



JOHN DEERE

225 SAE NET HORSEPOWER

J

LOADER

644J





It comes fully loaded.

Designed to maximize your productivity and uptime while minimizing your daily operating costs, the 225-horsepower 644J combines the muscle of a production machine with the flexibility and maneuverability of a utility loader. Numerous enhancements within the more spacious cab include a multifunction state-of-the-art monitor

with advanced diagnostics, durable solid-state electrical distribution center, new sealed switch module, and improved ventilation. Add to that a more efficient drivetrain and hydraulics cooling system with proportional fan control, and you've got a multipurpose machine that'll make any operator and operation more productive.



A detailed view of the operator's seat and controls in a John Deere 644J tractor cab. The image shows a grey fabric seat, a steering wheel with two hand levers, a control panel with various buttons and levers, and a multifunction monitor. The overall design is functional and ergonomic.

Productivity never felt this comfortable.

From the convenient controls that customize machine operation to the comfortable fully adjustable air-ride armchair, the 644J has everything your operators need to do their best. All-around visibility is unobstructed, and an improved ventilation system helps keep the view clear and the cab environment

comfortable. The all-new sealed switch module allows convenient fingertip control of multiple machine operations. Up-front, a state-of-the-art multifunction monitor with easy-to-read messaging, large analog gauges, and LED warning lights provides vital operating info at a glance.



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

Conveniently positioned switch module helps reduce operator fatigue with clearly visible backlit and sealed controls.

Standard air-ride armchair seat adjusts multiple ways for extra comfort and cushioning over rough terrain.



1

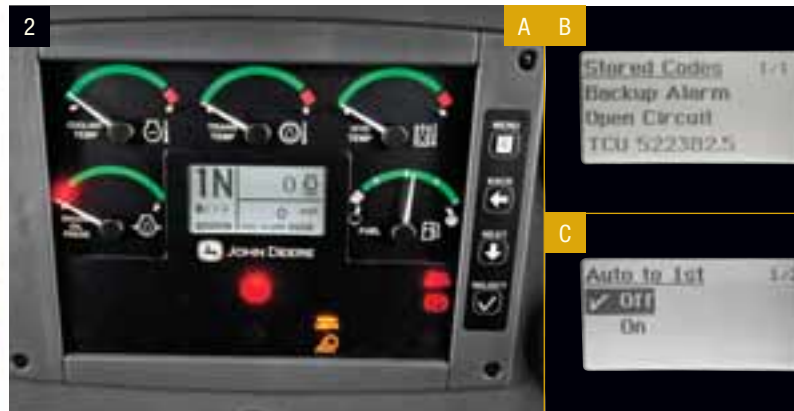
1. Industry-leading 360-degree visibility gives clear sight lines of the work ahead and the worksite around you.

2. Advanced programmable monitor with analog gauges and LED indicators provides:

A. Vital and general operating information including transmission mode, gear, engine rpms, and ground speed.

B. Diagnostic readings of most sensors and switches, enabling technicians to quickly troubleshoot problems.

C. Customized machine settings that let an operator match the 644J's operating characteristics to specific applications by preselecting transmission functions such as Quick Shift and Auto-to-1st for maximum productivity.



2

A B

Stored Codes 1/1
Backup Alarm
Open Circuit
TCU 522302.5

C

Auto to 1st 1/2
 Off
On

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

When the rpms drop below 2,200, the horsepower actually goes up. The John Deere Power Bulge advantage helps maintain good boom and bucket speed into the pile.

Responsive steering and full 80-degree articulation increase maneuverability in tight quarters — for faster cycle times and fewer “three-point” turns.



1. Choose from single-lever joystick or two-lever fingertip pilot-operated controls. Single-lever control can also be equipped with an optional fingertip FNR selector for convenient direction and full-range gear changes. Both controls also include John Deere's innovative Quick Shift feature that allows pushbutton gear changes, one gear at a time.

2. Sealed switch module gives fingertip control of numerous functions.




Programmable clutch cut-off increases productivity in all kinds of terrain. Simply select the slope at your dumpsite — level, small, or steep. When the brake pedal is depressed, the transmission disconnects while keeping engine speed high for fast boom cycles.



Boom height Kick-out sets maximum desired dump height, while return-to-carry predetermines the lowered boom position. Use these two John Deere advantages to speed production in repetitive loading applications.





Built to make hard work easier.

The 644J was designed and built with maximum productivity in mind. Its performance edge starts with a high-torque John Deere diesel that delivers extra horsepower when the going gets tough. Excavator-style hydraulics sense the load and deliver the fluid power needed for smooth boom and dump functions, and faster work

cycles. You won't find a smoother shifting loader, either. The 644J's PowerShift™ torque-converter transmission employs Smart Shift™ technology to continuously evaluate the machine's speed and load conditions, and adjusts clutch-pack engagement to suit. The 644J does the busywork, so your operator can concentrate on doing the work at hand.



Keeps you up and running, up and lifting.

