K-SERIES LOADERS 624K/644K/724K

139–197 kW (186–264 net hp)





Job driven. Customer inspired. And a fuel-sipping hybrid-electric model.

Secured keyless start. Advanced onboard diagnostics. Innovative Quad-Cool™ system with cool-on-demand swing-out fan. These and the many other features found in our K-Series come from listening to customer needs and responding with exceptionally productive, durable, and versatile loaders. Among the big customer inspirations is the availability of the hybrid-electric drivetrain in the 644K. Check out the whole K Loader line today. And be prepared to be an inspired customer yourself.



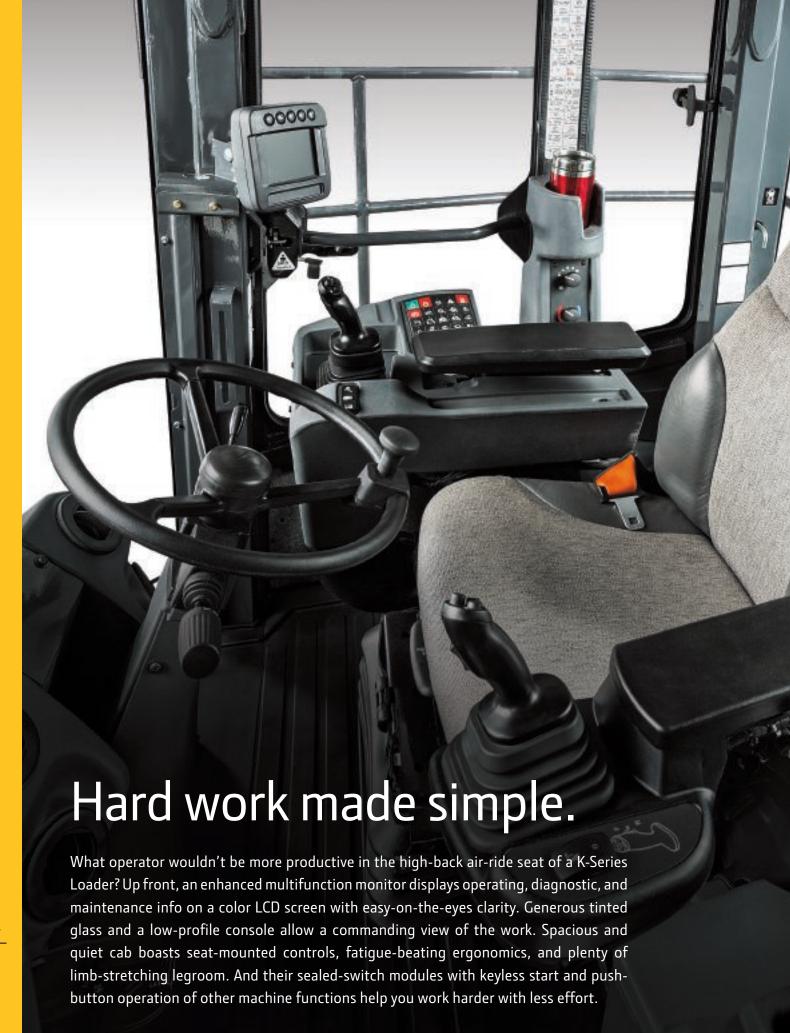
Fluid-efficient John Deere PowerTech™ EPA Final Tier 4 (FT4)/EU Stage IV diesels provide generous displacement, power, and lugging ability.

644K Hybrid provides fuel efficiency via a PowerTech EPA Interim Tier 4 (IT4)/EU Stage IIIB engine coupled with an ultrasmooth PowerShift™ hybrid-electric transmission system. PowerTech diesels maintain impressive torque reserves for great boom and bucket speeds in and out of the pile, delivering heaped loads — even in wet- or hard-packed material.

K-Series Loaders ride on a wide stance that provides additional lateral stability for handling heavy loads and working on rough terrain. Overall balance is exceptional. John Deere WorkSight™ is an exclusive suite of telematic 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.









To help prevent unauthorized machine operation, the keyless-start security system requires a numeric pass code when activated.

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

Standard eight-amp converter (15 and 30 amp are optional) and a 12-volt outlet provide convenient power for cell phones and other electronic devices.

Brake and throttle pedals are conveniently positioned, allowing plenty of legroom and easy entrance and exit.

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

1. Multi-language color LCD monitor provides push-button access to a wealth of machine data and functions:

Vital information, including transmission mode, gear, engine rpm, and ground speed.

Enhanced onboard diagnostics with speed, pressure, temperature readings, and switch status.

Customized machine settings — Quick Shift, Auto-to-1st, and ride control match your operating characteristics to specific jobs and conditions.

Optional embedded payload scale weighs each bucket load, helping fill trucks to the max.

- 2. Optional joystick steering on the 644K and 724K is ideal for V-pattern truck loading. It adapts to the loader's ground speed to deliver smooth control for load-and-carry applications.
- 3. Optional rearview camera only or optional rearview camera and radar object-detection system provides maximum visibility via an LCD screen. Radar object-dection system includes an audible alert for extra awareness in tight quarters and high-traffic areas.
- **4.** Spacious cab with a cooler compartment and beverage holder provides plenty of room to stow your stuff.









More power and control mean more productivity.

If you've got maximum productivity in mind, put a K-Series Loader at the top of your list. It's not just big torque reserves that make them such impressive performers. Single-lever joystick or two-lever fingertip controls provide smooth, near-effortless control. Excavator-style hydraulics sense the load to better deliver the flow needed for combined functions and fast work cycles. And you won't find a smoother-shifting loader — the standard PowerShift transmission with Smart-Shift™ technology continuously evaluates speed and load conditions, and adjusts clutch-pack engagement to suit.



- 1. A backlit touchpad sealedswitch module controls keyless start and 24 other machine functions, allowing the operator to activate boom-height kickout, return to carry, and return to dig from the seat.
- **2.** Choose between a single-lever joystick or...
- **3.** ...two-lever fingertip pilot-operated hydraulic controls.





Standard five-speed transmission with lockup torque converter for gears 2–5 increases acceleration, speeds cycles, and optimizes power and fuel efficiency during transport, roading, and ramp climbing.

The 644K Hybrid teams a purpose-built three-speed hybrid-electric transmission with an IT4 PowerTech engine to squeeze the most out of every drop of fuel.

Even when working with large wet loads, K-Series Loaders maintain excellent boom and bucket power into and out of the pile. Optional wheel-spin control boosts productivity by improving traction in troublesome underfoot conditions, reducing tire wear, fuel costs, and operator fatigue.

Powerllel-equipped 624K and 644K Loaders have two presets for added convenience when frequent attachment changeover is required.

Joystick F-N-R selector provides convenient direction and full-range gear changes, and includes an innovative Quick-Shift feature for push-button gear changes.

Boom-height kickout and return-to-carry functions speed production in repetitive loading applications.

Brake-pedal-activated clutch cutoff increases productivity and boom-cycle speed by maintaining engine speed while the transmission is disengaged. It's programmable to match the slope of your dumpsite — level, small, or steep.

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











It's a powerful hybrid of efficiency, value, and applied customer thinking.

Our 644K Hybrid Loader goes well beyond burning less fuel while reducing emissions — although with its PowerTech IT4 engine, hybrid-electric transmission, and brushless generator, it can boost fuel economy 25 percent. Designed with extensive customer input, it also delivers everyday operating advantages like consistently quick, smooth, and responsive hydraulics; fast ramp-climbing ability; and strong pushing power. And, it's nearly twice as quiet, both inside and outside the cab. Simply put, this hybrid will help make your operator more productive while making your operation more efficient.

The coast-control feature functions like dynamic braking in a hydrostatic transmission, slowing down the loader without touching a pedal and helping reduce service-brake component wear.

Running wide open at 1,800 rpm, in-cab sound levels are just 68 dBA. Noise is also less noticeable to bystanders, making this loader a good neighbor in residential areas.

The engine runs at a choice of three constant operator-selected rpms so boom and bucket functions are powerful, responsive, and quick while optimum fuel efficiency is maintained.

Purpose-built PowerShift transmission provides smooth moves through four forward speed ranges. Direction changes are performed by the electric motor, completely eliminating shifting in some truckloading applications.

Its John Deere 6.8-L diesel runs at a constant operator-selected speed of 1,200, 1,500, or 1,800 rpm to reduce engine wear, noise levels, and fuel consumption.

Brushless A/C generator and motor, water-cooled brake resistor, and solid-state power electronics deliver long-term reliable performance.







K-Series Loaders come standard with plenty of production-boosting features to help you handle almost anything you throw their way. But yours isn't just any application, so we've got you covered with a wide variety of factory- or dealer-installed options. Equip your loader with exactly what you need to maximize your efforts and expand your opportunities.



- 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.
- 2. With ride control, lift cylinders act as shock absorbers, cushioning bumps to allow navigation over rough ground quickly without losing material. Autoactuation travel speed is adjustable from 1.5 to 24.0 kph (1.0 to 15.0 mph).
- 3. Worksite Pro couplers increase versatility and make attachment switchover pushbutton easy. Or go for the optional Hi-Vis coupler for high-visibility picking of a broad range of Deere and other attachments.









Nothing runs — or is built — like a Deere.

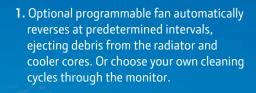
It's all about uptime. So we gave all three K-Loaders — including the 644K Hybrid — traditional John Deere durability features. They boast standard heavy-duty wet-sleeve diesels, Quad-Cool, and solid-state electrical systems. Other uptime-boosting features include reinforced articulation joints with double-tapered roller bearings, and 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.



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

Standard features like bypass-start protection, automatic park brake, and convenient handholds help keep the operator out of harm's way. All models feature slip-resistant steps and platforms on both sides of the machine to provide safer access.

John Deere PowerTech EPA FT4/EU Stage IV diesel engines meet emission regulations without sacrificing power or torque. A PowerTech IT4/Stage IIIB diesel and a brushless electrical generator power the 644K Hybrid.



- 2. Quad-Cool places the radiator, air conditioner, condenser, intercooler; and hydraulic, transmission, and standard axle coolers in a unique boxed configuration that's isolated from engine heat. Expect increased efficiency and durability.
- 3. Planetary final drives are mounted inboard. Hydraulic wet-disc brakes on all models are self-adjusting.









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, keeping things simple and durable.

Four steel plates support the loader tower, extending pin life and protecting the boomcylinder hoses.

Standard starter protection limits cranking time and requires cool-down periods between attempts.

Wet-sleeve engine liners provide uniform engine cooling for less oil breakdown and longer durability than cast-in-block designs. Wide-mouth fuel tank allows quick and convenient ground-level fill-ups — generous tank capacity lets you work longer.

Heavy-duty axles employ cooling, filtration, and temperature monitoring to increase durability.

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. The 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 features that help minimize maintenance 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. Extended 500-, 2,000-, and 4,000-hour engine, transmission, and hydraulic oilservice intervals help reduce operating costs.
- Ground-level fuel and diesel exhaust fluid (DEF) fill access help speed servicing for more uptime. There's also an available fast-fuel option.
- 3. If something goes wrong, the easyto-navigate LCD monitor displays diagnostic messages and offers possible solutions to help get you back up and running quickly.

- 4. Color-coded fluid-sample and diagnostic test ports help speed preventive maintenance and troubleshooting. Noninvasive design helps keep out contaminants.
- 5. Conveniently located, easy-toread sight gauges and see-through reservoirs let you check transmission, hydraulic, coolant, and windshield washer fluid levels at a glance.
- Lockable compartment opens wide, offering convenient groundlevel access to remote-start battery terminals and the electricaldisconnect switch.











Greasing is less messy thanks to centralized lube banks that provide easy access to zerks. Conveniently located periodic lube and maintenance chart ensures nothing gets overlooked.

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

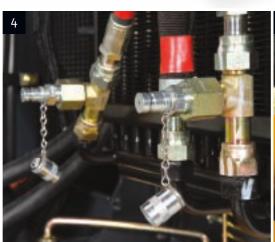
Hydraulically driven fan runs only as needed for efficient cooling. Helps conserve fuel, too.

All daily service points including fueling are grouped on the left side for quick and convenient ground-level access.

Ash-service intervals for the diesel particulate filter (DPF) are condition based, so changing it may not be necessary until the first engine overhaul. Intervals can be extended further depending on application, regular maintenance practices, and the use of recommended fluids and lubricants.

Three-mm 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.

