

624K



DEERE

Engine				
624K Z-BAR / HIGH-LIFT / POWERLLE™ / TOOL CARRIER				
Manufacturer and Model	John Deere PowerTech™ PVX 6068	John Deere PowerTech™ Plus 6068H	John Deere PowerTech™ 6068H	
Non-Road Emission Standard	EPA Final Tier 4/EU Stage IV	EPA Tier 3/EU Stage IIIA	EPA Tier 2/EU Stage II	
Cylinders	6	6	6	
Valves Per Cylinder	4	4	4	
Displacement	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)	6.8 L (414 cu. in.)	
Net Peak Power (ISO 9249)	139 kW (186 hp) at 1,800 rpm	147 kW (198 hp) at 1,800 rpm	147 kW (198 hp) at 1,800 rpm	
Net Peak Torque (ISO 9249)	826 Nm (609 lb.-ft.) at 1,300 rpm	836 Nm (617 lb.-ft.) at 1,600 rpm	836 Nm (617 lb.-ft.) at 1,600 rpm	
Net Torque Rise	57%	65%	65%	
Fuel System (electronically controlled)	High-pressure common rail	High-pressure common rail	High-pressure common rail	
Lubrication	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler	Full-flow spin-on filter and integral cooler	
Aspiration	Turbocharged, charge air cooled	Turbocharged, charge air cooled	Turbocharged, charge air cooled	
Air Cleaner	Under-hood, dual-element dry type, restriction indicator in cab monitor for service	Under-hood, dual-element dry type, restriction indicator in cab monitor for service	Under-hood, dual-element dry type, restriction indicator in cab monitor for service	
Fan Drive	Hydraulically driven, proportionally controlled, fan aft of coolers	Hydraulically driven, proportionally controlled, fan aft of coolers	Hydraulically driven, proportionally controlled, fan aft of coolers	
Electrical System	24 volt with 130-amp alternator	24 volt with 80-amp (100-amp optional) alternator	24 volt with 80-amp (100-amp optional) alternator	
Batteries (2 – 12 volt)	950 CCA (each)	950 CCA (each)	950 CCA (each)	
Transmission System				
Type	Countershaft-type PowerShift™			
Torque Converter	Single stage, single phase			
Shift Control	Electronically modulated, adaptive, load and speed dependent			
Operator Interface	Steering-column or joystick-mounted F-N-R and gear-select lever; quick-shift button on hydraulic lever			
Shift Modes	Manual/auto (1st-D or 2nd-D); quick-shift button with 2 selectable modes: kick-down or kick-up/down; and 3 adjustable clutch-cutoff settings			
	<i>Standard 5-Speed with Lockup Torque Converter</i>		<i>Optional 4-Speed</i>	
Maximum Travel Speeds (with 20.5 R 25 tires)	<i>Forward</i>	<i>Reverse</i>	<i>Forward</i>	<i>Reverse</i>
Range 1	5.9 km/h (3.7 mph)	6.3 km/h (3.9 mph)	7.6 km/h (4.7 mph)	7.6 km/h (4.7 mph)
Range 2	10.5 km/h (6.5 mph)	10.5 km/h (6.5 mph)	12.5 km/h (7.8 mph)	13.0 km/h (8.1 mph)
Range 3	16.1 km/h (10.0 mph)	26.2 km/h (16.3 mph)	25.0 km/h (15.5 mph)	25.7 km/h (16.0 mph)
Range 4	25.0 km/h (15.5 mph)	N/A	39.5 km/h (24.5 mph)	N/A
Range 5	40.0 km/h (24.9 mph)	N/A	N/A	N/A
Axles/Brakes				
Final Drives	Heavy-duty inboard-mounted planetary			
Differentials	Hydraulic locking front with conventional rear – standard; dual locking front and rear – optional			
Rear Axle Oscillation, Stop to Stop (with 20.5 R 25 tires)	24 deg. (12 deg. each direction)			
Service Brakes (conform to ISO 3450)	Hydraulically actuated, spring-retracted, self-adjusting, inboard sun-shaft mounted, oil-cooled, single disc			
Parking Brakes (conform to ISO 3450)	Automatic spring-applied, hydraulically released, driveline-mounted, oil-cooled, multi disc			
Tires/Wheels (see page 22 for complete tire adjustments)				
	<i>Tread Width</i>		<i>Width Over Tires</i>	
Michelin 20.5 R 25, 1 Star L-3	2050 mm (80.7 in.)		2657 mm (104.6 in.)	
Serviceability				
Refill Capacities	EPA FT4/EU Stage IV	EPA Tier 3/EU Stage IIIA	EPA Tier 2/EU Stage II	
Fuel Tank with Lockable Cap	299 L (79 gal.)	352 L (93 gal.)	352 L (93 gal.)	
Diesel Exhaust Fluid (DEF)	19 L (20 qt.)	N/A	N/A	
Cooling System	33.8 L (35.7 qt.)	27 L (29 qt.)	27 L (29 qt.)	
Engine Oil with Vertical Spin-On Filter	19.5 L (20.6 qt.)	19 L (20 qt.)	19 L (20 qt.)	
Transmission Reservoir with Vertical Filter	22 L (23 qt.)	22 L (23 qt.)	22 L (23 qt.)	
Axle Oil				
Front	22 L (23 qt.)	22 L (23 qt.)	22 L (23 qt.)	
Rear	17 L (18 qt.)	17 L (18 qt.)	17 L (18 qt.)	
Hydraulic Reservoir and Filter	105.2 L (27.8 gal.)	110 L (29 gal.)	110 L (29 gal.)	
Park Brake Oil (wet disc)	0.3 L (10 oz.)	0.3 L (10 oz.)	0.3 L (10 oz.)	
Hydraulic System/Steering				
Pump (loader and steering)	Variable-displacement, axial-piston pump; closed-center, pressure-compensating system			
Maximum Rated Flow at 6895 kPa (1,000 psi) and 2,350 rpm	223 L/m (59 gpm)			
System Relief Pressure (loader and steering)	24 821 kPa (3,675 psi)			
Loader Controls	2-function valve; joystick control or fingertip controls; hydraulic-function enable/disable; optional 3rd- and 4th-function valve with auxiliary lever			



