

 SAME DEUTZ-FAHR

R7
190-220



A different breed.



Lamborghini R7: a front line performer in all fields

The R7 series certainly produces remarkable traction, especially in heavy duty applications.

Now the R7, equipped with an advanced, high power Deutz DCR TIER III 7 litre engine, reconfirms Lamborghini's commitment to pushing back the boundaries of this extraordinary series, providing an unbeatable mix of technologies in the 190/220 hp range for outstanding productivity. But the Lamborghini R7 also sets a new standard for reliability, safety, comfort and reduced consumption.

And our commitment to the environment is attested by the use of clean technology in the 100% biodiesel engine. This commitment is one of the hallmarks of the entire Lamborghini range.



R7: 7 litres of advanced power

R7 is equipped with the powerful Deutz TDC 2013 DCR TIER III engine, 100% compatible with biodiesel fuels, with technical specifications that make it eminently suitable for even the most demanding traction applications.

6 cylinder turbointercooler with iEGR exhaust gas recirculation system, 7146 cc displacement, vertical exhaust with integral silencer, an impressive maximum torque delivery of 793 Nm (R7.190) - 836 Nm (R7.220), liquid/oil cooling, fuel cooling radiator and, above all, the exclusive DCR high pressure direct injection system (Deutz Common Rail) with electronic control - a step beyond traditional Common Rail systems.

Deutz Common Rail.
Higher efficiency,
lower emissions.

The Common Rail high pressure injection system for direct injection diesel engines is based on the principle of separating the pressure from the injection, independent from engine speed and load, by first storing fuel under high pressure in a central accumulator Rail. The fuel

is injected into the cylinders at a pressure of 1600 bar in reaction to a variety of engine parameters under the control of an ECU, at which pressure the fuel is finely atomised for better mixing with the air. This provides a significant improvement in terms of engine output as well as considerably reduced emissions.