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



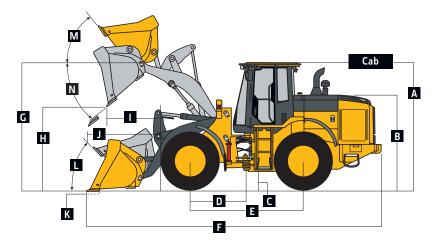




Engine	624K Z-BAR / HIGH-LIFT /	POWERL	LEL™ / TOOL CARI	RIER				
Manufacturer and Model	John Deere PowerTech™ P\	/X 6068	John Deere Power	Tech™ Plus 6068H	John De	eere PowerTech™ 6068H		
Non-Road Emission Standard	EPA Final Tier 4/EU Stage I	V	EPA Tier 3/EU Sta	age IIIA	EPA Tie	r 2/EU Stage II		
Cylinders	6		6	•	6	3		
Valves Per Cylinder	4		4		4			
Displacement	6.8 L (414 cu. in.) 6.8 L (414 cu. in.))	6.8 L (4	14 cu. in.)			
Net Peak Power (ISO 9249)	139 kW (186 hp) at 1,800	rpm	147 kW (198 hp)			(198 hp) at 1,800 rpm		
Net Peak Torque (ISO 9249)	826 Nm (609 lbft.) at 1,3		836 Nm (617 lb			(617 lbft.) at 1,600 rpm		
Net Torque Rise	57%	оо . р	65%	, ac 1,000 .p	65%	. (o., .z, a, o.op		
Fuel System (electronically controlled)	High-pressure common rai	ı	High-pressure co	mmon rail		essure common rail		
Lubrication	Full-flow spin-on filter and cooler			filter and integral		v spin-on filter and integral		
Aspiration	Turbocharged, charge air c	ooled	Turbocharged, ch	arge air cooled	Turboch	narged, charge air cooled		
Air Cleaner	Under-hood, dual-element	dry type,	restriction indicat	tor in cab monitor f	or servic	e		
Fan Drive	Hydraulically driven, propor	rtionally	Hydraulically drive	en, proportionally	Hydraul	ically driven, proportionally		
	controlled, fan aft of coole		controlled, fan af	ft of coolers		led, fan aft of coolers		
Electrical System	24 volt with 130-amp alter	rnator	24 volt with 80-a optional) alternational			with 80-amp (100-amp II) alternator		
Batteries (2 – 12 volt)	950 CCA (each)		950 CCA (each)		950 CCA	A (each)		
Transmission System								
Туре	Countershaft-type PowerS	hift™						
Torque Converter	Single stage, single phase							
Shift Control	Electronically modulated, a	adaptive,	load and speed de	pendent				
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; Quick-Shift button on hy				ton on hydraulic lever			
Shift Modes	Manual/auto (1st–D or 2nd and 3 adjustable clutch-cu	d–D); Qui toff settir	ck-Shift button wit					
	Standard 5-Speed with Lo	ckup Torq	ue Converter	Optional 4-Speed	1			
Maximum Travel Speeds (with 20.5 R 25 tires)	Forward	Reverse		Forward		Reverse		
Range 1	5.9 km/h (3.7 mph)	6.3 km/l	n (3.9 mph)	7.6 km/h (4.7 mp	h)	7.6 km/h (4.7 mph)		
Range 2	10.5 km/h (6.5 mph)	10.5 km	/h (6.5 mph)	12.5 km/h (7.8 m	ph)	13.0 km/h (8.1 mph)		
Range 3	16.1 km/h (10.0 mph)	26.2 km	/h (16.3 mph)	25.0 km/h (15.5 r	nph)	25.7 km/h (16.0 mph)		
Range 4	25.0 km/h (15.5 mph)	N/A		39.5 km/h (24.5 r	nph)	N/A		
Range 5	40.0 km/h (24.9 mph)	N/A		N/A		N/A		
Axles/Brakes								
Final Drives	Heavy-duty inboard-moun	ted plane	tary					
Differentials	Hydraulic locking front wit	h convent	tional rear – stand	ard; dual locking fr	ont and	rear – optional		
Rear Axle Oscillation, Stop to Stop (with 20.5 R 25 tires)	24 deg. (12 deg. each direc			, ,		•		
Service Brakes (conform to ISO 3450)	Hydraulically actuated, spr		cted. self-adiustin	a. inboard sun-sha	ft mount	ed. oil-cooled. sinale disc		
Parking Brakes (conform to ISO 3450)	Automatic spring-applied,							
Tires/Wheels (see page 23 for complete tire adjustments)	тассинате среме дериго,	.,	,		,			
	Tread Width		Width Over Tires					
Michelin 20.5 R 25, 1 Star L-3	2050 mm (80.7 in.)		2657 mm (104.6					
Serviceability	2000 (00.17)		2037 (10110	,				
Refill Capacities	EPA FT4/EU Stage IV		EPA Tier 3/EU Sta	age IIIA	FPA Tie	r 2/EU Stage II		
Fuel Tank with Lockable Cap	299 L (79 gal.)		352 L (93 gal.)			93 gal.)		
Diesel Exhaust Fluid (DEF)	19 L (20 qt.)		N/A		N/A	,5 gai.,		
Cooling System	33.8 L (35.7 qt.)		27 L (29 qt.)		27 L (29	at)		
Engine Oil with Vertical Spin-On Filter	19.5 L (20.6 qt.)		19 L (20 qt.)		19 L (20	• •		
Transmission Reservoir with Vertical Filter	22 L (23 qt.)		22 L (23 qt.)		22 L (23			
Axle Oil	22 L (23 qt.)		22 [(23 q)		22 L (23	, q.,,		
	221 (22 -+)		JJ /JJ -+ /		221/22) -+)		
Front	22 L (23 qt.)		22 L (23 qt.)		22 L (23	•		
Rear Hydraulic Reservoir and Filter	17 L (18 qt.)		17 L (18 qt.)		17 L (18			
,	105.2 L (27.8 gal.)		110 L (29 gal.)		110 L (2			
Park Brake Oil (wet disc)	0.3 L (10 oz.)		0.3 L (10 oz.)		0.3 L (1	U UZ.J		
Hydraulic System/Steering	We delibe disclose on the d	- Landard and						
Pump (loader and steering) Maximum Rated Flow at 6895 kPa (1,000 psi) and	Variable-displacement, axi 223 L/m (59 gpm)	ai-piston	pump; ciosea-cen	ter, pressure-comp	ensating	system		
2 350 rpm								
2,350 rpm System Relief Pressure (loader and steering)	74 871 kPa /3 675 acil	• • • • • • • • • • • • • • • • • • • •						
System Relief Pressure (loader and steering)	24 821 kPa (3,675 psi)	ontrolor	fingertin controls	2-function valve; joystick control or fingertip controls; hydraulic-function enable/disable; optional 3rd- and				
•	2-function valve; joystick c			; hydraulic-tunctior	i enable/	disable; optional 3rd- and		
System Relief Pressure (loader and steering) Loader Controls				; hydraulic-tunctior	1 епаріе/	disable; optional 3rd- and		
System Relief Pressure (loader and steering) Loader Controls Steering (conforms to ISO 5010)	2-function valve; joystick of 4th-function valve with au			; hydraulic-tunctior	i enable/	disable; optional 3rd- and		
System Relief Pressure (loader and steering) Loader Controls	2-function valve; joystick c	xiliary lev	er	; hydraulic-functior	i enable/	disable; optional 3rd- and		



Hydraulic System/Steering (continued)	624K Z-BAR / HIGH-LIFT /	624K Z-BAR / HIGH-LIFT / POWERLLEL / TOOL CARRIER						
Turning Radius (measured to centerline of outside tire)	5.27 m (17 ft. 4 in.)							
Hydraulic Cycle Times	Z-Bar	High-Lift	Powerllel	Tool Carrier				
Raise	5.9 sec.	5.9 sec.	5.9 sec.	5.6 sec.				
Dump	1.3 sec.	1.3 sec.	1.4 sec.	3.0 sec.				
Lower (float down)	2.7 sec.	2.7 sec.	2.8 sec.	2.7 sec.				
Total	9.9 sec.	9.9 sec.	10.1 sec.	11.3 sec.				
Dimensions and Specifications with Pin-On Bucket								

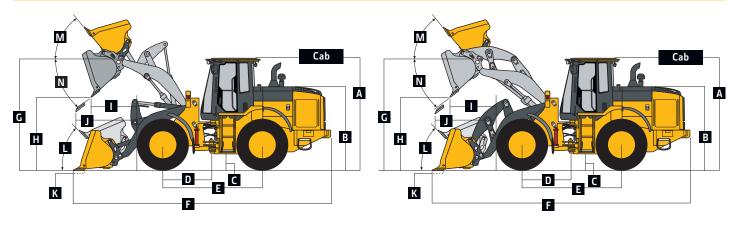


624K Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

	Z-Bar	High-Lift
Dimensions with Bucket	2.7-m³ (3.5 cu. yd.) general-purpose with bolt-on edge	2.7-m³ (3.5 cu. yd.) general-purpose with bolt-on edg
A Height to Top of Cab	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)
B Hood Height	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)
C Ground Clearance	384 mm (15.1 in.)	384 mm (15.1 in.)
D Length from Centerline to Front Axle	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)
E Wheelbase	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)
F Overall Length, Bucket on Ground	7.76 m (25 ft. 5 in.)	8.17 m (26 ft. 9 in.)
G Height to Hinge Pin, Fully Raised	3.95 m (13 ft. 0 in.)	4.30 m (14 ft. 2 in.)
H Dump Clearance, 45 deg., Full Height	2.86 m (9 ft. 5 in.)	3.23 m (10 ft. 7 in.)
Reach, 45-deg. Dump, Full Height	1.02 m (3 ft. 4 in.)	1.11 m (3 ft. 8 in.)
Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.57 m (5 ft. 2 in.)	1.93 m (6 ft. 4 in.)
K Maximum Digging Depth	95 mm (3.8 in.)	203 mm (8.0 in.)
L Maximum Rollback at Ground Level	37 deg.	36 deg.
M Maximum Rollback, Boom Fully Raised	50 deg.	49 deg.
N Maximum Bucket Dump Angle, Fully Raised	45 deg.	46 deg.
Loader Clearance Circle, Bucket Carry Position	12.24 m (40 ft. 2 in.)	12.61 m (41 ft. 4 in.)
Specifications with Bucket		
Capacity, Heaped	2.7 m ³ (3.5 cu. yd.)	2.7 m ³ (3.5 cu. yd.)
Capacity, Struck	2.3 m³ (3.0 cu. yd.)	2.3 m³ (3.0 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1148 kg (2,532 lb.)	1148 kg (2,532 lb.)
Bucket Width	2.69 m (8 ft. 10 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	12 821 kg (28,266 lb.)	11 662 kg (25,709 lb.)
Tipping Load, Straight, No Tire Deflection	13 804 kg (30,433 lb.)	11 590 kg (25,552 lb.)
Tipping Load, Straight, With Tire Deflection	13 005 kg (28,671 lb.)	11 007 kg (24,266 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	12 006 kg (26,469 lb.)	10 044 kg (22,143 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	10 956 kg (24,154 lb.)	9255 kg (20,404 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	6003 kg (13,234 lb.)	5022 kg (11,072 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	5478 kg (12,077 lb.)	4627 kg (10,201 lb.)
Operating Weight	15 747 kg (34,717 lb.)	15 948 kg (35,159 lb.)
	vith identified linkage and standard equipment, PowerTec.	h PVX 6068 (EPA Final Tier 4/EU Stage IV) engine. ROF

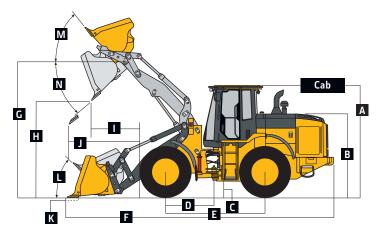
Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments.

^{*}Rated operating capacity based on Deere attachments only.



