





# ELEVATE YOUR EXPECTATIONS

## **ABOVE AND BEYOND** MEET THE P-TIER WHEEL LOADERS

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, and streamlined electrical and hydraulic routing, these versatile and productive mid-size models are designed to help you take your operation to the next level.



## **Take control**

Operators can easily control up to six functions without letting go of the ergonomically designed joystick. Two industry-exclusive multifunction buttons can each be programmed to handle any of up to 10 functions selected through the monitor, including bucket vibrate and EH Precision mode.

## The bucket list

A wide selection of enhanced production buckets with integrated spill guards, curved side cutters, and impressive rollback delivers elevated bucket-fill performance and material retention compared to earlier offerings.

## Remote diagnostics and support

To maximize uptime and lower costs, JDLink<sup>™</sup> connectivity provides machine location, utilization data, and alerts to help you maximize productivity and efficiency. JDLink also enables John Deere Connected Support<sup>™</sup>. Dealers use Expert Alerts based on data from thousands of connected machines to proactively address conditions that may otherwise likely lead to downtime. Your dealer can also monitor machine health and leverage remote diagnostics and programming capability to further diagnose problems and even update machine software without a time-consuming trip to the jobsite.\*

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

## At the forefront

Featuring bucket and linkage designs that improve load leveling, material retention, and visibility, these loaders yield more productivity and performance than previous models.

## It's easy to see

Large seven-inch in-cab display with easy-on-the-eyes clarity enables intuitive push-button access to key info. Standard rearview camera displays the activity behind the machine on the color LCD screen.

## On your side

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.

# **OVERACHIEVERS** ASPIRE TO GO HIGHER.

With handy front-end features and plenty of productivity-boosting enhancements over previous models, our 524 P-Tier Wheel Loader redefines expectations about the heights a utility loader can reach.



## Have a seat

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

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## Smooth operator

Seat-mounted right-hand joystick features two programmable multifunction buttons and electrohydraulic (EH) controls that are more intuitive to operate compared to our K-Series controls.



## 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.



## Clear advantage

Improved visibility to the work tool helps reduce spillage as well as cycle and tool-changeover times. It also helps minimize machine damage when working on crowded jobsites or up against walls.



## Step it up

Quad-Cool<sup>™</sup> places the radiator, air-conditioner condenser, intercooler, and hydraulic, transmission, and optional axle coolers in a unique boxed configuration that's isolated from engine heat, boosting efficiency and durability.





