

AGROTRON M



EVOLVING AGRICULTURE.

AGROTRON M. IN FULL COMMAND.



Integrated working lamps and tilting, glass roof hatch with sunshade, ideal for working with a front loader.

Sloping, streamlined cowling for excellent view of the front-mounted implements and cultivation area. Safe working and manoeuvring, even in confined spaces.

The very latest DEUTZ turbo diesel engines with DEUTZ common-rail technology (DCR). Depending on model with two and four-valve technology and externally cooled exhaust gas recirculation for reduced fuel consumption, plenty of torque and fast acceleration.

Pivot-mounted front mudguards as standard. A high degree of manoeuvrability and small turning circles are also guaranteed with a maximum front tyre size of 34".

The integrated front powerlift, with a lifting force of up to 4,500 kg and the electro-hydraulically operated 1,000 rpm front PTO, make the Agtron a full-system tractor for combined applications. Mounting a front mower or front hoppers for seed and fertiliser is simple.

One of the largest, best designed tractor cabs for relaxed, fatigue-free work. Air-conditioning as standard, together with ergonomic, intuitive controls with unparalleled features.

High-performance hydraulic system with a lift capacity of up to 9,200 kg. EHR with integrated diagnostic system as standard. Separate hydraulic circuit for the steering. Four mechanical or electrical remote valves and convenient operation with cross-gate lever, PowerComS or joystick control.

Four PTO speeds are standard. The economical ECO PTOs (540E and 1,000 E) give real fuel-saving benefits for all applications. In combination with the standard ASM drive control management, the PTOs, 4wheel drive and differential locks are controlled automatically.

Powershuttle, Powershift transmission with 4 Powershift stages. APS with two program memories (ProfiLine). Modern, practical transmission technology with excellent ratios and shifting characteristics.

Driving safety and comfort is considerably enhanced by the integrated suspension design with perfect coordination of hydropneumatic suspension on the front axle and mechanical or pneumatic suspension on the cab.

All agricultural enterprises want and need to earn money, as earning money makes work enjoyable. However, today you have to be more than just good agriculturists – you are purchasers of machinery, seeds, fertilisers and pesticides, business administrators and also personnel and logistics managers. You have to make far-reaching decisions that directly affect the operating results of your agricultural businesses.

Decision-making is often a long process of data and information collation and also listening to user appraisals, advisers and associations. Ultimately decisions are, however, always made for sound reasons, as all aspects that safeguard your business must be taken into account.

It is therefore advantageous if a decision can be made for a strong brand with a rational tractor concept that concentrates on one thing – the success of you, its customers – by providing technology that more than does justice to practical requirements.

The new Agtron is an example of such rational technology. This tractor is the cul-

mination of the rich experience of more than 80 years of major technological leadership in the agricultural machinery industry. Here is a tractor series that is one of the most comprehensive and modern on the market. The Agtron series comprises no less than fifteen models incorporating countless features and equipment options. This variety is unique.

The panoramic view concept, the styling and the spacious cab of the Agtron are unmistakable. The Agtron therefore sets standards in tractor design and ensures its owner productivity, value stability and profit.



Exclusively at DEUTZ-FAHR:
24 months guarantee for all
Agtron from 132 hp.



Approval for 100%
bio-diesel: Saves costs and
protects the environment.

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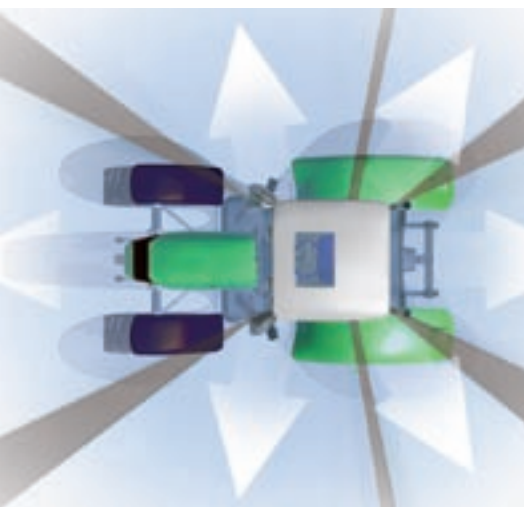
INVITING IN ALL RESPECTS.

ADVANTAGES

- ▶ Extensive cabin glazing of 6,5m²; unique panoramic view of 320°
- ▶ The glass roof hatch permits an unobstructed view when working with front loaders
- ▶ Up to 13 working headlights at the front and rear for safe illumination of working areas
- ▶ Xenon working headlights for all models to order
- ▶ Overhanging cab roof for improved shade, effective drip protection when doors and windows are opened and less screen soiling.
- ▶ Cable lead-in when rear windscreen is closed
- ▶ Air conditioning as standard feature
- ▶ Pressurised cab with two filters for dust and contaminants



Easy mounting: Two full-length hand rails are mounted on each side.



A cab design that still sets standards: With a panoramic view of 320° and cab glazing of 6,5 m² the spacious panoramic cab of the Agrotion is one of the largest available.



A total of 14 adjustable air nozzles ensure quick demisting and a pleasant atmosphere in the cab.

Relaxed and productive work requires room for movement and a clear arrangement of all operating elements. With the spacious panorama cab DEUTZ-FAHR has created a real trendsetter that, in addition to the unique all-round view, provides all creature-comforts, making work a real pleasure.

Simple and safe anti-slip, galvanised steps and wide-angle door opening range ensure safe mounting and dismounting. The interior exudes an atmosphere of comfort and a feeling of spaciousness that once more sets standards in tractor design. The orthopaedic, low-frequency seat and the optional pneumatic cab suspension are only two of the important design features of the modern cab.

Lighting

The cab and entrance area are illuminated automatically when the door is opened so that the driver can enter and exit safely in the dark. The effective Agrotion lighting also enhances safety and confidence, increasing productivity with improved illumination for night work. A maximum of 15 main and working headlights

on the front and rear illuminate an area of up to 500 m² around the tractor.

Instructor's seat

The standard, folding instructor's seat is perfectly integrated into the cab entrance, a safety bar, handle and child lock in the door make this seat also extremely safe. An integrated compartment in the seat backrest provides room for documents.

Noise silencing

With its low interior noise level the Agrotion is one of the quietest tractors in its class. This is achieved with basic design features such as engines with low noise emission and consistent exclusion of noise-emitting and noise-transferring components from the cab. An additional insulating wall between the engine compartment and the single-cell, full-body cab considerably improves noise insulation.

Impressive air conditioning

The powerful 4-stage heating and ventilation fan of the Agrotion cab has a capacity of up to 580 m³/h and ensures in no time a constant and pleasant working atmosphere. Fresh air is drawn in

through filtered intake openings in the left and right-hand B-struts. Short, insulated air ducts distribute the air selectively through 14 adjustable nozzles. The Agrotion is equipped with an environmentally-friendly compact air conditioning system that guarantees fast temperature adjustment; you can switch over from fresh to circulating air and defrost the windows with dehumidified air. A slight overpressure in the cab also prevents the ingress of dust or contaminants. Tinted windows and roller blinds on the front and rear windscreens protect the driver from excessive exposure to the sun's rays. Additional shading is provided with an overhanging roof.



Unobstructed view to the top: The optional glass roof hatch provides an even higher degree of safety with a clear view of the raised DEUTZ-FAHR front loader.



Automobile-standard air conditioning. The controls for the standard-feature air conditioning are integrated behind the instructor's seat.

EVERYTHING UNDER CONTROL AND IN FULL VIEW.