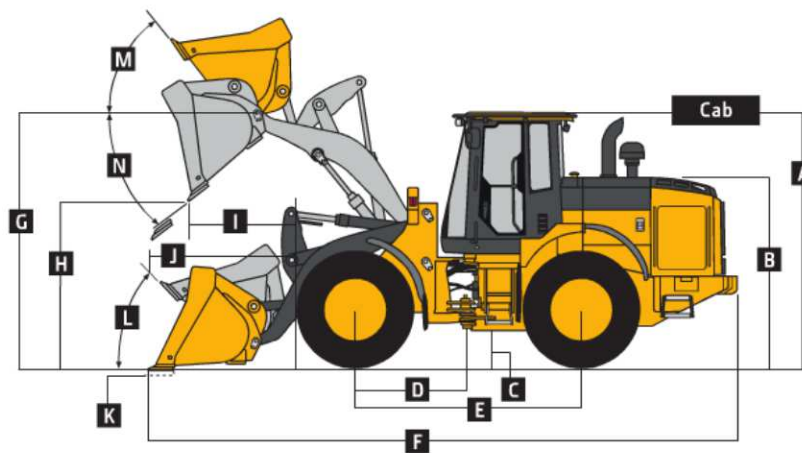
Hydraulic System/Steering (continued)

624K Z-BAR / HIGH-LIFT / POWERLIFT / TOOL CARRIER

Steering (conforms to ISO 5010)

Type	Power, fully hydraulic			
Articulation Angle	80-deg. arc (40 deg. each direction)			
Turning Radius (measured to centerline of outside tire)	5.27 m (17 ft. 4 in.)			
Hydraulic Cycle Times	<i>Z-Bar</i>	<i>High-Lift</i>	<i>Powerlift</i>	<i>Tool Carrier</i>
Raise	5.9 sec.	5.9 sec.	5.9 sec.	5.6 sec.
Dump	1.3 sec.	1.3 sec.	1.4 sec.	3.0 sec.
Lower (float down)	2.7 sec.	2.7 sec.	2.8 sec.	2.7 sec.
Total	9.9 sec.	9.9 sec.	10.1 sec.	11.3 sec.

