

# 7R Series Tractors

176 to 229 kW (240 to 312 hp) 97/68 EC with Intelligent Power Management





## Innovation you can feel, wherever work takes you

Whatever the tasks, on the field or on the road, your new John Deere 7R Series tractor will exceed your expectations for performance, uptime and cost of operation. We've given the 7R Series more power and introduced new standard features and options to deliver maximum return on your investment. Whether the capabilities you need are to get your crop in on time, work in heavy land or transporting on the road, you'll find everything you need to increase the profitability of your business.

Performance at a lower operating cost, wherever the job takes you.







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## The ultimate workhorse for transport, draft and PTO applications

The 7R Series is a power-dense Stage III B-compliant tractor with long wheelbase and short length, giving you manoeuvrability and strength for a broad range of applications. The 7210R and 7230R are built with the PowerTech PSX 6.8L engine, while the 7250R, 7270R and 7290R feature the PowerTech PVX 9.0L. Both of these engines deliver uncompromising performance, outstanding fuel efficiency and reduced emissions using **DieselOnly** technology, which means no additional acquisition costs.

The 7R Series delivers all the hitch-lift capacity you need to handle any attachment including large and wide implements. It is also the bright choice for working the night shift, fitted with the latest John Deere 360° LEDs to deliver higher quality light with less power consumption than conventional sealed beam bulbs and a life expectancy of more than 10,000 hours.

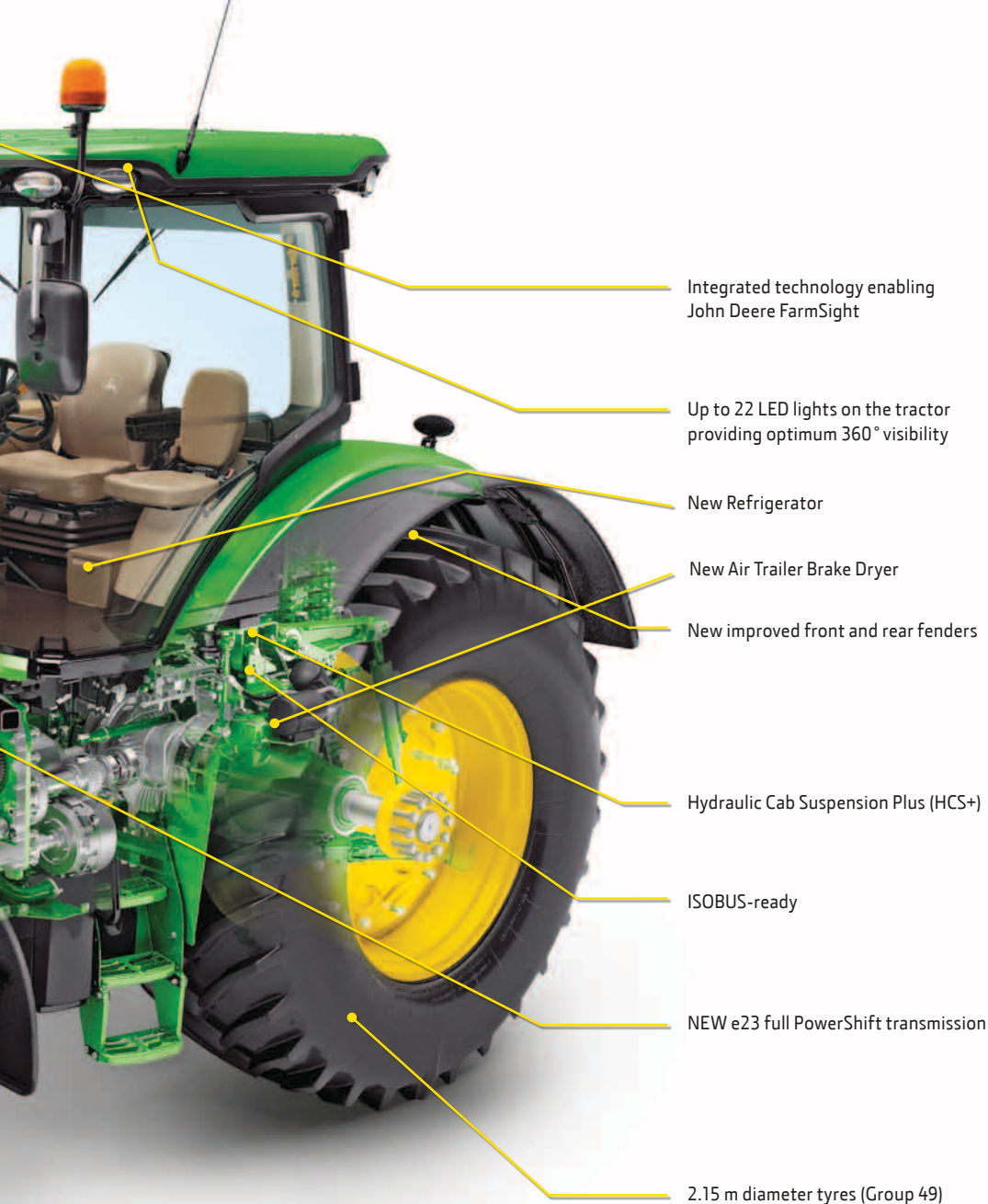
### Model year 2014 John Deere 7R Series

Model	Rated Engine Horsepower (97/68EC)	PTO Horsepower
7210R	210	170
7230R	230	189
7250R	250	205
7270R	270	224
7290R	290	242

- Spacious, high visibility CommandView III Cab and CommandCenter controls
- New CommandARM with 40° of seat swivel and backrest extension
- Easy control of hydraulics via new joystick
- New Generation 4 CommandCenter with 7" or 10" touchscreen
- New cooling package
- Additional horsepower up to 323 hp with IPM
- Triple-Link Suspension Plus (TLS+)
- Integrated front hitch







### Design your tractor the way you want it

John Deere 7R Series tractors perform the widest range of field and transport tasks. They are customisable to suit your most frequent applications, typical ground conditions, driving style and preferences. John Deere gives you the power of choice and we'll help you down to the last detail. First, choose the model according to your power requirements. Then you can select from three transmission types: the automatic shifting capabilities of CommandQuad, the new, e23 transmission with 23 forward and 11 reverse gears or the convenience of AutoPowr, now with four operation modes including pedal mode.

With Triple-Link Suspension Plus (TLS+), cab suspension and ActiveSeat, the 7R Series provides the most comfortable ride in farming, on-road and off-road. Select the Premium cab package for even better inside cab noise level, front and right sunshades, electrically telescopic mirrors and on-board refrigerator. Front hitch options give you up to 5,200 kg lift capacity. Need the ultimate in driving performance? Then select ActiveCommand Steering to reduce steering effort and improve comfort and control. And talking of control: the 4100 CommandCenter 7" touchscreen comes as standard or you can opt for the premium 4600 CommandCenter 10" touchscreen. With touch-screen menus, these are ideal when using integrated AMS functions such as AutoTrac.

Larger and wider 2.15 m (Group 49) tyres with a bigger footprint for better power transfer, increased performance and minimum soil compaction.





