4 m ³ (4.5 cu. yd.)	2.3 m ³ (3.0 cu. yd.)	3.4 m ³ (4.5 cu. yd.)
Capacity, Struck	2.0 m ³ (2.6 cu. yd.)	2.9 m ³ (3.8 cu. yd.)	2.0 m ³ (2.6 cu. yd.)	2.9 m ³ (3.8 cu. yd.)	2.0 m ³ (2.6 cu. yd.)	2.9 m ³ (3.8 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1450 kg (3,197 lb.)	1745 kg (3,847 lb.)	1450 kg (3,197 lb.)	1745 kg (3,847 lb.)	1428 kg (3,148 lb.)	1724 kg (3,801 lb.)
Bucket Width	2.69 m (8 ft. 10 in.)	2.89 m (9 ft. 6 in.)	2.69 m (8 ft. 10 in.)	2.89 m (9 ft. 6 in.)	2.69 m (8 ft. 10 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	8992 kg (19,824 lb.)	7375 kg (16,259 lb.)	8294 kg (18,285 lb.)	6847 kg (15,095 lb.)	8604 kg (18,968 lb.)	7861 kg (17,330 lb.)
Tipping Load, Straight, No Tire Deflection	9877 kg (21,775 lb.)	9290 kg (20,481 lb.)	8532 kg (18,810 lb.)	7986 kg (17,606 lb.)	9054 kg (19,961 lb.)	8472 kg (18,677 lb.)
Tipping Load, Straight, with Tire Deflection	9378 kg (20,675 lb.)	8796 kg (19,392 lb.)	8139 kg (17,943 lb.)	7602 kg (16,759 lb.)	8613 kg (18,988 lb.)	8043 kg (17,732 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	8520 kg (18,783 lb.)	7968 kg (17,566 lb.)	7328 kg (16,155 lb.)	6812 kg (15,018 lb.)	7788 kg (17,170 lb.)	7248 kg (15,979 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	7869 kg (17,348 lb.)	7326 kg (16,151 lb.)	6807 kg (15,007 lb.)	6297 kg (13,882 lb.)	7209 kg (15,893 lb.)	6666 kg (14,696 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	4260 kg (9,392 lb.)	3984 kg (8,783 lb.)	3664 kg (8,078 lb.)	3406 kg (7,509 lb.)	3894 kg (8,585 lb.)	3624 kg (7,989 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1)*	3934 kg (8,673 lb.)	3663 kg (8,075 lb.)	3403 kg (7,502 lb.)	3148 kg (6,940 lb.)	3604 kg (7,945 lb.)	3333 kg (7,348 lb.)
Operating Weight	13 601 kg (29,985 lb.)	13 896 kg (30,635 lb.)	13 736 kg (30,283 lb.)	14 031 kg (30,933 lb.)	14 327 kg (31,586 lb.)	14 622 kg (32,236 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) 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 Hi-Vis Coupler and Construction Forks 544K Z-BAR / HIGH-LIFT / POWERLLEL