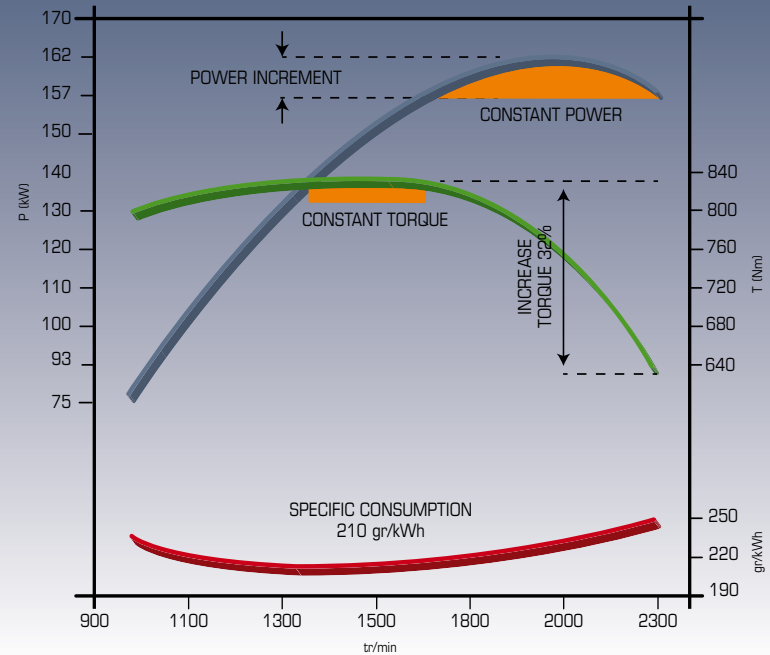


DEUTZ Common Rail



**Externally cooled
Exhaust Gas
Recirculation**

R7 220



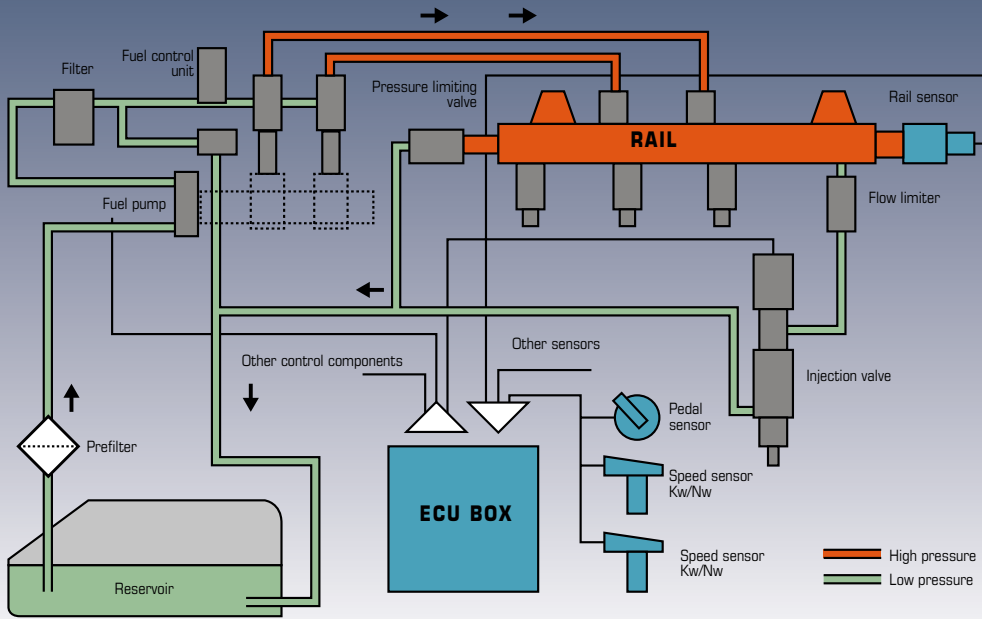
■ Electronic management technology ensures optimum control of power output, in response to the working engine loadings. Engine mapping ensures maximum power and torque during any operation.

Deutz Common Rail - or how to improve the best.

The special characteristic of the DCR system consists in its use of a fuel cooling radiator, which ensures better combustion, along with the 2 injection pumps which feed the rail and are housed in the engine block: the pumps are therefore lubricated by the engine oil and not by the fuel, as in traditional

common rail systems. This is not a small difference, as it ensures greater engine safety and reliability, as the 2 pumps are lubricated by oil of specified quality, rather than by fuel which may vary greatly from time to time.

In addition, these pumps have a flow control system designed to avoid the recirculation of fuel to the tank, thereby minimizing pressure losses and temperature rise in the fuel. This



■ The DCR (Deutz Common Rail) fuel injection system operates at pressures up to 1600 bar and is equipped with two wet pumps.

considerably reduces pressure drops while keeping the fuel temperature down.

for efficiency, robustness and reliability, as well as boasting some of the lowest consumption and emissions figures in its class.

Number One for low consumption.

Thanks to the advanced design of its powerful, electronically controlled engine, with realtime optimisation of power and torque curves in response to load, the R7 stands out from the crowd

100% Biodiesel.

Thanks to a number of unique design features and the use of first-rate materials in manufacture, the R7's engine is able to ensure absolute functional efficiency and total compatibility with biodiesel fuel, allowing blend ratios of up to 100% (biodiesel responding to the specifications of EN 14214:2003).

Biodiesel typically has a higher viscosity than other engine fuels and is chemically more aggressive, but Deutz engines are equipped with a special fuel injection system utilizing 2 immersed pumps and a fuel feed circuit with components manufactured from special materials, which make them particularly suited to the use of such fuels.



DRP: truly remarkable traction!

The greater the draft force, the more the front end sticks to the ground.

The Lamborghini R7 comes to the market with a reputation as the absolute benchmark where productivity is concerned, especially for those demanding tasks that require levels of power and traction totally out of the ordinary - like intensive ploughing on large acreages.

Due to its particular design, the R7 not only boasts an extremely powerful and advanced engine, but also optimised weight distribution and exclusive three-point linkage design. All these attributes

combine to ensure that when the implement encounters a particularly heavy patch of soil, the tractor's "Instantaneous Centre of Rotation" (referred to by the acronym DRP) - the focal point of downforce on the machine, moves forward along the axis of the vehicle and produces what is effectively a downward thrust on the front drive axle, causing the front end to force itself to the ground.

