

WASTE HANDLERS





Haste moves waste.

If it's a highly productive waste handler you want, get a John Deere J-Series. These nimble and quick machines come loaded with the survival gear they need to tackle transfer-station tasks, day after day. An innovative Quad-Cool™ system with proportional fan ensures that everything keeps cool. Extensive guarding minimizes debris build-up and helps keep

close encounters with obstacles from slowing you down. And a solid-state electrical distribution center, durable sealed switch module, and state-of-the-art diagnostic multi-function monitor further boost uptime and productivity. That's just the beginning. Read on to learn all the ways the J-Series Waste Handlers help take out the trash.



644J Waste Handler

232 net hp @ 1,700 rpm 5.0-7.0-cu.-yd. buckets 32,514-lb. full-turn tipping load 34,471-lb. breakout force 48,050-lb. operating weight

Purpose-built John Deere waste handlers come fully equipped with everything they need to survive and thrive in hostile wastelands.

Unique Quad-Cool™ package helps these three keep their cool under grueling conditions.

John Deere diesels deliver an impressive rise of 38% in the 544J, and 55% in the 624J and 644J. For pull-through power when the going gets tough.

Same-side ground-level daily service access makes routine tasks quick and easy. Extended service intervals and large fuel tanks further maximize uptime.

Heavy-duty waste-handler buckets range from 4–7 cubic yards. Third-function hydraulic valve is available for use with grapple buckets.

Optional high-lift booms increase dump height so you can move materials and push productivity to even greater heights.

Choose the axles that are right for you. Hydraulic front differential lock and conventional rear is standard; front and rear hydraulic differential is available.

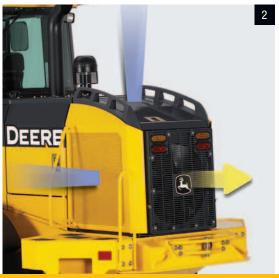
Transmission oil cooler has its own air-intake screen for more efficient cooling.

Three-millimeter perforations act as a "first filter," preventing entry of most airborne debris. Anything that gets through the side screens easily passes through the cooler cores.

There are no stacked cores in these waste handlers. Both sides of all coolers are easily accessible. Plus the hinged grill and fan swing open a full 90 degrees, further simplifying clean out.

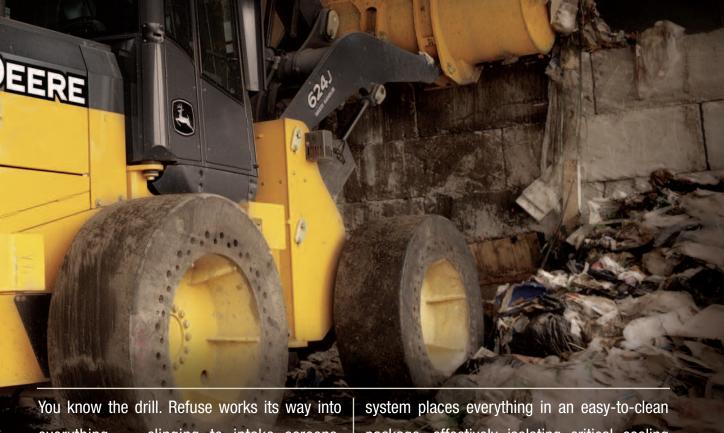
- **1.** Fan automatically reverses to help eliminate cooler-clogging buildup. Or press a button to actuate cleaning cycles as needed.
- 2. Quad-Cool™ system places the radiator, intercooler, air-conditioner condenser, and transmission and optional axle coolers in an independent package. Outside air flows through the perforated top, side panels, and coolers, and out the rear instead of drawing air through the engine compartment, for increased efficiency and durability.







Stay cool under pressure.



You know the drill. Refuse works its way into everything — clinging to intake screens, plugging coolers, filling engine compartments, and causing overheating. But these waste handlers are built to work long and hard without breaking a sweat. Their unique Quad-Cool™

system places everything in an easy-to-clean package, effectively isolating critical cooling components from engine heat. What's more, a hydraulically driven fan automatically reverses to eject debris build-up. For cool-running efficiency, regardless of what's underfoot — or in the air.





Extreme-duty front loader frame cover, lower loader frame guard, transmission side covers, and boom cylinder and hydraulic line guards give additional impact and debris resistance.

Window bars provide glass protection without obstructing visibility.

ROPS-mounted strobe light alerts bystanders; folds down for additional overhead clearance.

Extreme-duty steps take abuse and come back for more.

Guards help keep grease zerks intact and unobstructed so greasing gets done.

Axle guards help insulate the seals and resist refuse wrapping.

Access platform simplifies engine access and helps protect rear axle.

Self-adjusting wet-disc brakes are mounted inboard where they run cool, clean, and unexposed to corrosive materials. Brake lines are equally protected.

Bolt-on or optional hydraulic belly pans deliver unmatched protection to the fuel tank and drivetrain. Hydraulic version eases clean-out.

Optional front striker bars shed material from the tires.

- 1. Self-cleaning shields protect the boom cylinders by ejecting waste every time the boom is raised.
- 2. Articulation joint shields and driveshaft guards help resist trash build-up
- Electrical distribution center employs extremely reliable circuitboard technology and solid-state switches, eliminating the need for a multitude of wiring harnesses, fuses, relays, and connections.
- Planetary final drives are mounted inboard. Since gear size isn't limited by wheel hub diameter, larger, more durable components are utilized.





Quad-Cool™ system keeps the radiator; air-conditioner condenser; intercoolers; and hydraulic, transmission, and axle cooler isolated from engine heat for increased efficiency and durability.

Hydraulically driven variable-speed fan runs only as needed to help maximize fuel efficiency and reduce noise.

Extended service intervals and large fuel tanks help maximize uptime.

Both sides of all coolers are easily accessible, for quick and easy clean-out.

Large hinged doors open wide, providing quick and easy access to the engine and Quad-Cool system.

Corrugated fine-mesh screen air cleaner efficiently filters the airflow.