544K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS

544K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS

	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel
Dimensions with Forks	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length
A Height to Top of Cab and Canopy	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)	3.24 m (10 ft. 8 in.)
B Hood Height	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)	2.30 m (7 ft. 7 in.)
C Ground Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)
D Length from Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelbase	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
F Overall Length, Forks on Ground	7.89 m (25 ft. 11 in.)	8.19 m (26 ft. 10 in.)	8.22 m (27 ft. 0 in.)	8.52 m (27 ft. 11 in.)	7.99 m (26 ft. 3 in.)	8.29 m (27 ft. 2 in.)
G Height to Hinge Pin, Fully Raised	3.81 m (12 ft. 6 in.)	3.81 m (12 ft. 6 in.)	4.13 m (13 ft. 7 in.)	4.13 m (13 ft. 7 in.)	3.85 m (12 ft. 8 in.)	3.85 m (12 ft. 8 in.)
H Reach, Fully Raised	0.75 m (29.5 in.)	0.75 m (29.5 in.)	0.75 m (29.5 in.)	0.75 m (29.5 in.)	0.79 m (31 in.)	0.79 m (31 in.)
I Fork Height, Fully Raised	3.59 m (11 ft. 9 in.)	3.59 m (11 ft. 9 in.)	3.94 m (12 ft. 11 in.)	3.94 m (12 ft. 11 in.)	3.64 m (11 ft. 11 in.)	3.64 m (11 ft. 11 in.)
J Maximum Reach, Fork Level	1.54 m (5 ft. 1 in.)	1.54 m (5 ft. 1 in.)	1.80 m (5 ft. 11 in.)	1.80 m (5 ft. 11 in.)	1.61 m (5 ft. 4 in.)	1.61 m (5 ft. 4 in.)
K Fork Height, Maximum Reach	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.72 m (5 ft. 8 in.)	1.75 m (5 ft. 9 in.)	1.75 m (5 ft. 9 in.)
L Reach, Ground Level	0.95 m (3 ft. 2 in.)	0.95 m (3 ft. 2 in.)	1.28 m (4 ft. 3 in.)	1.28 m (4 ft. 3 in.)	0.99 m (3 ft. 3 in.)	0.99 m (3 ft. 3 in.)
M Depth Below Ground	13 mm (0.5 in.)	13 mm (0.5 in.)	96 mm (3.8 in.)	96 mm (3.8 in.)	1 mm (0.04 in.)	1 mm (0.04 in.)
N Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)
O Load Position, 50% Tine Length	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)
Specifications with Forks						
Tipping Load, Straight, No Tire Deflection	7739 kg (17,061 lb.)	7308 kg (16,111 lb.)	7024 kg (15,485 lb.)	6657 kg (14,676 lb.)	7359 kg (16,224 lb.)	6963 kg (15,351 lb.)
Tipping Load, Straight, with Tire Deflection	7533 kg (16,607 lb.)	7119 kg (15,695 lb.)	6843 kg (15,086 lb.)	6492 kg (14,312 lb.)	7158 kg (15,781 lb.)	6780 kg (14,947 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	6712 kg (14,797 lb.)	6332 kg (13,960 lb.)	6073 kg (13,389 lb.)	5749 kg (12,674 lb.)	6366 kg (14,035 lb.)	6018 kg (13,267 lb.)
Tipping Load, 40-deg. Full Turn, with Tire Deflection	6432 kg (14,180 lb.)	6075 kg (13,393 lb.)	5829 kg (12,851 lb.)	5532 kg (12,196 lb.)	6096 kg (13,439 lb.)	5766 kg (12,712 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, with Tire Deflection (conforms to ISO 14397-1 and SAE J1197)*	3216 kg (7,090 lb.)	3037 kg (6,695 lb.)	2914 kg (6,424 lb.)	2766 kg (6,098 lb.)	3048 kg (6,720 lb.)	2883 kg (6,356 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	3859 kg (8,508 lb.)	3645 kg (8,036 lb.)	3497 kg (7,710 lb.)	3319 kg (7,317 lb.)	3658 kg (8,064 lb.)	3460 kg (7,628 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, with Tire Deflection (conforms to EN474-3)*	5146 kg (11,345 lb.)	4860 kg (10,714 lb.)	4663 kg (10,280 lb.)	9758 kg (10,041 lb.)	4877 kg (10,752 lb.)	4613 kg (10,170 lb.)
Operating Weight	13 205 kg (29,112 lb.)	13 248 kg (29,207 lb.)	13 340 kg (29,410 lb.)	13 383 kg (29,504 lb.)	13 931 kg (30,713 lb.)	13 974 kg (30,807 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage IV) 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