Uptime is everything and exactly the reason we added enhancements such as the sealed solid-state electrical distribution center, advanced diagnostic monitor, extended service intervals, optional pre-cleaner, and reversing cooling fan. Of course, the 644J also retains numerous traditional John Deere durability features such as wet-sleeve engine cylinder liners,

inboard planetary axles with self-adjusting inboard wet-disc brakes, and four-plate loader frame, to list just a few. How tough is the 644J? Tough enough that it's backed by an exclusive warranty that covers all major frame structures, including articulation joints, mainframe, and loader boom — for three years, 10,000 hours. That's confidence, and peace of mind.



Four steel plates extend from the axle housing to the top of the loader tower, giving full support to the far end of the boom pivot pins. This heavy-duty design extends the life of the pins and helps protect the boom cylinder hoses.

You can expect long life from the PowerTech™ 8.1-L turbocharged diesel, thanks in part to its wet-sleeve liners that provide uniform cooling for less oil breakdown and longer durability than cast-in-block designs.

Service intervals for engine oil, transmission filter, and hydraulic oil have been extended to 500, 1,000, and 4,000 hours. So your 644J will require fewer breaks for routine maintenance.

If necessary, the PowerShift™ transmission's clutch fast-fill times can be easily recalibrated. Takes just minutes to restore like-new performance.

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

1. Electrical distribution center employs highly reliable circuit-board technology and solid-state switches, eliminating numerous wiring harnesses, fuses, relays, and connectors.
2. Optional fan automatically reverses every 30 minutes, ejecting debris from the radiator and coolers for more uptime and productivity. Or just hit the button to choose your own cleaning cycles.
3. Planetary final drives are mounted inboard. Since gear size isn't limited by wheel hub diameter, larger, more durable components are used. Hydraulic wet-disc brakes self-adjust for wear. Axle seal guards are standard.



1



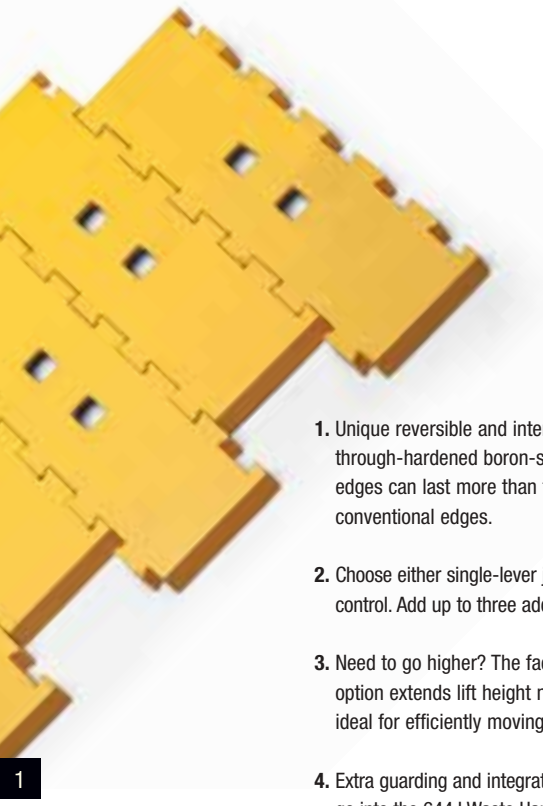
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3

Available spin control helps reduce tire wear, fuel consumption, and operator fatigue in poor tractive conditions. Enables the operator to work without worrying about wheel spin or trying to feather the accelerator.

Axle options include front differential lock with conventional rear or front and rear differential locks. For limited slip or conventional front and rear axles, see your John Deere dealer.



1. Unique reversible and interchangeable design and through-hardened boron-steel construction of JAGZ™ edges can last more than two times longer than conventional edges.
2. Choose either single-lever joystick or two-lever fingertip control. Add up to three additional hydraulic functions.
3. Need to go higher? The factory-installed high-lift option extends lift height nearly a foot-and-a-half and is ideal for efficiently moving materials to new heights.
4. Extra guarding and integrated “purpose-built” features go into the 644J Waste Handler. We’ve got what it takes for other heavy-duty applications, too.
5. Ride-control option enables the hydraulic lift cylinders to act as shock absorbers, so the 644J can navigate rough terrain more quickly and still maintain its load.



2

3

4

5



Build one your way.

Yours isn't just another business. So why should you buy just another loader? With the 644J, you won't have to "settle" for the wrong axles, boom, bucket, or whatever. We offer a wide

variety of factory-installed options to fit a wide variety of applications. Whether you're handling waste or shuttling sand, you can equip a 644J with the right stuff to maximize your efforts.

Side-by-side cooling components are exceptionally efficient and easy to clean. Condenser rotates forward and out of the way. Optional axle coolers mount between engine and radiator.



Large service doors open wide, and all daily service points are located on the left side for quick and convenient ground-level access.

The cooling package includes a hydraulic-driven fan with proportional control that's regulated by cooling system temperature. Varying the fan speed as needed reduces fuel consumption and daily operating costs.



We made ourselves more accessible.

You said you wanted a loader that's as easy to service as it is to operate. As you can see, we're open to your ideas. Deere designers worked hard to make the 644J hassle-free to maintain. Hinged side shields open wide, providing ample ground-level access to the engine compartment. All daily service points are conveniently grouped and located on the left

side. Even routine servicing is simplified. For example, the hydraulically driven cooling fan swings out and away for radiator and oil-cooler clean-out. Add to those details such as easy-to-read sight gauges and an advanced diagnostics monitor with clear and concise messaging, and it's easy to see how the 644J controls your costs as easily as it controls a load.