## Stay in your comfort zone – whatever the job, whatever the load

If your business involves towing very large loads, such as slurry tankers or driving long distances, the 7R Series is the ideal tractor. It's fast and highly manoeuvrable, with Active Command Steering (ACS), Triple-Link Suspension Plus (TLS+) and extra strong front-axle brakes. The long wheelbase and hydraulic cab suspension mean you get to the next job in comfort and at speed. John Deere offers a wide range of comfort and convenience features – an important consideration, since reduced operator fatigue boosts productivity and efficiency.

Whether in the field or on the road, ACS reduces steering effort. Exclusive John Deere Triple-Link Suspension Plus increases productivity in field, at loader and transport operations. It also improves operator comfort.

John Deere's ActiveSeat eliminates up to 90% of vertical movement, to provide the smoothest riding-seat in the agricultural industry. The 7R Series features a powerful hydraulic braking system as standard and can be equipped with an air or hydraulic brake coupler, or both.

The 7R Series beats operator fatigue like no other tractor on tillage, draft and transport applications.

Additional braking provides greater stopping power for 50 km/h transmissions, optional on 40 km/h transmissions.





# RIDE TO SUCCESS









## Power and versatility for the toughest PTO applications

The John Deere 7R Series tractors are the premium versatile solution for all heavy duty arable farming applications and contract work. These tractors deliver power with precision for the widest range of attachments, optimising productivity and profitability. They are like self-contained power plants combining up to 242 hp for power take-off applications, reduced PTO fuel consumption and optional front as well as rear PTO. You get up to three speeds for your rear PTO, including the “E” economy speed, which runs at 1750 engine rpm. For even greater operator convenience and efficiency, PTO speeds are shiftable directly via the CommandCenter.

You need to be versatile for different applications? The 7R Series provides a rapid and powerful PTO. Front hitch options give the power you need up front with lift capacity up to 5,200 kg while integrated front hitch and PTO make the 7R Series extremely versatile. You get up to 175 PTO hp, up to two SCVs and a pushbar for use with ground-engaging implements. The front hitch is situated close to the front axle for superb control.

The 7R Series is the ideal combination for arable farming and contract work.

Fit any farm attachment – including wide implements such as spreaders.





## Efficiency in the field

What makes the new John Deere 7R Series so efficient in the field? For a start, it covers more hectares per hour than ever before, reducing cost of operation by spreading them over a larger area in all tillage operations. Integrated John Deere technology, such as Intelligent Power Management (IPM), combines with Agricultural Management Solutions (AMS) including AutoTrac and iTEC Pro to reduce input costs per hectare such as fuel, fertiliser and seed.

Drive at the optimum speed for the conditions while minimising fuel consumption. The new e23 transmission with Efficiency Manager provides the widest gear selection on the market. You can run in Full Auto, Custom or Manual mode while maximising efficiency and power as the conditions or applications change. With a choice of three hydraulic pump options up to 223 l/minute, the hydraulics in the 7R Series require fewer parts, fewer hydraulic connections and shorter hydraulic lines. The result is more power and reliability. AutoTrac reduces overlap by up to 90% and eliminates over and under-laps with hands-free, GPS-assisted steering. This not only saves you time, fuel and labour costs, used with the easy to set up and use iTEC Pro Guidance, it also gives operators smooth runs and agile turns even on tough tillage applications.

AutoTrac reduces overlap by up to 90%.

The 7R Series finds the ideal speed for your application – delivering optimum fuel efficiency.





# PERFORMANCE & PRECISION





## Sitting comfortably? Then let's begin

At John Deere we take operator comfort and ergonomics very seriously, because greater comfort and convenience means less stress and less fatigue, and that in turn means a more productive working day. So get ready for the ride of your life. The spacious new CommandView III Cab is in a class of its own, with John Deere adaptive hydraulic-pneumatic suspension (HCS Plus) adjusting to changing ground conditions and requiring no programming for road or field applications. The redesigned seat includes fore-aft and lateral attenuation and lumbar support.

John Deere's exclusive ActiveSeat ensures a smooth ride on the road and in the field. The optional leather trim package features a leather-wrapped steering wheel, a heated leather operator seat and a leather instructor seat. The roof-integrated air-conditioning system with high performance air flow and optional automatic temperature control is easily set from the armrest. There's lots more to look forward to. In fact, the slender engine bonnet and wraparound visibility of the anti-glare glass surfaces let you keep a close watch on your work from any angle.

The cab is very effectively isolated against noise and vibrations from the engine, transmission, and chassis. Laminated glass, sound barrier and carpet floor mat improve the sound quality of the CommandView III cab by up to 2.5 decibels; heated leather seats, ACS, and exclusive TLS axle offerings provide best-in-class comfort. There's plenty of storage space too – this cab offers you all you need to feel comfortable during the course of a long working day. You can also call your family and friends using the Bluetooth connectivity located on the CommandARM.

### Premium cab package

Select the Premium cab package for additional comfort, including the seat bottom tilt and backrest extension. The package also includes a right hand wiper, right hand and rear sunshade, electrically telescopic mirrors, special sound dampening materials, power strip with convenience plug adapter and last but not least, the onboard refrigerator. Enjoy a fresh lunch and a refreshing drink in comfort and style.

Plenty of cab space and ergonomic design eliminates stress during demanding applications.



The leather trim package features a leather-wrapped steering wheel, a heated leather operator seat and a leather instructor seat.



Choice of full-colour touchscreen CommandCenter, which include AMS functionality such as AutoTrac: the standard 7" 4100 and the premium 10" 4600.













## Your decision support centre

The 7R Series makes sophisticated ag technology easy to operate. Everything is within easy reach on the CommandARM control stack and clearly viewable on the Generation 4 CommandCenter display, which is as intuitive to use as a smartphone. This provides increased efficiency, supports operator confidence and maximises uptime. Modular software design allows for future growth.

### Easy SCV control

On the CommandARM, the selective control valve levers and couplers are colour-coded to simplify recognition. For convenience and ease of use, all SCVs can be operated via a mid-mount electro-hydraulic valve stack with paddle pod control, or, for the ultimate in manoeuvrability, a mid-mount electro-hydraulic valve stack with joystick.

The Generation 4 CommandCenter is the tractor's central information system. Swivel the seat up to 40° and the CommandCenter will follow, so information is always in sight and sideward and rearward visibility optimised, further reducing operator fatigue. The CommandCenter also allows you to programme settings and adjust the readings to a specific operation.

Displays are an essential requirement for executing precision farming applications. Select the 4100 CommandCenter with its 7" touchscreen or the 4600 CommandCenter with a 10" touchscreen. They function just like a tablet with touch-screens: navigating through the options is simplified via menus, shortcuts and with context-sensitive help. AMS applications like AutoTrac can be operated directly via the Generation 4 CommandCenter.

Do you enjoy music while at work? Four high quality speakers and a powerful subwoofer are available as options. The Premium Radio Package also plays CDs and MP3s and supports USB as well as hands-free Bluetooth connectivity.

On the CommandARM you can reserve up to 4 iTEC buttons for automated functioning when working in field and headland.

Hydraulic control: with CommandQuad or e23 transmission you can change the speed (buttons 5 & 7 to shift gears up and down).

The Generation 4 CommandCenter moves with you for ease of operation.