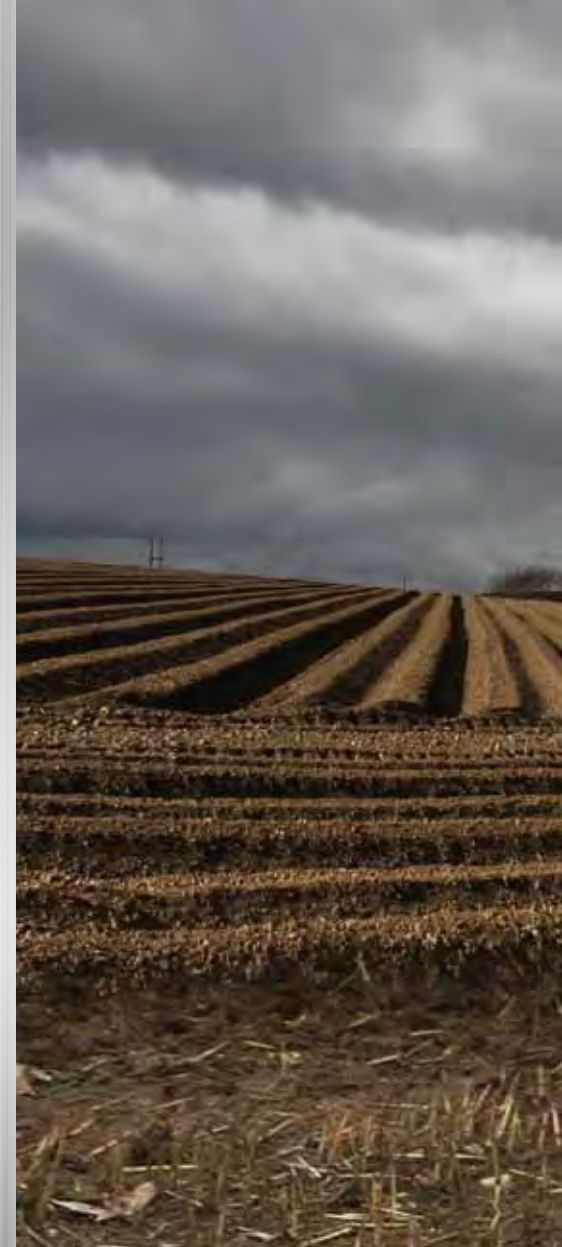
Exhaustive testing in the field have demonstrated that, compared with other tractors of a similar power rating, the more demanding the application (for in-

stance, very deep ploughing), the more the R7 guarantees traction, with exceptional grip reducing the need for excessive supplementary ballast. This translates directly into unbeatable productivity.

Standard tractor



Lamborghini R7





The R7 transmits greater efficiency, reliability and comfort.



A new gearbox.

Its new concept transmission is one of the standout features of the R7: thanks to the complete re-engineering of the Powertrain, we have been able to reduce its power absorption by a good 23 hp, which means consumption savings of about 12%. This is the outcome of: a new method of transferring oil between the gearcases, a new parking brake and new rear brakes with automatic take-up. From the point of view of hydraulics as well, the transmission has been completely redesigned and optimised for faster gear engagement (20%), as well as reducing leaks during lubrication and hydraulic cycles to zero.

Technically, the Powershift gearbox offers 24 speeds in two ranges and enables you to change gears within a given range under full load. A third range of 9 creeper gears allows the transmission to work efficiently under conditions demanding ultra-low speeds, so that the total gear range is now 33 FWD + 33 REV (40/50 Km/h).

Lamborghini's fully automatic APS gear-

box relieves you of the task of choosing the right gear for the job. The APS system automatically selects the right gear and changes up and down as operating conditions change.

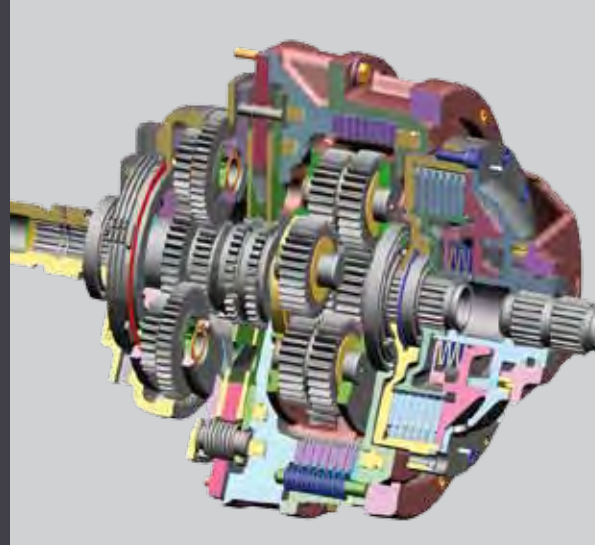
The electronically controlled APS gearbox ensures that the correct gear is always engaged, and changes speed if variation is detected in load or engine speed.