2 INDUSTRY-EXCLUSIVE MULTIFUNCTION BUTTONS

DEERE





## **524 P-TIER WHEEL LOADER SPECIFICATIONS**



While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

Non-Road Emission StandardEPA Final Tier 4/EU Stage VNet Torque Rise60%Cylinders6Fuel System (electronically controlled)High-pressure common railValves Per Cylinder4LubricationFull-flow spin-on filter and intDisplacement6.8 L (414 cu. in.)AspirationTurbocharged, charge air comNet Peak Power (ISO 9249)113 kW (152 hp) at 1,800 rpmAir CleanerUnder-hood, dual-element dual	Tacturer and Model John Deere PowerTech <sup>™</sup> PVS 60 oad Emission Standard EPA Final Tier 4/EU Stage V ers 6 Per Cylinder 4 cement 6.8 L (414 cu. in.)	Net Torque Rise	0 9249)	713 Nm (526 ftlb.) at 1,400 rpm
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Net Peak Torque (ISO 9249)       683 Nm (ISO4 lbft.) at 1,000 rpm       for service         Cooling       Hydraulically driven, proportionally controlled, fan aft of coolers       For service         Electrical       Hydraulically driven, proportionally controlled, fan aft of coolers       For service         Electrical System       24 volt with 100-amp alternator (optional I30-amp alternator)       Electrical System         Transmission System       700       Countershaft-type PowerShift"       700         Torque Converter       Single stage, single phase       700       700         Shift Control       Electrical System and and speed dependent       700       700         Operator Interface       Steering-column or joystick-mounted F-N-R and gear-select lever; Quick-Shift button on hydraulic lever       700         Shift Modes       Ganada Sopeed       700       700       700         Maximum Travel Speeds       Keverse       700       700       700       700         Mange 2       10.0 km/h (16.8 mph)       10.6 km/h (10.5 mph)       N/A       700       700       700         Range 5       40.0 km/h (10.6 mph)       270 km/h (10.6 mph)       N/A       700       700       700       700       700       700       700       700       700       700       700       700 <td></td> <td></td> <td></td> <td>restriction indicator in cab monitor</td>				restriction indicator in cab monitor
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Electrical System 24 volt with 100-amp alternator (optional 130-amp alternator) Bateries (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 [lst-D or 2nd-D]; Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and 4 c cutoff settings Standard 5-Speed Maximum Tavel Speeds Forward Reverse Standard 5-Speed Maximus Tavel Speeds To Work h (16,8 mph) 10,8 km/h (13,6 mph) Range 1 5,6 km/h (13,5 mph) 5,9 km/h (13,6 mph) Range 2 10,0 km/h (16,8 mph) 11,6 km/h (12, mph) Range 3 170 km/h (10,6 mph) 270 km/h (16,8 mph) Range 4 25,6 km/h (15,9 mph) N/A Ales/Brakes Final Drives Heavy-duty inboard-mounted planetary Differentials Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional Rar Avle Oscillation, Stop to Stop 24 deg. (12 deg. each direction) Kirth 20,5 R 25, 15tar I-3 XHA2 1952 mm (76,8 in.) Zervice Hydraulic lay actuated, spring-retracted, self-adjusting inboard sun-shaft mounted, oil cooled, single disc Parking Automatic spring applied, hydraulically released, driveline mounted, sealed wet multi disc Tres/Wheels (see page 10 for complete tire adjustments) Tred Width Wath Over Tires Refill Capacities Refill Capacities (continued) Refill Capacities (continued) Rate Over Tires 18, 10, 19, 10, 10, 10, 10, 10, 10, 10, 10, 10, 10		ally controlled, fan aft of cooler	s	
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Batteris (Ž – 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 c cutoff settings Standard 5-Speed Maximum Travel Speeds Range 1 S S km/h (158 mph) 15. km/h (7.2 mph) Range 2 4 0.0 km/h (16.4 mph) N/A Antes Travel Speeds N/A Antes Travel Speeds Antave		(ontional 130-amp alternator)		
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Torque ConverterSingle stage, single phaseShift ControlElectronically modulated, adaptive, load and speed dependentOperator InterfaceSteering-column or joystick-mounted F-N-R and gear-select lever, Quick-Shift button on hydraulic leverShift ModesManual/auto [Ist-D or 2nd-D]; Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and 4 c cutoff settingsStandard 5-SpeedMaximum Travel SpeedsMaximum Travel SpeedsForwardRange 15.6 km/h (3.5 mph)Range 211.0 km/h (6.8 mph)Range 3170 km/h (10.6 mph)Range 42.5 km/h (10.6 mph)Range 540.0 km/h (10.6 mph)Range 540.0 km/h (24.8 mph)N/AN/ARange 6170 km/h (10.6 mph)Range 724 deg. [12 deg. each direction)With 20.5 R 25 tires]Feavy-duty inboard-mounted planetaryDifferentialsHydraulic locking front with conventional rear – standard; dual locking front and rear – optionalRear Avle Oscillation, Stop to Stop24 deg. [12 deg. each direction)With 20.5 R 25 tires]ForwardBrakes (conform to ISO 3450)224 deg. [12 deg. each direction]ServiceHydraulically actuated, spring-retracted, self-adjusting inboard sun-shaft mounted, oil cooled, single discParkingAutomatic spring applied, hydraulically released, driveline mounted, sealed wet multi discTires/Wheels (see page 10 for complete tre adjusting inboard sun-shaft mounted, oil cooled, single discParking220 L (158 gal.)Attroatic spring applied, hydraulically released, driveline				