## Precision control for maximum productivity

Automatic guidance injects more comfort while reducing input costs: **AutoTrac** enables you to master straight and curved tracks, work comfortably in low visibility situations, while reducing skips and overlaps, which ultimately saves you fertiliser, seed and fuel. With the new CommandCenter you are ready to go. You just need the StarFire 3000 receiver and an AutoTrac activation.

You want more? **Intelligent Total Equipment Control (iTEC Pro)** integrates AutoTrac automatic steering and the implement management systems to control tractor speed, raise front and rear mounted implements and differential lock engagement. This allows hands-free turns, while reducing soil compaction.

### Tractor Automation

This exciting and award-winning concept makes the implement talk to the tractor via ISOBUS and adjust everything from tractor speed to hydraulic valves to ensure maximum productivity.

### John Deere FarmSight: Profit from Insight

With the new 7R Series you can benefit from the latest precision farming technologies, enabling you to experience John Deere FarmSight, our comprehensive approach for new levels of productivity and farm management.



World class experience: Utilising the GreenStar 3 2630 display and the StarFire 3000 receiver you can run the full spectrum of AMS solutions – from guidance and documentation to advanced ISOBUS capabilities.





## Optimise performance – from your office

### **John Deere Telematics**

JDLink combines your machine's build-in CANBUS system with satellite positioning and wireless communication technology to let you remotely optimise the 7R's performance capabilities and identify potential problems before the current operator even notices. The system continuously collects and transmits machine data via mobile phone technology to enable machine monitoring, proactive maintenance and remote diagnostics.

### **John Deere Remote Display Access\***

John Deere Remote Display Access takes remote support to a new level. Using the JDLink infrastructure to connect to the GreenStar 3 2630 display in the cab it enables farm managers and dealers to assist operators remotely with machine setup, setting adjustments and operation for tractors, combines, forage harvesters and sprayers as well as ISOBUS implements. It is almost as if you are in the cab. This means: faster service and maximum machine uptime.

\*available in selected markets only

John Deere Remote Display Access allows farm managers and dealers to assist operators remotely by connecting to the GreenStar 3 2630 display.





## More power to the ground and the best steering in any tractor

We know that you are looking for additional power density in your next tractor. The new 7R Series tractors deliver increased power density, making it easier to transport heavy loads and undertake demanding draft and loading work whilst using less fuel. With intelligent power management (IPM) the tractors deliver a further 30 horsepower for all models from the 7210R to the 7270R and 22 horsepower for the 7290R for PTO and transport applications.

You want maximum axle movement to ensure permanent ground contact in the field or uneven surface for optimised power transfer? That's why suspended axles are better than rigid front axles. Triple-Link Suspension Plus (TLS+) integrated self-levelling front suspension helps to put significantly more power to the ground – both in the field and on the road. Simply select maximum pressure from the CommandCenter to accommodate the transfer of heavy loads with minimal front axle movement. TLS+ self-levels at start-up and whenever the tractor speed exceeds 1.5 km/h. Another plus: thanks to its adaptive features, such as self-levelling and automatic adjustment of axle sensitivity, TLS+ can handle all axle load conditions smoothly.

### Reduced steering effort

Active Command Steering (ACS) is a very robust and comprehensive steering system in any tractor. Whether in the field or on the road, ACS reduces effort and improves operator comfort and control:

- Improves line holding at transport speeds
- Just 3.5 turns lock-to-lock in the field and 5 turns lock-to-lock at transport speeds
- Eliminates hand wheel backlash and drift
- Improves control when cornering at transport speeds
- Smaller hand wheel diameter for improved operator comfort and visibility
- Maintains operator feel and touch-points of traditional steering column systems
- Fully integrates with AutoTrac guidance systems

Self-levelling front suspension gives incredible traction for a relatively lightweight tractor.







## Cab suspension

Along with TLS+ front axle suspension, cab suspension improves operator comfort, which enables increased speed over rough terrain. It also improves health and safety by eliminating whole-body vibration and potential motion sickness.

Available as part of the Premium cab package, ActiveSeat uses electro-hydraulic technology in combination with air suspension, providing the smoothest riding seat in the agricultural industry. ActiveSeat senses the tractor's vertical movement and actively positions the seat to reduce vertical movement. ActiveSeat thereby isolates the operator from up to 90 % of vertical movements in typical farm and transport applications.

Hydraulic Cab Suspension Plus (HCS+) is controlled by two hydraulic rams feeding oil into two nitrogen-filled accumulators. The compressibility of the gas provides the suspension element for a movement of 50 mm up and 50 mm down. An active dampening system anticipates loads and braking to maintain cab balance, ensuring that the ride height remains centrally positioned, irrespective of the size or weight of the operator. At the same time, the operator retains an accurate feel for the tractor and the ground below.



Active dampening anticipates loads and braking to maintain cab balance.



## Easy on your eyes

The LED lighting on John Deere 7R Series tractors provides high quality white illumination for easier visibility, high contrast and even more light transmission between cab and bonnet. Result: less strain on the eyes.

With 40% greater width and 10% greater rear coverage requiring 45% less amperage than HID (high intensity discharge) lighting, LED lights relieve the draw on your charging system.

They last much longer than conventional lighting, too. LED lighting features a life usage rating of more than 10,000 hours and there is less likelihood of accidental damage. LED lights have no fragile filaments and they are resistant to heat, cold and shock.

LED lights provide natural light at low temperature, reducing eye and body fatigue – and they last longer.

### Productivity right through the night!

Whether it's ploughing, cultivating or harvesting you may need to work through the hours of darkness to get the job done. That's why we designed 7R Series tractors to shine brighter than ever with an easy to operate lighting system that covers all corners around the tractor for enhanced visibility and increased productivity.

#### 22 LED lights providing 360° visibility:

- 6 in the bonnet plus 2 Halogen headlights
- 12 in the cab roof
- 2 left and right on the cab cross beam
- 2 on the rear wheel covers

2 optional auxiliary lights are available as a field kit for large front mounted implements and front loaders

All lighting is easily controlled via the CommandCenter.



Greater visibility allowing you to work through the night.





THE BRIGHT CHOICE





# MAXIMUM EFFICIENCY



## Seven advantages of John Deere 7R Series tractors

1. **Improved fuel efficiency:** low consumption DieselOnly, with max 607 l fuel tank for maximum uptime
2. **Spectacular performance:** 10 % power bulge
3. **Low emissions:** full EU28+ standard compliance without compromising power
4. **Excellent transmission:** three offerings at 40 and 50 km/h
5. **Powerful hydraulics:** benchmark 223 l/minute
6. **Outstanding comfort:** new CommandView III Cab
7. **Smooth ride:** award winning Active Command Steering reduces hand steering by 75 %, TLS gives optimum suspension



## The JD PowerTech Stage III B engine – better pulling reaction, enhanced transient response

Keep things simple with the DieselOnly approach: For maximum performance, the 7R Series 9.0 I PowerTech PVX engine delivers up to 290 hp at rated speed and up to 312 hp with Intelligent Power Management. The 6.8 I PowerTech PSX engine delivers up to 230 hp rated hp and 260 hp with IPM for transport and non-stationary PTO applications. As a result, you get acceleration when you need it most, such as travelling uphill with a heavy load. Plus, the up to 607 l fuel tank provides many productive hours of non-stop operation. The new John Deere 7R Series tractors offer a completely enhanced cooling package, for less noise, greater fuel economy and better performance. Improved air flow, a 15% increase in the total cooler surface area and a new pull-style fan all improve cooling efficiency. Plus, the relocated air vents eliminate heat haze.

