

# 210K EP/210K

Engine	210K EP	210K		
Manufacturer and Model	John Deere PowerTech™ E 4045HT072 turbo-charged, standard	John Deere PowerTech E 4045HT073 turbo-charged, standard		
Non-Road Emission Standard	EPA Interim Tier 4/EU Stage IIIB	EPA Interim Tier 4/EU Stage IIIB		
Displacement	4.5 L (276 cu. in.)	4.5 L (276 cu. in.)		
Net Peak Power (ISO 9249)	52 kW (70 hp) at 2,000 rpm	66 kW (88 hp) at 2,000 rpm		
Net Peak Torque (ISO 9249)	315 Nm (232 lb.-ft.) at 1,300 rpm	375 Nm (277 lb.-ft.) at 1,400 rpm		
Net Torque Rise	44%	39%		
Lubrication	Pressure system with spin-on filter and cooler	Pressure system with spin-on filter and cooler		
Air Cleaner	Dual-stage dry type with safety element and evacuator valve			
<b>Cooling</b>				
Fan Type	Suction type	Electronically controlled, variable-rate suction type		
Engine Coolant Rating	-37 deg. C (-34 deg. F)	-37 deg. C (-34 deg. F)		
Engine Oil Cooler	Oil to water	Oil to water		
<b>Powertrain</b>				
<b>Transmission</b>	4 speed, helical-cut gears, full PowerShift™ transmission with hydraulic reverser standard; electric clutch cutoff on loader lever			
<b>Torque Converter</b>	Single stage, dual phase with 2.63:1 stall ratio, 280 mm (11 in.)			
Maximum Travel Speeds Measured with 16.9L-24 Rear Tires	<i>Forward</i>	<i>Reverse</i>	<i>Forward</i>	<i>Reverse</i>
Gear 1	5.1 km/h (3.2 mph)	6.4 km/h (4.0 mph)	5.1 km/h (3.2 mph)	6.4 km/h (4.0 mph)
Gear 2	9.5 km/h (5.9 mph)	11.9 km/h (7.4 mph)	9.5 km/h (5.9 mph)	11.9 km/h (7.4 mph)
Gear 3	19.3 km/h (12.0 mph)	—	19.5 km/h (12.1 mph)	—
Gear 4	31.2 km/h (19.4 mph)	—	32.3 km/h (20.0 mph)	—
<b>Axles</b>				
Axle Oscillation, Stop to Stop, Front Axle	22 deg.		22 deg.	
Axle Ratings	<i>Mechanical-Front-Wheel Drive (MFWD)</i>	<i>Rear</i>	<i>Mechanical-Front-Wheel Drive (MFWD)</i>	<i>Rear</i>
Static	12 000 kg (26,455 lb.)	13 000 kg (28,660 lb.)	12 000 kg (26,455 lb.)	13 000 kg (28,660 lb.)
Dynamic	6000 kg (13,228 lb.)	7000 kg (15,432 lb.)	6000 kg (13,228 lb.)	7000 kg (15,432 lb.)
Ultimate	28 200 kg (62,170 lb.)	30 600 kg (67,461 lb.)	28 200 kg (62,170 lb.)	30 600 kg (67,461 lb.)
<b>Steering</b>	Hydrostatic power (SAE J1151) and emergency (ISO5010)			
Axle	<i>MFWD</i>		<i>MFWD</i>	
<b>Curb-Turning Radius</b>				
With Brakes	2.59 m (8 ft. 6 in.)		2.59 m (8 ft. 6 in.)	
Without Brakes	3.96 m (13 ft. 0 in.)		3.96 m (13 ft. 0 in.)	
<b>Bucket Clearance Circle</b>				
With Brakes	9.55 m (31 ft. 4 in.)		9.55 m (31 ft. 4 in.)	
Without Brakes	10.67 m (35 ft. 0 in.)		10.67 m (35 ft. 0 in.)	
Steering Wheel Turns (lock to lock)	2.8		2.8	
<b>Final Drive, Mechanical-Front Wheel and Rear Axle</b>	Heavy duty, outboard planetary final drives distribute shock loads over 3 gears			
<b>Brakes (SAE J1473)</b>				
Service	Power assisted, hydraulic wet disc, mounted inboard, self-adjusting and self-equalizing			
Parking	Spring applied, hydraulically released, wet, multi-disc, independent of service brakes with electric switch control			



