K-SERIES CRAWLER DOZERS











HEARING IS BELIEVING.

When customers talk, we listen. And when we designed our K-Series Dozers, we heard some great input. Your ideas resulted in the 450K that's 16-percent more powerful than its predecessor. Eco mode that regulates engine rpm and the hydrostatic transmission to burn up to 20-percent less fuel than previous models. Total Machine Control for customizable control of a variety of machine functions. And an optional Slope Control system that helps operators create slopes and pads with ease. We believe you'll recognize a lot to like in these proven machines.

WORKDAY WARRIORS

BEEN THERE, DONE THAT.

John Deere 450K, 550K, and 650K Dozers have a wealth of experience out in the real world. Whether your work is in road-building, construction, mining, or land clearing, these material masters are equipped to help you get some real work done.



OPTIONAL SLOPE CONTROL REDUCES GRADING EFFORT

Go with the flow

Generous hydraulic flow and precise metering deliver quick and powerful blade response while enabling the natural "feel" that makes the most of an operator's grading ability.

Get good grades

Unlike traditional masted aftermarket grade-control systems that can be prone to theft, damage, and complicated installation, the purpose-built John Deere 650K SmartGrade™ Dozer combines powerful mastless technology with our track load-sensing system. This highly productive crawler features a fully integrated grade-control system that's easy to set up and run. And it's backed by the Deere dealer network.

Fuel saver

Standard Eco mode maximizes fuel usage by up to 20 percent compared to conventional torque-converter transmissions, automatically adjusting engine rpm and powertrain settings based on load, without loss of performance.

Engine tech

EPA Final Tier 4 (FT4)/EU Stage IV diesels meet emission regulations without loss of power or torque. Four-valve head delivers increased intake-air and exhaust-gas flow for each wet-sleeve cylinder, for long-lasting performance.

Slope control

Optional Slope Control system provides simple-to-use grade control that allows operators to set a desired slope and hold grade through changes in existing terrain. It helps both new and veteran operators hold grade with less effort and without needing an external elevation reference.

Shake it off

On electrohydraulic (EH)-equipped machines, the blade-shake feature for Power-Angle-Tilt (PAT) blades automatically shakes off dirt at the touch of a button.







POWERFUL PRODUCTIVITY

STILL PUSHING THE ENVELOPE.

Power turns. Counter-rotating tracks. Power management. Infinitely variable travel speeds. John Deere has been introducing productivity-boosting advantages on our crawler dozers for decades. Our 450K, 550K, and 650K are loaded with performance enhancements, including Eco mode and Total Machine Control (TMC).

Fundamentals of management

Simply set maximum desired ground speed and the power-management system automatically maintains peak engine rpm and power efficiency without stalling or shifting.

Turn, turn, turn

Counter-rotation boosts productivity by enabling an operator to overcome heavy corner loads and quickly reposition the blade on the go. Provides space-saving spot turns, too.

Take control

TMC enables an operator to customize control of decelerator mode and response, forward/reverse ground speed, steering modulation, and forward/reverse speed ratios, and even record machine usage.

Infinite flexibility

Infinitely variable range to 6.0 mph allows total flexibility to match ground speed to the load. Travel can also be varied to fit specific applications, terrain conditions, or operating preferences — and even limited to maximize undercarriage life.

Jack of all grades

When you order your dozer with electrohydraulic (EH) controls, it's grade-control ready, giving you the ability to add the grade-control system of your choice. Options such as Slope Control (on all K-Series models) and SmartGrade (on the 650K) provide in-depth factory integration and are supported by your John Deere dealer.





ON THE JOB AND IN THE ZONE

GET DOWN TO BUSINESS.

You can almost feel fatigue fade inside the roomy, well-appointed cab of a 450K, 550K, or 650K. With their range of customer-inspired amenities, these dozers go quietly about the business of helping operators be comfortably productive.









Forward outlook

Cab-forward design allows a commanding view behind, below, and beyond the blade. Side and rear visibility from inside the cab is open to the surrounding jobsite.

Raise the bar

Optional electrohydraulic (EH) controls significantly improve blade response, including increased hydraulic-pump capacity on the 450K that enables 50-percent greater blade-raise performance.

At your fingertips

Sealed-switch module (SSM) allows low-effort control of keyless start and enables exclusive features such as turbocharger cool-down, auto shutdown, and Eco mode. Touchpad security system requires a numeric pass code (when activated) to help prevent unauthorized machine operation.

Making slopes simple

Optional Slope Control system includes a deluxe LCD color monitor that gives a real-time display of mainfall and cross-slope information, allowing operators to set desired slopes, put the system in automatic, and let it do the work.

Let the light shine

Opt for the 360-degree lighting package to extend your workday beyond daylight.



ECO MODE OPTIMIZES FUEL ECONOMY

BY UP TO 20% (DEPENDING ON APPLICATION)







Let's be direct

Direct-drive fan on the 450K and 550K spins up to full speed whenever the engine moves to wide-open throttle. Variable-speed fan on the 650K includes an optional reversing feature that runs only as needed to provide efficient cooling, contain noise, and conserve fuel.

Power down

Exclusive turbo cool-down increases durability by allowing the engine to idle momentarily prior to shutting down. Auto shutdown turns the engine off after an operator-determined period of machine inactivity, saving warranty hours and fuel.

Economy is key

Eco mode automatically adjusts engine rpm and hydrostatic (HST) transmission settings based on load while maintaining ground speed, to help optimize fuel economy as much as 20 percent compared to conventional torque-converter transmissions.

Keep your cool

Transmission temperature is constantly monitored to protect the HST system. If temps get too hot or too cold, a warning light illuminates, and transmission and engine speed are automatically derated to prevent system damage.

Maximum benefit

Heavy-duty sealed and lubricated undercarriage is built to keep these machines in the field. Available Maximum Life Undercarriage delivers up to twice the bushing life, for extra durability in extremely abrasive conditions. To further reduce maintenance and operating costs, contact your John Deere dealer about our undercarriage wear-assurance programs.



MORE UPTIME, LESS UPKEEP

WE'RE OPEN-MINDED ABOUT EASY MAINTENANCE.