### Meeting the latest emission standards

John Deere 7R Series tractors offer proven, efficient, single fluid Stage III B engine solutions for full emissions compliance. Eco-transmission reduces engine RPM and fuel consumption to reach a top speed of 40 kph at 1480 rpm and 50 kph without eco at 1804 rpm. The single fluid solution also eliminates investment costs associated with diesel exhaust fluid purchasing, storage and handling equipment.

### Series Turbocharger (6.8 I PowerTech PSX engine only)

Fresh air is drawn into the low-pressure turbocharger and compressed. Then it is drawn into the high-pressure turbocharger for additional compression, before being routed through a charge air cooler and into the engine's intake manifold.

### Variable Geometry Turbocharger (VGT) (9.0 I PowerTech PVX engine only)

Fresh air is drawn in, pressurised and routed through a charge air cooler into the engine's intake manifold.

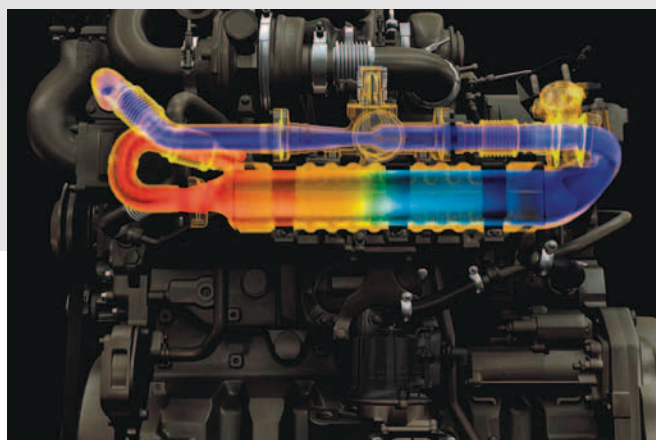
### Cooled Exhaust Gas Recirculation (EGR)

Cooled EGR lowers peak combustion temperatures and reduces nitrogen oxides (NOx). The variable turbo charge can change the angle of the vents to adjust the charge air pressure for optimum performance.

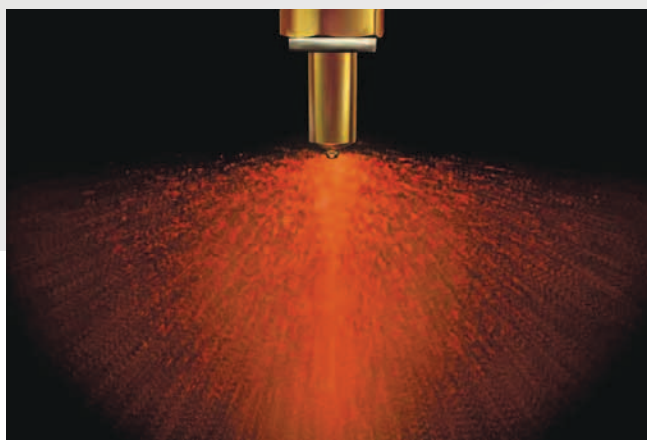
### Exhaust filters remove even the smallest particle

The diesel oxidation catalyst (DOC) and diesel particulate filter (DPF) used with John Deere PowerTech PSX and PVX engines remove particles down to 2.5 µm.

Whereas other emissions systems need expensive additives, John Deere achieves compliance with advanced technology, cooling the gases then removing particles.



The high pressure fuel injection system monitors all parameters for smooth running, rapid response to load changes and fuel economy.



The latest 7R Series tractors feature significant enhancements to the cooling system for improved efficiency and reduced noise.





## Choose the right transmission for your conditions

Which transmission is ideal for your application? Do you prefer automatic or shift? You have the power of choice: The John Deere 7R Series provides three options at 40 and 50 km/h, all of them easy to use even for an inexperienced operator. You can choose from three operating modes: Full Auto, Custom or Manual and maximise power to meet the exact requirements if the current conditions or applications change. Select the pedal drive mode (available across all infinitely variable transmissions) to control ground speed separate from engine speed in PTO applications such as mowing.

### CommandQuad with Efficiency Manager

Gear and throttle work hand in hand to reduce fuel consumption while increasing productivity. Select the fully automated mode for maximum fuel efficiency or, for targeted speed application, the manual mode with five ranges and four power speeds per range. Both are convenient and easy to use from the CommandARM control and a left hand reverser enables easy direction changes. The Eco power button reduces fuel consumption for less operating cost per output. Available for 7210R and 7230R.

### e23 transmission with Efficiency Manager

e23 is a unique, field-proven and economical transmission solution with 23 forward and 11 reverse speeds for smooth shifting, e23 transmission maximises efficiency and productivity in all conditions and for all applications. It combines all the benefits of a mechanical, full PowerShift transmission with the ease of use of an AutoPowr transmission. e23 transmission comes with three operating modes: Full Auto, Custom and Manual. You can shuttle shift with the left hand or right hand reverser without clutching. The top forward gears maintain maximum speed at constant RPM. e23 transmission offers overall fuel savings averaging two percent – a significant financial gain over the machine's lifetime. Available for all models.

