450J DOZER

52 kW (70 hp)







machine operation and response to personal preferences. Coupled with an uncommonly smooth full-featured hydrostatic transmission, the 450J delivers unsurpassed productivity, uptime, and daily operating costs. That's for starters. Read on and learn more about all of the 450J's many productivity- and uptime-boosting advantages.



Decelerator lets you choose between slowing travel speed and engine rpm, or travel speed only. For unparalleled low-effort toe-tip control.

diesel engine delivers power without compromise in all conditions.

Operator-favorite speed-in-grip steering and transmission control lever and rotary throttle are standard equipment.

Blade widths: 2464 mm (97 in.) LT; 2921 mm (115 in.) LGP



resale value.



Blade ratio and center of gravity are optimized, giving this dozer the balance needed for superior grade work.

State-of-the-art controls command the full-featured hydrostatic drivetrain and six-way blade, ensuring predictable response at all times, in all conditions.

Power management takes the guesswork out of efficient operation. Simply set maximum desired ground speed and the system maintains peak engine and power efficiency without stalling or shifting.

TMC allows maximum flexibility and control, letting you customize machine operation to personal preferences.

Infinitely variable travel speeds from standstill to 8 km/h (15 mph) let an operator choose the right speed for the job. Travel-speed range can also be modified for specific applications or terrain conditions, and even limited to maximize undercarriage life.

The fully modulated drivetrain ensures smooth starts and direction changes — virtually eliminating jerky and abrupt movements.

Infinitely variable control speeds up or slows power to each track, for smooth, full-power turns.

This dozer steers the same and maintains its preset speed whether it's on level ground or a 2-to-1 slope. For total control regardless of the terrain.





- Counterrotation is a productivityboosting feature that enables the operator to overcome heavy corner loads and to quickly reposition the blade on the go. Provides space-saving spot turns, too.
- 2. With optional Integrated Grade Control (IGC), your 450J Dozer arrives from the factory "plug and play" ready. Its open architecture design lets you employ the electronic grade-control system that's right for you.

Get more done within our comfort zone.

Want your operators to be more productive? Put them in the seat of this spacious air-conditioned cab. From its ergonomically designed fully customizable controls to best-in-class visibility, this dozer is loaded with everything you need to keep your operators calm, cool, productive — and on the payroll.

Generous hydraulic flow and precise metering deliver a natural "feel" to the T-bar control that will enhance any operator's grading skills. Blade response is powerful and quick.

Retractable seat belt, slip-resistant floor mat, convenient grab bars, neutral-start lever, and automatic park brake help keep the operator out of harm's way.

Deluxe-suspension armchair adjusts seven ways for daylong comfort and support. Adjustable armrests and footrests are standard. Single lever provides low-effort control of steering, forward/reverse travel, and ground speed. It's also detented so it doesn't require an operator's constant touch or attention and employs a thumbactuated travel-speed switch. Convenient 12-volt port provides power for cell phones and other accessories.

Automotive-type directional vents deliver warm or cool air with quiet efficiency. Air conditioning is standard in all cabs. For non-cab crawlers, an optional under-seat heater warms the operator.











- Cab-forward design positions the operator for a more stable ride and a commanding view behind, below, and beyond the blade. Monitor keeps a vigilant watch on vital functions and issues visual or audible warnings.
- Exclusive TMC lets you customize decelerator mode and response, forward/reverse groundspeed ranges, steering modulation, FNR shift rate, and forward/reverse speed ratios, for unsurpassed control.
- 3. Choose the decelerator function that's right for the job. Slow both ground speed and engine rpm, or ground speed only, to help maintain traction without affecting engine power and hydraulic response. Fully depressing the pedal applies the brakes.
- **4.** High-intensity halogen driving lights are standard. Or opt for the factory-installed 360-degree light package that delivers superior illumination.





- Engine, hydrostatic pumps, and hydraulic pump are bolted to a subframe, forming an easy-to-remove powertrain package. It's attached to the mainframe on rubber mounts to isolate vibration and reduce noise.
- Closed-cell blade design and fabricated, box-section C-frame are strong and durable. Heavy-duty ball-and-socket joint resists material build-up for long-term grading precision.
- Heavy-duty triple-reduction final drives are attached to the mainframe, isolating them from track-imposed shock loads. Seal guards are standard equipment.
- **4.** The 450J's highly adaptable drivetrain makes it an ideal choice for work with rippers, fire plows, and other rearmount attachments.

One-piece robot-welded mainframe resists torsional stress, absorbs shock loads, and delivers maximum strength while providing easy service access to major drivetrain components.