Fluid assets

Available quick fluid-evacuation system helps speed servicing. 500-hour engine oil and 2,000-hour transmission and hydraulic fluid intervals decrease maintenance downtime and expense.

Idle awhile

Auto-idle decreases engine speed when the dozer is not moving, to help maintain quiet working conditions and conserve precious fuel. Operators can program auto-idle to activate in increments from as soon as five seconds up to 15 minutes.

Simplify service

Serviceability improvements on the 550K and 650K over previous models include new composite fuel tank, redesigned diagnostic lines with pressure sensors, and John Deere transmission control unit software.

Get the message

Exhaust filter operation and status are indicated with on-screen displays and icons. Diagnostic monitor also provides easy-to-understand messages that help speed troubleshooting.



Get valuable insight with

PRECISION CONSTRUCTION

This suite of construction technology delivers **Productivity Solutions** to help you get more done, more efficiently. The in-base JDLink™ subscription provides machine location, utilization data, and alerts to help you maximize productivity and efficiency. Other productivity solutions include grade-management options for multiple machine forms and payload weighing for wheel loaders and articulated dump trucks.

To maximize uptime and lower costs, JDLink also enables John Deere Connected Support.™ John Deere's centralized Machine Health Monitoring Center analyzes data from thousands of connected machines, identifies trends, and develops recommended actions, called Expert Alerts, to help prevent downtime. Dealers use Expert Alerts to proactively address conditions that may otherwise likely lead to downtime. Your dealer can also monitor machine health and leverage remote diagnostics and programming capability to further diagnose problems and even update machine software without a timeconsuming trip to the jobsite.





Engine	450K / 450K LGP		
Blade Type	Power-Angle-Tilt (PAT)		
Manufacturer and Model	John Deere PowerTech™ PWS 4045		
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV		
Displacement	4.5L (276 cu. in.)		
SAE Net Rated Power	60 kW (80 hp) at 2,200 rpm		
Net Peak Torque	354 Nm (261 ftlb.) at 1,400 rpm		
Aspiration	Turbocharged with charge-air cooler		
Air Cleaner	Dual-stage dry tube with tangential unloader		
Cooling			
Type	Blower-type, direct-drive cooling fan		
Engine Coolant Rating	–37 deg. C. (–34 deg. F)		
Engine Radiator	8.47 fins per in.		
Powertrain			
Transmission	Automatic, dual-path, hydrostatic (HST) 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 variable-displacement 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		
System Relief Pressure	34 887 kPa (5,060 psi)		
Travel Speeds			
Forward and Reverse	8.0 km/h (5.0 mph)		
Maximum (optional)	9.7 km/h (6.0 mph)		
Steering	Single-lever steering, direction control, and counter-rotation; full power turns and infinitely variable track speeds provide unlimited maneuverability and optimum control; HST 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 load	ls	
Total Ratio	48.4 to 1		
Drawbar Pull	p. 100	7	
Maximum	122 kN (27,500 lb.)	16	
At 1.9 km/h (1.2 mph)	80 kN (17,900 lb.)	4	
At 3.2 km/h (2.0 mph)	48 kN (10,900 lb.) 450K FT4 Drawbar Pull vs. Ground Speed		
Brakes			
Service	HST (dynamic) braking stops the machine when the direction/steering control lever is moved to neutral or the decelerator is depressed to the detent	12	
Parking	depressed to the detent Exclusive spring-applied, hydraulically released park-brake feature engages wet, multiple-disc brakes automatically	8	
	whenever the engine stops, the operator depresses the decelerator pedal to the brake position, the unit is in neutral for	4	
	3 seconds (with detected motion), or the park-lock lever is in the park position; machine cannot be driven with brake applied, minimizing wearout or need	kg :	

Hydraulics

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

for adjustment

36.4 cc

System Relief Pressure 20 684 kPa (3,000 psi) Maximum Flow at Unloaded High Idle 80 L/m (21 gpm)

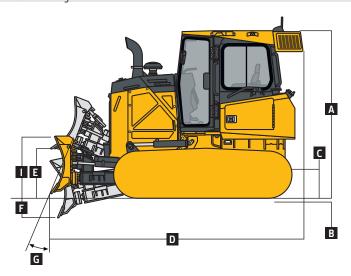
Control 3-function direct-acting T-bar joystick with push-button angle function





Electrical	450K / 450K LGP	
Blade Type	PAT	
Voltage	24 volts	
Capacity	21 10103	
Battery	950 CCA	
Reserve	190 min.	
Alternator Rating	130 11111.	
Cab	100 amp	
Canopy	100 amp	
Lights	Grille mounted (2), rear mounted (2), and rear reflectors (2)	
Undercarriage	450K	450K LGP
Tracks	John Deere DuraTrax™ features large deep-heat-treated cor idlers are permanently sealed and lubricated; full-length tra	nponents; pins and bushings are sealed for life; rollers 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 standard and Extended Life / 37 Maximum Life	40 standard and Extended Life / 37 Maximum Life
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 cm ² (4,128 sq. in.)
Ground Pressure	43.9 kPa (6.4 psi)	31.3 kPa (4.5 psi)
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	450K / 450K LGP	
ROPS (ISO 3471 – 2008) and FOPS (ISO 344	9 – 2005)	
Serviceability		
Refill Capacities		
Fuel Tank With Lockable Cap	202 L (53.45 gal.)	
Diesel Exhaust Fluid (DEF) Tank	11.8 L (3.1 gal.)	
Cooling System With Recovery Tank	21.1 L (5.6 gal.)	
Engine Oil With Filter	19 L (20 qt.)	
Hydraulic/HST Oil (common reservoir) With Filters	100 L (26.42 gal.)	
Final Drive (per tractor)	17 L (4.6 gal.)	
Operating Weights	450K	450K LGP
Base Weight (with standard equipment, rollover protective structure [ROPS], full fuel tank, and 79-kg [175 lb.] operator)	7959 kg (17,510 lb.)	8522 kg (18,752 lb.)
Optional Components		
Cab With Pressurizer and Heater/	306 kg (675 lb.)	306 kg (675 lb.)
Air Conditioner		
ROPS Canopy, Heater	12 kg (26 lb.)	12 kg (26 lb.)
ROPS Canopy and Cab		
Front and Door Screens	81 kg (179 lb.)	81 kg (179 lb.)
Rear Screen	34 kg (76 lb.)	34 kg (76 lb.)
Side Screens	43 kg (94 lb.)	43 kg (94 lb.)
Limb Risers (ROPS canopy and cab)	95 kg (209 lb.)	95 kg (209 lb.)
Counterweight		
Front	109 kg (240 lb.)	109 kg (240 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	,	J ,
406 mm (16 in.)	In base	_
610 mm (24 in.)	_	In base
5.5 mm (2 mm)		