Get the lowdown on the J-Series' daily operating costs.

When it comes to helping you control daily operating costs, we're open to new ideas — and the J-Series is loaded with them. Like the Quad-Cool™ system, for example. But we didn't stop there. Service intervals have been extended, and same-side ground-level service

points help make quick work of the daily routine. Hinged side shields open wide, providing quick and ample access to dipsticks, vertical spin-on filters, and sight gauges. These and other timesaving advantages help minimize down-time and expense.

- **1.** Vertical fuel and oil filters allow quick and easy, no-spill changes.
- If something goes wrong, an advanced monitor gives easy-to-understand diagnostic messages and even offers possible solutions to minimize downtime.
- **3.** Conveniently located sight gauges let you check fluid levels at a glance.

- **4.** Centralized lube banks make greasing less messy.
- Your John Deere dealer has the parts and service you need, including a wide variety of preventative maintenance programs.





Standard air-ride armchair seat adjusts multiple ways for extra comfort.

Independently adjustable louvers and defrosters provide effective airflow to help keep the glass clear and pressurized cab comfortable. Activated- carbon fresh-air filter reduces odors.

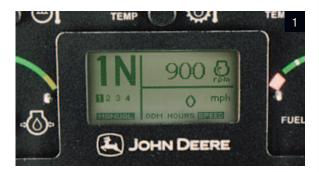
Choose either joystick or two-lever pilot-operated control.

Deere's PowerShift™ torque-converter transmission employs Smart-Shift™ technology to ensure smooth-as-silk gear changes.

Responsive steering and full 80-degree articulation increase maneuverability in tight quarters — for fast cycles and fewer three-point turns.

Return-to-carry, boom height kickout, and return-to-load are set with just a touch of a button. These advantages help speed production in repetitive loading applications.

Industry-leading 360-degree visibility gives a clear view of the work ahead and obstacles around you.



 Advanced, multi-language monitor with analog gauges and LED indicators provides:

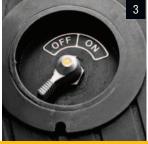
Vital and general operating information including transmission mode, gear, engine rpms, and ground speed.

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

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

- **2.** Conveniently positioned switch module helps reduce operator fatigue with clearly visible backlit and sealed controls.
- 3. In-cab lockable master switch makes it easy to disconnect electrical power.







Hard work never felt this easy. efficient HVAC system helps keep the view clear, From the convenient controls that let you the environment comfortable. A sealed switch customize machine operation, to the comfortable fully adjustable armchair seat — the J-Series module allows convenient, fingertip control of Loaders have everything your operators need to multiple machine operations. Up front, a statestay alert and productive. All-around visibility of-the-art multi-function monitor with easyto-read gauges and messaging provides vital is exceptional, offering clear sight lines of the work area and obstacles around you. And an operating info at a glance.

Engine		544J WH	
	turer and Model		
	d Emission Standards		
,	mont		
	nent Power (IS09249)		
	rower (1309249)		
	Torque (ISO9249)		m
	on		
	r Pre-Cleaner		
Air Clean	er	dual element dry type, restrictio	n indicator in cab
Cooling			
)		
			ctable timer can be actuated by switch in cab
	oolant Rating		
	adiator		
	: Cooler		
	sion Oil Cooler		
	er (option)		
Powertrain	,	p ()	
		stage, single-phase torque conv	erter; steering-column- or joystick-mounted F-N-R and gear-select lever; kick-down button on hydraulic lever
	of Gears Forward		3
	of Gears Reverse		
Shift Con	trol	electronically modulated, adapti	ve, load and speed dependent
		switch pad	able modes: auto/manual, auto to 1st or 2nd, kick down or kick up/down, 3 clutch cutoff settings adjustable on
	eeds With 20.5-25 Solid Rubber Tires		Reverse Maximum Speed
	1		4.5 mph (7.2 km/h)
	2		7.8 mph (12.6 km/h)
	3sion Clutch Disconnect		15.0 mph (24.1 km/h)
Axles	SIOH CHARCH DISCONNECT	5 Selectable Settlings on the Swi	шпраи
	Axle Oscillation, Stop to Stop	16 deg.	
			ng front with conventional rear – standard; hydraulic multi-disk 100% locking front and rear – optional
Steering		•	
	er, Fully Hydraulic (SAE J1511)		
	ulation Angle		
	ve		anetary
	rd	boit-on, axie seal guard	
Sorvi	conform to SAE J1473, ISO3450)	hydraulically actuated inhoard o	sun-shaft mounted, oil cooled, self-adjusting, single-disc
Parki	ing Brake	automatic spring applied hydra	ulically released, driveline mounted, oil cooled, multi-disc
Hydraulics	_	automatio opinig appnou, njara	anoung totalaca, attraine meanica, en contag maia allo
		variable-displacement axial-nis	ton pump; closed-center, pressure-compensating system
	n		ton pamp, dood donto, proced domponedany dystem
	n Rated Flow @ 1,000 psi (6895 kPa)		
System R	Relief Pressure, Loader and Steering	3,650 psi (25 166 kPa)	
		Standard Z-Bar Linkage	High-Lift Z-Bar Linkage
	B		5.8 sec.
	p		1.2 sec.
	er (float down)		3.2 sec. 3.3 sec.
	er (power down)		3.3 Sec. 10.2 sec.
Turning I		10.2 000.	10.2 000.
	sured to Centerline of Outside Tire	16 ft. 3 in. (4.95 m)	
			-lever controls; control lever lockout feature; optional third- and fourth-function valve with auxiliary lever
		. •	•

Electrical 544J WH

Electrical distribution center with solid-state switches and circuit-board technology

 Voltage
 24 volts

 Number of Batteries (12 volt)
 2

 Battery Capacity
 950 CCA

 Reserve Capacity
 200 min.