544K Z-BAR / HIGH-LIFT / POWERLLEL

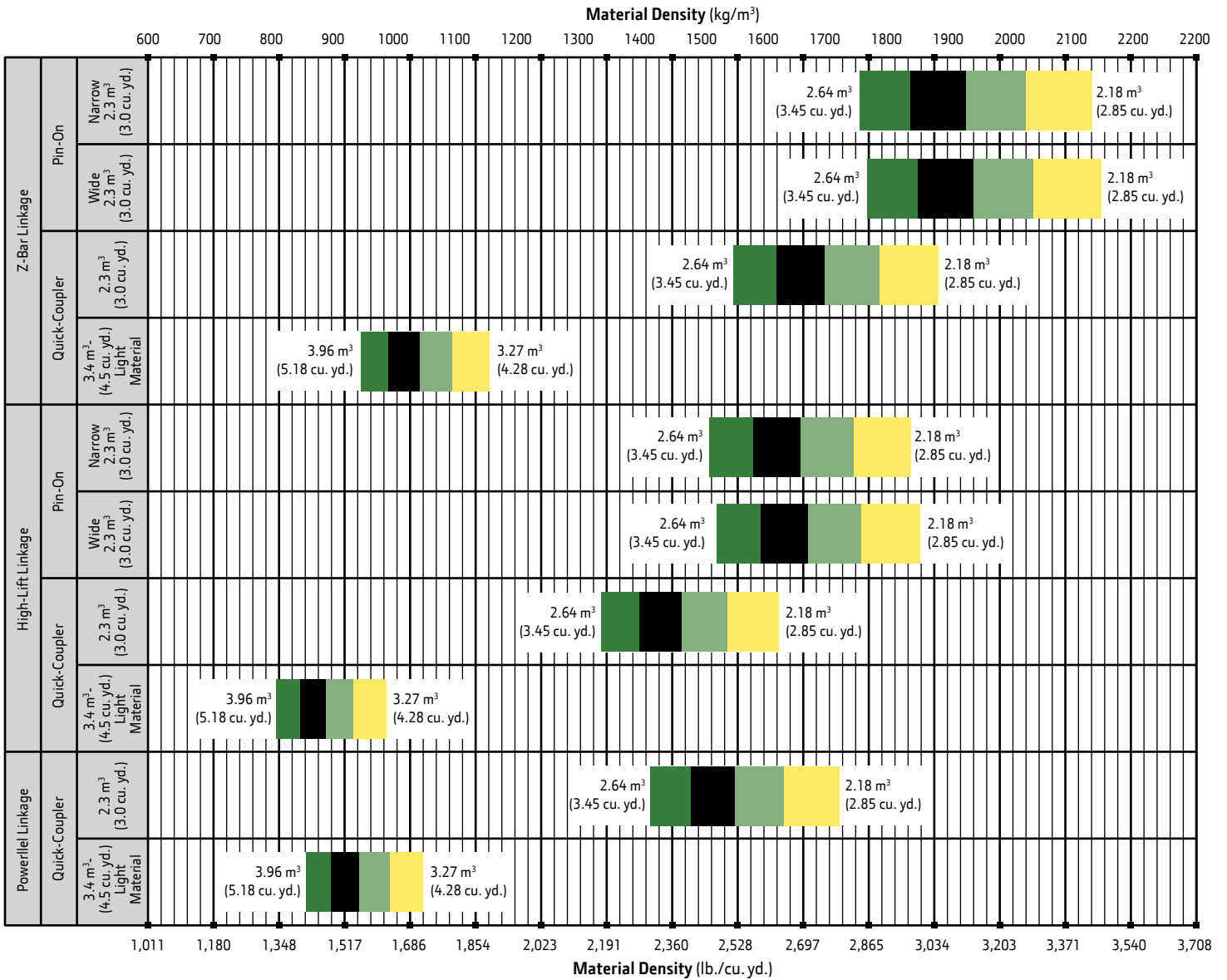
Adjustments to operating weights, tipping loads, and tires are based on Z-Bar machine with pin-on 2.3-m³ (3.0 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator*

