

744 X

Wheel Loader



JOHN DEERE





PROACTIVE POWERHOUSE

When your daily grind includes hauling material over long distances or working in abrasive aggregate conditions, you need a machine that can tackle it all while taking it easy on operators and your bottom line. With intuitive controls, a cab ergonomically designed for comfort and productivity, your choice of customer-inspired options, and now a purpose-built Electric Variable Transmission (EVT) to power your productivity, the 744 X-Tier Wheel Loader is redesigned and ready to deliver premium levels of machine performance and fuel efficiency along with an enhanced operator experience to help attract and retain your most precious resource.

Operate at an EVT advantage

Powered by our proven JD9 engine, the 744 X-Tier is equipped with an exclusive Deere-designed and -built Electric Variable Transmission (EVT). Replacing both the torque converter and traditional transmission of comparable models, the field-tested EVT delivers rapid response and power on demand as well as low-effort single-pedal operation. Two electric motors plus an inverter allow the system to efficiently manage

torque, power to the ground, and ground speed similar to the E-Drive in our 944 X-Tier and 644 X-Tier.

Outsized comfort

Standard premium heated/ventilated seat, HVAC system with automatic temperature control, and durable sealed-switch module are placed for ergonomic comfort and convenience. Wide door eases getting in and out of the cab.

It's easy to take control

Intuitive seat-mounted right-hand hydraulic controls feature two programmable multifunction buttons enabled with electrohydraulic (EH) capability. Operators can adjust settings based on individual preference to increase productivity across a range of jobsite applications.



FIND YOUR FIT



LEADING EDGE

Premium edge with innovative technology



EXCEPTIONAL PERFORMANCE

Advanced features and performance



RUGGED AND RELIABLE

Proven capabilities and value

Material matters

SmartWeigh™ option features dynamic weighing technology that allows operators to weigh without interrupting workflow and removes the need to lower and reraise the boom after tipoff. 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.

VISION AND DETECTION SYSTEM OFFERINGS

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

- Optional **AVS** includes two digital cameras mounted on the rearview-mirror platforms that integrate with the rearview (backup) camera for a single display on a dedicated in-cab monitor.
- Paired with a high-resolution camera and a dedicated display, optional **Advanced Rear Object-Detection System (ARODS)** utilizes a radar system that provides audible alerts when objects are detected at the rear of the machine. ARODS helps operators visualize the loader's reversal path based on its articulation.
- Available as an easily installed field kit, optional **SmartDetect** alerts operators of objects entering the machine's projected travel path, emitting sound and visual alerts inside the cab as well as an audible alarm to detected bystanders. SmartDetect requires AVS, ARODS, and a G5 display as well as software activation.
- Building on SmartDetect capabilities, optional **SmartDetect™ Digital** is equipped with advanced cameras that integrate with a dedicated G5 display to provide elevated operator and bystander alerts. 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



SMARTDETECT ON THE G5 DISPLAY

Pile it on

Pile Slip Assist improves tire traction and wear life while optimizing bucket fill and cycle times.

Environmental science

Running the engine at a constant speed eliminates unnecessary noise on the jobsite around the machine and creates a comfortable, quiet space for the operator inside the cab.

Heavy-duty durability

Large, high-capacity, heavy-duty axles with standard axle cooling and filtration are designed to durably withstand demanding conditions.

Reliable redesign

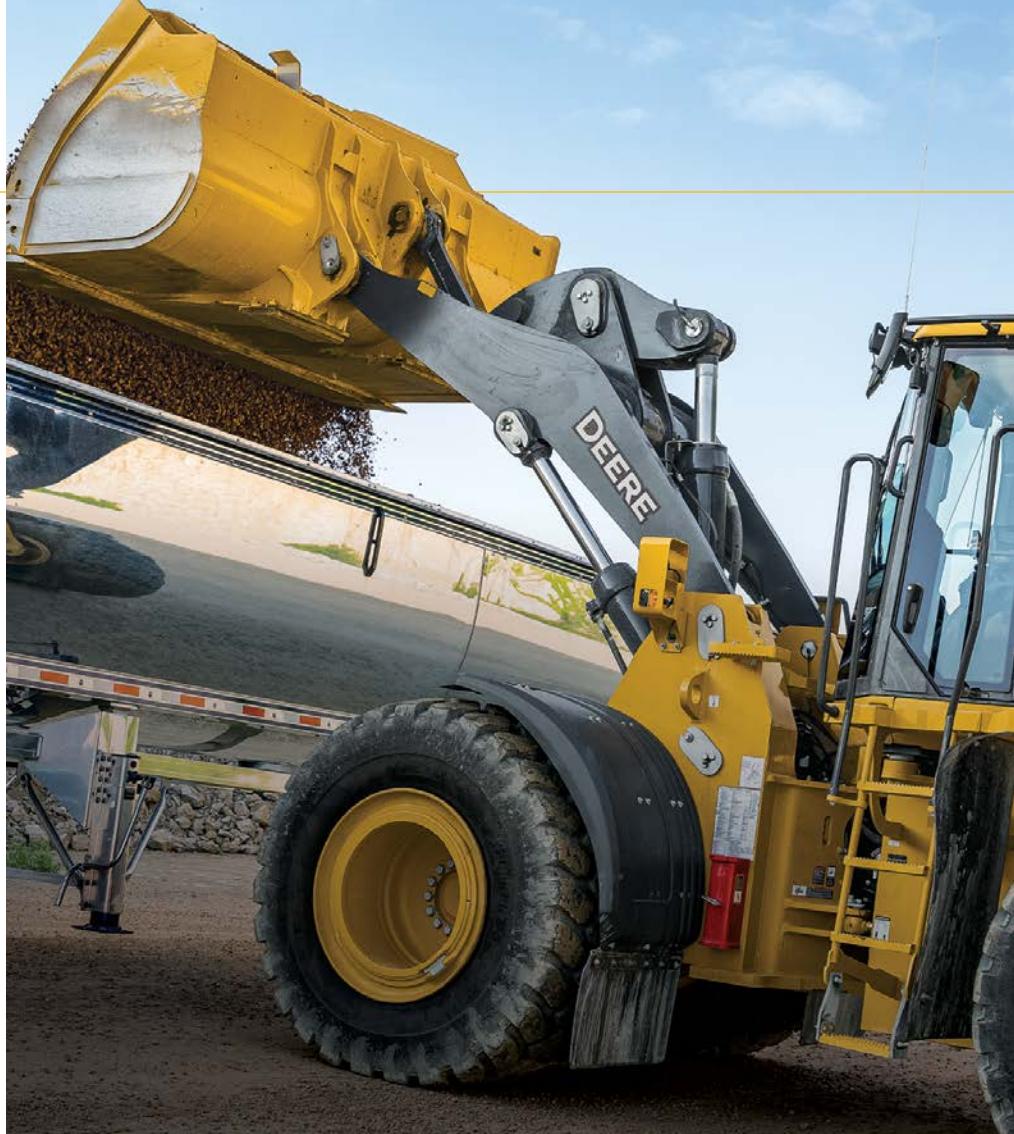
Routing of the electrical and hydraulic systems has been significantly simplified to minimize friction, improving reliability and easing maintenance.

