#### **K-SERIES LOADERS** 173–283 kW (232–380 hp)





### Think. Big.

Serious productivity demands serious thinking. Many of the numerous improvements in the K-Series came from the brightest minds in the industry — loader owners and users such as yourself. Armed with fresh insights from this Customer Advocate Group, we enlarged the cab, redesigned the cooling, enhanced the hydraulics, refined the ergonomics, and offered even more options. All with the goal of increasing productivity and uptime, while lowering daily operating costs. Owners, operators, and maintenance personnel will benefit from the big ideas found in the 644K, 724K, 744K, 824K, and 844K Series-II Loaders. To learn how, read through the following pages. Then talk to your John Deere dealer.



The EPA Interim Tier 4 (IT4)/EU Stage IIIB technology utilized in our K-Series diesel engines is fuel efficient, fully integrated, and fully supported.

Torque reserves are impressive, topping out at a whopping 65 percent in the 644K. It's a K-Series advantage that helps maintain good boom and bucket speed in and out of the pile. For heaped loads, even in wet or hard-packed material.

Low center of gravity and optimized fore-and-aft balance deliver impressive stability and full-turn tipping-load capacities.

Unsurpassed powertrain and hydraulic performance helps maintain quick ground speed and boom lift, even on steep ramps. For faster cycles.

With John Deere WorkSight<sup>™</sup>, JDLink<sup>™</sup> monitoring provides real-time machine utilization and health data, plus location info. Fleet Care proactively suggests maintenance to correct problems early before they cause costly downtime. Service ADVISOR<sup>™</sup> Remote enables your dealer to read diagnostic codes, record performance data, and even update software without a trip to your jobsite. And integrated payload weighing delivers load data. It's the most comprehensive, easy-to-use suite of technology available for increasing uptime and productivity while lowering operating costs.

#### **K-Series Specifications:**

	644K	724K	744K	824K	844K-II
Peak Net Power	173 kW (232 hp)	197 kW (264 hp)	227 kW (304 hp)	248 kW (333 hp)	283 kW (380 hp)
Bucket Capacity	3.2 m³ (4.25 cu. yd.)	3.6 m³ (4.75 cu. yd.)	4.0 m³ (5.25 cu. yd.)	4.6 m³ (6.0 cu. yd.)	5.5 m³ (7.25 cu. yd.)
Z-Bar:					
Tipping Load 40-degree full turn	12 879 kg (28,393 lb.)	14 132 kg (31,155 lb.)	16 946 kg (37,360 lb.)	17 481 kg (38,538 lb.)	22 094 kg (48,708 lb.)
Breakout Force	15 378 kg (33,903 lb.)	14 398 kg (31,742 lb.)	19 416 kg (42,805 lb.)	18 718 kg (41,266 lb.)	21 674 kg (47,782 lb.)
Operating Weight	18 333 kg (40,417 lb.)	19 264 kg (42,470 lb.)	24 346 kg (53,674 lb.)	26 501 kg (58,425 lb.)	34 152 kg (75,292 lb.)
Powerllel <sup>™</sup> :					
Tipping Load 40-degree full turn	11 051 kg (24,364 lb.)	N/A	N/A	N/A	N/A
Breakout Force	12 029 kg (26,519 lb.)	N/A	N/A	N/A	N/A
Operating Weight	19 966 kg (44,017 lb.)	N/A	N/A	N/A	N/A

# Expand your operator's comfort zone.

What operator wouldn't be more productive in the high-back air-ride seat of a K-Series Loader? An enhanced multifunction monitor displays operating and diagnostic info on a color LCD screen with easy-on-the-eyes clarity. Expansive tinted front glass and a low-profile console provide a commanding view of the work ahead. The quiet and spacious cab boasts generous legroom and exceptional ergonomics including fatigue-beating features like seat-mounted loader controls. And an expanded sealed-switch module with keyless start and easy push-button operation of even more functions.

Available premium high/wide-back heated air-suspension seat adjusts multiple ways for daylong comfort and support.

Joystick steering and hydraulic levers are within easy reach and move with the operator for more control with less fatigue.

Brake and throttle pedals have been repositioned and the front console reshaped to make way for more legroom and comfort.

Automotive-style directional louvers provide effective airflow to help keep the glass clear and pressurized cab comfortable.

You'll find plenty of places to stow a coffee cup, cooler, and other items. Convenient 12-volt port powers cell phones and other electronic devices.

Cab interior is noticeably quiet to help reduce operator fatigue.

Front and rear work lights stay on for up to three minutes after the engine is shut down, illuminating the way for an easier exit.

- Spacious front glass, low-profile console, and large side and rear windows allow unsurpassed 360-degree visibility.
- **2.** Sealed-switch module gives fingertip control of 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.
- **3.** Platforms, handrails, and steps allow uninterrupted three-point access. There are no crossbars, decreasing the risk of slipping.

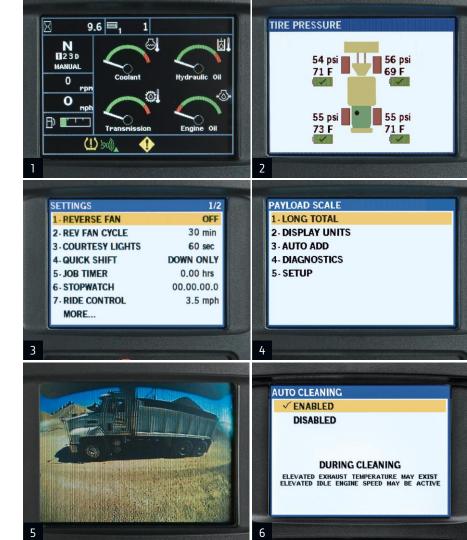


## Get in touch with your productive side.

If you want to get a handle on increased productivity, put your operator behind the controls of a K-Series Loader. Its enhanced multifunction LCD color monitor provides a wealth of machine info. And enables an operator to customize machine operation and response, weigh each bucket load, and view the action out back — all at the push of a button.

MAIN MENU 1-CODES 2-SETTINGS 3 - DIAGNOSTICS 4-PAYLOAD SCALE 5- SECURITY 6- EXHAUST FILTER 7 - SOFTWARE DELIVERY Multi-language color LCD monitor provides push-button access to a wealth of machine info and control:

- Vital and general operating information, including transmission mode, gear, engine rpms, and ground speed.
- Advanced onboard diagnostics with sensor information, calibration, and switch checks.
- **3.** Customized machine settings such as Quick Shift, Auto-to-1st, and Ride Control. So you can match operating characteristics to specific jobs and conditions.
- Optional embedded payload scale weighs each bucket load, helping fill trucks to the max.
- 5. Optional rearview camera provides "eyes-in-the-back-of-the-head" visibility. And rear-object-detection radar gives an audible alert of approaching objects. It's a "must have" for high-traffic jobsites.
- **6.** On IT4/Stage IIIB-equipped loaders, exhaust filter operation and maintenance status are indicated with warning lights and on-screen displays.





Programmable clutch cutoff increases productivity in all kinds of conditions. Engaging the brakes disconnects the transmission while maintaining high engine speed. For smooth dumps, fast cycles, and no machine rollback. Boom-height kick-out sets maximum desired dump height, while returnto-carry determines lowered-boom position. Use these two K-Series advantages to speed production in repetitive loading applications. On the 644K Powerllel, return-todig places the attachment at a predetermined level position. Switch includes two presets, for increased convenience and productivity in applications requiring frequent attachment changeover.

### Hard work was never this easy.

Big productivity shouldn't require a lot of extra effort. And it won't on a K-Series Loader. John Deere PowerTech<sup>™</sup> diesels provide impressive acceleration and torque, along with the horsepower needed for fast and full bucket fills. Increased hydraulic flow provides excellent low-engine-speed performance, and quick steering response and boom-up speed. Combined with load-sensing closed-center hydraulics, low-effort controls, and smooth-shifting PowerShift<sup>™</sup> transmission, maximum productivity comes naturally. To "weigh in" on which K-Series Loader is right for your operation, see your John Deere dealer.

Smart-Shift<sup>™</sup> delivers smooth-as-silk gear changes, regardless of whether the bucket is empty or fully loaded.

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

Spin control (standard on the 724K–844K-II, optional on the 644K) boosts productivity by improving traction in loose material or troublesome underfoot conditions. Reduces tire wear, fuel costs, and operator fatigue, too.

Available automatic differential lock engages as soon as a tire begins to slip. It's ideal for inexperienced operators or high-traction applications.

Responsive steering combines with full 80-degree articulation for exceptional maneuverability in tight quarters — and faster cycle times.

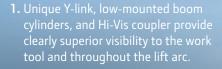
Load-sensing closed-center hydraulics deliver only the power required for smooth boom and bucket functions. So there's no wasted power or fuel.

1. Ride control smoothes travel, allowing these loaders to navigate jobsites more quickly without losing their loads. Auto-actuation travel speed is programmable between 3.2 and 24.1 km/h (2 and 15 mph). 2. Choose either single-lever joystick or twolever fingertip pilot-operated hydraulic controls. Joystick version is equipped with an F-N-R selector for convenient direction and full-range gear changes. Both include our innovative Quick-Shift feature for pushbutton gear changes, one gear at a time. **3.** Joystick steering offers fatigue-beating comfort and is ideal for V-pattern truck loading. Standard on the 844K-II and available on the other K models, it adapts to ground speed to deliver smooth low-effort control. Even during load-and-carry.



## Parallel lift that's simply unparalleled.

You don't have to sacrifice powerful digging forces to get parallel lift. The 644K Powerllel delivers the best of both, so you can have your loader and forklift, too. Unlike traditional tool-carrier linkages, our 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 the 644K to excel at a wide variety of material-handling tasks. But don't just look for these Powerllel advantages in the numbers on a spec sheet. The best way to appreciate them is on your jobsite. Whatever the job, whatever the load, you'll discover parallel lift that's without parallel.



- 2. Hi-Vis coupler lets you easily change attachments from the cab. Conforms to ISO23727, allowing it to pick up a broad range of John Deere and other attachments. Coupler keeps the attachment close to the machine, enhancing stability and breakout performance.
- 3. Unlike tool carriers that lose performance past the level position, the 644K Powerllel delivers outstanding breakout throughout the entire dump and rollback range. To conquer tough tasks such as sorting and loading logs.







Powerllel's unique design separates the bell crank from the cross tube, attaching instead to the loader frame via a Y-shape link. This "free-floating" bell-crank design increases boom-cylinder torque, for unsurpassed boom and bucket breakout.

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Want to test the power of a 644K Powerllel Loader? Attach a bucket and demo one against a comparable-size tool carrier in tough digging. The results will win you over.

Tire and axle options let you equip your 644K Powerllel Loader for material handling on a wide variety of terrain.

### Explore your options.

DEERE

Standard equipped with plenty of production-enhancing features, K-Series Loaders can handle almost anything. But if yours isn't just any application, we've got you covered with a wide variety of factoryor dealer-installed options. Work in a high-debris, extreme-temperature, or corrosive environment? Or emissions-sensitive nonattainment areas? Need a high-lift boom or long-life cutting edges to help maximize productivity and minimize costs? We can equip your loader with exactly what you need for your kind of work.

Axle choices include manually actuated front differential lock with conventional rear axle, front and rear differential locks, or automatic front and rear differential locks.

Automatic differential lock engages as soon as a tire begins to slip. It's ideal for inexperienced operators or applications requiring continuous high traction.

Powered cab pre-cleaner provides a cleaner interior when working in airborne debris.

Exclusive NeverGrease<sup>™</sup> option's lifetime sealed and lubricated roller bearings and bushings deliver consistent, extended pinjoint life.

Corrosion package shields electrical components and connections for longer life — so corrosion won't short-circuit productivity.

Advanced air-screen kits protect the engine and cooling system from debris while increasing airflow and preventing overheating. High-Lift loaders feature an optional, factoryinstalled boom that extends boom height by 330 mm (13 in.) to 559 mm (22 in.) so you can move materials and push productivity to even greater heights.

Heated mirrors prevent fog and ice from obstructing the view and affecting productivity.

Want to increase the traction, flotation, and stability of your 844K-II? Spec the low-profile tire option.

- Standard 5-speed transmission with torque converter lockup in gears 2–5 increases acceleration, speeds cycles, and optimizes power and fuel efficiency during transport, roading, and ramp climbing.
- 2. With greater visibility to the work tool and an improved load path, the Hi-Vis coupler and forks (available on 644K and 724K) help both loader and operator be more productive.
- 3. Embedded payload scale enables you to fill each truck to its limit. Powered by LOADRITE<sup>™</sup> technology, it's available on all Z-Bar and High-Lift loaders.



### Nothing runs like a Deere, because nothing is built like one.

When you've got hungry hoppers or empty trucks depending on your loader, downtime is more than a downer. It's unacceptable. Boost your uptime (and your bottom line) with K-Series advantages such as solid-state electronics, highly efficient Quad-Cool<sup>™</sup>, advanced diagnostic monitors, and NeverGrease pin joints. You'll also benefit from traditional John Deere durability features such as heavy-duty wet-sleeve diesels, self-adjusting wet-disc brakes, four-plate loader towers, and double-tapered articulation-joint 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 John Deere.

SER ING RIAL Large-capacity fuel tanks let you run longer between fill-ups. There's also a fast-fill option to get you back into the rat race more quickly.

You'll find fewer fuses, relays, connectors, and wiring harnesses. Instead, highly reliable circuit-board technology and sealed solid-state switches ensure the electrical integrity you need.

Heavy-duty inboard planetary axles with self-adjusting inboard wet-disc brakes provide long life and sure stops. 844K-II's heavier-duty mid-planetary axles also employ cooling, filtration, and temperature monitoring to help increase durability.

Expansive air-inlet surfaces increase airflow and prevent overheating, while keeping the cooling cores debris free. Three-millimeter side-screen perforations serve as a "first filter."

Automatic park brake, bypass-start protection, continuous handrails, and wide slip-resistant steps and platforms help keep operators out of harm's way.

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- Quad-Cool design places coolers in a unique boxed configuration that's isolated from engine heat for increased efficiency and durability. Optional fan automatically reverses at predetermined intervals, or can be programmed through the monitor, to eject debris from the cores.
- 2. Bulkhead fittings eliminate long hoses, simplifying replacement and component exchange.
- **3.** Our IT4/Stage IIIB technology is simple, fuel efficient, fully integrated, and fully supported. It employs field-proven cooled exhaust gas recirculation (EGR) for reducing NO<sub>x</sub>, and a diesel particulate filter and diesel oxidation catalyst to reduce particulate matter. Periodic active and passive regeneration automatically cleans the filter without impacting machine productivity.



JDLink enables your dealer to utilize Service ADVISOR Remote to read diagnostic trouble codes, record machine performance data, and even update software without making a trip to the jobsite — a real time and money saver.

Large hinged service doors swing open wide for ample ground-level access. All daily servicing is done on the same side.

NeverGrease pin joints eliminate numerous zerks and the daily attention they demand. An exclusive K-Series option, they significantly reduce operating cost.

Maintenance personnel will appreciate the common-sense locations and ease with which powertrain, hydraulic, and cab filters are replaced. Common hydraulic and transmission fluid- and filter-change intervals further simplify service.

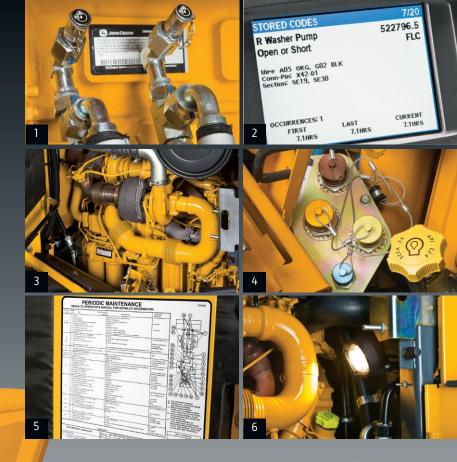
Coolers resist plugging, and both sides are easily accessible for cleaning. Hydraulically driven fan runs only as needed, reducing fuel consumption and debris flow through the cores.

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

IT4/Stage IIIB diesel particulate filter is easily removed for servicing and can be performed by your John Deere dealer. Minimum service interval is 5,000 hours.

### The bucks stop here.

Servicing big iron doesn't have to be a big production. And it isn't on a K-Series. Swing open the large side shields and you'll see the many ways these loaders minimize maintenance. Our unique Quad-Cool system and swing-out fan provide wide-open access to both sides of the individually mounted coolers for simplified cleanout. Grouped same-side service points make quick work of the daily routine. Easy-to-read sight gauges, quick-change filters, extended service intervals, and advanced self-diagnostics — plus numerous other time- and money-saving features help make maintenance manageable.



- 1. Color-coded fluid-sample and diagnostic test ports help speed preventive maintenance and troubleshooting. Noninvasive design helps prevent contamination.
- 2. If something goes wrong, the easy-to-navigate LCD monitor provides diagnostic info and even offers possible troubleshooting solutions to decrease downtime.
- **3.** Vertical spin-on engine, transmission, and in-tank hydraulic filters; quick-release fuel filters; and environmentally friendly fluid drains allow quick, no-spill changes.
- **4.** 500-, 2,000-, and 4,000-hour engine, transmission, and hydraulic oil and filter intervals decrease planned downtime and expense. Available quick fluid-evacuation system helps speed servicing.
- Conveniently displayed periodic lubrication and maintenance chart helps ensure that nothing is overlooked.
- **6.** Under-hood light and sight gauges simplify coolant, hydraulic, and transmission fluid-level checks.

### 644K

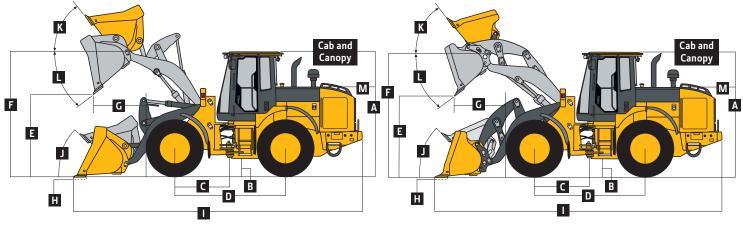
Engine	644K Z-BAR / HIGH-LIFT / POV	VERLLEL™		
Manufacturer and Model	John Deere PowerTech™ PVX 60	90 John Deere Powe	rTech™ Plus 6068H	John Deere PowerTech™ 6068H
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage III	B EPA Tier 3/EU St	age IIIA	EPA Tier 2/EU Stage II
Cylinders	6	6		6
Valves Per Cylinder	4	4		4
Displacement	9.0 L (548 cu. in.)	6.8 L (415 cu. in	.)	6.8 L (415 cu. in.)
Net Peak Power at 1,700 rpm	173 kW (232 hp)	173 kW (232 hp	)	173 kW (232 hp)
Net Peak Torque at 1,400 rpm	1062 Nm (783 lbft.)	1016 Nm (749 II	ft.)	1016 Nm (749 lbft.)
Net Torque Rise	65%	55%		55%
Fuel System (electronically controlled)	High-pressure common rail	High-pressure c	ommon rail	High-pressure common rail
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-or integral cooler		Full-flow spin-on filter and integral cooler
Aspiration	Turbocharged, charge air coole		harge air cooled	Turbocharged, charge air cooled
Air Cleaner	Under-hood, dual-element dry type, restriction indicator in ca monitor for service	Under-hood, du	al-element dry indicator in cab	Under-hood, dual-element dry type, restriction indicator in cab monitor for service
Fan Drive	Hydraulically driven, proportiona controlled, fan aft of coolers	ally Hydraulically driv controlled, fan a	en, proportionally Ift of coolers	Hydraulically driven, proportional controlled, fan aft of coolers
Electrical System	24 volt with 100-amp alternate (optional 130-amp alternator)	or 24 volt with 80- (optional 100-a		24 volt with 80-amp alternator (optional 100-amp alternator)
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)		950 CCA (each)
Transmission				
Туре	Countershaft-type PowerShift <sup>®</sup>	М		
Torque Converter	Single stage, single phase			
Shift Control	Electronically modulated, adap	· · · · ·		
Operator Interface				k-shift button on hydraulic lever
Shift Modes	Manual/auto (1st–D or 2nd–D) and 3 adjustable clutch-cutoff		vith 2 selectable m	odes: kick-down or kick-up/down
	Standard 5-Speed with Lockup	Torque Converter	Optional 4-Spee	d
Maximum Travel Speeds (with 23.5-25 tires)	Forward Rev	erse	Forward	Reverse
Gear 1	7.8 km/h (4.8 mph) 8.2	km/h (5.1 mph)	7.6 km/h (4.7 mp	oh) 7.9 km/h (4.9 mph)
Gear 2	13.4 km/h (8.3 mph) 13.6	5 km/h (8.5 mph)	12.6 km/h (7.8 n	nph) 12.9 km/h (8.0 mph)
Gear 3		3 km/h (17.9 mph)	24.7 km/h (15.3	mph) 24.9 km/h (15.5 mph)
Gear 4	27.4 km/h (17.0 mph) N/A		36.6 km/h (22.7	mph) N/A
Gear 5	40.0 km/h (24.9 mph) N/A		N/A	N/A
Axles/Brakes				
Final Drives	Heavy-duty inboard-mounted			
Differentials	Hydraulic locking front with co	nventional rear – star	ndard; dual locking	front and rear – optional
	26 deg.			
Rear Axle Oscillation, Stop to Stop (with 23.5-25 tires) Brakes (conform to ISO 3450)	5			
	Hydraulically actuated, inboard	l sun-shaft mounted,	oil cooled, self-adj	usting, single disc
Brakes (conform to ISO 3450) Service Brakes Parking Brake				
Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels	Hydraulically actuated, inboard Automatic spring applied, hydr	aulically released, dri	veline mounted, oi	l cooled, multi disc
Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)*	Hydraulically actuated, inboard Automatic spring applied, hydr Tread Width	aulically released, dri Width Over Tire	veline mounted, oi	l cooled, multi disc Change In Vertical Height
Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3	Hydraulically actuated, inboard Automatic spring applied, hydr	aulically released, dri	veline mounted, oi	l cooled, multi disc Change In Vertical Height No change
Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)*	Hydraulically actuated, inboard Automatic spring applied, hydr Tread Width	aulically released, dri Width Over Tire	veline mounted, oi s ? in.)	l cooled, multi disc Change In Vertical Height
Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5 R 25, 1 Star L-3 (CaCl <sub>2</sub> in rear tires) 23.5-25, 20 PR L-3	Hydraulically actuated, inboard Automatic spring applied, hydr Tread Width 2170 mm (85.4 in.)	aulically released, dri Width Over Tire 2875 mm (113.2	veline mounted, oi s ? in.) ? in.)	l cooled, multi disc Change In Vertical Height No change
Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5 R 25, 1 Star L-3 (CaCl <sub>2</sub> in rear tires)	Hydraulically actuated, inboard Automatic spring applied, hydr Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.)	aulically released, dri Width Over Tire 2875 mm (113.2 2875 mm (113.2	veline mounted, oi s ? in.) ? in.) in.)	l cooled, multi disc Change In Vertical Height No change No change

644K

<sup>B</sup>Equipped with 5-piece heavy-duty rims. <sup>§</sup>Requires 9-deg. rear axle stops.