624K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET

624K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET



624K TOOL CARRIER LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET

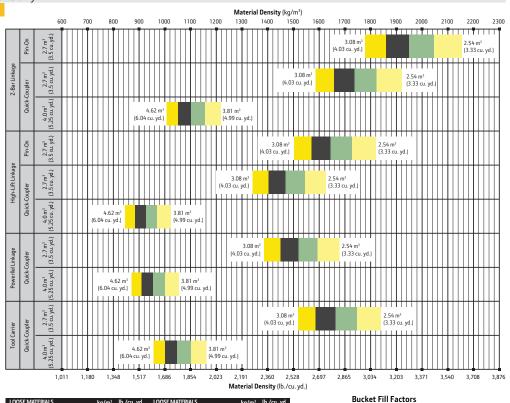
						· - ·		
	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel	Tool Carrier	Tool Carrier
Dimensions with Bucket	2.7-m³ (3.5 cu.	4.01-m³ (5.25	2.7-m³ (3.5 cu.	4.01-m³ (5.25	2.7-m³ (3.5 cu.	4.01-m³ (5.25	2.7-m³ (3.5 cu.	4.01-m³ (5.25
	yd.) general-	cu. yd.) light-	yd.) general-	cu. yd.) light-	yd.) general-	cu. yd.) light-	yd.) general-	cu. yd.) light-
	purpose with	material with	purpose with	material with	purpose with	material with	purpose with	material with
	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge
A Height to Top of Cab	3.32 m (10 ft.	11 in.)	3.32 m (10 ft.	11 in.)	3.32 m (10 ft.	11 in.)	3.32 m (10 ft.	11 in.)
B Hood Height	2.46 m (8 ft. 1	in.)	2.46 m (8 ft. 1	in.)	2.46 m (8 ft. 1	in.)	2.46 m (8 ft. 1	in.)
C Ground Clearance	384 mm (15.1	in.)	384 mm (15.1	in.)	384 mm (15.1	in.)	384 mm (15.1	in.)
D Length from Centerline to Front Axle	1.52 m (5 ft. 0	in.)	1.52 m (5 ft. 0	in.)	1.52 m (5 ft. 0	in.)	1.52 m (5 ft. 0	in.)
E Wheelbase	3.09 m (10 ft.	1 in.)	3.09 m (10 ft.	1 in.)	3.09 m (10 ft.	1 in.)	3.09 m (10 ft. 1 in.)	
F Overall Length, Bucket on Ground	7.98 m	8.09 m	8.39 m	8.50 m	8.13 m	8.42 m	7.95 m	8.19 m
	(26 ft. 2 in.)	(26 ft. 6 in.)	(27 ft. 6 in.)	(27 ft. 11 in.)	(26 ft. 8 in.)	(27 ft. 7.5 in.)	(26 ft. 1 in.)	(26 ft. 10 in.)
G Height to Hinge Pin, Fully Raised	3.96 m (13 ft. 0 in.)		4.32 m (14 ft.	4.32 m (14 ft. 2 in.)		3.99 m (13 ft. 1 in.)		1 in.)
H Dump Clearance, 45 deg., Full Height	2.69 m	2.56 m	3.06 m	2.90 m	2.70 m	2.55 m	2.81 m	2.60 m
	(8 ft. 10 in.)	(8 ft. 5 in.)	(10 ft. 1 in.)	(9 ft. 6 in.)	(8 ft. 10 in.)	(8 ft. 4 in.)	(9 ft. 3 in.)	(8 ft. 6 in.)
I Reach, 45-deg. Dump, Full Height	1.11 m	1.15 m	1.20 m	1.23 m	1.28 m	1.31 m	1.45 m	1.42 m
	(3 ft. 8 in.)	(3 ft. 9 in.)	(3 ft. 11 in.)	(4 ft. 0 in.)	(4 ft. 2 in.)	(4 ft. 4 in.)	(4 ft. 9 in.)	(4 ft. 8 in.)
J Reach, 45-deg. Dump, 2.13-m	1.56 m	1.50 m	1.94 m	1.90 m	1.75 m	1.70 m	1.85 m	1.77 m
(7 ft. 0 in.) Clearance	(5 ft. 2 in.)	(4 ft. 11 in.)	(6 ft. 4 in.)	(6 ft. 3 in.)	(5 ft. 9 in.)	(5 ft. 7 in.)	(6 ft. 1 in.)	(5 ft. 10 in.)
K Maximum Digging Depth	165 mm	257 mm	262 mm	358 mm	119 mm	228 mm	102 mm	225 mm
	(6.5 in.)	(10.12 in.)	(10.3 in.)	(14.0 in.)	(4.7 in.)	(9.0 in.)	(4.0 in.)	(8.9 in.)
L Maximum Rollback at Ground Level	39 deg.	40 deg.	39 deg.	41 deg.	42 deg.	45 deg.	49 deg.	56 deg.
M Maximum Rollback, Boom Fully Raised	55 deg.	56 deg.	48 deg.	50 deg.	52 deg.	53 deg.	64 deg.	58.5 deg.
N Maximum Bucket Dump Angle, Fully Raised	45 deg.	49 deg.	42 deg.	45 deg.	46 deg.	48 deg.	43 deg.	48 deg.
Loader Clearance Circle, Bucket Carry	12.38 m	13.00 m	12.77 m	13.36 m	12.60 m	12.90 m	12.26 m	12.55 m
Position	(40 ft. 7 in.)	(42 ft. 8 in.)	(41 ft. 11 in.)	(43 ft. 10 in.)	(41 ft. 4 in.)	(42 ft. 4 in.)	(40 ft. 3 in.)	(41 ft. 2 in.)

Dimensions and Specifications with Hi-Vis Coupler and Hook-On								
Bucket (continued)	624K Z-BAR / H	HIGH-LIFT / POW	/ERLLEL / TOOL	CARRIER				
	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel	Tool Carrier	Tool Carrier
Specifications with Bucket	2.7-m³ (3.5 cu.	4.01-m³ (5.25	2.7-m³ (3.5 cu.	4.01-m³ (5.25	2.7-m³ (3.5 cu.	4.01-m³ (5.25	2.7-m³ (3.5 cu.	4.01-m³ (5.25
	yd.) general-	cu. yd.) light-	yd.) general-	cu. yd.) light-	yd.) general-	cu. yd.) light-	yd.) general-	cu. yd.) light-
	purpose with	material with	purpose with	material with	purpose with	material with	purpose with	material with
	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge
Capacity, Heaped	2.7 m³	4.0 m³	2.7 m³	4.0 m³	2.7 m³	4.0 m³	2.7 m³	4.0 m³
	(3.5 cu. yd.)	(5.25 cu. yd.)	(3.5 cu. yd.)	(5.25 cu. yd.)	(3.5 cu. yd.)	(5.25 cu. yd.)	(3.5 cu. yd.)	(5.25 cu. yd.)
Capacity, Struck	2.3 m ³ (3.0 cu. yd.)	3.5 m ³ (4.6 cu. yd.)	2.3 m ³ (3.0 cu. yd.)	3.5 m³ (4.6 cu. yd.)	2.3 m ³ (3.0 cu. yd.)	3.5 m ³ (4.6 cu. yd.)	2.3 m ³ (3.0 cu. yd.)	3.5 m ³ (4.6 cu. yd.)
Bucket Weight with Bolt-On	1532 kg	1890 kg	1532 kg	1890 kg	1562 kg	1913 kg	1077 kg	1724 kg
Cutting Edge	(3,378 lb.)	(4,167 lb.)	(3,378 lb.)	(4,167 lb.)	(3,444 lb.)	(4,217 lb.)	(2,375 lb.)	(3,801 lb.)
Bucket Width	2.69 m	3.05 m	2.69 m	3.05 m	2.69 m	3.05 m	2.69 m	3.05 m
	(8 ft. 10 in.)	(10 ft. 0 in.)	(8 ft. 10 in.)	(10 ft. 0 in.)	(8 ft. 10 in.)	(10 ft. 0 in.)	(8 ft. 10 in.)	(10 ft. 0 in.)
Breakout Force	10 983 kg	9849 kg	9998 kg	9035 kg	10 759 kg	10 638 kg	10 978 kg	9826 kg
	(24,214 lb.)	(21,713 lb.)	(22,042 lb.)	(19,919 lb.)	(23,719 lb.)	(23,453 lb.)	(24,202 lb.)	(21,663 lb.)
Tipping Load, Straight, No Tire	12 357 kg	11 924 kg	10 419 kg	10 001 kg	10 803 kg	10 299 kg	11 837 kg	11 337 kg
Deflection	(27,242 lb.)	(26,288 lb.)	(22,969 lb.)	(22,048 lb.)	(23,816 lb.)	(22,705 lb.)	(26,097 lb.)	(24,994 lb.)
Tipping Load, Straight, With Tire	11 661 kg	11 199 kg	9900 kg	9540 kg	10 251 kg	9729 kg	11 169 kg	10 659 kg
Deflection	(25,708 lb.)	(24,689 lb.)	(21,826 lb.)	(21,032 lb.)	(22,600 lb.)	(21,449 lb.)	(24,623 lb.)	(23,499 lb.)
Tipping Load, 40-deg. Full Turn, No	10 694 kg	10 278 kg	8975 kg	8573 kg	9312 kg	8835 kg	10 253 kg	9774 kg
Tire Deflection	(23,577 lb.)	(22,659 lb.)	(19,786 lb.)	(18,900 lb.)	(20,530 lb.)	(19,478 lb)	(22,605 lb.)	(21,548 lb.)
Tipping Load, 40-deg. Full Turn,	9768 kg	9318 kg	8268 kg	7827 kg	8547 kg	8064 kg	9354 kg	8862 kg
With Tire Deflection	(21,535 lb.)	(20,542 lb.)	(18,228 lb.)	(17,255 lb.)	(18,843 lb.)	(17,778 lb.)	(20,622 lb.)	(19,537 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	5347 kg (11,788 lb.)	5139 kg (11,329 lb.)	4487 kg (9,893 lb.)	4286 kg (9,449 lb.)	4656 kg (10,265 lb.)	4417 kg (9,738 lb.)	5127 kg (11,302 lb.)	4887 kg (10,774 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	4884 kg (10,767 lb.)	4659 kg (10,271 lb.)	4134 kg (9,114 lb.)	3913 kg (8,627 lb.)	4273 kg (9,420 lb.)	4032 kg (8,889 lb.)	4677 kg (10,311 lb.)	4431 kg (9,769 lb.)
Operating Weight	16 152 kg	16 477 kg	16 352 kg	16,678 kg	17 167 kg	17 472 kg	16 166 kg	16 482 kg
	(35,608 lb.)	(36,325 lb.)	(36,050 lb.)	(36,769 lb.)	(37,847 lb.)	(38,519 lb.)	(35,640 lb.)	(36,336 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 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.

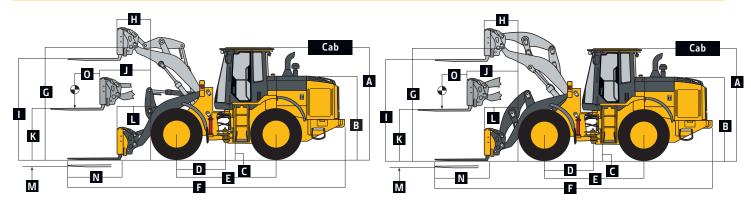
*Rated operating capacity based on Deere attachments only.

Bucket Selection Guides



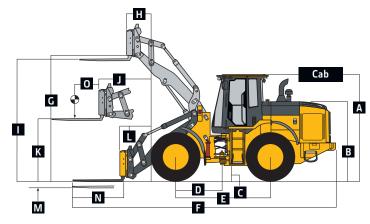
130% 115% 110% 105% 100% 95%

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



624K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS

624K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS



624K TOOL CARRIER LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS

	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel	Tool Carrier	Tool Carrier	
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	1.22-m (48 in.) tine length	1.52-m (60 in.) tine length	
A Height to Top of Cab	3.32 m (10 ft.	11 in.)	3.32 m (10 ft.	11 in.)	3.32 m (10 ft.	3.32 m (10 ft. 11 in.)		3.32 m (10 ft. 11 in.)	
B Hood Height	2.46 m (8 ft. 1	in.)							
C Ground Clearance	384 mm (15.1	in.)							
D Length from Centerline to Front Axle	1.52 m (5 ft. 0	in.)	1.52 m (5 ft. 0) in.)	1.52 m (5 ft. 0	in.)	1.52 m (5 ft. 0	in.)	
E Wheelbase	3.09 m (10 ft.	1 in.)							
F Overall Length, Forks on Ground	8.18 m	8.48 m	8.60 m	8.89 m	8.30 m	8.60 m	8.02 m	8.33 m	
	(26 ft. 10 in.)	(27 ft. 10 in.)	(28 ft. 2 in.)	(29 ft. 2 in.)	(27 ft. 3 in.)	(28 ft. 3 in.)	(26 ft. 4 in.)	(27 ft. 4 in.)	
G Height to Hinge Pin, Fully Raised	3.96 m (13 ft.	3.96 m (13 ft. 0 in.)		4.32 m (14 ft. 2 in.)		1 in.)	3.99 m (13 ft.	1 in.)	
H Reach, Fully Raised	0.75 m (29.5 i	n.)	0.84 m (33 in.)	0.92 m (36 in.)	0.89 m (35 in.))	
I Fork Height, Fully Raised	3.73 m (12 ft.	3 in.)	4.09 m (13 ft.	5 in.)	3.76 m (12 ft.	4 in.)	3.91 m (12 ft.	10 in.)	
J Maximum Reach, Fork Level	1.58 m (5 ft. 2	in.)	1.92 m (6 ft. 4	in.)	1.77 m (5 ft. 1	0 in.)	1.65 m (5 ft. 5	in.)	
K Fork Height, Maximum Reach	1.77 m (5 ft. 1	0 in.)	1.77 m (5 ft. 1	0 in.)	1.84 m (6 ft. 1	in.)	1.99 m (6 ft. 7	in.)	
L Reach, Ground Level	0.96 m (3 ft. 2	in.)	1.40 m (4 ft. 7	' in.)	1.11 m (3 ft. 8	in.)	0.88 m (35 in.))	
M Depth Below Ground	23 mm (0.9 in	.)	123 mm (4.8 i	n.)	19 mm (0.8 in	.)	0 mm (0 in.)		
N Tine Length	1.22 m	1.52 m							
	(48 in.)	(60 in.)							
O Load Position, 50% Tine Length	0.61 m	0.76 m							
	(24 in.)	(30 in.)							

Dimensions and Specifications								
with Hi-Vis Coupler and Construction Forks (continued)	624K Z-BAR / H	IIGH-LIFT / POW	ERLLEL / TOOL (ARRIER				
	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel	Tool Carrier	Tool Carrier
Specifications with Forks	1.22-m (48 in.)	1.52-m (60 in.)						
	tine length							
Tipping Load, Straight, No Tire	9706 kg	9185 kg	8642 kg	8215 kg	9054 kg	8595 kg	9369 kg	8889 kg
Deflection	(21,398 lb.)	(20,249 lb.)	(19,052 lb.)	(18,111 lb.)	(19,961 lb.)	(18,949 lb.)	(20,655 lb.)	(19,597 lb.)
Tipping Load, Straight, With Tire	9420 kg	8919 kg	8397 kg	7986 kg	8778 kg	8340 kg	9102 kg	8637 kg
Deflection	(20,767 lb.)	(19,663 lb.)	(18,512 lb.)	(17,606 lb.)	(19,532 lb.)	(18,387 lb.)	(20,066 lb.)	(19,041 lb.)
Tipping Load, 40-deg. Full Turn,	8445 kg	7985 kg	7494 kg	7116 kg	7854 kg	7446 kg	8157 kg	7731 kg
No Tire Deflection	(18,618 lb.)	(17,604 lb.)	(16,521 lb.)	(15,688 lb.)	(17,315 lb.)	(16,416 lb.)	(17,983 lb.)	(17,044 lb.)
Tipping Load, 40-deg. Full Turn,	8052 kg	7623 kg	7155 kg	6801 kg	7473 kg	7098 kg	7776 kg	7383 kg
With Tire Deflection	(17,752 lb.)	(16,806 lb.)	(15,774 lb.)	(14,994 lb.)	(16,745 lb.)	(15,648 lb.)	(17,143 lb.)	(16,277 lb.)
Rated Operating Load, 50% Full- Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1 and SAE J1197)*	4026 kg (8,876 lb.)	3812 kg (8,404 lb.)	3578 kg (7,888 lb.)	3401 kg (7,498 lb.)	3737 kg (8,239 lb.)	3549 kg (7,824 lb.)	3888 kg (8,572 lb.)	3692 kg (8,139 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	4831 kg (10,650 lb.)	4574 kg (10,084 lb.)	4293 kg (9,464 lb.)	4081 kg (8,997 lb.)	4484 kg (9,885 lb.)	4259 kg (9,389 lb.)	4666 kg (10,287 lb.)	4430 kg (9,767 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	6442 kg (14,202 lb.)	6098 kg (13,444 lb.)	5724 kg (12,619 lb.)	5441 kg (11,995 lb.)	5978 kg (13,179 lb.)	5678 kg (12,518 lb.)	6221 kg (13,715 lb.)	5906 kg (13,020 lb.)
Operating Weight	15 730 kg	15 773 kg	15 931 kg	15 971 kg	16 702 kg	16 745 kg	15 703 kg	15 746 kg
	(34,679 lb.)	(34, 773 lb.)	(35,122 lb.)	(35,210 lb.)	(36,822 lb.)	(36,916 lb.)	(34,619 lb.)	(34,714 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 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.