### AutoPowr

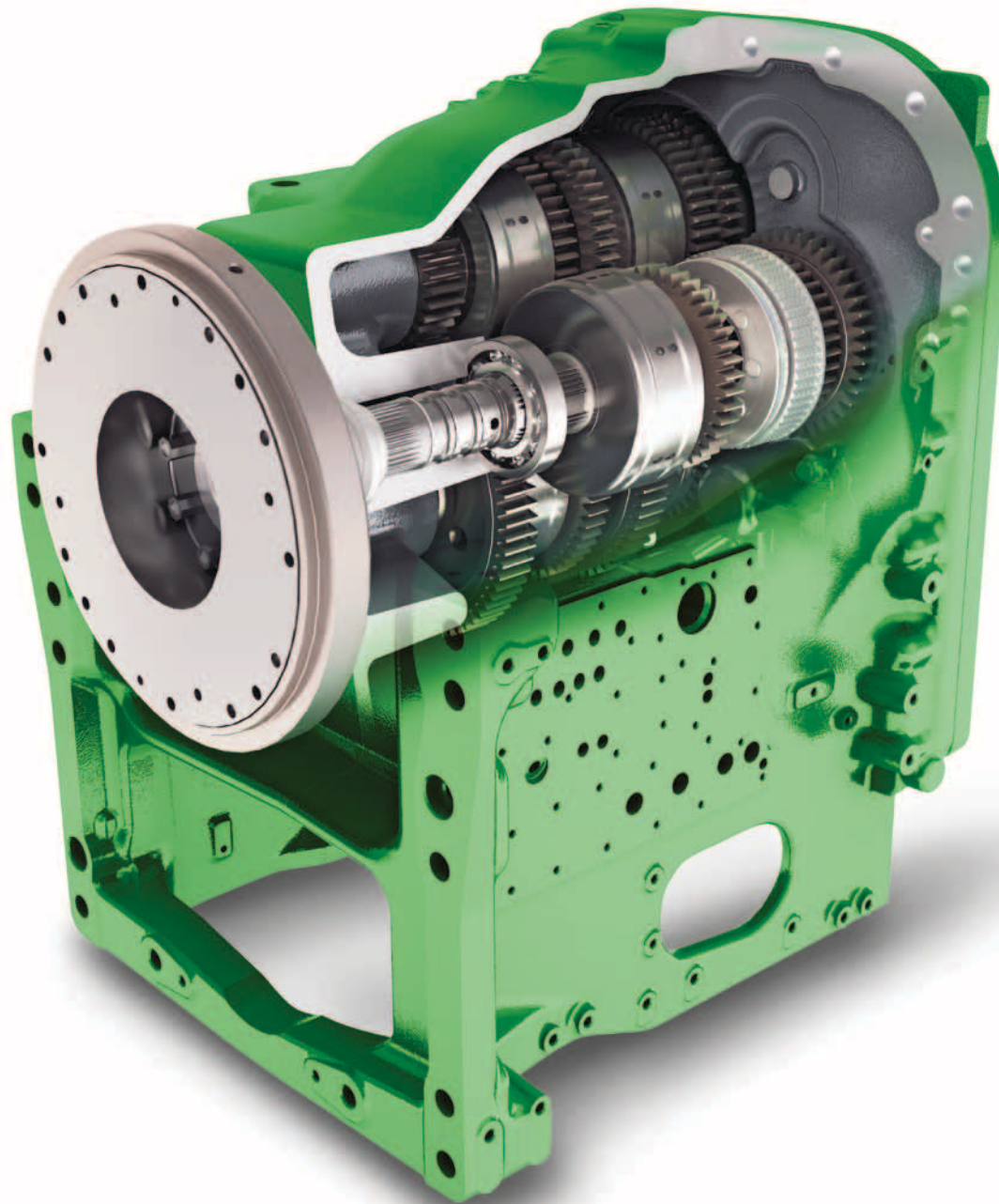
AutoPowr lets you shift smoothly from start-up to maximum speed with a single lever and absolutely no clutching. Just choose a specific speed and AutoPowr keeps it steady by automatically responding to changing load conditions. There are four modes available: Full Auto, Custom, Manual and the new Pedal mode, which enables you to control ground speed separate from engine. Available for all models.

With 23 forward and 11 reverse speeds, the 7R Series offers e23 transmission with more gears than any tractor in its class.



The CommandQuad offers automatic shifting capabilities, enhancing operator convenience and productivity.





**e23 transmission is available on all 7R models**

e23 transmission delivers the strength to handle sudden, high torque loads while maintaining responsive, application-based shifting

With the new e23 transmission gearbox, the 7R now has 23 automatic forward gears

11 reverse gears allow for greater speed and power when reversing

Gears F21–F23 maintain maximum ground speed at reduced rpm when reaching 40k or 50k for better fuel efficiency.

e23 transmission with Efficiency Manager



## Precision hydraulic power, smoothly delivered

How much hydraulic power does your application need and at what exact moment? Selecting the right hydraulic performance for any application is easy and precise with John Deere 7R Series tractors. They provide up to eight independent selective control valves (SCVs) (up to six at the rear and up to two at the front) and power all the way up to 223 l/minute: delivering more output, for a broad range of tillage, heavy draft or transport applications.

The hydraulics are easy to manage from the intuitive on-screen controls and can be operated via paddle pod or optionally with joystick control. Simple engineering is the key to the power, flexibility and reliability of the hydraulics in the 7R Series: fewer parts, fewer connections and shorter hydraulic lines than in other machines.

The 7R Series makes light work of heavy duty jobs such as unloading large trailers.



**Depending on your power needs, you have three hydraulic pump options:**

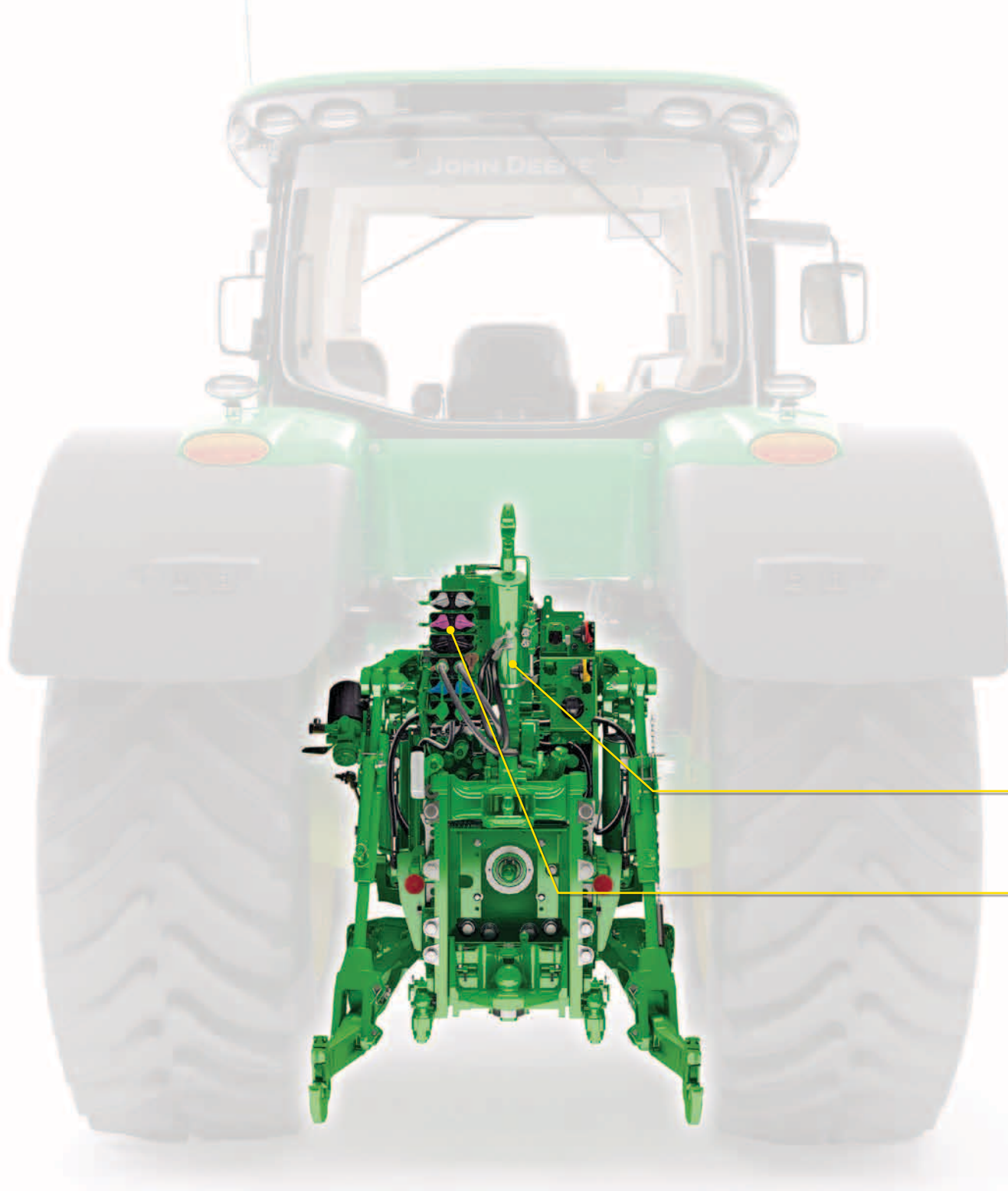
- 45 cm<sup>3</sup> hydraulic pump delivering 121 l/min (for 7210R and 7230R).
- 63 cm<sup>3</sup> hydraulic pump delivering 162 l/min.
- 85 cm<sup>3</sup> hydraulic pump delivering benchmark 223 l/min

The high maximum system pressure means you can look forward to amazing performance even at low engine speeds. Moreover, the high capacity hydraulic filters last for 1500 hours, saving you precious time and money.