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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 c crieff settings       Standard 5-Speed     Standard 5-Speed       Maximum Travel Speeds     Forward       Range 1     56 km/h (35 mph)       Range 2     11.0 km/h (6.8 mph)       Range 3     70 km/h (16.0 mph)       Range 4     25.6 km/h (15.9 mph)       N/A     Kampe 1       Range 5     40.0 km/h (24.8 mph)       N/A     Kaes/Fakes       Final Drives     Heavy-duty inboard-mounted planetary       Differentials     Hydraulic lecking front with conventional rear – standard; dual locking front and rear – optional       Rear Axle Oscillation, Stop to Stop     24 deg. (12 deg. each direction)       (with 20.5 R 25, 1 star L-3 XHA2     1952 mm (76.8 in.)       Service     Hydraulically actuated, spring-retracted, self-adjusting inboard sun-shaft mounted, oil cooled, single disc       Parking     Automatic spring applied, hydraulically released, driveline mounted, sealed wet multi disc       Tires/Wheels (see page 10 for comptet tire adjustments)     Z546 mm (100.2 in.)       Service     Hydraulically actuated, spring-retracted, self-adjusting inboard sun-shaft mounted, sealed wet multi disc       Tires/Wheels (see page 10 for comptet tire adjustments)     Kee		ive load and sneed dependent		
Shift Modes         Manual/auto [lst-D or 2nd-D]; Quick-Shift button with 2 selectable modes: kick-down or kick-up/down; and 4 c cutoff settings           Maximum Travel Speeds         Image 2         Forward         Reverse           Range 1         56 km/h (135 mph)         59 km/h (36 mph)         Image 2           Range 2         11.0 km/h (6.8 mph)         11.6 km/h (7.2 mph)         Image 2           Range 3         120 km/h (10.6 mph)         270 km/h (16.8 mph)         Image 2           Range 4         25.6 km/h (124 mph)         N/A         Image 2           Range 5         40.0 km/h (24.8 mph)         N/A         Image 2			or: Ouick Shift but	ttop op hydraulic lover
cutoff settings         Science           Raineum Travel Speeds         Forward         Reverse           [with 20.5 R 25 tires)         Forward         Reverse           Range 1         5.6 km/h (3.5 mph)         5.9 km/h (3.6 mph)         Jot m/h (3.6 mph)           Range 2         10.0 km/h (6.8 mph)         11.6 km/h (7.2 mph)         Jot m/h (16.8 mph)           Range 4         2.5 km/h (15.9 mph)         N/A         Jot m/h (16.8 mph)           Range 5         0.0 km/h (24.8 mph)         N/A         Jot m/h (24.8 mph)         Jot m (24.8 mph)         Jot m (24.8 mph)         Jot m (24.8 mph)         Jot m (24.8 mph)				
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Maximum Travel SpeedsForwardReverse[with 20,5 R 25 tires)5.6 km/h 13.5 mph)5.9 km/h (3.6 mph)[Range 15.6 km/h (16.8 mph)11.6 km/h (7.2 mph)[Range 211.0 km/h (10.6 mph)27.0 km/h (16.8 mph)[Range 42.5 6 km/h (15.9 mph)N/A[Range 540.0 km/h (12.8 mph)N/A[Range 540.0 km/h (12.8 mph)N/A[Range 640.0 km/h (24.8 mph)N/A[Range 740.0 km/h (24.8 mph)N/A[NiffernitalsHeavy-duty inboard-mounted planetary- optional[Niffernitals14 deg. (21 deg. each direction)- optional[with 20.5 R 25 tires)24 deg. (21 deg. each direction)- optional[with 20.5 R 25 tires)4 deg. (12 deg. each direction)- optional[service ParkingAutomatic spring applied, hydraulically released, driveline mounted, sealed wet wit disc- optional[service ParkingAutomatic spring applied, hydraulically catulated, serving mph applied, hydraulically catulated, service Parking- optional, sealed wet wit disc[service ParkingAutomatic spring applied, hydraulically catulated, service Parking- optional, sealed wet wit disc[service Parking20 L (58 gal.)Ade Ol (160.2 ti.)- optio				
[with 20.5 R 25 tires]ForwardReverseRange 156 km/h (3.5 mph)59 km/h (3.6 mph)Range 211.0 km/h (6.8 mph)11.6 km/h (7.2 mph)Range 37.0 km/h (10.6 mph)2.70 km/h (16.8 mph)Range 4256 km/h (15.9 mph)N/ARange 50.00 km/h (24.8 mph)N/ARange 540.0 km/h (24.8 mph)N/ARange 6W/d aulic locking front with conventional rear – standard; dual locking front and rear – optionalRear Axle 0 scillation, Stop to Stop4/d eg. (12 deg. each direction)With 20.5 R 25 tires)V/d eg. (12 deg. each direction)Brakes (conform to ISO 3450)V/d eg. (12 deg. each direction)ServiceMutomatic spring applied, hydraulically relaxed, driveline mounted, sealed wet multi discParkingAutomatic spring applied, hydraulically relaxed, driveline mounted, sealed wet multi discMichelin 20.5 R 25 Star L-3 XHA21952 mm (7.6 m)ServiceJost 25, 15tar L-3 XHA2Parking292 L (158 gal.)Michelin 20.5 R 25, 15tar L-3 XHA2299 L (3.6 qt.)Fuel Tank (with lockable cap)290 L (3.6 qt.)Parking290 L (3.6 gal.)Goling System299 L (3.6 qt.)Fuel Tank (with lockable cap)29.0 L (3.6 qt.)Ibesel Exhaust Fluid (DEF)15.6 L (0.6 st.)Rear All (With Wertical Spin-On Filter15.6 L (3.5 qt.)Joine Gilling With Vertical Spin-On Filter15.6 L (3.5 qt.)Ibesel Exhaust Fluid (DEF)15.6 L (3.5 qt.)Ibesel Exhaust Fluid (DEF)15.6 L (3.5 qt.)Ibe				
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Range 4         25.6 km/h (15.9 mph)         N/A           Range 5         40.0 km/h (24.8 mph)         N/A           Axles/Brakes         N/A           String Drives         Heavy-duty inboard-mounted planetary         String Drives         String Drives         String Drives         String Drives         String Drives         Heavy-duty inboard-mounted planetary         String Drives	5			
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(with 20.5 R 25 tires) Brakes (conform to ISO 3450) Brakes (conform to ISO 3450) Parking Mutomatic spring applied, hydraulically released, driveline mounted, sealed wet multi disc cooled, single disc disc pare 10 for complete tire adjustments Tires/Wheels (see page 10 for complete tire adjustments) Tiread Width Over Tires Tread Width 0 Vidth Over Tires Vieweibilty Serviceability Serviceability Fuel Tank (with lockable cap) 200 L (58 gal.) Axle 0 (leach) Foot 16.6 L (17.5 qt.) Diesel Exhaust Fluid (DEF) 15.6 L (16.5 qt.) D		iventional rear — standard; dual	locking front and i	rear — optional
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Tires/Wheels (see page 10 for complete tire adjustments)         Tread Width       Width Over Tires         Michelin 20.5 R 25, 1 Star L-3 XHA2       1952 mm (76.8 in.)       2546 mm (100.2 in.)         Serviceability         Refill Capacities (continued)         Fuel Tank (with lockable cap)       220 L (58 gal.)       Axle Oil (each)         Cooling System       29.9 L (31.6 qt.)       Front       16.6 L (17.5 qt.)         Diesel Exhaust Fluid (DEF)       15.6 L (16.5 qt.)       Rear       18 L (19 qt.)         Engine Oil With Vertical Spin-On Filter       19.5 L (20.6 qt.)       Hydraulic Reservoir and Filter       82.1 L (21.7 gal.)         Filter       Park Brake Oil (wet disc)       0.3 L (10 oz.)       Filter				