Road and go

Versatile log-handler, pipe-handler, and waste-handler configurations deliver impressive tipping-load capacities.

Master the maintenance routine

All daily service points including fuel are conveniently grouped on the left side of the machine at ground level, for easy access. The engine oil dipstick is conveniently within reach. Optional auto-lube system integrates with machine diagnostics to save time and operating expenses.



**PILE SLIP ASSIST
BOOSTS TRACTION
& BUCKET FILL**



744 X-TIER WHEEL LOADER



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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744 X-TIER		
Engine		
Manufacturer and Model	John Deere JD9	
Non-Road Emission Standard	EPA Final Tier 4/EU Stage V	
Cylinders	6	
Valves per Cylinder	4	
Displacement	9.0 L (548 cu. in.)	
Net Peak Power (ISO 9249)	243 kW (325 hp) at 1,500 rpm	
Net Peak Torque (ISO 9249)	1588 Nm (1,171 lb.-ft.) at 1,300 rpm	
Net Torque Rise	40%	
Fuel System (electronically controlled)	High-pressure common rail	
Lubrication	Full-flow cartridge filter and integral cooler	
Aspiration	Series turbocharged, charge air cooled	
Air Cleaner	Under-hood, dual-element dry type, restriction indicator in cab monitor for service	
Cooling		
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers	
Electrical		
Electrical System	24 volt with 145-amp alternator	
Batteries (2 – 12 volt)	1,400 CCA (each)	
Transmission System		
Type	Electric Variable Transmission (EVT)	
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; Quick-Shift button on hydraulic lever	
Shift Modes	Auto (1st–4th or 2nd–4th); Quick-Shift button with 2 selectable modes: kick-down or kick-up/down	
Maximum Travel Speeds (with 26.5 R 25, 1 Star L3 tires)	Electric Variable Transmission (EVT)	
Forward	Reverse	
Range 1	7.1 km/h (4.4 mph)	
Range 2	13.1 km/h (8.1 mph)	
Range 3	26.3 km/h (16.3 mph)	
Range 4	39.5 km/h (24.5 mph)	
Range 5	N/A	
Axes/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 26.5 R 25, 1 Star L3 tires)	26 deg. (13 deg. each direction)	
Brakes (conform to ISO 3450)		
Service	Hydraulically actuated, spring released, inboard, sun-gear mounted, oil cooled, self-adjusting, single disc	
Parking	Automatic spring applied, hydraulically released, oil cooled, multi disc	
Tires/Wheels		
(see page 10 for complete tire adjustments)		
	Tread Width	Width Over Tires
Michelin 26.5 R 25, 2 Star L3	2298 mm (90.5 in.)	3084 mm (121.4 in.)
Serviceability		
Refill Capacities		
Fuel Tank With Lockable Cap	477 L (126 gal.)	
Diesel Exhaust Fluid (DEF)	26.3 L (6.9 gal.)	
Cooling System	48 L (50.7 qt.)	
Engine Oil With Vertical Spin-On Filter	34 L (36 qt.)	
Transmission Reservoir With Vertical Filter	53 L (56 qt.)	
Power Electronics Cooling System	9.5 L (10 qt.)	
Axle Oil (front and rear, each)	55.3 L (58.4 qt.)	
Hydraulic Reservoir and Filter	151 L (39.9 gal.)	
Park Brake Oil (wet disc)	0.7 L (24 oz.)	
Hydraulic System/Steering		
Pump(s)	Loader	Steering
	2 variable-displacement, load-sensing axial-piston pumps; closed-center system	1 variable-displacement, load-sensing axial-piston pump; closed-center system
Rated rpm	1,600 rpm	1,600 rpm
Maximum Rated Flow at 6895 kPa (1,000 psi) and 1,600 rpm	400 L/m (106 gpm)	161.5 L/m (43 gpm)
System Relief Pressure	23 000 kPa (3,336 psi)	24 900 kPa (3,610 psi)
Differential Pressure	2103 kPa (305 psi)	2103 kPa (305 psi)
Loader Controls	2-function valve; single- or dual-lever controls; control lever lockout feature; optional 3rd- and 4th-function valve with auxiliary controls	