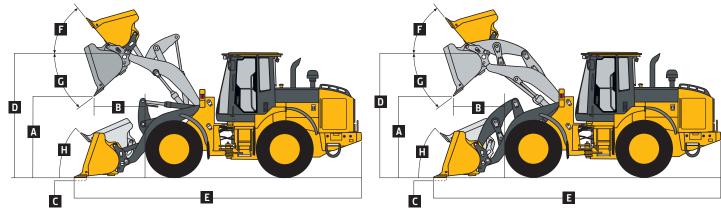
Serviceability	644K Z-BAR / HIGH-LIFT / POWERL		
Refill Capacities	EPA Interim Tier 4/EU Stage IIIB	EPA Tier 3/EU Stage IIIA	EPA Tier 2/EU Stage II
Fuel Tank (with ground-level fueling)	397 L (105 gal.)	352 L (93 gal.)	352 L (93 gal.)
Cooling System	45.5 L (48.1 qt.)	29.5 L (31.2 qt.)	29.5 L (31.2 qt.)
Engine Oil with Vertical Spin-On Filter	28 L (29.5 qt.)	24.5 L (26 qt.)	24.5 L (26 qt.)
Transmission Fluid with Vertical Filter	27 L (28.5 qt.)	27 L (28.5 qt.)	27 L (28.5 qt.)
Axle Oil (front and rear, each)	22 L (23 qt.)	22 L (23 qt.)	22 L (23 qt.)
Hydraulic Reservoir and Filters	110 L (29 gal.)	110 L (29 gal.)	110 L (29 gal.)
Park Brake Oil (wet disc)	0.6 L (20 oz.)	0.6 L (20 oz.)	0.6 L (20 oz.)
Hydraulic System/Steering			
Pump (loader and steering)	Variable-displacement, axial-piston	pump; closed-center, pressure-compe	nsating system
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	310 L/m (82 gpm)		
System Relief Pressure (loader and steering)	25 166 kPa (3,650 psi)		
Loader Controls	2-function valve, joystick control or 4th-function valve with auxiliary leve	fingertip controls, hydraulic-function er	enable/disable, optional 3rd- and
Steering (conforms to ISO 5010)			
Туре	Power, fully hydraulic		
Articulation Angle	80-deg. arc (40-deg. each direction)		
Hydraulic Cycle Times	Z-Bar	High-Lift	Powerllel
Raise	б.4 sec.	6.4 sec.	6.4 sec.
Dump	1.6 sec.	1.6 sec.	2.1 sec.
Lower (float down)	3.0 sec.	3.0 sec.	2.8 sec.
Total	11.0 sec.	11.0 sec.	11.3 sec.
Turning Radius (measured to centerline of outside tire)	5.57 m (18 ft. 3 in.)		
Dimensions with Standard Configuration	Z-BAR	HIGH-LIFT	POWERLLEL
	3.2-m³ (4.25 cu. yd.) pin-on bucket	3.2-m³ (4.25 cu. yd.) pin-on bucket	3.1-m <sup>3</sup> (4.0 cu. yd.) hook-on bucke with coupler
A Height to Top of Cab and Canopy	3.43 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)
B Ground Clearance	461 mm (18.1 in.)	461 mm (18.1 in.)	461 mm (18.1 in.)
C 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.)
D Wheelbase	3.26 m (10 ft. 8 in.)	3.26 m (10 ft. 8 in.)	3.26 m (10 ft. 8 in.)
E Dump Clearance	▲ (see page 21)	▲ (see page 21)	▲ (see page 21)
F 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.)
G Dump Reach	▲▲ (see page 21)	▲▲ (see page 21)	▲▲ (see page 21)
H Maximum Digging Depth	106 mm (4.2 in.)	200 mm (7.9 in.)	91 mm (3.6 in.)
I Overall Length	▲▲▲ (see page 21)	▲▲▲ (see page 21)	▲▲▲ (see page 21)
		41 deg.	41 deg.
J Maximum Rollback at Ground Level	42 deg.		
	42 deg. 55 deg.	47 deg.	55 deg.
J Maximum Rollback at Ground Level	5	5	55 deg. 50 deg.



644K Z-BAR AND HIGH-LIFT LOADERS

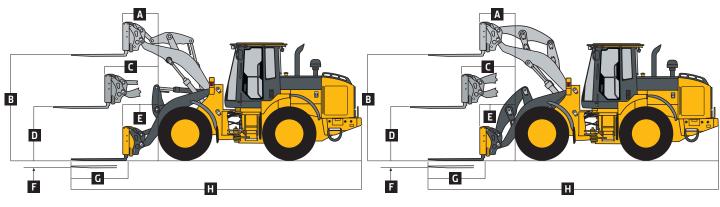
644K POWERLLEL LOADER

Dimensions with Hi-Vis Quick-Coupler and Hook-On Bucket	644K Z-BAR	HIGH-LIFT	POWERLLEL
A Dump Clearance	▲ (see page 21)	▲ (see page 21)	▲ (see page 21)
B Dump Reach	▲▲ (see page 21)	▲▲ (see page 21)	▲▲ (see page 21)
C Maximum Digging Depth	139 mm (5.0 in.)	226 mm (9.0 in.)	91 mm (3.6 in.)
D 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.)
E Overall Length	▲▲▲ (see page 21)	▲▲▲ (see page 21)	▲▲▲ (see page 21)
F Maximum Rollback, Boom Fully Raised	55 deg.	47 deg.	55 deg.
G Maximum Bucket Angle, Fully Raised	45 deg.	45 deg.	50 deg.
H Maximum Rollback at Ground Level	42 deg.	42 deg.	41 deg.



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

Dimensions with Hi-Vis Quick-Coupler and Hook-On Construction Fork	Z-BAR	HIGH-LIFT	POWERLLEL	
			Construction	Rockland Logging
A Reach, Fully Raised	788 mm (31.0 in.)	905 mm (35.6 in.)	819 mm (32.2 in.)	932 mm (37.0 in.)
B Fork Height, Fully Raised	3.89 m (12 ft. 9.0 in.)	4.22 m (13 ft. 10.1 in.)	3.79 m (12 ft. 5.0 in.)	3.83 m (12 ft. 7.0 in.)
C Maximum Reach, Fork Level	1.68 m (5 ft. 6.0 in.)	2.07 m (6 ft. 9.5 in.)	1.76 m (5 ft. 9.0 in.)	1.87 m (6 ft. 2.0 in.)
D Maximum Reach, Fork Height	1.71 m (5 ft. 7.0 in.)	1.86 m (6 ft. 1.2 in.)	1.71 m (5 ft. 7.0 in.)	1.76 m (5 ft. 9.0 in.)
E Reach, Ground Level	1.17 m (3 ft. 10.0 in.)	1.64 m (5 ft. 4.6 in.)	1.22 m (4 ft. 0 in.)	1.31 m (4 ft. 4.0 in.)
F Depth Below Ground	89 mm (4.0 in.)	181 mm (7.1 in.)	38 mm (1.5 in.)	0 mm (0 in.)
G Tine Length	▲ (see page 21)	▲ (see page 21)	▲ (see page 21)	▲ (see page 21)
H Overall Length	▲▲ (see page 21)	▲▲ (see page 21)	▲▲ (see page 21)	▲▲ (see page 21)



644K Z-BAR AND HIGH-LIFT LOADERS WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORK 644K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON CONSTRUCTION FORK

Dimensions with Pin-on Bucket	644K Z-BAR	HIGH-LIFT
Bucket Type/Size	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge
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	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	14 906 kg (32,862 lb.)	12 237 kg (26,978 lb.)
Tipping Load, 40-deg. Full Turn	12 879 kg (28,393 lb.)	10 508 kg (23,165 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.61 m (5 ft. 3.4 in.)	2.06 m (6 ft. 9.1 in.)
▲▲ Reach, 45-deg. Dump, Full Height	1.06 m (3 ft. 5.7 in.)	1.19 m (3 ft. 10.9 in.)
▲ Dump Clearance, 45 deg., Full Height	2.91 m (9 ft. 6.5 in.)	3.33 m (10 ft. 11.1 in.)
▲▲▲ Overall Length, Bucket on Ground	8.10 m (26 ft. 6.8 in.)	8.57 m (28 ft. 1.4 in.)
Loader Clearance Circle, Bucket Carry Position	13.19 m (43 ft. 3.1 in.)	13.62 m (44 ft. 8.2 in.)
Operating Weight	18 333 kg (40,417 lb.)	18 700 kg (41,226 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6090 (EPA Interim Tier 4/EU Stage IIIB) 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, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Dimensions with Hi-Vis Quick-Coupler and	Z-BAR	HIGH-LIFT	POWERLLEL
Hook-on Bucket			
Bucket Type/Size	General-Purpose with	General-Purpose with	General-Purpose with
	Bolt-on Edge	Bolt-on Edge	Bolt-on Edge
Capacity, Heaped	3.1 m <sup>3</sup> (4.0 cu. yd.)	3.1 m <sup>3</sup> (4.0 cu. yd.)	3.1 m <sup>3</sup> (4.0 cu. yd.)
Capacity, Struck	2.7 m <sup>3</sup> (3.6 cu. yd.)	2.7 m <sup>3</sup> (3.6 cu. yd.)	2.6 m³ (3.5 cu. yd.)
Bucket Weight with Coupler	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	13 586 kg (29,952 lb.)	11 125 kg (24,527 lb.)	12 877 kg (28,388 lb.)
Tipping Load, 40-deg. Full Turn	11 682 kg (25,754 lb.)	9496 kg (20,934 lb.)	11 051 kg (24,364 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.64 m (5 ft. 5 in.)	2.10 m (6 ft. 11 in.)	1.74 m (5 ft. 9 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.)
▲ 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.)
▲▲▲ 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.)
Loader Clearance Circle, Bucket Carry Position	13.28 m (43 ft. 7 in.)	13.72 m (45 ft. 0 in.)	13.36 m (43 ft. 10 in.)
Operating Weight	18 724 kg (41,279 lb.)	19 091 kg (42,088 lb.)	19 966 kg (44,017 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6090 (EPA Interim Tier 4/EU Stage IIIB) 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, and assumes no tire deflection per the standard ISO 14397-1 section 5.

Z-BAR		HIGH-LIFT		POWERLLEL		
				Construction		Rockland Logging*
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.)
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.)
9913 kg	9402 kg	8764 kg	8343 kg	9857 kg	9354 kg	9534 kg
(21,855 lb.)	(20,727 lb.)	(19,322 lb.)	(18,393 lb.)	(21,730 lb.)	(20,623 lb.)	(21,020 lb.)
8562 kg	8111 kg	7527 kg	7155 kg	8502 kg	8060 kg	8108 kg
(18,877 lb.)	(17,881 lb.)	(16,593 lb.)	(15,774 lb.)	(18,746 lb.)	(17,769 lb.)	(17,874 lb.)
18 253 kg	18 313 kg	18 620 kg	18 680 kg	19 494 kg	19 554 kg	21 483 kg
(40,241 lb.)	(40,373 lb.)	(41,050 lb.)	(41,182 lb.)	(42,977 lb.)	(43,109 lb.)	(47,362 lb.)
	1.52 m (60 in.) 8.81 m (28 ft. 11 in.) 9913 kg (21,855 lb.) 8562 kg (18,877 lb.) 18 253 kg	1.52 m (60 in.)       1.83 m (72 in.)         8.81 m       9.11 m         (28 ft. 11 in.)       (29 ft. 11 in.)         9913 kg       9402 kg         (21,855 lb.)       (20,727 lb.)         8562 kg       8111 kg         (18,877 lb.)       (17,881 lb.)         18 253 kg       18 313 kg	1.52 m (60 in.)       1.83 m (72 in.)       1.52 m (60 in.)         8.81 m       9.11 m       9.28 m         (28 ft. 11 in.)       (29 ft. 11 in.)       (30 ft. 5.4 in.)         9913 kg       9402 kg       8764 kg         (21,855 lb.)       (20,727 lb.)       (19,322 lb.)         8562 kg       8111 kg       7527 kg         (18,877 lb.)       (17,881 lb.)       (16,593 lb.)         18 253 kg       18 313 kg       18 620 kg	1.52 m (60 in.)       1.83 m (72 in.)       1.52 m (60 in.)       1.83 m (72 in.)         8.81 m       9.11 m       9.28 m       9.58 m         (28 ft. 11 in.)       (29 ft. 11 in.)       (30 ft. 5.4 in.)       (31 ft. 5 in.)         9913 kg       9402 kg       8764 kg       8343 kg         (21,855 lb.)       (20,727 lb.)       (19,322 lb.)       (18,393 lb.)         8562 kg       8111 kg       7527 kg       7155 kg         (18,877 lb.)       (17,881 lb.)       (16,593 lb.)       (15,774 lb.)         18 253 kg       18 313 kg       18 620 kg       18 680 kg	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.)           8.81 m         9.11 m         9.28 m         9.58 m         9.04 m           (28 ft. 11 in.)         (29 ft. 11 in.)         (30 ft. 5.4 in.)         (31 ft. 5 in.)         (29 ft. 8 in.)           9913 kg         9402 kg         8764 kg         8343 kg         9857 kg           (21,855 lb.)         (20,727 lb.)         (19,322 lb.)         (18,393 lb.)         (21,730 lb.)           8562 kg         8111 kg         7527 kg         7155 kg         8502 kg           (18,877 lb.)         (17,881 lb.)         (16,593 lb.)         (15,774 lb.)         (18,746 lb.)           18 253 kg         18 313 kg         18 620 kg         18 680 kg         19 494 kg	I.52 m (60 in.)         I.83 m (72 in.)         I.52 m (60 in.)         I.83 m (72 in.)         I.52 m (60 in.)         I.83 m (72 in.)           8.81 m         9.11 m         9.28 m         9.58 m         9.04 m         9.34 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.)           9913 kg         9402 kg         8764 kg         8343 kg         9857 kg         9354 kg           (21,855 lb.)         (20,727 lb.)         (19,322 lb.)         (18,393 lb.)         (21,730 lb.)         (20,623 lb.)           8562 kg         8111 kg         7527 kg         7155 kg         8502 kg         8060 kg           (18,877 lb.)         (17,881 lb.)         (16,593 lb.)         (15,774 lb.)         (18,746 lb.)         (17,769 lb.)           18 253 kg         18 313 kg         18 620 kg         18 680 kg         19 494 kg         19 554 kg

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6090 (EPA Interim Tier 4/EU Stage IIIB) 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, and assumes no tire deflection per the standard ISO 14397-1 section 5. \*With optional 644K Powerllel forestry application package equipped with 750/65R25 tires.

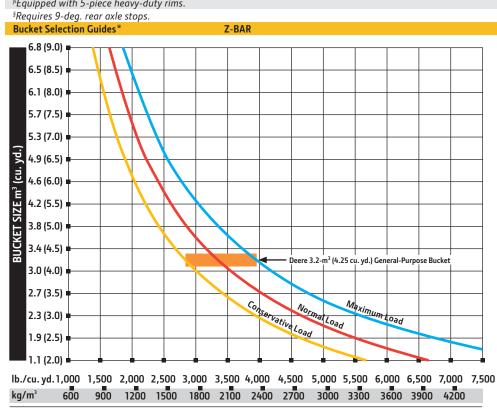
#### 644K Z-BAR / HIGH-LIFT / POWERLLEL

Adjustments to operating weights and tipping loads are based on Z-bar machine and standard equipment with pin-on 3.2-m<sup>3</sup> (4.25 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\* Tipping Load, 40-deg. Full Turn SAE Add (+) or deduct (-) kg (lb.) as indicated for **Operating Weight** Tipping Load, Straight

loaders with 3-piece rims and			
John Deere PowerTech PVX 6090	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
John Deere PowerTech Plus 6068H	– 77 kg (– 169 lb.)	+ 206 kg (+ 454 lb.)	+ 145 kg (+ 320 lb.)
John Deere PowerTech 6068H	– 103 kg (– 227 lb.)	+ 161 kg (+ 355 lb.)	+ 106 kg (+ 234 lb.)
Michelin 23.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
Goodyear 23.5 R 25, 1 Star L-3	+ 12 kg (+ 26 lb.)	+ 9 kg (+ 20 lb.)	+ 8 kg (+ 17 lb.)
Titan 23.5 R 25, 1 Star L-3	+ 12 kg (+ 26 lb.)	+ 9 kg (+ 20 lb.)	+ 8 kg (+ 17 lb.)
Bridgestone 23.5 R 25, 1 Star L-3	+ 116 kg (+ 256 lb.)	+ 86 kg (+ 190 lb.)	+ 76 kg (+ 167 lb.)
Titan 23.5-25, 20 PR L-3	– 156 kg (– 343 lb.)	– 115 kg (– 255 lb.)	– 102 kg (– 224 lb.)
Titan 725/70-25, 16-Ply L-4T (Logger style) <sup>₨</sup>	+ 266 kg (+ 587 lb.)	+ 208 kg (+ 459 lb.)	+ 183 kg (+ 404 lb.)
Michelin 750/65 R 25, 1 Star L-3T <sup>B§</sup>	+ 622 kg (+ 1,371 lb.)	+ 472 kg (+ 1,041 lb.)	+ 416 kg (+ 917 lb.)

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

<sup>&</sup>lt;sup>β</sup>Equipped with 5-piece heavy-duty rims.

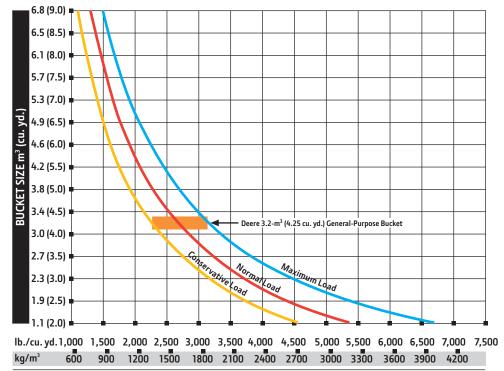


644K Z-BAR LOADER WITH PIN-ON BUCKET

LOOSE MATERIALS	kg/m³ lb	./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm		
(1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") si	ze 1602	2,700

\* This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this quide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

644K HIGH-LIFT / POWERLLEL



Clay, compact, solid 1746 2,943 1009 1,701 Clay, dry in lump loose Clay, excavated in water 1282 2,160 Coal, anthracite, broken, loose 865 1,458 Coal, bituminous, moderately wet 801 1,350 Earth, common loam, dry 1218 2,052 3,105 Earth, mud, packed 1843 Granite, broken 1538 2,592 2275 3,834 Gypsum Limestone, coarse, sized 1570 2,646 Limestone, mixed sizes 1682 2,835 2,295 Limestone, pulverized or crushed 1362 2083 3,510 Sand, damp 1762 2.970 Sand, dry Sand, voids, full of water 2083 3,510 Sandstone, guarried 1314 2,214 2,295 Shale, broken crushed 1362 1955 3,294 Slag, furnace granulated Stone or gravel, 37.5 to 87.5-mm 1442 (1.5 to 3.5") size 2,430 Stone or gravel, 18.75-mm (3/4") size 1602 2,700

kg/m³lb./cu.yd.