1. Conveniently located, easy-to-read sight gauges let you check fluid levels at a glance.
2. Extended transmission filter and engine and hydraulic oil service intervals contribute to the 644J's low operating costs.
3. Greasing is less messy, with centralized lube banks providing easy access to difficult-to-reach zerks.

4. When something goes wrong, the advanced monitor gives easy-to-understand diagnostic messages and even offers possible solutions to help get you back up and running more quickly.
5. Your John Deere dealer has the parts and service you need to stay productive, and also offers a wide variety of preventative maintenance and support programs to help control owning and operating costs.



Specifications

Engine

644J

Type	John Deere POWERTECH™ 6081H; meets EPA and CARB emission non-road regulations
Cylinders	6
Valves Per Cylinder	2
Displacement	496 cu. in. (8.1 L)
Net Peak Power	225 hp (168 kW) @ 1,600 rpm
Net Rated Power	185 hp (138 kW) @ 2,200 rpm
Net Peak Torque	765 lb.-ft. (1040 Nm) @ 1,300 rpm
Net Torque Rise	74%
Net Power Bulge	22%
Fuel System	high-pressure common rail
Lube System	full-flow spin-on filter and integral cooler
Aspiration	turbocharged, charge air cooled
Air Cleaner	dual element dry type, restriction indicator in cab monitor for service
Fan Drive	hydraulically driven, proportionally controlled, fan aft of coolers
Electrical System	24 volt with 80-amp alternator
Batteries (two 12 volt)	1,400 CCA

Transmission

Type	countershaft-type power shift	
Torque Converter	single stage, single phase	
Shift Control	electronically modulated, adaptive, load and speed dependent	
Operator Interface	steering-column-mounted, twist-grip shift lever; quick-shift button on hydraulic lever	
Shift Modes	auto/manual, auto to 1st or 2nd, kick down or kick up/down, three clutch cutoff settings adjustable on switch pad	
Travel Speeds*	<i>Forward</i>	<i>Reverse</i>
Gear 1	4.6 mph (7.4 km/h)	4.9 mph (7.9 km/h)
Gear 2	7.6 mph (12.2 km/h)	8.0 mph (12.8 km/h)
Gear 3	14.7 mph (23.6 km/h)	15.5 mph (24.9 km/h)
Gear 4	22.0 mph (35.4 km/h)	

*Equipped with 23.5 R 25 radial tires.

Axles/Brakes

Final Drives	heavy-duty inboard planetary
Differentials*	hydraulic locking front, conventional rear — standard; dual locking front and rear — optional
Rear Axle Oscillation, Stop to Stop**	26 degrees
Brakes (conform to SAE J1473, ISO3450)	
Service Brakes	hydraulically actuated, inboard, carrier mounted, pressure oil cooled, self adjusting, multi-disc
Parking Brake	automatic spring applied, hydraulically released, oil cooled, multi-disc

*Contact dealer for information regarding limited slip and conventional front and rear availability.

**Equipped with 23.5 R 25 radial tires.

Tires		644J		
	<i>Tread Width</i>	<i>Width Over Tires</i>	<i>Change In Vertical Height</i>	
Choice of (with multi-piece rims)				
23.5-25, 20 PR L3	85.4 in. (2170 mm)	113.4 in. (2881 mm)	- 0.1 in. (- 2 mm)	
23.5 R 25, 1 Star L3 Radial	85.4 in. (2170 mm)	113.2 in. (2875 mm)	0 in. (0 mm)	
750/65 R 25 L3-T*	86.8 in. (2204 mm)	120.7 in. (3066 mm)	- 0.3 in. (- 7 mm)	
28L-26, 14 PR LS2*†	89.4 in. (2272 mm)	117.6 in. (2986 mm)	+ 0.4 in. (+ 11 mm)	

*Requires 9-degree rear axle stops.

†With single-piece rims.

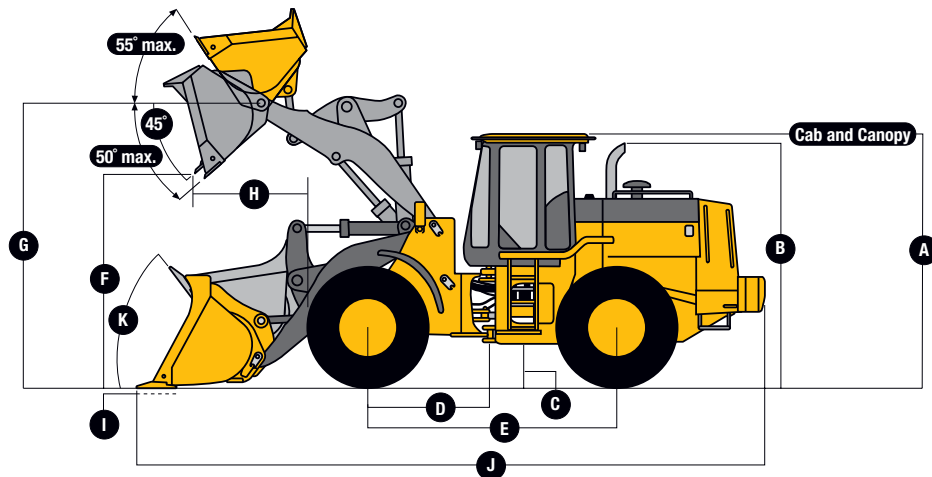
Refill Capacities (U.S.)	
Fuel Tank (with ground-level fueling)	100 gal. (379 L)
Cooling System	32 qt. (31 L)
Engine Lubrication, Including Vertical	
Spin-On Filter	26 qt. (25 L)
Powershift Transmission, Including Filter	27 qt. (26 L)
Differential (front and rear, each axle)	30 qt. (29 L)
Loader Hydraulic Reservoir and Filters	31 gal. (118 L)
Sealed Wet-Disc Parking Brake	20 oz. (0.6 L)