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744 X-TIER WHEEL LOADER SPECIFICATIONS

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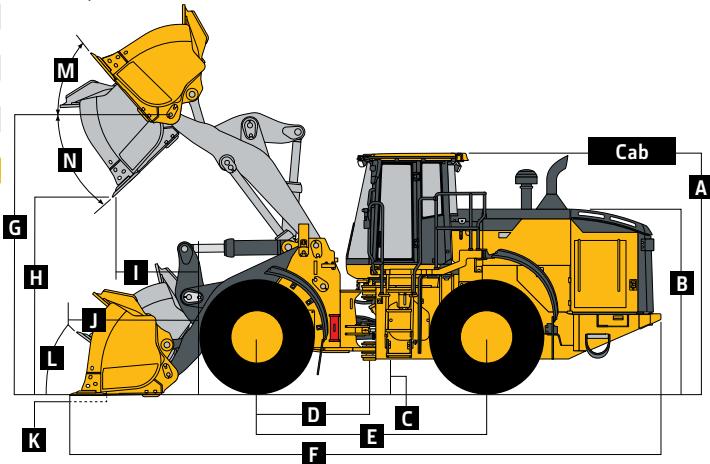
Hydraulic System/Steering (continued)

Steering (conforms to ISO 5010)

Type	Power, fully hydraulic
Articulation Angle	80-deg. arc (40 deg. each direction)
Turning Radius (measured to centerline of outside tire)	5.92 m (19 ft. 5 in.)
Hydraulic Cycle Times	<i>Standard-Lift / High-Lift</i>
Raise	6.1 sec.
Dump	1.4 sec.
Lower (float down)	2.8 sec.
Total	10.3 sec.

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Dimensions and Specifications With Pin-On Bucket



744 X-TIER STANDARD-LIFT AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

Dimensions With Bucket	Standard-Lift	Standard-Lift	High-Lift
Cutting Edge Type	<i>Standard-Lift</i> 4.2-m ³ (5.5 cu. yd.) general-purpose enhanced performance without wear plates <i>High-Lift</i> 4.5-m ³ (5.85 cu. yd.) material-handling enhanced performance without wear plates	<i>Standard-Lift</i> 4.5-m ³ (5.85 cu. yd.) material-handling enhanced performance without wear plates <i>High-Lift</i> 4.2-m ³ (5.5 cu. yd.) general purpose without wear plates	<i>Standard-Lift</i> 4.5-m ³ (5.85 cu. yd.) material-handling enhanced performance without wear plates <i>High-Lift</i> 4.2-m ³ (5.5 cu. yd.) general purpose without wear plates
A Height to Top of Cab	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)
B Hood Height	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)
C Ground Clearance	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)
D Length From Centerline to Front Axle	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)
E Wheelbase	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)
F Overall Length, Bucket on Ground	9.10 m (29 ft. 10 in.)	9.16 m (30 ft. 1 in.)	9.74 m (31 ft. 11 in.)
G Height to Hinge Pin, Fully Raised	4.27 m (14 ft. 0 in.)	4.27 m (14 ft. 0 in.)	4.84 m (15 ft. 11 in.)
H Dump Clearance, 45 deg., Full Height	2.90 m (9 ft. 6 in.)	2.86 m (9 ft. 5 in.)	3.66 m (12 ft. 0 in.)
I Reach, 45-deg. Dump, Full Height	1.21 m (4 ft. 0 in.)	1.25 m (4 ft. 1 in.)	1.60 m (5 ft. 3 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.92 m (6 ft. 4 in.)	1.94 m (6 ft. 4 in.)	2.48 m (8 ft. 2 in.)
K Maximum Digging Depth	110 mm (4.3 in.)	115 mm (4.5 in.)	225 mm (8.9 in.)
L Maximum Rollback at Ground Level	40.2 deg.	40.2 deg.	41.2 deg.
M Maximum Rollback, Boom Fully Raised	54.9 deg.	54.9 deg.	53.1 deg.
N Maximum Bucket Dump Angle, Fully Raised	49.9 deg.	49.9 deg.	38.8 deg.
Loader Clearance Circle, Bucket Carry Position	14.06 m (46 ft. 2 in.)	14.10 m (46 ft. 3 in.)	14.20 m (46 ft. 7 in.)
Specifications With Bucket			
Capacity, Heaped	4.2 m ³ (5.5 cu. yd.)	4.5 m ³ (5.85 cu. yd.)	4.2 m ³ (5.5 cu. yd.)
Capacity, Heaped at 110% Fill Factor	4.6 m ³ (6.05 cu. yd.)	5.0 m ³ (6.44 cu. yd.)	4.6 m ³ (6.05 cu. yd.)
Capacity, Struck	3.5 m ³ (4.6 cu. yd.)	3.8 m ³ (4.9 cu. yd.)	3.5 m ³ (4.6 cu. yd.)
Bucket Weight With Bolt-On Cutting Edge	2366 kg (5,216 lb.)	2404 kg (5,300 lb.)	2343 kg (5,165 lb.)
Bucket Width	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)
Breakout Force	18 755 kg (41,348 lb.)	17 937 kg (39,544 lb.)	16 817 kg (37,075 lb.)
Tipping Load, Straight, No Tire Deflection	20 720 kg (45,680 lb.)	20 581 kg (45,373 lb.)	16 563 kg (36,515 lb.)
Tipping Load, Straight, With Tire Deflection	19 359 kg (42,679 lb.)	19 218 kg (42,368 lb.)	15 570 kg (34,326 lb.)
Tipping Load, 37-deg. Partial Turn, No Tire Deflection	18 288 kg (40,318 lb.)	18 160 kg (40,036 lb.)	14 544 kg (32,064 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	17 894 kg (39,449 lb.)	17 768 kg (39,172 lb.)	14 217 kg (31,343 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	16 143 kg (35,589 lb.)	16 014 kg (35,305 lb.)	12 909 kg (28,459 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	8072 kg (17,996 lb.)	8007 kg (17,652 lb.)	6455 kg (14,230 lb.)
Operating Weight	25 639 kg (56,524 lb.)	25 676 kg (56,606 lb.)	26 179 kg (57,715 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, John Deere JD9 (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.