The flexible and intelligent APS gearbox also has two functioning modes to adapt to different working conditions: simply select "Performance" mode for maximum productivity, or "Economy" mode to keep consumption to a minimum.





■ The shuttle lever is located beneath the steering wheel. Ergonomically designed and easy to use, it has a "neutral" position and will function only when enabled, to ensure total safety in operation.



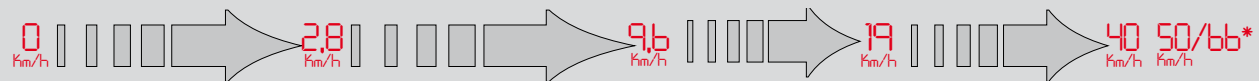
■ A system using 2 oil-immersed multi-disc clutches allows the operator to shift between forward and reverse drive under power.



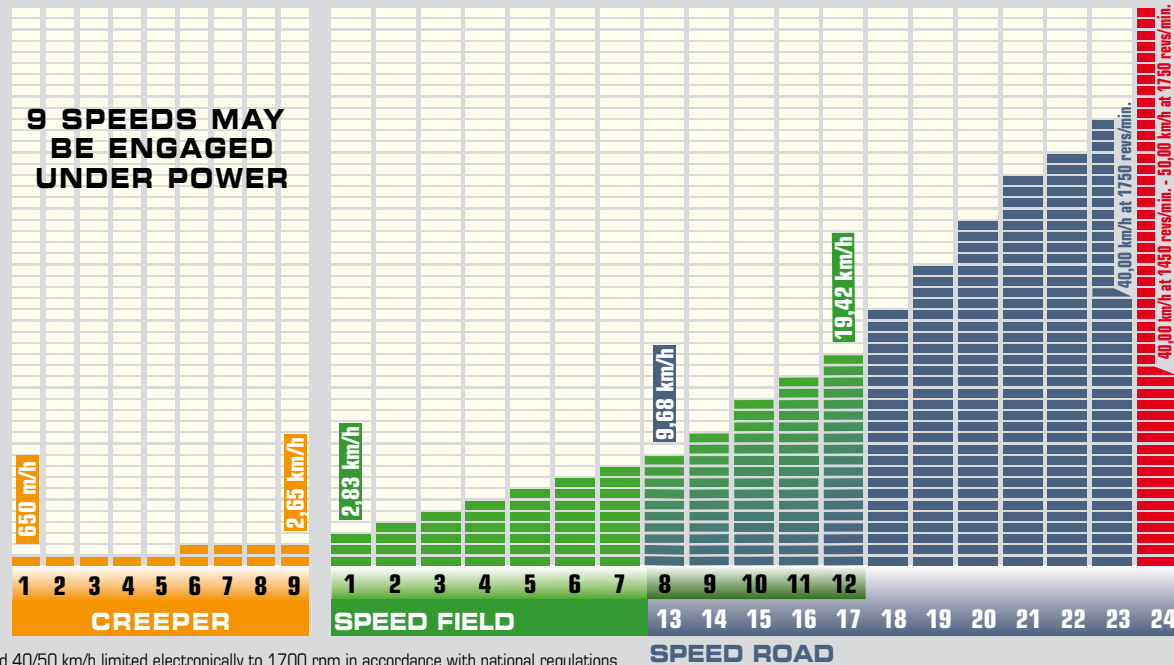
■ PowerComS joystick - all functions within easy reach: hydraulic system, transmission and rear lift.

Easy and fool proof with the "Sense Clutch" shuttle.

R7 is equipped with an electrohydraulic power shuttle with oil-immersed 2 disk clutches and the "Sense Clutch" system which enables the operator to reverse the direction of travel in a smooth way up to 13 km/h, even on slopes, by simply actuating the handy lever located beneath the steering wheel, without having to operate the clutch. This is a considerable benefit in terms of comfort and safety, especially when working in restricted spaces and headlands.



UP TO 24 SPEEDS TO CHOOSE FROM



* top speed 40/50 km/h limited electronically to 1700 rpm in accordance with national regulations

■ The powershift transmission gives a total of 33 ratios. The progression through the gears from low to high, and high to low, is controlled electronically.

Maximum performance



Aiming at total precision.

