

624 **P**

Wheel Loader



JOHN DEERE



ELEVATE YOUR EXPECTATIONS

VISION AND DETECTION SYSTEM OFFERINGS

Active jobsites present many operational challenges, including multiple machines, crew members, and bystanders. John Deere precision construction solutions such as Advanced Vision System (AVS), Advanced Object Detection (AOD), and SmartDetect™ can help enhance operator awareness to confidently navigate busy work areas:

- Optional **AVS** includes two additional digital cameras mounted on the left and right rearview mirror platforms that integrate with the digital rearview (backup) camera to project images on a single dedicated in-cab display.
- Paired with a high-resolution camera and a dedicated display, optional **AOD** system utilizes radar to provide in-cab operator-audible alerts when objects are detected behind the machine. AOD also adds dynamic path lines that articulate based on the loader's travel motion to the dedicated display to help operators visualize the machine's reverse path.
- Available as a factory install and also as an easily installed field kit for new and existing loaders, optional **SmartDetect** helps the operator distinguish between objects and people in the machine's reverse travel path. Combined with unique operator-audible alerts, the system issues visual cues highlighting detected objects on the dedicated display. An added external alarm alerts detected individuals in the loader's travel path. SmartDetect requires AVS, AOD, and a dedicated in-cab G5 display as well as software activation.
- Building on SmartDetect capabilities, optional **SmartDetect™ Digital** utilizes on-machine technologies to create an off-board solution for equipment owners, fleet managers, and safety professionals. Easily accessed through the user-friendly John Deere Operations Center™ mobile app, the system notifies supervisors of near-miss events with corresponding video. Weekly reports of digital usage and jobsite events within a heat-map summary are also available.



AVS ON THE G5 DISPLAY

ABOVE AND BEYOND

MEET THE P-TIER WHEEL LOADERS



**SMARTWEIGH™
PAYLOAD-WEIGHING
SOLUTION IS DEERE
DESIGNED & SUPPORTED**

When your material-handling application needs a heavy-duty lift, add a P-Tier Wheel Loader to your lineup. Combining convenient front-end features with near-parallel lift, spacious operator stations including customizable ergonomic electrohydraulic (EH) controls, streamlined electrical and hydraulic routing, and innovative options, these versatile and productive mid-size models are designed to help you take your operation to the next level.

Prepare for productivity

Integrated with the John Deere Operations Center mobile app and desktop interface, in-cab displays of auto daily fluid checks, fluid loss sensing, battery monitoring, and auto active warmup give operators the fleet health info needed to get the machine and themselves ready for a productive workday.

Keep your cool

The next evolution of Quad-Cool™ enables the cooling system to be conveniently accessed and cleaned from ground level. All daily service points including fuel refill are conveniently grouped at ground level on the left side of the

machine for easy access. Routing of electrical wire harnesses and hydraulic hoses has been streamlined.

At the forefront

Featuring bucket and linkage designs that improve load leveling, material retention, and visibility, P-Tier Loaders yield more productivity and performance than previous models. Enhanced-performance buckets with integrated spill guards, curved side cutters, and impressive rollback deliver elevated bucket-fill performance and material retention compared to earlier offerings. Optional new John Deere high-strength steel buckets with extended lip are made to move up to five-percent more material than previous designs.

Material matters

SmartWeigh option features dynamic weighing technology that allows operators to weigh without interrupting workflow and removes the need to lower and raise the boom after tipoff. SmartWeigh upgrades include new UX features that improve operator interaction. Shared through the onboard monitor, SmartWeigh is easy to calibrate and effortlessly integrates with the John Deere Operations Center so you can track and visualize payload data from almost anywhere. Available as a factory-installed or field-kit option, you can also try SmartWeigh at a low cost for 250 machine hours.

LED beacon option

Four optional new LED beacons can be added to the cab of the loader to help make bystanders more aware of the machine.



624 P

WHEEL LOADER



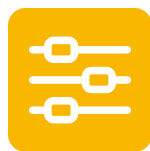
**VERSATILE BUCKET
+ LINKAGE DESIGNS**



OVERACHIEVERS

ASPIRE TO GO HIGHER.

With handy front-end features and plenty of productivity-boosting enhancements over previous models, our 624 P-Tier Wheel Loader redefines expectations about the heights a utility loader can reach.



Take control

Operators can easily control up to six functions without letting go of the ergonomically designed joystick. Four industry-exclusive multifunction buttons can each be programmed to handle any of up to 12 functions selected through the monitor, including bucket vibrate and EH Precision mode.



Have a seat

Spacious and comfortable cab features extra legroom, an improved HVAC system, additional storage, and a more adjustable seat than earlier models.



Get carried away

Tool Carrier configuration enables a clear view of the coupler and forks, making it easier to quickly move pipes, logs, and pallets.



Pretty big plus

High-Lift Plus configuration provides an additional 24 inches of hinge-pin height over standard lift height and 12 inches over the High-Lift model. All three lift heights feature near-parallel lift.



Level up

AutoLevel enables near-perfect parallelism throughout the boom-raise-and-lower cycle, letting operators set their desired attachment angle to within $\pm$ two degrees.