Hydraulic System/Steering	
Pump (loader and steering)	variable-displacement, axial-piston pump; closed-center, pressure-compensating system
Maximum Flow @ 2,200 rpm	68 gpm (257 L/m) @ 1,000 psi (6895 kPa)
Pressure	loader and steering relief 3,600 psi (24 850 kPa)
Loader Controls	two-function valve; single- or dual-lever controls; control lever lockout feature; optional third- and fourth-function valve with auxiliary lever
Steering (conforms to SAE J1511)	
Type	power, fully hydraulic
Pressure	3,600 psi (24 850 kPa) relief
Articulation Angle	80-degree arc (40 degrees each direction)
Hydraulic Cycle Times	<i>Standard Z-Bar</i> <i>High-Lift Z-Bar</i>
Raise	6.2 sec. 6.2 sec.
Dump	1.4 sec. 1.4 sec.
Lower	3.0 sec. (float down) 3.0 sec. (float down)
Total	10.6 sec. 10.6 sec.
Maximum Lift Capacity	with 4.25-cu.-yd. (3.3 m ³) bucket with bolt-on cutting edge
Lift at Ground Level	34,166 lb. (15 495 kg)
Lift at Maximum Height	20,226 lb. (9173 kg)
Turning Radius (measured to centerline of outside tire)	18 ft. 0 in. (5500 mm)

Dimensions with Pin-On Bucket

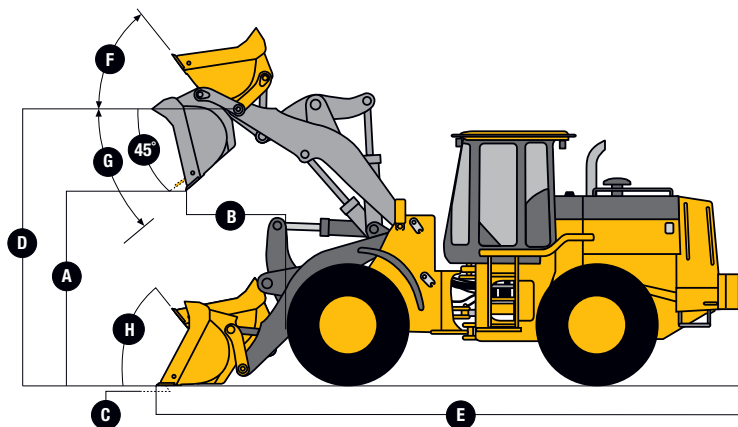
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	<i>Standard Z-Bar</i>	<i>High-Lift Z-Bar</i>
A Height to Top of Cab and Canopy	11 ft. 2 in. (3404 mm)	11 ft. 2 in. (3400 mm)
B Height to Top of Exhaust	11 ft. 0 in. (3353 mm)	11 ft. 0 in. (3353 mm)
C Ground Clearance	18.1 in. (461 mm)	18.1 in. (461 mm)
D Length from Centerline to Front Axle	63 in. (1600 mm)	63 in. (1600 mm)
E Wheelbase	126 in. (3200 mm)	126 in. (3200 mm)
F Dump Height	▲ (see page 17)	▲ (see page 19)
G Height to Hinge Pin, Fully Raised	13 ft. 7 in. (4144 mm)	15 ft. 0 in. (4569 mm)
H Dump Reach	▲▲ (see page 17)	▲▲ (see page 19)
I Maximum Digging Depth	2.7 in. (69 mm)	6.4 in. (163 mm)
J Overall Length	▲▲▲ (see page 17)	▲▲▲ (see page 19)
K Maximum Rollback at Ground Level	40 degrees	40 degrees



Dimensions with Quick-Coupler and Bucket

	<i>Standard Z-Bar</i>
A Dump Clearance	▲ (see page 18)
B Dump Reach	▲▲ (see page 18)
C Maximum Digging Depth	2.5 in. (63 mm)
D Height to Hinge Pin, Fully Raised	13 ft. 7 in. (4144 mm)
E Overall Length	▲▲▲ (see page 18)
F Maximum Rollback, Boom Fully Raised	55 degrees
G Maximum Bucket Discharge Angle, Fully Raised	45 degrees
H Maximum Rollback at Ground Level	39 degrees