Implement depth is of the greatest importance in modern farming. That is why the Lamborghini R7 is fitted with a powerful and extremely precise electronically controlled rear lift.

The R7's lift boasts an impressive lifting capacity of 10,000 kg and an efficient electronic control unit complete with radar. The system guarantees unrivalled efficiency by simultaneously analysing area, depth and lift.

You can program in minimum and maximum depth limits to establish the ideal working band. So you can be sure of uniform ploughing results even in difficult soils of varying consistency. The extremely compact front lift is fully integrated in the tractor body. The R7 therefore boasts an excellent steering angle of 55°. The front end lifting capacity with double acting cylinders is 4000 kg.

The intelligent way in which tractor resources are used on the R7 is typified by its hydraulics. The load sensing pump

delivers up to 113 litres/min and adapts flow to match the needs of the implement at any moment in time.



- Settings for the lift are selected from a side console.



- Maximum practical convenience in controlling the main functions of the auxiliary spool valves.

Versatility and productivity are also the hallmarks of the PTO's: the rear PTO gives you speeds of 540 Eco and 1000 rpm while the front PTO gives you 1000 rpm. Both PTO's have their own multi-disc, oil immersed clutches and are electro-hydraulically operated at the touch of a button.



■ The P.T.O. speed is changed without difficulty by operating a lever located on the driver's right.



■ Using the AUTO button, engagement and disengagement of the P.T.O. is controlled automatically.



Unbeatable, even standing still

“Power Brake” and “Electric Park Brake”. We had to go even further to stand as still as this.

While the R7 stands out primarily for its performance on the move, it is just as unbeatable when standing still, with the “Power Brake” system, which acts just like a car’s servobrake. A light touch on the brake pedal is enough to produce a prompt, powerful and flexible response from the entire braking system. This is because the hydraulic circuit is permanently pressurized, and does not rely on



■ With the POWER BRAKE system, minimal effort applied by the operator when depressing the brake pedal will produce an instant response.

mechanical force generated through the pedal.

To guarantee maximum safety in the event of system failure, an emergency accumulator ensures up to 10 brake applications in complete comfort and safety, even without the engine running.

And this is not all. The R7 also has a new Electric Park Brake system (EPB). The traditional parking brake lever which acted on the diff. axle shafts has been replaced by a handy and much more practical electronic control on the multifunction armrest, which operates both when the engine is off and when it is idling. The system uses an electric motor to lock the rear brake discs, with an applied force of 4,000 N, and also features a small backup battery to ensure operation even when the main battery fails.



■ Electronic parking brake: simple, safe, and fast-acting.



■ The heart of the EPB system consists in an innovative mechanical locking system controlled electronically (highlighted in red).





Treated like a king

The design of the R7 reflects its strong personality, and transmits the values of power, elegance and contained aggression, in line with the overall “family feeling” of the Lamborghini brand.

The new one-piece hood is manufactured employing LFI (Long Fibre Injection) technology in composite materials to ensure that it combines light weight and exceptional strength at its high running temperatures and in case of accidental collisions.

The hood opens very wide with a simple, quick movement, for easy access to all interior components.

The R7's attractive, fascinating styling is completed by the large cab with panoramic view, with Lamborghini's trademark roominess: a good 3 m³ of interior space and a width of 1640 mm, with convex windows that further improve the on board comfort and ergonomics. The view is excellent, both during field work and when driving on the road.



Protected from noise and vibration.

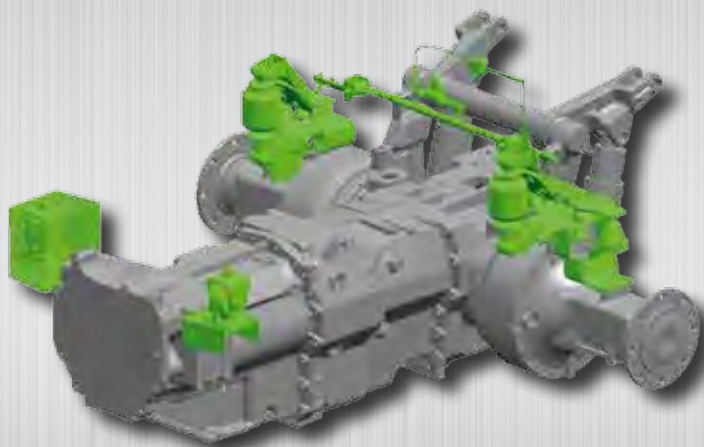
The new laminated windshield, combined with double-glazed front windows at the base and new sound-absorbing inserts in the interior reduce the noise level in the cab by 3 dB - which means a reduction in the noise perceived by the operator of 50%!