Connected machines

John Deere construction equipment comes with in-base connectivity — free from subscriptions or annual renewals. Analyze critical machine data, track utilization, review diagnostic alerts, and more from **the John Deere Operations Center**. The Operations Center also enables John Deere Connected Support™, which uses data from thousands of connected machines to proactively address issues before they arise. With your approval, your dealer can also remotely monitor machine health, diagnose problems, and even update machine software without a trip to the jobsite.*

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



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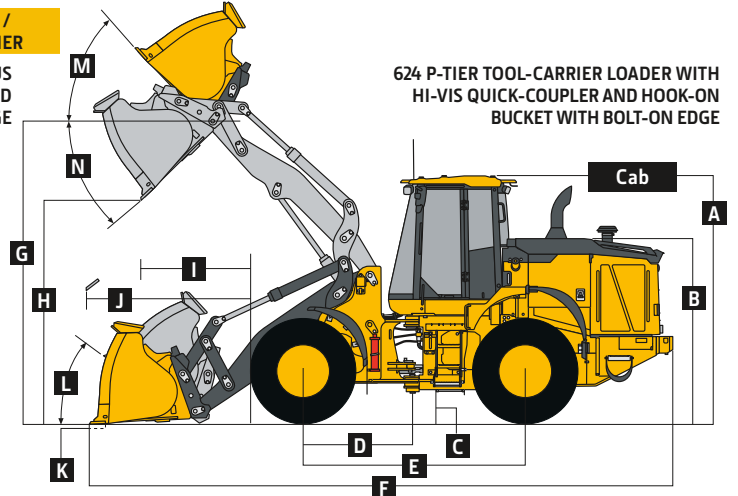
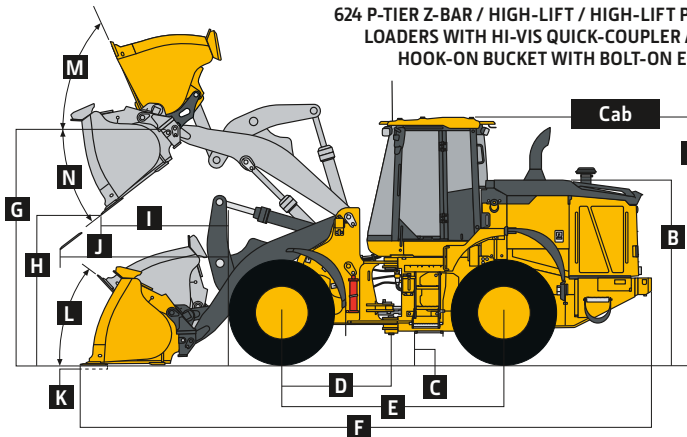
Engine 624 P-TIER Z-BAR / HIGH-LIFT / HIGH-LIFT PLUS / TOOL CARRIER				
Manufacturer and Model	John Deere PowerTech™ PVS 6068		Net Torque Rise	58% standard
Non-Road Emission Standard	EPA Final Tier 4/EU Stage V		Rated Speed	2,200 rpm
Cylinders	6		Fuel System (electronically controlled)	High-pressure common rail
Valves Per Cylinder	4		Lubrication	Full-flow spin-on filter and integral cooler
Displacement	6.8 L (414 cu. in.)		Aspiration	Turbocharged, charge air cooled
Net Peak Power (ISO 9249)	143 kW (192 hp) at 1,600 rpm		Air Cleaner	Under-hood, dual-element dry type, restriction indicator in cab monitor for service
Gross Peak Power (ISO 9249)	152 kW (203 hp) at 1,600 rpm			
Net Peak Torque (ISO 9249)	874 Nm (644 ft.-lb.) at 1,300 rpm			
Gross Peak Torque (ISO 9249)	923 Nm (681 ft.-lb.) at 1,500 rpm			
Cooling				
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers			
Electrical				
Electrical System	24 volt with 145-amp alternator			
Batteries (2 – 12 volt)	950 CCA (each)			
Transmission System				
Type	Countershaft-type PowerShift™			
Torque Converter	Single stage, single phase			
Shift Control	Electronically modulated, adaptive, load and speed dependent			
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; Quick-Shift button on hydraulic lever			
Shift Modes	Manual/auto (1st-D or 2nd-D); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and 4 clutch cutoff settings			
Maximum Travel Speeds (with 20.5 R 25 tires)	Standard 5-Speed Without Lockup Torque Converter Optional 5-Speed With Lockup Torque Converter			
	Forward	Reverse	Forward	Reverse
Range 1	6.3 km/h (3.9 mph)	6.7 km/h (4.1 mph)	7.0 km/h (4.3 mph)	6.6 km/h (4.1 mph)
Range 2	11.4 km/h (7.0 mph)	12.0 km/h (7.4 mph)	12.1 km/h (7.5 mph)	12.8 km/h (7.9 mph)
Range 3	17.5 km/h (10.8 mph)	28.7 km/h (17.8 mph)	18.7 km/h (11.6 mph)	30.7 km/h (19.0 mph)
Range 4	27.2 km/h (16.9 mph)	N/A	29.1 km/h (18.1 mph)	N/A
Range 5	40.0 km/h (24.8 mph)	N/A	40.0 km/h (24.8 mph)	N/A
Axles/Brakes				
Final Drives	Heavy-duty inboard-mounted planetary			
Differentials	Hydraulic locking front with conventional rear — standard; dual locking front and rear — optional			
Rear Axle Oscillation, Stop to Stop (with 20.5 R 25 tires)	24 deg. (12 deg. each direction)			
Brakes (conform to ISO 3450)				
Service	Hydraulically actuated, spring-retracted, self-adjusting, inboard sun-shaft mounted, oil cooled, single disc			
Parking	Automatic spring applied, hydraulically released, driveline mounted, oil-cooled, multi disc			
Tires/Wheels (see page 10 for complete tire adjustments)				
	Tread Width		Width Over Tires	
Bridgestone VJT 20.5R25 L3 1-Star	2053 mm (80.8 in.)		2580 mm (101.6 in.)	
Serviceability				
Refill Capacities			Refill Capacities (continued)	
Fuel Tank (with lockable cap)	227 L (60 gal.)		Axle Oil (each)	
Cooling System	32.6 L (34.4 qt.)		Front	22 L (23 qt.)
Diesel Exhaust Fluid (DEF)	15.6 L (16.5 qt.)		Rear	17 L (18 qt.)
Engine Oil With Vertical Spin-On Filter	19.5 L (20.6 qt.)		Hydraulic Reservoir and Filter	90.5 L (23.9 gal.)
Transmission Reservoir With Vertical Filter	27 L (28.5 qt.)		Park Brake Oil (wet disc)	0.3 L (10 oz.)
Hydraulic System/Steering				
	Z-Bar / High-Lift / High-Lift Plus			Tool Carrier
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system			
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,200 rpm	208 L/m (55 gpm)			208 L/m (55 gpm)
System Relief Pressure (loader and steering)	27 370 kPa (3,970 psi)			24 994 kPa (3,625 psi)
Loader Controls	2-function valve, joystick control or fingertip controls, hydraulic-function enable/disable, optional 3rd- and 4th-function valve from factory, 5th and 6th functions available by field kit			
Steering (conforms to ISO 5010)	Steering-column-mounted, twist-grip shift lever; Quick-Shift button on hydraulic lever			
Type	Power, fully hydraulic			
Articulation Angle	80-deg. arc (40 deg. each direction)			
Turning Radius (measured to centerline of outside tire)	5.27 m (17 ft. 4 in.)			