486

1,134

2,700

288

673

1602

LOOSE MATERIALS

Clay and gravel, dry

Cinders (coal, ashes, clinkers)

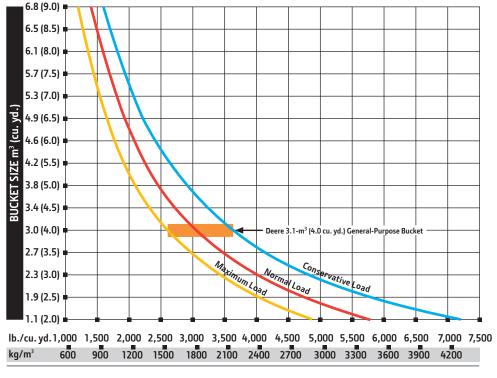
Chips, pulpwood

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

LOOSE MATERIALS	kg∕m³ lb	./cu.yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm		
(1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") si	ze 1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

644K HIGH-LIFT LOADER WITH PIN-ON BUCKET



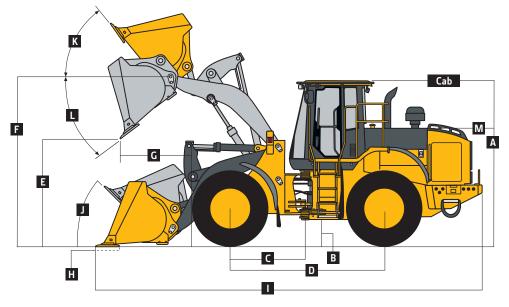
644K POWERLLEL LOADER WITH QUICK-COUPLER AND HOOK-ON BUCKET

### 724K

Engine	724K Z-BAR / HIGH-LIFT				
Manufacturer and Model	John Deere PowerTech™ PVX 6	090 John Deere Power	Tech™ Plus 6090H	John Dee	ere PowerTech™ 6090H
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage III	IB EPA Tier 3/EU Sta	age IIIA	EPA Tier	2/EU Stage II
Cylinders	6	6	Ĩ	6	-
Valves Per Cylinder	4	4		4	
Displacement	9.0 L (548 cu. in.)	9.0 L (548 cu. in.	)	9.0 L (54	8 cu. in.)
Net Peak Power at 1,800 rpm	197 kW (264 hp)	197 kW (264 hp)	,	197 kW (264 hp)	
Net Peak Torque at 1,300 rpm	1161 Nm (856 lbft.)	1159 Nm (852 lb		1158 Nm (852 lbft.)	
Net Torque Rise	61%	60%	,	60%	
Fuel System (electronically controlled)	High-pressure common rail	High-pressure co	ommon rail	High-pressure common rail	
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on integral cooler		Full-flow spin-on filter and integral cooler	
Aspiration	Turbocharged, charge air cool		harge air cooled	5	arged, charge air cooled
Air Cleaner	Dual-element dry type	Dual-element dry			ment dry type
Fan Drive	Hydraulically driven, proportion controlled, fan aft of coolers	nally Hydraulically drive	Hydraulically driven, proportionally controlled, fan aft of coolers		ally driven, proportionall d, fan aft of coolers
Electrical System	24 volt with 100-amp alternat (optional 130-amp alternator)	tor 24 volt with 100-			vith 100-amp alternator
Batteries (2 – 12 volt)	1,400 CCA (each)	, 1,400 CCA (each)		1,400 CC	A (each)
Transmission	.,			1,100 00	
Type	Countershaft-type PowerShift	t™			
Torque Converter	Single stage, single phase				
Shift Control	Electronically modulated, ada	ntive lead and speed d	lanandant		
Operator Interface				k chift hu	tton on hydraulic lovor
Shift Modes	Steering-column or joystick-m Manual/auto (1st–D or 2nd–D				
Shift Modes	and 3 adjustable clutch-cutof	f settings			-down or kick-up/down;
	Standard 5-Speed with Locku		Optional 4-Spee	đ	0
Maximum Travel Speeds (with 23.5 R 25, 1 Star L3 tires)		verse	Forward		Reverse
Gear 1		9 km/h (4.9 mph)	7.2 km/h (4.5 mj		7.6 km/h (4.7 mph)
Gear 2		.0 km/h (8.1 mph)	11.9 km/h (7.4 n		12.5 km/h (7.8 mph)
Gear 3		.8 km/h (17.9 mph)	23.1 km/h (14.4		24.2 km/h (15.1 mph)
Gear 4	27.4 km/h (17.0 mph) N//		35.6 km/h (22.1		N/A
Gear 5	40.0 km/h (24.9 mph) N//	A	N/A		N/A
Axles/Brakes					
Final Drives	Heavy-duty inboard-mounted				
Differentials	Hydraulic locking front with co	onventional rear – stan	dard; dual locking	front and	rear – optional
Rear Axle Oscillation, Stop to Stop (with 23.5 R 25,	26 deg.				
1 Star L3 tires)					
1 Star L3 tires) Brakes (conform to ISO 3450)					
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes	Hydraulically actuated, inboar			self-adjust	ing, multi disc
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake	Hydraulically actuated, inboar Automatic spring applied, hyd			self-adjust	ing, multi disc
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels	Automatic spring applied, hyd	draulically released, oil o	cooled, multi disc		
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 3-piece rims)*	Automatic spring applied, hyd Tread Width	draulically released, oil o Width Over Tires	cooled, multi disc	Change	n Vertical Height
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.)	draulically released, oil o Width Over Tires 2880 mm (113.4	cooled, multi disc ; in.)	Change I No chan	n Vertical Height ge
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.)	draulically released, oil o Width Over Tires 2880 mm (113.4 2893 mm (113.9	cooled, multi disc in.) in.)	Change I No chan + 13 mm	n Vertical Height ge (+ 0.5 in.)
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3 725/70-25, 16-Ply L-4T (Logger style) <sup>®§</sup>	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.)	draulically released, oil o Width Over Tires 2880 mm (113.4	cooled, multi disc in.) in.)	Change I No chan + 13 mm	n Vertical Height ge
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.)	draulically released, oil o Width Over Tires 2880 mm (113.4 2893 mm (113.9	cooled, multi disc in.) in.) in.)	Change I No chan + 13 mm + 36 mm	n Vertical Height ge (+ 0.5 in.)
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3 725/70-25, 16-Ply L-4T (Logger style) <sup>®§</sup>	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.)	draulically released, oil o Width Over Tires 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8	cooled, multi disc in.) in.) in.) in.)	Change I No chan + 13 mm + 36 mm	n Vertical Height ge (+ 0.5 in.) (+ 1.8 in.)
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3 725/70-25, 16-Ply L-4T (Logger style) <sup>®§</sup> 750/65 R 25, 1 Star L-3T <sup>®§</sup> *Based on Z-bar machine configuration; may change bas <sup>β</sup> Equipped with 5-piece heavy-duty rims.	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.)	draulically released, oil o Width Over Tires 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8	cooled, multi disc in.) in.) in.) in.)	Change I No chan + 13 mm + 36 mm	n Vertical Height ge (+ 0.5 in.) (+ 1.8 in.)
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3 725/70-25, 16-Ply L-4T (Logger style) <sup>®§</sup> 750/65 R 25, 1 Star L-3T <sup>®§</sup> *Based on Z-bar machine configuration; may change bas <sup>β</sup> Equipped with 5-piece heavy-duty rims. <sup>§</sup> Requires 9-deg. rear axle stops.	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.)	draulically released, oil o Width Over Tires 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8	cooled, multi disc in.) in.) in.) in.)	Change I No chan + 13 mm + 36 mm	n Vertical Height ge (+ 0.5 in.) (+ 1.8 in.)
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3 725/70-25, 16-Ply L-4T (Logger style) <sup>®§</sup> 750/65 R 25, 1 Star L-3T <sup>®§</sup> *Based on Z-bar machine configuration; may change bas <sup>β</sup> Equipped with 5-piece heavy-duty rims. <sup>§</sup> Requires 9-deg. rear axle stops. Serviceability	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) red on vehicle configuration, we	draulically released, oil o Width Over Tires 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8 eight, or tire-pressure a	cooled, multi disc in.) in.) in.) in.) djustments.	Change I No chan + 13 mm + 36 mm + 8 mm (	n Vertical Height ge (+ 0.5 in.) (+ 1.8 in.) + 0.3 in.)
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3 725/70-25, 16-Ply L-4T (Logger style) <sup>®§</sup> 750/65 R 25, 1 Star L-3T <sup>®§</sup> *Based on Z-bar machine configuration; may change bas <sup>®</sup> Equipped with 5-piece heavy-duty rims. <sup>§</sup> Requires 9-deg. rear axle stops. Serviceability Refill Capacities	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) red on vehicle configuration, we	Hraulically released, oil of Width Over Tires 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8 eight, or tire-pressure a IB EPA Tier 3/EU Sta	cooled, multi disc in.) in.) in.) in.) djustments.	Change I No chan + 13 mm + 36 mm + 8 mm (	n Vertical Height ge (+ 0.5 in.) (+ 1.8 in.) + 0.3 in.) 2/EU Stage II
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3 725/70-25, 16-Ply L-4T (Logger style) <sup>®§</sup> 750/65 R 25, 1 Star L-3T <sup>®§</sup> *Based on Z-bar machine configuration; may change bas <sup>β</sup> Equipped with 5-piece heavy-duty rims. <sup>§</sup> Requires 9-deg. rear axle stops. Serviceability Refill Capacities Fuel Tank (with ground-level fueling)	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) red on vehicle configuration, we EPA Interim Tier 4/EU Stage III 397 L (105 gal.)	Hraulically released, oil of Width Over Tires 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8 eight, or tire-pressure a IB EPA Tier 3/EU Sta 352 L (93 gal.)	cooled, multi disc in.) in.) in.) in.) djustments.	<i>Change I</i> No chan + 13 mm + 36 mm + 8 mm ( EPA Tier 352 L (9)	n Vertical Height ge (+ 0.5 in.) (+ 1.8 in.) + 0.3 in.) 2/EU Stage II 3 gal.)
1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 3-piece rims)* 23.5 R 25, 1 Star L-3 23.5-25, 20 PR L-3 752/70-25, 16-Ply L-4T (Logger style) <sup>R§</sup> 750/65 R 25, 1 Star L-3T <sup>R§</sup> *Based on Z-bar machine configuration; may change bas <sup>B</sup> Equipped with 5-piece heavy-duty rims. <sup>S</sup> Requires 9-deg. rear axle stops. Serviceability Refill Capacities Fuel Tank (with ground-level fueling) Cooling System	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) red on vehicle configuration, we EPA Interim Tier 4/EU Stage III 397 L (105 gal.) 45.4 L (48.1 qt.)	Araulically released, oil of <i>Width Over Tires</i> 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8 eight, or tire-pressure a IB EPA Tier 3/EU Sta 352 L (93 gal.) 33.8 L (35.7 qt.)	cooled, multi disc in.) in.) in.) in.) djustments.	<i>Change</i> I No chan + 13 mm + 36 mm + 8 mm ( EPA Tier 352 L (9 33.8 L (3	n Vertical Height ge (+ 0.5 in.) (+ 1.8 in.) + 0.3 in.) 2/EU Stage II 3 gal.) 5.7 qt.)
<ul> <li>1 Star L3 tires)</li> <li>Brakes (conform to ISO 3450) <ul> <li>Service Brakes</li> <li>Parking Brake</li> </ul> </li> <li>Tires/Wheels</li> <li>Choice of (with 3-piece rims)* <ul> <li>23.5 R 25, 1 Star L-3</li> <li>23.5 - 25, 20 PR L-3</li> <li>725/70-25, 16-Ply L-4T (Logger style)<sup>R§</sup></li> <li>750/65 R 25, 1 Star L-3T<sup>R§</sup></li> <li>*Based on Z-bar machine configuration; may change bas</li> <li><sup>R</sup>Equiped with 5-piece heavy-duty rims.</li> <li><sup>R</sup>Requires 9-deg. rear axle stops.</li> </ul> </li> <li>Serviceability <ul> <li>Refill Capacities</li> <li>Fuel Tank (with ground-level fueling)</li> <li>Cooling System</li> <li>Engine Oil with Vertical Spin-On Filter</li> </ul> </li> </ul>	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) bed on vehicle configuration, we EPA Interim Tier 4/EU Stage III 397 L (105 gal.) 45.4 L (48.1 qt.) 28 L (29.6 qt.)	Araulically released, oil of <i>Width Over Tires</i> 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8 eight, or tire-pressure a IB EPA Tier 3/EU Sta 352 L (93 gal.) 33.8 L (35.7 qt.) 29.6 L (28 qt.)	cooled, multi disc in.) in.) in.) in.) djustments.	Change I No chan + 13 mm + 36 mm + 8 mm ( EPA Tier 352 L (9 33.8 L (3 29.6 L (2	2 In Vertical Height ge (+ 0.5 in.) (+ 1.8 in.) + 0.3 in.) 2/EU Stage II 3 gal.) 5.7 qt.) 8 qt.)
<ul> <li>1 Star L3 tires)</li> <li>Brakes (conform to ISO 3450) <ul> <li>Service Brakes</li> <li>Parking Brake</li> </ul> </li> <li>Tires/Wheels</li> <li>Choice of (with 3-piece rims)* <ul> <li>23.5 R 25, 1 Star L-3</li> <li>23.5-25, 20 PR L-3</li> <li>725/70-25, 16-Ply L-4T (Logger style)<sup>®§</sup></li> <li>750/65 R 25, 1 Star L-3T<sup>®§</sup></li> </ul> </li> <li>*Based on Z-bar machine configuration; may change bas <ul> <li><sup>®</sup>Equipped with 5-piece heavy-duty rims.</li> <li><sup>®</sup>Requires 9-deg. rear axle stops.</li> </ul> </li> <li>Serviceability</li> <li>Refill Capacities <ul> <li>Fuel Tank (with ground-level fueling)</li> <li>Cooling System</li> <li>Engine Oil with Vertical Spin-On Filter</li> <li>Transmission Fluid with Vertical Filter</li> </ul> </li> </ul>	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) bed on vehicle configuration, we EPA Interim Tier 4/EU Stage III 397 L (105 gal.) 45.4 L (48.1 qt.) 28 L (29.6 qt.) 27 L (28.5 qt.)	Araulically released, oil of <i>Width Over Tires</i> 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8 eight, or tire-pressure a IB EPA Tier 3/EU Sta 352 L (93 gal.) 33.8 L (35.7 qt.) 29.6 L (28 qt.) 27 L (28.5 qt.)	cooled, multi disc in.) in.) in.) in.) djustments.	<i>Change</i> I No chan + 13 mm + 36 mm + 8 mm ( EPA Tier 352 L (9 33.8 L (3 29.6 L (2 27 L (28.	2 /n Vertical Height ge (+ 0.5 in.) (+ 1.8 in.) + 0.3 in.) 2/EU Stage II 3 gal.) 5.7 qt.) 8 qt.) 5 qt.)
<ul> <li>1 Star L3 tires)</li> <li>Brakes (conform to ISO 3450) <ul> <li>Service Brakes</li> <li>Parking Brake</li> </ul> </li> <li>Tires/Wheels</li> <li>Choice of (with 3-piece rims)* <ul> <li>23.5 R 25, 1 Star L-3</li> <li>23.5 - 25, 20 PR L-3</li> <li>725/70-25, 16-Ply L-4T (Logger style)<sup>R§</sup></li> <li>750/65 R 25, 1 Star L-3T<sup>R§</sup></li> <li>*Based on Z-bar machine configuration; may change bas</li> <li><sup>R</sup>Equiped with 5-piece heavy-duty rims.</li> <li><sup>R</sup>Requires 9-deg. rear axle stops.</li> </ul> </li> <li>Serviceability <ul> <li>Refill Capacities</li> <li>Fuel Tank (with ground-level fueling)</li> <li>Cooling System</li> <li>Engine Oil with Vertical Spin-On Filter</li> </ul> </li> </ul>	Automatic spring applied, hyd Tread Width 2170 mm (85.4 in.) 2170 mm (85.4 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) 2204 mm (86.8 in.) bed on vehicle configuration, we EPA Interim Tier 4/EU Stage III 397 L (105 gal.) 45.4 L (48.1 qt.) 28 L (29.6 qt.)	Araulically released, oil of <i>Width Over Tires</i> 2880 mm (113.4 2893 mm (113.9 2992 mm (117.8 3018 mm (118.8 eight, or tire-pressure a IB EPA Tier 3/EU Sta 352 L (93 gal.) 33.8 L (35.7 qt.) 29.6 L (28 qt.)	cooled, multi disc in.) in.) in.) in.) djustments.	Change I No chan + 13 mm + 36 mm + 8 mm ( EPA Tier 352 L (9 33.8 L (3 29.6 L (2	n Vertical Height ge (+ 0.5 in.) (+ 1.8 in.) + 0.3 in.) 2/EU Stage II 3 gal.) 5.7 qt.) 8 qt.) 5 qt.)



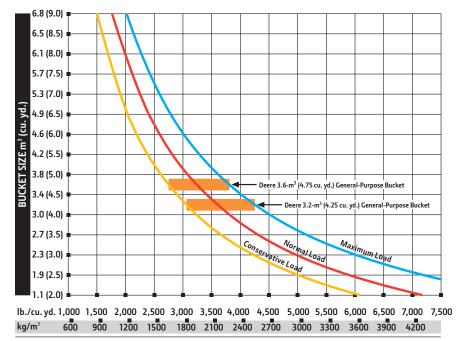
Hydraulic System/Steering	724K Z-BAR / HIGH-LIFT	
Pump (loader and steering)	Variable-displacement, axial-piston	pump; closed-center, pressure-compensating system
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,250 rpm	310 L/m (82 gpm)	
System Relief Pressure (loader and steering)	25 166 kPa (3,650 psi)	
Loader Controls	2-function valve, joystick control or 4th-function valve with auxiliary leve	fingertip controls, hydraulic-function enable/disable, optional 3rd- and er
Steering (conforms to ISO 5010)		
Туре	Power, fully hydraulic	
Articulation Angle	80-deg. arc (40-deg. each direction)	
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.
Turning Radius (measured to centerline of outside tire)	5.64 m (18 ft. 6 in.)	
Dimensions with Standard Configuration	Z-BAR	HIGH-LIFT
	3.6-m³ (4.75 cu. yd.) pin-on bucket	3.2-m³ (4.25 cu. yd.) pin-on bucket
A Height to Top of Cab and Canopy	3.43 m (11 ft. 3 in.)	3.43 m (11 ft. 3 in.)
B Ground Clearance	461 mm (18.1 in.)	461 mm (18.1 in.)
C Length from Centerline to Front Axle	1.60 m (5 ft. 3 in.)	1.60 m (5 ft. 3 in.)
D Wheelbase	3.26 m (10 ft. 8 in.)	3.26 m (10 ft. 8 in.)
E Dump Clearance	▲ (see page 26)	▲ (see page 26)
F Height to Hinge Pin, Fully Raised	4.12 m (13 ft. 6 in.)	4.54 m (14 ft. 11 in.)
G Dump Reach	▲▲ (see page 26)	▲▲ (see page 26)
H Maximum Digging Depth	123 mm (5.0 in.)	216 mm (8.5 in.)
I Overall Length	▲▲▲ (see page 26)	▲▲▲ (see page 26)
J Maximum Rollback at Ground Level	40.6 deg.	41.6 deg.
K Maximum Rollback, Boom Fully Raised	55.1 deg.	47.2 deg.
L Maximum Bucket Angle, Fully Raised	50.1 deg.	45.0 deg.
M Hood Height	2.53 m (8 ft. 4 in.)	2.53 m (8 ft. 4 in.)