Add (+) or deduct (-) kg (lb.) as indicated for loaders with 3-piece rims	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg. Full Turn	Tread Width	Width Over Tires	Vertical Height
John Deere PowerTech PVS 6068	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech E 6068H						
Z-Bar	-96 kg (-212 lb.)	-3 kg (-7 lb.)	-18 kg (-40 lb.)	N/A	N/A	N/A
High-Lift/Powerllel	-112 kg (-245 lb.)	-37 kg (-82 lb.)	-45 kg (-99 lb.)	N/A	N/A	N/A
Michelin 20.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Bridgestone 20.5 R 25, 1 Star L-3	+44 kg (+97 lb.)	+32 kg (+71 lb.)	+28 kg (+62 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-3	-4 kg (-9 lb.)	-3 kg (-7 lb.)	-3 kg (-7 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Michelin 20.5 R 25, 1 Star L-2	-172 kg (-379 lb.)	-125 kg (-276 lb.)	-110 kg (-242 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Bridgestone 20.5 R 25, 1 Star L-2	-80 kg (-176 lb.)	-58 kg (-128 lb.)	-51 kg (-112 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5 R 25, 1 Star L-2	-100 kg (-220 lb.)	-72 kg (-159 lb.)	-64 kg (-141 lb.)	0 mm (0 in.)	-5 mm (-0.2 in.)	-5 mm (-0.2 in.)
Titan 20.5-25, 16 PR L-2	-260 kg (-573 lb.)	-188 kg (-415 lb.)	-166 kg (-366 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-2	-280 kg (-617 lb.)	-203 kg (-448 lb.)	-179 kg (-395 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 12 PR L-2	-316 kg (-697 lb.)	-229 kg (-505 lb.)	-202 kg (-445 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Titan 20.5-25, 12 PR L-2	-280 kg (-617 lb.)	-203 kg (-448 lb.)	-179 kg (-395 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+3 mm (+0.1 in.)
Firestone 20.5-25, 16 PR L-3	-252 kg (-556 lb.)	-183 kg (-403 lb.)	-161 kg (-355 lb.)	0 mm (0 in.)	-2 mm (-0.1 in.)	+9 mm (+0.4 in.)
Michelin 20.5 R 25 L2 Sno-Plus	-100 kg (-220 lb.)	-72 kg (-159 lb.)	-64 kg (-141 lb.)	0 mm (0 in.)	+7 mm (+0.28 in.)	-22 mm (-0.9 in.)
620/75R26 MegaXbib ⁶⁸	-200 kg (-440 lb.)	-145 kg (-320 lb.)	-128 kg (-282 lb.)	+189 mm (+7.4 in.)	+61 mm (+2.4 in.)	+22 mm (+0.86 in.)
CaCl ₂ in 20.5-25, L-3 Rear Tires, 75% Fill	+825 kg (+1,820 lb.)	+1010 kg (+2,227 lb.)	+891 kg (+1,964 lb.)	N/A	N/A	N/A

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

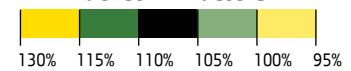
⁵Equipped with 1-piece rims.

⁶⁸Requires 8-deg. rear axle stops.



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 (1.5 to 3.5") size	1442	2,430		
Granite, broken	1538	2,592	Stone or gravel, 18.75-mm (3/4") size	1602	2,700		
Gypsum	2275	3,834					

Bucket Fill Factors



Additional equipment

Key: ● Standard ▲ Optional or special See your John Deere dealer for further information.