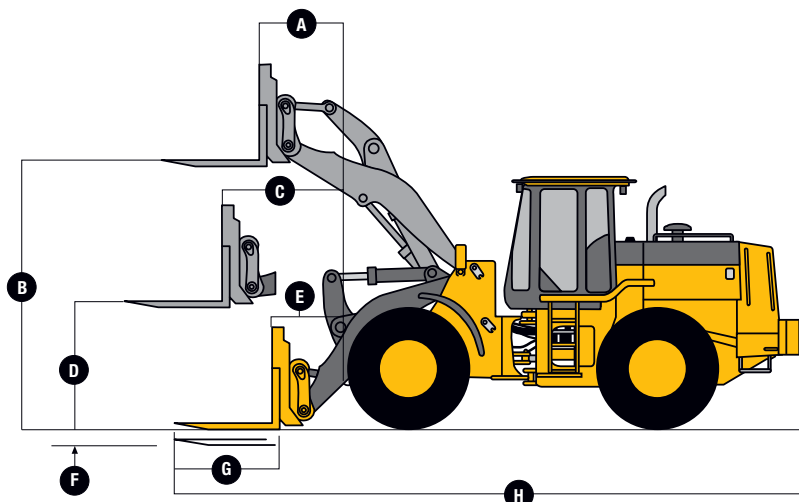


Dimensions with Quick-Coupler and Construction Fork

644J

Standard Z-Bar

A Reach, Fully Raised	2 ft. 1 in. (642 mm)
B Fork Height, Fully Raised	12 ft. 11 in. (3929 mm)
C Maximum Reach, Fork Level.	5 ft. 1 in. (1537 mm)
D Fork Height, Maximum Reach	6 ft. 1 in. (1848 mm)
E Reach, Ground Level.	3 ft. 0 in. (925 mm)
F Depth Below Ground.	2.0 in. (49 mm)
G Tine Length	▲ (see page 18)
H Overall Length	▲▲ (see page 18)



Standard Z-Bar Pin-On Type Bucket Information

Bucket Type/Size	General Purpose w/Bolt-On Edge	General Purpose w/ Teeth and Segments	General Purpose w/JAGZ™
Capacity, Heaped SAE	4.25 cu. yd. (3.3 m³)	4.25 cu. yd. (3.3 m³)	4.5 cu. yd. (3.4 m³)
Capacity, Struck SAE	3.7 cu. yd. (2.8 m³)	3.7 cu. yd. (2.8 m³)	3.9 cu. yd. (3.0 m³)
Bucket Weight.	3,555 lb. (1612 kg)	3,680 lb. (1670 kg)	3,650 lb. (1655 kg)
Bucket Width.	114.2 in. (2900 mm)	114.2 in. (2900 mm)	114.2 in. (2900 mm)
Breakout Force, SAE J732C.	34,407 lb. (15 604 kg)	34,407 lb. (15 604 kg)	33,961 lb. (15 402 kg)
Tipping Load, Straight	31,210 lb. (14 154 kg)	31,044 lb. (14 079 kg)	31,150 lb. (14 127 kg)
Tipping Load, 40-Degree Full Turn, SAE	26,281 lb. (11 919 kg)	26,118 lb. (11 845 kg)	26,215 lb. (11 889 kg)
Reach, 45-Degree Dump, 7-ft. (2.13 m) Clearance	65.7 in. (1668 mm)	67.6 in. (1718 mm)	66.2 in. (1681 mm)
▲▲ Reach, 45-Degree Dump, Full Height	42.2 in. (1071 mm)	46.2 in. (1174 mm)	42.8 in. (1087 mm)
▲ Dump Clearance, 45 Degree, Full Height	115.8 in. (2942 mm)	111.9 in. (2841 mm)	115.7 in. (2938 mm)
▲▲▲ Overall Length, Bucket on Ground	26 ft. 5 in. (8045 mm)	26 ft. 8 in. (8197 mm)	26 ft. 5 in. (8055 mm)
Loader Clearance Circle, Bucket In Carry Position	42 ft. 3 in. (12 883 mm)	42 ft. 7 in. (12 978 mm)	42 ft. 3 in. (12 888 mm)
Operating Weight.	38,876 lb. (17 631 kg)	39,004 lb. (17 689 kg)	38,971 lb. (17 674 kg)

Loader operating information is based on machine with all standard equipment; 23.5 R 25 radial tires; standard counterweight; ROPS/FOPS cab; 175-lb. (79 kg) operator; and full fuel tank. This information is affected by tire size, ballast, and different attachments.