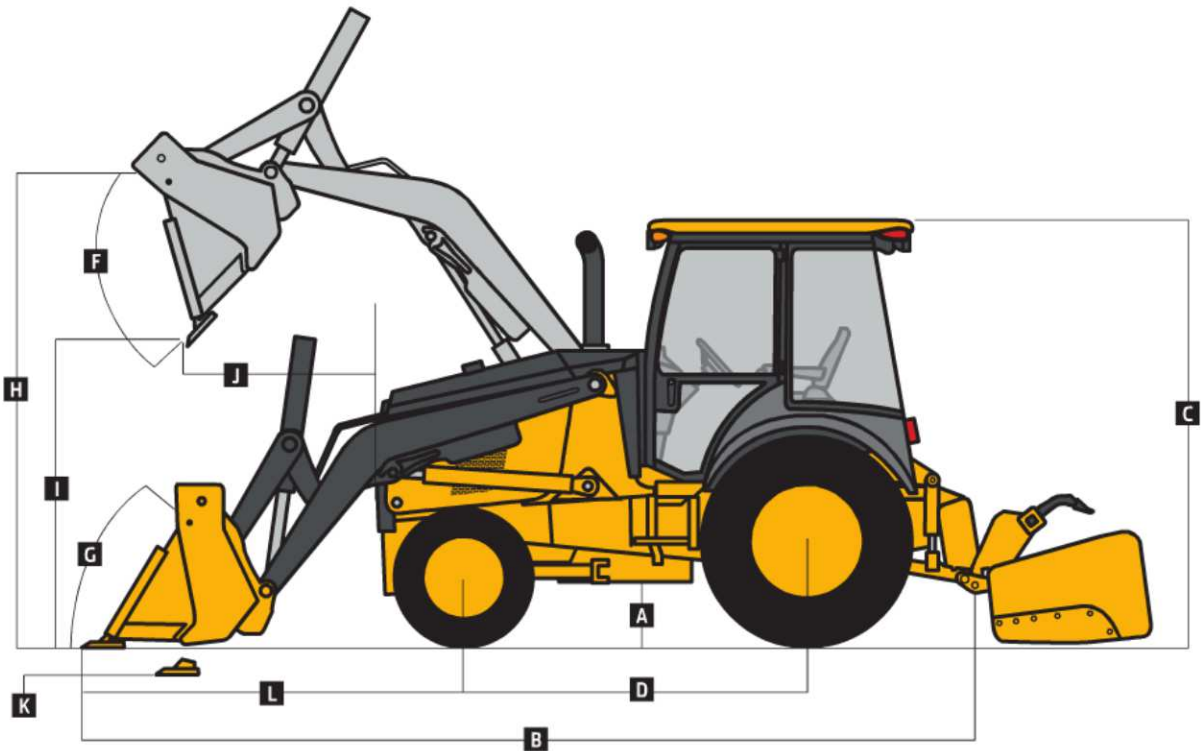
<b>Hydraulics</b>	<b>210K EP</b>	<b>210K</b>	
Main Pump	Open-center, single-gear pump, integral priority valve		
Pump Flow, Hitch and Loader, at 2,250 rpm	78 L/m (20.5 gpm)	96 L/m (25.3 gpm)	
System Relief Pressure	18 961 kPa (2,750 psi)	18 961 kPa (2,750 psi)	
Bucket Dump at Maximum Height	2.6 sec.	2.4 sec.	
Boom Lower (power down)	3.7 sec.	3.4 sec.	
<b>Controls</b>			
Hitch	4-lever, single-tilt cylinder standard; 5-lever dual-tilt cylinder (includes auxiliary) optional		
Loader	Single-lever loader/bucket control with electric clutch cutoff switch standard; separate lever loader auxiliary function and single-lever loader/auxiliary with metered roller switch for auxiliary optional		
<b>Power-Takeoff (PTO) Performance</b>	N/A	Dedicated hydrostatic system (pump, motor, and cooling package) suitable for continuous, heavy-duty PTO operations	
Net Power (540 rpm maximum)	N/A	41 kW (55 hp)	
<b>Cylinders</b>	<b>210K EP / 210K</b>		
Type	Heat-treated, chrome-plated, polished rods; hardened steel (replaceable bushings) pivot pins		
	<i>Bore</i>	<i>Rod Diameter</i>	<i>Stroke</i>
Loader Boom (2)	80.0 mm (3.15 in.)	50.0 mm (1.97 in.)	790.0 mm (31.10 in.)
Loader Bucket (1)	90.0 mm (3.54 in.)	50.0 mm (1.97 in.)	744.0 mm (29.29 in.)
<b>Hitch</b>			
Lift (1)	76.2 mm (3.00 in.)	50.8 mm (2.00 in.)	196.9 mm (7.75 in.)