624 P-TIER

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Dimensions and Specifications With Hi-Vis Coupler and Hook-On Bucket With Bolt-On Edge

624 P-TIER Z-BAR / HIGH-LIFT / HIGH-LIFT PLUS / HIGH-LIFT PLUS / TOOL CARRIER



	Z-Bar	Z-Bar	High-Lift	High-Lift	High-Lift Plus	High-Lift Plus	Tool Carrier	Tool Carrier
	2.7-m ³ (3.5 cu. yd.) enhanced performance	4.0-m ³ (5.25 cu. yd.) light material	2.5-m ³ (3.25 cu. yd.) enhanced performance	3.4-m ³ (4.5 cu. yd.) light material	2.3-m ³ (3.0 cu. yd.) enhanced performance	3.1-m ³ (4.0 cu. yd.) light material	2.7-m ³ (3.5 cu. yd.) enhanced performance	3.4-m ³ (4.5 cu. yd.) light material
Dimensions With Bucket With Bolt-On Edge (illustrations above)								
A Height to Top of Cab	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)
B Hood Height	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)
C Ground Clearance	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)
D Length From Centerline to Front Axle	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)
E Wheelbase	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)
F Overall Length, Bucket on Ground	7.95 m (26 ft. 1 in.)	8.04 m (26 ft. 4 in.)	8.38 m (27 ft. 6 in.)	8.50 m (27 ft. 11 in.)	8.59 m (28 ft. 2 in.)	8.65 m (28 ft. 5 in.)	7.99 m (26 ft. 2 in.)	8.13 m (26 ft. 8 in.)
G Height to Hinge Pin, Fully Raised	3.96 m (13 ft. 0 in.)	3.96 m (13 ft. 0 in.)	4.32 m (14 ft. 2 in.)	4.32 m (14 ft. 2 in.)	4.57 m (15 ft. 0 in.)	4.57 m (15 ft. 0 in.)	4.00 m (13 ft. 1 in.)	4.00 m (13 ft. 1 in.)
H Dump Clearance, 45 deg., Full Height	2.72 m (8 ft. 11 in.)	2.67 m (8 ft. 9 in.)	3.11 m (10 ft. 2 in.)	3.03 m (9 ft. 11 in.)	3.45 m (11 ft. 4 in.)	3.37 m (11 ft. 1 in.)	2.74 m (9 ft. 0 in.)	2.64 m (8 ft. 8 in.)
I Reach, 45-deg. Dump, Full Height	1.22 m (4 ft. 0 in.)	1.28 m (4 ft. 2 in.)	1.33 m (4 ft. 4 in.)	1.42 m (4 ft. 8 in.)	1.24 m (4 ft. 1 in.)	1.34 m (4 ft. 5 in.)	1.39 m (4 ft. 7 in.)	1.51 m (4 ft. 11 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.66 m (5 ft. 5 in.)	1.70 m (5 ft. 7 in.)	2.05 m (6 ft. 9 in.)	2.10 m (6 ft. 11 in.)	2.24 m (7 ft. 4 in.)	2.28 m (7 ft. 6 in.)	1.83 m (6 ft. 0 in.)	1.89 m (6 ft. 2 in.)
K Maximum Digging Depth	0.10 m (4 in.)	0.11 m (4 in.)	0.20 m (8 in.)	0.21 m (8 in.)	0.19 m (7 in.)	0.19 m (7 in.)	0.13 m (5 in.)	0.13 m (5 in.)
L Maximum Rollback at Ground Level	44 deg.	44 deg.	48 deg.	48 deg.	49 deg.	49 deg.	52 deg.	52 deg.
M Maximum Rollback, Boom Fully Raised	60 deg.	60 deg.	60 deg.	60 deg.	60 deg.	60 deg.	57 deg.	57 deg.
N Maximum Bucket Dump Angle, Fully Raised	48 deg.	48 deg.	46 deg.	45 deg.	45 deg.	45 deg.	50 deg.	50 deg.