The cab is also suspended with silent blocks at the front and mechanical/pneumatic shocks at the rear which, in combination with the front axle suspension system (which can be deactivated

manually when it is not required), reduce vibrations at the operator position by 40%. Everything about the cab of the Lamborghini R7 is designed to meet the operator's needs and facilitate familiarity in operating the tractor's controls. All controls are positioned logically and rationally, with controls of the same type grouped together and different types colour coded for instant recognition. The most frequently used controls are all incorporated in a multifunctional joystick and in the armrest console.

The dashboard is divided into three

zones: one for gauges, one for warning lights and one for the digital display and "Infocenter". This genuine on-board computer can display four different productivity or tractor functioning parameters at the same time.



■ Unparalleled driving comfort guaranteed by the exclusive pneumatic cab suspension.



Technology within easy reach

Anyone who test-drives a LAMBORGHINI R7 will be won over by its technology. With SDS, for example, the driver can save, retrieve and automate repetitive operations.

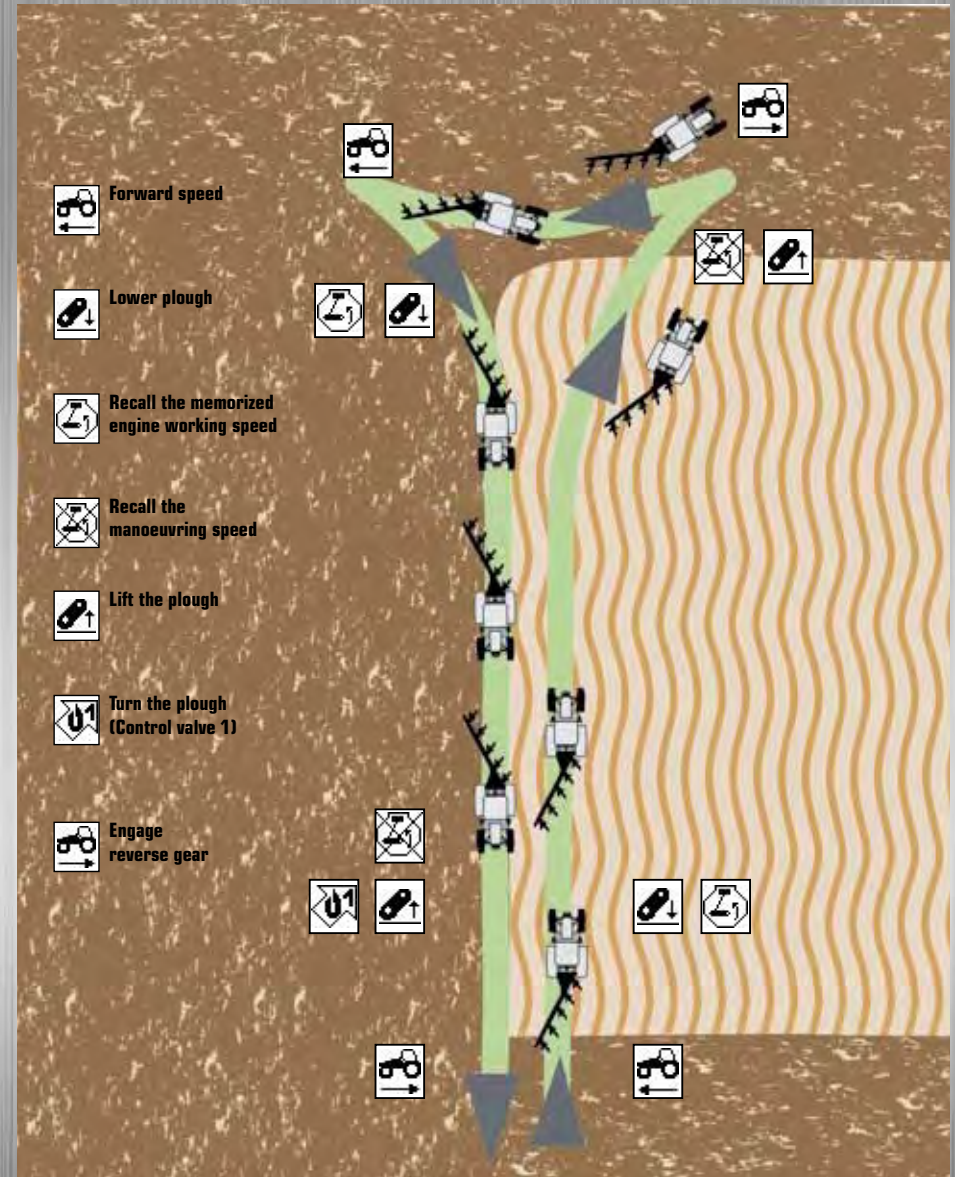
An on-board computer allows the operator to programme and retrieve a range of commands (up to **26 operations**), simply by shifting the joystick to the left. To activate the system, all that is required is to press the enable button and shift the joystick momentarily to the left. During operation, the operator can scroll through the steps of the programmed sequence to skip from one to the next simply by toggling the joystick repeatedly to the left.