Tread Width       Width Over Tires         Michelin 20.5 R 25, 1 Star L-3 XHA2       1952 mm (76.8 in.)       2546 mm (100.2 in.)         Serviceability       Fuel Tank (with lockable cap)       20 L (58 gal.)       Refill Capacities (continued)         Fuel Tank (with lockable cap)       220 L (58 gal.)       Axle Oil (each)		ulically released, driveline moun	ted, sealed wet mu	ulti disc
Michelin 20.5 R 25, 1 Star L-3 XHA2       1952 mm (76.8 in.)       2546 mm (100.2 in.)         Serviceability         Refill Capacities       Refill Capacities (continued)         Fuel Tank (with lockable cap)       220 L (58 gal.)       Axle Oil (each)         Cooling System       29.9 L (31.6 qt.)       Front       16.6 L (17.5 qt.)         Diesel Exhaust Fluid (DEF)       15.6 L (16.5 qt.)       Rear       18 L (19 qt.)         Engine Oil With Vertical Spin-On Filter       19.5 L (20.6 qt.)       Hydraulic Reservoir and Filter       82.1 L (21.7 gal.)         Transmission Reservoir With Vertical       21 L (22.2 qt.)       Park Brake Oil (wet disc)       0.3 L (10 oz.)         Hydraulic System/Steering       Hydraulic System/Steering       Hydraulic System/Steering       Hydraulic System/Steering				
Serviceability         Refill Capacities (continued)         Refill Capacities       Refill Capacities (continued)         Fuel Tank (with lockable cap)       220 L (58 gal.)       Axle Oil (each)         Cooling System       29.9 L (31.6 qt.)       Front       16.6 L (17.5 qt.)         Diesel Exhaust Fluid (DEF)       15.6 L (16.5 qt.)       Rear       18 L (19 qt.)         Engine Oil With Vertical Spin-On Filter       19.5 L (20.6 qt.)       Hydraulic Reservoir and Filter       82.1 L (21.7 gal.)         Transmission Reservoir With Vertical       21 L (22.2 qt.)       Park Brake Oil (wet disc)       0.3 L (10 oz.)         Hydraulic System/Steering       Hydraulic System/Steering       Hydraulic System/Steering       Hydraulic System/Steering				
Refill Capacities     Refill Capacities (continued)       Fuel Tank (with lockable cap)     20 L (58 gal.)     Axle Oil (each)       Cooling System     29.9 L (31.6 qt.)     Front     16.6 L (17.5 qt.)       Diesel Exhaust Fluid (DEF)     15.6 L (16.5 qt.)     Rear     18 L (19 qt.)       Engine Oil With Vertical Spin-On Filter     19.5 L (20.6 qt.)     Hydraulic Reservoir and Filter     82.1 L (21.7 gal.)       Transmission Reservoir With Vertical     21 L (22.2 qt.)     Park Brake Oil (wet disc)     0.3 L (10 oz.)       Hydraulic System/Steering     Hydraulic System / Steering     Hydraulic System / Steering     Hydraulic System / Steering		2546 mm (100.2 in.)		
Fuel Tank (with lockable cap)         220 L (58 gal.)         Axle Oil (each)           Cooling System         29.9 L (31.6 qt.)         Front         16.6 L (17.5 qt.)           Diesel Exhaust Fluid (DEF)         15.6 L (16.5 qt.)         Rear         18 L (19 qt.)           Engine Oil With Vertical Spin-On Filter         19.5 L (20.6 qt.)         Hydraulic Reservoir and Filter         82.1 L (21.7 gal.)           Transmission Reservoir With Vertical         21 L (22.2 qt.)         Park Brake Oil (wet disc)         0.3 L (10 oz.)           Hydraulic System/Steering         Hydraulic System/Steering         Hydraulic System/Steering         Hydraulic System/Steering				
Cooling System         29.9 L (31.6 qt.)         Front         16.6 L (17.5 qt.)           Diesel Exhaust Fluid (DEF)         15.6 L (16.5 qt.)         Rear         18 L (19 qt.)           Engine Oil With Vertical Spin-On Filter         19.5 L (20.6 qt.)         Hydraulic Reservoir and Filter         82.1 L (21.7 gal.)           Transmission Reservoir With Vertical         21 L (22.2 qt.)         Park Brake Oil (wet disc)         0.3 L (10 oz.)           Filter         Hydraulic System/Steering         Hydraulic System/Steering         Hydraulic System/Steering			inued)	
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Transmission Reservoir With Vertical 21 L (22.2 qt.)       Park Brake Oil (wet disc)       0.3 L (10 oz.)         Filter       Hydraulic System/Steering	el Exhaust Fluid (DEF) 15.6 L (16.5 qt.)	Rear		18 L (19 qt.)
Filter Hydraulic System/Steering	ine Oil With Vertical Spin-On Filter 19.5 L (20.6 qt.)	Hydraulic Reservoir ar	nd Filter	82.1 L (21.7 gal.)
Hydraulic System/Steering	smission Reservoir With Vertical 21 L (22.2 qt.)	Park Brake Oil (wet dis	sc)	0.3 L (10 oz.)
	r			
Pump (loader and steering) Variable-displacement, axial-niston nump: closed-center, pressure-compensating system	ulic System/Steering			
- implication provide control	(loader and steering) Variable-displacement, axial-pi	ston pump; closed-center, pressu	re-compensating	system
Maximum Rated Flow at 6895 kPa 178 L/m (47 gpm)	timum Rated Flow at 6895 kPa 178 L/m (47 gpm)			
(1,000 psi) and 2,200 rpm				
System Relief Pressure (loader and 24 994 kPa (3,625 psi)	em Relief Pressure (loader and 24 994 kPa (3,625 psi)			
steering)				
Loader Controls 2-function valve, joystick control or fingertip controls, hydraulic-function enable/disable, optional 3rd- and 4th- valve with auxiliary lever		ol or fingertip controls, hydraulic	-function enable/	disable, optional 3rd- and 4th-functio
Steering (conforms to ISO 5010) Steering-column-mounted, twist-grip shift lever; Quick-Shift button on hydraulic lever	ng (conforms to ISO 5010) Steering-column-mounted, twi	st-grip shift lever; Quick-Shift bu	utton on hydraulic	lever
Type Power, fully hydraulic				
Articulation Angle 80-deg. arc (40 deg. each direction)		tion)		
Turning Radius (measured to centerline 5.0 m (16 ft. 5 in.)				