ADVANTAGES

- Ergonomically designed workplace for safe operation using perfectly clear control elements
- Control elements clustered to form function groups
- Powershuttle in easy reach to the left of the steering wheel
- Fast, individual adjustment to the driver's needs with adjustable steering wheel, driver's seat and multi-function armrest
- Fast identification of all operating functions due to the easily read display and a clear view of the instrument panel
- Air-conditioning system has switchover from fresh air to recirculated air as standard
- Low noise levels due to consistent sound insulation
- Low frequency seat air suspension with over 11 different functions and individual settings



Operating the Agrottron could hardly be more straightforward. All the levers and switches have different designs in terms of form and color; their layout is logical and clearly categorized into function groups and frequency of use in a single operating console on the right-hand side.

The multi-function armrest

All the main control elements for actuating the EHR, Powershift, saving the engine speed and the manual throttle are integrated in the right-hand armrest. The layout of the switches and controllers is based on their priority and they are easy to distinguish by means of their form and color. The armrest can be adjusted longitudinally to suit the individual needs of each driver and enhances the ease of use. An attenuated vertical light illuminates the control elements whilst the tractor is in use at night.

The info center

The info centre shows the driver the tractor operating status at all times. Function indicators, for example for PTO speeds and tractor speeds, are displayed in digital form and in addition servicing and error messages are displayed in both digital and text form. The engine speed and temperature and the fuel content are shown in analog form. The non-reflective, backlit and anti-static glass guarantees that all the instruments can be read without any dazzle.

The performance monitor (ProfiLine version)

The performance monitor enables the driver to monitor the major data relating to a job (PTO shaft on/off; powerlift adjustment; manual) in two separate memories: Working time, total area and area completed per hour; distance traveled, average speed and the average tractor load. This gives the driver an up to date summary of his productivity at all times.



- 1 Electronic manual throttle
- 2 Engine RPM memory
- 3 Actuation of the Powershift stages (forwards/backwards)
- 4 Lifting/lowering the rear lift, activating the EHR, stop and fast penetration
- 5 Front PTO On/Off
- 6 Automatic PTO On/Off
- 7 Rear PTO On/Off
- 8 Drive train management (ASM)
- 9 Front wheel drive
- 10 Differential lock

The standard version of the EHR control is within easy reach.



- 1 Rev counter
- 2 Fuel gauge
- 3 Engine temperature
- 4 Warning and control lamps
- 5 Digital display
- 6 Warning and control lamps
- 7 Service hour counter
- 8 Speed
- 9 Speed of front PTO
- 10 Speed of rear PTO
- 11 Slip



- 1 APS programming
- 2 Potentiometer for APS sensitivity
- 3 Front axle suspension
- 4 Drive train management (ASM)
- 5 Flow rate adjuster for electronic control valves 1 + 2
- 6 Time adjustment for electronic control valves 3 + 4
- 7 Flow rate adjuster for electronic control valves 3 + 4
- 8 Menu keys for programming

The flow rate and flow time adjusters and the keys for programming the gearbox are located conveniently under the right armrest.

ADVANTAGES

- All operating groups are colour-coded
- The self-explanatory symbols ensure fast, intuitive operation
- Practical operating management

PowerComS-operating lever with Comfortip

- 1 Actuation of the electrohydraulic remote valve 1
- 2 Actuation of the electrohydraulic remote valve 2
- 3 Lifting/lowering the rear lift, activating the EHR, stop and fast penetration
- 4 Direction forwards / reverse
- 5 Actuation of the Powershift stages (forwards / backwards)
- 6 Comfortip operating management
- 7 EMC (Electronic Motor Control)
- 8 Electronic manual throttle
- 9 Transmission neutral
- 10 Differential lock
- 11 Front axle drive
- 12 Joystick electronic remote valves 3+4
- 13 Activation APS

There are many operating concepts on the market. However, in practice few are simple, self-explanatory and easy to learn. For this reason the DEUTZ-FAHR development engineers focused all their attention on functionality and operating simplicity.

Every driver should, in practice, be able to use the tractor reliably and productively without extra training and after only a short period of familiarisation. For this reason the innovative PowerComS operating

lever is used in the ProfiLine version of the Agrottron.

Everything in one

The new, ergonomically designed PowerComS operating lever (standard feature on the ProfiLine version) combines all important functions of the tractor – actuation of the Powershift stages, operation of the rear powerlift and the hydraulic remote valves, the Comfortip operating management feature and also the reversing transmission. This means

that all operating and control operations can be performed without having to take your hand from the PowerComS. The advantages are obvious – timesaving and also, because operation is already intuitive even after a short time, you have safe and a fast reaction speed during work. Irritating grasping for controls for different operations is a thing of the past – you are able to concentrate fully on your work.

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WORK MORE PRODUCTIVELY – WITH EASE.

INTUITIVE CONTROL OF ALL FUNCTIONS: COMFORTIP IS A REAL HELP FOR THE DRIVER.



Operation made easy

Standardised programmes really cannot do justice to all the varying applications found in agricultural enterprises. Wouldn't you prefer it if you could automate the repetitive functions required for each job? Ideally, a simple movement of one lever should enable you to retrieve each function.

Easy programming

With the PowerComS lever and the Comfortip function the driver can easily program individual operation sequences and retrieve them by simply moving the lever. All operation sequences are displayed centrally and in their consecution in the InfoCenter. The next function is highlighted in the display so that the driver always

knows which function he can retrieve next. To set up the system for programming operating sequences – this is possible when the tractor is stationary or moving – the PowerComS joystick only has to be moved to the left whilst simultaneously pressing the enable button. An acoustic signal is then sounded and the digital display on the instrument panel is activated to accept the command function. To programme your preferred sequence it is only necessary to press the respective buttons on the PowerComS joystick or on the multi-function armrest. The programmed functions are then stored in the memory even when the tractor is switched off. This is the ultimate in hassle-free headland management.

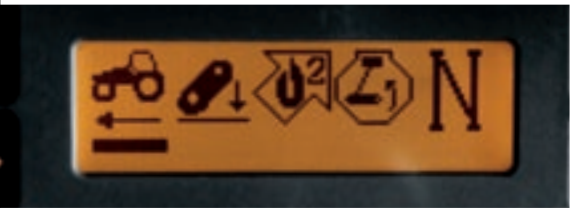
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ADVANTAGES

- Unique panoramic view of 320°
- Sloping, streamlined cowling for excellent view of the front-mounted implements and cultivation area.
- High-performance hydraulic system with high operating efficiency and adjustable oil flow rate



The ASM response sensitivity can be set individually with an adjustment knob.



