

7R Series

200- to 280-Horsepower Tractors • Specifications



2011 7R Series Tractors Specifications



| | 7200R | 7215R | 7230R | 7260R | 7280R |
|--|---|-----------------|--|--|-----------------|
| POWER (manufacturer's estimates) | | | | | |
| Rated PTO hp at 2,100 engine rpm | 164 hp (123 kW) | 178 hp (133 kW) | 189 hp (141 kW) | 215 hp (161 kW) | 232 hp (173 kW) |
| Rated engine hp (ISO) per 97/68/EC at 2,100 engine rpm | 200 hp (147 kW) | 215 hp (158 kW) | 230 hp (169 kW) | 260 hp (191 kW) | 280 hp (206 kW) |
| Maximum engine hp (ISO) per 97/68/EC at 1,900 engine rpm | 220 hp (162 kW) | 237 hp (174 kW) | 253 hp (186 kW) | 286 hp (210 kW) | 308 hp (227 kW) |
| Intelligent Power Management* (optional) | 30 additional engine horsepower at 2,100 rpm (rated speed) | | | | |
| PTO torque rise | 40% | | | | |
| PTO power bulge | 10% | | | | |
| ENGINE | | | | | |
| Description | John Deere PowerTech PSX 6.8 L Engine: diesel, in-line, 6-cylinder, wet-sleeve with 4 valves-in-head | | John Deere PowerTech PVX 9.0 L Engine: diesel, in-line, 6-cylinder, wet-sleeve with 4 valves-in-head | | |
| Rated speed | 2,100 rpm | | | | |
| Aspiration | Dual-series turbocharger with fixed geometry first stage, variable geometry second stage; air-to-air aftercooling and cooled exhaust gas recirculation | | Variable geometry turbocharger with air-to-air aftercooling and cooled exhaust gas recirculation | | |
| Filter, engine air | Dual stage | | | | |
| Displacement | 415 cu. in. (6.8 L) | | 549 cu. in. (9.0 L) | | |
| Bore and stroke | 4.19 in. (106 mm) x 5 in. (127 mm) | | 4.66 in. (118 mm) x 5.35 in. (136 mm) | | |
| Compression ratio | 17.2:1 | | 16:1 | | |
| Lubrication | Full-pressure, full-flow filtration with bypass | | | | |
| Filter, oil | Replaceable cartridge-style oil filter | | | | |
| FUEL SYSTEM | | | | | |
| Description | Electronically controlled, high-pressure common-rail with electric fuel transfer pump (self priming) | | | | |
| Filter system | Two-stage with water separator and service-indicator light | | | | |
| Filter, primary | 10 micron replaceable cartridge with water indication sensor and drain | | | | |
| Filter, secondary | 2 micron spin-on element | | | | |
| Fuel-tank capacity | 133 U.S. gal. (504 L) on tractors equipped with PowrQuad and Group 47 or 48 tires 138 U.S. gal. (524 L) on tractors equipped with IVT and Group 47 or 48 tires 144 U.S. gal. (544 L) on tractors equipped with IVT and Group 49 tires | | | | |
| Required fuel type | Ultralow sulfur diesel (B20 diesel compatible) | | | | |
| TRANSMISSIONS | | | | | |
| 16-speed PowrQuad PLUS, 19 mph (30 kph) | Optional | Optional | Optional | — | — |
| 20-speed AutoQuad PLUS, 26 mph (40 kph) | Standard | Standard | Standard | — | — |
| 20-speed CommandQuad, 26 mph (40 kph) | Optional | Optional | Optional | — | — |
| 20-speed CommandQuad, 31 mph (50 kph) | Optional | Optional | Optional | — | — |
| John Deere Infinitely Variable Transmission (IVT), 26 mph (40 kph) | Optional | Optional | Optional | Standard | Standard |
| John Deere Infinitely Variable Transmission (IVT), 31 mph (50 kph) | Optional | Optional | Optional | Optional | Optional |
| ELECTRICAL SYSTEM | | | | | |
| Description | Two batteries in parallel | | | | |
| Alternator/battery | 200 amps/12 Volt | | | | |
| Total cold-cranking amps | 1850 | | | | |
| FINAL DRIVES | | | | | |
| Description | Inboard planetary, three pinion | | | | |
| REAR AXLE | | | | | |
| 3.94 x 100.4 in. (100 x 2550 mm) diameter | Optional | Optional | Optional | — | — |
| 3.94 x 110.5 in. (100 x 2808 mm) diameter | Optional | Optional | Optional | — | — |
| 3.94 x 118.5 in. (100 x 3012 mm) diameter | Standard | Standard | Standard | — | — |
| 4.33 x 100.4 in. (110 x 2550 mm) diameter | — | — | — | Optional | Optional |
| 4.33 x 118.5 in. (110 x 3012 mm) diameter | — | — | — | Standard | Standard |
| 4.72 x 100.4 in. (120 x 2550 mm) diameter | — | — | — | Optional | Optional |
| 4.72 x 118.5 in. (120 x 3012 mm) diameter | — | — | — | Optional | Optional |
| REAR-WHEEL EQUIPMENT | | | | | |
| Tires | Group 47 and 48 tires available as singles/duals | | | Group 47, 48 and 49 tires available as singles/duals | |
| FRONT AXLE | | | | | |
| 2WD, tread range 60 to 88 in. (1524 to 2235 mm) | Optional | — | — | — | — |
| 1150 Series MFWD, tread range 60 to 88 in. (1524 to 2235 mm) | Standard | Standard | — | — | — |
| 1300 Series MFWD, tread range 60 to 88 in. (1524 to 2235 mm) | — | — | Standard | Standard | Standard |
| Triple Link Suspension Plus (TLS), tread range 60 to 88 in. (1524 to 2235 mm) | Optional | Optional | Optional | Optional | Optional |
| Triple Link Suspension Plus (TLS), with front brakes, available with 40 kph transmissions (standard with 50 kph transmissions) | Optional | Optional | Optional | Optional | Optional |