724K Z-BAR AND HIGH-LIFT LOADERS

Dimensions with Pin-on Bucket Bucket Type/Size	724K Z-BAR General-Purpose with	General-Purpose with	HIGH-LIFT General-Purpose with	General-Purpose with
Bucket Type/Size	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge	General-Purpose with Bolt-on Edge
Constant Harris	2			2
Capacity, Heaped	3.6 m <sup>3</sup> (4.75 cu. yd.)	3.2 m <sup>3</sup> (4.25 cu. yd.)	3.6 m <sup>3</sup> (4.75 cu. yd.)	3.2 m <sup>3</sup> (4.25 cu. yd.)
Capacity, Struck	3.2 m <sup>3</sup> (4.2 cu. yd.)	3.0 m <sup>3</sup> (3.5 cu. yd.)	3.2 m <sup>3</sup> (4.2 cu. yd.)	2.8 m <sup>3</sup> (3.7 cu. yd.)
Bucket Weight	1822 kg (4,016 lb.)	1736 kg (3,827 lb.)	1822 kg (4,017 lb.)	1736 kg (3,827 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	14 398 kg (31,742 lb.)	15 607 kg (34,408 lb.)	12 968 kg (28,590 lb.)	13 884 kg (30,610 lb.)
Tipping Load, Straight	16 392 kg (36,138 lb.)	16 516 kg (36,412 lb.)	13 087 kg (28,851 lb.)	13 291 kg (29,303 lb.)
Tipping Load, 40-deg. Full Turn	14 132 kg (31,155 lb.)	14 253 kg (31,421 lb.)	11 222 kg (24,740 lb.)	11 412 kg (25,160 lb.)
	1.67 m (5 ft. 6 in.)	1.61 m (5 ft. 3 in.)	2.12 m (6 ft. 11 in.)	2.06 m (6 ft. 9 in.)
▲ Reach, 45-deg. Dump, Full Height	1.13 m (3 ft. 9 in.)	1.06 m (3 ft. 6 in.)	1.25 m (4 ft. 1 in.)	1.19 m (3 ft. 11 in.)
▲ Dump Clearance, 45 deg., Full Height		2.91 m (9 ft. 7 in.)	3.26 m (10 ft. 8 in.)	
	2.84 m (9 ft. 4 in.)		. ,	3.33 m (10 ft. 11 in.)
▲▲ Overall Length, Bucket on Ground	8.31 m (27 ft. 3 in.)	8.20 m (26 ft. 11 in.)	8.78 m (28 ft. 10 in.)	8.67 m (28 ft. 5 in.)
	13.25 m (43 ft. 6 in.)	13.19 m (43 ft. 3 in.)	13.68 m (44 ft. 11 in.)	13.62 m (44 ft. 8 in.)
Operating Weight	19 264 kg (42,470 lb.)	19 171 kg (42,265 lb.)	19 486 kg (42,959 lb.)	19 397 kg (42,763 lb.)
Loader operating information is based on mac				
ROPS cab, rear cast bumper/counterweight, tr				
mation is affected by changes in tires, ballast,	r, and different attachment	s, and assumes no tire deflect	tion per the standard ISO 1	4397-1 section 5.
imensions with Hi-Vis Quick-Coupler and	Z-BAR		HIGH-LIFT	
ook-on Bucket				
ucket Type/Size	General-Purpose with Bol	lt-on Edge	General-Purpose with	Bolt-on Edge
Capacity, Heaped	3.1 m <sup>3</sup> (4.0 cu. yd.)	-	3.1 m <sup>3</sup> (4.0 cu. yd.)	-
Capacity, Struck	2.4 m <sup>3</sup> (3.2 cu. yd.)		2.4 m <sup>3</sup> (3.2 cu. yd.)	
Bucket Weight with Coupler	1764 kg (3,890 lb.)		1764 kg (3,890 lb.)	
Bucket Width	2.90 m (9 ft. 6 in.)		2.90 m (9 ft. 6 in.)	
Breakout Force	14 524 kg (32,019 lb.)		12 404 kg (27,346 lb.)	
Tipping Load, Straight	15 110 kg (33,312 lb.)		12 122 kg (26,724 lb.)	
Tipping Load, 40-deg. Full Turn	12 982 kg (28,620 lb.)		10 351 kg (22,819 lb.)	
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.72 m (5 ft. 8 in.)		2.10 m (6 ft. 11 in.)	
▲▲ Reach, 45-deg. Dump, Full Height	1.15 m (3 ft. 9 in.)		1.28 m (4 ft. 2 in.)	
▲ Dump Clearance, 45 deg., Full Height	2.88 m (9 ft. 6 in.)		3.11 m (10 ft. 2 in.)	
▲▲▲ Overall Length, Bucket on Ground	8.20 m (26 ft. 11 in.)		8.74 m (28 ft. 8 in.)	
			13 72 m (45 ft Ω in )	
Loader Clearance Circle, Bucket On Ground Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast,	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua	rds, bottom guards, standard	tires, full fuel tank, and 79	9-kg (175 lb.) operator. This in
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua	rds, bottom guards, standard	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79	9-kg (175 lb.) operator. This in
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua	rds, bottom guards, standard	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79	)-kg (175 lb.) operator. This in
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua and different attachments 1.52 m (60 in.)	rds, bottom guards, standard , and assumes no tire deflecti 1.83 m (72 in.)	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.)	)-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length Overall Length ipping Load, Straight (fork level, load centered	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.)	rds, bottom guards, standard , and assumes no tire deflecti	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14	)-kg (175 lb.) operator. This in 397-1 section 5.
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork Tine Length ▲ Overall Length ipping Load, Straight (fork level, load centered nd positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.)	rds, bottom guards, standard , and assumes no tire deflecti 1.83 m (72 in.) 9.19 m (30 ft. 2 in.)	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.)	)-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length ▲ Overall Length ipping Load, Straight (fork level, load centered and positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length)	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.)	rds, bottom guards, standard , and assumes no tire deflection 1.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.)	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 75 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.)	D-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length ▲ Overall Length ipping Load, Straight (fork level, load centered nd positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) Operating Weight	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.)	rds, bottom guards, standard , and assumes no tire deflection 1.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.)	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 75 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.)	D-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length Tine Length Overall Length Tipping Load, Straight (fork level, load centered and positioned at 50% tine length) Tipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast,	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage ansmission side-frame gua and different attachments,	rds, bottom guards, standard , and assumes no tire deflection 1.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) engi-kg (175 lb.) operator. This inf
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork . Tine Length . Overall Length ipping Load, Straight (fork level, load centered ind positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) perating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast,	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage ansmission side-frame gua and different attachments,	rds, bottom guards, standard , and assumes no tire deflection 1.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This in
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Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length Overall Length Tipping Load, Straight (fork level, load centered nd positioned at 50% tine length) Tipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) Derating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage ansmission side-frame gua and different attachments, try counterweight package <b>Z-BAR / HIGH-LIFT</b>	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Po rds, bottom guards, standard , and assumes no tire deflection	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This in 397-1 section 5.
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length Overall Length Tipping Load, Straight (fork level, load centered and positioned at 50% tine length) Tipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) Derating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores Adjustments to Operating Weights and Tipping Loads with Buckets	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, try counterweight package Z-BAR / HIGH-LIFT oads are based on Z-bar ma	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Po rds, bottom guards, standard , and assumes no tire deflection chine and pin-on 3.6-m <sup>3</sup> (4.79	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14	D-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This in 397-1 section 5.
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length Overall Length ipping Load, Straight (fork level, load centered nd positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores djustments to Operating Weights and ipping Loads with Buckets djustments to operating weights and tipping lo dge, ROPS cab, rear cast bumper/counterweight	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, itry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on <b>Z-bar man</b> ant, transmission side-frame	rds, bottom guards, standard , and assumes no tire deflection 7.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection chine and pin-on 3.6-m <sup>3</sup> (4.79) guards, bottom guards, stan	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 5 cu. yd.) general-purpose dard tires, full fuel tank, a	D-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This in 397-1 section 5.
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length Overall Length ipping Load, Straight (fork level, load centered nd positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores adjustments to Operating Weights and tipping Loads with Buckets adjustments to operating weights and tipping loads dige, ROPS cab, rear cast bumper/counterweight dd (+) or deduct (−) kg (lb.) as indicated for	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, try counterweight package Z-BAR / HIGH-LIFT oads are based on Z-bar ma	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Po rds, bottom guards, standard , and assumes no tire deflection chine and pin-on 3.6-m <sup>3</sup> (4.79	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 5 cu. yd.) general-purpose dard tires, full fuel tank, a	D-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng. -kg (175 lb.) operator. This in 397-1 section 5.
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork Tine Length Overall Length ipping Load, Straight (fork level, load centered and positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) perating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores djustments to Operating Weights and ipping Loads with Buckets djustments to operating weights and tipping loads d(+) or deduct (-) kg (lb.) as indicated for baders with 3-piece rims and	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, itry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on <b>Z-bar man</b> ant, transmission side-frame	rds, bottom guards, standard , and assumes no tire deflection 7.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection chine and pin-on 3.6-m <sup>3</sup> (4.79) guards, bottom guards, stan	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 5 cu. yd.) general-purpose dard tires, full fuel tank, a	D-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng. -kg (175 lb.) operator. This in 397-1 section 5.
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork Tine Length Overall Length ipping Load, Straight (fork level, load centered and positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) perating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores djustments to Operating Weights and ipping Loads with Buckets djustments to operating weights and tipping lo dge, ROPS cab, rear cast bumper/counterweight dd (+) or deduct (-) kg (lb.) as indicated for	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, itry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on <b>Z-bar man</b> ant, transmission side-frame	rds, bottom guards, standard , and assumes no tire deflection 7.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection chine and pin-on 3.6-m <sup>3</sup> (4.79) guards, bottom guards, stan	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14: 5 cu. yd.) general-purpose dard tires, full fuel tank, a	D-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng. -kg (175 lb.) operator. This in 397-1 section 5.
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, becifications with Hi-Vis Quick-Coupler and ook-on Construction Fork Tine Length ▲ Overall Length ping Load, Straight (fork level, load centered and positioned at 50% tine length) pping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) perating Weight Loader operating information is based on mac ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores djustments to Operating Weights and pping Loads with Buckets djustments to operating weights and tipping load (+) or deduct (-) kg (lb.) as indicated for aders with 3-piece rims and	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage ransmission side-frame gua and different attachments, stry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on <b>Z-bar man</b> ht, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.)	rds, bottom guards, standard , and assumes no tire deflection 1.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection and assumes no tire deflection assumes	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 0 per the standard ISO 14 5 cu. yd.) general-purpose dard tires, full fuel tank, at traight Tip	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng- kg (175 lb.) operator. This ini 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* ping Load, 40-deg. Full Turn S g (0 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork Tine Length ▲ Overall Length pping Load, Straight (fork level, load centered and positioned at 50% tine length) pping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) perating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores djustments to Operating Weights and ipping Loads with Buckets djustments to operating weights and tipping le dd (+) or deduct (-) kg (lb.) as indicated for haders with 3-piece rims and John Deere PowerTech PUX 6090 John Deere PowerTech Plus 6090H	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage ransmission side-frame gua and different attachments, stry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on <b>Z-bar man</b> t, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.)	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) and astandard equipment, Po rds, bottom guards, standard and assumes no tire deflection and assumes no tire deflection chine and pin-on 3.6-m³ (4.7! squards, bottom guards, standard and assumes no tire deflection and assumes no tire deflection assumes no tire deflection assumes no tire deflection assumes no tire deflection assumes no tire deflection as	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 5 cu. yd.) general-purpose dard tires, full fuel tank, and 79 on per the standard ISO 14 5 cu. yd.) general-purpose dard tires, full fuel tank, a traight Tip 0 k 0 8	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng- -kg (175 lb.) operator. This ini 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* ping Load, 40-deg. Full Turn S g (0 lb.) 3 kg (– 183 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork Tine Length ▲ Overall Length pping Load, Straight (fork level, load centered and positioned at 50% tine length) pping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) perating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores djustments to Operating Weights and ipping Loads with Buckets djustments to operating weights and tipping le dde, ROPS cab, rear cast bumper/counterweight dd (+) or deduct (-) kg (lb.) as indicated for raders with 3-piece rims and John Deere PowerTech Plus 6090H John Deere PowerTech Plus 6090H	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, itry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on Z-bar mant, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.) – 105 kg (– 232 lb.)	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) 9 and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection and assumes no tire deflection standard equipment, Po rds, bottom guards, standard and assumes no tire deflection and assumes no tire deflection of the standard equipment, Po rds, bottom guards, standard and assumes no tire deflection and assumes no tire deflection	19 788 kg (43,625 lb.)         werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14         1.52 m (60 in.)         9.35 m (30 ft. 8 in.)         9521 kg (20,991 lb.)         8176 kg (18,025 lb.)         19 317 kg (42,587 lb.)         19 317 kg (42,587 lb.)         9 mertech PVX 6090 (EPA Intropose the standard ISO 14         5 cu. yd.) general-purpose that the standard ISO 14         5 cu. yd.) general -purpose that the standard ISO 14         6 cu. yd.) general -purpose that the standard ISO 14	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This in 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* ping Load, 40-deg. Full Turn S g (0 lb.) 3 kg (– 183 lb.) 4 kg (– 163 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork Tine Length ▲ Overall Length pping Load, Straight (fork level, load centered and positioned at 50% tine length) pping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) perating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores djustments to Operating Weights and ipping Loads with Buckets djustments to operating weights and tipping lo dder, ROPS cab, rear cast bumper/counterweight dd (+) or deduct (-) kg (lb.) as indicated for laders with 3-piece rims and John Deere PowerTech PUX 6090 John Deere PowerTech Plus 6090H John Deere PowerTech Plus 6090H Michelin 23.5 R 25, 1 Star L-3	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, stry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on Z-bar mant, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.) – 105 kg (– 232 lb.) 0 kg (0 lb.)	rds, bottom guards, standard , and assumes no tire deflection 1.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) 19 151 kg (42,220 lb.) and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection chine and pin-on 3.6-m <sup>3</sup> (4.7! guards, bottom guards, standard chine and guards, bottom guards, bottom guards, standard chine and guards, bottom guards, standards, sta	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 75 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA Int tires, full fuel tank, and 79 on per the standard ISO 14. 5 cu. yd.) general-purpose idard tires, full fuel tank, a traight Tip 0 k 0.) – 8 0.) – 7	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng. -kg (175 lb.) operator. This ini 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* bing Load, 40-deg. Full Turn S g (0 lb.) 3 kg (– 183 lb.) 4 kg (– 163 lb.) g (0 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork Tine Length	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, itry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on <b>Z-bar man</b> t, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.) – 105 kg (– 232 lb.) 0 kg (0 lb.) + 12 kg (+ 26 lb.)	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection chine and pin-on 3.6-m <sup>3</sup> (4.7! guards, bottom guards, stand Tipping Load, St 0 kg (0 lb.) - 84 kg (- 185 ll - 74 kg (- 163 ll 0 kg (0 lb.) + 9 kg (+ 20 lb.)	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 75 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA Int tires, full fuel tank, and 79 on per the standard ISO 14. 5 cu. yd.) general-purpose idard tires, full fuel tank, a traight Tip 0 k 0.) – 8 0.) – 7 0 k	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This in 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* bing Load, 40-deg. Full Turn S g (0 lb.) 3 kg (– 183 lb.) 4 kg (– 163 lb.) g (0 lb.) kg (+ 17 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork Tine Length	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, itry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on Z-bar man ht, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.) – 105 kg (– 232 lb.) 0 kg (0 lb.) + 12 kg (+ 26 lb.) + 12 kg (+ 26 lb.)	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection content of the standard standa	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 75 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA Int tires, full fuel tank, and 79 on per the standard ISO 14. 5 cu. yd.) general-purpose idard tires, full fuel tank, a traight Tip 0 k b.) – 8 b.) – 7 0 k + 8	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This initiation 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* bing Load, 40-deg. Full Turn S g (0 lb.) 3 kg (– 183 lb.) 4 kg (– 163 lb.) g (0 lb.) kg (+ 17 lb.) kg (+ 17 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and ook-on Construction Fork . Tine Length	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage ransmission side-frame gua and different attachments, try counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on Z-bar man t, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.) – 105 kg (– 232 lb.) 0 kg (0 lb.) + 12 kg (+ 26 lb.) + 116 kg (+ 256 lb.)	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection chine and pin-on 3.6-m <sup>3</sup> (4.7! guards, bottom guards, stand Tipping Load, St 0 kg (0 lb.) - 84 kg (- 185 ll - 74 kg (- 163 ll 0 kg (0 lb.) + 9 kg (+ 20 lb.)	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 75 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA Int tires, full fuel tank, and 79 on per the standard ISO 14. 5 cu. yd.) general-purpose idard tires, full fuel tank, a traight Tip 0 k 0.) – 8 0.) – 7 0 k + 8 6.) + 7	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This initiation 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* bing Load, 40-deg. Full Turn S g (0 lb.) 3 kg (- 183 lb.) 4 kg (- 163 lb.) g (0 lb.) kg (+ 17 lb.) kg (+ 17 lb.) 6 kg (+ 167 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, itry counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on Z-bar man ht, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.) – 105 kg (– 232 lb.) 0 kg (0 lb.) + 12 kg (+ 26 lb.) + 12 kg (+ 26 lb.)	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection content of the standard standa	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA Im tires, full fuel tank, and 79 on per the standard ISO 14. 5 cu. yd.) general-purpose idard tires, full fuel tank, a traight Tip 0 k b.) – 7 (b.) – 1	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng. -kg (175 lb.) operator. This ini 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* big Load, 40-deg. Full Turn S g (0 lb.) 3 kg (– 183 lb.) 4 kg (– 163 lb.) g (0 lb.) kg (+ 17 lb.) kg (+ 17 lb.) 6 kg (+ 167 lb.) 02 kg (– 224 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ransmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage ransmission side-frame gua and different attachments, try counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on Z-bar man t, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.) – 105 kg (– 232 lb.) 0 kg (0 lb.) + 12 kg (+ 26 lb.) + 116 kg (+ 256 lb.)	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection content of the standard standard and assumes no tire deflection and ass	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA Im tires, full fuel tank, and 79 on per the standard ISO 14. 5 cu. yd.) general-purpose idard tires, full fuel tank, a traight Tip 0 k b.) – 7 (b.) – 1	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This in: 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* bing Load, 40-deg. Full Turn S g (0 lb.) 3 kg (– 183 lb.) 4 kg (– 163 lb.) g (0 lb.) kg (+ 17 lb.) kg (+ 17 lb.) 6 kg (+ 167 lb.) 02 kg (– 224 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length A Overall Length ipping Load, Straight (fork level, load centered and positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores djustments to Operating Weights and ipping Loads with Buckets djustments to operating weights and tipping lo dge, ROPS cab, rear cast bumper/counterweight dd (+) or deduct (-) kg (lb.) as indicated for baders with 3-piece rims and John Deere PowerTech Plus 6090H John Deere PowerTech Plus 6090H Michelin 23.5 R 25, 1 Star L-3 Titan 23.5 R 25, 1 Star L-3 Bridgestone 23.5 R 25, 1 Star L-3 Titan 23.5 R 25, 1 Star L-3	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, try counterweight package <b>Z-BAR / HIGH-LIFT</b> ods are based on <b>Z-bar ma</b> t, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.) – 105 kg (– 232 lb.) 0 kg (0 lb.) + 12 kg (+ 26 lb.) + 116 kg (+ 256 lb.) – 156 kg (– 343 lb.) + 266 kg (+ 587 lb.)	rds, bottom guards, standard , and assumes no tire deflection 9.19 m (30 ft. 2 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Po rds, bottom guards, standard and assumes no tire deflection context of the standard standard guards, bottom guards, standard and assumes no tire deflection context of the standard standa	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14. 5 cu. yd.) general-purpose dard tires, full fuel tank, a traight Tip 0 k 0. 8 0. 8 0. 8 0. 8 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 0 k 4 k 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 0 k 19 317 kg (42,587 lb.) 19 4 10 10 10 10 10 10 10 10 10 10 10 10 10	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng. -kg (175 lb.) operator. This ini 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* big (0 lb.) 3 kg (- 183 lb.) 4 kg (- 163 lb.) g (0 lb.) kg (+ 17 lb.) kg (+ 17 lb.) 6 kg (+ 167 lb.) 02 kg (- 224 lb.) 83 kg (+ 404 lb.)
Loader Clearance Circle, Bucket Carry Position Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, pecifications with Hi-Vis Quick-Coupler and look-on Construction Fork Tine Length A Overall Length ipping Load, Straight (fork level, load centered and positioned at 50% tine length) ipping Load, 40-deg. Full Turn (fork level, load entered and positioned at 50% tine length) Operating Weight Loader operating information is based on mace ROPS cab, rear cast bumper/counterweight, tr mation is affected by changes in tires, ballast, With logging tires and rims, and optional fores djustments to Operating Weights and ipping Loads with Buckets djustments to operating weights and tipping lo deg, ROPS cab, rear cast bumper/counterweight and (+) or deduct (−) kg (lb.) as indicated for baders with 3-piece rims and John Deere PowerTech Plus 6090H John Deere PowerTech Plus 6090H Michelin 23.5 R 25, 1 Star L-3 Goodyear 23.5 R 25, 1 Star L-3 Bridgestone 23.5 R 25, 1 Star L-3 Titan 23.5 R 25, 1 Star L-3 Titan 23.5 R 25, 0 PR L-3	12.93 m (42 ft. 5 in.) 19 562 kg (43,127 lb.) chine with identified linkage ansmission side-frame gua and different attachments 1.52 m (60 in.) 8.89 m (29 ft. 2 in.) 10 995 kg (24,239 lb.) 9485 kg (20,910 lb.) 19 091 kg (42,088 lb.) chine with identified linkage and different attachments, try counterweight package <b>Z-BAR / HIGH-LIFT</b> oads are based on <b>Z-bar ma</b> t, transmission side-frame <i>Operating Weight</i> 0 kg (0 lb.) – 111 kg (– 245 lb.) – 105 kg (– 232 lb.) 0 kg (0 lb.) + 12 kg (+ 26 lb.) + 12 kg (+ 26 lb.) + 116 kg (– 245 lb.) – 156 kg (– 343 lb.) + 266 kg (+ 587 lb.) + 622 kg (+ 1,371 lb.)	rds, bottom guards, standard , and assumes no tire deflection 1.83 m (72 in.) 9.19 m (30 ft. 2 in.) 10 434 kg (23,004 lb.) 8992 kg (19,824 lb.) 19 151 kg (42,220 lb.) e and standard equipment, Pords, bottom guards, standard and assumes no tire deflection context of the standard standard standard standard equipment, Pords, bottom guards, standard and assumes no tire deflection context of the standard stand	19 788 kg (43,625 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14 1.52 m (60 in.) 9.35 m (30 ft. 8 in.) 9521 kg (20,991 lb.) 8176 kg (18,025 lb.) 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) werTech PVX 6090 (EPA In tires, full fuel tank, and 79 on per the standard ISO 14. 5 cu. yd.) general-purpose dard tires, full fuel tank, a traight Tip 0 k 0. 8 0. 8 0. 8 0. 8 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 0 k 4 k 19 317 kg (42,587 lb.) 19 317 kg (42,587 lb.) 0 k 19 317 kg (42,587 lb.) 19 4 10 10 10 10 10 10 10 10 10 10 10 10 10	P-kg (175 lb.) operator. This in 397-1 section 5. 1.83 m (72 in.) 9.65 m (31 ft. 8 in.) 9069 kg (19,994 lb.) 7778 kg (17,148 lb.) 19,377 kg (42,719 lb.) rerim Tier 4/EU Stage IIIB) eng -kg (175 lb.) operator. This in 397-1 section 5. bucket with bolt-on cutting ind 79-kg (175 lb.) operator* bing Load, 40-deg. Full Turn S g (0 lb.) 3 kg (– 183 lb.) 4 kg (– 163 lb.) g (0 lb.) kg (+ 177 lb.) kg (+ 177 lb.) 6 kg (+ 167 lb.) 02 kg (– 224 lb.)

