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Fendt 500 Vario Gen3

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Fendt 500 Vario Gen3

Model		512	513	514	516
Rated power ECE R 120	kW/PS	91/124	98/133	110/150	120/163
Maximum power ECE R 120	kW/PS	96/131	104/141	115/156	126/171

Fendt 500 Vario Gen3.



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At a glance.

Fendt 500 Vario - ONE IS SIMPLE: FendtONE

Conditions in agriculture are becoming increasingly challenging: from extreme weather events to stricter legal guidelines.

With the Fendt 500 Vario with FendtONE, on the other hand, we offer you something that makes your work easier - both on the machine and during preparation and follow-up work in the field.

In addition, the Fendt 500 Vario scores with its outstanding manoeuvrability and clarity. It is not for nothing that the Fendt 500 Vario is one of the most popular all-round tractors: strong in traction, precise in maintenance work, particularly economical in consumption and comfortable and safe in transport.

- Power segment 124 - 163 hp nominal power (according to ECE R120)
- FendtONE:
 - new driver workstation (onboard)
 - Planning and management functions with FendtONE offboard
- 3 front linkage variants up to relieving regulation
- VisioPlus cabin in 3 different versions
- Standard headland management Fendt TI
- Fendt Reaction steering system
- Fendt Guide tracking with receiver selection
- Choice of numerous Smart Farming features, e.g. Fendt TI Headland for professional headland work
- Software updateable: performance that grows with you



Performance.

Concept

Innovations of the Gen3

Spotlights

Areas of application

Equipment lines

Settings



Concept.

Powerful, compact and manoeuvrable

- Ideal all-round tractor:
 - Powerful in the field
 - Precise for municipal work
 - Economical on fuel
 - Comfortable and safe during transport
- Outstanding manoeuvrability and visibility, ideal for front loader use
- Very good overview to the rear when hitching implements
- Cab with pneumatic suspension, panoramic windscreen and 300° windscreen wiper
- Maximum speed 50 km/h

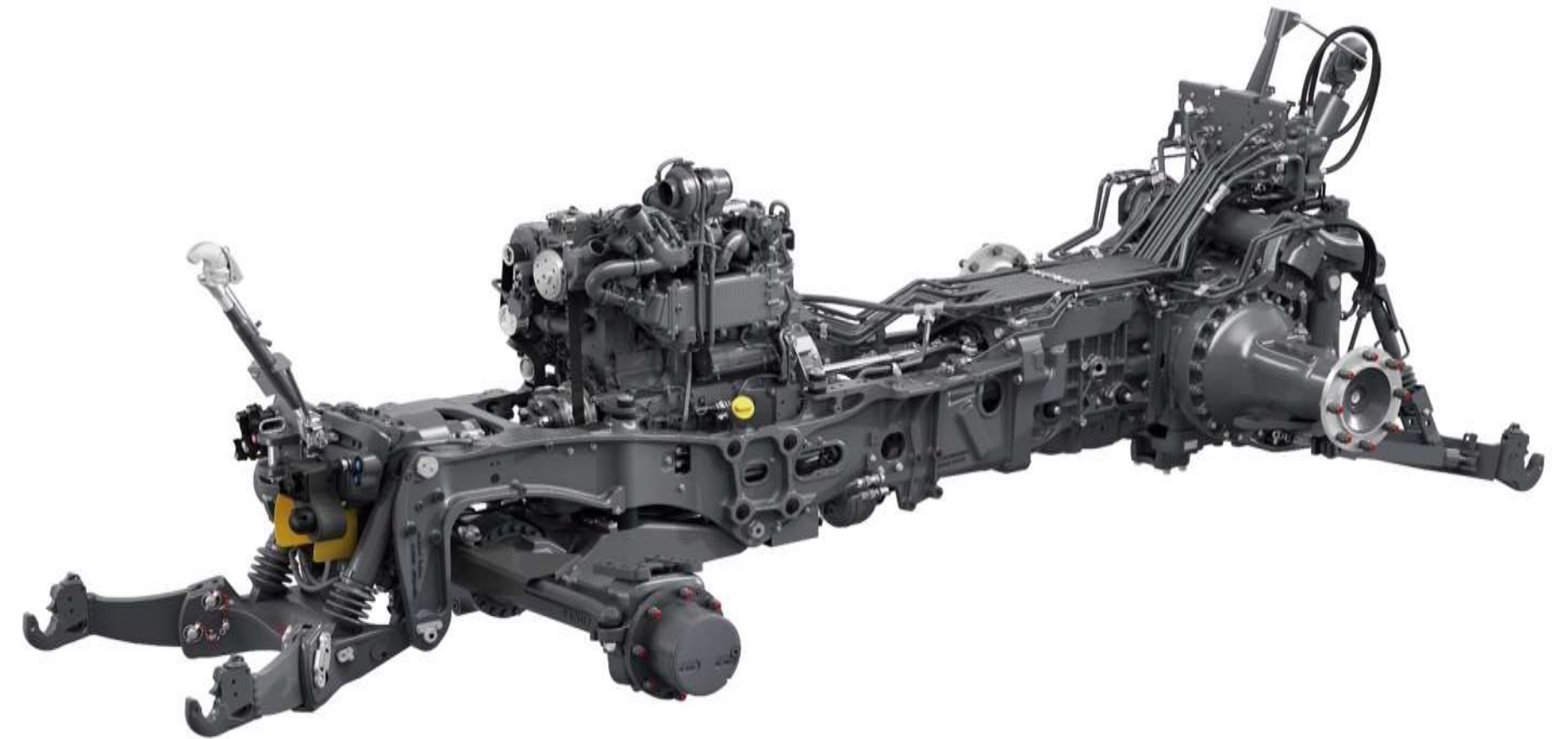
+ Compact, manoeuvrable tractor with high performance



Concept.

Chassis

- Semi-frame construction with flanged gearbox housing
- Engine mounted on rubber blocks
- Full integration of the connection points for the front axle suspension and the level-controlled suspension system
- Front PTO and front linkage incorporated into the half frame
- Stub axle available ex works



- + Stable half-frame construction
- + Motor carries no load
- + No noise transfer of the engine through the frame due to being mounted on rubber blocks
- + Front linkage fully integrated (no additional frame required)

Innovations of Gen3.

FendtONE operating philosophy

- New driver workstation (onboard) for more functionality, customisation and ergonomics
- Perform planning and management functions with FendtONE offboard from anywhere.

Infotainment package

- Electronic platform for entertainment and communication with:
 - High-end hands-free system
 - Highest quality radio reception worldwide
 - Connection to a wide range of external audio sources
 - Fully integrated operation via terminal or rotary knob on the armrest

Additional cabin variant

- Panoramic cabin VisioPlus + door right: continuous windscreen, door left and right

Cargo 4X loader with third valve

- Performs up to three functions simultaneously, e.g. when used with a round bale grab: lowering, tilting and opening the bale grab

ISOBUS interface in the front

- Thus full flexibility, both in the rear and in the front

Low idle speed of 850 - 950 rpm

- Intelligent lowering when the vehicle is stationary
- Speed is increased under certain conditions, resulting in better starting behaviour
- Improved PTO start-up

Further innovations

- 4 camera connections (2x digital, 2x analogue)
- Chrome package possible
- 4 USB ports on the armrest



Fendt 500 Vario Gen3 - Spotlights.

Here you will find the special Fendt solutions, the so-called Fendt Spotlights, which make the difference and simply make your work better every day.

1. VisioPlus Cabin

- Spacious cabin with a field of vision of 77°.
- numerous storage compartments
- comfortable passenger seat

2. FendtONE driver's workstation

- new armrest with Fendt-known elements
- Flexible key assignment via the Individual Operation Manager (IOM)
- Up to three displays an option: 10" dashboard, 12" terminal on armrest, 12" terminal retractable into cab liner
- Colour coding of the different function groups, also for function reassignment
- 3L joystick with reverse button

3. front linkage cat. 2 position / relief

- Front linkage fully integrated into the vehicle concept
- Permanent height adjustment of the implement to the terrain

4. front loader Fendt CARGO 4X/80 DW with 3rd valve

- Performs up to three functions simultaneously, e.g. when used with a round bale grab: lowering, tilting and opening the bale grab

5. software updates - always up to date with the latest technology

- Securing the technical advantage and value retention of the machine

6. Fendt Reaction steering system

- Safe straight-ahead running: steering wheel is automatically returns to the centre position
- Safe and sensitive steering
- Driving comfort like a car/truck

7. headland management Fendt TI

- Save recurring sequences at the headland and activate them at the desired time.
- Manually create the optimum operating sequence when stationary or record and save it while driving
- Activation of the defined sequence of work steps at the touch of a button



10. automatic steering axle lock

- Trailing steering axle of trailers is automatically opened within a selectable speed range
- No need to manually lock the trailing steered axle outside the selected speed range or when reversing
- Stable handling at higher speeds thanks to rigid trailing steering

9. infotainment package + 4.1 sound system

- Hands-free system: 8 microphones installed in the cab liner for perfect acoustics
- Best radio reception thanks to FM/AM/DAB+/HD and permanent station search via two antennas
- Four high-end speakers and a subwoofer for superior sound quality
- MP3 playback via USB, AUX-IN or via Bluetooth directly from smartphone

8. smart farming modules - individually selectable

- four modules from which you can choose as required: Guidance - Agronomy - Telemetry - Machine control
- each module consisting of basic package with all necessary start-up applications
- Can be expanded as required with options: Fendt Contour Assistant, Fendt TI Headland, Fendt Section Control and Fendt Variable Rate Control and much more.

Areas of application.

- Compact, manoeuvrable 4-cylinder tractor
- Flexible application possibilities in grassland, arable farming and municipal areas due to extensive equipment options
- Optimum front loader conditions due to narrow bonnet, very good visibility to the front and upwards through the curved front windscreen
- Low dead weight for transport work with high payloads
- Numerous Smart Farming functions available:
 - Guidance
 - Agronomy
 - telemetry
 - Machine control

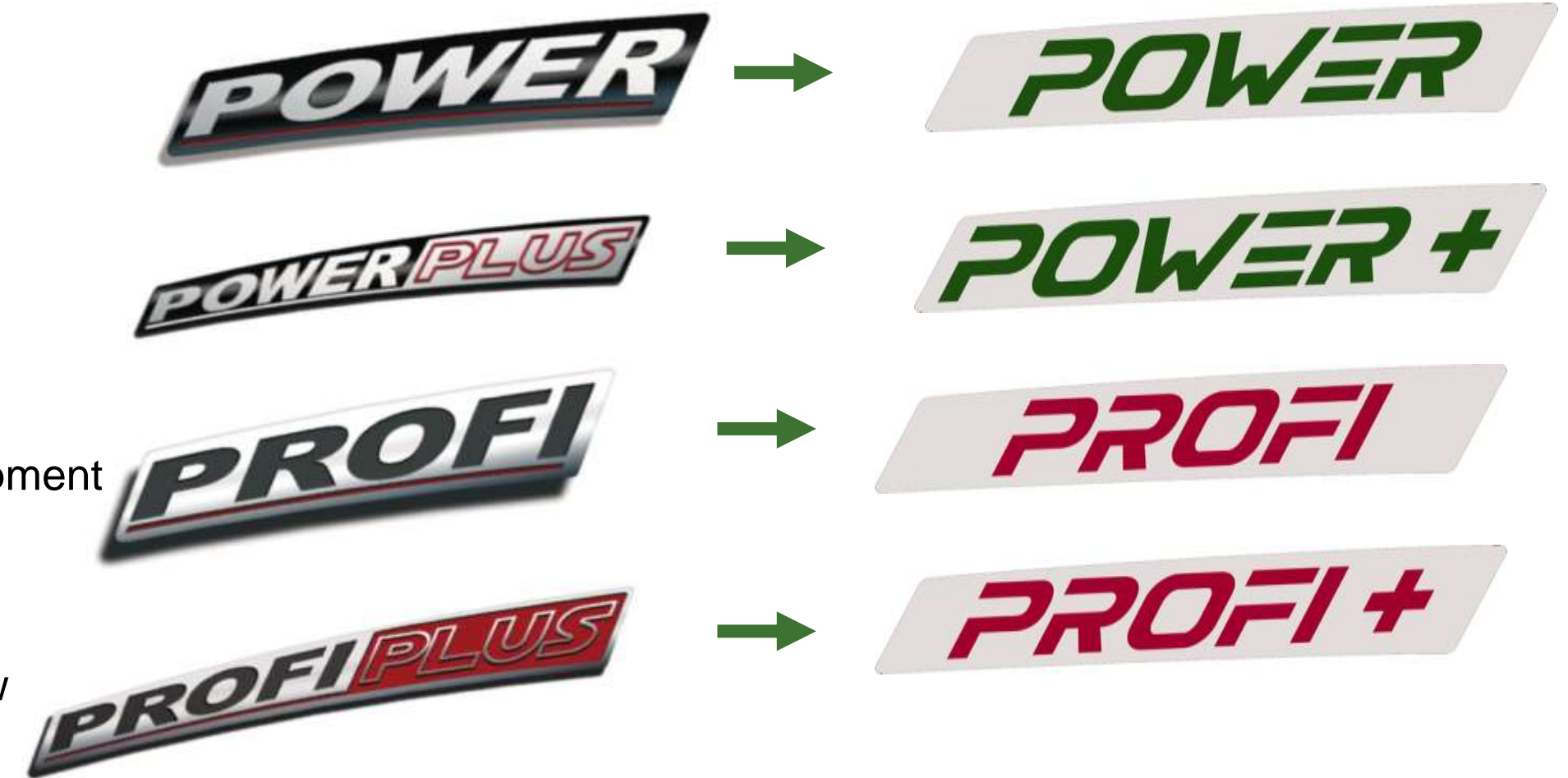


Equipment lines.



4 different equipment lines

- Power
 - Power+
 - Profi
 - Profi+
- with "+" always guidance ready (guidance basic package) included
 - Two different settings (Setting 1 and Setting 2) can be selected for each equipment line.
 - Selection of the desired equipment line right at the beginning of the vehicle configuration
 - New design as an identification mark that the vehicle is equipped with the new FendtONE driver's workstation.



Configuration		Summary	Technical Data
<p>< Line Engine Transmission Power lift Hydraulics Cab Guidance Agr</p>			
Description	Details		
<input checked="" type="radio"/> Power Setting1	i		
<input type="radio"/> Power Setting2	i		
<input type="radio"/> Power+ Setting1	i		
<input type="radio"/> Power+ Setting2	i		
<input type="radio"/> Profi Setting1	i		
<input type="radio"/> Profi Setting2	i		
<input type="radio"/> Profi+ Setting1	i		
<input type="radio"/> Profi+ Setting2	i		

Configurator



Lettering on the driver's door

Equipment lines.



Equipment Power

- Multifunction control lever with 8 buttons and 2 proportional mini-rockers for operating spool valves
- Digital 10" Dashboard
- Hydraulic pump 75 l/min max. 4 additional rear spools

Optional

- 12" terminal on the armrest
- Hydraulic pump 110 l/min
- Front linkage cat. 2



Additional equipment Power+

- 12" terminal on the armrest
- Machine control Basic package for controlling ISOBUS implements
- Guidance basic package incl. Fendt Guide

Optional

- Fendt Contour Assistant
- Agronomy basic package incl. Fendt Task Doc
- Telemetry basic package incl. Fendt Connect
- Fendt Section Control
- Fendt Variable Rate Control



Additional equipment Profi

- Hydraulic pump 110 l/min max. 5 additional rear spools
- Corner Lights
- Coming Home Light

Optional

- 12" terminal in the roof
- Implement control at the front (ISOBUS interface in the front)
- Infotainment package + 4.1 sound system



Additional equipment Profi+

- Guidance basic package incl. Fendt Guide
- Agronomy basic package incl. Fendt TaskDoc
- Telemetry basic package incl. Fendt Connect

Optional

- Fendt TI Headland*
- Fendt Implement Management (TIM)

*) initially consisting of Fendt TI Auto

Settings 1/2.

Equipment lines with different settings

Two different settings can be selected for each equipment variant. All illustrations show standard equipment and optionally available front linkage.

POWER



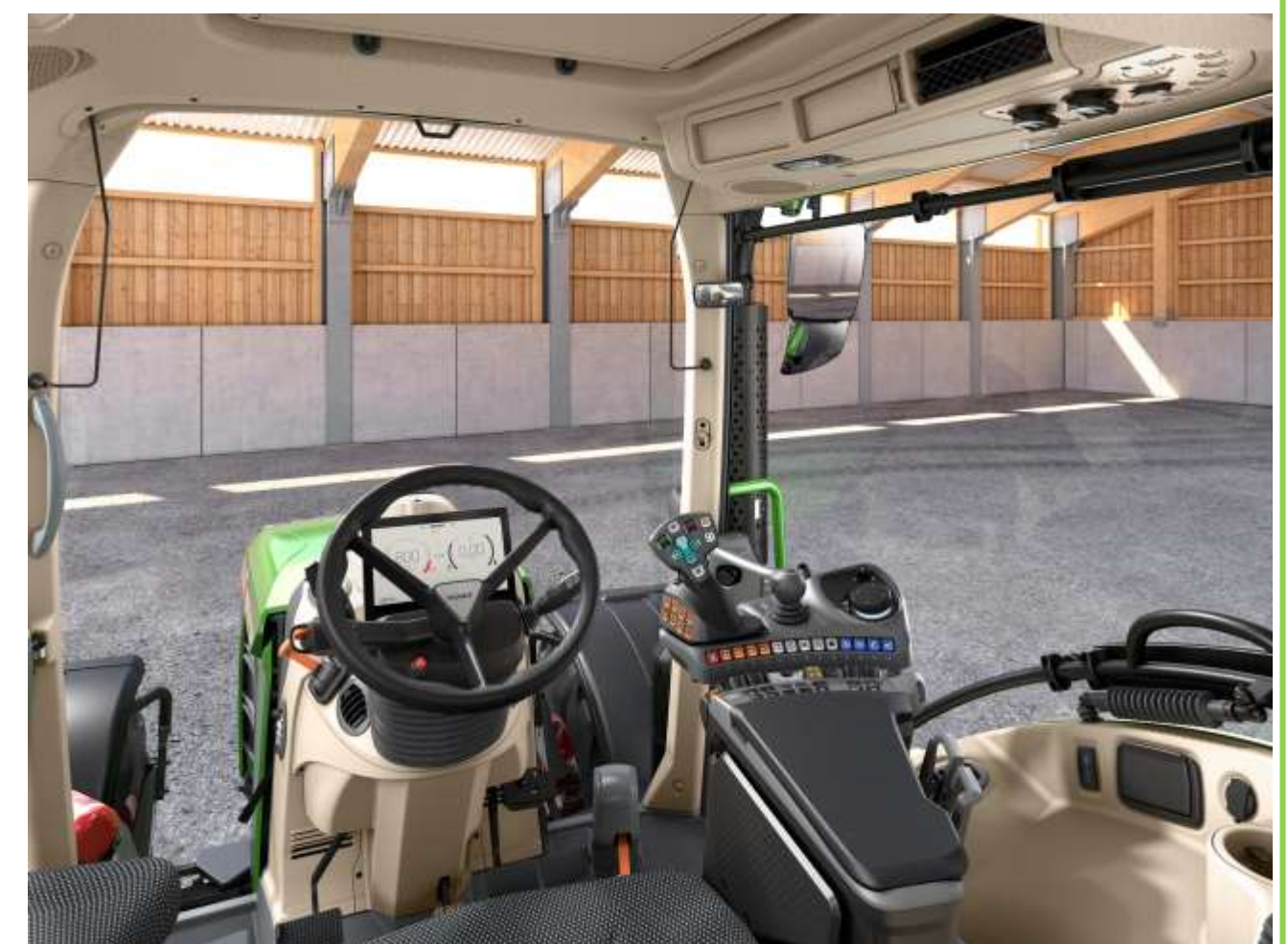
Exemplary picture of the Fendt 300 Vario

Power Setting 1

- Optional: with terminal on the armrest
- Without cross gate lever
- Two finger-tip spools for operating the hydraulic valves

Power Setting 2

- Optional: with terminal on the armrest
- Cross gate lever



Exemplary picture of the Fendt 300 Vario

Settings 2/2.

All illustrations show standard equipment and optional front linkage.

POWER+



Power+ Setting 1

- 12" terminal on the armrest
- Cross-gate lever
- Two finger-tip spools for operating the hydraulic valves



Power+ Setting 2

- 12" terminal on the armrest
- 3L joystick
- Two finger-tip spools for operating the hydraulic valves

PROFI



Profi Setting 1 / Profi+ Setting 1

- 12" terminal on the armrest
- Cross-gate lever
- Four finger-tip spools for operating the hydraulic valves

PROFI+



Profi Setting 2 / Profi+ Setting 2

- 12" terminal on the armrest
- 3L joystick
- Four finger-tip spools for operating the hydraulic valves

Engine.

Concept

Characteristics

Exhaust gas aftertreatment

Air filter

Tank

Cooling



Concept.

Features

- Deutz (TCD 4.1 L4) - 4.04 litre capacity, 4 cylinders, 4 valve technology
- Exhaust gas aftertreatment with external exhaust gas recirculation (EGR), diesel oxidation catalyst (DOC), passive diesel particulate filter (DPF) and Selective Catalytic Reduction (SCR)
- Pneumatically controlled wastegate turbocharger without engine brake (for all types)
- Fuel prefilter with thermostatic valve
- Bonnet lock, can only be unlocked with vehicle key



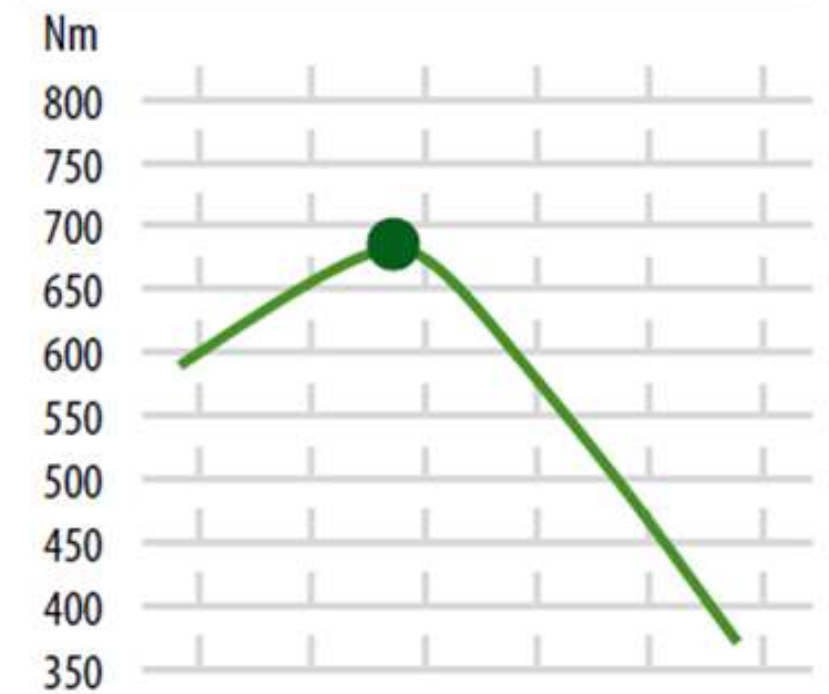
- + Optimum performance characteristics
- + Complies with exhaust stage Tier 4 final/Stage V
- + The compact design allows for a very good overview
- + Electronic motor control guarantees optimum utilisation of the motor

Characteristics.

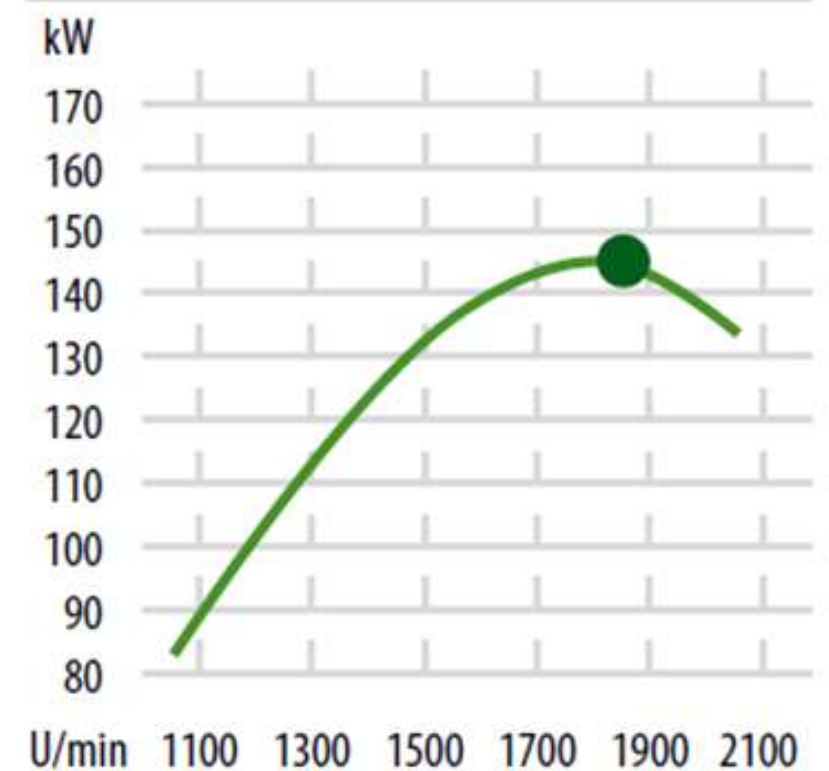
- Wide constant power range
- Excess power characteristic
- Common rail - multiple injection with 1600 bar injection pressure
- Final speed at reduced engine speed (1700 rpm at 50 km/h or 1400 rpm at 40 km/h)
- High maximum torque of 699 Nm at 1500 rpm (516 Vario)
- High torque increase (up to 36%)

- + Low nominal speed at 2100 rpm for optimised fuel consumption
- + Electronic engine control enables optimum adjustment of the engine
- + High torque for the highest performance demands

Drehmoment



Leistung

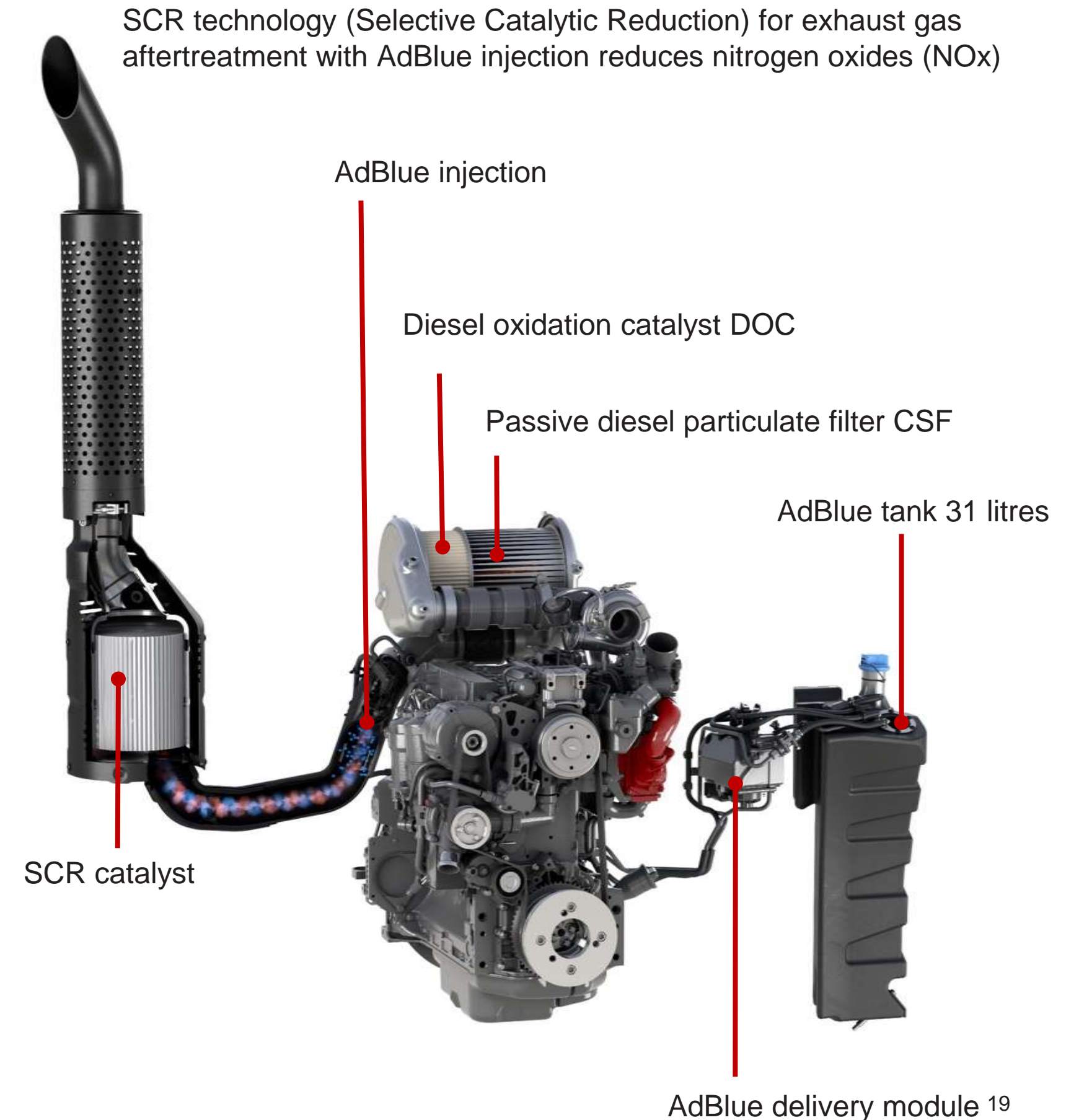


Exhaust gas aftertreatment.

Stage V / TIER 4 final

exhaust gas aftertreatment to comply with the EU exhaust gas standard Stage V:

- Exhaust gas recirculation (AGRex)
- Diesel oxidation catalyst (DOC)
- Passive, coated diesel particulate filter: Coated Soot Filter (CSF)
- SCR catalytic converter



Exhaust gas aftertreatment.

Combination of DOC and CSF

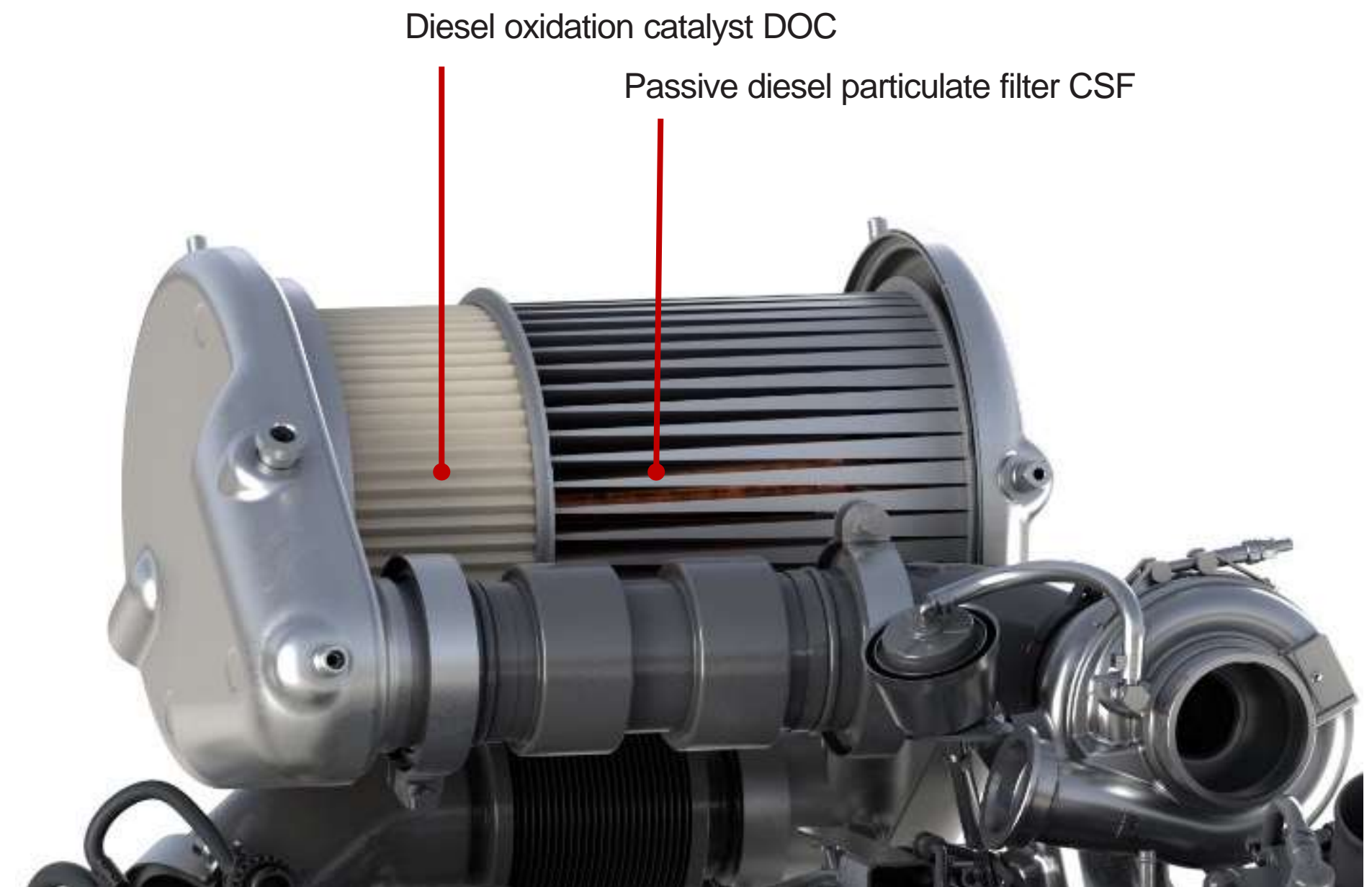
Diesel Oxidation Catalyst (DOC):

- Post-oxidation of not completely burnt hydrocarbons also in the partial load range

Diesel particulate filter CSF (Coated Soot Filter)

- Passive regeneration during driving
- Demand-oriented control of the combustion parameters for regeneration (Heat Mode)
- Protection against soot overload through differential pressure sensor
- Coating of the diesel particulate filter (Coated Soot Filter) lowers the soot ignition temperature for continuous soot burn-off

- + Design for service life for lowest operating costs
- + Reduction of AdBlue consumption
- + Intelligent engine control influences regeneration via combustion process
- + Passive regeneration, i.e. direct diesel injection for regeneration not required



Exhaust gas aftertreatment.

Advantages of exhaust gas aftertreatment

- + Total engine concept with highest fuel efficiency for lowest operating costs
- + Significant reduction of AdBlue consumption through combination of SCR and CSF - AdBlue tank display in the digital dashboard and AdBlue consumption display in the terminal
- + Heat Mode: Demand-based control of air throttling and combustion parameters
- + Optimum engine performance
- + Slimmer SCR catalytic converter casing for even better visibility
- + Compliance with exhaust emission standard Stage V / TIER 4 Final

Air filter.

High-performance filter

- Efficient, proven round filter technology
- Safety element/cartridge centrally located in the round filter
- Optimised airflow for low losses and low air heating
- Intake of combustion air in the low-dust area above the cooler

- + Long filter life due to pre-separation
- + Maintenance-friendly due to long filter service life and very good accessibility
- + Low susceptibility to dirt due to coarse dirt extraction
- + High motor efficiency due to low air heating and low differential pressures



Tank.

Fuel tank with high tank capacity

- Full use of the available space
- AdBlue tank (31 l) fully integrated in fuel tank (298 l)
- Fuel prefilter with thermostatic valve draws in part of the (preheated) diesel return again via a bypass in icy temperatures
- An electrically heated fuel pre-filter is available as an option
- Toolbox as insert in the fuel tank



+ 100 % utilisation of the available space due to adapted design
+ High tank volume combined with low consumption allows long working days without interruption, even under extreme conditions

Cooling.

Powerful cooling system with:

- Air-conditioning condenser
- Fuel cooler
- Intercooler
- Transmission oil cooler
(with heat exchanger for co-cooling the hydraulic oil)
- Water cooler

- Water pump with 300 l/min output
- High efficiency thanks to particularly good air supply to all cooler components
- Good accessibility to all components of the cooling system for particularly high ease of maintenance



- + Tidy design with flat radiator bottom
- + Cooler reserves, even at full load, ensure low thermal load
- + Good cleaning accessibility of the radiators

Cooling.

- 1 Water cooler
- 2 Intercooler (air - air)
- 3 Fuel cooler
- 4 Air-conditioning condenser
- 5 Transmission oil cooler



Cooling.

Visctronic fan

- Temperature-controlled/demand-controlled fan: Fan only runs when there is a demand (with necessary speed) -> lower fuel consumption and power saving, which is available to the tractor elsewhere
- Electronically controlled visco-fan clutch that is activated immediately when cooling capacity is required
- Less radiator contamination due to adjusted fan speed
- High air delivery capacity with low power requirement
- Favourable running properties and thus low noise development
- Large diameter open fan

- + Low noise due to good running properties
- + High operating and operational safety
- + Very good cooling properties

Transmission.