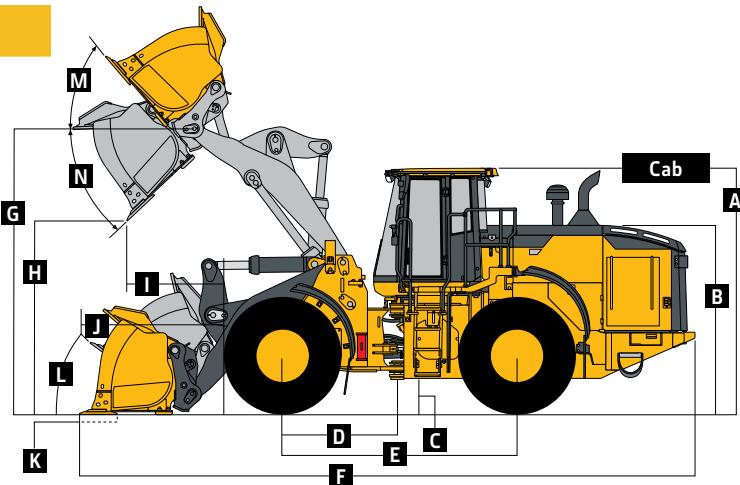
*Rated operating capacity based on Deere attachments only.

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Dimensions and Specifications With Coupler and Hook-On Bucket

744 X-TIER



744 X-TIER STANDARD-LIFT AND HIGH-LIFT LOADERS WITH HOOK-ON BUCKET

	Standard-Lift	Standard-Lift	High-Lift
Dimensions With Bucket	3.8-m³ (5.0 cu. yd.) general-purpose enhanced performance without wear plates	4.0-m³ (5.25 cu. yd.) general-purpose enhanced performance without wear plates	3.8-m³ (5.0 cu. yd.) general-purpose enhanced performance without wear plates
Cutting Edge Type	bolt-on edge	bolt-on edge	bolt-on edge
A Height to Top of Cab	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)
B Hood Height	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)
C Ground Clearance	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)
D Length From Centerline to Front Axle	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)
E Wheelbase	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)
F Overall Length, Bucket on Ground	9.17 m (30 ft. 1 in.)	9.18 m (30 ft. 1 in.)	9.81 m (32 ft. 2 in.)
G Height to Hinge Pin, Fully Raised	4.27 m (14 ft. 0 in.)	4.27 m (14 ft. 0 in.)	4.84 m (15 ft. 11 in.)
H Dump Clearance, 45 deg., Full Height	2.86 m (9 ft. 5 in.)	2.85 m (9 ft. 4 in.)	3.64 m (11 ft. 11 in.)
I Reach, 45-deg. Dump, Full Height	1.29 m (4 ft. 3 in.)	1.29 m (4 ft. 3 in.)	1.69 m (5 ft. 7 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.98 m (6 ft. 6 in.)	1.98 m (6 ft. 6 in.)	2.55 m (8 ft. 4 in.)
K Maximum Digging Depth	83 mm (3.3 in.)	88 mm (3.5 in.)	199 mm (7.8 in.)
L Maximum Rollback at Ground Level	40.3 deg.	40.3 deg.	41.2 deg.
M Maximum Rollback, Boom Fully Raised	54.9 deg.	54.9 deg.	53.1 deg.
N Maximum Bucket Dump Angle, Fully Raised	49.5 deg.	49.5 deg.	38.9 deg.
Loader Clearance Circle, Bucket Carry Position	14.1 m (46 ft. 3 in.)	14.1 m (46 ft. 3 in.)	14.4 m (47 ft. 1 in.)
Specifications With Bucket			
Capacity, Heaped	3.8 m ³ (5.0 cu. yd.)	4.0 m ³ (5.25 cu. yd.)	3.8 m ³ (5.0 cu. yd.)
Capacity, Heaped at 110% Fill Factor	4.2 m ³ (5.5 cu. yd.)	4.4 m ³ (5.78 cu. yd.)	4.2 m ³ (5.5 cu. yd.)
Capacity, Struck	3.25 m ³ (4.25 cu. yd.)	3.4 m ³ (4.5 cu. yd.)	3.25 m ³ (4.25 cu. yd.)
Bucket Weight With Bolt-On Cutting Edge	2343 kg (5,165 lb.)	2366 kg (5,216 lb.)	2343 kg (5,165 lb.)
Bucket Width	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)	3.28 m (10 ft. 9 in.)
Breakout Force	17 280 kg (38,096 lb.)	17 114 kg (37,730 lb.)	15 433 kg (34,024 lb.)
Tipping Load, Straight, No Tire Deflection	19 638 kg (43,294 lb.)	19 654 kg (43,330 lb.)	15 653 kg (34,509 lb.)
Tipping Load, Straight, With Tire Deflection	18 276 kg (40,292 lb.)	18 282 kg (40,305 lb.)	14 637 kg (32,269 lb.)
Tipping Load, 37-deg. Partial Turn, No Tire Deflection	17 222 kg (37,968 lb.)	17 227 kg (37,979 lb.)	13 630 kg (30,049 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	16 831 kg (37,106 lb.)	16 834 kg (37,113 lb.)	13 302 kg (29,326 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	15 069 kg (33,221 lb.)	15 060 kg (33,202 lb.)	11 958 kg (26,363 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	7535 kg (16,612 lb.)	7530 kg (16,601 lb.)	5979 kg (13,181 lb.)
Operating Weight	26 798 kg (59,079 lb.)	26 883 kg (59,267 lb.)	27 338 kg (60,270 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, John Deere JD9 (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.