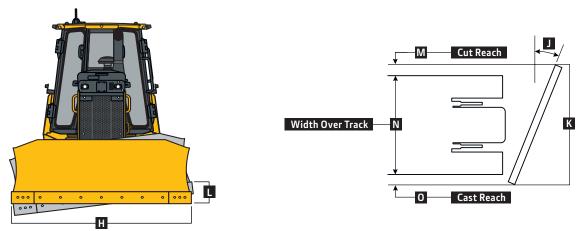
	Machine Dimensions	450K / 450K LGP
Blade Type		Power-Angle-Tilt (PAT)
F	Overall Height to Roof	2799 mm (9 ft. 2 in.)
E	Tread Depth With Single-Bar Grouser	49 mm (1.9 in.)
(Ground Clearance in Dirt	329 mm (13 in.)
	Overall Length	4016 mm (158 in.) (13 ft. 2 in.)
E	Blade Lift Height	772 mm (30.4 in.)
F	Blade Digging Depth	528 mm (20.8 in.)
0	Blade Cutting-Edge Angle, Adjustable	52 to 60 deg.



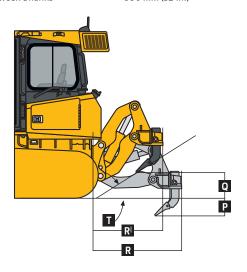
450K / 450K LGP WITH POWER-ANGLE-TILT (PAT) BLADE

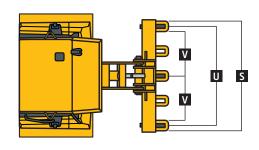
Machine Dimensions (continued)	450K	450K LGP		
Straight				
-	2464 mm (97 in.) (8 ft. 1 in.)	2921 mm (115 in.) (9 ft. 7 in.)		
Blade Height	955 mm (3 ft. 2 in.)	955 mm (3 ft. 2 in.)		
SAE Capacity	1.6 m³ (2.1 cu. yd.)	2.0 m³ (2.6 cu. yd.)		
Weight	494 kg (1,090 lb.)	628 kg (1,385 lb.)		
C-Frame Assembly Weight (without blade)	330 kg (727 lb.)	330 kg (727 lb.)		
Blade Angle	25.4 deg.	25.4 deg.		
Overall Width With Blade Angled	2225 mm (7 ft. 4 in.)	2639 mm (8 ft. 8 in.)		
Blade Tilt (uses tilt jack)	338 mm (13.3 in.)	399 mm (15.7 in.)		
Cut Reach	56 mm (2.2 in.)	58.4 mm (2.2 in.)		
Width Over Track	1854 mm (6 ft. 1 in.)	2261 mm (7 ft. 5 in.)		
Cast Reach	318 mm (12.5 in.)	320 mm (12.6 in.)		
traight (option)				
Blade Width	2921 mm (115 in.) (9 ft. 7 in.)	3150 mm (124 in.) (10 ft. 4 in.)		
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.)		
Blade Angle	25.4 deg.	25.4 deg.		
Overall Width With Blade Angled	2639 mm (8 ft. 8 in.)	2845 mm (9 ft. 4 in.)		
Blade Tilt (uses tilt jack)	399 mm (15.7 in.)	429 mm (16.9 in.)		
Cut Reach	262 mm (10.3 in.)	163 mm (6.4 in.)		
Width Over Track	1854 mm (6 ft. 1 in.)	2261 mm (7 ft. 5 in.)		
Cast Reach	523 mm (20.6 in.)	424 mm (17.0 in.)		
	Blade Width Blade Height SAE Capacity Weight C-Frame Assembly Weight (without blade) Blade Angle Overall Width With Blade Angled Blade Tilt (uses tilt jack) Cut Reach Width Over Track Cast Reach traight (option) Blade Width Blade Height SAE Capacity Weight C-Frame Assembly Weight (without blade) Blade Angle Overall Width With Blade Angled Blade Tilt (uses tilt jack) Cut Reach Width Over Track	Blade Width 2464 mm (97 in.) (8 ft. 1 in.) Blade Height 955 mm (3 ft. 2 in.) SAE Capacity 1.6 m³ (2.1 cu. yd.) Weight 494 kg (1,090 lb.) C-Frame Assembly Weight (without blade) 330 kg (727 lb.) Blade Angle 25.4 deg. Overall Width With Blade Angled 2225 mm (7 ft. 4 in.) Blade Tilt (uses tilt jack) 338 mm (13.3 in.) Cut Reach 56 mm (2.2 in.) Width Over Track 1854 mm (6 ft. 1 in.) Cast Reach 318 mm (12.5 in.) traight (option) Blade Width 2921 mm (115 in.) (9 ft. 7 in.) Blade Height 955 mm (3 ft. 2 in.) SAE Capacity 2.0 m³ (2.6 cu. yd.) Weight 628 kg (1,385 lb.) C-Frame Assembly Weight (without blade) 330 kg (727 lb.) Blade Angle 25.4 deg. Overall Width With Blade Angled 2639 mm (8 ft. 8 in.) Blade Tilt (uses tilt jack) 399 mm (15.7 in.) Cut Reach 262 mm (10.3 in.) Width Over Track 1854 mm (6 ft. 1 in.)		