Concept

Function

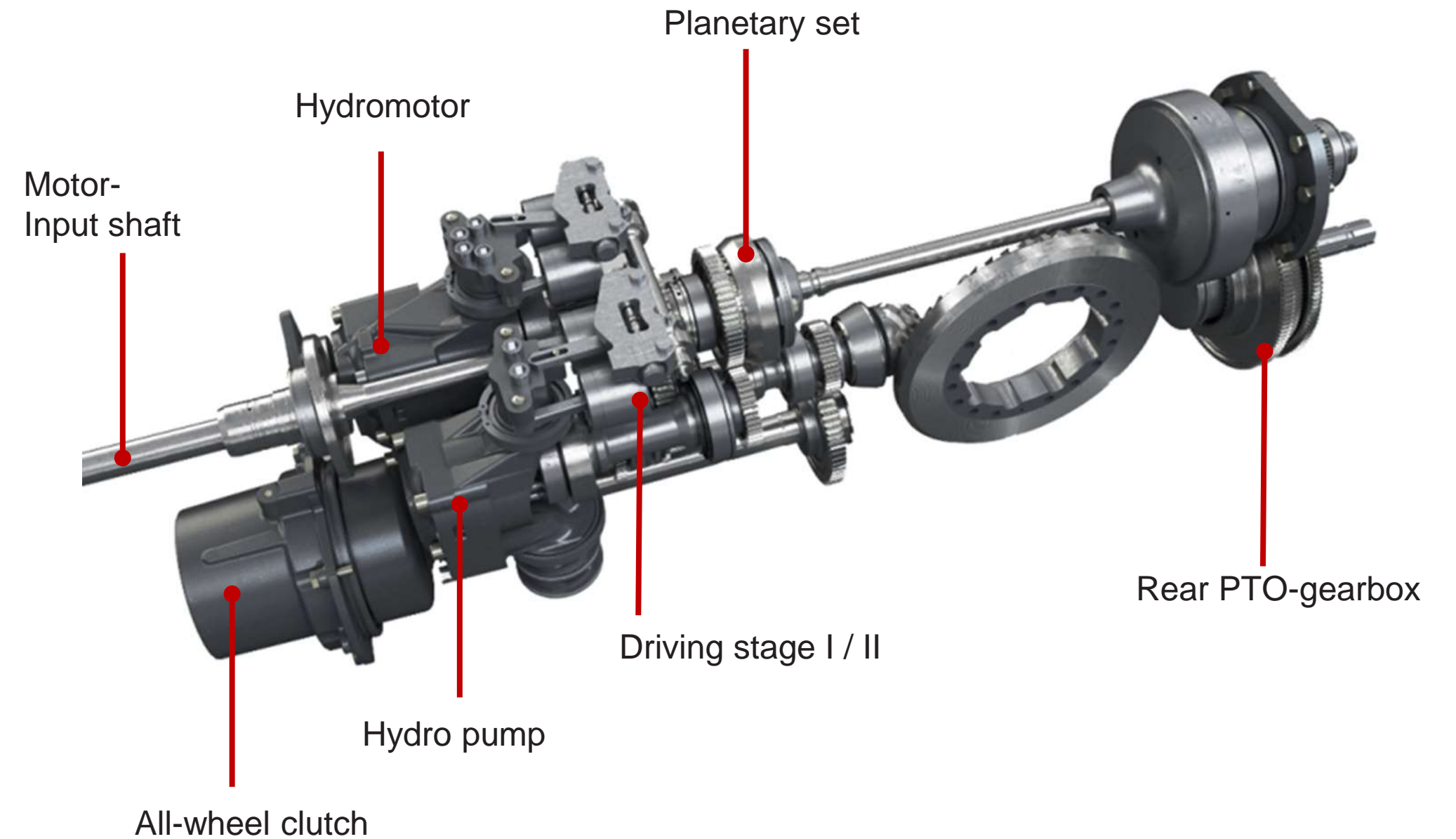
Maintenance/Diagnosis



Concept.

Proven Vario gearbox ML 90

- Stepless, jerk-free starting and driving for maximum flexibility
- Stepless travel drive from 20 m/h to 50 km/h at reduced speed (1700 rpm)
- Completely wear-free change from forward to reverse by swivelling the hydraulic pump
- Simple control of the gearbox via joystick, electromechanical drive and adjusting shaft with cam track
- Automated operation through cruise control function and load limit control 2.0
- High-performance hydrostats with very high efficiency
- Permanent frictional connection
- Independent control of engine/power take-off speed and travel speed
- Separate circuits for transmission and hydraulic oil



Concept.

Advantages

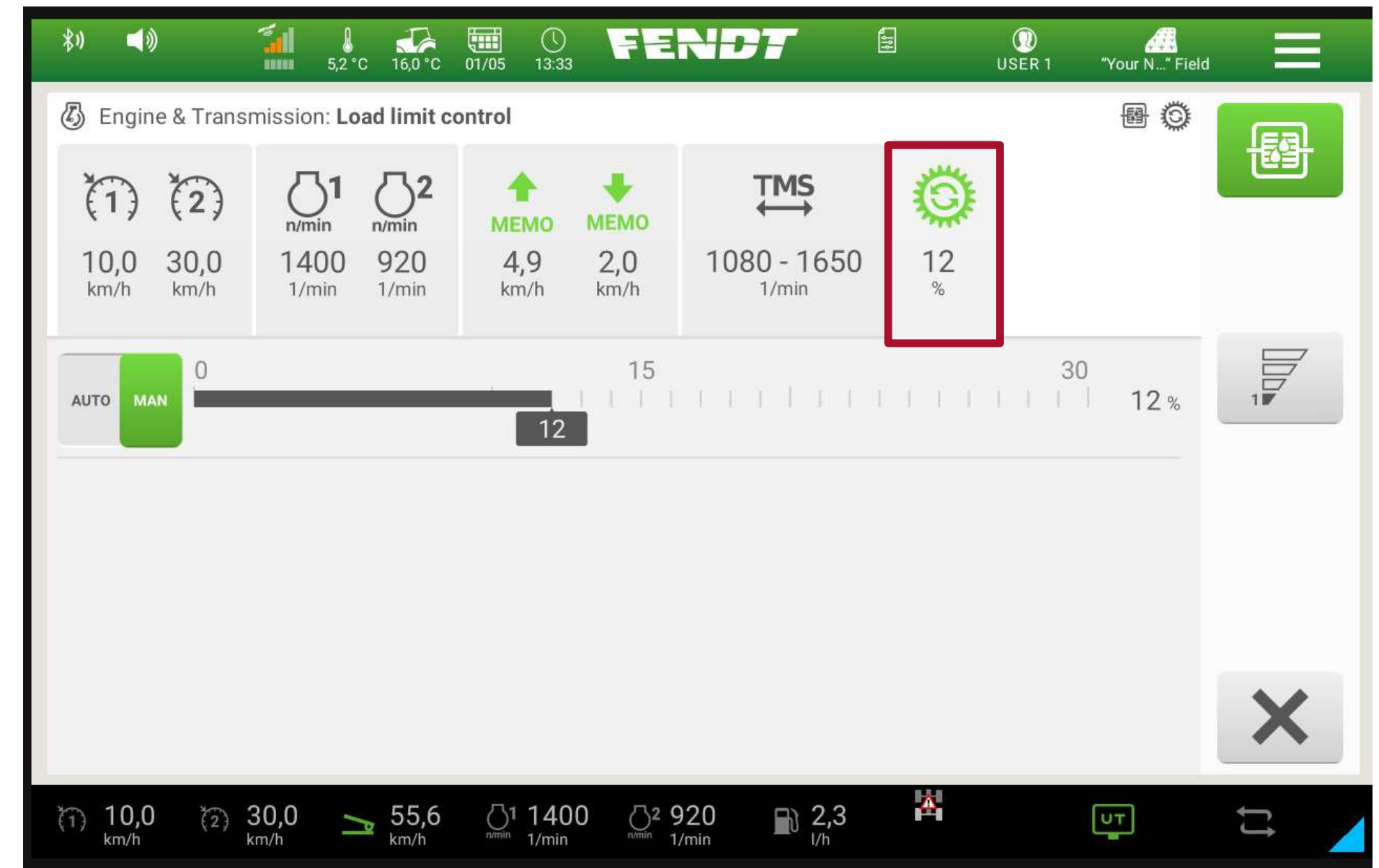
- + High fuel efficiency due to automated tuning of transmission and engine (TMS) depending on load
- + Low fuel consumption during transport work due to reduced engine speed at top speed
- + Optimum engine utilisation due to stepless speed adjustment
- + Gear oil change only every 2000 hours
- + No special oil necessary
- + Electronic control guarantees optimum setting or monitoring of the gearbox
- + No dirt entry via hydraulic system thanks to separate oil circuits



Concept.

Automatic load limit 2.0

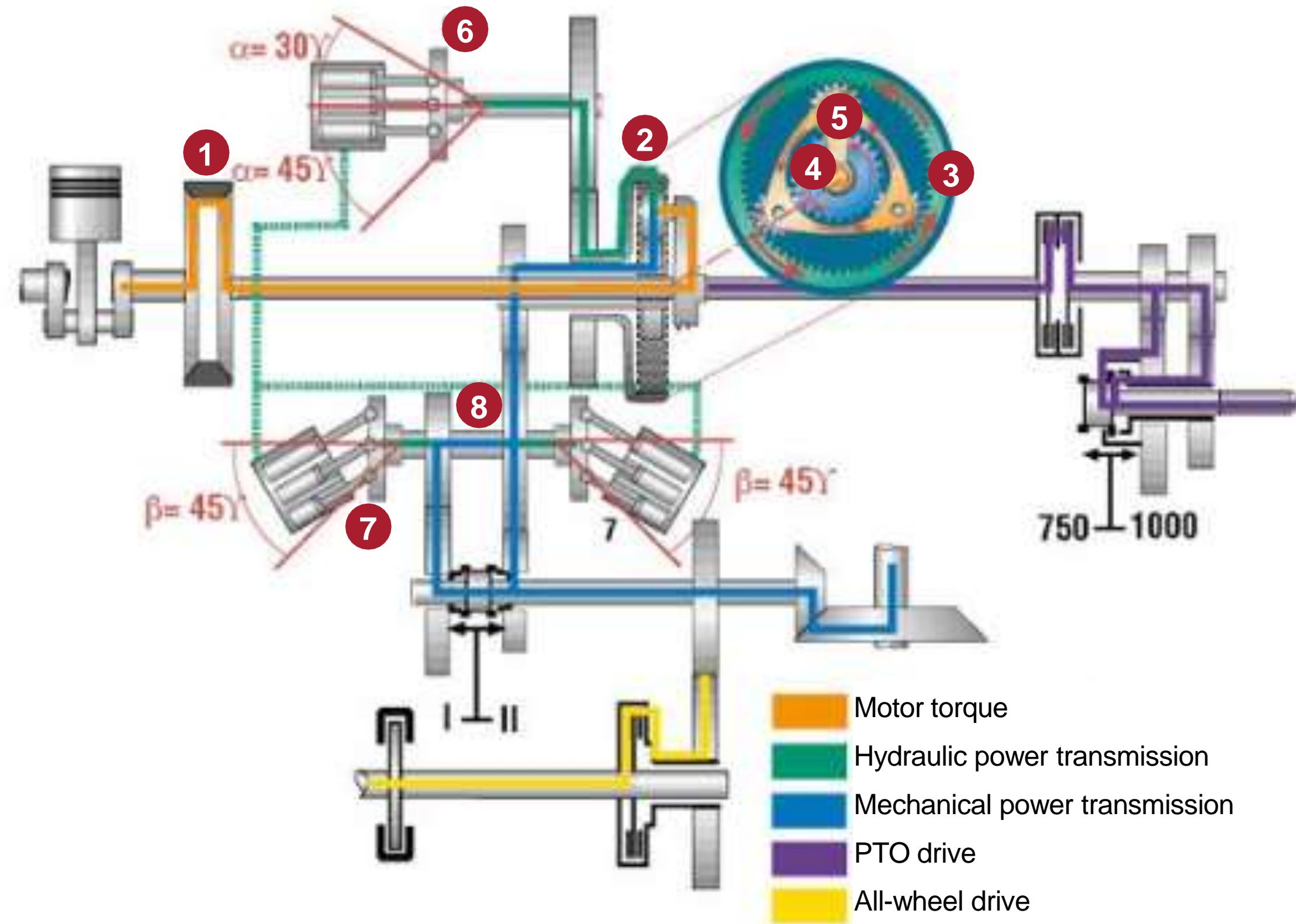
- Load limit control determines how far the engine speed may drop under load before the transmission readjusts.
- Fully automatic adjustment of the load limit and thus the engine load
- Control depending on set speed (with TMS or cruise control activation) or engine load (without TMS/ cruise control).
- Manual adjustment still possible



- + Faster achievement of the set speed
- + better maintenance of the set speed
- + zippier driving under load
- + Higher average speed with optimum consumption

Function.

- 1** Torsion damper
- 2** Planetary set
- 3** Ring gear
- 4** Sun wheel
- 5** Planetary carrier
- 6** Hydro pump
- 7** Hydromotors
- 8** Accumulator shaft



Maintenance/Diagnosis.

- Separate transmission and hydraulic oil reservoir
- Change gear oil only every 2,000 operating hours
- Remote measuring points on the gearbox -> quick and easy troubleshooting without dismantling the wheel -> cost reduction for the customer

- + No dirt entry into the transmission due to contaminated hydraulic oil
- + Long maintenance intervals result in less downtime
- + Simplified diagnostic option that reduces time and costs
- + low maintenance costs

Fendt 500 Vario Gen3 - PTO shaft

PTO.

Concept



Concept.

Three speed PTO

- Stub PTO with three speeds or flange PTO with two speeds
- Connection crankshaft and PTO stub only via one gear stage
- Electrohydraulic speed preselection in the dashboard or terminal
- External operation on both sides of the mudguard
- Automatic start-up control
- Overload protection to protect the motor
- Stationary operation possible
- Bevelled and chamfered profile, thus quick and easy fitting of cardan shafts
- Reaching the ZW nominal speed already at approx. 1940 rpm of the engine (or 540 E at approx. 1500 rpm), thus low fuel consumption

+ PTO implements can be operated at constant speed and at the same time variable driving speed
+ Time and fuel-saving implement combinations thanks to front and rear PTO shaft



Concept.

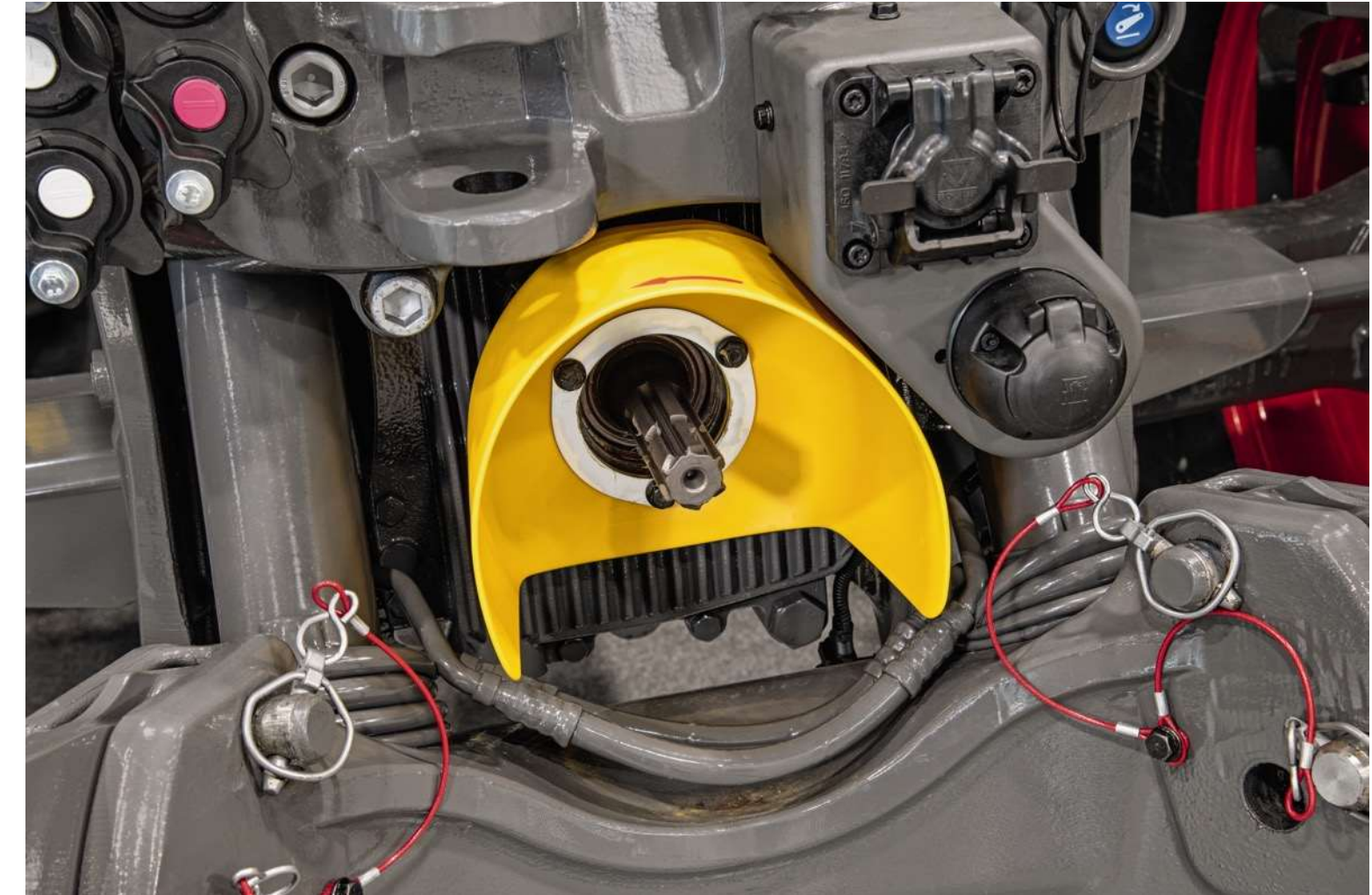
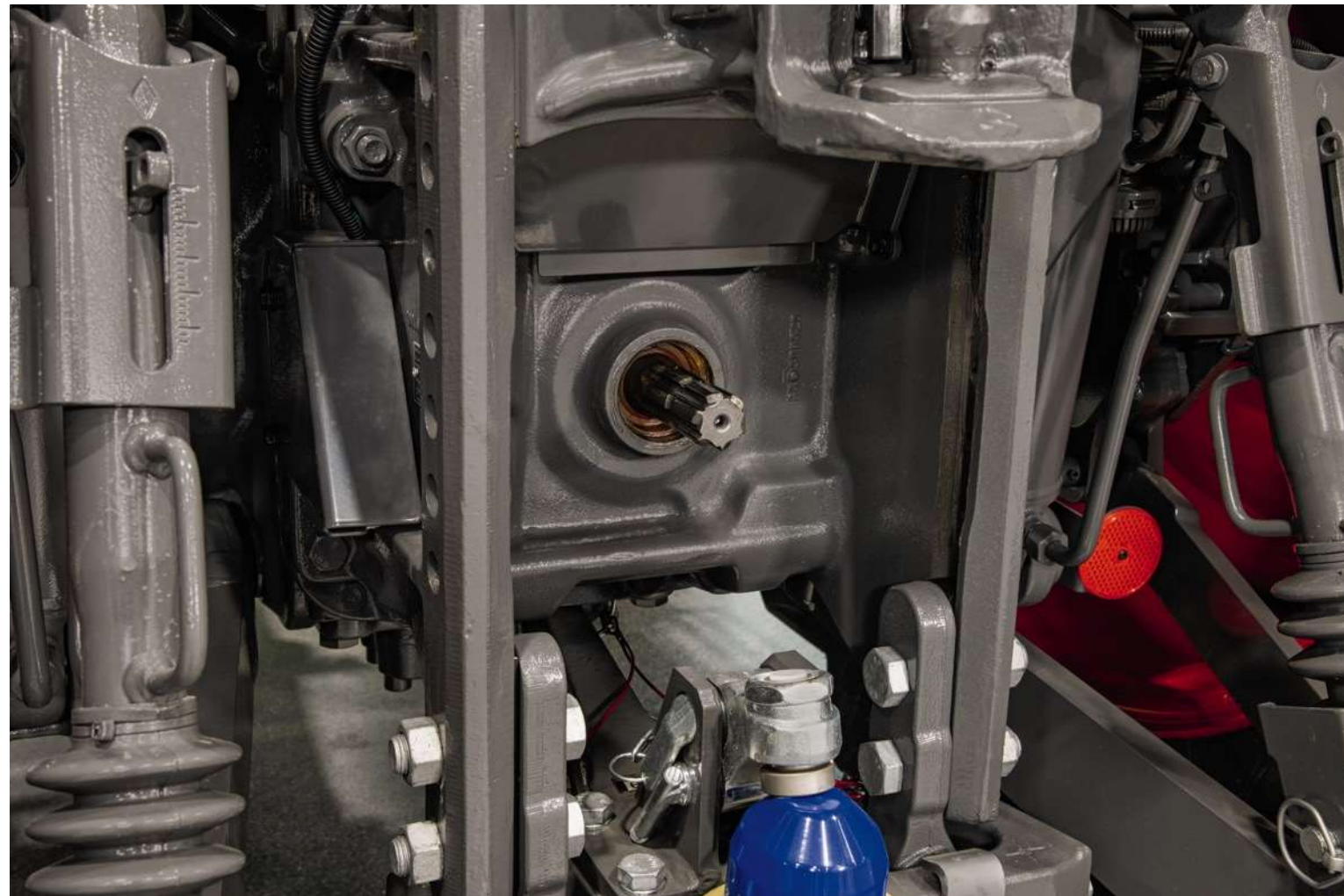
Rear PTO speeds

- Stub PTO: 540/540E/1000 or optional 540E/1000/1000E
- Flange PTO: 540/1000; usable with 1 3/8" 21-spline or 1 3/8" 6-spline

- Power/Power+: only stub PTO available
- Profi/Profi+: optional flange-PTO also available

Front PTO speeds

- Option: 1000 rpm



Concept.

Automatic rear or front PTO functions

- Switching the rear and front PTO on and off can be done with a push of a button on the GO & END buttons on the multi-function joystick
- The PTO is switched on and off automatically at preset positions of the linkage
- Targeting a preset engine speed when activating the PTO on the mudguard
- Fully integrated into the Fendt TI headland management system

- + Simplified operation due to the connection of power lift and PTO shaft
- + Simplified operation on the multifunction joystick for rear and front PTOs

Switching on the rear PTO externally



Linkage.

Rear linkage

Front linkage

External operation



Rear linkage.

- High lifting force: 7,890 daN
- EHR with proportional operation via rocker, rotary wheel for depth regulation, 2 memo positions
- Single-acting cylinders with locking function via mechanical locking device
- Single acting for Power/Power+
- Optional double-acting cylinders with Profi/Profi+
- Rear operation on the left and right mudguards
- Reinforced lifting struts and side support
- Active vibration damping for road travel with implements
- Load compensated lowering
- Tool-free change between cat. 2/3 by repositioning bolts



+ Constant lowering speed regardless of the weight of the unit

Rear linkage.

Advantages

- + High lifting capacity for all applications
- + External operation on both sides for easy attachment and detachment of implements
- + Vibration damping for best driving comfort even with heavy attachments
- + Easy operation and adjustment via power lift control module and dashboard/terminal
- + high operating comfort
- + Load-compensated lowering for constant lowering speed even with variable implement weights (e.g. seed drill)
- + Operation of the linkage also possible via the multi-function joystick



Front linkage.

- High lifting force: 3,420 daN
- Separate hydraulic valve for FKH (separate from working hydraulics)

Variants:

1. Without front linkage
2. Comfort ballast support
3. Standard front linkage, single acting
4. Comfort front linkage with double-acting cylinders and position control
5. Comfort front linkage with double-acting cylinders, position control and relief control (also possible with Power/Power+)

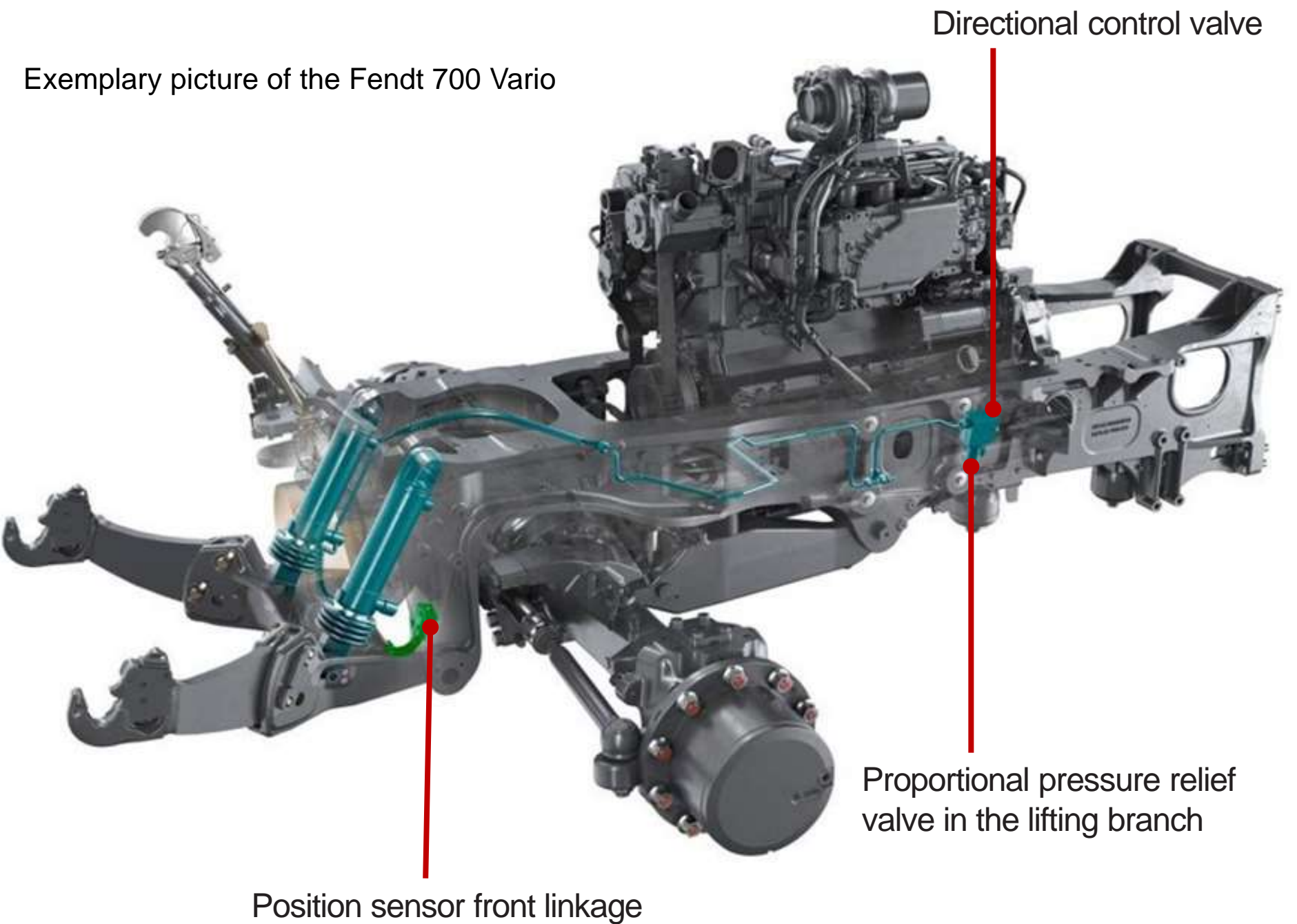


Front linkage.

Comfort front linkage with position control and relief control

- Active regulation of the relief pressure
- Relief effect adjustable thanks to pressure relief valve
- Simple and convenient setting of the relief effect in the terminal
- Position sensor on the front linkage to detect unevenness
- No mower relief springs necessary

- + Enables work that is gentle on the equipment
- + Optimum ground adaptation, thus protecting the sward when mowing and less forage contamination/higher forage quality.
- + Ensuring directional stability through Load on the front axle depending on the area of use



Front linkage.

Advantages

- + High lifting capacity for a wide range of applications
- + compact design
- + no restrictions on the working hydraulics due to having its own hydraulic valve
- + Lower link quickly foldable and removable
- + Passive vibration damping via nitrogen accumulator
- + Wide choice of options for different areas of application
- + Easier unit attachment due to external operation
- + Easy operation and adjustment via proportional rocker, rotary wheel for depth regulation, memo function (for version with position control) and terminal
- + Relief control e.g. for front mower (also with Power/Power+);
Fuel saving, soil protection, directional stability
- + Control also possible with the travel lever
- + Protection of the cylinder rods by bellows against e.g. stone impacts



External operation.

Tail - on both sides:



Valve actuation

Power lift operation

PTO activation

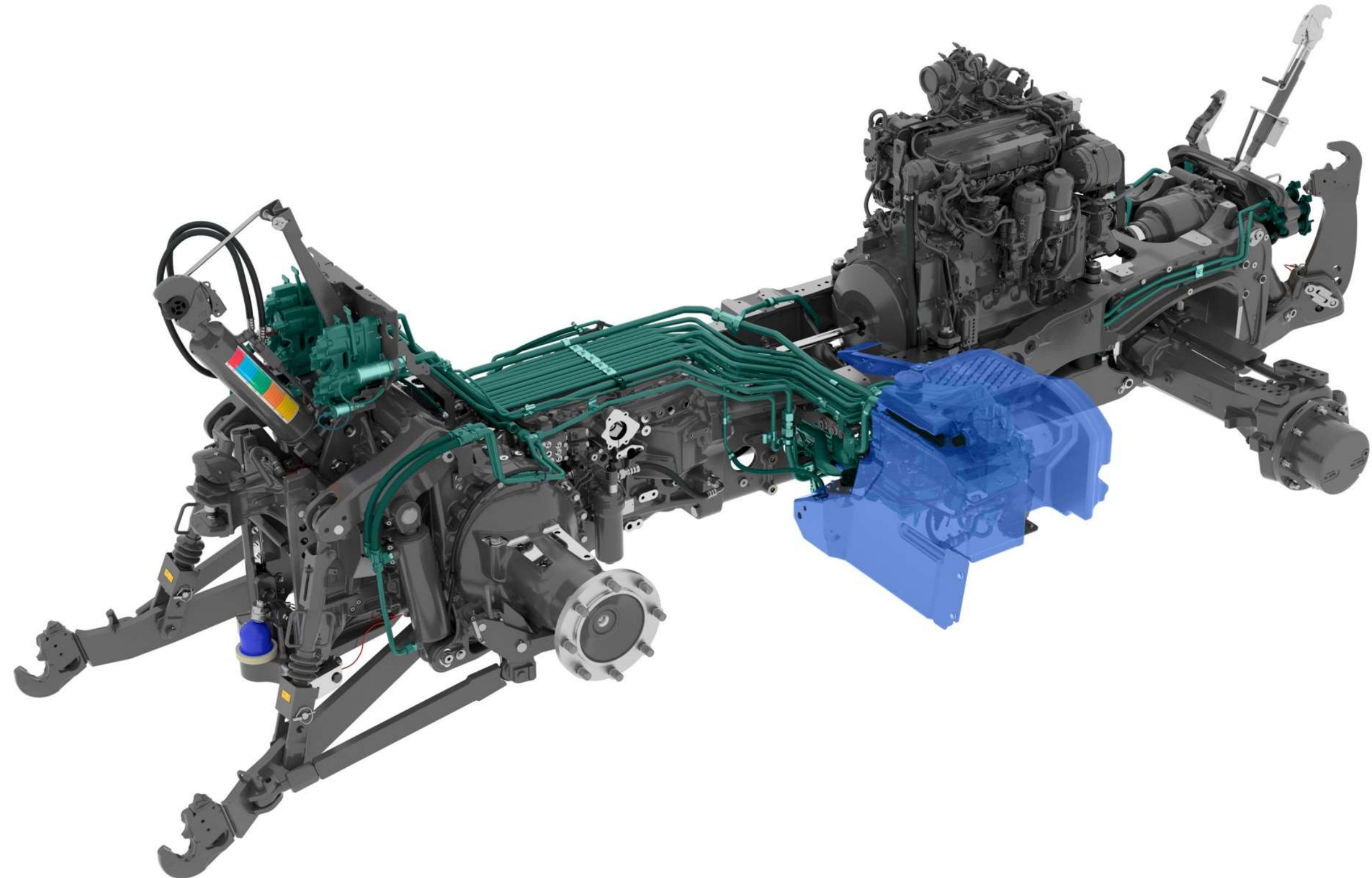
Front:



Power lift operation

Hydraulics.

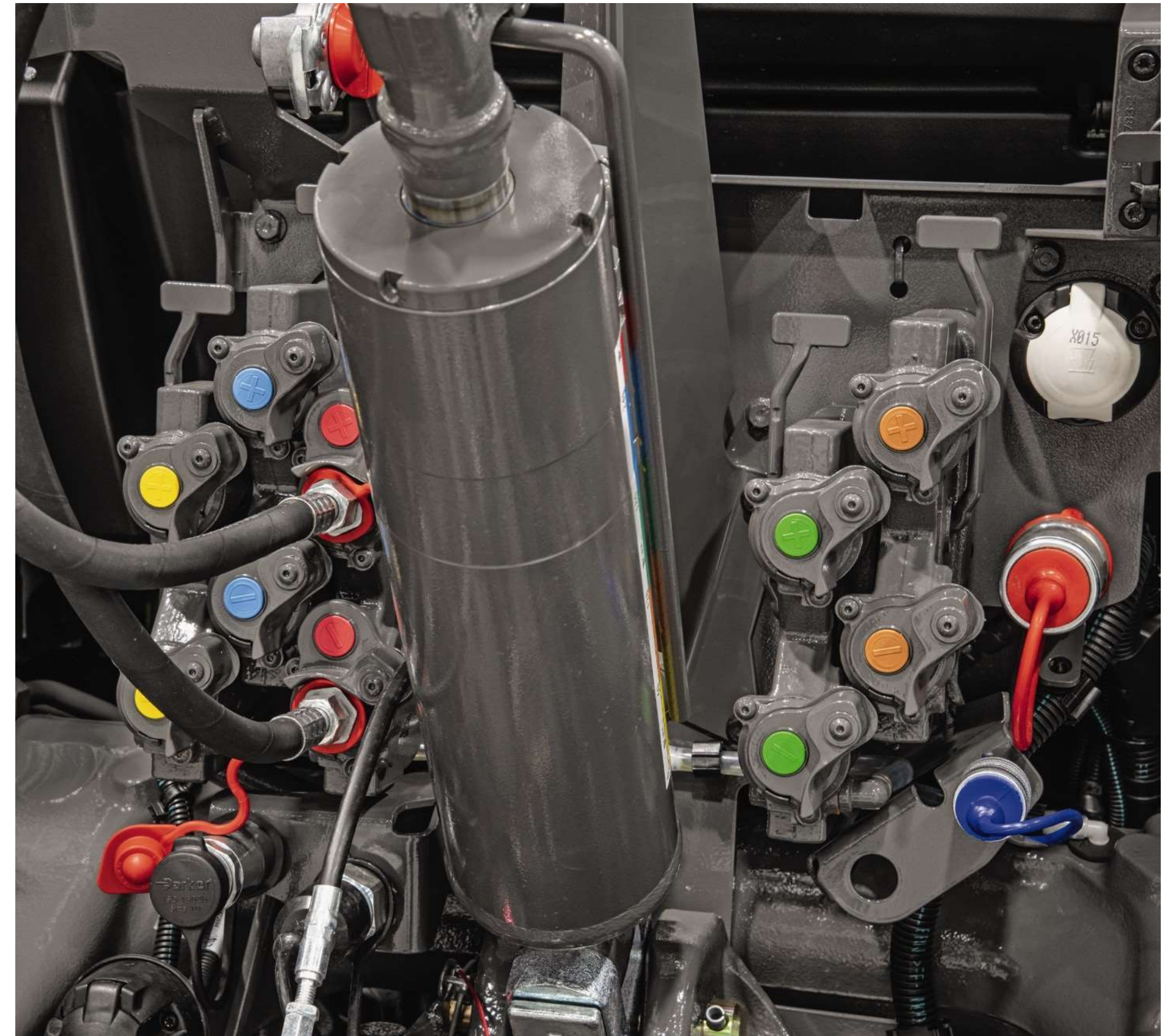
Concept



Concept.

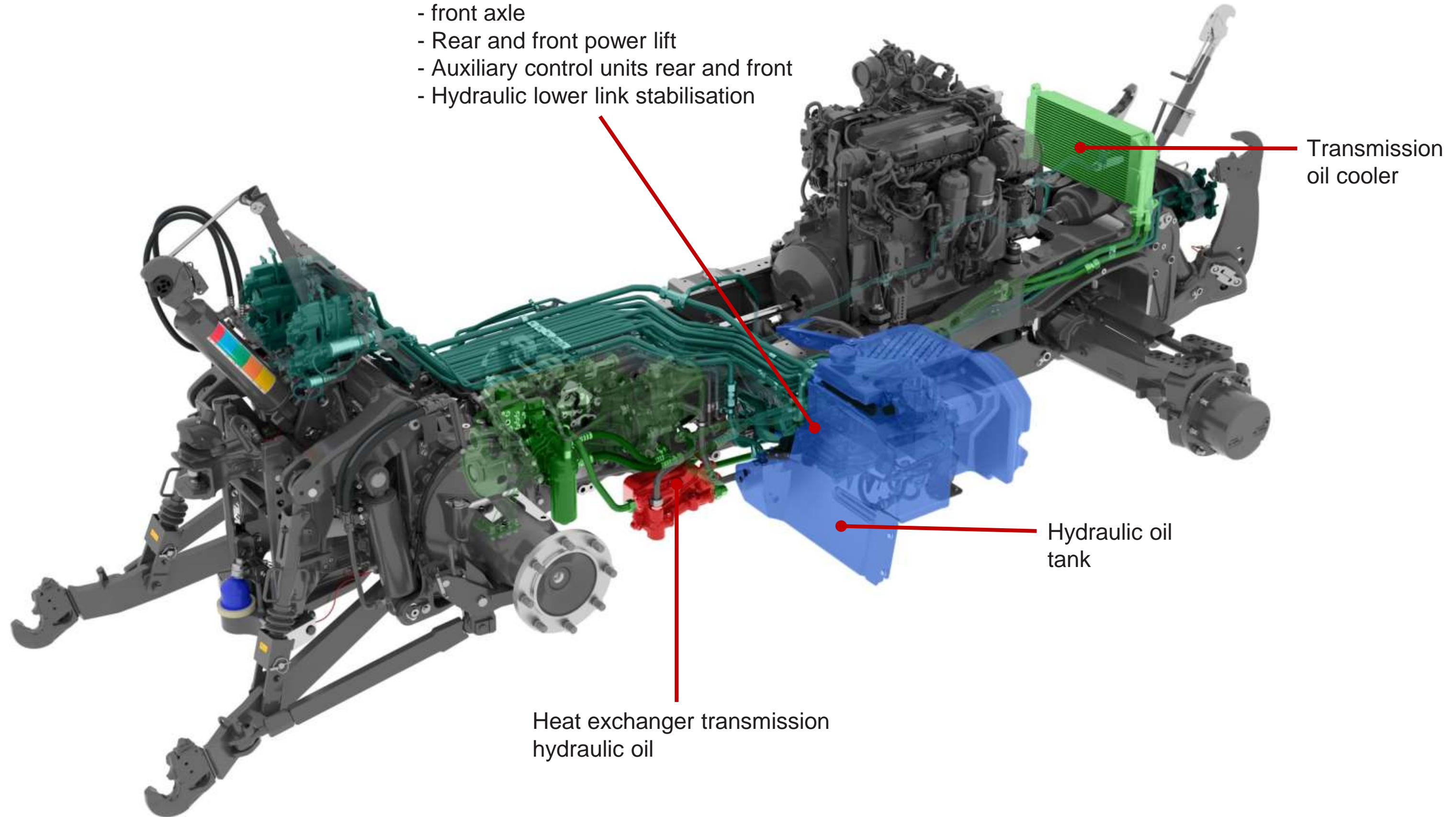
Features

- Power/Power+: standard load-sensing pump with optional 75 or 110 l/min pump output
- Profi/Profi+: standard load-sensing pump with optional 110 or 158 l/min pump output
- High removable oil quantity of 55 litres
- Separate transmission and hydraulic oil balance
- Optimum ergonomic arrangement of the controls for the working hydraulics and power lift
- Numerous setting options via the terminal (free assignment of operating locations, time function, oil quantity setting,...)
- Hydraulic oil preheating



Concept.