Loader Clearance Circle, Bucket Carry Position	12.09 m (39 ft. 8 in.)	12.44 m (40 ft. 10 in.)	12.53 m (41 ft. 1 in.)	12.76 m (41 ft. 10 in.)	12.77 m (41 ft. 11 in.)	12.98 m (42 ft. 7 in.)	12.24 m (40 ft. 2 in.)	12.5 m (41 ft. 0 in.)
Specifications With Bucket With Bolt-On Edge								
Capacity, Heaped	2.7 m ³ (3.5 cu. yd.)	4.0 m ³ (5.25 cu. yd.)	2.5 m ³ (3.25 cu. yd.)	3.4 m ³ (4.5 cu. yd.)	2.3 m ³ (3.0 cu. yd.)	3.1 m ³ (4.0 cu. yd.)	2.7 m ³ (3.5 cu. yd.)	3.4 m ³ (4.5 cu. yd.)
Capacity, Struck	2.17 m ³ (2.8 cu. yd.)	3.46 m ³ (4.53 cu. yd.)	2.1 m ³ (2.7 cu. yd.)	2.9 m ³ (3.8 cu. yd.)	1.9 m ³ (2.4 cu. yd.)	2.6 m ³ (3.4 cu. yd.)	1.9 m ³ (2.4 cu. yd.)	2.9 m ³ (3.8 cu. yd.)
Bucket Weight With Bolt-On Cutting Edge	999 kg (2,202 lb.)	1376 kg (3,034 lb.)	983 kg (2,167 lb.)	1294 kg (2,853 lb.)	945 kg (2,083 lb.)	1234 kg (2,721 lb.)	999 kg (2,202 lb.)	1294 kg (2,853 lb.)
Bucket Width	2.68 m (8 ft. 10 in.)	3.05 m (10 ft. 0 in.)	2.69 m (8 ft. 10 in.)	2.89 m (9 ft. 6 in.)	2.69 m (8 ft. 10 in.)	2.89 m (9 ft. 6 in.)	2.68 m (8 ft. 10 in.)	2.89 m (9 ft. 6 in.)
Breakout Force	12 956 kg (28,563 lb.)	11 982 kg (26,416 lb.)	13 158 kg (29,008 lb.)	11 882 kg (26,195 lb.)	14 054 kg (30,984 lb.)	13 176 kg (29,048 lb.)	11 032 kg (24,321 lb.)	10 289 kg (22,683 lb.)
Tipping Load, Straight, No Tire Deflection	12 318 kg (27,157 lb.)	11 930 kg (26,301 lb.)	10 480 kg (23,104 lb.)	10 080 kg (22,223 lb.)	9800 kg (21,605 lb.)	9482 kg (20,904 lb.)	11 751 kg (25,906 lb.)	11 454 kg (25,252 lb.)
Tipping Load, Straight, With Tire Deflection	11 595 kg (25,563 lb.)	11 166 kg (24,617 lb.)	9939 kg (21,912 lb.)	9516 kg (20,979 lb.)	9321 kg (20,549 lb.)	8979 kg (19,795 lb.)	11 046 kg (24,352 lb.)	10 767 kg (23,737 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	10 626 kg (23,426 lb.)	10 232 kg (22,558 lb.)	8992 kg (19,824 lb.)	8590 kg (18,938 lb.)	8377 kg (18,468 lb.)	8052 kg (17,752 lb.)	10 981 kg (24,209 lb.)	9820 kg (21,649 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	9666 kg (21,310 lb.)	9222 kg (20,331 lb.)	8256 kg (18,201 lb.)	7830 kg (17,262 lb.)	7722 kg (17,024 lb.)	7368 kg (16,244 lb.)	9228 kg (20,344 lb.)	8937 kg (19,703 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection (conforms to ISO 14397-1)*	5313 kg (11,713 lb.)	5116 kg (11,279 lb.)	4496 kg (9,912 lb.)	4295 kg (9,469 lb.)	4188 kg (9,233 lb.)	4026 kg (8,876 lb.)	5491 kg (12,106 lb.)	4910 kg (10,825 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	4833 kg (10,655 lb.)	4611 kg (10,166 lb.)	4128 kg (9,101 lb.)	3915 kg (8,631 lb.)	3861 kg (8,512 lb.)	3684 kg (8,122 lb.)	4614 kg (10,172 lb.)	4469 kg (9,852 lb.)
Operating Weight	15 968 kg (35,203 lb.)	16 397 kg (36,149 lb.)	16 162 kg (35,631 lb.)	16 563 kg (36,515 lb.)	16 386 kg (36,125 lb.)	16 743 kg (36,912 lb.)	15 785 kg (34,800 lb.)	16 074 kg (35,437 lb.)