 Alternator Rating
 80 amp

Lights (SAE 99) driving lights with guard, turn signals, and flashers; stop and taillight

Work Lights..... front (2), rear (2)

Tires/Wheels

 Tread Width
 Width Over Tires

 With 20.5 x 25 Solid Rubber Tires
 6 ft. 5 in. (1951 mm)
 8 ft. 1 in. (2466 mm)

Serviceability

Hinged bottom access covers (bolt-on); bottom protection, integral in mainframe; engine side shields hinged, fan door and fan opens 90 deg. for full access to coolers; ground-level fueling; remote grease bank for front axle; hydraulic "0"-ring face seal connectors

 Fluid-Change Interval
 Hours

 Engine Oil
 500

 Park Brake Oil
 1,000

 Hydraulic Oil
 4,000

 Axle Oil
 2,000

Refill Capacities

 Axle Oil (front and rear)
 18 qt. (17 L)

 Wet-Disc Parking Brake Oil
 10 oz. (0.3 L)

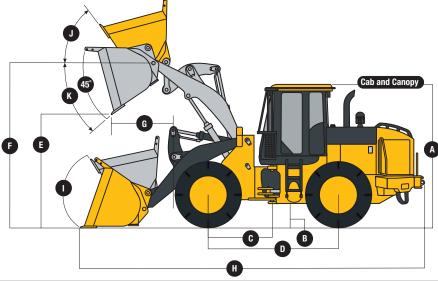
 Cooling System
 23 qt. (22 L)

 Engine Oil With Vertical Spin-On Filter
 22.2 qt. (21 L)

 Fuel Tank
 85 gal. (322 L)

 Hydraulic Reservoir and Filters
 25.5 gal. (96.5 L)

 Transmission Fluid With Vertical Filter
 19.5 qt. (18.5 L)



Operating Weights

All configurations include weight with complete waste-handler protection, 20.5 x 25 solid rubber tires, cab, full fuel tank, and 175-lb. (79 kg) operator

Standard Z-Bar Linkage High-Lift Z-Bar Linkage

4.0 cu. yd. (3.1 m³) 5.0 cu. yd. (3.8 m³) 4.0 cu. yd. (3.1 m³) 5.0 cu. yd. (3.8 m³) 5.0 cu. yd. (3.8 m³) 5.0 cu. yd. (3.1 m³) 5.0 cu. yd. (3.8 m³) 5.0 cu. yd. (3.8 m³) 5.0 cu. yd. (3.1 m³) 5.0 cu. yd. (3.8 m²) 5.0 cu. yd. (3.1 m³) 5.0 cu. y

Machine Dimensions

Stand	dard Z-Bar Linkage With Pir	n-On Bucket	High-Lift Z-Bar Linkage WIth Pin-On Bucket			
4.0-c	uyd.	5.0-cuyd.	4.0-cuyd.	5.0-cuyd.		
(3.1 r	m³) Bucket	(3.8 m³) Bucket	(3.1 m³) Bucket	(3.8 m³) Bucket		
A Height to Top of Cab and Canopy 10 ft.	10 in. (3.30 m)	10 ft. 10 in. (3.30 m)	10 ft. 10 in. (3.30 m)	10 ft. 10 in. (3.30 m)		
B Ground Clearance	. (0.46 m)	18 in. (0.46 m)	18 in. (0.46 m)	18 in. (0.46 m)		
C Length from Centerline to Front Axle 4 ft. 9	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)		
D Wheelbase	6 in. (2.90 m)	9 ft. 6 in. (2.90 m)	9 ft. 6 in. (2.90 m)	9 ft. 6 in. (2.90 m)		
E Dump Clearance) in. (2.73 m)	8 ft. 7 in. (2.62 m)	10 ft. 1 in. (3.08 m)	9 ft. 9 in. (2.97 m)		
F Height to Hinge Pin, Fully Raised12 ft.	9 in. (3.89 m)	12 ft. 9 in. (3.89 m)	13 ft. 10 in. (4.22 m)	13 ft. 10 in. (4.22 m)		
G Dump Reach) in. (0.92 m)	3 ft. 5 in. (1.04 m)	3 ft. 0 in. (0.92 m)	3 ft. 5 in. (1.04 m)		
H Overall Length	5 in. (7.44 m)	24 ft. 11 in. (7.59 m)	24 ft. 6 in. (7.47 m)	26 ft. 1 in. (7.95 m)		
I Maximum Rollback at Ground Level 35 de	eg.	35 deg.	35 deg.	35 deg.		
J Maximum Rollback at Full Height 51 de	eg.	51 deg.	51 deg.	51 deg.		
K Maximum Dump Angle at Full Height 49 de	•	9	3	49 deg.		
Capacity, Heaped SAE (with bolt-on cutting edge) 4.0 ci			4.0 cu. yd. (3.1 m ³)	5.0 cu. yd. (3.8 m ³)		
Capacity, Struck SAE				4.36 cu. yd. (3.3 m³)		
Breakout Force (SAE J732C)		18,262 lb. (8284 kg)	19,371 lb. (8787 kg)	16,721 lb. (7586 kg)		
Tipping Load, Straight		, (),	, (21,008 lb. (9529 kg)		
Tipping Load, 40-deg. Full Turn, SAE		20,674 (9380 kg)	19,572 lb. (8878 kg)	18,362 lb. (8329 kg)		
Bucket Weight		3,800 lb. (1724 kg)	3,200 lb. (1451 kg)	3,800 lb. (1724 kg)		
Bucket Width		8 ft. 10 in. (2.69 m)	,	8 ft. 10 in. (2.69 m)		
Reach, 45-deg. Dump, 7-ft. (2.13 m) Clearance 4 ft. 6	, ,	4 ft. 8 in. (1.43 m)	5 ft. 6 in. (1.68 m)	5 ft. 8 in. (1.73 m)		
Loader Clearance Circle, Bucket Carry Position 38 ft.	8 In. (11.79 m)	39 ft. 0 in. (11.89 m)	39 ft. 7 in. (12.07 m)	39 ft. 11 in. (12.17 m)		
Lift Capacity	00 lb (40 477 los)	10.010 - (0.445)	00 005 15 (40 707 155)	00.450 lb (04.44 l)		
At Ground Line		, (, (20,158 lb. (9144 kg)		
At Full Height14,10	JS ID. (0397 Kg)	13,722 lb. (6224 kg)	12,147 lb. (5510 kg)	11,768 lb. (5338 kg)		