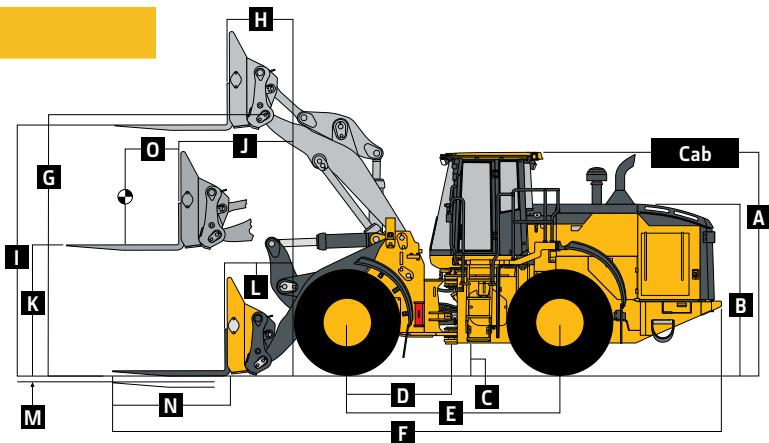
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**Dimensions and Specifications With
Coupler and Hook-On Construction Forks**

744 X-TIER



744 X-TIER STANDARD-LIFT AND HIGH-LIFT LOADERS WITH HOOK-ON CONSTRUCTION FORKS

Dimensions With Forks	<i>Standard-Lift</i>	<i>Standard-Lift</i>	<i>High-Lift</i>
A Height to Top of Cab	1.83-m (72 in.) tine length	2.44-m (96 in.) tine length	1.83-m (72 in.) tine length
B Hood Height	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)	3.57 m (11 ft. 9 in.)
C Ground Clearance	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)	2.73 m (8 ft. 11 in.)
D Length From Centerline to Front Axle	458 mm (18 in.)	458 mm (18 in.)	458 mm (18 in.)
E Wheelbase	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)	1.70 m (5 ft. 7 in.)
F Overall Length, Forks on Ground	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)	3.46 m (11 ft. 4 in.)
G Height to Hinge Pin, Fully Raised	9.82 m (32 ft. 3 in.)	10.43 m (34 ft. 3 in.)	10.49 m (34 ft. 5 in.)
H Reach, Fully Raised	4.27 m (14 ft. 0 in.)	4.27 m (14 ft. 0 in.)	4.84 m (15 ft. 11 in.)
I Fork Height, Fully Raised	0.90 m (35 in.)	0.90 m (35 in.)	1.05 m (3 ft. 5 in.)
J Maximum Reach, Fork Level	4.09 m (13 ft. 5 in.)	4.09 m (13 ft. 5 in.)	4.66 m (15 ft. 3 in.)
K Fork Height, Maximum Reach	1.77 m (5 ft. 10 in.)	1.77 m (5 ft. 10 in.)	2.29 m (7 ft. 6 in.)
L Reach, Ground Level	2.00 m (6 ft. 7 in.)	2.00 m (6 ft. 7 in.)	2.00 m (6 ft. 7 in.)
M Depth Below Ground	1.00 m (3 ft. 3 in.)	1.00 m (3 ft. 3 in.)	1.67 m (5 ft. 6 in.)
N Tine Length	56 mm (2.2 in.)	56 mm (2.2 in.)	59 mm (2.3 in.)
O Load Position, 50% Tine Length	1.83 m (72 in.)	2.44 m (96 in.)	1.83 m (72 in.)
Specifications With Forks			
Tipping Load, Straight, No Tire Deflection	13 484 kg (29,727 lb.)	12 233 kg (26,969 lb.)	11 548 kg (25,459 lb.)
Tipping Load, Straight, With Tire Deflection	13 050 kg (28,770 lb.)	11 856 kg (26,138 lb.)	11 196 kg (24,683 lb.)
Tipping Load, 37-deg. Partial Turn, No Tire Deflection	11 896 kg (26,226 lb.)	10 769 kg (23,742 lb.)	10 128 kg (22,328 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection	11 639 kg (25,660 lb.)	10 532 kg (23,219 lb.)	9 898 kg (21,821 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection	11 040 kg (24,339 lb.)	10 008 kg (22,064 lb.)	9 408 kg (20,741 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load, With Tire Deflection (conforms to ISO 14397-1)*	5520 kg (12,170 lb.)	5004 kg (11,032 lb.)	4704 kg (10,371 lb.)
Rated Operating Load, Rough Terrain, 60% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	6624 kg (14,603 lb.)	6005 kg (13,239 lb.)	5645 kg (12,445 lb.)
Rated Operating Load, Firm and Level Ground, 80% Full-Turn Tipping Load, With Tire Deflection (conforms to EN474-3)*	8832 kg (19,471 lb.)	8006 kg (17,650 lb.)	7526 kg (16,593 lb.)
Operating Weight	25 535 kg (56,295 lb.)	25 708 kg (56,676 lb.)	26 271 kg (57,917 lb.)