- Central control block for:
- pilot pressure
 - front axle
 - Rear and front power lift
 - Auxiliary control units rear and front
 - Hydraulic lower link stabilisation



Concept.

Working hydraulics - equipment features

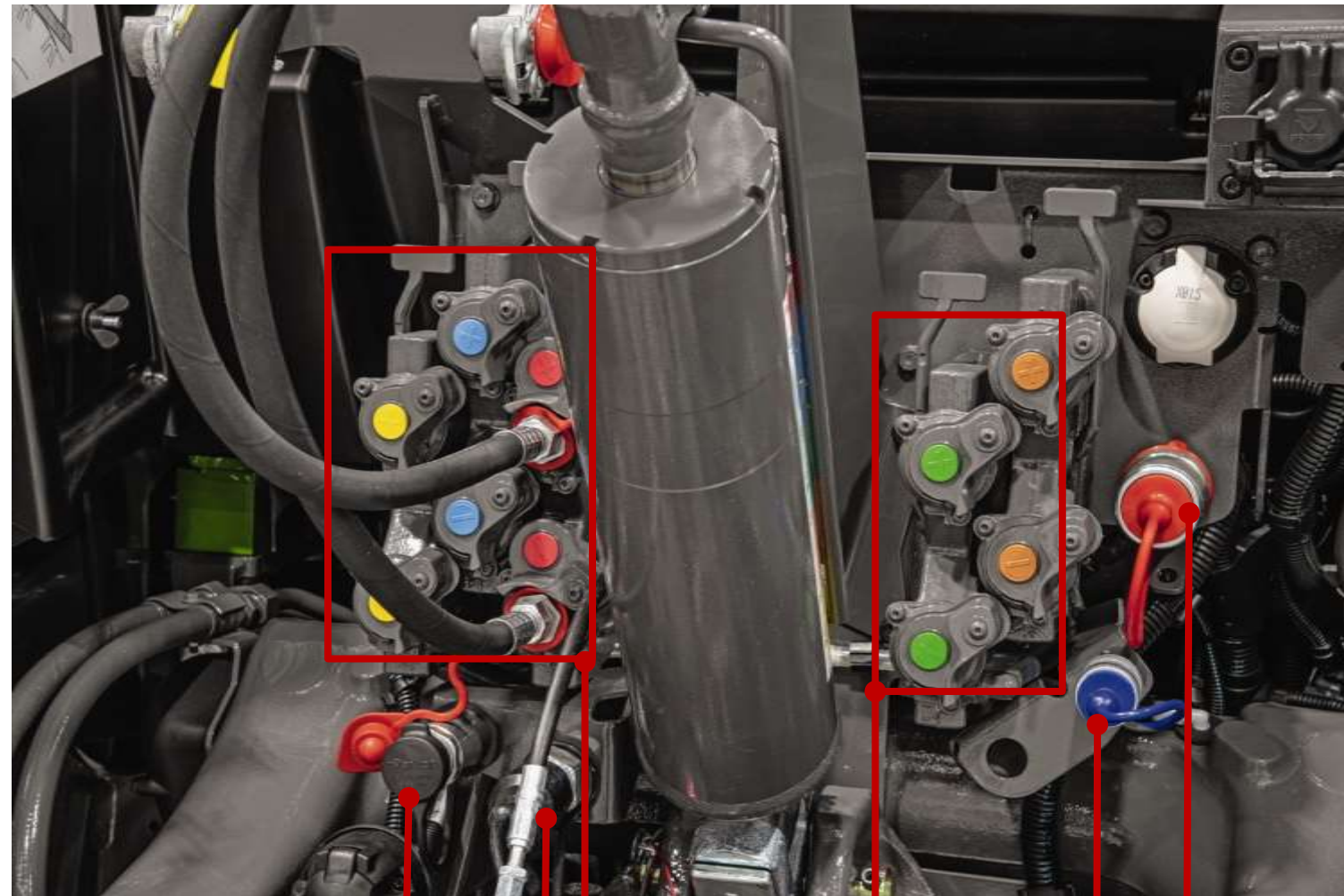
- For Power/Power+: max. 4 double acting valves in total (front 0/rear 4 or front 1/rear 3).
- For Profi/Profi+ applies: max. 7 double acting valves in total (max. 5 valves at the rear and max. 2 valves at the front)
- Flow rate adjustable from 0-100 l/min for each valve (+ and - separately)
- Power Beyond Connection
- Optional DUDK - lever couplings (UDK series)
- Removable hydraulic oil quantity: 55 litres
- External actuation available on both sides for a freely assignable additional control unit

- + Double-acting control units with float position
- + Numerous setting options
- + Simple and convenient operation via Multi-function travel lever (proportional), and cross-shift lever or 3L joystick and linear modules



Concept.

Rear:



Return

Leakage oil line

Rear valve connections 1 - 5

Power
Beyond
control line

Power Beyond
pressure line

Front:



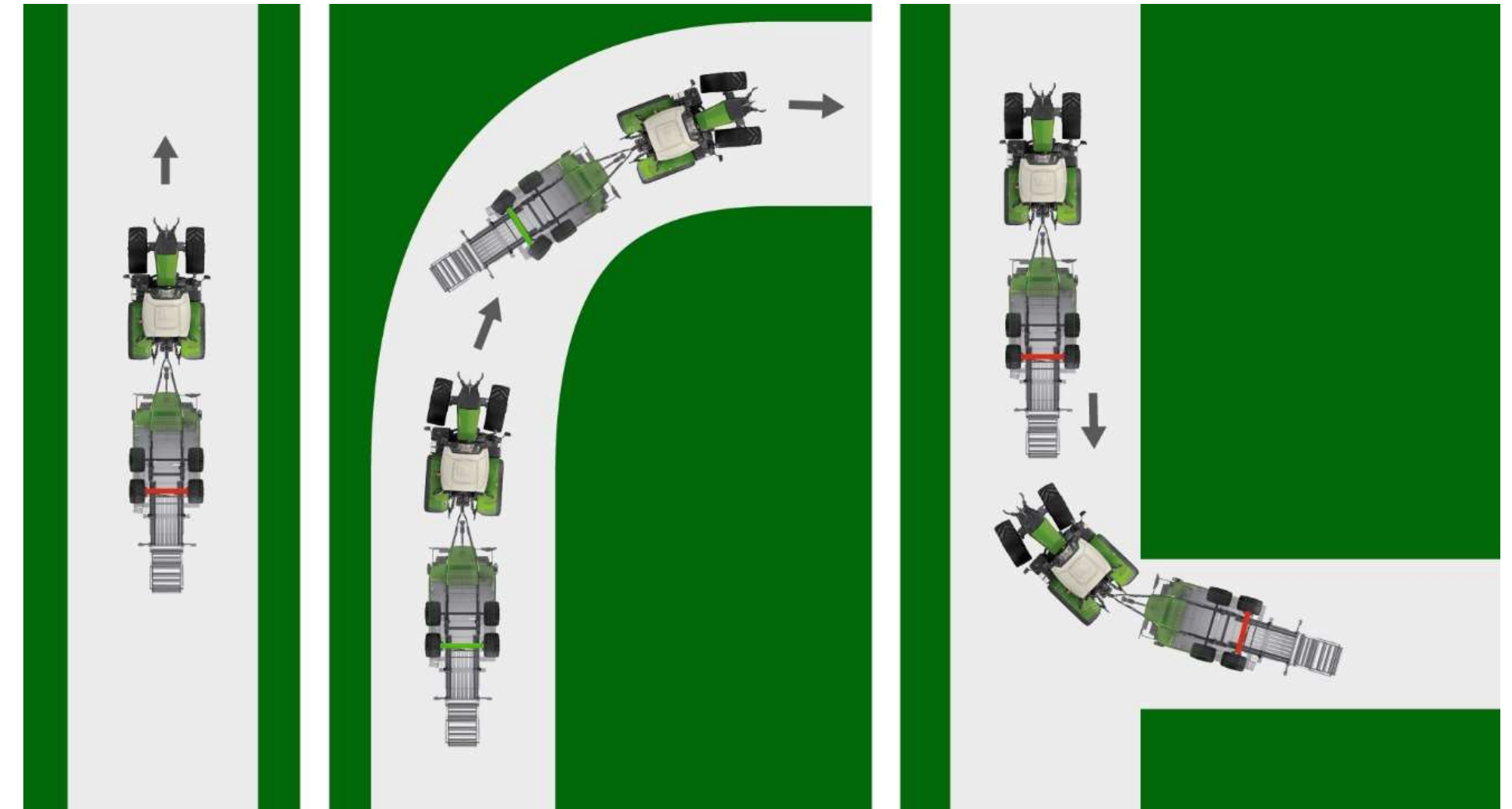
Valve connections front

Pressureless return

Concept.

Automatic steering axle lock

- Automatic locking and opening of the trailer steering axle above and below respectively definable speeds
- Steering axle is always locked when reversing
- Activation and setting of the speed range (lower limit: 0 - 3 km/h; upper limit 10 - 25 km/h) as well as assignment of the hydraulic valve in the terminal.
- Automatic override possible



- + Enormous driver relief and comfort gain
- + less tyre wear
- + increased driving stability
- + Enormous gain in safety
- + Avoidance of accidents and damage
- + simple operation

Chassis.

Half frame with waist

Chassis - Suspension

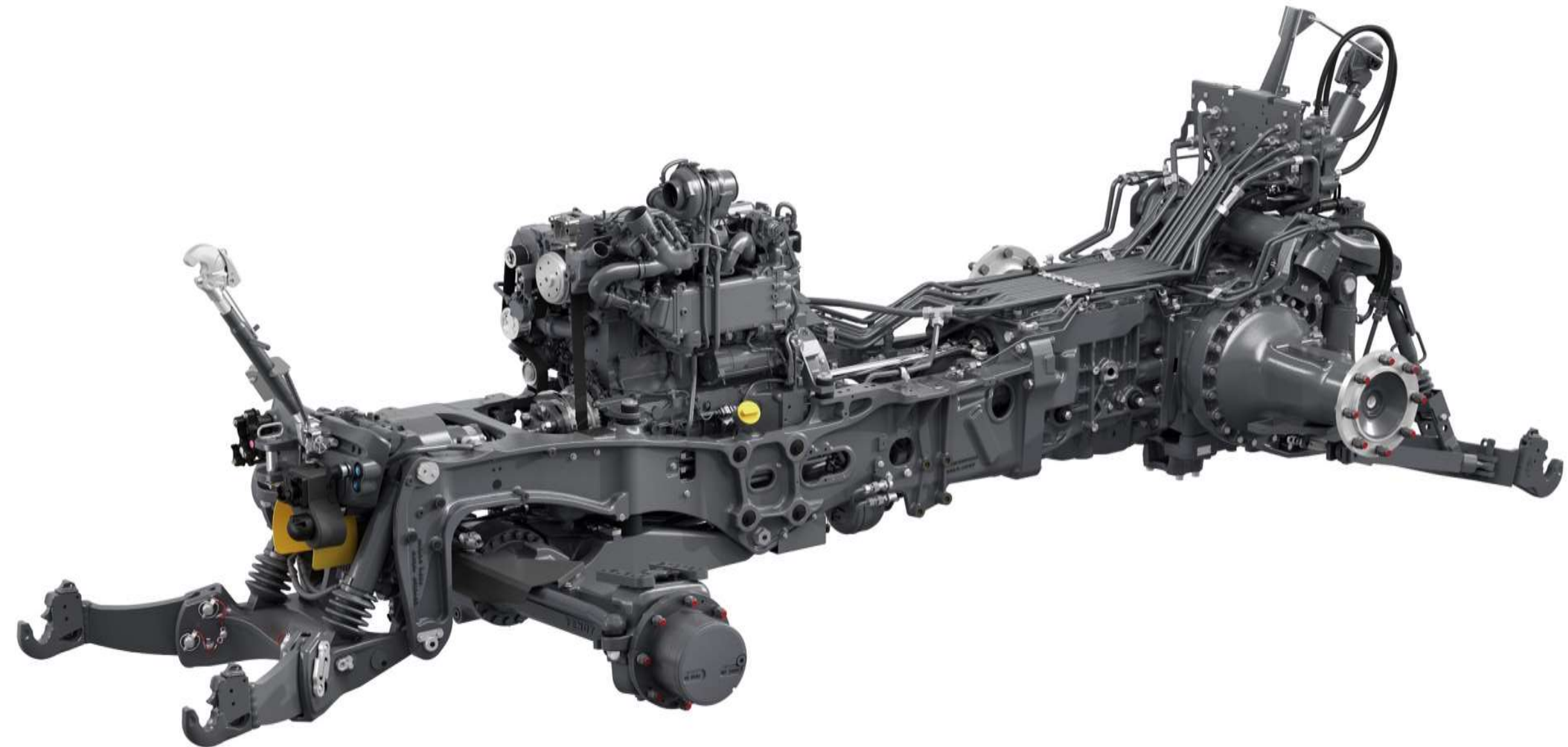
Front axle

Rear axle

Brakes

Trailer hitch options

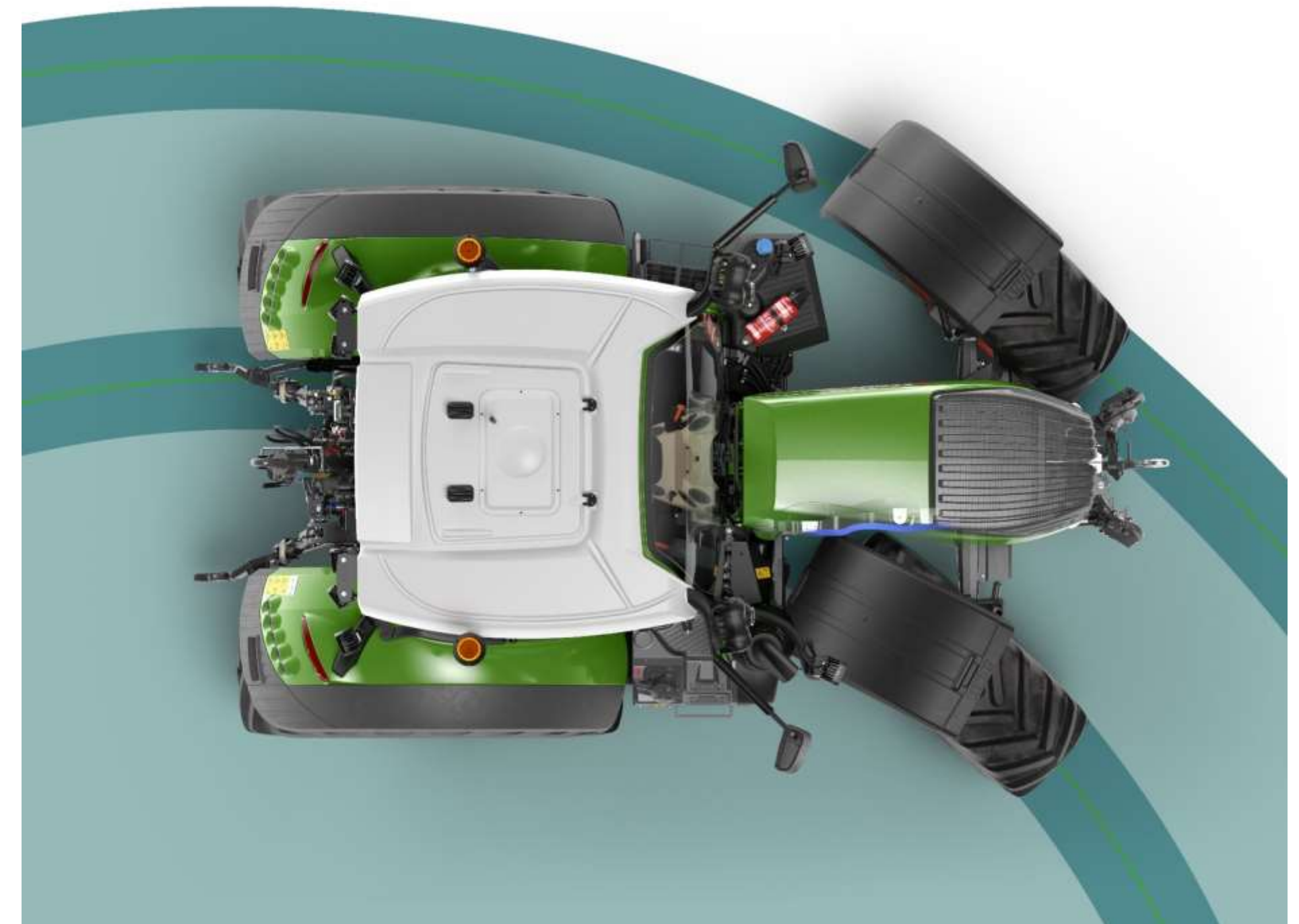
Ballasting



Half frame with waist.

Best manoeuvrability due to narrow frame

- Outstanding manoeuvrability thanks to waisted half frame and optimised wheel angle
- Best visibility and steering angle because no protruding parts
- Swivelling mudguards (Power=option; Profi=series)
- Increased steering angle, protection of the mudguards



+ Optimum manoeuvrability

Chassis - Suspension.

Superior ride comfort

Intelligent combination of 5 systems for maximum driving and working comfort:
Chassis - suspension systems.

- 1 Level-controlled front axle suspension:** for consistent ride comfort, independent of the load, due to level regulation
- 2 Cab suspension:** mechanically or pneumatically suspended cab and spring-mounted driver's seat
- 3 Active vibration damping rear linkage:** Compensation of rear implement vibrations prevents rocking: Front axle with even load - full steerability
- 4 Vibration-damped front linkage via nitrogen accumulator:** prevented Rocking up, protects the implement and guarantees driving safety and comfort with heavy loads
- 5 Fendt Reaction steering with return center:** sensitively controllable Fendt Reaction steering for safe directional stability



Front axle.

Concept

- Permissible front axle load:
 - 4.8 t perm. front axle load
 - 8.0 t perm. front axle load up to 8 km/h (for front loader work)
- 52° steering angle
- Central axle with suspension and pendulum
- Level-controlled front axle suspension
- Best steering ability due to large steering cylinder (70 mm)
- Reaction steering system - straight line steering when the steering wheel is released
- VarioActive superimposed steering (in conjunction with Power+/Profi+ equipment)
- All-wheel drive: permanent and automatic
- Differential lock: permanent and automatic



- + Higher area output
- + High working speed and safety thanks to Front axle suspension and four-wheel brake system (via all-wheel drive gearstick)
- + Optimum manoeuvrability
- + High permissible front axle load

Front axle.

VarioActive superimposed steering

- in combination with Power+/Profi+ equipment
- at the headland, a complete wheel turn is realised with one turn of the steering wheel
- the superimposed steering uses the same steering valve as Fendt Guide
- Tractor drives with active superimposed steering only max. 25 km/h
- up to 8 km/h the superimposed steering has no restriction, from 8 to 18 km/h the superimposed steering is reduced linearly

Without VarioActive:

1x turn of the steering wheel = 26.6°.

With VarioActive:

1x turn of the steering wheel = 43.3°.



Front axle.

All-wheel

- Largely dimensioned multi-plate all-wheel clutch
- Electro-hydraulic activation via buttons on the armrest
- Engagement via spring package, opening of the all-wheel clutch via hydraulic force
- Automatic function:
Deactivation from a speed above 20 km/h and from a steering angle of 25°;
if the values are undershot, all-wheel drive is activated again automatically



All-wheel automatic

All wheel 100 %

- + High tractive force transmission
- + Full powershift and load capacity under all operating conditions
- + All-wheel drive automatic for highest Driving safety and vehicle protection

Front axle.

Differential lock

- Automatic differential lock (Locomatic) in combination with 100 % multi-disc differential lock
- Locking via hydraulic force, opening via spring assembly
- Control via buttons on the armrest
- Automatic function:
- Disconnection from a speed above 20 km/h (no reconnection); from a steering angle of 12° and when applying the brake with reconnection



Differential lock 100 %

Differential lock
Automatic

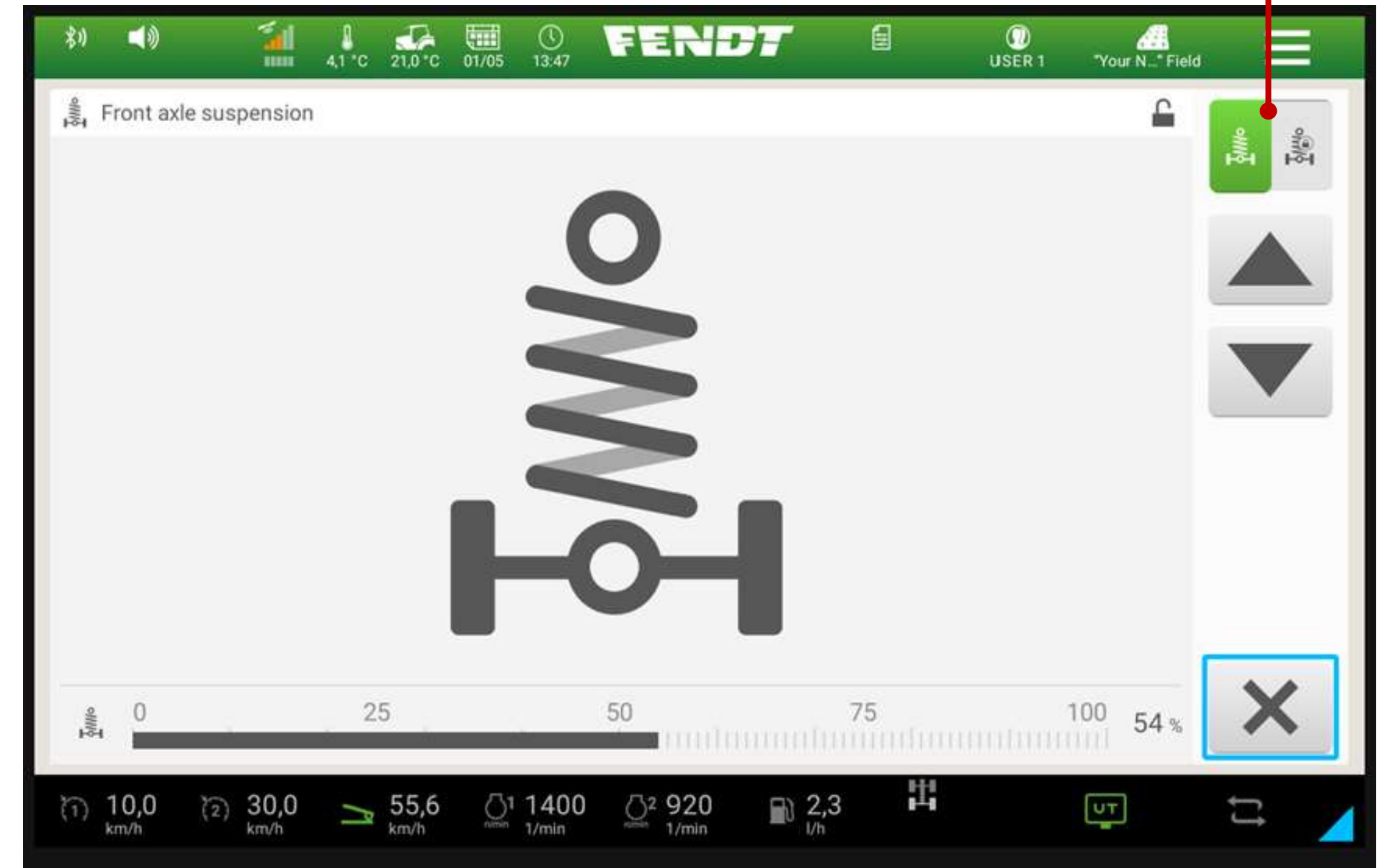
+ 100 % power transmission to all four wheels
+ Automatic differential lock for maximum driving safety
and vehicle protection

Front axle.

Front axle suspension

- Two internal spring cylinders directly between frame and swingarm (longitudinal swingarm)
- Oscillation is maintained even when the front axle suspension is locked
- Level regulation via position sensor
- +/- 50 mm suspension travel

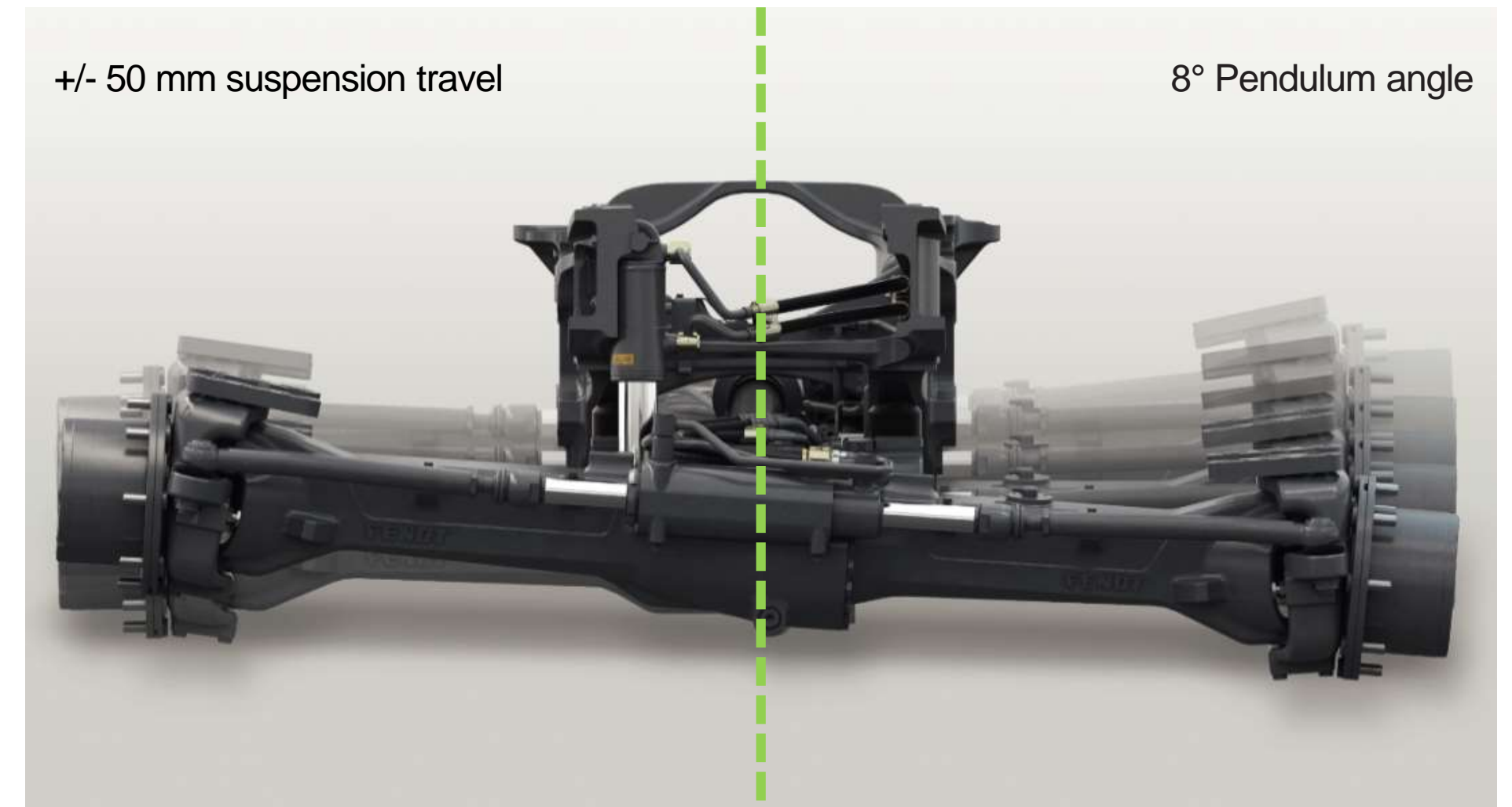
Activate/lock front axle suspension



Front axle.

Advantages of the front axle suspension

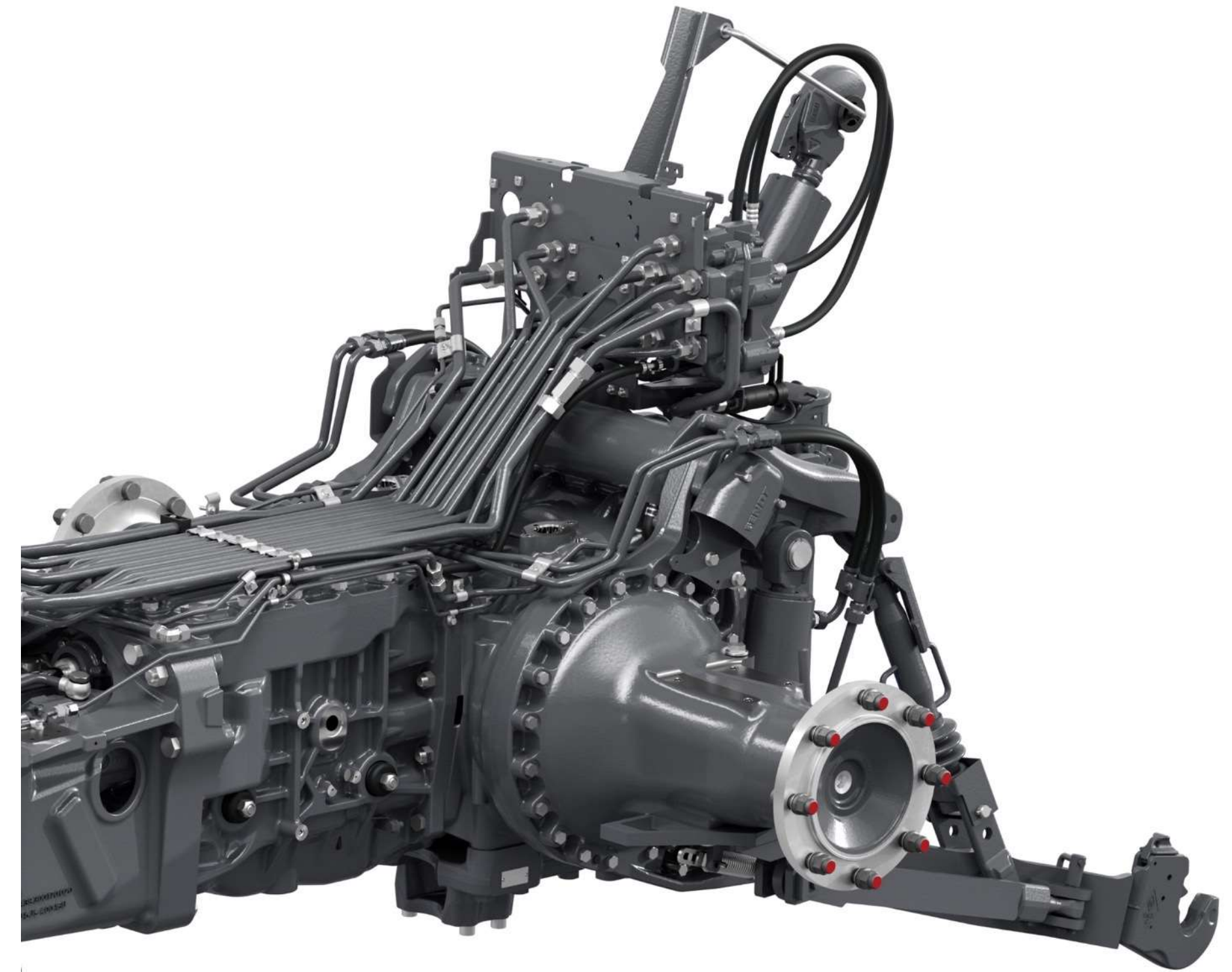
- + large spring travel of +/- 50 mm
- + Constant suspension comfort, regardless of the load or attachment, thanks to level control via position sensors
- + Complete spring travel can be passed through when stationary
- + Possibility to pick up the front weight without front power lift or wheel change
- + High steering angle due to half-frame concept
- + High permissible axle loads



Rear axle.

Concept

- Proven rear axle HA 90 (8 hole)
- Permissible rear axle load of 8,500 kg
- Axle housing with integrated bearing for linkage arm and lifting cylinder
- 100 % multi-disc differential lock
- Wet solid disc brakes for high permissible total weight
- Pressure lubrication with common oil budget for gearbox and rear axle and separate budget for the final drives



- + Stable construction due to planetary rear axle now with 1 t more load capacity
- + High permissible total weight
- + Low maintenance
- + High efficiency of the brakes

Brakes.

Four-wheel brake system

- Four-wheel brake by engaging the all-wheel drive
- Safe braking on all four wheels
- Brake pressure monitoring

Parking brake

- Mechanical control via handbrake lever on left-hand side of driver's seat
- Pneumatic control via handbrake lever on left-hand side of steering column if compressed air system has been installed.
- When equipped with compressed air system: Electronically monitored air dryer and parking brake cylinder with spring accumulator
- All-wheel drive engagement independent of the actuation mode

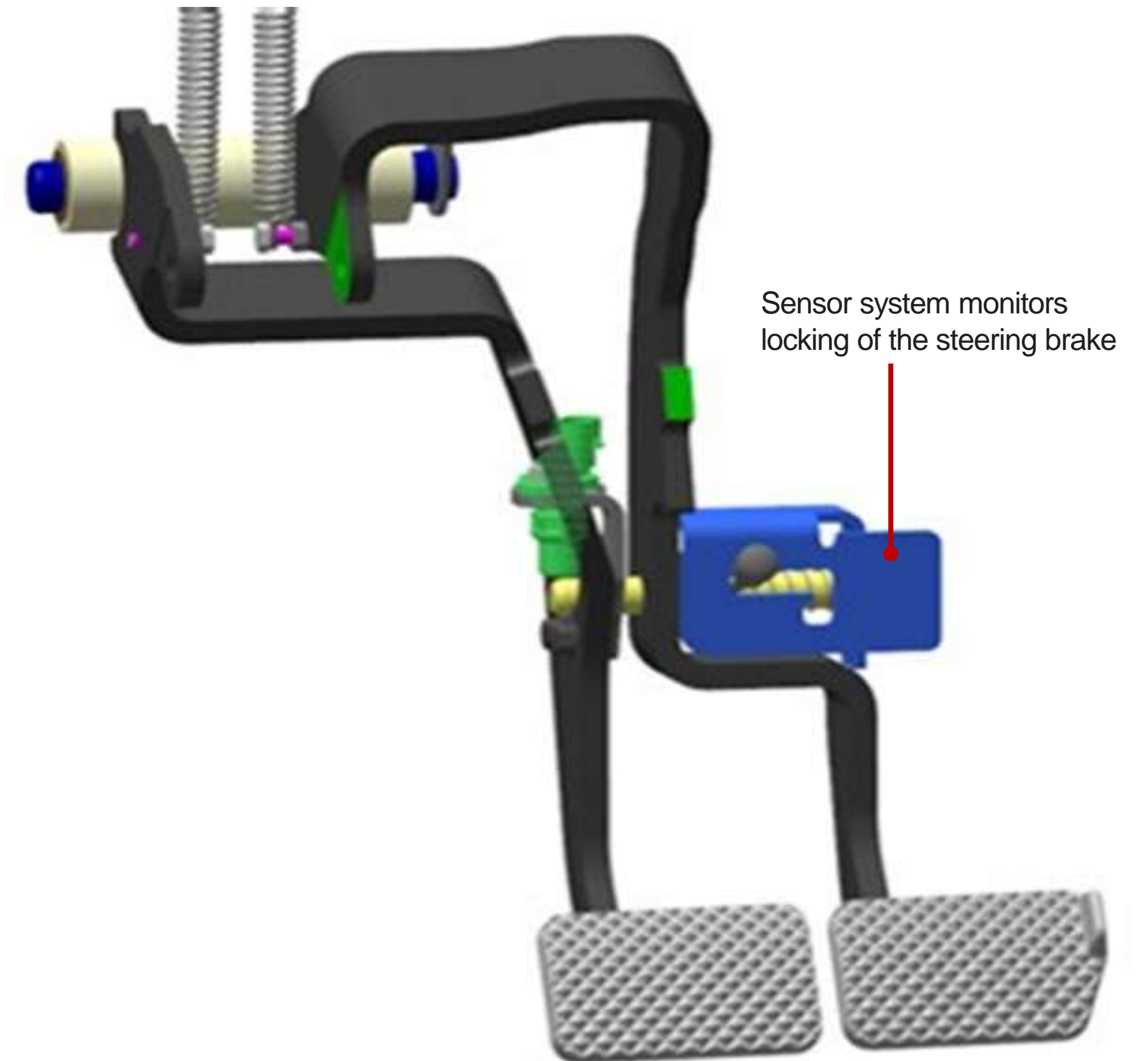
- + Short pedal travel and low pedal forces
- + Long service life due to wet braking system
- + Safe braking on all four wheels



Brakes.

