



7R 310

Key Specs

Engine Make - John Deere PowerTech™ 9.0L (B20 diesel compatible)

Displacement - 549 cu in

Rated Engine Power - 228 kW

Rated Engine Power - 310 PS

Maximum Engine Power - 251 kW

Maximum Engine Power - 341 PS

Transmission Type - Standard: John Deere e23™ 40 km/h 26 mph Optional: John Deere e23 transmission 50 km/h 31 mph John Deere Infinitely Variable Transmission (AutoPowr/IVT™) 0.05-40 km/h 0.03-26 mph John Deere Infinitely Variable Transmission (AutoPowr/IVT) 0.05-50 km/h 0.03- 31 mph

Rear Hitch Category (SAE Designation) - Category 3/3N with hook ends or Category 4N/3 with hook ends

Pump Rated Output - Standard: 162 L/min 43 gpm Optional: 222.3 L/min 59 gpm

Base Machine Weight - 11400 kg

Machine Configuration

Wheel or Track Configuration - Wheel

Drive Type - 4WD

Engine

Engine Make - John Deere PowerTech™ 9.0L (B20 diesel compatible)

Emissions Certifications - Stage V

Displacement - 549 cu in

Aspiration - Single turbocharger, variable geometry turbo

Number of Cylinders - 6

Engine

Cylinder Liners - Wet-sleeve

Aftertreatment Type - Diesel particulate filter (DPF), diesel oxidation catalyst (DOC), selective catalytic reduction (SCR) with diesel exhaust fluid (DEF)

Rated Engine Speed - 2100 rpm

Rated Engine Power - 228 kW

Rated Engine Power - 310 PS

Engine Torque at Rated Speed - 1452 Nm

Maximum Engine Power - 251 kW

Maximum Engine Power - 341 PS

Maximum Engine Torque - At 1600 rpm: 1452 Nm 1071 lb-ft

Fuel Type - Diesel

Transmission

Transmission Type - Standard: John Deere e23™ 40 km/h 26 mph Optional: John Deere e23 transmission 50 km/h 31 mph John Deere Infinitely Variable Transmission (AutoPowr/IVT™) 0.05-40 km/h 0.03-26 mph John Deere Infinitely Variable Transmission (AutoPowr/IVT) 0.05-50 km/h 0.03- 31 mph

Maximum Speed Forward - Standard: 40 km/h (26 mph) Optional: 50 km/h (31 mph)

Rear Power Take-Off (PTO)

Rated PTO Power - 193 kW

Engine rpm at Rated PTO Speeds (540/1.000) - 1950

Engine rpm at Rated PTO Speeds (540E/1000/1.000E) - 1750

Engagement Method - Electric switch with adjustable modulation

Front Hitch

Lift Capacity Through Full Lift Range at Coupling Points - 3150 kg

Maximum Lift Capacity at Coupling Points - 5200 kg

Rear Hitch

Rear Hitch Category (SAE Designation) - Category 3/3N with hook ends or Category 4N/3 with hook ends

Maximum Lift Capacity Directly at Coupling Points - 22258 lb 10100 kg

Maximum Lift Capacity at 610-mm Behind Hitch Point - 17306 lb 7850 kg

Lift Capacity Through Full Lift Range at 610-mm Behind Hitch Point - 15212 lb 6900 kg

Sensing Type - Electrohydraulic

Drawbar

Drawbar Category - Category 4

Maximum Vertical Load - 6614 lb 3000 kg

Hydraulics

Hydraulic System Type - Closed-center, pressure/flow compensated system with load sensing

Pump Rated Output - Standard: 162 L/min 43 gpm Optional: 222.3 L/min 59 gpm

Number of Rear Selective Control Valves (SCVs) - Standard: Four ISO coupler SCVs Optional: five ISO couplers: 12.7 mm 1/2 in.

Available Flow at a Single Rear SCV - 132 L/min 35 gpm

Hydraulics Number of Mid Selective Control Valves (SCVs) - 3

Available Flow at Front SCVs - 126 L/min

Front Axle

Front Axle Type - Standard: 1300 Series MFWD Triple Link Suspension Plus (TLS): tread range 1,524 to 2,235 mm 60 to 88 in. Optional: TLS with front brakes available with 40 km/h 24.9 mph TLS with front brakes standard with 50 km/h 31 mph

Front Axle Differential Lock - 1300 Series MFWD TLS: Limited slip TLS with front brakes: Full-locking electrohydraulic (actuated at same time as rear diff lock)

Rear Axle

Rear Axle Type - Standard: Rack-and-pinion or flange axles Optional: Diameter: 110 x 2550 mm 4.33 x 100.4 in. Diameter: 120 x 2550 mm 4.72 x 100.4 in. Flanged axle: 335 mm 13.2 in.

Rear Differential Lock - Full-locking electrohydraulic with on/off auto mode depending on steering angle

Final Drive - Inboard planetary three pinion

Steering & Brakes

Steering Type - Standard: Load sensing hydraulic with flow metering and electric backup pump Optional: Reactive Steering - Self-centering steering system or ActiveCommand Steering 2 - System with ability to select variable or fixed ratio steering mode, adjustable steering wheel resistance, and adjustable steering sensitivity

Electrical System

Battery Voltage - 12 V

Battery Cold Cranking Amps - 1900 CCA

Alternator Capacity - Standard: 210 amp Optional: 250 amp

Working Lights - Standard: 18 halogen; Available: 18 LED + 2 halogen or 22 LED + 2 halogen

Operator Station

Seat Suspension - Standard: Air seat Optional: ActiveSeat™ II

Degree of Seat Swivel, Left Hand - 8 degree (angle)

Degree of Seat Swivel, Right Hand - 40 degree (angle)

Cab Suspension - Optional: electrical Adjustable Cab Suspension (eCS)

Instructional Seat - Standard

Primary Display - 32.5 cm 12.8 in.

Radio - Standard: AM/FM, remote controls, auxiliary input jack, four speakers, and external antenna
Optional: Touchscreen radio with smartphone interface and voice recognition, Digital Radio (DAB+) with Radio Data System (RDS), Auxiliary input jack, USB audio and video input, and Bluetooth microphone, Six-speaker system (four speakers and two tweeters) and one subwoofer

Inner Cab Volume - 3.24 m³

Cab Glass Area - 6.56 m²

Technology Integration

Guidance - Standard: Integrated StarFire™ Receiver with SF1 AutoTrac™ Activation, Section Control, Variable Rate, Documentation, Data Sync, Over-the-Air Updates, Remote Display Access Optional: AutoTrac™ Implement Guidance, AutoTrac™ Turn Automation (ATTA), AutoPath™, In-Field Data Sharing, Machine Sync, SF-RTK, AutoTrac™ RowSense™

Connectivity - Optional: Tractor Implement Management (TIM)

Remote Diagnostics - Available with activated JDLink™ hardware and activations

Capacities

Fuel Tank Capacity - With e23 transmission: 463 With AutoPowr/IVT transmission: 513 L

Diesel Exhaust Fluid (DEF) Tank Capacity - 26.2 L

Cooling System Capacity - 44.5 L

Transmission - Hydraulic System - 160 L

Crankcase Oil Volume - 23 L

Dimensions & Weights

Wheelbase - 2925 mm

Base Machine Weight - 11400 kg

Overall Height - 3494 mm

Overall Length - 5910 mm

Front Axle Ground Clearance - 668 mm

Drawbar Ground Clearance - 463 mm

Maximum Permissible Weight - 18000 kg

Additional Information

Country of Manufacture - USA

Date Collected - 2024-May-01