

# 7R TRACTORS

Model Year 2021; 210-350 Engine Horsepower



JOHN DEERE

**7R**

**350**



# MOVING FORWARD

Multi-functional. Multi-talented. The redesigned 7R Tractors include eight models ranging from 210 to 350 hp that deliver a refined cab, plus integrated intelligence and high power-density. With a base weight of 24,700lbs, the new 7R 350 delivers 350 rated engine horsepower and 385 max engine horsepower\*. That makes it the best power-to-weight ratio of any John Deere large row-crop tractor.

Take advantage of three new cab and visibility packages, fight fatigue on those long days with Triple Link Suspension (TLS™) and improved AutoTrac™, and enhanced steering ease and control with new Active Command Steering™ 2. Plus, enjoy total tractor control at your fingertips with CommandPRO™.

These are the large-hp, maneuverable tractors that deliver any task you need to accomplish in the field, barnyard or on the road.



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# 7R Tractors Overview

**All-New Larger Cab** – Select from three packages so your cab works the way you work. Features include a new ergonomic seat, Generation 4 CommandCenter™ Display, improved suspension, and more.

**New LED Lighting** – Make the most of your time, no matter the time, when you choose from three **Visibility Packages**. And with two times the LED light output compared to halogen bulbs, you can focus on the task at hand, not the amount of sunlight left.

**New Styling** – All-new exterior styling allows for more interior space compared to previous models.

**e23 PowerShift Transmission** – Meet the demands of whatever conditions are thrown your way – and save on fuel costs - with three operating modes: FullAUTO, Custom, and Manual.

\*Activation/subscription required. Some additional accessories and/or components may be required. JDLink requires a cellular connection to transfer information from machine to JDLink website. Consult your John Deere Dealer for coverage availability. Gen 4 Activations are machine specific activations that remain with the tractor. Free subscription to JDLink expires five years from date of purchase of qualifying 7R Tractor. This subscription will not be automatically renewed. To continue your subscription, you must actively renew and subscription fees shall apply.

## Integrated Intelligence:

- **CommandPRO™ Control** – Experience seamless control of your tractor and implements in the palm of your hand. Eleven configurable buttons keep you in command of your operation.
- **StarFire™ 6000 Receiver** – Faster planting, better accuracy, ultimate precision.
- **JDLink™\*** - See where your machines are, what they're doing, and how they're performing with JDLink.
- **AutoTrac™** - Enjoy hands-free turns and reduced overlap, all while maximizing inputs and reducing fatigue.





# Ride in Comfort

When the hours are long and the terrain is tough, there's no better place to be than our all-new cab. Your home away from home. Step inside our most spacious cab through the 24% wider doorway than before. Enjoy more space than our previous cab, complete with extra headroom, extra storage capacity, and extra USB ports. Choose from these options; amenities vary by package. Discover more details at [JohnDeere.com/7R](http://JohnDeere.com/7R) or [JohnDeere.ca/7R](http://JohnDeere.ca/7R).

SELECT	PREMIUM	ULTIMATE
<ul style="list-style-type: none"> <li>■ Cloth seat with manual controls and manual lumbar support; 8° left-hand and 40° right-hand swivel</li> <li>■ AM/FM/WX radio with auxiliary and Bluetooth inputs; 4 speakers</li> <li>■ Business-band ready</li> <li>■ 4 USB ports and 12V outlet</li> <li>■ Dual-tilt steering column</li> </ul>	<ul style="list-style-type: none"> <li>■ Cloth seat with electronic controls and pneumatic lumbar support; 25° left-hand and 40° right-hand swivel</li> <li>■ 6.5-inch (16.5 cm) touchscreen radio, SiriusXM ready; 6 speakers with subwoofer</li> <li>■ Business-band ready</li> <li>■ 4 USB ports, 12V outlet</li> <li>■ Dual-tilt steering column</li> <li>■ Foot rests</li> <li>■ Refrigerator</li> <li>■ Right-hand accessory rail</li> <li>■ 120V outlet</li> </ul>	<ul style="list-style-type: none"> <li>■ Leather seat with electronic controls, massage and pneumatic lumbar support; 25° left-hand and 40° right-hand swivel; heated and ventilated; adjustable bolsters</li> <li>■ 6.5-inch (16.5 cm) touchscreen radio, SiriusXM ready; 6 speakers with subwoofer</li> <li>■ Business-band ready</li> <li>■ 4 USB ports, 12V outlet</li> <li>■ Dual-tilt steering column</li> <li>■ Foot rests</li> <li>■ Refrigerator</li> <li>■ Right-hand accessory rail</li> <li>■ Carpeted floor mat</li> <li>■ Leather-wrapped steering wheel</li> <li>■ 120V outlet</li> </ul>