Engine	624J WH	
Manufacturer and Model		
Non-Road Emission Standards		ations
Cylinders		
Displacement		
Net Peak Power (ISO9249)	. 196 HP (147 KW) @ 1,000 FPH 55%	
Net Peak Torque (ISO9249)		nm
Lubrication	. full-flow spin-on filter and inted	oral cooler
Engine Air Pre-Cleaner		,
Air Cleaner	. dual element dry type, restriction	on indicator in cab
Cooling		
Fan Drive	. hydraulically driven, proportion	ally controlled, fan aft of coolers
Fan Type		
Engine Coolant Rating		
Engine Radiator		
Hydraulic Cooler		
Charge Air Cooler	. 6.3 fins per in. (air to air)	
Transmission Oil Cooler		
Axle Coolers (optional)	. 6 fins per in. (oil to air)	
Powertrain		
		verter; steering-column- or joystick-mounted F-N-R and gear-select lever; kick-down button on hydraulic lever
Number of Gears Forward Number of Gears Reverse		
		tive lead and around dependent
Shift Control		ive, load and speed dependent lable modes: auto/manual, auto to 1st or 2nd, kick down or kick up/down, 3 clutch cutoff settings adjustable on
Stillt Wodes	switch pad	able modes, auto/mandal, auto to 15t of 2nd, kick down of kick dp/down, 5 clutch cuton settings adjustable of
Travel Speeds With 20.5-25 Solid Rubber Tires		Reverse Maximum Speed
Gear 1		4.7 mph (7.6 km/h)
Gear 2		8.1 mph (13.0 km/h)
Gear 3	. 15.2 mph (24.5 km/h)	16.0 mph (25.7 km/h)
Transmission Clutch Disconnect	. 3 selectable settings on the sw	itch pad
Axles		
Rear Axle Oscillation, Stop to Stop	. 16 deg.	
	. hydraulic multi-disk 100% lock	ring front with conventional rear – standard; hydraulic multi-disk 100% locking front and rear – optional
Steering Power, Fully Hydraulic (SAE J1511)	aingle lover central with adjust	abla uristraat
Articulation Angle		
Final Drive		
Guard		
Brakes (conform to SAE J1473, ISO3450)		
Service Brakes	. hydraulically actuated, inboard	sun-shaft mounted, oil cooled, self-adjusting, single-disc
Parking Brake	. automatic spring applied, hydra	aulically released, driveline mounted, oil cooled, multi-disc
Hydraulics		
Main Pump (loader and steering)	. variable-displacement, axial-pis	ston pump; closed-center, pressure-compensating system
Rated rpm		
Maximum Rated Flow @ 1,000 psi (6895 kPa)	01 (
System Relief Pressure, Loader and Steering		W W. T. D
Hydraulic Cycle Time	Standard Z-Bar Linkage	High-Lift Z-Bar Linkage
Raise		5.9 sec.
Dump		1.3 sec.
Lower (float down)		2.7 sec.
Lower (power down)		3.3 sec. 9.9 sec.
Turning Radius	. ʊ.ʊ ১৫Ს.	J.J 300.
Measured to Centerline of Outside Tire	. 17 ft. () in. (5.18 m)	
		al-lever controls; control lever lockout feature; optional third- and fourth-function valve with auxiliary lever
		, service and an analysis and

Electrical 624J WH

Electrical distribution center with solid-state switches and circuit-board technology

Number of Batteries (12 volt) 2 Battery Capacity......950 CCA Alternator Rating 80 amp

Lights (SAE 99) driving lights with guard, turn signals, and flashers; stop and taillight

Work Lights..... front (2), rear (2)

Tires/Wheels

Tread Width Width Over Tires With 20.5 x 25 Solid Rubber Tires 6 ft. 9 in. (2050 mm) 8 ft. 5 in. (2573 mm)

Serviceability

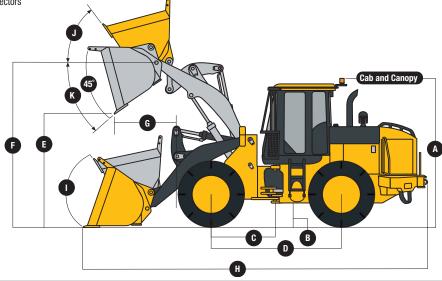
Hinged bottom access covers (bolt-on); bottom protection, integral in mainframe; engine side shields hinged, fan door and fan swing out 90 deg. for full access to coolers; ground-level fueling;

remote grease bank for front axle; hydraulic "0"-ring face seal connectors Fluid-Change Interval Hours

Refill Capacities

Axle Oil

Front ... Wet-Disc Parking Brake Oil 10 oz. (0.3 L) Engine Oil With Vertical Spin-On Filter 22 qt. (21 L) Hydraulic Reservoir and Filters 32 gal. (119 L) Transmission Fluid With Vertical Filter 24 qt. (23 L)



5.0 cu. yd. (3.8 m³)

6.0 cu. yd. (4.6 m³)

Operating Weights

All configurations include weight with complete waste-handler protection, 20.5 x 25 solid rubber tires, cab, full fuel tank, and 175-lb. (79 kg) operator

Standard Z-Bar Linkage High-Lift Z-Bar Linkage 6.0 cu. yd. (4.6 m³) 4.0 cu. yd. (3.1 m³) 5.0 cu. yd. (3.8 m³) 4.0 cu. yd. (3.1 m³)

40,264 lb. (18 264 kg) 39,715 lb. (18 015 kg) 40,065 lb. (18 173 kg) 40,565 lb. (18 400 kg)