450K / 450K LGP



- 1	Rear Ripper	450K / 450K LGP	
ı	Blade Type	PAT	
-	Multi-shank parallelogram ripper with 5 po	ckets and 3 shanks	
١		981 kg (2,163 lb.)	
P	Maximum Penetration	508 mm (20 in.)	
Q	Maximum Clearance Under Tip	508 mm (20 in.)	
R	Overall Length, Lowered Position	1450 mm (57 in.) (4 ft. 9 in.)	
R	Overall Length, Raised Position	1015 mm (40 in.) (3 ft. 4 in.)	
S	Overall Beam Width	1830 mm (6 ft. 0 in.)	
Т	Slope Angle (full raise)	40 deg.	
U	Ripping Width	1670 mm (5 ft. 6 in.)	
٧	Distance Between Shanks	806 mm (32 in.)	









Engine	550K / 550K LGP
Blade Type	Power-Angle-Tilt (PAT)
Manufacturer and Model	John Deere PowerTech™ PWS 4045
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV
Displacement	4.5L (276 cu. in.)
SAE Net Rated Power	69 kW (92 hp) at 2,200 rpm
Net Peak Torque	420 Nm (310 ftlb.) at 1,400 rpm
Aspiration	Turbocharged with charge-air cooler
Air Cleaner	Dual-stage dry tube with tangential unloader
Cooling	
Туре	Blower-type, direct-drive cooling fan
Engine Coolant Rating	–37 deg. C. (–34 deg. F)
Engine Radiator	8.47 fins per in.
Powertrain	
Transmission	Automatic, dual-path, hydrostatic (HST) 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 variable-displacement 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 control ground speed to stop
System Relief Pressure	38 741 kPa (5,619 psi)
Travel Speeds	56 74 Ki d (5,615 p3)
Forward and Reverse	8.0 km/h (5.0 mph)
Maximum (optional)	9.7 km/h (6.0 mph)
Steering	Single-lever steering, direction control, and counter-rotation; full power turns and infinitely variable track speeds provid
Steering	unlimited maneuverability and optimum control; HST 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 load
Total Ratio	48.4 to 1
Drawbar Pull	10.1.01
Maximum	134 kN (30,000 lb.)
At 1.9 km/h (1.2 mph)	94 kN (21,100 lb.)
At 3.2 km/h (2.0 mph)	58 kN (13,100 lb.) 550K FT4 Drawbar Pull vs. Ground Speed
Brakes	330KT (4 Drawbar Fullys, Ground Speed
Service	HST (dynamic) braking stops the machine when the direction/steering control lever is moved to neutral or the decelerator is depressed to the detent
Parking	depressed to the detent Exclusive spring-applied, hydraulically released park-brake feature engages wet, multiple-disc brakes automatically
	whenever the engine stops, the operator depresses the decelerator pedal to the brake position, the unit is in neutral for
	3 seconds (with detected motion), or the park-lock lever is in the park position;
	machine cannot be driven with brake

Hydraulics

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

for adjustment

36.4 cc

System Relief Pressure 20 684 kPa (3,000 psi) Maximum Flow at Unloaded High Idle 80 L/m (21 gpm)

Control 3-function direct-acting T-bar joystick with push-button angle function

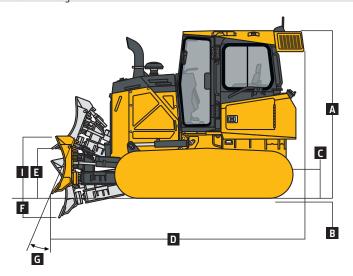
applied, minimizing wearout or need





Electrical	550K / 550K LGP	
Blade Type	PAT	
Voltage	24 volts	
Capacity	21 10103	
Battery	950 CCA	
Reserve	190 min.	
Alternator Rating	130 11111.	
Cab	100 amp	
Canopy	100 amp	
Lights	Grille mounted (2), rear mounted (2), and rear reflectors (2)	
Undercarriage	550K	550K LGP
Tracks	John Deere DuraTrax™ features large deep-heat-treated con idlers are permanently sealed and lubricated; full-length tra	nponents; pins and bushings are sealed for life; rollers and
Track Gauge	1549 mm (61 in.)	1753 mm (69 in.)
Grouser Width	457 mm (18 in.)	610 mm (24 in.)
Chain	Sealed and lubricated	Sealed and lubricated
Shoes, Each Side	40 standard and Extended Life / 37 Maximum Life	40 standard and Extended Life / 37 Maximum Life
Track Rollers, Each Side	6	6
Track Length on Ground	2184 mm (86 in.)	2184 mm (86 in.)
Ground Contact Area	19 974 cm² (3,096 sq. in.)	26 632 cm ² (4,128 sq. in.)
Ground Pressure	44.1 kPa (6.4 psi)	35.2 kPa (5.1 psi)
Track Pitch	160 mm (6.3 in.) standard and Extended Life / 171 mm (6.7 in	.) Maximum Life
Operator Station	550K / 550K LGP	
ROPS (ISO 3471 – 2008) and FOPS (ISO 344	9 – 2005)	
Serviceability		
Refill Capacities		
Fuel Tank With Lockable Cap	202 L (53.45 gal.)	
Diesel Exhaust Fluid (DEF) Tank	11.8 L (3.1 gal.)	
Cooling System With Recovery Tank	21.1 L (5.6 gal.)	
Engine Oil With Filter	19 L (20 qt.)	
Hydraulic/HST Oil (common reservoir) With Filters	100 L (26.42 gal.)	
Final Drive (per tractor)	17 L (4.6 gal.)	
Operating Weights	550K	550K LGP
Base Weight (with standard equipment, rollover protective structure [ROPS], full fuel tank, and 79-kg [175 lb.] operator)	8981 kg (19,758 lb.)	9544 kg (21,000 lb.)
Optional Components		
Cab With Pressurizer and Heater/	306 kg (675 lb.)	306 kg (675 lb.)
Air Conditioner		
ROPS Canopy, Heater	39 kg (85 lb.)	39 kg (85 lb.)
ROPS Canopy and Cab		
Front and Door Screens	81 kg (179 lb.)	81 kg (179 lb.)
Rear Screen	34 kg (76 lb.)	34 kg (76 lb.)
Side Screens	43 kg (94 lb.)	43 kg (94 lb.)
Limb Risers (ROPS canopy and cab)	95 kg (209 lb.)	95 kg (209 lb.)
Counterweight		
Front	109 kg (240 lb.)	109 kg (240 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	128 kg (282 lb.)	128 kg (282 lb.)
Maximum Life Undercarriage	258 kg (569 lb.)	258 kg (569 lb.)
Track Shoes		
457 mm (18 in.)	In base	_
610 mm (24 in.)	_	In base
,		