Ultimate Comfort and Convenience package shown.

# Own the day

The following features are only available in the Ultimate Comfort & Convenience package. Take a seat in the most comfortable chair in the industry. And get ready to log serious hours in comfort, style and peak productivity.

A higher backrest and adjustable side bolsters let you sit comfortably within the seat. Massaging feature helps keep you alert when you're spending long hours in the cab. And since the seat is heated and ventilated, you'll stay warm or cool depending on the season.





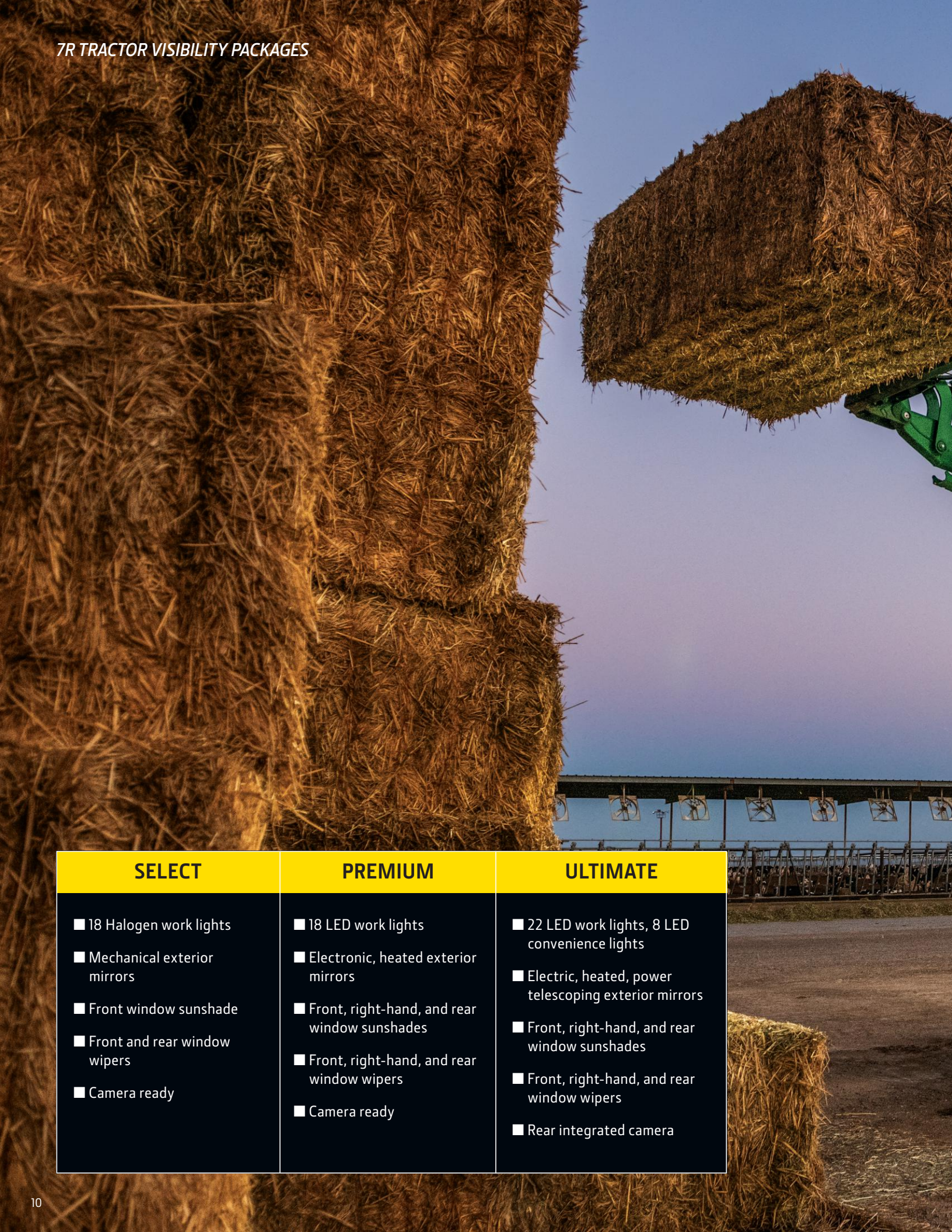


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Default Tractor Run Page

100	36%	8.0 MPH	8.0 MPH	5.0 MPH	32.8 h	2100	126	1.4	1000	45.93	14.3
0	0	8.0 MPH	8.0 MPH	5.0 MPH	32.8 h	2100	126	1.4	1000	45.93	14.3

Machine: 14.3  
Counters A: 45.93  
Machine: 126  
Counters A: 1.4  
Machine: 1000  
Counters A: 45.93



SELECT	PREMIUM	ULTIMATE
<ul style="list-style-type: none"><li>■ 18 Halogen work lights</li><li>■ Mechanical exterior mirrors</li><li>■ Front window sunshade</li><li>■ Front and rear window wipers</li><li>■ Camera ready</li></ul>	<ul style="list-style-type: none"><li>■ 18 LED work lights</li><li>■ Electronic, heated exterior mirrors</li><li>■ Front, right-hand, and rear window sunshades</li><li>■ Front, right-hand, and rear window wipers</li><li>■ Camera ready</li></ul>	<ul style="list-style-type: none"><li>■ 22 LED work lights, 8 LED convenience lights</li><li>■ Electric, heated, power telescoping exterior mirrors</li><li>■ Front, right-hand, and rear window sunshades</li><li>■ Front, right-hand, and rear window wipers</li><li>■ Rear integrated camera</li></ul>