Adjustments to Operating Weights with Standard Z-Bar Pin-On Buckets

Adjustments to operating weights and tipping loads based on standard boom and 4.25-cu.-yd. (3.3 m³) general-purpose bucket with bolt-on cutting edge

Add (+) or deduct (-) lb. (kg) as indicated for loaders with	Operating Weight	Tipping Load, Straight	Tipping Load, 40-Degree Full Turn, SAE
23.5-25, 20 PR L3	- 309 lb. (- 140 kg)	- 213 lb. (- 97 kg)	- 182 lb. (- 83 kg)
23.5 R 25, 1 Star L3 Radial	0 lb. (0 kg)	0 lb. (0 kg)	0 lb. (0 kg)
750/65 R 25 L3-T Radial*	+ 981 lb. (+ 446 kg)	+ 679 lb. (+ 308 kg)	+ 584 lb. (+ 265 kg)
28L-26, 14 PR LS2*	+ 88 lb. (+ 40 kg)	+ 61 lb. (+ 28 kg)	+ 52 lb. (+ 24 kg)

*Requires 9-degree rear axle stops.

†With single-piece rims.

**Standard Z-Bar Information
with Quick-Coupler and Bucket**

644J

	<i>General Purpose w/Bolt-On Edge</i>	<i>General Purpose w/ Teeth and Segments</i>
Bucket Type/Size		
Capacity, Heaped SAE	4.25 cu. yd. (3.3 m ³)	4.25 cu. yd. (3.3 m ³)
Capacity, Struck SAE	3.8 cu. yd. (2.9 m ³)	3.8 cu. yd. (2.9 m ³)
Bucket Weight with Coupler	4,900 lb. (2223 kg)	5,025 lb. (2280 kg)
Bucket Width	114.2 in. (2900 mm)	114.2 in. (2900 mm)
Breakout Force, SAE J732C.	28,976 lb. (13 141 kg)	28,976 lb. (13 141 kg)
Tipping Load, Straight	29,121 lb. (13 207 kg)	28,958 lb. (13 133 kg)
Tipping Load, 40-Degree Full Turn, SAE. . .	24,394 lb. (11 063 kg)	24,235 lb. (10 991 kg)
Reach, 45-Degree Dump, 7-ft. (2.13 m) Clearance	62.9 in. (1598 mm)	63.8 in. (1620 mm)
▲ Reach, 45-Degree Dump, Full Height . . .	44.4 in. (1128 mm)	48.1 in. (1222 mm)
▲▲ Dump Clearance, 45 Degree, Full Height	106.8 in. (2713 mm)	102.5 in. (2603 mm)
▲▲▲ Overall Length, Bucket on Ground	27 ft. 1 in. (8266 mm)	27 ft. 7 in. (8418 mm)
Loader Clearance Circle, Bucket In Carry Position	42 ft. 9 in. (13 018 mm)	43 ft. 0 in. (13 118 mm)
Operating Weight	40,224 lb. (18 242 kg)	40,349 lb. (18 299 kg)

Loader operating information is based on machine with all standard equipment; 23.5 R 25 radial tires; standard counterweight; ROPS/FOPS cab; 175-lb. (79 kg) operator; and full fuel tank. This information is affected by tire size, ballast, and different attachments.

Standard Z-Bar Information with Quick-Coupler and Construction Fork

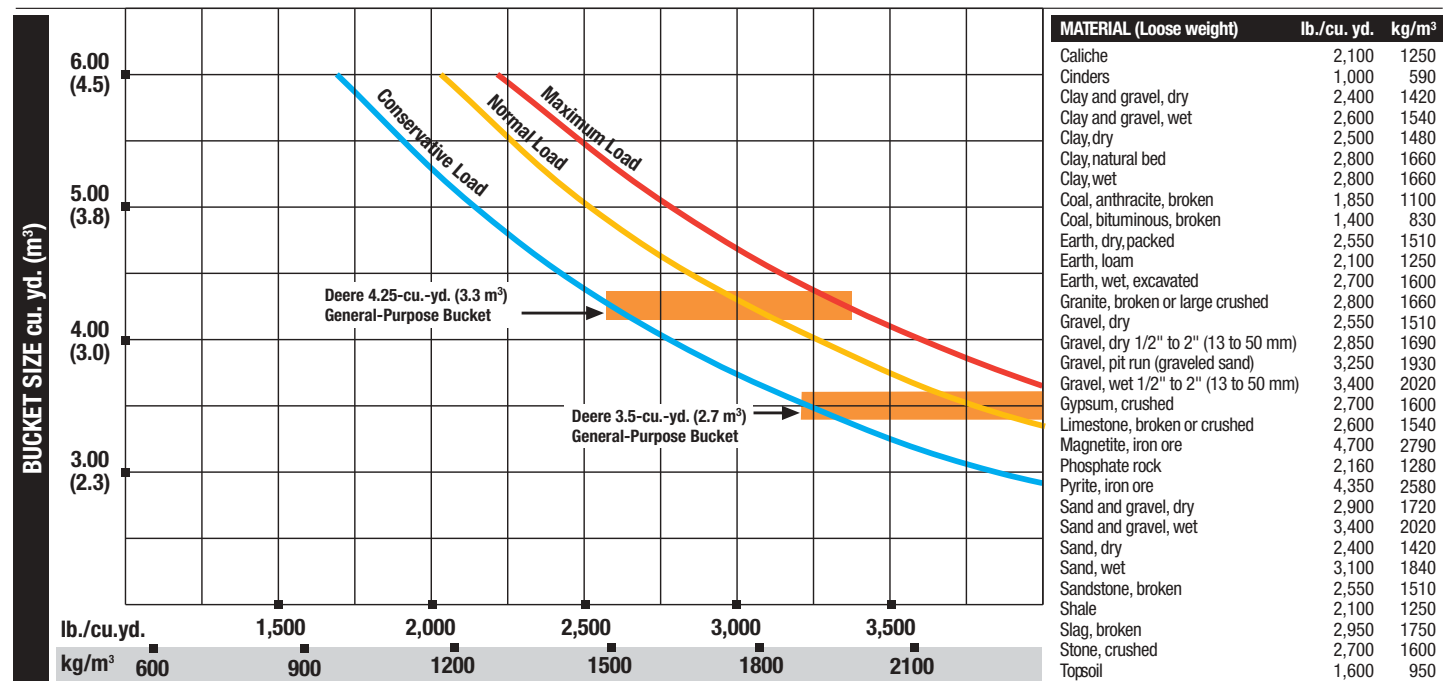
▲ Tine Length	60 in. (1525 mm)	72 in. (1829 mm)
▲▲ Overall Length	28 ft. 4 in. (8641 mm)	29 ft. 4 in. (8946 mm)
Tipping Load, Straight (fork level, load centered 24 in. [610 mm] forward on tine).	22,782 lb. (10 334 kg)	22,603 lb. (10 252 kg)
Tipping Load, 40-Degree Full Turn (fork level, load centered 24 in. [610 mm] forward on tine)	19,206 lb. (8712 kg)	19,029 lb. (8632 kg)
Operating Weight	38,854 lb. (17 621 kg)	39,051 lb. (17 710 kg)