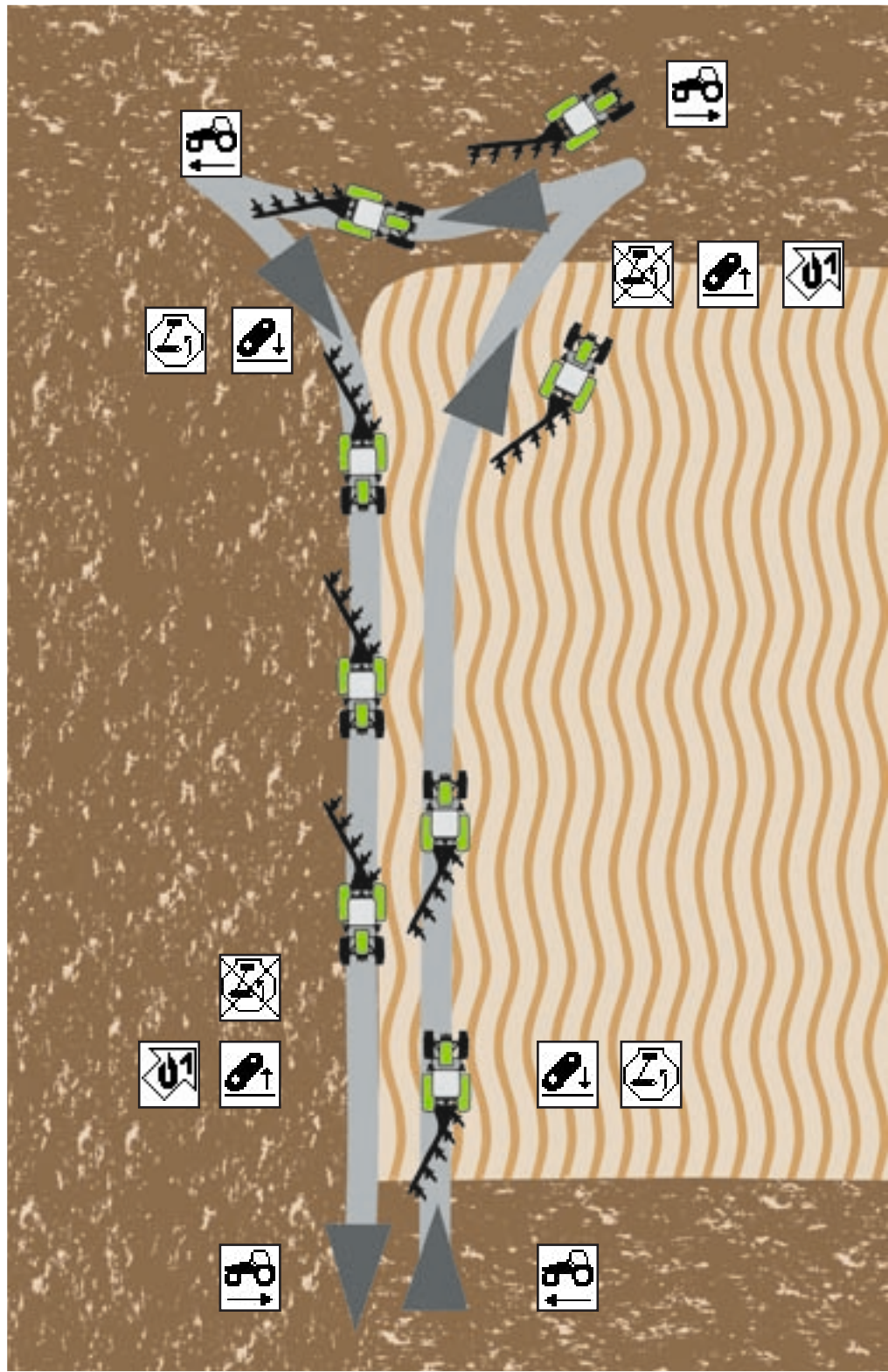
All Comfortip functions in full view.



A light touch to the left and the next function is retrieved.

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- Four PTO speeds as standard
- Integrated Front lift with a lifting capacity of 4,500 kg (option)
- Front PTO with 1,000 r.p.m. (option)
- Easy to clean compact cooling system
- Powershuttle for changing travel direction without actuating the clutch



Forward speed

Recall the memorized engine working speed

Lift the plough

Engage reverse gear

Lower plough

Recall the manoeuvring speed

Turn the plough (Control valve 1)

COMFORT FOR LONG WORKING DAYS.

THE CAB AND SUSPENSION CONCEPT MAKE THE AGROTRON M UNIQUE.



- ADVANTAGES

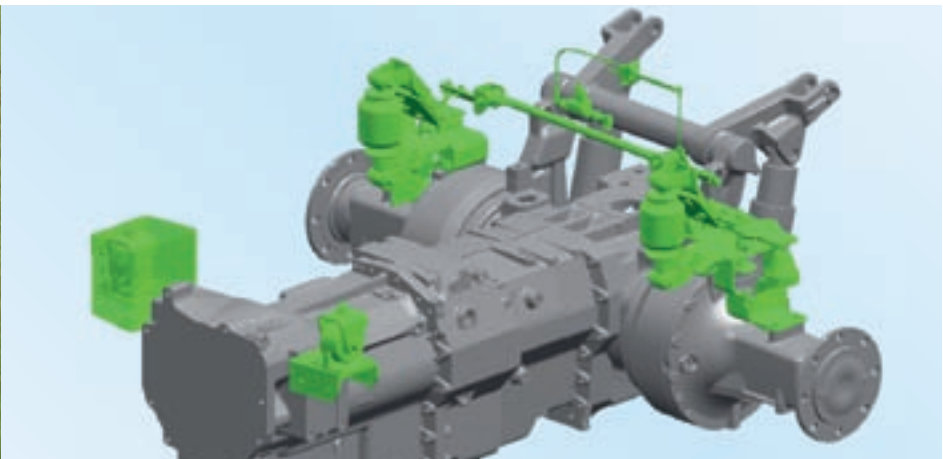
 - Improvement in driving safety and enhancement of driving comfort
 - Reduces unhealthy vibration for the driver
 - Reduction of the torsion and rolling motion and therefore less strain on the cab and drive train

- Automatic rapid reaction, high speed suspension adaptation to all the road, field or load conditions
 - Shift of the tractor's centre of gravity towards the front

- Closed-circuit low-maintenance suspension system
 - Non-wearing damping system

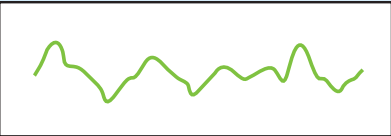


The air-suspended comfort seat offers more than 11 different functions to make it easy for the driver to find his individual, comfortable seating position.

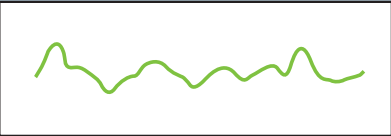


The finest travelling comfort – superb pneumatic cab suspension.

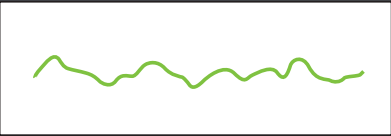
Suspension characteristic curves



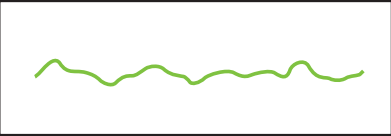
Without suspension



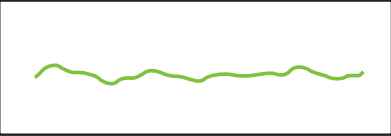
Front axle suspension



Cab suspension



Front axle and cab suspension



Front axle, cab suspension and Aeromat seat suspension

The integrated suspension concept provides high driving comfort.

Front axle suspension

In the 50km/h version the Agtron has front axle suspension as a standard feature (40 km/h on request). Driving safety and comfort are considerably enhanced by the suspension. The front axle is a swing axle supported in a rocker arm. The rocker arm is doubly secured to the front axle support and is attached to two hydraulic cylinders at the front. Suspension is hydro-pneumatic. Two pressure shock-absorbing reservoirs are provided in the closed circuit. The swing and steering angles of the front axle are not affected by the suspension. Suspension and sw-

ing angle are independent of one another. Importantly the suspension is progressive, i.e. its effect is heightened with an increase in speed.