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**Rated operating capacity based on Deere attachments only.*

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744 X-TIER LOG HANDLER Dimensions and Specifications With Pin-On Millyard Forks

Dimensions With Millyard Forks		Standard-Lift
Height to Top of Cab		Wicker with 1.68-m (66 in.) tine length
Height to Top of Cab		3.57 m (11 ft. 9 in.)
Hood Height		2.73 m (8 ft. 11 in.)
Ground Clearance		458 mm (18 in.)
Length From Centerline to Front Axle		1.70 m (5 ft. 7 in.)
Wheelbase		3.46 m (11 ft. 4 in.)
Overall Length, Forks on Ground		9.30 m (30 ft. 6 in.)
Height to Hinge Pin, Fully Raised		4.27 m (14 ft. 0 in.)
Reach, Fully Raised		0.97 m (3 ft. 2 in.)
Fork Height, Fully Raised		4.15 m (13 ft. 7 in.)
Maximum Reach, Fork Level		1.84 m (6 ft. 0 in.)
Fork Height, Maximum Reach		2.06 m (6 ft. 9 in.)
Reach, Ground Level		1.02 m (3 ft. 4 in.)
Depth Below Ground		112 mm (4.4 in.)
Tine Length		1.68 m (66 in.)
Grapple Weight		2381 kg (5,250 lb.)
Overall Grapple Width		2.21 m (87 in.) (7 ft. 3 in.)

Specifications With Millyard Forks		Standard-Lift
Tipping Load, Straight, No Tire Deflection		Wicker with 1.68-m (66 in.) tine length
Tipping Load, Straight, With Tire		16 800 kg (37,038 lb.)
Deflection		15 957 kg (35,179 lb.)
Tipping Load, 37-deg. Partial Turn, No Tire Deflection		14 756 kg (32,531 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection		14 425 kg (31,802 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection		13 275 kg (29,266 lb.)
Operating Weight		26 975 kg (59,470 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, John Deere JD9 (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.

744 X-TIER PIPE HANDLER Dimensions and Specifications With Pin-On Pipe Grapple

Dimensions With Pipe Grapple		Standard-Lift
Height to Top of Cab		Rockland with 0.09-m x 0.20-m x 2.44-m (3.5 in. x 8.0 in. x 96.0 in.) tine length
Height to Top of Cab		3.57 m (11 ft. 9 in.)
Hood Height		2.73 m (8 ft. 11 in.)
Ground Clearance		458 mm (18 in.)
Length From Centerline to Front Axle		1.70 m (5 ft. 7 in.)
Wheelbase		3.46 m (11 ft. 4 in.)
Overall Length, Forks on Ground		9.91 m (32 ft. 6 in.)
Height to Hinge Pin, Fully Raised		4.27 m (14 ft. 0 in.)
Reach, Fully Raised		0.90 m (35 in.)
Fork Height, Fully Raised		4.51 m (14 ft. 10 in.)
Maximum Reach, Fork Level		1.76 m (5 ft. 9 in.)
Fork Height, Maximum Reach		2.42 m (7 ft. 11 in.)
Reach, Ground Level		0.54 m (21 in.)
Depth Below Ground		470 mm (18.5 in.)
Tine Length		2.44 m (96 in.)
Grapple Weight		3406 kg (7,510 lb.)
Overall Grapple Width		3.05 m (120 in.) (10 ft. 0 in.)

Specifications With Pipe Grapple		Standard-Lift
Tipping Load, Straight, No Tire		Rockland with 0.09-m x 0.20-m x 2.44-m (3.5 in. x 8.0 in. x 96.0 in.) tine length
Deflection		13 421 kg (29,588 lb.)
Tipping Load, Straight, With Tire		12 885 kg (28,407 lb.)
Deflection		11 668 kg (25,724 lb.)
Tipping Load, 37-deg. Partial Turn, No Tire Deflection		11 384 kg (25,097 lb.)
Tipping Load, 40-deg. Full Turn, No Tire Deflection		10 638 kg (23,453 lb.)
Tipping Load, 40-deg. Full Turn, With Tire Deflection		28 000 kg (61,729 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, John Deere JD9 (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.

Adjustments to Operating Weights and Tipping Loads With Buckets

Adjustments to operating weights, tipping loads, and tires are based on Standard-Lift machine with pin-on 4.0-m³ (5.25 cu. yd.) general-purpose bucket with bolt-on cutting edge and no wear plates, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator.*