# Own the night

Take charge of your night when the daytime hours aren't enough. Our three new Visibility Packages are a bold leap forward, shedding new light on nighttime productivity. With the Ultimate Visibility Package, you'll experience two times more lighting than halogen bulbs thanks to the LED work lights. LEDs provide brighter, 360-degree illumination for those work days that turn into work nights. Amenities vary by package.



Ultimate Visibility package shown.

7R TRACTOR CABS

# Enjoy the view

The view is amazing from any angle. Look at implements behind you with ease, thanks to three times more swivel to the left (compared to previous models). Pneumatic lumbar support and electronic controls let you make adjustments with ease.





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WWW.JDPOWER.COM

7R TRACTOR PRECISION AG TECHNOLOGY

# Integrated Intelligence



It's easier than ever to have a connected machine. All new 7R tractors come standard with JDLink™ and five years of connected service\* and capabilities, enabling you to easily benefit from technology-enabled machines.

By connecting through JDLink, you can wirelessly share information and plans with those who help you farm to make even better decisions. View reported work completed timely with Data Sync. Stay running in the field with help from your dealer using John Deere Connected Support™ and Remote Display Access. Keep track of your operation anytime and from anywhere from a desktop computer or a mobile device with John Deere Operations Center and MyOperations™ mobile app.

The primary user interface with the 7R Tractors is the Generation 4 CommandCenter™ Display for added productivity while boosting your confidence to make every pass more efficient.