Steering brake monitoring

- if the steering brake is not locked, the top speed is electronically reduced to 40 km/h
- When the pedal is unlocked, a warning message appears shortly before the 40 km/h limit is reached.

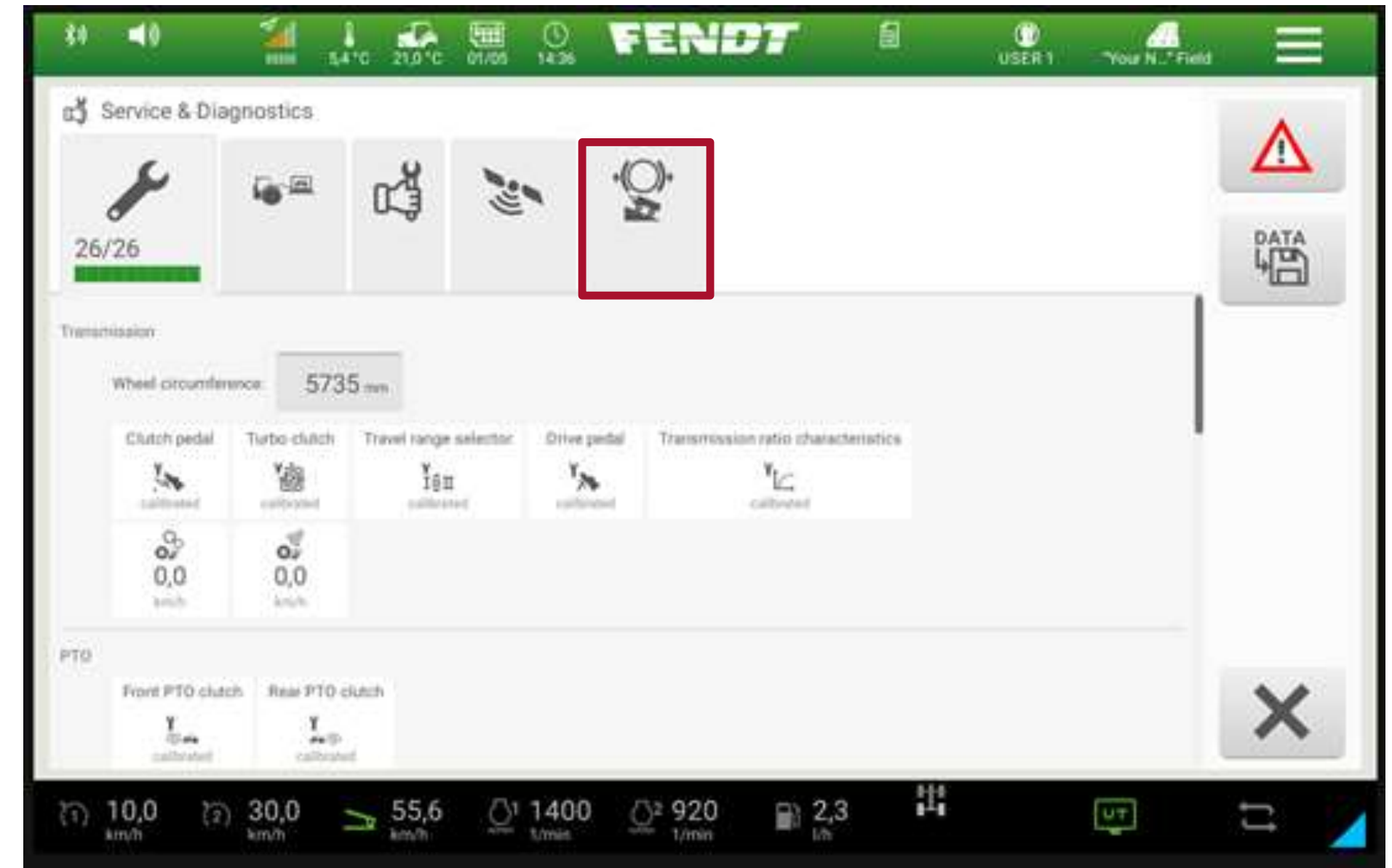


+ Sensor-supported steering brake monitoring to prevent incorrect operation

Brakes.

Function for checking the braking force of the parking brake (EC control position)

- Trailer brake can be released separately from tractor parking brake
- Function ensures that the tractor parking brake can hold the traction on the slope if the air pressure in the brake circuit escapes or the trailer spring accumulator is too weak



Hitching systems.

Hitching devices*

- Common height-adjustable trailer couplings in the carriage with 2 t drawbar load (carriage width 312 mm)
- Modular system for lower trailers with up to 3 t drawbar load
- Fall-through protection for height-adjustable trailer couplings
- Mudguard serves as PTO cover

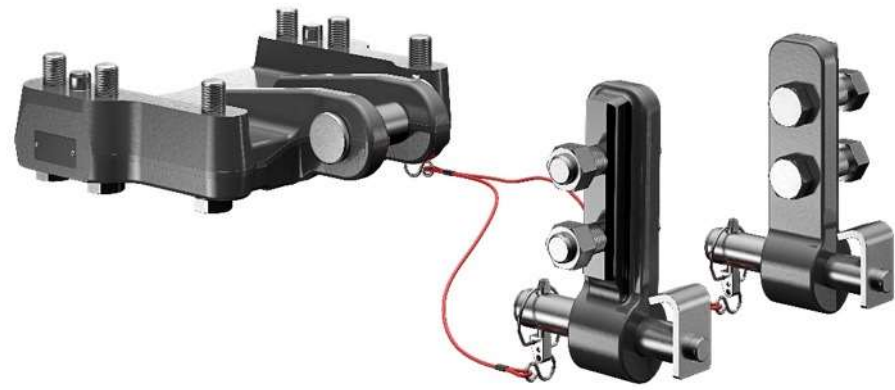
*country specific



- + Highest flexibility through modularity
- + Towing parts can be used with different tractors
- + different coupling variants can be used modularly on one tractor
- + High towing capacity with ball coupling



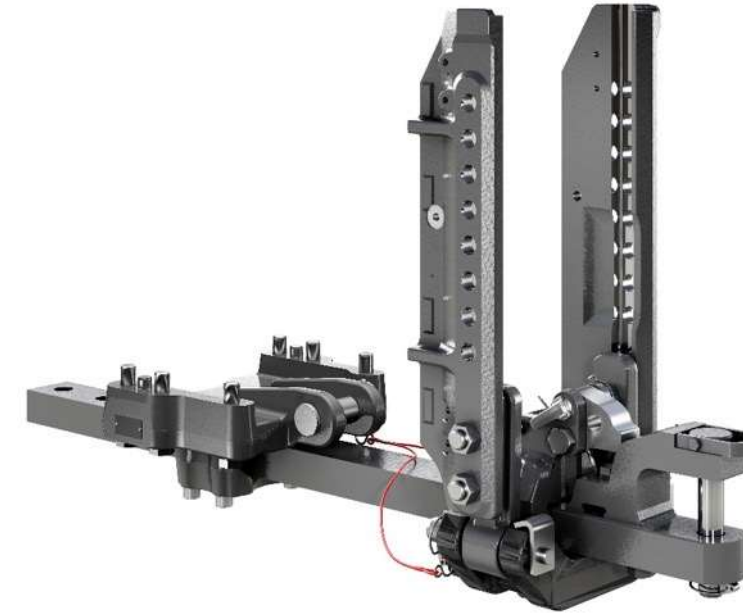
Hitching systems.



Bottom hitch attachment parts Basic (A179)



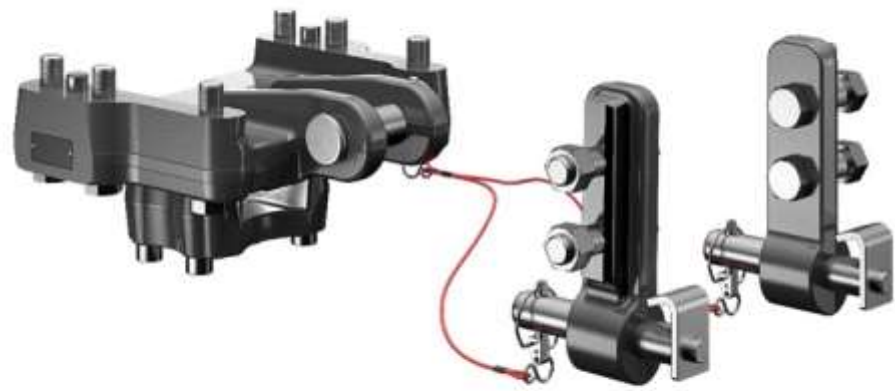
Ball head coupling short (with/without connection points forced steering)



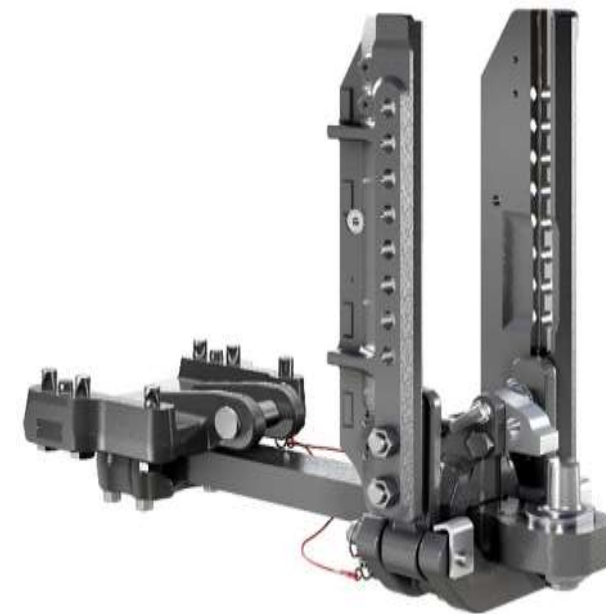
Pull rod extendable 30 mm bolt (A192)



Piton Fix Heavy duty (A201)



Bottom hitch attachments (A197)



Piton Fix drawbar



Hitch (A175)

Ballasting.

Front ballasting:

- 400 kg
- 870 kg
- 1250 kg

Rear axle ballasting:

- 2 x 200 kg
- 2 x 300 kg
- 2 x 600 kg



+ Individual ballasting for optimum tractive force transmission
+ fully roadworthy ballasting concept without speed restriction and excess width marking

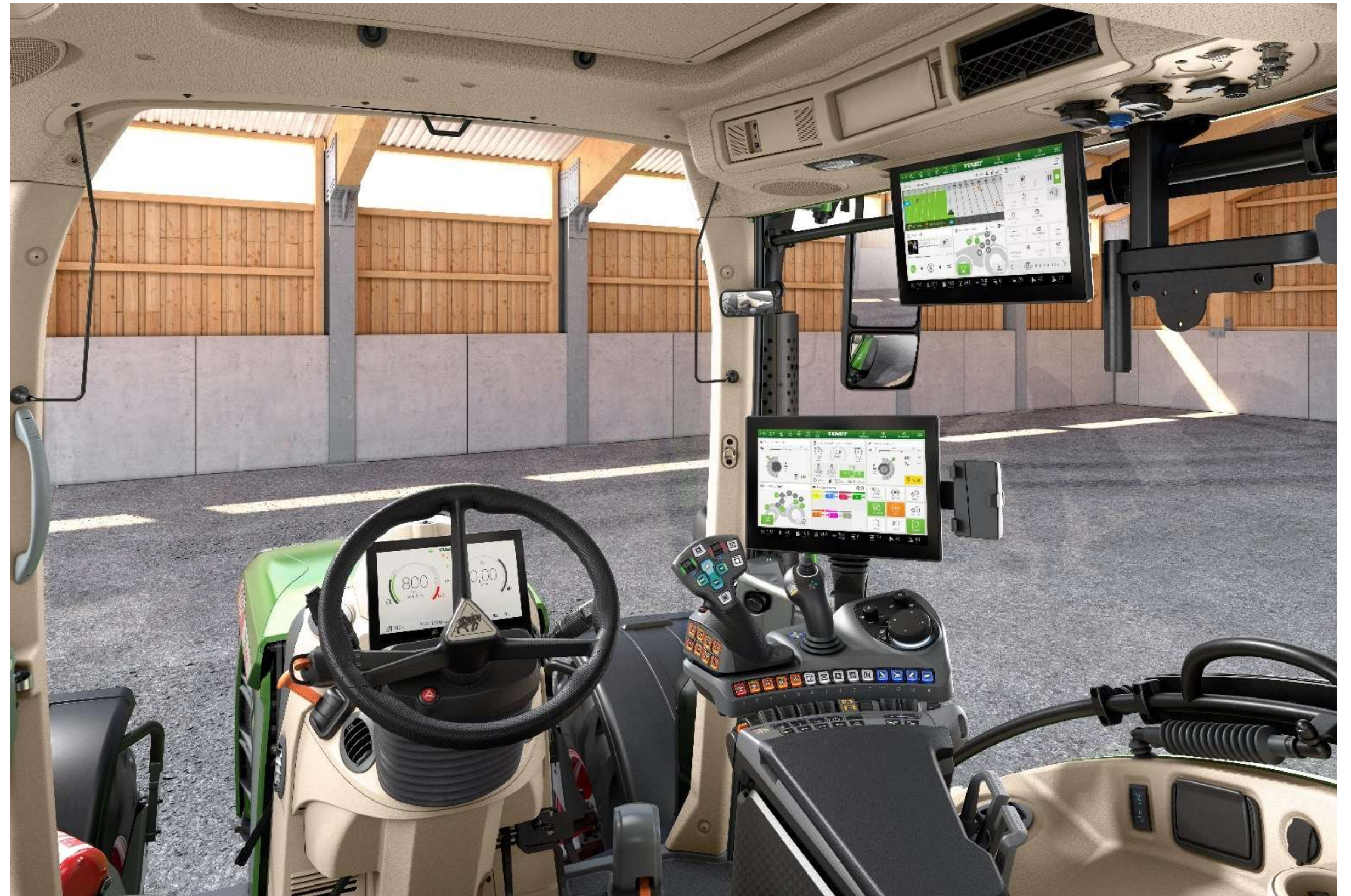
Cabin.

Concept

Equipment

Lighting

FendtONE operating philosophy



Concept.

Overview - VisioPlus Cabin

- FendtONE operating philosophy
- VisioPlus cabin in 3 different variants
- Compact rear-view mirror with integrated wide-angle component in series production
- optional: large, electrically adjustable and heated rear-view mirror with separately adjustable and heated wide-angle mirror
- Air conditioning or automatic air conditioning
- Dashboard swivels with steering wheel
- Various storage and stowage options
- Optional immobiliser with coded key
- Various suspension systems
- Innovative cross illumination



Concept.

Advantages VisioPlus cabin

- Cabin with ideal dimensions: 6.1 m² glass surface, 2,520 l volume, 77° field of vision
- Higher performance of the driver through optimal driving and operating comfort
- Low noise level and excellent all-round visibility for comfortable work
- A wide range of equipment options for all needs
- Pneumatic suspension systems
- Storage facilities for catering and a tidy workplace
- Safety kit with first aid kit, safety waistcoat and warning triangle
- Crossed worklights for best visibility in the dark without shadows



Concept.

Panoramic windows

- Very large glass surfaces (6.1 m²)
- Sun blind across the entire width of the windscreen
- Panoramic pane right
- Standard, upwardly extended panoramic windscreen



- + Best all-round visibility for all applications
- + High working comfort during front loader work due to the panoramic front window
- + Safety, driving and working comfort come first Job

Concept.

Cabin variants

Choice of three cabin variants:

- VisioPlus panoramic cabin: windscreen and right-hand side of cabin cannot be opened; completely pulled through
- Panoramic cabin VisioPlus + door right: continuous windscreen, door left and right
- Standard cabin VisioPlus: right door and windscreen open (right side continuous without B-pillar becomes door)



- + different options for different operating conditions
- + Variants offer precise matching to customer needs

Concept.

Cabin suspension

Choice between two variants:

- Mechanical: two conical bearings at the front, Panhard bar, two mechanical suspension elements at the rear
- pneumatic: two conical bearings at the front, Panhard rod, two pneumatic spring elements at the rear, integrated level control



- + Possibility of adaptation to different application spectra
- + Consistent comfort due to large suspension travel
- + Maximum driving comfort for long working days, even under extreme conditions

Equipment.

Pivoting steering column with digital dashboard

- Steering column with integrated instrument cluster (digital dashboard)
- Digital dashboard swivels when the steering wheel is adjusted
- Individual adjustment of height and inclination
- With pneumatic handbrake: handbrake directly next to steering column on left side
- Lighting (dimmer) for digital dashboard is controlled via daylight and is independent of the driving light



- + perfect ergonomic adjustment
- + Optimal view and avoidance of reflections on dashboard due to height and tilt adjustment

Equipment.

Comfort driver's seats

6 different driver seats are available:

1. Comfort seat with air suspension: mechanical lumbar support, longitudinal horizontal suspension
2. Super comfort seat with air suspension: Seat heating, pneumatic lumbar support
3. Super comfort seat with air suspension, 3-point seat belt: incl. 3-point seat belt for optimum safety on the road (e.g. municipal) and high driving comfort.
4. Super comfort seat Evolution dynamic / DL: seat climate control, seat heating, pneumatic lumbar support, side horizontal suspension, compressed air supply via vehicle compressor, dynamic damping
5. Super comfort seat Evolution dynamic Dualmotion: with adaptive backrest
6. Super comfort seat Evolution dynamic Dualmotion leather: genuine leather incl. leather steering wheel

- + High seating comfort for driver and front passenger
- + Leather version possible
- + Dualmotion backrest actively adapts to a turning movement of the driver and supports the driver's back



Equipment.



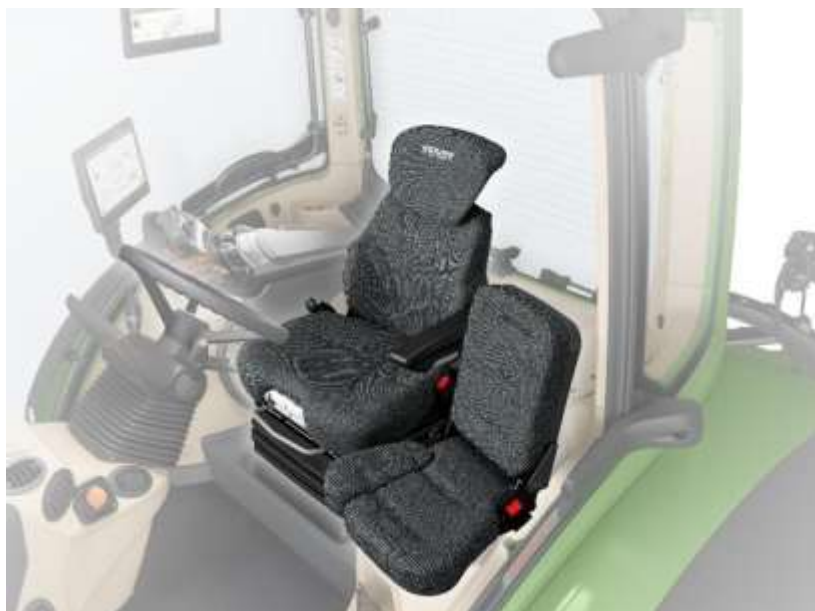
Comfort seat with air suspension (C080)



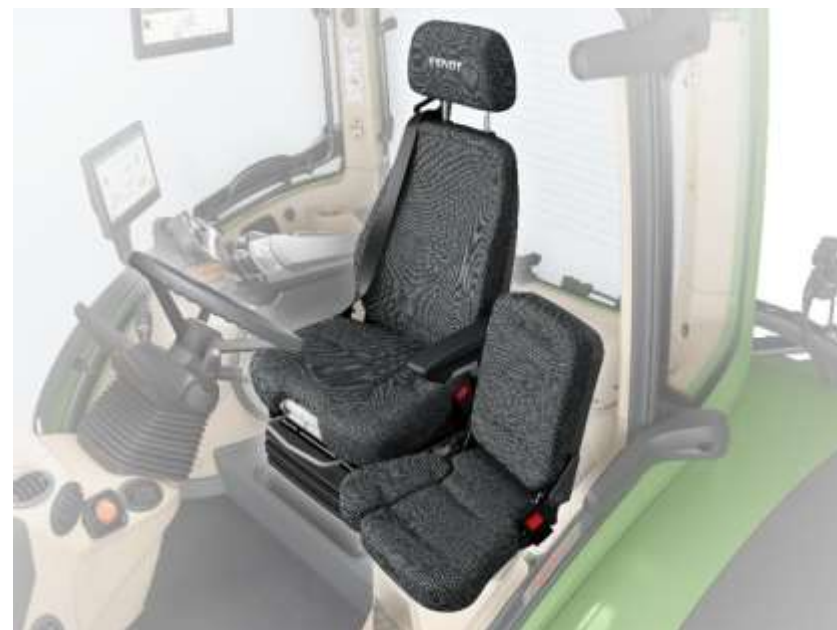
Super comfort seat Evolution dynamic (C092)



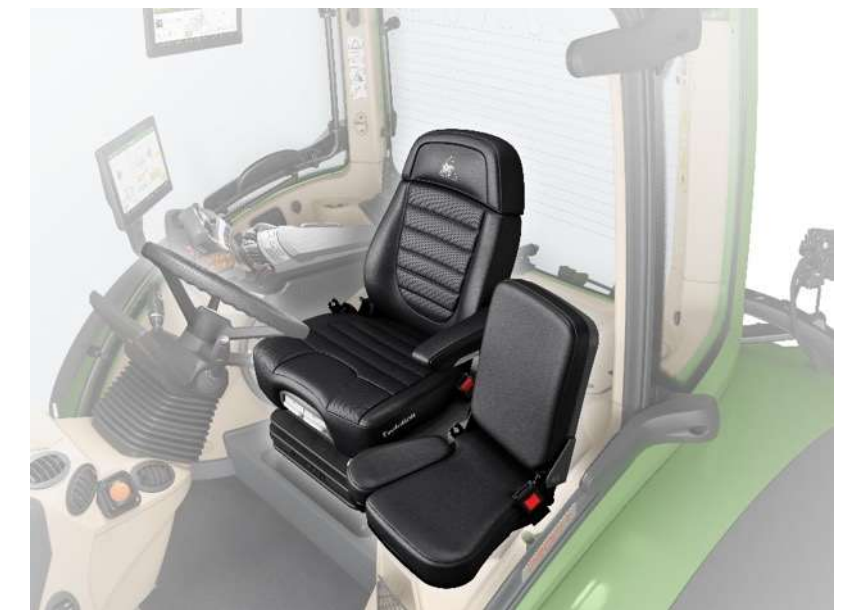
Super comfort seat Evolution dynamic DuMo with fabric (C098)



Super comfort seat with air suspension (C082)



Super Comfort Seat Air Suspension 3 Point Harness (C079)



Super comfort seat Evolution dynamic DuMo with leather, incl. leather steering wheel (C099; only with Profi/Profi+)

Equipment.

Passenger seat

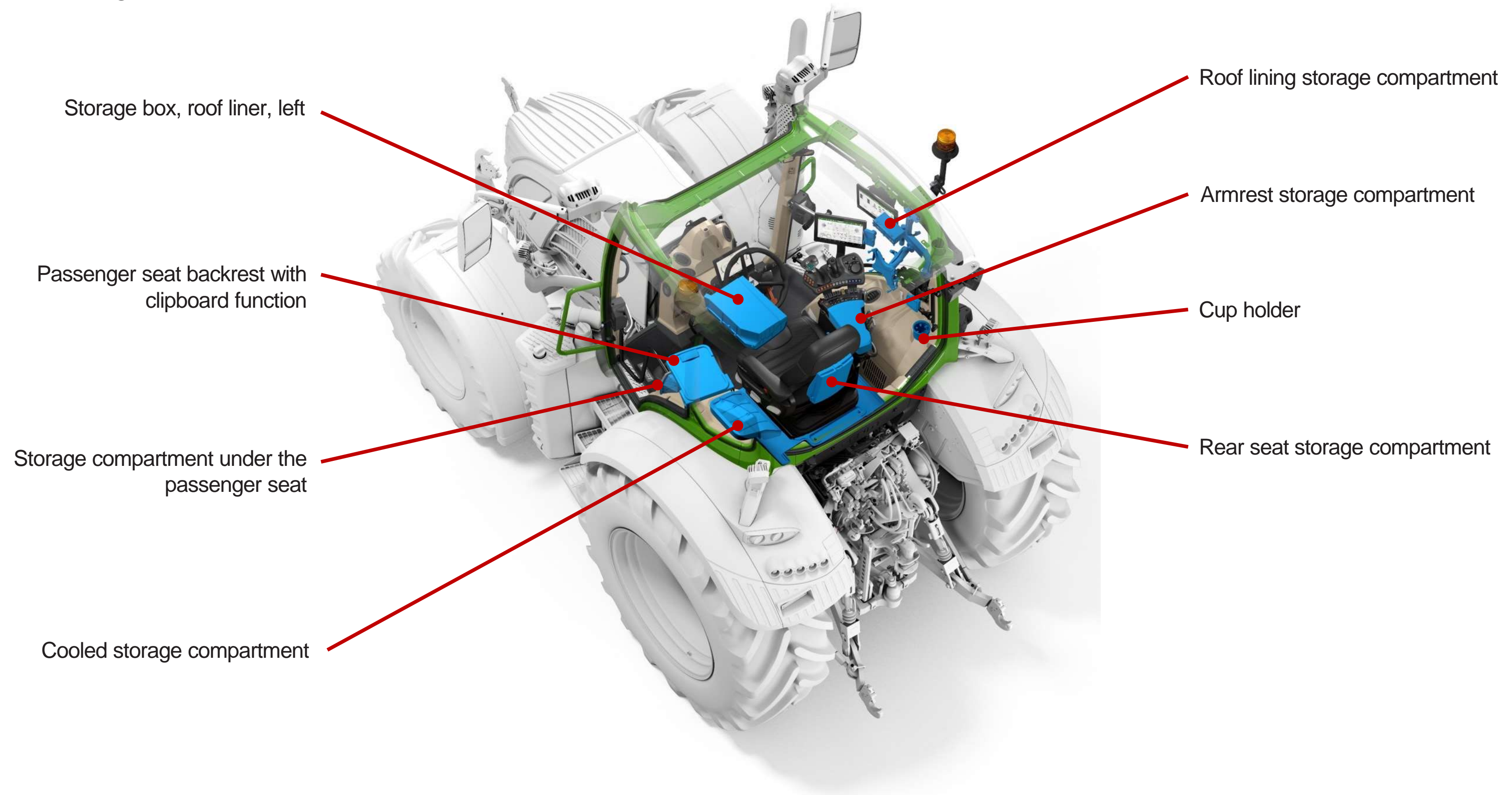
- Passenger seat on 500 Vario Power/Power+ and comfort passenger seat on 500 Vario Profi/Profi+
- Seat always with seat belt, on the comfort passenger seat (Profi and Profi+) the backrest and part of the seat surface are foldable
- Additional storage and stowage space under the seat
- Folded backrest can be used as a writing surface and has an integrated document holder

- + comfortable seating for passenger
- + practical additional functions integrated in backrest
- + Practical storage compartment on the entry below the passenger seat



Equipment.

Numerous storage options



Equipment.

Integrated cable routing

- 3 integrated cable ducts below the rear window:
 - less dirt entering the cab
- better sound insulation
- Additional bracket in the C-pillar enables neat routing of the cables to the sockets



- + Quiet, clean and tidy workplace
- + No danger/damage from loose cables hanging around

Equipment.

Holder for terminals and tablets



Exemplary picture of the Fendt 300 Vario

Terminal holder

- Stable holder for terminals on the right side of the cabin; support to the C-pillar
- Adjustable via telescopic square tube



Tablet holder

- Secure and precisely fitting attachment for tablets of different sizes on the right-hand side of the cabin; attachment of the holder to the terminal bracket
- Very variably adjustable due to guidance in a rail as well as bearing in a ball joint

Equipment.

Infotainment - Overview

Electronic platform for entertainment and communication: Infotainment Package includes four integrative components:

- High End Handsfree
- Highest quality radio reception worldwide
- Connection of a wide range of external audio sources
- Fully integrated operation via terminal or rotary knob on the armrest

Sound system in various expansion stages:

Infotainment Package includes four integrative components:

- Infotainment package: 4 premium speakers
- Infotainment package + 4.1 sound system (from Profi): 4 premium speakers plus subwoofer integrated in sound bar



- + Future-oriented infotainment system with many expansion options
- + perfectly balanced sound in the cabin
- + maximum ease of use
- + Complete integration into the vehicle

Equipment.

Infotainment - High-end hands-free kit

- 8 microphones fully integrated and optimally distributed in the headliner
- Microphones communicate with each other for best voice recording and maximum noise reduction
- Elimination of background noise
- Operation of the hands-free system via central rotary knob (volume/mute) on the armrest and terminal
- Access to contacts and call list of the smartphone



+ Best reception and transmission quality for hands-free talking due to optimal distribution of the microphones in the headliner

Equipment.

Infotainment - Entertainment & Radio Reception

- Multi-antenna system with vertical and horizontal antennas in roof and side window
- Best radio reception regardless of driving direction
- Maximum availability of radio stations
- Automatic station search and tuning
- Reception of a wide range of audio sources (Bluetooth, USB, AUX-IN)
- Operation via rotary knob on the armrest and terminal

- + Best radio reception quality
- + Music streaming via smartphone or other audio sources
- + maximum ease of use



Connection of external audio sources via Bluetooth or cable-based via USB or AUX-IN connection

Equipment.

Exterior mirrors - variants

1. Compact mirror with wide-angle component
 2. Electrically adjustable rear-view mirror with separate wide-angle mirror in one housing; both mirrors heatable (Profi/Profi+)
- Very good overview of dangerous zones when turning left and right
 - Avoidance of blind spots

+ highest safety in road traffic
+ Best overview, even with large attachments and in tight spaces



Equipment.

Windscreen wiper variants

- Segment windscreen wiper
- Segment windscreen wiper / 2 wiper fields with 270° wiping field



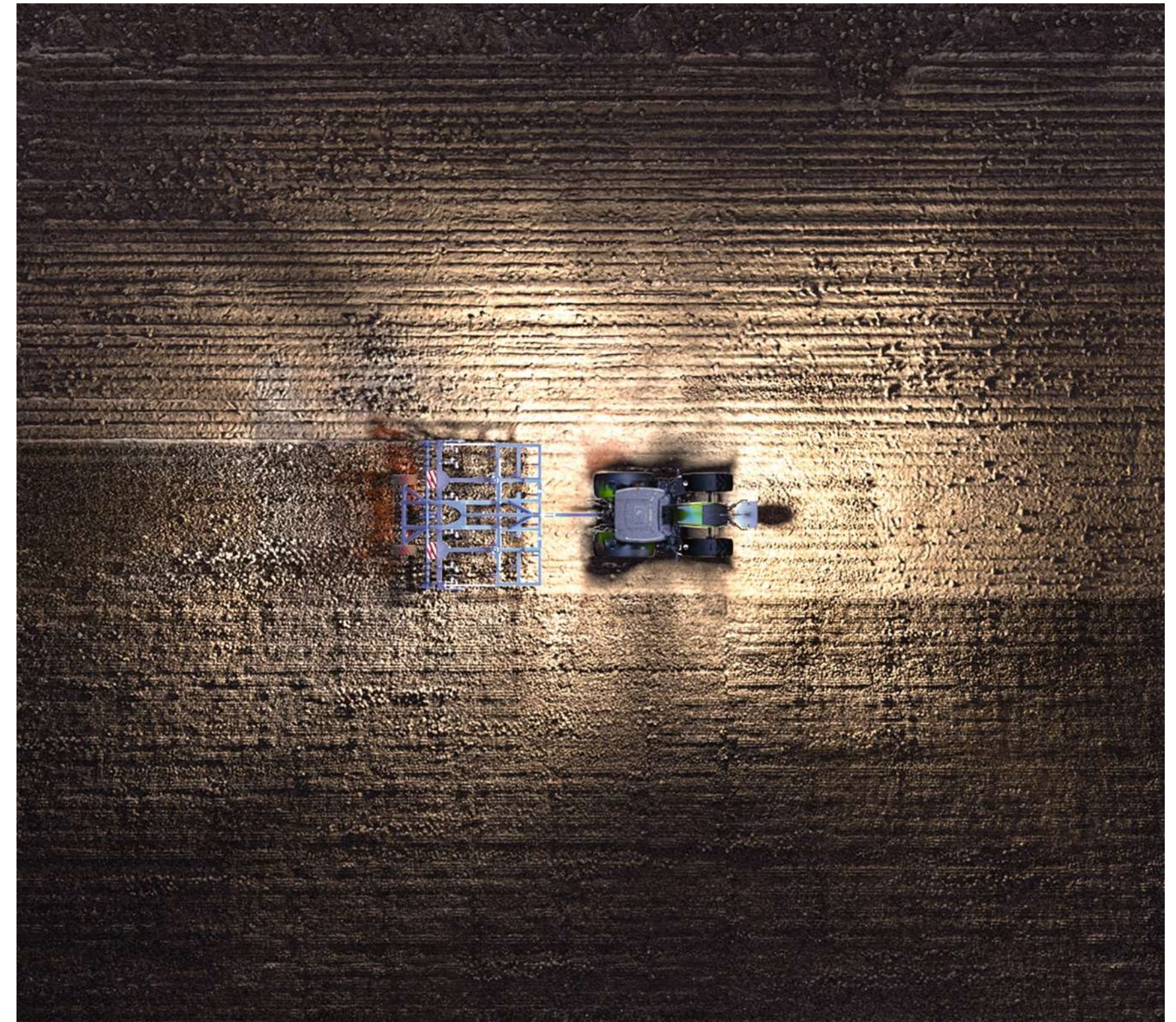
- + Spray nozzle integrated in wiper for effective windscreen cleaning
- + 270° windscreen wipers for a clear view, also of the wheel inlets and the front mounting space
- + 270° wiper with three switching steps

Lighting.

Extensive lighting concept, consisting of:

- Headlights with low beam and high beam
- Flashing and position lights
- Rear lights and indicators
- Rotating beacon LED left and right
- Up to 12 working lights (6 front and 6 rear), all also available as LED, with 2 memo functions, with crossover arrangement
- Corner Lights
- Ascent lighting
- Ambient lighting in the cabin
- Coming Home light (for Profi/Profi+)
- Light sensor for automatic dimming of controls and display areas
- Night mode for dashboard and terminal

- + Intelligent arrangement of the worklights extends the viewing areas and avoids cast shadows
- + Best illumination for high safety and comfortable working even at night
- + Extended service life and energy saving through LED technology



Lighting.



Lighting.



Lighting.

Equipment differences Power/Power + - Profi/Profi +

Compared to the 500 Vario Power/Power+, the Profi/Profi+ versions have some special features:

- Cover for the position lights and indicators on the Fendt 500 Vario Profi and Profi+ in chrome look
- Cover for the main headlights also in chrome look
- Corner lights in halogen version also as standard
- Additional Coming Home light with Profi/Profi+

- + High-quality optics for a high-quality product
- + Corner lights illuminate wheel intakes on front wheels



FendtONE operating philosophy.



Previous driver's workplace

- Multiple operating locations
- One display surface



FendtONE driver's workplace

- + Centralisation of all operating elements
- + Up to three display surfaces
- + Reorganisation of functional areas
- + Simple menu structure due to two operating levels in the terminal
- + Individualisation of the entire workplace

■ Operating elements

■ Display area

FendtONE operating philosophy.

Greater individualisation of operation

Individualisation of the workplace with FendtONE

For the first time, operating locations with:

- Tractor functions
- ISOBUS functions
- Teach-in functions can be assigned

Reassignment in the IOM
(Individual Operation Manager)



FendtONE operating philosophy.

Expansion of the display areas to show relevant functions



Previous driver's workplace

- Central terminal for operation
- Decentralised computing unit in the terminal
- No interaction between terminals possible
- Dashboard not integrated into the operating concept



FendtONE driver's workplace

- Network of up to 3 display options
 - digital dashboard
 - 12" terminal on the armrest
 - Additional terminal retractable into the cab liner
- Central Display Control Unit (DCU): Functions can be displayed simultaneously on 3 terminals and operated alternately
- Roof terminal can be retracted halfway into the cab lining
- Enhanced display through digital dashboard
- Switching the displayed functions between terminals

FendtONE operating philosophy.

Unique selling points

Freely programmable armrest - the first on the market

+ free assignment of the keys

+ Individualisation via Individual Operation Manager (IOM)

Unique colour concept for a better overview

+ logical and dynamic colour concept

+ Optimum overview thanks to colours assigned to the function groups

Extension of the display area - terminal network

First operating concept on the market with terminal network and central computer unit ex works

+ Real-time synchronisation of content on all terminals

The only consistent operating philosophy on the market

+ First holistic operating approach on the market

+ No change in operation between driver's workstation and offboard system in the office

FendtONE operating philosophy.



FendtONE operating philosophy.



1. more display areas

- Digital 10" dashboard: flexible display of important data such as on-board computer, key assignment, etc.
- 12" terminal on armrest and headliner: individual display of tractor operation, guidance, ISOBUS devices, infotainment, etc.

2. more operating options

- Multi-function control lever: more freely assignable buttons (also for ISOBUS functions)
- 3L joystick: up to 27 functions distributed over up to three operating levels (also for ISOBUS functions and operation of the front loader with a 3rd valve)
- Freely assignable buttons on the armrest
- No additional operating elements (terminals, joysticks) necessary

3. customisable

- Creation of user profiles to save settings for changing drivers
- Assignment of admin rights
- Individualisability of the display surfaces
- Free assignment of keys and visual feedback to avoid operating errors

4. simple operation

- All controls centrally in one place
- Intuitive operation (similar to smartphones and tablets)
- Flat menu structure for easy finding of individual functions
- Colour coding of the different function groups
- Proportional operation of the power lifts
- Proportional operation of the hydraulic valves on the multifunction travel lever
- Display of messages in plain text

5. future-proof

- Large storage capacity
- More interfaces
- High connectivity

FendtONE operating philosophy.