444	524	544	Engine
●	●	●	Wet-sleeve cylinder liners
●	●	●	Automatic glow plugs for cold start [†]
●	●	●	Programmable auto-idle and auto shutdown
●	●	●	Selected idle adjustment from 900–1,250 rpm
●	●	●	Starter protection
●	●	●	Automatic engine cool-down timer [†]
●	●	●	Automatic derating for exceeded system temperatures
●	●	●	Serpentine drive belt for automatic tensioner
●	●	●	Under-hood prescreened air intake
●	●	●	Electrical fuel-priming pump [†]
●	●	●	Dual-stage fuel filter and water separator
●	●	●	500-hour vertical spin-on oil filter
▲	▲	▲	Chrome exhaust stack
▲	▲	▲	Automatic ether starting aid (recommended for cold starts below –12 deg. C [10 deg. F]) [‡]
▲	▲	▲	Engine-block heater (recommended for cold starts below –23 deg. C [–10 deg. F])
▲	▲	▲	Centrifugal engine air pre-cleaner
Powertrain			
●	●	●	Programmable maximum high gear
●	●	●	Clutch calibration engaged from monitor
●	●	●	2,000-hour vertical spin-on transmission filter
●	●	●	Transmission fill tube and sight gauge
●	●	●	Transmission diagnostic ports
●	●	●	5-speed transmission with lockup torque converter
●	●	▲	4-speed transmission with non-lockup torque converter
●	▲	▲	Rear axle disconnect
●	●	●	Front locking differential
▲	▲	▲	Rear locking differential
▲	▲	▲	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
●	●	●	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
●	●	●	Antifreeze, –37 deg. C (–34 deg. F)
●	●	●	Cool-on-demand, hydraulically driven, swing-out fan
●	●	●	Enclosed fan safety guard
▲	▲	▲	Automatic reversing fan drive
▲	▲	▲	Axle and service-brake coolers
Hydraulics			
●	●	●	Automatic return-to-dig bucket positioner
●	●	●	In-cab adjustable automatic return-to-dig bucket positioner (Powerllel™ only)

444	524	544	Hydraulics (continued)
●	●	●	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 — joystick with F-N-R
▲	▲	▲	2 function — joystick with steering column F-N-R
▲	▲	▲	2 function — 2-lever fingertip controls and steering column F-N-R
▲	▲	▲	3 function — joystick with F-N-R and 3rd-function auxiliary lever
▲	▲	▲	3 function — joystick with steering column F-N-R and 3rd-function auxiliary lever
▲	▲	▲	3 function — 3-lever fingertip controls and steering column F-N-R
▲	▲	▲	4 function — 4-lever fingertip controls and steering column F-N-R
▲	▲	▲	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			
●	●	●	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
●	●	●	Lights: Halogen driving lights with guards (2) / Front (4), rear cab (2), and rear grille (2) work lights / Incandescent front turn signals and flashers / LED stop and taillights
▲	▲	▲	Heavy-duty front LED turn signal and marker lights
▲	▲	▲	Premium LED light package (all exterior lights are heavy-duty LED)
●	●	●	Programmable courtesy lights
●	●	●	Horn, electric
●	●	●	Reverse warning alarm
●	●	●	Multi-function/multi-language 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)
●	●	●	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
▲	▲	▲	AM/FM/Weather-Band (WB) radio with remote auxiliary port
▲	▲	▲	Premium AM/FM/WB/XM Satellite Radio™ ready radio with Bluetooth®, remote auxiliary port, and remote USB port
●	●	●	24- to 12-volt, 8-amp converter
▲	▲	▲	24- to 12-volt, 15- or 30-amp converter and power port

[†]Available only on EPA Final Tier 4 (FT4)/EU Stage IV engines.

[‡]Available only on EPA Tier 3/EU Stage IIIA engines.

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions per ISO 9249. No derating is required up to 3050-m (10,000 ft.) altitude. Specifications and design subject to change without notice. Specifications with the exception of bucket capacity are in accordance with all applicable ISO standards. Except where otherwise noted, these specifications are based on units with applicable linkage and standard equipment, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator.

Additional equipment *(continued)*

Key: ● Standard ▲ Optional or special See your John Deere dealer for further information.