Adjustments to Operating Weights and Tipping Loads with Buckets

Adjustments to operating weights, tipping loads, and tires are based on Z-bar machine with pin-on 2.7-m³ (3.5 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*

edge, ROPS cab, rear cast bumper/co	ounterweignt, transmi	ssion side-frame guar	as, pottom guaras, st	andard tires, tuli tue	i tank, and 79-kg (17:	o ib.) operator"
Add (+) or deduct (–) kg (lb.) as indi-		Tipping Load,	Tipping Load, 40-			
cated for loaders with 3-piece rims	Operating Weight	Straight	deg. Full Turn SAE	Tread Width	Width Over Tires	Vertical Height
John Deere PowerTech PVX 6068	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech Plus 6068H	–130 kg (–287 lb.)	+38 kg (+84 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech 6068H	-146 kg (-322 lb.)	–7 kg (–15 lb.)	-45 kg (-101 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.)	+33 kg (+73 lb.)	+29 kg (+64 lb.)	0 mm (0 in.)	-16 mm (-0.6 in.)	0 mm (0 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.)	-16 mm (-0.6 in.)	0 mm (0 in.)
Michelin 20.5 R 25, 1 Star L-2	-172 kg (-379 lb.)	-129 kg (-285 lb.)	–114 kg (–251 lb.)	0 mm (0 in.)	-16 mm (-0.6 in.)	-3 mm (-0.1 in.)
Bridgestone 20.5 R 25, 1 Star L-2	–80 kg (–176 lb.)	–60 kg (–132 lb.)	–53 kg (–117 lb.)	0 mm (0 in.)	-16 mm (-0.6 in.)	-3 mm (-0.1 in.)
Titan 20.5 R 25, 1 Star L-2	-128 kg (-282 lb.)	–96 kg (–212 lb.)	–85 kg (–187 lb.)	0 mm (0 in.)	-16 mm (-0.6 in.)	-3 mm (-0.1 in.)
Firestone 20.5-25, 16 PR L-3	-252 kg (-556 lb.)	-189 kg (-417 lb.)	-167 kg (-367 lb.)	0 mm (0 in.)	-12 mm (-0.5 in.)	+13 mm (+0.5 in.)
Titan 20.5-25, 16 PR L-2	-260 kg (-573 lb.)	+195 kg (+430 lb.)	-172 kg (-379 lb.)	0 mm (0 in.)	-12 mm (-0.5 in.)	+6 mm (+0.2 in.)
Firestone 20.5-25, 16 PR L-2	–280 kg (–617 lb.)	–210 kg (–464 lb.)	-185 kg (-408 lb.)	0 mm (0 in.)	-12 mm (-0.5 in.)	+6 mm (+0.2 in.)
20.5R25 L2 Sno-Plus Michelin	–88 kg (–194 lb.)	–66 kg (–145 lb.)	–58 kg (–128 lb.)	0 mm (0 in.)	+7 mm (+0.3 in.)	-28 mm (-1.1 in.)
620/75R26 MegaXbib ^{®£}	-216 kg (-476 lb.)	–162 kg (–357 lb.)	–143 kg (–315 lb.)	0 mm (0 in.)	+61 mm (+3.3 in.)	+27 mm (+1.06 in.)
CaCl ₂ in 20.5-25, L-3 Rear Tires	+1166 kg (+2,571 lb.)	+1432 kg (+3,157 lb.)	+1305 kg (+2,878 lb.)	N/A	N/A	N/A

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

^{*}Rated operating capacity based on Deere attachments only.

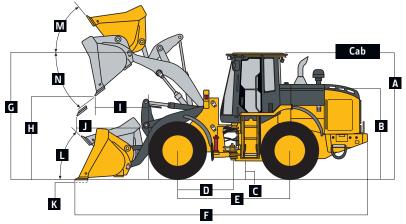
[®]Requires 8-deg. rear axle stops.

[£]Equipped with 1-piece rims.

	6//// T DAD //// CIT	/ DOINE						
Engine Manufacturer and Model	644K Z-BAR / HIGH-L John Deere PowerTech 6090			re PowerTech™ Plus	John Deere PowerTec	h™ 6068H	John Deer	re PowerTech PSX
Non-Road Emission Standard	EPA Final Tier 4/EU Sta	age IV		/EU Stage IIIA	EPA Tier 2/EU Stage I	I	EPA Interi	m Tier 4/EU Stage IIIB
Cylinders	6		6		6		6	
Valves Per Cylinder	4		4		4		4	
Displacement	9.0 L (548 cu. in.)		6.8 L (414	cu. in.)	6.8 L (414 cu. in.)		6.8 L (414	+ cu. in.)
Net Peak Power (ISO 9249)	173 kW (232 hp) at 1,	700 rpm		232 hp) at 1,700 rpm	173 kW (232 hp) at 1	.700 rpm		229 hp) at 1,700 rpm
Net Peak Torque (ISO 9249)	1062 Nm (783 lbft.)			(749 lbft.) at	1016 Nm (749 lbft.)	•		730 lbft.) at
Wet reak forque (150 32 15)	1,400 rpm	u.	1,400 rpm		1,400 rpm	ut.	1,400 rpn	·
Net Torque Rise	56%		55%		55%		19%	
Fuel System (electronically controlled)	High-pressure commo	on rail		sure common rail	High-pressure commo	on rail		ssure common rail
Lubrication	Full-flow spin-on filter				Full-flow spin-on filte			
Aspiration	Series turbocharged, o	-		ged, charge air cooled				rged, charge air cooled
Air Cleaner	Under-hood, dual-eler monitor for service	ment dry typ	e, restricti	on indicator in cab	Under-hood, dual-ele monitor for service	ment dry ty	pe, restricti	ion indicator in cab
Fan Drive	Hydraulically driven, p	roportional			Hydraulically driven, p	proportional	lly controlle	ed, fan aft of coolers
Electrical System	24 volt with 130-amp alternator		24 volt wi	th 80-amp (100-amp o _l				ith 100-amp optional alternator)
Batteries (2 – 12 volt) Transmission System	950 CCA (each)		950 CCA (each)	950 CCA (each)		950 CCA (each)
	EPA FT4/EU Stage IV /	EPA Tier 3/	EU Stage II	IA / EPA Tier 2/EU Stage	e II	EPA IT4/EU		with Hybrid-
	Standard 5-Speed wit Converter	h Lockup To	rque	Optional 4-Speed		Standard 3	3-Speed Hy	brid-Electric Drive
Туре	Countershaft-type Pov	werShift™		Countershaft-type Po	werShift	Countersh	aft-type Po	owerShift
Torque Converter	Single stage, single phase Single stage, single phase		ohase N/A					
Motor/Generator	N/A N/A		Brushless		A/C			
Inverter	N/A				Solid-state	·		
Shift Control	Electronically modulated, adaptive, load Electronically modulat and speed dependent and speed dependent			Electronica and speed		ited, adaptive, load t		
Operator Interface	Steering-column or jo	ystick-moun	ted F-N-R	and gear-select lever; C	uick-Shift button on h	ydraulic leve	r	
Shift Modes	Manual/auto (1st–D o clutch-cutoff settings		uick-Shift l	outton with 2 selectable	e modes: kick-down or	kick-up/dow	n; and 3 ac	ljustable
Maximum Travel Speeds (with 23.5 R 25 tires)	Forward	Reverse		Forward	Reverse	Forward		Reverse
Range 1	7.8 km/h (4.8 mph)	8.2 km/h (7.6 km/h (4.7 mph)	7.9 km/h (4.9 mph)	7.5 km/h (7.5 km/h (4.5 mph)
Range 2	13.4 km/h (8.3 mph)	13.6 km/h		12.6 km/h (7.8 mph)	12.9 km/h (8.0 mph)	14.0 km/h		14.0 km/h (8.7 mph)
Range 3	22.6 km/h	28.8 km/h		24.7 km/h	24.9 km/h	25.0 km/h		25.0 km/h
	(14.0 mph)	(17.9 mph)		(15.3 mph)	(15.5 mph)	(15.5 mph		(15.5 mph)
Range 4	27.4 km/h (17.0 mph)	N/A		36.6 km/h (22.7 mph)	N/A	40.0 km/h (24.9 mph		40.0 km/h (24.9 mph)
Range 5	40.0 km/h (24.9 mph)	N/A		N/A	N/A	N/A		N/A
Axles/Brakes								
	EPA FT4/EU Stage IV / EPA Tier 2/EU Stage II		EU Stage II	IA /	EPA IT4/EU Stage IIIB	with Hybrid	d-Electric D	Orive
Final Drives	Heavy-duty inboard-m				Heavy-duty inboard-r		netary	
Differentials	, ,		entional re	ar – standard; dual lock				
Rear Axle Oscillation, Stop to Stop (with 23.5 R 25 tires)	26 deg. (13 deg. each				26 deg. (13 deg. each			
Service Brakes (conform to ISO 3450)	Hydraulically actuated sun-shaft mounted, or			f-adjusting, inboard	Hydraulically actuated self-adjusting, single		un-shaft m	ounted, oil-cooled,
Parking Brakes (conform to ISO 3450)	Automatic spring-app mounted, oil-cooled, r		lically relea	sed, driveline-	Automatic spring-app integrated, oil-cooled		ilically relea	ased, transmission-
Tires/Wheels (see page 28 for complete tire adjustments)								
		' EPA Tier 3/	EU Stage II	IA / EPA Tier 2/EU Stage	e II / EPA IT4/EU Stage	IIIB with Hyl	orid-Electr	ic Drive
	Tread Width			Width Over Tires				
Michelin 23.5 R 25, 1 Star L-3	2170 mm (85.4 in.)			2875 mm (113.2 in.)				
Serviceability Refill Capacities	EPA FT4/EU Stage IV			EPA Tier 3/EU Stage II				with Hybrid-
Fuel Tank with Lockable Cap	397 L (105 gal.)			EPA Tier 2/EU Stage II 352 L (93 gal.)		Electric Do 397 L (105		
Diesel Exhaust Fluid (DEF)	32 L (34 qt.)			N/A		N/A	, gai.,	
Engine Cooling System	45.5 L (48.1 qt.)			29.5 L (31.2 qt.)		54.9 L (58	at)	
Inverter Cooling System	N/A			N/A		5.7 L (6 qt		
Engine Oil with Vertical Spin-On Filter	28 L (29.5 qt.)			24.5 L (26 qt.)		27 L (28.5		
Transmission Reservoir with Vertical Filter	23 L (24 qt.)			27 L (28.5 qt.)		37.9 L (40	•	
Axle Oil (front and rear, each)	22 L (23 qt.)			22 L (23 qt.)		22 L (23 qt		
Hydraulic Reservoir and Filter	105.2 L (27.8 gal.)			110 L (29 gal.)		106 L (28	•	
Park Brake Oil (wet disc)	0.6 L (20 oz.)			0.6 L (20 oz.)		0	51	
. a.v. State on (wet alse)	5.0 L (20 02.)			5.0 L (20 02.)		3		



Hydraulic System/Steering	644K Z-BAR / HIGH-	LIFT / POWERLLEL					
Pump (loader and steering)	Variable-displacemen	nt, axial-piston pump; clo	sed-center, pressure-cor	npensating system			
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,250 rpm	297 L/m (78 gpm)						
System Relief Pressure (loader and steering)	25 166 kPa (3,650 ps	si)					
Loader Controls	2-function valve; joys	tick control or fingertip c	ontrols; hydraulic-functio	n enable/disable; option	al 3rd- and 4th-function	valve with auxiliary lever	
Steering (conforms to ISO 5010)							
Туре	Power, fully hydrauli	Power, fully hydraulic					
Articulation Angle	80-deg. arc (40 deg.	each direction)					
Turning Radius (measured to centerline of outside tire)	5.57 m (18 ft. 3 in.)						
	EPA FT4/EU Stage IV	/ EPA Tier 3/EU Stage IIIA	/ EPA Tier 2/EU Stage II	EPA IT4/EU Stage IIIB with Hybrid-Electric Drive			
Hydraulic Cycle Times	Z-Bar	High-Lift	Powerllel	Z-Bar	High-Lift	Powerllel	
Raise	6.4 sec.	6.4 sec.	6.4 sec.	8.2 sec.	8.2 sec.	8.2 sec.	
Dump	1.6 sec.	1.6 sec.	2.1 sec.	2.3 sec.	2.3 sec.	2.8 sec.	
Lower (float down)	3.0 sec.	3.0 sec.	2.8 sec.	3.0 sec.	3.0 sec.	2.8 sec.	
Total	11.0 sec.	11.0 sec.	11.3 sec.	13.5 sec.	13.5 sec.	13.8 sec.	
Dimensions and Specifications with Pin-On Bucket							