Get started faster with more precision, less calibration and faster pull-in time with the integrated StarFire™ 6000 Receiver and SF3 signal. Precision Ag is built-in the tractor with AutoTrac™, Documentation, and Data Sync unlocked and ready for use. Find out more about all our latest technology including John Deere Operations Center at [JohnDeere.com/7R](http://JohnDeere.com/7R) or [JohnDeere.ca/7R](http://JohnDeere.ca/7R).



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7R TRACTORS POWER AND EFFICIENCY

# Shift into high gear







The **John Deere PowerTech™ PVS 6.8L** engine found in the 7R 210 features a single variable geometry turbocharger (VGT) that provides the torque rise and engine responsiveness to meet varying load conditions. Overall benefits of the PowerTech PVS 6.8L engine include great fuel economy and peak torque with quick response under load.

Featured in the 7R 230, 7R 250 and 7R 270, the **John Deere PowerTech PSS 6.8L** engine utilizes twin series turbochargers, one fixed and one VGT, that help maintain engine performance and provide a controlled pressure boost for added fuel economy.

The higher horsepower 7R 290, 7R 310, 7R 330 and 7R 350 include the **John Deere PowerTech PVS 9.0L** engine. With a single variable geometry turbocharger—this engine maximizes uptime while setting a new standard for the productivity, efficiency and performance you need.

**Power of choice in transmissions.** Choose from e23™ PowerShift with Efficiency Manager™ with 23 forward gears evenly spaced 15% apart to fit your different operating conditions and implements. Or the Infinitely Variable Transmission (IVT™) that lets you move smoothly from 0 to 26 or 31 mph (40 or 50 km/h) — and any speed in between, including creeper speeds as low as 164 feet per hour with a single lever.

**New CommandPRO™** (IVT only) delivers seamless control of your tractor and implements all in the palm of your hand.

7R TRACTORS TRANSPORT

# Agility and power: the perfect combination





**Hauling implements for transport** is another big advantage of the 7R tractor lineup. With high horsepower, light weight and a compact chassis, the nimble 7R tractor delivers the pulling power you need and the drivability to move quickly and easily. Our 7R 350, for example, can tow implements up to 78 tons.

The 7R tractors are equipped with Triple Link Suspension Plus (TLS™) to reduce power hop to help maintain ground contact to maximize drawbar pull. In combination with cab suspension, you can experience a smooth ride in the cab.

With CommandPRO™, you'll experience total tractor and implement control at your fingertips. Plus, ActiveCommand Steering (ACS™ 2) helps reduce steering effort and fatigue at all ground speeds. The result: you can handle transport applications with ease.

7R TRACTORS HITCHES, AXLES, HYDRAULICS

# The power-driven support you need

With a rear hitch capacity of 17,300 lbs. (7,847 kg), you're set to pull large planters, and the optional front hitch has operations covered with front-mounted implements. A fully independent, 45-mm (1-3/4-in.), 1000-rpm PTO is standard equipment and specially designed for high-power, heavy PTO loads. Get added load-bearing strength to handle large-capacity and extra-wide implements with an optional Category 4 drawbar.

The heavy-duty hydraulic system boasts plenty of reserve capacity to operate large hydraulic motors, even at reduced engine speeds. Triple Link Suspension (TLS™) delivers electro-hydraulic automatic engagement and give you the drawbar pulling power you need in all operating conditions with reduced power hop.







# The connected support you need

When you're running, you don't want anything to slow you down. Your 7R Tractor comes with five years of JDLink connected service\*. Once activated, your John Deere dealer can offer John Deere Connected Support™ services such as Remote Display Access and Service ADVISOR™ Remote, allowing your dealer to “dial in” to your tractor's diagnostic data and assess trouble codes to help you avoid downtime.

Protect your investment with a PowerGard™ Plan\*\*. The John Deere PowerGard Protection Plan lets you purchase extended coverage and powertrain warranty coverage for up to an additional three years or 3,000 hours over the normal warranty period. You get flexible coverage, low deductibles and peace of mind. Ask your dealer for details or go to [www.powergard.com](http://www.powergard.com) or [www.JohnDeere.com/PowerGard](http://www.JohnDeere.com/PowerGard).

