



Fendt 800 Vario Gen5

Quick overview

Model overview	3	Tractor Management System (TMS)	46	Tyres	101
Highlights	4	Maintenance/Diagnosis	47	VarioGrip – tyre pressure regulation system	103
Introduction	6	PTO	48	Trailer systems	108
Customer added value - Arable farming (1/2)	7	Concept	49	Ballasting	111
Customer added value - Arable farming (2/2)	8	Automatic function & stationary operation	52	Cab	112
Customer added value - Grassland	9	Power lift	53	Concept	113
Customer added value - Transport	10	Rear power lift	54	Equipment	120
Series in comparison	11	Front power lift	59	Lighting concept	143
Lines	16	Hydraulics	66	FendtONE operation	151
Engine	19	Concept	67	Concept	152
Concept	20	Working hydraulics	73	Operation	156
Exhaust brake	24	Flat Face Coupling (FFC)	77	Smart Farming	186
Exhaust gas treatment	25	Automatic steering axle lock	79	Technical Specifications	187
Air filter	27	Additional equipment	80		
Tank	30	Concept	81		
Cooling & ventilation	31	Front axle	83		
DynamicPerformance (DP)	34	Rear axle	87		
Transmission	37	Rear axle	94		
Concept	38	Brakes	95		
Load limit control	45				

Model overview

		826 Vario	829 Vario	832 Vario
Rated power	kW/hp	191/260	213/290	235/320
Rated power with DP ECE R 120	kW/hp	208/283	230/313	252/343
Maximum power	kW/hp	191/260	213/290	235/320
Maximum power with DP ECE R 120	kW/hp	208/283	230/313	252/343
Max. torque	Nm	1450	1550	1680



Highlights

Fendt 800 Vario (1/2)

- New AGCO Power CORE80 engine generation, 6 cylinders, 8.0 litre cubic capacity, VTG turbocharger with engine braking function, Fendt iD low speed concept
- Maximum power with DP ECE R 120 for 832 Vario: 252/343 kW/hp
- All models with DynamicPerformance - smart additional performance concept
- Extremely narrow and compact standard fan and reversible fan with self-cleaning function
- Automatic dust extraction for active cleaning of the engine air filter during work, as well as automatic dust extraction for the cab air filter
- Efficient and fuel-saving VarioDrive drive wheel (TA250) with variable four-wheel drive, in 40, 50 and 60 km/h versions
- Quadruple and triple motorised PTO at the rear with automatic function and stationary operation
- Position control and relief control front and rear power lift
- Fully integrated front PTO with cooling



Highlights

Fendt 800 Vario (2/2)

- Two hydraulic pumps with a flow rate of 385 l/min, additional hydraulic oil cooler
- The VarioGrip integrated tyre pressure system
- XL compressor - two-piston air compressor, water-cooled
- Outstanding manoeuvrability with 11.35 m track circle
- Low power-to-weight ratio of just 28.86 kg/hp with a simultaneous payload of up to 7.6 tonnes
- Fendt Stability Control for more driving safety
- Trailer brake assist for increased safety when working with a trailer on hilly terrain
- New 360° lighting concept with UltraVision headlamps and Groundvision drawbar and pick-up illumination in the mudguard
- Reverse drive control (RüFa)
- SuperComfort seat Titanium leather
- 12 litre compressor cooler
- High Speed Guidance - guidance system up to 40 km/h
- Fendt Workgroup - networking with other FendtONE machines



INTRODUCTION

Customer added value - Arable farming

Customer added value - Grassland

Customer added value - Transport

Series in comparison

Lines



Customer added value - Arable farming (1/2)

1. VarioDrive & Fendt iD low speed concept

- Maximum efficiency in the drive wheel - saving money with every operation!

2. The VarioGrip integrated tyre pressure system

- The lowest possible soil pressure and therefore optimum seedbed properties - the foundation for a successful harvest and fertile soils in the long term!

3. Self-cleaning air filter, reversible fan and automatic dust extraction of the cab air filter

- Continuous use under the most extreme conditions - most efficient operation of all components and maximum operational reliability!

4. High payload

- Legal and safe on the road - even with front and rear-mounted implements in the three-point linkage!

5. New generation of cabs with three displays

- Fendt Guide, ISOBUS implements and application map can be displayed simultaneously and the work is documented synchronously via TaskDoc - optimum clarity, high customisability and fast operation for high performance and fatigue-free working!

6. New lighting concept - UltraVision and GroundVision

- Relaxed and fatigue-free working with the best view of the work result - individual spotlights can be dimmed individually!

7. Double pump hydraulics

- Avoid pressure fluctuations with several hydraulic consumers with different pressure and volume requirements!

8. Additional hydraulic oil cooler

- Problem-free operation even at high temperatures or with very demanding hydraulic consumers!

9. Twin tyres with dual wheel hub

- Easy assembly and quicker to convert depending on the application - increased soil protection and increased traction thanks to the dual tyres!



Customer added value - Arable farming (2/2)

10. Compressor cooler

- Chilled drinks to refresh you on long workdays!

11. Hydraulic side stabilizers

- Precise guidance of the implements!

12. Suspension concept

- Maximum driving comfort for less fatigue and more motivation for the driver!

13. Fendt Guide, Fendt TI Headland

- Increased area coverage, fuel-saving operation, high soil protection and smaller headlands - that's the guidance system with FendtONE!

14. FendtONE: High Speed Guidance

- Guidance system up to 40 km/h - adapted impact force, higher area coverage and considerable time savings, especially with large field structures!

15. FendtONE: Tramline Control

- For farms where the working width of the seed drill is not aligned with cultivation machines, there is no need to count the waylines - making work much easier.

16. FendtONE: Internal headland line

- Convenient and consistent use of TI Auto and Section Control even with obstacles in the field - so obstacles in the field are also surrounded by a headland line!

17. FendtONE: Implement Slope Compensation

- No need for a second receiver and still benefit from the precise operation of Implement Slope Compensation on slopes!



Customer added value - Grassland

1. Sward protection thanks to VarioDrive

- The torsion-free VarioDrive drive wheel ensures maximum protection of the sward - intact sward even when cornering tightly!

2. Low vehicle weight and VarioGrip

- No damage to the ground, so less forage contamination and still high driving speeds possible!

3. High load capacity

- Always legally on the road with large mower combinations!

4. Relieving front power lift control

- Optimum ground tracking of the front mower - already integrated in the tractor!

5. Groundvision - Drawbar lighting

- Optimum illumination of the pick-up and easier attachment of implements at night - always focus on the essentials!

6. Cooled front PTO

- Equipped for the toughest mowing jobs!

7. Laminated safety glass in the cab

- Protect the driver from foreign objects during mowing or mulching work!

8. FendtONE: Tractor Implement Management (TIM)

- Forage wagon controls the tractor automatically - gets the best out of the combination!

9. FendtONE: Contour Assistant Coverage Guidance

- Easy to use steering system - guidance system at the touch of a button with less preparation time and increased productivity!



Customer added value - Transport

1. Extremely high-torque 6-cylinder engine

- With Fendt iD low-speed concept, VarioGrip with optimum tyre pressure and VarioDrive - the fastest and most economical vehicle in the chopping class!

2. VarioDrive

- No manual switching on and off of the four-wheel drive when changing between field and road, no driving range shift and maximum traction at low speeds, especially when starting off!

3. Low operating weight in the 340 hp class

- Lower fuel consumption with higher payload!

4. VTG exhaust brake & hydraulic auxiliary brake

- Wear-free and powerful deceleration!

5. Automatic steering axle with all equipment lines

- Automatic locking of the steering axle for greater safety and relief for the driver!

6. Smart trailer brake assist

- Enhanced safety in every trailer overrun scenario!

7. Parking brake

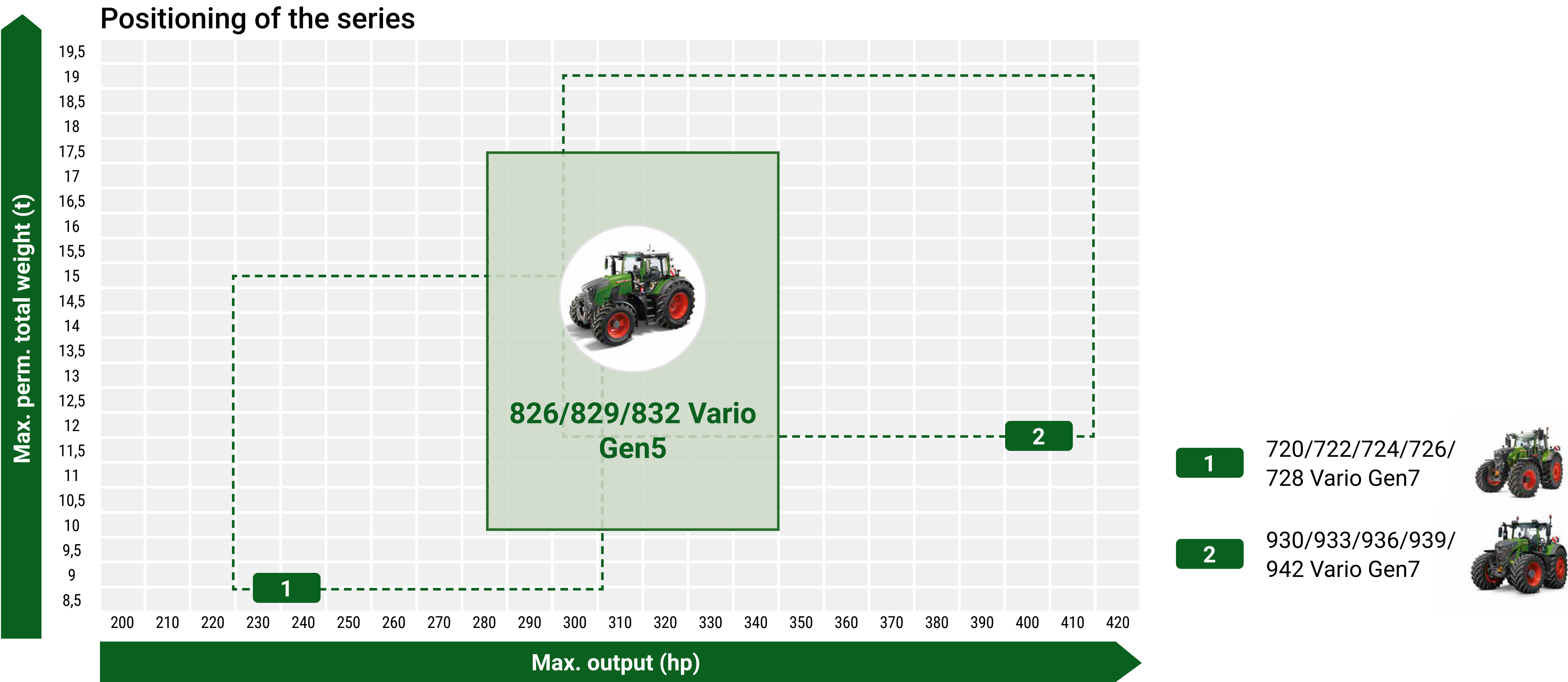
- Automatic application and release of the parking brake - highly convenient and enhanced safety!

8. Customised terminal settings

- Seat, mirrors, multimedia, light and telephone can be individually adjusted on the terminal - everything at a glance, without distraction when driving on the road!



Series in comparison



Series in comparison

		728 Vario	828 Vario	826 Vario	829 Vario	832 Vario	933 Vario	933 Vario S4
Engine								
Maximum power ECE R 120	kW/hp		211/287				239/326	247/336
Maximum power with DP ECE R 120	kW/hp	223/303		208/283	230/313	252/343		
No. of cylinders	number	6	6	6	6	6	6	6
Cubic capacity	cm³	7527	6057	8000	8000	8000	9037	7750
Rated speed	rpm	1700	2100	1700	1700	1700	1700	2100
Max. Torque at 1300 rpm	Nm	1450						
Max. torque at 1450 rpm	Nm		1217					
Max. torque at 1500 rpm	Nm							1380
Max. torque	Nm			1450	1550	1680	1650	
Optional fuel tank capacity	litres	484.0						
AdBlue tank	litres	48.0	50.0	65.0	65.0	65.0	70.0	36.0
Transmission and PTO								
Transmission type		TA 190	ML 220	TA250	TA250	TA250	TA 300	ML 260
Speed range forward	km/h	0,02 - 60		0,02-60 km/h	0,02-60 km/h	0,02-60 km/h	0.02 - 60	
Rear PTO		540/540 E/ 1000/1000 E	540E/ 1000	540/540E/ 1000/1000E	540/540E/ 1000/1000E	540/540E/ 1000/1000E	540E/1000	540E/1000

Series in comparison

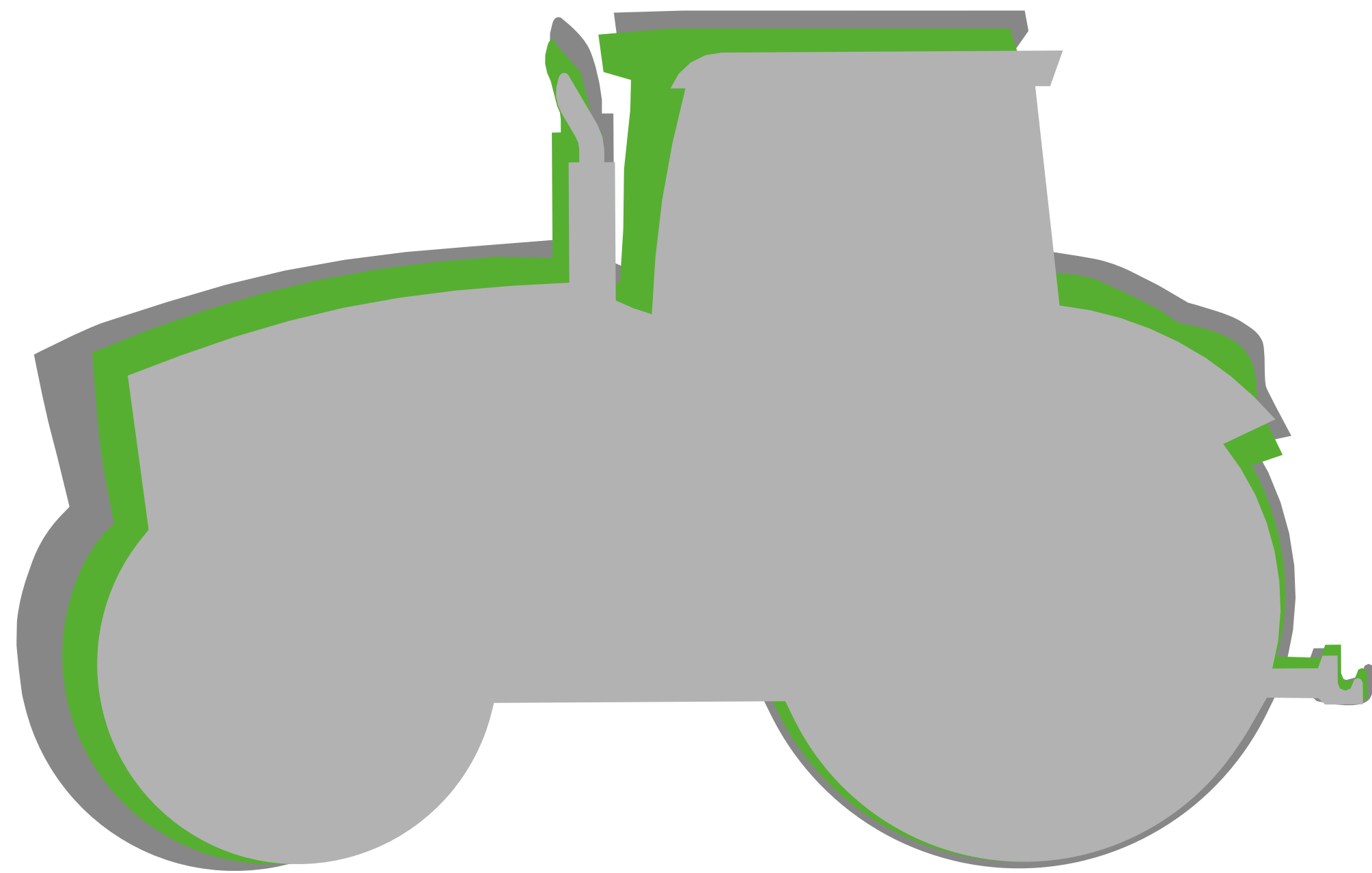
		728 Vario	828 Vario	826 Vario	829 Vario	832 Vario	933 Vario	933 Vario S4
Power lift and hydraulics								
Variable flow pump	l/min	165	152	165	165	165	165	152
Variable flow pump option 1	l/min	220	205	220	220	220	220	205
Variable flow pump option 2	l/min			165+220	165+220	165+220	220 + 210	
Max. valves (front/centre/rear) Power+	number	1/3/5		1/0/5	1/0/5	1/0/5	0(1)/0/5(4)	
Max. valves (front/centre/rear) Power/Power Plus	number		0/0/4					2/0/6
Max. valves (front/centre/rear) Profi / Profi+	number		2/0/6					2/0/6
Max. valves (front/centre/rear) Profi / Profi+	number	2/3/5		2/0/6	2/0/6	2/0/6	2/0/6	
Max. lift capacity of rear power lift	daN	11050	11110				12410	11800
Max. Rear power lift lifting capacity (at the coupling point)	kg			10500	10500	10500		
Max. lift capacity of front power lift	daN	5300	5040				5584	5584
Max. Lifting capacity front power lift (at the coupling point)	kg			5300	5300	5300		

Series in comparison

		728 Vario	828 Vario	826 Vario	829 Vario	832 Vario	933 Vario	933 Vario S4
Dimensions								
Overall width with standard tyres	mm	2650	2750				2710	2750
Maximum diameter front tyre	mm			1670	1670	1670		
Maximum diameter rear tyre	mm			2175	2175	2175		
Overall cab height with standard tyres with Fendt Guide	mm		3314					3308
Max. ground clearance	mm	570	575	650	650	650	553	575
Wheelbase	mm	2900	2950	3020	3020	3020	3150	3050
Weights								
Operating weight (incl. common accessories - +/- 5%)	kg	9200 - 9650						
Max. permissible overall weight up to 50km/h (2-circuit brake)	kg		16000.0	17500.0	17500.0	17500.0		18000.0
Max. permissible overall weight up to 60km/h	kg	14000.0	14000.0	16000.0	16000.0	16000.0	17000.0	16000.0

Series in comparison

Dimensions



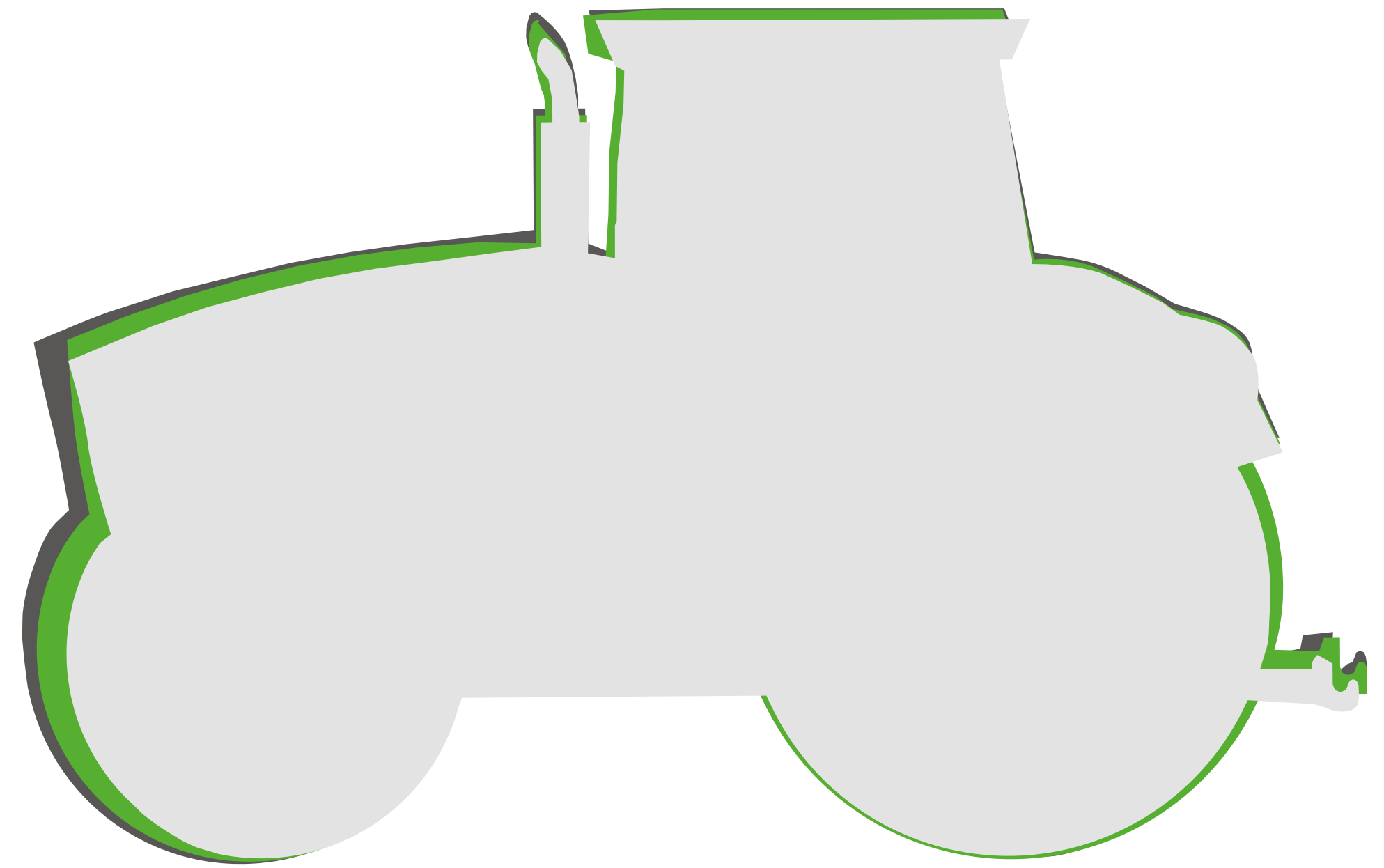
900 Vario Gen7



700 Vario Gen7



800 Vario Gen5



900 Vario S4



800 Vario S4

Lines

Power+ | Equipment and features

FendtONE armrest:

- Setting 1: Two rocker pairs (linear modules) for operating the EHS valves, no crossgate lever, no 3L-Joystick
- Setting 2: One rocker pair (linear module) for operating the EHS valves, no crossgate lever, 3L-Joystick

Maximum possible equipment with Power+:

- Pneumatic cab suspension
- Comfort rear-view mirror
- Five double-acting pairs of EHS valves in the rear, then no pair possible in the front
- One double-acting pair of EHS valves in the front, then a maximum of four pairs possible in the rear
- 220 l/min hydraulic pump
- Radio (Infotainment package)

Smart Farming equipment with Power+:

- Basic packages for guidance, machine control and agronomy are included - additional digital options:
 - Contour Assistant
 - High Speed Guidance
 - Implement Slope Compensation
 - Section Control
 - Variable Rate Control
 - Implement Management (TIM-Steering)



Power+ Setting 1



Power+ Setting 2

Lines

Profi | Equipment and features

FendtONE armrest:

- Setting 1: Min. 2 rocker pairs (linear modules) for operating the EHS valves, crossgate lever, no 3L-Joystick
- Setting 2: Min. 2 rocker pairs (linear modules) for operating the EHS valves, no crossgate lever, 3L-Joystick

Special features of Profi:

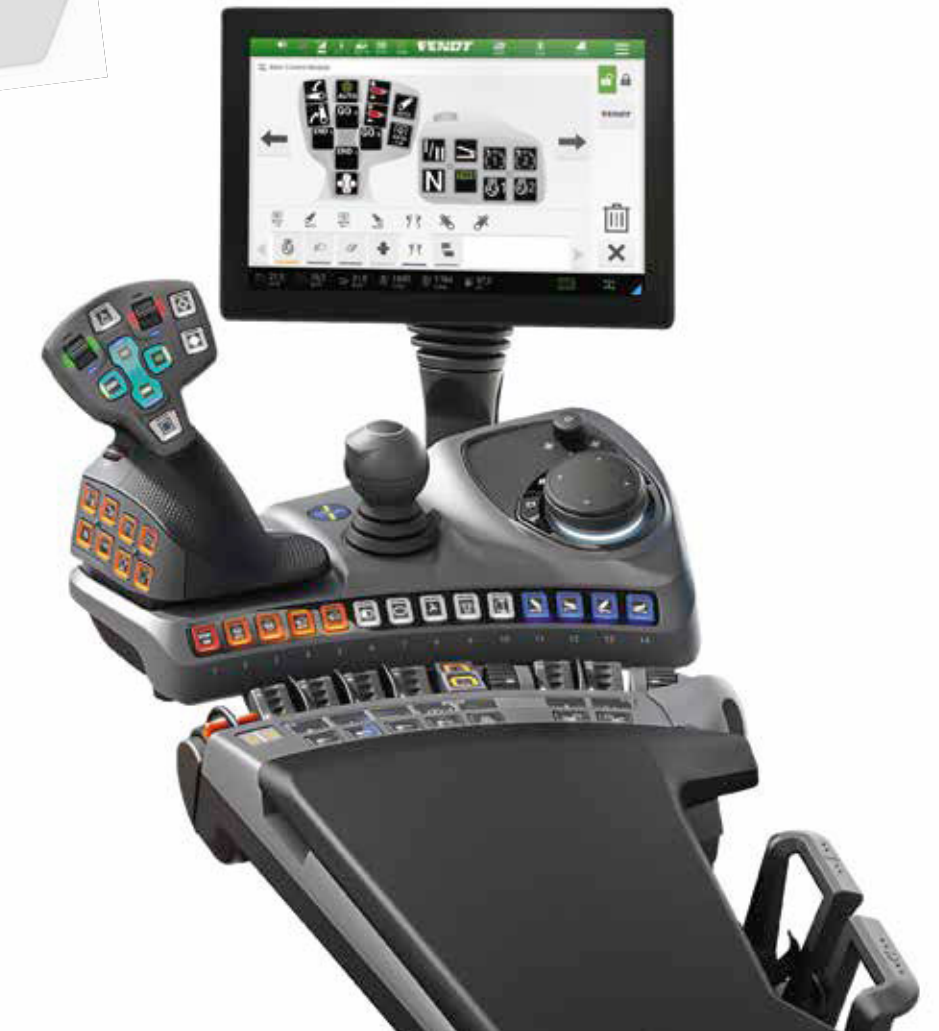
- Fourth double-acting pair of EHS valves included in the rear
- Roof painted white - includes UV protection

Possible equipment only with Profi & Profi+:

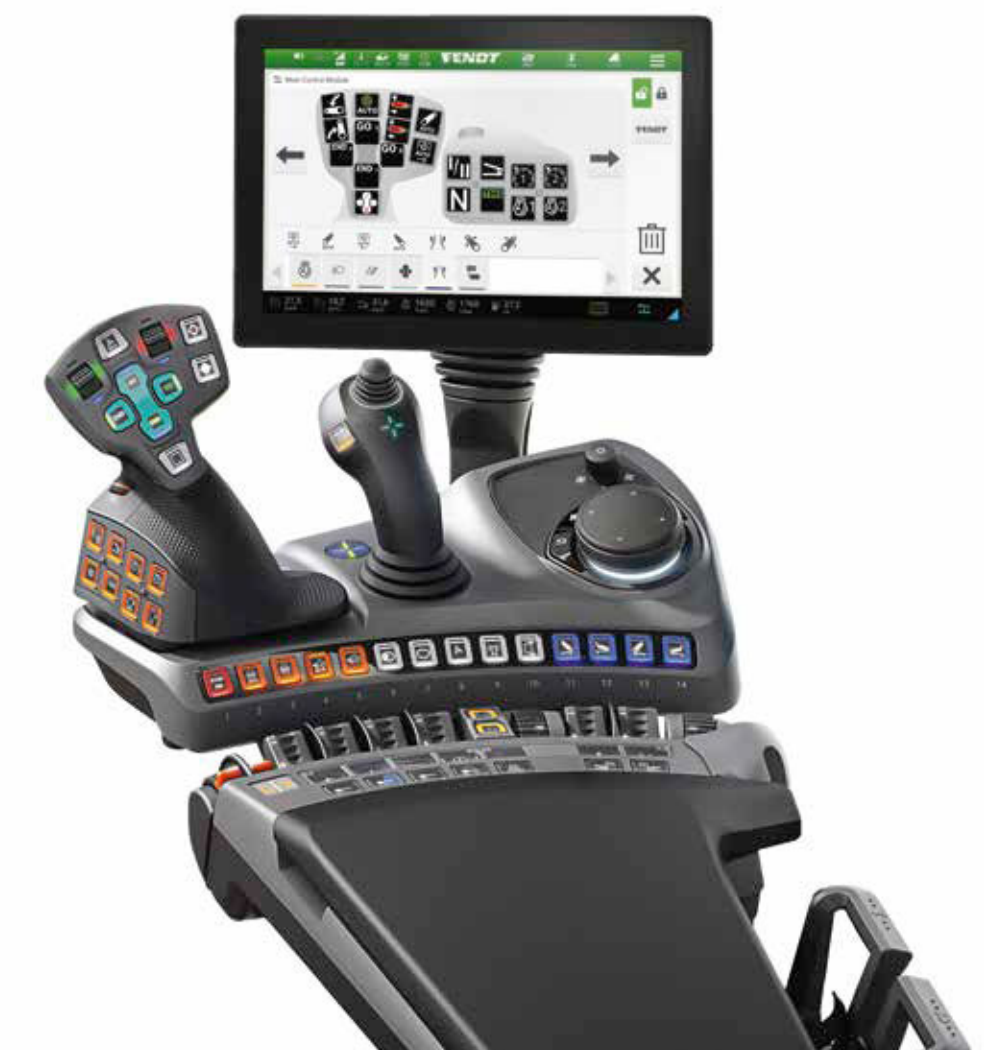
- Pneumatic comfort cab suspension, electrically telescopic comfort mirror
- 2 hydraulic pumps 165+220 l/min
- Five or more double-acting pairs of rear EHS valves, optionally with one or two pairs in the front
- Two double-acting pairs of EHS valves in the front
- UltraVision lighting package and/or 4 Tech Rail UltraVision work lights
- External control for rear power lift
- Rear and/or bonnet camera
- 12" terminal in the roof, infotainment package + 4.1 sound system, 4 USB ports on the armrest
- 60 km/h version

Smart Farming equipment with Profi:

- Basic machine control package is included - guidance system and agronomy basic package are not possible



Profi Setting 1



Profi Setting 2*

Lines

Profi+ | Equipment and features

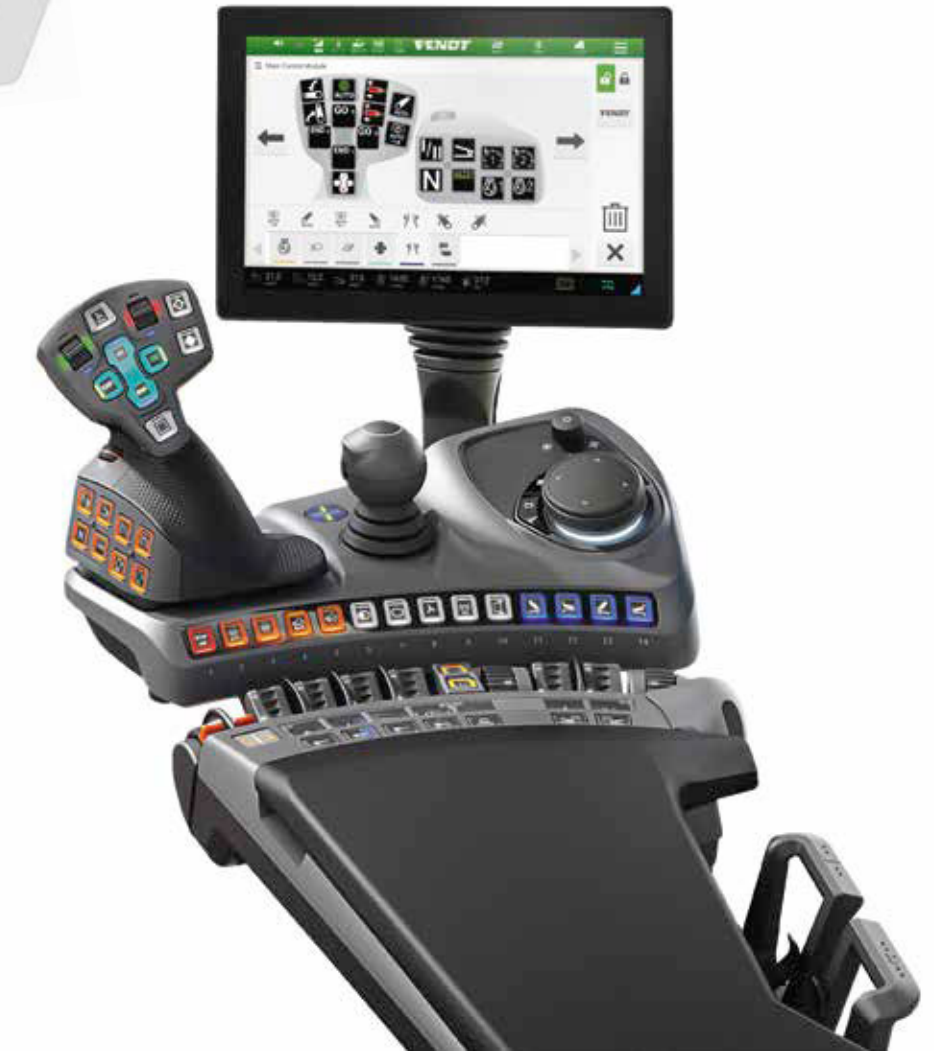
FendtONE armrest:

- Setting 1: Min. 2 rocker pairs (linear modules) for operating the EHS valves, crossgate lever, no 3L-Joystick
- Setting 2: Min. 2 rocker pairs (linear modules) for operating the EHS valves, no crossgate lever, 3L-Joystick

Smart Farming equipment with Profi+:

- Basic packages for guidance, machine control, telemetry and agronomy are included
- Other possible digital equipment options:
 - Contour Assistant
 - High Speed Guidance
 - Implement Slope Compensation
 - Section Control
 - Variable Rate Control
 - Implement Management (TIM-Steering)
- Exclusive equipment options only for Profi+:
 - TI Headland
 - CTF Project Import
 - Smart Connect
 - Implement Management (TIM)

Special features and equipment options correspond to the Profi equipment.



Profi+ Setting 1



Profi+ Setting 2

ENGINE

Concept

Exhaust brake

Exhaust gas treatment

Air filter

Tank

Cooling & ventilation

DynamicPerformance (DP)



Concept

Motor features - I

- New engine generation: AGCO Power CORE80 - 6 cylinders, 8.0 litres cubic capacity
- Four-valve technology - 12/12 inlet/exhaust valves
- Fendt iD low speed concept - speed range from only 700 rpm (idling) to 1,700 rpm (rated speed)
- Common rail fuel supply system with 2,500 bar injection pressure
- VTG turbocharger with exhaust braking function
- Hydraulic tappets for automatic valve clearance adjustment - Hydraulic tappets automatically adjust the valve clearance hydraulically
- Steel piston



Benefits - more convenience and lower total cost of ownership

- + Low background noise due to smooth, low-vibration engine running thanks to hydraulic tappet
- + Low maintenance costs due to maintenance-free valve train with hydraulic tappets:
 - Ensure optimum motor operation over the entire motor service life
 - Quiet and low-vibration engine running protects the entire vehicle
- + Maximum fuel efficiency and maximum protection of the engine components thanks to the Fendt iD low-speed concept

Concept

Motor features - II

- Fendt DynamicPerformance (DP) - intelligent additional power concept - with 23 hp for all models
- Engine oil pan with a volume of 31.5 litres (as a comparison: 17 litres for the Fendt 800 Vario S4)
 - Oil service interval: every 500 hours
 - No 50-hour initial interval
- Large, service-life-optimised engine mounts (as with the 700 Vario Gen7)
- No external exhaust gas recirculation
- Approved for the use of alternative fuels in accordance with DIN EN 15940, e.g., HVO



Benefits - more productivity and sustainability

- + Up to demanding tasks thanks to very high power reserves - e.g., tasks that require tractive power, hydraulics and PTO in conjunction with other auxiliary consumers such as the air compressor
- + Implements with the highest power requirements are operated efficiently - e.g., large precision air seeders, large roundabout harrow-drill combinations, Xtra Density square balers
- + Maximum fuel efficiency results in higher efficiency: amount of fuel used in relation to productive output

Concept

Fendt iD low engine speed concept

- Motor operates in a speed range of just 700 to 1,700 rpm
- Low rated speed of 1,700 rpm
- Full torque curve and full torque from low rpm - so there is sufficient torque in the low speed range

Benefits - more productivity, more driving comfort, lower total cost of ownership

- + Immediately agile and powerful tractor behaviour
 - More tonnes transported per hour
 - More hectares processed per hour
- + Low fuel consumption reduces operating costs
- + Less wear, therefore lower maintenance costs
- + Lower noise level



More hectares processed per hour



More tonnes transported per hour

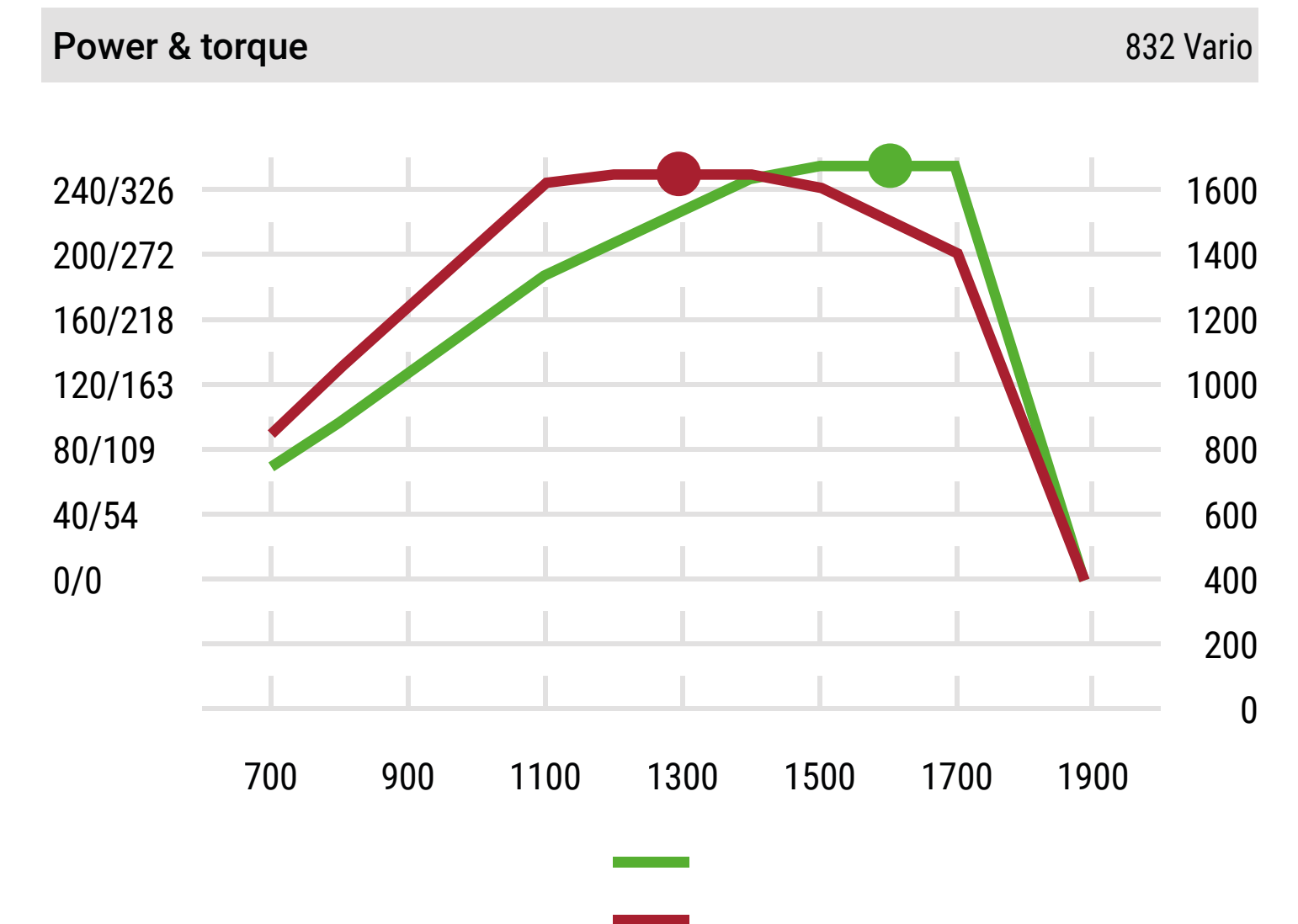
Concept

Characteristics - Power & torque

- Available performance has been increased by highly efficient fan drive (Concentric Air System (CAS))
- Engine always operates in the lowest specific consumption range
- Over 400 Nm more torque at low engine speeds (1,200 rpm) compared to the predecessor model - Increase in starting and constant torque
- Max speed at reduced engine speed:
 - 40 km/h at 950 rpm, 50 km/h at 1,200 rpm, 60 km/h at 1,450 rpm

Specific diesel and AdBlue consumption:

- The Tractor Management System (TMS) always runs the engine in the range with the lowest specific fuel consumption



Benefits - lower total cost of ownership and maximum productivity

- + Maximum fuel efficiency with maximum productivity in all situations
- + Thanks to torque and power behaviour:
 - Tractor behaves agilely in every situation - e.g., when starting off with fully loaded, multi-axle tippers
 - Engine power reaches the PTO stub in every situation - e.g., when using large roundabout cultivators
 - Tractor delivers maximum tractive power in every situation - e.g., effortless start-up with drained cultivator

Exhaust brake

VTG turbocharger with exhaust braking function

- Use of the VTG turbocharger: The variable turbine geometry (VTG) enables the braking function
- Wear-free braking when travelling downhill
- Deceleration of high travelling speeds, e.g., with heavy dumper trucks, multi-axle slurry tankers or multi-axle pesticide sprayers
- Activation via foot switch in the cab floor and/or a freely assignable (white) button on the FendtONE armrest
- Deceleration performance is influenced by trailer load, speed and hydraulic oil temperature
- Optional: only in conjunction with the hydraulic auxiliary brake



Benefits - more comfort, work safety and economy

- + The exhaust brake relieves the driver of some of the work when travelling downhill - there is no risk of overheating, as would be possible with a service brake
- + Service brake is protected, resulting in less wear and lower maintenance costs
- + Overall higher braking force thanks to three brakes - pneumatic service brake, exhaust brake & hydraulic auxiliary brake
- + Machine can be safely transported at full capacity
- + Increased driving safety on the road and therefore stress-free working
- + Improved control over the tractor

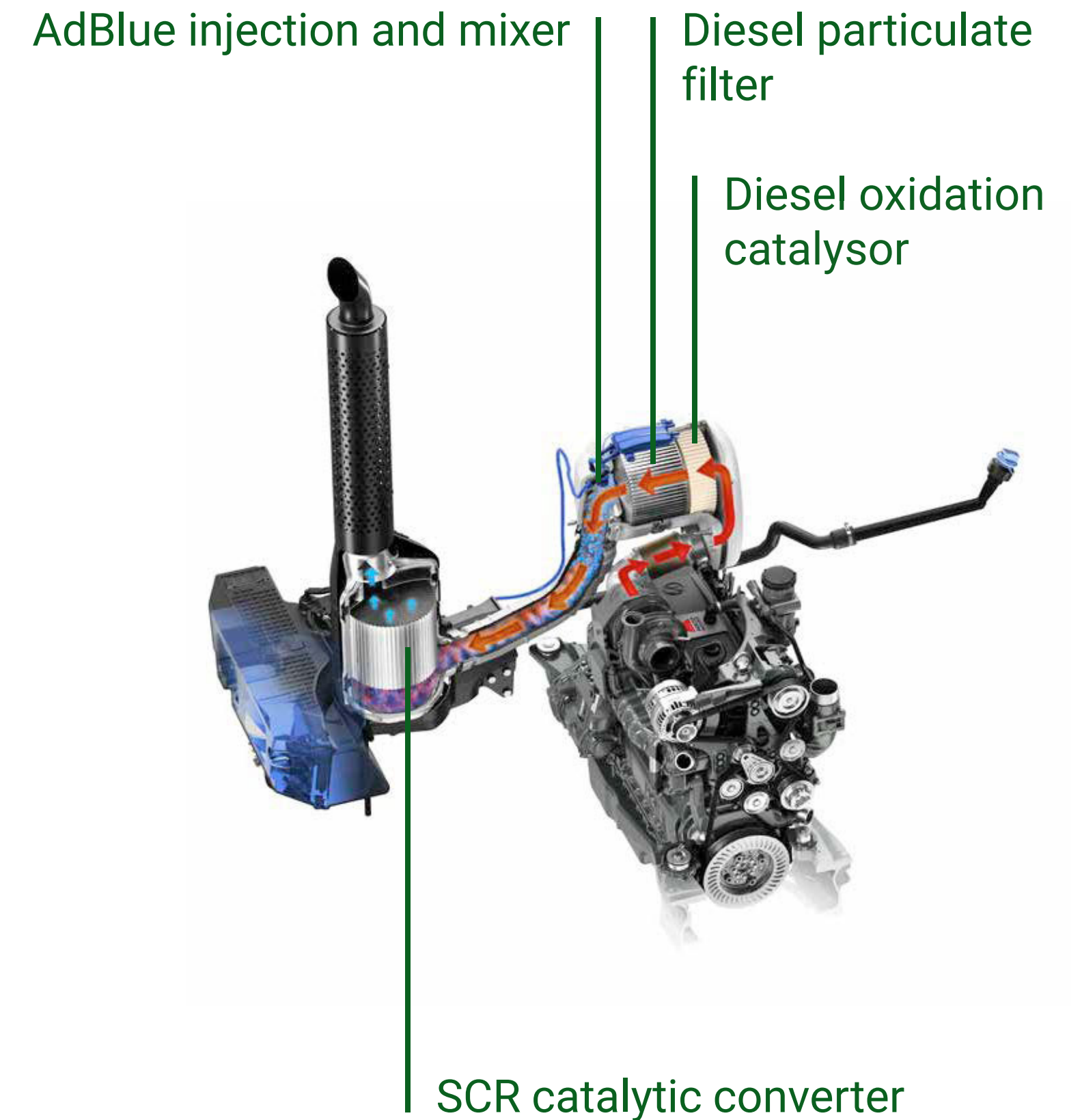
Exhaust gas treatment

Emission stage tier 4 final | V – (1/2)

- Exhaust gas after-treatment with:
 - Diesel Oxidation Catalysor (DOC)
 - Diesel Particulate Filter (DPF)
 - Selective catalytic reduction (SCR) with AdBlue/DEF
- No exhaust gas recirculation
- SCR catalytic converter and tailpipe with visibility-optimised arrangement on the right-hand A-pillar
- Same design and same components in all markets and for all emission levels

Benefits - user-friendliness and sustainability

- + Greater clarity thanks to the visibility-optimised arrangement on the right-hand A-pillar
- + Maximum environmental protection

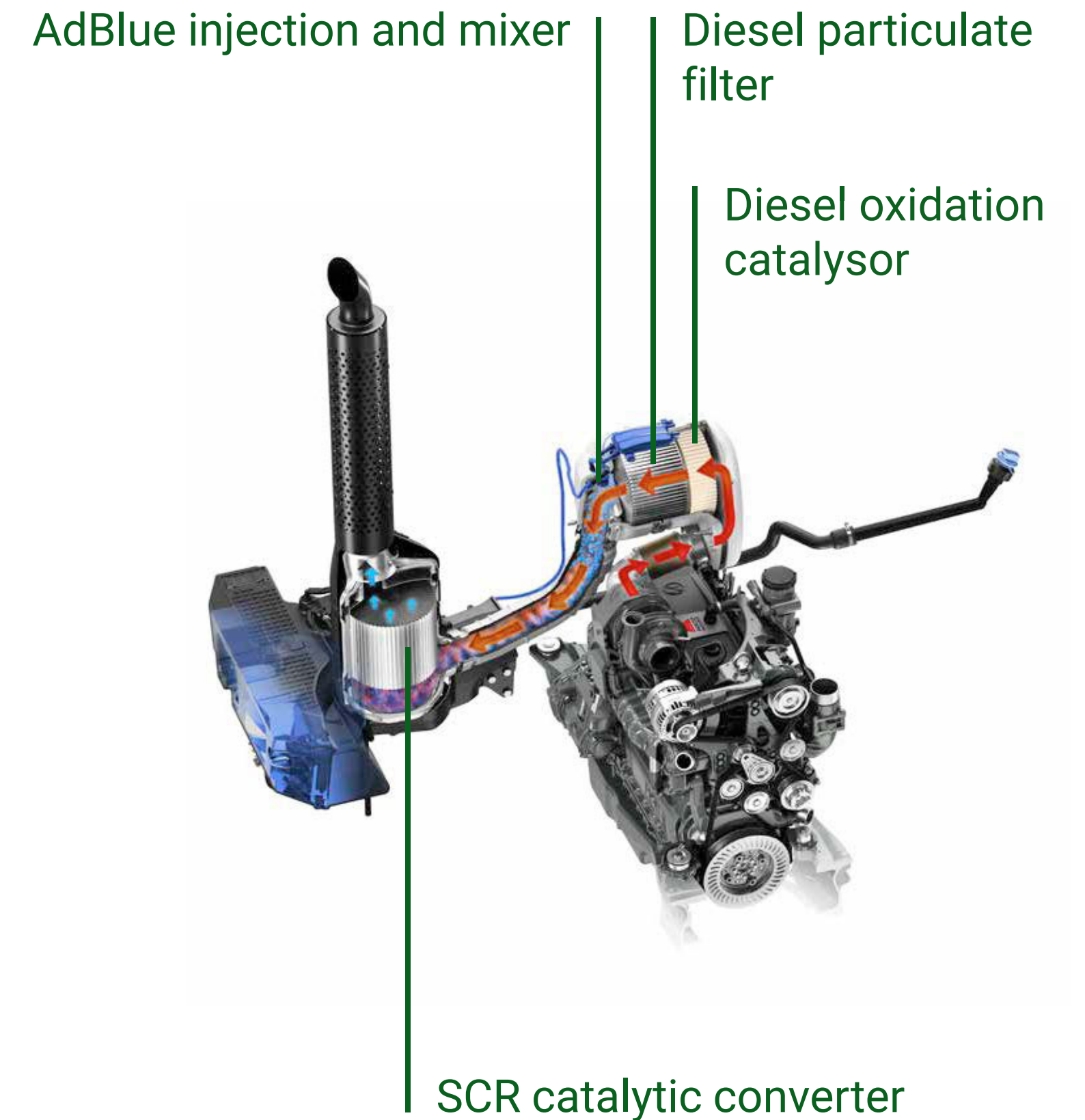


Exhaust gas treatment

Emission stage tier 4 final | V – (2/2)

Exhaust gas aftertreatment process:

- Diesel oxidation catalytic converter (DOC) oxidises carbon monoxide and hydrocarbons
- Diesel particulate filter ensures reduced particulate emissions
- Thanks to common rail high-pressure injection and electronic engine control, combustion is optimised, reducing the number of soot particles to a minimum
- Diesel particulate filter regenerates itself under normal operating conditions; standstill regeneration possible
- SCR technology removes the majority of nitrogen oxides (NO_x)
- Ideal mixing of AdBlue and exhaust gases, thus achieving a high conversion rate



Air filter

High-performance filter

- System consists of two main components: Pre-cleaner and main cleaner
- Both utilise efficient, proven high-performance air filters from MANN + HUMMEL (two-stage, round dry air filter/paper filter)
- Safety element/cartridge in the filter is positioned in the centre
- Optimised air routing for low losses, low differential pressures and low air heating
- Maintenance display shows filter load in per cent in the terminal



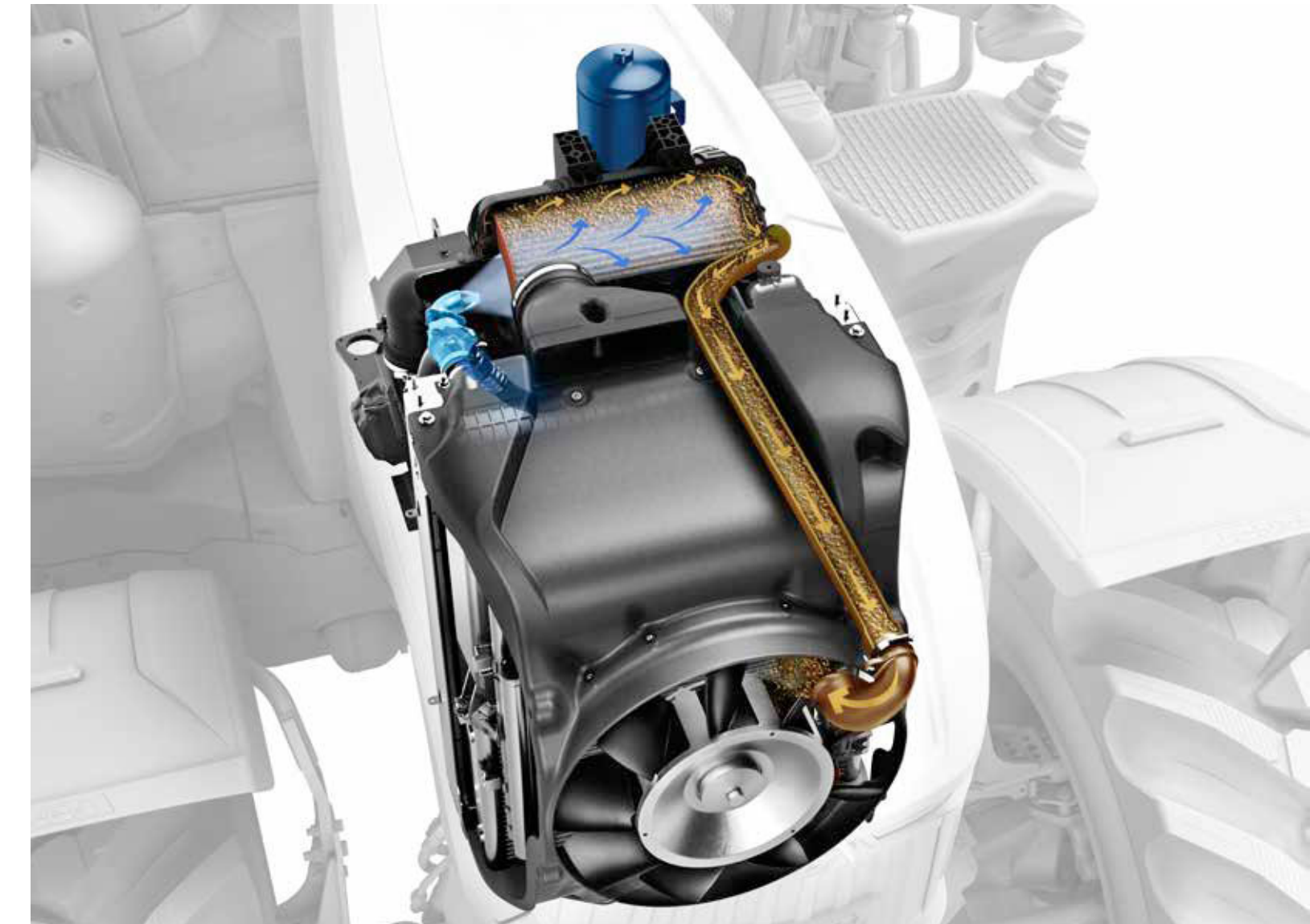
Benefits - more convenience, lower total cost of ownership and higher productivity