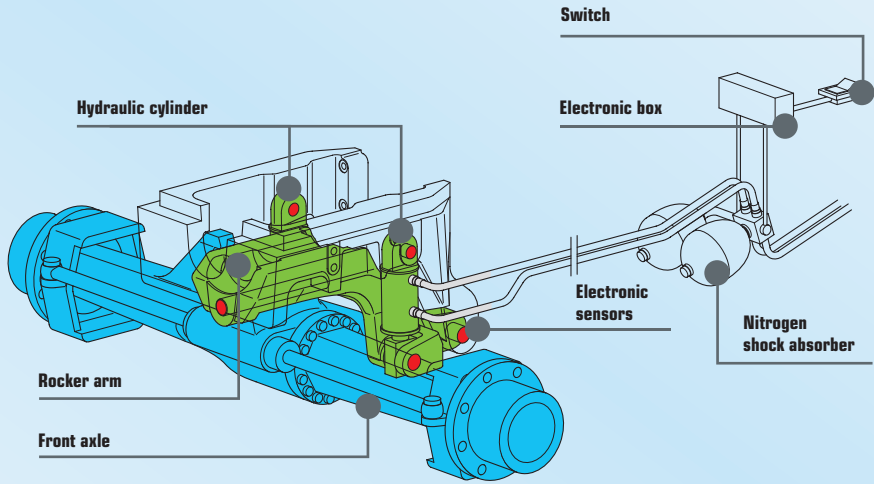
Mechanical cab suspension

With the mechanical suspension the vibration stress for the driver is reduced by one third and the vibration and jolting which negatively affects the driver's health is also reduced.

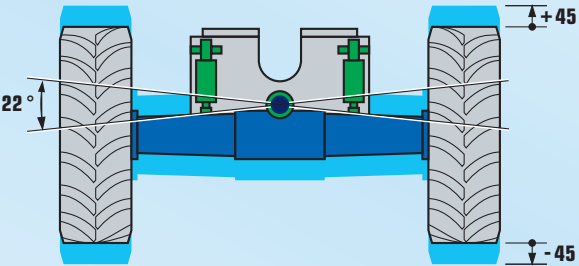
Pneumatic cab suspension

The cab suspension with load-dependent level control is supplied from the tractor's

compressed air system and permits optimum driving comfort. Irrespective of the cab load, the full suspension travel of 80 mm is always available, reducing vibration considerably even at low speeds. The pneumatic cab suspension provides a very high degree of comfort, comparable to that of a modern truck. With the perfect coordination of front axle and cab suspension plus the driver's pneumatic seat the Agtron provides unprecedented suspension and driving comfort.



Comfortable and safe: The Agtron M has hydro-pneumatic front axle suspension.



The front axle with suspension is distinguished by its large swing and steering angle.

Note for Editor:
The illustration (which I know is an old one!), shows the hydraulic cylinders at the rear of the axle. In the text it states „at the front“. One is incorrect! WFW.

SUPERB POWER AND ECONOMY.

DCR[®]

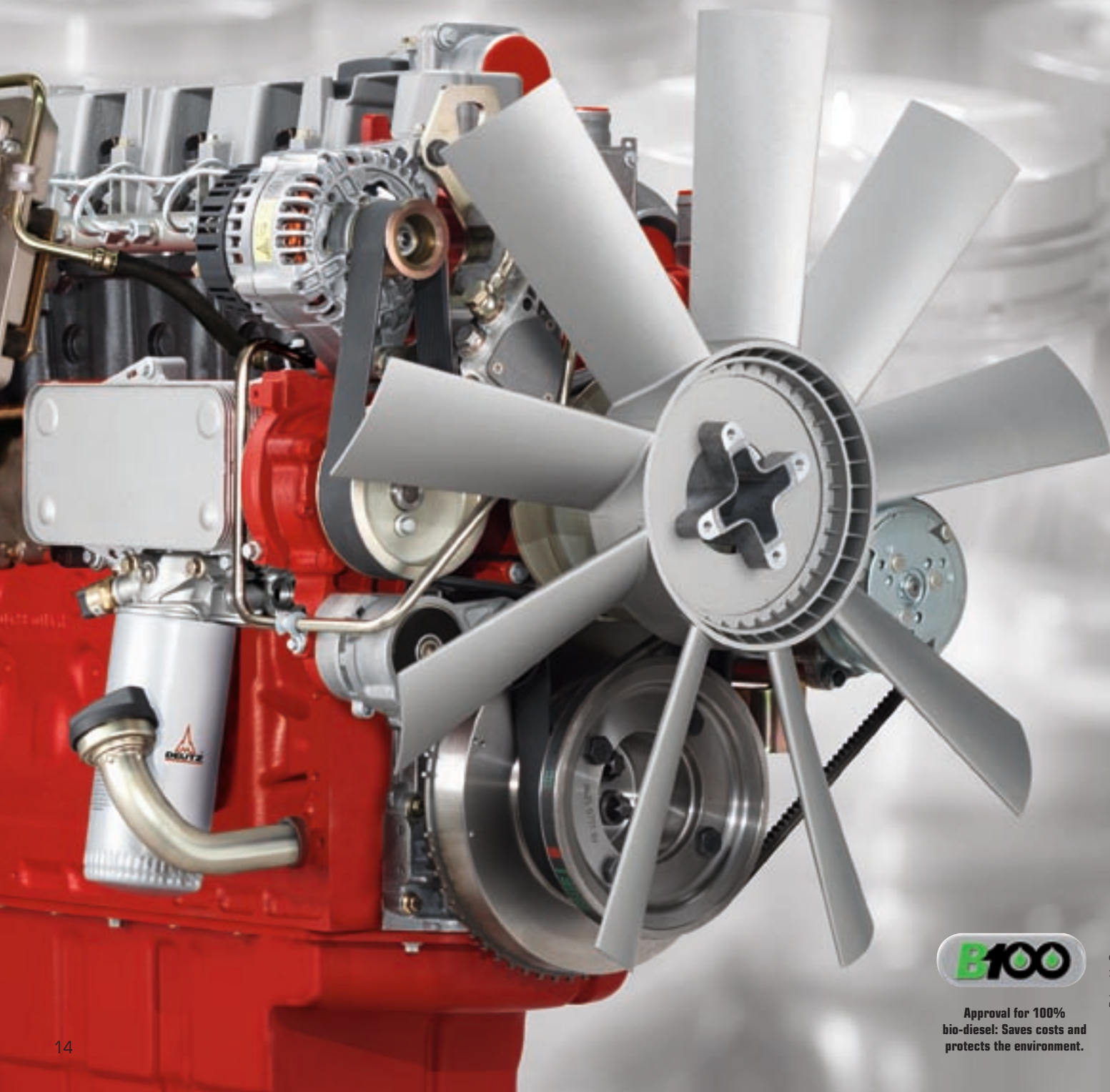
DEUTZ Common-Rail:
The exclusive technology
for minimal fuel
consumption and the
quickest possible
response characteristics.

AGRex[®]

External exhaust gas
recirculation reduces
consumption.