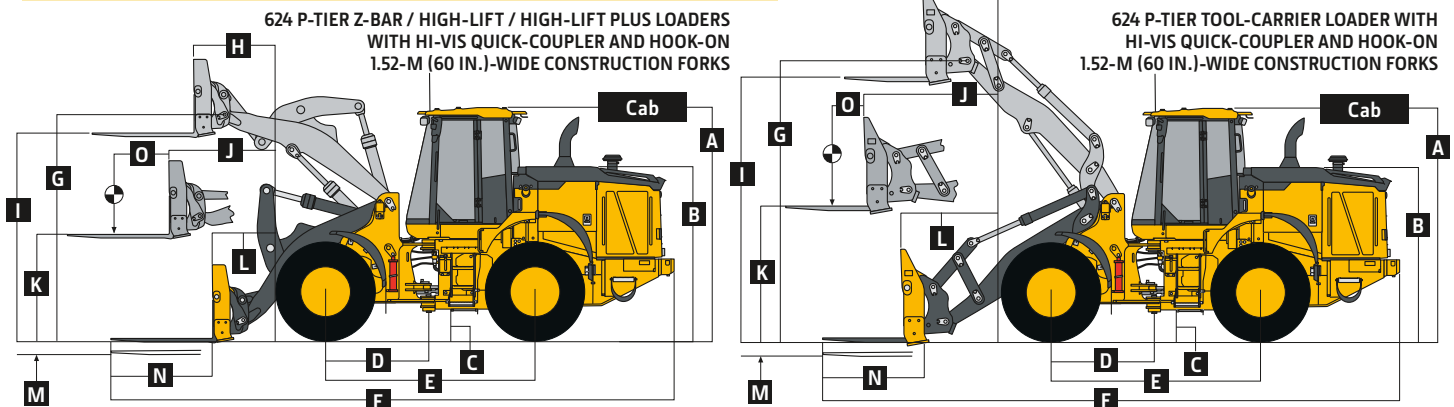
Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage VI) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. 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. / *Rated operating capacity based on Deere attachments only.

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624 P-TIER

Dimensions and Specifications With Hi-Vis Coupler and Hook-On Construction Forks

624 P-TIER Z-BAR / HIGH-LIFT / HIGH-LIFT PLUS / TOOL CARRIER



	Z-Bar 1.52-m (60 in.)	Z-Bar 1.83-m (72 in.)	High-Lift 1.52-m (60 in.)	High-Lift 1.83-m (72 in.)	High-Lift Plus 1.52-m (60 in.)	High-Lift Plus 1.83-m (72 in.)	Tool Carrier 1.52-m (60 in.)	Tool Carrier 1.83-m (72 in.)
Dimensions With Forks (illustrations above)	<i>tine length</i>	<i>tine length</i>	<i>tine length</i>	<i>tine length</i>	<i>tine length</i>	<i>tine length</i>	<i>tine length</i>	<i>tine length</i>
A Height to Top of Cab	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)	3.39 m (11 ft. 1 in.)
B Hood Height	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)	2.52 m (8 ft. 3 in.)
C Ground Clearance	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)	437 mm (17.2 in.)
D Length From Centerline to Front Axle	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)
E Wheelbase	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)
F Overall Length, Forks on Ground	8.48 m (27 ft. 10 in.)	8.78 m (28 ft. 10 in.)	8.94 m (29 ft. 4 in.)	9.25 m (30 ft. 4 in.)	9.24 m (30 ft. 4 in.)	9.54 m (31 ft. 4 in.)	8.63 m (28 ft. 4 in.)	8.94 m (29 ft. 4 in.)
G Height to Hinge Pin, Fully Raised	3.96 m (13 ft. 0 in.)	3.96 m (13 ft. 0 in.)	4.32 m (14 ft. 2 in.)	4.32 m (14 ft. 2 in.)	4.57 m (15 ft. 0 in.)	4.57 m (15 ft. 0 in.)	4.00 m (13 ft. 1 in.)	4.00 m (13 ft. 1 in.)
H Reach, Fully Raised	0.81 m (32 in.)	0.81 m (32 in.)	0.95 m (3 ft. 1 in.)	0.95 m (3 ft. 1 in.)	0.96 m (3 ft. 2 in.)	0.96 m (3 ft. 2 in.)	1.05 m (3 ft. 5 in.)	1.05 m (3 ft. 5 in.)
I Fork Height, Fully Raised	3.64 m (11 ft. 11 in.)	3.64 m (11 ft. 11 in.)	4.00 m (13 ft. 2 in.)	4.00 m (13 ft. 2 in.)	4.25 m (13 ft. 11 in.)	4.25 m (13 ft. 11 in.)	3.72 m (12 ft. 2 in.)	3.72 m (12 ft. 2 in.)
J Maximum Reach, Fork Level	1.62 m (5 ft. 4 in.)	1.62 m (5 ft. 4 in.)	1.98 m (6 ft. 6 in.)	1.98 m (6 ft. 6 in.)	2.18 m (7 ft. 2 in.)	2.18 m (7 ft. 2 in.)	1.80 m (5 ft. 11 in.)	1.80 m (5 ft. 11 in.)
K Fork Height, Maximum Reach	1.69 m (5 ft. 7 in.)	1.69 m (5 ft. 7 in.)	1.69 m (5 ft. 7 in.)	1.69 m (5 ft. 7 in.)	1.69 m (5 ft. 7 in.)	1.69 m (5 ft. 7 in.)	1.80 m (5 ft. 11 in.)	1.80 m (5 ft. 11 in.)
L Reach, Ground Level	1.06 m (3 ft. 6 in.)	1.06 m (3 ft. 6 in.)	1.49 m (4 ft. 11 in.)	1.49 m (4 ft. 11 in.)	1.73 m (5 ft. 8 in.)	1.73 m (5 ft. 8 in.)	1.21 m (4 ft. 0 in.)	1.21 m (4 ft. 0 in.)
M Depth Below Ground	77 mm (3 in.)	77 mm (3 in.)	181 mm (7 in.)	181 mm (7 in.)	173 mm (7 in.)	173 mm (7 in.)	170 mm (7 in.)	170 mm (7 in.)
N Tine Length	1.52 m (60 in.)	1.83 m (72 in.)	1.52 m (60 in.)	1.83 m (72 in.)	1.52 m (60 in.)	1.83 m (72 in.)	1.52 m (60 in.)	1.83 m (72 in.)
O Load Position, 50% Tine Length	0.76 m (30 in.)	0.91 m (3 ft. 0 in.)	0.76 m (30 in.)	0.91 m (3 ft. 0 in.)	0.76 m (30 in.)	0.91 m (3 ft. 0 in.)	0.76 m (30 in.)	0.91 m (3 ft. 0 in.)