- + The driver can conveniently and accurately estimate the maintenance requirement using the maintenance display in the terminal - without having to remove the filter manually
- + Long filter service life and therefore less maintenance time for the main cleaner thanks to pre-cleaning
- + Best air supply to the engine and thus increased efficiency, effectiveness and maximum performance, which reduces running costs per hour and increases productivity

Air filter

Automatic dust extraction

- Automatic and/or manual passive and active cleaning of the motor air filter during work for optimum air supply - even in very dusty conditions
- Two components:
 - Continuous, passive dust extraction through negative pressure from the engine fan
 - Active, situational cleaning with short blasts of air - the dust is removed by the passive dust extraction system
- Total active cleaning takes approx. 30 seconds - two short blasts of air blow the engine air filter free
- Own compressed air tank with 12 bar - Control of the compressed air flow via two pulse valves and a solenoid valve
- Manual mode: If the engine air filter needs to be actively cleaned, a pop-up message appears in the terminal, which must be confirmed for cleaning
- Auto mode: If the filter needs to be actively cleaned, it is automatically and actively blown out
- Solution cannot be retrofitted
- Option is always installed in conjunction with automatic dust extraction for cab air filters

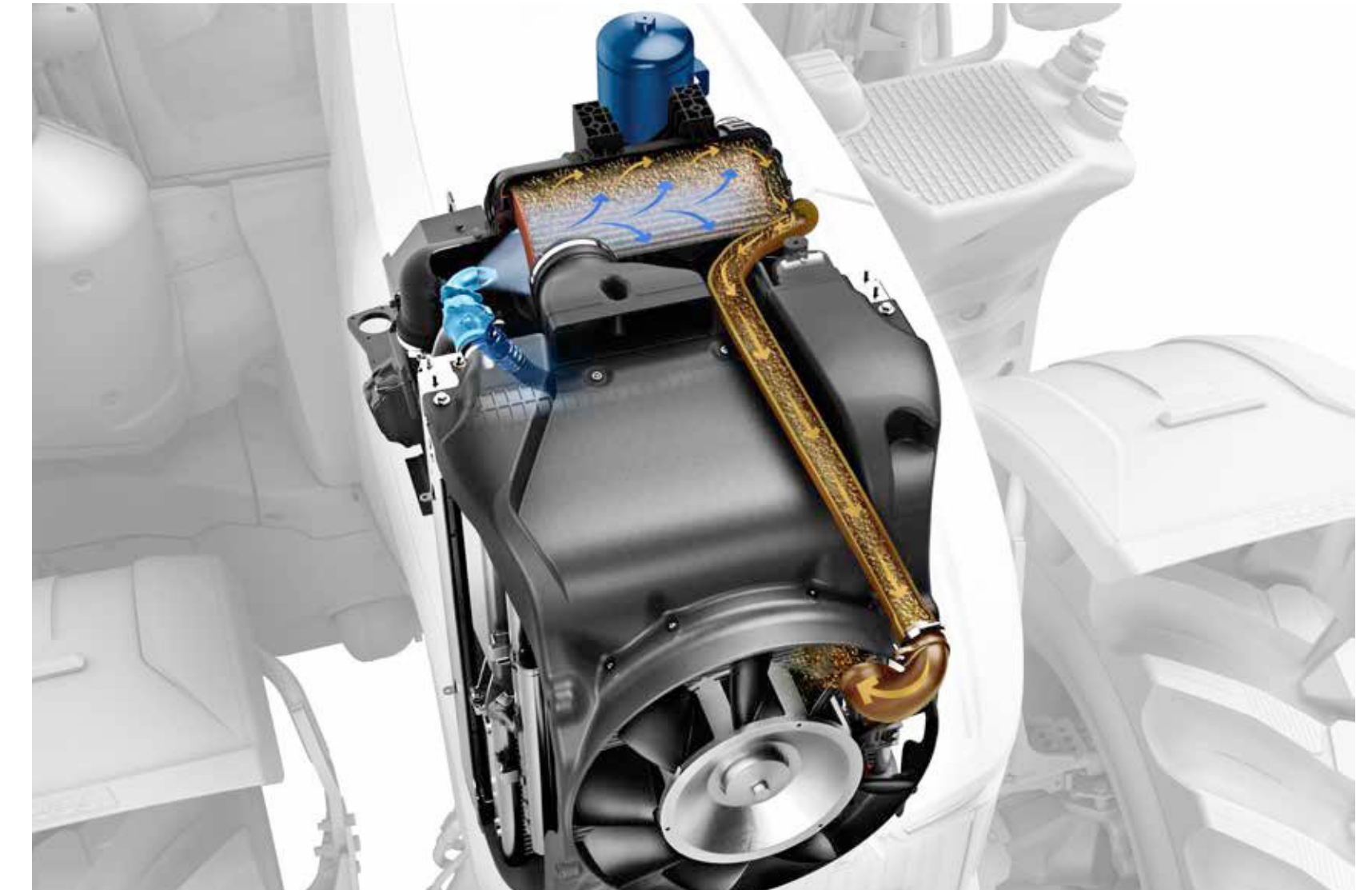


Air filter

Automatic dust extraction - Benefits

Benefits - increased productivity, greater efficiency and maximum convenience

- + No more manual blowing out of the engine air filter, convenient control via the terminal, filter cleaning possible while driving
- + Reduced manual maintenance, as the engine air filter can be cleaned at the touch of a button:
 - Longer service life of the engine air filter:
 - 10 to 15 times longer service life
 - Filter replacement only approx. every two years (special filter required that allows active cleaning)
 - Employees need less time to maintain the machine



Tank

Large fuel tank and low diesel consumption

- Diesel tank (540 litres) and AdBlue tank (65 litres) use the compartment space on the left-hand side of the tractor
- Filling from the left-hand side, directly when climbing up to the cab - easy access from the ground
- Filling up with diesel without the pump nozzle switching off too early, as the diesel in the tank is minimised from kicking back
- Safe, wide entry with deep steps and a relatively flat ascent angle
- Fully integrated entrance lighting
- Optional: Heated fuel pre-filter for increased operational reliability even with poorer quality diesel or at low temperatures



Benefits - high comfort, work safety, productivity and economy

- + Best accessibility, short distances and minimised risk of accidents during filling - AdBlue and diesel fuel are filled from the same side and from the ground
- + Long operating time without refuelling thanks to the combination of a large tank capacity and low specific diesel consumption - less downtime, more productive working time, higher tractor utilisation
- + No manual refuelling until the tank is completely full
- + Maximum comfort and minimised risk of accidents when climbing - thanks to wide access and fully integrated lighting

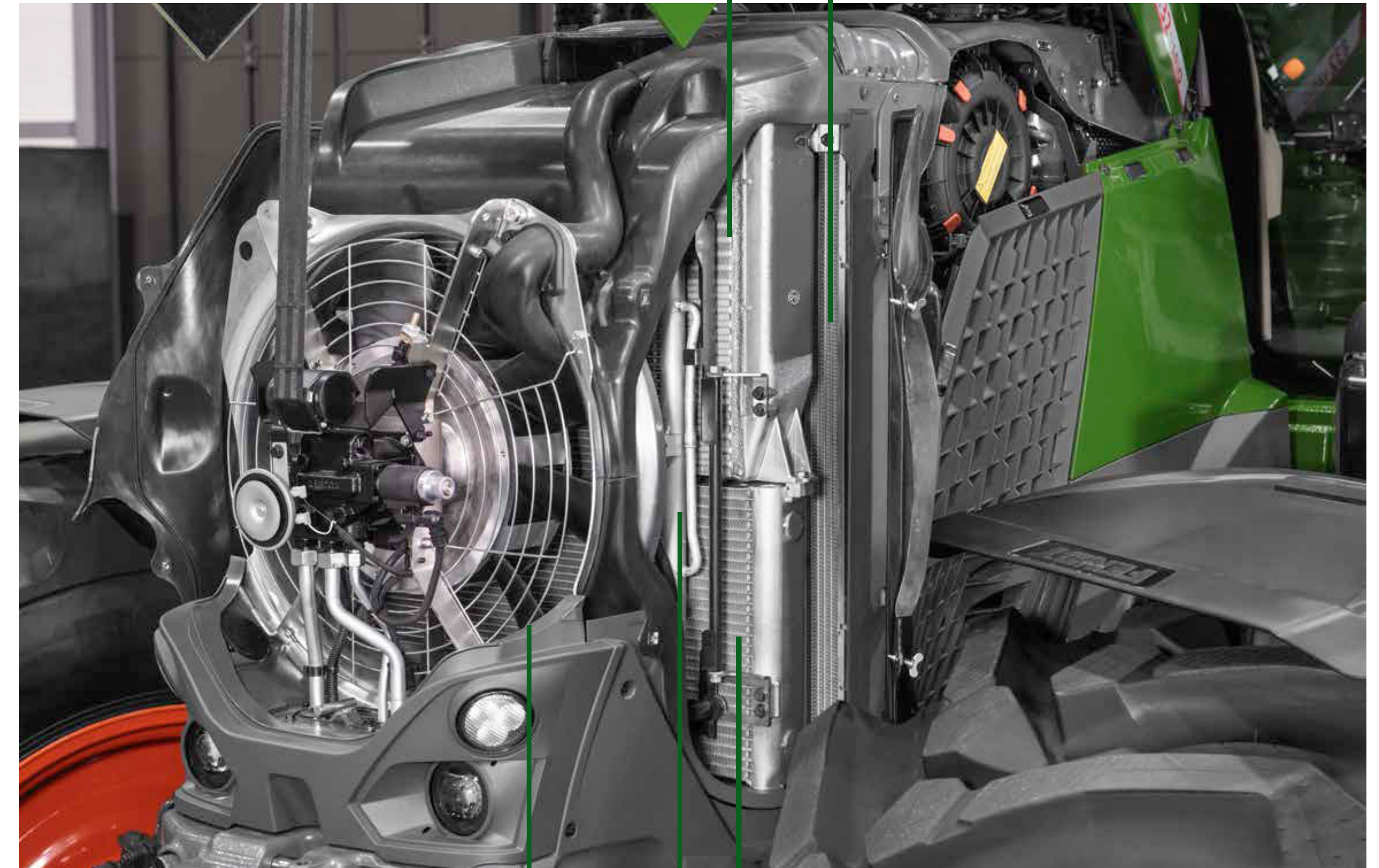
Cooling & ventilation

Overview of cooling concept - CAS with pressurised fan

- Concentric Air System (CAS): Concentric axial fan in front of the radiator core with independent, hydrostatic drive
- High efficiency due to fan arrangement in front of the cooler package
- Cooling system is designed for 45 °C outside temperature
- Reversible fan function an option

How it works

- Fan draws in cold, dense air - low air temperature and therefore higher air density at the fan blades increase efficiency
- Air is accelerated quickly via concentrically shaped blades and forced through the radiators
- Separate hydrostatic drive for ideal cooling performance, independent of the engine speed and as required for each component - each cooler can control the fan separately (cooling management)
- The fan has excellent efficiency thanks to the blade geometry and the small gap to the guard (1 to 2 mm)



Intercooler (air - air)

Water cooler

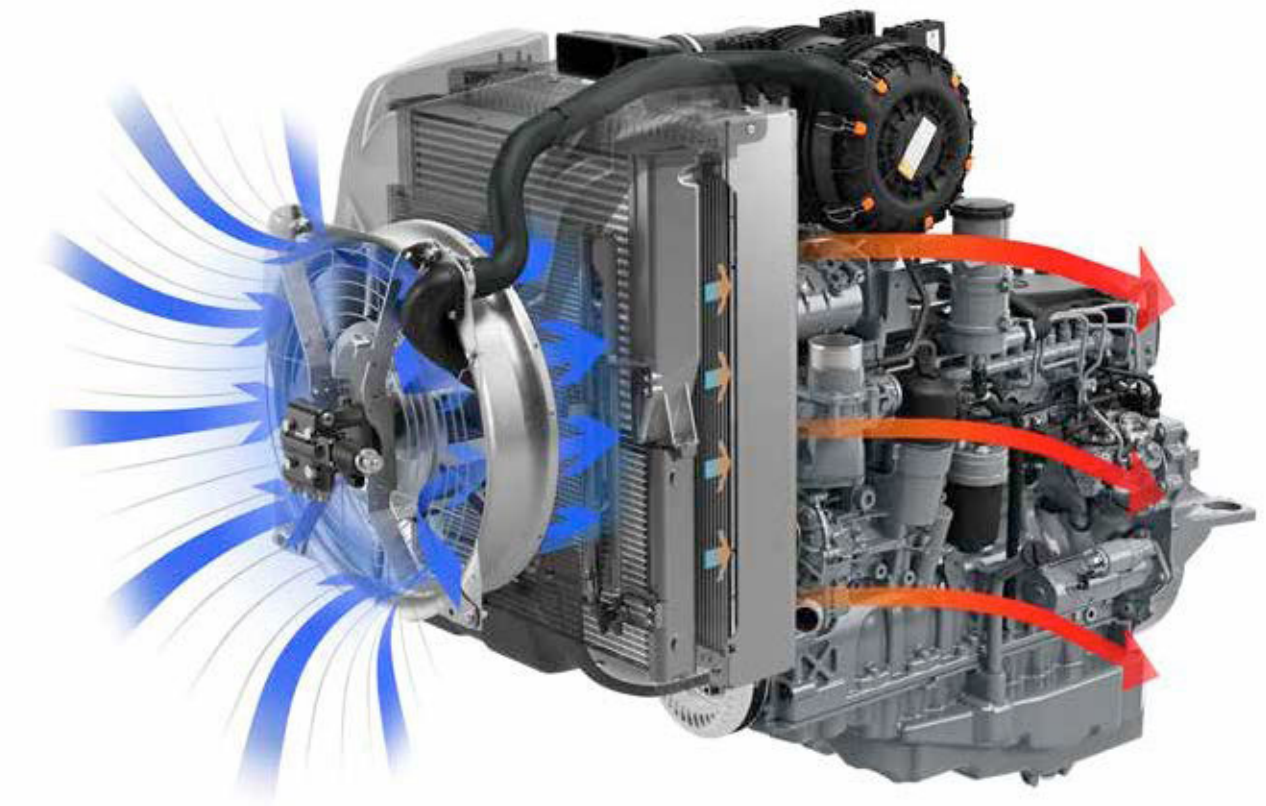
Transmission oil cooler

Air-conditioning condenser

Hydraulic oil cooler

Cooling & ventilation

Benefits of the cooling concept - CAS with pressurised fan



- The Concentric Air System (CAS) with extremely narrow, compact fan (560 mm) enables a narrow bonnet and therefore outstanding visibility and a very high steering angle
- Low fan speed
- No suction effects due to wide air intake, which minimises soiling on the bonnet cooling grilles
- Large power reserves, cooling system designed for 45 °C outside temperature

Benefits - absolutely user-friendly, increased efficiency and productivity

- + Extremely efficient: less drive power required, up to 40% more economical than conventional cooling concept in normal operation - more available power and more diesel and AdBlue savings
- + High steering angle ensures outstanding manoeuvrability - helpful for turning manoeuvres in the field, on the road and in the yard
- + Pleasant working thanks to low noise level due to low fan speed
- + Less cleaning effort due to less soiling
- + Work can continue even at high temperatures - e.g., in midsummer during heavy-duty soil cultivation or during demanding PTO work such as in front of a roundabout cultivator or soil stabilisers

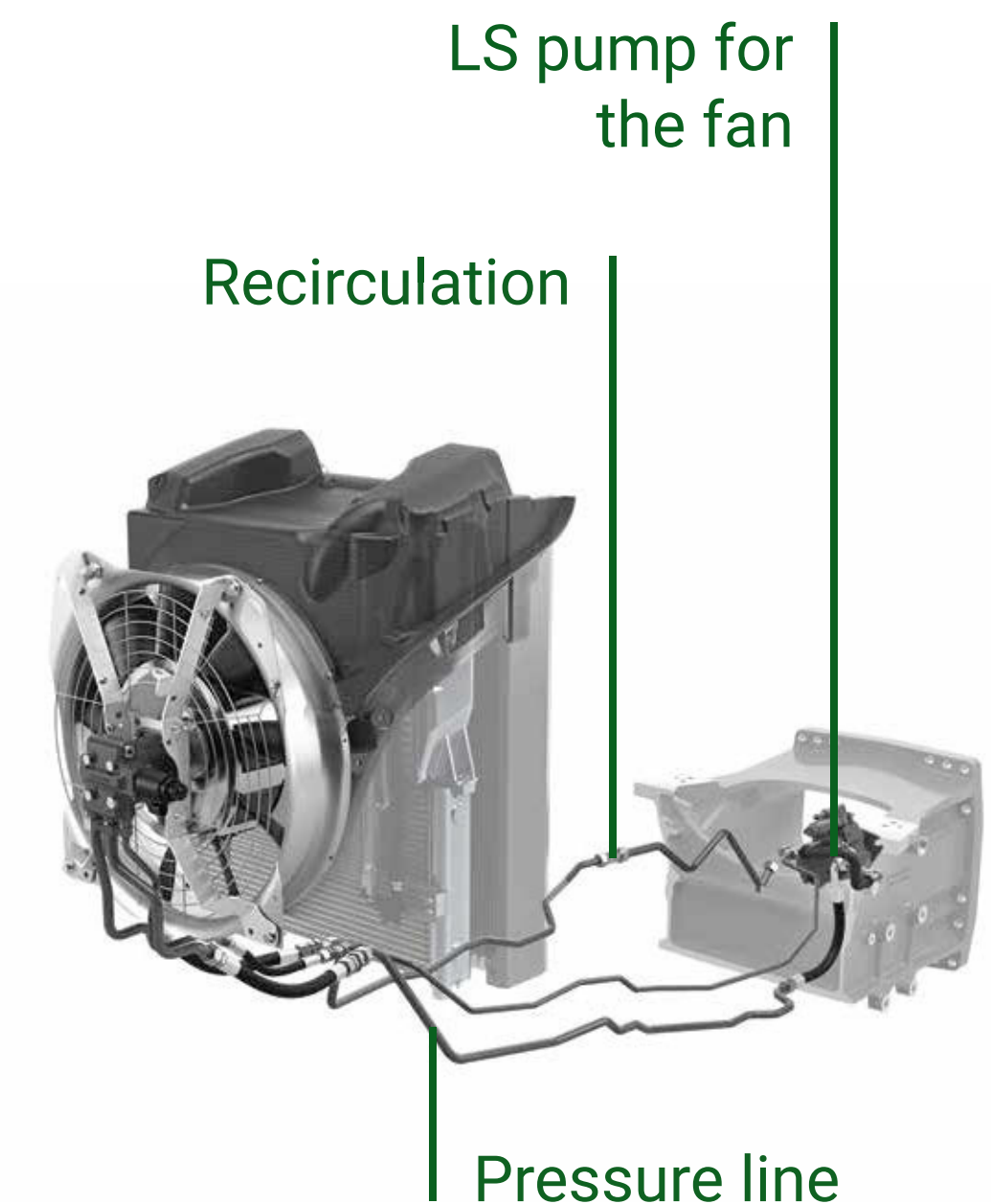
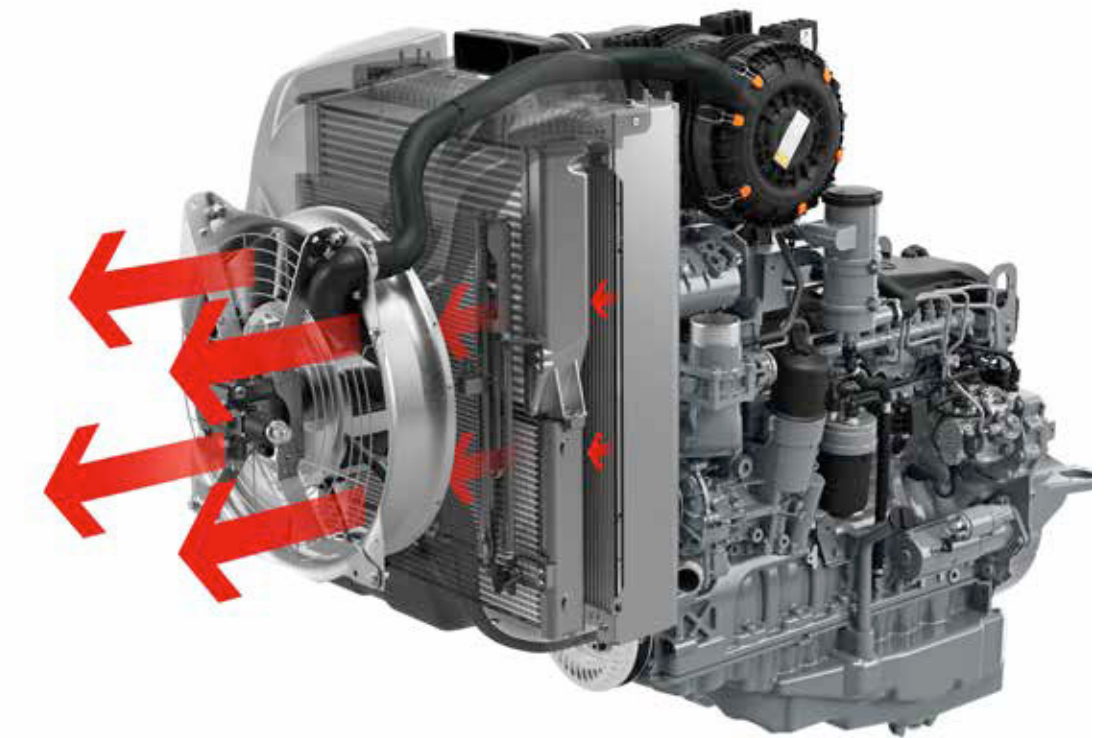
Cooling & ventilation

Reversible fan

- Independent cleaning of the radiator grille
- Reversible fan drive with variable flow pump (axial piston pump, electrically adjustable)
- Reversing motor (axial piston motor, electrically adjustable)
- Normal operation: normal direction of rotation
- Reverse: Motor is adjusted in reverse direction of rotation
- Control via the terminal:
 - Manual: Activating the reversible fan function in the terminal
 - Automatic: interval-controlled reversible fan function - time-dependent programmable in the terminal
- Ideal for dusty conditions when a lot of light material is stirred up, e.g., mowing, straw baling and non-agricultural applications such as on construction sites in front of a soil stabiliser

Benefits - user-friendliness, increased occupational safety and lower total cost of ownership

- + Integration in Fendt TI Headland (headland management)
- + Straw can be constantly and easily removed from the radiator grille during straw baling - the machine therefore always works at a safe operating temperature and the radiator grille does not have to be cleaned manually
- + Cooling concept can always be operated optimally, at the highest efficiency level



DynamicPerformance (DP)

Intelligent multi-performance concept

- DynamicPerformance: additional power concept that intelligently, variably and steplessly compensates for power losses caused by auxiliary consumers, thus ensuring consistent productivity with maximum efficiency

Why does the tractor need an intelligent additional power concept?

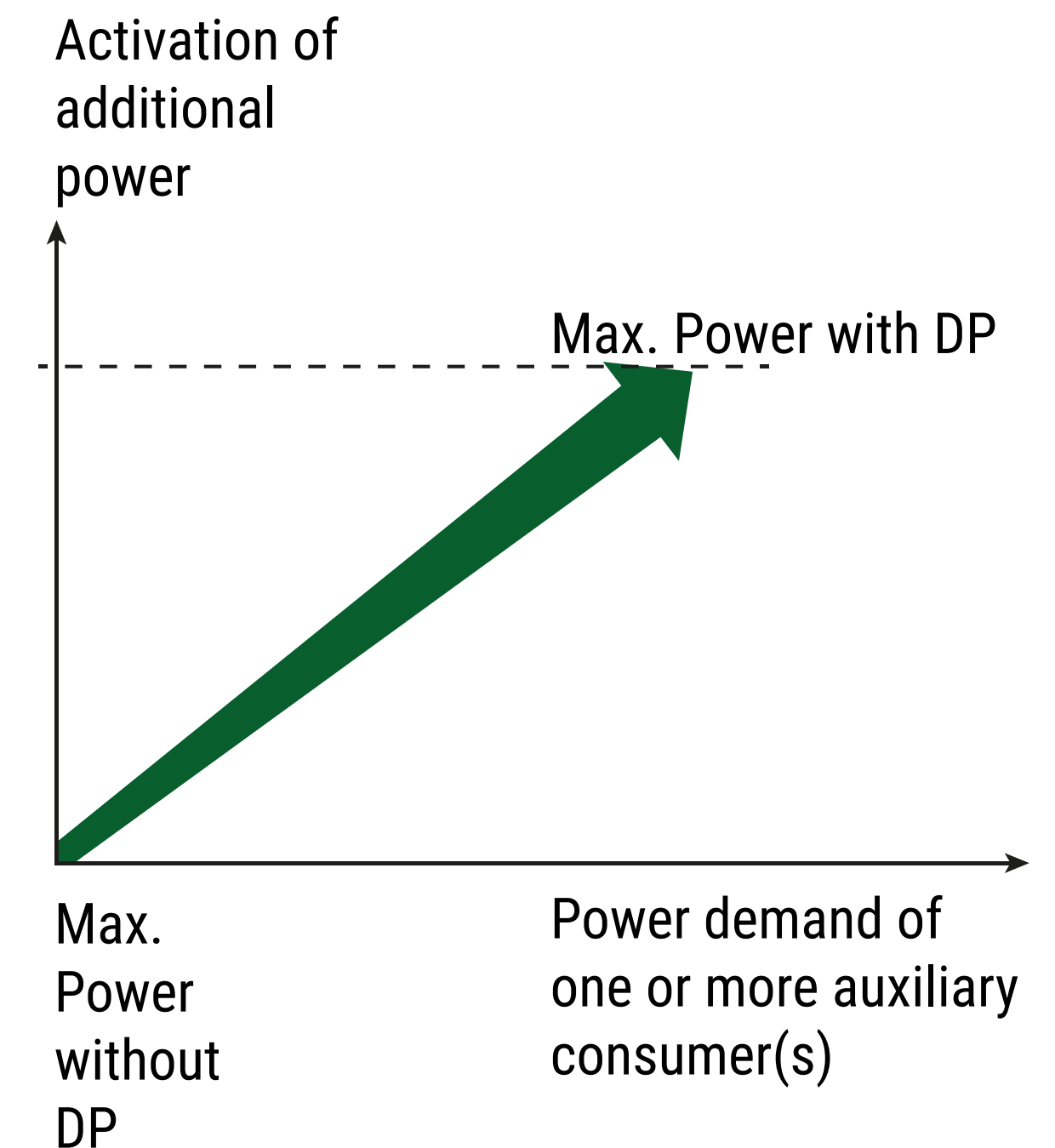
- The engine must supply main consumers (such as the traction drive) and numerous auxiliary consumers (such as the engine fan) with the generated drive power
- There are main and auxiliary consumers, for example, during soil cultivation, PTO work (in motion and stationary) and also during transport

What happens with DynamicPerformance?

- Auxiliary consumers only draw power occasionally or depending on the situation
- If there is a demand from the auxiliary consumers, the engine delivers its additional power - intelligently controlled, WITHOUT being restricted by certain conditions (such as PTO operation, driving speed, etc.).

Main benefits of this engine power reserve

- + Reduced fuel consumption
- + Consistent productivity



DynamicPerformance (DP)

Operational advantages

- The engine delivers more power when required - without throttling the performance of the main consumer
- Secondary consumers therefore do not take any power from the main consumer, but are served via the additional power

Benefits

- + Consistent productivity with maximum efficiency - maximum work performed with minimum fuel consumption
- + Maximum productivity in various applications at all times - even in demanding conditions such as
 - PTO work: Wood chipper on the PTO delivers maximum throughput in bulk cubic metres per hour, maximum area output when mowing with a large mower combination
 - Towing work: maximum area coverage under hot summer conditions
 - Hydraulic work: The seed drill fan is always optimally driven for perfect sowing accuracy
 - Transport: maximum number of laps between the field and the transport silo
- + Driver always feels the best performance of the vehicle - the tractor delivers what it promises
- + Most efficient use of diesel fuel and therefore best (minimum) greenhouse gas emissions in relation to the work performed



Dynamic Performance (DP)

Main and auxiliary consumers

Examples of main consumers:

- Tractive power at the wheels
- PTO that drives corresponding devices
- Hydraulic pump that drives equipment or controls functions

Examples of auxiliary consumers:

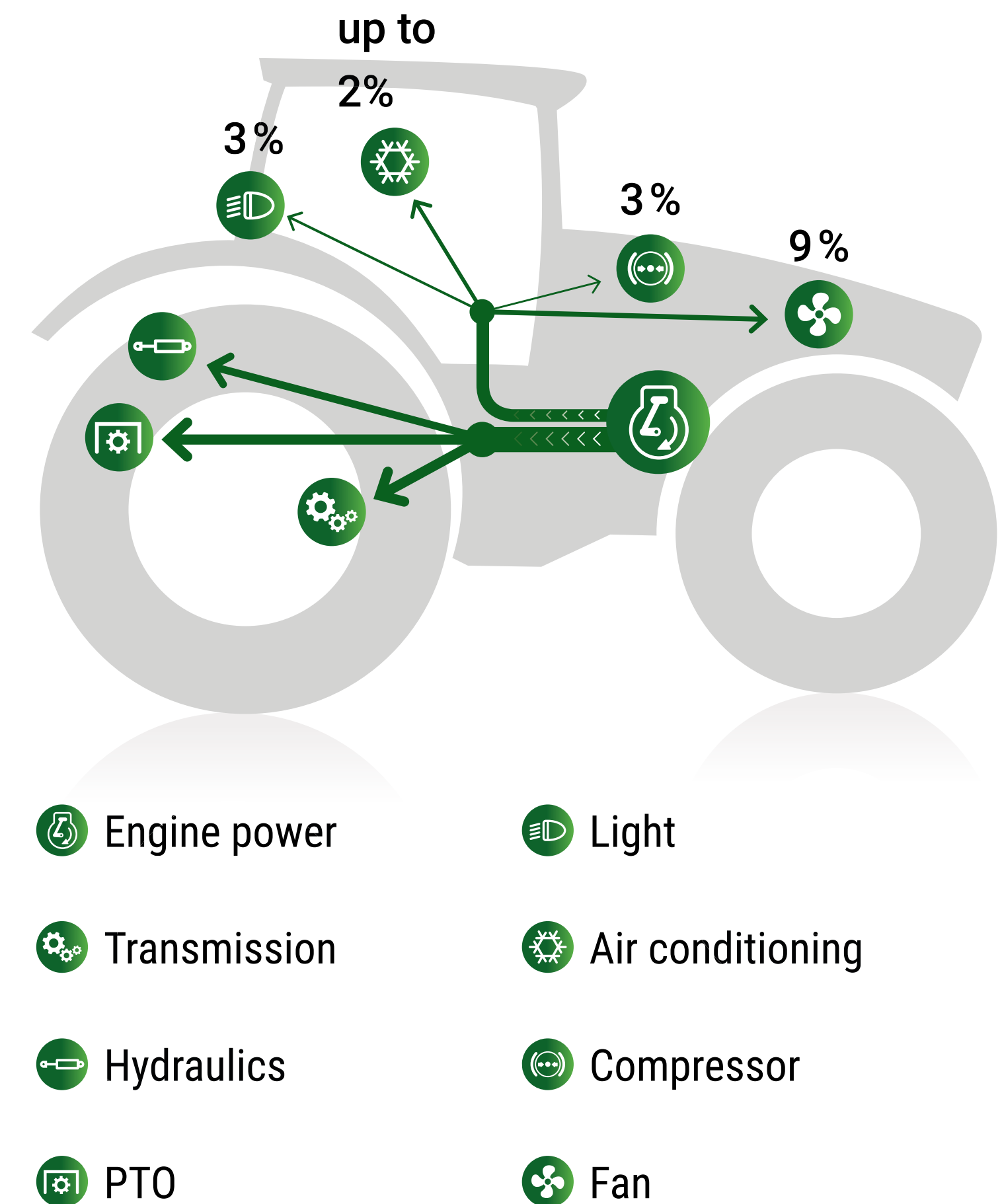
Engine fan, air conditioning, alternator, air compressor

What basically happens due to the power requirements of the auxiliary consumers?

- Available power for traction, PTO and hydraulic work is reduced

What are the limitations of conventional boost concepts on the market?

- Known boost concepts of the competition are only available for limited application situations
- For example, boost is only enabled from a fixed minimum speed, gradually depending on the driving speed or only when the PTO is switched on while driving
- Tractive work: maximum area coverage under hot summer conditions



TRANSMISSION

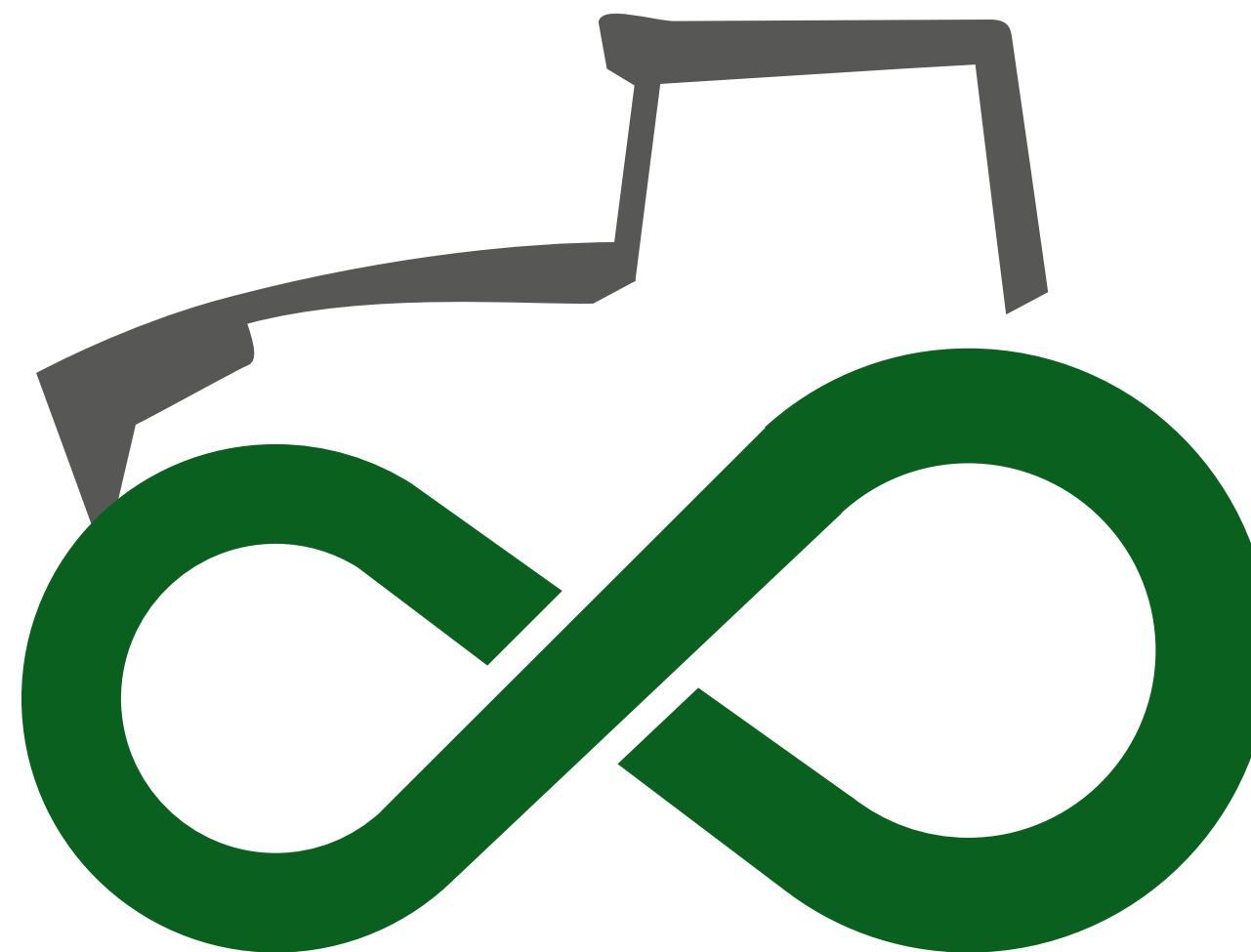
Concept

VarioDrive customer benefits

Load limit control

Tractor Management System (TMS)

Maintenance/Diagnosis



Fendt
VarioDrive

Concept

VarioDrive drive train with permanent 4WD

- New in the Fendt 800 Vario - VarioDrive is the revolutionary further development of the proven Fendt Vario transmission
- Renowned for maximum efficiency, lowest diesel consumption and maximum comfort and already 100% proven in the Fendt 600, 700, 900 and 1000 Vario series

How does VarioDrive work?

- Hydrostatic and mechanically power-split transmission (TA250) with separate hydraulic motors for front and rear axle
- Hydraulic motors drive the respective axles independently of each other
- Smart four-wheel drive clutch between front and rear axle, closes automatically when one axle slips and transfers torque to the other axle that currently has grip (= Fendt Torque Distribution)
- Rear axle is (additionally) mechanically driven

This technical solution is only available from Fendt and is unique in agricultural technology!

Benefits

- + Best manoeuvrability due to pull-in turn effect
- + Maximum traction on any surface
- + Always in the right speed range - comfortable for driver and machine
- + Optimum utilisation of engine power even during transport

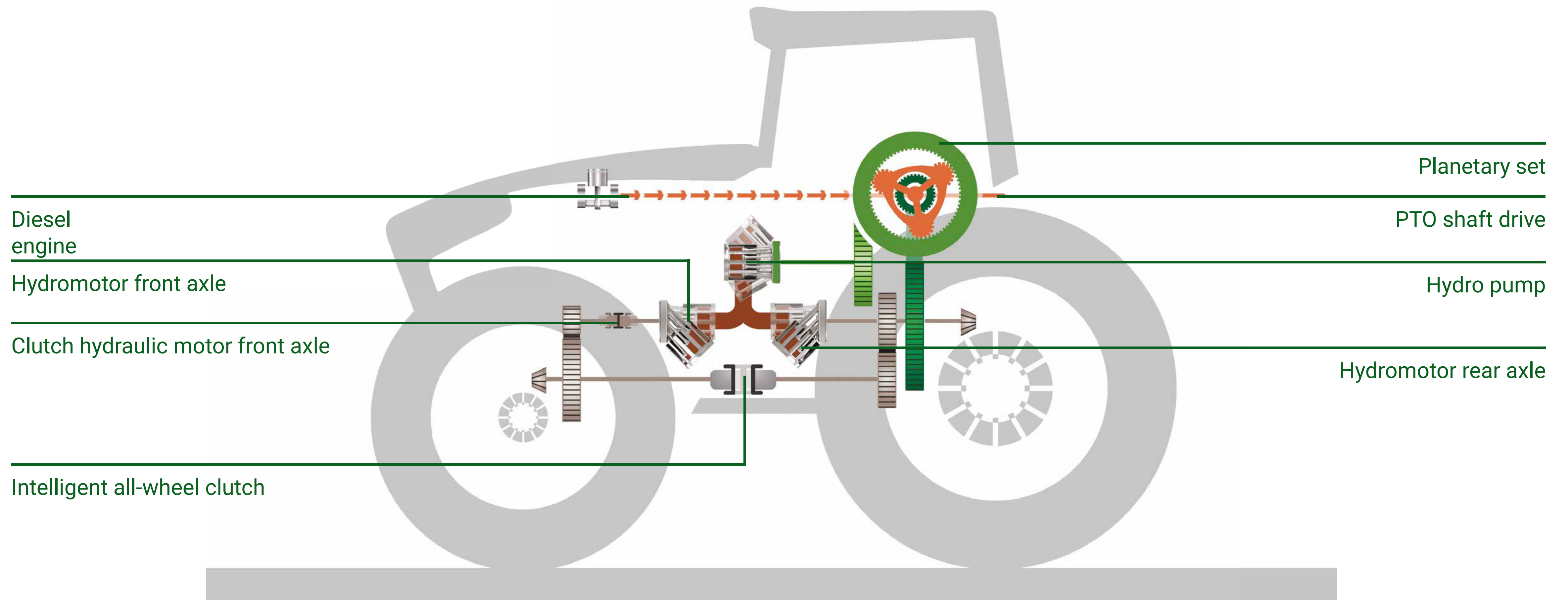
See the benefits of VarioDrive at a glance.



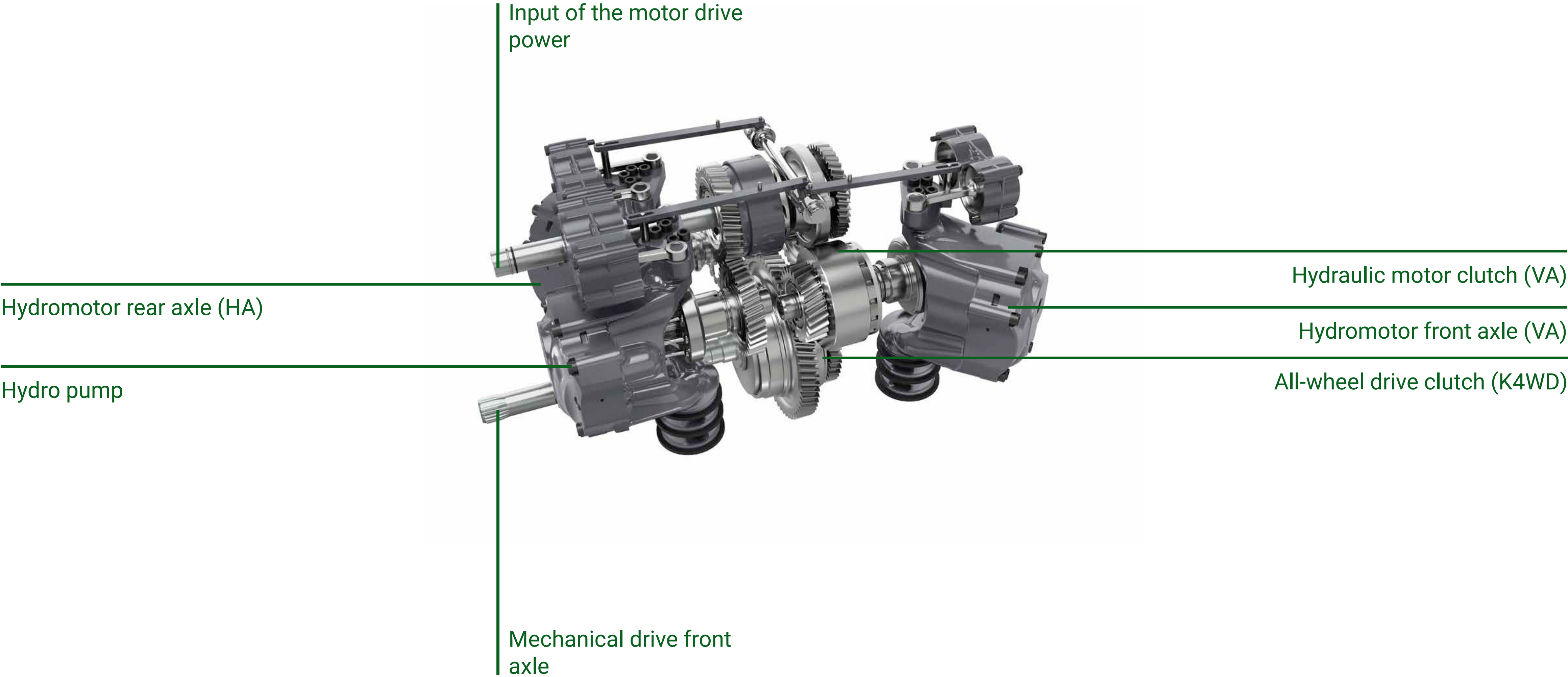
FENDT

Concept

Fendt VarioDrive



Concept



Concept

What VarioDrive makes possible

Independent, variable four-wheel drive up to 25 km/h

- Hydraulic motor on the front axle swings back when accelerating - up to approx. 25 km/h
- It is then in the neutral position, no longer transmits torque and is disconnected
- There are no drag losses with this hydraulic motor, efficiency gain of up to 10 kW
- The closable longitudinal differential works automatically, intelligently up to approx. 25 km/h, if slip occurs on one of the axles (detection via transmission pressure)

Stepless drive

- From 20 m/h to 60 km/h
- Final speed at reduced engine speed: the rear axle hydraulic motor swivels back fully until the final speed is reached
- The entire power or torque is then transmitted mechanically - e.g., 40 km/h at 950 rpm

Pull-in turn effect

- Front-wheel drive actively pulls the tractor into the turn
- Conventional four-wheel drive (with a fixed ratio between the front and rear axle) has a negative impact on the turning circle
- The pull-in turn effect generates a 10% smaller turning circle compared to the conventional, classic four-wheel drive system



Concept

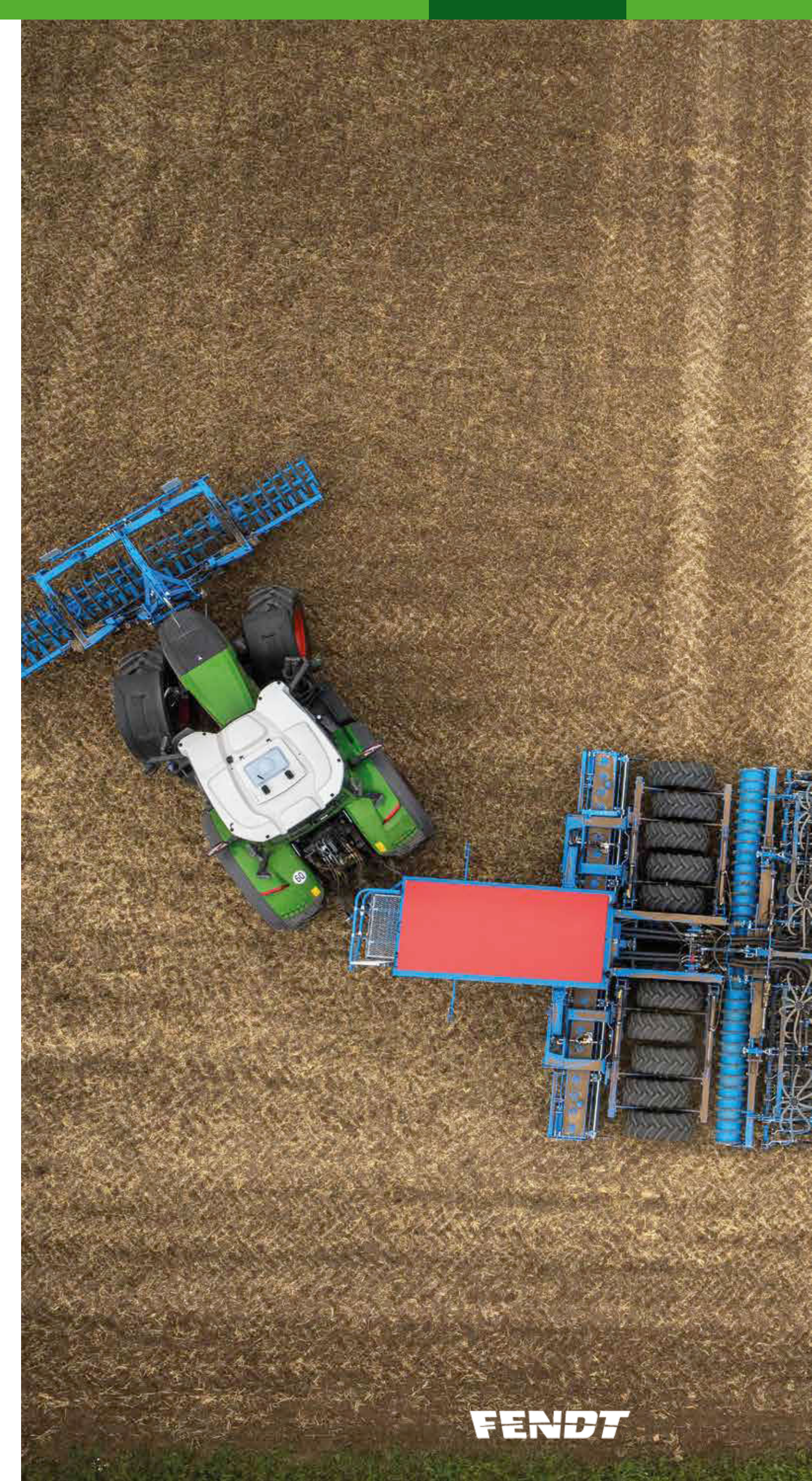
Customer Benefits

Best manoeuvrability

- + Easy turning on narrow headlands
- + Less manoeuvring, therefore faster work
- + Comfort for every driver, inexperienced drivers can operate the machine more quickly and effectively
- + Maximum soil protection: on the headland due to small turning circle, maximum protection of the sward in grassland, in the field by minimising slippage

Automatic, variable four-wheel drive

- + No manual switching on or off necessary:
 - Vehicle is always safe on the road
 - Best efficiency and soil protection
 - Minimal wear
- + Tractor is permanently friction-locked - e.g., when changing speed while working or reversing on hilly terrain
- + Stress-free four-wheel drive protects the machine as much as possible



Concept

Customer Benefits

Maximum tractive power

- + Maximum tractive power on any surface and in any situation - for example, more area coverage can be achieved in deep tillage
- + Full tractive power on the front axle at all times, even when manoeuvring around obstacles in the field or in turns - more productivity, as the speed does not slow down during heavy tillage, for example
- + Maximum protection for the tractor - thanks to tension-free, variable four-wheel drive

Less tyre wear

- + Tyres with longer service life - compared to drive types with classic four-wheel drive

No more driving range switching I/II for field and road

- + Driver is always travelling in the optimum speed range
- + Driver can concentrate on the essentials



Concept

Customer Benefits

Best utilisation of engine power in transport

- + Best utilisation of engine power and lowest diesel consumption by decoupling the hydraulic motors - maximum efficiency, best drive power and highest efficiency
- + Shortest transport times thanks to 60 km/h version, yet very low diesel fuel consumption due to reduced engine speed (40 km/h and 50 km/h version also available)



Load limit control

Automatic load limit 2.0

- Load limit control determines how far the engine speed may drop under load before the transmission adjusts (change in overall gear ratio)
- Automatic and manual mode available
- Automatic mode:
 - Fully automatic adjustment of the load limit and thus the engine load
 - Control depending on target speed (when using TMS or cruise control) or engine utilisation (without using TMS or cruise control)
 - Target speed is reached as quickly as possible and maintained automatically - highest possible average speed with lowest possible fuel consumption



Benefits in automatic mode

- + Tractor always works at its optimum and is therefore operated most economically
- + Productivity is increased through lively reaction behaviour
- + High level of comfort - operator is relieved:
 - Full control of the implement possible, which increases the quality of work
 - Easier familiarisation of workers

Benefits in manual mode

- + Even more specific adaptation possible depending on the application - optimise work results even further, increase productivity through more lively reaction behaviour

Tractor Management System (TMS)

Economical driving - completely automatically

- TMS is software that acts as an interface between the engine and transmission - engine speed and transmission ratio are automatically controlled to optimise consumption
- Operation via multifunction control lever and accelerator pedal
- The tractor electronics take control of the engine and transmission - the driver simply sets the desired speed and the TMS takes care of the rest



What happens when TMS is activated:

- On level ground, a tractor drives at reduced engine speed - uphill, when the load increases, the TMS increases the engine speed
- As soon as the load decreases (back on level ground or downhill), the injection quantity is reduced again

With TMS, the tractor is operated at the lowest possible engine speed and an economical driving style is automatically achieved!