#### 724K Z-BAR / HIGH-LIFT



Cinders (coal, ashes, clinkers) 673 1,134 1602 2,700 Clay and gravel, dry 2,943 1746 Clay, compact, solid Clay, dry in lump loose 1,701 1009 Clay, excavated in water 1282 2.160 1.458 Coal, anthracite, broken, loose 865 Coal, bituminous, moderately wet 801 1.350 Earth, common loam, dry 1218 2,052 Earth, mud, packed 1843 3,105 Granite, broken 1538 2,592 Gypsum 2275 3,834 Limestone, coarse, sized 1570 2,646 Limestone, mixed sizes 1682 2,835 Limestone, pulverized or crushed 1362 2,295 3,510 Sand, damp 2083 Sand, dry Sand, voids, full of water 1762 2,970 3,510 2083 2,214 Sandstone, quarried 1314 2,295 Shale, broken crushed 1362 Slag, furnace granulated 1955 3,294 Stone or gravel, 37.5 to 87.5-mm 2.430 (1.5 to 3.5") size 1447 Stone or gravel, 18.75-mm (3/4") size 1602 2,700

kg/m³ lb./cu. yd.

486

288

LOOSE MATERIALS

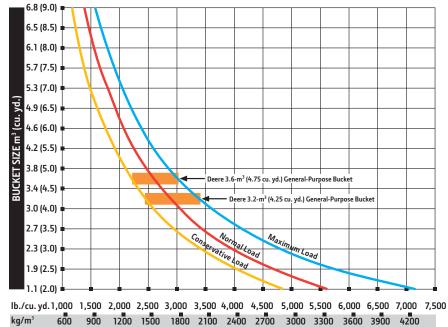
Chips, pulpwood

\* This guide, representing bucket sizes not necessarily manufactured by Derer, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

LOOSE MATERIALS	kg/m³ lb	./cu. yd
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,70
Clay, excavated in water	1282	2,16
Coal, anthracite, broken, loose	865	1,45
Coal, bituminous, moderately wet	801	1,35
Earth, common loam, dry	1218	2,05
Earth, mud, packed	1843	3,10
Granite, broken	1538	2,59
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,64
Limestone, mixed sizes	1682	2,83
Limestone, pulverized or crushed	1362	2,29
Sand, damp	2083	3,510
Sand, dry	1762	2,97
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,29
Slag, furnace granulated	1955	3,29
Stone or gravel, 37.5 to 87.5-mm		
(1.5 to 3.5") size	1442	2,43
Stone or gravel, 18.75-mm (3/4") si	ze 1602	2,70

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.





724K HIGH-LIFT LOADER WITH PIN-ON BUCKET

### 744K

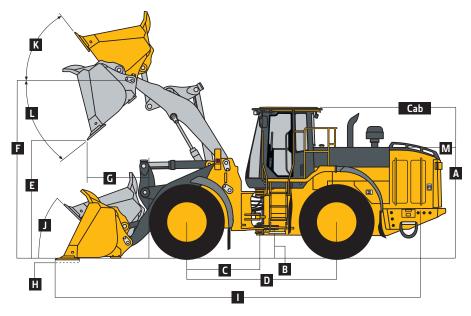
Engine	744K Z-BAR / HIGH-LIFT					
Manufacturer and Model	John Deere PowerTech <sup>™</sup> PSX 6	090 John Deere Pow	erTech™ Plus 6090H	John Dee	ere PowerTech™ 6090H	
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage II	IB EPA Tier 3/EU S	tage IIIA	EPA Tier	2/EU Stage II	
Cylinders	6	6	5	6	2	
Valves per Cylinder	4 4 4		4			
Displacement	9.0 L (548 cu. in.) 9.0 L (548 cu. in.)		9.0 L (54	8 cu. in.)		
Net Peak Power at 1,500 rpm (ISO 9249)	227 kW (304 hp)	•	227 kW (304 hp)		227 kW (304 hp)	
Net Peak Torque at 1,400 rpm (ISO 9249)	1456 Nm (1,074 lbft.)	1456 Nm (1,07	•		(1,074 lbft.)	
Net Torque Rise			47%			
Fuel System (electronically controlled)				ssure common rail		
Lubrication	Full-flow spin-on filter and	Full-flow spin-c			spin-on filter and	
Labrication	integral cooler	integral cooler		integral o		
Aspiration	Series turbocharged, charge a		charge air cooled		arged, charge air cooled	
	cooled	,			J.,	
Air Cleaner	Under-hood, dual-element dr	y Under-hood, di	ual-element dry	Under-ho	ood, dual-element dry	
	type, restriction indicator in c		n indicator in cab		triction indicator in cab	
	monitor for service	monitor for ser			for service	
Fan Drive	Hydraulically driven, proportior	nally Hydraulically dri	ven, proportionally	Hydraulic	ally driven, proportional	
	controlled, fan aft of coolers	controlled, fan			d, fan aft of coolers	
Electrical System	24 volt with 100-amp alternat	or 24 volt with 10	D-amp alternator	24 volt w	ith 100-amp alternator	
	(optional 130-amp alternator)		•			
Batteries (2 – 12 volt)	1,400 CCA (each)	1,400 CCA (eac	h)	1,400 CC	A (each)	
Transmission						
Туре	Countershaft-type PowerShift	t™				
Torque Converter	Single stage, dual phase with					
Shift Control	Electronically modulated, ada		dependent			
Operator Interface	Steering-column or joystick-m			·k-shift hut	ton on hydraulic lever	
Shift Modes	Manual/auto (1st–D or 2nd–E					
Sint Wodes	and 3 adjustable clutch-cutof		with 2 selectable in	oues. Nick	down of kick up/down	
	Standard 5-Speed with Locku		Optional 4-Spee	d		
Maximum Travel Speeds (with 26.5 R 25, 1 Star radial tires)	,	verse	Forward		Reverse	
Gear 1		4 km/h (4.6 mph)	6.6 km/h (4.1 mp		6.6 km/h (4.1 mph)	
Gear 2		.3 km/h (8.9 mph)			13.8 km/h (8.6 mph)	
			13.8 km/h (8.6 m			
Gear 3		.3 km/h (20.1 mph)	20.8 km/h (12.9		29.9 km/h (18.6 mph)	
Gear 4	32.2 km/h (20.0 mph) N/		40.0 km/h (24.9		N/A	
Gear 5	40.0 km/h (24.9 mph) N/		N/A		N/A	
Transmission Clutch Disconnect	3 selectable settings on the s	witch pad				
Axles/Brakes						
Final Drives	Heavy-duty inboard-mounted					
Differentials	Hydraulic locking front with c	onventional rear – sta	indard; dual locking	j front and	rear – optional	
Rear Axle Oscillation, Stop to Stop (with 26.5 R 25,	26 deg.					
1 Star tires)						
Brakes (conform to ISO 3450)						
Service Brakes	Hydraulically actuated, inboar			justing, sin	igle disc	
Parking Brake	Automatic spring applied, hyc	Iraulically released, oi	l cooled, multi disc			
Tires/Wheels						
Choice of (with 5-piece rims)*	Tread Width	Width Over Tire	25	Change I	n Vertical Height	
26.5 R 25, 1 Star L3	2298 mm (90.5 in.)	3065 mm (120.	7 in.)	No chang		
26.5-25, 20 PR L3	2298 mm (90.5 in.)	3060 mm (120.			, (+ 1.1 in.)	
26.5-25, 20 PR L5 <sup>§</sup>	2298 mm (90.5 in.)	3060 mm (120.			(+ 2.6 in.)	
*Based on Z-bar machine configuration; may change bas						
§Requires 8-deq. rear axle stops.		5	,			
Serviceability						
Refill Capacities	EPA Interim Tier 4/EU Stage II	IB EPA Tier 3/EU S	tage IIIA	EPA Tier	2/EU Stage II	
Fuel Tank (with ground-level fueling)	492 L (130 gal.)	469 L (124 gal.		469 L (12		
Cooling System	50.3 L (53.2 qt.)	44.8 L (47.3 qt		44.8 L (4		
	· · · · · · · · · · · · · · · · · · ·	34 L (36 qt.)	1	34 L (36		
		J+ L (JO UL)				
Engine Oil with Vertical Spin-On Filter	34 L (36 qt.)		1		0 E a+ 1	
Engine Oil with Vertical Spin-On Filter Transmission Fluid with Vertical Filter	27.9 L (29.5 qt.)	27.9 L (29.5 qt	.)	27.9 L (2		
Engine Oil with Vertical Spin-On Filter Transmission Fluid with Vertical Filter Axle Oil (front and rear, each)	27.9 L (29.5 qt.) 46 L (49 qt.)	46 L (49 qt.)	.)	46 L (49	qt.)	
Engine Oil with Vertical Spin-On Filter Transmission Fluid with Vertical Filter	27.9 L (29.5 qt.)		.)		qt.) 2 gal.)	

-P-P-X

## DEERE

Hydraulic System/Steering	744K Z-BAR / HIGH-LIFT			
Pump (loader and steering)	2 variable-displacement, load-sensir	ng axial-piston pumps; closed-center system		
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,250 rpm	515 L/m (136 gpm)			
System Relief Pressure (loader and steering)	22 670 kPa (3,288 psi)			
Loader Controls	2-function valve; single- or dual-leve valve with auxiliary levers	er controls; control lever lockout feature; optional 3rd- and 4th-function		
Steering (conforms to ISO 5010)	2			
Туре	Power, fully hydraulic			
Articulation Angle	80-deg. arc (40-deg. each direction)			
Hydraulic Cycle Times	Z-Bar	High-Lift		
Raise	≤ 6.8 sec.	≤ 6.8 sec.		
Dump	1.6 sec.	1.6 sec.		
Lower (float down)	2.8 sec.	2.8 sec.		
Total	11.2 sec.	11.2 sec.		
Turning Radius (measured to centerline of outside tire)	6.28 m (20 ft. 7 in.)			
Dimensions with Standard Configuration	Z-BAR	HIGH-LIFT		
	4.0-m³ (5.25 cu. yd.) pin-on bucket	4.0-m³ (5.25 cu. yd.) pin-on bucket		
A Height to Top of Cab and Canopy	3.50 m (11 ft. 6 in.)	3.50 m (11 ft. 6 in.)		
B Ground Clearance	462 mm (18.2 in.)	462 mm (18.2 in.)		
C Length from Centerline to Front Axle	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)		
D Wheelbase	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)		
E Dump Clearance	▲ (see page 30)	▲ (see page 30)		
F Height to Hinge Pin, Fully Raised	4.28 m (14 ft. 1 in.)	4.85 m (15 ft. 11 in.)		
G Dump Reach	▲▲ (see page 30)	▲▲ (see page 30)		
H Maximum Digging Depth	80 mm (3.2 in.)	214 mm (8.4 in.)		
I Overall Length	▲▲▲ (see page 30)	▲▲▲ (see page 30)		
J Maximum Rollback at Ground Level	39.5 deg.	40.6 deg.		
K Maximum Rollback, Boom Fully Raised	54.9 deg.	53.1 deg.		
L Maximum Bucket Angle, Fully Raised	49.4 deg.	39.2 deg.		
M Hood Height	2.65 m (8 ft. 8 in.)	2.65 m (8 ft. 8 in.)		

( )



744K Z-BAR AND HIGH-LIFT LOADERS

Dimensions with Pin-on Bucket	744K Z-BAR					HIGH-LIFT
	General-Purpose Bucket with Bolt-on Edge	Light-Material Bucket with Bolt-on Edge	General-Purpose Bucket with Teeth and Segments	Light-Material Bucket with Teeth and Segments	General-Purpose Bucket with JAGZ™	General-Purpose Bucket with Bolt-on Edge
Capacity, Heaped	4.0 m³	4.4 m³	4.0 m <sup>3</sup>	4.4 m <sup>3</sup>	4.0 m³	4.0 m³
	(5.25 cu. yd.)	(5.75 cu. yd.)	(5.25 cu. yd.)	(5.75 cu. yd.)	(5.25 cu. yd.)	(5.25 cu. yd.)
Capacity, Struck	3.4 m <sup>3</sup>	3.8 m <sup>3</sup>	3.4 m <sup>3</sup>	3.8 m <sup>3</sup>	3.4 m <sup>3</sup>	3.4 m <sup>3</sup>
	(4.5 cu. yd.)	(5.0 cu. yd.)	(4.5 cu. yd.)	(5.0 cu. yd.)	(4.5 cu. yd.)	(4.5 cu. yd.)
Bucket Weight	2517 kg	2595 kg	2643 kg	2721 kg	2540 kg	2517 kg
	(5,549 lb.)	(5,722 lb.)	(5,827 lb.)	(5,999 lb.)	(5,599 lb.)	(5,549 lb.)
Bucket Width	3.27 m	3.27 m	3.29 m	3.27 m	3.27 m	3.27 m
	(10 ft. 9 in.)	(10 ft. 9 in.)	(10 ft. 9 in.)	(10 ft. 9 in.)	(10 ft. 9 in.)	(10 ft. 9 in.)
Breakout Force	19 416 kg	18 276 kg	19 345 kg	18 190 kg	19 462 kg	17 433 kg
	(42,805 lb.)	(40,292 lb.)	(42,648 lb.)	(40,102 lb.)	(42,906 lb.)	(38,433 lb.)
Tipping Load, Straight	19 678 kg	19 482 kg	19 511 kg	19 312 kg	19 650 kg	15 559 kg
	(43,383 lb.)	(42,950 lb.)	(43,013 lb.)	(42,576 lb.)	(43,321 lb.)	(34,303 lb.)
Tipping Load, 37-deg. Partial Turn	17 327 kg	17 143 kg	17 159 kg	16 973 kg	17 299 kg	13 614 kg
	(38,199 lb.)	(37,793 lb.)	(37,829 lb.)	(37,419 lb.)	(38,137 lb.)	(30,013 lb.)
Tipping Load, 40-deg. Full Turn	16 946 kg	16 764 kg	16 778 kg	16 594 kg	16 918 kg	13 299 kg
	(37,360 lb.)	(36,958 lb.)	(36,990 lb.)	(36,584 lb.)	(37,298 lb.)	(29,319 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	1.85 m	1.88 m	1.88 m	1.95 m	1.85 m	2.41 m
	(6 ft. 1 in.)	(6 ft. 2 in.)	(6 ft. 2 in.)	(6 ft. 5 in.)	(6 ft. 1 in.)	(7 ft. 11 in.)
▲▲ Reach, 45-deg. Dump, Full Height	1.23 m	1.29 m	1.30 m	1.42 m	1.23 m	1.38 m
	(4 ft. 0 in.)	(4 ft. 3 in.)	(4 ft. 3 in.)	(4 ft. 8 in.)	(4 ft. 0 in.)	(4 ft. 6 in.)
▲ Dump Clearance, 45 deg., Full Height	3.04 m	2.98 m	2.97 m	2.86 m	3.04 m	3.61 m
	(10 ft. 0 in.)	(9 ft. 9 in.)	(9 ft. 9 in.)	(9 ft. 5 in.)	(10 ft. 0 in.)	(11 ft. 10 in.)
▲▲▲ Overall Length, Bucket on Ground	9.01 m	9.09 m	9.11 m	9.27 m	9.00 m	9.64 m
	(29 ft. 7 in.)	(29 ft. 10 in.)	(29 ft. 11 in.)	(30 ft. 5 in.)	(29 ft. 6 in.)	(31 ft. 8 in.)
Loader Clearance Circle, Bucket Carry Position	14.01 m (46 ft. 0 in.)	14.07 m (46 ft. 2 in.)	14.12 m (46 ft. 4 in.)	14.18 m (46 ft. 6 in.)	14.01 m (46 ft. 0 in.)	14.59 m (47 ft. 10 in.)
Operating Weight	24 346 kg	24 425 kg	24 472 kg	24 551 kg	24 368 kg	24 897 kg
	(53,674 lb.)	(53,847 lb.)	(53,952 lb.)	(54,125 lb.)	(53,722 lb.)	(54,889 lb.)

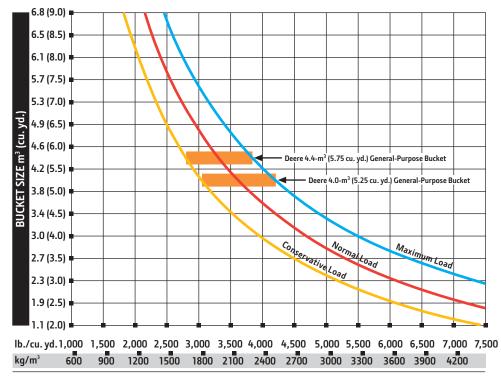
Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSX 6090 (EPA Interim Tier 4/EU Stage IIIB) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5. Adjustments to Operating Weights and Z-BAR / HIGH-LIFT

Tipping Loads with Buckets

Adjustments to operating weights and tipping loads are based on Z-bar machine and pin-on 4.0-m<sup>3</sup> (5.25 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 Operating Weight Tipping Loader, Straight Tipping Load, 37-deg. Tipping Load, 40-deg. Full loaders with 5-piece rims and Partial Turn SAE Turn SAE John Deere PowerTech PSX 6090 0 kg (0 lb.) 0 kg (0 lb.) 0 kg (0 lb.) 0 kg (0 lb.) + 65 kg (+ 143 lb.) + 316 kg (+ 697 lb.) + 377 kg (+ 831 lb.) + 299 kg (+ 659 lb.) John Deere PowerTech Plus 6090H + 59 kg (+ 130 lb.) + 367 kg (+ 809 lb.) + 307 kg (+ 677 lb.) + 290 kg (+ 639 lb.) John Deere PowerTech 6090H Michelin 26.5 R 25, 2 Star L-3 0 kg (0 lb.) 0 kg (0 lb.) 0 kg (0 lb.) 0 kg (0 lb.) Titan 26.5 R 25, 1 Star L-3 0 kg (0 lb.) 0 kg (0 lb.) 0 kg (0 lb.) 0 kg (0 lb.) – 36 kg (– 79 lb.) – 35 kg (– 77 lb.) Goodyear 26.5 R 25, 1 Star L-3 – 56 kg (– 123 lb.) – 40 kg (– 88 lb.) Firestone 26.5-25, 20-Ply L-3 – 360 kg (– 794 lb.) – 230 kg (– 507 lb.) – 226 kg (– 498 lb.) – 256 kg (– 565 lb.) + 312 kg (+ 688 lb.) + 222 kg (+ 490 lb.) + 199 kg (+ 440 lb.) + 196 kg (+ 432 lb.) Firestone 26.5-25, 20-Ply L-5§ \*May change based on vehicle configuration, weight, or tire-pressure adjustments.

<sup>§</sup>Requires 8-deg. rear axle stops.