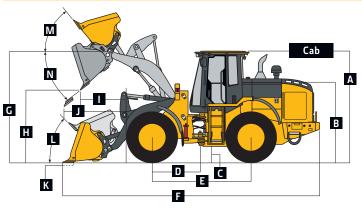


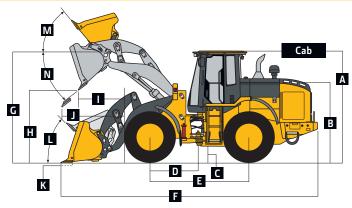
644K Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

	Z-Bar	High-Lift
Dimensions with Bucket	3.2-m³ (4.25 cu. yd.) general-purpose with bolt-on edge	3.2-m³ (4.25 cu. yd.) general-purpose with bolt-on edge
A Height to Top of Cab	3.43 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)
B Hood Height	2.53 m (8 ft. 4 in.)	2.53 m (8 ft. 4 in.)
C Ground Clearance	461 mm (18.1 in.)	461 mm (18.1 in.)
D Length from Centerline to Front Axle	1.60 m (5 ft. 3 in.)	1.60 m (5 ft. 3 in.)
E Wheelbase	3.26 m (10 ft. 8 in.)	3.26 m (10 ft. 8 in.)
F Overall Length, Bucket on Ground	8.30 m (27 ft. 3 in.)	8.77 m (28 ft. 9 in.)
G Height to Hinge Pin, Fully Raised	4.12 m (13 ft. 6 in.)	4.54 m (14 ft. 11 in.)
H Dump Clearance, 45 deg., Full Height	2.91 m (9 ft. 6.5 in.)	3.33 m (10 ft. 11.1 in.)
I Reach, 45-deg. Dump, Full Height	1.06 m (3 ft. 5.7 in.)	1.19 m (3 ft. 10.9 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.61 m (5 ft. 3.4 in.)	2.06 m (6 ft. 9.1 in.)
K Maximum Digging Depth	106 mm (4.2 in.)	200 mm (7.9 in.)
L Maximum Rollback at Ground Level	42 deg.	41 deg.
M Maximum Rollback, Boom Fully Raised	55 deg.	47 deg.
N Maximum Bucket Dump Angle, Fully Raised	50 deg.	45 deg.
Loader Clearance Circle, Bucket Carry Position	13.19 m (43 ft. 3.1 in.)	13.62 m (44 ft. 8.2 in.)
Specifications with Bucket		
Capacity, Heaped	3.2 m³ (4.25 cu. yd.)	3.2 m³ (4.25 cu. yd.)
Capacity, Struck	2.8 m³ (3.7 cu. yd.)	2.8 m³ (3.7 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1735 kg (3,826 lb.)	1736 kg (3,827 lb.)
Bucket Width	3.04 m (10 ft. 0 in.)	3.04 m (10 ft. 0 in.)
Breakout Force	15 378 kg (33,903 lb.)	13 782 kg (30,384 lb.)
Tipping Load, Straight, No Tire Deflection	14 771 kg (32,565 lb.)	12 249 kg (27,004 lb.)
Tipping Load, Straight, With Tire Deflection	13 923 kg (30,695 lb.)	11 628 kg (25,635 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	12 798 kg (28,214 lb.)	10 546 kg (23,250 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	11 739 kg (25,880 lb.)	9750 kg (21,495 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	6398 kg (14,107 lb.)	6124 kg (13,502 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	5870 kg (12,941 lb.)	4875 kg (10,747 lb.)
Operating Weight	18 682 kg (41,188 lb.)	19 091 kg (42,088 lb.)
		(EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counter-

weight, 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.





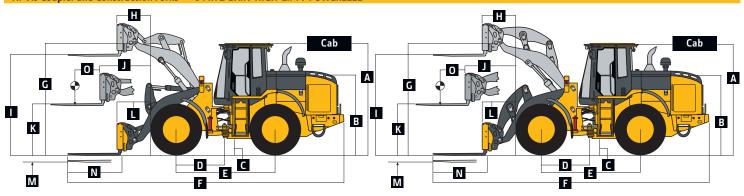
644K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET

644K POWERLLEL LOADER WITH QUICK-COUPLER

AND HOOK-0	ON BUCKET		CON BUCKET
	Z-Bar	High-Lift	Powerllel
imensions with Bucket	3.1-m³ (4.0 cu. yd.) general-purpose	3.1-m³ (4.0 cu. yd.) general-purpose	3.1-m³ (4.0 cu. yd.) general-purpos
	with bolt-on edge	with bolt-on edge	with bolt-on edge
Height to Top of Cab	3.43 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)
Hood Height	2.53 m (8 ft. 4 in.)	2.53 m (8 ft. 4 in.)	2.53 m (8 ft. 4 in.)
Ground Clearance	461 mm (18.1 in.)	461 mm (18.1 in.)	461 mm (18.1 in.)
Length from Centerline to Front Axle	1.60 m (5 ft. 3 in.)	1.60 m (5 ft. 3 in.)	1.60 m (5 ft. 3 in.)
Wheelbase	3.26 m (10 ft. 8 in.)	3.26 m (10 ft. 8 in.)	3.26 m (10 ft. 8 in.)
Overall Length, Bucket on Ground	8.27 m (27 ft. 2 in.)	8.74 m (28 ft. 8 in.)	8.50 m (27 ft. 11 in.)
Height to Hinge Pin, Fully Raised	4.12 m (13 ft. 6 in.)	4.54 m (14 ft. 11 in.)	4.12 m (13 ft. 6 in.)
Dump Clearance, 45 deg., Full Height	2.79 m (9 ft. 2 in.)	3.11 m (10 ft. 2 in.)	2.79 m (9 ft. 2 in.)
Reach, 45-deg. Dump, Full Height	1.16 m (3 ft. 10 in.)	1.28 m (4 ft. 2 in.)	1.20 m (3 ft. 11 in.)
Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.64 m (5 ft. 5 in.)	2.10 m (6 ft. 11 in.)	1.74 m (5 ft. 9 in.)
Maximum Digging Depth	139 mm (5.0 in.)	226 mm (9.0 in.)	91 mm (3.6 in.)
Maximum Rollback at Ground Level	42 deg.	42 deg.	41 deg.
Maximum Rollback, Boom Fully Raised	55 deg.	47 deg.	55 deg.
Maximum Bucket Dump Angle, Fully Raised	45 deg.	45 deg.	50 deg.
oader Clearance Circle, Bucket Carry osition	13.28 m (43 ft. 7 in.)	13.72 m (45 ft. 0 in.)	13.36 m (43 ft. 10 in.)
pecifications with Bucket			
Capacity, Heaped	3.1 m ³ (4.0 cu. yd.)	3.1 m ³ (4.0 cu. yd.)	3.1 m ³ (4.0 cu. yd.)
Capacity, Struck	2.7 m ³ (3.6 cu. yd.)	2.7 m ³ (3.6 cu. yd.)	2.6 m³ (3.5 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	2124 kg (4,682 lb.)	2124 kg (4,682 lb.)	2085 kg (4,597 lb.)
Bucket Width	3.00 m (9 ft. 10 in.)	3.00 m (9 ft. 10 in.)	3.04 m (10 ft. 0 in.)
Breakout Force	13 664 kg (30,124 lb.)	12 242 kg (26,989 lb.)	12 029 kg (26,519 lb.)
Tipping Load, Straight, No Tire Deflection	13 401 kg (29,543 lb.)	11 155 kg (24,593 lb.)	12 923 kg (28,489 lb.)
Tipping Load, Straight, With Tire Deflection	12 645 kg (27,877 lb.)	10 593 kg (23,353 lb.)	12 216 kg (26,932 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	11 556 kg (25,476 lb.)	9549 kg (21,051 lb.)	11 123 kg (24,523 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	10 605 kg (23,380 lb.)	8814 kg (19,431 lb.)	10 227 kg (22,547 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	5778 kg (12,738 lb.)	4774 kg (10,525 lb.)	5562 kg (12,261 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	5303 kg (11,691 lb.)	4407 kg (9,716 lb.)	5114 kg (11,274 lb.)
Operating Weight	19 074 kg (42,050 lb.)	19 482 kg (42,951 lb.)	20 269 kg (44,685 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSX 6090 (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.



644K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS

644K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORKS

AND HOOK-ON CONST	RUCTION FORKS			AND HOO	K-ON CONSTRUCT	ION FORKS	
	Z-Bar	Z-Bar	High-Lift	High-Lift	Powerllel	Powerllel	Powerllel
							Rockland
					Construction	Construction	Logging
Dimensions with Forks	1.52-m (60 in.)	1.83-m (72 in.)	1.52-m (60 in.)	1.83-m (72 in.)	1.52-m (60 in.)	1.83-m (72 in.)	1.52-m (60 in.)
	tine length						
A Height to Top of Cab	3.43 m						
	(11 ft. 3 in.)						
B Hood Height	2.53 m						
	(8 ft. 4 in.)						
C Ground Clearance	461 mm						
	(18.1 in.)						
D Length from Centerline to Front Axle	1.60 m	1.45 m	1.60 m	1.45 m	1.60 m	1.45 m	1.45 m
	(5 ft. 3 in.)	(4 ft. 9 in.)	(5 ft. 3 in.)	(4 ft. 9 in.)	(5 ft. 3 in.)	(4 ft. 9 in.)	(4 ft. 9 in.)
E Wheelbase	3.26 m	2.93 m	3.26 m	2.93 m	3.26 m	2.93 m	2.93 m
	(10 ft. 8 in.)	(9 ft. 7 in.)	(10 ft. 8 in.)	(9 ft. 7 in.)	(10 ft. 8 in.)	(9 ft. 7 in.)	(9 ft. 7 in.)
F Overall Length, Forks on Ground	8.81 m	9.11 m	9.28 m	9.58 m	9.04 m	9.34 m	9.13 m
	(28 ft. 11 in.)	(29 ft. 11 in.)	(30 ft. 5.4 in.)	(31 ft. 5 in.)	(29 ft. 8 in.)	(30 ft. 8 in.)	(29 ft. 11 in.)
G Height to Hinge Pin, Fully Raised	4.12 m	4.12 m	4.54 m	4.54 m	4.12 m	4.12 m	4.12 m
	(13 ft. 6 in.)	(13 ft. 6 in.)	(14 ft. 11 in.)	(14 ft. 11 in.)	(13 ft. 6 in.)	(13 ft. 6 in.)	(13 ft. 6 in.)
H Reach, Fully Raised	788 mm	788 mm	905 mm	905 mm	819 mm	819 mm	932 mm
	(31.0 in.)	(31.0 in.)	(35.6 in.)	(35.6 in.)	(32.2 in.)	(32.2 in.)	(37.0 in.)
I Fork Height, Fully Raised	3.89 m	3.89 m	4.22 m	4.22 m	3.79 m	3.79 m	3.83 m
	(12 ft. 9 in.)	(12 ft. 9 in.)	(13 ft. 10.1 in.)	(13 ft. 10.1 in.)	(12 ft. 5 in.)	(12 ft. 5 in.)	(12 ft. 7 in.)
J Maximum Reach, Fork Level	1.68 m	1.68 m	2.07 m	2.07 m	1.76 m	1.76 m	1.87 m
	(5 ft. 6 in.)	(5 ft. 6 in.)	(6 ft. 9.5 in.)	(6 ft. 9.5 in.)	(5 ft. 9 in.)	(5 ft. 9 in.)	(6 ft. 2 in.)
K Fork Height, Maximum Reach	1.71 m	1.71 m	1.86 m	1.86 m	1.71 m	1.71 m	1.76 m
	(5 ft. 7 in.)	(5 ft. 7 in.)	(6 ft. 1.2 in.)	(6 ft. 1.2 in.)	(5 ft. 7 in.)	(5 ft. 7 in.)	(5 ft. 9 in.)
L Reach, Ground Level	1.17 m	1.17 m	1.64 m	1.64 m	1.22 m	1.22 m	1.31 m
	(3 ft. 10 in.)	(3 ft. 10 in.)	(5 ft. 4.6 in.)	(5 ft. 4.6 in.)	(4 ft. 0 in.)	(4 ft. 0 in.)	(4 ft. 4 in.)
M Depth Below Ground	89 mm (4.0 in.)	89 mm (4.0 in.)	181 mm (7.1 in.)			38 mm (1.5 in.)	0 mm (0 in.)
N Tine Length	1.52 m (60 in.)	1.83 m (72 in.)	1.52 m (60 in.)	1.83 m (72 in.)	1.52 m (60 in.)	1.83 m (72 in.)	1.52 m (60 in.)
O Load Position, 50% Tine Length	0.76 m (30 in.)	0.92 m (36 in.)	0.76 m (30 in.)	0.92 m (36 in.)	0.76 m (30 in.)	0.92 m (36 in.)	0.76 m (30 in.)
Specifications with Forks							
Tipping Load, Straight, No Tire	9883 kg	9373 kg	8791 kg	8369 kg	9892 kg	9388 kg	9632 kg
Deflection	(21,789 lb.)	(20,663 lb.)	(19,381 lb.)	(18,449 lb.)	(21,807 lb.)	(20,697 lb.)	(21,235 lb.)
Tipping Load, Straight, With Tire	9621 kg	9123 kg	8571 kg	8166 kg	9579 kg	9090 kg	9234 kg
Deflection	(21,211 lb.)	(20,113 lb.)	(18,896 lb.)	(18,003 lb.)	(21,118 lb.)	(20,040 lb.)	(20,357 lb.)
Tipping Load, 40-deg. Full Turn, No	8562 kg	8110 kg	7571 kg	7198 kg	8557 kg	8112 kg	8209 kg
Tire Deflection	(18,876 lb.)	(17,880 lb.)	(16,691 lb.)	(15,868 lb.)	(18,866 lb.)	(17,884 lb.)	(18,097 lb.)
Tipping Load, 40-deg. Full Turn, With	8208 kg	7773 kg	7266 kg	6912 kg	8145 kg	7725 kg	7674 kg
Tire Deflection	(18,095 lb.)	(17,136 lb)	(16,019 lb.)	(15,238 lb.)	(17,957 lb.)	(17,031 lb.)	(16,918 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (con- forms to ISO 14397-1 and SAE J1197)*	4104 kg (9,048 lb.)	3887 kg (8,569 lb.)	3633 kg (8,009 lb.)	3456 kg (7,619 lb.)	4073 kg (8,979 lb.)	3863 kg (8,516 lb.)	3837 kg (8,459 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	4925 kg (10,858 lb.)	4664 kg (10,282 lb.)	4360 kg (9,612 lb.)	4147 kg (9,143 lb.)	4887 kg (10,774 lb.)	4635 kg (10,218 lb.)	4604 kg (10,150 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	6567 kg (14,476 lb.)	6219 kg (13,710 lb.)	5813 kg (12,815 lb.)	5530 kg (12,192 lb.)	6516 kg (14,365 lb.)	6180 kg (13,626 lb.)	6139 kg (13,534 lb.)
Operating Weight	18 603 kg	18 663 kg	19 012 kg	19 072 kg	19 796 kg	19 856 kg	21 469 kg
	(41,012 lb.)	(41,144 lb.)	(41,914 lb.)	(42,046 lb.)	(43,643 lb.)	(43,775 lb.)	(47,330 lb.)
	1						