Benefits - more efficiency, productivity, sustainability and comfort

- + Tractor always drives in the optimum range 'without intervention', driver can concentrate on controlling the implement
- + Optimised fuel consumption - engine speed is automatically adjusted as required, with maximum work results
- + Tractor pulls the implement at the same speed on level ground and uphill - the power requirement is also covered on uphill terrain by increasing the engine speed

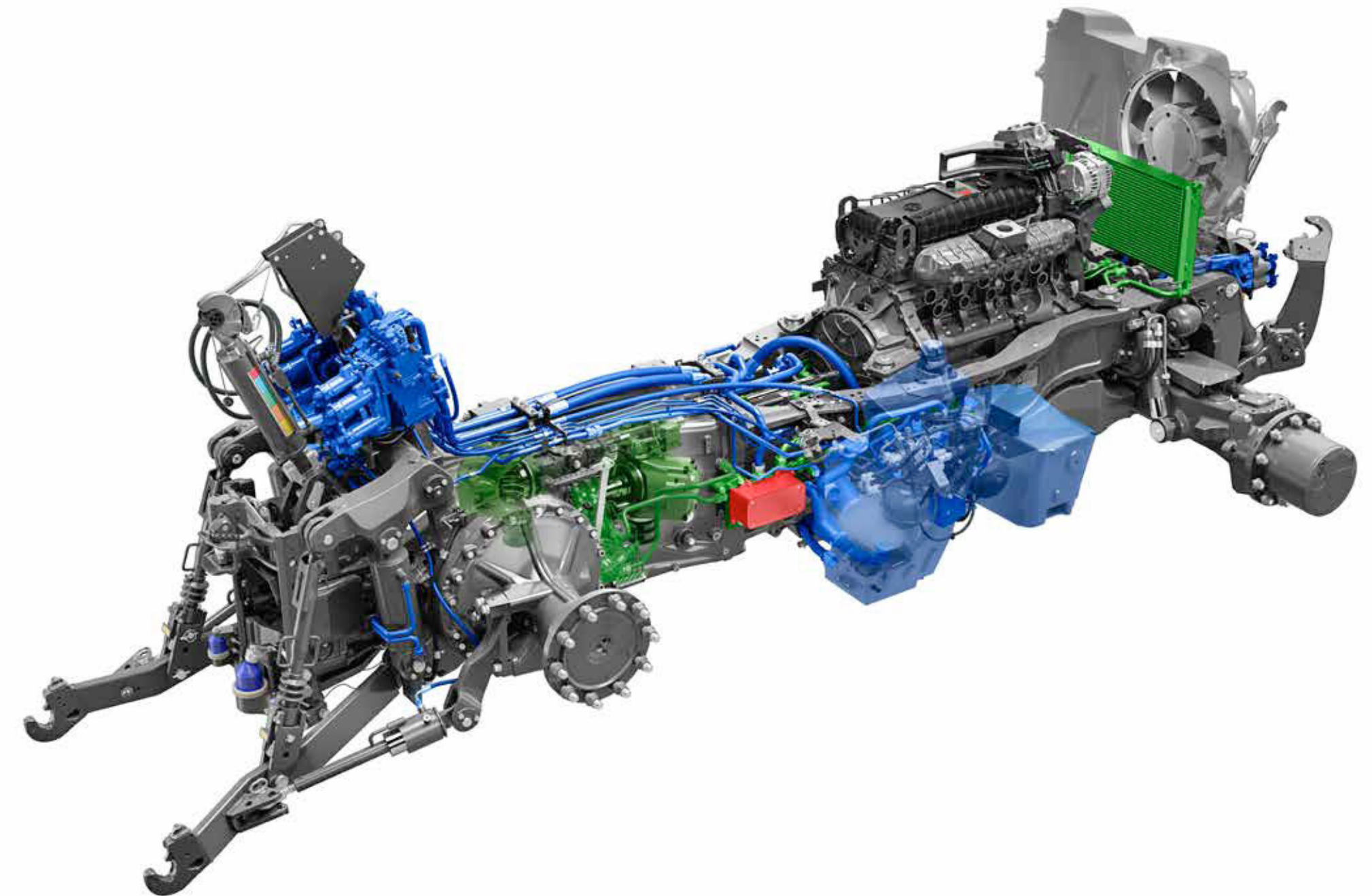
Maintenance/Diagnosis

Tuned for low costs

- Separate gearbox and hydraulic oil reservoir
- Hydraulic oil change every 2,000 h
- Transmission oil change only every 4,000 h/four years
- Remote measuring points on the transmission

Benefits - lower total cost of ownership, more sustainability

- + No dirt ingress into the gearbox due to contaminated hydraulic oil - protects the machine, greater value retention
- + Remote measuring points speed up and simplify troubleshooting without dismantling the wheel - short maintenance and repair times reduce downtimes and costs
- + Reduction in overall oil consumption thanks to longer intervals between gearbox oil changes and therefore lower maintenance costs



PTO

Concept

Automatic function & stationary operation



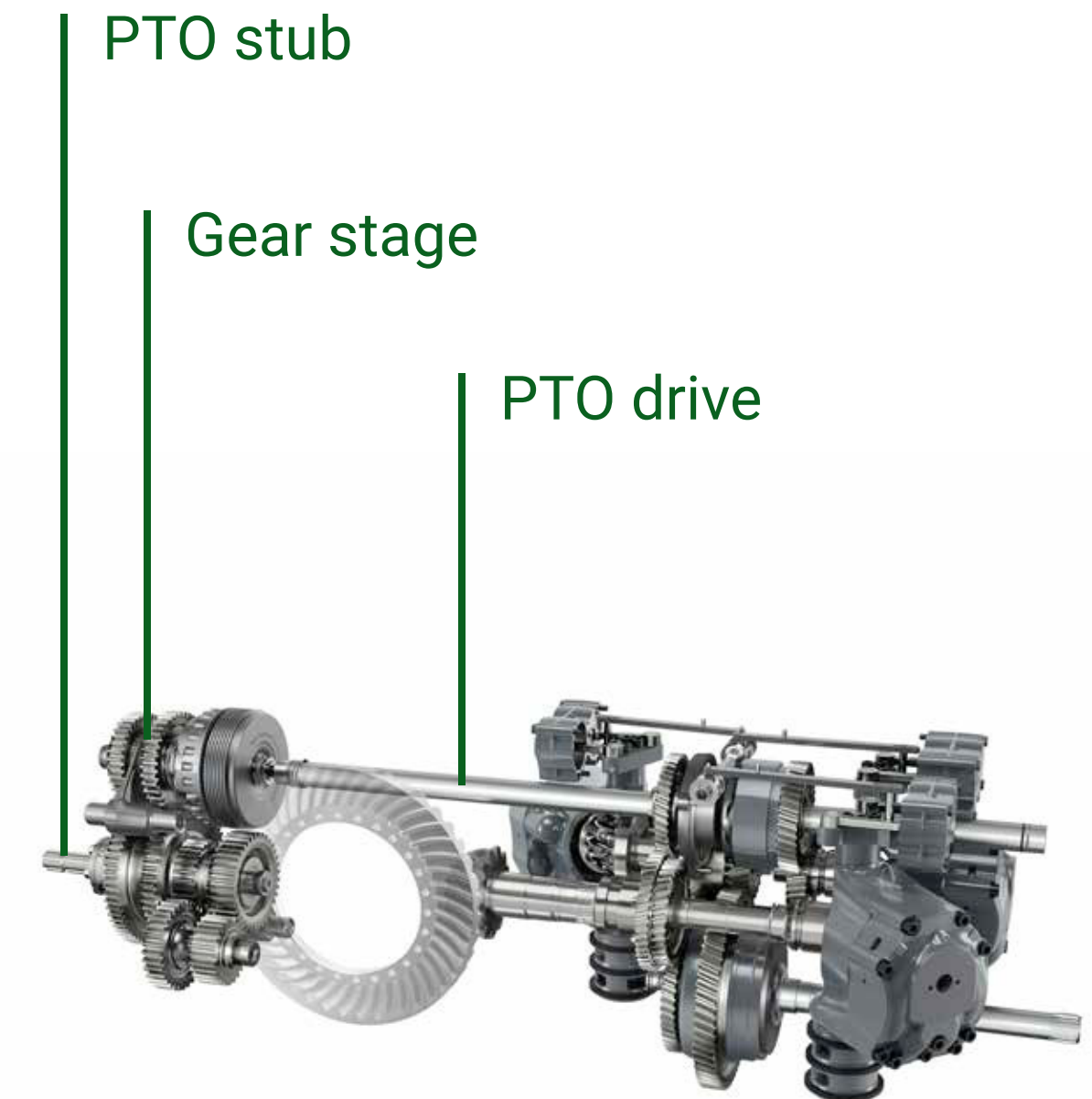
Concept

Four-speed rear PTO

- 540/540E/1000/1000E - four speeds/modes on the rear PTO
- Connection of the crankshaft and the PTO stub via only one gear stage - very high efficiency
- Electro-hydraulic speed preselection: PTO-driven implements can be operated at constant PTO speed and variable travelling speed at the same time
- External operation on both sides of the mudguard
- Automatic PTO stub detection - used flange stub is recognised by the tractor
- 'E' PTO modes (ECO) for desired PTO speed at reduced engine speed:
 - 540 rpm PTO speed at 1,618 rpm engine speed
 - 540E rpm PTO speed at 1,405 rpm engine speed
 - 1000 rpm PTO speed at 1,649 rpm engine speed
 - 1000E rpm PTO speed at 1,432 rpm engine speed

Benefits - more efficiency and convenience

- + Optimised fuel consumption thanks to maximum efficiency and highest efficiency levels
- + Work at the optimum operating point - e.g., more area coverage with a small weather window, more fuel savings with a large weather window
- + Greater convenience and more productive working time thanks to external controls on both sides of the mudguard

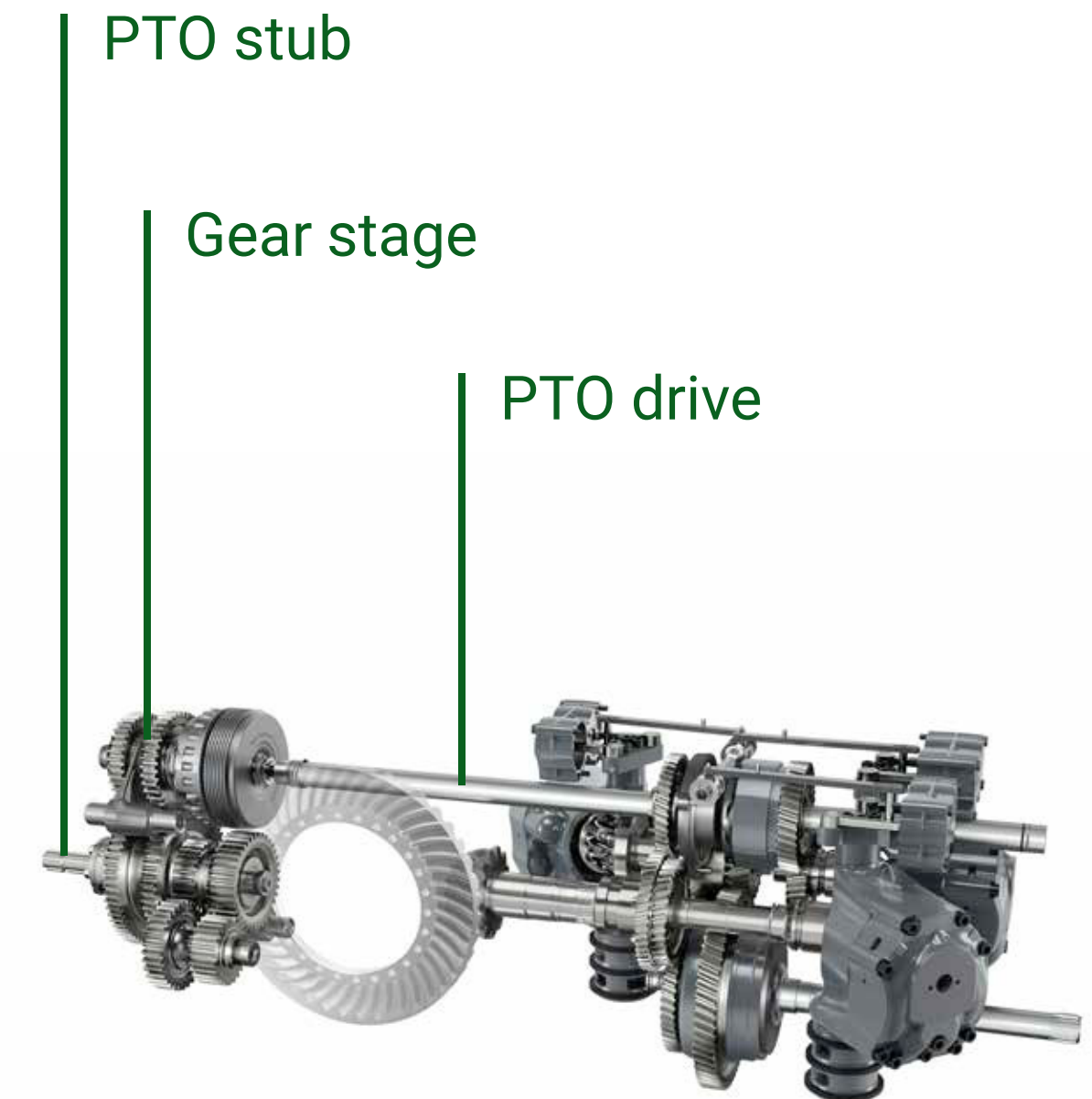


Example of the quadruple PTO

Concept

Triple rear PTO

- Technical features correspond to the quadruple PTO
- 540/900/1000 rpm - three speeds/modes on the engine PTO at the rear:
 - 540 rpm PTO speed at 1,618 rpm engine speed
 - 900 rpm PTO speed at 1,694 rpm engine speed
 - 1000 rpm PTO speed at 1,649 rpm engine speed
- Main area of application: implements that are operated at a slightly reduced maximum PTO speed of 900 rpm and have very high, continuous torque requirements
- Special transmission ratio ensures that the engine runs as close as possible to the rated engine speed of 1,700 rpm - for maximum power and torque values
- For example, special application areas such as
 - Trailed (PTO) wood chippers - very high, continuous torque requirement
 - Slurry spreading, with a low application rate m^3/ha in heavily hilly terrain - maximum power and torque values are available at higher engine speeds, the PTO does not run too fast (despite this), so that the desired application rate remains low



Example of the quadruple PTO

Benefits - more comfort, lower operating costs and more productivity

- + Always effective use of the tractor, without operator control
- + Tractor automatically operates at the best engine speed at 900 rpm on the PTO and remains at this speed - e.g., maximum throughput can be achieved when chopping wood

Concept

Fully integrated front PTO

- Electro-hydraulically controlled wet multi-plate clutch, allowing the front PTO to be completely disconnected from the drive wheel
- Flange spigot 3/8" 6-piece for front PTO 1000 rpm with cooling and without cooling
- Compartment space in the front can be used universally by providing a PTO drive - e.g., for mowers, mulchers, dam cutters or snow blowers
- Cooling of the front PTO (optional) enables optimum oil operating temperature for continuous use with the highest performance requirements
 - Cooling takes place via an additional cooler and a pump that are integrated into the oil circuit of the front PTO oil
 - The pump is also responsible for other tasks such as lubrication and actuation of the PTO clutch
 - Additional cooler is integrated in the cooling package



Benefits - more efficiency, flexibility and productivity

- + Thanks to this drive option, the tractor can be used for a wide range of work - even with wider implements
- + Thanks to the cooling, work with the highest performance requirements such as snow blowers, operation of mowers with conditioners or milling during potato harvesting can be carried out without interruption

Automatic function & stationary operation

Automatic function & stationary operation of the rear PTO

Auto function

- Switching the rear PTO on and off can be assigned to the button on the speed control lever
- The rear PTO can be switched on and off automatically when the rear power lift is in a predefined position
- Fully integrated into the Fendt TI headland management system

Stationary mode

- For safety reasons, the PTO must switch off after 7 seconds if the driver leaves the seat
- In 'stationary mode', however, the rear PTO is not switched off when the driver leaves the seat
- Stationary mode does not need to be activated to switch the rear PTO on/off via the external control on the mudguard



External rear PTO operation



Preselection of PTO speed

activate stationary mode

Benefits of automatic function - lower total cost of ownership

- + PTO is always switched on and off optimally - maximising productive operating and working time
- + For example, it is no longer possible to forget to switch the roundabout cultivator on and off - this saves working time for possible corrections

POWER LIFT

Rear power lift

Front power lift



Rear power lift

Additional equipment

- High maximum lifting force at the coupling point: 10,500 kg
- Electronic linkage control (EHR) - lifting and lowering via 'rocker' in the FendtONE armrest (incl. two memory functions)
- Draft measurement via force measuring pin
- Sufficient clearance to possibly existing forced steering balls
- Load-compensated lowering for constant lowering speed
- Active vibration damping for road travel with attachments (control via pressure sensors on the lift cylinders)
- External controls on both sides of mudguards at the rear
- Lifting strut adjustment with integrated scale
- Optional: External control rear power lift - automatic control of the lifting height of the rear power lift by the implement



Benefits - more work safety, productive working time and protection of the machines

- + Vehicle sways less when travelling on roads with large implements in the rear hydraulics
- + Easy and quick height adjustment on both sides: no additional tools required and easy to adjust thanks to the scale
- + Implement signals the correct height setting, rear power lift adjusts automatically via external control - e.g., potatoes are always placed at the same height

Rear power lift

Variants

1. Mode of action:

- Single-acting or double-acting with relief

2. lower link:

- Coupling type options: Quick coupler or ball ends
- Options for lower link categories: Spread dimension and dimensions of the lower link catch hook/ball end
- Side support/side stabilisation options:
 - Mechanical: Can be driven closed or open - when open, stabilisation and centring are performed automatically when the rear power lift is fully raised
 - Hydraulic: Stabilisation and centring are performed at the touch of a button in the FendtONE terminal at any position of the rear power lift - stabilisation and centring can be performed automatically at a specific position when lifting and released again when lowering below this point
 - 'Unstabilised' with rub blocks: lower links are held to the vehicle (not laterally stabilised) by correctly setting the spread dimension and the rub blocks - without implement: large spring holds them together

3. Top link (optional)

- Options for coupling types at the end of the top link: quick couplers or ball ends
- Options in the category: Dimensions of the top link catch hook/ball end
- Options in the type of length adjustment: mechanical via thread or hydraulic

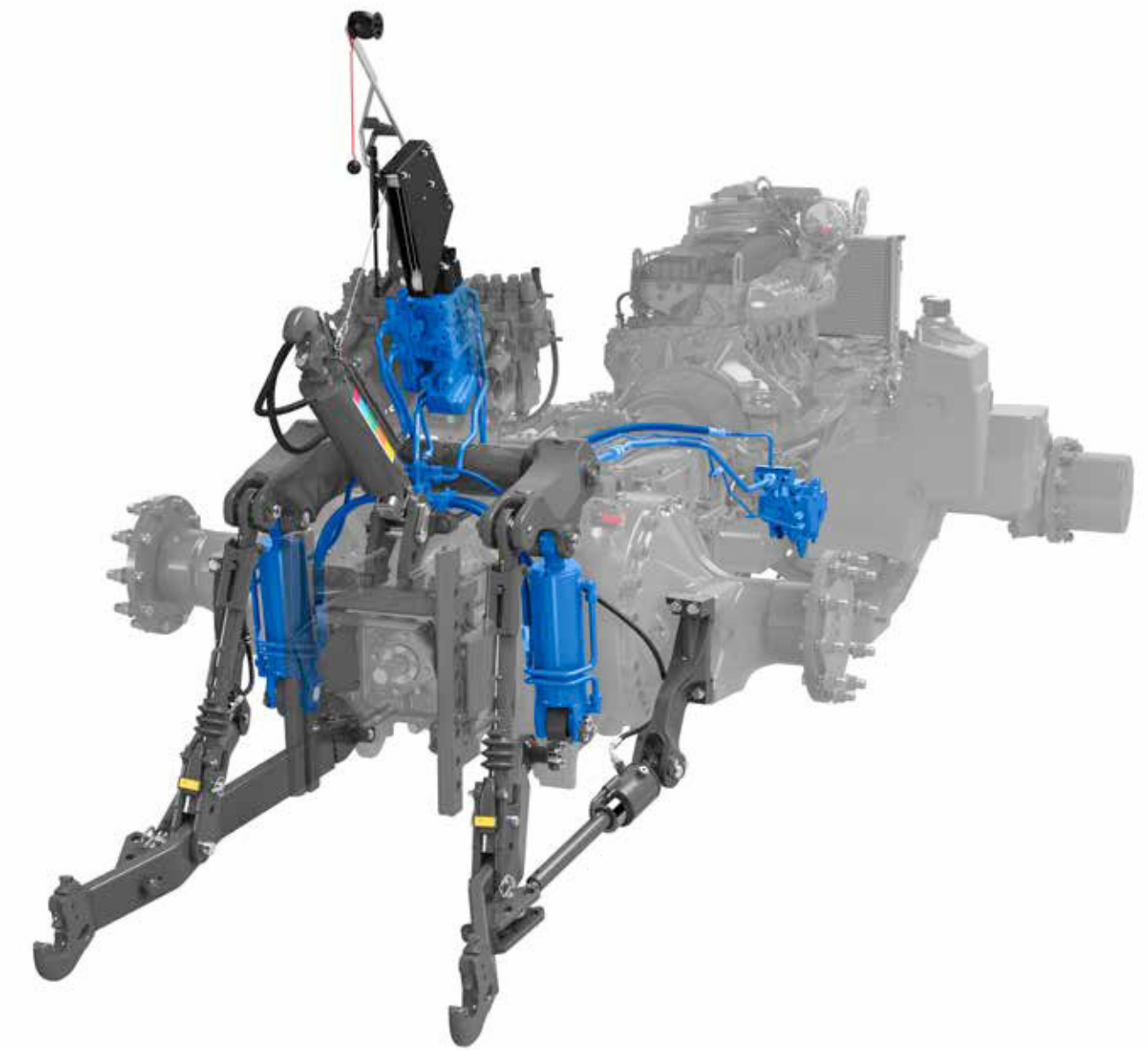


Rear power lift with quick-release hook and hydraulic side support (EU) and hydraulic top link

Rear power lift

Double-acting (DA) with pressure relief

- The mode of action is 'double-acting with relief'
- The rear hydraulics can actively pull and push
- Control: control front lift with steplessly adjustable unloading pressure of the rear power lift and thus contact pressure of the implement, both of which are kept constant
- With 'rigid tractor rail' locking function in the FendtONE terminal



Benefits - greater convenience, more precise work results and more productive working time

- + Heavy, ground-guided attachments work precisely and with high work quality even on soft ground - they follow the ground contour with constant contact pressure
- + Driver does not have to correct manually and can control other processes
- + Greater traction and less slip thanks to weight transfer to the rear axle
- + By pressing the rear hydraulics, the tractor can better pull soil tillage implements into hard soil
 - Operation of the implement from the desired point
 - Headland retains intended size
 - Driver does not have to reverse the trailer
- + Quick tyre change by jacking up the tractor using the pressure function of the rear hydraulics

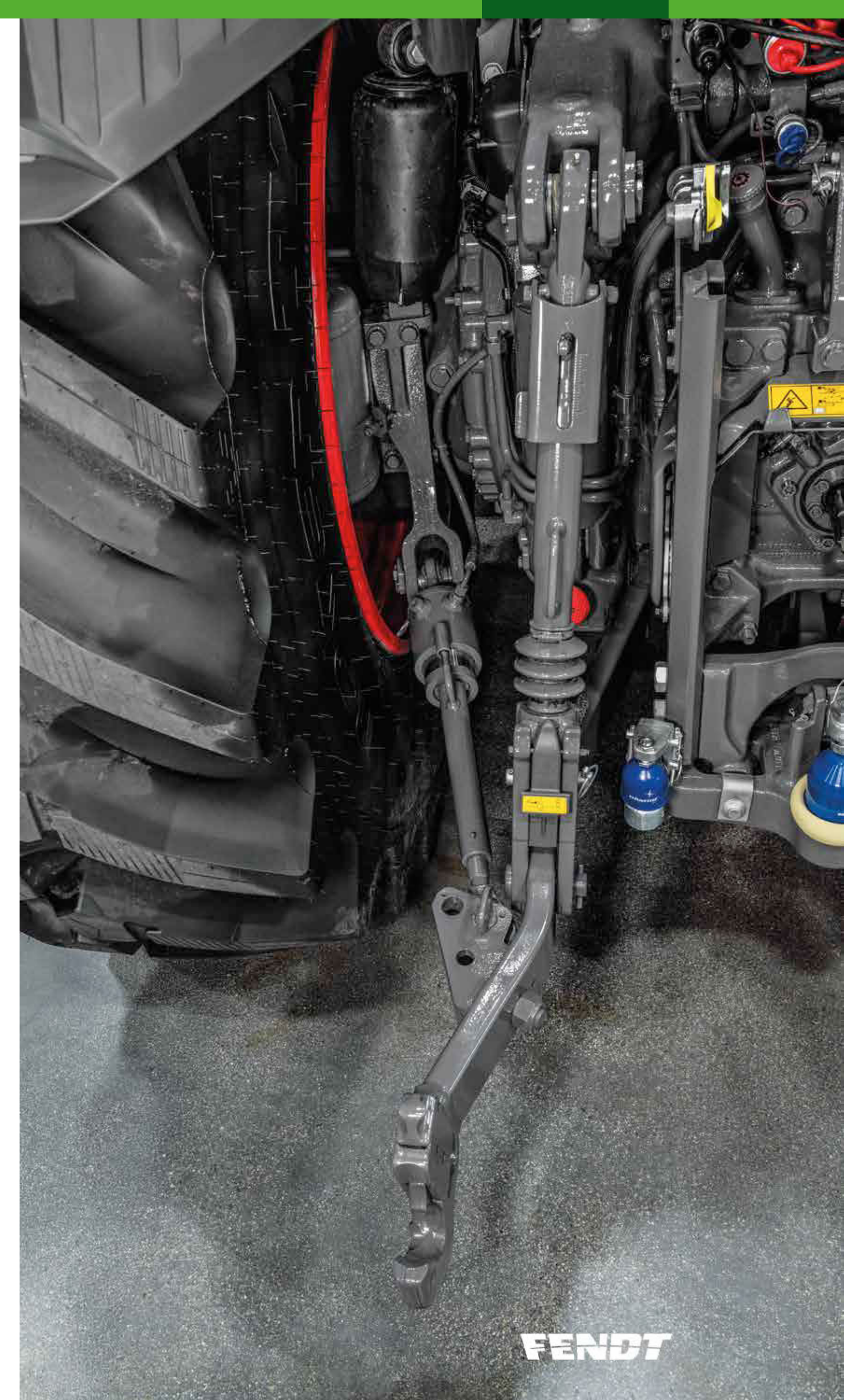
Rear power lift

Lower link with parking position.

- Adjust lower link height without tools
- Moving a pin and pushing up the lower link until it clicks into place, shortens lift struts and puts the lower links into parking position
- This creates 15 cm more clearance between the lower link and the PTO and/or drawbar of the trailed implement

Benefits - significantly more comfort, work safety and more productivity

- + Even with critical devices, lower links do not need to be removed with tools
- + Maximum manoeuvrability at all times thanks to the 15 cm clearance gained - no repositioning necessary
- + Damage to safety-relevant components is prevented, e.g., no wear on the PTO and drawbar when turning - less downtime, maintenance and repair costs
- + Adjustment is much faster, which means more productive working time is available



Rear power lift

Top link - Relief systems

Hydraulic top link lifting aid (optional)

- Support/relief system for the top link at the rear - only available in conjunction with hydraulic top link
- When the top link is raised and lowered, part of the top link weight is absorbed via a gas pressure damper and cable pull mechanism

Relief when repositioning the top link (standard)

- Standard if no hydraulic top link lifting aid is installed
- Top link holder with integrated ball holds the top link in the parked position when no implement is mounted
- Gas struts on the top link holder takes the weight of the top link
- Support for the operator if the upper linkage point needs to be changed and the top link is repositioned in the hole pattern on the tractor - e.g., for fertiliser spreaders in the three-point hitch



Benefits - more convenience, work safety and less time wasted

- + Back-friendly mounting and dismounting of implements thanks to weight relief
- + Attaching and removing implements more easily and quickly - more productive working time
- + The top link can no longer slip away completely and the bolt can simply be repositioned in the hole pattern

Front power lift

Additional equipment

Features of the front power lift:

- High maximum lifting force at the coupling point (lower link catch hook): 5,300 kg
- Electronic linkage control (EHR) with position sensors
- Own hydraulic supply - EHS valves in the rear are not used by the front power lift
- Vibration damping through nitrogen dampers
- Leakage oil reservoir for auxiliary control units integrated in lower link frame
- Optional: max. two EHS valves and optional unpressurised return in the front
- External operation at the front of the tractor
- 9-pin device socket in the front
- Optional: Implement control at the front, via which an ISOBUS socket is installed in the front
- Integrated side panelling to protect hydraulic lines from damage and soiling
- Cylinder with bellows protection
- Tool-free opening/closing and disassembly
- Folded lower links right up close to the vehicle
- Delivery includes top link with quick-release hook of the same category and bracket



Front power lift

Variants

Variants:

- Comfort ballast support
- Cat. 2 sa front power lift with position control
- Cat. 2 front power lift with position and relief control

All variants offer a short front projection thanks to the deep integration into the vehicle.



Comfort ballast support



Front power lift Cat. 2

Front power lift

Benefits at a glance

More productive working time, lower total cost of ownership, greater comfort and more occupational safety

- + The high continuous lifting force means that the front-mounted implement can be engaged and disengaged as required and very sensitively
- + Simple operation of the EHS valves, as the valves are always the same due to the separate hydraulic supply and shut-off valves do not need to be repositioned
- + Thanks to vibration damping, no rocking while driving, increased control when travelling on the road and protection of the machine
- + Easy vehicle maintenance and high level of component protection thanks to side panelling and bellows
- + No restrictions on manoeuvrability and less risk of collision thanks to folded lower links and short front projection
- + Easy adaptation of the lower links to the application situation thanks to tool-free, simple opening/closing and removal
- + EHR with position sensors: Front power lift can move to a specific position and driver reaches his destination effectively



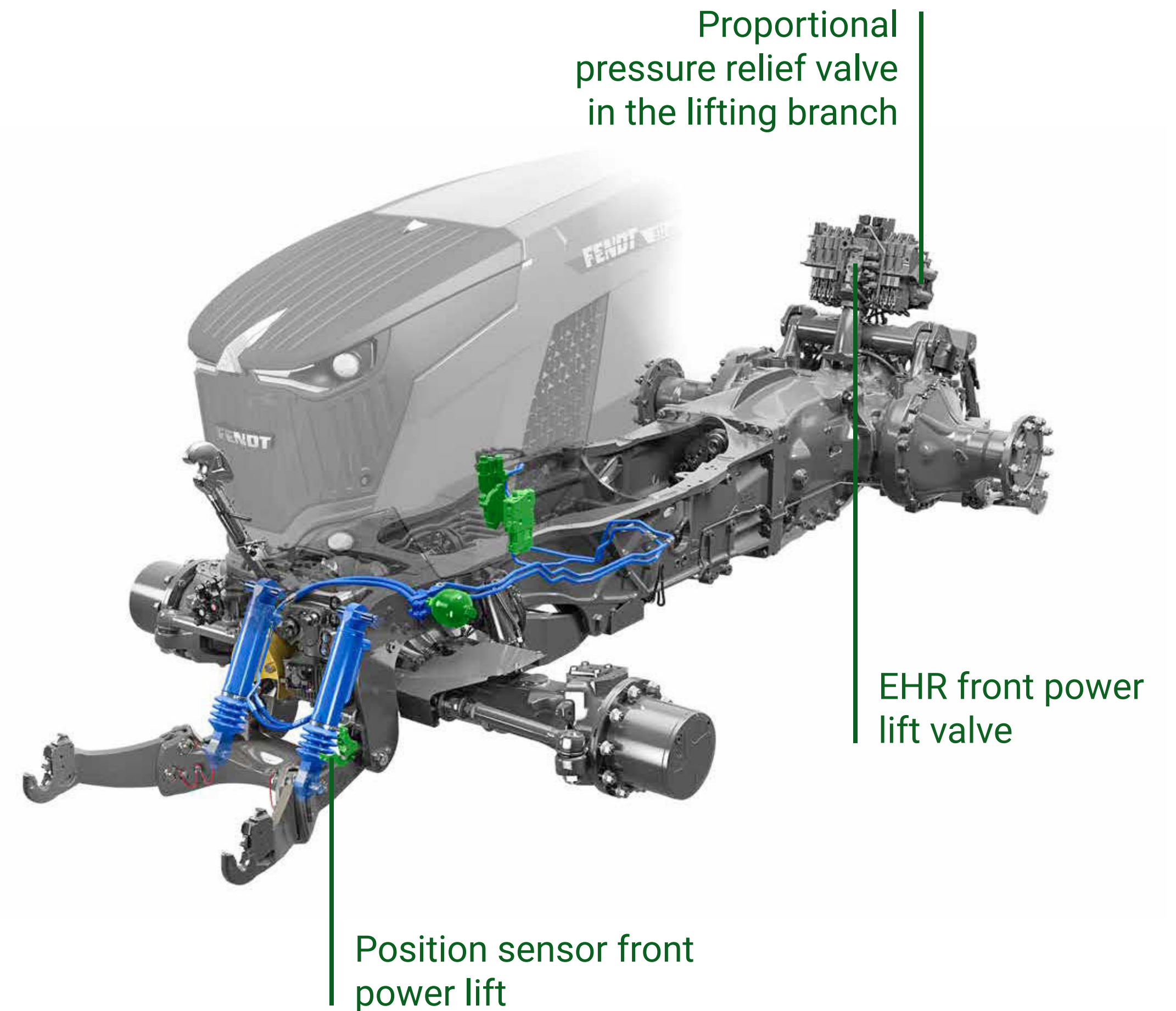
Front power lift

Position control and relief control

- From 0.6 km/h active, dynamic control of the relief pressure of the front power lift and thus the contact pressure of the implement, both of which are kept constant
- Adjust the relief pressure in the terminal
- Relief effect due to proportional pressure relief valve and regulation via pressure sensor

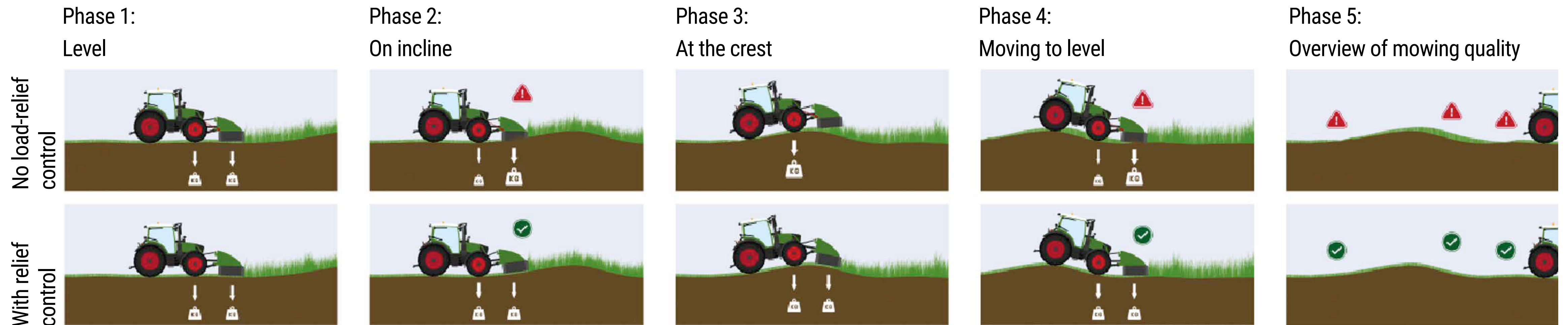
Benefits

- + Optimum traction, manoeuvrability and directional stability, as the front axle is automatically loaded as required
- + Driver does not have to correct manually and can focus on other processes
- + Quick tyre change by jacking up the tractor using the pressure of the front hydraulics



Front power lift

Position control and comfort front lift - practical 1/3



Front power lift

Position control and comfort front lift - practical 2/3

Phase 1: Implement follows the ground contour exactly at ground level

Phase 2: Transition to hill

- Without comfort front lift, the mower can damage the sward and soil because the springs are compressed too much and therefore do not provide enough relief. This gives higher contact pressure from the mower. Disadvantage: dirt gets into the feed and reduces the quality.
- With comfort front lift: Pressure sensor keeps the set contact pressure of the mower (actual and target pressure) constant. When the ground height changes, the mower adjusts the pressure back to the setpoint. The mower is regulated upwards until the set pressure is reached again. Benefit: Consistent cutting height without dirt in the forage and better regrowth.

Phase 3: Transition to peak

- Without comfort front lift: Mower deck springs are stretched more and thus relieve the mower deck too much - it deflects upwards. Cutting height is not maintained, crop remains partially standing.
- With position control and relief control: pressure sensor detects pressure changes and regulates downwards - stock is cut at the optimum height.

Phase 4: Transition to level

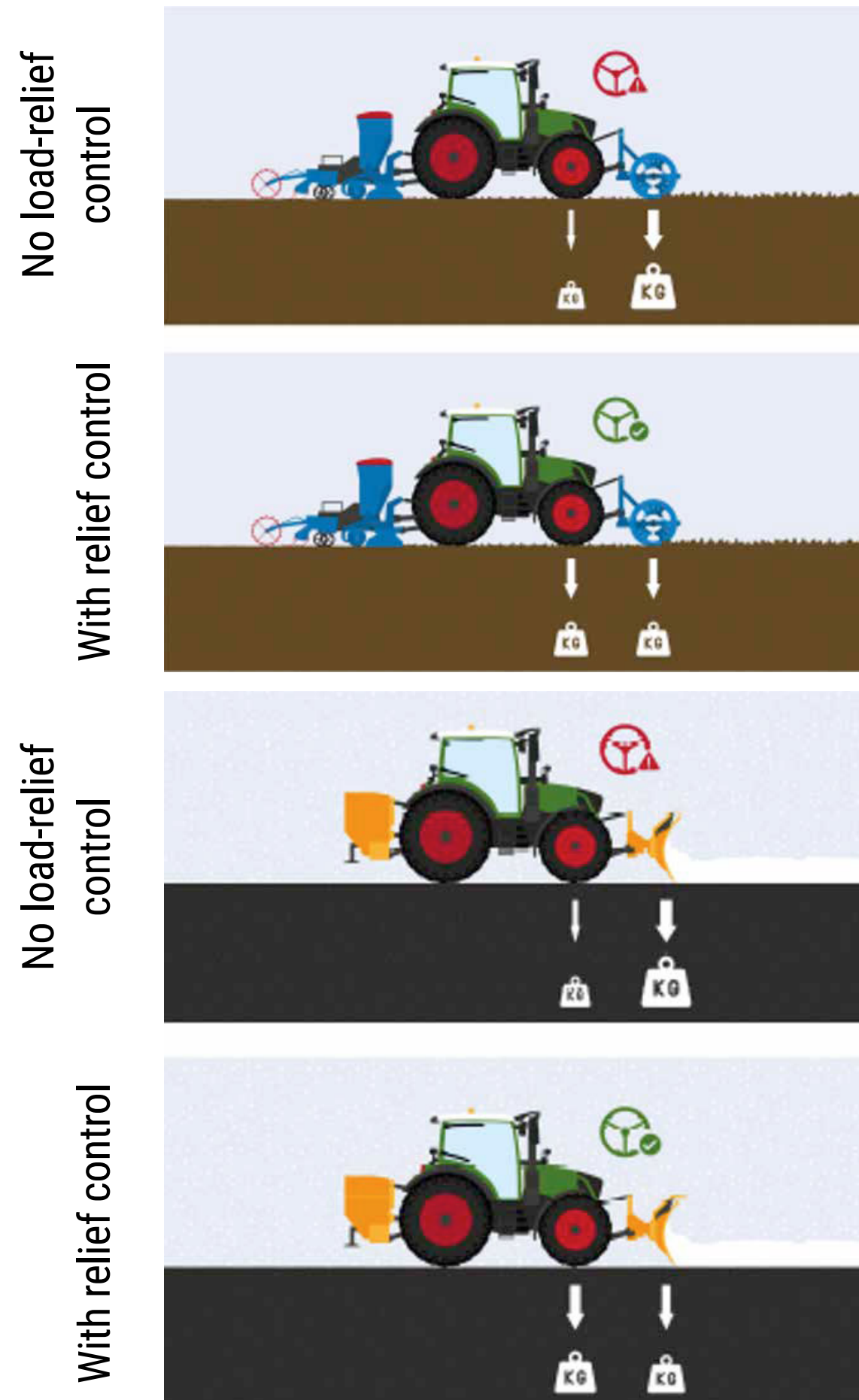
- Without comfort front lift, the mower can damage the sward and soil because the springs are compressed too much and therefore do not provide enough relief. This gives higher contact pressure from the mower. Disadvantage: dirt gets into the feed and reduces the quality.
- With comfort front lift: pressure sensor keeps the set contact pressure of the mower constant. Differences in ground height cause a change in pressure, which is actively adjusted back to the setpoint. The mower is regulated upwards until the set pressure is reached again. Benefit: Consistent cutting height without dirt in the forage.

Phase 5: Overview of cut and forage quality in key phases - benefits of the position control and relief control:

- Higher cutting and forage quality thanks to uniform, controlled cutting height and protection of the sward thanks to even ground pressure
- No relief springs

Front power lift

Position control and comfort front lift - practical 3/3



Combination of implements with front furrow press

- Without control: heavy packer lies on the ground and relieves the front axle - front axle with insufficient traction and steering ability. Front furrow press sets direction.
- With control: The weight of the device is transferred to the front axle via pressure relief. Benefit: best traction, steering ability, directional stability and clean, controlled levelling.

Winter service combination with snow plough

- Without control: Heavy snow plough lies on the ground and takes the load off the front axle - front axle with insufficient traction, steering ability and directional stability. Higher wear on the snow plough and risk of damage when crossing manhole covers.
- With control: Via pressure relief: Snow plough - implement weight is transferred to front axle via set contact pressure. Benefit: best traction, steering ability and directional stability for even results. Reduced equipment wear and fuel savings.

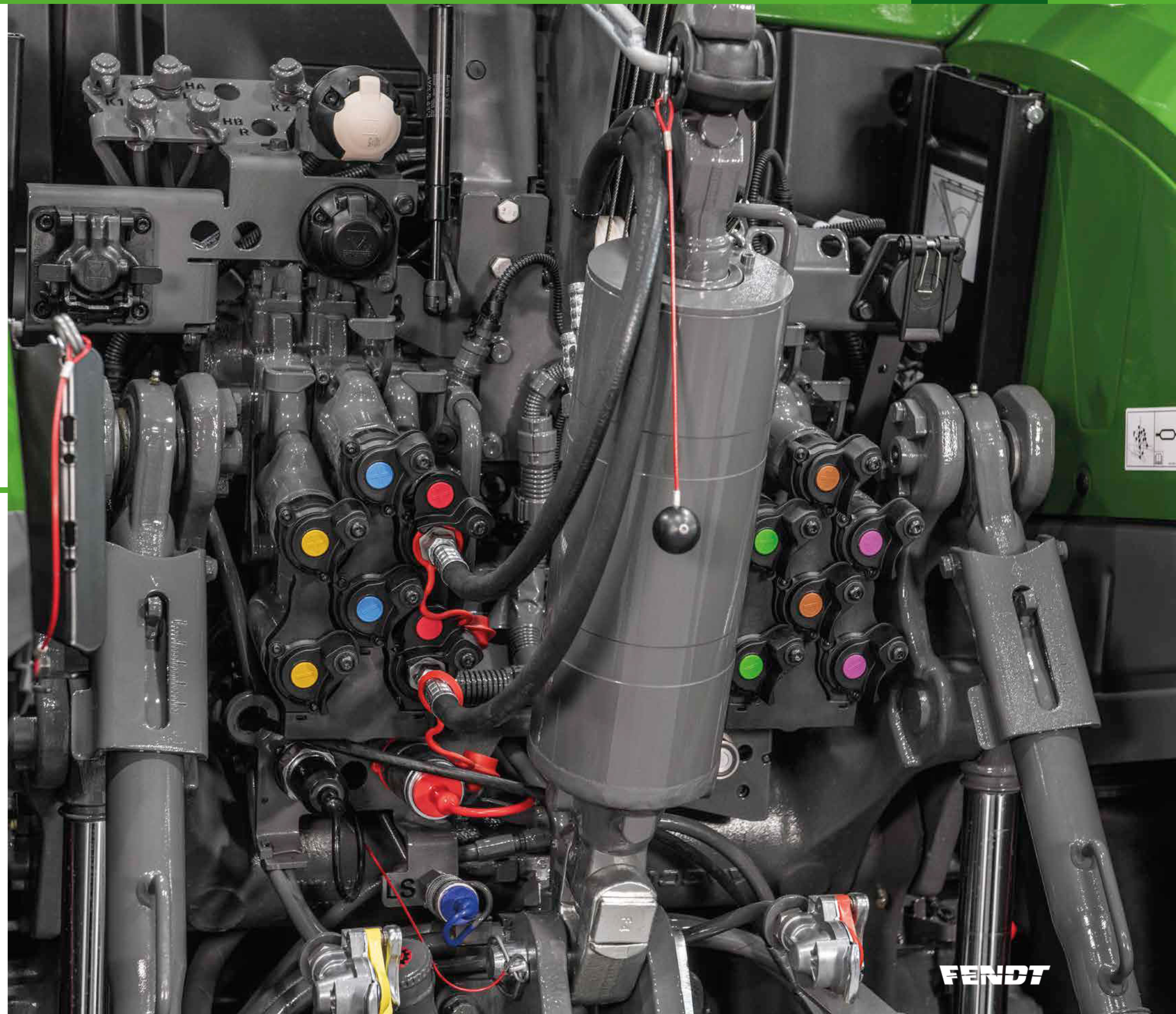
HYDRAULICS

Concept

Working hydraulics

Flat Face Coupling (FFC)

Automatic steering axle lock



Concept

Features

- 3 different versions: 165 l/min, 220 l/min or 385 l/min flow rate
- At 385 l/min, two electronically controlled load-sensing pumps (e-LS) with two separate hydraulic circuits are installed:
 - 1st pump 165 l/min
 - 2nd pump 220 l/min
- Variable flow pumps with electronically controlled load sensing (e-LS):
 - Power+: standard e-LS pump with 165 or 220 l/min pump capacity
 - Profi/Profi+: optional e-LS pump with 385 l/min pump capacity
- Pilot pressure generation via e-LS pump instead of power steering pump (gear pump)
- 205 bar system pressure
- Large removable oil quantity of 85.5 litres
- Separate transmission and hydraulic oil supply with heat exchanger concept
- Optimum ergonomic arrangement of the controls for the working hydraulics and power lift in the FendtONE armrest
- Wide range of setting options via the terminal (free assignment of operating locations, time function, oil quantity setting, etc.)
- Hydraulic oil preheating
- High hydraulic oil cooling capacity as standard thanks to return flows via plate heat exchangers
- Hydraulic oil change intervals of 2,000 operating hours or 2 years (biohydraulic oil 1,000 h or 1 year)

Concept

Features - Benefits

Benefits

- + High pump capacity of up to 385 l/min for work with high oil volume at low engine speed
- + Low maintenance costs due to long oil change intervals
- + Up to 2,000 hrs oil change interval (not bio-oil) under normal operating conditions with Profi/Profi+ thanks to electronic oil filter monitoring
- + Very good steering response, even with parallel consumption
- + High removable oil quantity ensures ample supply for large consumers
- + Use of bio-hydraulic oils supported due to separate oil reservoir
- + No oil mixing/dirt ingress
- + Outstanding ease of use thanks to FendtONE
- + Faster full functionality even in cold weather

Concept

2-circuit high-performance hydraulics

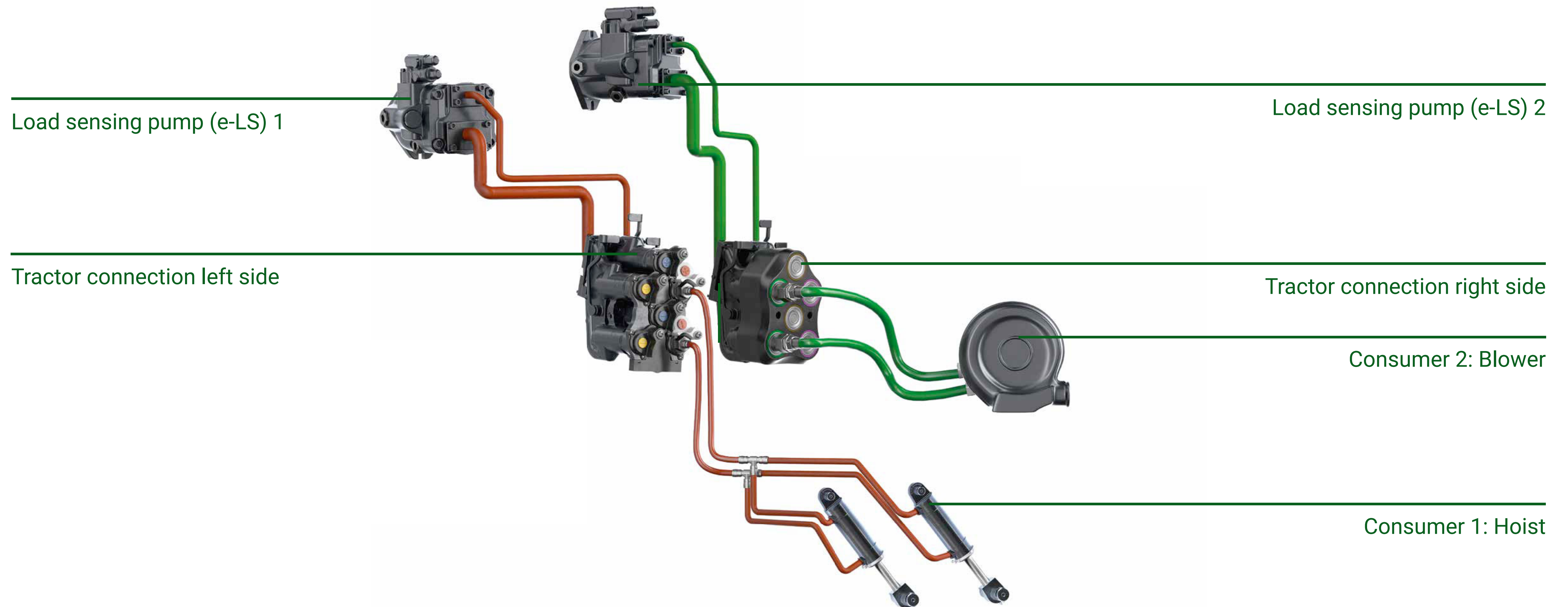
- 1. e-LS pump supplies the left hydraulic block, steering, front axle suspension, Power Beyond and front/rear power lift
- 2. e-LS pump (optional) supplies the right-hand hydraulic block
- Two independent priority functions possible with two pumps
- With two e-LS pumps, device functions can be specifically connected according to their oil requirements - two independent pressure levels can be realised. E.g.:
 - A control unit with a requirement for high pressure and low oil flow (e.g., hydraulic cylinder)
 - A control unit with a requirement for low pressure and high oil flow (e.g., oil motor).
 - Connections are distributed to both pumps. Each pump only supplies the oil required in each case - no throttling losses occur
- Power Beyond connection:
 - Power Beyond connection is supplied by the 1st pump, which also supplies the left-hand control block
 - Additional device functions should be connected to the right-hand hydraulic block - this allows the 2nd pump to supply the other consumers on control units on the right-hand hydraulic block as required
- Customer s must be informed about the advantages of being able to use the system

Benefits

- + With the right connection, heavily reduced throttle losses
- + Low power consumption
- + Very efficient and fuel-saving system with separate control for both pumps

Concept

Connection example for precision seed drill



Concept

Additional hydraulic oil cooler

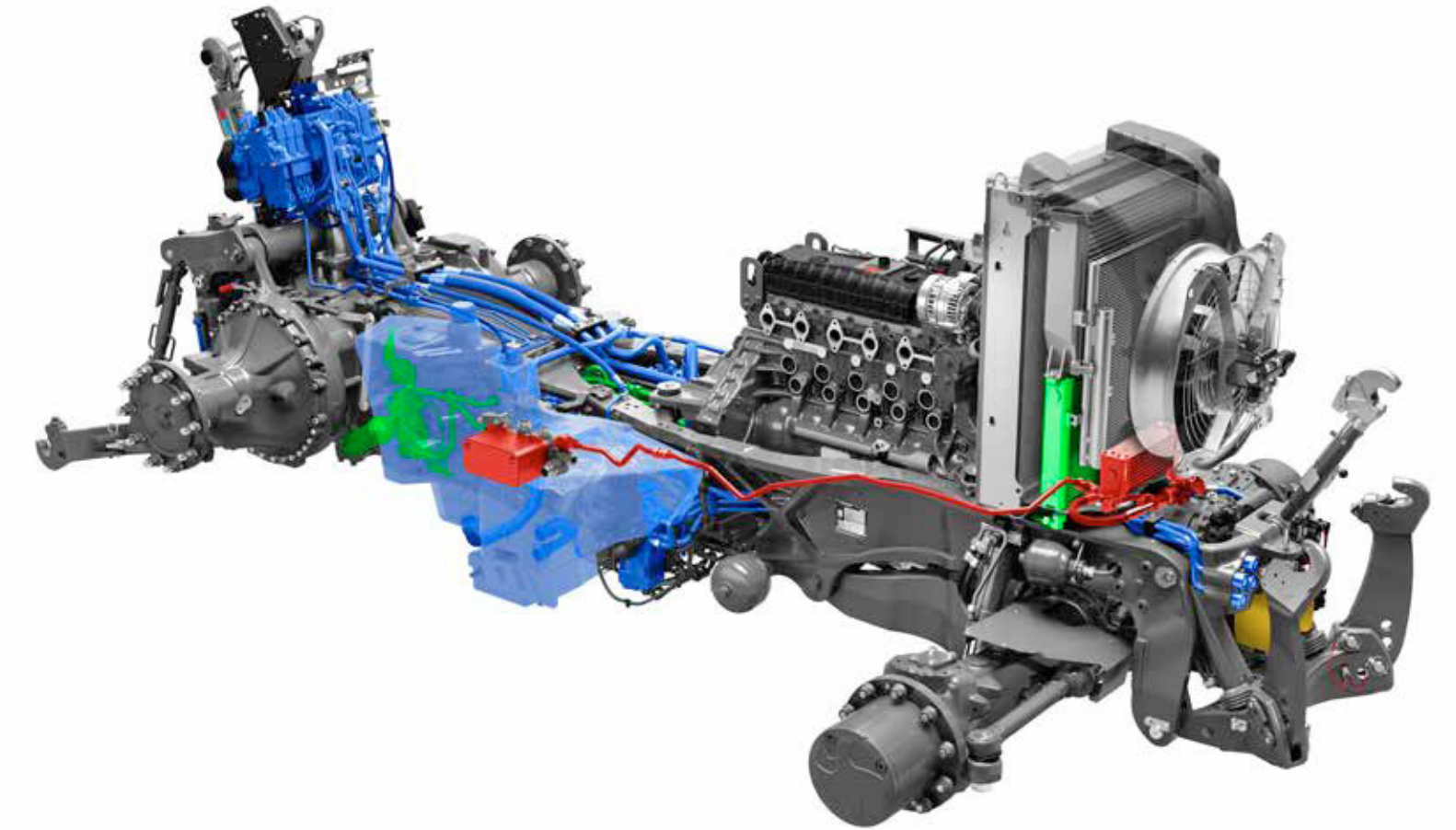
Consists of two components:

1. Additional cooler for the hydraulic oil integrated in the radiator package in the front

- Cooler is integrated into the hydraulic circuit of the fan oil motor
- Hydraulic oil flows after the fan oil motor with increased heat through the additional cooler and is cooled
- The hydraulic oil then goes back into the hydraulic oil tank through the return filter, as usual
- Additional radiator therefore always cools because the fan oil motor is always running

2. 1.5-fold plate heat exchanger (instead of the single one in the standard version) in the regular cooling circuit for the hydraulic oil

- Increases the heat exchange between hydraulic and transmission oil, so that hydraulic oil can transfer more heat to cooled transmission oil
- Optionally available - fitted as standard when 2-circuit high-performance hydraulics are selected
- Not in conjunction with front PTO 1000 rpm with cooling - then the same additional cooler is used to cool the oil of the front PTO



Benefits - more work safety, efficiency, productivity and comfort

- + Enables implements with the highest demands on hydraulic and hydraulic recooling performance to be met at high ambient temperatures:
 - For example, when using large precision seed drills at temperatures of up to 43 °C
 - More area coverage leads to maximum productivity, machine is always operating at its economic optimum
- + No exceeding of the permissible operating temperature - protects the vehicle and prevents accidents
- + Work can be carried out without interruptions - convenient for the driver

Concept

Overview of front and rear hydraulics

Max. 6 valves in the rear, couplings (optional: UDK, DCUP, FFC)

Test connections

Cable plug = external control

Trailer socket

ISOBUS

Free flow return

Power Beyond - pressure line

Load Sensing - Control line

Front valve connections

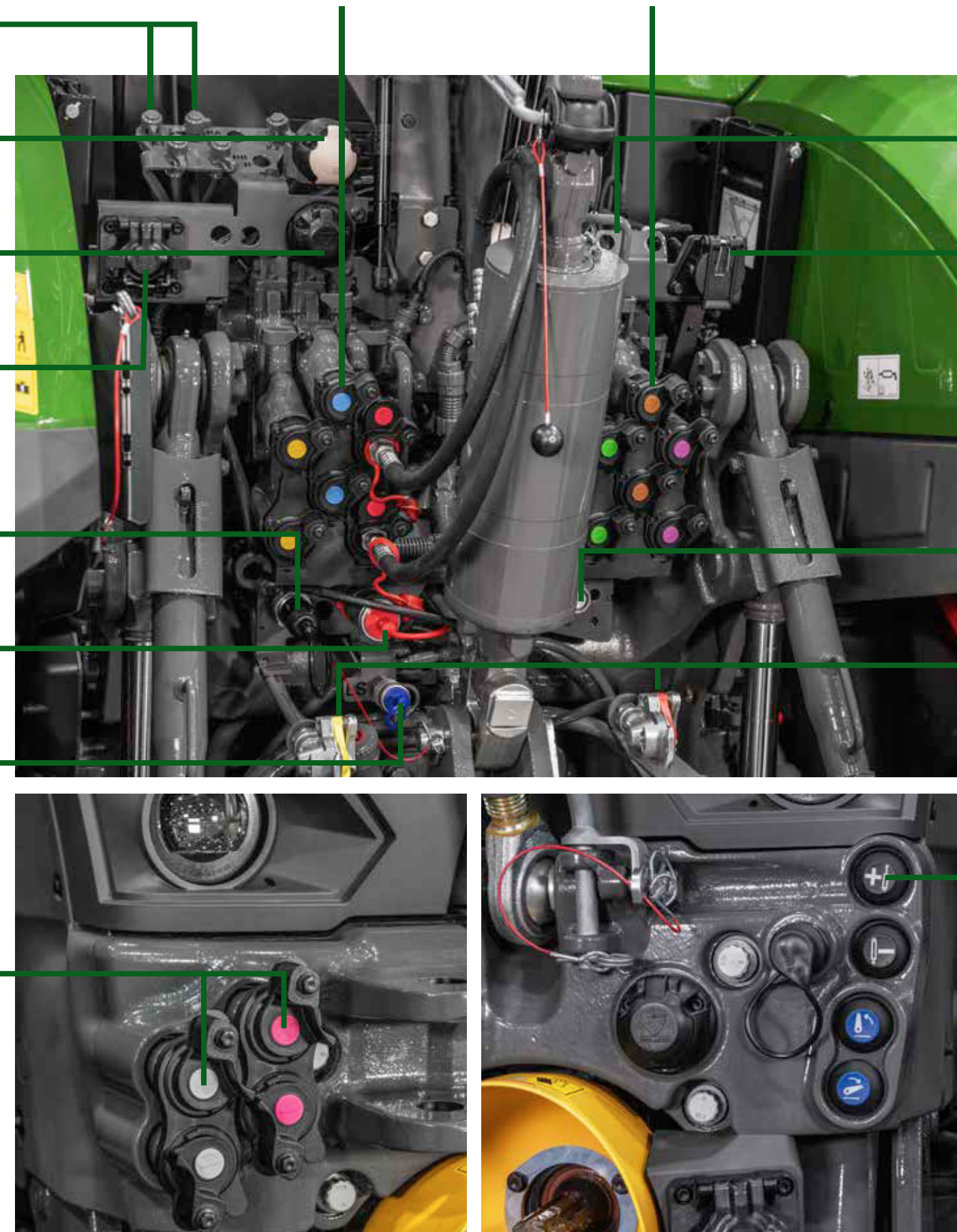
Switchable 3-pin socket outlet

ABS socket

Case Drain = Leakage oil line

Pneumatic trailer brake

Valve actuation



Working hydraulics

Overview

- Minimum 3 rear valves; either CUP, DCUP or FFC
- UDK: SB24 valves: seat-tight on one side, without manual override, max. flow rate: 140 l/min at the rear, 120 l/min at the front
- DUDK/FFC: SB34 valves in combination with modular hydraulic coupling system (1/2", 3/4"; 5/8" FFC), seat-tight on both sides; with manual override, 120 l/min max. flow rate at the front, 140 (1/2" DUDK, 5/8" FFC) or 170 l/min (3/4" DUDK, 5/8" FFC) max. flow rate at the rear:
 - Flow rate of 140 l/min standard in the rear
 - High flow rate of up to 170 l/min (max. 2 valves: 3rd and 4th control unit, with 3/4" DCUP or 5/8" FFC)
- NEW: electronically controlled load sensing (e-LS) as the basis for further future features
- Front valves in 1/2" UDK or 5/8" FFC with a flow rate of up to 120 l/min
- Pressureless return available in the front (FFC)
- DCUP couplings with relief levers
- Flat Face Coupling (FFC) - flat face couplings available from the factory

Benefits

- + Simple, precise operation via finger tip controls, cross-gate lever and multifunction joystick
- + Compact design with good accessibility and high coupling comfort
- + High flow rate for various consumers
- + Optional 2-circuit high-performance hydraulics to supply appliance functions according to their oil requirements and to meet the highest demands on delivery capacity

Working hydraulics

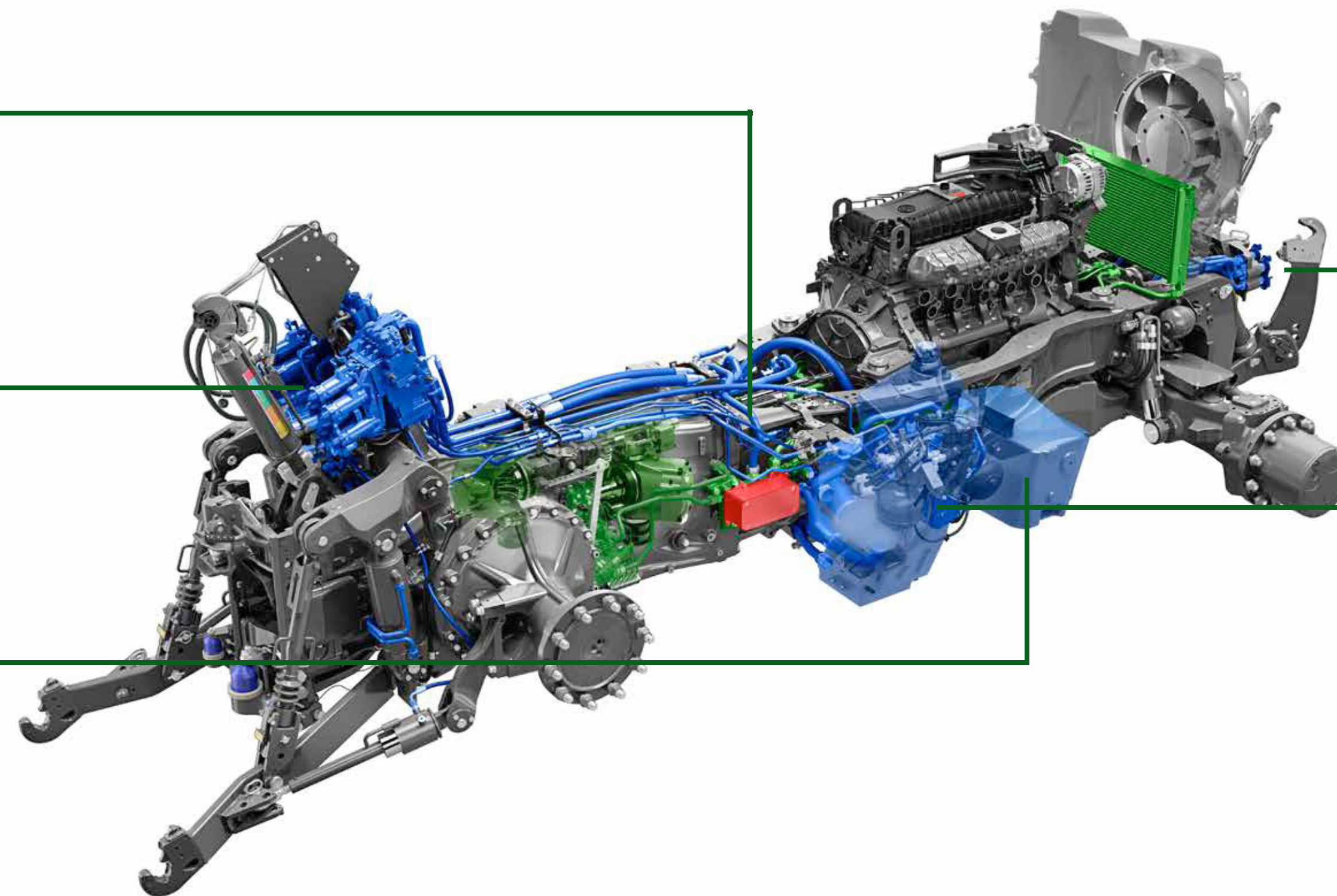
One or two variable flow pump(s)
with electronically controlled load
sensing

Up to 6 rear valves

Hydraulic oil tank
85.5 l removable oil quantity

Up to 2 front valves

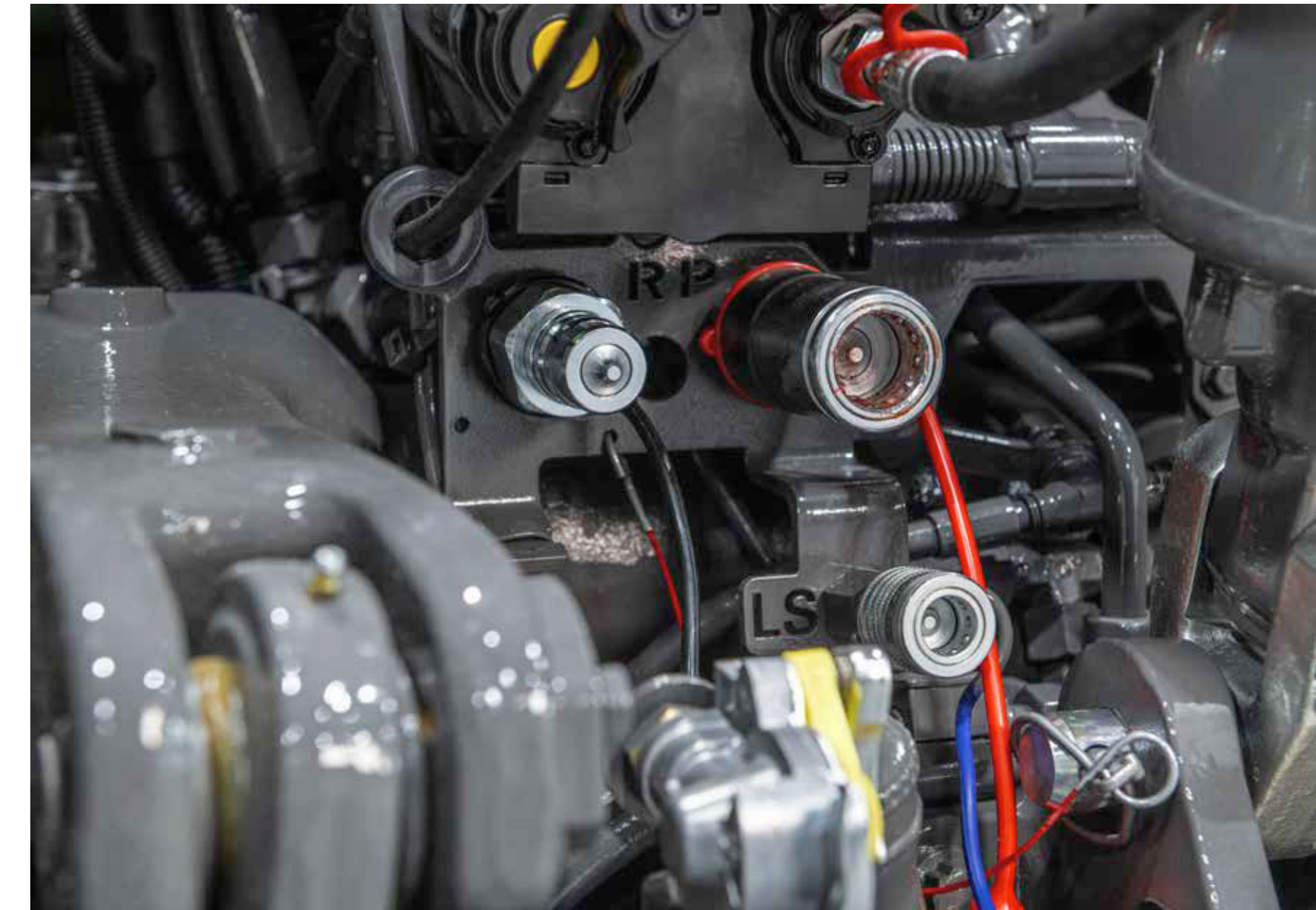
Central control block



Working hydraulics

Equipment features (1/2)

- Max. number of valves with Power+:
 - Max. 5 da valves in total (4+1 or 5+0; rear 4/5, front 0/1) plus Power Beyond
- Max. number of valves for Profi/Profi+:
 - Max. 8 da valves in total (front 2, rear 6) plus Power Beyond
- Power Beyond connection in two versions: classic with 3/4" socket or as 5/8" FFC:
 - Associated unpressurised return with filter is included in the respective version
 - Connections for Power Beyond (P, pressure), the associated unpressurised return (R, return) and the control line (LS, load sensing) are located on the left-hand side - coupling can be carried out quickly and conveniently on the side on which the operator enters and exits the vehicle
 - With Power Beyond FFC, a leakage oil line, return line rear unpressurised (D, drain) is automatically connected in the configuration - connection is on the right-hand side



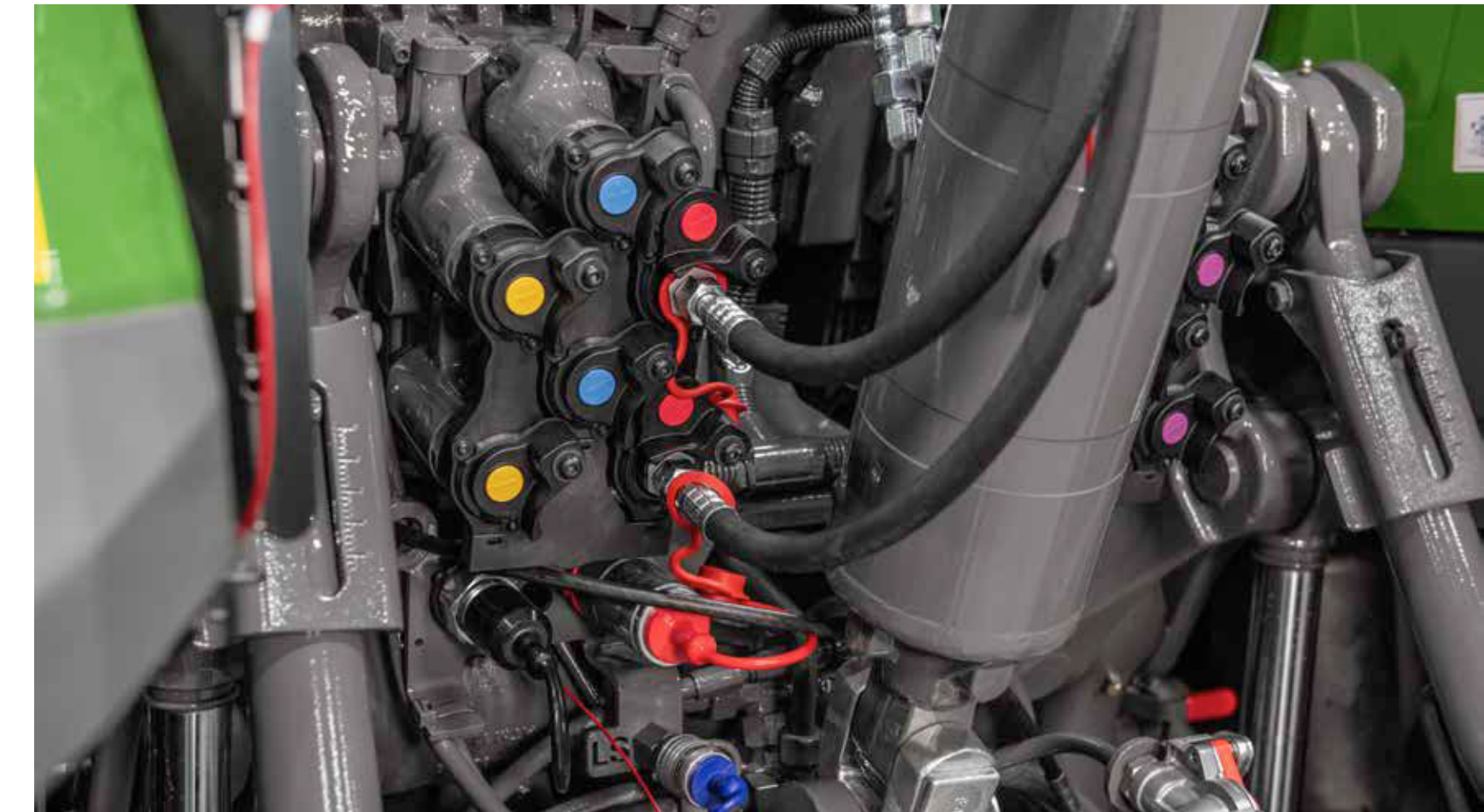
Benefits

- + Double-acting control units with floating position
- + Numerous setting options
- + Simple and convenient operation via multi-function drive lever (proportional), and cross-gate lever or 3L-Joystick and finger tip spools

Working hydraulics

Equipment features (2/2)

- Choice of valves between:
 - UDK couplings (can be coupled under pressure; flow rate of 140 l/min; series)
 - DCUP couplings (can be coupled on both sides under pressure, flow rate of 140 or 170 l/min, optional, flow rate of 170 l/min only on the 3rd and 4th valve with 3/4" connections)
 - FFC couplings (Flat Face Coupling, flat sealing, can be coupled on both sides under pressure, flow rate of 140 or 170 l/min, flow rate of 170 l/min only on the 3rd or 4th valve, always as 5/8" cartridge, Power Beyond and front valves available as FFC, optional)
- Left and right valve block can be equipped independently with FFC couplings, either standard or FFC couplings available on one block
- Flow rate adjustable for each valve (+ and - separately)
- Removable hydraulic oil quantity: 85.5 litres
- External actuation on both sides available for a freely assignable additional control unit



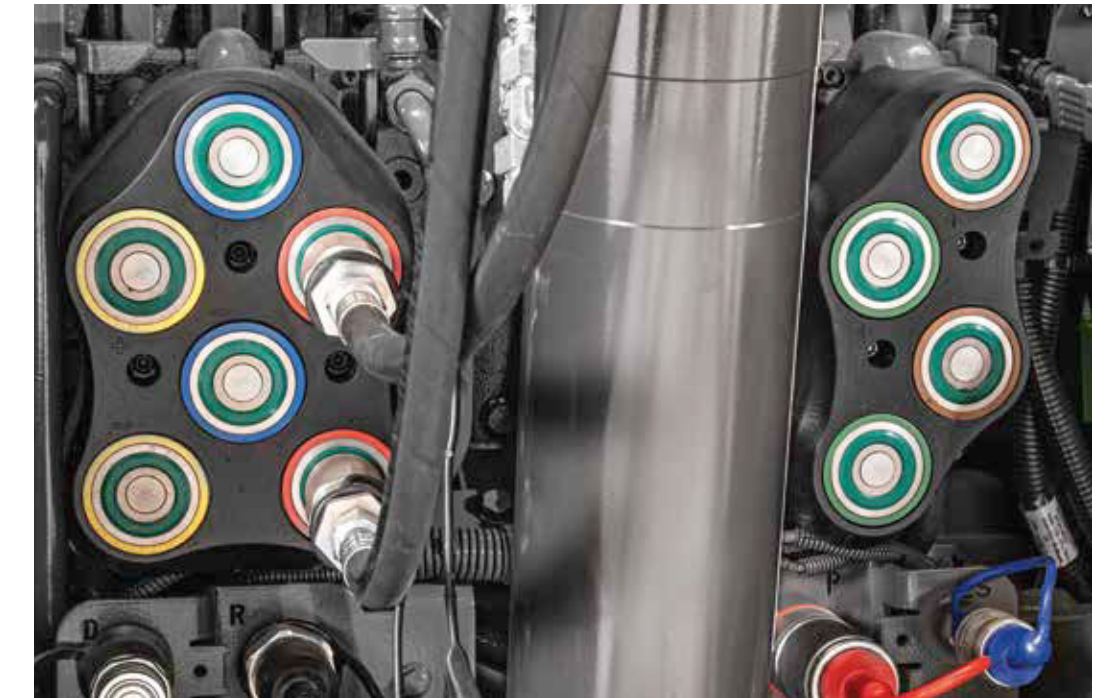
Benefits

- + Double-acting control units with floating position
- + Numerous setting options
- + Simple and convenient operation via multi-function drive lever (proportional), and cross-gate lever or 3L-Joystick and finger tip spools

Flat Face Coupling (FFC)

Flat-face hydraulic coupling system

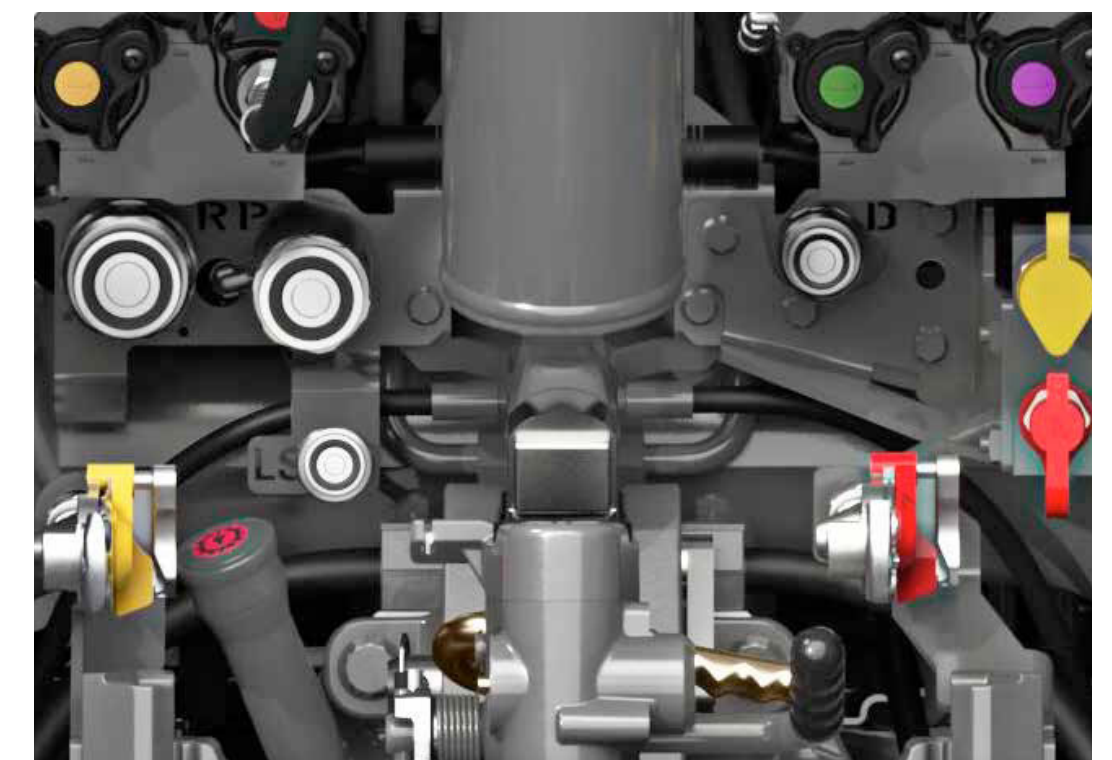
- 5/8" Flat-Face Coupling (FFC)
- Can be coupled under pressure on both sides
- Combination of different connections (standard sleeves and FFC cartridges) technically possible
- Comfortable lever operation
- Proven colour coding of the connections
- Easy to clean surface
- Breakaway function
- Power Beyond and front valves available as FFC



Picture shows Fendt 700 Vario Gen7

Benefits

- + No dirt ingress into the system due to smooth, easy-to-clean surface
- + In combination with device memory in the terminal, always the same operation
- + Various cartridge inserts possible
- + Leakage-free
- + Breakaway function, system remains closed, no pressure loss or leaking oil



Power Beyond as FFC (optional)

Flat Face Coupling (FFC)

Coupling plate Plug & Work

- Coupling plate Plug & Work in combination with FFC
- Max. 4 hoses for 2 additional control units are combined on one coupling plate
- Coupling plugs are guided in the sliding sleeves of the coupling plate during coupling
- Coupling plate is always correctly aligned and centred via two small pins
- Confusion-proof design: plugs can only actually be coupled when correctly aligned
- Max. 5 coupling plates can be ordered and used on one tractor
- Possibility of colour coding the coupling plates with the valve colours

Coupling plate is patented - Fendt unique selling point

Benefits

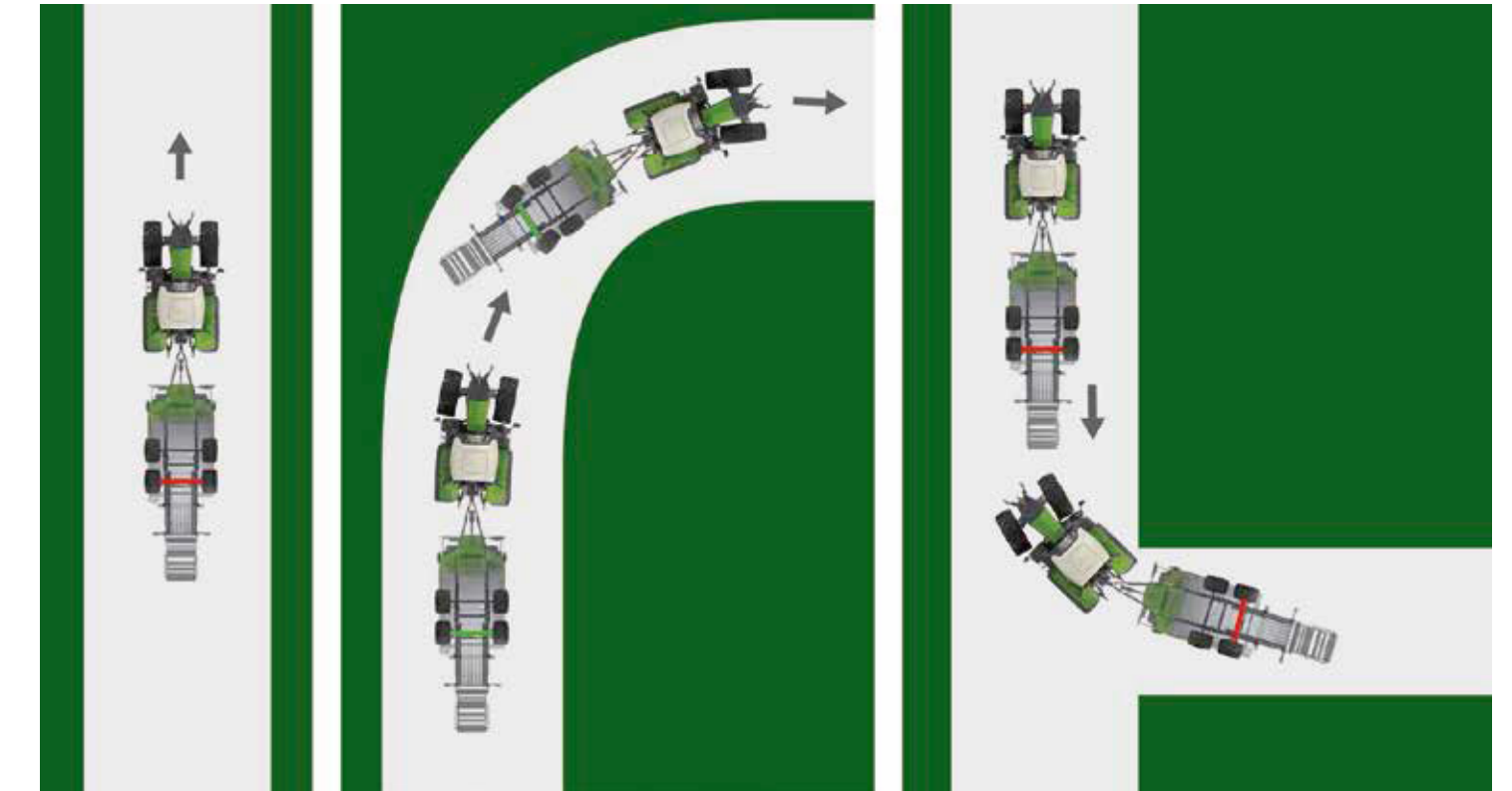
- + Always the right assignment, even when changing drivers
- + Simple coupling by guiding the plug in the sliding sleeve
- + Cleaner and faster handling, as hoses are included



Automatic steering axle lock

Automatic locking and unlocking

- Automatic locking and unlocking of the trailer steering axle above and below 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) and assignment of the EHS valve in the terminal
- Automatic override possible



Benefits

- + Enormous relief to the driver and comfort gain
- + Less tyre wear
- + Increased driving stability
- + Enormously enhanced safety
- + Avoidance of accidents and damage
- + Simple operation

ADDITIONAL

Concept

Front axle

Rear axle

Brakes

Tyres

VarioGrip

Trailer systems

Ballasting



Concept

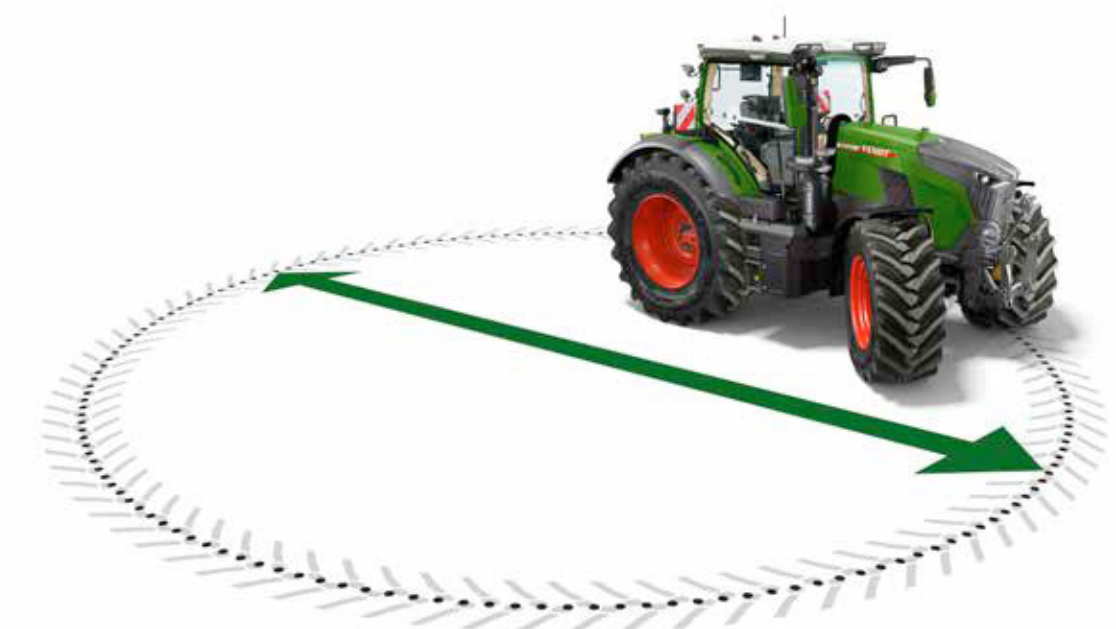
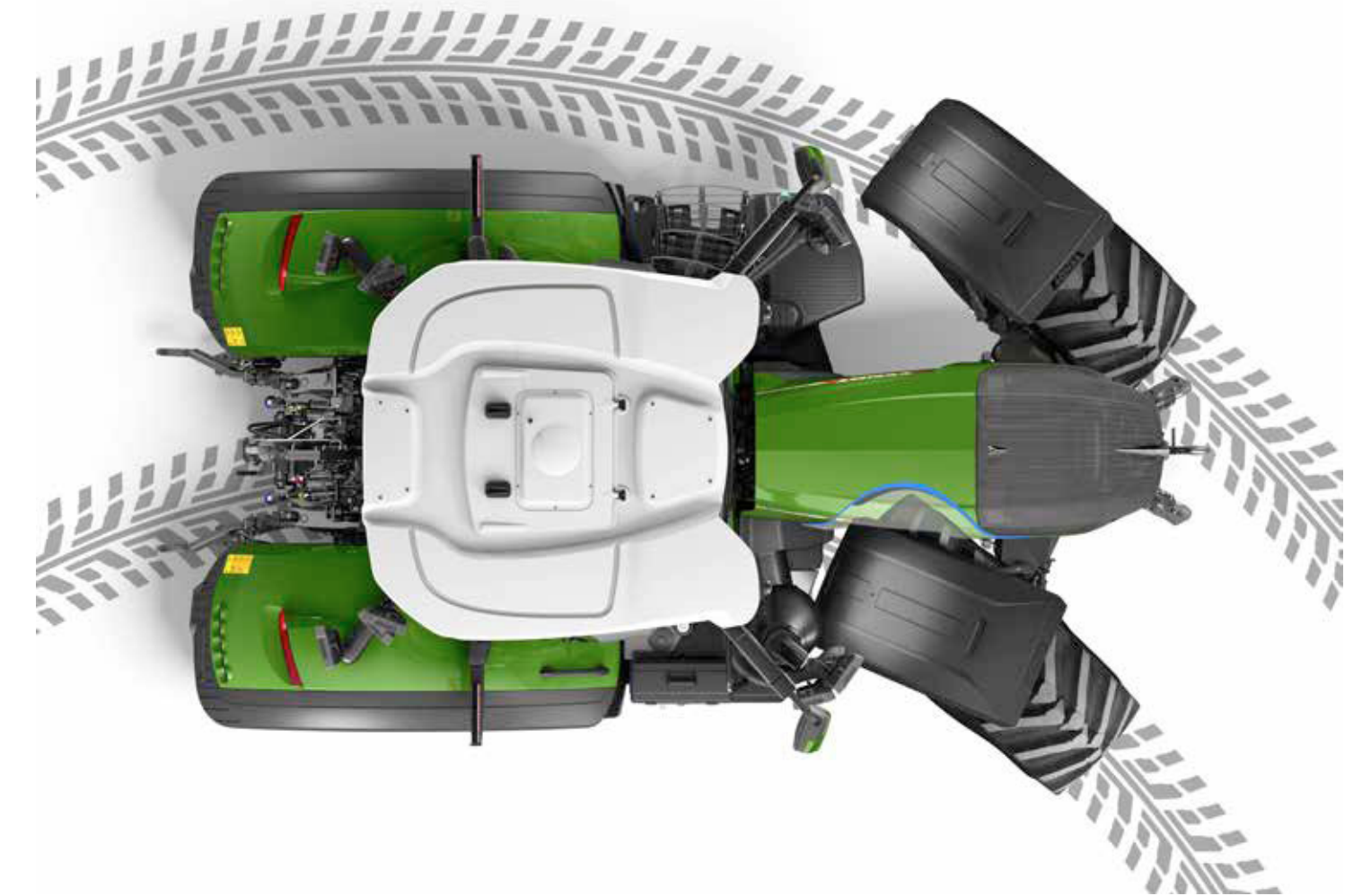
Outstanding manoeuvrability

- Vehicle optimised for the smallest possible turning radius:
 - Optimised frame structure with waist
 - Narrow compact fan allows for a slim bonnet
 - Increased steering angle
 - 10% smaller turning circle due to pull-in turn effect
- Track circle with four-wheel drive from only:
 - 11.35 m with VF600/70R30 tyres (measured with 2,030 mm track at the front axle) - for comparison: despite 120 mm longer wheelbase only 28 cm more than a Fendt 728 Vario Gen7 with VF600/70R30 (measured with 2,030 mm track at the front axle)
 - 12.7 m with VF650/60R34 tyres (measured at 2,060 mm track on the front axle)
- Swivelling mudguards

Outstanding manoeuvrability in the 340 hp class!

Benefits

- + Outstanding manoeuvrability for maximum flexibility
- + Predestined for narrow headlands



Concept

High ground clearance and outstanding payload

- Extremely high ground clearance of up to 65 cm (with VF710/75R42 rear tyres and VF650/60R34 front tyres) - pesticide and fertilisation also possible at late growth stages
- Swivelling mudguards at the front for better wheel turn-in

Low power-to-weight ratio of only 28.86 kg/hp combined with maximum payload

- Fendt 832 Vario impresses with 9,900 kg (operating weight MCM*) or 28.86 kg/hp thanks to its optimised frame structure, which offers high strength with a low tare weight and thus flexible ballasting options - so the right operating weight can always be achieved
- High payload of up to 7.6 tonnes with a gross vehicle weight of 17.5 tonnes (40/50 km/h version)**
- Flexible ballasting via front and wheel weights
- Payload/operating weight index of 0.76*, i.e., 76% of the tractor's operating weight is available as additional payload

*Most common model (MCM): full tanks, front power lift, rear power lift, mechanical top link in the rear, full valve equipment (four DCUP valves in the rear, one valve in the front); Fendt 832 Vario: front tyres - 600/65R34, rear tyres - 710/75R42

** = internal measurement



Benefits through ballasting options

- + Fuel saving
- + Reduction of tyre wear
- + Protects the soil

Front axle

Overview

- Level-controlled front axle suspension with 100% lock and 120 mm suspension travel
 - Full suspension travel can be travelled manually: simple tyre change, twin wheel mounting or attachment of a front weight with comfort ballast support
 - No swinging up after raising/lowering
 - Manual lowering/raising for attaching/detaching of implements via push-button (if no front power lift is installed)
 - Maintenance-free
- Long wheel studs available for the use of spacers for mounting dual tyres
- 23% more steering force on the steering cylinder than on the 700 Vario Gen7 for uncompromising use of dual tyres on the front axle
- Twin tyres up to 2 x VF620/75R30
- FSC (Fendt Stability Control) roll support
- Reaction steering system - straight-ahead driving when the steering wheel is released (like in a car)
- VarioActive superimposed steering system



Benefits

- + Higher area output
- + Optimum manoeuvrability
- + High permissible front axle load

Front axle

VarioActive superimposed steering system

- Full steering angle with only one turn of the steering wheel
- Preselect on terminal, activate on the multi-function armrest (VarioGuide button)
- VarioActive uses the Fendt Guide steering valve
- Activation of VarioActive changes the transmission ratio of the steering system
- Maximum driving speed with active superimposed steering is 25 km/h
- Up to 8 km/h fully superimposed steering, from 8 km/h to 18 km/h the superimposed effect reduces linearly

Benefits

- + Fast and comfortable turning at the headland by halving the steering wheel revolutions
- + Very good ground protection in conjunction with the driven front axle



Without VarioActive:
2 steering wheel turns necessary for full steering angle

With VarioActive:
Full steering angle with one turn of the steering wheel

Front axle

Differential lock

- Automatic differential lock in combination with 100% multi-disc differential lock
- Locking via hydraulic force, opening via spring assembly
- 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

Benefits

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



Front axle

Fendt Stability Control (FSC) - Safety assistance systems

- Speed-dependent, self-activating system for lateral stabilisation
- Integrated FSC stabilises the tractor by damping the lateral tilt
- FSC ensures maximum steering precision, driving stability and braking safety in all applications
- From 20 km/h, Fendt Stability Control (FSC) locks the equalisation between the right and left side of the front axle suspension



without FSC:
Tractor goes off line

with FSC:
Tractor stays on line

Benefits

- + FSC ensures maximum steering precision, driving stability and braking safety in all applications

Rear axle

Overview

- 60" variant for row crop markets*, twin tyres up to 2 x VF710/75R42
- 3 rear axle variants:
 - Flange rear axle (planetary rear axle)
 - Stub rear axle 2500 mm
 - Stub rear axle 3000 mm*
- Multi-disc differential lock
- Pressure lubrication with common oil sump for gearbox and rear axle and separate sump for the final drives
- Radial rotary unions as well as lines and bores for tyre pressure control system for flange and stub axle
- Large tyres with a maximum diameter of 2.175 m for more tractive force transmission
- Pneumatic brake actuation via 2 Tristop cylinders
- Steering brake as an option

*country specific



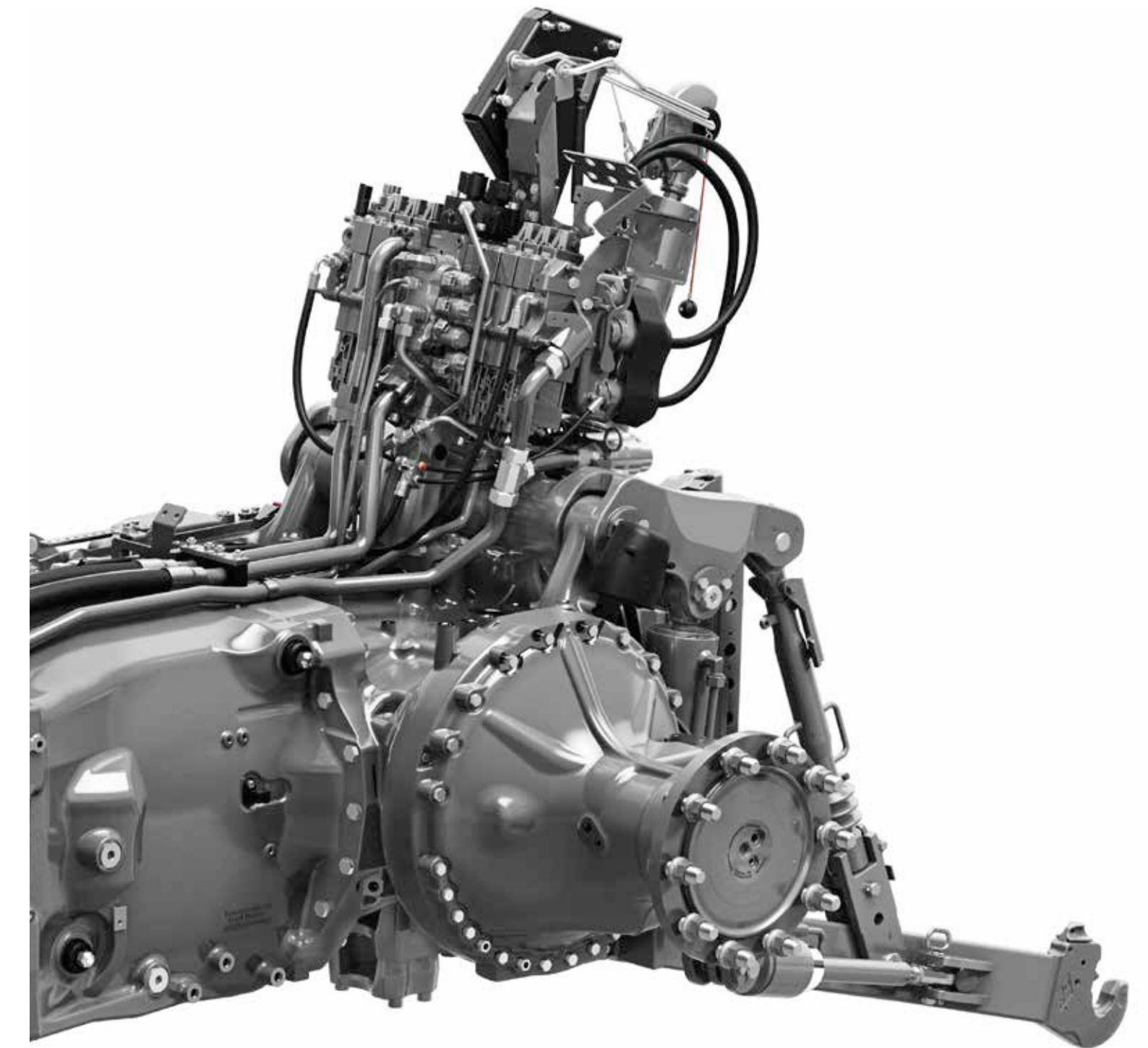
Benefits

- + Many tyre options for different uses
- + Components for tyre pressure control fully integrated and protected - for single and twin tyres (only for Row Crop)

Rear axle

Planetary rear axle

- Planetary rear axle HA250 with the planetary flange variant
- Well-known, proven standard for Fendt tractors
- Flange dimension 1890 mm, bolt circle diameter 335 mm, 10 threaded bolts per wheel hub
- Permissible rear axle load of 11.5 tonnes (maximum (StVZO axle load) at 40 to 60 km/h (up to 25 km/h for duals))
- Also with 900 mm wide tyres under 3 m outer width with 2070 mm track



Benefits - more occupational safety

- + Increased safety when travelling on the road

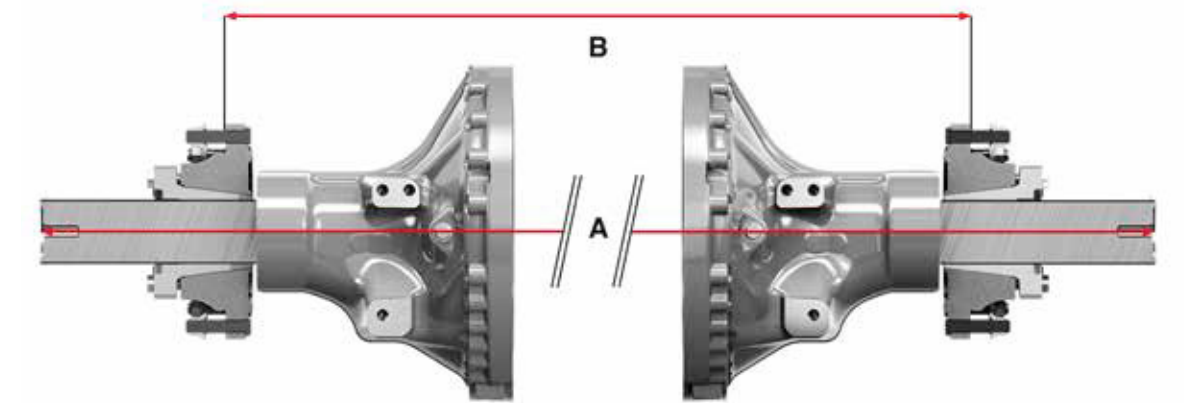
Rear axle

Stub rear axle - 2500 mm variant

- HA250 with the 2.5 m stub variant, always supplied with one single wheel hub per side
- Outer width of the vehicle at the stubs: 2.5 m (A)
- Minimum flange dimension of the single wheel hub: 1890 mm (B)
- Maximum flange dimension of the single wheel hub: 2305 mm (no dual wheel hub fitted)
- Optional dual wheel hub, flange dimension: 2500 mm
- Bolt circle diameter 335 mm, 10 threaded bolts per wheel hub
- Permissible axle load of 12.5 tonnes (maximum (StVZO axle load) at 40 to 50 km/h (up to 25 km/h for twins))
- Also with 900 mm wide tyres under 3 m outer width with 2070 mm track

Both variants with:

- Bolt circle diameter 335 mm, 10 threaded bolts per wheel hub
- Permissible axle load of 12.5 tonnes (maximum (StVZO axle load) at 40 to 50 km/h (up to 25 km/h for twins))
- Also with 900 mm wide tyres under 3 m outer width with 2070 mm track



Stub rear axle 2500 mm

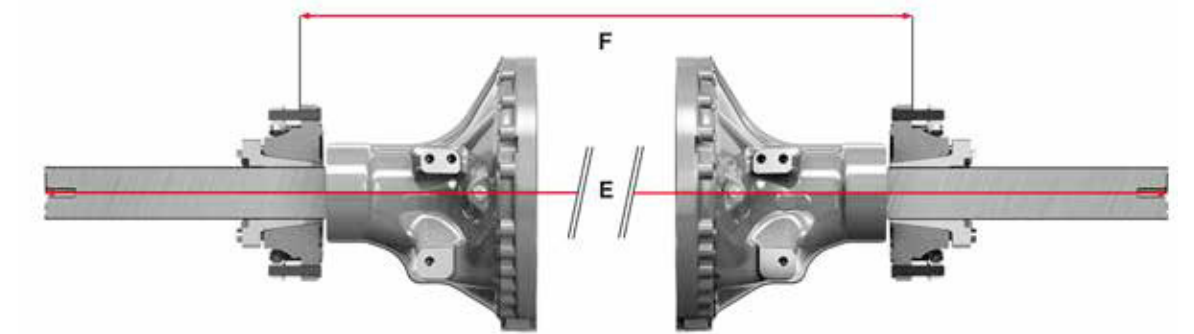
Rear axle

Stub rear axle - 3000 mm variant

- HA250 with the 3 m stub variant, which is always supplied with one single wheel hub per side
- Outer width of the vehicle at the stubs: 3 m (E) Track of 60" possible (152.4 cm, for row crops)
- Flange dimension of the single wheel hub minimum: 1890 mm (F)
- Maximum flange dimension of the single wheel hub: 2755 mm (no dual wheel hub fitted)
- Optional dual wheel hub, max. flange dimension: 2950 mm

Both variants with:

- Bolt circle diameter 335 mm, 10 threaded bolts per wheel hub
- Permissible axle load of 12.5 tonnes (maximum (StVZO axle load) at 40 to 50 km/h (up to 25 km/h for twins))
- Also with 900 mm wide tyres under 3 m outer width with 2070 mm track



Stub rear axle 3000 mm

Rear axle

Stub rear axles - Overview

- Moving the single wheel hub on the stub axle offers flexibility in track width adjustment
- With the optionally available dual wheel hub, optimum mounting and optimum use of dual tyres is possible
- The use of dual tyres is to be seen as the primary application of stub rear axles with single and dual wheel hubs:
 - For 2,500 mm: Alternative to conventional, European clamping systems (Double Touch (dual) Systems (DTS)) for mounting dual tyres
 - At 3,000 mm: 3 m version of the stub rear axle is mainly used in classic row crops such as grain maize, soya beans and sugar beet in North and South America
- Different track gauges:
 - For 2,500 mm: Can be realised via spacer (= intermediate piece/spacer tube)
 - At 3,000 mm: Track is very easy to adjust via the stub rear axle, the single and dual wheel hub and spacer (= intermediate piece/spacer tube)
- Designed for tractive force transmission and soil protection
- Conventional rims can be used on the single and dual wheel hubs - no special, reinforced rims for clamping systems are required to use dual tyres
- Simple use of the VarioGrip tyre pressure control system on the main and dual wheels

Rear axles

Stub rear axles - Benefits

Stub rear axle 2500 mm

- Simple, unrestricted, regular authorisation for EU and UK
- General use also in Europe
- Elimination of the clamping systems

Stub rear axle 3000 mm

- Especially for row crops such as maize and sugar beet in North and South America