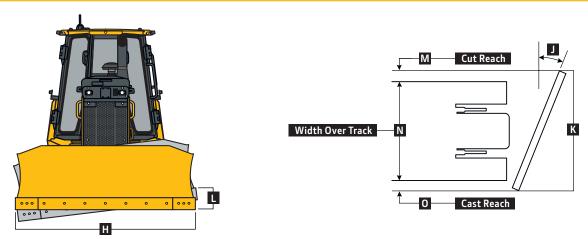
- 1	Machine Dimensions	550K / 550K LGP
- 1	Blade Type	Power-Angle-Tilt (PAT)
Α	Overall Height to Roof	2799 mm (9 ft. 2 in.)
В	Tread Depth With Single-Bar Grouser	49 mm (1.9 in.)
C	Ground Clearance in Dirt	329 mm (13 in.)
D	Overall Length	4016 mm (158 in.) (13 ft. 2 in.)
Ε	Blade Lift Height	772 mm (30.4 in.)
F	Blade Digging Depth	523 mm (20.6 in.)
G	Blade Cutting-Edge Angle, Adjustable	52 to 60 deg.



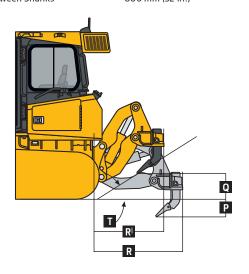
550K / 550K LGP WITH POWER-ANGLE-TILT (PAT) BLADE

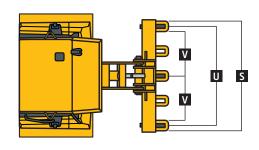
Λ	lachine Dimensions (continued)	550K	550K LGP		
	Straight Straight				
Н	Blade Width	2667 mm (105 in.) (8 ft. 9 in.)	2921 mm (115 in.) (9 ft. 7 in.)		
1	Blade Height	955 mm (3 ft. 2 in.)	955 mm (3 ft. 2 in.)		
	SAE Capacity	1.8 m³ (2.4 cu. yd.)	2.0 m³ (2.6 cu. yd.)		
	Weight	603 kg (1,330 lb.)	628 kg (1,385 lb.)		
	C-Frame Assembly Weight (without blade)	399 kg (879 lb.)	399 kg (879 lb.)		
J	Blade Angle	22.2 deg.	22.2 deg.		
K	Overall Width With Blade Angled	2469 mm (8 ft. 1 in.)	2705 mm (8 ft. 11 in.)		
L	Blade Tilt (uses tilt jack)	363 mm (14.3 in.)	399 mm (15.7 in.)		
M	Cut Reach	117 mm (4.6 in.)	56 mm (2.2 in.)		
N	Width Over Track	2007 mm (6 ft. 7 in.)	2362 mm (7 ft. 9 in.)		
0	Cast Reach	345 mm (18.3 in.)	287 mm (11.0 in.)		
St	raight (option)				
Н	Blade Width	2921 mm (115 in.) (9 ft. 7 in.)	3150 mm (124 in.) (10 ft. 4 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)	399 kg (879 lb.)	399 kg (879 lb.)		
J	Blade Angle	22.2 deg.	22.2 deg.		
K	Overall Width With Blade Angled	2705 mm (8 ft. 11 in.)	2916 mm (9 ft. 7 in.)		
L	Blade Tilt (uses tilt jack)	399 mm (15.7 in.)	429 mm (16.9 in.)		
M	Cut Reach	234 mm (9.2 in.)	163 mm (6.4 in.)		
Ν	Width Over Track	2007 mm (6 ft. 7 in.)	2464 mm (8 ft. 1 in.)		
0	Cast Reach	465 mm (18.3 in.)	391 mm (15.4 in.)		

550K / 550K LGP



F	ear Ripper	550K / 550K LGP
E	lade Type	PAT
N	Aulti-shank parallelogram ripper with 5 po	ckets and 3 shanks
٧	Veight	981 kg (2,163 lb.)
P	Maximum Penetration	508 mm (20 in.)
Q	Maximum Clearance Under Tip	508 mm (20 in.)
R	Overall Length, Lowered Position	1450 mm (57 in.) (4 ft. 9 in.)
$\mathbf{R}^{ }$	Overall Length, Raised Position	1015 mm (40 in.) (3 ft. 4 in.)
S	Overall Beam Width	1830 mm (6 ft. 0 in.)
Т	Slope Angle (full raise)	40 deg.
U	Ripping Width	1670 mm (5 ft. 6 in.)
٧	Distance Between Shanks	806 mm (32 in.)







650K XLT / 650K LGP

20 684 kPa (3,000 psi)

