

1510E / 1910E

Engine	1510E	1910E
Manufacturer and Model	John Deere PowerTech™ Plus 6068	John Deere PowerTech Plus 6090
Non-Road Emissions Standard	EPA Tier 3 / EU Stage IIIA	EPA Tier 3 / EU Stage IIIA
Engine Displacement	6.8 L (415 cu. in.)	9.0 L (549 cu. in.)
Net Peak Power	145 kW (195 hp) at 1,900 rpm	186 kW (249 hp) at 1,900 rpm
Net Peak Torque	800 Nm (590 lb.-ft.) at 1,300–1,400 rpm	1100 Nm (811 lb.-ft.) at 1,400 rpm
Aspiration	Turbocharged, charge air cooled	Turbocharged, charge air cooled
Fuel Tank Capacity	167 L (44 gal.)	184 L (49 gal.)
Transmission		
Hydrostatic-mechanical, 2-speed gearbox		
Tractive Force	185 kN (41,590 lb.)	220 kN (49,458 lb.)
Travel Speed		
Gear 1	0–7.5 km/h (0–4.7 mph)	0–7 km/h (0–4.3 mph)
Gear 2	0–23 km/h (0–4.3 mph)	0–21 km/h (0–13.1 mph)
Steering		
Proportional frame steering with mini levers		
Turning Angle	± 42 deg.	± 42 deg.
Brakes		
1510E / 1910E		
Service/Work	Hydraulically actuated, oil-immersed, multi-disc	
Parking/Emergency	Spring actuated	
Frame Oscillation	Automated	
Axles/Bogies		
Hydromechanical differential lock at the front and rear		
Axles		
Front	Heavy-duty Duraxle™ balanced bogie axle; rigid axle (6W)	
Rear	Heavy-duty Duraxle balanced bogie axle	
Electrical		
1510E		
Voltage	24 volt	24 volt
Batteries	2 x 145 Ah	2 x 149 Ah
Alternator	140 A (28 volt)	140 A (28 volt)
Lights	Halogen: 8 x twin power and 7 x single power	
Optional	Xenon	Xenon
Hydraulics		
Load sensing, power adjustable		
Pump Capacity	140 cm ³ (8.5 cu. in.)	180 cm ³ (10.98 cu. in.)
Operating Pressure	24 MPa (3,480 psi)	24 MPa (3,480 psi)
Hydraulic Tank	161 L (42.5 gal.)	185 L (49 gal.)
Boom		
Type	CF7	CF8
Maximum Reach Lengths	7.2/8.5/10 m (23.6/27.9/32.8 ft.)	7.2/8.5 m (23.6/27.9 ft.)
Gross Lifting Torque	125 kNm (92,195 lb.-ft.)	151 kNm (111,372 lb.-ft.)
Slewing Torque	32 kNm (23,602 lb.-ft.)	41 kNm (30,240 lb.-ft.)
Slewing Angle	380 deg.	380 deg.
Cabin		
1510E / 1910E		
Rotating, or rotating and leveling		
Rotating Angle	290 deg.	
Tilt		
Sideways	10 deg.	
Forward and Backward	6 deg.	
Control System		
PC / Windows®-based TimberMatic™ F-09 or CommandCenter™		



Measurements*	1510E	1910E
A Length	9570 mm (377 in.)	10 370 mm (408 in.)
Long Wheelbase	10 770 mm (424 in.)	11 270 mm (444 in.)
B Bogie Center – Middle Joint	1700 mm (67 in.)	2000 mm (79 in.)
C Middle Joint – Bogie Center	3400 mm (134 in.)	3600 mm (142 in.)
Long Wheelbase	4000 mm (157 in.)	4100 mm (161 in.)
Wheelbase (B+C)	5100 mm (200 in.)	5600 mm (221 in.)
Long Wheelbase	5700 mm (224 in.)	6000 mm (236 in.)
D Headboard – Bogie Center	2600 mm (102 in.)	2700 mm (106 in.)
Long Wheelbase	3200 mm (126 in.)	3200 mm (126 in.)
E Bogie Center – Rear	1900 mm (75 in.)	2100 mm (83 in.)
Long Wheelbase	2500 mm (98 in.)	2500 mm (98 in.)
F Width		
700-Series Tires	2956 mm (116 in.)	3090 mm (122 in.)
800-Series Tires	3086 mm (122 in.)	N/A
Turning Angle	42 deg.	42 deg.
Turning Radius – 700-Series Tires		
Outer	8550 mm (337 in.)	9260 mm (365 in.)
Inner	4840 mm (191 in.)	5450 mm (215 in.)
Transport Height	3800 mm (150 in.)	3900 mm (154 in.)
G Ground Clearance		
6W	670 mm (26.3 in.)	755 mm (29.7 in.)
8W	660 mm (25.9 in.)	755 mm (29.7 in.)
Tires		
Front 6W / 8W	34–14 / 26.5–20	34–16 / 26.5–20
Rear	26.5–20	26.5–20
Machine Weight		
6W	16 500 kg (36,380 lb.)	19 050 kg (42,125 lb.)
8W	18 400 kg (40,565 lb.)	21 800 kg (48,080 lb.)
Approach Angle		
6W	25 deg.	29 deg.
8W	36 deg.	42 deg.

*Note: Measurements are nominal and may vary depending on manufacturing tolerances.