High-Lift Z-Bar Pin-On Type Bucket Information

644J

	<i>General Purpose w/Bolt-On Edge</i>
Bucket Type/Size	
Capacity, Heaped SAE	4.25 cu. yd. (3.3 m ³)
Capacity, Struck SAE	3.7 cu. yd. (2.8 m ³)
Bucket Weight	3,554 lb. (1612 kg)
Bucket Width	114.2 in. (2900 mm)
Breakout Force, SAE J732C	30,574 lb. (13 868 kg)
Tipping Load, Straight	24,798 lb. (11 248 kg)
Tipping Load, 40-Degree Full Turn, SAE	20,765 lb. (9419 kg)
Reach, 45-Degree Dump, 7-ft. (2.13 m) Clearance	82.4 in. (2093 mm)
▲ Reach, 45-Degree Dump, Full Height	46.3 in. (1175 mm)
▲▲ Dump Clearance, 45 Degree, Full Height	132.9 in. (3375 mm)
▲▲▲ Overall Length, Bucket on Ground	28 ft. 0 in. (8525 mm)
Loader Clearance Circle, Bucket In Carry Position	43 ft. 8 in. (13 320 mm)
Operating Weight	39,000 lb. (17 690 kg)
<i>Loader operating information is based on machine with all standard equipment; 23.5 R 25 radial tires; standard counterweight; ROPS/FOPS cab; 175-lb. (79 kg) operator; and full fuel tank. This information is affected by tire size, ballast, and different attachments.</i>	

Bucket Selection Guide*



* 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.

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Key: ● Standard equipment ▲ Optional or special equipment

*See your John Deere dealer for further information.

644J Engine

- Meets EPA and CARB emission non-road regulations
- Antifreeze, -34°F (-37°C)
- Coolant recovery tank
- Fan guard
- Muffler, under hood with large exhaust stack
- Environmentally friendly engine oil drain
- Engine oil cooler
- Quick-release fuel filter and water separator
- Heavy-duty trash-resistant cooling package
- ▲ Ether start aid (for cold starts)
- ▲ Engine air heater (for cold starts)
- ▲ Engine coolant heater, 1,000 watts, 110 volts
- ▲ Reversing fan
- ▲ Desert and high-altitude cooling package
- ▲ Special-application trash screens, axle seal guards, etc.*
- ▲ Chrome exhaust stack
- ▲ Cooler corrosion package

Powertrain

- ZF torque-converter powershift transmission — 4F/3R
- Electronically controlled, adaptive, load- and speed-dependent shift modulation
- Integral transmission sight gauge / fill tube
- Transmission clutch disconnect with three selectable settings
- Quick-shift button with two selectable modes
- Front axle with hydraulic locking differential
- ▲ Conventional-type differentials, front and rear*
- ▲ Front and rear axles with hydraulic locking differentials
- ▲ Limited slip differentials*
- ▲ Spin-control system
- ▲ Axle oil coolers

Hydraulic System

- In-cab adjustable automatic bucket positioner
- In-cab adjustable automatic boom height kick-out control
- In-cab adjustable automatic boom return-to-carry control
- Reservoir sight gauge
- Spin-on hydraulic filters, vertical mounting
- Hydraulic lever lockout
- Two-function hydraulic valve with single-lever control and adjustable wristrest
- ▲ Two-function hydraulic valve with two-lever fingertip controls and adjustable wristrest
- ▲ Three-function hydraulic valve with single-lever control and auxiliary lever for third function
- ▲ Three-function hydraulic valve with two-lever fingertip controls, adjustable wristrest, and auxiliary lever for third function
- ▲ Four-function hydraulic valve, with dual single-lever controls
- ▲ Hydraulic conversion kits, two- to three- and three- to four-function valves