\*Free subscription to JDLink expires five years from date of purchase of qualifying 7R Tractor. This subscription will not be automatically renewed. To continue your subscription, you must actively renew and subscription fees shall apply. For additional details, see footnote on page 15.

\*\*PowerGard Protection Plan extended warranty covers failures due to defective materials or original workmanship of covered components. Customers have a choice between either the Limited (engine & powertrain) coverage form or the Comprehensive (full-machine) coverage form. See your dealer or [JohnDeere.com/PowerGard](http://JohnDeere.com/PowerGard) or [JohnDeere.ca/PowerGard](http://JohnDeere.ca/PowerGard) for details.



# SPECIFICATIONS 7R TRACTORS

Manufacturers Estimates	7R 210	7R 230	7R 250	7R 270	7R 290	7R 310	7R 330	7R 350
<b>POWER</b>								
Rated PTO power (hp SAE) at rated engine speed (2100 rpm)†	170 hp (126 kW)	189 hp (140 kW)	205 hp (152 kW)	224 hp (167 kW)	242 hp (180 kW)	260 hp (193 kW)	260 hp (193 kW)	260 hp (193 kW)
Rated engine power PS (hp ISO) at rated engine speed (ECE-R120)*	210 hp (154 kW)	230 hp (169 kW)	250 hp (184 kW)	270 hp (199 kW)	290 hp (213 kW)	310 hp (228 kW)	330 hp (243 kW)	350 hp (257 kW)
Max engine power PS (hp ISO) at 1900 engine rpm (ECE-R120)	231 hp (170 kW)	253 hp (186 kW)	275 hp (202 kW)	297 hp (218 kW)	319 hp (235 kW)	341 hp (251 kW)	363 hp (267 kW)	385 hp (283 kW)
Intelligent Power Management* (Available)				30				25
Additional engine horsepower PS (hp ISO) at 2,100 RPM (rated speed)								
PTO torque rise	40%			38%	40%			
PTO power bulge				10%				
<b>ENGINE</b>								
Manufacturer (EU Stage V)	Deere PowerTech™ PVS 6.8L	John Deere PowerTech™ PSS 6.8L			John Deere PowerTech™ PVS 9.0L			
Rated speed				2,100 rpm				
Aspiration (US EPA Final Tier 4)	Single turbocharger, variable geometry turbo	Dual turbochargers, variable geometry turbo with fixed geometry turbo in series			Dual stage		Single turbocharger, variable geometry turbo	
Filter, engine air				Dual stage				
Displacement	415 cu in (6.8L)					549 cu in (9.0L)		
Bore and stroke	4.19 in (106 mm) x 5.00 in (127 mm)					4.66 in (118.4 mm) x 5.35 in (136 mm)		
Compression ratio	17.2:1	16.7:1			16.0:1			
Lubrication	Full-pressure, full-flow filtration with bypass							
Filter, oil	Replaceable cartridge style oil filter							
<b>FUEL SYSTEM</b>								
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 w/water indication sensor and drain							
Filter, secondary	2 micron spin-on element							
<b>TRANSMISSIONS</b>								
e23 PowerShift 40K, 26 mph (40 km/h)	Standard (42 km/h @ 1680 rpm w/grp 47 tires, 42 km/h @ 1600 rpm w/grp 48 tires, 42 km/h @ 1520 rpm w/grp 49 tires)			Standard (42 km/h @ 1600 rpm w/grp 48 tires, 42 km/h @ 1520 rpm w/grp 49 tires)		Standard (42 km/h @ 1600 rpm w/grp 48 tires, 42 km/h @ 1520 rpm w/grp 49 tires)		NA
e23 PowerShift 50K, 31 mph (50 km/h)	Available (50 km/h @ 2000 rpm w/grp 47 tires, 50 km/h @ 1900 rpm w/grp 48 tires, 50 km/h @ 1800 rpm w/grp 49 tires)			Available (50 km/h @ 1900 rpm w/grp 48 tires, 50 km/h @ 1800 rpm w/grp 49 tires)		Available (50 km/h @ 1900 rpm w/grp 48 tires, 50 km/h @ 1800 rpm w/grp 49 tires)		NA
John Deere Infinitely Variable Transmission, 26 mph (42 km/h)	Available (42 km/h @ 1440 rpm w/grp 47 tires, 42 km/h @ 1360 rpm w/grp 48 tires, 42 km/h @ 1290 rpm w/grp 49 tires)			Available (42 km/h @ 1360 rpm w/grp 48 tires, 42 km/h @ 1290 rpm w/grp 49 tires)		Available (42 km/h @ 1360 rpm w/grp 48 tires, 42 km/h @ 1290 rpm w/grp 49 tires)		