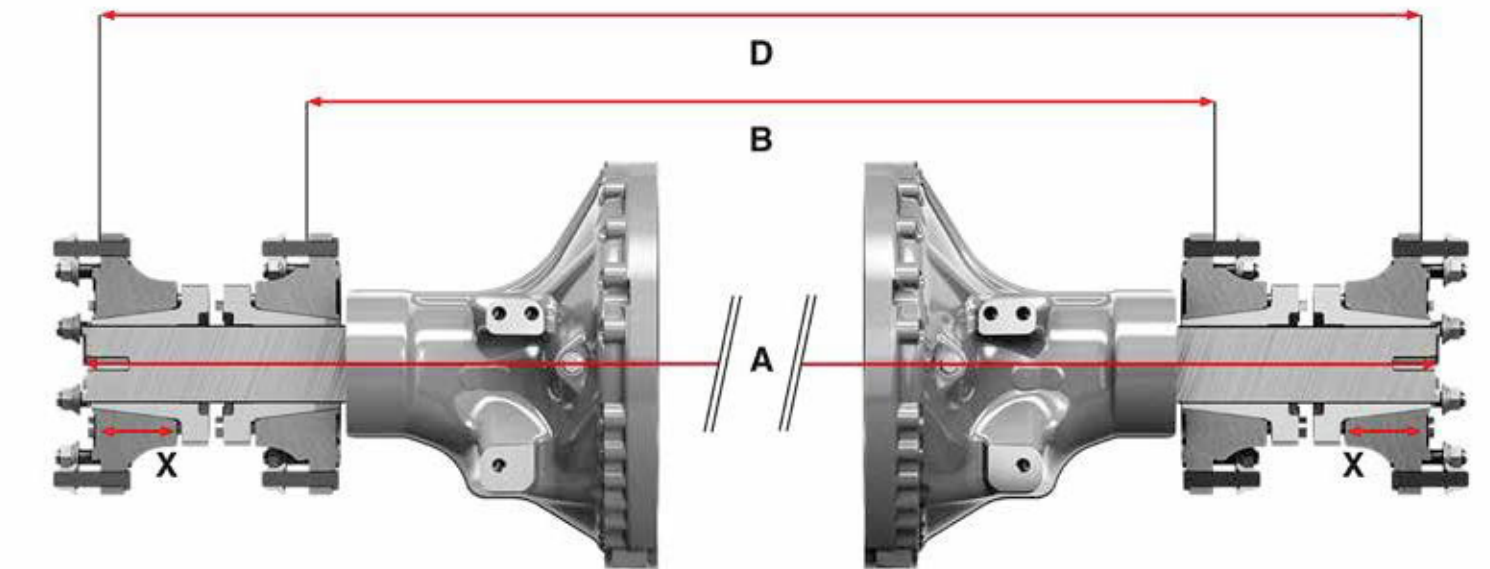
Benefits - more productivity, efficiency and high comfort

- + Maximum traction - more productivity with increased soil protection at the same time
- + Simple adjustment of different track widths using spacers and moving the wheel hubs
- + Simple use of the VarioGrip tyre pressure control system for even more soil protection
- + Different track widths with the same rim
- + Both variants can be driven with conventional rims

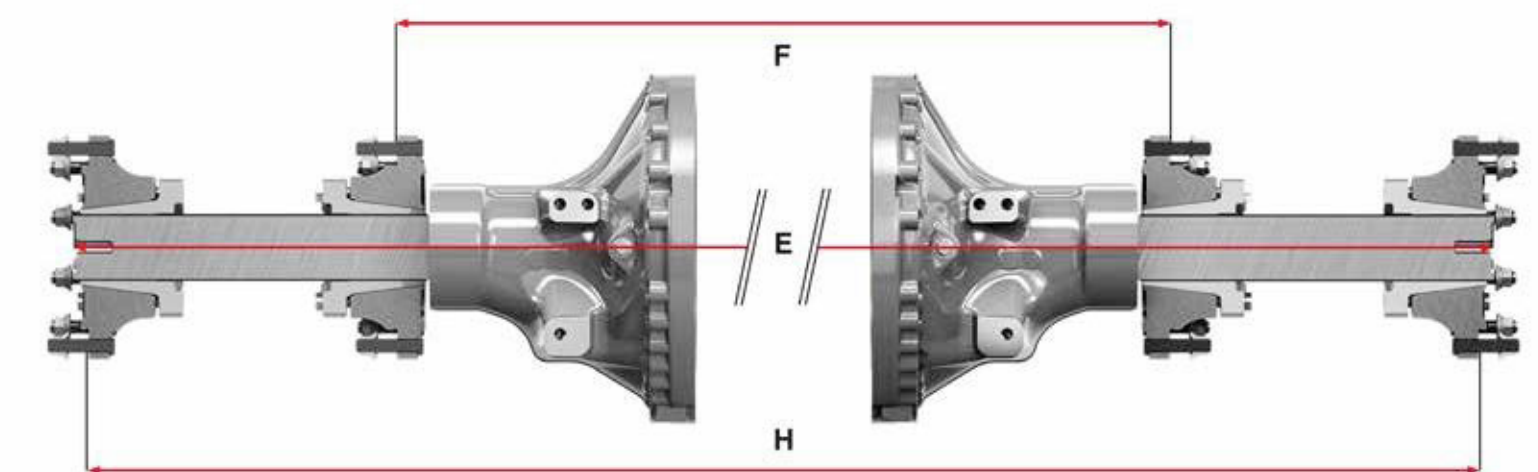
Rear axle

Dual wheel hub

- Second wheel hub for the 2500 mm or 3000 mm stub rear axle
- Dual wheels can be attached directly to the stub rear axle of the tractor using the dual wheel hub (and a spacer if necessary)
- With the 'VarioGrip' option: Technically possible to use the tyre pressure control system for dual tyres with both row crop and metric tyres



A: Stub rear axle 2500 mm, B: Single wheel hub completely inside 1890 mm, dual wheel hub 2500 mm



E: Stub rear axle 3000 mm, F: Single wheel hub completely inside 1890 mm, H: Dual wheel hub 2950 mm

Benefits - more productivity and efficiency

- + Power is transmitted to the dual wheel via a stub axle
 - Increased power transmission
 - Reduction of ground pressure
 - Better off-road mobility on poorly load-bearing soils such as grassland or moorland
- + More machine utilisation thanks to flexible use and higher work output, e.g., due to greater area coverage

Rear axle

Tyres



Metric tyres on flange axle



Row Crop tyres on 3 m stub rear axle



Metric EU tyres on 2.5 m stub rear axle
with spacer

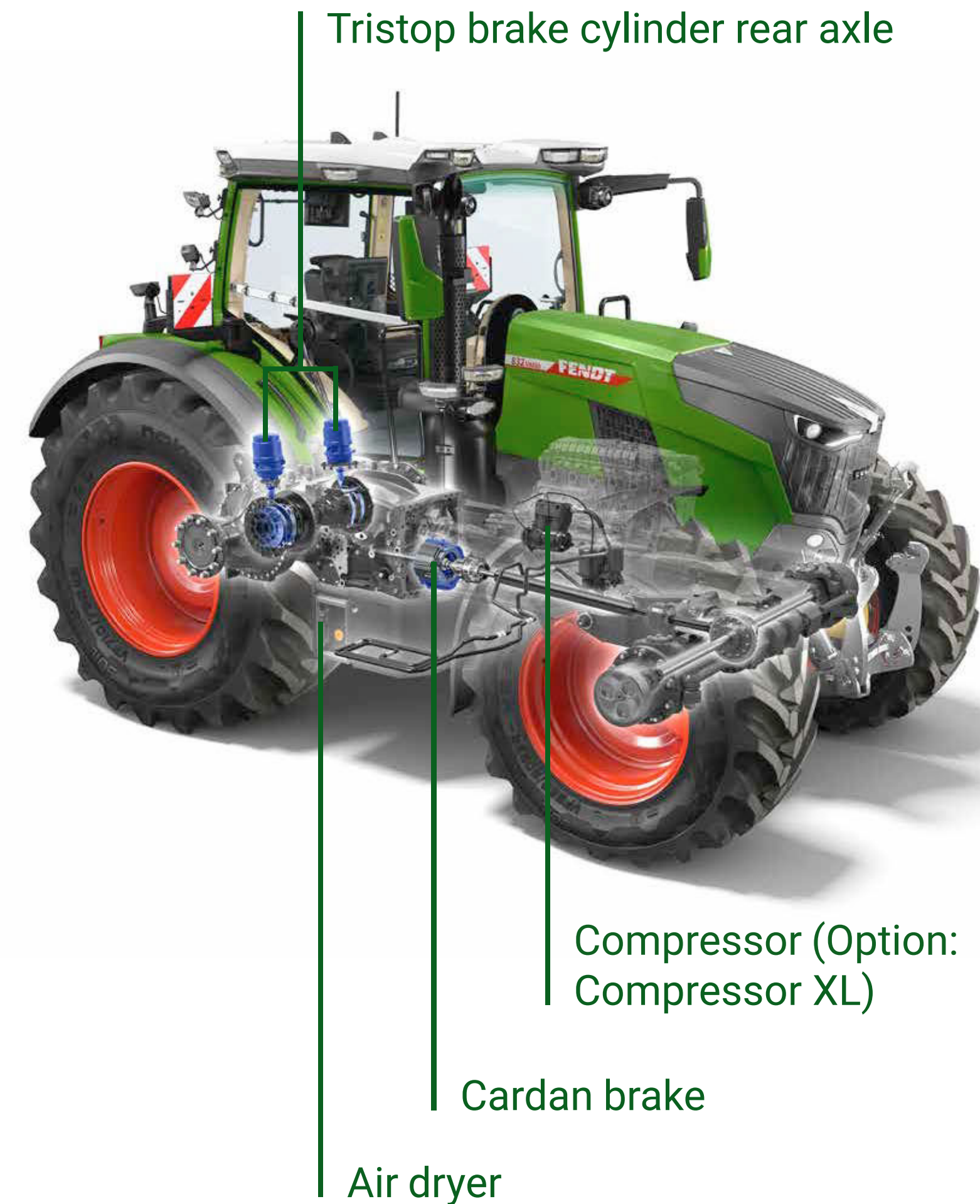
Brakes

Dual-circuit brake system

- Fully pneumatic brake system, tristop cylinder (first circuit) on rear axle, as well as directly pneumatically controlled cardan brake (second circuit)
- Electronically monitored air dryer (single or dual chamber, depending on the compressor selected)
- In case of failure of one brake circuit, the other is able to brake the vehicle
- Increased braking power for increased permissible total weight
- Steering brake available

Benefits

- + Sensitive dosing of the braking force possible thanks to pneumatic control
- + Low wear due to sintered linings
- + Electronic compressed air dryer protects vehicle compressor



Brakes

Hydraulic Auxiliary Brake

- Hydraulic circuits of the motor fan, hydraulic pump and hydraulic heating valve are used to generate a power loss that develops the braking effect
- Wear-free braking when travelling downhill or decelerating at high speeds, e.g., with heavy dump trucks, multi-axle slurry tankers or multi-axle crop protection sprayers
- Option is only installed in conjunction with the exhaust brake
- Activation via foot switch in the cab floor and/or a freely assignable white button on the FendtONE armrest
- Deceleration performance is influenced by trailer load, speed and hydraulic oil temperature

Benefits - more work safety, greater comfort and lower maintenance costs

- + The exhaust brake relieves the driver of some of the work on long downhill runs and can be used without restriction - no possible overheating as with a service brake
- + Overall higher braking performance and improved control of the tractor
- + Increased safety on the road and stress-free working
- + Service brake is protected - low wear and therefore lower maintenance costs

Brakes

Parking brake

2 different variants from the driver's point of view:

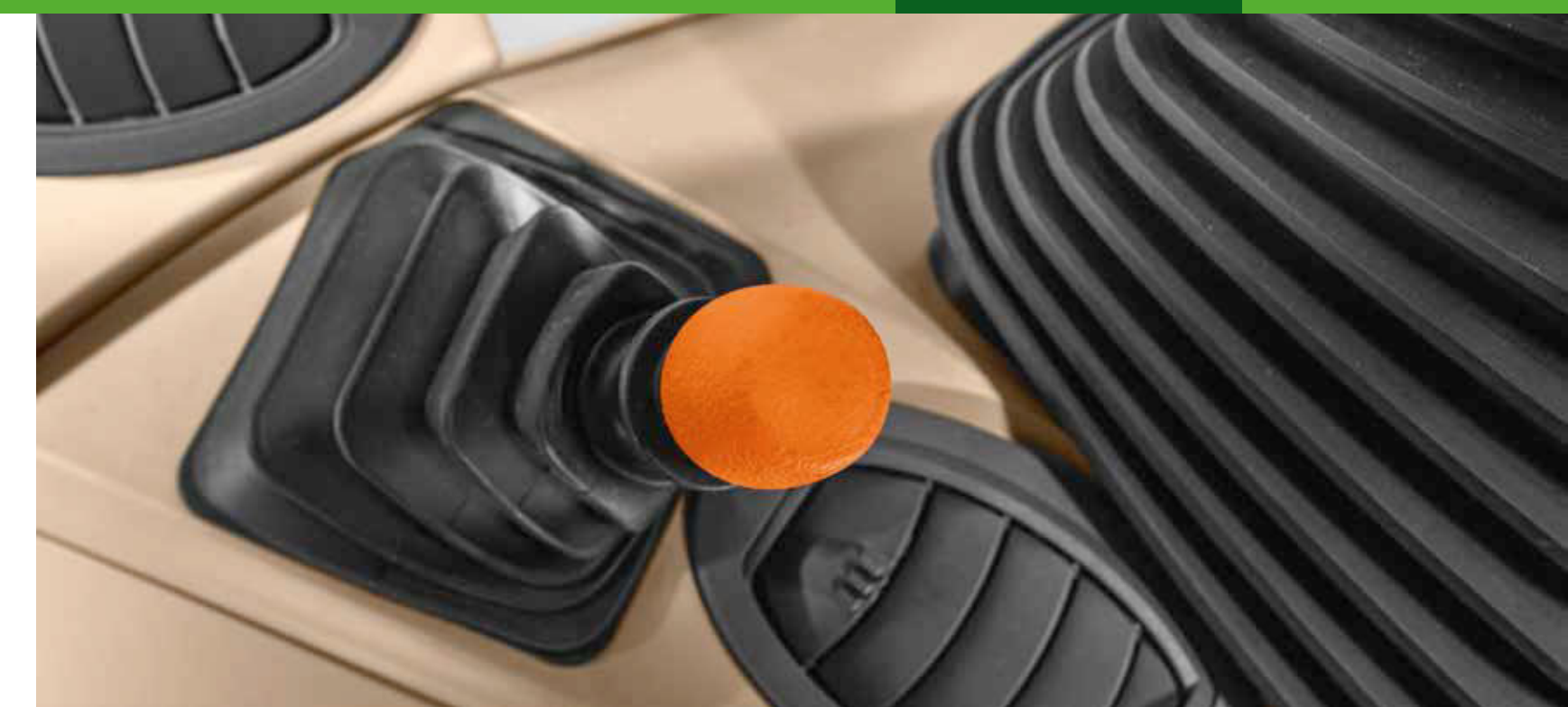
- Mechanical: opened or closed purely pneumatically via lever
- Fully automatic - 3 lever positions:
 - Open
 - Automatic (smart function that is controlled electropneumatically)
 - Closed

Automatic function:

- Automatic parking brake application when leaving the driver's seat
- Automatic release of the parking brake when starting off (forwards and backwards)

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

- 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 suspension accumulator is too weak
- Trailer brake can be released separately from tractor parking brake



Benefits - more comfort and safety

- + Driver-relieving automatic brake system
- + Ergonomic arrangement

Brakes

Steering brake monitoring

- If the steering brake is not locked, the top speed is electronically reduced to 40 km/h
- When the brake pedals are unlocked, a warning message appears in the dashboard shortly before reaching 40 km/h



Sensor system monitors
locking of the steering brake

Benefits

- + Sensor-supported steering brake monitoring to prevent incorrect operation

Brakes

Safety assistance systems

Trailer Brake Assist

- Safety and comfort feature which ensures that a pneumatically braked trailer doesn't "push" against the tractor
- Continuous monitoring of the trailer's thrust on the tractor
- Brake pressure is automatically controlled in critical situations without the need to press the brake pedal:
 - When decelerating by pulling back the driving lever
 - When driving downhill, around bends, at intersections and junctions
 - When reducing the cruise control speed

Benefits - high comfort and work safety

- + Safe and relaxed driving with a trailer



FENDT

Brakes

Optional braking system

Hydraulic dual-circuit trailer brake

- Hydraulic dual-circuit brake for trailers or towed implements with hydraulic brake system (single or dual-circuit)
- Compatible with trailers and implements that have a hydraulic single-circuit brake

Benefits - High work safety and continued use of existing implements

- + No restrictions when using existing trailers and implements, as it is compatible with devices with hydraulic single-circuit brakes

Tyres

Maximum soil protection and traction

- New tyre dimensions: Maximum diameter of up to 2,175 mm in the rear and 1.67 m in the front
- New hybrid tyres available for mixed agricultural use in the field and on the road - combined use of lug and block treads

Benefits - more efficiency and flexibility

- + Wide selection of tyre options enables the best possible preparation for every application situation - versatile use of the machine and therefore high potential utilisation
- + With the right tyres, depending on the application:
 - Wear and fuel consumption minimised
 - Increased traction with simultaneous soil protection
- + Large tyres in conjunction with VarioGrip tyre pressure control system for up to 10% more traction/area performance and maximum ground protection

Tyres

Offered designs

Michelin

- AGRIBIB 2
- AGRIBIB ROW CROP
- AXIOBIB 2 PFO
- EVOBIB PFO
- MACHXBIB
- YELDBIB

Mitas

- SFT

Nokian Tyres

- Ground King
- Soil King
- TRI 2

Trelleborg

- TM100
- TM1000 ProgressiveTraction
- TM600
- TM900 High Power

Vredestein

- Traxion Optimall
- Traxion XXL

Use of dual tyres possible

- Up to 2 x VF620/75 R30 on the front axle
- Up to 2 x VF710/75R42 on the rear axle
- Optimisation of the dual tyres by using the dual wheel hub and the stub rear axle



Michelin AGRIBIB



Michelin AXIOBIB



Michelin EVOBIB



Michelin MACHXBIB



Trelleborg TM600



Trelleborg TM 1000 High Power 1



Nokian TRI 2



Nokian Soil-King

VarioGrip – tyre pressure regulation system

VarioGrip for flange and stub axle

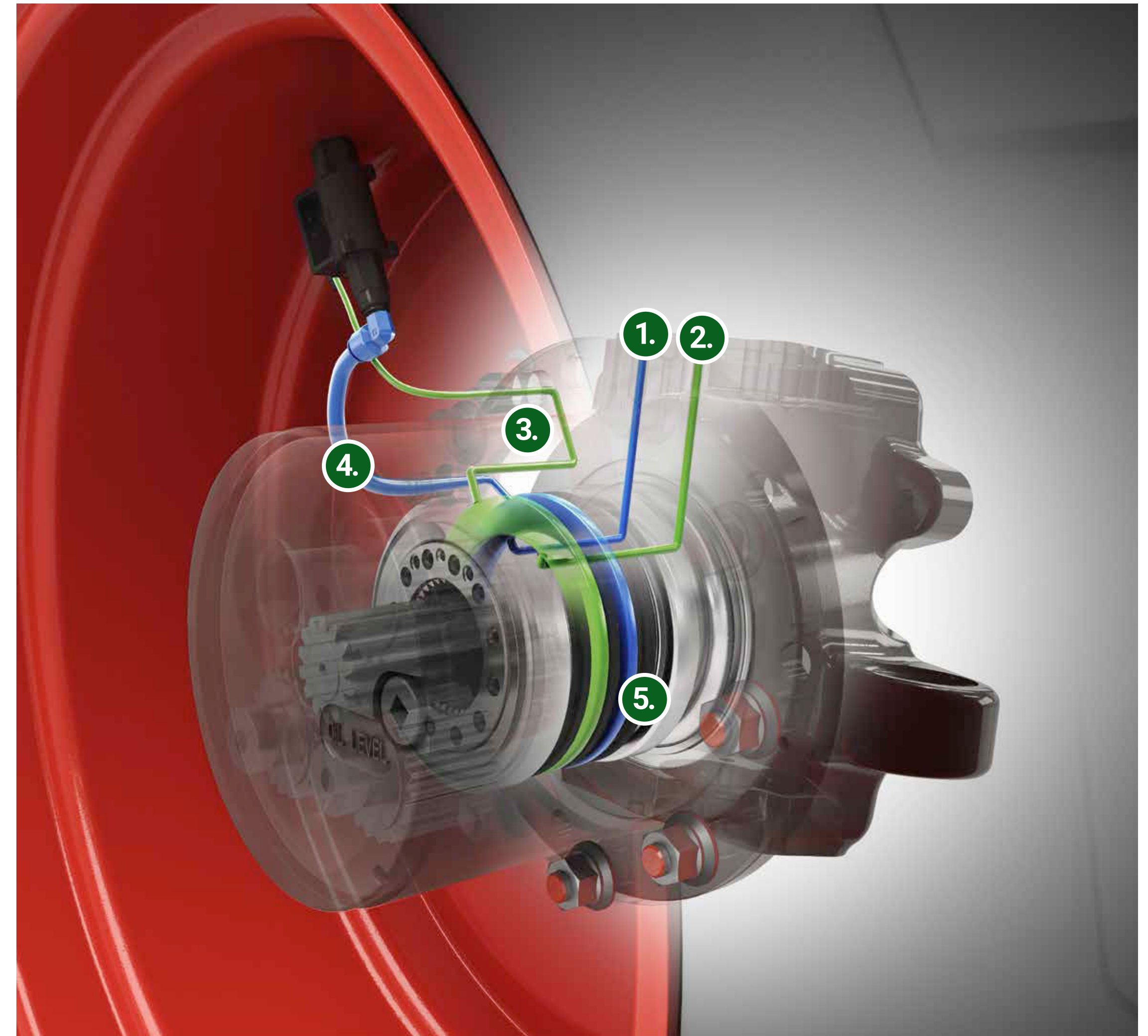
- VarioGrip is available for flanged and stub axles
- Pressure adjustment is also possible with dual tyres
- Complete integration with built in valve and air lines
- Complete solution with water-cooled twin-piston air compressor (Compressor XL) with max. 800 l/min air volume flow (at 8 bar, approx. 680 l/min at 12.5 bar), 626 cm³ cubic capacity and 12.5 bar operating pressure
- XL compressor is required for VarioGrip tyre pressure control system, but can also be selected without VarioGrip
- If the XL compressor is installed, the system automatically switches from a single-chamber to a dual-chamber air dryer
- Fendt development with radial rotating unions on front and rear axle
- Two-line technology with control and filling line
- Control line opens tyre valve; inflation line is used for inflation and deflation
- Two pressures for front and rear axle can be stored and recalled
- System air pressure is only present during air pressure control/measurement
- Air pressure control also possible at full speed



VarioGrip – tyre pressure regulation system

Technical implementation on the front axle

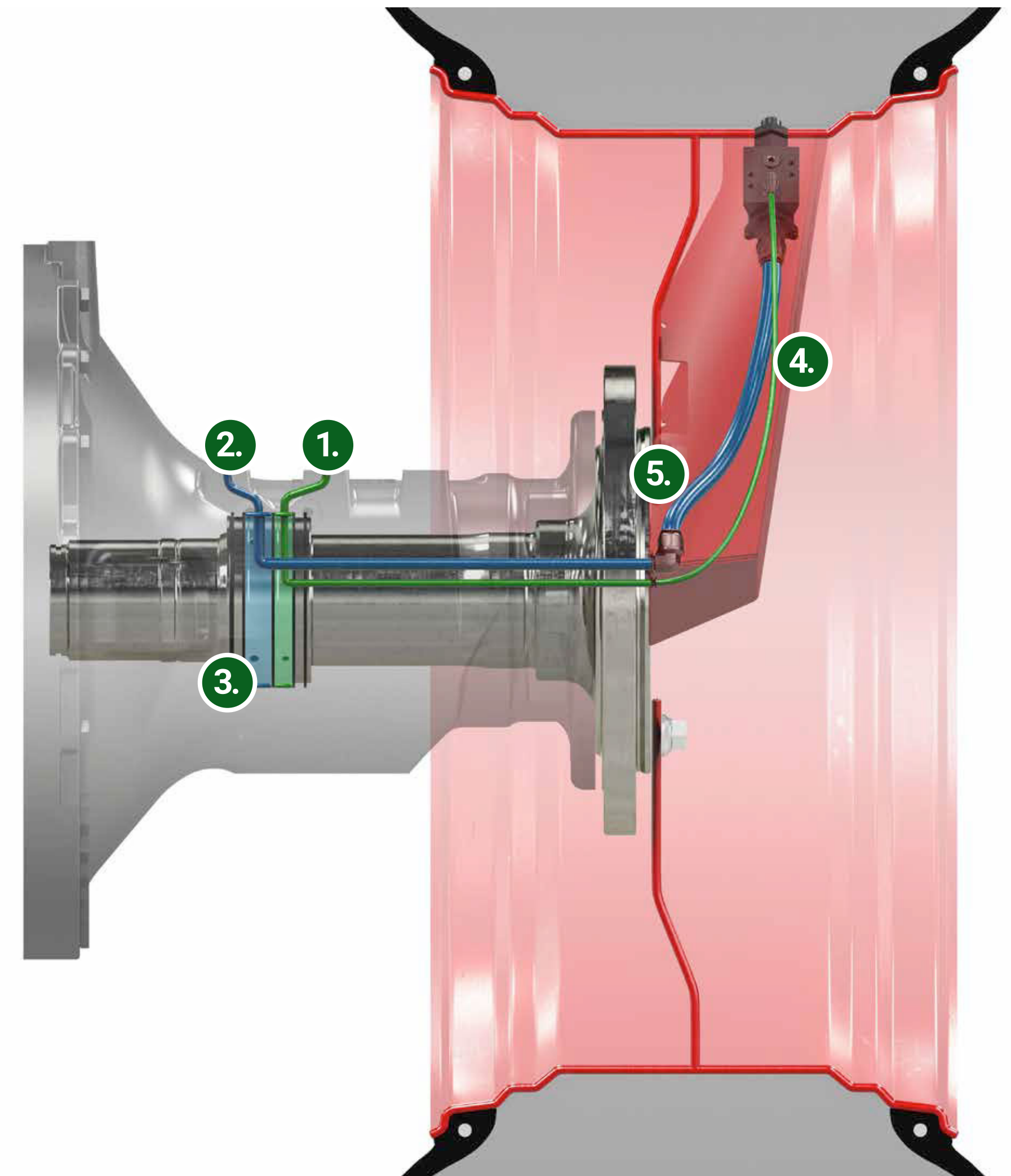
1. Filling line - input on stub axle
2. Control cable - input on stub axle
3. Control cable to the valve
4. Filling line to the valve
5. Radial rotary union front axle



VarioGrip – tyre pressure regulation system

Technical implementation on the rear axle (flange)

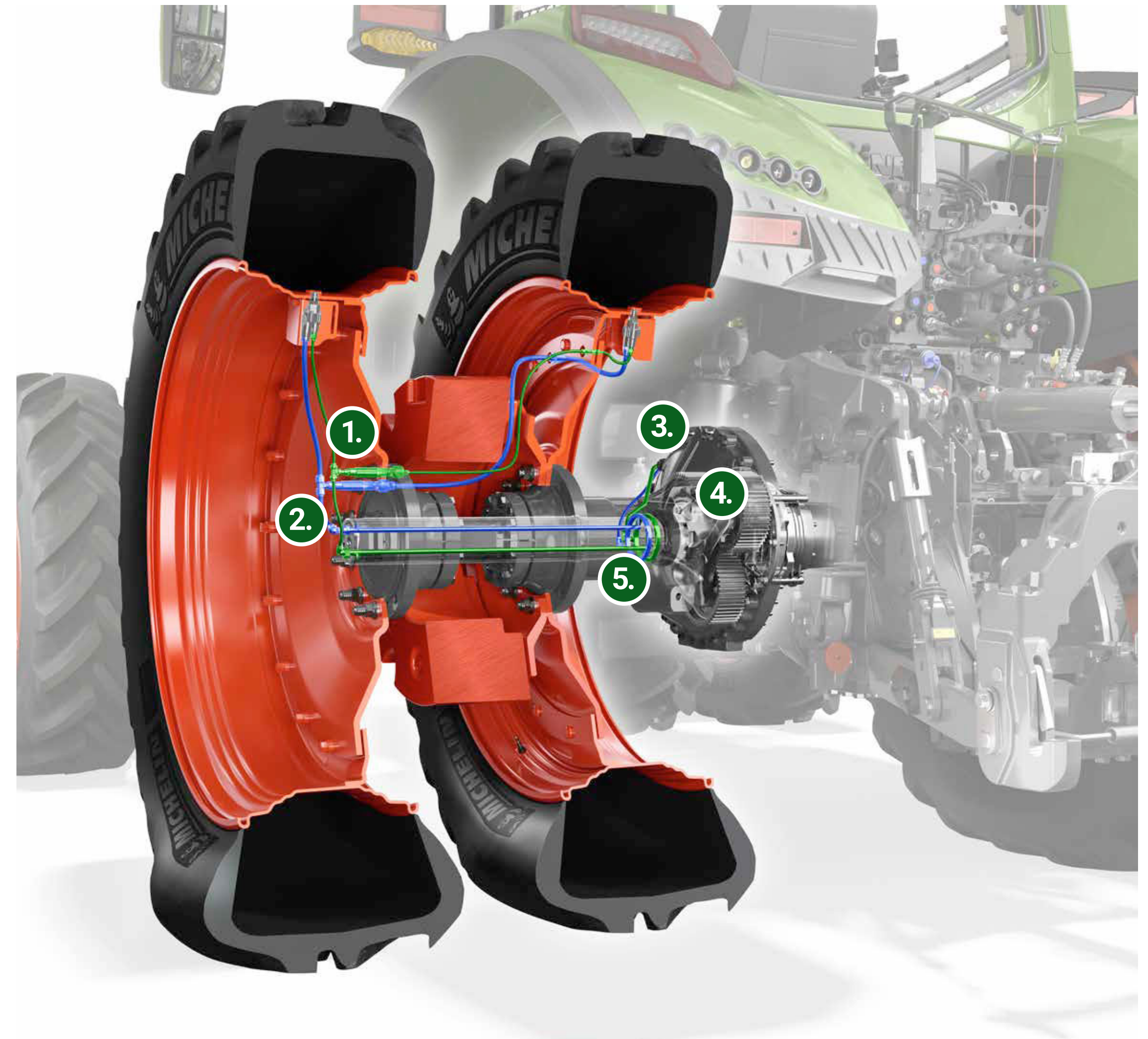
1. Control cable input on axle funnel
2. Filling line input at the axle funnel
3. Radial rotary union rear axle
4. Control cable to the valve
5. Filling line to the valve



VarioGrip – tyre pressure regulation system

Technical realisation on the rear axle (stub)

1. Control line to the valve
2. Filling line to the valve
3. Filling line (blue)
4. Control line (green)
5. Radial rotary union rear axle



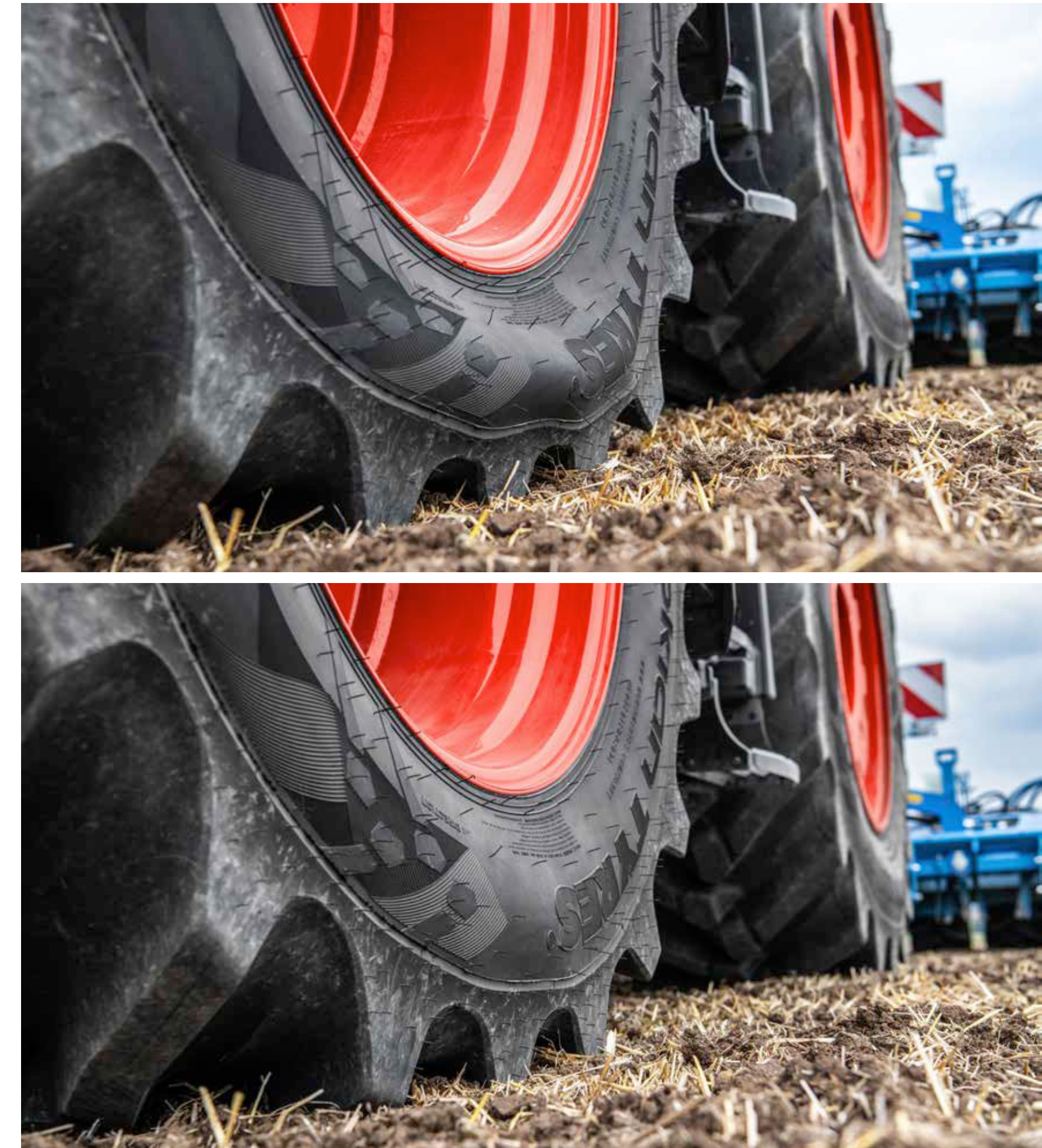
VarioGrip – tyre pressure regulation system

Benefits

Benefits

- + Full integration into the vehicle concept with modified vehicle compressor and own valve technology
- + Up to 10% more tractive power and reduction in fuel consumption of up to 8% with 8% more area output*
- + No blanket air pressure, but individually adapted tyre pressure for use and ground conditions
- + Increased driving stability and safety during transport work
- + Reduction of rolling resistance to reduce fuel consumption
- + Tyre protection for low operating costs
- + Maximum convenience through simple operation in the terminal
- + Surface pressure is significantly reduced to protect the ground
- + Flexibility of use due to fast inflation and deflation times

*South Westphalia University of Applied Sciences; Agricultural Economics Soest



Trailer systems

Towing hitch*

- Common height-adjustable trailer couplings in the sledge with 2 t drawbar load
- NEW: Height-adjustable coupling head in the carriage with 3 t drawbar load
- Modular system for bottom hitching
- Rear power lift parking position for sufficient clearance with lower hitching
- Fail-safe device for height-adjustable trailer systems
- Protective plate integrated in the headstock serves as a PTO cover

*country specific

Benefits

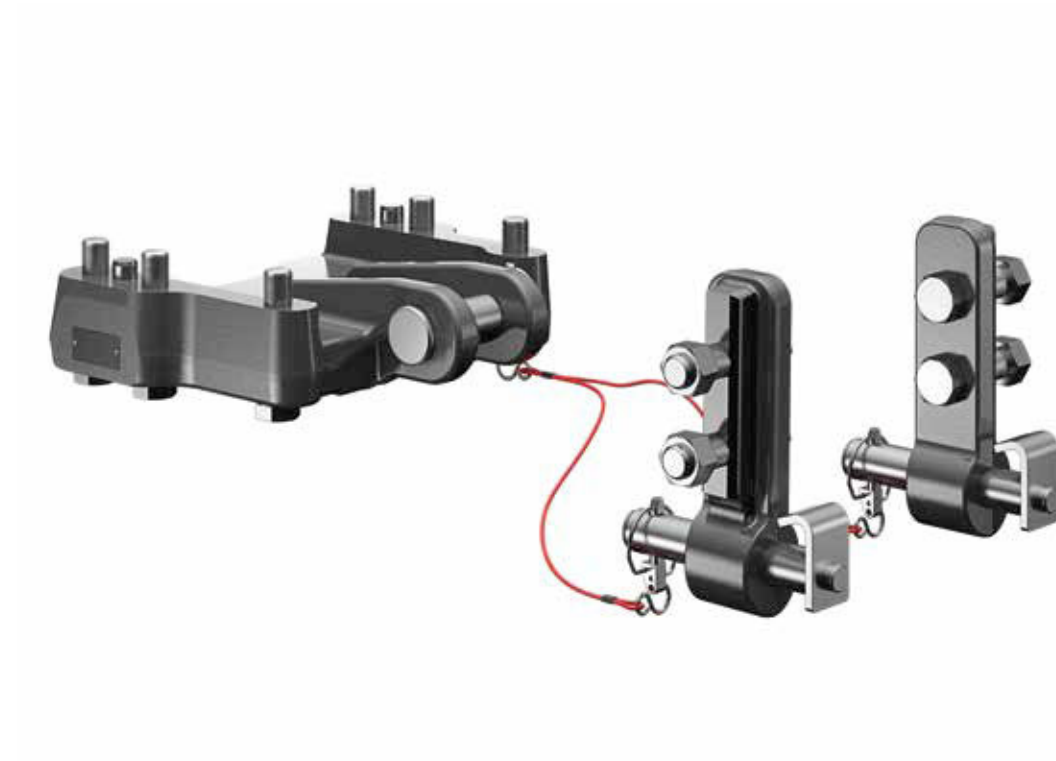
- + Highest flexibility through modularity
- + Implements can be used with different tractor models
- + Different coupling variants can be used with one tractor
- + High drawbar load with coupling head



1. Towing hitch manual CUNA Cat. D2, 0-60 km/h (A235)
2. Towing hitch manual CUNA Cat. D3, 0-60 km/h (A236)
3. Automatic towing hitch (A155)
4. Automatic towing hitch 38 mm bolts (A160)
5. Height-adjustable coupling head (A183)
6. Manual towing hitch (A153)
7. Mounting block for towing hitch (A195)

Trailer systems

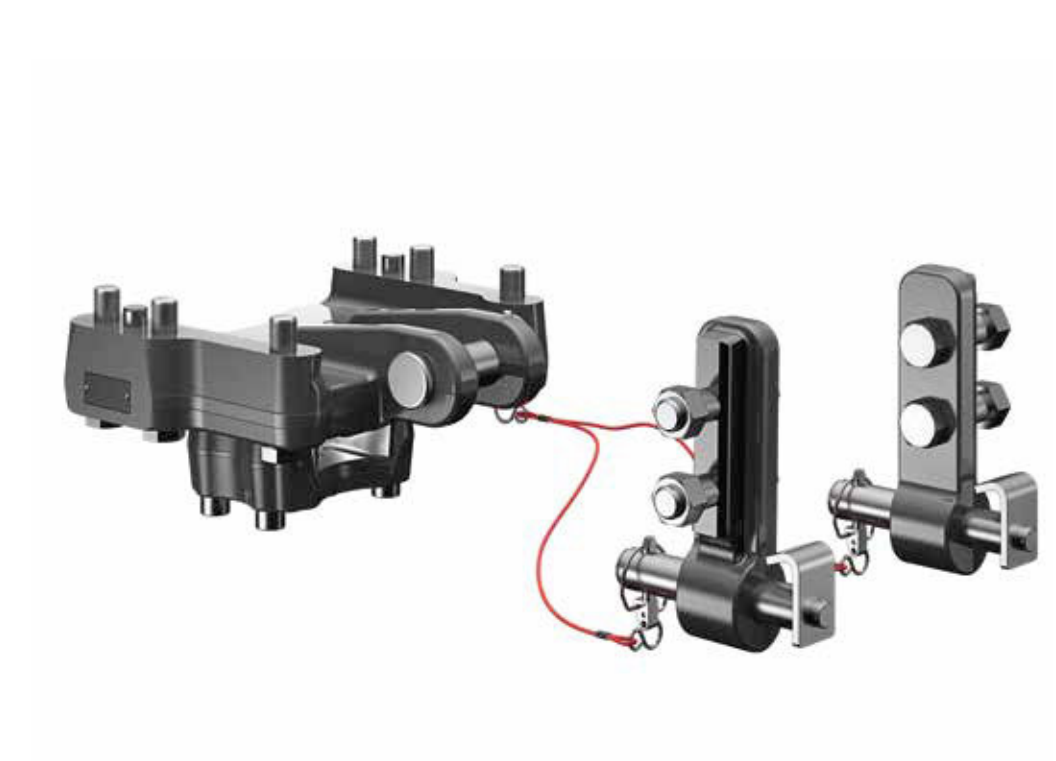
Variants



Bottom hitch attachment parts Basic (A179)



Piton Fix Heavy duty (A201)



Bottom hitch attachments (A197)



Extendable drawbar; 30 mm bolt (A192)



Piton - Fix (A170)



Piton - Fix incl. frame (A169)

Trailer systems

Variants



Coupling head with/without balls Forced steering left and right (A198, A199)



Extendable drawbar Cat. 3; 38 mm bolt (A232)



Long coupling head with/without balls Forced steering left and right (A198, A199)



Extendable drawbar Cat. 4; 50 mm bolt (A203)



Swivelling drawbar Cat. 3, 38 mm bolt



Hitch (Bill Bennet Uniglide Pickup Hitch) (A175)

Ballasting

Front and rear axle ballasting

Front ballasting

- 870 kg
- 1,250 kg
- 1,800 kg
- 2,200 kg

Rear axle ballasting

- 2 x 300 kg
- 2 x 600 kg
- 2 x 1,000 kg

Benefits - more comfort and work safety

- + Lightweight basic vehicle can be individually ballasted according to your own requirements for optimum tractive force transmission
- + Fully roadworthy ballasting concept without speed limit and wide load marking
- + Always the best manoeuvrability and visibility in the dark thanks to the smallest possible dimensions of the front weight and unobstructed line of sight of the low beam and high beam



CAB

Concept

Equipment

Lighting concept



Concept

Fendt X6 cab - Exterior

- Modern open-plan cab
- New, innovative lighting concept (work lights and headlamps)
- Crossed work lights for glare-free illumination in the dark
- Rear-view mirror with integrated wide-angle section as standard - Optional: electrically adjustable and telescopic, heated rear-view mirror
- Entry in the lower section 420 mm* wide (+ 80 mm compared to the larger competitor)
- Exterior dimensions based on X5 cab (= predecessor)
- 3rd brake light above licence plate in roof optionally available
- Mudguards for large tyres
- Cab ROPS increased to 12.5 t
- Integrated bonnet and rear camera available

*= internal measurement



Concept

Fendt X6 cab - Exterior

Benefits

- + Wider tyres possible at a smaller external width
- + Better recognisable for other road users thanks to 3rd brake light
- + Good overview of front and rear implements thanks to digital bonnet and rear camera
- + High ROPS rollover protection value enables construction site approval up to 2 tonnes operating weight without additional frame



Concept

Fendt X6 cab - Interior

- Proven, modern interior with soft-touch surfaces
- Infotainment packages and sound system available
- FendtONE operating philosophy
- Large cooling and warming box on the right-hand side
- Numerous storage and stowage options
- Pivoting steering column with digital dashboard
- New premium driver's seat for maximum comfort, comfort driver's seat with adaptive backrest (Dualmotion) and leather upholstery
- Comfort co-driver's seat with upholstery, backrest, table function and document holder
- Air conditioning or automatic climate control, sun blinds front, right and rear
- Additional device holder available as a rail and tablet and smartphone holder
- Several 12 V connections, e.g., for mobile phone, radio, cool box, etc.
- Safety kit with first aid kit, safety vest and warning triangle
- Optional: three footrests



Concept

Fendt X6 cab - Interior

Benefits

- + Comfortable cab for long operating times and shift work
- + Easy handling when reversing - e.g., the cool box does not need to be removed, comfort passenger seat also with RüFa variant
- + Comfortable shading from the sun thanks to roller blinds and excellent cooling for hot summer days and use in hot regions



Concept

Key variants, immobiliser & locking system

Without immobiliser and without security lock system

- Simple, green key without immobiliser
- Standard key(bit)
- Key locks cab door, ignition lock, bonnet and fuel tank on all machines without immobiliser

With immobiliser and security lock system

- Silver key with Fendt embossing and transponder for immobiliser
- Customised key (bit)
- Key locks vehicle-specific cab door, ignition lock, bonnet and fuel tank

AdBlue tank retains separate key due to increased risk of corrosion.

Benefits

- + All-round security package: security lock system and immobiliser combined
- + Maximum security against machine theft and unauthorised fuel removal

Concept

More overview thanks to large glass surfaces

- Less viewing edges at the mudguards
- Better view over the rear section
- All windows are glued
- Heated front window made from laminated safety glass can be delivered from the factory

270° segment front window wiper on the front window and side window wiper with 220° wiper field

- Large wash area
- More breakaway torque
- Wash nozzles integrated into wiper arm
- Additional side window wiper on right side



Benefits - more work safety, more comfort, lower total cost of ownership

- + Torsion-resistant
- + Repair of small stone chips possible with laminated safety glass - without replacing the entire pane
- + Exclusive 270° clear view on front window and 220° on side window
- + Clear vision over the wheel arches
- + Better view to the side and over the rear section with fewer visual obstructions

Concept

Cab suspension

- 2 different variants* to choose from:
 - Pneumatic: front cone suspension, rear pneumatic cab suspension
 - Pneumatic comfort: 3-way pneumatic cab suspension
- Even greater ride comfort thanks to optimised cab mounting and even more space between the suspensions
- Suspension is supported behind the rear axle, thus better spring deflection behaviour during braking and acceleration
- Integrated level control
- Interaction of cab, seat and front axle suspension as well as vibration damping on the front and rear linkage

*country specific

Benefits

- + Maximum driving comfort for long working days, even under extreme conditions
- + Choice of different suspensions to suit every application
- + Sophisticated overall suspension concept



FENDT

Equipment

Fendt X6 cab - new comfort features

Digital bonnet and rear camera

- High-resolution for the best image quality
- Good view of the front power lift or the implement in the rear
- Bonnet camera integrated in the Dieselross emblem
- Rear camera integrated in the cab roof next to the vehicle registration plate



Benefits - more work safety and maximum comfort

- + Maximum safety due to visibility into the front and rear work area
- + Faster and easier attachment of front and rear implements - more productive working time

Equipment

Fendt X6 cab - new comfort features

Large cool box

- Compressor cool box that can cool, with a capacity of 12 litres



Benefits - maximum comfort

- + Food and drinks can be kept cool
- + Increases the attractiveness of the workplace and offers the driver a high level of comfort for long working days

Equipment

Fendt X6 cab - new comfort features

Three footrests

- Are attached to the bottom left and right of the steering console in the front and to the bottom right side of the footwell on the side console
- Full compatibility with available cool boxes and the available brake options (dual-circuit brake and dual-circuit brake with steering brake)
- Incompatible with reverse drive control

Benefits - maximum comfort

- + Comfortable footrest increases the attractiveness of the workplace and offers the driver a high level of comfort
- + The footrests are ergonomically available both when the seat is upright and when it is rotated

Equipment

Fendt X6 cab - new comfort features

3-pin appliance socket at the rear

- Additional 3-pin socket (12 V, 25 A) available at the rear
- Connection of e.g., work lights or cameras on the implement is switched separately via the socket (no longer via street lighting)
- Can be switched on and off via the FendtONE user interface in the terminal
- Located on the right-hand side (in the direction of travel) above the EHS valves



Benefits - more productive working time, increased comfort and more work safety

- + Working lights and cameras on the implement can be switched independently of the road lighting (e.g., for cultivators, for the interior of a forage wagon, etc.)
- + Always the right lighting, as it can be switched according to the situation - for field work and road travel, always optimally adapted to the machine environment
- + No manual switching on and off necessary (no work interruption), as the controls are conveniently operated from the cab

Equipment

Fendt X6 cab - new comfort features

Tech Rails

- Fastening rails integrated in the C-/B-pillar of the tractor cab
- For example, for additional work lights, carriers that hold pipes for transporting seed or fertiliser between the front and rear attachment areas, sensor technology (e.g., for plant cultivation)



Benefits - greater convenience and more productive working time

- + Accessories required for the respective application can be attached quickly and easily using the dedicated, fully integrated attachment point
- + Optimum customisation of the machine for the respective application makes the machine more flexible to use and increases work quality and productivity

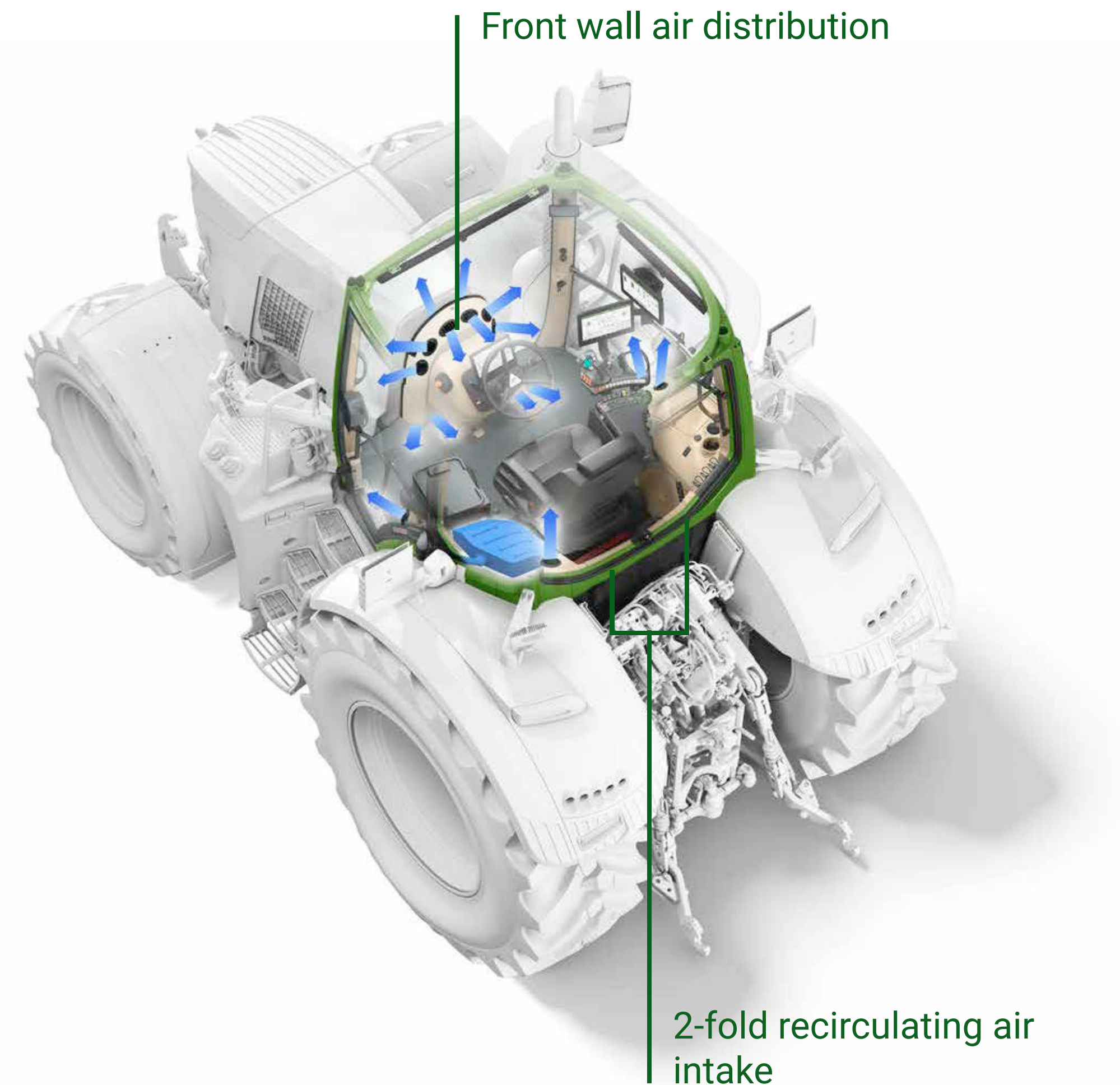
Equipment

Powerful air conditioning

- Air conditioning was designed for extremely hot regions (up to 45 °C outside temperature)
- Two fans for even air distribution, plus separate fresh air fan
- Bigger evaporators
- 2x ambient air extraction
- Front wall air distributor with more outlets and better air distribution on the front window
- Ventilation outlets also at the rear of the cab especially for RüFa applications

Benefits - high comfort

- + More relaxed work even under extreme conditions
- + Better distribution of air outlets in the cab



Equipment

Pivoting steering column with digital dashboard

- Steering column with integrated instrument cluster (digital dashboard)
- Digital dashboard pivots when adjusting the steering wheel
- with individual height and tilt adjustment
- Handbrake directly next to steering column on left side
- Lighting (dimmer) for digital dashboard is controlled via a light sensor and is independent of the driving light



Benefits

- + Perfect ergonomic adjustment
- + Optimal view and avoidance of reflections on dashboard through height and tilt adjustment

Equipment

Choice of 4 driver's seats

Comfort seats:

- Super comfort seat with air suspension: Seat heating, pneumatic lumbar support

Premium seats:

- Super Comfort Seat EvolutionUp DualMotion / DL
- Super Comfort Seat Titanium / DL
- Super Comfort Seat Titanium leather / DL electric

Premium seat with comprehensive adjustment functions. Integrated memory function saves individual settings via the user profile - adjustable via the terminal!