40 km/h
with lowered
engine speed

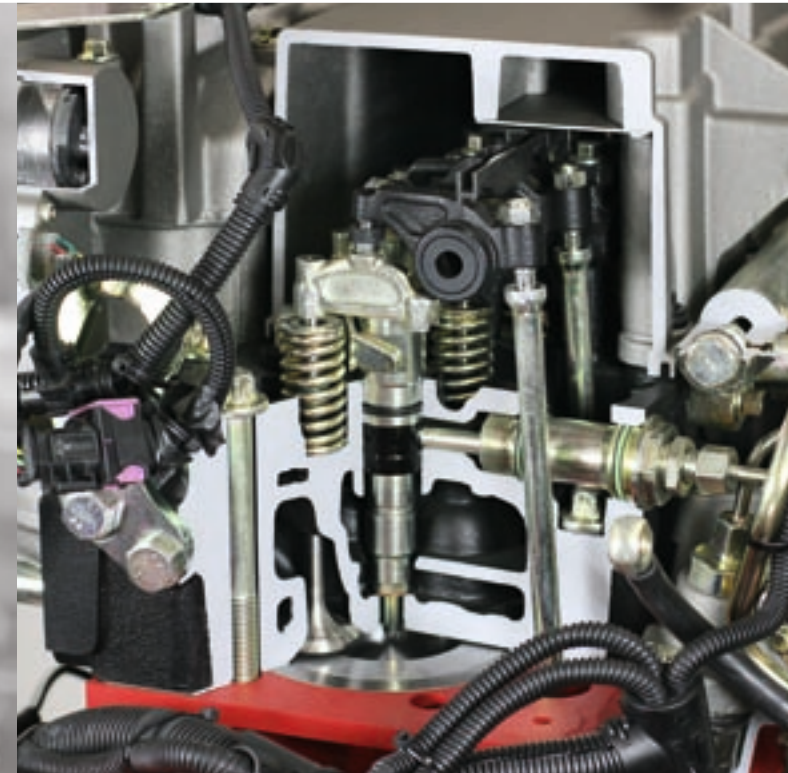
Fuel-efficiency even at
40 km/h thanks to the
reduced engine speed.



Approval for 100%
bio-diesel: Saves costs and
protects the environment.

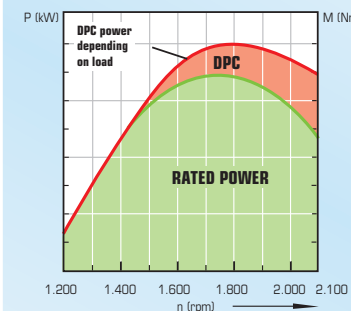
ADVANTAGES

- Modern, high-propulsion and fuel-efficient DEUTZ 2 or 4-valve turbo diesel engines with electronic engine control (EMC) for low consumption and compliance with TIER III exhaust gas emissions regulations
- The correct power and economy for any situation using the innovative DPC system (DEUTZ-FAHR Power Control)
- DEUTZ Common-Rail (DCR) high-pressure injection, up to 1,600 bar via two injection pumps
- You can also order the Agrottron M powered with pure vegetable oil: designated the Agrottron M NaturalPower, it is then supplied ex-works with a twin tank fuel system.
- Air filter with ejector dust separation and long maintenance intervals
- DEUTZ-FAHR is the first manufacturer granting approval for bio-diesel fuel (B100) incl. guarantee for 24 months. Expensive after sales solutions or additional assurances are not necessary. Savings from the first moment on.

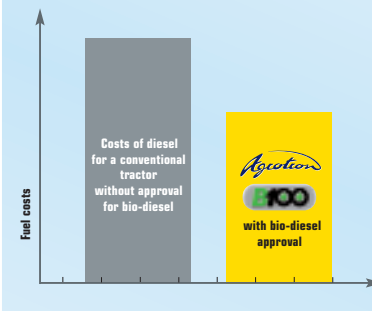


Optimum fuel combustion thanks to four valves and 7-hole injection nozzles.

DEUTZ-FAHR Power Control (DPC)

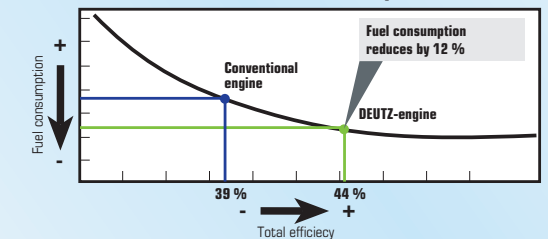


DEUTZ-FAHR Power Control (DPC). The innovative DPC technology delivers the highest and most economically efficient power at all times depending on the load situation. Strong torque, quick response characteristics and sufficient traction are therefore guaranteed even under the most difficult operating conditions.



Every litre of bio-diesel saves hard cash. At a fuel consumption rate of 30,000 l/year and an average price saving of 15 ct/l, the overall saving over five years would be 22,000 Euro.

Low fuel consumption



Powerful, economic and environmentally friendly

Many can construct engines. But the real task is to build strong and efficient engines which comply with the effective emission standards and still set their own trend. The DEUTZ engine philosophy comes down to power, economy and environmentally friendliness.

We develop for agriculture

DEUTZ-FAHR uses a whole host of intelligent technologies for this, aimed at increasing performance, lowering fuel consumption and reducing harmful emissions. This bio diesel initiative is only one of several forward-looking projects.

Particularly, the changing applications in agriculture require extraordinary know-how and longtime experience in engine construction. But there is one thing all those applications have in common: power has to be available when it's needed.

And the consumption has to be reduced at the same time. Although this sounds paradoxical, the engineers at DEUTZ-FAHR have managed to achieve it with the innovative DPC (DEUTZ-FAHR Power Control). By combining the electronic engine control (EMC) and the DEUTZ Common-Rail-Technology, a complex but very efficient engine control system has been developed.

Powerful, strong, efficient

The 6 cylinder high-tech DEUTZ turbo diesel engines in the Agrottron M come with innovative DEUTZ Common-Rail-Technology (DCR) as standard. And thanks to the DPC the engines deliver constant power, high overpower and maximum torque. The driver can therefore relax while working with minimal gearshift changes because the engine offers sufficient reserves of power, good elasticity values and reduced fuel consumption at all times. At the top speed of 50 km/h

the engine only reaches a speed of 2,100 rpm and at 40 km/h it is just 1,680 rpm. That saves fuel and protects the driver's ears.

Reducing emissions and the consumption = Protecting the environment

Both models M 640 and 650 are equipped with a external exhaust gas recirculation as a standard. This reduces consumption and exhaust emissions. Possible noise sources were already excluded at the design stage of the engines, because noises that don't occur don't require insulation. For example, a rigid, ribbed crank housing, soft combustion thanks to 7-hole injection nozzles, reliable waste gate turbochargers, double casing silencers and a flexible intake and exhaust pipe mounting system reduce noise where it arises.

TAKING THE BURDEN OUT OF SHIFTING.

THE ENGINE AND GEARBOX ARE PERFECTLY TAILORED TO EACH OTHER SO THAT THE DRIVER CAN ALWAYS FIND THE SUITABLE SPEED FOR THE TASK IN HAND.

In the Agrotрон we use the reliable and track-proven 7200 series ZF transmission. The fully synchronised transmission comprises three main components: 4-stage Powershift, 6-stage main transmission with wet multi-plate clutch and 4-speed creeper gear group.

Due to the position of the large-dimensioned wet multi-plate clutch, between the main and Powershift transmission, wear on the clutch and the effort needed for gear shifting are both considerably reduced. This results in smooth and fluid shifting with maximum clutch reliability. The clutch can either be controlled using

the pedal or a knob on the gearshift lever. The Voith hydrodamp vibration absorbers enhance smooth starting and reduce the load peaks when the Powershift stages are actuated.

Graduation and speeds

With 40 forward/reverse speeds the transmission has very close ratios to suit all practical requirements. The possible speed range – depending on the type and tyres – is from 390m/h to 50km/h. In the working range alone from 4-15km/h the transmission has 10 speeds. The top standard speed is 50km/h and can be reduced if required with the electronic engine

control EMC to a top speed of 40km/h. The engine speed reduction at 40km/h reduces fuel consumption and engine noise considerably. The driver can make full use of the tractor for ploughing, in second gear for example, solely by utilising the 4 Powershift stages, together with the full engine performance and constant power characteristics enabling speeds of 4.5 to 10km/h to be achieved without having to change gear. With the Powershift the respective working speeds are increased by approximately 20 percent or lowered by approximately 17 percent.Third gear, for example, covers a range of 9 to 16km/h for fast tilling, again without interrupting the power flow.