Colour and lighting concept

- Colour concept: Control buttons have different colours depending on their function
- each function group is assigned to a specific colour:
 - **orange**: driveline or transmission functions
 - **yellow**: power take-off functions
 - **blue**: hydraulic and linkage functions
 - **white**: general functions
 - **teal**: can be assigned with teach-in, ISOBUS functions, linkage automatics
 - **White keys can be freely assigned**



- + Quick orientation and easy operation due to colour coding of the different function groups
- + High degree of customisability thanks to large number of freely assignable keys

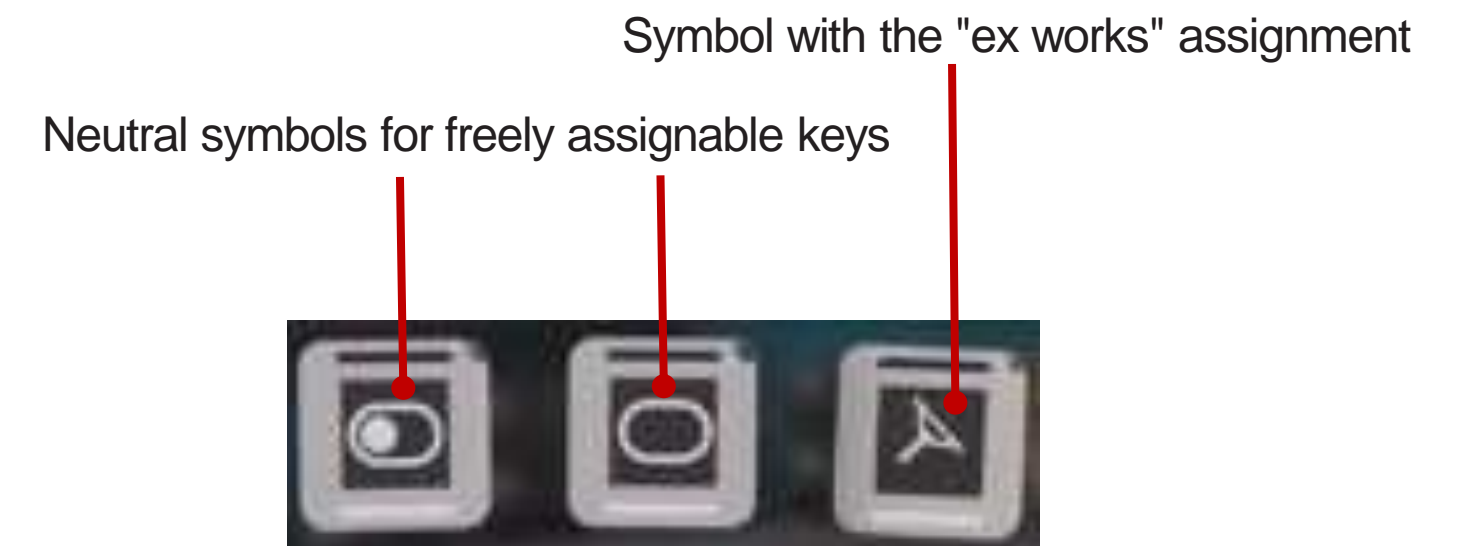
FendtONE operating philosophy.

Colour and lighting concept

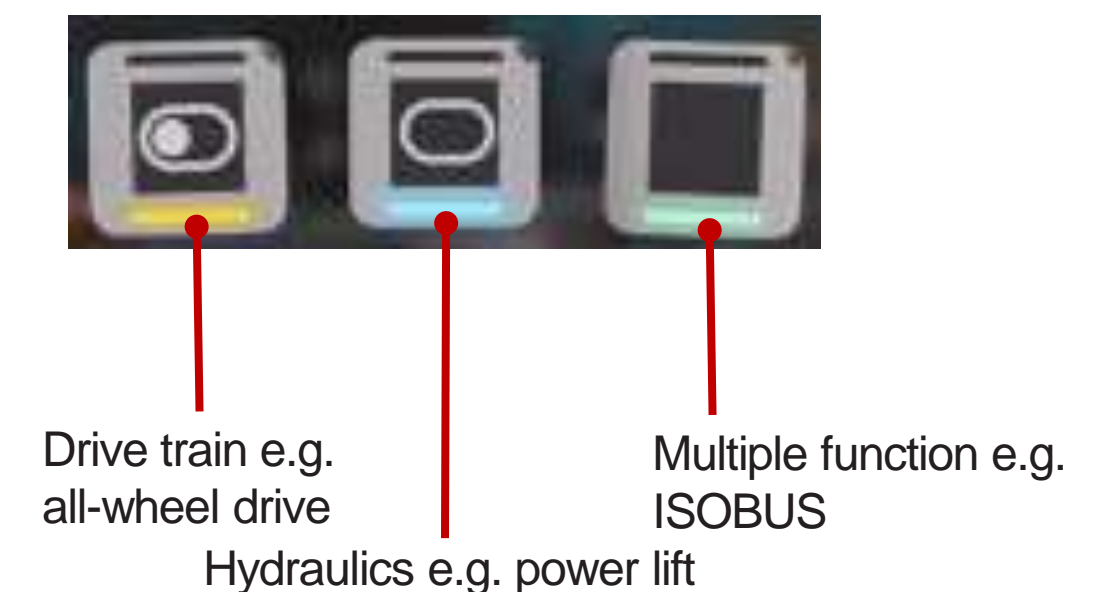
- White keys are freely assignable
- Teal-coloured buttons can be assigned with Teach In, ISOBUS functions and linkage automatics
- In the case of function reassignment, newly assigned functions are displayed in the colour of the respective function group
- LEDs on buttons give corresponding feedback:
 - lower LED: shows the colour of the respective function group
 - upper LED: shows the status of the function (on/off)

Optical feedback

Assignment ex works:



Example of a possible reassignment:



Optical feedback for function reassignment and thus avoidance of operating errors

FendtONE operating philosophy.

Digital dashboard

- 10.1" large display (no touch)
- Fixed to the steering column, can be swivelled along with the steering column
- Different display modes:
 - Road and field mode
 - Day and night mode
- Display of messages (3 levels):
 - 1) Message
 - 2) Warning message
 - 3) Alarm
- Choice between different views, e.g. hydraulic valves, key assignment, fuel consumption etc.
- In the power version without terminal on the armrest (dashboard only), settings can be made via the dashboard



- + Flexible display of important data such as on-board computer, key assignment, etc.
- + even if the standard view is changed, the data relevant to the road traffic regulations continue to be displayed

FendtONE operating philosophy.

Reverser on the steering column

Stop-and-go function in conjunction with TMS:

- Press and hold the rocker IN the direction of travel:
 - Tractor decelerates to a standstill
 - After releasing the rocker switch, it accelerates in the same direction of travel.
- Press and hold the rocker switch AGAINST the direction of travel:
 - Tractor decelerates to a standstill
 - After releasing the rocker switch, the tractor accelerates in the opposite direction of travel.



FendtONE operating philosophy.

Multifunction control lever

- Redesigned multifunction control lever for improved ergonomics
- Basic functions (reversing, activating cruise control and accelerating/decelerating) have not changed
- 4 additional keys with the possibility of function reassignment
- Rotary wheel on the driving lever for adjusting the cruise control speed while driving
- Two minirockers with proportional operation of control units on the driving lever
- Further transmission functions such as driving range change, TMS, etc. are located in the lower side area.



- + New shape and layout for improved ergonomics
- + Basic functions have not changed - quick orientation for Fendt drivers
- + Possibility of individualisation thanks to freely assignable buttons
- + Less reaching around necessary thanks to central arrangement of the functions on the drive lever

FendtONE operating philosophy.

Multifunction control lever

Factory-set with track guidance activation, possibility of reassignment

proportional operation of hydraulic valves (4 positions)

Activation of headland management and linkage automatics

White keys: freely assignable

Rotary wheel for changing the cruise control speed

Cruise control preselection 1 and 2

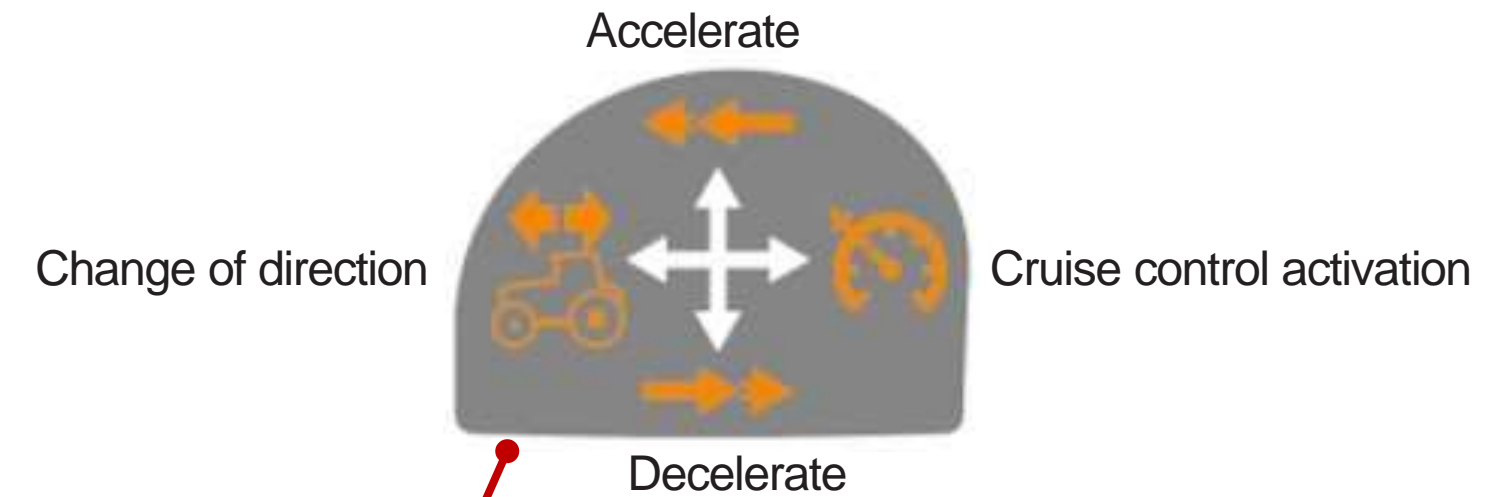
Driving range I/II

Accelerator pedal shift

Neutral button

Activation TMS

Engine speed memory 1 and 2



- Acceleration ramps (I - IV):**
- Ramp I: 0.02 km/h - 0.5 km/h (adjustable)
 - Ramp II: 0.5 km/h
 - Ramp III: 1.0 km/h
 - Ramp IV: 2.0 km/h

FendtONE operating philosophy.

3L joystick

- Optional 3L joystick for Power+, Profi and Profi+ (each Setting 2)
- for operating the 3rd and 4th hydraulic control unit and the front loader
- in combination with a Fendt front loader with 3rd valve, three functions can be performed simultaneously for the first time
- Fully ISOBUS-capable
- Up to 27 functions distributed over up to three operating levels (3L - 3 levels)
- Reverse key
- Functions can be reassigned via the IOM; colour feedback
- Entire 3L joystick can be locked for safety reasons



- + Reversing button eliminates the need to reach around, e.g. for front loader work
- + Freely customisable through function reassignment
- + Locking of the 3L joystick possible: prevention of unintentional operation

FendtONE operating philosophy.

Rotary-push actuator

- for operating the terminals/dashboard (terminals can also be operated by touch)
- 4 Access keys for quick navigation

Switching between terminals/dashboard

Individual Operation Manager (IOM)

Launchpad

Back button



- + Fast navigation thanks to access keys
- + In addition to touch operation of the terminals, complete operation via rotary push plates is also possible

FendtONE operating philosophy.

Operating buttons

- 14 function keys, colour-coded according to function groups
- Some of the white buttons are assigned to general functions such as mirror adjustment at the factory, but they can be reassigned.
- Visual feedback when functions are reassigned thanks to sophisticated lighting concept

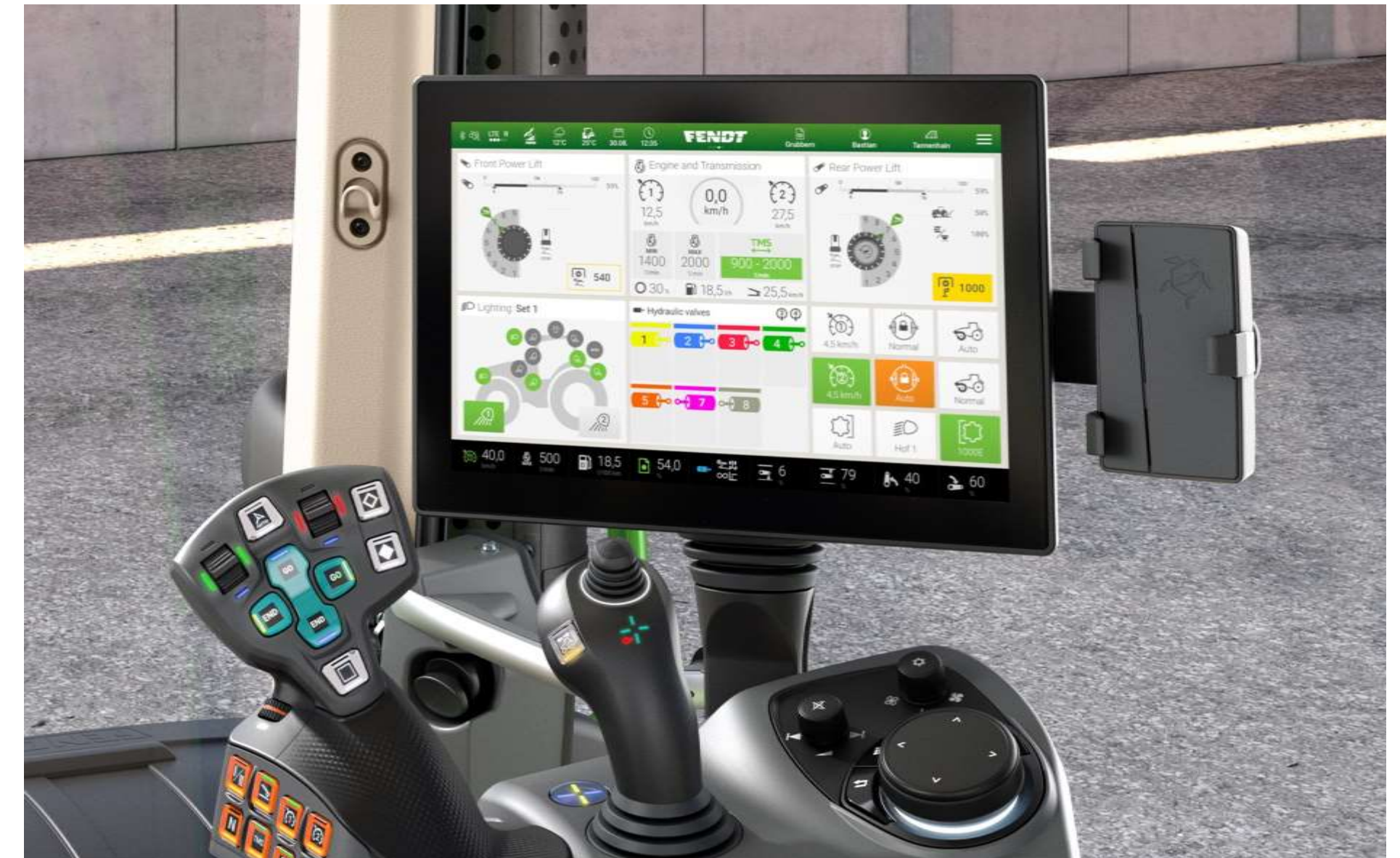


- + White keys can be customised through function reassignment
- + Quick orientation and avoidance of operating errors thanks to well thought-out colour and lighting concept

FendtONE operating philosophy.

12" terminal on the armrest

- Standard from Power+ Setting 1
- Up to six freely configurable tiles per page
- Creation of user profiles to save page views and settings for changing drivers
- Operable by touch and/or rotary-push dial
- Integrated day and night design



- + larger display area (12" instead of 10.7")
- + intuitive operation (similar to smartphones and tablets)
- + Flat menu structure for easy finding of individual functions
- + Possibility of individualisation through freely configurable pages or tiles

FendtONE operating philosophy.

12" terminal in the roof

- Additional 12" terminal in the roof for even more display space
- Functions correspond to the terminal on the armrest
- Can be half retracted into the headlining: lower half can still be seen and operated even in retracted position



- + more display area: no additional external terminals necessary
- + When not in use, possibility of retracting terminal up to halfway in the headlining and switching it off

FendtONE operating philosophy.

12" terminal

- Consistent header and footer even with changing page views
- Header with general status information such as reception, time, date, selected driver profile, etc.
- Footer with important information such as memorized cruise control speeds, engine speeds, fuel consumption, etc.
- Click on the respective symbol in the header or footer to open the corresponding menu (fullscreen).
- Factory default: Terminal pages with 6 tiles



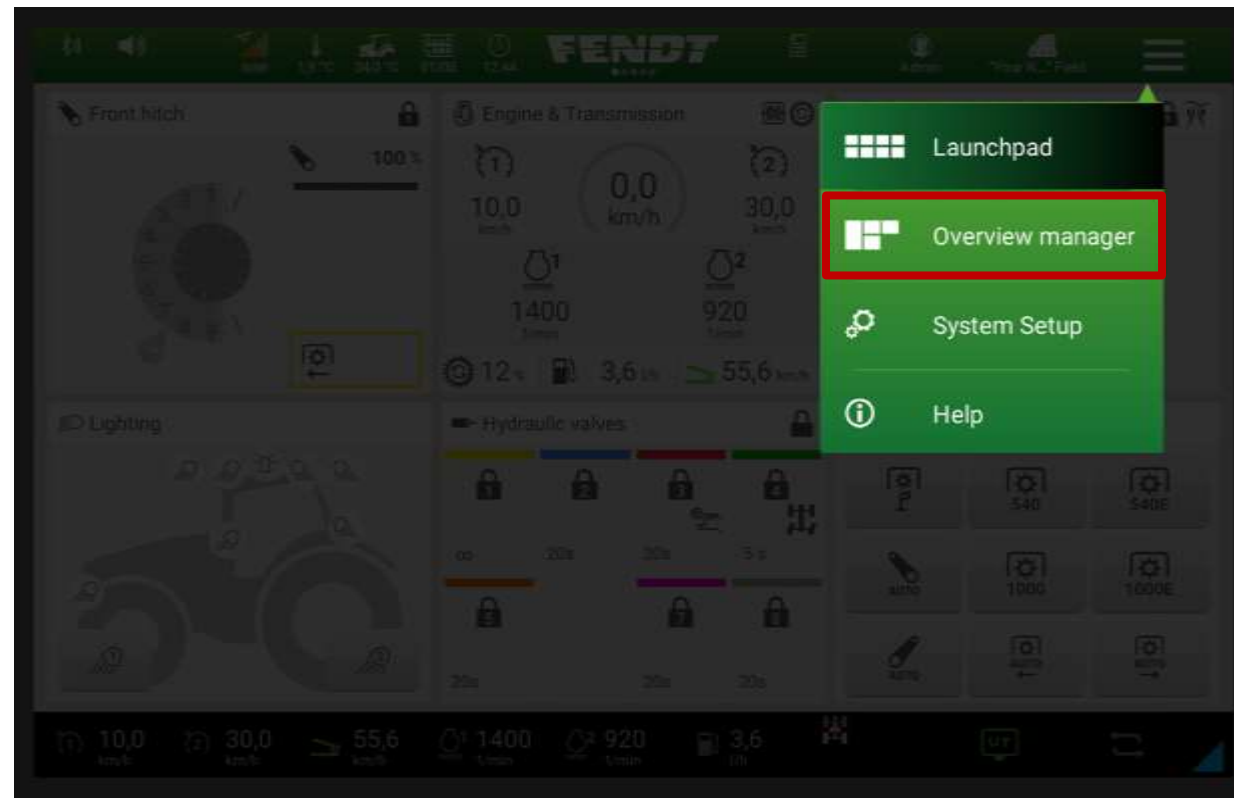
Exemplary picture of the Fendt 700 Vario

+ Important information is always displayed regardless of the terminal view

+ Access by clicking in the header or footer

FendtONE operating philosophy.

Overview manager



Overview manager for customising the terminal pages

- + more display area with up to 6 tiles per page (instead of 4 tiles so far)
- + Individual creation of up to 15 overview pages per user
- + intuitive customisation of the terminal pages by drag & drop



Factory default setting with 6 tiles can be changed as desired

- The various tiles and pages can be changed via drag & drop



For a better overview

- Functions can, for example, also be displayed on 4 tiles, such as track guidance here.
- Click on the respective tile to open the corresponding menu in fullscreen mode.

FendtONE operating philosophy.

Launchpad

- Overview page in the terminal for quick access to all functions
- Comparable to a home button on a smartphone
- Access button on the rotary-push dial



FendtONE operating philosophy.

Power lift operation

Front linkage:

Rear linkage:

Float position mode front linkage

Control mode front linkage and storage of the the currently set depth as the new MEMO setpoint.

Float position mode rear linkage

Control mode rear linkage: Storage of the currently set depth as a new MEMO setpoint value

Front PTO (on/off)

Front linkage (lift/lower/quick lift)

Scroll wheel (infinite): Working depth front linkage

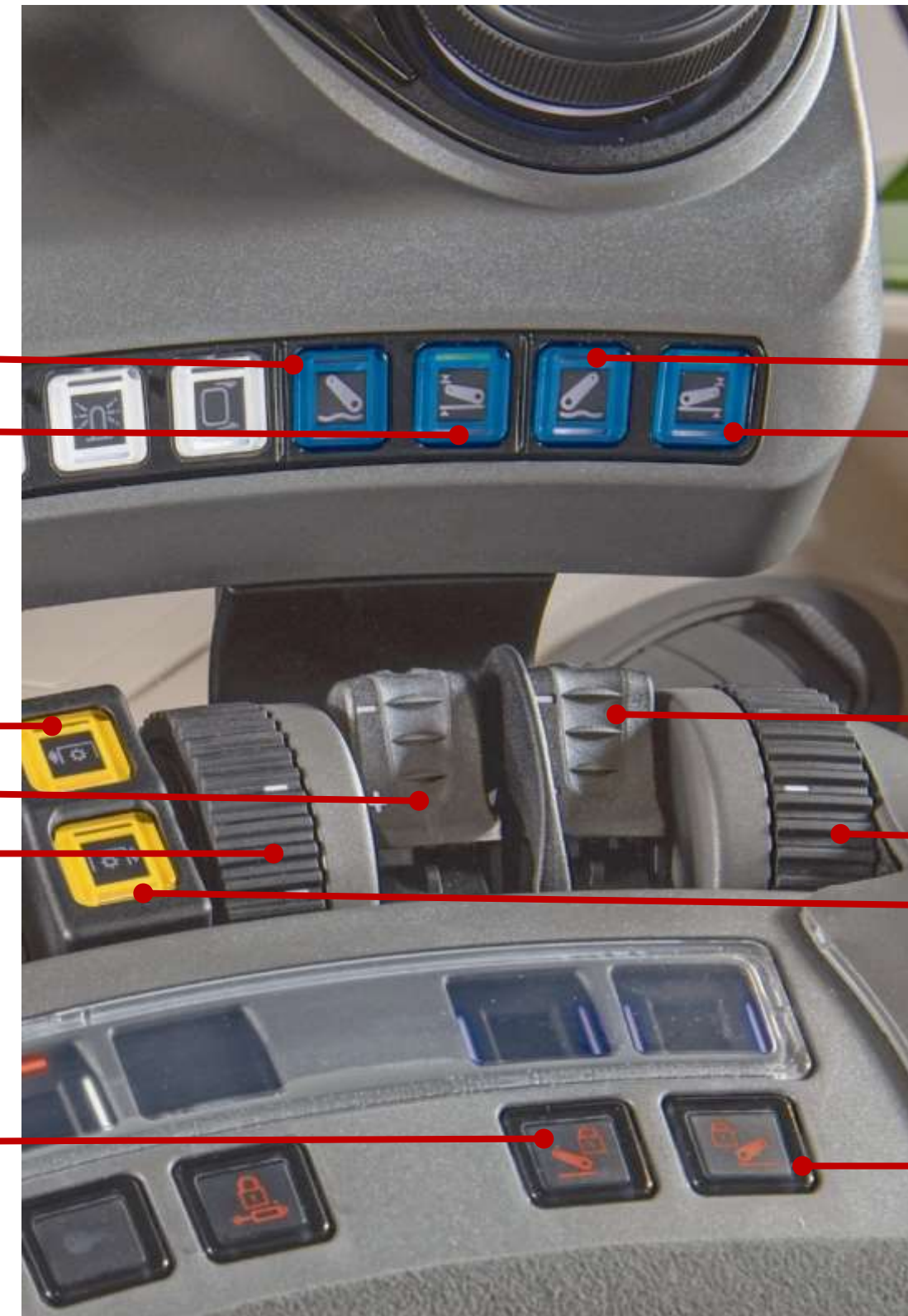
Rear linkage (lifting/lowering/quick lift)

Scroll wheel (infinite): Working depth rear linkage

Rear PTO (on/off)

Lock/unlock front hydraulics

Lock/unlock rear hydraulics



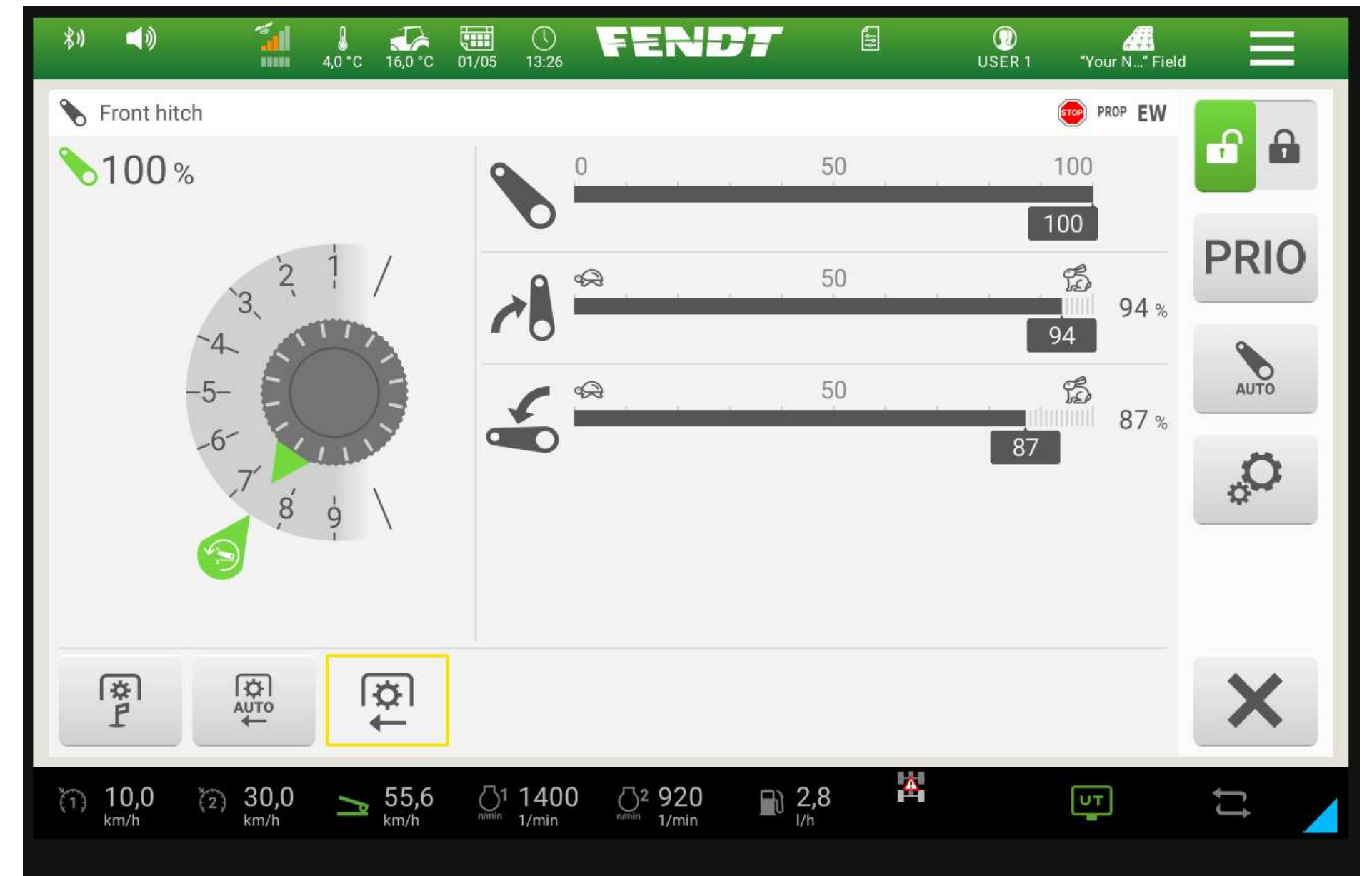
FendtONE operating philosophy.

Terminal - Front linkage

Setting/activation of:

- Lifting height
- Lifting speed
- Lowering speed

- Front PTO automatic
- Stationary operation Front PTO
- Relief control

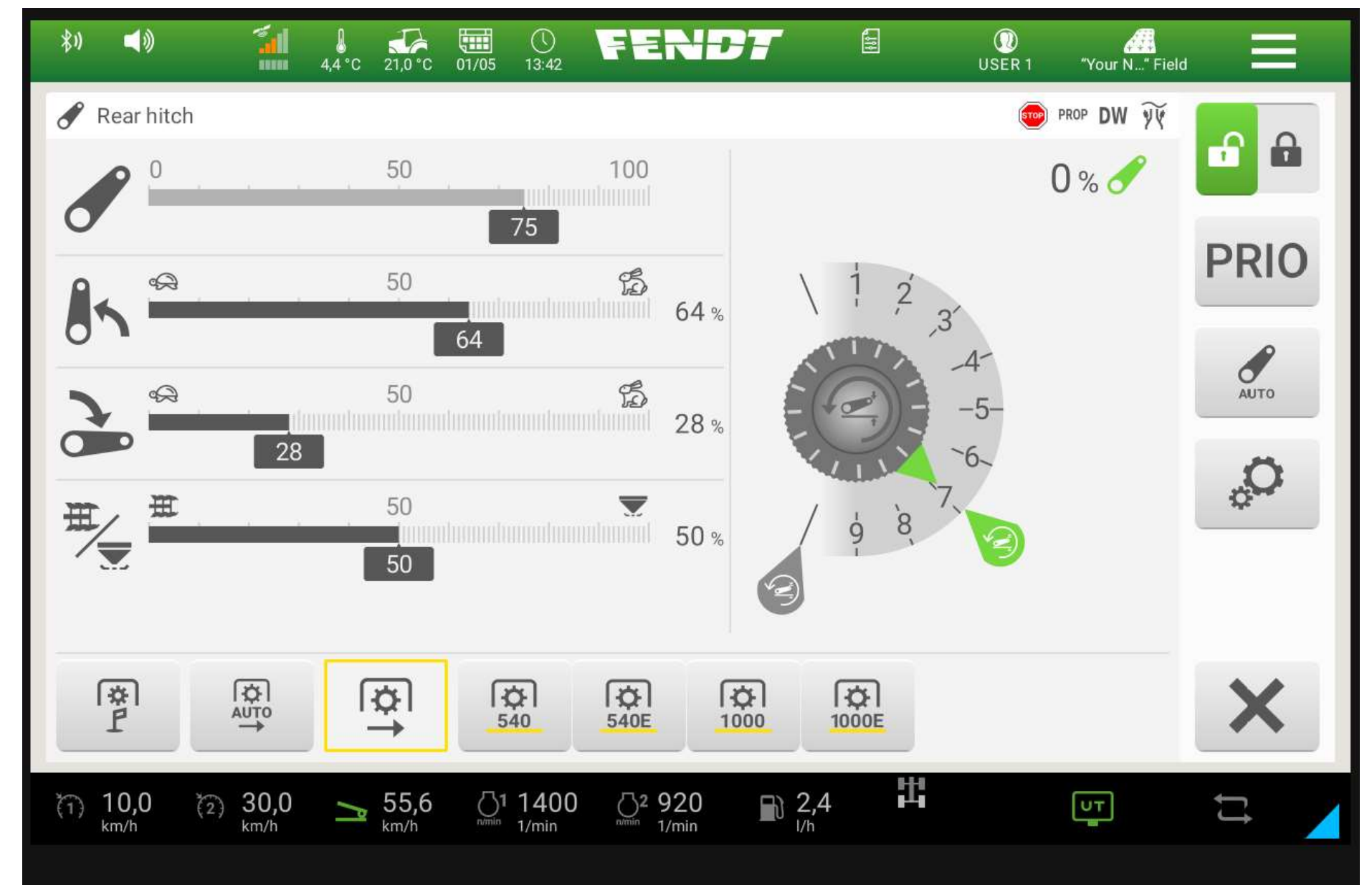
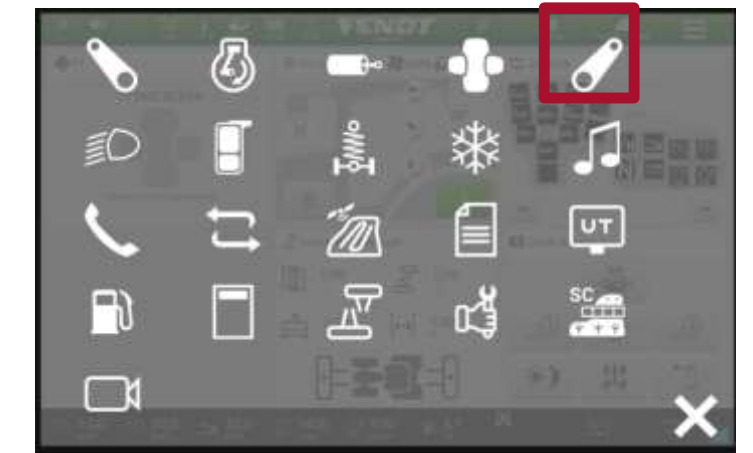


FendtONE operating philosophy.

Terminal - rear linkage

Setting/activation of:

- Lifting height
- Lifting speed
- Lowering speed
- Rear PTO speed
- Rear PTO automatic
- Stationary operation rear PTO
- Draft and position control
- Two memo positions



FendtONE operating philosophy.

Terminal - Engine & Gearbox

- 2 cruise control speeds can be stored - optimum speed adjustment independent of engine speed
- 2 engine speeds can be stored
- Setting for changing the direction of travel (memo function)
- TMS - consumption-optimised automatic control of engine speed and transmission ratio (operation via multifunction control lever and accelerator pedal)
- automatic load limit control 2.0



+ Simple and safe setting by touch and/or rotary-push dial
+ Quick activation of functions (memo function, turbo coupling function...)

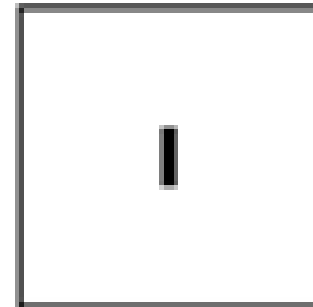
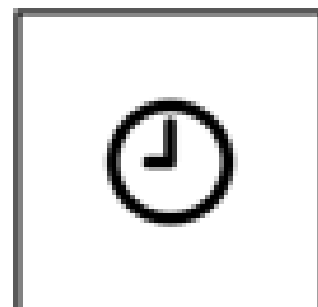
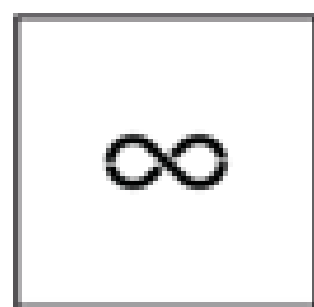
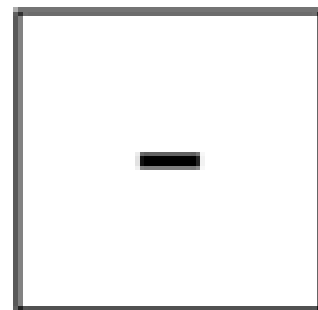
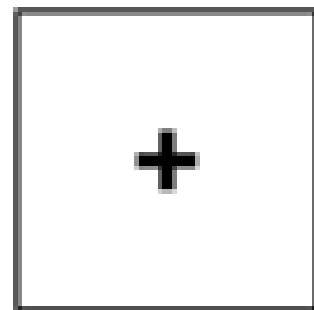


FendtONE operating philosophy.

Finger tips for operating the hydraulic valves

Each rocker has four positions:

- 1) Plus
- 2) Minus
- 3) Floating position
- 4) Without function
 - Permanent flow (can be activated via terminal)
 - Time function (can be activated via terminal)



Lock/unlock all rockers together

Lock/unlock respective rocker separately



FendtONE operating philosophy.