Specifications With Forks

Tipping Load, Straight, No Tire Deflection	8759 kg (19,310 lb.)	8282 kg (18,259 lb.)	7704 kg (16,984 lb.)	7312 kg (16,120 lb.)	7272 kg (16,032 lb.)	6914 kg (15,243 lb.)	8735 kg (19,257 lb.)	8279 kg (18,252 lb.)
Tipping Load, Straight, With Tire Deflection	8511 kg (18,764 lb.)	8055 kg (17,758 lb.)	7491 kg (16,515 lb.)	7113 kg (15,681 lb.)	7083 kg (15,615 lb.)	6738 kg (14,855 lb.)	8211 kg (18,102 lb.)	7782 kg (17,156 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	7553 kg (16,651 lb.)	7132 kg (15,723 lb.)	6605 kg (14,562 lb.)	6259 kg (13,799 lb.)	6206 kg (13,682 lb.)	5891 kg (12,987 lb.)	7655 kg (16,876 lb.)	7249 kg (15,981 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	7209 kg (15,893 lb.)	6813 kg (15,020 lb.)	6312 kg (13,916 lb.)	5982 kg (13,188 lb.)	5931 kg (13,076 lb.)	5631 kg (12,414 lb.)	6966 kg (15,357 lb.)	6597 kg (14,544 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1 and SAE J1197)*	3605 kg (7,948 lb.)	3407 kg (7,511 lb.)	3156 kg (6,958 lb.)	2991 kg (6,594 lb.)	2966 kg (6,539 lb.)	2816 kg (6,208 lb.)	3483 kg (7,679 lb.)	3299 kg (7,273 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	4325 kg (9,535 lb.)	4088 kg (9,012 lb.)	3787 kg (8,349 lb.)	3589 kg (7,912 lb.)	3559 kg (7,846 lb.)	3379 kg (7,449 lb.)	4180 kg (9,215 lb.)	3958 kg (8,726 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	5767 kg (12,714 lb.)	5450 kg (12,015 lb.)	5050 kg (11,133 lb.)	4786 kg (10,551 lb.)	4745 kg (10,461 lb.)	4505 kg (9,932 lb.)	5573 kg (12,286 lb.)	5278 kg (11,636 lb.)
Operating Weight	15 880 kg (35,009 lb.)	15 940 kg (35,142 lb.)	16 107 kg (35,510 lb.)	16 167 kg (35,642 lb.)	16 368 kg (36,085 lb.)	16 429 kg (36,220 lb.)	15 667 kg (34,540 lb.)	15 753 kg (34,729 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVS 6068 (EPA Final Tier 4/EU Stage V) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

*Rated operating capacity based on Deere attachments only.

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Adjustments to Operating Weights and Tipping Loads With Buckets

624 P-TIER Z-BAR / HIGH-LIFT / HIGH-LIFT PLUS / TOOL CARRIER

Adjustments to operating weights, tipping loads, and tires are based on Z-Bar machine with pin-on 2.7-m³ (3.5 cu. yd.) enhanced-performance bucket with bolt-on cutting edge, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator*

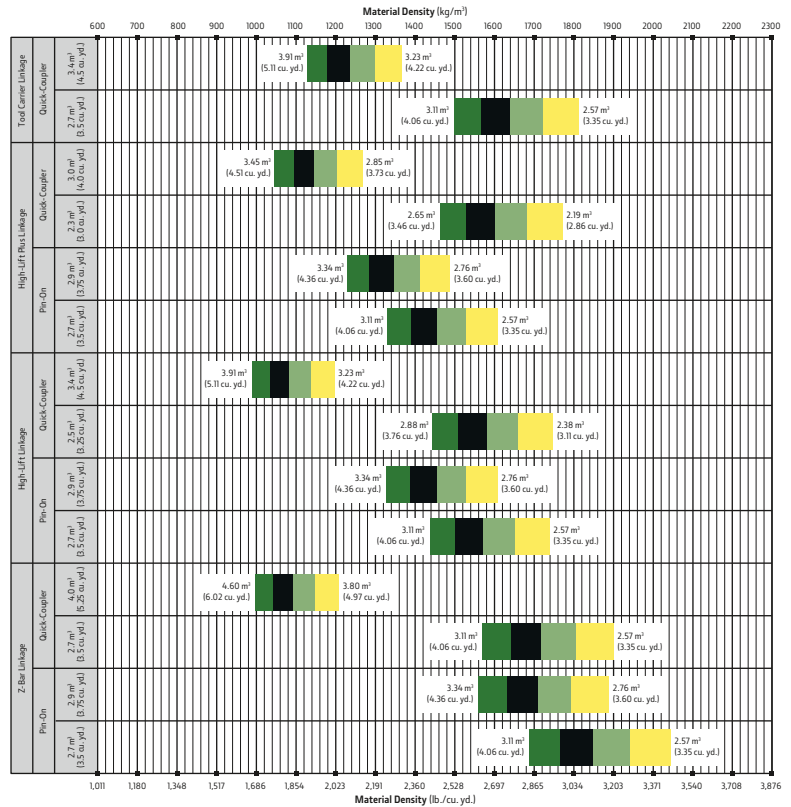
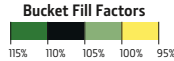
Add (+) or deduct (–) kg (lb.) as indicated