The CommandCenter display lets you monitor flow rates and times for maximum control and efficiency.





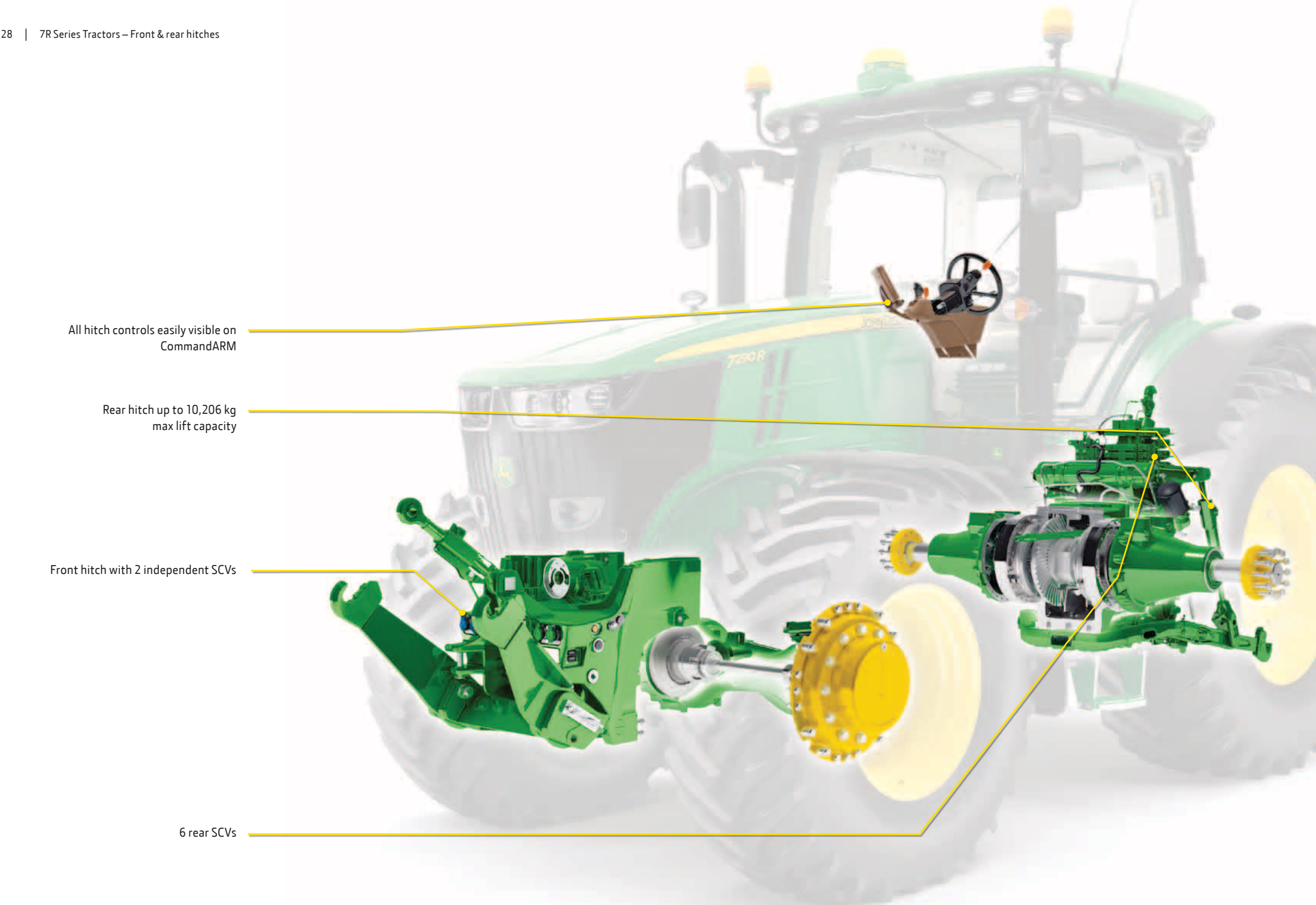
High capacity hydraulic filters last for 1500 hours

Independent hydraulic centre link

Up to six rear SCVs

Three hydraulic pump options up to 223 l/min





All hitch controls easily visible on CommandARM

Rear hitch up to 10,206 kg max lift capacity

Front hitch with 2 independent SCVs

6 rear SCVs



## More lift, more performance, more attachability

With drawbar and ball, pick-up, piton and wagon hitches to choose from, it's easy to find solutions suited to your individual applications – for a wide range of draft applications, including ploughing and seeding. 7R Series hitches also support wider implements such as spreaders, further boosting your productivity. You adjust the height of the hitch and hydraulic topline from the comfort of the cab or within easy reach on the fenders, enabling you to make adjustments on-the-go or easily connect and disconnect attachments.

Powerful rear hitch provides up to 10,206 kg max lift capacity.



### Rear hitch

The 7R Series features increased max. rear hitch capacity and up to six independent SCVs to meet your heavy draft requirements. Find the hitch that delivers the lifting power you need:

- Up to 9,208 kg on 7210R and 7230R
- Up to 10,206 kg on 7250R, 7270R and 7290R

### Front hitch

The optional front hitch (with PTO) offers a lift capacity of up to 5,200 kg and a large lift travel. Plus:

- Remote raise/lower switch
- Front ISOBUS-ready set-up
- Up to 2 independent SCVs
- Optional pushbar
- Remote-controlled front PTO

Fully integrated front hitch includes foldable lower links, up to two independent front SCVs and is ISOBUS-ready.





## Enhanced stability for maximum lifting capacity

It isn't just the 223 l/minute hydraulics or wide range of hitch options that give you unrivalled lifting capacity. The structural chassis of the 7R Series has been conceived for unprecedented power density. The tractors are as light and as compact as possible, for greater manoeuvrability and less soil compaction, while still delivering a maximum of power. Whether you opt for a 7R Series tractor with 6.8 l or a 9.0 l PowerTech engine, the chassis mounting strategy is identical. The structural oil pan concept is particularly advantageous, enabling integrated TLS+ front support, loader mounts and a front hitch pushbar mount.

### Tyres

With the 7R Series you can opt for the largest 2.15 m diameter (Group 49) tyres, giving you greater traction, higher ground clearance, better power transfer, better performance and minimum soil compaction.

2.15 m (Group 49) tyres provide extra traction.