ADVANTAGES

- 7200 series ZF transmission: Simple and reliable transmission design
- Easy shifting
- Pulling off, stopping and changing direction without the clutch pedal
- Comfort clutch fitted as standard

- APS (Automatic Powershift) standard feature on the ProfiLine
- Transmission ratios optimally coordinated with the engine performance therefore no unnecessary additional Powershift stages

- Fast, clear information for the driver with integrated diagnostics
- No power train interruption in the Powershift range



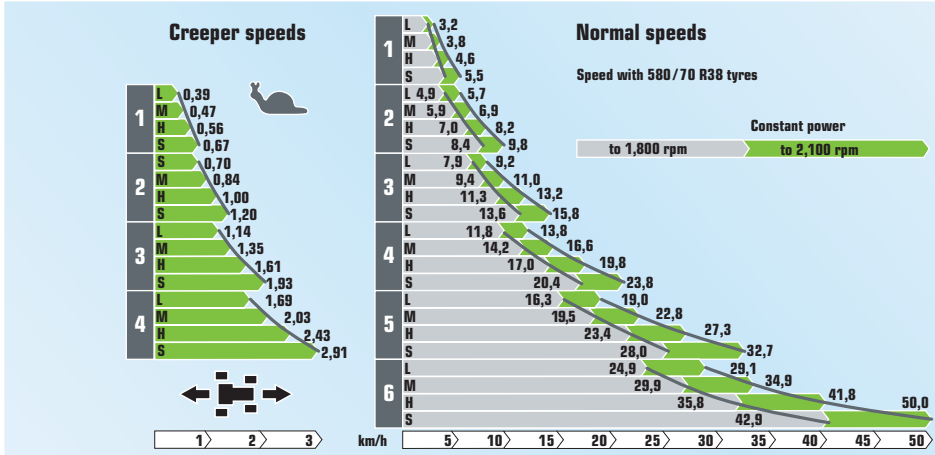
Easy control with the PowerComS lever.



Changing the direction of travel without actuating the clutch: the standard Powershuttle .



Everything in view: The central display of the Powershift stages in the A-strut.



Economical in each speed: Additional Powershift stages are unnecessary due to the perfect coordination of engine and transmission. The driver can drive without constant shifting and still save fuel.

Powershift

4 different clutchless Powershift speeds are available on all six normal and four creeper speeds at the touch of a button either on the gearshift lever or with the switch on the multi-function armrest.

Shuttle transmission

With the shuttle transmission it is possible to pull off from a stationary position or change the direction of travel (reverse/forwards) without actuating the clutch. The Powershuttle lever, with the positions forwards, neutral and reverse is located on the left within easy reach below the steering wheel. The engaged speed and

Powershift stage are retained when the direction is changed. The Powershuttle is of particular advantage when working on the headland or with the front loader, as the driver's right hand is free to operate other function controls.

More than just a Powershift: AutomaticPowershift (APS)

As an exclusive feature of the ProfiLine version the four Powershift stages are automatically shifted, depending on the load conditions of the tractor, with the newly-developed APS feature. The load on and the rpm of the engine are used as a control impulse. The driver can infinitely vary

the sensitivity of the system with a rotary switch. The driver can shift 24 speeds without using the clutch pedal. As an additional feature the APS automatically adapts the Powershift stages to the travelling and engine speed when the six gears are selected. Two memories permit the respective Powershift stages to be programmed to achieve practical speed matching.

ECONOMICAL: THE 4-STAGE PTO.

THE CONSISTENT USE OF ECO PTOS SAVES UP TO 12% FUEL CONSUMPTION AND REDUCES WEAR AND NOISE.

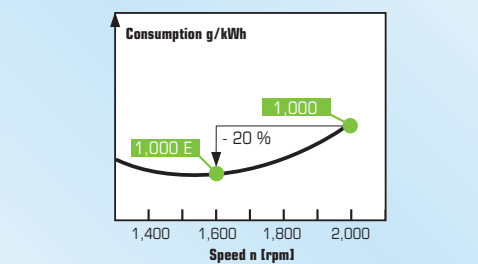


ADVANTAGES

- Automatic deactivation when the rear powerlift is raised and automatic activation when it is lowered; switching times can be adjusted by the driver
- Standard rear PTO with four speeds, two of which are ECO PTO's with reduced engine speed
- Economy PTOs with lower engine speed
- Simple adaptation to different cardan shaft profiles
- Modulated start-up

Specifications of the rear PTO – Agrottron M

Clutch	Multi-plate clutch, oil-immersed
Actuation	electrohydraulic
Speed selection	In the cab from driver's seat
Output shaft	6 or 21 section profile 1 3/8"
Speeds	Corresponding engine speed (rpm)
540	2,005
540 E	1,608
1,000	1,995
1,000 E	1,600



With the economy PTO the Agrottron runs in the optimum consumption range of 1,600 rpm. The speed is lowered by 20% and the consumption by around 12%.



Safe operation: Speeds are selected from the cab.

The Agrottron is one of the few tractors in its class to have a four speed rear PTO as a standard feature: (540/540 E/1,000/1,000 E rpm) effectively covering a wide range of applications.

The PTO can be operated from the cab and also with pushbuttons on the rear mudguard. The electrohydraulic control

ensures modulated, low-wear PTO start-up. When the rear powerlift is raised the PTO is automatically switched off. In the ProfiLine version the PTO is also automatically switched on when the hydraulic system is lowered. This prevents operation faults and reduces wear on the implements.

Savings are standard – for all jobs
With the lower engine speeds the economy PTOs (540 E and 1,000 E) not only lower fuel consumption but also the strain on the engine and noise emission. This also has a positive effect on the driver and the environment. Due to practical transmission coordination the working range of the economy PTO is always

within the lowest consumption range and is – due to the DEUTZ engine characteristic curve – still at a very high power and torque level. The economy PTO therefore provides sufficient power for all but the heaviest assignments.

Front PTO
The optional front 1,000 rpm PTO is driven directly by the engine and electrohydraulically activated at the touch of a button, working independently of the rear PTO. Due to the modulation of the wet multi-plate clutch, implement start-up is always smooth and independent of the load.



Fast replacement: The screw-connection PTO stub.

FULL HYDRAULIC POWER.

THE HYDRAULIC POWER AND LIFTING POWER SATISFY THE HIGHEST DEMANDS.



ADVANTAGES

- Very high efficiency
- Oil is only conveyed when required by the consumers
- Lower thermal burden on the hydraulic and transmission due to the standard volume adjustment system

- Very high flow rate of 120 l/min – removable oil volume of 40 l/min
- Four mechanical or electrical (ProfiLine) remote valves as standard
- The remote valves are integrated into the control management system

- Vibration damping and non-pressurized return as standard
- Direct connection of third-party devices (Power-Beyond) to order
- Very high lifting force of 9,2 t
- Mechanical lower link stabilization in work; automatic lateral stabilization when raised

You can never have enough hydraulic power. With this in mind the Agrotor M is fitted as standard with an open-center hydraulic system which satisfies the very highest demands with a delivery rate of 83 l/min and a system pressure of 200 bar.

Load-Sensing hydraulic system

A pressure and volume-controlled load-sensing and hydraulic system can be supplied to order (ProfiLine series). The system runs with an axial piston variable displacement pump that is controlled by the respective implement. When the consumer draws off oil, the system pressure drops and only then does the variable displacement pump instantly provide more oil so that the pressure required by the consumers is maintained. The consumer with the highest pressure requirements determines the current system pressure. The delivery rate may be up to 120 l/min; the removable oil volume is 40 litres.