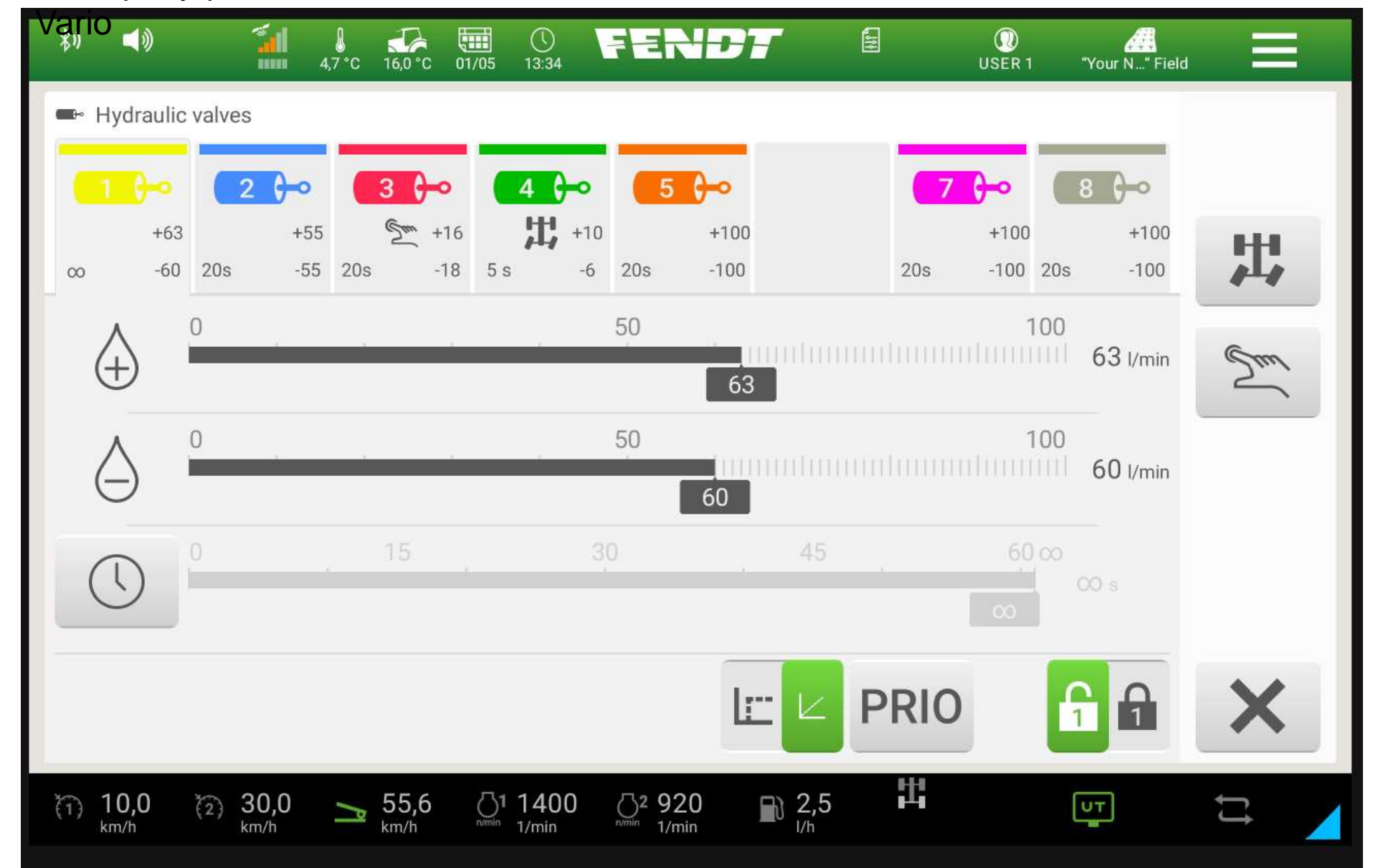
Terminal - Hydraulic valves

Setting/activation of:

- Oil quantity
- Time function
- Start-up control
- Valve selection for external operation
- Priority function
- Automatic steering axle lock



Exemplary picture of the Fendt 700



FendtONE operating philosophy.

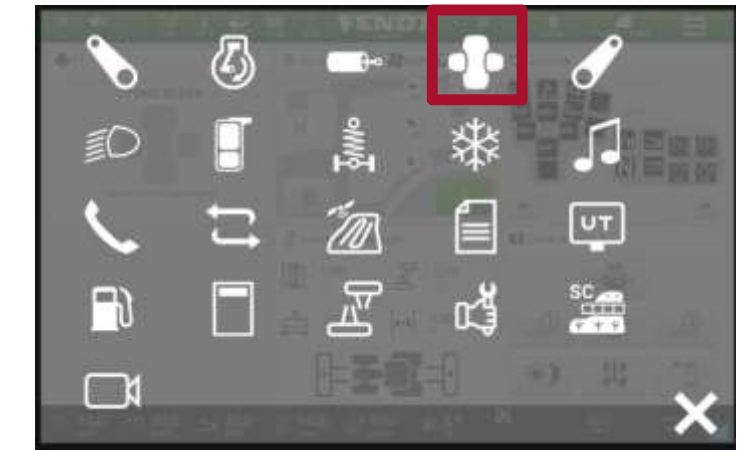
Headland management Fendt TI



1) Selection of the respective sequence by clicking in the field



2) Open EDIT offline menu



3) Selection of the trigger or the function



4) Adding the desired function by drag & drop

FendtONE operating philosophy.

Terminal - Lighting

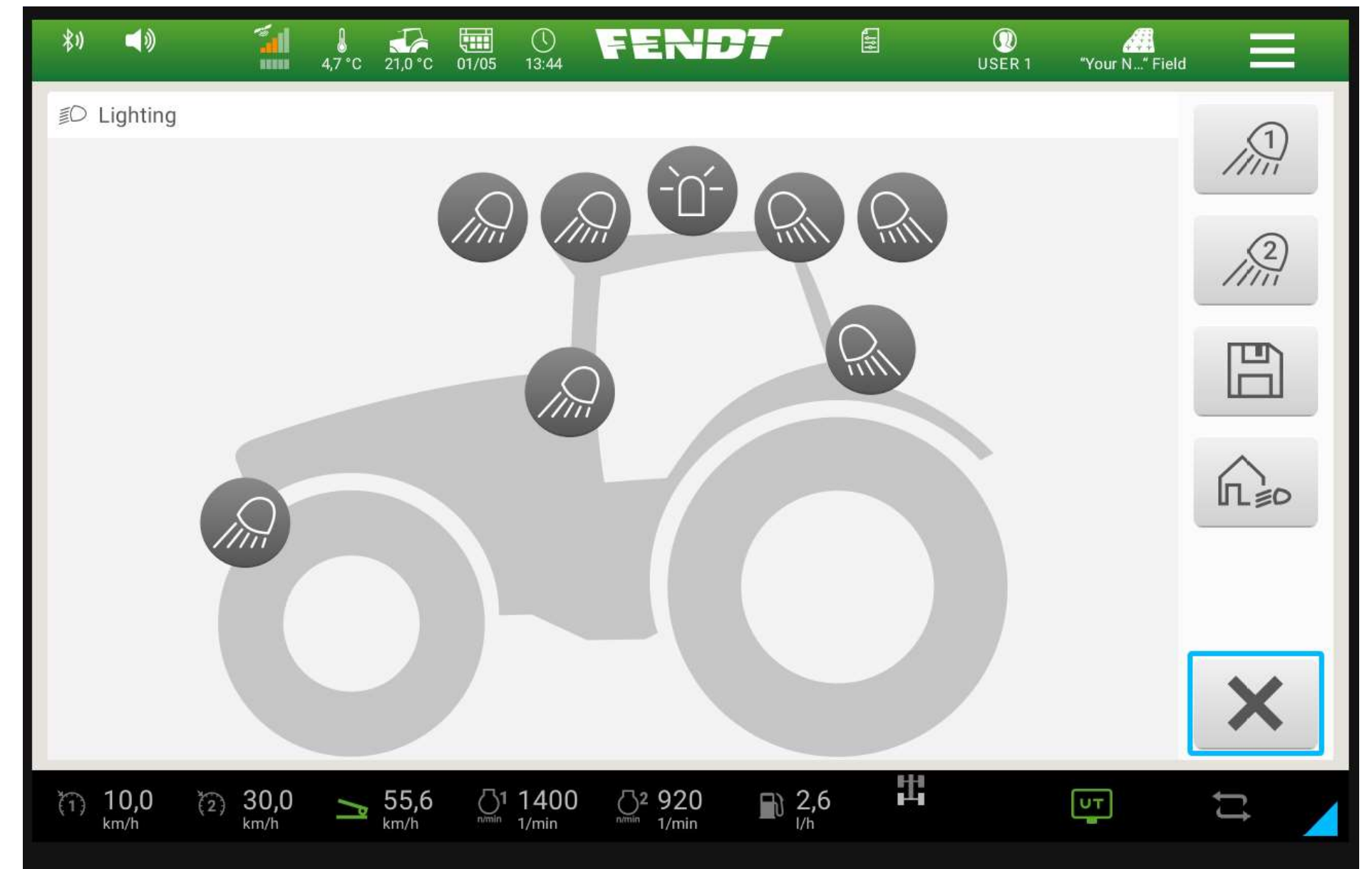
Setting of:

- 2 storable lighting modes, e.g. street and field mode
- Coming home function (with Profi/Profi+)

Switch on the reversing lever for activating/switching the two stored lighting modes



+ Fast switching between two stored lighting modes



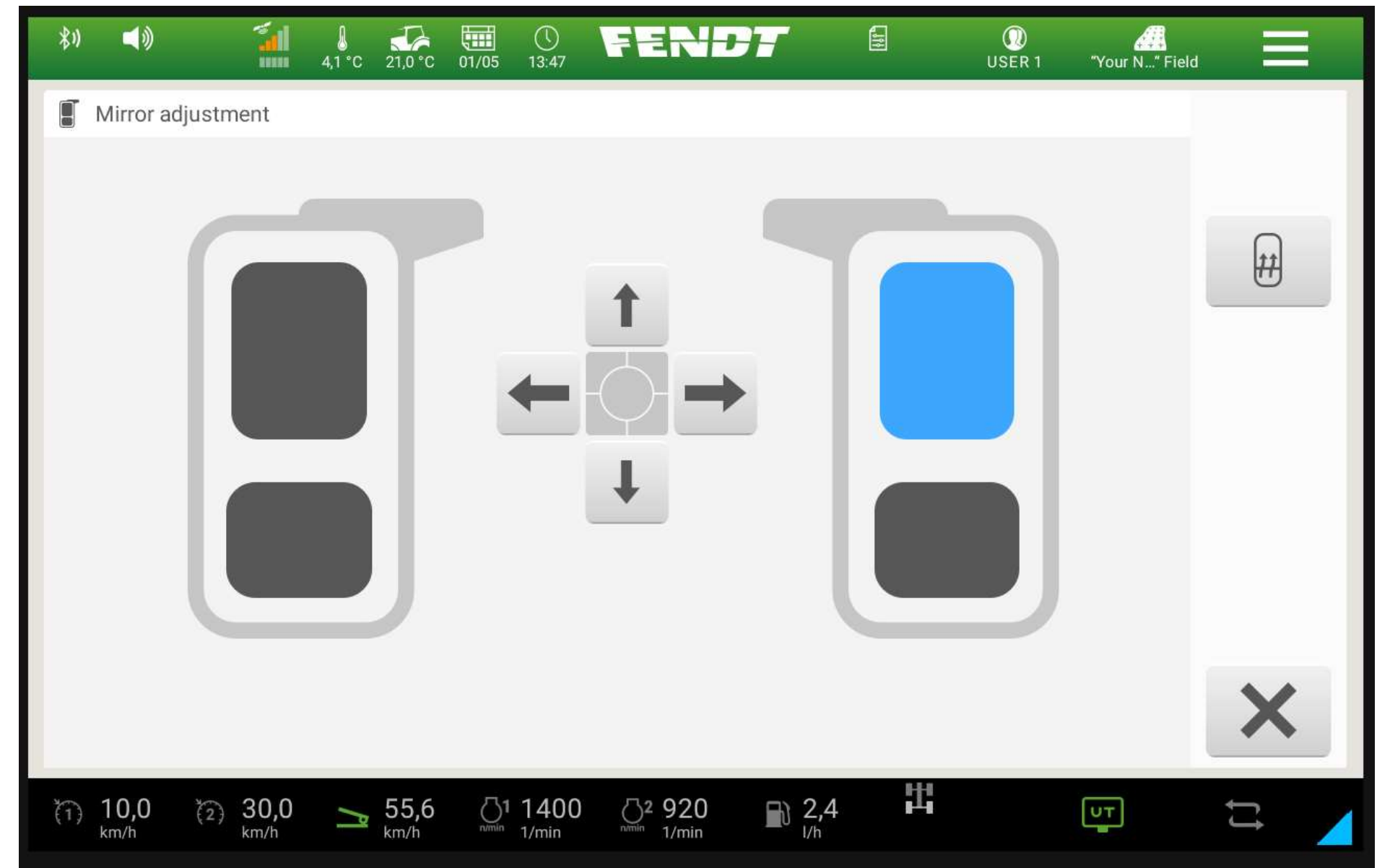
FendtONE operating philosophy.

Terminal - Mirror settings

- Adjustment of the electrically adjustable rear-view mirrors by touch (arrow keys) or via rotary-push dial
- Activating the mirror heating



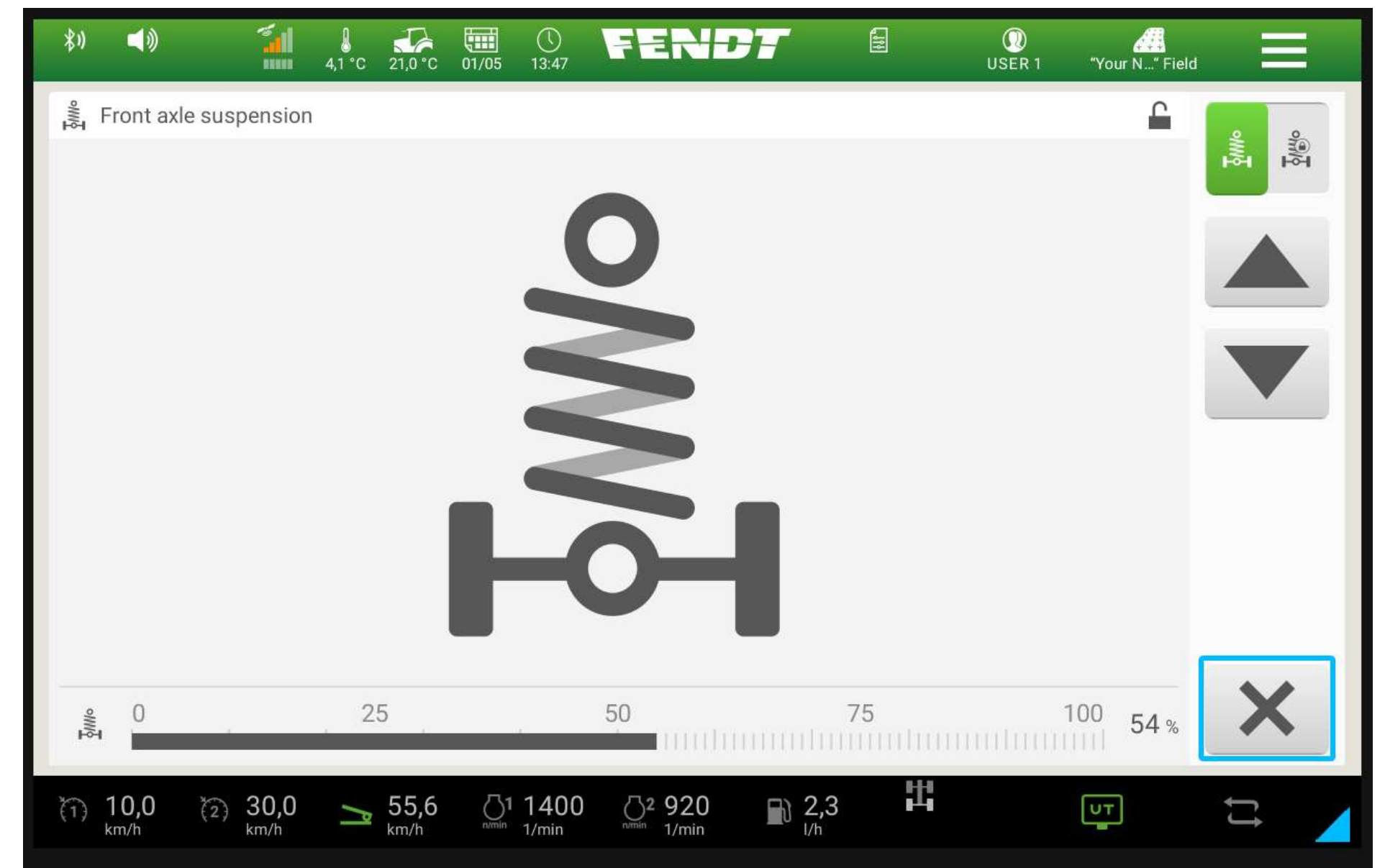
+ Comfortable adjustment of the mirrors via the terminal (no additional button below the armrest flap necessary).



FendtONE operating philosophy.

Terminal - Front axle suspension

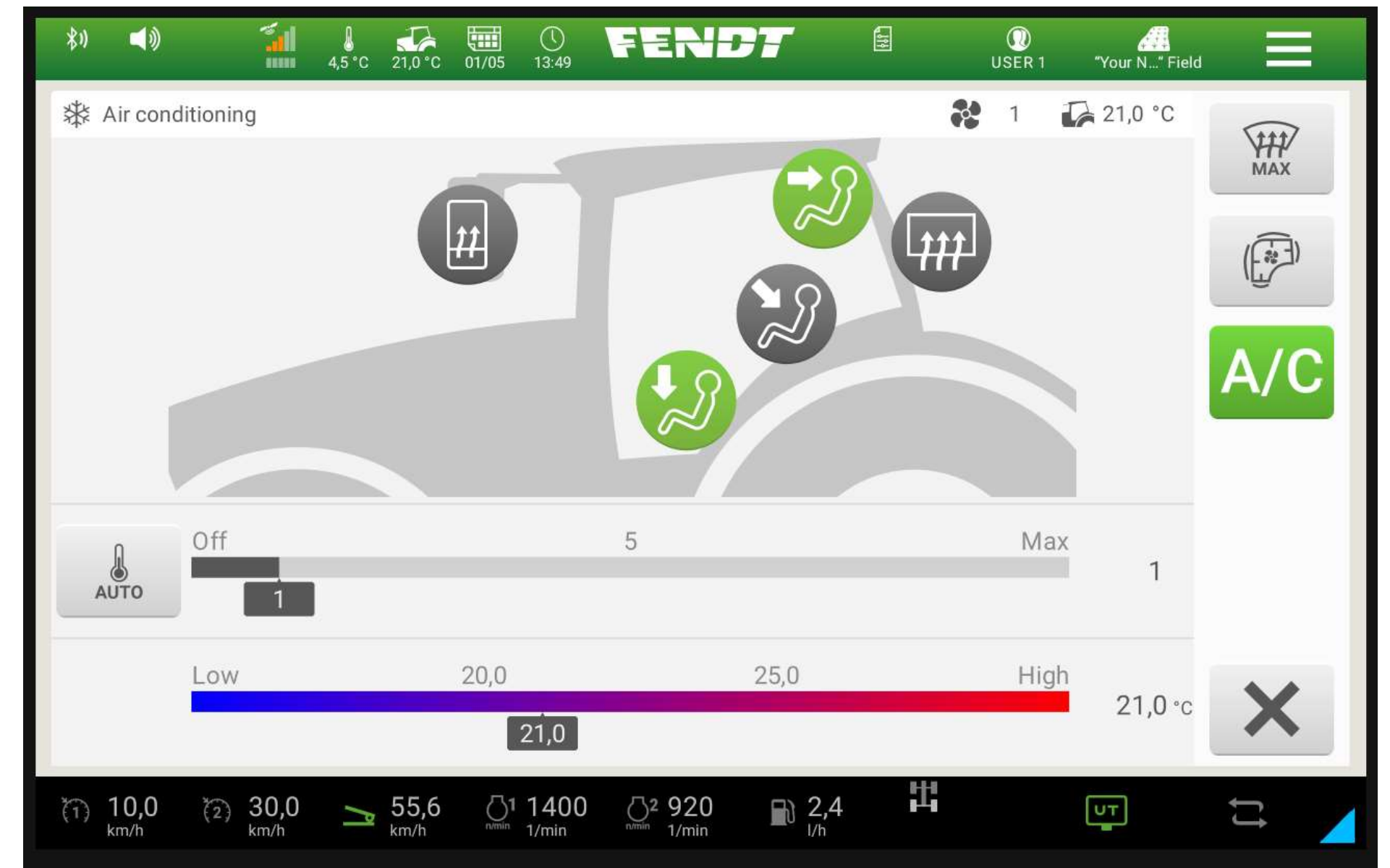
- Locking function for precise device guidance
- Manual raising and lowering of the suspension



FendtONE operating philosophy.

Ventilation/air conditioning

- Operation via rotary knob on the armrest or via touch in the terminal
- Quick setting via rotary knob:
 - Switch to the left or right: Fan up/down
 - Turn: Temperature up/down
 - Press: Activate automatic mode
 - Press longer: Defroster mode (highest temperature & highest fan speed)



+ No need to reach up to the cab lining thanks to central control on the armrest

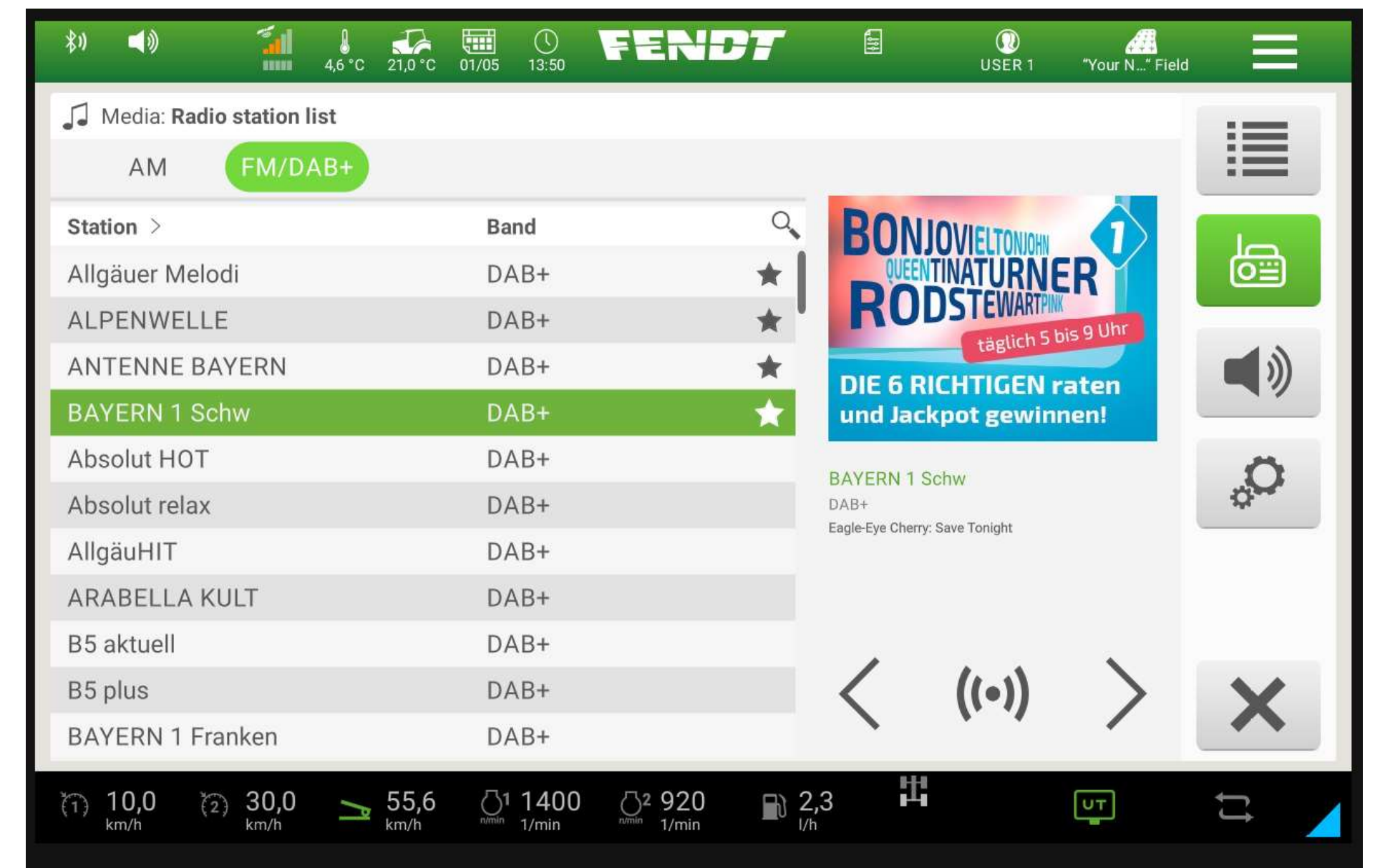
FendtONE operating philosophy.

Terminal - Media

- Rotary knob on the armrest for quick adjustment:
 - to the left or right to advance or rewind the radio station/song title.
 - turn: Volume up/down
 - press: mute
- Audio source selection:
 - AUX
 - Bluetooth
 - USB
 - Radio (AM or FM/DAB+)



+ No need to reach up to the cab lining thanks to central control on the armrest



FendtONE operating philosophy.

Flexible key assignment via IOM (Individual Operation Manager)

- The key assignment can be conveniently managed via the IOM
- Functions can be placed in the best possible operating location for the driver
- The functions can be placed at the respective operating location by dragging and dropping in the IOM menu.
- Individual key assignment is stored in the respective user profile
-> each driver can quickly call up their settings again
- 3 ways to access the IOM in the terminal:
 - Access button on the rotary-push dial
 - via the icon on the launchpad
 - own tile in the terminal



+ best possible driver-specific individualisation of the workplace
+ Simple and intuitive function reassignment by drag & drop


FendtONE operating philosophy.

Multifunction control lever - IOM

Factory function assignment



- red: hydraulic valve locked
- Hydraulic valve colour
- blue: Hydraulics function group
- LED teal: Teach-In or ISOBUS function group
- keys not in use



Colour of the LEDs changes according to the reassignment

Go/end symbol disappears on reassignment

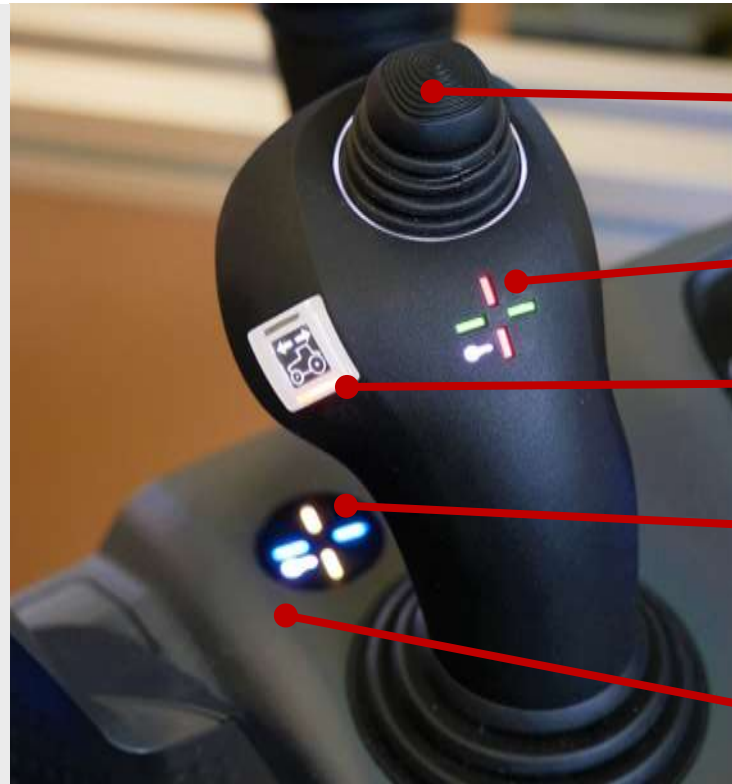
For function reassignment



FendtONE operating philosophy.

3L joystick - IOM

Factory function assignment



- Thumb joystick
- Display function assignment thumb joystick:
Valve colours or petrol for ISOBUS and Teach-IN
- Freely assignable button; factory setting: Reverse button
(orange: function group motor/gearbox)
- Display function assignment 3L joystick:
Valve colours or teal for ISOBUS and Teach-IN
- White key: Joystick unlocked

Red key: Joystick locked



Reversing symbol disappears when reassigned

Colour of the LEDs changes according to the reassignment

For function reassignment



FendtONE operating philosophy.

Operating keys - IOM



Factory function assignment

Not assigned

LED white: general functions

factory symbols disappear;
the lower LEDs take on the colour of the respective function group

LED green: status on

Factory unassigned keys that are assigned a function: Appearance of a symbol



For function reassignment

FendtONE operating philosophy.

Rocker (linear modules) - IOM

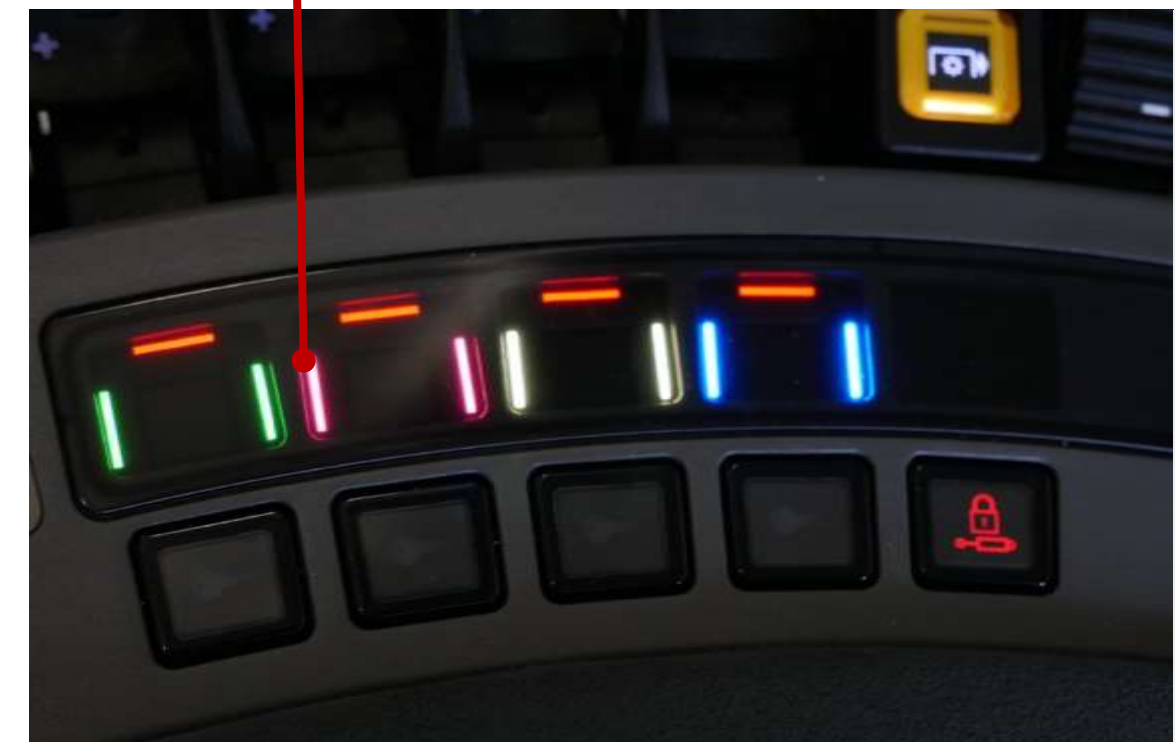
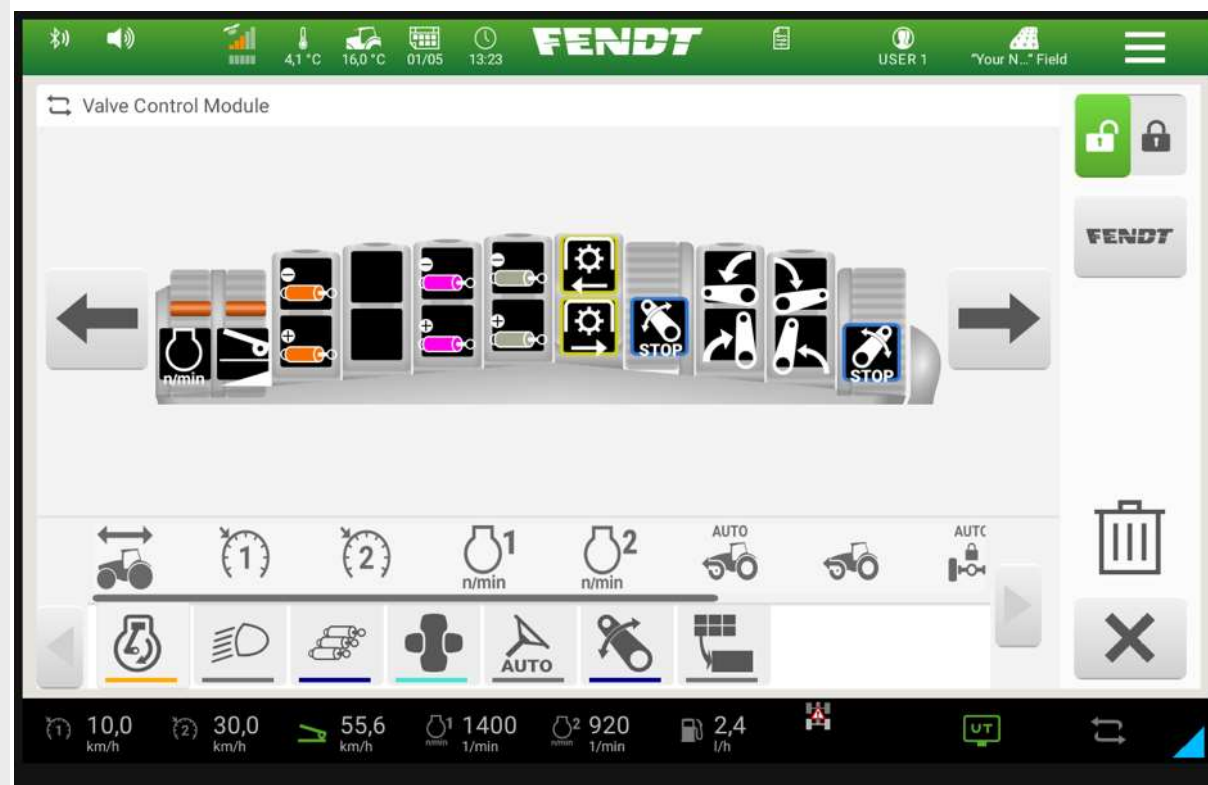


Finger tip spool locked

Hydraulic valve colour

The colour of the LEDs changes according to the reassignment

Factory function assignment



For function reassignment

FendtONE operating philosophy.

Terminal - Fuel consumption

- Consumption display for diesel and AdBlue in l/h, l/ha and l/100km
- Display of 4 consumption types:
 - current
 - average
 - Diesel total counter 1
 - Diesel total counter 2



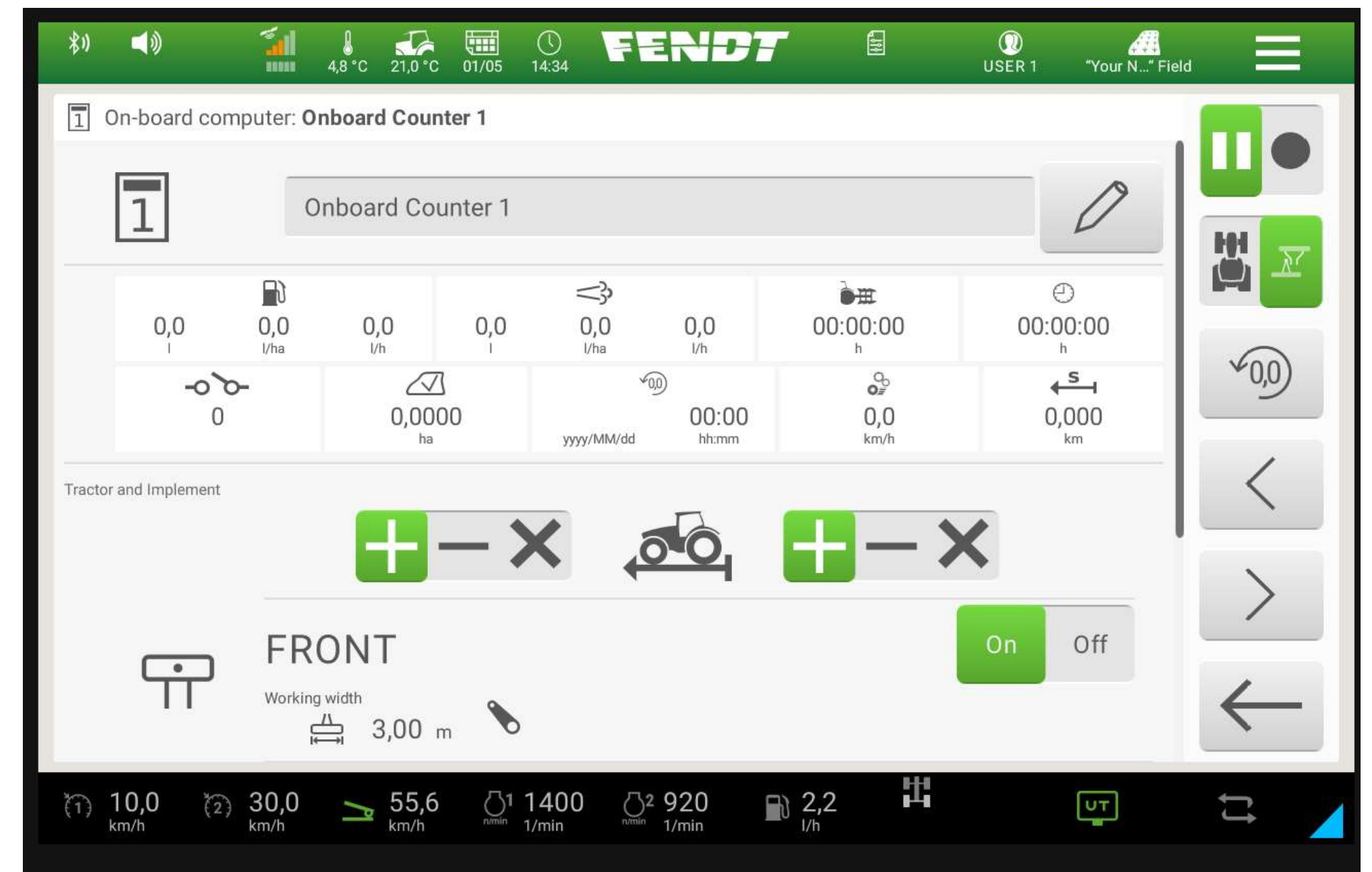
FendtONE operating philosophy.