## 524 P-TIER WHEEL LOADER SPECIFICATIONS



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While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

Hydraulic System/Steering (continued)	524 P-TIER Z-BAR / HIGH-LIFT / HIGH-	LIFT PLUS / TOOL CARRIER	
Hydraulic Cycle Times	Z-Bar / High-Lift / High-Lift Plus	Tool Carrier	
Raise	6.1 sec.	5.8 sec.	
Dump	2.0 sec.	2.2 sec.	
Lower (power down)	4.0 sec.	3.5 sec.	
Total	12.1 sec.	11.5 sec.	
and the second second			

Bucket Capacity Range
Bucket Type

 Pin-On
 2.1–2.5 m³ (2.75–3.25 cu. yd.)

 Coupler
 1.9–3.4 m³ (2.5–4.5 cu. yd.)

 Dimensions and Specifications With Pin-On Bucket With Bolt-On Edge



	Z-Bar	Z-Bar	High-Lift	High-Lift Plus
	2.1-m³ (2.75 cu. yd.)	2.3-m³ (3.0 cu. yd.)	2.1-m³ (2.75 cu. yd.)	2.1-m³ (2.75 cu. yd.)
Dimensions With Bucket With Bolt-On Edge (illustration above right)	general purpose	general purpose	general purpose	general purpose
A Height to Top of Cab	3.33 m (10 ft. 11 in.)			
B Hood Height	2.375 m (7 ft. 9 in.)			
C Ground Clearance	0.40 m (15.7 in.)			
D Length From Centerline to Front Axle	1.45 m (4 ft. 9 in.)			
E Wheelbase	2.93 m (9 ft. 7 in.)			
F Overall Length, Bucket on Ground	7.37 m (24 ft. 2 in.)	7.45 m (24 ft. 5 in.)	7.80 m (25 ft. 7 in.)	8.10 m (26 ft. 7 in.)
G Height to Hinge Pin, Fully Raised	3.81 m (12 ft. 6 in.)	3.81 m (12 ft. 6 in.)	4.17 m (13 ft. 8 in.)	4.42 m (14 ft. 6 in.)
<ul> <li>Dump Clearance, 45 deg., Full Height</li> </ul>	2.78 m (9 ft. 1 in.)	2.72 m (8 ft. 11 in.)	3.14 m (10 ft. 4 in.)	3.39 m (11 ft. 1 in.)
Reach, 45-deg. Dump, Full Height	0.99 m (3 ft. 3 in.)	1.04 m (3 ft. 5 in.)	1.09 m (3 ft. 7 in.)	1.12 m (3 ft. 8 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.44 m (4 ft. 9 in.)	1.47 m (4 ft. 10 in.)	1.81 m (5 ft. 11 in.)	2.03 m (6 ft. 8 in.)
K Maximum Digging Depth	102 mm (4.0 in.)	108 mm (4.3 in.)	193 mm (7.6 in.)	198 mm (7.8 in.)
Maximum Rollback at Ground Level	44 deg.	44 deg.	48 deg.	49 deg.
Maximum Rollback, Boom Fully Raised	60 deg.	60 deg.	60 deg.	61 deg.
Maximum Bucket Dump Angle, Fully Raised	50 deg.	50 deg.	46 deg.	45 deg.
Loader Clearance Circle, Bucket Carry Position	11.40 m (37 ft. 5 in.)	11.42 m (37 ft. 6 in.)	11.68 m (38 ft. 4 in.)	12.08 m (39 ft. 7 in.
Specifications With Bucket With Bolt-On Edge				
Capacity, Heaped	2.1 m³ (2.75 cu. yd.)	2.3 m³ (3.0 cu. yd.)	2.1 m³ (2.75 cu. yd.)	2.1 m <sup>3</sup> (2.75 cu. yd.)
Capacity, Struck	1.7 m <sup>3</sup> (2.26 cu. yd.)	1.9 m <sup>3</sup> (2.53 cu. yd.)	1.7 m <sup>3</sup> (2.26 cu. yd.)	1.7 m <sup>3</sup> (2.26 cu. yd.)
Bucket Weight With Bolt-On Cutting Edge	1056 kg (2,327 lb.)	1095 kg (2,415 lb.)	1056 kg (2,327 lb.)	1056 kg (2,327 lb.)
Bucket Width	2.55 m (8 ft. 4 in.)			
Breakout Force	11 070 kg (24,406 lb.)	10 285 kg (22,674 lb.)	10 952 kg (24,145 lb.)	11 059 kg (24,381 lb.
Tipping Load, Straight, No Tire Deflection	10 297 kg (22,702 lb.)	10 172 kg (22,426 lb.)	8667 kg (19,107 lb.)	7967 kg (17,564 lb.)
Tipping Load, Straight, With Tire Deflection	9753 kg (21,502 lb.)	9630 kg (21,230 lb.)	8253 kg (18,195 lb.)	7614 kg (16,786 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	8955 kg (19,742 lb.)	8840 kg (19,489 lb.)	7496 kg (16,526 lb.)	6860 kg (15,123 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	8259 kg (18,208 lb.)	8145 kg (17,957 lb.)	6963 kg (15,351 lb.)	6390 kg (14,088 lb.
Rated Operating Load, 50% Full-Turn Tipping Load, No Tire Deflection		4420 kg (9,745 lb.)	3748 kg (8,263 lb.)	3430 kg (7,562 lb.)
(conforms to ISO 14397-1)*	5	5	<b>J</b>	<b>3</b>
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection	4130 kg (9,104 lb.)	4073 kg (8,978 lb.)	3482 kg (7,675 lb.)	3195 kg (7,044 lb.)
(conforms to ISO 14397-1)*	2	<b>J</b>	2	<b>J</b>
Operating Weight	13 123 kg (28,931 lb.)	13 163 kg (29,018 lb.)	13 341 kg (29,412 lb.)	13 457 kg (29,667 lb
Loader operating information is based on machine with identified link	age and standard equip	ment, PowerTech PVS 60	68 (EPA Final Tier 4/EU	Stage V) engine, ROF
cab, rear cast bumper counterweight, transmission side-frame guard	s, bottom guards, stand	ard tires, full fuel tank, a	nd 79-kg (175 lb.) opera	tor. This information

affected by changes in tires, ballast, and different attachments. \*Rated operating capacity based on Deere attachments only.