Wet sleeve liners provide uniform engine cooling and longer durability than cast-in-block designs.

Heavy-duty high-pressure hoses connect the pumps and motors that form the drivetrain. O-ring face-seal couplings virtually eliminate leaks.

Sealed transmission electrical connectors with gold-plated pins prevent moisture and contaminants from entering terminals.









The bucks stop here.

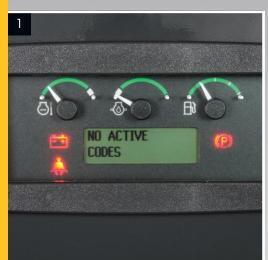
If there's a way to simplify maintenance and reduce your daily operating costs, we've incorporated it into the 450J Dozer. Service intervals have been extended, and same-side service points help make quick work of the daily routine. Lockable doors swing open wide, providing quick and ample access to dipsticks, vertical spin-on filters, sight gauges, and maintenance-free batteries. These and other timesaving features such as an easy-to-clean undercarriage, quick-to-replace hydraulic hoses, and designed-in diagnostics minimize downtime and expense.

Hydraulic and hydrostatic reservoirs are completely separated, eliminating any possibility of cross-contamination.

Lube bank puts difficult-to-grease C-frame pivots within easy reach. Periodic maintenance and lube chart ensures that nothing gets overlooked. Hinged side shields open wide and provide ground-level access to batteries; master electrical switch; cold-weather-start aid; and vertical transmission, hydraulic, and fuel filters.

Large fuel tank and 500-hour engine oil service interval let you run longer between fill-ups and maintenance.

- 1. Unlike other crawlers that require a laptop computer, an advanced diagnostic monitor gives easy-to-understand messages.
- **2.** Vertical filters allow quick, no-spill changes. Engine, hydraulics, and transmission utilize a common oil, further simplifying service.
- **3.** Serpentine belt never needs adjusting. 500-hour service interval lets you go longer between engine oil changes.
- 4. Remote drive system test ports help speed troubleshooting for increased uptime and productivity.















Engine 450J LT / 450J LGP Blade Type Power Angle Tilt (PAT) John Deere PowerTech™ M 4045 Manufacturer and Model Non-Road Emissions Standard EPA Interim Tier 4/EU Stage IIIB Displacement 4.5 L (276 cu. in.) SAE Net Rated Power 52 kW (70 hp) at 2,200 rpm

Net Peak Torque 316 Nm (233 lb.-ft.) at 1,200 rpm Aspiration Turbocharged with charge air cooler Dual-stage dry tube with tangential unloader Air Cleaner 45-deg. fore-aft / 30-deg. side slope Slope Operation, Maximum Angle

Transmission

Blower-type cooling fan Type **Engine Coolant Rating** -37 deg. C (-34 deg. F)

Engine Radiator 10 fins per in. Powertrain

> Automatic, dual-path, hydrostatic drive; load-sensing feature automatically adjusts speed and power to match changing load conditions; each individually controlled track is powered by a variable-displacement piston pump and 2-speed motor combination; ground-speed selection buttons on single-lever steering and direction control; independently selectable $reverse\ speed\ ratios\ of\ 100\%\ , 115\%, or\ 130\%\ of\ forward\ ground\ speed;\ decelerator\ pedal\ controls\ ground\ speed\ to\ stop$ 44 470 kPa (6,450 psi)

> > 30

28

26

24

22

CRAWLER SPEED

VS GROUND PULL

System Relief Pressure Travel Speeds 8.0 km/h (5.0 mph) Forward and Reverse

9.7 km/h (6.0 mph) Maximum (optional)

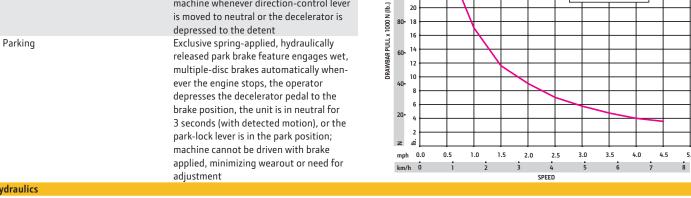
Steering Single-lever steering, direction control, and counterrotation; full power turns and infinitely variable track speeds provide unlimited maneuverability and optimum control; hydrostatic steering eliminates steering clutches and brakes **Final Drives** Triple-reduction final drives mounted independently of track frames and dozer push frames for isolation from shock loads

Total Ratio 48.4 to 1

Drawbar Pull 118 kN (26,500 lb.) Maximum At 1.9 km/h (1.2 mph) 64 kN (14,400 lb.) 39 kN (8,700 lb.)