744K Z-BAR / HIGH-LIFT



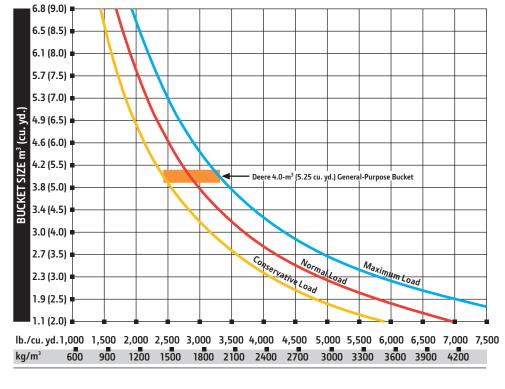
#### LOOSE MATERIALS kg/m³ lb./cu. yd. 288 Chips, pulpwood 486 Cinders (coal, ashes, clinkers) 673 1,134 Clay and gravel, dry 1602 2,700 2,943 Clay, compact, solid 1746 Clay, dry in lump loose 1009 1,701 1282 Clay, excavated in water 2,160 Coal, anthracite, broken, loose 865 1,458 Coal, bituminous, moderately wet 801 1,350 Earth, common loam, dry 1218 2,052 3,105 Earth, mud, packed 1843 1538 2,592 Granite, broken Gypsum 2275 3,834 Limestone, coarse, sized 1570 2,646 Limestone, mixed sizes 1682 2,835 2,295 Limestone, pulverized or crushed 1362 Sand, damp 2083 3,510 Sand, dry 1762 2,970 3,510 Sand, voids, full of water 2083 Sandstone, quarried 1314 2,214 Shale, broken crushed 1362 2,295 Slag, furnace granulated 1955 3,294 Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5") size 1442 2,430 Stone or gravel, 18.75-mm (3/4") size 1602 2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

LOOSE MATERIALS	kg∕m³ lb	./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm		
(1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") si	ze 1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

#### 744K Z-BAR LOADER WITH PIN-ON BUCKET



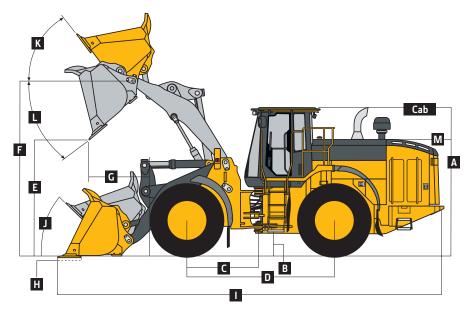
744K HIGH-LIFT LOADER WITH PIN-ON BUCKET



Engine	824K Z-BAR / HIGH-LIFT						
Manufacturer and Model	John Deere PowerTech <sup>™</sup> PSX (	6135 Joh 613		erTech™ Plus	John De	eere PowerTech™ 6135H	
Non-Road Emissions Standard	EPA Interim Tier 4/EU Stage	IIIB EPA	Tier 3/EU St	age IIIA	EPA Tie	r 2/EU Stage II	
Cylinders	6	6		5	6	5	
Valves Per Cylinder	4	4	4		4		
Displacement	13.5 L (824 cu. in.)	13.	13.5 L (824 cu. in.)		13.5 L (	824 cu. in.)	
Net Peak Power at 1,600 rpm (ISO 9249)	248 kW (333 hp)					/ (333 hp)	
Net Peak Torque at 900 rpm (ISO 9249)	1619 Nm (1,194 lbft.)				m (1,194 lbft.)		
Net Torque Rise	55%			55%			
Fuel System	Mechanically actuated electr unit injectors		chanically act injectors	tuated electronic		Mechanically actuated electronic unit injectors	
Lubrication	Full-flow spin-on filter and integral cooler	Full	-flow spin-or	n filter and		w spin-on filter and	
Aspiration	Series turbocharged, charge cooled			harge air cooled		harged, charge air cooled	
Air Cleaner	Dual-element dry type, restriction indicator in cab monitor for se			y type, restriction nonitor for service		ement dry type, restriction or in cab monitor for service	
Fan Drive	Hydraulically driven, proport ally controlled, fan aft of coc	ion- Hyd	raulically dri	ven, proportion- an aft of coolers	Hydrau	lically driven, proportion- trolled, fan aft of coolers	
Electrical System	24 volt with 100-amp alternation (optional 130-amp alternational 1	ator 24 v		-amp alternator		with 100-amp alternator	
Batteries (2 – 12 volt)	1,400 CCA (each)		00 CCA (each	)	1,400 0	CCA (each)	
Transmission			1				
Туре	Countershaft-type PowerShi	ft™					
Torque Converter	Single stage, dual phase with		ing stator				
Shift Control	Electronically modulated, ad			dependent			
Operator Interface	Steering-column or joystick-				k-shift b	utton on hvdraulic lever	
Shift Modes	Manual/auto (1st-4th or 2nd and 3 clutch-cutoff settings	l–4th); quic adjustable	k-shift buttoi on switch pa	n with 2 selectable d	modes: k		
	Standard 5-Speed with Lock		Lonverter	Optional 4-Spee	d		
Maximum Travel Speeds (with 26.5 R 25, 1 Star L3 tires)		everse	2 13	Forward	1.5	Reverse	
Gear 1		.3 km/h (5.)		7.4 km/h (4.6 mp		7.4 km/h (4.6 mph)	
Gear 2 Gear 3		4.0 km/h (8 3.9 km/h (2		13.8 km/h (8.6 m		13.8 km/h (8.6 mph)	
Gear 4		5.9 kiii/ii (2  /A		21.0 km/h (13.1		30.1 km/h (18.7 mph) N/A	
Gear 5		/A /A		40.0 km/h (24.9	mpn)	N/A N/A	
	40.0 km/h (24.9 mph) N	/A		N/A		IN/A	
Axles/Brakes							
Final Drives	Heavy-duty inboard planetar		1 .	1 1 1 11 1.	с.	1	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25,	Heavy-duty inboard planetar Hydraulic locking front with 26 deg.		al rear – star	ndard; dual locking	front an	d rear – optional	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires)	Hydraulic locking front with		al rear – star	ndard; dual locking	front an	ıd rear – optional	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires)	Hydraulic locking front with 26 deg.	convention					
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa	convention ard, sun-ge	ar mounted,	pressure oil cooled			
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake	Hydraulic locking front with 26 deg.	convention ard, sun-ge	ar mounted,	pressure oil cooled			
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b>	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy	convention ard, sun-ge draulically	ar mounted, released, oil	pressure oil coolec cooled, multi disc	d, self-ad	justing, single disc	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)*	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy Tread Width	ard, sun-ge rdraulically Wic	ar mounted, released, oil Ith Over Tire:	pressure oil coolec cooled, multi disc s	d, self-ad	justing, single disc In Vertical Height	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake Tires/Wheels Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.)	ard, sun-ge rdraulically <i>Wic</i> 306	ar mounted, released, oil <i>Ith Over Tire</i> 5 mm (120.7	pressure oil coolea cooled, multi disc s ' in.)	d, self-ad <i>Change</i> No chai	justing, single disc In Vertical Height nge	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-5, 20 Ply <sup>§</sup>	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.)	ard, sun-ge ard, sun-ge (draulically <i>Wic</i> 306 306	ar mounted, released, oil <i>Ith Over Tire</i> : 5 mm (120.7 0 mm (120.5	pressure oil coolec cooled, multi disc s ' in.) 5 in.)	d, self-ad <i>Change</i> No chai + 31 mr	justing, single disc In Vertical Height nge m (+ 1.2 in.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-5, 20 Ply <sup>§</sup> 26.5-25, 20 PR L-3	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.)	ard, sun-ge rdraulically <i>Wic</i> 306 306 306	ar mounted, released, oil <i>th Over Tire</i> : 5 mm (120.7 0 mm (120.5 0 mm (120.5	pressure oil coolec cooled, multi disc s ' in.) 5 in.) 5 in.)	d, self-ad <i>Change</i> No chan + 31 mr + 67 mr	justing, single disc e In Vertical Height nge m (+ 1.2 in.) m (+ 2.6 in.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-5, 20 Ply <sup>§</sup> 26.5-25, 20 PR L-3 29.5 R 25, 1 Star L-3	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.)	ard, sun-ge rdraulically <i>Wic</i> 306 306 306 305	ar mounted, released, oil <i>th Over Tire</i> : 5 mm (120.7 0 mm (120.5 0 mm (120.2 2 mm (120.2	pressure oil coolec cooled, multi disc s 7 in.) 5 in.) 5 in.) 2 in.)	d, self-ad <i>Change</i> No chan + 31 mr + 67 mr	justing, single disc In Vertical Height nge m (+ 1.2 in.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-5, 20 Ply <sup>§</sup> 26.5-25, 20 PR L-3 29.5 R 25, 1 Star L-3 *Based on Z-bar machine configuration; may change bas §Requires 8-deg. rear axle stops.	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.)	ard, sun-ge rdraulically <i>Wic</i> 306 306 306 305	ar mounted, released, oil <i>th Over Tire</i> : 5 mm (120.7 0 mm (120.5 0 mm (120.2 2 mm (120.2	pressure oil coolec cooled, multi disc s 7 in.) 5 in.) 5 in.) 2 in.)	d, self-ad <i>Change</i> No chan + 31 mr + 67 mr	justing, single disc e In Vertical Height nge m (+ 1.2 in.) m (+ 2.6 in.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-5, 20 Ply <sup>§</sup> 26.5-25, 20 PR L-3 29.5 R 25, 1 Star L-3 *Based on Z-bar machine configuration; may change bas §Requires 8-deg. rear axle stops. Serviceability	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 3298 mm (90.5 in.) 3298 mm (90.5 in.)	ard, sun-ge vdraulically Wice 306 306 305 veight, or ti	ar mounted, released, oil 5 mm (120.7 0 mm (120.5 0 mm (120.5 2 mm (120.2 re-pressure o	pressure oil cooled cooled, multi disc s 7 in.) 5 in.) 2 in.) 2 in.) ndjustments.	d, self-ad Change No chai + 31 mr + 67 mr + 72 mr	justing, single disc e In Vertical Height nge m (+ 1.2 in.) m (+ 2.6 in.) m (+ 2.8 in.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-5, 20 Ply <sup>§</sup> 26.5-25, 20 PR L-3 29.5 R 25, 1 Star L-3 *Based on Z-bar machine configuration; may change bas §Requires 8-deg. rear axle stops. Serviceability Refill Capacities	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 3298 mm (90.5 in.)	ard, sun-ge vdraulically Wice 306 306 305 veight, or ti	ar mounted, released, oil 5 mm (120.7 0 mm (120.5 0 mm (120.2 2 mm (120.2 re-pressure o	pressure oil cooled cooled, multi disc s 7 in.) 5 in.) 2 in.) 2 in.) adjustments.	d, self-ad Change No chai + 31 mr + 67 mr + 72 mr EPA Tie	justing, single disc e In Vertical Height nge m (+ 1.2 in.) m (+ 2.6 in.) m (+ 2.8 in.) r 2/EU Stage II	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-3, 20 Ply <sup>§</sup> 26.5-25, 20 PR L-3 29.5 R 25, 1 Star L-3 *Based on Z-bar machine configuration; may change bas §Requires 8-deg. rear axle stops. Serviceability Refill Capacities Fuel Tank (with ground-level fueling)	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) sed on vehicle configuration, w EPA Interim Tier 4/EU Stage I 469.4 L (124 gal.)	ard, sun-ge rdraulically Wice 306 306 306 305 reight, or ti IIIB EPA 469	ar mounted, released, oil 5 mm (120.7 0 mm (120.5 2 mm (120.2 2 mm (120.2 re-pressure o Tier 3/EU St .4 L (124 gal	pressure oil cooled cooled, multi disc s i n.) i n.) i n.) djustments.	d, self-ad Change No chan + 31 mr + 67 mr + 67 mr + 72 mr EPA Tie 469.4 L	justing, single disc e In Vertical Height nge m (+ 1.2 in.) m (+ 2.6 in.) m (+ 2.8 in.) r 2/EU Stage II . (124 gal.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-3 26.5-25, 20 PR L-3 29.5 R 25, 1 Star L-3 *Based on Z-bar machine configuration; may change bas %Requires 8-deg. rear axle stops. Serviceability Refill Capacities Fuel Tank (with ground-level fueling) Cooling System	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) sed on vehicle configuration, w EPA Interim Tier 4/EU Stage I 469.4 L (124 gal.) 73.8 L (78 qt.)	ard, sun-ge vdraulically Wice 306 306 306 305 veight, or ti IIIB EPA 469 47.	ar mounted, released, oil 5 mm (120.5 0 mm (120.5 2 mm (120.2 2 mm (120.2 Tier 3/EU St .4 L (124 gal 4 L (50.1 qt.)	pressure oil cooled cooled, multi disc s i n.) i n.) i n.) djustments.	d, self-ad Change No chai + 31 mr + 67 mr + 67 mr + 72 mr EPA Tie 469.4 L 47.4 L (	justing, single disc e In Vertical Height nge m (+ 1.2 in.) m (+ 2.6 in.) m (+ 2.8 in.) r 2/EU Stage II . (124 gal.) 50.1 qt.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5 - 25, 1 Star L-3, 20 Ply <sup>§</sup> 26.5 - 25, 20 PR L-3 29.5 R 25, 1 Star L-3 *Based on Z-bar machine configuration; may change bas §Requires 8-deg. rear axle stops. <b>Serviceability</b> <b>Refill Capacities</b> Fuel Tank (with ground-level fueling) Cooling System Engine Oil with Vertical Spin-On Filter	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) sed on vehicle configuration, w EPA Interim Tier 4/EU Stage I 469.4 L (124 gal.) 73.8 L (78 qt.) 40 L (40 qt.)	ard, sun-ge draulically Wice 306 306 306 305 veight, or ti IIIB EPA 469 47. 36 I	ar mounted, released, oil 5 mm (120.7 0 mm (120.5 2 mm (120.2 2 mm (120.2 re-pressure o Tier 3/EU St .4 L (124 gal 4 L (50.1 qt.) . (38 qt.)	pressure oil cooled cooled, multi disc s i n.) i in.) 2 in.) 2 in.) adjustments.	d, self-ad <i>Change</i> No chai + 31 mi + 67 mi + 67 mi + 72 mi EPA Tie 469.4 L 47.4 L ( 36 L (38	justing, single disc e In Vertical Height nge m (+ 1.2 in.) m (+ 2.6 in.) m (+ 2.8 in.) r 2/EU Stage II . (124 gal.) 50.1 qt.) 8 qt.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-3, 20 Ply <sup>§</sup> 26.5-25, 20 PR L-3 29.5 R 25, 1 Star L-3 *Based on Z-bar machine configuration; may change bas *Bequires 8-deg. rear axle stops. Serviceability Refill Capacities Fuel Tank (with ground-level fueling) Cooling System Engine Oil with Vertical Spin-On Filter Transmission Fluid with Vertical Filter	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) sed on vehicle configuration, w EPA Interim Tier 4/EU Stage I 469.4 L (124 gal.) 73.8 L (78 qt.) 40 L (40 qt.) 27.9 L (29.5 qt.)	ard, sun-ge draulically Wice 306 306 306 306 106 409 47. 36 1 27.5	ar mounted, released, oil 5 mm (120.7 0 mm (120.5 2 mm (120.2 2 mm (120.2 re-pressure o Tier 3/EU St .4 L (124 gal 4 L (50.1 qt.) . (38 qt.) 9 L (29.5 qt.)	pressure oil cooled cooled, multi disc s 7 in.) i in.) 2 in.) 2 in.) adjustments.	d, self-ad <i>Change</i> No chai + 31 mr + 67 mr + 72 mr EPA Tie 469.4 L 47.4 L ( 36 L (38 27.9 L (	justing, single disc <i>In Vertical Height</i> nge m (+ 1.2 in.) m (+ 2.6 in.) m (+ 2.8 in.) r 2/EU Stage II . (124 gal.) 50.1 qt.) 8 qt.) 29.5 qt.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-3 26.5-25, 20 PR L-3 29.5 R 25, 1 Star L-3 *Based on Z-bar machine configuration; may change bas \$Requires 8-deg. rear axle stops. Serviceability Refill Capacities Fuel Tank (with ground-level fueling) Cooling System Engine Oil with Vertical Spin-On Filter Transmission Fluid with Vertical Filter Axle Oil (front and rear, each)	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 3298 mm (90.5 in.	ard, sun-ge draulically <i>Wic</i> 306 306 306 <i>weight, or ti</i> IIIB EPA 469 47.4 36 I 27.1	ar mounted, released, oil 5 mm (120.7 0 mm (120.5 0 mm (120.2 2 mm (120.2 2 mm (120.2 re-pressure o Lier 3/EU St .4 L (124 gal 4 L (50.1 qt.) . (38 qt.) 9 L (29.5 qt.)	pressure oil cooled cooled, multi disc s 7 in.) i in.) 2 in.) 2 in.) adjustments.	d, self-ad Change No chai + 31 mr + 67 mr + 72 mr EPA Tie 469.4 L 47.4 L ( 36 L (38 27.9 L ( 27.9 L (	justing, single disc <i>In Vertical Height</i> nge m (+ 1.2 in.) m (+ 2.6 in.) m (+ 2.8 in.) r 2/EU Stage II .(124 gal.) 50.1 qt.) 8 qt.) 29.5 qt.) 29.5 qt.)	
Final Drives Differentials Rear Axle Oscillation, Stop to Stop (with 26.5 R 25, 1 Star L3 tires) Brakes (conform to ISO 3450) Service Brakes Parking Brake <b>Tires/Wheels</b> Choice of (with 5-piece rims)* 26.5 R 25, 1 Star L-3 26.5-25, 1 Star L-5, 20 Ply <sup>§</sup> 26.5-25, 20 PR L-3 29.5 R 25, 1 Star L-3 *Based on Z-bar machine configuration; may change bas §Requires 8-deg. rear axle stops. Serviceability Refill Capacities Fuel Tank (with ground-level fueling) Cooling System Engine Oil with Vertical Spin-On Filter Transmission Fluid with Vertical Filter	Hydraulic locking front with 26 deg. Hydraulically actuated, inboa Automatic spring applied, hy <i>Tread Width</i> 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) 2298 mm (90.5 in.) sed on vehicle configuration, w EPA Interim Tier 4/EU Stage I 469.4 L (124 gal.) 73.8 L (78 qt.) 40 L (40 qt.) 27.9 L (29.5 qt.)	ard, sun-ge draulically <i>Wic</i> 306 306 306 <i>weight, or ti</i> IIIB EPA 469 47.4 36 I 27.1	ar mounted, released, oil 5 mm (120.7 0 mm (120.5 2 mm (120.2 2 mm (120.2 re-pressure o Tier 3/EU St .4 L (124 gal 4 L (50.1 qt.) . (38 qt.) 9 L (29.5 qt.)	pressure oil cooled cooled, multi disc s 7 in.) i in.) 2 in.) 2 in.) adjustments.	d, self-ad <i>Change</i> No chai + 31 mr + 67 mr + 72 mr EPA Tie 469.4 L 47.4 L ( 36 L (38 27.9 L (	justing, single disc <i>In Vertical Height</i> nge m (+ 1.2 in.) m (+ 2.6 in.) m (+ 2.8 in.) r 2/EU Stage II . (124 gal.) 50.1 qt.) 8 qt.) 29.5 qt.) 29.5 qt.)	



824K Z-BAR / HIGH-LIFT				
2 variable-displacement, load-sensir	ng, axial-piston pumps; closed-center system			
513 L/m (136 gpm)				
25 166 kPa (3,650 psi)				
2-function valve; single- or dual-lever controls; control lever lockout feature; optional 3rd- and 4th valve with auxiliary lever				
2				
Power, fully hydraulic				
80-deg. arc (40-deg. each direction)				
Z-Bar	High-Lift			
5.9 sec.	6.0 sec.			
1.3 sec.	1.3 sec.			
2.5 sec.	2.6 sec.			
9.7 sec.	9.9 sec.			
5.92 m (19 ft. 5 in.)				
Z-BAR	HIGH-LIFT			
4.6-m³ (6.0 cu. yd.) pin-on bucket	4.6-m³ (6.0 cu. yd.) pin-on bucket			
3.55 m (11 ft. 8 in.)	3.55 m (11 ft. 8 in.)			
462 mm (18.2 in.)	462 mm (18.2 in.)			
1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)			
1.70 m (5 ft. 7 in.) 3.46 m (11 ft. 4 in.)				
· · · · · ·	1.70 m (5 ft. 7 in.)			
3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.48 m (14 ft. 9 in.)	1.70 m (5 ft. 7 in.) 3.46 m (11 ft. 4 in.)			
3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.48 m (14 ft. 9 in.) ▲▲ (see page 34)	1.70 m (5 ft. 7 in.) 3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.85 m (15 ft. 11 in.) ▲ (see page 34)			
3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.48 m (14 ft. 9 in.)	1.70 m (5 ft. 7 in.) 3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.85 m (15 ft. 11 in.)			
3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.48 m (14 ft. 9 in.) ▲▲ (see page 34) 115 mm (4.5 in.) ▲▲ (see page 34)	1.70 m (5 ft. 7 in.) 3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.85 m (15 ft. 11 in.) ▲▲ (see page 34) 196 mm (7.7 in.) ▲▲ (see page 34)			
3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.48 m (14 ft. 9 in.) ▲▲ (see page 34) 115 mm (4.5 in.) ▲▲▲ (see page 34) 45.5 deg.	1.70 m (5 ft. 7 in.) 3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.85 m (15 ft. 11 in.) ▲▲ (see page 34) 196 mm (7.7 in.) ▲▲ (see page 34) 45.5 deg.			
3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.48 m (14 ft. 9 in.) ▲▲ (see page 34) 115 mm (4.5 in.) ▲▲▲ (see page 34) 45.5 deg. 52.0 deg.	1.70 m (5 ft. 7 in.) 3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.85 m (15 ft. 11 in.) ▲▲ (see page 34) 196 mm (7.7 in.) ▲▲ (see page 34) 45.5 deg. 53.0 deg.			
3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.48 m (14 ft. 9 in.) ▲▲ (see page 34) 115 mm (4.5 in.) ▲▲▲ (see page 34) 45.5 deg.	1.70 m (5 ft. 7 in.) 3.46 m (11 ft. 4 in.) ▲ (see page 34) 4.85 m (15 ft. 11 in.) ▲▲ (see page 34) 196 mm (7.7 in.) ▲▲▲ (see page 34) 45.5 deg.			
	2 variable-displacement, load-sensi 513 L/m (136 gpm) 25 166 kPa (3,650 psi) 2-function valve; single- or dual-lev valve with auxiliary lever Power, fully hydraulic 80-deg. arc (40-deg. each direction <b>Z-Bar</b> 5.9 sec. 1.3 sec. 2.5 sec. 9.7 sec. 5.92 m (19 ft. 5 in.) <b>Z-BAR</b> 4.6-m <sup>3</sup> (6.0 cu. yd.) pin-on bucket 3.55 m (11 ft. 8 in.)			