On-board computer

- Up to 10 on-board computers for easy determination of the following data during various operations:
 - Fuel consumption
 - working time
 - total time
 - area worked
 - Distance travelled
- Activation of the count via different triggers possible



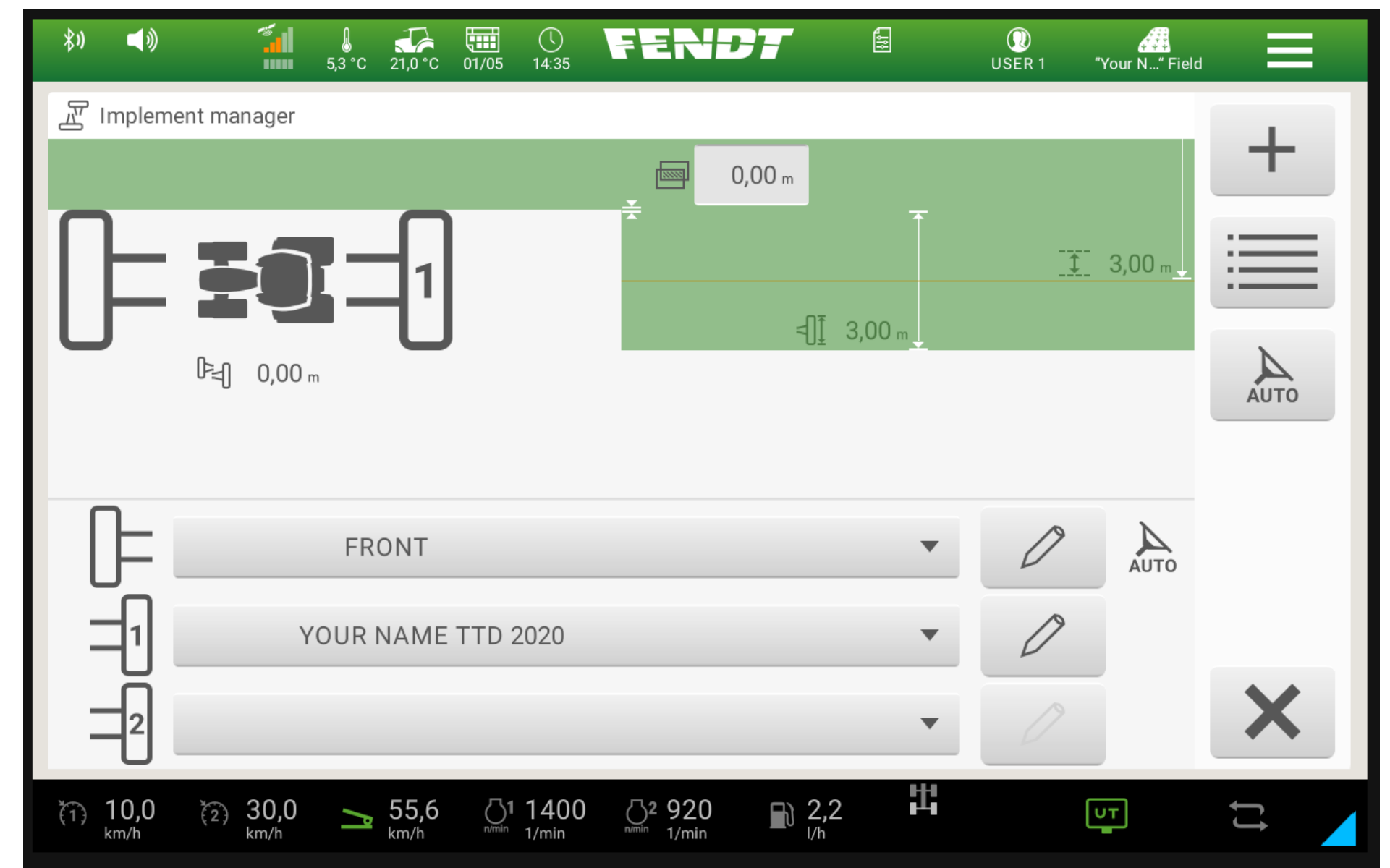
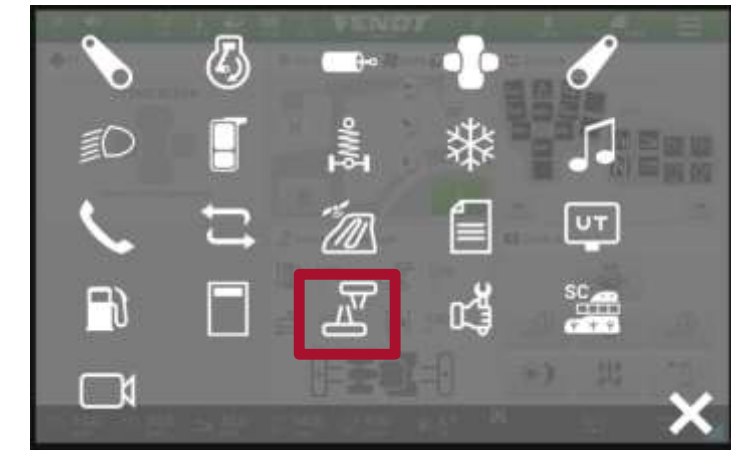
+ Simple logging of important data



FendtONE operating philosophy.

Device manager

- Central storage of attachments in the implement manager:
 - Working width
 - Steering axle or rigid axle
 - Type of attachment:
 - Front attachment
 - Three-point linkage semi-mounted
 - Three-point linkage
 - Drawbar
 - towing hitch
 - Ball head coupling



FendtONE operating philosophy.

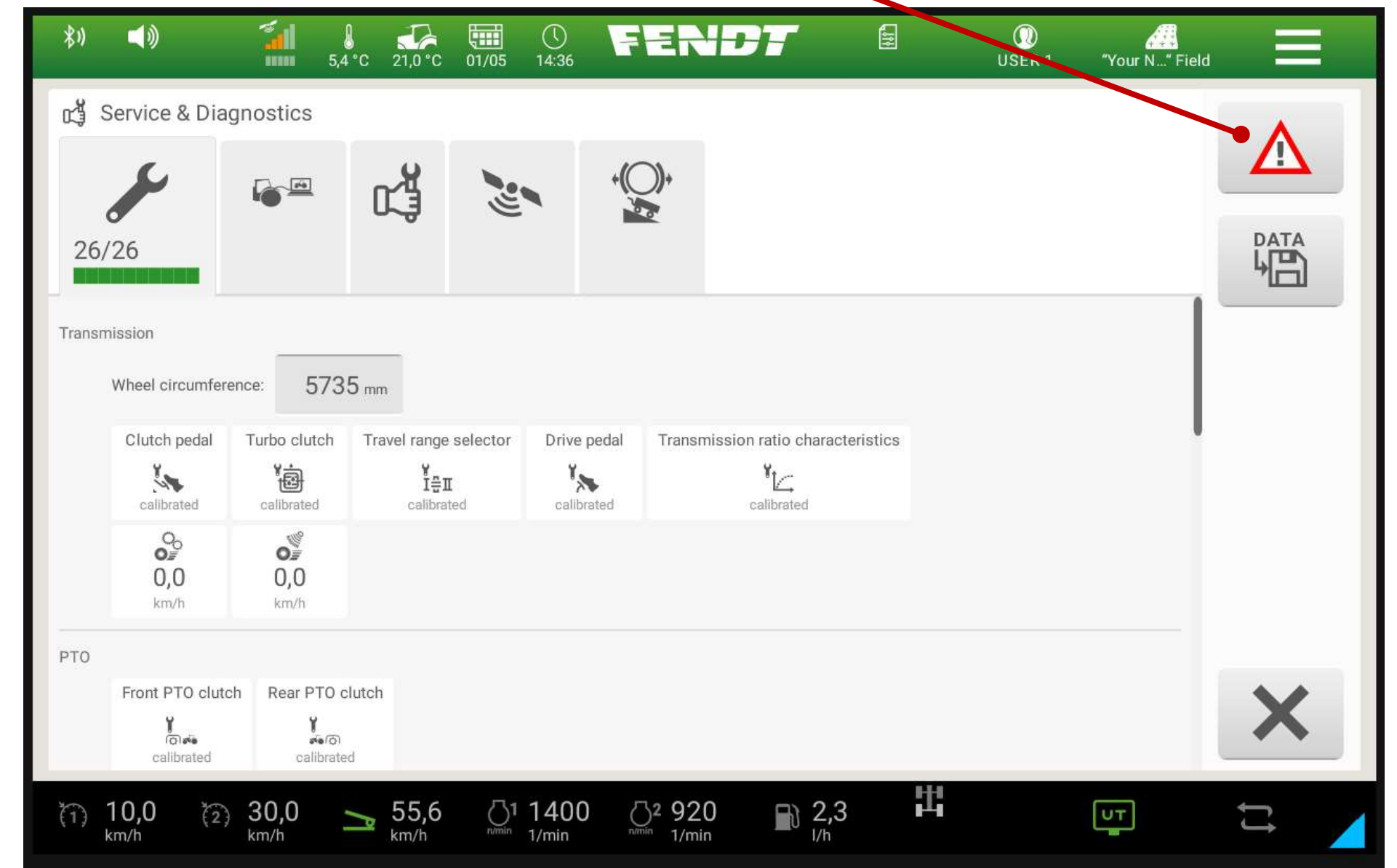
Service & Diagnosis

- Logbook with all error messages including description, e.g. display of:
 - Air filter contamination
 - hydraulic oil level
 - DPF loading condition
- Customer service info
- Review of the EC control position
- Switching the hydraulic trailer brake to depressurised

Call logbook



+ Display of error messages in plain text



FendtONE operating philosophy.

Camera

Variants for camera connections:

- Camera connections 2x digital and 2x analogue
- Camera connections 4x digital
- Extremely high-resolution display of the transmission image in the terminal



+ Flexible camera selection through analogue and digital camera connections

Smart Farming.

Basics

FendtONE offboard

Guidance

Agronomy

Telemetry

Machine control



Basics - module logic and naming.

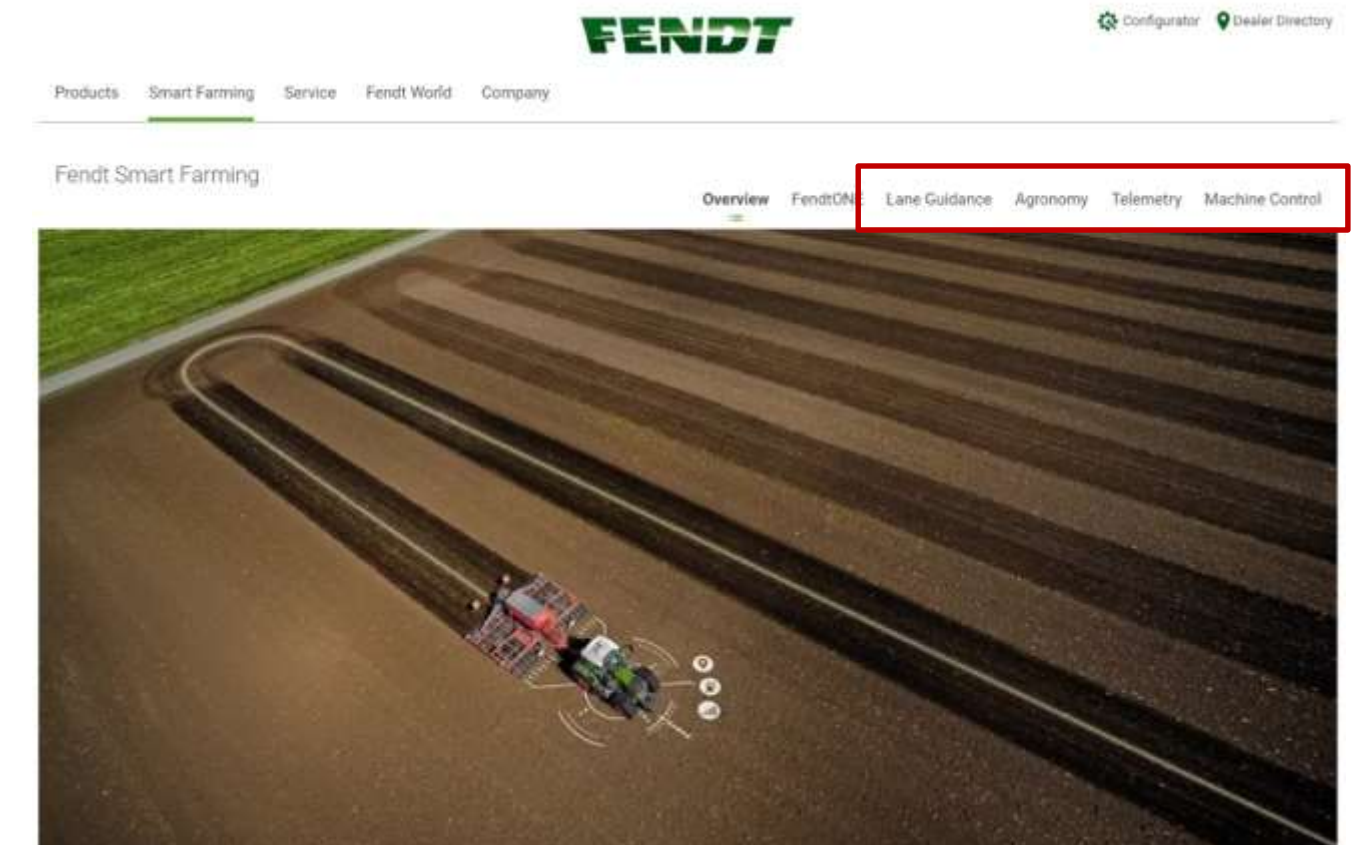
- Increasing number and complexity of smart farming solutions
- Structuring since PL 789:

4 modules:

- Guidance
- Agronomy
- Telemetry
- Machine control

- respective basic function included in the basic package (e.g. Fendt Guide in the track guidance module)
- Additional functions are optionally available (e.g. Fendt Contour Assistant in the track guidance module).
- New naming for electronic features at the new driver's workplace

+ Easier orientation through clear and uniform structure across all channels
+ Possibility to distinguish current vs. new driver workstation and still the same module logic and similar logic in naming



Website

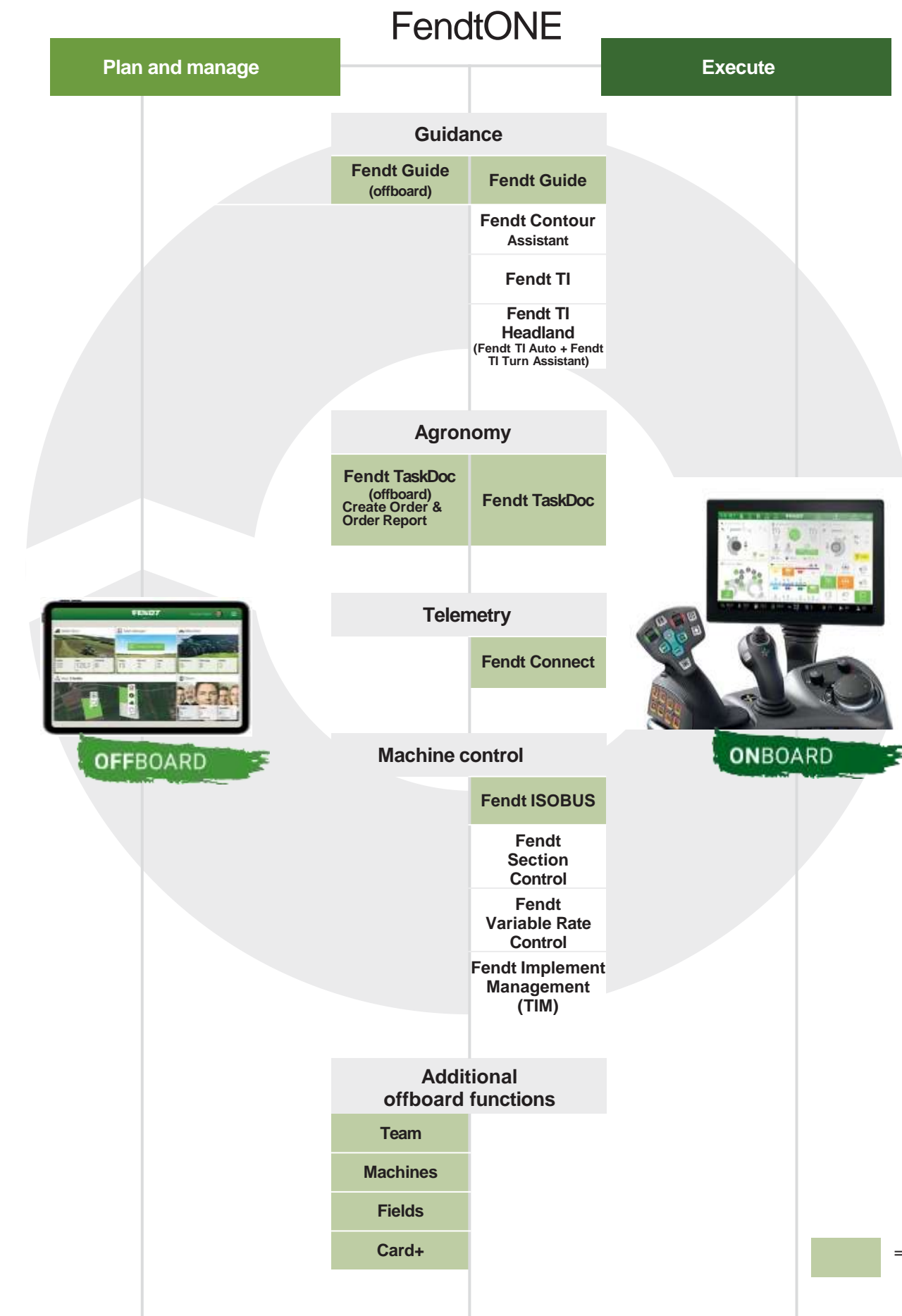


Configurator

Basics.

How do FendtONE and Fendt Smart Farming fit together?

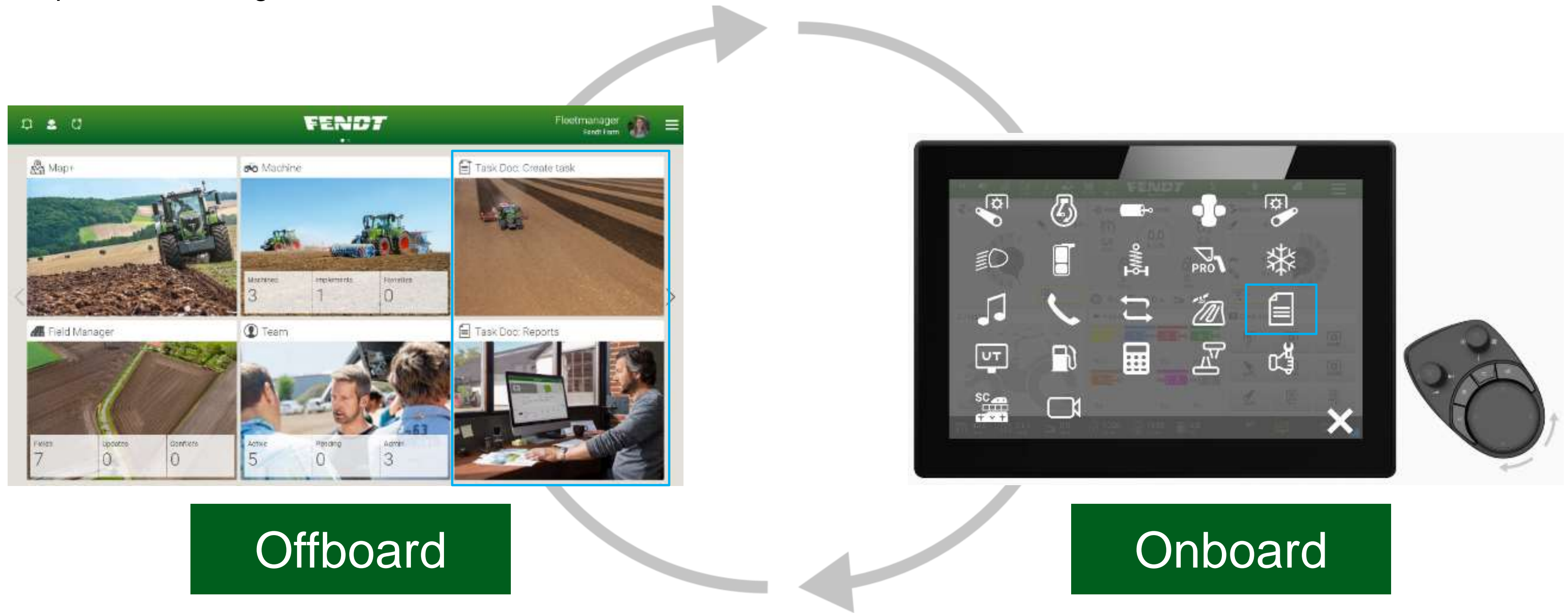
- FendtONE expands the previously known technology products that run onboard on the tractor to include planning and managing components offboard
- Example order management:
 offboard: Order planning onboard: Order is executed, actual values are recorded offboard: Order report



- + Easy entry into system-supported documentation
- + Full complement to Fendt: complementary functions
- + Reduction of complexity

Basics.

Example order management



FendtONE offboard - range of functions at launch.

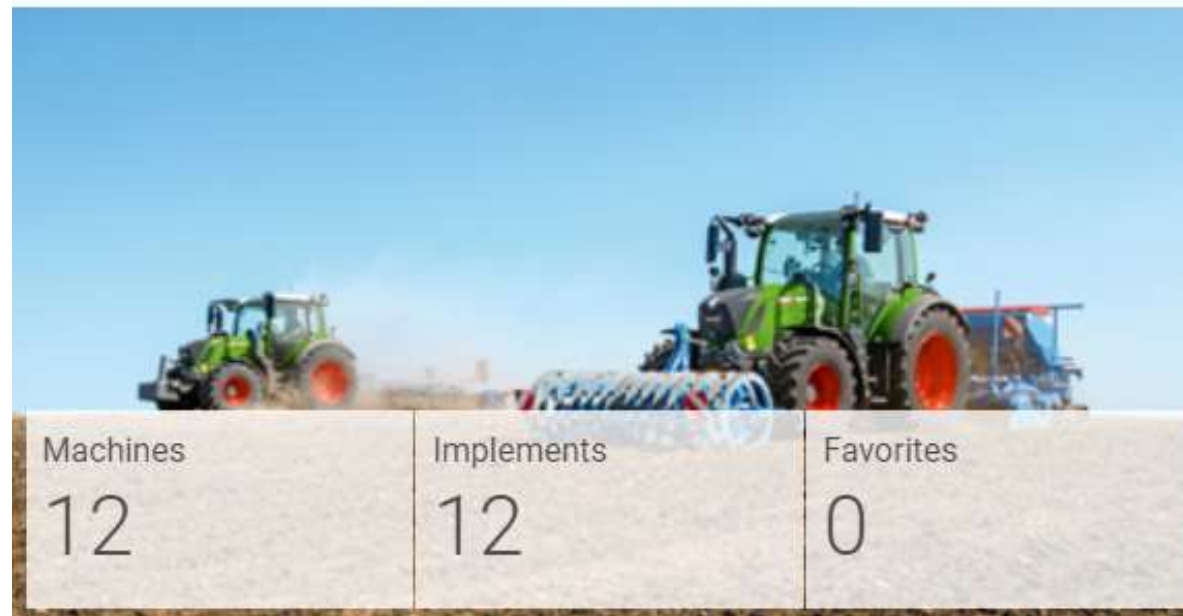
Team



Team Management

- Invite people to FendtONE offboard
- Granting roles and permissions

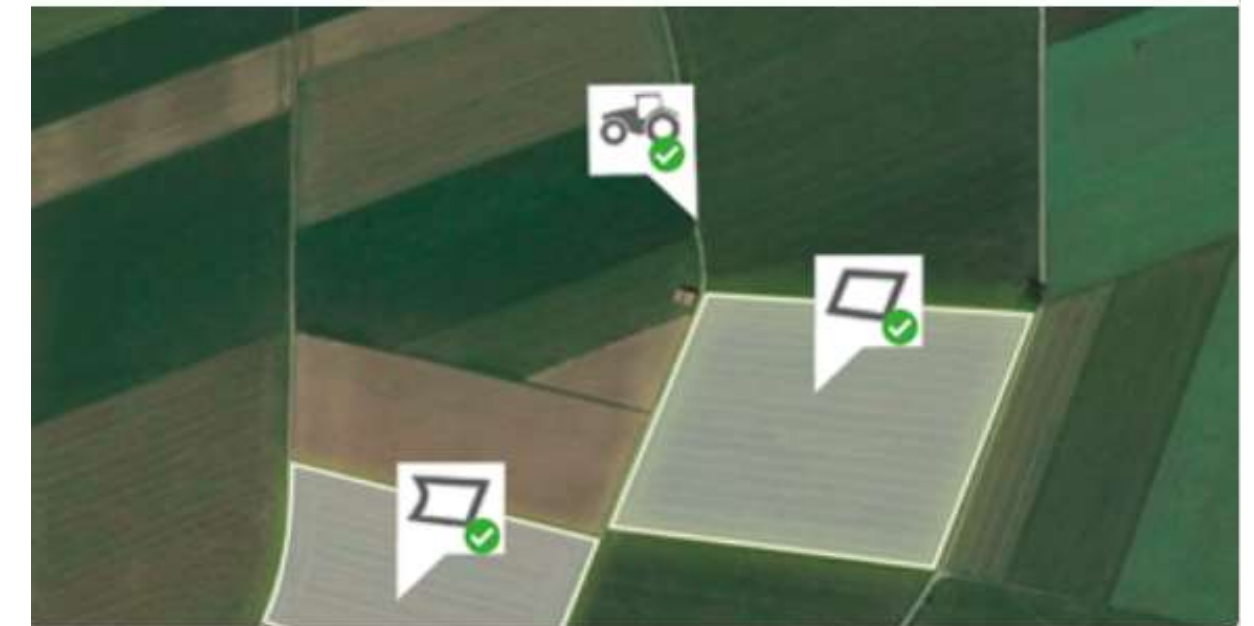
Machines



Machine management

- Add machines
- Machine information
- Interface to Fendt Connect

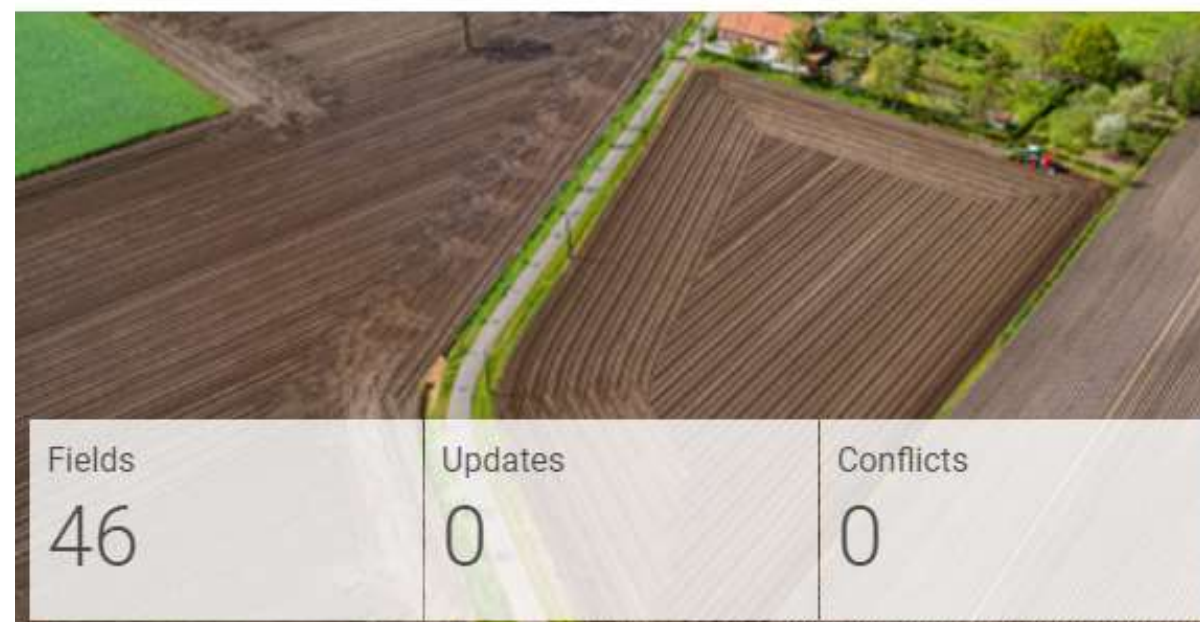
Map+



Card+

- Locate fields and tractors
- Points of interest
- Weather

Fields



Fields Management

- Manage fields and track lines
- Import fields
- Field master data

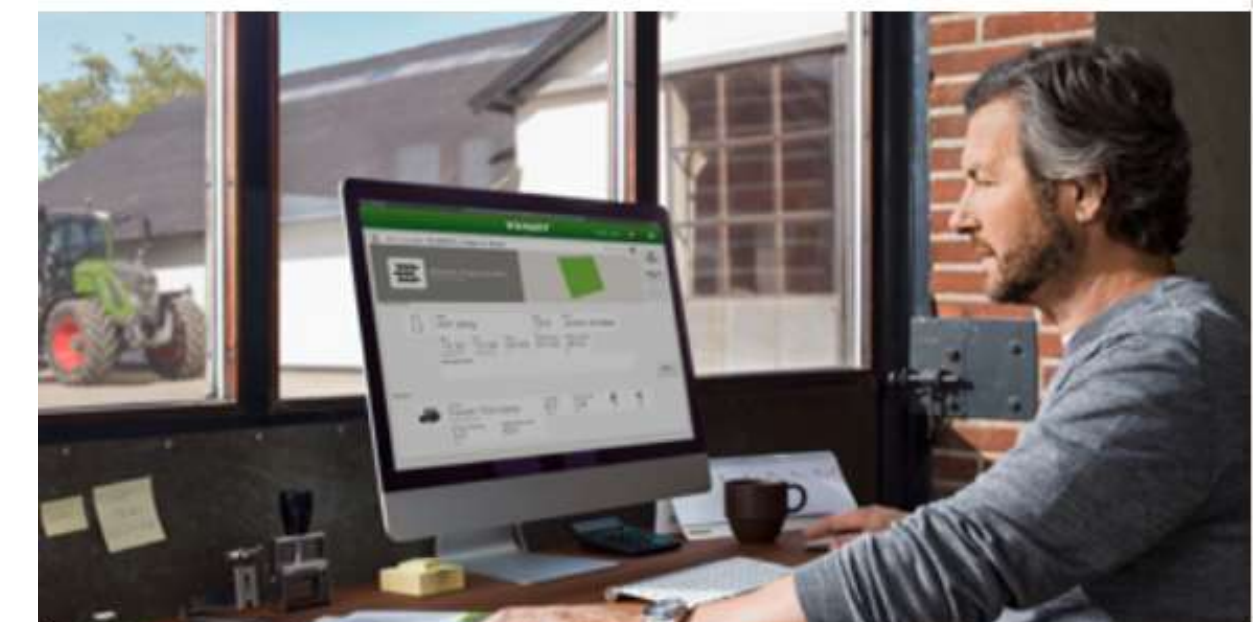
Task Doc: Create task



Job planning

- Create and send orders





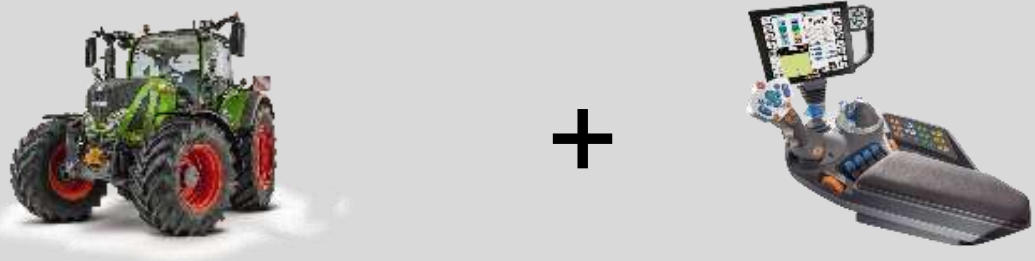

Task Doc: Reports



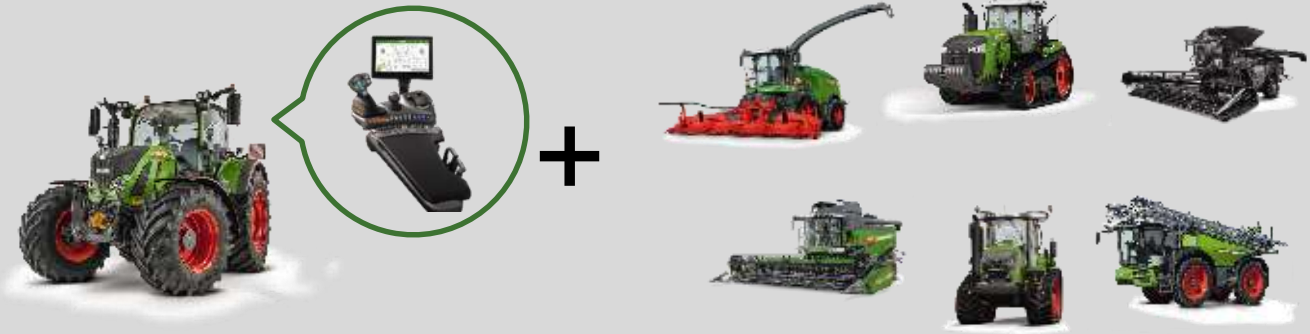



Order management

- Import orders
- Evaluate and visualise orders
- Quick report

FendtONE offboard - Availability.

Model / Type	Comment	Status
	<p>All Fendt tractors with FendtONE driver's workstation</p>	
	<p>Combination of FendtONE model and tractor with 10.4" terminal</p>	
	<p>Fendt tractors with 10.4" terminal</p>	

FendtONE offboard - Availability.


Model / Type	Comment	Status
	<p>Rogator600 MT1100 with VarioGuide MT900 IDEAL Fendt combine harvester In combination with FendtONE tractor</p>	
	<p>..... as a single machine</p>	

FendtONE onboard is the ticket for FendtONE offboard



FendtONE offboard - Requirements.




Requirements		
Series/Model	All tractors with FendtONE workstation Ticket to FendtONE offboard 	Self-propelled and tractors with existing workplace: only in combination with FendtONE tractor
GNSS receiver	<ul style="list-style-type: none"> • Novatel Smart6L/Smart7L • Trimble AG382/AG482 	<ul style="list-style-type: none"> • Novatel Smart6L/Smart7L • Trimble AG382/AG482 • Topcon AGI4 with VDO2/VD03
Software equipment	<ul style="list-style-type: none"> • E082: Agronomy Basic Package (Task Doc activation incl. 3-year server licence) 	<ul style="list-style-type: none"> • 10.4" terminal with VarioDocPro activation • Task Doc / VarioDoc Pro server licence • Machine created on TaskDoc server
Hardware equipment	<ul style="list-style-type: none"> • SIM card with data tariff for wireless data transmission and RTK reception via Ntrip, if applicable. 	
Optional hardware equipment	E101: Telemetry Basic Package Required for machine localisation in Map+ and display of machine info such as alarms and status information.	
Required settings in the terminal	<ul style="list-style-type: none"> • The data transmission type must be set to "Mobile radio" in the connection settings. • ISOBUS and Task Controller must be activated. 	

Guidance. 1/10



Current driver's workplace	New driver's workplace
Guidance	Guidance
VarioGuide	Fendt Guide
VarioGuide Standard NovAtel	Fendt Standard NovAtel
VarioGuide RTK NovAtel	Fendt RTK NovAtel
VarioGuide Standard Trimble	Fendt Standard Trimble
VarioGuide RTK Trimble	Fendt RTK Trimble
VarioGuide Contour Assistant	Fendt Contour Assistant
VariotronicTI	Fendt TI
Fendt TI Headland	Fendt TI Headland
VariotronicTI automatic	Fendt TI Car
VariotronicTI Turn Assistant	Fendt TI Turn Assistant

 Basic package



Guidance. 2/10

Guidance basic package

- Includes the tractor preparation for guidance and the Fendt Guide application.

Option

- Choice of receivers (NovAtel or Trimble)
- Fendt Contour Assistant
- Fendt TI Headland (Fendt TI Auto + Fendt TI Turn Assistant)

- + Relief for the driver: full concentration on the implement, easy control of the area already worked on.
- + Savings potential: higher area output through full utilisation of the working width, at the same time minimisation of undesired overlaps and thus reduction of operating resource expenditure
- + Sustainable land management: minimisation of soil compaction by reducing the number of passes and optimising turning operations.

Guidance. 3/10

Receiver selection with Fendt Guide

- 2 different GNSS receivers are possible:
 - NovAtel Receiver
 - Trimble receiver
- Each business can individually select the receiver that best suits its requirements

- + Choice between two powerful receivers
- + Variety of correction data signals of different accuracy levels
- + Upgrades and conversions possible at any time, even with older machines
- + Installation of the receivers under the roof hatch: perfect protection against theft, weather and damage.
- + Bypass mechanisms in case of signal failures (NovAtel RTK ASSIST & Trimble xFill (Premium))



NovAtel SMART7



Trimble AG-482

Guidance. 4/10



The powerful all-rounder: NovAtel® Standard	The efficient specialist: Trimble® Standard
SBAS (EGNOS / WAAS)	SBAS (EGNOS / WAAS)
TerraStar-L (free of charge in the first year)	RangePoint® RTX (free of charge in the first year)
Option	Option
TerraStar-L (from the second year)	RangePoint® RTX (from the second year)
TerraStar-C Pro	CenterPoint® RTX
	CenterPoint® RTX Fast
RTK (radio)	RTK (radio)
RTK (NTRIP Mobile Radio)	RTK (NTRIP Mobile Radio)
Advantages	Advantages
Inexpensive to purchase	Trimble xFill™ technology: bridging RTK outages up to 20 minutes
High accuracy in SBAS mode through GLIDE algorithm	Optional use of xFill™ Premium: unlimited bridging of RTK failures
Steadyline mechanism (fallback solution for RTK failures)	
Optional use of RTK ASSIST™: bridging of RTK failures up to 20 minutes	

Tracking. 5/10

Fendt Contour Assistant

- The Fendt Contour Assistant supplements the known contour line types with the contour lines
 - Contour segments and
 - Single track
- Available as a software option for the Profi+ equipment variant

Fendt Contour Assistant

Contour segments

= Combining track lines of the same type (e.g. all track lines of the main machining direction) into contour segments.