## 524 P-TIER

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries.

## Dimensions and Specifications With Hi-Vis Coupler and Hook-On Bucket With Bolt-On Edge 524 P-TIER Z-BAR / HIGH-LIFT / HIGH-LIFT PLUS / TOOL CARRIER



524 P-TIER TOOL-CARRIER LOADER WITH HI-VIS COUPLER AND HOOK-ON BUCKET WITH BOLT-ON EDGE М Cab Ν A 1 G В 1 Н L C D -**B**-K

		Z-Bar	Z-Bar	High-Lift	High-Lift		High-Lift Plus	Tool Carrier	Tool Carrier
D:	Mathe Decels + Mattel	2.1-m <sup>3</sup>	3.1-m <sup>3</sup>	2.1-m <sup>3</sup>	3.1-m <sup>3</sup>	1.9-m <sup>3</sup>	3.1-m <sup>3</sup>	2.1-m <sup>3</sup>	3.1-m <sup>3</sup>
Bolt-On	ons With Bucket With Edge (illustrations above)	(2.75 cu. yd.) general purpose		(2.75 cu. yd.) general purpose		(2.5 cu. yd.) general purpose		(2.75 cu. yd.) general purpose	5
Height	to Top of Cab	3.33 m (10 ft. 11 in.)	3.33 m (10 ft. 11 in.)	3.33 m (10 ft. 11 in.)	3.33 m (10 ft. 11 in.)	3.33 m (10 ft. 11 in.)	3.33 m (10 ft. 11 in.)	3.33 m (10 ft. 11 in.)	3.33 m (10 ft. 11 in.)
Hood H	leight	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)	2.375 m (7 ft. 9 in.)
Ground	d Clearance	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.)	0.40 m (15.7 in.
l Length	From Centerline to Front Axle	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)	1.45 m (4 ft. 9 in.)
E Wheelb	base	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)	2.93 m (9 ft. 7 in.)
Overall	Length, Bucket on Ground	7.52 m (24 ft. 8 in.)	7.65 m (25 ft. 1 in.)	7.95 m (26 ft. 1 in.)	8.08 m (26 ft. 6 in.)	8.15 m (26 ft. 9 in.)	8.37 m (27 ft. 6 in.)	7.77 m (25 ft. 6 in.)	7.80 m (25 ft. 7 in.)
i Height	to Hinge Pin, Fully Raised	3.81 m (12 ft. 6 in.)	3.81 m (12 ft. 6 in.)	4.17 m (13 ft. 8 in.)	4.17 m (13 ft. 8 in.)	4.42 m (14 ft. 6 in.)	4.42 m (14 ft. 6 in.)	3.89 m (12 ft. 9 in.)	3.89 m (12 ft. 9 in.)
I Dump (	Clearance, 45 deg., Full Height	2.68 m (8 ft. 10 in.)	2.60 m (8 ft. 6 in.)	3.04 m (10 ft. 0 in.)	2.96 m (9 ft. 9 in.)	3.35 m (11 ft. 0 in.)	3.21 m (10 ft. 6 in.)	2.79 m (9 ft. 2 in.)	2.70 m (8 ft. 10 in.)
Reach,	45-deg. Dump, Full Height	1.09 m (3 ft. 7 in.)	1.19 m (3 ft. 11 in.)	1.19 m (3 ft. 11 in.)	1.29 m (4 ft. 3 in.)	1.17 m (3 ft. 10 in.)	1.33 m (4 ft. 4 in.)	1.34 m (4 ft. 5 in.)	1.44 m (4 ft. 9 in.)
J Reach, Clearar	45-deg. Dump, 2.13-m (7 ft. 0 in.) nce	1.50 m (4 ft. 11 in.)	1.55 m (5 ft. 1 in.)	1.87 m (6 ft. 2 in.)	1.92 m (6 ft. 4 in.)	2.06 m (6 ft. 9 in.)	2.16 m (7 ft. 1 in.)	1.81 m (5 ft. 11 in.)	1.86 m (6 ft. 1 in.)
K Maxim	um Digging Depth	108 mm (4.2 in.)	111 mm (4.4 in.)	199 mm (7.8 in.)	202 mm (8.0 in.)	196 mm (7.7 in.)	207 mm (8.1 in.)	100 mm (3.9 in.)	102 mm (4.0 in
L Maxim	um Rollback at Ground Level	44 deg.	44 deg.	48 deg.	48 deg.	49 deg.	49 deg.	50 deg.	50 deg.
<b>/</b> Maxim	um Rollback, Boom Fully Raised	60 deg.	60 deg.	60 deg.	60 deg.	61 deg.	61 deg.	55 deg.	55 deg.
N Maxim	um Bucket Dump Angle, Fully Raised	50 deg.	50 deg.	46 deg.	46 deg.	45 deg.	45 deg.	46 deg.	46 deg.
Loader C Position	learance Circle, Bucket Carry	11.44 m (37 ft. 7 in.)	11.80 m (38 ft. 9 in.)	11.78 m (38 ft. 8 in.)	12.22 m (40 ft. 1 in.)	12.02 m (39 ft. 6 in.)	12.54 m (41 ft. 2 in.)	11.24 m (36 ft. 11 in.)	12.04 m (39 ft. 6 in.)
	ations With Bucket With Bolt-On Edg								
	ity, Heaped	2.1 m³ (2.75 cu. yd.)	3.1 m³ (4.0 cu. yd.)	2.1 m³ (2.75 cu. yd.)	3.1 m³ (4.0 cu. yd.)	1.9 m³ (2.5 cu. yd.)	3.1 m³ (4.0 cu. yd.)	2.1 m³ (2.75 cu. yd.)	3.1 m³ (4.0 cu. yd.)
Capaci	ity, Struck	1.7 m³ (2.26 cu. yd.)	2.6 m³ (3.4 cu. yd.)	1.7 m³ (2.26 cu. yd.)	2.6 m³ (3.4 cu. yd.)	1.5 m³ (1.96 cu. yd.)	2.6 m³ (3.4 cu. yd.)	1.7 m³ (2.26 cu. yd.)	2.6 m³ (3.4 cu. yd.)
Bucket	t Weight With Bolt-On Cutting Edge	1454 kg (3,205 lb.)	1683 kg (3,711 lb.)	1454 kg (3,205 lb.)	1683 kg (3,711 lb.)	1385 kg (3,052 lb.)	1683 kg (3,711 lb.)	1437 kg (3,167 lb.)	1656 kg (3,651 lb.)
Bucket	t Width	2.55 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)	2.55 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)	2.55 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)	2.55 m (8 ft. 4 in.)	2.89 m (9 ft. 6 in.)
Breako	out Force	9604 kg (21,173 lb.)	8569 kg (18,891 lb.)	9500 kg (20,945 lb.)	8475 kg (18,684 lb.)	10 383 kg (22,891 lb.)	8559 kg (18,870 lb.)	10 660 kg (23,501 lb.)	9109 kg (20,081 lb.)
Tippin	g Load, Straight, No Tire Deflection	9483 kg (20,906 lb.)	9168 kg (20,212 lb.)	7969 kg (17,568 lb.)	7672 kg (16,913 lb.)	7436 kg (16,394 lb.)	7032 kg (15,504 lb.)	8691 kg (19,160 lb.)	8385 kg (18,486 lb.)
Tipping	g Load, Straight, With Tire Deflection		8637 kg (19,041 lb.)	7575 kg (16,700 lb.)	7260 kg (16,006 lb.)	7092 kg (15,635 lb.)	6672 kg (14,709 lb.)	8259 kg (18,208 lb.)	7938 kg (17,500 lb.)
Tippin Deflec	g Load, 40-deg. Full Turn, No Tire :tion	8199 kg (18,075 lb.)	7888 kg (17,391 lb.)	6841 kg (15,082 lb.)	6548 kg (14,436 lb.)	6360 kg (14,021 lb.)	5965 kg (13,150 lb.)	7503 kg (16,541 lb.)	7203 kg (15,880 lb.)
Tippin	g Load, 40-deg. Full Turn, With eflection	7539 kg (16,621 lb.)	7206 kg (15,886 lb.)	6327 kg (13,949 lb.)	6033 kg (13,300 lb.)	5919 kg (13,049 lb.)	5493 kg (12,110 lb.)	6936 kg (15,291 lb.)	6633 kg (14,623 lb.)
Tippin	Operating Load, 50% Full-Turn g Load, No Tire Deflection rms to ISO 14397-1)*	4099 kg (9,037 lb.)	3944 kg (8,695 lb.)	3421 kg (7,541 lb.)	3274 kg (7,218 lb.)	3180 kg (7,011 lb.)	2982 kg (6,575 lb.)	3752 kg (8,271 lb.)	3602 kg (7,940 lb.)
Tippin	Operating Load, 50% Full-Turn g Load, With Tire Deflection orms to ISO 14397-1)*	3770 kg (8,310 lb.)	3603 kg (7,943 lb.)	3164 kg (6,974 lb.)	3017 kg (6,650 lb.)	2960 kg (6,525 lb.)	2747 kg (6,055 lb.)	3468 kg (7,646 lb.)	3317 kg (7,312 lb.)
	ting Weight	13 541 kg	13 770 kg	13 760 kg (30,335 lb.)	13 989 kg (30,841 lb.)	13 806 kg (30,438 lb.)	14 105 kg (31,097 lb.)	13 390 kg (29,520 lb.)	13 610 kg (30,004 lb.)