Continued on next page.

| | 7200R | 7215R | 7230R | 7260R | 7280R |
|---|--|--|--|--|--|
| DIFFERENTIAL LOCK | | | | | |
| Front axle, 1150 Series MFWD | Limited slip | Limited slip | — | — | — |
| Front axle, 1300 Series MFWD | — | — | Limited slip | Limited slip | Limited slip |
| Front axle, TLS Plus | Limited slip | | | | |
| Front axle, TLS Plus with front brakes | Full-locking electrohydraulic | | | | |
| Rear axle | Full-locking electrohydraulic | | | | |
| STEERING | | | | | |
| Hydrostatic power steering | Standard | Standard | Standard | Standard | Standard |
| ActiveCommand Steering (ACS) | Optional | Optional | Optional | Optional | Optional |
| HYDRAULIC SYSTEM | | | | | |
| Description | Closed-center, pressure and flow compensated | | | | |
| Selective control valves (SCVs) | 3, 4, 5 or 6 with CommandQuad and IVT; 3 or 4 with PowrQuad and AutoQuad | | | | |
| Main pump, axial piston (displacement) | 45 cc standard 63 and 85 cc optional | 45 cc standard 63 and 85 cc optional | 45 cc standard 63 and 85 cc optional | 63 cc standard 85 cc optional | 63 cc standard 85 cc optional |
| Clean-oil reservoir charge pump | Gear-driven, integrated | | | | |
| Maximum pressure | 2,958.1 psi (20 400 kPa) +/- 4.4 psi (300 kPa) | | | | |
| Rated flow, 45 cc pump | 32 U.S. gpm (121.1 L/min) | 32 U.S. gpm (121.1 L/min) | 32 U.S. gpm (121.1 L/min) | — | — |
| Rated flow, 63 cc pump | 43 U.S. gpm (162.8 L/min) | 43 U.S. gpm (162.8 L/min) | 43 U.S. gpm (162.8 L/min) | 43 U.S. gpm (162.8 L/min) | 43 U.S. gpm (162.8 L/min) |
| Rated flow, 85 cc pump | 59 U.S. gpm (223.3 L/min) | 59 U.S. gpm (223.3 L/min) | 59 U.S. gpm (223.3 L/min) | 59 U.S. gpm (223.3 L/min) | 59 U.S. gpm (223.3 L/min) |
| Available flow at a single SCV | 35 U.S. gpm (132 L/min) | | | | |
| 3-POINT HITCH, REAR | | | | | |
| Description | Electrohydraulic sensing | | | | |
| Category 3/3N with Quik-Coupler | 12,000 lb. (5443 kg) standard 15,200 lb. (6895 kg) optional | 12,000 lb. (5443 kg) standard 15,200 lb. (6895 kg) optional | 12,000 lb. (5443 kg) standard 15,200 lb. (6895 kg) optional | 15,200 lb. (6895 kg) standard | 15,200 lb. (6895 kg) standard |
| Category 3N/3 with Quik-Coupler | — | — | — | 15,200 lb. (6895 kg) standard 17,300 lb. (7847 kg) optional | 15,200 lb. (6895 kg) standard 17,300 lb. (7847 kg) optional |
| 3-POINT HITCH, FRONT | | | | | |
| Description | Category 3N, optional pushbar available for use with ground-engaging front implements | | | | |
| Standard lift capacity | 11,464 lb. (5200 kg) | | | | |
| DRAWBAR | | | | | |
| Category 3, 4,050 lb. (1837 kg) - 6,000 lb. (2700 kg) maximum vertical load dependent | Standard | Standard | Standard | Standard | Standard |
| Category 3 with high capacity 10,000 lb. (4536 kg) maximum vertical load | Optional | Optional | Optional | Optional | Optional |