Smooth road travel

During fast road travel vibrations and oscillations can occur in the hydraulic system caused by bouncing of the implement. These can have a considerable detrimental effect on driving safety and comfort. The Agrotor has, as standard a vibration absorber, which automatically registers all vibration at speeds of more than 8 km/h, and compensates and reduces these by selective and fast counteraction by the powerlift.

Tremendous lifting power

Large-dimension lift cylinders provide a tremendous lifting force of up to 9.2 t. Fast, sure and safe implement coupling and uncoupling is also possible by additionally actuating the powerlift buttons on the rear mudguard. The coupling of heavy implements is easier with Cat. II/II fast couplers.

Electronic control

All Agrotor M tractors are equipped with an electronic powerlift control (EHR) as a standard feature. Its functions and sensors are continuously monitored by an integrated diagnostic system. When the powerlift is activated, the system automatically runs a self-check with this diagnostic programme. The actuator of the EHR is integrated within easy reach in the side console or upon request in the multi-function armrest. The following functions are automatically monitored: draft and position control, mix control, free floating, fast penetration, slip control (with fitted radar sensor), vibration damping, transport locking, external control switches, lifting height limitation, lowering speed control.

Four remote valves

The Agrotor M is equipped as standard with four mechanical single and double-acting remote valves, each with four functions. They are controlled using cross levers (1+2) and single levers (3+4) and have four functions (lift, lower, neutral and float setting). The ProfiLine versions are fitted with four electrical remote valves. Two are activated with the PowerComS operating lever (flow rates and times are adjustable); two others are operated with the joystick (flow rate is adjustable). The remote valves are operated either by buttons on the PowerComS lever or by joystick.

Power-Beyond

With the power beyond connection an uninterrupted flow of oil can be routed from the axial piston pump directly to a consumer. Implements, which have a separate load-sensing capable control unit, can be connected at this point. As a result devices such as a potato harvester, air-seeder or self-loading forage wagon can be directly supplied with oil from the axial piston pump, uninterrupted by other remote flow requirements.



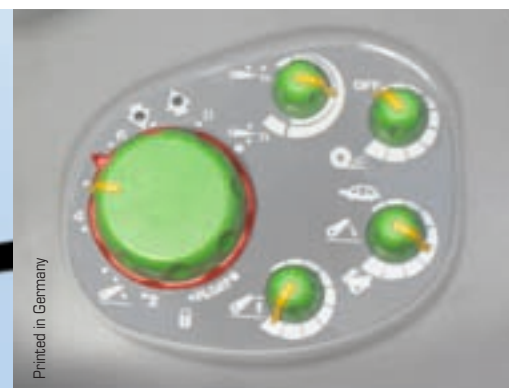
To order the Agrotor M can be fitted with Power-Beyond connectors for the direct connection of third-party devices.



Flow rate and quantity can be simply adjusted. The ProfiLine models also have a throughflow time adjustment facility.

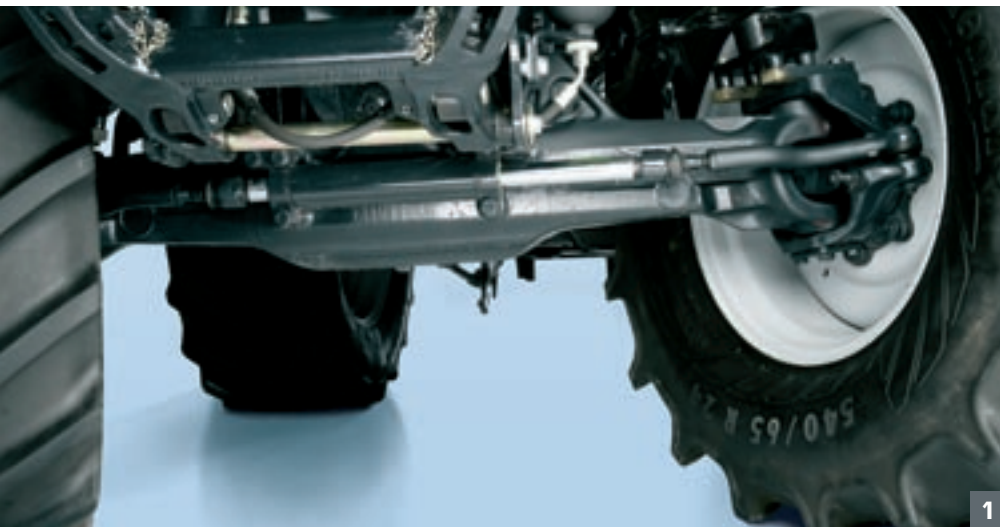


On the ProfiLine version the powerlift and remote valves 1+2 are operated directly with the PowerComS lever.



Within easy reach and easy to read – the EHR operating panel.

MAY WE OFFER YOU ANYTHING ELSE?