Machine Dimensions

	Standard Z-Bar Linkage	e With Pin-On Bucket		High-Lift Z-Bar Linkage WIth Pin-On Bucket				
	4.0-cuyd.	5.0-cuyd.	6.0-cuyd.	4.0-cuyd.	5.0-cuyd.	6.0-cuyd.		
	(3.1 m³) Bucket	(3.8 m³) Bucket	(4.6 m³) Bucket	(3.1 m³) Bucket	(3.8 m³) Bucket	(4.6 m³) Bucket		
A Height to Top of Cab and Canopy	11 ft. 2 in. (3.40 m)	11 ft. 2 in. (3.40 m)	11 ft. 2 in. (3.40 m)	11 ft. 2 in. (3.40 m)	11 ft. 2 in. (3.40 m)	11 ft. 2 in. (3.40 m)		
B Ground Clearance	18.7 in. (475 mm)	18.7 in. (475 mm)	18.7 in. (475 mm)	18.7 in. (475 mm)	18.7 in. (475 mm)	18.7 in. (475 mm)		
C Length from Centerline to Front Axle	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)		
D Wheelbase	9 ft. 11 in. (3.02 m)	9 ft. 11 in. (3.02 m)	9 ft. 11 in. (3.02 m)	9 ft. 11 in. (3.02 m)	9 ft. 11 in. (3.02 m)	9 ft. 11 in. (3.02 m)		
E Dump Clearance	9 ft. 6 in. (2.90 m)	9 ft. 1 in. (2.78 m)	8 ft. 7 in. (2.61 m)	10 ft. 10 in. (3.31 m)	10 ft. 6 in. (3.20 m)	10 ft. 0 in. (3.05 m)		
F Height to Hinge Pin, Fully Raised	13 ft. 2 in. (4.01 m)	13 ft. 2 in. (4.01 m)	13 ft. 2 in. (4.01 m)	14 ft. 4 in. (4.37 m)	14 ft. 4 in. (4.37 m)	14 ft. 4 in. (4.37 m)		
G Dump Reach	2 ft. 11 in. (0.89 m)	3 ft. 4 in. (1.01 m)	3 ft. 10 in. (1.17 m)	3 ft. 5 in. (1.05 m)	3 ft. 10 in. (1.18 m)	4 ft. 5 in. (1.35 m)		
H Overall Length	24 ft. 9 in. (7.54 m)	25 ft. 4 in. (7.72 m)	26 ft. 1 in. (7.95 m)	26 ft. 2 in. (7.98 m)	26 ft. 9 in. (8.15 m)	27 ft. 6 in. (8.38 m)		
Maximum Rollback at Ground Level	38 deg.	38 deg.	38 deg.	39 deg.	39 deg.	39 deg.		
J Maximum Rollback at Full Height	55 deg.	55 deg.	55 deg.	49 deg.	49 deg.	49 deg.		
K Maximum Dump Angle at Full Height		45 deg.	45 deg.	41 deg.	41 deg.	41 deg.		
Capacity, Heaped SAE (with bolt-on cutting edge)		5.0 cu. yd. (3.8 m³)	6.0 cu. yd. (4.6 m ³)	4.0 cu. yd. (3.1 m ³)	5.0 cu. yd. (3.8 m ³)	6.0 cu. yd. (4.6 m ³)		
Capacity, Struck SAE		4.3 cu. yd. (3.3 m³)	4.6 cu. yd. (3.5 m ³)	3.5 cu. yd. (2.7 m ³)	3.8 cu. yd. (2.9 m³)	4.6 cu. yd. (3.5 m ³)		
Breakout Force (SAE J732C)		25,567 lb. (11 597 kg)	21,300 lb. (9662 kg)	26,991 lb. (12 243 kg)	23,137 lb. (10 495 kg)	19,223 lb. (8719 kg)		
Tipping Load, Straight		28,350 lb. (12 860 kg)	26,812 lb. (12 162 kg)	24,754 lb. (11 228 kg)	23,752 lb. (10 774 kg)	22,443 lb. (10 180 kg)		
Tipping Load, 40-deg. Full Turn, SAE		25,118 (11 394 kg)	23,688 lb. (10 745 kg)	21,900 lb. (9934 kg)	20,967 lb. (9510 kg)	19,743 lb. (8955 kg)		
Bucket Weight		3,801 lb. (1724 kg)	4,400 lb. (1996 kg)	3,200 lb. (1451 kg)	3,801 lb. (1724 kg)	4,400 lb. (1996 kg)		
Bucket Width		9 ft. 7 in. (2.91 m)	9 ft. 7 in. (2.91 m)	9 ft. 7 in. (2.91 m)	9 ft. 7 in. (2.91 m)	9 ft. 7 in. (2.91 m)		
Reach, 45-deg. Dump, 7-ft. (2.13 m) Clearance		4 ft. 11 in. (1.51 m)	5 ft. 2 in. (1.57 m)	5 ft. 11 in. (1.81 m)	6 ft. 2 in. (1.88 m)	6 ft. 5 in. (1.96 m)		
Loader Clearance Circle, Bucket Carry Position	40 ft. 2 in. (12.24 m)	40 ft. 6 in. (12.34 m)	40 ft. 0 in. (12.19 m)	40 ft. 4 in. (12.29 m)	41 ft. 8 in. (12.70 m)	42 ft. 2 in. (12.85 m)		
Lift Capacity								
At Ground Line		28,220 lb. (12 800 kg)	28,041 lb. (12 719 kg)	25,629 lb. (11 625 kg)	24,749 lb. (11 226 kg)	24,442 lb. (11 087 kg)		
At Full Height	16,615 lb. (7536 kg)	16,240 lb. (7366 kg)	15,717 lb. (7129 kg)	15,093 lb. (6846 kg)	14,729 lb. (6681 kg)	14,205 lb. (6443 kg)		