| POWER TAKE-OFF (PTO), REAR, INDEPENDENT | | | | | |
| 1 3/4 in. (44 mm) 20-spline, 1,000 rpm | Standard | Standard | Standard | Standard | Standard |
| 1 3/4 in. (44 mm) 20-spline, 1,000 rpm, capable of 1 3/8 in. (35 mm) 540E/1000/1000E rpm gearcase | Optional | Optional | Optional | Optional | Optional |
| 1 3/4 in. (44 mm) 20-spline, 1,000 rpm with 1 3/8 in. (35 mm) 540/540E/1000 rpm gearcase | Optional | Optional | Optional | Optional | Optional |
| PTO speed at engine rpm | 540/1,000 at 1950; 540E/1000E PTO at 1750 | | | | |
| POWER TAKE-OFF (PTO), FRONT, INDEPENDENT | | | | | |
| 1 3/8 in. (35 mm) 21-spline, 1,000 rpm | Optional; PTO shaft rotates clockwise | | | | |
| 1 3/4 in. (44 mm) 20-spline, 1,000 rpm | Optional; PTO shaft rotates clockwise | | | | |
| 1 3/8 in. (35 mm) 6-spline, 1,000 rpm | Optional; PTO shaft rotates counter-clockwise | | | | |
| WHEELBASE | | | | | |
| 2WD | 119.4 in. (3032 mm) | — | — | — | — |
| MFWD/TLS Plus | 115.2 in. (2925 mm) | | | | |
| COMMANDVIEW II CAB | | | | | |
| Cab glass area | 70.18 sq. ft. (6.52 m ²) on tractors equipped with CommandQuad and IVT | | | | |
| Cab volume | 127 cu. ft. (3.597 m ³) on tractors equipped with CommandQuad and IVT | | | | |
| CONNECTIONS | | | | | |
| AutoTrac Ready | Standard (except 2WD) | | | | |
| JDLINK | Factory-installed option with one year of complimentary JDLINK Ultimate service | | | | |
| Service ADVISOR Remote | Requires activated JDLINK service | | | | |
| ISOBUS Connection | Standard (ISO 11783) | | | | |
| GS3 CommandCenter Display | Video capable on optional touch-screen display; single video input (Tyco Connector PN 776536-1) for camera with PAL or NTSC signal (camera and extension harness available through John Deere Parts) | | | | |
| AVERAGE STANDARD WEIGHT (less front weights) | | | | | |
| 2WD | 18,104 lb. (8212 kg) | — | — | — | — |
| MFWD** | 23,080 lb. (10 469 kg) | 23,080 lb. (10 469 kg) | 23,492 lb. (10 656 kg) | — | — |
| TLS Plus ¹ | 26,355 lb. (11 954 kg) | 26,355 lb. (11 954 kg) | 26,585 lb. (12 259 kg) | 27,180 lb. (12 329 kg) | 27,180 lb. (12 329 kg) |

Specifications and design subject to change without notice. *Activates during mobile rear PTO applications and transport speeds. **Weight based on MFWD, CommandQuad, two 450 lb. inner weights, front weight support, Category 3 hitch with Quik-Coupler, 30 gallons of fuel, 480/80R46 duals, 420/90R30 fronts. ¹Weight based on TLS Plus, IVT, 1400 lb. inner weights, front weight support, Category 3 hitch with Quik-Coupler, 30 gallons fuel, 480/80R50 duals, 380/80R38 fronts. PowerTech, PowrQuad, AutoQuad, CommandQuad, IVT, TLS Plus, CommandView, AutoTrac, JDLINK, Service ADVISOR, and CommandCenter are registered trademarks of Deere and Company. 48539 (07/12/11)