644J Hydraulic System (continued)

- Hydraulic system oil cooler (for continuous running attachments and extreme temperatures)
- ▲ Ride control, automatic type
- ▲ Hydraulic control system for quick-coupler locking pins

Electrical

- Solid-state electrical power distribution system
 - 24-volt electrical system
 - High-capacity batteries (2), 12 volt with 1,400 CCA, 200-min. rated reserve
 - Master electrical disconnect switch
 - Alternator, high capacity, 80 amps and 24 volts
 - ▲ Alternator trash covers
 - Battery terminal safety covers
 - Starting switch with electric fuel shutoff
 - Lights (conform to SAE 99): Driving with guards / LED turn signals and flashers / Stop and taillights
 - Work lights, front (2) and rear (2)
 - Horn, with push button in center of steering wheel (conforms to SAE J994, J1446)
 - Reverse warning alarm (conforms to SAE J994, J1446)
 - Computerized multifunction monitor
 - Audible and visual warnings: Amber caution / Red stop / Analog gauges: Engine coolant temperature, transmission oil temperature, fuel level, hydraulic oil temperature, engine oil pressure / Digital instruments: Engine rpm, odometer, transmission gear indicator, speedometer, hourmeter / Operator warning lights: Check engine, engine oil pressure, engine air filter restriction, battery voltage, transmission filter restriction, brake pressure, hydraulic oil filter, fasten seat belt, transmission fault, hydraulic oil temperature, transmission fault
 - Indicator lights: Park brake / Ride control / LED turn signals and warning flashers / Coupler pin disconnect / Engine preheater / Secondary steering / Work lights
 - Built-in diagnostics: Fault code retrieval
 - Radio-ready cab
 - 24- to 12-volt converter, 5 amp with receptacle
 - ▲ 24- to 12-volt converter, 10 amp with two receptacles
 - ▲ 24-volt AM/FM/WB stereo radio with cassette
 - ▲ 24-volt AM/FM/WB stereo radio with CD
 - ▲ 24-volt AM/FM/WB stereo radio with clock
 - Cab wired for rotating beacon
 - ▲ Electrical corrosion-prevention package
- ### Operator's Station
- Cab (conforms to SAE J1040 APR88): ROPS/ FOPS / Heater/defroster / Multiplane isolation mounted for noise/vibration reduction / Front and rear windshield washers and intermittent wipers / Tinted safety glass
 - ▲ Canopy (conforms to SAE J1040 APR88): ROPS/

644J Operator's Station (continued)

- FOPS / Multiplane isolation mounted for noise/vibration reduction / Optional canopy rear window glass, for noise reduction
- ▲ Air conditioning (factory installed)
- Seat belt, 3 in. (76 mm), with retractor
- Seat, air suspension, deluxe cloth covered with deep foam, high back, air suspension, adjustable for weight-height, fore-aft position, backrest tilt, and armrest angle with backrest extension
- ▲ Seat, air suspension, vinyl, on canopy with backrest extension
- Backlit sealed switch module with function indicators
- Cup holder, personal cooler holder and storage space
- ▲ Sun visor for cab
- Rubber floor mat
- Tilt steering column
- Textured steering wheel and spinner knob
- Rearview mirrors, outside (2) and inside (1) (conform to SAE J985)
- Handholds and steps, ergonomically located and slip resistant (conform to SAE J185)

Loader Linkage

- Loader boom service locking bar (conforms to SAE J38)
- Z-bar loader linkage
- ▲ High-lift Z-bar loader linkage

Buckets and Attachments

- ▲ Full line of Deere pin-on buckets with selection of bolt-on cutting edges, JAGZ™ cutting edges, and teeth-segmented bolt-on cutting edges*

Tires

- ▲ 23.5-25, 20 PR L3
- 23.5 R 25, 1 Star L3 Radial
- ▲ 750/65 R 25 L3-T*
- ▲ 28L-26, 14 PR LS-2 (single-piece rims)
- Multi-piece rims
- ▲ Less wheels and tires
- ▲ 9-degree rear axle stops for extra-large tires, 12-degree oscillation for standard

Other

- Fenders, front
- ▲ Full fenders, front, with mud flap
- ▲ Full fenders, front and rear, with mud flap
- Articulation locking bar (conforms to SAE J276)
- Vandal protection, includes lockable engine enclosure, rear grille, and fuel fill
- Counterweight, built-in
- Drawbar, with locking pin
- ▲ Transmission side frame guards
- ▲ Auxiliary bottom guards
- ▲ Lift hooks
- ▲ Fire extinguisher
- ▲ License plate bracket
- ▲ Secondary steering



JOHN DEERE

DKA644J Litho in U.S.A. (06-03)

Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan, at standard conditions per SAE J1349 and DIN 70 020, using No. 2-D fuel at 35 API gravity. No derating is required up to 10,000-ft. (3050 m) altitude. Gross power is without cooling fan.

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on a unit with all standard equipment, 23.5 R 25 radial tires, standard counterweight, ROPS/FOPS cab, full fuel tank, and 175-lb. (79 kg) operator.