824K Z-BAR AND HIGH-LIFT LOADERS

Dimensions with Pin-on Bucket	824K Z-BAR		HIGH-LIFT	
Bucket Type/Size	General-Purpose with	Light Material with	General-Purpose with	General-Purpose with
	Bolt-on Edge	Bolt-on Edge	Bolt-on Edge	Teeth and Segments
Capacity, Heaped	4.6 m³ (6.0 cu. yd.)	5.2 m³ (6.75 cu. yd.)	4.6 m³ (6.0 cu. yd.)	4.6 m³ (6.0 cu. yd.)
Capacity, Struck	4.0 m³ (5.3 cu. yd.)	4.4 m³ (5.8 cu. yd.)	4.0 m³ (5.25 cu. yd.)	4.0 m <sup>3</sup> (5.25 cu. yd.)
Bucket Weight	2788 kg (6,146 lb.)	2908 kg (6,411 lb.)	2788 kg (6,146 lb.)	2914 kg (6,423 lb.)
Bucket Width	3.27 m (10 ft. 9 in.)			
Breakout Force	18 718 kg (41,266 lb.)	17 310 kg (38,163 lb.)	17 534 kg (38,655 lb.)	17 437 kg (38,443 lb.)
Tipping Load, Straight	20 369 kg (44,907 lb.)	20 082 kg (44,274 lb.)	17 105 kg (37,711 lb.)	16 994 kg (37,465 lb.)
Tipping Load, 37-deg. Partial Turn	17 883 kg (39,425 lb.)	17 613 kg (38,830 lb.)	14 943 kg (32,944 lb.)	14 481 kg (31,926 lb.)
Tipping Load, 40-deg. Full Turn	17 481 kg (38,538 lb.)	17 213 kg (37,949 lb.)	14 593 kg (32,172 lb.)	14 527 kg (32,027 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	2.05 m (6 ft. 9 in.)	2.09 m (6 ft. 10 in.)	2.50 m (8 ft. 2 in.)	2.58 m (8 ft. 5 in.)
▲▲ Reach, Max. Dump, Full Height	1.28 m (4 ft. 2 in.)	1.36 m (4 ft. 6 in.)	1.63 m (5 ft. 4 in.)	1.77 m (5 ft. 10 in.)
▲ Dump Clearance, Max. Dump, Full Height	3.19 m (10 ft. 6 in.)	3.12 m (10 ft. 3 in.)	3.63 m (11 ft. 11 in.)	3.52 m (11 ft. 7 in.)
▲▲▲ Overall Length, Bucket on Ground	9.26 m (30 ft. 5 in.)	9.38 m (30 ft. 9 in.)	9.77 m (32 ft. 1 in.)	9.95 m (32 ft. 8 in.)
Loader Clearance Circle, Bucket Carry Position	14.14 m (46 ft. 5 in.)	14.20 m (46 ft. 7 in.)	14.68 m (48 ft. 2 in.)	14.81 m (48 ft. 7 in.)
Operating Weight	26 501 kg (58,425 lb.)	26 625 kg (58.698 lb.)	26 889 kg (59.279 lb.)	26 973 kg (59.465 lb.)

Operating Weight26 501 kg (58,425 lb.)26 625 kg (58,698 lb.)26 889 kg (59,279 lb.)26 973 kg (59,465 lb.)Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSX 6135 (EPA Interim Tier 4/EU Stage IIIB)<br/>engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator.<br/>This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.Adjustments to Operating Weights andZ-BAR / HIGH-LIFT

#### Tipping Loads with Buckets

Adjustments to operating weights and tipping loads are based on Z-bar machine and pin-on 4.6-m<sup>3</sup> (6.0 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\* Add (+) or deduct (-) kg (lb.) as indicated for Operating Weight Tipping Loader, Straight Tipping Load, 37-dea. Tipping Load, 40-dea.

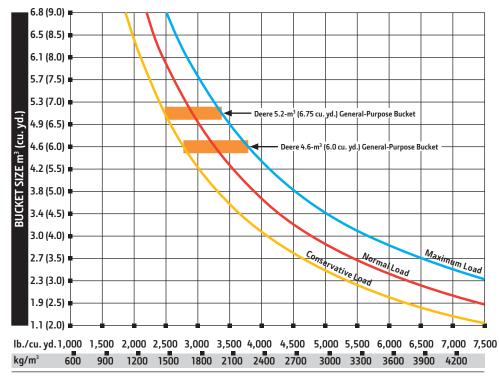
loaders with 5-piece rims and	Operating weight	npping Louder, Straight	Partial Turn SAE	Full Turn SAE
John Deere PowerTech PSX 6135	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
John Deere PowerTech Plus 6135H	+ 67 kg (+ 147 lb.)	+ 258 kg (+ 569 lb.)	+ 215 kg (+ 475 lb.)	+ 208 kg (+ 459 lb.)
John Deere PowerTech 6135H	+ 67 kg (+ 147 lb.)	+ 258 kg (+ 569 lb.)	+ 215 kg (+ 475 lb.)	+ 208 kg (+ 459 lb.)
Michelin 26.5 R 25, 2 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
Titan 26.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
Goodyear 26.5 R 25, 1 Star L-3	– 56 kg (– 123 lb.)	– 40 kg (– 88 lb.)	– 36 kg (– 79 lb.)	– 35 kg (– 77 lb.)
Firestone 26.5-25, 20-Ply L-3	– 360 kg (– 794 lb.)	– 256 kg (– 565 lb.)	– 230 kg (– 507 lb.)	– 226 kg (– 498 lb.)
Firestone 26.5-25, 20-Ply L-5 <sup>§</sup>	+ 312 kg (+ 688 lb.)	+ 222 kg (+ 490 lb.)	+ 199 kg (+ 440 lb.)	+ 196 kg (+ 432 lb.)
Michelin 29.5 R 25, 2 Star L-3	+ 604 kg (+ 1,332 lb.)	+ 430 kg (+ 949 lb.)	+ 386 kg (+ 851 lb.)	+ 379 kg (+ 836 lb.)
Titan 29.5 R 25, 1 Star L-3	+ 664 kg (+ 1,464 lb.)	+ 473 kg (+ 1,043 lb.)	+ 425 kg (+ 936 lb.)	+ 417 kg (+ 919 lb.)
Bridgestone 29.5 R 25, 1 Star L-3	+ 720 kg (+ 1,587 lb.)	+ 513 kg (+ 1,131 lb.)	+ 460 kg (+ 1,015 lb.)	+ 452 kg (+ 996 lb.)
*Parad on 7 has machine configuration, may	hange based on vehicle confi	ourotion waight or tire proc	cura adjuctments	

\*Based on Z-bar machine configuration; may change based on vehicle configuration, weight, or tire-pressure adjustments.

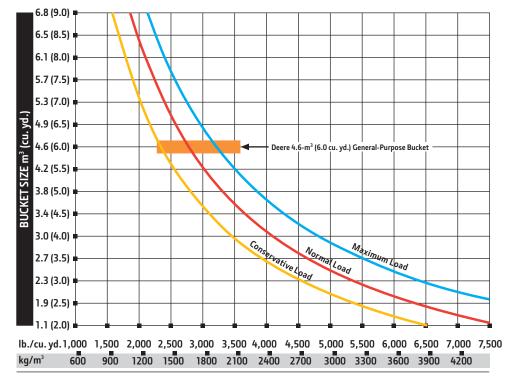
<sup>§</sup>Require 8-deg. rear axle stops.

#### Bucket Selection Guides\*

824K Z-BAR / HIGH-LIFT



#### 824K Z-BAR LOADER WITH PIN-ON BUCKET



824K HIGH-LIFT LOADER WITH PIN-ON BUCKET

LOOSE MATERIALS	kg/m³ lb	./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm		
(1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") si	ze 1602	2,700

\*This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

LOOSE MATERIALS	kg∕m³ lb	./cu.yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm		
(1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") si	ze 1602	2,700

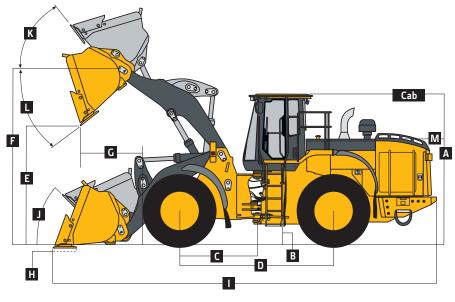
\* This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.



Engine Manufasturer and Model	844K-II Z-BAR	CV CLOF	John Doors D	arTach™ Dl	lah = D	are DowerTest Claru
Manufacturer and Model	John Deere PowerTech™ PSX 6135		John Deere PowerTech™ Plus 6135H		John Deere PowerTech™ 6135H	
Non-Road Emissions Standard	EPA Interim Tier 4/EU Sta	ge IIIB	EPA Tier 3/EU Stage IIIA		EPA Tie	r 2/EU Stage II
Cylinders	6		6		6	
Valves Per Cylinder	4		4		4	
Displacement	13.5 L (824 cu. in.)		13.5 L (824 cu. i	n.)	13.5 L (	824 cu. in.)
Net Peak Power at 1,600 rpm (ISO 9249)	283 kW (380 hp)		283 kW (380 hp		283 kW	(380 hp)
Net Peak Torque at 900 rpm (ISO 9249)	1793 Nm (1,323 lbft.)		1793 Nm (1,323	lbft.)	1793 N	m (1,323 lbft.)
Net Torque Rise	44%		44%	,	44%	
Fuel System	Mechanically actuated ele	ectronic	Mechanically act	uated electronic	Mechar	ically actuated electroni
	unit injectors		unit injectors		unit inje	
Lubrication	Full-flow spin-on filter an	d	Full-flow spin-or	n filter and	Full-flow	w spin-on filter and
Aspiration	integral cooler Series turbocharged, char	rge air	integral cooler Turbocharged, c	harge air cooled	integral Turboch	cooler harged, charge air cooled
Air Cleaner	cooled Dual-element dry type, res	-	-	-		
Air Cleaner	indicator in cab monitor fo			y type, restriction nonitor for service		ement dry type, restrictio r in cab monitor for servic
Fan Drive	Hydraulically driven, prop ally controlled, fan aft of		Hydraulically dri ally controlled, f			ically driven, proportion- trolled, fan aft of coolers
Electrical System	24 volt with 100-amp alte		24 volt with 100			with 100-amp alternator
Batteries (2 – 12 volt)	(130 amp optional) 1,400 CCA (each)		1,400 CCA (each		1,400 C	CA (each)
Transmission						
Туре	Countershaft-type Power	Shift™				
Torque Converter	Single stage, dual phase v		wheeling stator			
Shift Control	Electronically modulated,			lependent		
Operator Interface	Steering-column or joysti				-down bu	itton on hydraulic lever
Shift Modes	Manual/auto (1st-4th or 2					
	and 3 clutch-cutoff settin					· · · · · · · · · · · · ·
	Standard 5-Speed with Lo			Optional 4-Speed	d	
Maximum Travel Speeds (with 29.5 R 25, 1 Star L3 tires)	Forward	Reverse		Forward		Reverse
Gear 1	7.9 km/h (4.9 mph)	7.9 km/	'h (4.9 mph)	6.6 km/h (4.1 mp	oh)	6.6 km/h (4.1 mph)
Gear 2	13.5 km/h (8.4 mph)		1/h (8.1 mph)	12.2 km/h (7.6 m		12.2 km/h (7.6 mph)
Gear 3	20.9 km/h (13.0 mph)		1/h (19.1 mph)	18.8 km/h (11.7	1 1	27.3 km/h (17.0 mph)
Gear 4	30.7 km/h (19.1 mph)	N/A	40.5 km/h (25.2			N/A
Gear 5	40.0 km/h (24.9 mph)	N/A		N/A	1 '	N/A
Axles/Brakes						
Final Drives	Heavy-duty outboard plar	netary				
Differentials	Conventional front and re		dard; hydraulic lo	king front and rea	ar – optio	nal
Rear Axle Oscillation, Stop to Stop (with 29.5 R 25, 1 Star L3 tires)	26 deg.			5		
Brakes (conform to ISO 3450)						
		1 1.1				
			dicc			
Service Brakes	Outboard, forced oil cool			lad wat multi dicc		
Parking Brake	Outboard, forced oil coole Automatic spring applied,			led wet multi disc		
Parking Brake Tires/Wheels	Automatic spring applied,		cally released, sea		Chart	In Vertical Using
Parking Brake Tires/Wheels Choice of (with 5-piece rims)*	Automatic spring applied, Tread Width		cally released, sea Width Over Tires	;		In Vertical Height
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star	Automatic spring applied, Tread Width 2440 mm (96.1 in.)		cally released, sea Width Over Tires 3291 mm (129.6	; in.)	No char	nge
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3	Automatic spring applied, Tread Width 2440 mm (96.1 in.) 2440 mm (96.1 in.)		cally released, sea Width Over Tires 3291 mm (129.6 3190 mm (125.6	; in.) in.)	No char – 8 mm	nge (– 0.3 in.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5	Automatic spring applied, Tread Width 2440 mm (96.1 in.) 2440 mm (96.1 in.) 2440 mm (96.1 in.)		cally released, sea Width Over Tires 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6	; in.) in.) in.)	No char - 8 mm - 6 mm	nge (– 0.3 in.) (– 0.2 in.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.) 2440 mm (96.1 in.) 2440 mm (96.1 in.)		cally released, sea Width Over Tire: 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1	; in.) in.) in.) in.)	No char - 8 mm - 6 mm - 5 mm	nge (– 0.3 in.) (– 0.2 in.) (– 0.2 in.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.) 2440 mm (96.1 in.) 2440 mm (96.1 in.) 2440 mm (96.1 in.)		cally released, sea Width Over Tire: 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4	; in.) in.) in.) in.) in.)	No char - 8 mm - 6 mm - 5 mm - 2 mm	nge (– 0.3 in.) (– 0.2 in.) (– 0.2 in.) (– 0.1 in.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.)		cally released, sea Width Over Tire: 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2	; in.) in.) in.) in.) in.) in.)	No char - 8 mm - 6 mm - 5 mm - 2 mm + 31 mr	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star Michelin 29.5 R 25, L5, 1 Star	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.)	, hydraulio	cally released, sea Width Over Tires 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2 3202 mm (126.1	; in.) in.) in.) in.) in.) in.) in.)	No char - 8 mm - 6 mm - 5 mm - 2 mm + 31 mr	nge (– 0.3 in.) (– 0.2 in.) (– 0.2 in.) (– 0.1 in.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.)	, hydraulio	cally released, sea Width Over Tires 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2 3202 mm (126.1	; in.) in.) in.) in.) in.) in.) in.)	No char - 8 mm - 6 mm - 5 mm - 2 mm + 31 mr	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star Michelin 29.5 R 25, L5, 1 Star *Based on Z-bar machine configuration; may change bas Serviceability	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.)	, hydraulio	cally released, sea Width Over Tires 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2 3202 mm (126.1 or tire-pressure c	; in.) in.) in.) in.) in.) in.) in.) in.)	No char - 8 mm - 6 mm - 5 mm - 2 mm + 31 mr	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.) n (+ 1.2 in.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star Michelin 29.5 R 25, L5, 1 Star *Based on Z-bar machine configuration; may change bas	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.)	, hydraulii n, weight,	cally released, sea Width Over Tires 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2 3202 mm (126.1	; in.) in.) in.) in.) in.) in.) in.) in.)	No char – 8 mm – 6 mm – 5 mm – 2 mm + 31 mr + 31 mr	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.) n (+ 1.2 in.) r 2/EU Stage II
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star Michelin 29.5 R 25, L5, 1 Star *Based on Z-bar machine configuration; may change bas Serviceability	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.)	, hydraulii n, weight,	cally released, sea Width Over Tires 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2 3202 mm (126.1 or tire-pressure c	; in.) in.) in.) in.) in.) in.) in.) in.)	No char – 8 mm – 6 mm – 5 mm – 2 mm + 31 mr + 31 mr	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.) n (+ 1.2 in.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star Michelin 29.5 R 25, L5, 1 Star *Based on Z-bar machine configuration; may change bas Serviceability Refill Capacities	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.)	, hydraulii n, weight,	cally released, sea Width Over Tire: 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2 3202 mm (126.1 or tire-pressure of EPA Tier 3/EU St	; in.) in.) in.) in.) in.) in.) in.) in.)	No char – 8 mm – 6 mm – 5 mm – 2 mm + 31 mr + 31 mr EPA Tien 553 L (1)	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.) n (+ 1.2 in.) r 2/EU Stage II
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star Michelin 29.5 R 25, L5, 1 Star *Based on Z-bar machine configuration; may change bas Serviceability Refill Capacities Fuel Tank (with ground-level fueling)	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.)	, hydraulii n, weight,	cally released, sea Width Over Tire: 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2 3202 mm (126.1) or tire-pressure of EPA Tier 3/EU St 553 L (146 gal.)	; in.) in.) in.) in.) in.) in.) in.) in.)	No char – 8 mm – 6 mm – 5 mm – 2 mm + 31 mr + 31 mr EPA Tien 553 L (1)	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.) n (+ 1.2 in.) r 2/EU Stage II 46 gal.) 55.4 qt.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L-5 Bridgestone 29.5 R 25, 1 Star L3 Firestone 29.5-25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star Michelin 29.5 R 25, L5, 1 Star *Based on Z-bar machine configuration; may change bas Serviceability Refill Capacities Fuel Tank (with ground-level fueling) Cooling System	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440	, hydraulii n, weight,	cally released, sea Width Over Tire: 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2 3202 mm (126.1 or tire-pressure of EPA Tier 3/EU St 553 L (146 gal.) 52.4 L (55.4 qt.) 36 L (38 qt.)	; in.) in.) in.) in.) in.) in.) in.) in.)	No char - 8 mm - 6 mm - 5 mm - 2 mm + 31 mr + 31 mr EPA Tier 553 L (1) 52.4 L ( 36 L (38	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.) n (+ 1.2 in.) r 2/EU Stage II 46 gal.) 55.4 qt.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L3 Firestone 29.5 R 25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star Michelin 29.5 R 25, L5, 1 Star *Based on Z-bar machine configuration; may change bas Serviceability Refill Capacities Fuel Tank (with ground-level fueling) Cooling System Engine Oil with Vertical Spin-On Filter Transmission Fluid with Vertical Filter	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440 mm (96.1 in.) EVALONE (96.1 in.) 2440 mm (96.1 in.) 2440	, hydraulii n, weight,	cally released, sea Width Over Tire: 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.1 3206 mm (126.2 3202 mm (126.1 or tire-pressure of EPA Tier 3/EU St 553 L (146 gal.) 52.4 L (55.4 qt.) 36 L (38 qt.) 28 L (29.5 qt.)	; in.) in.) in.) in.) in.) in.) in.) in.)	No char - 8 mm - 6 mm - 5 mm - 2 mm + 31 mr + 31 mr EPA Tier 553 L (1) 52.4 L ( 36 L (38 28 L (25)	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.) n (+ 1.2 in.) r 2/EU Stage II (46 gal.) 55.4 qt.) 3 qt.) 9.5 qt.)
Parking Brake Tires/Wheels Choice of (with 5-piece rims)* Bridgestone 875/65R29, L3, 1 Star Michelin 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L3 Titan 29.5 R 25, 1 Star L3 Firestone 29.5 R 25, L3 28-Ply Bridgestone 29.5 R 25, L5, 1 Star Michelin 29.5 R 25, L5, 1 Star *Based on Z-bar machine configuration; may change bas Serviceability Refill Capacities Fuel Tank (with ground-level fueling) Cooling System Engine Oil with Vertical Spin-On Filter	Automatic spring applied, <i>Tread Width</i> 2440 mm (96.1 in.) 2440	, hydraulii n, weight,	cally released, sea Width Over Tire: 3291 mm (129.6 3190 mm (125.6 3189 mm (125.6 3202 mm (126.1 3210 mm (126.4 3206 mm (126.2 3202 mm (126.1 or tire-pressure of EPA Tier 3/EU St 553 L (146 gal.) 52.4 L (55.4 qt.) 36 L (38 qt.)	; in.) in.) in.) in.) in.) in.) in.) in.)	No char - 8 mm - 6 mm - 5 mm - 2 mm + 31 mr + 31 mr EPA Tier 553 L (1) 52.4 L ( 36 L (38	nge (- 0.3 in.) (- 0.2 in.) (- 0.2 in.) (- 0.1 in.) n (+ 1.2 in.) n (+ 1.2 in.) r 2/EU Stage II (46 gal.) 55.4 qt.) 8 qt.) 9.5 qt.) 2 qt.)