for loaders with 3-piece rims	Operating Weight	Tipping Load, Straight	Tipping Load, 40-deg. Full Turn	Tread Width	Width Over Tires	Vertical Height
Bridgestone 20.5 R 25, 1-Star L-3 VJT	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Firestone 20.5-25, 16 PR L-2 SGG	–277 kg (–611 lb.)	–199 kg (–439 lb.)	–175 kg (–386 lb.)	+0 mm (+0 in.)	+7 mm (+0.3 in.)	–64 mm (–2.5 in.)
Continental 20.5 R 25, 1-Star L-3 EM-Master	+131 kg (+289 lb.)	+94 kg (+207 lb.)	+82 kg (+181 lb.)	+0 mm (+0 in.)	+2 mm (+0.1 in.)	–19 mm (–0.7 in.)
CaCl ₂ in 20.5-25, L-3 Rear Tires, 75% Fill	+825 kg (+1,820 lb.)	+1193 kg (+2,631 lb.)	+1051 kg (+2,318 lb.)	N/A	N/A	N/A

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

Bucket Selection Guides

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



Additional equipment

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

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P-TIER Engine

- Wet-sleeve cylinder liners
- Programmable auto-idle and auto shutdown
- Selected idle adjustment from 900–1,250 rpm
- Starter excessive-cranking protection
- Automatic engine cool-down timer
- Automatic derating for exceeded system temperatures
- Serpentine drive belt for automatic tensioner
- Electrical fuel-priming pump
- Dual-stage fuel filter and water separator
- 500-hour vertical spin-on oil filter
- ▲ Engine-compartment light
- ▲ Chrome exhaust stack
- Automatic glow plugs for cold start
- ▲ Engine-block heater (recommended for cold starts below –23 deg. C [–10 deg. F])
- ▲ Centrifugal engine air pre-cleaner
- ▲ Throttle lock

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P-TIER Powertrain

- Clutch cutoff with 4 operator settings: Automatic, level ground, small slope, or steep slope
- Programmable maximum high gear
- Clutch calibration engaged from monitor
- 2,000-hour vertical spin-on transmission filter
- Transmission fill tube and sight gauge
- Transmission diagnostic ports
- 5-speed transmission without lockup torque converter
- ▲ 5-speed transmission with lockup torque converter
- Front locking differential
- ▲ Rear locking differential
- Brake retractors and adjusters
- ▲ Automatic differential lock
- Axle oil temperature sensing
- ▲ Wheel-spin control

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P-TIER Quad-Cool™ Cooling System

- Heavy-duty, trash-resistant radiator and high-ambient cooling package
- 2-side access to all coolers
- Isolated from engine compartment
- Engine radiator
- Engine oil cooler
- Hydraulic oil cooler (oil to air)
- Transmission oil cooler (oil to air)
- Charge air cooler (air to air)
- Fuel cooler
- Coolant recovery tank
- Antifreeze, –37 deg. C (–34 deg. F)
- Cool-on-demand, hydraulically driven, swing-out fan
- Enclosed fan safety guard
- ▲ Automatic reversing fan drive
- Axle and service-brake coolers

Additional equipment *(cont.)*

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

624 P-TIER	Hydraulics
●	Electrohydraulic (EH) controls with soft stops and adjustable settings
●	In-cab adjustable automatic return-to-dig bucket positioner
●	In-cab adjustable automatic boom-height kickout/return to carry
●	Reservoir with sight gauge and fill strainer
●	Hydraulic diagnostic ports
●	4,000-hour in-tank filter
●	2 function — joystick with F-N-R
▲	2 function — 2-lever fingertip controls and steering column F-N-R
▲	3 function — joystick with F-N-R and integrated 3rd-function roller
▲	3 function — 3-lever fingertip controls and steering column F-N-R
▲	4 function — joystick with F-N-R and integrated 3rd/4th-function rollers
●	Programmable multifunction buttons (2)
●	Adjustable and continuous hydraulic-flow settings
●	Programmable attachment settings
▲	Ride control, automatic with monitor-adjustable speed settings
▲	Hydraulic control system for quick-coupler locking pins
▲	Hydrau™ XR cold-temperature hydraulic fluid recommended below -25 deg. C (-13 deg. F)
Steering Systems	
●	Conventional steering wheel with spinner knob
▲	Secondary steering
Electrical	
●	Solid-state electrical power-distribution system
●	Lockable master electrical-disconnect switch
●	Battery-terminal safety covers
●	By-pass start safety cover at starter
●	Remote jump-start access in battery box
●	Pre-wired for beacon/strobe light
●	Lights: Halogen driving lights with guards (2) / Front (4), rear cab (2), and rear grille (2) work lights / LED front turn signals and flashers / LED stop- and taillights
▲	Premium LED light package (all exterior lights are heavy-duty LED)
●	Programmable courtesy lights
●	Horn, electric
●	Reverse warning alarm
●	Multifunction/multi-language 178-mm (7 in.) LCD color monitor includes: Digital instruments — Analog display (hydraulic oil temperature, engine coolant temperature, transmission oil temperature, and engine oil pressure) / Digital display (engine rpm, transmission gear/direction indicator, hour meter, fuel level, diesel exhaust fluid (DEF) level, speedometer, odometer, and average fuel consumption)
▲	Multifunction/multi-language 127-mm (5 in.) LCD color monitor includes: Digital instruments — Analog display (hydraulic oil temperature, engine coolant temperature, transmission oil temperature, and engine oil pressure) / Digital display (engine rpm, transmission gear/direction indicator, hour meter, fuel level, DEF level, speedometer, odometer, and average fuel consumption)