80 L/m (21 gpm)

Engine	650K XLT / 650K LGP		
Blade Type	Power-Angle-Tilt (PAT)		
Manufacturer and Model	John Deere PowerTech™ PWS 4045		
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV		
Displacement	4.5L (276 cu. in.)		
SAE Net Rated Power	78 kW (104 hp) at 2,200 rpm		
Net Peak Torque	475 Nm (350 ftlb.) at 1,400 rpm		
Aspiration	Turbocharged with charge-air cooler		
Air Cleaner	Dual-stage dry tube with tangential unloader		
Cooling	3 7		
Type	Variable-speed suction fan with optional reversing feature		
Engine Coolant Rating	–37 deg. C. (–34 deg. F)		
Engine Radiator	10 fins per in.		
Powertrain	io mo per mi		
Transmission	Automatic, dual-path, hydrostatic (HST) drive; load-sensing feature automatically adjusts speed and power to matc	h	
Transmission	changing load conditions; each individually controlled track is powered by a variable-displacement piston pump and		
	variable-displacement motor combination; ground-speed selection buttons on single-lever steering and direction con		
	independently selectable reverse speed ratios of 100%, 115%, or 130% of forward ground speed; decelerator pedal con		
		LIUIS	
System Relief Pressure	ground speed to stop 42 692 kPa (6,192 psi)		
Travel Speeds	42 032 Nr a (0,132 ps))		
Forward and Reverse	8.0 km/h (5.0 mph)		
	•		
Maximum (optional)	9.7 km/h (6.0 mph)		
Steering	Single-lever steering, direction control, and counter-rotation; full power turns and infinitely variable track speeds pro	vide	
F: 15 '	unlimited maneuverability and optimum control; HST 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 le	oads	
Total Ratio	52.13 to 1		
Drawbar Pull	*. 10		
Maximum	148 kN (33,600 lb.)		
At 1.9 km/h (1.2 mph)	108 kN (24,200 lb.)		
At 3.2 km/h (2.0 mph)	69 kN (15,600 lb.) "" 650K FT4 Drawbar Pull vs. Ground Speed		
Brakes	10		
Service	HST (dynamic) braking stops the machine	1	
	when the direction/steering control lever		
	is moved to neutral or the decelerator is		
	depressed to the detent		
Parking	depressed to the detent Exclusive spring-applied, hydraulically The what Pull load (lbfl = Both Sides		
	released park-brake feature engages ⁸ • Drawbar Pull Load (lbf) – Both Sides		
	wet, multiple-disc brakes automatically		
	whenever the engine stops, the operator		
	depresses the decelerator pedal to the		
	brake position, the unit is in neutral for		
	3 seconds (with detected motion), or the		
	park-lock lever is in the park position;		
	machine cannot be driven with brake applied, minimizing wearout or need		
	for adjustment GROUND SPEED		
Hydraulics	Tot adjustment		
Type	Open-center hydraulic system with fixed-displacement gear pump		
Pump Displacement	36.4 cc		
System Policy Prossure	20.4 (C. 20.00 pc)		

3-function direct-acting T-bar joystick with push-button angle function

System Relief Pressure

Control

Maximum Flow at Unloaded High Idle

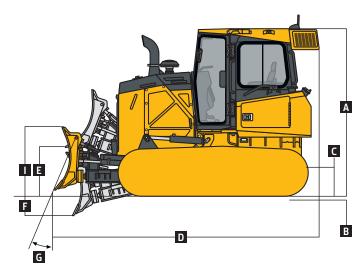


vs		
	16865	

Electrical	650K XLT / 650K LGP	
Blade Type	PAT	
Voltage	24 volts	
Capacity		
Battery	950 CCA	
Reserve	190 min.	
Alternator Rating		
Cab	100 amp	
Canopy	100 amp	
Lights	Grille mounted (2), rear mounted (2), and rear reflectors (2)	
Undercarriage	650K XLT	650K LGP
Tracks	John Deere DuraTrax™ features large deep-heat-treated cor idlers are permanently sealed and lubricated; full-length tra	
Track Gauge	1550 mm (61 in.)	1750 mm (69 in.)
Grouser Width	457 mm (18 in.)	710 mm (28 in.)
Chain	Sealed and lubricated	Sealed and lubricated
Shoes, Each Side	40	40
Track Rollers, Each Side	7	7
Track Length on Ground	2349 mm (92 in.)	2349 mm (92 in.)
Ground Contact Area	21 479 cm ² (3,329 sq. in.)	33 412 cm ² (5,179 sq. in.)
Ground Pressure	44.1 kPa (6.4 psi)	29.6 kPa (4.3 psi)
Track Pitch	171 mm (6.7 in.)	171 mm (6.7 in.)
Operator Station	650K XLT / 650K LGP	17 Fillin (0.7 III.)
ROPS (ISO 3471 – 2008) and FOPS (ISO 344		
	+9 - 2005)	
Serviceability		
Refill Capacities	2021/52/5 11	
Fuel Tank With Lockable Cap	202 L (53.45 gal.)	
Diesel Exhaust Fluid (DEF) Tank	11.8 L (3.1 gal.)	
Cooling System With Recovery Tank	21.1 L (5.6 gal.)	
Engine Oil With Filter	19 L (20 qt.)	
Hydraulic/HST Oil (common reservoir) With Filters	100 L (26.42 gal.)	
Final Drive (per tractor)	17 L (4.6 gal.)	
Operating Weights	650K XLT	650K LGP
Base Weight (with standard equipment, rollover protective structure [ROPS], full	9691 kg (21,320 lb.)	10 156 kg (22,343 lb.)
fuel tank, and 79-kg [175 lb.] operator		
Optional Components		
Cab With Pressurizer and Heater Air Conditioner	306 kg (675 lb.)	306 kg (675 lb.)
ROPS Canopy, Heater	39 kg (85 lb.)	39 kg (85 lb.)
ROPS Canopy and Cab		
Front and Door Screens	81 kg (179 lb.)	81 kg (179 lb.)
Rear Screen	34 kg (76 lb.)	34 kg (76 lb.)
Side Screens	43 kg (94 lb.)	43 kg (94 lb.)
Limb Risers (ROPS canopy and cab)	104 kg (229 lb.)	104 kg (229 lb.)
Counterweight		
Front	109 kg (240 lb.)	109 kg (240 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.)
Center Chain Guides	41 kg (90 lb.)	41 kg (90 lb.)
Full-Length Rock Guards	98 kg (216 lb.)	98 kg (216 lb.)
Maximum Life Undercarriage	182 kg (400 lb.)	182 kg (400 lb.)
Track Shoes		
457 mm (18 in.)	In base	_
510 mm (20 in.)	83 kg (183 lb.)	–344 kg (–760 lb.)
610 mm (24 in.)	— — — — — — — — — — — — — — — — — — —	–172 kg (–380 lb.)
710 mm (28 in.)	_	In base
, 10 mm (20 m.,		2000

650K

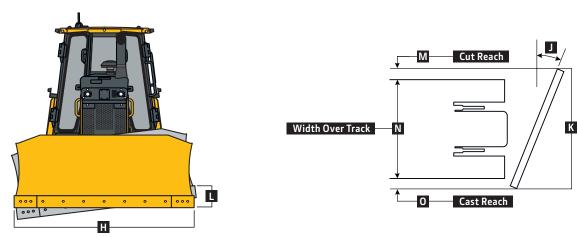
ľ	Machine Dimensions	650K XLT / 650K LGP
E	Blade Type	Power-Angle-Tilt (PAT)
Α	Overall Height to Roof	2762 mm (9 ft. 1.25 in.)
В	Tread Depth With Single-Bar Grouser	49 mm (1.9 in.)
C	Ground Clearance in Dirt	341 mm (13.5 in.)
D	Overall Length	4255 mm (168 in.) (14 ft. 0 in.)
Ε	Blade Lift Height	818 mm (32.2 in.)
F	Blade Digging Depth	500 mm (19.7 in.)
G	Blade Cutting-Edge Angle, Adjustable	52 to 60 deg.