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSX 6090 (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 644K Z-BAR / HIGH-LIFT / POWERLLEL

Adjustments to operating weights, tipping loads, and tires are based on Z-bar machine with pin-on 3.1-m³ (4.0 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 indi
Tipping Load,
Tipping Load, 40
Staight Staight Staight Staight Trans SAE Trans Width Over Tires Vertical Height

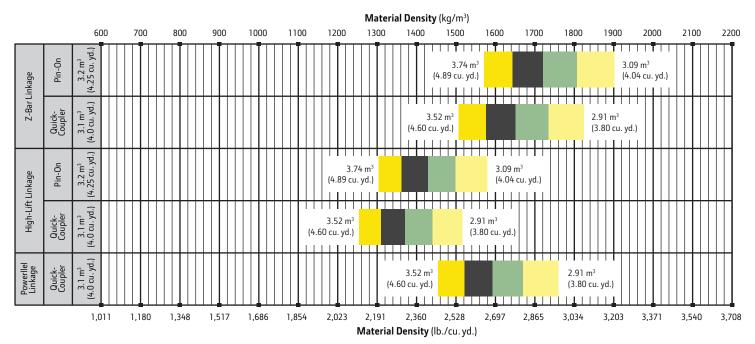
Add (+) or deduct (–) kg (lb.) as indi-		Tipping Load,	Tipping Load, 40-			
cated for loaders with 3-piece rims	Operating Weight	Straight	deg. Full Turn SAE	Tread Width	Width Over Tires	Vertical Height
John Deere PowerTech PSX 6090	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech Plus 6068H	–98 kg (–215 lb.)	+338 kg (+745 lb.)	+242 kg (+534 lb.)	N/A	N/A	N/A
John Deere PowerTech 6068H	-124 kg (-273 lb.)	+293 kg (+646 lb.)	+203 kg (+448 lb.)	N/A	N/A	N/A
John Deere PowerTech PSX 6068 Z-Bar	–341 kg (–753 lb.)	–682 kg (–1,504 lb.)	–554 kg (–1,222 lb.)	N/A	N/A	N/A
John Deere PowerTech PSX 6068 High Lift/Powerllel	+8 kg (+18 lb.)	+14 kg (+30 lb.)	+35 kg (+78 lb.)	N/A	N/A	N/A
Michelin 23.5 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 23.5 R 25, 1 Star L-3	+116 kg (+256 lb.)	+86 kg (+190 lb.)	+76 kg (+167 lb.)	0 mm (0 in.)	-28 mm (-1.1 in.)	+17 mm (+0.7 in.)
Titan 23.5 R 25, 20 PR L-3	-156 kg (-343 lb.)	–115 kg (–255 lb.)	-102 kg (-224 lb.)	0 mm (0 in.)	+27 mm (+1.1 in.)	0 mm (0 in.)
Titan 725/70-25 16-Ply L-4T (Logger Style)†§§	+266 kg (+587 lb.)	+208 kg (+459 lb.)	+183 kg (+404 lb.)	+37 mm (+1.5 in.)	+95 mm (+3.7 in.)	+49 mm (+1.9 in.)
Michelin 750/65 R 25, 1 Star L-3T ^{+§8}	+622 kg (+1,371 lb.)	+472 kg (+1,041 lb.)	+416 kg (+917 lb.)	+37 mm (+1.5 in.)	+158 mm (+6.2 in.)	+12 mm (+0.5 in.)

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

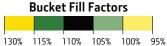
[†]Equipped with 5-piece heavy-duty rims.

[§]CaCl₂ not recommended.

[®]Requires 9-deg. rear axle stops.



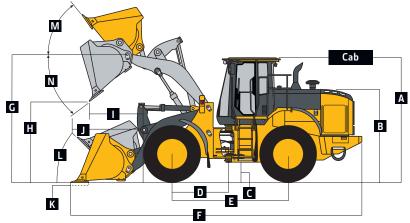
LOOSE MATERIALS	kg/m³	lb./cu. yd.	LOOSE MATERIALS	kg/m³	lb./cu. yd.
Chips, pulpwood	288	486	Limestone, coarse, sized	1570	2,646
Cinders (coal, ashes, clinkers)	673	1,134	Limestone, mixed sizes	1682	2,835
Clay and gravel, dry	1602	2,700	Limestone, pulverized or crushed	1362	2,295
Clay, compact, solid	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		
Granite, broken	1538	2,592	(1.5 to 3.5") size	1442	2,430
Gypsum	2275	3,834	Stone or gravel, 18.75-mm (3/4") size	1602	2,700



Engine	724K Z-BAR / HIGH-LIFT					
Manufacturer and Model	John Deere PowerTech™ PS>	(60 <u>0</u> 0	John Doore Pourer	Tech™ Plus 6090H	John Da	ere PowerTech™ 6090H
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV		EPA Tier 3/EU Sta			2/EU Stage II
	6		6	ge IIIA	6	Z/EO Stage II
Cylinders	4		4		4	
Valves Per Cylinder						0 :-)
Displacement	9.0 L (548 cu. in.)		9.0 L (548 cu. in.)	1 000	9.0 L (54	
Net Peak Power (ISO 9249)	197 kW (264 hp) at 1,800 rp		197 kW (264 hp) a			(264 hp) at 1,800 rpm
Net Peak Torque (ISO 9249)	1161 Nm (856 lbft.) at 1,3	uu rpm	1159 Nm (852 lb.	-rt.) at 1,300 rpm		n (852 lbft.) at 1,300 rpm
Net Torque Rise	61%		60%	.1	60%	.1
Fuel System (electronically controlled)	High-pressure common rail		High-pressure cor			essure common rail
Lubrication	Full-flow spin-on filter and i	ntegral	Full-flow spin-on	filter and integral		spin-on filter and integral
A. C. C.	cooler		cooler		cooler	d de
Aspiration	Series turbocharged, charge	air	Turbocharged, ch	arge air cooled	Turboch	arged, charge air cooled
Air Classes	cooled	J 4		.::		
Air Cleaner	Under-hood, dual-element of					aalla daisaa aaaaaatiaaalla
Fan Drive	Hydraulically driven, proport controlled, fan aft of coolers		Hydraulically drive controlled, fan af			cally driven, proportionally ed, fan aft of coolers
Floatrical System						·
Electrical System	24 volt with 130-amp altern	lator	24 volt with 100-a	amp aiternator		vith 100-amp alternator
Batteries (2 – 12 volt)	950 CCA (each)		1,400 CCA (each)		1,400 CC	.A (each)
Transmission System	Carratavala et trona Darra ech	: CLTM				
Type	Countershaft-type PowerSh	ΙΙΤ				
Torque Converter	Single stage, single phase	J				
Shift Control	Electronically modulated, ac					1 1 1: 1:
Operator Interface	Steering-column or joystick-					
Shift Modes	Manual/auto (1st–D or 2nd-		k-Shift button with	2 selectable modes	s: kick-dov	vn or kick-up/down; and
	3 adjustable clutch-cutoff so			0.1:	,	
Martin of Tarada (1911) 22 F. D. 25 J. Start	Standard 5-Speed with Lock			Optional 4-Speed		D
Maximum Travel Speeds (with 23.5 R 25, 1 Star	Forward	Reverse		Forward		Reverse
L3 tires)	7 [/ - //- 7 -)	7 0 1 /	L //. O L)	7 2 1 / 1/. [L\	7 () /- //- 7
Range 1	7.5 km/h (4.7 mph)		h (4.9 mph)	7.2 km/h (4.5 mpl		7.6 km/h (4.7 mph)
Range 2	13.4 km/h (8.3 mph)		/h (8.1 mph)	11.9 km/h (7.4 m)		12.5 km/h (7.8 mph)
Range 3	22.6 km/h (14.0 mph)		/h (17.9 mph)	23.1 km/h (14.4 m		24.2 km/h (15.1 mph)
Range 4	27.4 km/h (17.0 mph)	N/A		35.6 km/h (22.1 m	npn)	N/A
Range 5	40.0 km/h (24.9 mph)	N/A		N/A		N/A
Axles/Brakes	The data taken days at	1 -1 1				
Final Drives	Heavy-duty inboard-mounte			al al allo altro Con		Paral
Differentials	Hydraulic locking front with		ionai rear — Standar	d; dual locking from	nt and real	г – ортіопаі
Rear Axle Oscillation, Stop to Stop (with 23.5 R 25, 1 Star L3 tires)	26 deg. (13 deg. each direct	попј				
Service Brakes (conform to ISO 3450)	Hydraulically actuated, sprir	a rotrac	tod colf adjusting	inhoard oun shaft	mounted	oil cooled single diss
Parking Brakes (conform to ISO 3450)	Automatic spring-applied, h				illouliteu,	oli-coolea, siligle alsc
Tires/Wheels (see page 34 for complete tire adjustments)	Automatic spring-applied, in	yuraunca	illy released, oil-coo	neu, muiti uisc		
These wineers (see page 34 for complete the adjustments)	Tread Width		Width Over Tires			
Michelin 23.5 R 25, 1 Star L-3	2170 mm (85.4 in.)		2880 mm (113.4 i	n l		
Serviceability	2170 11111 (03.4 111.)		2000 111111 (113.41	11. j		
Refill Capacities	EPA FT4/EU Stage IV		EPA Tier 3/EU Sta	ne IIIA	FPA Tier	2/EU Stage II
Fuel Tank with Lockable Cap	397 L (105 gal.)		352 L (93 gal.)	ge ma	352 L (9)	
Diesel Exhaust Fluid (DEF)	32 L (34 gt.)		N/A		N/A	gui.)
Cooling System	45.5 L (48.1 qt.)		33.8 L (35.7 qt.)		33.8 L (3	15.7 at 1
Engine Oil with Vertical Spin-On Filter	28 L (29.5 qt.)		29.6 L (28 qt.)		29.6 L (2	
Transmission Reservoir with Vertical Filter	24 L (25 gt.)		24 L (25 qt.)		24 L (25	
Axle Oil (front and rear, each)	24 L (25 qt.) 22 L (23 qt.)		24 L (25 qt.) 22 L (23 qt.)		24 L (25 22 L (23	
Hydraulic Reservoir and Filter	105.2 L (27.8 gal.)		110 L (29 gal.)		110 L (25	• •
Park Brake Oil (wet disc)	0.6 L (20 oz.)		0.6 L (20 oz.)		0.6 L (20	5
Hydraulic System/Steering	U.U L (ZU UZ.)		U.U L (ZU UZ.)		U.U L (20	04.]
Pump (loader and steering)	Variable-displacement, axial	niston :	nimus closed costs	r proceure compan	enting co	tom
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,250 rpm	297 L/m (78 gpm)	i-histori l	oump, closed-cente	i, pressure-comper	isatilig sys	icem
System Relief Pressure (loader and steering)	25 166 kPa (3,650 psi)					
Loader Controls	2-function valve; joystick co	ntrol or	ingertin controls: h	vdraulic-function o	nahla/dis	able: ontional 3rd, and
Loader Controls	4th-function valve with auxi		J 1	iyaradiic-idiictioii e	וומטופ/ עול	abie, optional stu- and
Steering (conforms to ISO 5010)	ren-runction valve with duxi	mary leve				
Type	Power, fully hydraulic					
Articulation Angle	80-deg. arc (40 deg. each di	rection)				
And Calation Angic	33 deg. die 170 deg. each di	(CCIOII)				