■ All programmed sequences and the progress of the current sequence can be viewed in a specific digital display area of the instrument panel.



■ The steps of the programmed sequence can be retrieved and performed at a touch of the lever.



iMonitor

The iMonitor: a new multimedia interface allowing management of the main tractor functions by way of a control panel with a dial, easy to use and highly intuitive. The following functions are integrated: main menu controlling all machine functions; (lift, PTO, spool valves, engine and transmission, ASM and cab suspension); performance monitor (fuel consumption, productivity and area-tillage information); ISO-bus monitor allowing the use of ISO-bus compatible implements; mp3 player and bluetooth hands-free speakerphone.

The iMonitor is operated by way of an operating terminal with a dial that is pressed and turned to scroll the individual tractor menus where they can be set and/or checked by the operator.

This kind of control features the same operating principle as used by leading automobile makers for navigation systems and other similar menu-driven devices. Easy to see, and easy to understand. A screen with an attractive graphic dis-



■ With the control panel located on a console to the right of the driving position, the operator can navigate easily through the menus using the dial.

play creates a reassuring sense of order and clarity, with conventional symbols ensuring that users can quickly familiarize themselves and become confident with the controller.

For the first time, a tractor equipped

with hands-free Bluetooth, MP3 player, radio and automatic CCTV reversing camera: features available up till now only on other types of vehicles.

The iMonitor can also be used for appliances controlled by ISOBUS commands,

which means that the operator only has to view one screen.

TECHNICAL DATA**R7 190****R7 220**

| ENGINE | | | |
|--|--------|--|---------|
| Engine model | | TCD 2013 L06 2V DCR | |
| Cylinders / Displacement | n°/cc | 6/7146 | |
| Turbo-Intercooled air intake | | Standard | |
| Maximum rated power (type approved) | kW/HP | 139/189 | 157/213 |
| Maximum power | kW/HP | 145/197 | 162/220 |
| Maximum torque | Nm/kgm | 793/81 | 836/87 |
| Speed at max torque | rpm | 1500-1700 | |
| Torque rise | % | 31,5 | |
| Rated speed | rpm | 2350 | |
| Electronic engine management | | Standard | |
| Liquid cooling | | Standard | |
| Oil cooler / Fuel | | Standard | |
| Air cleaner with dust unloader | | Standard | |
| Vertical exhaust silencer adjacent to cab post | | Standard | |
| CLUTCH | | | |
| Electrohydraulically operated clutch | | Standard | |
| Diameter / n° discs | | 168mm / 8 | |
| Sintered material | | Standard | |
| GEARBOX | | | |
| Powershift gearbox 33 FWD + 33 REV | | Full Powershift: automatic gear selection dependent on the load and engine speed | |
| Creeper | | Standard | |
| Electrohydraulically operated power shuttle | | Standard | |
| Pressure lubrication | | Standard | |
| Max. speed | km/h | 50* @ 1750 tr/min | |
| Oil cooler | | Standard | |
| REAR POWER TAKE-OFF | | | |
| Oil-immersed multi-disc clutch, electrohydraulically operated | | Standard | |
| Diameter | mm. | 140 | |
| Shaft diameter | | 1,3/8" | |
| P.T.O. shaft splines | | 21 | |
| P.T.O. at 540 - engine rpm | | 1650 | |
| P.T.O. at 1000 - engine rpm | | 2136 | |
| Fender mounted control | | Standard | |
| FRONT POWER TAKE-OFF | | | |
| Front power take-off | | Optional | |
| Oil-immersed multi-disc clutch, electrohydraulically operated | | Standard | |
| Diameter | mm. | 140 | |
| Graphite material | | Standard | |
| Shaft diameter | | 1,3/8" | |
| P.T.O. shaft splines | | 6 | |
| P.T.O. at 1000ECO (opt) - engine rpm | | 2043 | |
| FRONT AXLE | | | |
| Electrohydraulically operated front and rear differential lock | | Standard | |
| Automatic control of 4WD and differential lock functions | | Standard | |
| 4WD Steering angle / Turning radius | | 55°/5650 | |
| Swivel front fenders | | Standard | |