At 3.2 km/h (2.0 mph) Brakes

Hydrostatic (dynamic) braking stops the Service machine whenever direction-control lever



Hydraulics

Open-center hydraulic system with fixed-displacement gear pump Type

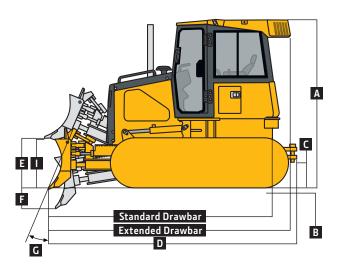
Pump Displacement 26 cc

System Relief Pressure 20 684 kPa (3,000 psi) Maximum Flow at Unloaded High Idle 57 L/m (15 qpm)

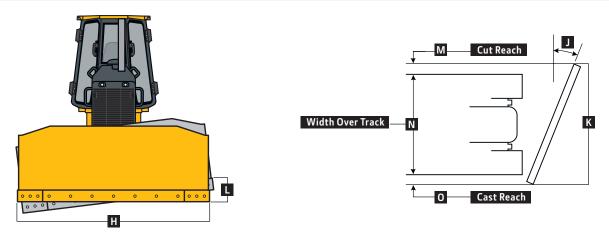
Control 3-function direct-acting T-bar joystick



Electrical	450J LT / 450J LGP	
Voltage	12 volts	
Battery Capacity	950 CCA	
Reserve Capacity	190 min.	
Alternator Rating		
Cab	90 amp	
Canopy	70 amp	
Lights	Grille mounted (2), rear mounted (1), and rear reflectors (2)	
Undercarriage	450J LT	450J LGP
Blade Type	PAT	PAT
Tracks	John Deere Dura Trax™ features large deep-heat-treated, sealed lubricated rollers for maximum wear resistance; sprockets are so for severe applications	, and lubricated track links and through-hardened, sealed, and
Track Gauge	1448 mm (57 in.)	1651 mm (65 in.)
Grouser Width	406 mm (16 in.)	610 mm (24 in.)
Chain	Sealed and lubricated	Sealed and lubricated
Shoes, Each Side	40	40
Track Rollers, Each Side	6	6
Track Length On Ground	2184 mm (86 in.)	2184 mm (86 in.)
Ground Contact Area	17 755 cm ² (2,752 sq. in.)	26 632 cm² (4,128 sq. in.)
Ground Pressure		29.3 kPa (4.30 psi) standard / 29.8 kPa (4.32 psi) Maximum Life
Track Pitch	160 mm (6.3 in.) standard / 171 mm (6.7 in.) Maximum Life	160 mm (6.3 in.) standard / 171 mm (6.7 in.) Maximum Life
Operator Station	450J LT / 450J LGP	100 mm (0.5 m.) standard 7 17 1 mm (0.7 m.) waximam Enc
ROPS (ISO 3471 – 2008) and FOPS (ISO 34		
Serviceability	113 2003)	
Refill Capacities		
Fuel Tank with Lockable Cap	178 L (47 gal.)	
Cooling System with Recovery Tank	16 L (4.2 gal.)	
Engine Oil with Filter	14L (15 qt.)	
Transmission Reservoir with Filter	43 L (11.3 gal.)	
Hydraulic Reservoir and Filter	32.2 L (8.5 gal.)	(FOLLOR
Operating Weights	450J LT	450J LGP
Blade Type	PAT	PAT
Base Weight (with standard equipment, rollover protective structure [ROPS], full fuel tank, and 79-kg [175 lb.] operator) Optional Components	7386 kg (16,283 lb.)	7949 kg (17,525 lb.)
Cab with Pressurizer and Heater/Air	206 l- 167F lb)	200 l (C7F lb.)
Conditioner	306 kg (675 lb.)	306 kg (675 lb.)
	121. (2011.)	121. (2011.)
Heater (ROPS canopy)	12 kg (26 lb.)	12 kg (26 lb.)
Screens	011 (17011)	0.1 (1.70)
Front and Door	81 kg (179 lb.)	81 kg (179 lb.)
Rear	34 kg (76 lb.)	34 kg (76 lb.)
Side	43 kg (94 lb.)	43 kg (94 lb.)
Limb Risers (ROPS canopy and cab)	104 kg (229 lb.)	104 kg (229 lb.)
Counterweight	0.1.1.122211.1	
Front	94 kg (207 lb.)	94 kg (207 lb.)
Rear	150 kg (330 lb.)	150 kg (330 lb.)
Retrieval Hitch	23 kg (50 lb.)	23 kg (50 lb.)
Drawbar, Extended Rigid	33 kg (72 lb.)	33 kg (72 lb.)
Winch	652 kg (1,437 lb.)	652 kg (1,437 lb.)
Fairlead, 4 Roller	85 kg (187 lb.)	85 kg (187 lb.)
Full-Length Rock Guards	117 kg (257 lb.)	131 kg (288 lb.)
Maximum Life Undercarriage	88 kg (193 lb.)	132 kg (290 lb.)
Track Shoes		
457 mm (18 in.)	In base	_
610 mm (24 in.)	_	In base