Hydraulic System/Steering (continued)	724K Z-BAR / HIGH-LIFT	
Turning Radius (measured to centerline of outside tire)	5.64 m (18 ft. 6 in.)	
Hydraulic Cycle Times	Z-Bar	High-Lift
Raise	6.4 sec.	6.4 sec.
Dump	1.4 sec.	1.6 sec.
Lower (float down)	3.0 sec.	3.0 sec.
Total	10.8 sec.	11.0 sec.
Dimensions and Specifications with Pin-On Bucket		

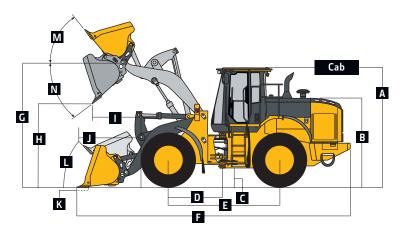


724K Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

	Z-Bar	Z-Bar	High-Lift	High-Lift
Dimensions with Bucket	3.2-m³ (4.25 cu. yd.)	3.6-m³ (4.75 cu. yd.)	3.2-m³ (4.25 cu. yd.)	3.6-m³ (4.75 cu. yd.)
	general-purpose with	general-purpose with	general-purpose with	general-purpose with
	bolt-on edge	bolt-on edge	bolt-on edge	bolt-on edge
N Height to Top of Cab	3.43 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)
B Hood Height	2.53 m (8 ft. 4 in.)	2.53 m (8 ft. 4 in.)	2.53 m (8 ft. 4 in.)	2.53 m (8 ft. 4 in.)
C Ground Clearance	461 mm (18.1 in.)	461 mm (18.1 in.)	461 mm (18.1 in.)	461 mm (18.1 in.)
Length from Centerline to Front Axle	1.60 m (5 ft. 3 in.)	1.60 m (5 ft. 3 in.)	1.60 m (5 ft. 3 in.)	1.60 m (5 ft. 3 in.)
Wheelbase	3.26 m (10 ft. 8 in.)	3.26 m (10 ft. 8 in.)	3.26 m (10 ft. 8 in.)	3.26 m (10 ft. 8 in.)
Overall Length, Bucket on Ground	8.20 m (26 ft. 11 in.)	8.31 m (27 ft. 3 in.)	8.67 m (28 ft. 5 in.)	8.78 m (28 ft. 10 in.)
Height to Hinge Pin, Fully Raised	4.12 m (13 ft. 6 in.)	4.12 m (13 ft. 6 in.)	4.54 m (14 ft. 11 in.)	4.54 m (14 ft. 11 in.)
d Dump Clearance, 45 deg., Full Height	2.91 m (9 ft. 7 in.)	2.84 m (9 ft. 4 in.)	3.33 m (10 ft. 11 in.)	3.26 m (10 ft. 8 in.)
Reach, 45-deg. Dump, Full Height	1.06 m (3 ft. 6 in.)	1.13 m (3 ft. 9 in.)	1.19 m (3 ft. 11 in.)	1.25 m (4 ft. 1 in.)
Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.61 m (5 ft. 3 in.)	1.67 m (5 ft. 6 in.)	2.06 m (6 ft. 9 in.)	2.12 m (6 ft. 11 in.)
Maximum Digging Depth	123 mm (5.0 in.)	123 mm (5.0 in.)	216 mm (8.5 in.)	216 mm (8.5 in.)
Maximum Rollback at Ground Level	41 deg.	41 deg.	42 deg.	42 deg.
M Maximum Rollback, Boom Fully Raised	55 deg.	55 deg.	47 deg.	47 deg.
Maximum Bucket Dump Angle, Fully Raised	50 deg.	50 deg.	45 deg.	45 deg.
Loader Clearance Circle, Bucket Carry Position	13.19 m (43 ft. 3 in.)	13.25 m (43 ft. 6 in.)	13.62 m (44 ft. 8 in.)	13.68 m (44 ft. 11 in.)
Specifications with Bucket				
Capacity, Heaped	3.2 m³ (4.25 cu. yd.)	3.6 m³ (4.75 cu. yd.)	3.2 m³ (4.25 cu. yd.)	3.6 m³ (4.75 cu. yd.)
Capacity, Struck	3.0 m ³ (3.5 cu. yd.)	3.2 m³ (4.2 cu. yd.)	2.8 m³ (3.7 cu. yd.)	3.2 m³ (4.2 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1736 kg (3,827 lb.)	1822 kg (4,016 lb.)	1736 kg (3,827 lb.)	1822 kg (4,017 lb.)
Bucket Width	3.04 m (10 ft. 0 in.)	3.04 m (10 ft. 0 in.)	3.04 m (10 ft. 0 in.)	3.04 m (10 ft. 0 in.)
Breakout Force	15 607 kg (34,408 lb.)	14 398 kg (31,742 lb.)	13 884 kg (30,610 lb.)	12 968 kg (28,590 lb.)
Tipping Load, Straight, No Tire Deflection	16 508 kg (36,396 lb.)	16 236 kg (35,794 lb.)	13 332 kg (29,393 lb.)	13 101 kg (28,883 lb.)
Tipping Load, Straight, With Tire Deflection	15 534 kg (34,247 lb.)	15 267 kg (33,658 lb.)	12 645 kg (27,877 lb.)	12 420 kg (27,381 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	14 266 kg (31,451 lb.)	14 015 kg (30,899 lb.)	11 466 kg (25,278 lb.)	11 252 kg (24,806 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	13 047 kg (28,764 lb.)	12 801 kg (28,221 lb.)	10 578 kg (23,320 lb.)	10 371 kg (22,864 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	7133 kg (15,726 lb.)	7008 kg (15,449 lb.)	5733 kg (12,639 lb.)	5626 kg (12,403 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	6524 kg (14,383 lb.)	6401 kg (14,111 lb.)	5289 kg (11,660 lb.)	5186 kg (11,433 lb.)
Operating Weight	19 419 kg (42,812 lb.)	19 512 kg (43,016 lb.)	19 646 kg (43,311 lb.)	19 739 kg (43,516 lb.)

*Rated operating capacity based on Deere attachments only.

affected by changes in tires, ballast, and different attachments.

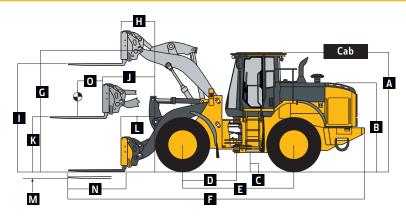


724K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON BUCKET

1-m³ (4.0 cu. yd.) general-purpose with bolt-on edge 43 m (11 ft. 3 in.) 53 m (8 ft. 4 in.) 51 mm (18.1 in.) 60 m (5 ft. 3 in.) 26 m (10 ft. 8 in.) 20 m (26 ft. 11 in.) 12 m (13 ft. 6 in.) 88 m (9 ft. 6 in.) 15 m (3 ft. 9 in.) 72 m (5 ft. 8 in.) 23 mm (5.0 in.) 1 deg. 6 deg. 2.93 m (42 ft. 5 in.)	3.1-m³ (4.0 cu. yd.) general-purpose with bolt-on edge 3.43 m (11 ft. 3 in.) 2.53 m (8 ft. 4 in.) 461 mm (18.1 in.) 1.60 m (5 ft. 3 in.) 3.26 m (10 ft. 8 in.) 8.74 m (28 ft. 8 in.) 4.54 m (14 ft. 11 in.) 3.11 m (10 ft. 2 in.) 1.28 m (4 ft. 2 in.) 2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
53 m (8 ft. 4 in.) 61 mm (18.1 in.) 60 m (5 ft. 3 in.) 26 m (10 ft. 8 in.) 20 m (26 ft. 11 in.) 12 m (13 ft. 6 in.) 88 m (9 ft. 6 in.) 15 m (3 ft. 9 in.) 72 m (5 ft. 8 in.) 23 mm (5.0 in.) 1 deg. 6 deg.	2.53 m (8 ft. 4 in.) 461 mm (18.1 in.) 1.60 m (5 ft. 3 in.) 3.26 m (10 ft. 8 in.) 8.74 m (28 ft. 8 in.) 4.54 m (14 ft. 11 in.) 3.11 m (10 ft. 2 in.) 1.28 m (4 ft. 2 in.) 2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
51 mm (18.1 in.) 60 m (5 ft. 3 in.) 26 m (10 ft. 8 in.) 20 m (26 ft. 11 in.) 12 m (13 ft. 6 in.) 88 m (9 ft. 6 in.) 15 m (3 ft. 9 in.) 72 m (5 ft. 8 in.) 23 mm (5.0 in.) 1 deg. 6 deg.	461 mm (18.1 in.) 1.60 m (5 ft. 3 in.) 3.26 m (10 ft. 8 in.) 8.74 m (28 ft. 8 in.) 4.54 m (14 ft. 11 in.) 3.11 m (10 ft. 2 in.) 1.28 m (4 ft. 2 in.) 2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
60 m (5 ft. 3 in.) 26 m (10 ft. 8 in.) 20 m (26 ft. 11 in.) 12 m (13 ft. 6 in.) 88 m (9 ft. 6 in.) 15 m (3 ft. 9 in.) 72 m (5 ft. 8 in.) 83 mm (5.0 in.)	1.60 m (5 ft. 3 in.) 3.26 m (10 ft. 8 in.) 8.74 m (28 ft. 8 in.) 4.54 m (14 ft. 11 in.) 3.11 m (10 ft. 2 in.) 1.28 m (4 ft. 2 in.) 2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
26 m (10 ft. 8 in.) 20 m (26 ft. 11 in.) 12 m (13 ft. 6 in.) 88 m (9 ft. 6 in.) 15 m (3 ft. 9 in.) 72 m (5 ft. 8 in.) 83 mm (5.0 in.) 84 deg. 85 deg.	3.26 m (10 ft. 8 in.) 8.74 m (28 ft. 8 in.) 4.54 m (14 ft. 11 in.) 3.11 m (10 ft. 2 in.) 1.28 m (4 ft. 2 in.) 2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
20 m (26 ft. 11 in.) 12 m (13 ft. 6 in.) 88 m (9 ft. 6 in.) 15 m (3 ft. 9 in.) 72 m (5 ft. 8 in.) 83 mm (5.0 in.) 84 deg. 85 deg.	8.74 m (28 ft. 8 in.) 4.54 m (14 ft. 11 in.) 3.11 m (10 ft. 2 in.) 1.28 m (4 ft. 2 in.) 2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
12 m (13 ft. 6 in.) 88 m (9 ft. 6 in.) 15 m (3 ft. 9 in.) 72 m (5 ft. 8 in.) 23 mm (5.0 in.) 6 deg. 6 deg.	4.54 m (14 ft. 11 in.) 3.11 m (10 ft. 2 in.) 1.28 m (4 ft. 2 in.) 2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
88 m (9 ft. 6 in.) 15 m (3 ft. 9 in.) 72 m (5 ft. 8 in.) 23 mm (5.0 in.) deg. 5 deg.	3.11 m (10 ft. 2 in.) 1.28 m (4 ft. 2 in.) 2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
15 m (3 ft. 9 in.) 72 m (5 ft. 8 in.) 23 mm (5.0 in.) deg. 5 deg.	1.28 m (4 ft. 2 in.) 2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
72 m (5 ft. 8 in.) 23 mm (5.0 in.) 1 deg. 5 deg. 0 deg.	2.10 m (6 ft. 11 in.) 216 mm (8.5 in.) 42 deg. 47 deg.
23 mm (5.0 in.) deg. 5 deg. 0 deg.	216 mm (8.5 in.) 42 deg. 47 deg.
deg. 6 deg. 0 deg.	42 deg. 47 deg.
o deg.	47 deg.
) deg.	-
_	45 deg.
2.93 m (42 ft. 5 in.)	
	13.72 m (45 ft. 0 in.)
1 m³ (4.0 cu. yd.)	3.1 m ³ (4.0 cu. yd.)
4 m³ (3.2 cu. yd.)	2.4 m³ (3.2 cu. yd.)
764 kg (3,890 lb.)	1764 kg (3,890 lb.)
90 m (9 ft. 6 in.)	2.90 m (9 ft. 6 in.)
+ 524 kg (32,019 lb.)	12 404 kg (27,346 lb.)
5 025 kg (33,125 lb.)	12 178 kg (26,848 lb.)
+ 157 kg (31,211 lb.)	11 553 kg (25,470 lb.)
2 929 kg (28,503 lb.)	10 416 kg (22,964 lb.)
829 kg (26,078 lb.)	9603 kg (21,171 lb.)
+64 kg (14,251 lb.)	5208 kg (11,482 lb.)
915 kg (13,040 lb.)	4802 kg (10,586 lb.)
	20 037 kg (44,173 lb.)
2 !	157 kg (31,211 lb.) 929 kg (28,503 lb.) 829 kg (26,078 lb.) 54 kg (14,251 lb.)

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.