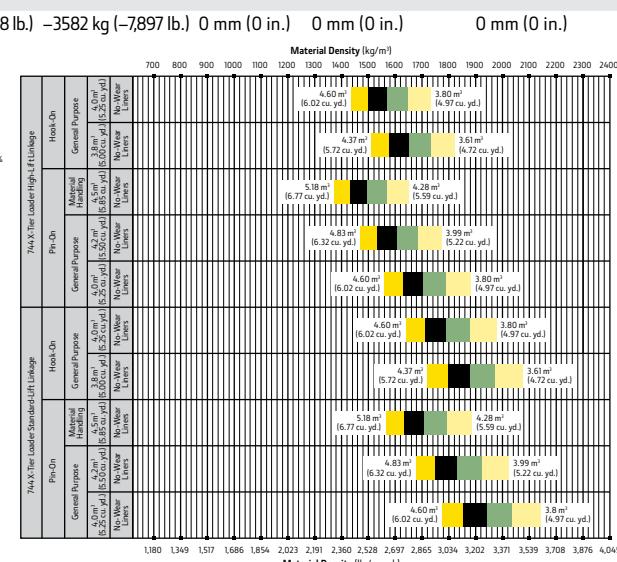
Add (+) or deduct (-) kg (lb.) as indicated for loaders with 3-piece rims	Operating Weight	Tipping Load, Straight		Tipping Load, 37-deg. Partial Turn		Tipping Load, 40-deg. Full Turn		Tread Width	Width Over Tires	Vertical Height
		4.0-m ³ (5.25 cu. yd.)	4.0-m ³ (5.25 cu. yd.)	4.0-m ³ (5.25 cu. yd.)	4.0-m ³ (5.25 cu. yd.)	4.0-m ³ (5.25 cu. yd.)	4.0-m ³ (5.25 cu. yd.)			
Michelin 26.5 R 25, 2 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
Titan 26.5 R 25, 1 Star L-3	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 kg (0 lb.)	0 mm (0 in.)	-8 mm (-0.30 in.)	+4 mm (+0.15 in.)
Goodyear 26.5 R 25, 1 Star L-3	-56 kg (-123 lb.)	-42 kg (-93 lb.)	-37 kg (-82 lb.)	-37 kg (-82 lb.)	-37 kg (-82 lb.)	-37 kg (-82 lb.)	-37 kg (-82 lb.)	0 mm (0 in.)	0 mm (0 in.)	+4 mm (+0.15 in.)
Firestone 26.5-25, 20-Ply L-3	-360 kg (-794 lb.)	-268 kg (-591 lb.)	-241 kg (-531 lb.)	-236 kg (-520 lb.)	-236 kg (-520 lb.)	-236 kg (-520 lb.)	-236 kg (-520 lb.)	0 mm (0 in.)	-30 mm (-1.18 in.)	+41 mm (+1.61 in.)
Michelin 775/65 R29, 1 Star L-3 [§]	+726 kg (+1,601 lb.)	+541 kg (+1,193 lb.)	+486 kg (+1,071 lb.)	+477 kg (+1,052 lb.)	+477 kg (+1,052 lb.)	+477 kg (+1,052 lb.)	+477 kg (+1,052 lb.)	0 mm (0 in.)	+104 mm (+4.09 in.)	+23 mm (+0.91 in.)
Bridgestone 775/65 R29, 1 Star L-3 [§]	+876 kg (+1,931 lb.)	+653 kg (+1,440 lb.)	+586 kg (+1,292 lb.)	+575 kg (+1,268 lb.)	+575 kg (+1,268 lb.)	+575 kg (+1,268 lb.)	+575 kg (+1,268 lb.)	0 mm (0 in.)	+99 mm (+3.90 in.)	+14 mm (+0.55 in.)
4.2-m ³ (5.5 cu. yd.) General-Purpose Bucket	+237 kg (+522 lb.)	-461 kg (-1,016 lb.)	-439 kg (-968 lb.)	-435 kg (-959 lb.)	-435 kg (-959 lb.)	-435 kg (-959 lb.)	-435 kg (-959 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
With Wear Liners										
4.5-m ³ (5.85 cu. yd.) Material-Handling Bucket With Wear Liners	+274 kg (+604 lb.)	-603 kg (-1,329 lb.)	-570 kg (-1,257 lb.)	-565 kg (-1,246 lb.)	-565 kg (-1,246 lb.)	-565 kg (-1,246 lb.)	-565 kg (-1,246 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)
High-Lift Boom										
+540 kg (+1,190 lb.)	+4041 kg (-8,909 lb.)	-3646 kg (-8,038 lb.)	-3582 kg (-7,897 lb.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)	0 mm (0 in.)			

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

[§]Requires 8-deg. rear axle stops.

Bucket Selection Guides

LOOSE MATERIALS	kg/m ³	lb./cu. yd.	LOOSE MATERIALS	kg/m ³	lb./cu. yd.	Bucket Fill Factors	
Chips, pulped	288	486	Limestone, coarse, sized	1570	2,646	115%	100%
Cinders (coal, ashes, clinkers)	673	1,34	Limestone, mixed sizes	1682	2,835	110%	95%
Clay and gravel, dry	1602	2,70	Limestone, pulverized or crushed	1362	2,295	105%	90%
Clay, compacted	1704	2,64	Sand, dry	2039	3,530	100%	85%
Clay, damp/lump loose	1009	1,70	Sand, dry	1762	2,970	95%	80%
Clay, excavated in water	1282	2,160	Sand, voids, full of water	2083	3,510	90%	75%
Coal, anthracite, broken, loose	865	1,458	Sandstone, quarried	1314	2,214	85%	70%
Coal, bituminous, moderately wet	801	1,35	Shale, crushed	1362	2,295	80%	65%
Earth, common loam, dry	2,023	3,293	Furnace slag, granulated	1955	3,294	75%	60%
Earth, mud, packed	1843	3,305	Stone or gravel, 37.5 to 87.5-mm (1.5 to 3.5 in.) size	1442	2,430	70%	55%
Granite, broken	1538	2,592	Stone or gravel, 18.75-mm (0.75 in.) size	1602	2,700	65%	50%
Gypsum	2275	3,834	Stone or gravel, 18.75-mm (0.75 in.) size	1602	2,700	60%	45%



Additional equipment

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

744 X 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
- Black exhaust stack with brushed-nickel trim
- ▲ Chrome exhaust stack
- ▲ Automatic ether starting aid and engine block heater (recommended for cold starts below –12 deg. C [10 deg. F])
- Centrifugal engine air pre-cleaner

Powertrain

- Programmable maximum ground speed or high gear
- Clutch calibration engaged from monitor
- 2,000-hour vertical spin-on transmission filter
- Transmission fill tube with sight gauge
- 4-speed electric variable transmission
- Front locking differential
- ▲ Rear locking differential
- Brake adjusters and retractors
- ▲ Automatic differential lock
- Axle oil temperature sensing
- Wheel-spin control
- Coast control, 4 operator settings
- Cruise control
- ▲ Pile Slip Assist