John Deere Infinitely Variable Transmission, 31 mph (50 km/h)	Available (50 km/h @ 1800 rpm w/grp 47 tires, 50 km/h @ 1700 rpm w/grp 48 tires, 50 km/h @ 1620 rpm w/grp 49 tires)			Available (50 km/h @ 1700 rpm w/grp 48 tires, 50 km/h @ 1620 rpm w/grp 49 tires)		Available (50 km/h @ 1700 rpm w/grp 48 tires, 50 km/h @ 1620 rpm w/grp 49 tires)		
<b>ELECTRICAL SYSTEM</b>								
Two batteries in parallel								
Alternator/Battery	Standard: 210 amp / 12 volt, Available: 250 amp / 12 volt							
Total cold cranking amps	1850 (2-925 CCA grp 31 batteries)							
<b>REAR AXLE FINAL DRIVES</b>								
Description	Inboard planetary three pinion							
<b>REAR AXLES</b>								
Rack-and-pinion								
110 x 3010 mm diameter (4.33 x 118.5 in)				Standard				NA
110 x 2550 mm diameter (4.33 x 100.4 in)				Available				NA
110 x 2808 mm diameter (4.33 x 110.5 in)				Available				NA
120 x 2550 mm diameter (4.72 x 100.4 in)				Available				
120 x 3010 mm diameter (4.72 x 118.5 in)				Available				Standard
<b>REAR WHEEL EQUIPMENT</b>								
Description	Group 47/48/49 tires available as singles/duals					Group 48/49 tires available as singles/duals		
<b>FRONT AXLES</b>								
1150 Series MFWD - tread range 60 to 88 in (1524 to 2235 mm)	Standard				NA			
1300 Series MFWD - tread range 60 to 88 in (1524 to 2235 mm)	NA				Standard			
TLS - tread range 60 to 88 in (1524 to 2235 mm)				Available				
TLS with front brakes, available with 40km/h, standard with 50km/h				Available				
<b>HYDRAULIC SYSTEM</b>								
Closed-center, pressure/flow compensated								
Selective control valves	Standard: 4, Available: 5 - 6							
Main pump, axial piston (displacement)	Standard: 63 cc, Available: 85 cc							
Maximum pressure	2,958 psi (20,400 + or- 300 kPa)							
Rated flow, 63cc pump	43 US gpm (162 lpm)							
Rated flow, 85cc pump	59 US gpm (223 lpm)							
Available flow at a single rear SCV	35 US gpm (132 lpm)							
Available flow at a single front SCV	33 US gpm (126 lpm)							
Take out oil capacity	Standard: 65 L, Available: 85 L (aux reservoir)							
<b>3-POINT HITCH - REAR</b>								
Electrohydraulic sensing								
Category 3/3N w/ Quick-Coupler	Standard: 15,200 lb (6894 kg)							
Category 3/3N w/ Quick-Coupler	Available: 17,300 lb (7847 kg) [requires 120mm dia axle]							
<b>REAR POWER TAKE OFF (PTO)</b>								
Independent								
1-3/4" in, 20-spline, 1,000-rpm				Standard				
1-3/4" in, 20-spline, 1,000-rpm; capable of 1-3/8" in 540/1000 rpm				Available				
1-3/4" in, 20-spline, 1,000-rpm; capable of 1-3/8" in 540/1000/1000E rpm				Available				
1-3/4" in, 20-spline, 1,000-rpm; capable of 1-3/8" in 540/540E/1000 rpm				Available				
PTO Speed @ Engine rpm	(540/1000 PTO rpm @ 1950 engine rpm) (540E/1000E PTO rpm @ 1750 engine rpm)							
<b>3-POINT HITCH - FRONT</b>								
Category 3N								
Lift capacity through full lift range, with hook style ends (measured 24 in behind hook point, OECD)	6,994 lb (3150 kg) lift capacity (ground engaging requires premium front hitch)							
Lift capacity through full lift range, with hook style ends (measured 0 in behind hook point, OECD)	7,690 lb (3488 kg) lift capacity (ground engaging requires premium front hitch)							
<b>INTEGRATED TECHNOLOGY</b>								
Integrated AutoTrac™	Standard							
Modular Telematics Gateway (MTG)	Available with JDLink™ hardware, activations, and ethernet harnesses (availability dependent upon destination)							
Service Advisor™ Remote	Available with JDLink™ hardware and activations							
Command Center™ 8.4 in (213 mm) w/ 4200 processor	Availability dependent upon destination							
Command Center™ 10 in (254 mm) w/ 4600 processor	Availability dependent upon destination							
<b>CAPACITIES</b>								
Fuel tank, e23				122 gal (463 L)				
Fuel tank, IVT				135 gal (513 L)				
DEF tank				6.9 gal (26.2 L)				