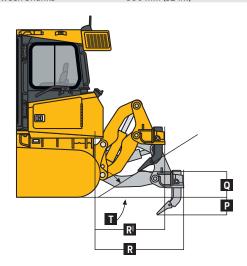
650K XLT / 650K LGP WITH POWER-ANGLE-TILT (PAT) BLADE

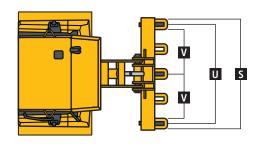
650K YIT	650K LGP
OJOR ALI	OJON Edi
2667 mm (105 in.) (8 ft. 9 in.)	2921 mm (115 in.) (9 ft. 7 in.)
1067 mm (3 ft. 6 in.)	955 mm (3 ft. 2 in.)
2.2 m³ (2.9 cu. yd.)	2.0 m³ (2.6 cu. yd.)
603 kg (1,330 lb.)	628 kg (1,385 lb.)
399 kg (879 lb.)	399 kg (879 lb.)
22.2 deg.	22.2 deg.
2469 mm (8 ft. 1 in.)	2705 mm (8 ft. 11 in.)
363 mm (14.3 in.)	399 mm (15.7 in.)
117 mm (4.6 in.)	5 mm (0.2 in.)
2007 mm (6 ft. 7 in.)	2464 mm (8 ft. 1 in.)
345 mm (13.6 in.)	236 mm (9.3 in.)
2921 mm (115 in.) (9 ft. 7 in.)	3150 mm (124 in.) (10 ft. 4 in.)
955 mm (3 ft. 2 in.)	894 mm (35 in.)
2.0 m³ (2.6 cu. yd.)	1.9 m³ (2.5 cu. yd.)
628 kg (1,385 lb.)	631 kg (1,391 lb.)
399 kg (879 lb.)	399 kg (879 lb.)
22.2 deg.	22.2 deg.
2705 mm (8 ft. 11 in.)	2916 mm (9 ft. 7 in.)
399 mm (15.7 in.)	429 mm (16.9 in.)
234 mm (9.2 in.)	112 mm (4.4 in.)
2007 mm (6 ft. 7 in.)	2464 mm (8 ft. 1 in.)
465 mm (18.3 in.)	340 mm (13.4 in.)
	2.2 m³ (2.9 cu. yd.) 603 kg (1,330 lb.) 399 kg (879 lb.) 22.2 deg. 2469 mm (8 ft. 1 in.) 363 mm (14.3 in.) 117 mm (4.6 in.) 2007 mm (6 ft. 7 in.) 345 mm (13.6 in.) 2921 mm (115 in.) (9 ft. 7 in.) 955 mm (3 ft. 2 in.) 2.0 m³ (2.6 cu. yd.) 628 kg (1,385 lb.) 399 kg (879 lb.) 22.2 deg. 2705 mm (8 ft. 11 in.) 399 mm (15.7 in.) 234 mm (9.2 in.) 2007 mm (6 ft. 7 in.)

N	Machine Dimensions (continued)	650K XLT	650K LGP
В	lade Type	PAT	PAT
S	traight (option)		
Н	Blade Width	3150 mm (124 in.) (10 ft. 4 in.)	3251 mm (128 in.) (10 ft. 8 in.)
1	Blade Height	894 mm (35 in.)	955 mm (3 ft. 2 in.)
	SAE Capacity	1.9 m³ (2.5 cu. yd.)	2.2 m³ (2.9 cu. yd.)
	Weight	631 kg (1,391 lb.)	694 kg (1,530 lb.)
	C-Frame Assembly Weight (without blade)	399 kg (879 lb.)	399 kg (879 lb.)
J	Blade Angle	22.2 deg.	22.2 deg.
K	Overall Width With Blade Angled	2916 mm (9 ft. 7 in.)	3010 mm (9 ft. 11 in.)
L	Blade Tilt (uses tilt jack)	429 mm (16.9 in.)	445 mm (17.5 in.)
M	Cut Reach	340 mm (13.4 in.)	157 mm (6.2 in.)
Ν	Width Over Track	2007 mm (6 ft. 7 in.)	2464 mm (8 ft. 1 in.)
0	Cast Reach	569 mm (22.4 in.)	569 mm (22.4 in.)



650K XLT / 650K LGP Rear Ripper Multi-shank parallelogram ripper with 5 pockets and 3 shanks 981 kg (2,163 lb.) Weight 508 mm (20 in.) P Maximum Penetration Maximum Clearance Under Tip 508 mm (20 in.) Q 1450 mm (57 in.) (4 ft. 9 in.) Overall Length, Lowered Position R Overall Length, Raised Position 1015 mm (40 in.) (3 ft. 4 in.) S Overall Beam Width 1830 mm (6 ft. 0 in.) Slope Angle (full raise) Т 40 deg. U Ripping Width 1670 mm (5 ft. 6 in.) V Distance Between Shanks 806 mm (32 in.)





Additional equipment

Key: ● Standard ▲ Optional or special

See your John Deere dealer for further information.