Dimensions and Specifications with Pin-On Bucket



624K Z-BAR AND HIGH-LIFT LOADERS WITH PIN-ON BUCKET

	<i>Z-Bar</i>	<i>High-Lift</i>
Dimensions with Bucket	2.7-m ³ (3.5 cu. yd.) general-purpose with bolt-on edge	2.7-m ³ (3.5 cu. yd.) general-purpose with bolt-on edge
A Height to Top of Cab	3.32 m (10 ft. 11 in.)	3.32 m (10 ft. 11 in.)
B Hood Height	2.46 m (8 ft. 1 in.)	2.46 m (8 ft. 1 in.)
C Ground Clearance	384 mm (15.1 in.)	384 mm (15.1 in.)
D Length from Centerline to Front Axle	1.52 m (5 ft. 0 in.)	1.52 m (5 ft. 0 in.)
E Wheelbase	3.09 m (10 ft. 1 in.)	3.09 m (10 ft. 1 in.)
F Overall Length, Bucket on Ground	7.76 m (25 ft. 5 in.)	8.17 m (26 ft. 9 in.)
G Height to Hinge Pin, Fully Raised	3.95 m (13 ft. 0 in.)	4.30 m (14 ft. 2 in.)
H Dump Clearance, 45 deg., Full Height	2.86 m (9 ft. 5 in.)	3.23 m (10 ft. 7 in.)
I Reach, 45-deg. Dump, Full Height	1.02 m (3 ft. 4 in.)	1.11 m (3 ft. 8 in.)
J Reach, 45-deg. Dump, 2.13-m (7 ft. 0 in.) Clearance	1.57 m (5 ft. 2 in.)	1.93 m (6 ft. 4 in.)
K Maximum Digging Depth	95 mm (3.8 in.)	203 mm (8.0 in.)
L Maximum Rollback at Ground Level	37 deg.	36 deg.
M Maximum Rollback, Boom Fully Raised	50 deg.	49 deg.
N Maximum Bucket Dump Angle, Fully Raised	45 deg.	46 deg.
Loader Clearance Circle, Bucket Carry Position	12.24 m (40 ft. 2 in.)	12.61 m (41 ft. 4 in.)
Specifications with Bucket		
Capacity, Heaped	2.7 m ³ (3.5 cu. yd.)	2.7 m ³ (3.5 cu. yd.)
Capacity, Struck	2.3 m ³ (3.0 cu. yd.)	2.3 m ³ (3.0 cu. yd.)
Bucket Weight with Bolt-On Cutting Edge	1148 kg (2,532 lb.)	1148 kg (2,532 lb.)
Bucket Width	2.69 m (8 ft. 10 in.)	2.69 m (8 ft. 10 in.)
Breakout Force	12 821 kg (28,266 lb.)	11 662 kg (25,709 lb.)
Tipping Load, Straight	13 804 kg (30,433 lb.)	11 590 kg (25,552 lb.)
Tipping Load, 40-deg. Full Turn	12 006 kg (26,469 lb.)	10 044 kg (22,143 lb.)
Rated Operating Load, 50% Full-Turn Tipping Load (conforms to ISO 14397-1)*	6003 kg (13,234 lb.)	5022 kg (11,072 lb.)
Operating Weight	15 747 kg (34,717 lb.)	15 948 kg (35,159 lb.)

Loader operating information is based on machine with identified linkage and standard equipment, PowerTech PVX 6068 (EPA Final Tier 4/EU Stage IV) engine, ROPS cab, rear cast bumper/counterweight, transmission side-frame guards, bottom guards, standard tires, full fuel tank, and 79-kg (175 lb.) operator. This information is affected by changes in tires, ballast, and different attachments, and assumes no tire deflection per the standard ISO 14397-1 section 5.

*Rated operating capacity based on Deere attachments only.