Hydraulic System/Steering	844K-II Z-BAR
Pump (loader and steering)	2 variable-displacement, load-sensing, axial-piston pumps; closed-center system
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,250 rpm	621 L/m (164 gpm)
System Relief Pressure (loader and steering)	24 132 kPa (3,500 psi)
Loader Controls	2-function valve; single- or dual-lever controls; control lever lockout feature; optional 3rd- and 4th-function valve with auxiliary levers
Steering (conforms to ISO 5010)	
Туре	Power, fully hydraulic; single-lever control and adjustable wristrest with conventional steering wheel override
Articulation Angle	80-deg. arc (40-deg. each direction)
Hydraulic Cycle Times at 2,250 rpm	Z-Bar
Raise	5.9 sec.
Dump	1.9 sec.
Lower (float down)	3.5 sec.
Total	11.3 sec.
Turning Radius (measured to centerline of outside tire)	6.30 m (20 ft. 8 in.)
Dimensions with Standard Configuration	Z-BAR
	5.5-m³ (7.25 cu. yd.) pin-on bucket
A Height to Top of Cab and Canopy	3.76 m (12 ft. 4 in.)
B Ground Clearance	463 mm (18.2 in.)
C Length from Centerline to Front Axle	1.85 m (6 ft. 1 in.)
D Wheelbase	3.70 m (12 ft. 2 in.)
E Dump Clearance	▲ (see page 38)
F Height to Hinge Pin, Fully Raised	4.62 m (15 ft. 2 in.)
G Dump Reach	▲▲ (see page 38)
H Maximum Digging Depth	93 mm (3.7 in.)
I Overall Length	▲▲▲ (see page 38)
J Maximum Rollback at Ground Level	40.5 deg.
K Maximum Rollback, Boom Fully Raised	56.3 deg.
L Maximum Bucket Angle, Fully Raised	55.2 deg.
M Hood Height	2.74 m (9 ft. 0 in.)



844K Z-BAR LOADER

Dimensions with Pin-on Bucket	844K-II Z-BAR					
Bucket Type/Size	General-Purpose with Bolt-on Edge, without Wear Inserts	General-Purpose with Bolt-on Edge and Wear Inserts	Light Material with Bolt-on Edge and Optional Spillguard*, with- out Wear Inserts	Light Material with Bolt-on Edge, Optional Spillguard*, and Wear Inserts	Spade-Nose Rock with Teeth, Seg- ments, Spillguard, and Wear Inserts	Spade-Nose Rock with Bolt-on Edge, Spillguard, and Wear Inserts
Capacity, Heaped	5.5 m³	5.5 m³	6.2 m³	6.2 m³	4.8 m³	4.8 m³
	(7.25 cu. yd.)	(7.25 cu. yd.)	(8.1 cu. yd.)	(8.1 cu. yd.)	(6.3 cu. yd.)	(6.3 cu. yd.)
Capacity, Struck	4.7 m <sup>3</sup>	4.7 m³	5.6 m <sup>3</sup>	5.6 m <sup>3</sup>	4.1 m <sup>3</sup>	4.1 m <sup>3</sup>
	(6.2 cu. yd.)	(6.2 cu. yd.)	(7.3 cu. yd.)	(7.3 cu. yd.)	(5.4 cu. yd.)	(5.4 cu. yd.)
Bucket Weight	3515 kg	3759 kg	3741 kg	3998 kg	4260 kg	4124 kg
	(7,748 lb.)	(8,288 lb.)	(8,247 lb.)	(8,813 lb.)	(9,392 lb.)	(9,092 lb.)
Bucket Width	3.46 m	3.46 m	3.46 m	3.46 m	3.49 m	3.49 m
	(11 ft. 4 in.)	(11 ft. 4 in.)	(11 ft. 4 in.)	(11 ft. 4 in.)	(11 ft. 6 in.)	(11 ft. 6 in.)
Breakout Force	21 674 kg	21 568 kg	20 550 kg	20 449 kg	18 680 kg	19 222 kg
	(47,782 lb.)	(47,549 lb.)	(45,305 lb.)	(45,083 lb.)	(41,183 lb.)	(42,376 lb.)
Tipping Load, Straight	25 697 kg	25 399 kg	25 223 kg	24 941 kg	24 933 kg	25 118 kg
	(56,651 lb.)	(55,996 lb.)	(55,607 lb.)	(54,985 lb.)	(54,968 lb.)	(55,376 lb.)
Tipping Load, 37-deg. Partial Turn	22 596 kg	22 298 kg	22 153 kg	21 871 kg	21 816 kg	22 001 kg
	(49,815 lb.)	(49,159 lb.)	(48,839 lb.)	(48,217 lb.)	(48,096 lb.)	(48,504 lb.)
Tipping Load, 40-deg. Full Turn	22 094 kg	21 796 kg	21 656 kg	21 374 kg	21 312 kg	21 497 kg
	(48,708 lb.)	(48,053 lb.)	(47,743 lb.)	(47,122 lb.)	(46,984 lb.)	(47,392 lb.)
Reach, 45-deg. Dump, 2.13-m (7 ft.) Clearance	2.28 m	2.28 m	2.31 m	2.31 m	2.47 m	2.38 m
	(7 ft. 6 in.)	(7 ft. 6 in.)	(7 ft. 7 in.)	(7 ft. 7 in.)	(8 ft. 1 in.)	(7 ft. 10 in.)
▲▲ Reach, 45-Deg. Dump, Full Height	1.49 m	1.49 m	1.54 m	1.54 m	1.80 m	1.64 m
	(4 ft. 11 in.)	(4 ft. 11 in.)	(5 ft. 1 in.)	(5 ft. 1 in.)	(5 ft. 11 in.)	(5 ft. 4 in.)
▲ Dump Clearance, 45 Deg., Full Height	3.32 m	3.32 m	3.27 m	3.27 m	3.05 m	3.21 m
	(10 ft. 11 in.)	(10 ft. 11 in.)	(10 ft. 9 in.)	(10 ft. 9 in.)	(10 ft. 0 in.)	(10 ft. 6 in.)
▲▲▲ Overall Length, Bucket on Ground	9.65 m	9.65 m	9.72 m	9.72 m	10.06 m	9.83 m
	(31 ft. 8 in.)	(31 ft. 8 in.)	(31 ft. 11 in.)	(31 ft. 11 in.)	(33 ft. 0 in.)	(32 ft. 3 in.)
Loader Clearance Circle, Bucket Carry Position	15.92 m	15.92 m	15.97 m	15.97 m	15.89 m	15.86 m
	(52 ft. 3 in.)	(52 ft. 3 in.)	(52 ft. 5 in.)	(52 ft. 5 in.)	(52 ft. 2 in.)	(52 ft. 0 in.)
Operating Weight	34 152 kg	34 431 kg	34 384 kg	34 646 kg	34 905 kg	34 776 kg
	(75,292 lb.)	(75,906 lb.)	(75,804 lb.)	(76,382 lb.)	(76,953 lb.)	(76,668 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PSX 6135 (EPA Interim Tier 4/EU Stage IIIB) 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, and assumes no tire deflection per the standard ISO 14397-1 section 5. \*Spillguard adds approximately 0.3 m<sup>3</sup> (0.4 cu. yd.) to bucket capacity.

Adjustments to Operating Weights and Z-BAR

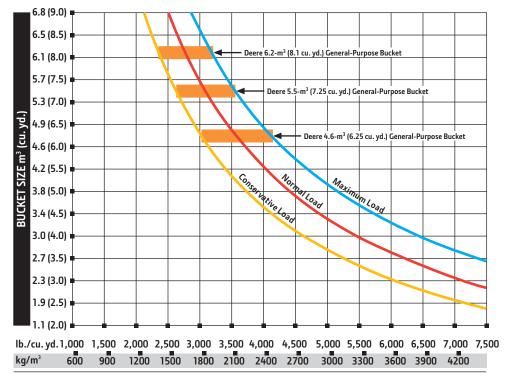
#### Tipping Loads with Buckets

Adjustments to operating weights and tipping loads are based on Z-bar machine and pin-on 5.5-m<sup>3</sup> (7.25 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 5-piece rims and	Operating Weight	Tipping Loader, Straight	Tipping Load, 37-deg. Partial Turn SAE	Tipping Load, 40-deg. Full Turn SAE
John Deere PowerTech PSX 6135	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
John Deere PowerTech Plus 6135H	– 90 kg (– 198 lb.)	+ 59 kg (+ 130 lb.)	+ 34 kg (+ 75 lb.)	+ 30 kg (+ 66 lb.)
John Deere PowerTech 6135H	– 90 kg (– 198 lb.)	+ 59 kg (+ 130 lb.)	+ 34 kg (+ 75 lb.)	+ 30 kg (+ 66 lb.)
Bridgestone 875/65R29, L3, 1 Star	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)
Michelin 29.5 R 25, 1 Star L3	– 840 kg (– 1,852 lb.)	– 691 kg (– 1,524 lb.)	– 615 kg (– 1,356 lb.)	– 603 kg (– 1,329 lb.)
Titan 29.5 R 25, 1 Star L-5	– 780 kg (– 1,720 lb.)	– 642 kg (– 1,415 lb.)	– 571 kg (– 1,259 lb.)	– 560 kg (– 1,234 lb.)
Bridgestone 29.5 R 25, 1 Star L3	– 724 kg (– 1,596 lb.)	– 596 kg (– 1,314 lb.)	– 530 kg (– 1,169 lb.)	– 519 kg (– 1,145 lb.)
Firestone 29.5-25, L3 28-Ply	– 348 kg (– 767 lb.)	– 286 kg (– 631 lb.)	– 255 kg (– 562 lb.)	– 250 kg (– 550 lb.)
Bridgestone 29.5 R 25, L5, 1 Star	+ 512 kg (+ 1,129 lb.)	+ 421 kg (+ 929 lb.)	+ 375 kg (+ 826 lb.)	+ 367 kg (+ 810 lb.)
Michelin 29.5 R 25, L5, 1 Star	– 32 kg (– 71 lb.)	– 26 kg (– 58 lb.)	– 23 kg (– 52 lb.)	– 23 kg (– 51 lb.)

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

844K-II Z-BAR



LOOSE MATERIALS	kg∕m³ lb	./cu. yd.
Chips, pulpwood	288	486
Cinders (coal, ashes, clinkers)	673	1,134
Clay and gravel, dry	1602	2,700
Clay, compact, solid	1746	2,943
Clay, dry in lump loose	1009	1,701
Clay, excavated in water	1282	2,160
Coal, anthracite, broken, loose	865	1,458
Coal, bituminous, moderately wet	801	1,350
Earth, common loam, dry	1218	2,052
Earth, mud, packed	1843	3,105
Granite, broken	1538	2,592
Gypsum	2275	3,834
Limestone, coarse, sized	1570	2,646
Limestone, mixed sizes	1682	2,835
Limestone, pulverized or crushed	1362	2,295
Sand, damp	2083	3,510
Sand, dry	1762	2,970
Sand, voids, full of water	2083	3,510
Sandstone, quarried	1314	2,214
Shale, broken crushed	1362	2,295
Slag, furnace granulated	1955	3,294
Stone or gravel, 37.5 to 87.5-mm		
(1.5 to 3.5") size	1442	2,430
Stone or gravel, 18.75-mm (3/4") si	ze 1602	2,700

\* This guide, representing bucket sizes not necessarily manufactured by Deere, will help you in selecting proper bucket size for material density, loader configuration, and operating conditions. Optimum bucket size is determined after adding or subtracting all tipping load changes due to optional equipment. The "conservative load" line on this guide is recommended when operating in conditions such as soft ground and unlevel surfaces. The "maximum load" condition on this guide is sometimes utilized when operating on firm ground and level surfaces.

844K Z-BAR LOADER WITH PIN-ON BUCKET

#### Additional equipment

e

		744			Engine Wat slowe cylinder liners
•	•	•	•	•	Wet-sleeve cylinder liners Programmable auto-idle and auto shutdown
•	•	•	•	•	Selected idle adjustment from 900–1,250 rpm
•	•	•	•	•	Starter protection
•	٠	٠	٠	٠	Automatic turbo cool-down/shutdown timer <sup>†</sup>
٠	٠	٠	٠	٠	Automatic derating for exceeded system
•	•	•	•	•	temperatures Serpentine drive belt for automatic tensioner
	•	•	•	•	Electrical fuel-priming pump
•	•	•	•	•	Dual-stage fuel filter and water separator
	٠	٠	٠	٠	500-hour vertical spin-on oil filter
٠	٠	٠	٠	٠	Engine-compartment light
					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
٠	٠	٠	٠	٠	2,000-hour vertical spin-on transmission filter
•	٠	٠	٠	٠	Transmission diagnostic ports
•	•	٠	٠	٠	5-speed transmission with lockup torque
					converter 4-speed transmission with non-lockup torque
-	-	-	_	-	converter
•	٠	٠	٠		Front locking differential
<b>A</b>					Rear locking differential
<b>A</b>					Automatic differential lock
	•	•	•	•	Axle oil temperature sensing Wheel-spin control
					Quad-Cool <sup>™</sup> Cooling System
٠	٠	٠	٠	٠	Heavy-duty, trash-resistant radiator and high-
•	•	•	•	•	ambient cooling package 2-side access to all coolers
•	•	•	•	•	Isolated from engine compartment
•	•	•	•	•	Integral engine oil cooler
٠	٠	٠	٠	٠	Hydraulic oil cooler (oil to air)
•	٠	٠	٠	٠	Transmission oil cooler (oil to air)
٠	٠	٠	٠	٠	Charge air cooler (air to air)
•	•	•	•	•	Coolant recovery tank
•	•	•	•	•	Antifreeze, –37 deg. C (–34 deg. F) Cool-on-demand swing-out fan
•		•		•	Enclosed fan safety guard
				•	Automatic reversing fan drive
		٠	•	٠	Axle and service-brake coolers
					Corrosive-environment coolers
					Hydraulics
•	•	•	•	•	Automatic return-to-dig bucket positioner In-cab adjustable automatic boom-height
•	•		•		kickout/return to carry
٠	٠	٠	٠	٠	Reservoir with sight gauge and fill strainer
•	•	٠	٠	•	Hydraulic diagnostic ports
•	٠	٠	٠	٠	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-adjust-

**Key:** ● Standard ▲ Optional or special

See your John Deere dealer for further information.

644	724	744	874	844	Hydraulics (continued)
•				•	Hydraulic control system for quick-coupler
-	-	-	-	-	locking pins
					Steering Systems
•	٠	٠	٠		Conventional steering wheel with spinner knob
				•	Joystick steering (including conventional steer- ing column) with gearshift, F-N-R, and horn
					Secondary steering
-	-	_	-	-	Electrical
٠	٠	٠	٠	٠	Solid-state electrical power-distribution system
٠	٠	٠	٠	•	Lockable master electrical-disconnect switch
٠	٠	٠	٠	٠	By-pass start safety cover at starter
٠	٠	٠	۲	٠	Pre-wired for beacon/strobe light
•	•	•	•	•	Lights: Halogen driving lights with guards (2) / Front (4) and rear (2) cab work lights (644K and 724K) / Front (4), rear cab (2), and rear grille (2) work lights (744K, 824K, and 844K) / Turn signals and flashers (644K, 724K, 744K, and 824K) / LED stop- and taillights
•	٠	٠	٠	•	Programmable courtesy lights
•	•	•	•	•	Horn, electric
					Reverse warning alarm Multi-function/multi-language LCD color mon-
•	•	•	•	•	Itor includes: Digital instruments — Analog display (hydraulic oil temperature, engine cool- ant temperature, transmission oil temperature, and engine oil pressure) / Digital display (engine rpm, transmission gear/direction indicator, hour meter, fuel level, speedometer, odom- eter, and outside temperature)
٠	٠	٠	۲	•	Integrated cycle counter with 5 categories
•	•	•	•	•	Indicator lights: Standard and selected options / Amber caution and red stop
٠	٠	٠	٠	•	Operator-warning messages
•	•	•	•	•	Built-in diagnostics: Diagnostic-code details / Sensor values / Calibrations / Individual circuit tester
				•	Heavy-duty LED turn signal and marker lights
					Electrical corrosion-prevention package
					AM/FM/weather-band radio with CD player
•	•	•	•	•	24- to 12-volt, 8-amp converter Operator's Station
•					Canopy with ROPS/FOPS, isolation mounted
•					ROPS canopy rear window
					Quiet Cab with heater
	٠	٠	٠	٠	Quiet Cab with air conditioning/heater
٠	٠	٠	٠	٠	Key-less 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 head-
-	-	-	-	•	rest extension, heated, leather/fabric cover, and adjustable air suspension
•	•	•	•	•	Hydraulic controls integrated to seat
•	•	•	•	•	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
		٠	٠	٠	Outside (2) and inside (2) rearview mirrors
٠	٠	٠	٠	•	Left-side operator-station access
	٠	٠	٠	٠	Slip-resistant steps and ergonomic handholds
	٠	٠	٠	٠	Sun visor (Quiet Cab only)
	٠	٠	٠	٠	Radio ready (Quiet Cab only)

644	724	744	824	844	Operator's Station (continued)
	٠	٠	۲	٠	Front and rear intermittent windshield wiper
					and washers
					Powered cab air pre-cleaner
					Large heated outside mirrors
		<b>A</b>		<b>A</b>	Beacon bracket
					Rear camera and radar object-detection system
					Embedded payload scale
					Fire extinguisher
					Loader Linkage
•	•	•	•	•	Z-bar loader linkage
					High-lift Z-bar loader linkage
•					Powerllel linkage for visibility and parallel-lift
					Buckets and Attachments
	•	•	•	•	Full line of Deere pin-on buckets
-	<b>A</b>				Hi-Vis hydraulic coupler which accepts Euro- pattern attachments (Volvo)
					Full line of Deere hook-on buckets and forks
					Bolt-on bucket spill guard
					Bolt-on fork frame guard
~	-	-		-	Overall Vehicle
•	•	•	•	•	JDLink <sup>™</sup> Ultimate wireless communication system (available in specific countries; see your dealer for details)
•	•	•	•		NeverGrease <sup>™</sup> rear-axle oscillation
•	•	•	•	•	NeverGrease steering-cylinder joints
				•	Bushed pin joints (including static joints on bucket and steering cylinders)
•	•	•	•	•	Front and rear tie-downs (844K includes mid tie-downs)
٠	٠	٠	٠	٠	Rear cast bumper with rear hitch and locking pin
٠	٠	٠	۲	٠	Articulation locking bar
٠	٠	٠	٠		Loader boom service locking bar
•	•	•	•	•	40-deg. steering articulation to each side with rubber-cushion stops on frame
•	•	•	•	•	Vandal protection with lockable engine enclo- sures, right counterweight storage, battery box, and filler access for radiator/fuel/hydraulic transmission
	٠	٠	٠	٠	Right and left handrails, platforms, and steps
•	•	•	•	•	Service steps and handholds
•	•	•	•	•	Storage compartment
•	•	•	•	•	Fuel-tank fill strainer
•	٠	•	•	•	Heavy-duty fuel-tank guard
•	•	•	•	•	Ground-level fueling
•	•	•	•	•	Same-side ground-level daily servicing
•	•	•	•	•	Environmental drains for engine, transmission, hydraulic oils, and engine coolant
•	•	•	•	•	Fluid-sampling ports for engine, transmission, hydraulic and axle oils, and engine coolant
٠	٠				23.5R25 L3 tires on 3-piece rims
		٠	٠		26.5R25 L3 tires on 5-piece rims
				٠	29.5R25 L3 tires on 5-piece rims
					Waste handler (Z-bar and High-Lift)
					NeverGrease linkage (Z-bar and High-Lift)
			•	•	Transmission side-frame and bottom guards with Level 2 sound package
					Fast-fuel system
					Quick fluid service (engine, transmission,
					hydraulic oils, and engine coolant)
					Fenders, full-coverage, front
					Fenders, full-coverage, front and rear
					Close-mounted steps
					Less wheels and tires with axle stops
					Rims less tires
		٠	٠	٠	Lift eyes
					License-plate bracket and light
					Forestry-application package (Powerllel only)
					Special guarding for waste and forestry appli- cations
tAvail	labla	only			storim Tior (/ELI Stage IIIP opgings

<sup>†</sup>Available only with EPA Interim Tier 4/EU Stage IIIB 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.

able speed settings