450K	550K	650K	Engine
•	•	•	Meets EPA Final Tier 4/EU Stage IV emissions
			John Deere PowerTech™ PWS 4045 4.5L engine
•	•	•	Turbocharged and air-to-air aftercooled
			Electronic control with automatic engine protection
•	•	•	Eco mode
•	•	•	Dual safety element dry-type air cleaner, evacuator valve
•			Exhaust filter, under hood, with vertical stack
			Engine glow-plug starting system
			Automatic turbo cool-down timer
		•	Programmable auto-idle and auto shutdown
			Wet-sleeve cylinder liners
			Remote-mounted fuel filters with automatic
			electronic priming
			Engine coolant heater, 110 volts
			Exhaust stack, black
			Exhaust stack, chrome
			Rotary ejector engine air pre-cleaner
			Severe-duty fuel filter and water separator with
			heating element
•	•	•	100-amp alternator, cab and canopy
			Cooling
•	•		Direct-drive cooling fan, blower type
		•	Hydraulically driven cooling fan, variable-speed suction type
			Automatic, programmable reversing-fan-drive fan
			Engine cooling rated -37 deg. C (-34 deg. F)
•	•	•	Enclosed safety fan guard (conforms to SAE J1308 and ISO3457)
•			Perforated engine side shields
			Heavy-duty perforated grille
•	•	•	Heavy-duty, trash-resistant radiator and high-ambient cooling package
A		A	Extreme-duty perforated grille with light guard
			Powertrain
•	•	•	Dual-path hydrostatic (HST) transmission
			Reverse-speed ratios (100%, 115%, and 130% presets)
•	•	•	Remote diagnostic test ports
•	•	•	Operator-selectable decelerator function (hydrostats and engine or hydrostats only)

450K	550K	650K	Powertrain (continued)
TJUK	DJOK	OJOK	Wet, multi-disc parking brake
	•	•	Full power turns with infinitely variable track speed
			Single-lever steering with counter-rotate function
			HST (dynamic) service brakes
			Automatic cold-weather transmission warmup system
			Automatic transmission derating for exceeded system temperatures
			2,000-hour vertical spin-on transmission filter
			Hydraulic System
•	•	•	Open-center fixed-displacement hydraulic gear pump
•	•	•	3-spool manual control valve for Power-Angle-Tilt (PAT)
			3-spool electrohydraulic (EH) control valve for PAT
			4-spool manual-control valve for PAT
			4-spool EH control valve for PAT with single auxiliary
		•	2,000-hour vertical spin-on hydraulic filter
A			Drive-through hydraulic pump for use with winch
			Grade-control-ready electrohydraulics
A		A	Slope Control system
			SmartGrade™ 3D mastless grade control
			Overall Vehicle
•	•	•	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 / Trans-
			mission reservoir / Hydraulic reservoir
			Fluid-sample valves
			Quick-service ports
			Forestry limb risers (sweeps)
			Trimble-ready interface package
			Topcon-ready interface package
			Leica-ready interface package
			Attachments
	A	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
			Drawbar, extended for winch (with or without

fairlead)

Additional equipment (continued)

 $\textbf{Key:} \hspace{0.1in} \bullet \hspace{0.1in} \textbf{Standard} \hspace{0.1in} \blacktriangle \hspace{0.1in} \textbf{Optional or special} \hspace{0.1in} \textbf{See your John Deere dealer for further information}.$

450K	550K	650K	Attachments (continued)	Canopy	Cab	Operator's Station / Electrical (continued)
			Rear ripper, parallelogram, 3 shank, 5 pocket		•	Wipers, intermittent with washers: front window and left
			Winch, John Deere 4000, power in/free spool out			and right doors
			OR power out			Rear wiper and washer
			Winch, John Deere 4000, low speed, power in/free	A		Full screens
			spool out OR power out			Rear window screen
			4-roller fairlead for winch	•		Standard seat, vinyl with heavy-duty air suspension
	A	A	Root-rake blade attachment			Standard seat, fabric with heavy-duty air suspension
			Undercarriage			Deluxe seat, heated with heavy-duty air suspension and
•	•	•	Full-length, smooth-surface track frame covers			leather bolstered
			Chain guides, front and rear			Under-seat heater
	•		Maximum Life undercarriage system with SC-2™ bushings			AM/FM/Weather Band (WB) radio with USB and auxiliary port and MP3 player front plug-in
	A	A	Extended Life undercarriage with SC-2 bushings		A	Premium radio with Bluetooth®, AM/FM/WB radio with
_	_	_	Heavy-duty sealed and lubricated undercarriage			USB and auxiliary port, remote auxiliary, and remote
			Full-length rock guards			USB port
-	-	•	Double-flange rollers		•	Radio-area storage slot
STD	LGP	450K	3	•		Lockable master electrical disconnect switch
•			nm (16 in.) moderate service	•	•	Multifunction/multi-language LCD monitor: Analog display
	•	610-mm (24 in.) moderate service				(fuel level, coolant temperature, and engine oil pressure) /
STD	LGP		550K Shoes			Digital display (engine rpm, charge pressure, hours, DPF
•	A	457-m	nm (18 in.) moderate service			soot level, and transmission direction/speed range)
		610-m	nm (24 in.) moderate service	A		Multifunction/multi-language 178-mm (7 in.) color LCD
XLT	LGP	650K				monitor for Slope Control: Tachometer, hour meter, trans-
•		457-m	nm (18 in.) moderate service			mission direction and speed (forward/reverse), exhaust
		510-mm (20 in.) moderate service with clipped corners				filter status, ambient temperature, and clock
		610-mm (24 in.) moderate service				Built-in diagnostics: Diagnostic-code details / Sensor values / Calibrations / Individual circuit tester
		710-m	ım (28 in.) moderate service with clipped corners			Keyless start with multiple security modes
Canop	y Cab	Ope	rator's Station / Electrical			Battery, dual, 24 volts
•		Retr	actable seat belts, 76 mm (3 in.) (conform to SAE J386)			Lights: LED, grille-mounted front (2) and halogen,
•	•		essories: Convex wide-angle interior rearview mirror /			cab-mounted rear (2)
			h cushions (2) / Cup holders (2)			LED lights: grille-mounted front (2), cab-mounted front (2),
	•	Power port (cab includes two power ports)				and rear (2)
		Lockable dash-mounted storage compartment				External-mounted attachment mirror
		Air conditioner and heater, 24,000 Btu		•		JDLink™ wireless communication system (available in
		Tinted glass Dome light				specific countries; see your dealer for details)
		Dou	ne light			