Pitch (1)	63.5 mm (2.50 in.)	31.8 mm (1.25 in.)	171.5 mm (6.75 in.)
Tilt (1 or 2)	76.2 mm (3.00 in.)	50.8 mm (2.00 in.)	120.7 mm (4.75 in.)
MFWD (1)	67.0 mm (2.64 in.)	42.0 mm (1.65 in.)	210.0 mm (8.27 in.)
<b>Electrical</b>	<b>210K EP</b>	<b>210K</b>	
Voltage	12 volt	12 volt	
Alternator Rating	90 amp	120 amp	
<b>Lights</b>	4 halogen: 2 front and 2 optional rear (32,500 candlepower each); turn signals and flashers: 2 front and 2 rear; stop and taillights; and 2 rear reflectors		
<b>Operator Station</b>	<b>210K EP / 210K</b>		
Type (SAE J1040)	Canopy: solid mounted, ROPS/FOPS left access, with 2-post ROPS and steel roof; cab: isolation mounted, left access, with molded roof and standard heating, ventilation, and air conditioning (HVAC)		
<b>Seat Rotation</b>			
Right	40 deg.		
Left	10 deg.		
<b>Tires/Wheels</b>			
	<i>Front</i>	<i>Rear</i>	
MFWD	12-16.5, 8 PR	16.9-24, 8 PR, R4	
<b>Serviceability</b>	Hydraulic Oil Filter, Spin-On Enclosed Replaceable Element 6-micron filtration; 1,000 break-in/service hours		
<b>Refill Capacities</b>			
Cooling System	25 L (26 qt.)		
Rear Axle	18 L (19 qt.)		
Engine Oil (including vertical spin-on filter)	13 L (14 qt.)		
Torque Converter and Transmission	15 L (16 qt.)		
Fuel Tank (with ground-level fueling)	102.2 L (27 gal.)		
Hydraulic System	89 L (23.6 gal.)		
Hydraulic Reservoir	37 L (9.8 gal.)		
<b>MFWD Housing</b>			
Axle	6.5 L (7 qt.)		
Planetary (each)	1 L (1 qt.)		