444	524	544	Operator's Station
●	●	●	Canopy (ROPS/FOPS Level 1, isolation mounted)
▲	▲	▲	Canopy rear window
▲	▲	▲	Quiet Cab with heater (ROPS/FOPS Level 1, isolation mounted)
▲	▲	▲	Quiet Cab with air conditioning/heater (ROPS/FOPS Level 1, isolation mounted)
●	●	●	Keyless start with multiple security modes
●	●	●	Sealed-switch module with function indicators
●	●	●	Seat with backrest extension, deep foam, vinyl cover, and adjustable air suspension
▲	▲	▲	Seat with backrest extension, deep foam, fabric cover, and adjustable air suspension
▲	▲	▲	Premium seat with high-wide back and headrest extension, heated, leather/fabric cover, and adjustable air suspension
●	●	●	Hydraulic controls integrated to seat
●	●	●	High-visibility, bright-orange seat belt, 76 mm (3 in.), with retractor
●	●	●	Cup holders (2)
●	●	●	Lunch-box/cooler holder
▲	▲	▲	Dome and reading light (included with Quiet Cab)
▲	▲	▲	12-volt power port
●	●	●	Rubber floor mat
●	●	●	Tilt steering column
●	●	●	Operator's manual storage compartment
●	●	●	Outside (2) and inside (1) rearview mirrors
▲	▲	▲	Large heated outside mirrors
●	●	●	Left-side operator-station access
●	●	●	Slip-resistant steps and ergonomic handholds
▲	▲	▲	Sun visor (included with Quiet Cab)
▲	▲	▲	Radio ready (Quiet Cab only)
▲	▲	▲	Front and rear intermittent windshield wipers and washers (included with Quiet Cab)
▲	▲	▲	Powered cab air pre-cleaner
▲	▲	▲	Beacon bracket (single or dual available)
▲	▲	▲	Rearview camera
▲	▲	▲	Rear camera and radar object-detection system
●	●	●	LOADRITE™ L2180™ Payload Scale Ready
▲	▲	▲	LOADRITE L2180 Payload Scale
▲	▲	▲	Embedded payload scale
▲	▲	▲	Fire extinguisher
Loader Linkage			
●	●	●	Z-Bar loader linkage
▲	▲	▲	High-Lift Z-Bar loader linkage
▲		▲	Powerlift linkage for visibility and parallel-lift

444	524	544	Buckets and Attachments
▲	▲	▲	Full line of Deere pin-on buckets
▲	▲	▲	Worksite Pro™ hydraulic coupler which accepts JRB-pattern attachments
▲	▲	▲	Hi-Vis hydraulic coupler which accepts Euro-pattern attachments (Volvo)
▲	▲	▲	Full line of Deere hook-on buckets and forks
▲	▲	▲	Bolt-on fork frame guard
Overall Vehicle			
●	●	●	JDLINK™ Ultimate wireless communication system (available in specific countries; see your dealer for details)
●	●	●	NeverGrease™ rear-axle oscillation
●	●	●	NeverGrease steering-cylinder joints
●	●	●	Front and rear tie-downs
●	●	●	Rear cast bumper/counterweight 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, and filler access for radiator/fuel/DEF [†] /hydraulic transmission
●	●	●	Left-side service steps and handholds
▲	▲	▲	Right-side service steps and handrails
▲	▲	▲	Left-side close-mounted steps
●	●	●	Storage compartment
●	●	●	Fuel-tank fill strainer
●	●	●	Heavy-duty fuel-tank guard
●	●	●	DEF [†] and ground-level fueling
●	●	●	Same-side ground-level daily servicing
●		●	17.5R25 tires on 3-piece rims
▲	●	●	20.5R25 tires on 3-piece rims
●	●	●	Level 1 sound package [‡]
▲	▲	▲	Level 2 sound package
▲	▲	▲	Environmental drains and sample ports
●	●	●	Fenders, front
▲	▲	▲	Fenders, full-coverage, front
▲	▲	▲	Fenders, full-coverage, front and rear
▲	▲	▲	Less wheels and tires with 8-deg. axle stops
▲	▲	▲	Rims less tires
▲	▲	▲	Transmission side-frame guards
▲	▲	▲	Bottom guards, front frame and transmission
▲	▲	▲	Lift eyes
▲	▲	▲	License-plate bracket and light

[†]Available only on EPA Final Tier 4 (FT4)/EU Stage IV engines.

[‡]Standard only on FT4/Stage IV engines.

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