Specifications and design subject to change without notice. Pre-production models shown.

\*John Deere Standard RES10080, SAE Standards J1995.

† PTO power for IVT models. Does not include available equipment losses. Nominal data is metric. Standard data is converted from metric data. Use metric for all calculations.



Manufacturers Estimates	7R 210	7R 230	7R 250	7R 270	7R 290	7R 310	7R 330	7R 350
<b>WHEELBASE</b>								
MFWD / TLS					115.2 in (2925 mm)			
MFWD / TLS axle clearance - 1300 axle, G43 420/85R34 tires					19.5 in (495 mm)			
Turning radius - 380/85R34 group 42 tires @ 60" spacing, 1300			23 ft (7 m)				NA	
Turning radius - 600/70R30 group 43 tires @ 74.1" spacing, TLS					22 ft (6.7 m)			
Turning radius - 620/75R30 group 44 tires @ 82" spacing, TLS					28.5 ft (8.7 m)			
See OM for additional configurations								
<b>AVERAGE BASE WEIGHT</b>								
IVT, 85cc pump, 4 SCVs, PTO, CAT4 drawbar, 600/70R30 front tires, 710/70R42 rear tires, TLS, front hitch					25,700 lb (11700 kg)			
IVT, 85cc pump, 6 SCVs, PTO, CAT4 drawbar, 480/70R34 front tires, 480/80R50 rear tires, TLS					24,300 lb (11000 kg)			
e23, 63cc pump, 4 SCVs, PTO, CAT3 drawbar, 18.4R46 rear tires, 420/90R30 rear tires, TLS					22,200 lb (10000 kg)			NA
Max ballast level		145 lbs/SAE PTO HP - see OM for specific ballast instructions				135 lbs/SAE PTO HP - see OM for specific ballast instructions		
Max payload capacity		See OM for details on tractor loading						
<b>CAB</b>								
Cab glass area					70.61 sq ft (6.56 sq m)			
Cab volume					114.42 cu ft (3.24 cu m)			





# Supported by one of the most responsive dealer networks in the business

Nobody cares more about keeping your equipment in solid working order than your John Deere dealer. With a complete inventory of genuine John Deere parts, highly trained service technicians, and a thorough understanding of your business, your John Deere dealer knows how to keep you and your equipment up and running.

A strong name in equipment, and a strong dealership network: get it all with John Deere.

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