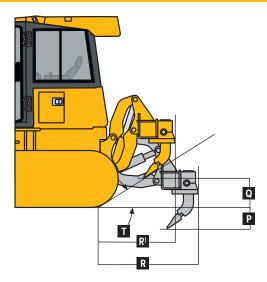


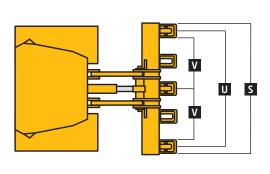
Α	Overall Height to Roof	2747 mm (9 ft. 0 in.)	2747 mm (9 ft. 0 in.)
В	Tread Depth with Single-Bar Grouser	49 mm (1.9 in.)	49 mm (1.9 in.)
C	Ground Clearance in Dirt	345 mm (13.6 in.)	345 mm (13.6 in.)
D	Overall Length	3940 mm (155 in.) (12 ft. 11 in.)	4013 mm (158 in.) (13 ft. 2 in.)
E	Blade Lift Height	772 mm (30.4 in.)	772 mm (30.4 in.)
F	Blade Digging Depth	528 mm (20.8 in.)	528 mm (20.8 in.)
G	Blade Cutting-Edge Angle, Adjustable	52 to 60 deg.	52 to 60 deg.



Stı	aight		
Н	Blade Width	2464 mm (97 in.)	2921 mm (115 in.)
-1	Blade Height	955 mm (3 ft. 2 in.)	955 mm (3 ft. 2 in.)
	SAE Capacity	1.6 m ³ (2.1 cu. yd.)	2.0 m³ (2.6 cu. yd.)
	Weight	494 kg (1,090 lb.)	628 kg (1,385 lb.)
	C-Frame Assembly Weight (without	330 kg (727 lb.)	330 kg (727 lb.)
	blade)		
J	Blade Angle	25.4 deg.	25.4 deg.
K	Overall Width with Blade Angled	2225 mm (7 ft. 4 in.)	2639 mm (8 ft. 8 in.)
L	Blade Tilt (uses tilt jack)	338 mm (13.3 in.)	399 mm (15.7 in.)
M	Cut Reach	56 mm (2.2 in.)	58.4 mm (2.2 in.)
N	Width Over Track	1854 mm (6 ft. 1 in.)	2261 mm (7 ft. 5 in.)
0	Cast Reach	318 mm (12.5 in.)	320 mm (12.6 in.)

M	achine Dimensions (continued)	450J LT	450J LGP
Bl	ade Type	PAT	PAT
St	raight (option)		
Н	Blade Width	2921 mm (115 in.)	3150 mm (124 in.)
-1	Blade Height	955 mm (3 ft. 2 in.)	894 mm (35 in.)
	SAE Capacity	2.0 m³ (2.6 cu. yd.)	1.9 m³ (2.5 cu. yd.)
	Weight	628 kg (1,385 lb.)	631 kg (1,391 lb.)
	C-Frame Assembly Weight (without blade)	330 kg (727 lb.)	330 kg (727 lb.)
J	Blade Angle	25.4 deg.	25.4 deg.
K	Overall Width with Blade Angled	2639 mm (8 ft. 8 in.)	2845 mm (9 ft. 4 in.)
L	Blade Tilt (uses tilt jack)	399 mm (15.7 in.)	429 mm (16.9 in.)
M	Cut Reach	262 mm (10.3 in.)	163 mm (6.4 in.)
N	Width Over Track	1854 mm (6 ft. 1 in.)	2261 mm (7 ft. 5 in.)
0	Cast Reach	523 mm (20.6 in.)	424 mm (17 in.)
Re	ar Ripper	450J LT / 450J LGP	





Heavy-duty parallelogram ripper, 5 shank pockets with 3 teeth
Weight 981 kg (2,163 lb.)

P Maximum Penetration 508 mm (20 in.)

Q Maximum Clearance Under Tlp 508 mm (20 in.)

R Overall Length, Lowered Position 1450 mm (57 in.)

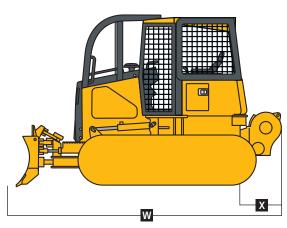
RI Overall Length, Raised Position 1015 mm (40 in.)