ballast, and different attachments. / \*Rated operating capacity based on Deere attachments only.

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## 524 P-TIER



	Z-Bar 1.22-m (48 in.)	Z-Bar 1.52-m (60 in.)	High-Lift 1.22-m (48 in.)	High-Lift 1.52-m (60 in.)	High-Lift Plus 1.22-m (48 in.)	High-Lift Plus 1.52-m (60 in.)	Tool Carrier 1.22-m (48 in.)	Tool Carrier 1.52-m (60 in.)
Dimensions With Forks (illustrations above)	tine length	tine length	tine length	tine length	tine length	tine length	tine length	tine length
A Height to Top of Cab	3.33 m	3.33 m	3.33 m	3.33 m	3.33 m	3.33 m	3.33 m	3.33 m
	(10 ft. 11 in.)	(10 ft. 11 in.)	(10 ft. 11 in.)	(10 ft. 11 in.)	(10 ft. 11 in.)	(10 ft. 11 in.)	(10 ft. 11 in.)	(10 ft. 11 in.)
B Hood Height	2.375 m	2.375 m	2.375 m	2.375 m	2.375 m	2.375 m	2.375 m	2.375 m
	(7 ft. 9 in.)	(7 ft. 9 in.)	(7 ft. 9 in.)	(7 ft. 9 in.)	(7 ft. 9 in.)	(7 ft. 9 in.)	(7 ft. 9 in.)	(7 ft. 9 in.)
<b>C</b> Ground Clearance		0.40 m (15.7 in.)			0.40 m (15.7 in.)			0.40 m (15.7 in.)
D Length From Centerline to Front Axle	1.45 m	1.45 m	1.45 m	1.45 m	1.45 m	1.45 m	1.45 m	1.45 m
5	(4 ft. 9 in.)	(4 ft. 9 in.)	(4 ft. 9 in.)	(4 ft. 9 in.)	(4 ft. 9 in.)	(4 ft. 9 in.)	(4 ft. 9 in.)	(4 ft. 9 in.)
E Wheelbase	2.93 m	2.93 m	2.93 m	2.93 m	2.93 m	2.93 m	2.93 m	2.93 m
	(9 ft. 7 in.)	(9 ft. 7 in.)	(9 ft. 7 in.)	(9 ft. 7 in.)	(9 ft. 7 in.)	(9 ft. 7 in.)	(9 ft. 7 in.)	(9 ft. 7 in.)
F Overall Length, Forks on Ground	7.94 m	8.24 m	8.37 m	8.68 m	8.67 m	8.97 m	8.13 m	8.44 m
	(26 ft. 1 in.)	(27 ft. 1 in.)	(27 ft. 6 in.)	(28 ft. 6 in.)	(28 ft. 5 in.)	(29 ft. 5 in.)	(26 ft. 8 in.)	(27 ft. 8 in.)
G Height to Hinge Pin, Fully Raised	3.81 m	3.81 m	4.17 m	4.17 m	4.42 m	4.42 m	3.89 m	3.89 m
	(12 ft. 6 in.)	(12 ft. 6 in.)	(13 ft. 8 in.)	(13 ft. 8 in.)	(14 ft. 6 in.)	(14 ft. 6 in.)	(12 ft. 9 in.)	(12 ft. 9 in.)
H Reach, Fully Raised	0.82 m (32 in.)	0.82 m (32 in.)	0.92 m	0.92 m	0.96 m	0.96 m	1.08 m	1.08 m
			(3 ft. 0 in.)	(3 ft. 0 in.)	(3 ft. 2 in.)	(3 ft. 2 in.)	(3 ft. 7 in.)	(3 ft. 7 in.)
I Fork Height, Fully Raised	3.48 m	3.48 m	3.84 m	3.84 m	4.09 m	4.09 m	3.66 m	3.66 m
	(11 ft. 5 in.)	(11 ft. 5 in.)	(12 ft. 7 in.)	(12 ft. 7 in.)	(13 ft. 5 in.)	(13 ft. 5 in.)	(12 ft. 0 in.)	(12 ft. 0 in.)
J Maximum Reach, Fork Level	1.56 m	1.56 m	1.89 m	1.89 m	2.10 m	2.10 m	1.81 m	1.81 m
	(5 ft. 1 in.)	(5 ft. 1 in.)	(6 ft. 2 in.)	(6 ft. 2 in.)	(6 ft. 11 in.)	(6 ft. 11 in.)	(5 ft. 11 in.)	(5 ft. 11 in.)
K Fork Height, Maximum Reach	1.65 m	1.65 m	1.66 m	1.66 m	1.66 m	1.66 m	1.83 m	1.83 m
L Reach, Ground Level	(5 ft. 5 in.) 0.99 m	(5 ft. 5 in.) 0.99 m	(5 ft. 5 in.) 1.40 m	(5 ft. 5 in.) 1.40 m	(5 ft. 5 in.) 1.65 m	(5 ft. 5 in.) 1.65 m	(6 ft. 0 in.) 1.17 m	(6 ft. 0 in.) 1.17 m
L Reach, Ground Level	(3 ft. 3 in.)	(3 ft. 3 in.)	1.40 m (4 ft. 7 in.)	(4 ft. 7 in.)	(5 ft. 5 in.)	1.65 m (5 ft. 5 in.)	(3 ft. 10 in.)	(3 ft. 10 in.)
M Depth Below Ground	99 mm (4 in.)	99 mm (4 in.)	189 mm (7 in.)	189 mm (7 in.)	195 mm (8 in.)	195 mm (8 in.)	154 mm (6 in.)	154 mm (6 in.)
N Tine Length	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)	1.22 m (48 in.)	1.52 m (60 in.)
<ul><li>0 Load Position, 50% Tine Length</li></ul>	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)	0.61 m (24 in.)	0.76 m (30 in.)
Specifications With Forks	0.01111 (2-111.)	0.70 m (50 m.)	0.01111 (24111.)	0.70 m (50 m.)	0.01111 (24111.)	0.70 m (50 m.)	0.01111 (24111.)	0.70 m (50 m.)
Tipping Load, Straight, No Tire Deflection	6990 ka	6574 kg	6101 kg	5760 kg	5701 kg	5393 kg	6504 kg	6135 kg
ripping Loud, Straight, No The Denection	(15,411 lb.)	(14,494 lb.)	(13,451 lb.)	(12,698 lb.)	(12,569 lb.)	(11,889 lb.)	(14,339 lb.)	(13,525 lb.)
Tipping Load, Straight, With Tire Deflection		6393 kg	5943 kg	5616 kg	5538 kg	5250 kg	6333 kg	5976 kg
· · · · · · · · · · · · · · · · · · ·	(14,994 lb.)	(14,094 lb.)	(13,102 lb.)	(12,381 lb.)	(12,209 lb.)	(11,574 lb.)	(13,962 lb.)	(13,175 lb.)
Tipping Load, 40-deg. Full Turn, No Tire	6050 kg	5681 kg	5246 kg	4943 kg	4877 kg	4604 kg	5619 kg	5289 kg
Deflection	(13,338 lb.)	(12,524 lb.)	(11,566 lb.)	(10,898 lb.)	(10,752 lb.)	(10,149 lb.)	(12,388 lb.)	(11,660 lb.)
Tipping Load, 40-deg. Full Turn, With	5796 kg	5442 kg	5013 kg	4728 kg	4674 kg	4401 kg	5385 kg	5085 kg
Tire Deflection	(12,778 lb.)	(11,998 lb.)	(11,052 lb.)	(10,423 lb.)	(10,304 lb.)	(9,703 lb.)	(11,872 lb.)	(11,210 lb.)
Rated Operating Load, 50% Full-Turn	2898 kg	2721 kg	2507 kg	2364 kg	2337 kg	2201 kg	2693 kg	2543 kg
Tipping Load, With Tire Deflection	(6,389 lb.)	(5,999 lb.)	(5,526 lb.)	(5,212 lb.)	(5,152 lb.)	(4,851 lb.)	(5,936 lb.)	(5,605 lb.)
(conforms to ISO 14397-1 and SAE J1197)*								
Rated Operating Load, Rough Terrain,	3478 kg	3265 kg	3008 kg	2837 kg	2804 kg	2641 kg	3231 kg	3051 kg
60% Full-Turn Tipping Load, With Tire	(7,667 lb.)	(7,199 lb.)	(6,631 lb.)	(6,254 lb.)	(6,183 lb.)	(5,822 lb.)	(7,123 lb.)	(6,726 lb.)
Deflection (conforms to EN474-3)*								
Rated Operating Load, Firm and Level	4637 kg	4354 kg	4010 kg	3782 kg	3739 kg	3521 kg	4308 kg	4068 kg
Ground, 80% Full-Turn Tipping Load, With	(10,222 lb.)	(9,598 lb.)	(8,841 lb.)	(8,339 lb.)	(8,244 lb.)	(7,762 lb.)	(9,498 lb.)	(8,968 lb.)
Tire Deflection (conforms to EN474-3)*		/ !						
Operating Weight	13 366 kg	13 427 kg	13 585 kg	13 646 kg	13 701 kg	13 762 kg	13 206 kg	13 266 kg
Loader operating information is based on r	(29,468 lb.)	(29,601 lb.)	(29,950 lb.)	(30,084 lb.)	(30,206 lb.)	(30,339 lb.)	(29,114 lb.)	(29,246 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.

\*Rated operating capacity based on Deere attachments only.

## **524 P-TIER**

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#### 524 P-TIER Z-BAR / HIGH-LIFT / HIGH-LIFT PLUS / TOOL CARRIER Adjustments to Operating Weights and Tipping Loads With Buckets

Adjustments to operating weights, tipping loads, and tires are based on Z-Bar machine with pin-on 2.1-m<sup>3</sup> (2.75 cu. yd.) general-purpose bucket with bolt-on cutting edge, ROPS cab, mission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator\*