644J WH Engine Manufacturer and Model John Deere PowerTech Plus™ 6068H Non-Road Emission Standards complies with EPA Tier 3 regulations Lubrication......full-flow spin-on filter and integral cooler Engine Air Pre-Cleaner centrifugal Cooling Fan Drivehydraulically driven, proportionally controlled (cool-on-demand) cooling fan, aft of coolers, swing-out fan Fan Typeblower with reverser valve; selectable timer can be actuated by switch in cab Engine Radiator 8 fins per in. (water to air) Charge Air Cooler 6.3 fins per in. (air to air) Transmission Oil Cooler 6.3 fins per in. (oil to air) Axle Coolers (optional) 6 fins per in. (oil to air) **Powertrain** Countershaft-type PowerShift™ transmission; single-stage, single-phase torque converter; steering-column- or joystick-mounted F-N-R and gear-select lever; kick-down button on hydraulic lever Shift Control electronically modulated, adaptive, load and speed dependent switch pad Forward Maximum Speed Travel Speeds With 23.5 R 25 Radial Tires Reverse Maximum Speed 4.9 mph (7.9 km/h) 8.0 mph (12.9 km/h) Gear 3......14.7 mph (23.7 km/h) 15.5 mph (24.9 km/h) Transmission Clutch Disconnect............................... 3 selectable settings on the switch pad Axles Rear Axle Oscillation, Stop to Stop. 18 deg. Steering Power, Fully Hydraulic (SAE J1511).....single-lever control with adjustable wristrest Articulation Angle 80-deg. arc (40 deg. each direction) Final Drive heavy-duty inboard-mounted planetary Guard bolt-on, axle seal guard Brakes (conform to SAE J1473, ISO3450) **Hydraulics** Main Pump (loader and steering) variable-displacement, axial-piston pump; closed-center, pressure-compensating system Maximum Rated Flow @ 1,000 psi (6895 kPa) 68 gpm (257 L/m) System Relief Pressure, Loader and Steering 3,600 psi (24 821 kPa) Hydraulic Cycle Time Standard Z-Bar Linkage High-Lift Z-Bar Linkage 6.2 sec. 1.4 sec. 3.0 sec. 10.6 sec. **Turning Radius** Measured to Centerline of Outside Tire 18 ft. 0 in. (5486 mm)

Electrical 644J WH

Electrical distribution center with solid-state switches and circuit-board technology

 Voltage
 24 volts

 Number of Batteries (12 volt)
 2

 Battery Capacity
 1,400 CCA

 Reserve Capacity
 200 min.

 Alternator Rating
 80 amp

Lights (SAE 99) driving lights with guard, turn signals, and flashers; stop and taillight

Work Lights..... front (2), rear (2)

Tires/Wheels

Tread Width Width Over Tires

With 23.5 R 25, 1-Star L3 Radial Tires With

Serviceability

Bottom protection, integral in mainframe; engine side shields hinged, fan door opens 90 deg. for full access to all coolers; ground-level fueling; remote grease bank for front axle; hydraulic "0"-ring face seal connectors

 Fluid-Change Interval
 Hours

 Engine Oil
 500

 Park Brake Oil
 1,000

 Transmission Oil
 2,000

 Hydraulic Oil
 3,000

 Axle Oil
 2,000

Refill Capacities

 Axle Oil (front and rear)
 23 qt. (22 L)

 Wet-Disc Parking Brake Oil
 20 oz. (0.6 L)

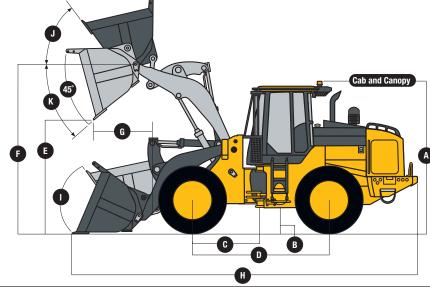
 Cooling System
 31 qt. (29.5 L)

 Engine Oil With Vertical Spin-On Filter
 26 qt. (24.5 L)

 Fuel Tank
 93 gal. (352 L)

 Hydraulic Reservoir and Filters
 31 gal. (117.3 L)

PowerShift Transmission Fluid With Vertical



Operating Weights

All configurations include weight with full fuel tank and 175-lb. (79 kg) operator

Standard Z-Bar Linkage 5.0 cu. yd. (3.8 m³) 6.0 c

6.0 cu. yd. (4.5 m³) 7.0 cu. yd. (5.35 m³) 48,651 lb. (22 050 kg) 49,051 lb. (22 231 kg) High-Lift Z-Bar Linkage 5.0 cu. yd. (3.8 m³)

5.0 cu. yd. (3.8 m³) 6.0 cu. yd. (4.5 m³) 7.0 cu. yd. (5.35 m³) 48,530 lb. (21 995 kg) 49,130 lb. (22 267 kg) 49,530 lb. (22 449 kg)