S Overall Beam Width 1830 mm (6 ft. 0 in.)

T Slope Angle (full raise) 40 deg.

U Ripping Width 1670 mm (5 ft. 6 in.)

V Distance Between Shanks 806 mm (32 in.)



WOverall Length with Winch4560 mm (15 ft. 0 in.)XWinch Length750 mm (30 in.)

Additional equipment

Key: ● Standard ▲ Optional or special

*See your John Deere dealer for further information.

Canopy Cab Operator's Station / Electrical

450J	450J	
LT	LGP	Engine
		Meets EPA Interim Tier 4/EU Stage IIIB
		emissions
•		Electronic control with automatic engine
		protection
•	•	Dual safety element dry-type air cleaner, evacuator valve
•		Muffler, self-draining, under hood, with
		vertical stack
_	A	Environmental service drains
		Ether start aid
	A	Engine coolant heater, 110 volts
		Engine coolant heater, fuel fired
		Chrome exhaust
		Fuel filter heater
		Rotary ejection engine air precleaner
		Cooling
		Enclosed safety fan guard (conforms to
		SAE J1308 and ISO3457)
		Perforated engine side shields
•	•	Heavy-duty grille
		Extreme-duty grille
		Transmission
•	•	Remote diagnostic test ports
•	•	Automatic cold-weather transmission
		warmup system
		Automatic transmission derating for
		exceeded system temperatures
A	A	Environmental service drains
		Hydraulic System
•	•	3-function hydraulics
		4-function hydraulics with rear plumbing
		Drive-through hydraulic pump for use
		with winch
A		Integrated Grade Control (IGC)

450J	450J	
LT	LGP	Mainframe, Access Panels
•		Front tow loop (bolt-on)
•		Reinforced engine and mid-frame
		bottom guards
		Integral transmission guard
•		Vandal protection: Engine access door /
		Side tank access doors / Fuel tank /
		Instrument panel / Transmission
		reservoir / Hydraulic reservoir
		Attachments
	A	Counterweight, front, 94 kg (207 lb.)
		Counterweight, rear, 150 kg (330 lb.)
	A	Retrieval hitch with pin
_	A	Extended rigid drawbar with pin for
		pull-type implements
A	A	Drawbar, extended for winch (with or without fairlead)
	•	Ripper, parallelogram with 5 shank
		pockets and 3 teeth
A	•	Winch, John Deere, power in/free spool
_	_	out OR power out
		4-roller fairlead for winch
A	A	Root-rake blade attachment
		Rear-mounted toolbox
A	A	Trimble®-ready interface package
		Topcon-ready interface package
		Leica-ready interface package
		Undercarriage
		Full-length, smooth-surface track frame
		covers
		Chain guides, front and rear
•	•	Single-flange roller
		Double-flange rollers
	A	Full-length rock guards
		Maximum Life Undercarriage System
	A	Sealed and lubricated undercarriage
		406-mm (16 in.) moderate-service shoes
		610-mm (24 in.) moderate-service shoes

(conform to SAE J386) A Retractable seat belts, 76 mm (3 in.) (conform to SAE J386) A Accessories: Convex wide-angle interior rearview mirror / Thigh cushions (2) / Seat-side lockable storage box/lunch box/cup holder Power port, 12 volts, 20 amps Lockable side-seat storage compartment Air conditioner, 24,000 Btu
(conform to SAE J386) ▲ Accessories: Convex wide-angle interior rearview mirror / Thigh cushions (2) / Seat-side lockable storage box/lunch box/cup holder ● Power port, 12 volts, 20 amps ▲ Lockable side-seat storage compartment
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▲ Lockable side-seat storage compartment
partment
Air conditioner, 24,000 Btu
Tinted glass
Dome light
Heater (roof mount)
Front and door wipers
Mechanical suspension vinyl seat
Mechanical suspension fabric seat
Air suspension vinyl seat
▲ Air suspension fabric seat ■ Under-seat heater
▲ Rear wiper
▲ AM/FM, weather-band radio, clock
▲ MP3/satellite radio/cell-phone holder
with 2 power ports and cargo net
▲ External-mounted attachment mirror
Sealed alternator, 65 amps
Master electrical disconnect switch
 Lights, grille mounted (2), rear
mounted (1)
▲ Work lights, roof mounted
Battery, single, 12 volts
▲ Battery, dual, 12 volts
 JDLink™ Ultimate wireless communi-
cation system (available in specific
countries; see your dealer for details)