Super Comfort Seat Titanium / DL



Super Comfort Seat with air suspension



Super Comfort Seat EvolutionUp DualMotion / DL



Super Comfort Seat Titanium leather / DL electric

Benefits - best comfort

- + Wide selection of driver's seats

Equipment

Premium seats in comparison (1/4)

Super Comfort Seat EvolutionUp DualMotion	Super Comfort Seat Titanium	Super Comfort Seat Titanium Leather (electric)	M*	T*
Storage compartment on the seat back	Storage pocket on the seat back	Storage pocket on the seat back		
Left armrest fabric cover, height-adjustable and foldable	Left armrest fabric cover, height-adjustable and foldable	Left armrest fabric cover, height-adjustable and foldable		
Air-suspension Comfort Seat with compressed air supply from the vehicle (no compressor noise in the cab)	Air-suspension Comfort Seat with compressed air supply from the vehicle (no compressor noise in the cab)	Air-suspension Comfort Seat with compressed air supply from the vehicle (no compressor noise in the cab)		
Dynamic Dumping System	Progressive damping with optimum tuning	Progressive damping with optimum tuning		
Low-frequency suspension	Low-frequency suspension	Low-frequency suspension		
Swivel adapter	Swivel adapter	Swivel adapter		
Suspension travel 180 mm	Suspension travel 180 mm	Suspension travel 180 mm		

*M = Memory function; T = Operation via terminal

Equipment

Premium seats in comparison (2/4)

Super Comfort Seat EvolutionUp DualMotion	Super Comfort Seat Titanium	Super Comfort Seat Titanium leather / electric	M*	T*
Automatic weight adjustment	Automatic weight adjustment	Automatic weight adjustment (Memory)	x	
Height adjustment air-supported, stepless	Height adjustment air-supported, stepless	Height adjustment air-supported, stepless/ automatic (Memory)	x	
Climate control system (seat and backrest ventilation)	Three-stage climate control system (seat and backrest ventilation)	Multi-stage climate control system (operated via the terminal)		x
Heated seat	Three-stage heated seat	Multi-stage heated seat (operated via the terminal)		x
Longitudinal adjustment	Longitudinal adjustment	Longitudinal adjustment, automatic (Memory)	x	
Longitudinal and lateral suspension	Longitudinal and lateral suspension	Longitudinal and lateral suspension		x
Pneumatic lumbar support	Pneumatic lumbar support	Pneumatic lumbar support (Memory, operated via the terminal)	x	x

M = Memory function; T = Operation via terminal

Equipment

Premium seats in comparison (3/4)

Super Comfort Seat EvolutionUp DualMotion	Super Comfort Seat Titanium	Super Comfort Seat Titanium leather / electric	M*	T*
	Pneumatic side bolster adjustment	Pneumatic, automatic side panel adjustment (memory, operation via terminal possible)	x	x
Seat cushion depth and tilt adjustment	Seat cushion depth and tilt adjustment	Seat cushion depth and tilt adjustment	x	x
Seat contact switch	Seat contact switch	Seat contact switch	x	x
Seat cushion width 550 mm	Seat cushion width 550 mm	Seat cushion width 550 mm	x	x
		Massage function (operated via the terminal)		x

*M = Memory function; T = Operation via terminal

Equipment

Premium seats in comparison (4/4)

SuperComfort seat EvolutionUp DualMotion	SuperComfort seat Titanium	SuperComfort seat Titanium leather - electric	M*	T*
Backrest tilt position	Backrest tilt position	Backrest tilt adjustment, automatic (Memory)	x	
Adaptive Dualmotion backrest extension (can be moved to the left): Dualmotion: Flexible adjustment of the upper backrest to support the body in backward sitting positions, facilitates turning and provides optimum clearance for observing attachments	Back extension can be extended and retracted	Back extension can be extended and retracted		
Lap belt restraint system	Lap belt restraint system	Lap belt restraint system		

*M = Memory function; T = Operation via terminal

Equipment

Comfort passenger seat

- Comfort passenger seat is standard
- Backrest with table function and clipboard function (for RüFa: narrower backrest without additional functions)
- Because of the wider entrance, the passenger seat is now further back



Benefits - maximum comfort

- + More room as you come in because of the shifted passenger seat
- + Passenger seat also available in leather version
- + More leg room for the passenger
- + Simple turning possible with RüFa
- + Practical additional function integrated in backrest

Equipment

Built-in cable ducts

- 3 integrated cable grommets below the rear window:
- Less dirt ingress into the cab
- Better sound insulation
- Additional brackets in the C-pillar allow the cables to be routed to the sockets in an organised manner



Benefits - more comfort and work safety

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

Equipment

Reverse drive control (RüFa)

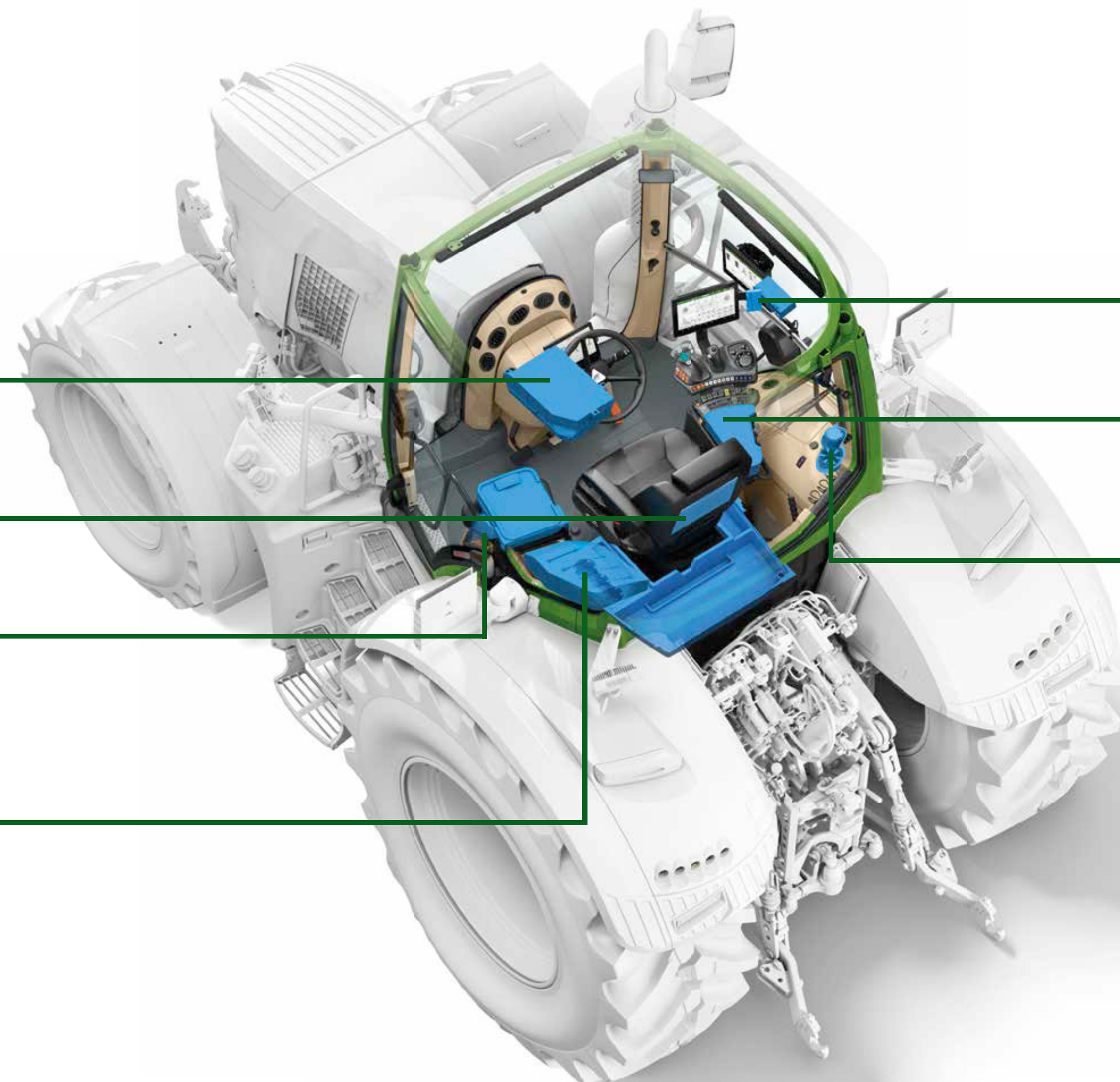
- With pneumatic support the entire driver platform rotates 180°
- Used for specialised tasks such as forestry or municipal work
- Full compatibility with both available cool boxes on the right-hand side
- Comfort passenger seat also possible with reversing device
- Always with sun blinds
- Always supplied with Titanium / DL super-comfort seat

Benefits

- + Fully versatile
- + All controls move together
- + Same level of comfort forwards and in reverse
- + Faster turning, as the cooler and warming box as well as the passenger seat are not in the swivelling range

Equipment

Storage options



Storage compartments in the roof liner

Document pouch

Storage compartment with net in the entrance (under passenger seat)

Cup holder

Mobile phone holder and tablet holder

Storage in the armrest

Ash tray and drinks holder

Equipment

Holder for terminals and tablets

Auxiliary device holder

- Sturdy holder for terminals on the right-hand side of the cab, visibility-optimised arrangement
- Variably adjustable due to guide in rail

Tablet holder

- Secure and custom-fit attachment for tablets of different sizes on the right-hand side of the cab
- Fastening the bracket to the terminal bracket
- Vastly variably adjustable due to guide in a rail and bearing in a ball joint



Equipment

Infotainment - Overview

Electronic platform for entertainment and communication includes four components:

- Hands-free equipment
- High-quality radio reception
- 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: 4 premium speakers
- Infotainment package + 4.1 sound system (from Profi): 4 premium speakers plus subwoofer integrated in sound bar

Benefits

- + Modern infotainment system with many expansion options
- + Perfectly balanced sound in the cab
- + Highest user comfort
- + Complete integration into the vehicle



Equipment

Infotainment - Hands-free system

- Microphones fully integrated and optimally distributed in the roof liner
- 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

Benefits

- + Best reception and transmission quality for hands-free calling thanks to the distribution of the microphones in the roof lining



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 frequency bands worldwide
 - FM/AM/DAB+/HD
 - FMHD
 - Satellite radio ready
- Connection of a wide range of audio sources via Bluetooth or cable-based via USB or AUX-IN connection on the infotainment module
- Operation via rotary knob on the armrest and terminal

Benefits

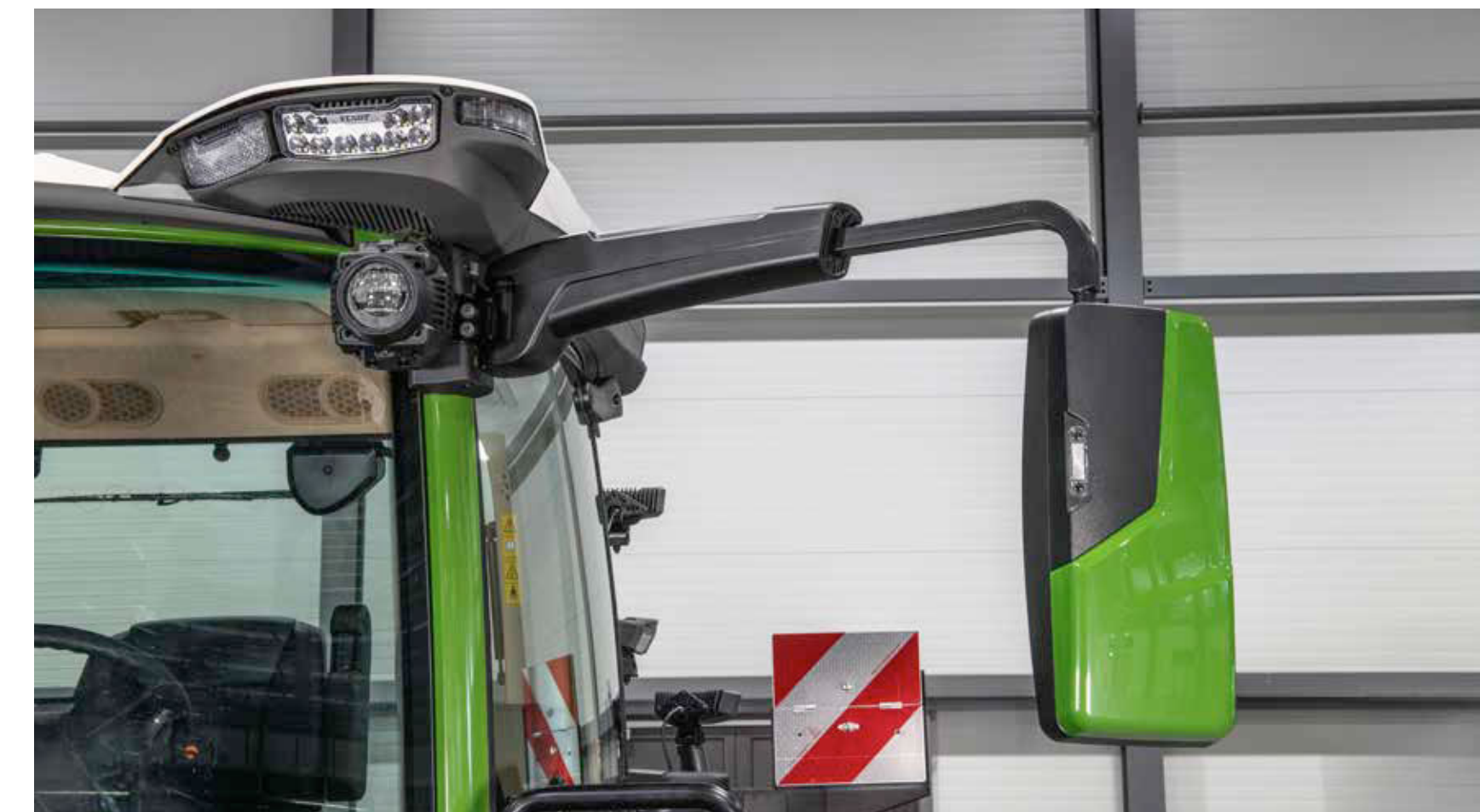
- + Best radio reception quality
- + Music streaming via smartphone or other audio sources
- + Highest user comfort



Equipment

Electronically adjustable comfort rear-view mirror

- 3 different variants to choose from:
 - Rear-view mirror: mechanically adjustable mirror holder, electrically adjustable and heated main mirror, mechanically adjustable and heated wide-angle mirror, without clearance light
 - Comfort mirrors: mechanically adjustable mirror holder, electrically adjustable and heated main mirror, electrically adjustable and heated wide-angle mirror, with clearance light
 - Electric telescopic comfort mirror (only for Profi/Profi+): electrically adjustable mirror holder, electrically adjustable and heated main mirror, electrically adjustable and heated wide-angle mirror, with clearance light
- As LIN mirror complete integration in vehicle electronics
- Operation in the terminal
- Function for simultaneous retraction of both mirrors
- Position lights in the mirror housing in conjunction with comfort mirrors
- Best overview of dangerous zones when turning
- Mirror heating



Equipment

Electronically adjustable comfort rear-view mirror

Benefits - more working and driving safety, greater comfort

- + Driver can adjust mirrors conveniently and easily
- + No blind spots and the best overview even with large implements in tight spaces
- + Position lights so other road users can easily see the vehicle dimensions



Equipment

Dust extraction for cab air filter

- Automatic, continuous, passive dust extraction via cyclone separator and vacuum from the engine fan before dust-laden air reaches the cab air filter
- Only available in conjunction with the automatic dust extraction system for the engine air filter

Benefits - more comfort, work safety and productive working time

- + Cab air filter rarely needs to be cleaned manually - no need for daily maintenance
- + Driver is optimally protected from dust
- + Cab air filter is continuously and gently cleaned to optimise service life and reduce the number of filter changes
- + In conjunction with the automatic dust extraction system for engine air filters, the machine can be used without interruption even at times of very high utilisation

Lighting concept

Overview

- New pioneering 360° lighting concept for work lights in the cab roof and on the cab - with up to 114,700 lumens (with UltraVision)
- Lighting in the bonnet consisting of:
 - Work lights
 - With low beam and high beam
 - Auxiliary lights (required due to comfort ballast pick-up and the front power lift)
- Combination lights for indicator, position light and side marker light
- Rear lights with wiping indicators
- Other headlamps: A-pillar front, C/B-pillar rear, mudguard rear
- Lighting for road travel
- Optional: GroundVision (drawbar lighting), integrated LED rotating beacon, third brake light

Unique solution on the market!

Benefits - more comfort, work safety and productivity

- + Optimum illumination makes working at night just as possible as during the day - less dependent on the time of day
- + High luminous flux with LED and maximum energy efficiency



Lighting concept

Front view

LED front roof work lights (Vision or UltraVision)

Rotating beacon (fully integrated)

Auxiliary front lighting (backup headlamps; LED as an option)

LED work lights A-pillar (Vision or UltraVision)

Combination light

Daylight running light

LED work light bonnet top (Vision or UltraVision)

Low beam and high beam (optional LED)

Corner lights

Total lumen output LED with UltraVision 114,700 lumens



Lighting concept

Rear view

Rear roof work lights (Vision or UltraVision)

A-pillar and rear mudguard work lights

Wiping indicator

Rear mudguard work light (GroundVision)



Tech Rail LED work lights (UltraVision)

LED tail and brake light

Lighting concept

Cab work lights - Overview (1/2)

- New pioneering concept clearly surpasses the previous concept
- Choice of 8 or 12 work lights in the cab roof
- Choice of LED headlamps:
 - Vision work lights each have a luminous flux of 1000 lumens
 - UltraVision work lights each have a luminous flux of 4400 lumens, which can be individually dimmed in five stages per spotlight
- Enables uniform illumination around the tractor:
 - Front, rear and sides are optimally illuminated
 - Light is distributed seamlessly over the near, medium and far ranges of the tractor thanks to targeted installation of the respective version (Vision and UltraVision headlamps)
 - Cross alignment of the front headlamps in the cab roof to illuminate the area in front of the tractor in the best possible way



Vision with 8 spotlights



Vision with 12 spotlights



UltraVision with 8 spotlights



UltraVision with 12 spotlights



Lighting concept

Cab work lights - Overview (2/2)

- 360° illumination (uniform and wide-ranging) - designed to provide optimum coverage for all typical attachments
- Beam angle of the work lights automatically achieves optimum illumination
- Individual switching on and off of the individual work lights for four situations can be saved via four profiles, e.g.:
 - Set profiles with dark right or dark left side
 - Mirror the current configuration of the headlamp settings with one click
 - Left and right headlamps of the same position individually adjustable and also dimmable with UltraVision
- Headlights above the door are automatically switched on and off when getting in/out of the vehicle
- Light reflections are minimised - glare-free working for the driver, even with full lighting



Vision with 8 spotlights



Vision with 12 spotlights



UltraVision with 8 spotlights



UltraVision with 12 spotlights



Lighting concept

Cab work lights - Benefits

Benefits - more comfort, work safety, increased productivity and efficiency

- + Maximise working time and machine utilisation thanks to optimum illumination even in the dark - less dependent on the time of day
- + Work quality is not impaired even in the dark - for example, the result of seedbed preparation can always be checked in the best possible way
- + Automatic, optimum illumination without manual intervention by the driver
- + Glare-free working thanks to minimised reflection despite the light flux being fully switched on - convenient and prevents accidents
- + Better monitoring of the working environment in the dark
- + UltraVision's dimming function increases safety in poor visibility conditions:
 - Better visibility in fog or snow
 - Reduced glare for oncoming vehicles
- + Adjust the lighting with one click, depending on the situation (without interrupting work) thanks to memorisable settings in four profiles
- + Safe entry and exit via glare-free boarding thanks to automatic switching on and off of the light at the entrance
- + Use of LED spotlights improves the machine's power consumption



Lighting concept

Drawbar lighting

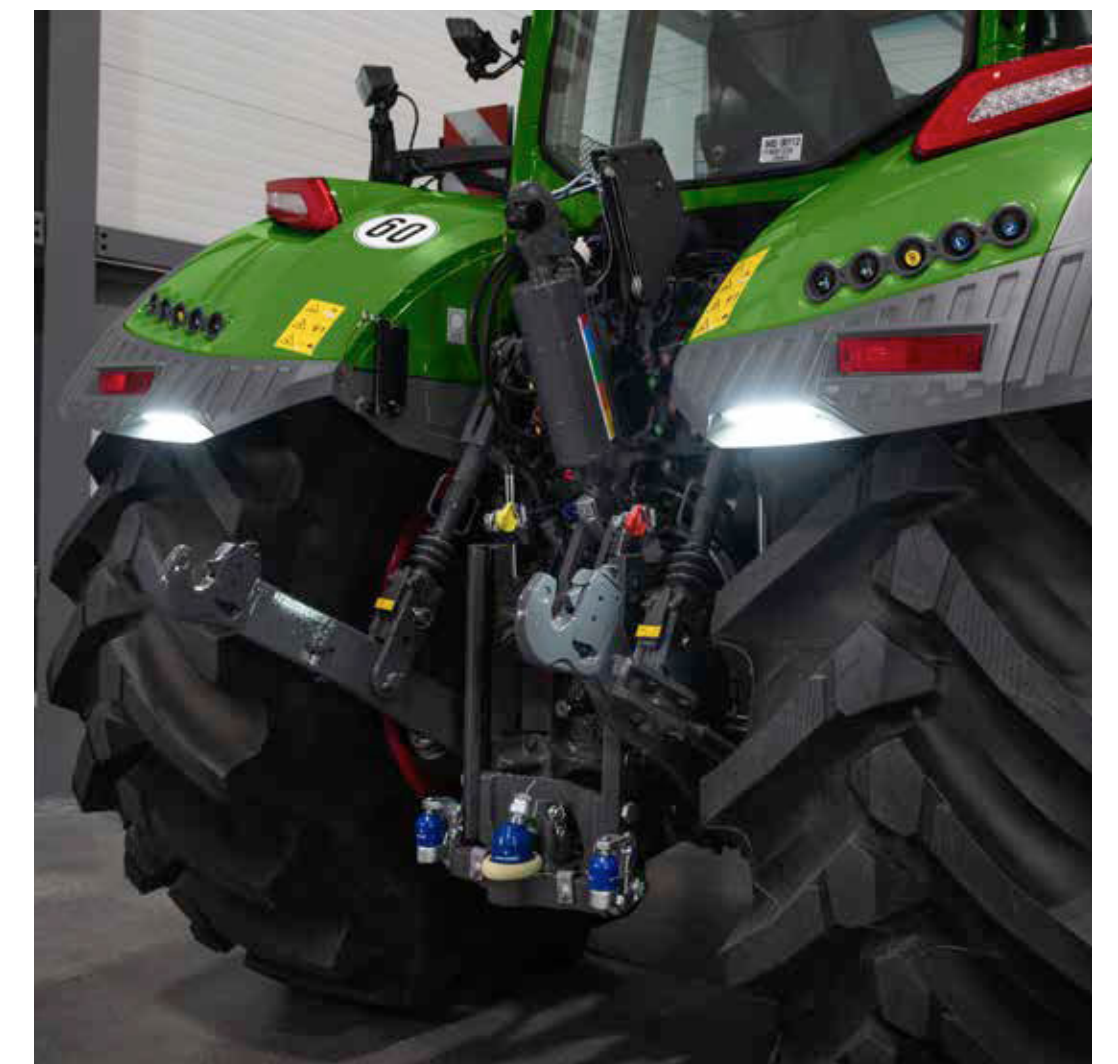
Groundvision

- One headlamp integrated in the left and one in the right mudguard
- Important area behind the tractor in the direct attachment area and closer surroundings illuminated
- Beams always downwards, backwards and to the sides
- Optimally illuminate, for example, the working area of a power harrow, the pick-up of a forage wagon and the pick-up of a baler

Unique solution for drawbar lighting on the market!

Benefits - more productivity, increased work safety and greater efficiency

- + Ensures the quality of the implement's work even in the dark, while at the same time protecting the driver's concentration and well-being
- + Better visibility of the drawbar and pick-up reduces the risk of damage and accidents - e.g., with piles or objects in the swath



Lighting concept

Integrated rotating beacon

- Part of the new cab roof design, fully integrated installation
- Four rotating beacons - one per corner of the cab roof, LED version
- Full StVO approval



Benefits - more productivity and increased occupational safety

- + No more folding and unfolding necessary - no interruption to work and less risk of accidents and damage, e.g., from hanging branches

FENDTONE OPERATION

Operation



Concept

Overview - FendtONE driver's workstation

1. More display areas

- Network of up to 3 display options
- Digital 10" dashboard: flexible display, important data such as on-board computer, button assignment, etc.
- 12" terminal on the armrest and in the roof lining (retractable): individual display of tractor operation, guidance system, ISOBUS devices, infotainment, etc.
- Central Display Control Unit (DCU): show functions on 3 terminals at the same time and use them interchangeably to adjust settings
- Enhanced display through digital dashboard
- Switching the displayed functions between terminals

2. More operating options

- Multifunction joystick: more buttons can be freely assigned (also for ISOBUS function)
- 3L-Joystick: up to 27 functions distributed over up to three operating levels (also for ISOBUS functions)
- Free assignment of buttons on the armrest
- No additional operating elements such as terminals or joysticks required



Concept

Overview - FendtONE driver's workstation

3. Greater individualisation of operation

- For the first time, operating locations can be assigned tractor functions, ISOBUS functions and teach-in functions
- Creation of user profiles to save settings for different drivers
- Assignment of admin rights
- Personalization of the display surfaces
- Free assignment of buttons and visual feedback to avoid operating errors

4. Simple operation

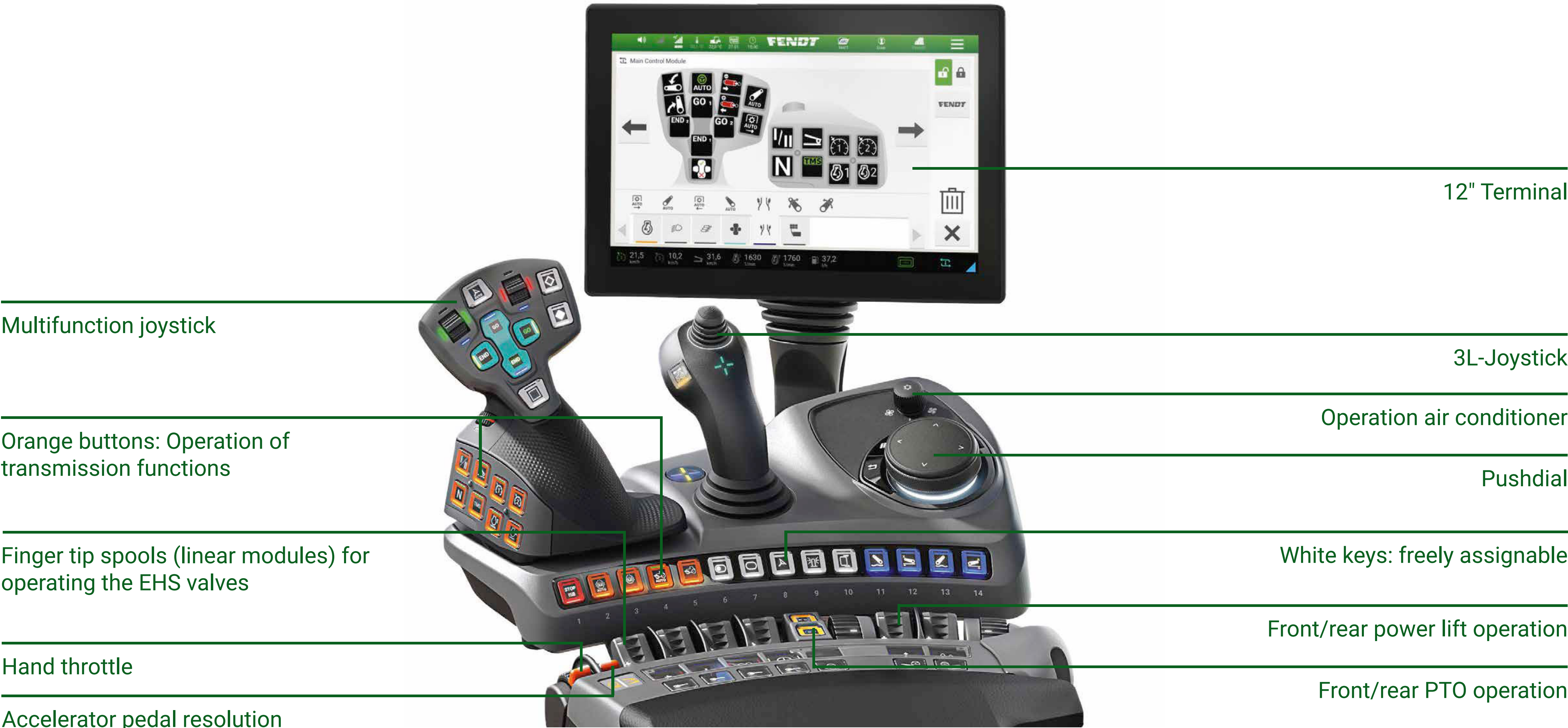
- All of the operating elements in one central location
- Intuitive operation (similar to smartphones and tablets)
- Flat menu structure to easily find individual functions
- Colour-coded labelling of the various function groups
- Proportional operation of the power lift
- Proportional operation of the EHS valves on the multi-function joystick
- Display of messages in clear text

5. Future-proof

- Large storage capacity, more interfaces, high connectivity



Concept



Concept

Key arguments - FendtONE driver's workplace

Freely programmable armrest - the first on the market

- Free assignment of the buttons
- Individualisation via Individual Operation Manager (IOM)

Unique colour concept for a better overview

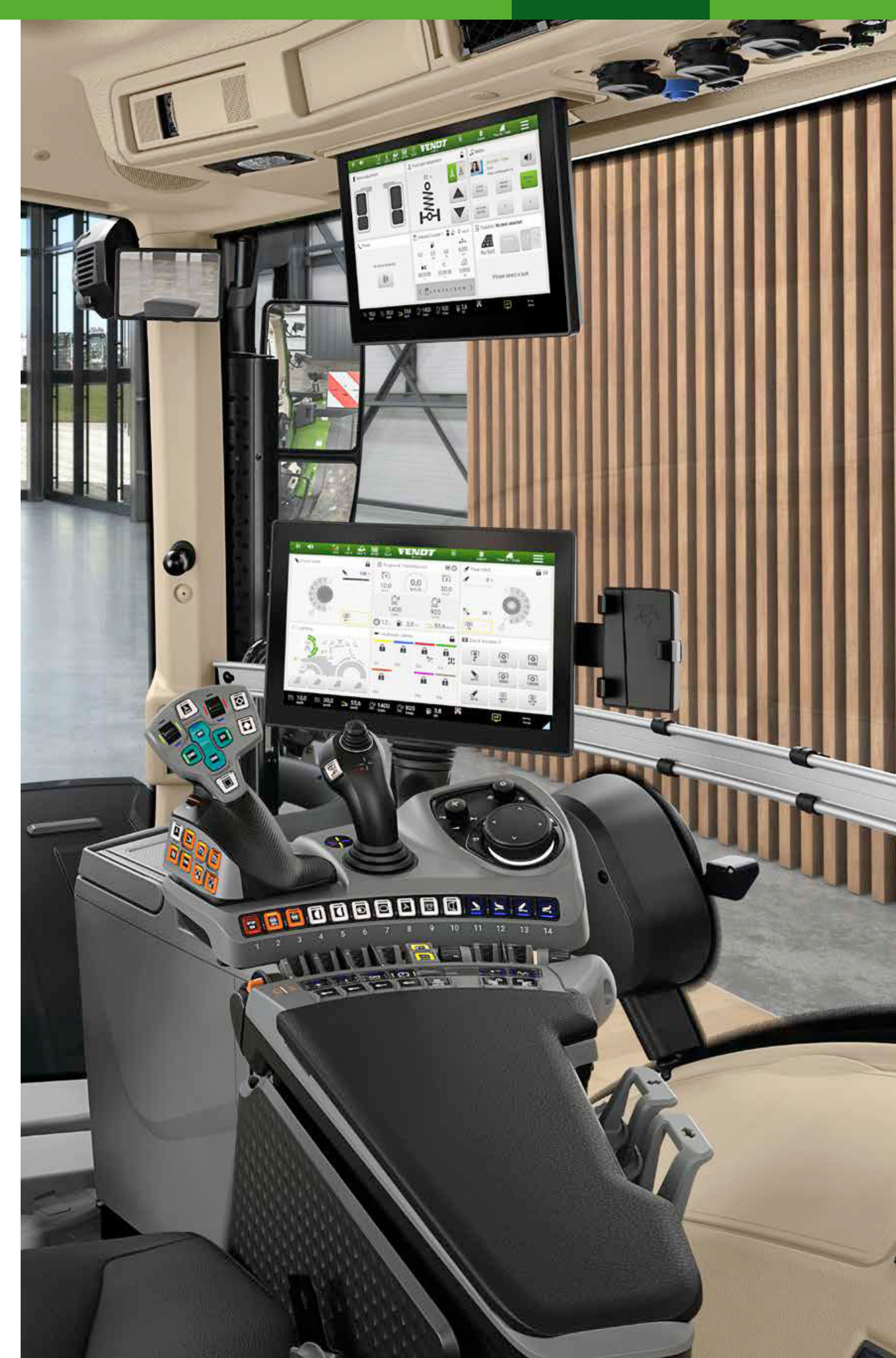
- Logical and dynamic colour concept
- Optimum overview thanks to the colours assigned to the function groups

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 the driver's workplace (FendtONE onboard) and the system in the office (FendtONE offboard)



Operation

Colour and lighting concept

- Colour concept: operating buttons have different colours depending on their function (14 function buttons)
- Each function group is assigned to a specific colour:
 - Orange: Drive wheel or transmission functions
 - Yellow: PTO functions
 - Blue: Hydraulic and power lift functions
 - White: General functions
 - Petrol: Teach-in, ISOBUS functions, multiple functions
 - White and teal-coloured keys can be freely assigned
- In the case of function reassignment, newly assigned functions are displayed in the colour of the respective function group
- LEDs on buttons provide corresponding feedback:
 - Lower LED: shows the colour of the respective function group
 - Upper LED: shows the status of the function (on/off)



Benefits

- + Quick orientation and simple operation due to colour coding of the different function groups
- + High degree of customisability thanks to large number of freely assignable keys
- + Avoidance of operating errors through visual feedback during function reassignment

Operation

Reverser on the steering column

Stop-and-go function in conjunction with TMS:

- Press and hold the forward/reverse rocker **IN** the direction of travel:
 - Tractor decelerates to a standstill
 - After releasing the rocker, it accelerates in the same direction of travel
- Press and hold the forward/reverse rocker **AGAINST** the direction of travel:
 - Tractor decelerates to a standstill
 - After releasing the rocker, it accelerates in the opposite direction of travel



Operation

Multi-function joystick - Concept

- Ergonomic shape and arrangement
- Fendt familiar operation of functions such as reversing, activation of cruise control and accelerating/ decelerating is retained
- 4 additional keys with the possibility of function reassignment
- Rotary wheel on the driving lever for adjusting the cruise control speed while driving
- Important transmission functions such as cruise control preselection, TMS, speed memory, etc. located in the lower side area

Benefits

- + Quick orientation for Fendt drivers, as the basic functions are the same for all Fendt tractors
- + Possibility of individualisation thanks to freely assignable buttons
- + Less reaching around required thanks to central arrangement of the functions on the drive lever

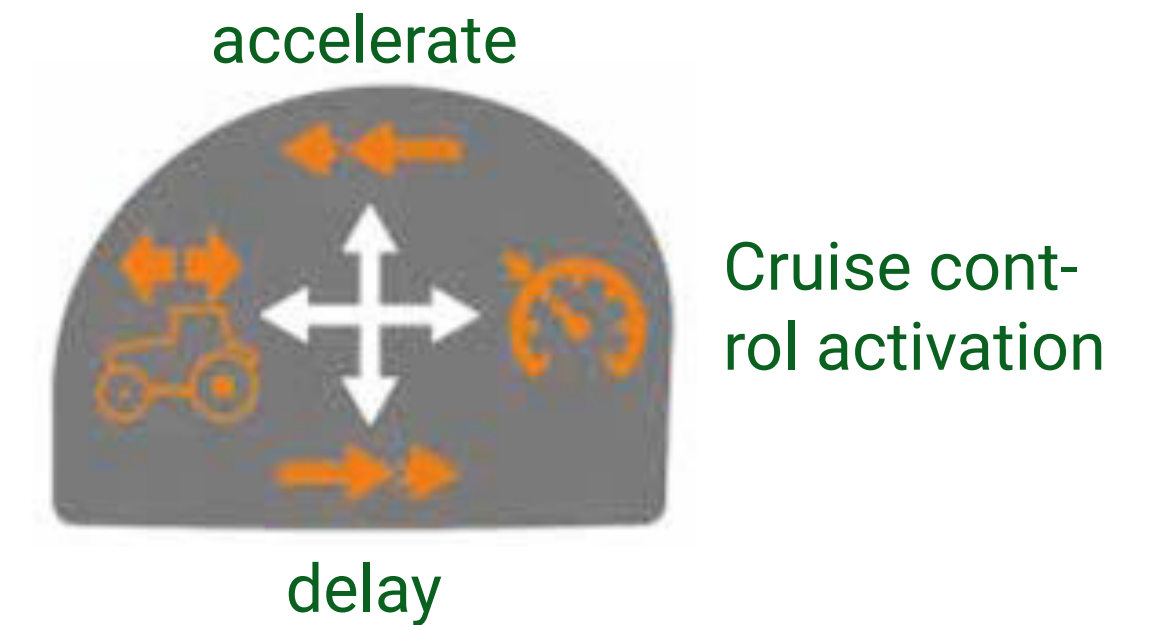


Operation

Multi-function joystick - Overview



Change of direction



Acceleration ramps (I-IV):

- Ramp I: 0.02 km/h – 0.5 km/h
- Ramp II: 0.5 km/h
- Ramp III: 1.0 km/h
- Ramp IV: 2.0 km/h

Operation

3L-Joystick

- Optional 3L-Joystick (with Power+ Setting 2, Profi Setting 2 and Profi+ Setting 2)
- Operation of the 3rd and 4th hydraulic control unit
- Fully ISOBUS-capable
- Up to 27 functions distributed over up to three operating levels (3L - 3 levels)
- Additional reverse key
- Functions can be reassigned via the IOM; colour feedback
- Entire 3L-Joystick can be locked for safety reasons



Benefits

- + No need to reach around thanks to the reverse button
- + Freely customisable through function reassignment
- + Locking of the 3L-Joystick possible: prevention of unintentional operation

Operation

Pushdial

- To operate the terminals/dashboard (terminals can also be operated by touch)
- 4 Quick-access keys for quick navigation

Benefits

- + Quick navigation thanks to quick-access keys
- + In addition to touch operation of the terminals, complete operation via rotary pushdial is also possible



Operation

Digital Dashboard

- 10.1" large display (not touch capable)
- Fixed to the steering column, can be swivelled along with the steering column
- Different display modes:
 - Street and field mode
 - Day and night mode
- Display of messages (3 levels):
 - 1) Communication
 - 2) Warning message
 - 3) Alarm
- Choice between different views, e.g., EHS valves, button assignment, fuel consumption, etc.

Benefits

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



Operation

Terminals - armrest and headlining

12" terminal on the armrest

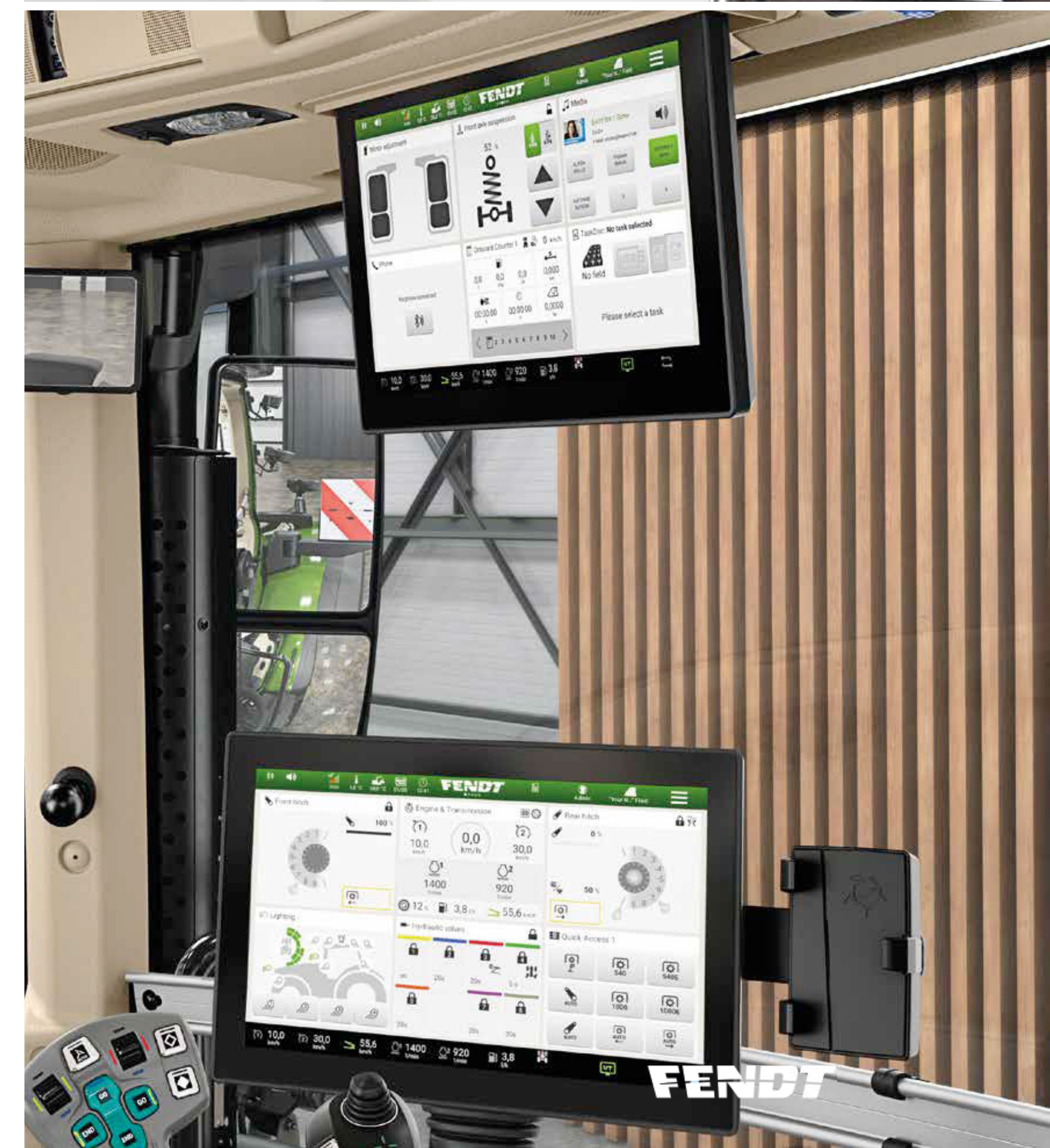
- Standard across all equipment variants
- Can be operated by touch and pushdial
- Up to six freely configurable tiles per page
- Creation of user profiles to save page arrangements and settings for changing drivers
- Integrated day and night design

12" terminal in the roof

- Additional display area - no additional external terminals required
- Can be half retracted into the headlining (lower half is still visible)
- Functions correspond to the terminal on the armrest

Benefits

- + Intuitive operation (similar to smartphones and tablets)
- + Flat menu structure to easily find individual functions
- + Possibility of personalisation through freely configurable pages or tiles



Operation

Terminal operation

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

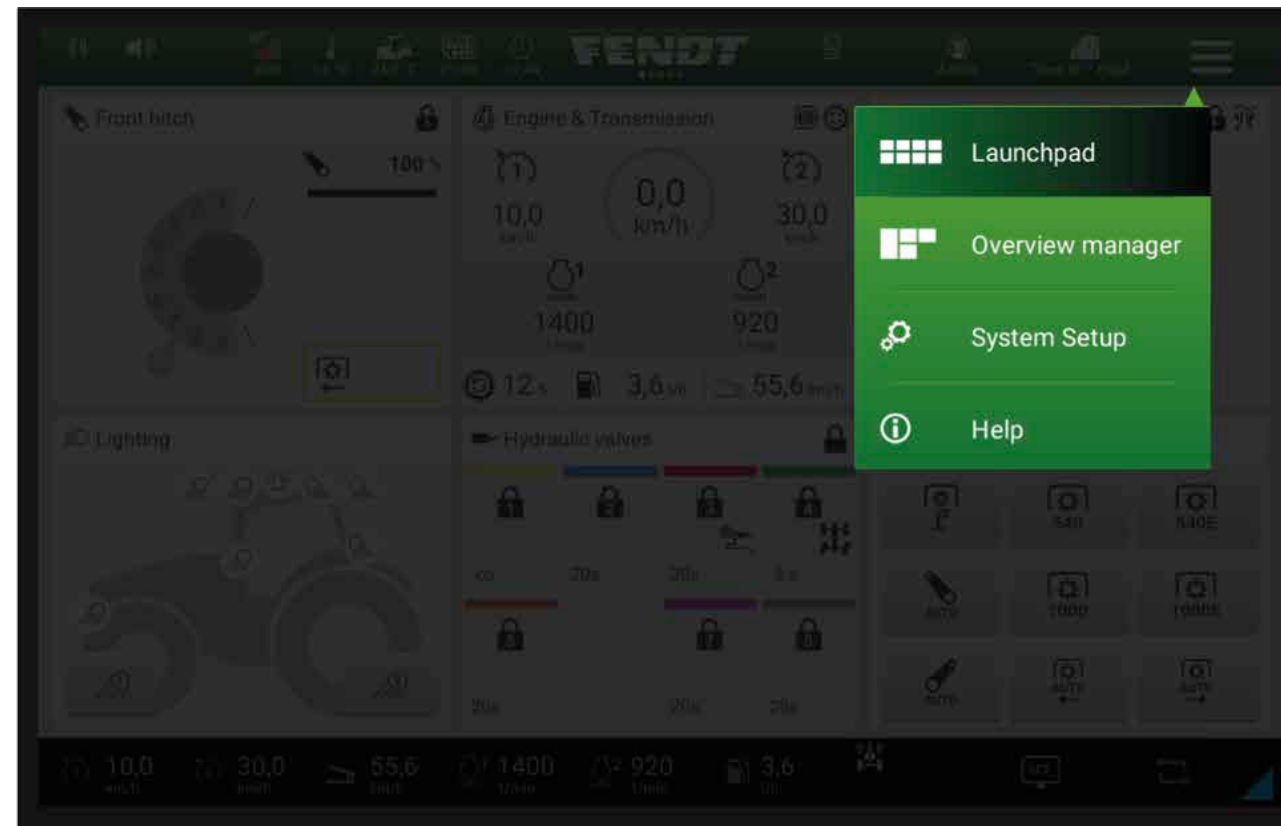


Benefits

- + Important information is always displayed regardless of the terminal view
- + Quick-access by clicking on header or footer column

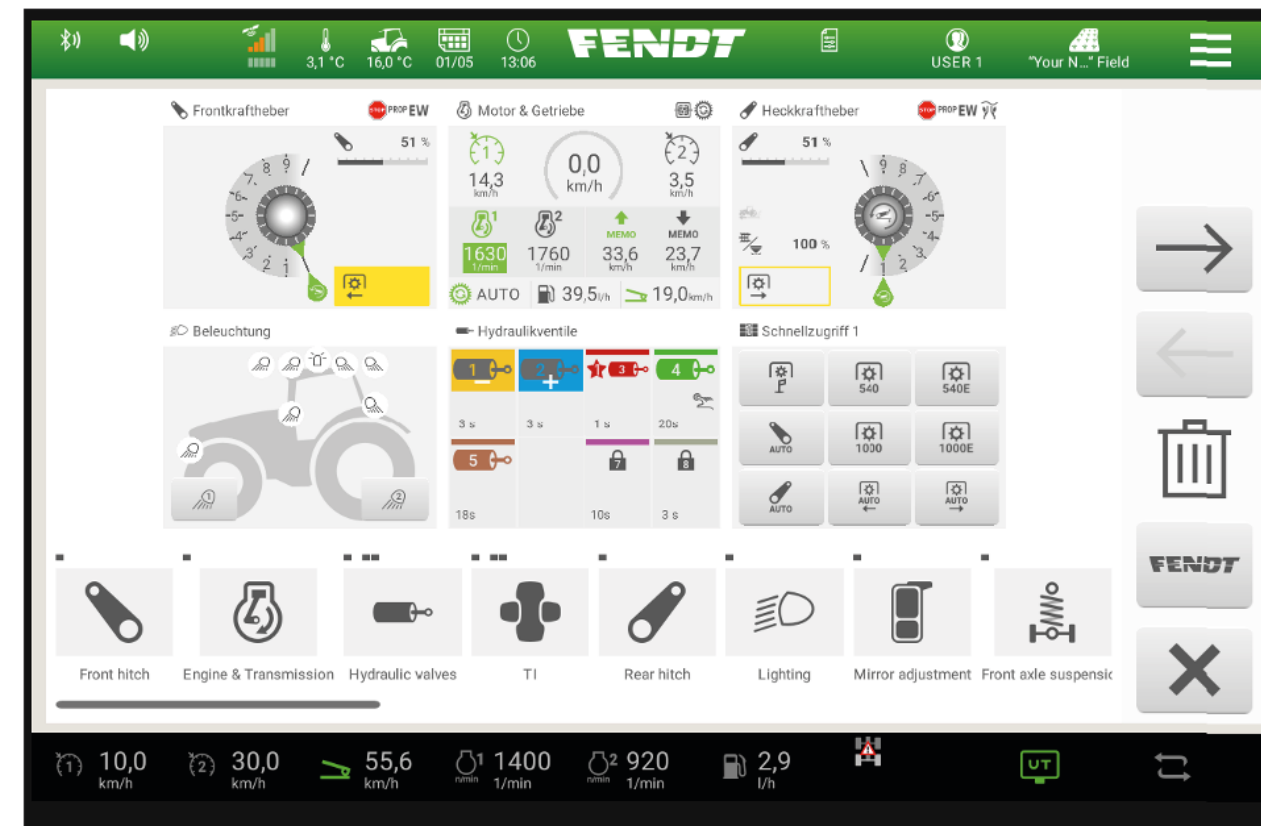
Operation

Terminal - Overview manager



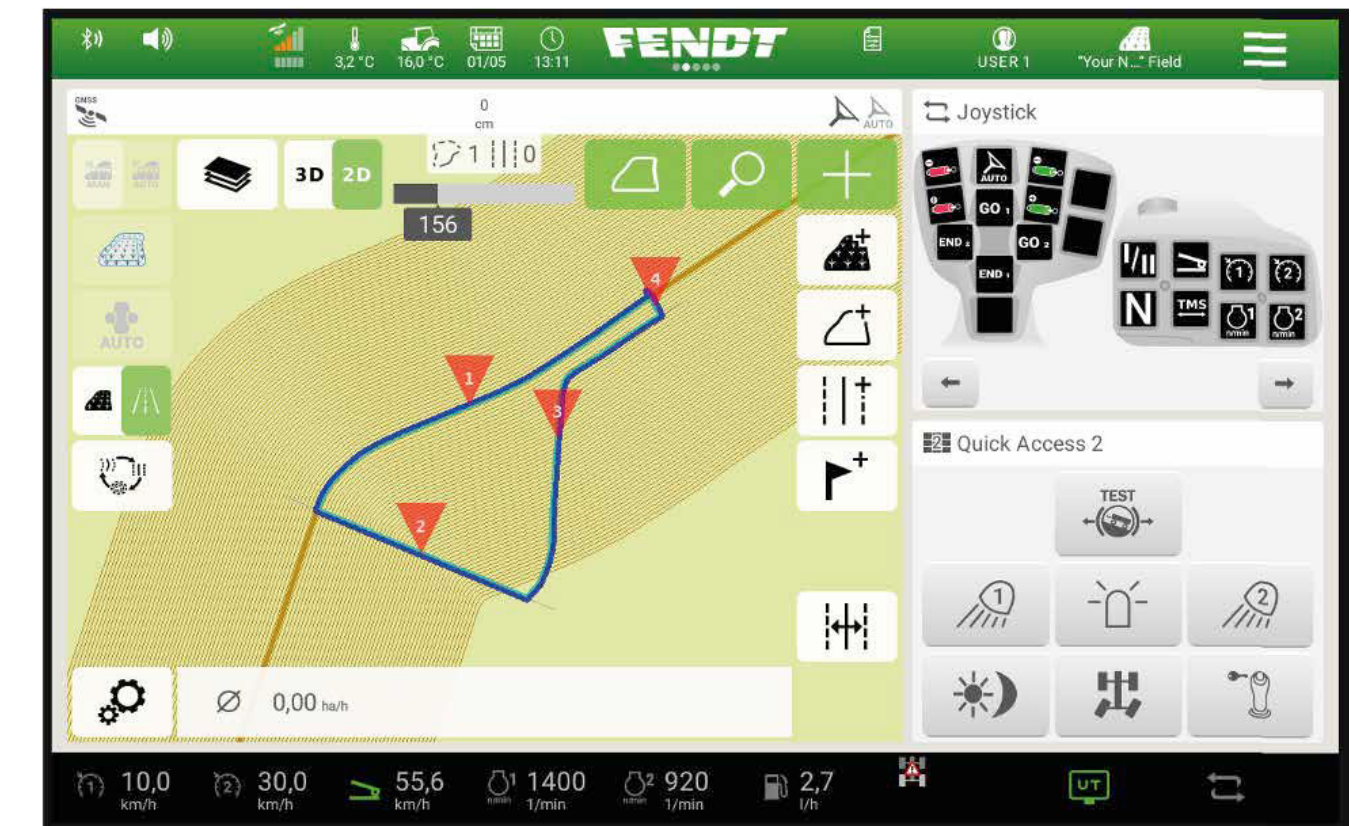
Overview manager for customising the terminal pages