## Parts and Service

### PowerGard\*

Control your operating costs and maximise performance from your machine with maintenance and repair protection programmes from John Deere. There are three flexible options to choose from:

1

#### PowerGard Maintenance

Get regular, scheduled maintenance and enjoy the full benefits and cost savings of using genuine John Deere parts

2

#### PowerGard Protection

Available in connection with PowerGard Maintenance, gives up to four years (or a max. of 7500 operating hours) of additional repair protection for engine, transmission and frame after the regular warranty cover expires.

3

#### PowerGard Protection Plus

For even more financial protection, Protection Plus further builds on the Protection option and covers repair costs of all key components in the tractor.

\*in selected countries only

### Genuine for a reason

John Deere delivers outstanding quality parts that are tailored to enhance the performance, comfort and reliability of your 7R Series tractor. They operate, fit and function perfectly. They even optimise fuel consumption while protecting your health and the environment. John Deere replacement parts actually pay for themselves and keep your machine as strong and reliable as the day you bought it.



#### Genuine for a reason

- Excellent parts availability
- Performance quality parts
- Built to last

Genuine John Deere parts are your best choice for performance and reliability.

### John Deere Tractor Attachments

#### Make a great machine even better!

Personalise your 7R to fit your individual business needs with genuine John Deere attachments. You can choose from a large attachment portfolio. Designed and engineered by John Deere, you can be sure they'll fit properly and are built to last.



#### Add more

- Performance, productivity with e.g. John Deere ballasting and lighting solutions
- Versatility with e.g. John Deere hydraulic and hitch solutions
- Comfort, convenience with e.g. monitor brackets, sun shades





# Specifications

	7210R	7230R	7250R	7270R	7290R
ENGINE PERFORMANCE					
Rated Engine power at 2100 engine rpm (97/68EC), hp (kW)	210 (154.5)	230 (169.2)	250 (183.9)	270 (198.6)	290 (213.3)
Max Engine power at 1900 engine rpm (97/68EC), hp (kW)	231 (170)	253 (186.1)	275 (202.3)	297 (218.4)	319 (234.6)
Nominal Engine Power with IPM at 2100 engine rpm (97/68EC), hp (kW)	240 (176.5)	260 (191.2)	280 (205.9)	300 (220.6)	312 (229.6)
Max Engine Power with IPM at 1900 engine rpm (97/68EC), hp (kW)	249 (182.9)	269 (198.1)	290 (213.4)	311 (228.6)	323 (237.6)
Rated Engine power at 2100 engine rpm (ECE-R24), hp (kW)	202 (148.3)	221 (162.4)	240 (176.5)	259 (190.6)	278 (204.8)
Max Engine power at 1900 engine rpm (ECE-R24), hp (kW)	222 (163.2)	243 (178.6)	264 (194.2)	285 (209.7)	306 (225.2)
Max Engine Power with IPM at 1900 engine rpm (ECE R24), hp (kW)	238.7 (175.6)	258.6 (190.2)	278.5 (204.8)	298.4 (219.5)	310.1 (228.1)
Intelligent Power Management (IPM), hp			30 (Available)		22 (Available)
PTO Torque Rise, %	40	37	40	40	35
Maximum PTO Torque (nominal), Nm	807	897	973	1047	1104
PTO Power Bulge, %	10	10	10	10	10
Engine Peak Torque (Nm) (40 % @ 1600 rpm)	983	1077	1171	1245	1305
Constant Power Range (rpm)	1550–2100	1550–2100	1550–2100	1550–2100	1550–2100
Manufacturer	John Deere PowerTech PSX (B20 Diesel Compatible) 6.8L			John Deere PowerTech PVX (B20 Diesel Compatible) 9.0L	
Rated Speed, rpm			2100		
Type	Diesel, in-line, 6-cylinder, wet-sleeve cylinder liners with 4 valves-in-head				
Aspiration	Dual turbochargers, variable geometry turbo with fixed geometry turbo in series			Single turbocharger, variable geometry turbo	
Filter, engine air			Dual stage		
Displacement, l	6.8			9.0	
Bore and stroke, mm	106 x 127			118.4 x 136	
Fuel Injection System and Control	Electronically controlled, high pressure common rail with electric fuel transfer pump (self priming)				
Filter system	Two Stage with water separator and service indicator light				
TRANSMISSION					
CommandQuad Eco					
20F/20R CommandQuad Transmission, 40 km/h	Option			n/a	
	(40 km/h@ 1567 rpms w/grp 47 tyres, 40 km/h@ 1501 rpms w/grp 48 tyres)				
20F/20R CommandQuad Transmission, 50 km/h	Option			n/a	
	(50 km/h@ 1865 rpms w/grp 47 tyres, 50 km/h@ 1770 rpms w/grp 48 tyres)				
e23 Transmission					
e23 PowerShift Transmission, 40 km/h	Standard			Standard	
	(40 km/h@ 1683 rpm w/grp 47 tyres, 40 km/h@ 1598 rpm w/grp 48 tyres)			(40 km/h@ 1683 rpm w/grp 47 tyres, 40 km/h@ 1598 rpm w/grp 48 tyres, 40 km/h@ 1480 rpm w/grp 49 tyres)	
e23 PowerShift Transmission, 50 km/h	Option			Option	
	(50 km/h@ 2004 rpm w/grp 47 tyres, 50 km/h@ 1902 rpm w/grp 48 tyres)			(50 km/h@ 2004 rpm w/grp 47 tyres, 50 km/h@ 1902 rpm w/grp 48 tyres, 50 km/h@ 1804 rpm w/grp 49 tyres)	
AutoPowr					
JD AutoPowr 0.05–42 km/h				Option	
JD AutoPowr 0.05–50 km/h)				Option	



	7210R	7230R	7250R	7270R	7290R
<b>AXLES</b>					
<b>Rear Axles Final Drives</b>			Inboard planetary three pinion		
100 x 2550 mm diameter (3.94 x 100.4 in.)		Option		n/a	
100 x 2808 mm diameter (3.94 x 110.5 in.)		Option		n/a	
100 x 3012 mm diameter (3.94 x 118.5 in.)		Option		n/a	
110 x 2550 mm diameter (4.33 x 100.4 in.)		n/a		Option	
110 x 3012 mm diameter (4.33 x 118.5 in.)		n/a		Option	
120 x 2550 mm diameter (4.72 x 100.4 in.)		n/a		Option	
120 x 3012 mm diameter (4.72 x 118.5 in.)		n/a		Option	
335 mm Flanged Axle			Option		
<b>Rear Wheel Equipment</b>	Group 47/48 tyres available as Singles/Duals			Group 47/48/49 tyres available as Singles/Duals	
<b>Front Axles</b>					
1150 Series MFWD – tread range 60 to 88 in. (1524 to 2235 mm)	Standard			n/a	
1300 Series MFWD – tread range 60 to 88 in. (1524 to 2235 mm)	n/a			Standard	
TLS – tread range 60 to 88 in. (1524 to 2235 mm)			Option		
TLS with front brakes, available with 40 km/h, standard with 50 km/h			Option		
<b>ELECTRICAL SYSTEM (two batteries in parallel)</b>					
Alternator/Battery			200 amps / 12 Volt – 240 a / 12 Volt		
Total cold cranking amps			1850 (2-925CCA grp 31 batteries)		
<b>STEERING</b>					
Type			(Standard) – Load Sensing, Hydrostatic, Flow Metering with a 406 mm diameter Strg wheel		
Active Command Steering w/electric pump back-up			Variable ratio 15:1 to 23:1 (3.1 – 5.0 turns lock to lock) w/Stability Augmentation and passive tactile feedback – 345 mm diameter strg wheel		
<b>HYDRAULIC SYSTEM</b>					
Type			Closed-centre, pressure/flow compensated		
Selective control valves			3, 4 (Standard), 5, 6		
Main pump, axial piston (displacement)	45 cc Option, 63 cc Standard, 85 cc Option			63 cc Standard, 85 cc Option	
Maximum pressure			2,958 psi (20,400 ± 300 kPa)		
Rated flow, 45 cc pump, lpm	121.1			n/a	
Rated flow, 63 cc pump, lpm			162		
Rated flow, 85 cc pump, lpm			223.3		
Available flow at a single rear SCV			132		
Available flow at a single front SCV			126		
Take out oil capacity	CommandQuad: 85 L; e23 and AutoPowr: 65 or 85 L w/ aux reservoir			e23 and AutoPowr 65 or 85 Litres w/ aux reservoir	