624 P-TIER	Electrical <i>(continued)</i>
▲	Integrated cycle counter with 5 categories
●	Indicator lights: Standard and selected options / Amber caution and red stop
●	Operator-warning messages
●	Built-in diagnostics: Diagnostic-code details / Sensor values / Calibrations / Individual circuit tester
▲	Electrical corrosion-prevention package
●	Standard AM/FM/Weather-Band (WB) radio with remote auxiliary port
▲	Premium AM/FM/WB radio with Bluetooth®, remote auxiliary port, and remote USB port (premium cab only)
●	24- to 12-volt, 8-amp converter and cab power ports (3)
▲	24- to 12-volt, 15- or 30-amp converter and cab power ports (3)
Operator's Station	
●	Standard cab with air conditioning/heater (ROPS/FOPS Level 1, isolation mounted)
▲	Premium cab with air conditioning/heater (ROPS/FOPS Level 1, isolation mounted)
▲	Automatic temperature control (premium cab only)
●	Rear window defrost vent
●	Keyless start with multiple security modes
●	Sealed-switch module with function indicators
●	Seat with backrest extension, deep foam, fabric cover, and adjustable air suspension
▲	Premium seat with high-wide back- and headrest extension, heated and ventilated, leather/fabric cover, and adjustable heavy-duty air suspension
●	Hydraulic controls integrated to seat
●	High-visibility, bright-orange seat belt, 76 mm (3 in.), with retractor
▲	4-point seat-belt harness
▲	Seat-belt indicator beacon light
●	Cup holder and cup/Thermos® holder with retaining strap
●	Lunch-box/cooler holder with tie-down brackets
●	Coat hook
●	LED dome and reading light
●	Rubber floor mat
●	Dual-tilt steering column
●	Operator's manual storage compartment
●	Outside (2) and inside (1) rearview mirrors
▲	Heated outside mirrors with convex lens
▲	In-cab adjustable heated outside mirrors with convex lens (premium cab only)
●	Left-side operator-station access
●	Fall-arrest system anchor points tested to 2268 kg (5,000 lb.) on front of cab
●	Slip-resistant steps and ergonomic handholds
●	Pull-down front sun visor
●	Front and rear intermittent windshield wipers and washers
▲	Powered cab air pre-cleaner
▲	Beacon bracket only
▲	Beacon bracket with strobe beacon
●	Rearview camera

624 P-TIER	Operator's Station <i>(continued)</i>
▲	Rearview camera with radar object-detection system
▲	Dedicated 178-mm (7 in.) rear camera display
▲	Advanced Object Detection
▲	Advanced Vision System
●	Payload scale ready
▲	SmartWeigh™ ready + trial
▲	SmartWeigh
▲	SmartDetect™
▲	SmartDetect™ Digital
▲	Fire extinguisher
Loader Linkage	
●	Z-Bar loader linkage (parallel lift)
▲	High-Lift Z-Bar loader linkage (parallel lift)
▲	High-Lift Plus Z-Bar loader linkage (parallel lift)
▲	Tool Carrier linkage for visibility (parallel lift)
Buckets and Attachments	
▲	Full line of Deere pin-on buckets, coupler buckets, and forks
▲	John Deere hydraulic coupler that accepts JRB-pattern attachments
▲	Hi-Vis hydraulic coupler that accepts Euro-pattern attachments (ISO)
Overall Vehicle	
●	JDLink™ wireless communication system (available in specific countries; see your dealer for details)
●	NeverGrease™ rear-axle oscillation
●	Front and rear tie-downs
●	Rear cast bumper/counterweight with rear hitch and locking pin
●	Articulation locking bar
●	Loader boom service locking bar
●	40-deg. steering articulation to each side with rubber-cushion stops on frame
●	Vandal protection with lockable engine enclosures, right counterweight storage, and filler access for radiator/fuel/DEF/hydraulic transmission
●	Left-side service steps and handholds
▲	Right-side service steps and handrails
▲	Left-side close-mounted steps
●	Storage compartment
●	Fuel-tank fill strainer
●	Heavy-duty fuel-tank guard
●	Ground-level fuel and DEF fill
●	Same-side ground-level daily servicing
●	20.5R25 tires on 3-piece rims
▲	Ag material-handling package
▲	Waste handler (Z-Bar and High-Lift)
▲	Environmental drains and sample ports for engine, transmission, hydraulic oils, and engine coolant
●	Fenders, front narrow
▲	Fenders, front full width
▲	Fenders, front and rear full width
▲	Fenders, front and rear full width with mud flaps
▲	Less wheels and tires with axle stops
▲	Rims less tires
▲	Transmission side-frame and bottom guards
▲	Special guarding for waste applications
▲	Lift eyes
▲	License-plate bracket and light

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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 a unit 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.



MW624PBU (25-05)



JOHN DEERE