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100%

real cast builiper/counterweight, transmissio	i side-fraille guards, bo	ctoni guarus, stanu
Add (+) or deduct (–) kg (lb.) as indicated for		Tipping Load,
loaders with 3-piece rims	Operating Weight	Straight
Michelin 20.5 R 25, 1 Star L-3 XHA2	0 kg (0 lb.)	0 kg (0 lb.)
Bridgestone 20.5 R 25, 1 Star L-3 VJT	+4 kg (+9 lb.)	+3 kg (+6 lb.)
Titan 20.5 R 25, 1 Star L-3 STL3	+11 kg (+23 lb.)	+8 kg (+17 lb.)
Michelin 20.5 R 25, 1 Star L-2 XTLA	–152 kg (–335 lb.)	–109 kg (–241 lb.)
Bridgestone 20.5 R 25, 1 Star L-2 VUT	–65 kg (–144 lb.)	–47 kg (–104 lb.)
Titan 20.5 R 25, 1 Star L-2 TGD2	–85 kg (–188 lb.)	–61 kg (–135 lb.)
Titan 20.5-25, 16 PR L-2	–245 kg (–541 lb.)	–176 kg (–389 lb.)
Firestone 20.5-25, 16 PR L-2 SGG LD	–280 kg (–617 lb.)	–201 kg (–443 lb.)
Titan 20.5-25, 12 PR L-2	–266 kg (–587 lb.)	–191 kg (–422 lb.)
Firestone 20.5-25, 16 PR L-3 SRG LD	–276 kg (–608 lb.)	–198 kg (–437 lb.)
Michelin 20.5 R 25, 1 Star L2 SNO-PLUS	–96 kg (–212 lb.)	–69 kg (–152 lb.)
Michelin 620/75R26 MegaXbib <sup>£®</sup>	–189 kg (–417 lb.)	–136 kg (–300 lb.)
CaCl, in 20.5-25, L-3 Rear Tires, 75% Fill	+825 kg (+1,820 lb.)	+1185 kg (+2,613 lb.

Tipping Load,			
40-deg. Full Turn	Tread Width	Width Over Tires	Vertical Height
0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
+3 kg (+6 lb.)	0 mm (0 in.)	+2 mm (+0.1 in.)	–41 mm (–1.6 in.)
+7 kg (+15 lb.)	0 mm (0 in.)	–7 mm (–0.3 in.)	-5 mm (-0.2 in.)
–96 kg (–212 lb.)	0 mm (0 in.)	+4 mm (+0.2 in.)	–11 mm (–0.4 in.)
–41 kg (–91 lb.)	0 mm (0 in.)	+3 mm (+0.1 in.)	-10 mm (-0.4 in.)
–54 kg (–119 lb.)	0 mm (0 in.)	–7 mm (–0.3 in.)	–10 mm (–0.4 in.)
–155 kg (–343 lb.)	0 mm (0 in.)	+8 mm (+0.3 in.)	–2 mm (–0.1 in.)
–177 kg (–391 lb.)	0 mm (0 in.)	+5 mm (+0.2 in.)	–1 mm (0 in.)
–169 kg (–372 lb.)	0 mm (0 in.)	+8 mm (+0.3 in.)	–2 mm (–0.1 in.)
–175 kg (–385 lb.)	0 mm (0 in.)	+8 mm (+0.3 in.)	+3 mm (+0.1 in.)
–61 kg (–134 lb.)	0 mm (0 in.)	+6 mm (+0.2 in.)	–16 mm (–0.6 in.)
–120 kg (–264 lb.)	+187 mm (+7.4 in.)	+247 mm (+9.7 in.)	+23 mm (+0.9 in.)
+1045 kg (+2,304 lb.)	N/A	N/A	N/A

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

<sup>£</sup>Equipped with 1-piece rims. <sup>B</sup>Requires 8-deq. rear axle stops.

## **Bucket Selection Guides**

LOOSE MATERIALS	ka/m³	lb./cu. yd.	LOOSE MATERIALS	ka/m³	lb./cu. yd.		Buck	et Fill	Facto	rs
	5			5						
Chips, pulpwood	288	486	Limestone, coarse, sized	1570	2,646					
Cinders (coal, ashes, clinkers)	673	1,134	Limestone, mixed sizes	1682	2,835	130%	120%	110%	105%	100
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, guarried	1314	2,214					
Coal, bituminous, moderately wet	801	1,350	Shale, broken crushed	1362	2,295					
Earth, common loam, dry	1218	2,052	Slag, furnace granulated	1955	3,294					
Earth, mud, packed	1843	3,105	Stone or gravel, 37.5 to 87.5-mm							
Granite, broken	1538	2,592	(1.5 to 3.5 in.) size	1442	2,430					
Gypsum	2275	3.834	Stone or gravel, 18,75-mm (0,75 in.) size	1602	2,700					



Additional equipment

#### 524 P 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

#### 574 P 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 with non-lockup torque converter
- Front locking differential
- Rear locking differential
- Brake retractors and adjusters
- Automatic differential lock
- Axle oil temperature sensing
- Wheel-spin control

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

### 524 P

- ambient cooling package
- Isolated from engine compartment
- Engine radiator

- Transmission oil cooler (oil to air)

- Coolant recovery tank
- Antifreeze, -37 deg. C (-34 deg. F)
- Cool-on-demand, hydraulically driven, swingout fan
- Automatic reversing fan drive
- Axle and service-brake coolers

## Quad-Cool<sup>™</sup> Cooling System

- Heavy-duty, trash-resistant radiator and high-
- 2-side access to all coolers

- Engine oil cooler
- Hydraulic oil cooler (oil to air)
- Charge air cooler (air to air)
- Fuel cooler

- Enclosed fan safety guard

# Additional equipment (cont.)

## 524 P 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<sup>™</sup> 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)

## 524 P Electrical (continued)

- 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)
- ▲ 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<sup>®</sup>, 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
- ▲ Seat-belt minder monitoring with JDLink<sup>™</sup> and seat-belt indicator beacon
- Cup holder and cup/Thermos<sup>®</sup> 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

While general information, pictures, and descriptions are provided, some illustrations and text may include product options and accessories NOT AVAILABLE in all regions, and in some countries products and accessories may require modifications or additions to ensure compliance with the local regulations of those countries. 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 tres, full fuel tank, and 79-kg (175 lb.) operator.

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

524 P	Operator's Station (continued)
٠	Pull-down front sun visor
•	Front and rear intermittent windshield wipe
	and washers

- Powered cab air pre-cleaner
- ▲ Beacon bracket only
- Beacon bracket with strobe beacon
- Rearview camera
- Rearview camera with radar object-detection system
- Dedicated 178-mm (7 in.) rear camera display
- Payload scale ready
- ▲ 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)

## Tool Carrier linkage for visibility (p Buckets and Attachments

- Full line of Deere pin-on buckets, coupler buckets, and forks
- ▲ John Deere hydraulic coupler that accepts JRBpattern 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<sup>™</sup> 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

Heavy-duty fuel-tank quard

Ground-level fuel and DEF fill

20.5R25 tires on 3-piece rims

Fenders, front narrow

Rims less tires

Lift eyes

Fenders, front full width

Ag material-handling package

Fenders, front and rear full width

License-plate bracket and light

Less wheels and tires with axle stops

Same-side ground-level daily servicing

Environmental drains and sample ports for engine,

transmission, hydraulic oils, and engine coolant

Fenders, front and rear full width with mud flaps

Transmission side-frame and bottom guards

- ▲ Left-side close-mounted steps
- Storage compartment
   Fuel-tank fill strainer

▲