Machine Dimensions

lacnine dimensions							
Standard Z-Bar Linkag	e With Pin-On Bucket		High-Lift Z-Bar Linkage With Pin-On Bucket				
5.0-cuyd.	6.0-cuyd.	7.0-cuyd.	5.0-cuyd.	6.0-cuyd.	7.0-cuyd.		
(3.8 m³) Bucket	(4.6 m³) Bucket	(5.4 m³) Bucket	(3.8 m³) Bucket	(4.6 m³) Bucket	(5.4 m³) Bucket		
A Height to Top of Cab and Canopy	11 ft. 2 in. (3.40 m)	11 ft. 2 in. (3.40 m)	11 ft. 2 in. (3.40 m)	11 ft. 2 in. (3.40 m)	11 ft. 2 in. (3.40 m)		
B Ground Clearance	18.1 in. (460 mm)	18.1 in. (460 mm)	18.1 in. (460 mm)	18.1 in. (460 mm)	18.1 in. (460 mm)		
C Length from Centerline to Front Axle 5 ft. 3 in. (1.60 m)	5 ft. 3 in. (1.60 m)	5 ft. 3 in. (1.60 m)	5 ft. 3 in. (1.60 m)	5 ft. 3 in. (1.60 m)	5 ft. 3 in. (1.60 m)		
D Wheelbase	10 ft. 6 in. (3.20 m)	10 ft. 6 in. (3.20 m)	10 ft. 6 in. (3.20 m)	10 ft. 6 in. (3.20 m)	10 ft. 6 in. (3.20 m)		
E Dump Clearance	9 ft. 2 in. (2.79 m)	8 ft. 10 in. (2.69 m)	10 ft. 6 in. (3.20 m)	10 ft. 10 in. (3.30 m)	10 ft. 6 in. (3.21 m)		
F Height to Hinge Pin, Fully Raised	13 ft. 10 in. (4.22 m)	13 ft. 10 in. (4.22 m)	15 ft. 2 in. (4.62 m)	15 ft. 2 in. (4.62 m)	15 ft. 2 in. (4.62 m)		
G Dump Reach	3 ft. 1 in. (0.93 m)	3 ft. 11 in. (1.19 m)	3 ft. 9 in. (1.15 m)	4 ft. 4 in. (1.33 m)	4 ft. 9 in. (1.44 m)		
H Overall Length	25 ft. 11 in. (7.90 m)	27 ft. 2 in. (8.28 m)	27 ft. 6 in. (8.38 m)	26 ft. 9 in. (8.15 m)	28 ft. 9 in. (8.76 m)		
Maximum Rollback at Ground Level 37 deg.	37 deg.	37 deg.	37 deg.	37 deg.	37 deg.		
J Maximum Rollback at Full Height 57 deg.	57 deg.	57 deg.	47 deg.	47 deg.	47 deg.		
K Maximum Dump Angle at Full Height 45 deg.	45 deg.	45 deg.	40 deg.	40 deg.	40 deg.		
Capacity, Heaped SAE (with bolt-on cutting edge) 5.0 cu. yd. (3.8 m³)	6.0 cu. yd. (4.6 m³)	7.0 cu. yd. (5.4 m³)	5.0 cu. yd. (3.8 m³)	6.0 cu. yd. (4.6 m³)	7.0 cu. yd. (5.4 m³)		
Capacity, Struck SAE	5.5 cu. yd. (4.2 m³)	6.2 cu. yd. (4.8 m ³)	4.3 cu. yd. (3.3 m³)	5.5 cu. yd. (4.2 m³)	6.2 cu. yd. (4.8 m³)		
Breakout Force (SAE J732C)	28,848 lb. (13 085 kg)	26,043 lb. (11 813 kg)	30,674 lb. (13 913 kg)	25,604 lb. (11 614 kg)	23,075 lb. (10 467 kg)		
Tipping Load, Straight	35,615 lb. (16 155 kg)	34,251 lb. (15 536 kg)	30,366 lb. (13 763 kg)	29,040 lb. (13 173 kg)	27,904 lb. (12 657 kg)		
Tipping Load, 40-deg. Full Turn, SAE 32,514 lb. (14 748 kg)	31,108 (14 111 kg)	29,861 lb. (13 545 kg)	26,492 lb. (12 007 kg)	25,249 lb. (11 453 kg)	24,205 lb. (10 979 kg)		
Bucket Weight	4,400 lb. (1996 kg)	4,800 lb. (2177 kg)	3,800 lb. (1724 kg)	4,400 lb. (1996 kg)	4,800 lb. (2177 kg)		
Bucket Width	9 ft. 6 in. (2.90 m)	9 ft. 6 in. (2.90 m)	9 ft. 6 in. (2.90 m)	9 ft. 6 in. (2.90 m)	9 ft. 6 in. (2.90 m)		
Reach, 45-deg. Dump, 7-ft. (2.13 m) Clearance 5 ft. 0 in. (1.53 m)	5 ft. 3 in. (1.61 m)	5 ft. 5 in. (1.65 m)	6 ft. 5 in. (1.96 m)	6 ft. 9 in. (2.05 m)	6 ft. 11 in. (2.10 m)		
Loader Clearance Circle, Bucket Carry Position 42 ft. 3 in. (12.88 m)	42 ft. 9 in. (13.03 m)	40 ft. 0 in. (12.19 m)	43 ft. 7 in. (13.28 m)	44 ft. 2 in. (13.46 m)	44 ft. 6 in. (13.56 m)		
Lift Capacity							
At Ground Line	34,094 lb. (15 465 kg)	28,592 lb. (12 969 kg)	30,802 lb. (13 972 kg)	29,677 lb. (13 461 kg)	28,592 lb. (12 969 kg)		
At Full Height	22,989 lb. (10 428 kg)	16,906 lb. (7668 kg)	17,779 lb. (8064 kg)	17,219 lb. (7810 kg)	16,906 lb. (7668 kg)		

Key: ● Standard equipment ▲ Optional equipment

*See your John Deere dealer for further information.