Single track

= Possibility of recording a track with free contour

- + Even more efficient and convenient field cultivation
- + Consistent use of track guidance also at the headland

Guidance. 6/10

Fendt Contour Assistant - Contour segments

- Three ways to create contour segment track lines:
 - Recording the contour segments: When circling the field, individual segments / track line types can be recorded
 - Automatic calculation based on existing field boundaries
 - Creation of the contour segments from existing track lines
- During subsequent cultivation, the tractor automatically selects the appropriate track line depending on the current driving direction and position
No more manual changing of the track lines in the terminal necessary
- In addition, the field boundary can also be created on the basis of the contour segments if this does not yet exist

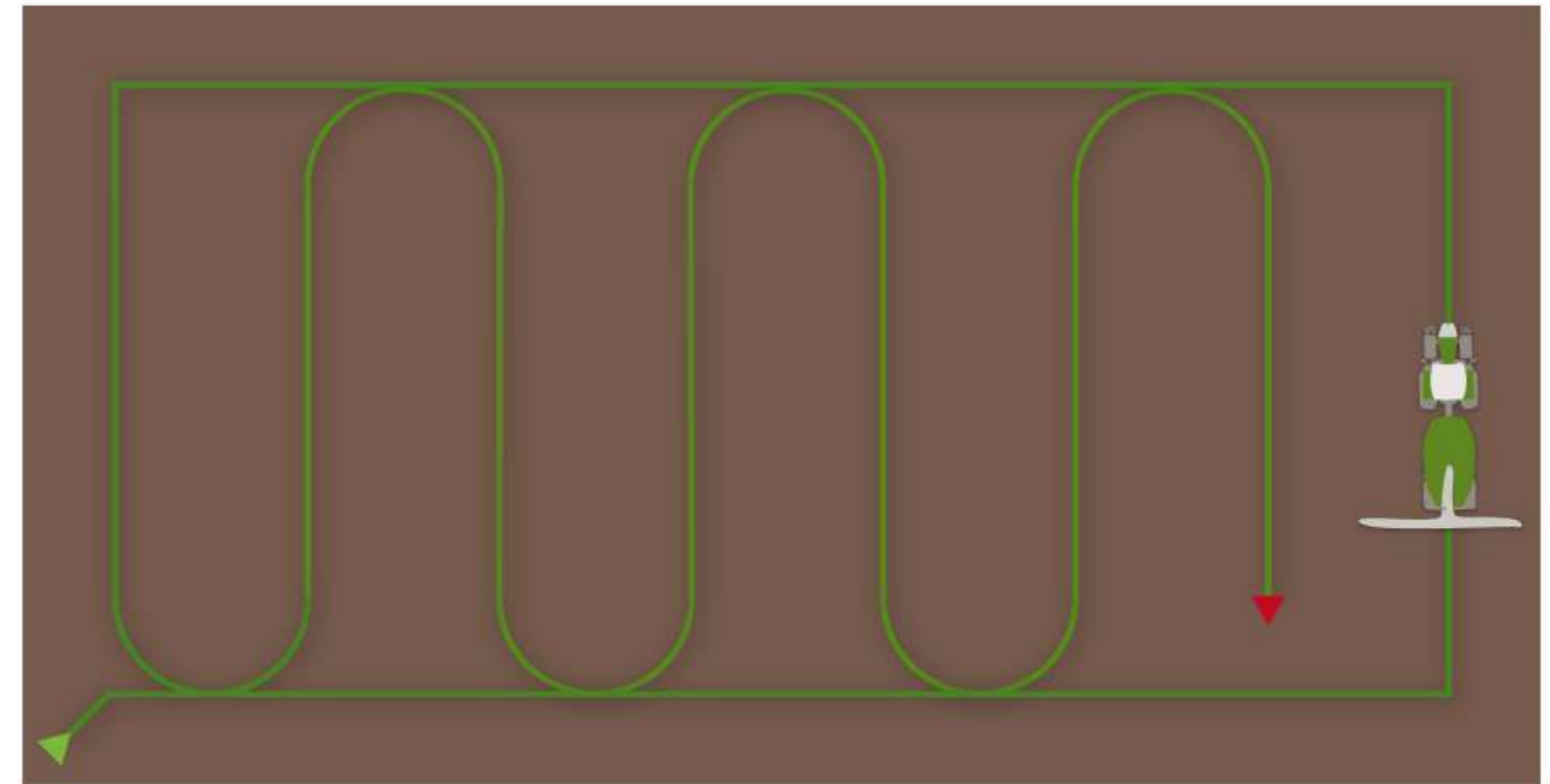


- + Time saving and convenience: quick and easy recording of track lines, automatic creation of contour segments based on the field boundary, consistent use of the steering system, also at the headland
- + Data preservation and enhancement: possibility to convert track lines already recorded (for many years) into contour segments

Guidance. 7/10

Fendt Contour Assistant - single track

- Enables the recording of a track with a free contour
- During maintenance work (fertilisation/plant protection), the entire tramlines can be saved as a contour line.
- Tractor can drive complete field according to a single recorded track
- Perfect for use in harvesting and tending special crops planted without track guidance



- + Predestined for crop protection, as the complete application can be picked up and the tractor then automatically drives off the track
- + Use of the guidance system also for crops that have not been sown with it
- + Work facilitation and optimisation through automatic turning processes
- + Full concentration on the plant stand
- + Consideration of obstacles

Guidance. 8/10

Fendt TI Headland

- Complete package for professional work on the headland
- Consists of the two functions
 - Fendt TI Car
 - Fendt TI Turn Assistant
- The Fendt TI Turn Assistant is available for all FendtONE machines from PL 795 (November 2021) onwards.

Fendt TI Headland

Fendt TI Car

= Storing and automatic triggering of a sequence of work steps at the headland

Fendt TI Turn Assistant

= automatic turning at the headland

+ Full utilisation of the track guidance system, also at the headland

Guidance. 9/10

Fendt TI Headland - Fendt TI Auto

- In combination with Fendt Guide, individual sequences (e.g. lowering the rear hydraulics) are automatically activated via the position on the headland determined by the guidance system - manual activation is no longer necessary.



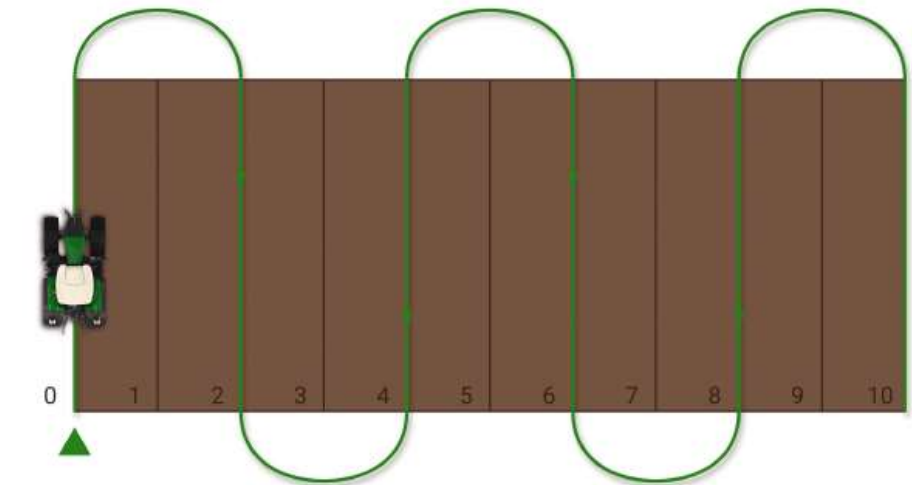
- + Driver relief through automatic triggering of the sequence of work steps
- + Precision even at the headland: Distance to field boundary always remains the same

Guidance. 10/10

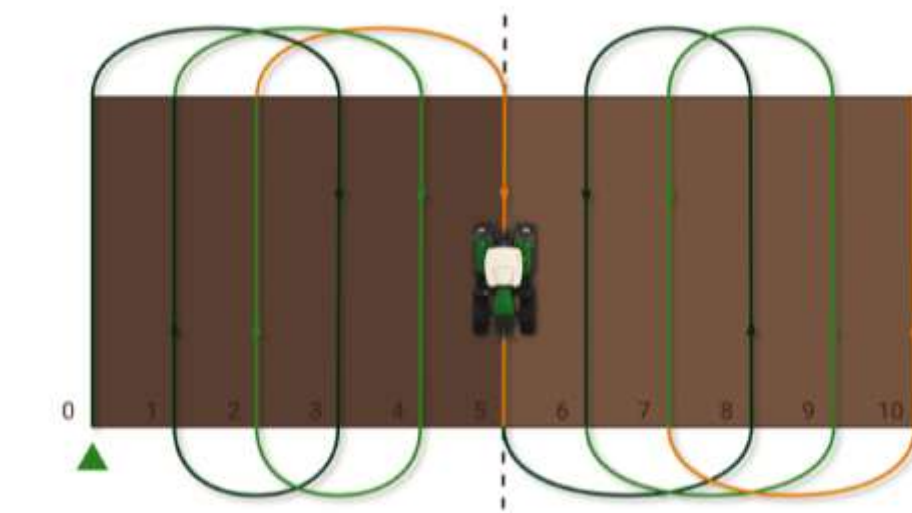
Fendt TI Headland - Fendt TI Turn Assistant

- Adds the automatic turning function to Fendt TI Auto
- Two different release modes:
 - Manual mode:
 - Manual initiation of the turning process
 - Field boundary not mandatory
 - Automatic mode:
 - Based on a given boundary line with headland settings, all turning operations are calculated
- The automatic mode contains two different turning types:
 - U-Turn
 - Bed mode

- + Maximum driver relief
- + Maximum precision and efficiency
- + Savings in turning times and operating resources
- + Soil protection due to optimal turning processes



U-Turn



Bed mode

Agronomy. 1/4



Current driver's workplace

Agronomy

VarioDoc Pro

Fendt TaskDoc (offboard)

agrirouter



New driver's workplace

Agronomy

Fendt TaskDoc

Fendt TaskDoc (offboard)

agrirouter



 = Basic package

Agronomy. 2/4

Agronomy Basic Package

- The Agronomy basic package includes the order-related documentation system Fendt TaskDoc and the associated offboard component
- It includes a three-year TaskDoc server licence, which is required for mobile data transfer between FendtONE offboard (or a farm management system) and the tractor

Option

- agrirouter

- + Overview of tasks and assignments
- + Simplified documentation of orders and fieldwork
- + complete documentation of the field work
- + also prepared for future documentation efforts

Agronomy. 3/4

Fendt Task Doc (onboard)

- Fast and easy data transfer to the Farm Management Information System (FMIS) via mobile radio or USB
- Simple and prompt documentation without intermediate steps
- Transfer of all data relevant for documentation into the FMIS:
 - Field data (Fendt Guide track lines, boundaries and obstacles)
 - Field name + current fruit, address of the enterprise or customer
 - Application name
 - Plant protection product used + application rate
 - Attachment used
- Existing field data from third-party providers can also be used via an FMIS
- Fendt Task Doc is available as standard for Profi+

- + Simple intuitive operation through complete integration into the overall concept
- + High data security due to large storage space and data backup until data transfer



Adding a new job



Adding the individual elements

Agronomy. 4/4

agrirouter

- Web-based data exchange platform that enables cross-manufacturer data transfer between machines and agricultural software
- Via an agrirouter account, for example, agronomy data can be sent wirelessly from an FMIS to the Fendt terminal and vice versa.
- Data transmission in standardised format
- Can be used in conjunction with FendtONE:
 - Through the agrirouter, other farm management systems can also be connected to FendtONE -> wireless data exchange between Fendt terminal and other FMIS*.



Prerequisite

- Agronomy Basic Package

- + barrier-free data transfer even with mixed machine parks*.
- + Transparency and data control: definition of data transmission routes
- + Data security: no data storage

*) Provided that the respective agricultural machinery or agricultural equipment manufacturer is a member of the agrirouter consortium.

More info at www.my-agrirouter.com

Telemetry. 1/5



Current driver's workplace

Telemetry

- Fendt Connect
- Fendt Smart Connect



New driver's workplace

Telemetry

- Fendt Connect
- Fendt Smart Connect

 = Basic package



Telemetry. 2/5

Telemetry Basic Package

The telemetry basic package includes all components for the use of the telemetry solution Fendt Connect

- ACM Box
- Licence for a five-year use of Fendt Connect
- Fendt Connect web application and app

The Fendt Smart Connect product can be ordered as an option (free of charge).



AGCO Connectivity Module ("ACM Box")

Prerequisite for the

- + Data transmission via mobile radio to Fendt Connect
- + Data transmission via WLAN to Fendt Smart Connect (optional, free of charge)

Telemetry. 3/5

Fendt Connect

- Fendt Connect is the central telemetry solution for Fendt machines
- With Fendt Connect, machine data is recorded and evaluated so that farms and contractors can monitor, analyse and optimise the condition and use of their machines.
- Thanks to mobile data transmission, current machine data can be called up from any location - via farm PC, tablet or smartphone.

- + Increased efficiency through better logistics decisions
- + Reduction of input: Monitoring consumption to improve performance
- + Maximise uptime through intelligent service appointment scheduling
- + Minimising downtime: Use of diagnostic support for decision-making
- + Flexibility: Retrieval of current machine data from anywhere



Telemetry. 4/5

Fendt Connect

What information does Fendt Connect provide?

- Position and travel paths of the machine
- Fuel and AdBlue consumption
- Speed and working time
- Machine utilisation
- Error messages
- upcoming service intervals
- etc.



Telemetry. 5/5

Fendt Smart Connect

- Fendt Smart Connect can be booked as an option to the basic telemetry package (free of charge).
- With Fendt Smart Connect, machine parameters can be visualised on the iPad, e.g. engine speed, slip, fuel and AdBlue consumption, engine load, etc.
- In addition to mobile radio, the ACM Box is equipped with its own WLAN, which enables data transmission to the free Fendt Smart Connect App.
- With Fendt Smart Connect, the driver is provided with an additional display surface that can be individually adapted
- There is no permanent data storage



- + Free additional display space in the cabin
- + Intuitive operation through familiar hardware and operating logic
- + Full data control - no permanent data storage

Machine control. 1/7



Current driver's workplace

Machine control

- Variotronic unit control
- SectionControl
- VariableRateControl
- Variotronic Implement Management (TIM)




New driver's workplace

Machine control

- Fendt ISOBUS
- Fendt Section Control
- Fendt Variable Rate Control
- Fendt Implement Management (TIM)



 = Basic package

Machine control. 2/7

Machine control basic package

- Prerequisite for further ISOBUS functions
- Simple and intuitive control of ISOBUS implements via standardised, cross-manufacturer interface Standard ISO 11783
- Tractor terminal and implement are connected by means of a socket at the rear

Option

- Fendt Section Control (SC)
- Fendt Variable Rate Control (VRC)
- Fendt Implement Management (TIM)
- Front unit control

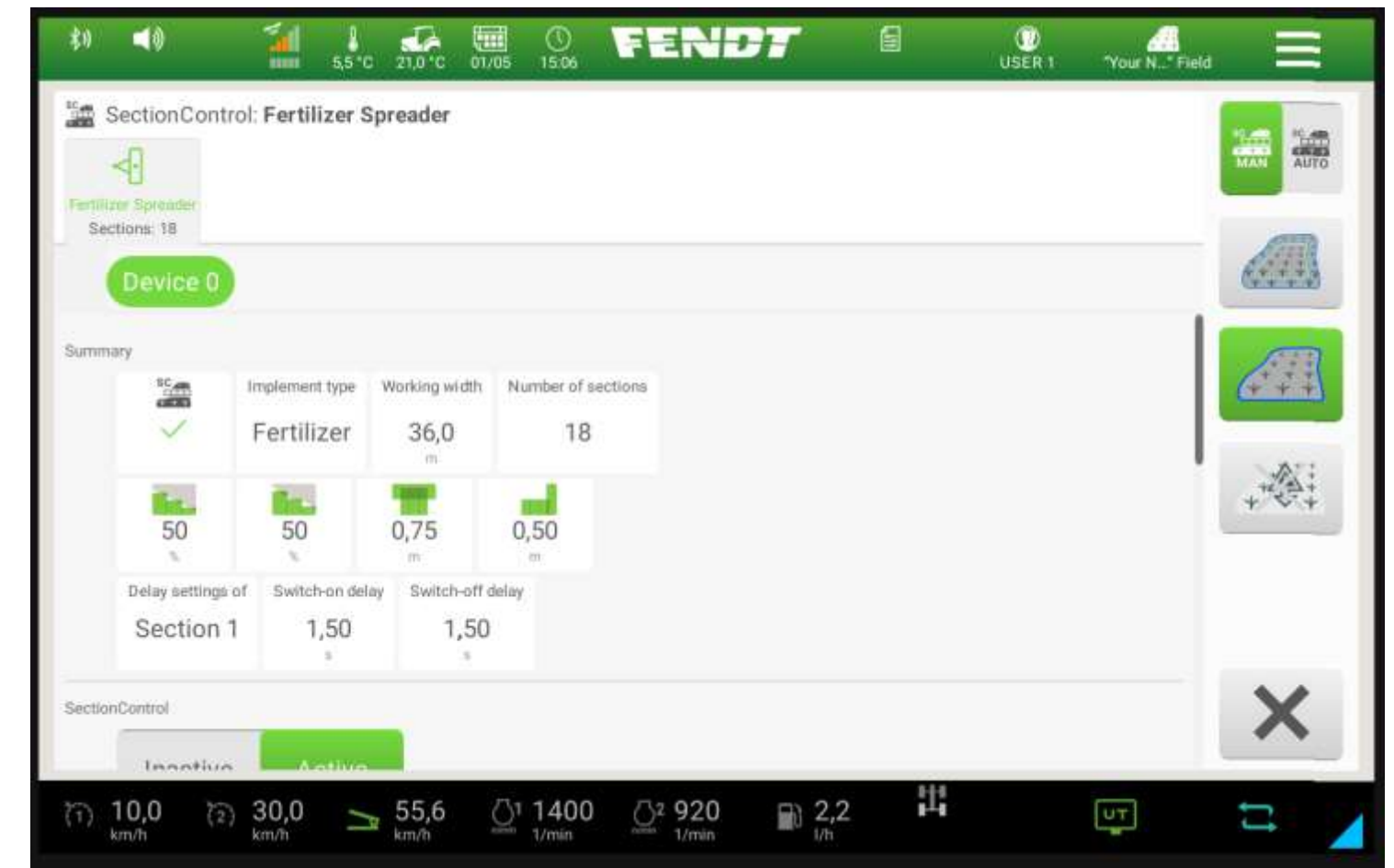
- + Increasing the efficiency of the team
- + Increasing the quality of work
- + Maximum range of functions for controlling ISOBUS devices
- + Simple operation of complex attachments
- + Basis for site-specific processing

Machine control. 3/7

Fendt Section Control

- Section Control is the automatic part-width section control for ISOBUS implements.
- This function is made possible by the Task Controller Section Control (TC-SC).
- The task controller documents where the area has already been processed and passes on the necessary switching commands to the machine's job computer, which switches the sections accordingly
- Headland mode: possibility to work the inside of the field first and then the headland
- Prerequisites: Fendt Guide, activation of TC-SC on tractor AND implement

- + Savings of up to 15 % on fertilisers, sprays, seeds, etc. by avoiding unwanted overlaps.
- + Reduction of disease, pest and weed pressure by avoiding overly dense stands and missing areas.
- + Relief for the driver, full concentration on monitoring the implement
- + Increased quality of work due to clean connections at the headland



Machine control. 4/7

New: Fendt Section Control with Multi Device Control ("Multi Boom") and 144 boom sections

- Function extension for Fendt Section Control
- Up to now, the automatic boom section control could only be used on one implement/one application unit ("boom") at a time
- With Multi Device Control, part width sections for up to five application units can be switched independently of each other (useful e.g. for maize sowing with fertiliser tank).
- In addition, Section Control now supports up to 144 sections

+ Control of several units simultaneously



Machine control. 5/7

Fendt Variable Rate Control (VRC)

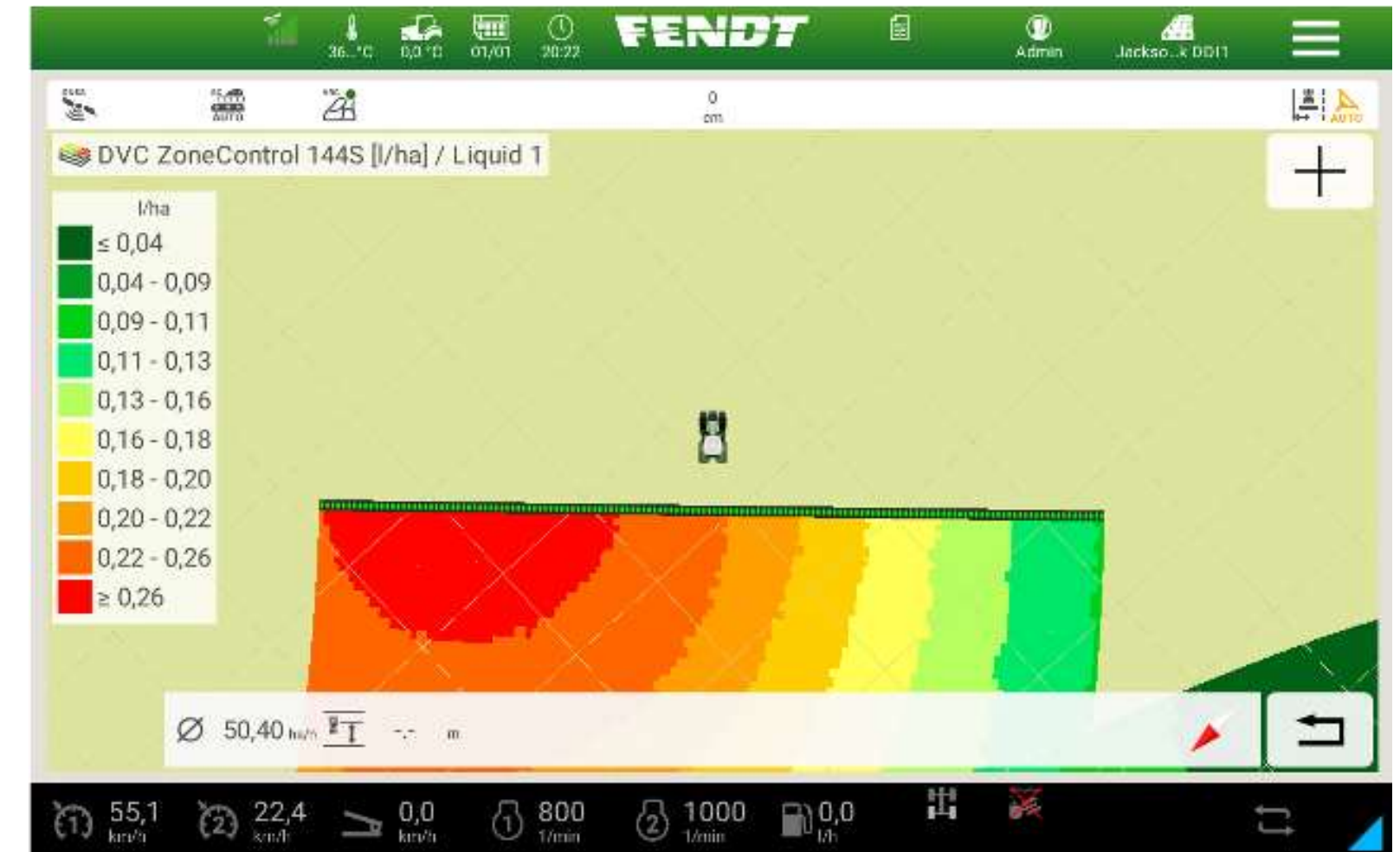
- Variable Rate Control (VRC) is the site-specific control of the application rate of inputs (seed, crop protection products or fertiliser).
- Basis: Application map created in advance with the help of a farm management system.
- Application map is transferred to the machine as part of an order as an ISO-XML file via mobile radio or USB (Shape format also compatible, transferable only via USB)
- The TC-GEO task controller automatically adjusts the specified target application rates depending on the position.
- After completion of the order, send back an order report with the actual quantities applied to the Farm Management System.
- Prerequisites: Fendt Guide, Agronomy basic package, Fendt Section Control and activation for the ISOBUS standard TC-GEO for tractor AND implement.

- + Increasing efficiency: maximising yields per unit area while saving on inputs
- + Time saving: use of the order report as a basis for documentation
- + Flexibility: Support of ISO-XML as well as Shape files

Machine control. 6/7

New: Fendt Variable Rate Control (VRC) with Zone Control

- Function extension for Fendt Variable Rate Control
- Until now, the application rate could only be controlled over the entire working width
- With Zone Control, the application rate can now be regulated per part-width section (zone) (provided the implement is equipped accordingly)
- Support for up to 144 zones



- + Even more needs-based application of operating resources
- + Especially useful for larger working widths

Machine control. 7/7

Fendt Implement Management (TIM)

- With Tractor Implement Management (TIM), an implement can automatically control certain functions of the tractor, e.g. its forward speed or spool valves.
- This is possible as soon as both tractor and implement are equipped with the ISOBUS function TIM
- With the help of TIM, the implement optimises its own workload, the driver is relieved and the team works more productively.
- TIM is available from PL 795 for all FendtONE machines

+ Increasing the efficiency of the team

+ Maximum driver relief

Equipment variants. 1/8

	Power	Power+	Profi	Profi+
Engine				
Fuel pre-filter (heated)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preheater unit (engine, transmission, hydraulic oil)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transmission				
Vario TMS - Tractor Management System	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Shuttle function, stop-and-go function	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cruise control	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Acoustic signal when reversing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Guidance system				
Guidance system basic package		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Standard Trimble / NovAtel		<input type="checkbox"/>		<input type="checkbox"/>
RTK Trimble / NovAtel		<input type="checkbox"/>		<input type="checkbox"/>
TI Auto				<input type="checkbox"/>
Contour Assistant		<input type="checkbox"/>		<input type="checkbox"/>
Telemetry				
Agronomy basic package		<input type="checkbox"/>		<input checked="" type="checkbox"/>
Telemetry basic package		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Smart Connect				<input type="checkbox"/>

Equipment variants. 2/8

	Power	Power+	Profi	Profi+
Machine control				
Machine control basic package (ISOBUS)		■	■	■
Front implement control (ISOBUS)			□	□
Section Control (SC)		□		□
Variable Rate Control (VRC)		□		□
Vario operation				
Multi-function joystick with cruise control, engine speed memory, automatic modes, controls for hydraulics	■	■	■	■
3L joystick		□	□	□
Individual Operation Manager – flexible key assignment	■	■	■	■
Digital Dashboard	■	■	■	■
12" terminal with touchscreen and key control	□	■	■	■
Second 12" terminal in roof			□	□
Ready for automatic steering system				
VarioActive steering				
Fendt Active steering				
Electronic immobiliser	□	□	□	□
Without immobiliser	■			
Cab				
Active charcoal filter	□	□	□	□

Equipment variants. 3/8

	Power	Power+	Profi	Profi+
Mechanical cab suspension	■	■	■	■
Pneumatic cab suspension	□	□	□	□
Super comfort seat 3-point belt	□	□	□	□
Comfort seat, air sprung	■	■	■	■
Super Comfort Seat, air sprung	□	□	□	□
Super comfort seat Evolution dynamic / CA	□	□	□	□
Super Comfort Seat Evolution dynamic DuMo/CA	□	□	□	□
Super Comfort Seat Evolution dynamic DuMo leather / CA			□	□
Comfort instructor seat			■	■
Height and tilt-adjustable steering column	■	■	■	■
Heating with stepless fans	■	■	■	■
Air-conditioning	■	■	■	■
Integrated automatic climate control	□	□	□	□
Climate-controlled storage compartment	■	■	■	■
Split windscreen and door on right	□	□	□	□
Continuous windscreen	■	■	■	■
One-piece windscreen and door on right	□	□	□	□
Rear window heated	□	□	□	□
Segment wipers front	■	■	□	□
300°-front windscreen wipers (with continuous windscreen)	□	□	■	■

Equipment variants. 4/8

	Power	Power+	Profi	Profi+
Rear window wash/wipe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ext. rearview mirror, mechanically adjustable			<input checked="" type="checkbox"/>	
Rear view mirror and wide-angle mirror electrically adjustable, heated			<input type="checkbox"/>	<input type="checkbox"/>
Wide-angle mirror	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Terminal bracket	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Radio mounting kit with two stereo speakers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Infotainment package	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Infotainment bundle + 4.1 sound system			<input type="checkbox"/>	<input type="checkbox"/>
4 USB ports			<input type="checkbox"/>	<input type="checkbox"/>
Self-cancelling indicators			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Electric battery disconnect switch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Add. storage space, 12 Volt left, light in roof liner left			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Floor mat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Chassis				
Front axle suspension self-levelling, lockable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Steering brake	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Automatic trailer steering axle lock			<input type="checkbox"/>	<input type="checkbox"/>
Compressed air system 2-circuit system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compressed air Duomatic coupling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Equipment variants. 5/8

	Power	Power+	Profi	Profi+
4WD / differential locks				
Comfort engagement controls for 4WD / differential locks				■
Rear / front differential with 100% disc locking and steering angle sensors				■
Power lift				
Tractive power and stepless mixed control	■	■		
Clearance, position control	■			
Sa front power lift, with external control (separate valve)	□	□	□	□
Comfort front power lift da, with position control, external controls	□	□	□	□
Comfort front power lift da, with position control and relief control, external controls	□	□	□	□
Electrohydraulic power lift da (EHR), with external controls			□	□
Electrohydraulic power lift sa (EHR), with external controls	■	■	■	■
Externally controlled rear power lift	■	■	■	■
Shock load stabilising, electro-hydraulic power lift control	■	■	■	■
PTO				
Front: 1000 rpm	□	□	□	□
Rear PTO 540/540E/1000 rpm	■	■	■	■
Rera PTO 540E/1000/1000E rpm	□	□	□	□
Rear: Flanged PTO 540/1,000 rpm	□	□	□	□
External controls for rear PTO	■	■	■	■
PTO comfort control, electrohydr. preselection	■	■	■	■

Equipment variants. 6/8

	Power	Power+	Profi	Profi+
Hydraulics				
EHS valve actuation crossgate lever, multi-function joystick	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
EHS valve actuation linear module	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
External control for hydraulic control unit at rear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Load sensing system with axial piston pump (75 l/min)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Load sensing system with axial piston pump (110 l/min)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Load sensing system with axial piston pump (158 l/min)			<input type="checkbox"/>	<input type="checkbox"/>
1st and 2nd EHS valve at rear	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3rd EHS valve at rear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4th EHS valve at rear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5th EHS valve at rear			<input type="checkbox"/>	<input type="checkbox"/>
1st front EHS valve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2nd front EHS valve			<input type="checkbox"/>	<input type="checkbox"/>
Hydraulic power beyond connection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Return rear	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unpressurised rear return flow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Double connect-under-pressure lever couplings rear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CUP coupling rear	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Bio hydraulic oil	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Equipment variants. 7/8

	Power	Power+	Profi	Profi+
Additional equipment				
Manual hitch	■	■	■	■
Automatic trailer hitch with remote control, rear	□	□	□	□
Ball coupling, height adjustable	□	□	□	□
Ball coupling in the bottom hitch	□	□	□	□
Hitch	□	□	□	□
Drawbar	□	□	□	□
Piton-fix	□	□	□	□
Comfort ballast for front-end weight (not available with front power lift)	□	□	□	□
Front weights, various sizes	□	□	□	□
Wheel weights, rear wheels	□	□	□	□
Forced steering (one or two-sided)	□	□	□	□
Pivoting front wheel mudguard	□	□	■	■

Equipment variants. 8/8



	Power	Power+	Profi	Profi+
Front loader				
Front loader attachment parts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Front loader Cargo 4X/75	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Front loader Cargo 4X/75 - third valve		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Front loader Cargo 4X/75 Profi				
Front loader Cargo 4X/80	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Front loader Cargo 4X/80 - third valve		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Front loader Cargo Profi 4X/80			<input type="checkbox"/>	<input type="checkbox"/>
Front loader Cargo Profi 4X/80 - third valve			<input type="checkbox"/>	<input type="checkbox"/>

Technical specifications. 1/4

		512 Vario	513 Vario	514 Vario	516 Vario
Engine					
Rated power ECE R 120	kW/hp	91/124	98/133	110/150	120/163
Maximum power ECE R 120	kW/hp	96/131	104/141	115/156	126/171
No. of cylinders	number	4	4	4	4
Cylinder bore/stroke	mm	101/ 126	101/ 126	101/ 126	101/ 126
Cubic capacity	cm ³	4038	4038	4038	4038
Rated speed	rpm	2100	2100	2100	2100
Max. torque at 1500 rpm	Nm	564	604	663	699
Torque rise	%	36.0	35.0	33.0	28.0
Fuel level	litres	298.0	298.0	298.0	298.0
AdBlue tank	litres	31.0	31.0	31.0	31.0
Oil change interval	working hours	500	500	500	500
Transmission and PTO					
Transmission type		ML 90	ML 90	ML 90	ML 90
Speed range 1	km/h	0,02-28	0,02-28	0,02-28	0,02-28
Speed range 1 - reverse	km/h	0,02-17	0,02-17	0,02-17	0,02-17
Speed range 2	km/h	0,02-50	0,02-50	0,02-50	0,02-50
Speed range 2 - reverse	km/h	0,02-33	0,02-33	0,02-33	0,02-33
Top speed	km/h	50	50	50	50

Technical specifications. 2/4

		512 Vario	513 Vario	514 Vario	516 Vario
Rear PTO		540/ 540E/ 1000	540/ 540E/ 1000	540/ 540E/ 1000	540/ 540E/ 1000
Rear PTO option		540E/ 1000 /1000E	540E/ 1000 /1000E	540E/ 1000 /1000E	540E/ 1000 /1000E
Front PTO option		1000	1000	1000	1000
Engine rpm at rated speed of rear PTO (540 PTO)	rpm	1933	1933	1933	1933
Engine rpm at rated speed of rear PTO (540E PTO)	rpm	1502	1502	1502	1502
Engine rpm at rated speed of rear PTO (1000 PTO)	rpm	1938	1938	1938	1938
Engine rpm at rated speed of rear PTO (1000E PTO)	rpm	1541	1541	1541	1541

Power lift and hydraulics

Variable flow pump	l/min	75	75	75	75
Variable flow pump option 1	l/min	110	110	110	110
Variable flow pump option 2	l/min	158	158	158	158
Working pressure / control pressure	bar	200/20	200/20	200/20	200/20
Max. valves (front/centre/rear) Power / Power+	number	0/0/4 od. 1/0/3	0/0/4 od. 1/0/3	0/0/4 od. 1/0/3	0/0/4 od. 1/0/3
Max. valves (front/centre/rear) Profi / Profi+	Number	2/0/5	2/0/5	2/0/5	2/0/5
Max. valves available as an option (front/centre/rear)	number	2/0/5	2/0/5	2/0/5	2/0/5
Max. available hydraulic oil volume	litres	55	55	55	55
Flow rate of control valves (all valves)	litres	100	100	100	100
Max. lift capacity of rear power lift	daN	7890	7890	7890	7890
Max. lift capacity of front power lift	daN	3420	3420	3420	3420

Technical specifications. 3/4

		512 Vario	513 Vario	514 Vario	516 Vario
Electrical features					
Batteries	number	1	1	1	1
Alternator	V/A	14/ 200	14/ 200	14/ 200	14/ 200
Max. transferable current ISOBUS socket	A	60+25	60+25	60+25	60+25
Tyres					
Front tyres (standard)		480/65R28	480/65R28	480/70R28	540/65R28
Standard tyres rear		600/65R38	600/65R38	580/70R38	650/65R38
1st option for front tyres		16.9R28	16.9R28	480/65R28	480/65R28
1st option for rear tyres		20.8R38	20.8R38	600/65R38	600/65R38
2nd option for front tyres		480/70R28	480/70R28	16.9R28	16.9R28
2nd option for rear tyres		580/70R38	580/70R38	20.8R38	20.8R38
3rd option for front tyres		540/65R28	540/65R28	540/65R28	480/70R28
3rd option for rear tyres		650/65R38	650/65R38	650/65R38	580/70R38
Dimensions					
Front track width (standard tyres)	mm	1880	1880	1880	1880
Rear track width (standard tyres)	mm	1860	1860	1860	1860
Overall width with standard tyres	mm	2450	2450	2450	2505
Overall length	mm	4453	4453	4453	4453
Overall cab height with standard tyres without Fendt Guide	mm	2930	2930	2965	2965

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		512 Vario	513 Vario	514 Vario	516 Vario
Overall cab height with standard tyres with Fendt Guide	mm	2980	2980	3015	3015
Max. ground clearance	mm	530	530	530	530
Wheelbase	mm	2560	2560	2560	2560
Weights					
Unladen weight (base tractor with cab - full tanks, without driver)	kg	6050.0	6050.0	6400.0	6400.0
Max. permissible overall weight	kg	10500.0	10500.0	10500.0	10500.0
Max. permissible overall weight up to 40 km/h country-specific exception approval required	kg	10500.0	10500.0	10500.0	10500.0
Max. permissible overall weight up to 50 km/h country-specific exception approval required	kg	10500.0	10500.0	10500.0	10500.0
Max. trailer hitch load	kg	2000.0	2000.0	2000.0	2000.0
Max. permissible front axle load	kg	4800.0	4800.0	4800.0	4800.0
Max. permissible front axle load up to 8 km/h	kg	8000.0	8000.0	8000.0	8000.0
Max. permissible rear axle load (country-specific)	kg	8500.0	8500.0	8500.0	8500.0