724K 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	1.52-m (60 in.) tine length	1.83-m (72 in.) tine length	1.52-m (60 in.) tine length	1.83-m (72 in.) tine length
N Height to Top of Cab	3.43 m (11 ft. 3 in.)			
B Hood Height	2.53 m (8 ft. 4 in.)			
Ground Clearance	461 mm (18.1 in.)			
Length from Centerline to Front Axle	1.60 m (5 ft. 3 in.)			
Wheelbase	3.26 m (10 ft. 8 in.)			
Overall Length, Forks on Ground	8.89 m (29 ft. 2 in.)	9.19 m (30 ft. 2 in.)	9.35 m (30 ft. 8 in.)	9.65 m (31 ft. 8 in.)
Height to Hinge Pin, Fully Raised	4.12 m (13 ft. 6 in.)	4.12 m (13 ft. 6 in.)	4.54 m (14 ft. 11 in.)	4.54 m (14 ft. 11 in.)
l Reach, Fully Raised	788 mm (31.0 in.)	788 mm (31.0 in.)	905 mm (35.6 in.)	905 mm (35.6 in.)
Fork Height, Fully Raised	3.89 m (12 ft. 9.0 in.)	3.89 m (12 ft. 9.0 in.)	4.22 m (13 ft. 10.1 in.)	4.22 m (13 ft. 10.1 in.)
Maximum Reach, Fork Level	1.68 m (5 ft. 6.0 in.)	1.68 m (5 ft. 6.0 in.)	2.07 m (6 ft. 9.5 in.)	2.07 m (6 ft. 9.5 in.)
K Fork Height, Maximum Reach	1.71 m (5 ft. 7.0 in.)	1.71 m (5 ft. 7.0 in.)	1.86 m (6 ft. 1.2 in.)	1.86 m (6 ft. 1.2 in.)
Reach, Ground Level	1.17 m (3 ft. 10.0 in.)	1.17 m (3 ft. 10.0 in.)	1.64 m (5 ft. 4.6 in.)	1.64 m (5 ft. 4.6 in.)
N Depth Below Ground	89 mm (4.0 in.)	89 mm (4.0 in.)	181 mm (7.1 in.)	181 mm (7.1 in.)
I Tine Length	1.52 m (60 in.)	1.83 m (72 in.)	1.52 m (60 in.)	1.83 m (72 in.)
Load Position, 50% Tine Length	0.76 m (30 in.)	0.92 m (36 in.)	0.76 m (30 in.)	0.92 m (36 in.)
pecifications with Forks				
Tipping Load, Straight, No Tire Deflection	11 082 kg (24,432 lb.)	10 518 kg (23,188 lb.)	9598 kg (21,160 lb.)	9143 kg (20,156 lb.)
Tipping Load, Straight, With Tire Deflection	10 770 kg (23,744 lb.)	10 227 kg (22,547 lb.)	9342 kg (20,596 lb.)	8904 kg (19,630 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	9576 kg (21,112 lb.)	9080 kg (20,017 lb.)	8256 kg (18,202 lb.)	7855 kg (17,317 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	9162 kg (20,199 lb.)	9691 kg (21,365 lb.)	7911 kg (17,441 lb.)	7530 kg (16,601 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1 and SAE J1197)*	4581 kg (10,099 lb.)	4846 kg (10,684 lb.)	3956 kg (8,721 lb.)	3765 kg (8,300 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	5497 kg (12,119 lb.)	5815 kg (12,820 lb.)	4747 kg (10,465 lb.)	4518 kg (9,960 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	7330 kg (16,160 lb.)	7753 kg (17,092 lb.)	6329 kg (13,953 lb.)	6024 kg (13,281 lb.)
Operating Weight	19 385 kg (42,738 lb.)	19 446 kg (42,870 lb.)	19 618 kg (43,250 lb.)	19 678 kg (43,383 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSX 6090 (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

724K Z-BAR / HIGH-LIFT

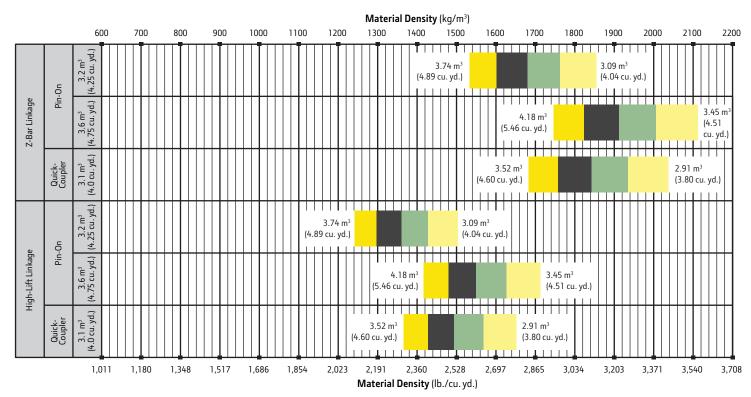
Adjustments to operating weights, tipping loads, and tires are based on Z-bar machine with pin-on 3.6-m³ (4.75 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (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 SAE	Tread Width	Width Over Tires	Vertical Height
John Deere PowerTech PSX 6090	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	N/A	N/A	N/A
John Deere PowerTech Plus 6090H	-120 kg (-265 lb.)	+44 kg (+97 lb.)	+13 kg (+29 lb.)	N/A	N/A	N/A
John Deere PowerTech 6090H	-126 kg (-278 lb.)	+34 kg (+75 lb.)	+4 kg (+9 lb.)	N/A	N/A	N/A
Michelin 23.5 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 23.5 R 25, 1 Star L-3	+116 kg (+256 lb.)	+86 kg (+190 lb.)	+76 kg (+167 lb.)	0 mm (0 in.)	-28 mm (-1.1 in.)	+17 mm (+0.7 in.)
Titan 23.5-25, 20 PR L-3	–156 kg (–343 lb.)	–115 kg (–255 lb.)	–102 kg (–224 lb.)	0 mm (0 in.)	+27 mm (+1.1 in.)	0 mm (0 in.)
Titan 725/70-25, 16-Ply L-4T (Logger Style) ^{†8}	+266 kg (+587 lb.)	+208 kg (+459 lb.)	+183 kg (+404 lb.)	+37 mm (+1.5 in.)	+95 mm (+3.7 in.)	+49 mm (+1.9 in.)
Michelin 750/65 R 25, 1 Star L-3T ^{+B}	+622 kg (+1,371 lb.)	+472 kg (+1,041 lb.)	+416 kg (+917 lb.)	+37 mm (+1.5 in.)	+158 mm (+6.2 in.)	+12 mm (+0.5 in.)

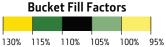
^{*}May change based on vehicle configuration, weight, or tire-pressure adjustments.

[†]Equipped with 5-piece heavy-duty rims.

^BRequires 9-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		
Granite, broken	1538	2,592	(1.5 to 3.5") size	1442	2,430
Gypsum	2275	3,834	Stone or gravel, 18.75-mm (3/4") size	1602	2,700



Additional equipment

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

624	644	724	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
			Engine-compartment light
			Chrome exhaust stack
	•	•	Automatic ether starting aid (recommended for cold starts below –12 deg. C [10 deg. F])§
A	A	A	Engine-block heater (recommended for cold starts below –23 deg. C [–10 deg. F])
A	A	A	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
	A	A	4-speed transmission with non-lockup torque converter
			Hybrid-electric transmission system
•	•	•	Front locking differential
			Rear locking differential
•	•	•	Brake retractors and adjusters (not available with hybrid-electric transmission-system option)
			Automatic differential lock
•	•	•	Axle oil temperature sensing
A	A	•	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 swing-out fan
•	•	•	Enclosed fan safety guard
			Automatic reversing fan drive
			Axle and service-brake coolers (optional on units equipped with

hybrid-electric transmission system)

62/	61.1.	72/	Hudraulies
624	644	724	Hydraulics Automatic return-to-dig bucket positioner
			In-cab adjustable automatic return-to-dig bucket positioner
			(Powerllel™ only)
			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
•	A	•	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
\blacksquare	A	A	4 function — 4-lever fingertip controls and steering column F-N-R
			Ride control, automatic with monitor-adjustable speed settings
	A	A	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
			Joystick steering (including conventional steering column) with
			gearshift, F-N-R, and horn
_	A	A	Secondary steering
			Electrical Solidar and a size of a size of the size of a size of the size of a size o
	•	•	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) and rear (2) cab work lights / Incandescent front turn signals and flashers / LED stop- and taillights
			Heavy-duty front LED turn signal and marker lights
\blacksquare	A	A	Premium LED work, drive, and marker lights
			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)
*Available only on 624K EPA Final Tier 4 (FT4)/EU Stage IV engines, 624K and
644K EPA Tier 3/EU Stage IIIA and EPA Tier 2/EU Stage II engines, and 644K
Hybrid EPA Interim Tier 4/EU Stage IIIB engines.

[†]Available only with EPA FT4/EU Stage IV engines.

[®]Available only on 624K and 644K EPA Tier 3/EU Stage IIIA and EPA Tier 2/EU Stage II engines.

^{*}Available only on 624K, 644K, and 724K EPA FT4/EU Stage IV engines, and 724K EPA Tier 3/EU Stage IIIA and EPA Tier 2/EU Stage II engines.

[§]Available only on 644K and 724K EPA FT4/EU Stage IV engines, and 724K EPA Tier 3/EU Stage IIIA and EPA Tier 2/EU Stage II engines.

Additional equipment (continued)

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

624	644	724	Electrical (continued)	624	644	724	Buckets and Attachments
•	•	•	Integrated cycle counter with 5 categories	A			Full line of Deere pin-on buckets
•	•	•	Indicator lights: Standard and selected options / Amber caution and red stop	•			Worksite Pro™ hydraulic coupler that accepts JRB-pattern attachments
•	•	•	Operator-warning messages	A	A	A	Hi-Vis hydraulic coupler that accepts Euro-pattern attachments
•	•	•	Built-in diagnostics: Diagnostic-code details / Sensor values /				(Volvo)
			Calibrations / Individual circuit tester				Full line of Deere hook-on buckets and forks
			Electrical corrosion-prevention package	_			Bolt-on fork frame guard
			AM/FM/Weather-Band (WB) radio with remote auxiliary port				Overall Vehicle
•	•	A	Premium AM/FM/WB/XM Satellite Radio™ ready radio with Bluetooth®, remote auxiliary port, and remote USB port	•	•	•	JDLink™ Ultimate wireless communication system (available in specific countries; see your dealer for details)
	•		24- to 12-volt, 8-amp converter and power port				NeverGrease™ rear-axle oscillation
			24- to 12-volt, 15- or 30-amp converter and power port	•	•	•	NeverGrease steering-cylinder joints
			Operator's Station			•	Front and rear tie-downs
\blacktriangle			Quiet Cab with heater (ROPS/FOPS Level 1, isolation mounted)				Rear cast bumper/counterweight with rear hitch and locking pir
•	•	•	Quiet Cab with air conditioning/heater (ROPS/FOPS Level 1, isolation mounted)	•	•	•	Articulation locking bar Loader boom service locking bar
•	•	•	Keyless start with multiple security modes				40-deg. steering articulation to each side with rubber-cushion
•	•		Sealed-switch module with function indicators				stops on frame
•	•	•	Seat with backrest extension, deep foam, fabric cover, and adjustable air suspension Seat with backrest extension, deep foam, vinyl cover, and	•	•	•	Vandal protection with lockable engine enclosures, right counter weight storage, and filler access for radiator/fuel/DEF [†] /hydraulic transmission
			adjustable air suspension				Right and left platforms with handrails
_	•	•	Premium seat with high-wide back and headrest extension,				Left-side service steps and handholds
_	_	_	heated, leather/fabric cover, and adjustable air suspension			Ā	Right-side service steps and handholds
•	•		Hydraulic controls integrated to seat		_		Left-side close-mounted steps§
•	•	•	High-visibility, bright-orange seat belt, 76 mm (3 in.), with				Storage compartment
			retractor				Fuel-tank fill strainer
•			Cup holders (2)				Heavy-duty fuel-tank guard
•	•	•	Lunch-box/cooler holder				Ground-level fueling and DEF [†]
•			Dome and reading light (included with Quiet Cab)				Same-side ground-level daily servicing
•	•	•	Rubber floor mat				Environmental drains for engine, transmission, hydraulic oils,
•	•	•	Tilt steering column				and engine coolant
•	•	•	Operator's manual storage compartment				Quick fluid service (engine, transmission, hydraulic oils, and
•			Outside (2) and inside (1) rearview mirrors				engine coolant)
A	A	A	Large heated outside mirrors	•			20.5R25 tires on 3-piece rims
•			Left-side operator-station access				23.5R25 tires on 3-piece rims
•	•		Slip-resistant steps and ergonomic handholds				23.5R25 tires on 5-piece rims
•			Sun visor (Quiet Cab only)				Waste handler (Z-bar and High-Lift)
•	•	•	Radio ready (Quiet Cab only)				Level 1 sound package
•			Front and rear intermittent windshield wiper and washers				Level 2 sound package
\blacktriangle			Powered cab air pre-cleaner				Transmission side-frame and bottom guards
			Beacon bracket (single or dual available)				Fast-fuel system
			Rearview camera	•			Fenders, front
\blacktriangle			Rearview camera and radar object-detection system			•	Fenders, full-coverage, front
			LOADRITE™ L2180™ Payload Scale Ready				Fenders, full-coverage, front and rear
\blacktriangle			LOADRITE L2180 Payload Scale				Less wheels and tires with axle stops
\blacktriangle			Embedded payload scale	A			Rims less tires
			Fire extinguisher				Lift eyes
			Loader Linkage				License-plate bracket and light
•	•	•	Z-bar loader linkage				Forestry-application package (Powerllel only)
			High-Lift Z-bar loader linkage				Special guarding for waste and forestry applications
\blacktriangle			Powerllel linkage for visibility and parallel-lift	†Ava	ailable	only v	vith EPA Final Tier 4 (FT4)/EU Stage IV engines.
			Tool-carrier linkage for parallel-lift				on EPA Tier 3/EU Stage IIIA and EPA Tier 2/EU Stage II engines.