# Specifications

	7210R	7230R	7250R	7270R	7290R
3-POINT HITCH – REAR					
Type			Electro-hydraulic sensing		
Category 3/3N w/Quik-Coupler	Std: 5443 kg 100 mm dia. axle (7300 kg max lift)		n/a		
Category 3/3N w/Quik-Coupler	Opt: 6894 kg 100 mm dia. axle (9208 kg max lift)		Standard: 6894 kg 110 mm dia. axle (9208 kg max lift)		
Category 3N/3 w/Quik-Coupler	n/a		Opt: 7847 kg 120 mm dia. axle (10206 kg max lift)		
Category 3/3N with Hook Ends	Std: 5443 kg 100 mm dia. axle (7300 kg max lift)		n/a		
Category 3/3N with Hook Ends	Opt: 6894 kg 100 mm dia. axle (9208 kg max lift)		Standard: 6894 kg 110 mm dia. axle (9208 kg max lift)		
Category 3N/3 with Hook Ends	n/a		Opt: 7847 kg 120 mm dia. axle (10206 kg max lift)		
Drawbar					
Cat 3	Standard – 1837 kg – 2700 kg Maximum Vertical Load dependent on drawbar position				
Cat 3 HD	Available – 4536 kg Maximum Vertical Load				
3 in 1 hitch	Available				
Wagon Hitch	Available				
Ball Hitch	Available				
Piton Hitch	Available				
Pick-up hitch	Available				
Cat 2 drawbar	Standard				
Cat 3 drawbar	Available				
3-POINT HITCH – FRONT – Category 3N					
Standard lift capacity	Cat. 3N Hitch, 5200 kg Lift Capacity Standard/ Cat. 3N Hitch, 5200 kg Lift Capacity Ground Engaging Available				
FRONT PTO (power take off)					
1 – 3/8 in., 6-spline, 1000-rpm, Counter Clockwise Rotation (when facing Front PTO)	Available**				
1 – 3/8 in., 21-spline, 1000-rpm, Counter Clockwise Rotation (when facing Front PTO)	Available				
1 – 3/4 in., 20-spline, 1000-rpm, Counter Clockwise Rotation (when facing Front PTO)	Available				
1 – 3/8 in., 21-spline, 1000-rpm, Clockwise Rotation (when facing Front PTO)	Available				
1 – 3/4 in., 20-spline, 1000-rpm, Clockwise Rotation (when facing Front PTO)	Available				
PTO Speed @ Engine RPM (1:2 ratio)	1000 PTO RPM @ 1940 ERPM				
PTO Power (SAE hp)	175 hp (130 kW) maximum output				
**Availability dependent upon destination					
PTO (power take off)			Independent		
1 – 3/4 in., 20-spline, 1000-rpm	Standard				
1 – 3/4-in., 20-spline, 1000-rpm with 1 – 3/8 in. 540/1000 rpm gearcase	Available				
1 – 3/4-in., 20-spline, 1000-rpm with 1 – 3/8 in. 540E/1000/1000E rpm gearcase	Available				
1 – 3/4-in., 20-spline, 1000-rpm with 1 – 3/8 in. 540/540E/1000 rpm gearcase	Available				
PTO Speed @ Engine RPM			(540/1000 PTO rpm @ 1950 engine rpm) (540E/1000E PTO rpm @ 1750 engine rpm)		



	7210R	7230R	7250R	7270R	7290R
CAB					
Cab glass area, m²			6.52		
Cab volume, m³			3.597		
MISCELLANEOUS					
AutoTrac Ready			Standard		
Modular Telematics Gateway (MTG)			Available JDLINK Ultimate and Ethernet Harnesses (availability dependent upon destination)		
Service ADVISOR Remote			Capable with JDLINK Select & Ultimate		
CommandCenter Video with 4100 Display			Single video input (Tyco Connector PN 776536-1) for camera using PAL or NTSC signal. Integrated behind rear cab cover. Camera and extension harness available through parts.		
CommandCenter Video with 4600 Display			Four video inputs (Tyco Connector PN 776536-1) for camera using PAL or NTSC signal. Integrated behind rear cab cover. Camera and extension harness available through parts.		
CAPACITIES					
Fuel Tank, CommandQuad, G47/48, l	572			n/a	
Fuel Tank, e23 PST, G47/48, l			544		
Fuel Tank, AutoPowr, G47/48, l			589		
Fuel Tank, e23, G49, l	n/a			562	
Fuel Tank, AutoPowr, G49, l	n/a			607	
Cooling System, l	39.5			44.5	
Crankcase oil volume, l	24.5			27	
Transmission-Hydraulic system, CommandQuad, l	160			n/a	
Transmission-Hydraulic system, e23, l			160		
Transmission-Hydraulic system, AutoPowr, l			160		
Front PTO Oil, l			4.0		
TLS Plus w/ Diff. Lock			10.8		
TLS Plus w/ Limited Slip			14.4		
DIMENSIONS AND WEIGHTS					
Wheelbase MFWD / TLS, mm			2925 mm		
MFWD / TLS axle clearance – 1300 axle, G43 420/85R34 tires, mm			495 mm		
Turning Radius – 380/85R34 group 42 tyres @ 60" spacing, 1300, m			7		
Turning Radius – 600/70R30 group 43 tyres @ 74.1" spacing, TLS, m			6.7		
Turning Radius – 620/75R30 group 44 tyres @ 82" spacing, TLS, m		n/a		8.7	
MFWD/CQT/1-450lbs inner weights/front weight support/Cat3 hitch w/QC/shipping fuel/480/80R46 duals/420/90R30 fronts, kg	10129	10129		n/a	
TLS/e23/1-450 lbs inner weight/front weight support/Cat3 hitch w/QC/shipping fuel/480/80R50 duals/380/80R38 fronts, kg	11256	11256	11651	11651	11651
TLS/IVT/Flange axle/1-450 lb outer weight/front support/hooks with sway blocks/3 in 1 hitch rails with wagon hitch/shipping fuel/650/85R38 singles/540/65R34 fronts, kg	10425	10425	10816	10816	10816



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