Operating Weights	210K EP	210K
With Full Fuel Tank, 79-kg (175 lb.) Operator, and Standard Equipment	4707 kg (10,379 lb.)	4959 kg (10,936 lb.)
Typical with Canopy, MFWD, Single Battery, 2x4 Valve, 0.86-m <sup>3</sup> (1.12 cu. yd.) Loader Bucket, 454-kg (1,000 lb.) Wheel Weights, Deluxe Electrical, and 2134-mm (84 in.) Box Blade	6013 kg (13,259 lb.)	6266 kg (13,816 lb.)

**Adjustments to Operating Weights with Optional Components**

Cab	363 kg (800 lb.)	363 kg (800 lb.)
Box Blade		
2.13-m (84 in.)	771 kg (1,700 lb.)	771 kg (1,700 lb.)
2.20-m (88 in.)	816 kg (1,800 lb.)	816 kg (1,800 lb.)
Wheel Weights	454 kg (1,000 lb.)	454 kg (1,000 lb.)
Hitch Weights	227 kg (500 lb.) / 363 kg (800 lb.)	227 kg (500 lb.) / 363 kg (800 lb.)
Front Loader Coupler	286 kg (630 lb.)	286 kg (630 lb.)

Overall Dimensions	210K EP / 210K
A Ground Clearance, Minimum	287 mm (11.3 in.)
B Overall Length, Transport (without box blade)	5.23 m (17 ft. 2 in.)
C Transport Height	
Canopy	2.54 m (8 ft. 4 in.)
Cab	2.64 m (8 ft. 8 in.)
D Length from Axle to Axle (MFWD axle)	2.12 m (6 ft. 11 in.)
E Width Over Tires	2.13 m (7 ft. 0 in.)



Loader Dimensions/Performance		210K EP / 210K		
<b>F</b>	Bucket, Dump Angle, Maximum	45 deg.		
<b>G</b>	Rollback Angle at Ground Level	40 deg.		
<b>Bucket</b>		<i>Heavy-Duty Long Lip</i>	<i>Heavy-Duty</i>	<i>Multipurpose</i>
	Capacity	0.77 m <sup>3</sup> (1.00 cu. yd.)	0.86 m <sup>3</sup> (1.12 cu. yd.)	0.96 m <sup>3</sup> (1.25 cu. yd.)
	Width	2184 mm (86 in.)	2184 mm (86 in.)	2184 mm (86 in.)
	Weight	328 kg (722 lb.)	417 kg (918 lb.)	795 kg (1,750 lb.)
	Breakout Force (with wheel weights and box blade)	38.4 kN (8,642 lb.)	38.7 kN (8,700 lb.)	32.8 kN (7,369 lb.)
	Lift Capacity, Full Height (with wheel weights and box blade)	2548 kg (5,612 lb.)	2466 kg (5,432 lb.)	2239 kg (4,932 lb.)
<b>H</b>	Height to Bucket Hinge Pin, Maximum	3.34 m (10 ft. 11 in.)	3.34 m (10 ft. 11 in.)	3.34 m (10 ft. 11 in.)
<b>I</b>	Dump Clearance, Bucket at 45 deg.	2.67 m (8 ft. 9 in.)	2.67 m (8 ft. 9 in.)	2.67 m (8 ft. 9 in.)
<b>J</b>	Reach at Full Height, Bucket at 45 deg.	914 mm (36 in.)	914 mm (36 in.)	914 mm (36 in.)
<b>K</b>	Digging Depth Below Ground, Bucket Level	203 mm (8 in.)	203 mm (8 in.)	203 mm (8 in.)
<b>L</b>	Length from Front Axle Centerline to Bucket Cutting Edge	2.03 m (6 ft. 8 in.)	2.03 m (6 ft. 8 in.)	2.15 m (7 ft. 1 in.)

Lift Capacity with Quick-Coupler/Forks			
<b>Hydraulic Capacity</b>		<i>1219-mm (48 in.) Tines</i>	<i>1524-mm (60 in.) Tines</i>
<b>A<sup>1</sup></b>	Maximum Height	1400 kg (3,086 lb.)	1297 kg (2,860 lb.)
<b>B<sup>1</sup></b>	Maximum Reach	2624 kg (5,786 lb.)	2486 kg (5,480 lb.)
<b>C<sup>1</sup></b>	At Ground Line	3287 kg (7,247 lb.)	3102 kg (6,839 lb.)
<b>D<sup>1</sup></b>	Below Ground Line	211 mm (8.3 in.)	211 mm (8.3 in.)