- 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



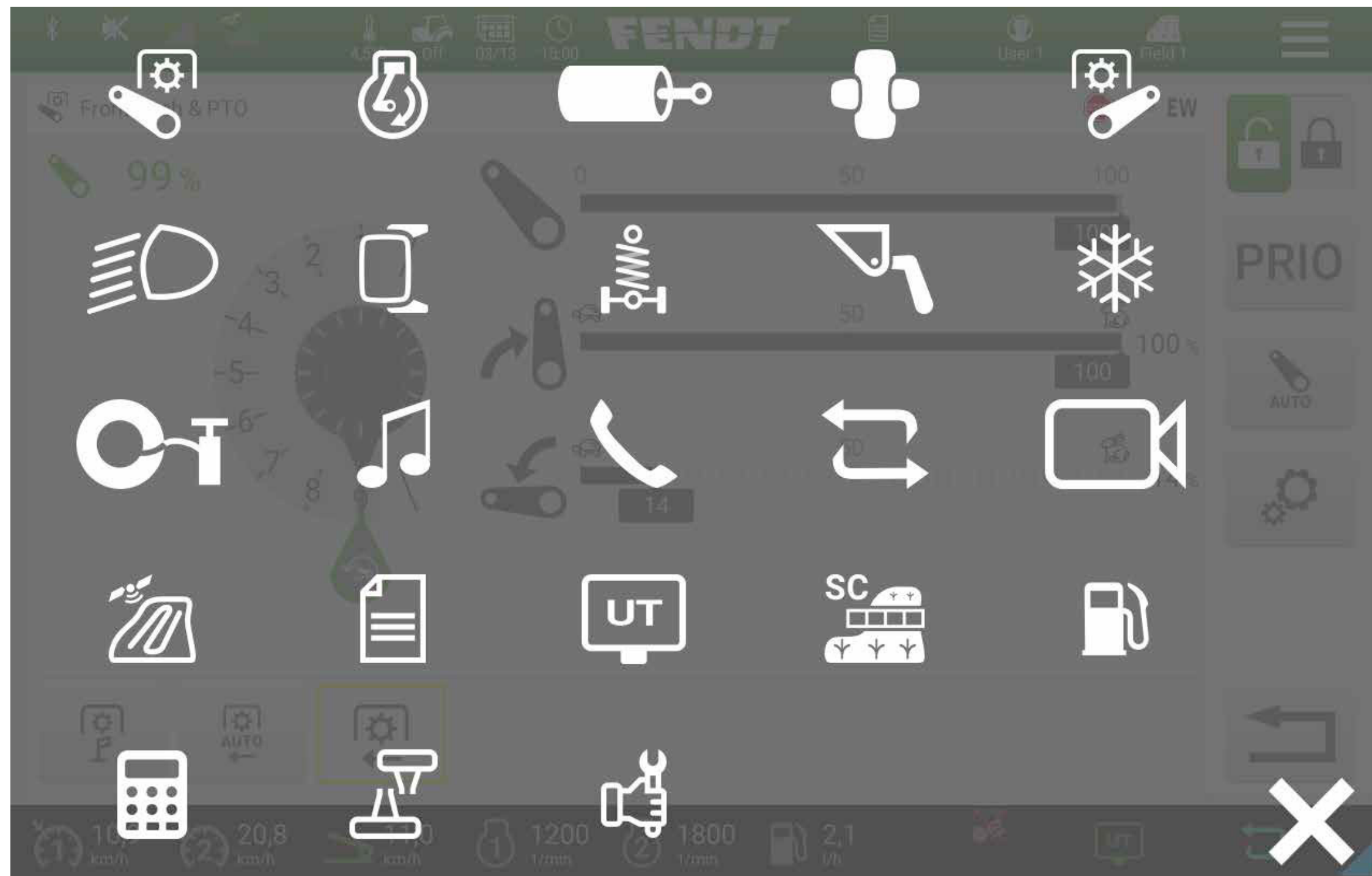
For a better overview

- Functions can, for example, also be displayed on 4 tiles, such as track guidance here
- Clicking on the respective tile opens the corresponding menu in full-screen mode

Operation

Launch pad

- Overview page in the terminal for quick access to all functions
- Comparable to a home button on a smartphone
- Quick-access button on the pushdial



Operation

Front and rear power lift

Float position mode front linkage

Front hydraulics control mode: Saving the currently set depth as a new MEMO setpoint value

Front linkage (lift/lower/rapid retraction)

Front PTO (on/off)

Rear PTO (on/off)

Scroll wheel (infinite): Working depth front linkage

Lock/unlock front linkage

Float position mode rear linkage

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

Rear linkage (lifting/lowering/rapid retraction)

Scroll wheel (infinite): Working depth rear linkage

Lock/unlock rear linkage



Operation

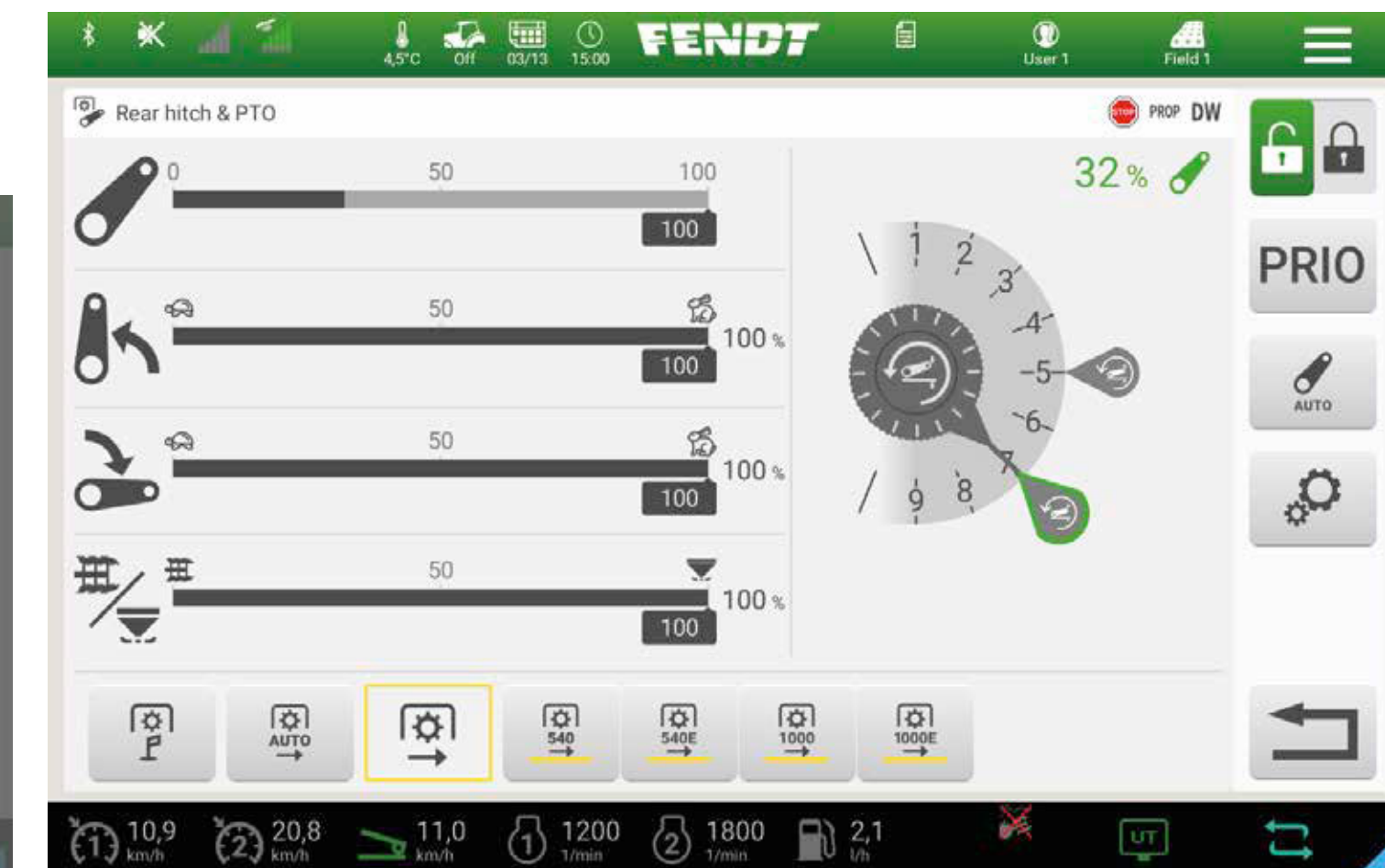
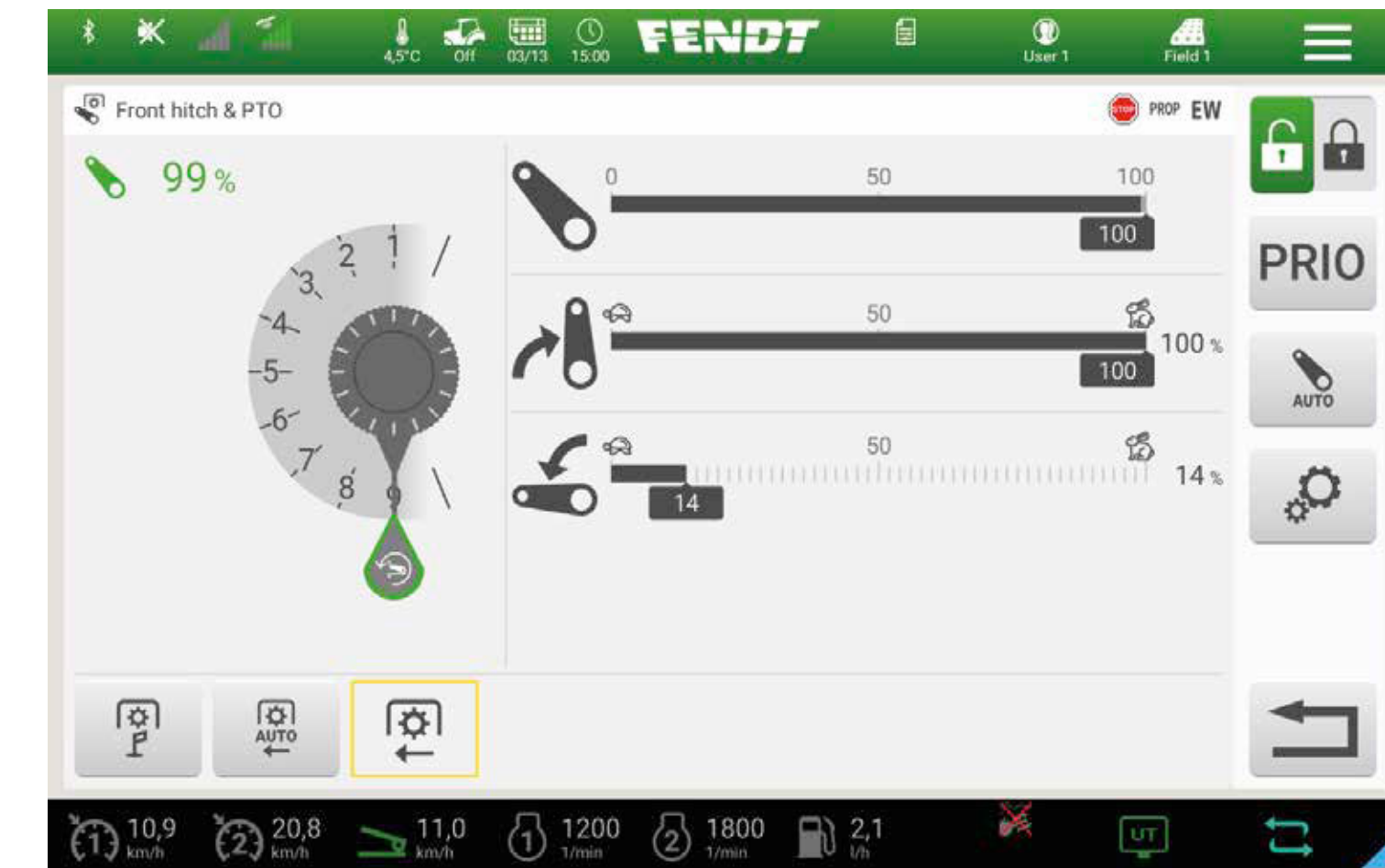
Terminal - Power lift

Front power lift - setting/activation of:

- Lifting height
- Lifting speed
- Lowering speed
- Front PTO speed
- Front PTO automatic
- Stationary operation Front PTO
- Relief control

Rear power lift - setting/activation of:

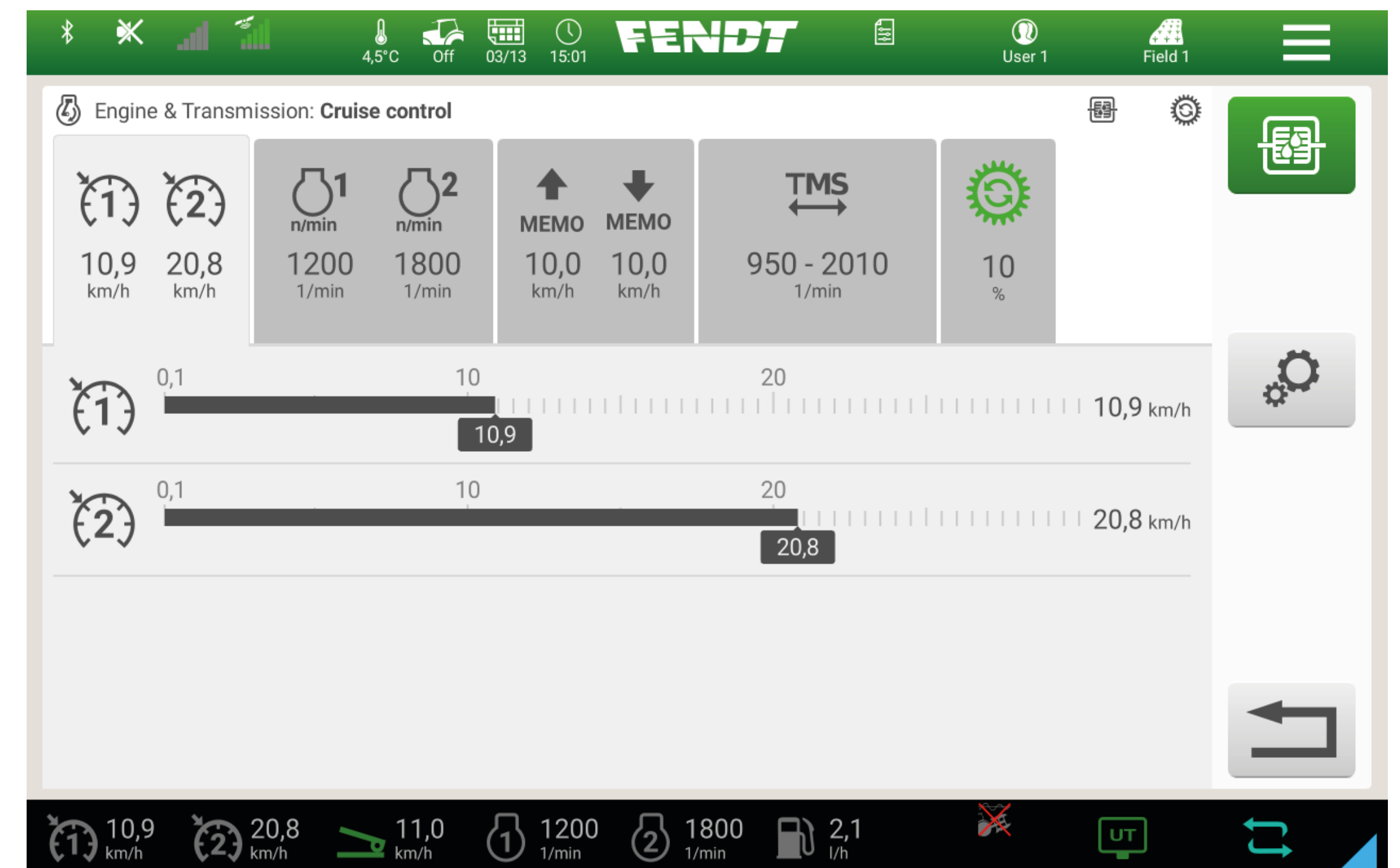
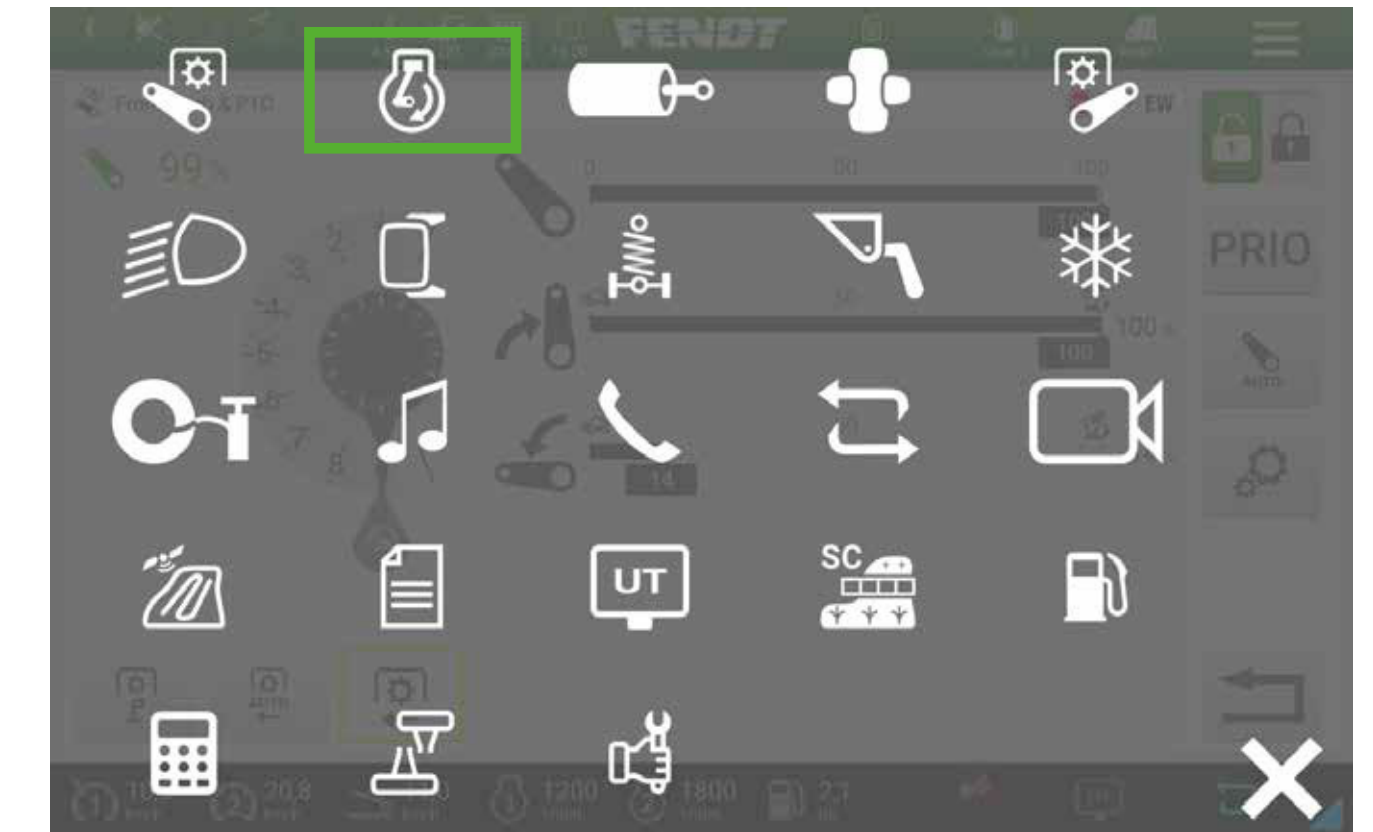
- Lifting height
- Lifting speed
- Lowering speed
- Rear PTO speed
- Rear PTO automatic
- Stationary operation Rear PTO
- Side stabilisers
- Traction and position control
- Relief control



Operation

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



Benefits

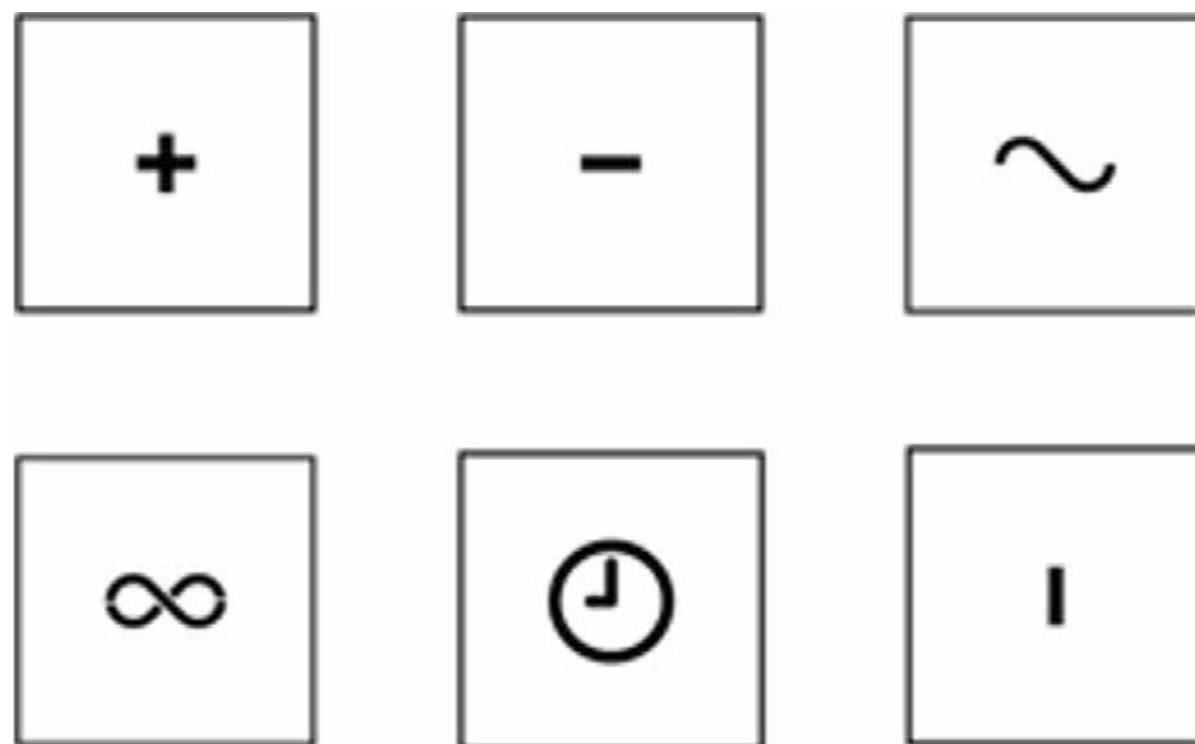
- + Simple and safe adjustment by touch and/or pushdial
- + Quick activation of functions (memo function, turbo coupling function...)

Operation

Finger tip spools (linear modules) for operating the EHS valves

Each finger tip spool has four positions:

- 1. Plus
- 2. Minus
- 3. Floating position
- 4. Without function:
 - Constant pump (can be activated via terminal)
 - Time function (can be activated via terminal)



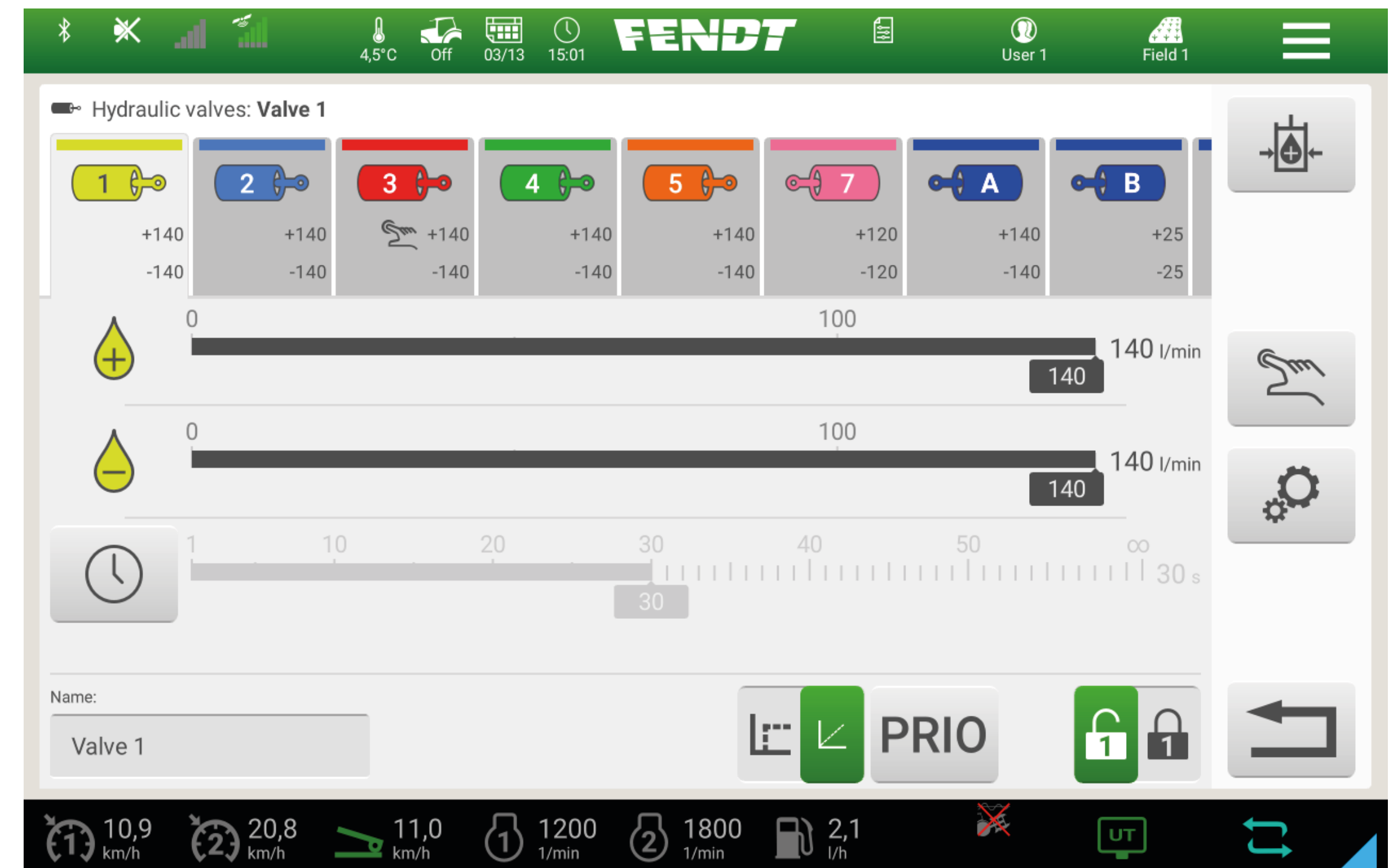
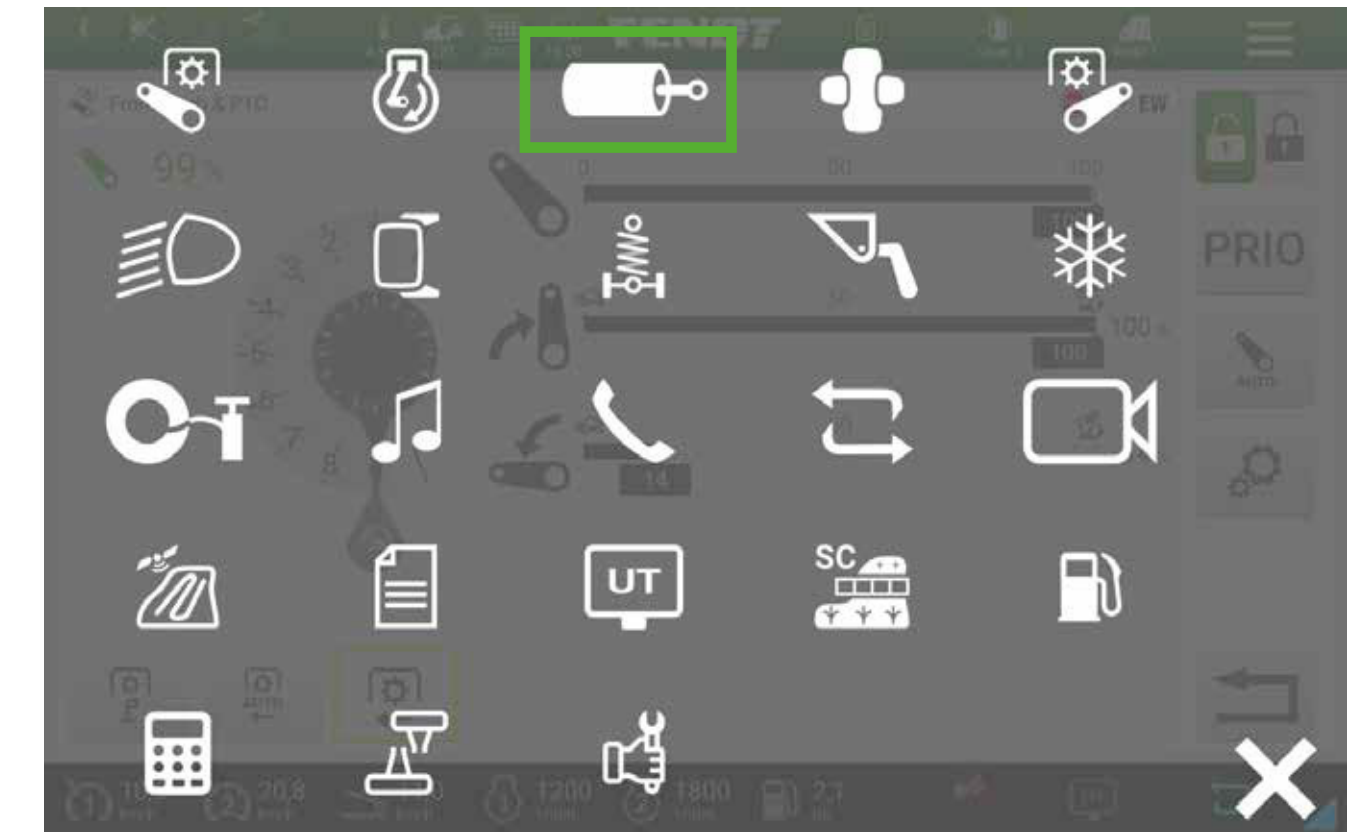
Lock/unlock respective finger tip
spool separately

Lock/unlock all finger tip spools together

Operation

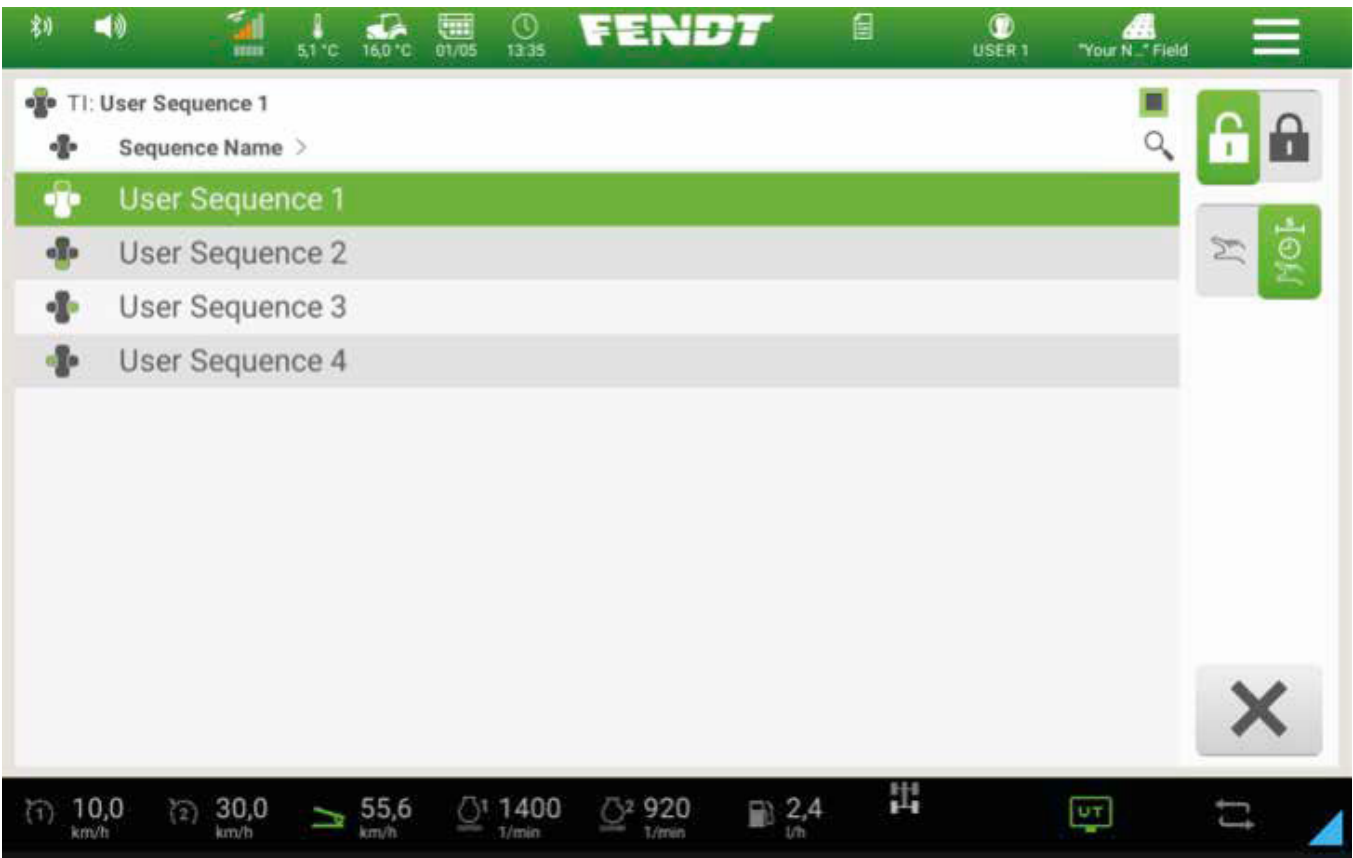
Terminal – Hydraulic valves

- Clear status display of all EHS valves
- Setting/activation of:
 - Oil quantity
 - Time function
 - Start-up control
 - Valve selection for external operation
 - Priority function
 - Automatic steering axle lock

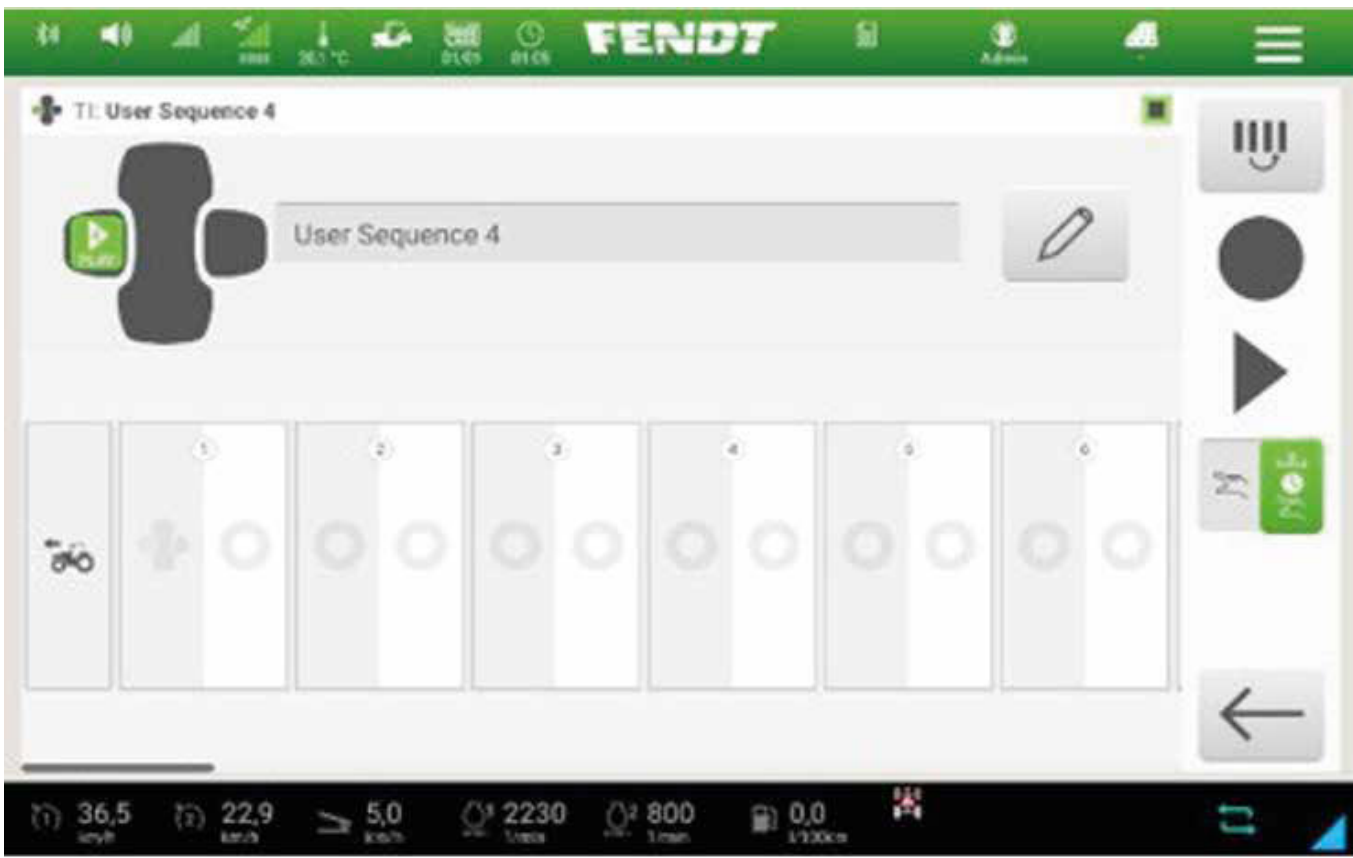


Operation

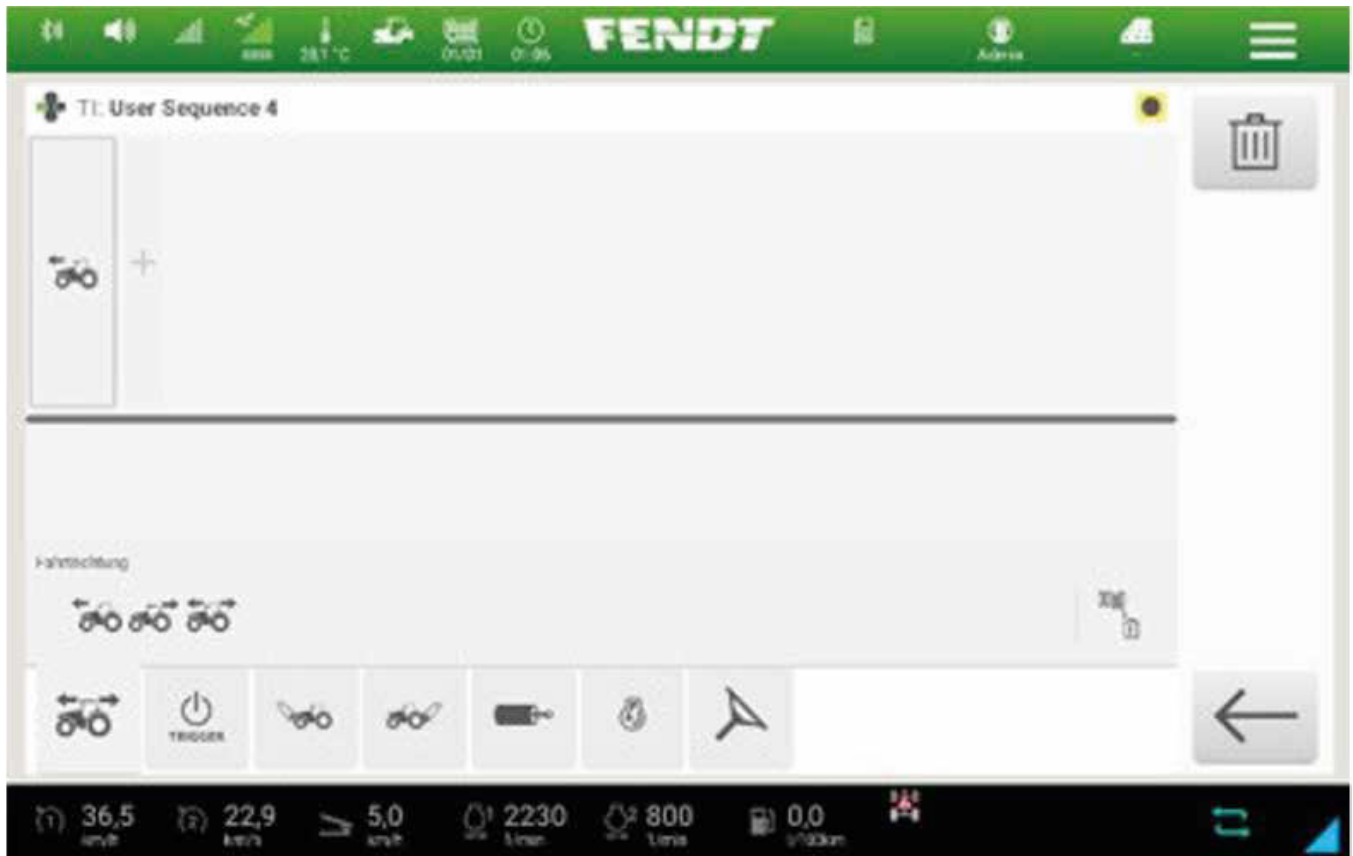
Headland management with TeachIn sequences



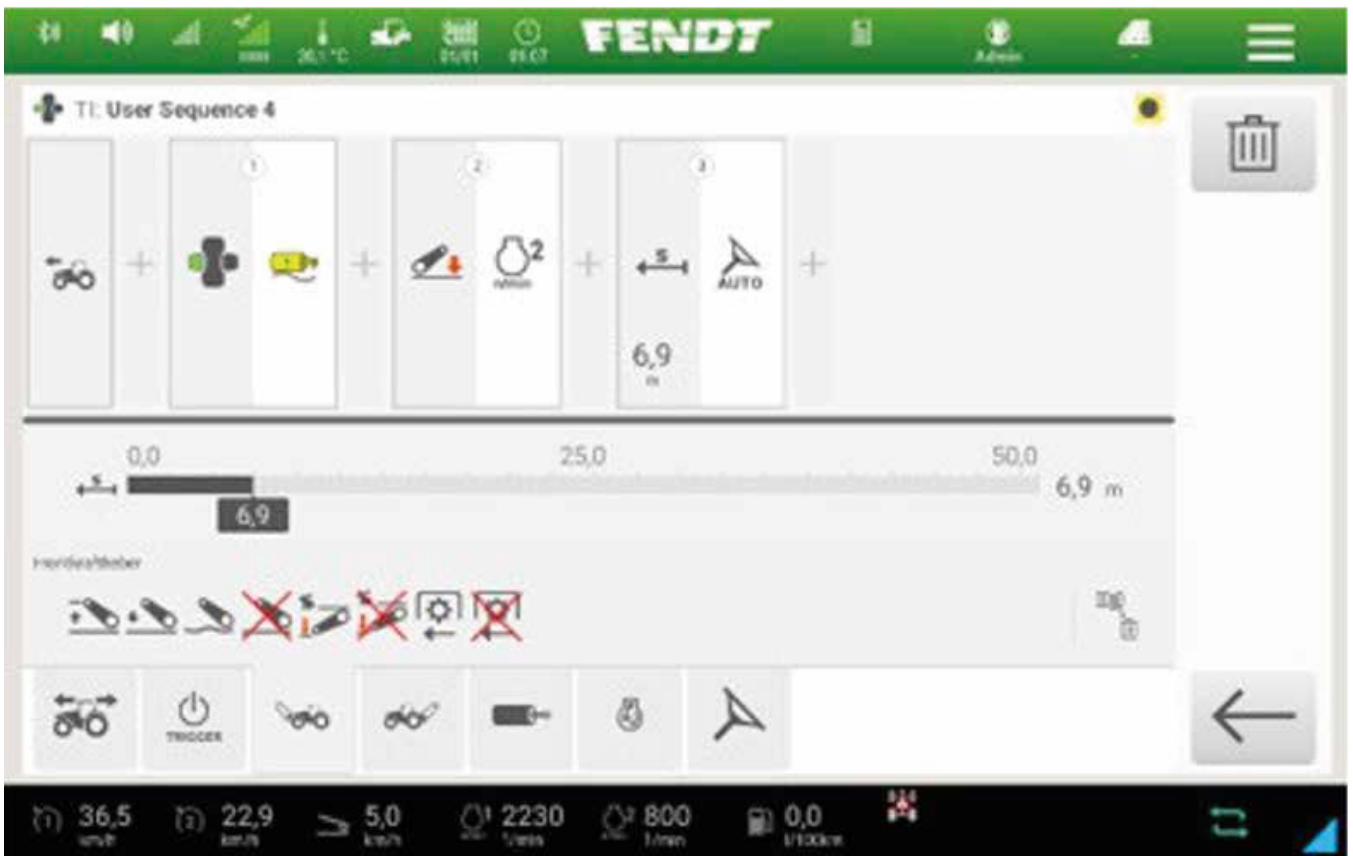
1) Select the relevant sequence by clicking in the field



2) Open EDIT offline menu



3) Selection of the trigger or function



4) Add the desired function using drag & drop

Operation

Terminal – Lighting

- Individual switching on and off of individual work lights in the cab
- Can be memorised for four different situations via four profiles
- Left and right headlamps can be switched individually from each other
- UltraVision spotlight with dimming function



Benefits

- + Dimming function: better visibility, e.g., in fog, no dazzling of oncoming vehicles
- + Saving the headlamps enables faster and more convenient working with optimum illumination

Operation

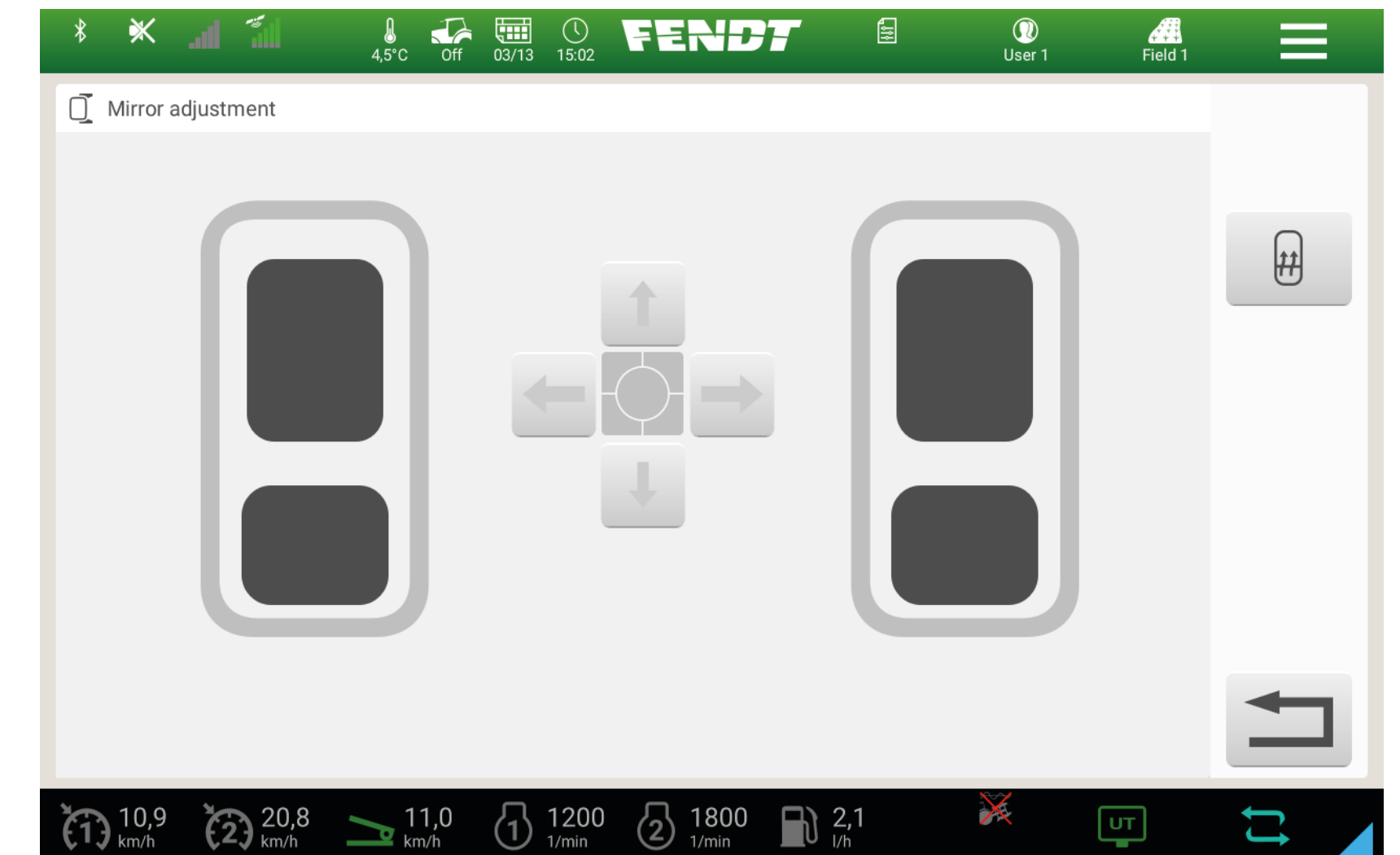
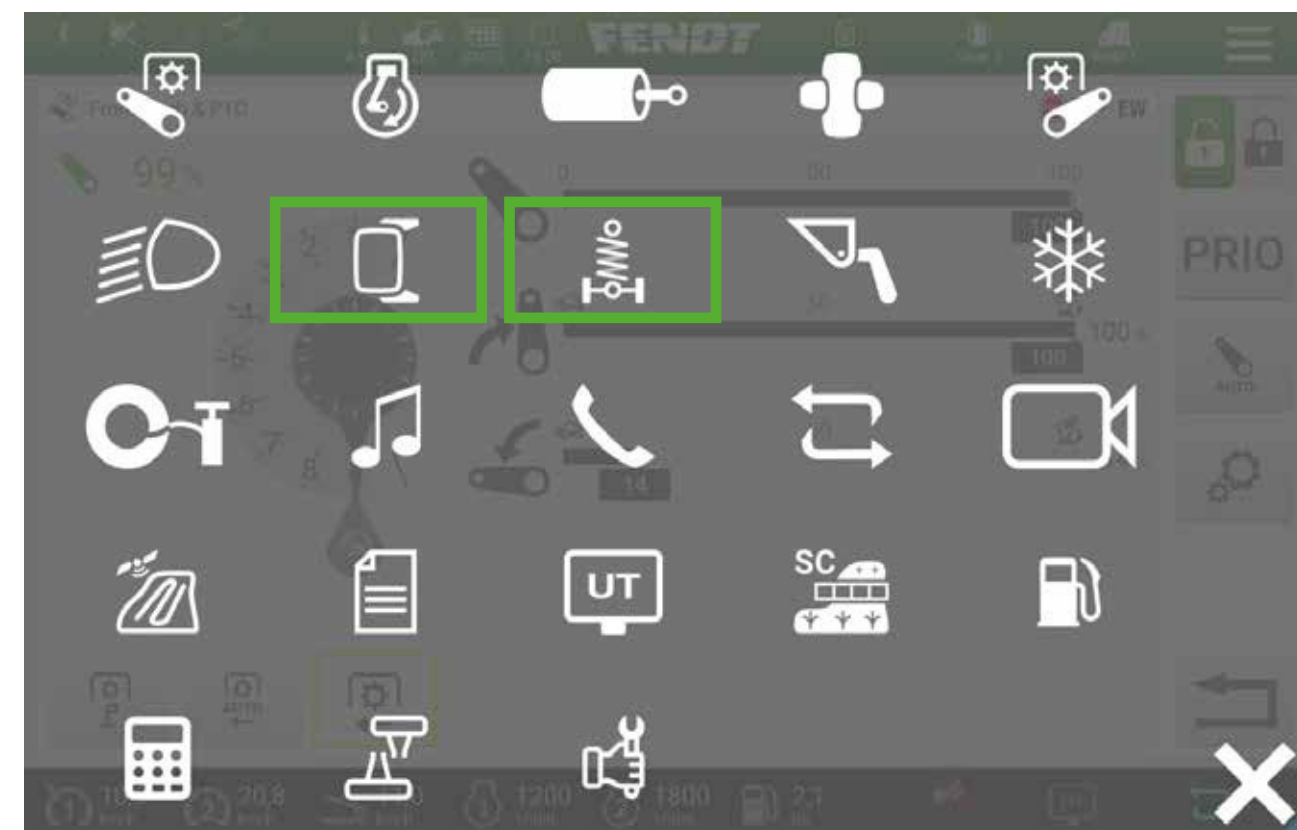
Terminal - Mirrors & front axle suspension