TECHNICAL DATA

R7 190

R7 220

| BRAKES | | | |
|--|--------------|--|-------------------------|
| All-wheel braking | | | Standard |
| Oil-immersed disc brakes front and rear | | | Standard |
| Diameter of front discs / rear | mm | | 224 / 280 |
| Parking brake | | | EPB |
| Hydraulic trailer braking valve | | | Optional |
| STEERING | | | |
| Hydrostatic, with height and tilt adjustable steering column | | | Standard |
| Pump flow rate | l/min | | 37 |
| REAR HYDRAULIC LIFT | | | |
| Electronically controlled, maximum lifting capacity with assistor rams | Kg | | 10000 |
| Mechanical adjustable right lift link and top link | | | Standard |
| Hydraulic adjustable right lift link and top link | | | Optional |
| Quick attach claw lift links | | | Standard |
| Fender mounted controls | | | Standard |
| FRONT LIFT | | | |
| Mechanical front lift with retractable links | | | Optional |
| Maximum lifting capacity | kg | | 4000 |
| Quick couplers | | | Standard |
| AUXILIARY VALVES | | | |
| Pump flow rate at maximum engine power | l/min | | 113 |
| Auxiliary valves | max n° ports | | 10 (+ 4 front) |
| Operating pressure | [Bar] | | 180 |
| FUEL TANK | | | |
| Tank capacity | litres | | 380 |
| CAB / ROPS | | | |
| One-piece cab | | | Standard |
| Pneumatic cab suspension | | | Standard |
| Ventilation and Heating | | | Standard |
| Air Conditioning | | | Standard |
| TYRES | | | |
| With front tyres / rear | | | 540/65R34" / 650/65R42" |
| DIMENSIONS | | | |
| Wheelbase | mm | | 2985 |
| Length | mm | | 5010 |
| Height | mm | | 3030 |
| Min-max width | mm | | 2500-2740 |
| Ground clearance | mm | | 460-590 |
| MAXIMUM PERMISSIBLE LADEN WEIGHT AT 40/50 KM/H [1] | | | |
| Maximum permissible weight, front axle | kg | | 4600-5100 |
| Maximum permissible weight, rear axle | kg | | 7300-7400 |
| Maximum permissible weight, total | kg | | 11900-12000 |

The above specifications refer to tractors with all available equipment. For standard equipment and options, refer to the current price list and ask your local dealer for details.

PLEASE NOTE: REVERSE SPEEDS ARE SLIGHTLY HIGHER THAN THE CORRESPONDING FORWARD SPEEDS

* according to national standards.

[1]: Maximum permissible weights require narrowest trackwidth.





**We work every day
to guarantee your
satisfaction.**

For SAME DEUTZ-FAHR customers, satisfaction begins as soon as they cross the threshold of one of over 3000 Authorized Dealerships and Garages located all over the world.

This extensive Sales and Assistance Network devotes unwavering attention to Customer Satisfaction, built on excellent standards of service and, even more importantly, on the passion and professionalism of the entire workforce.

 **SDF Service**

The name says it all

From pre-sale negotiations and pre-delivery inspections to programmed maintenance and prompt availability of original parts and accessories, the SDF assistance network has one sole objective: to provide precise, prompt and professional solutions to every customer requirement.



 **SDF Parts**

SDF original parts: quality that pays.

SDF parts are the only spare parts that preserve the original quality of your tractor, allowing you to enjoy its full potential. By choosing original parts, you can rest assured that your tractor's performance and functions will be enhanced and kept in tip-top condition at all times.

DEALER CONTACT



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Company with
Quality System Certified
in compliance with
ISO 9001:2000



We recommend the use of SDF Lubricants and Coolant