Quad-Cool™ Cooling System

- Dedicated power electronics coolant-based cooling system
- Heavy-duty, trash-resistant radiator and high-ambient cooling package
- 2-side access to all coolers
- Isolated from engine compartment
- Engine radiator
- Integral engine oil cooler
- Hydraulic oil cooler (oil to air)
- Transmission oil cooler (oil to air)
- Charge air cooler (air to air)
- Fuel cooler
- Coolant recovery tank with under-hood lighting
- Coolant-loss sensor
- Antifreeze, –37 deg. C (–34 deg. F)
- Cool-on-demand swing-out fan
- Enclosed fan safety guard
- Automatic reversing fan drive
- Axle and service-brake coolers

Hydraulics

- Electrohydraulic control 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 – 2-lever fingertip controls
- ▲ 2 function – joystick
- ▲ 2 function – joystick with F-N-R (steering wheel only)
- ▲ 3 function – 3-lever fingertip controls
- ▲ 3 function – joystick with integrated 3rd-function roller
- ▲ 3 function – joystick with integrated 3rd-function roller and F-N-R (steering wheel only)
- ▲ 4 function – joystick with integrated 3rd/4th-function rollers
- ▲ 4 function – joystick with integrated 3rd/4th-function rollers and F-N-R (steering wheel only)
- 2 programmable multifunction buttons

744 X Hydraulics (continued)

- Adjustable and continuous auxiliary hydraulic-flow settings
- Programmable attachment settings
- Ride control, automatic with monitor-adjustable speed settings
- ▲ Hydraulic control system for quick-coupler locking pins
- ▲ Hydraul™ XR cold-temperature hydraulic fluid recommended below –25 deg. C (–13 deg. F)
- Steering Systems**
- Joystick steering with gearshift, F-N-R, and horn
- ▲ 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
- ▲ Beacon bracket (single or dual available)
- ▲ LED strobe beacon
- Lights: LED 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
- 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)
- 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
- Premium AM/FM/Weather Band (WB) radio with Bluetooth®, remote auxiliary port, and remote USB port
- ▲ 24- to 12-volt, 30-amp converter with 3 in-cab power ports
- Operator's Station**
- Quiet Cab with air conditioning/heater (ROPS/FOPS Level 2, isolation mounted)
- Automatic temperature control
- Rear window defrost vent
- Keyless start with multiple security modes
- Sealed-switch module with function indicators
- Premium seat with high-wide back and headrest extension, heated and ventilated, leather/fabric cover, pan tilt/extend, damper adjustments, and adjustable heavy-duty air suspension
- Hydraulic controls and joystick steering 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
- LED dome and reading light
- Coat hook
- Rubber floor mat
- ▲ Dual-tilt steering column (steering wheel only)
- Operator's manual storage compartment
- Outside (2) and inside (2) rearview mirrors
- ▲ In-cab adjustable heated outside mirrors with convex lens
- Left-side operator-station access
- Front window-washing platforms with fall-arrest system anchor points tested to 2,268 kg (5,000 lb.)

744 X Operator's Station (continued)

- Slip-resistant steps and ergonomic handholds
- Pull-down front sun visor
- ▲ Pull-down rear sun visor
- CB radio ready with 12-volt power, bracket, and antennae included
- Front and rear intermittent windshield wiper and washers
- ▲ Powered cab air pre-cleaner
- Rearview camera
- ▲ Advanced Rear Object-Detection System
- ▲ Advanced Vision System
- Payload scale ready
- ▲ SmartWeigh™ ready + trial
- ▲ SmartWeigh
- ▲ SmartDetect™
- ▲ SmartDetect™ Digital
- ▲ Fire extinguisher
- Loader Linkage**
- Z-Bar loader linkage
- ▲ High-Lift Z-Bar loader linkage
- Buckets and Attachments**
- Full line of Deere pin-on buckets, hook-on buckets, and forks
- John Deere hydraulic coupler that accepts JRB 420-pattern attachments
- Bolt-on bucket spill guard
- ▲ Bushed pin joints (including static joints) on optional Enhanced-Performance buckets
- Overall Vehicle**
- JDLink™ wireless communication system (available in specific countries; see your dealer for details)
- ▲ Auto-lube system with empty reservoir sensor and diagnostics integrated into machine diagnostics and JDLink alerts
- Front and rear tie-downs
- Rear cast bumper 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, battery box, and filler access for radiator/fuel/hydraulic transmission
- Right and left handrails, platforms, and steps
- Service steps and handholds
- Storage compartment
- Fuel-tank fill strainer
- Heavy-duty fuel-tank guard
- Ground-level fueling and DEF
- Same-side ground-level daily servicing
- Environmental drains for engine, transmission, hydraulic oils, and engine coolant
- Fluid-sampling ports for engine, transmission, hydraulic and axle oils, and engine coolant
- 26.5R25 tires on 5-piece rims
- ▲ 775/65R29 tires on 5-piece rims
- ▲ Tire-pressure monitoring system
- ▲ Transmission side-frame and bottom guards
- ▲ Fast-fuel system
- ▲ Quick fluid service (engine, transmission, hydraulic oils, and engine coolant)
- Fenders, full-coverage, front
- ▲ Fenders, full-coverage, front and rear
- ▲ Fenders, roading, full-coverage, front and rear
- Rims less tires with axle stops
- Lift eyes
- ▲ Wheel-chock-mounting brackets
- ▲ License-plate bracket and light
- ▲ Log handler (Standard-Lift only)
- ▲ Pipe handler (Standard-Lift only)
- ▲ Special guarding for waste and forestry applications

*Standard or optional depending on determination with less bucket as an option; bucket bushings are standard.

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 tires, full fuel tank, and 79-kg (175 lb.) operator.



MW744XAU (25-04)



JOHN DEERE