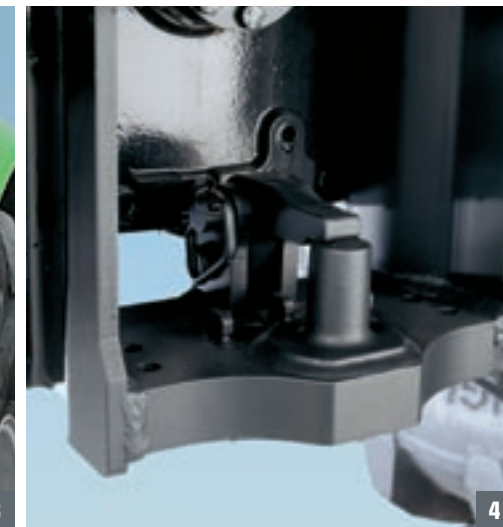
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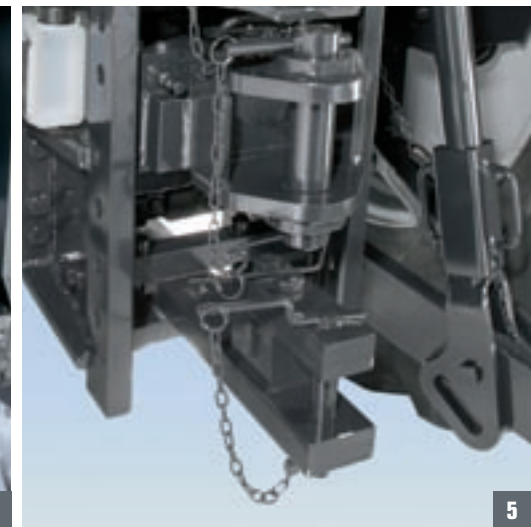
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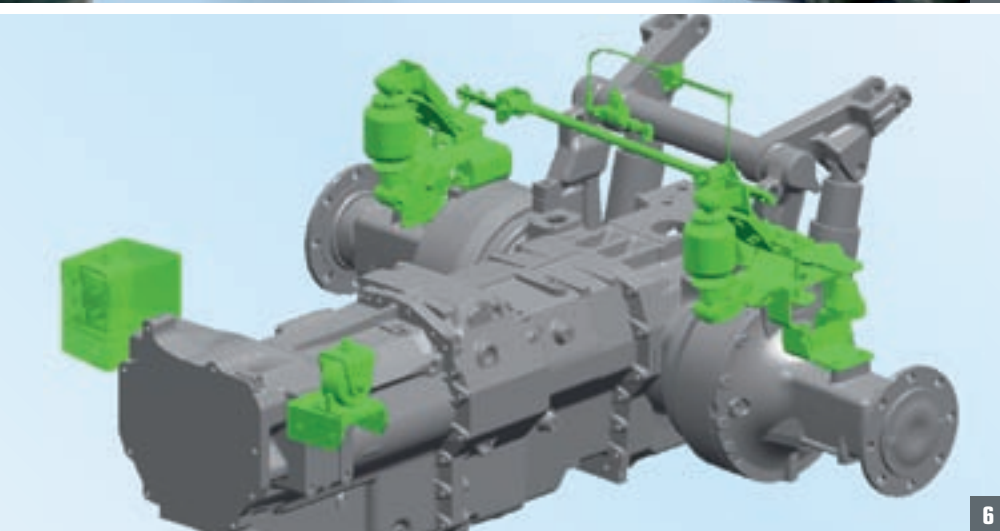
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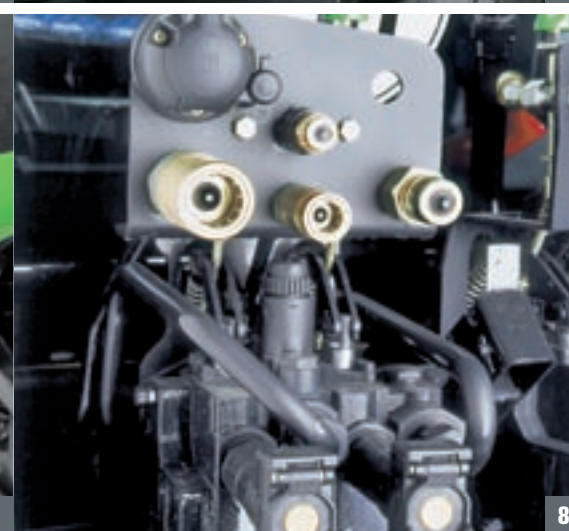
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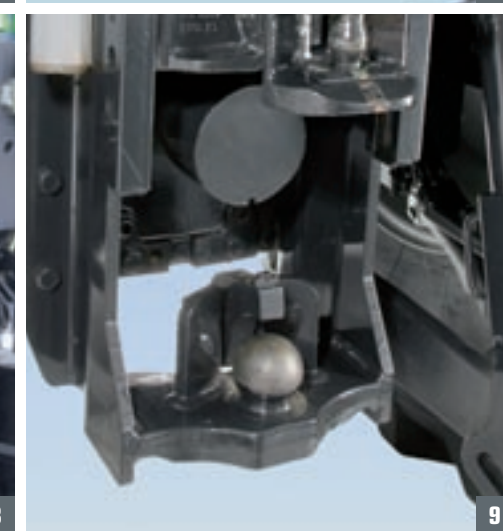
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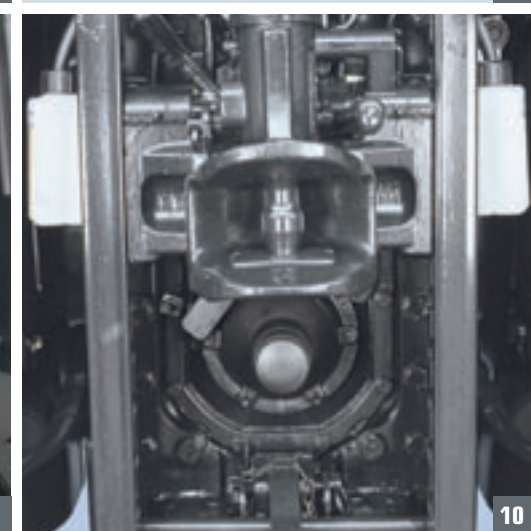
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Even if the standard equipment of the Agrotron is already very comprehensive, it can be further supplemented. DEUTZ-FAHR supplies a coordinated range of additional and special equipment for all ranges and assemblies. Contact your DEUTZ-FAHR dealer. They will be pleased to be of assistance.

1 Front axle with suspension: The 40km/h version can be equipped with integrated front axle suspension upon request. Driving safety and comfort is considerably enhanced by the suspension.

2 Pneumatic braking system: Combined 1 and 2-line system. Indispensable for road transport with trailers.

3 Wide, solid mudguards

4 Piton-Fix: The Piton-Fix has a pin diameter of 45 mm and has a maximum drawbar load of 3,000 kg.

5 Swinging drawbar: This drawbar can be used in either fixed or swinging positions. Its length can be simply adjusted as required.

6 Pneumatic cab suspension: The cab suspension is supplied from either the compressed air system of the tractor or a separate compressed air source and has a load-independent level control for superior suspension and driving comfort.

7 Front linkage and PTO: The Agrotron really reveals its true versatility when equipped with front mounted implements. The integrated front powerlift has a lift capacity of up to 4,5t and a PTO speed of 1,000rpm.

8 Power-Beyond connectors for the direct connection of third-party devices.

9 Ballhead hitch with a drawbar load of 3,000 kg.

10 Tow hitch: The automatic tow hitch can be optionally equipped with a pin diameter of 32 or 38 mm. A remote control can also be fitted upon request.

11 Ballast carrier: Optimum weight distribution is achieved using different ballast carriers and front weights that are adapted to suit various applications.

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NO NEED FOR LONG SERVICING.

ADVANTAGES

- Long maintenance intervals
- Engine oil change every 500 hours
- Tool-free access to all important maintenance points
- Simple cooler cleaning
- Standard diagnosis feature
- Very low maintenance and operating costs, as tests in independent trade magazines have shown
- Tappet clearance check every 1,500 hours



Fast daily maintenance

Daily maintenance is simple and completed in next to no time with the rearward opening angle of the engine cowl. Pneumatic springs keep the cowl in the open position. All important components and assemblies are easily accessible, without tools, for simple maintenance work. The engine oil level can be checked without opening the cowl. At the rear axle a large, easily visible sight glass indicates the transmission and hydraulic oil levels.

Long maintenance intervals

The regular engine maintenance intervals are long – in fact uniquely long. The engine oil only requires changing every 500 hours and the valve adjustment only needs checking every 1,500 hours of operation.

1 The compact cooler system is simply and easily opened up in three steps for cleaning.

2 The oil filler and dipstick are easily accessible. Long maintenance intervals lower operating costs.

3 The engine air filter is easily accessible. The air intake, situated in a low-dust area and the ejector dust separation feature, ensure that the maintenance intervals of the filter are very long.

4 The transmission and hydraulic oil levels are visible in a large sight glass. The indicator is easily visible.

5 All fuses and switching relays are well protected in the cab and are easily accessible in the right-hand rear fender panel.

6 Real time diagnosis. DEUTZ-FAHR service centres can perform fast electronic system diagnostic checks on the tractor via a single plug connection.

7 Both cab air filters are located at easily accessible positions in the B struts. The filters can be cleaned and replaced without tools. Active carbon, aerosol filters are available upon request.

8 The cab floor mat can be easily removed for cleaning.



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SURE AND SAFE WITH ORIGINAL DEUTZ-FAHR.



Original service is wise.

Without doubt – many can repair much. But only your DEUTZ-FAHR specialist dealer knows your tractor inside and out. Only your dealer has regularly trained mechanics and experts on call. Only dealers have the special tools and diagnostic equipment required for competent diagnosis and inspection. All this gives you peace of mind – without doubt.

Original parts make good sense.

As you placed your trust in the original tractor, we recommend you use original parts when required. Only these comply with the high quality and safety standards of DEUTZ-FAHR and ensure correct function and operation without problems – guaranteed.

DEUTZ-FAHR lubricants

We recommend new genuine DEUTZFAHR lubricants. The outstanding quality of this product range, which is made exclusively for DEUTZ-FAHR, ensures that your tractor always receives exactly what it needs.



Have a word with your DEUTZ-FAHR dealer – he will be pleased to answer your questions:

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