					Hydraulic System (continued)			-	Operator's Station (continued)
•	Pre-cleaner				Hydraulic control system for quick-cou-				Steering wheel, textured with spinner know
• (Automatic derating when system temper-				pler locking pins				Tilt steering column
	atures exceeded				Electrical				Rearview mirrors, outside (2) and inside (1
	Monitor-selected high-altitude compensation	_	_	_		_	_	_	(conform to SAE J985)
	10-micron primary fuel filter/water separator				Solid-state electrical power distribution				Handholds and steps, ergonomically locate
	2-micron final fuel filter	_	_		system				
					Batteries, high capacity (2), 12 volt with				and slip resistant (conform to SAE J185)
	Heavy-duty steel fuel tank guard				950 CCA, 200-min. rated reserve each				Waste Handler Package
	500-hour full-flow spin-on oil filter				Batteries, high capacity (2), 12 volt with				Waste handler guards: Articulation guards
	Polyvee drive belt with automatic tensioner				1,400 CCA, 440-min. rated reserve each				Axle seal guards / Boom cylinder and
	Environmentally friendly engine oil drain				Lights (conform to SAE J99): Driving with				hydraulic lines guard / Bucket cylinder
	Cooling				guards / Turn signals and flashers / Stop				hydraulic lines, zerk, and sensor guard /
• (Reversing fan drive – auto control with				and taillights				Driveshaft guard / Extreme-duty front
	manual override				LED heavy-duty taillights and turn signals				loader frame cover with handles / Extreme
	Heavy-duty trash-resistant high-ambient		ě	ě	Work lights, front (2) and rear (2)				duty transmission side guards / Lower
•	cooling package				Horn, with push button in center of steer-				boom and bucket grease-fitting guards
	Two-side access to all coolers				ing wheel (conforms to SAE J994, J1446)				Rear loader frame cover
	Cooling system isolated from engine				Reverse warning alarm (conforms to SAE				Cab floor-mounted lockable master elec
	compartment	_	_	_	J994, J1446)	_	_	_	trical disconnect switch
	Proportionally controlled (cool-on-demand),				Computerized multifunction monitor				Extreme-duty cab entry steps
	hydraulically driven, swing-out fan				Audible and visual warnings: Amber cau-				Extreme-duty hydraulic bottom guards
• (Integral engine oil cooler				tion / Red stop / Analog gauges: Engine				(fuel tank, loader frame, engine frame)
• (Coolant recovery tank				coolant temperature, transmission oil				Bottom guards, bolt-on, front frame and
• (Fan guard				temperature, fuel level, hydraulic oil tem-				transmission
	Powertrain				perature, engine oil pressure / Digital				Full-frontal cab window guard (high-vis
A 4					instruments: Engine rpm, odometer, trans-				bility version not designed to SAE J1084
	Electronically controlled, adaptive, load-				mission gear indicator, speedometer, hour				Rear-access platforms with step, hand-
	and speed-dependent shift modulation				meter / Operator warning lights: Check	_	_	•	hold, and tie-downs
	Auto-shift/manual-shift modes				engine, engine oil pressure, engine air				
•	Gear kickdown button in hydraulic-control								Loader Linkage
	lever				filter restriction, battery voltage, trans-				Loader boom service locking bar (con-
•	1,000-hour transmission filter				mission filter restriction, brake pressure,				forms to SAE J38)
• (Integral transmission sight gauge/fill tube				hydraulic oil filter, fasten seat belt, trans-				Z-bar loader linkage
• (Lube-for-life U-joints	_	_	_	mission fault, hydraulic oil temperature				High-lift Z-bar loader linkage
	Top axle housing fill and dipstick port				Indicator lights: Park brake / Ride control /				Buckets and Attachments
ě	Front axle with hydraulic locking front				Turn signals and warning flashers / Cou-			_	
	and conventional rear differentials				pler pin disconnect / Engine preheater /				Full line of Deere pin-on and hook-on
A 1	Front and rear axles with hydraulic lock-				Secondary steering / Work lights				buckets with selection of bolt-on cutting
					Radio-ready cab: Fused 24-volt radio elec-				edges and teeth-segmented bolt-on cut
A 1	ing differentials				trical lead, and fused lead for optional Deere				ting edges*
A	Remote-axle breathers				5-amp and 10-amp voltage converters				Quick-coupler which accepts Deere and
	Hydraulic System				Built-in diagnostics: Fault code retrieval				JRB attachments
• (In-cab adjustable automatic bucket		$\overline{\mathbf{A}}$	A	AM/FM/WB stereo radio			\blacksquare	Hydraulic control system for quick-cou-
	positioner					_	_	_	pler locking pins, includes all controls in
	In-cab adjustable automatic boom height	—	-	-	AM/FM/WB stereo radio with cassette				cab, lines, and valves
		_			AM/FM/WB stereo radio with CD		•	•	Loadrite™ weighing system*
	kickout control				Strobe light wired to master electrical				
•	In-cab adjustable automatic boom return-				disconnect switch				Tires
	to-carry control				Operator's Station				20.5 X 25
	Reservoir sight gauge				Cab (conforms to SAE J1040C APR88):				23.5 X 25
• (Spin-on hydraulic filters, vertical mounting								L-5 radial or bias ply
• (Hydraulic lever lockout				ROPS/FOPS / Heater/defroster / Multiplane				Less wheels and tires
• (Two-function hydraulic valve with joystick				isolation mounted for noise/vibration reduc-				Multi-piece rims
	Two-function hydraulic valve with two-				tion / Front and rear windshield washers				•
	lever fingertip controls and adjustable				and intermittent wipers / Tinted safety glass				Other
	wristrest				Air conditioning		•	•	Articulation locking bar (conforms to SA
A 1	Three-function hydraulic valve with two-				Seat belt, 3 in. (76 mm), with retractor				J276)
					Seat, deluxe cloth covered with deep				Vandal protection, includes lockable
	lever fingertip controls, adjustable wrist-	_	-	_	foam, high back, air suspension, adjust-				
	rest, and auxiliary lever for third function				able for weight-height, fore-aft position,				engine enclosure, rear grille, and fuel fil
	Three-function hydraulic valve with joy-								Counterweight, built-in
	stick control and auxiliary lever for third				backrest tilt, and armrest angle				Drawbar, with locking pin
	function		•		Cup holder, personal cooler holder				Lift hooks
	Four-function hydraulic valve, with dual				Sun visor for cab				Fire extinguisher
					Storage compartment for operator's				License-plate bracket
	single-lever controls								
	single-lever controls Hydraulic conversion kits, two- to three-				manual and other items				Secondary steering



Net engine power is with standard equipment including air cleaner, exhaust system, alternator, and cooling fan at test conditions per ISO9249. No derating is required up to 5,000-ft. (1525 m) altitude for the 544J and 624J, and up to 10,000-ft. (3050 m) altitude for the 644J.

Specifications and design subject to change without notice. Wherever applicable, specifications are in accordance with SAE standards. Except where otherwise noted, these specifications are based on units with all standard equipment, waste handler protection packages, ROPS cabs, ROPS cab, full fuel tanks, and 175-lb. (79 kg) operators; 544J and 624J units with 20.5 X 25 solid rubber tires; and 644J unit with 23.5 X 25 solid rubber tires.