Mirror settings

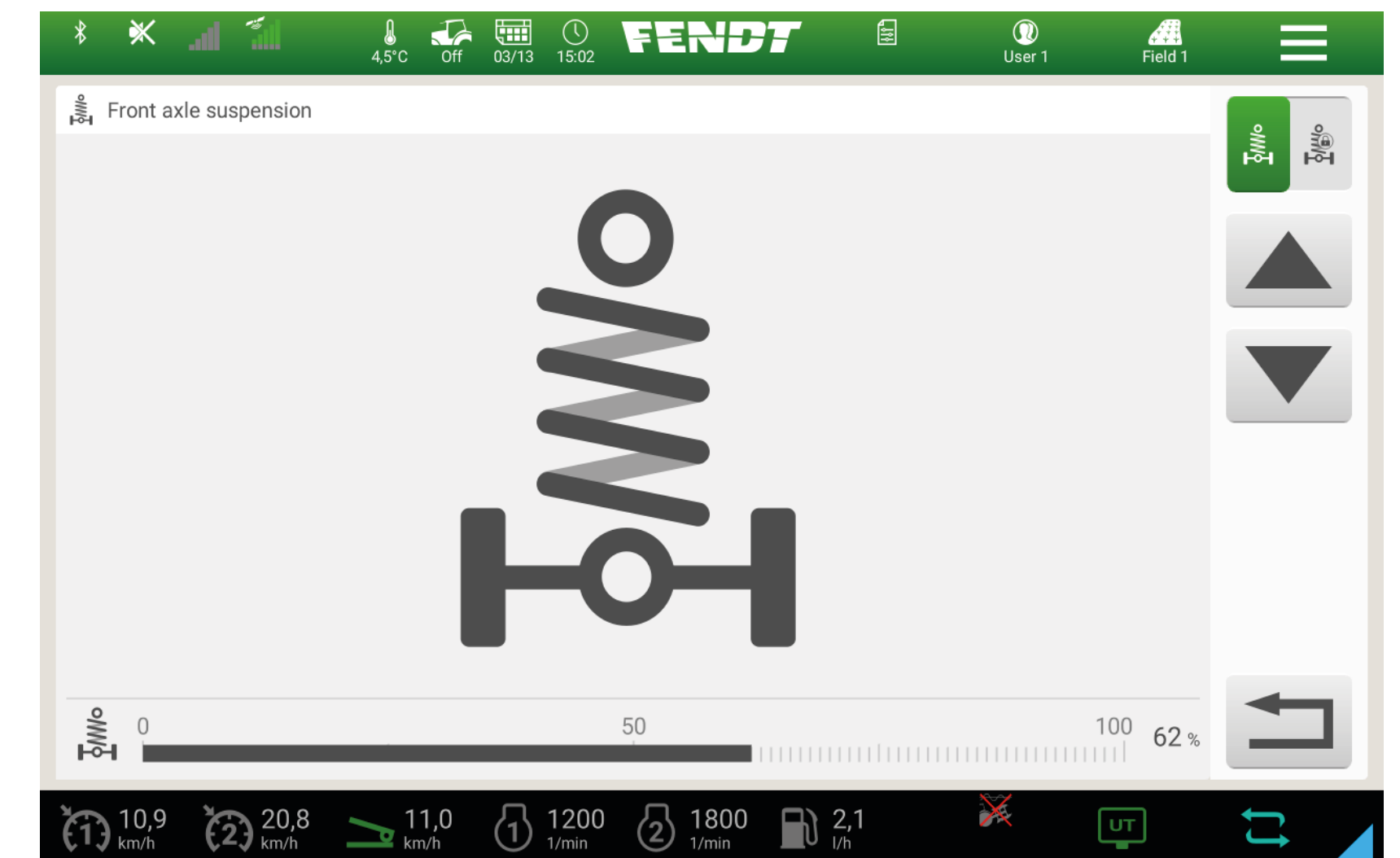
- Convenient adjustment of the electrically adjustable rear-view mirrors via touch in the terminal (arrow keys) or via pushdial - no additional button required below the armrest flap
- Activating the mirror heating

Front axle suspension

- Locking function for precise device guidance
- Raising and lowering the suspension



Mirror settings



Front axle suspension

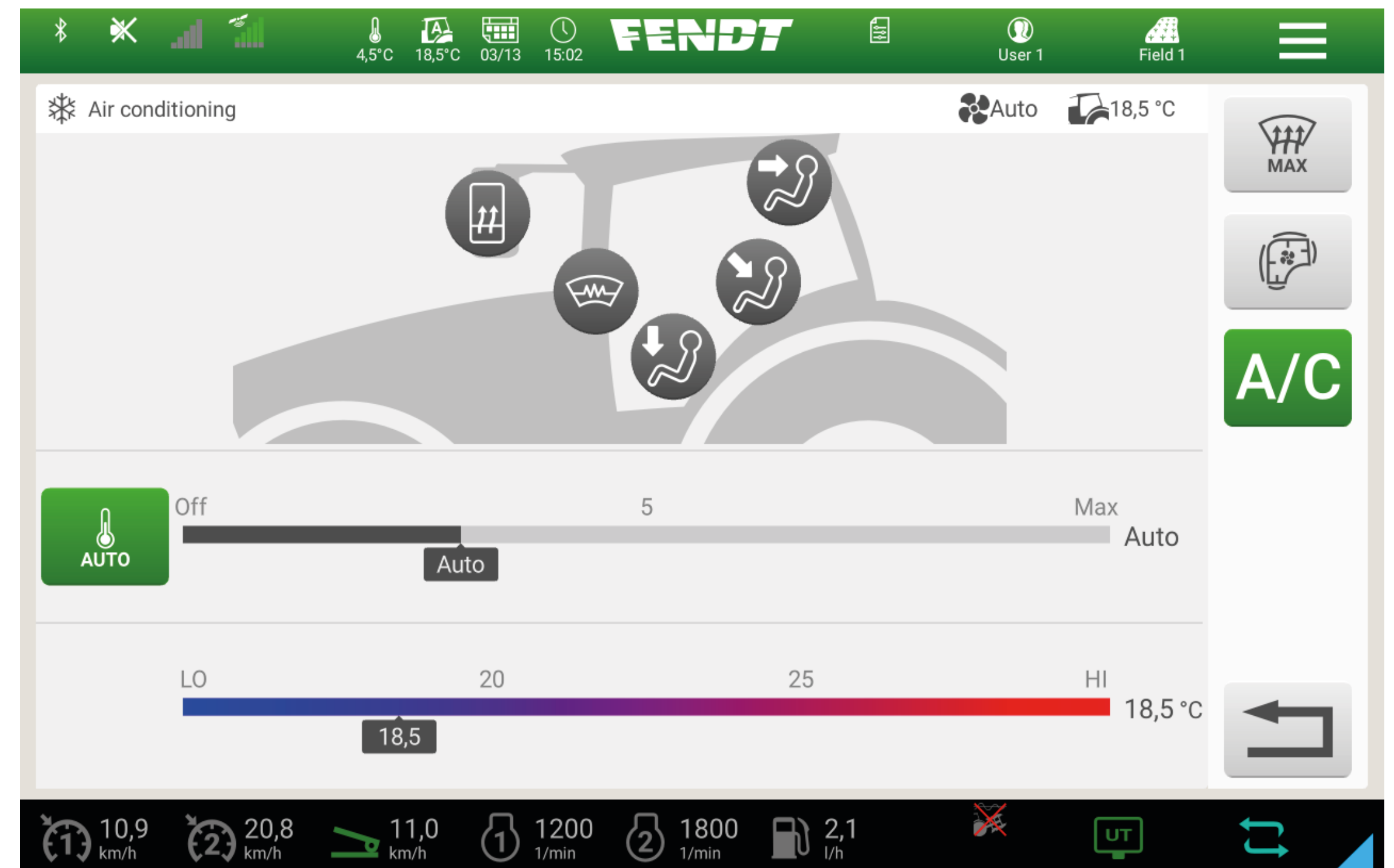
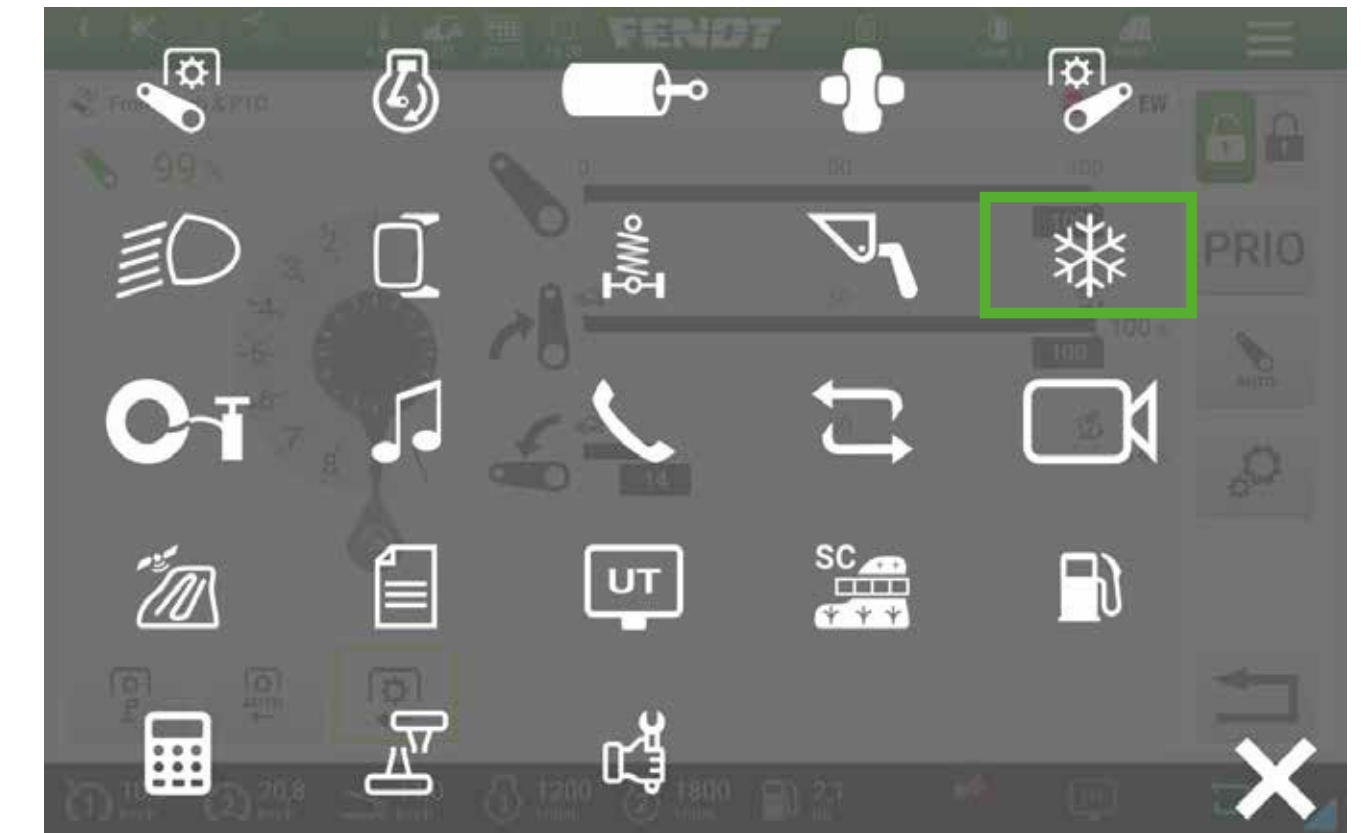
Operation

Terminal - 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)

Benefits

- + No need to reach up to the roof thanks to central control on the armrest



Operation

Terminal – Infotainment & Media

Rotary knob on the armrest for quick adjustment:

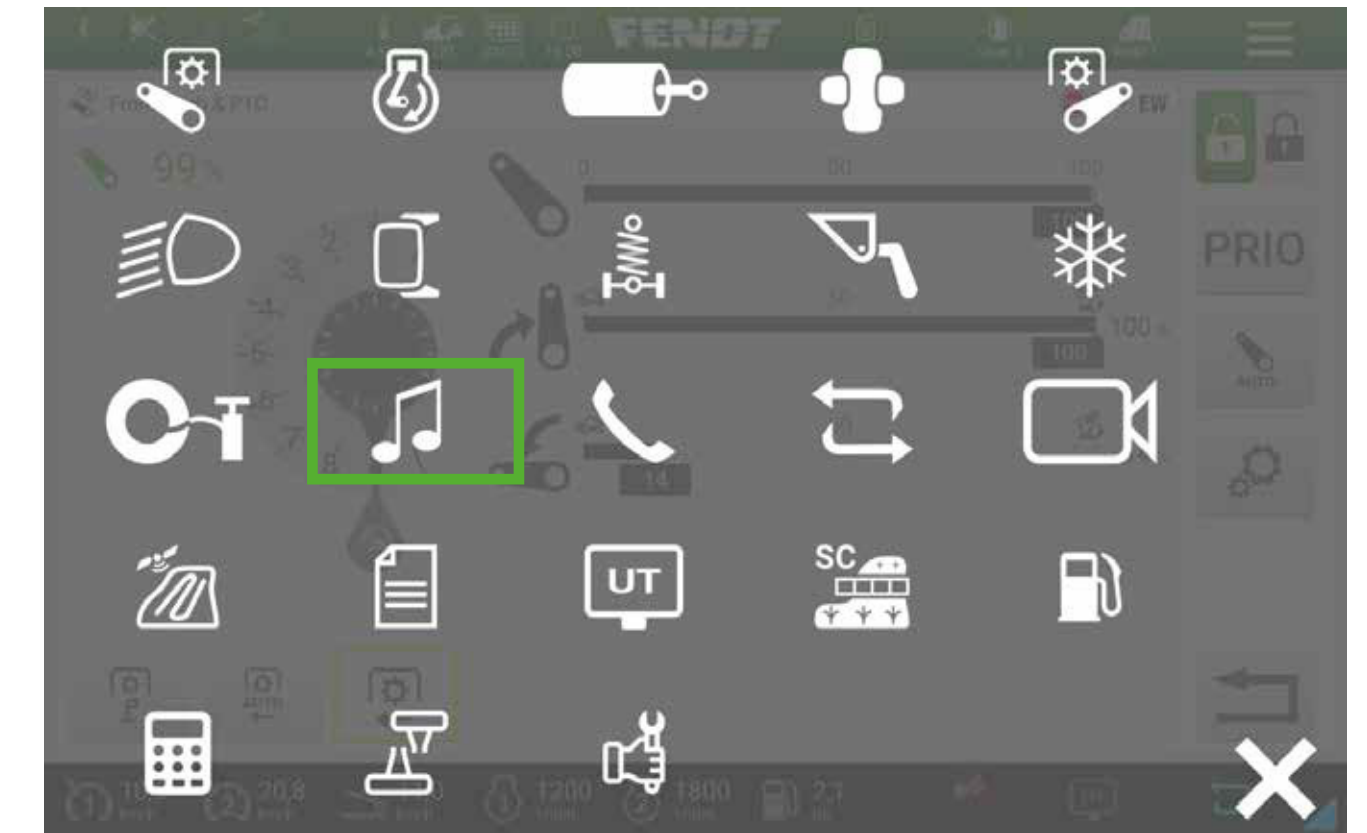
- To the left or right: Switch to the next or previous radio station/song title
- Turn: Volume up/down
- Press: mute

Selecting the audio source:

- AUX
- Bluetooth
- USB
- Radio (AM or FM/DAB+)

Benefits

- + No need to reach up to the roof thanks to central control on the armrest



Operation

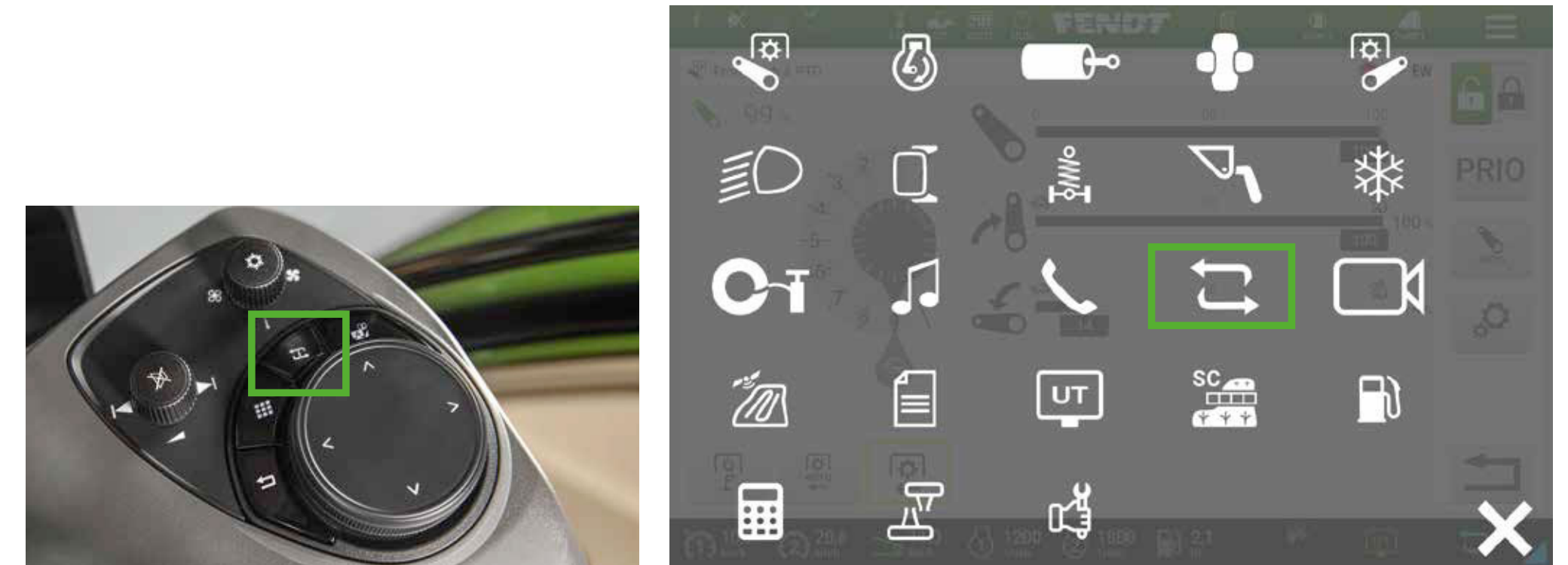
Flexible button assignment via IOM

- The IOM (Individual Operation Manager) is used to conveniently manage the key assignment
- Functions can be placed in the best possible operating location for the driver
- The functions are assigned to the respective operating location via drag & drop in the IOM menu
- Individual button assignment is stored in the respective user profile
- There are 2 ways to get to the IOM in the terminal:
 - Quick-access button on the pushdial
 - via the icon on the Launchpad

Benefits

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

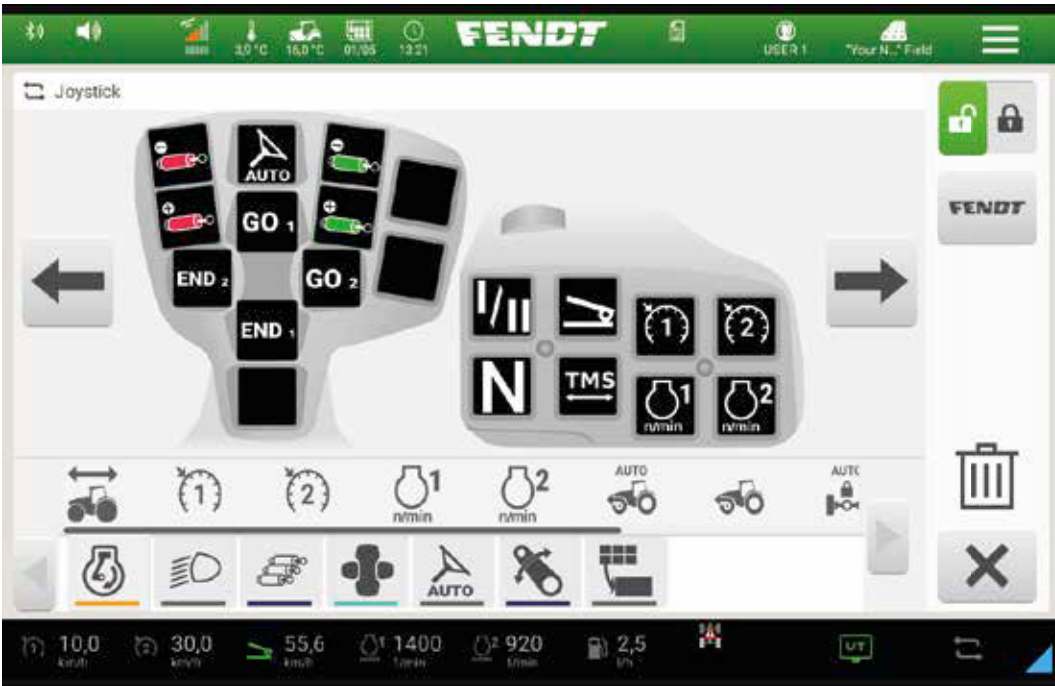
Every driver can quickly recall their settings!



Operation

Multifunction control lever - IOM

Factory function assignment



LED teal: Teach In or ISOBUS function group



Hydraulic valve colour

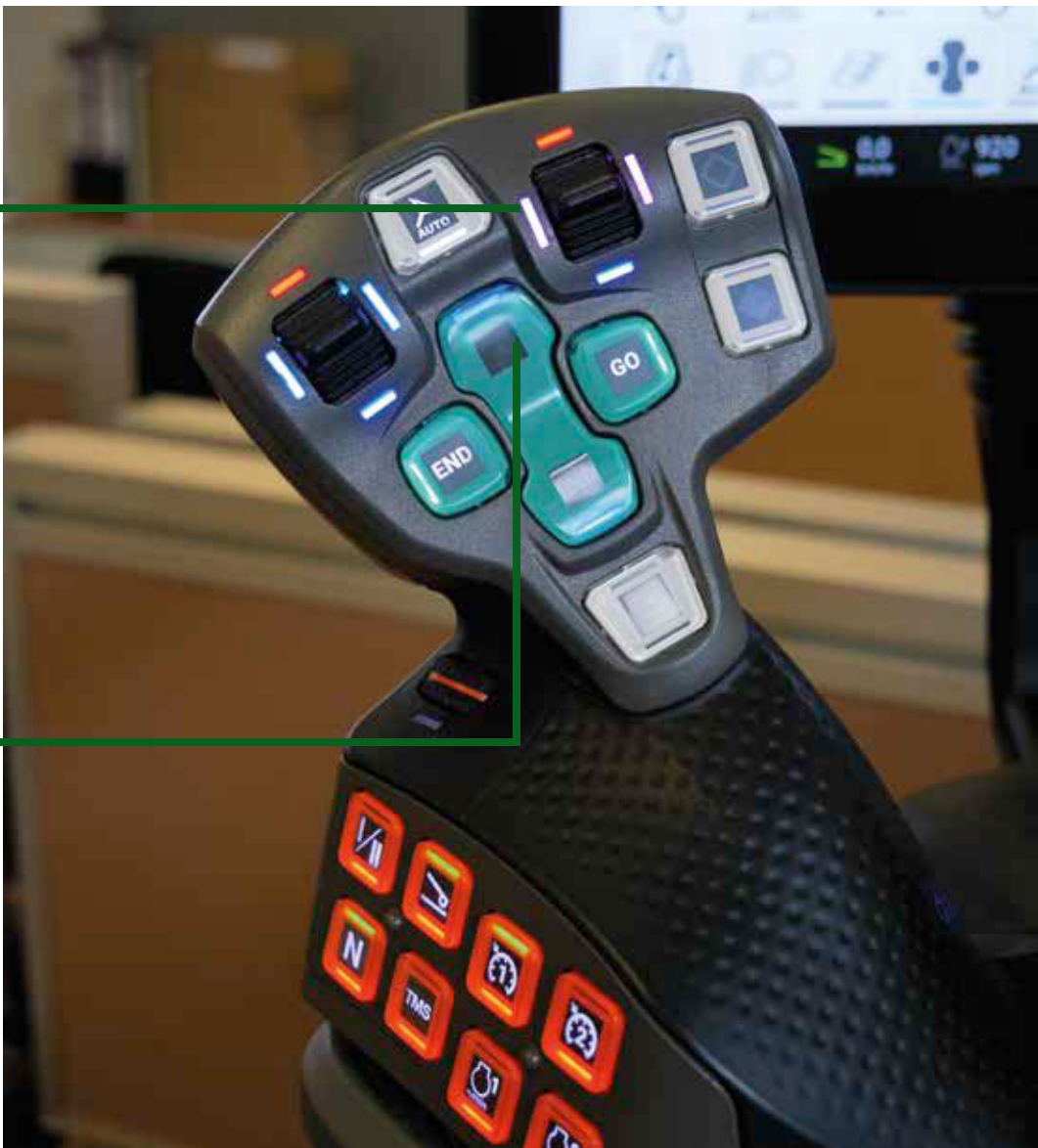
Red: Hydraulic valve locked

Blue: Hydraulics function group

The colour of the LEDs changes according to the reassignment

keys not in use

Go/end symbol disappears on reassignment



Operation

3L-Joystick - IOM

Factory function assignment



Display function assignment
3L-Joystick: colours of the valves
or teal for ISOBUS and Teach-IN

White key: Joystick unlocked

Thumb joystick



Red key: Joystick locked

Freely assignable button; factory
setting: Reverse button (orange:
engine/transmission function
group)

Display function assignment thumb
joystick: colours of the valves or
petrol for ISOBUS and Teach-IN

Reversing symbol disappears when
reassigned

The colour of the LEDs changes
according to the reassignment



Operation

Operating keys – IOM

Factory function assignment



Unoccupied

LED white: general functions



LED green: status on

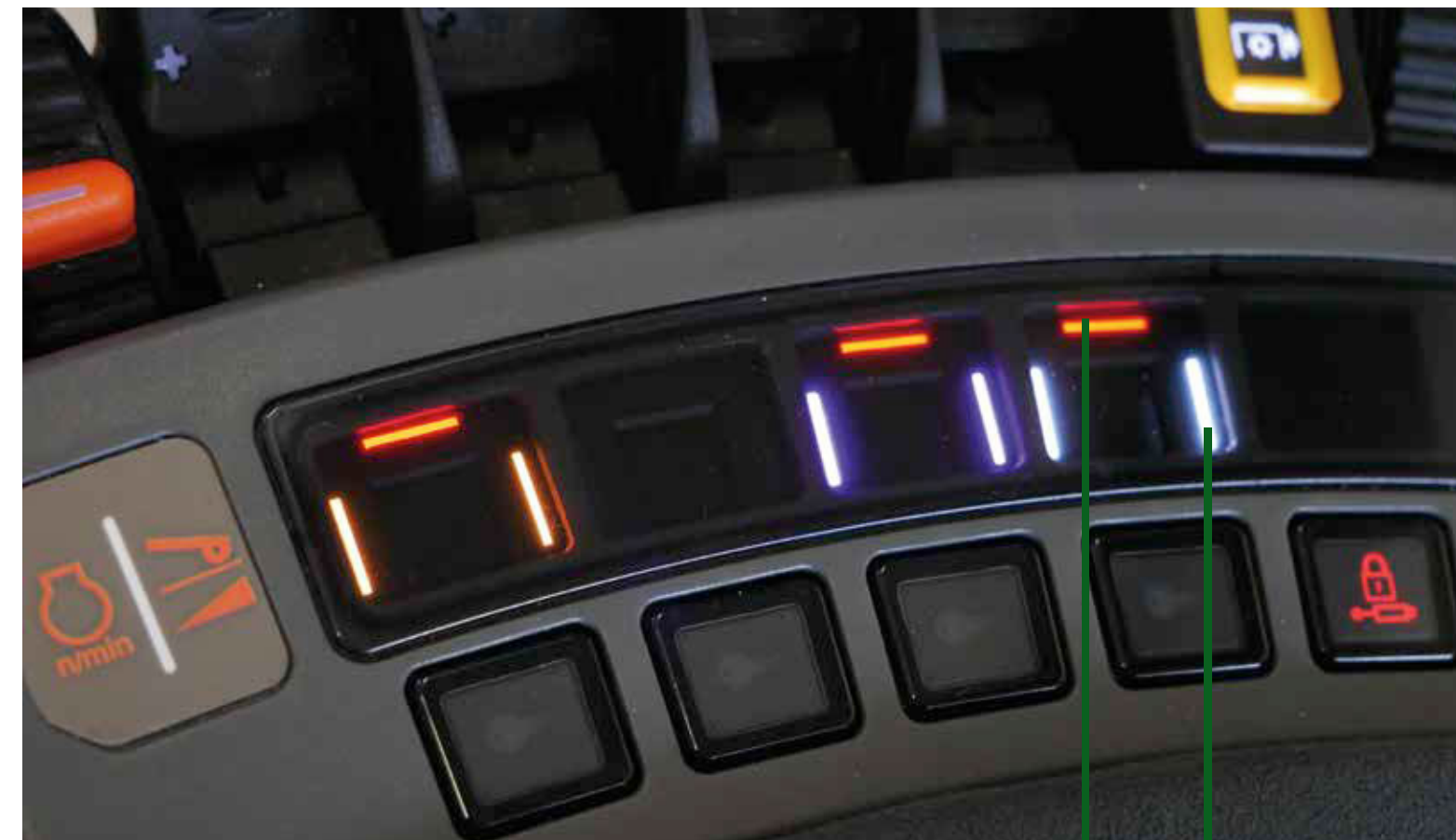
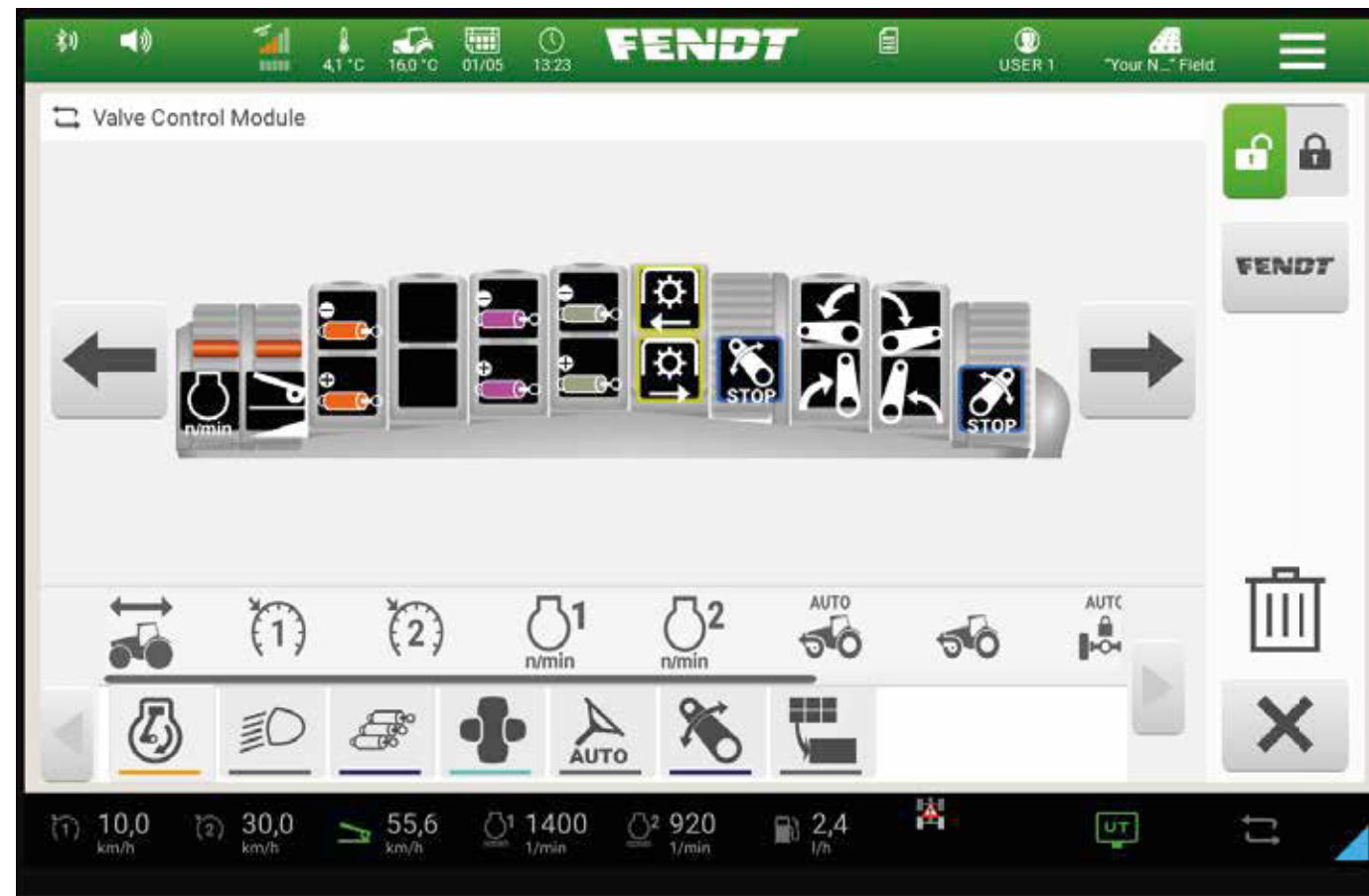
Buttons that have not been assigned a function at the factory: Appearance of an icon

Factory-set symbols disappear; the lower LEDs take on the colour of the respective function group

Operation

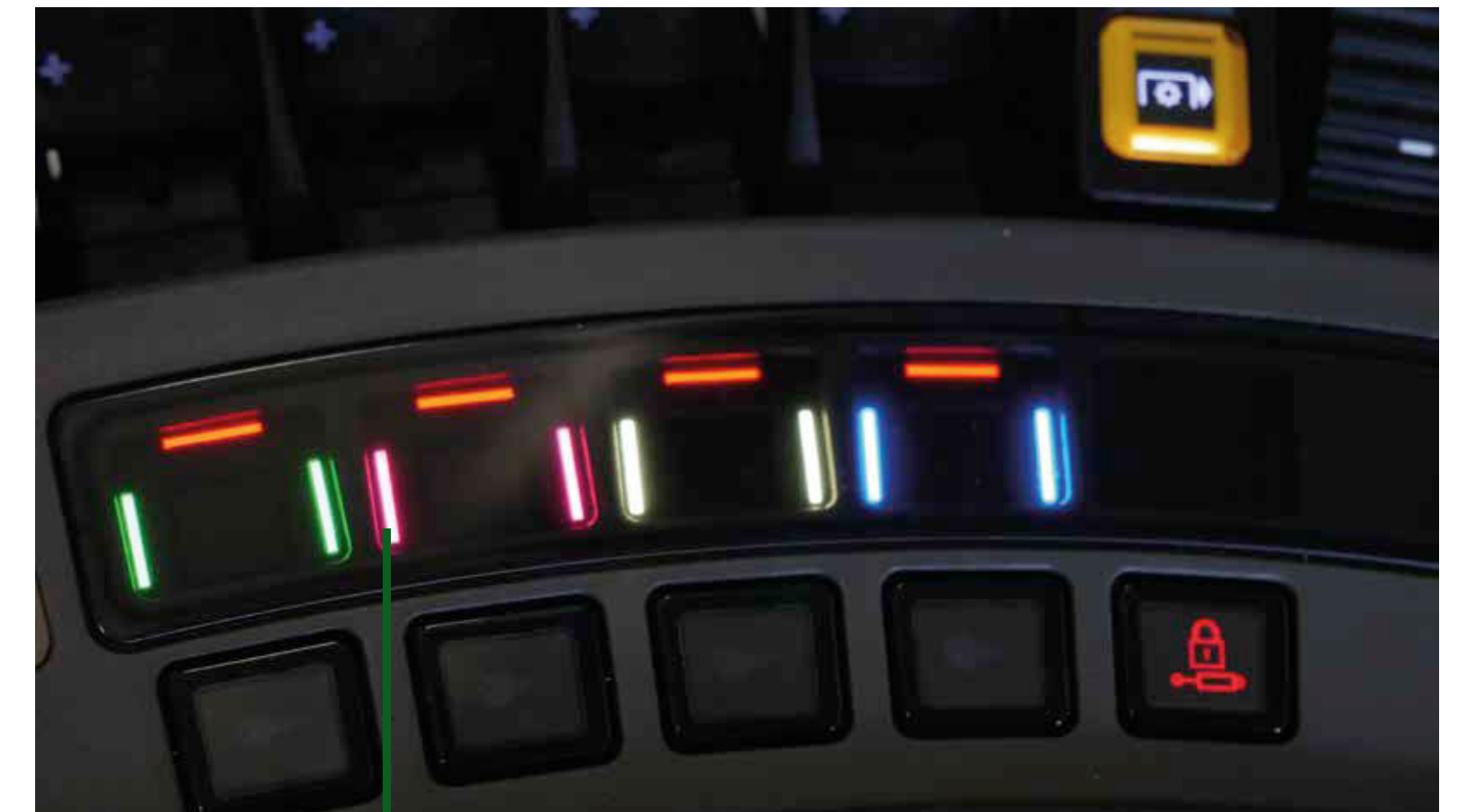
Finger tip (linear modules) – IOM

Factory function assignment



Finger tip (linear module) locked

Hydraulic valve colour



The colour of the LEDs changes according to the reassignment

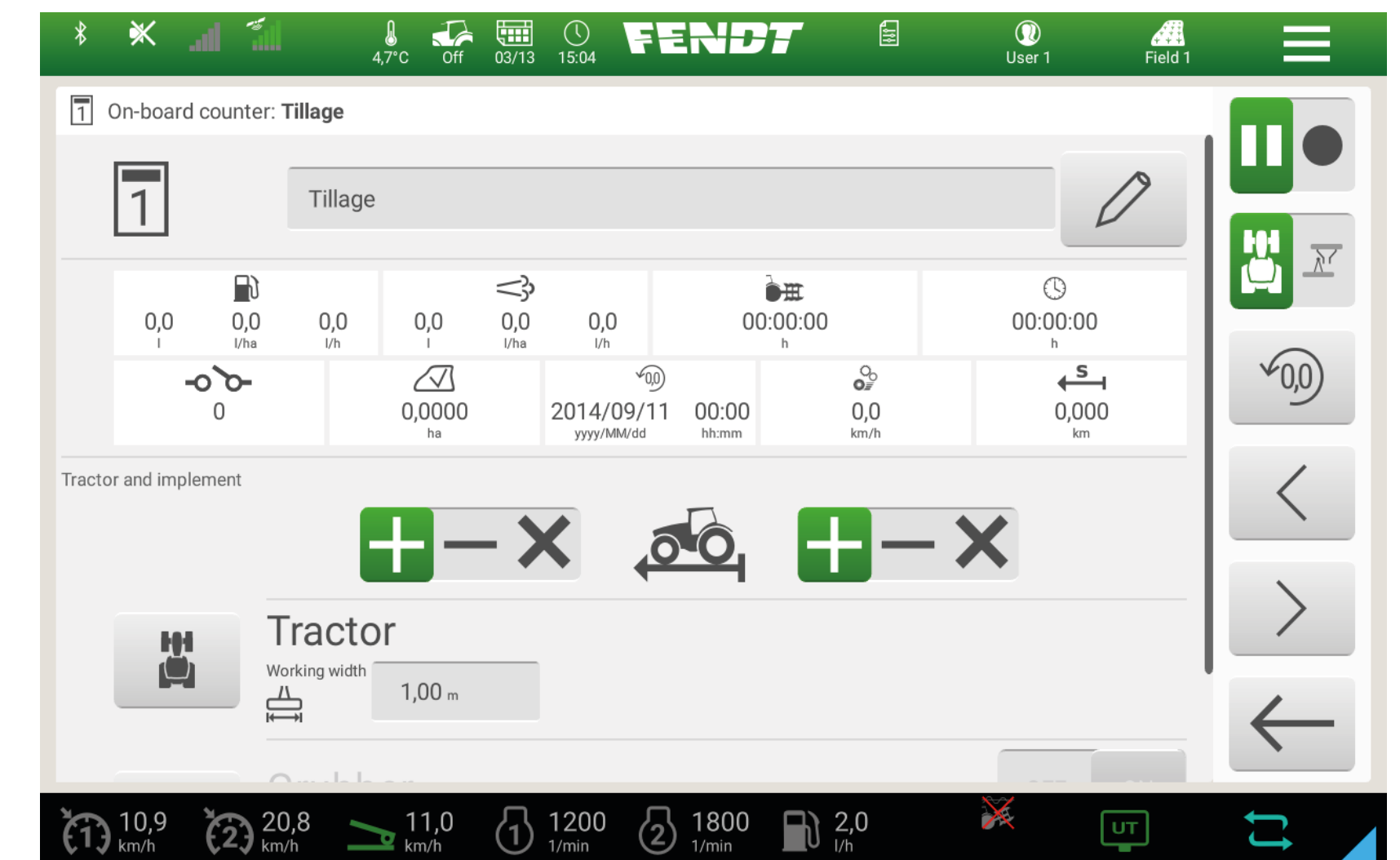
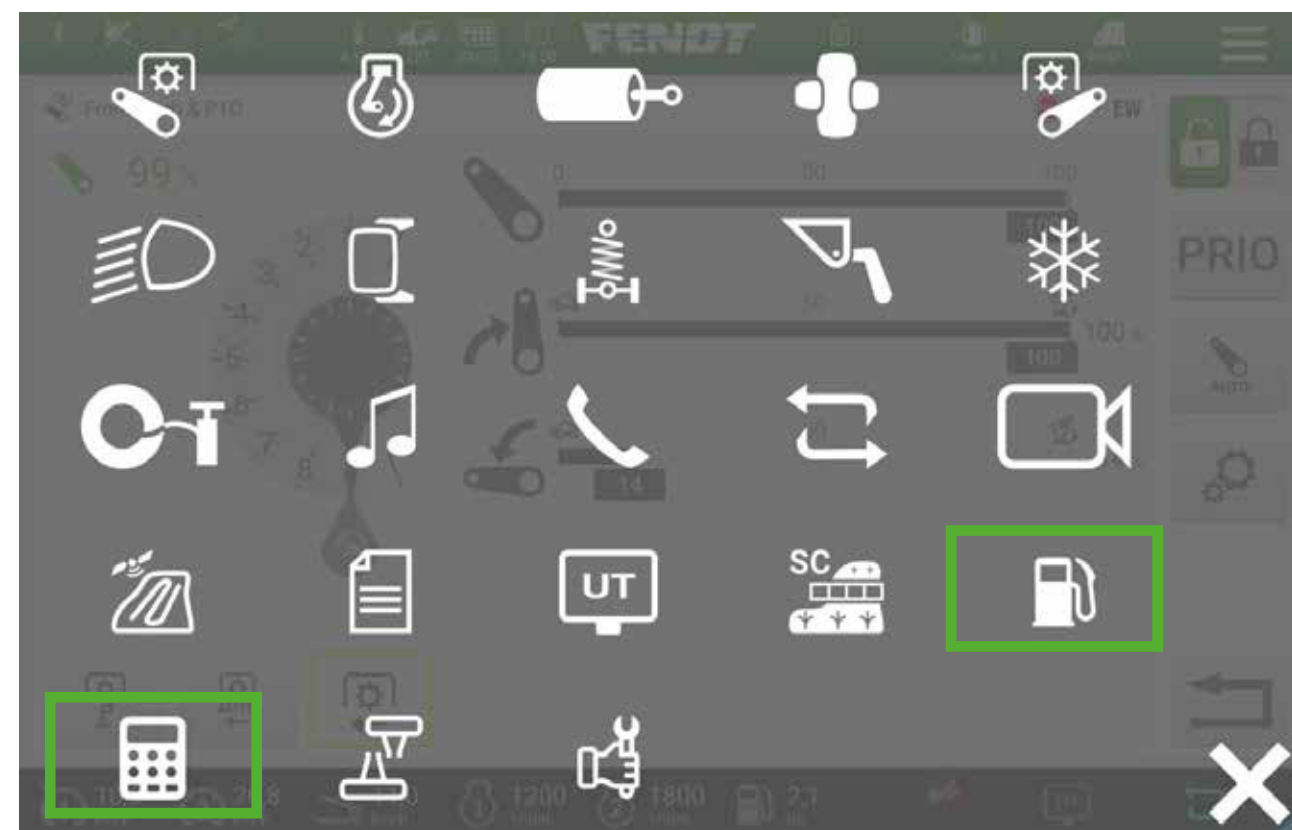
Operation

Terminal - Fuel consumption & on-board computer

- Consumption display in l/h, l/ha and l/100 km
- Display of 4 consumption types:
 - Current
 - Average
 - Diesel total counter 1
 - Diesel total counter 2
- Up to 10 on-board computers for easy determination of fuel consumption during different operations

Benefits

- + Simple logging of fuel consumption

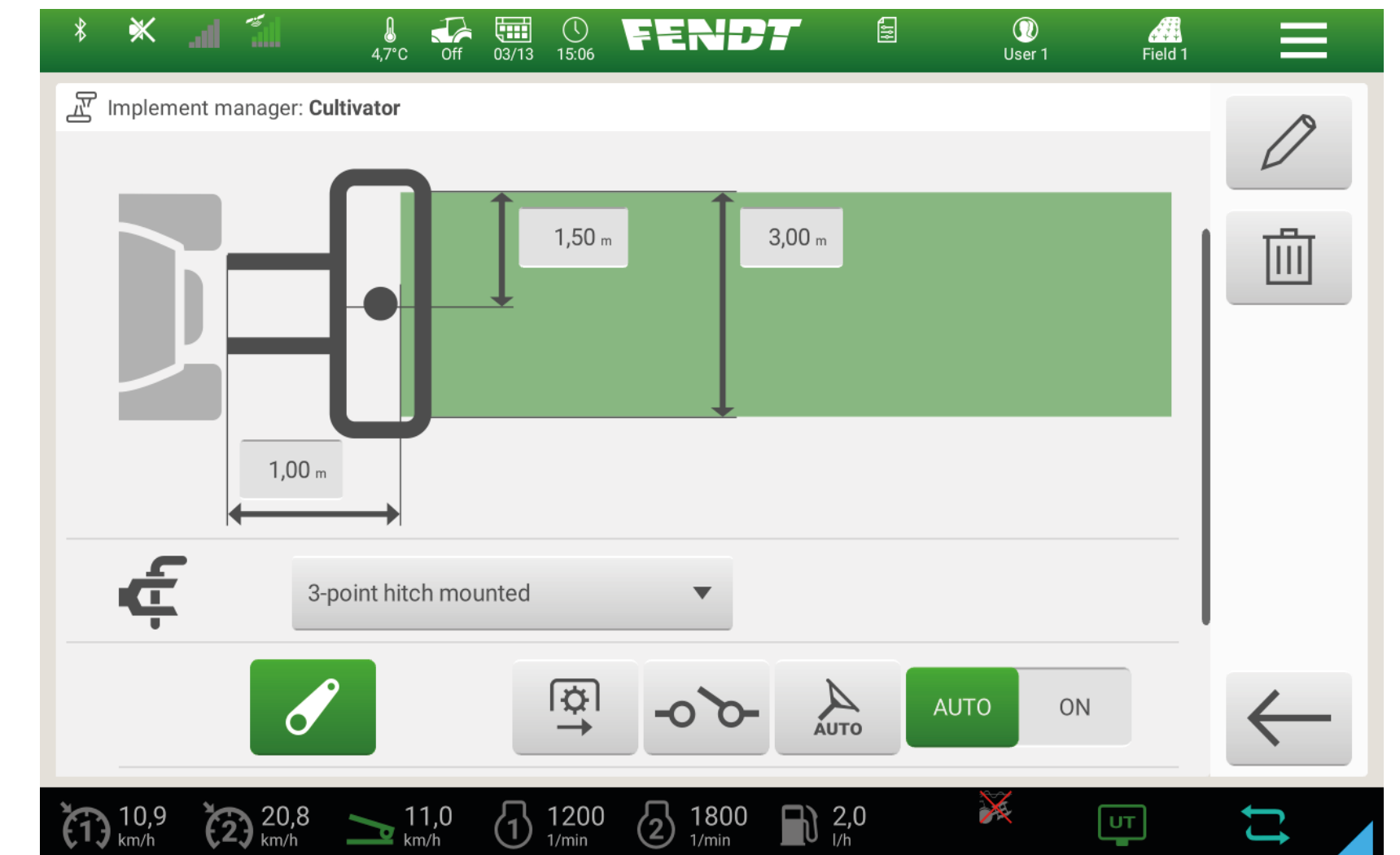
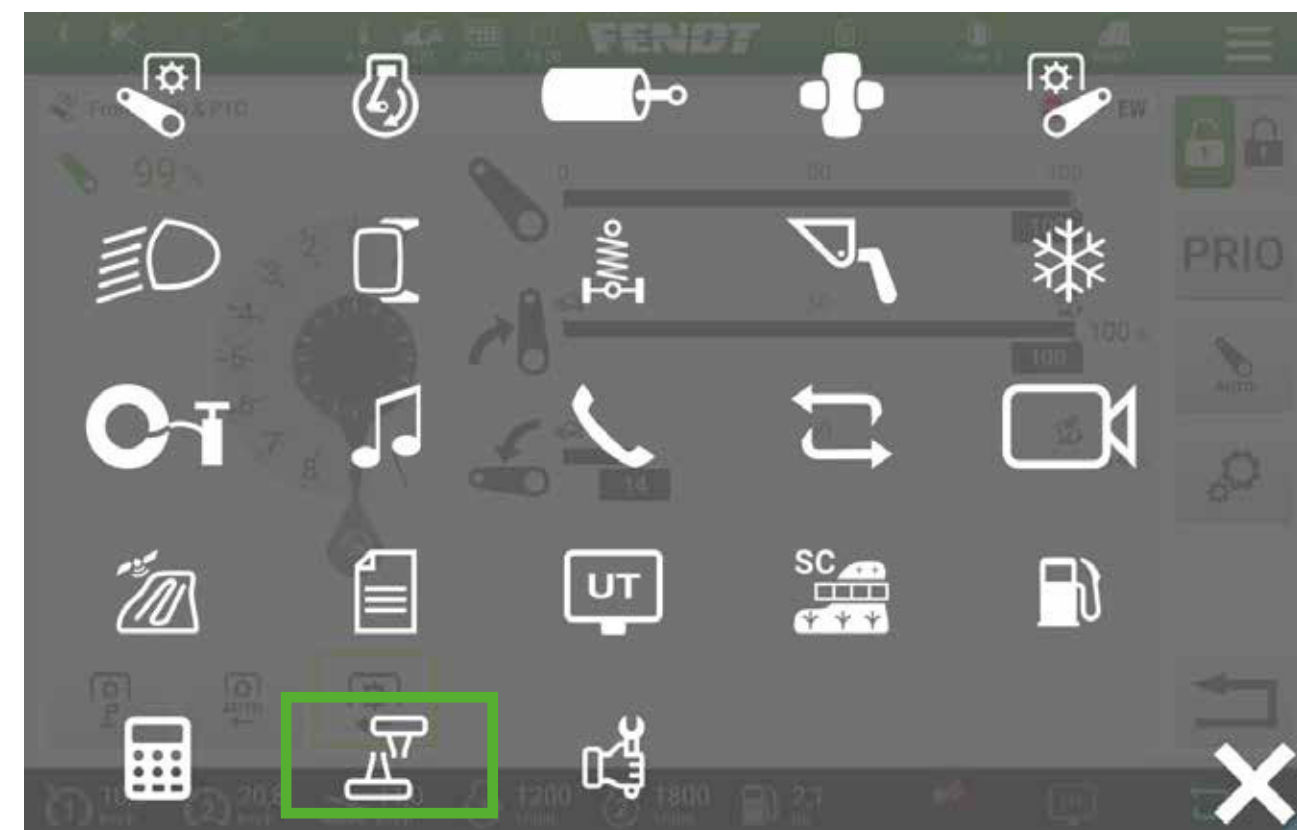


Operation

Terminal - Device manager

Central storage of attachments in the attachment manager:

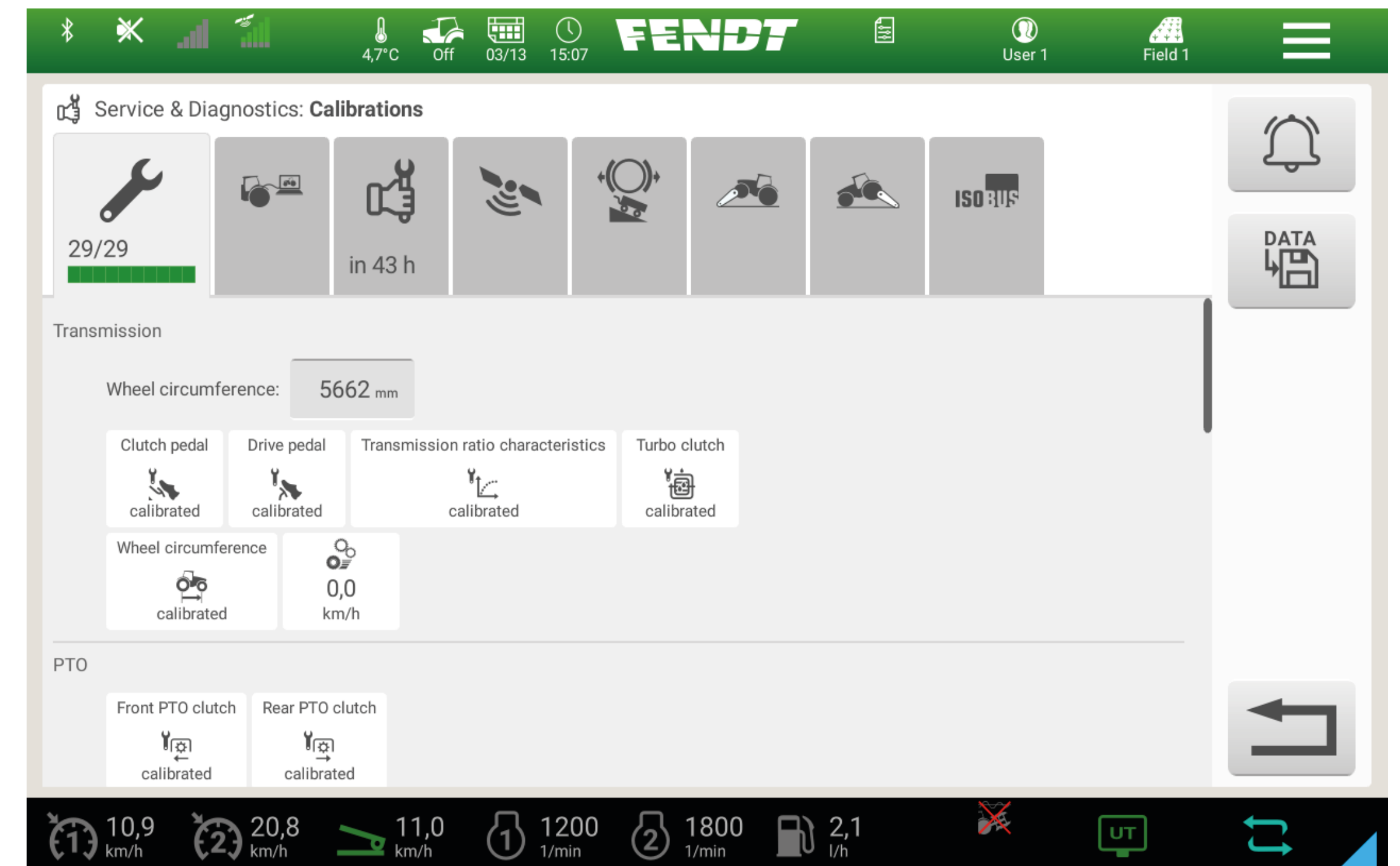
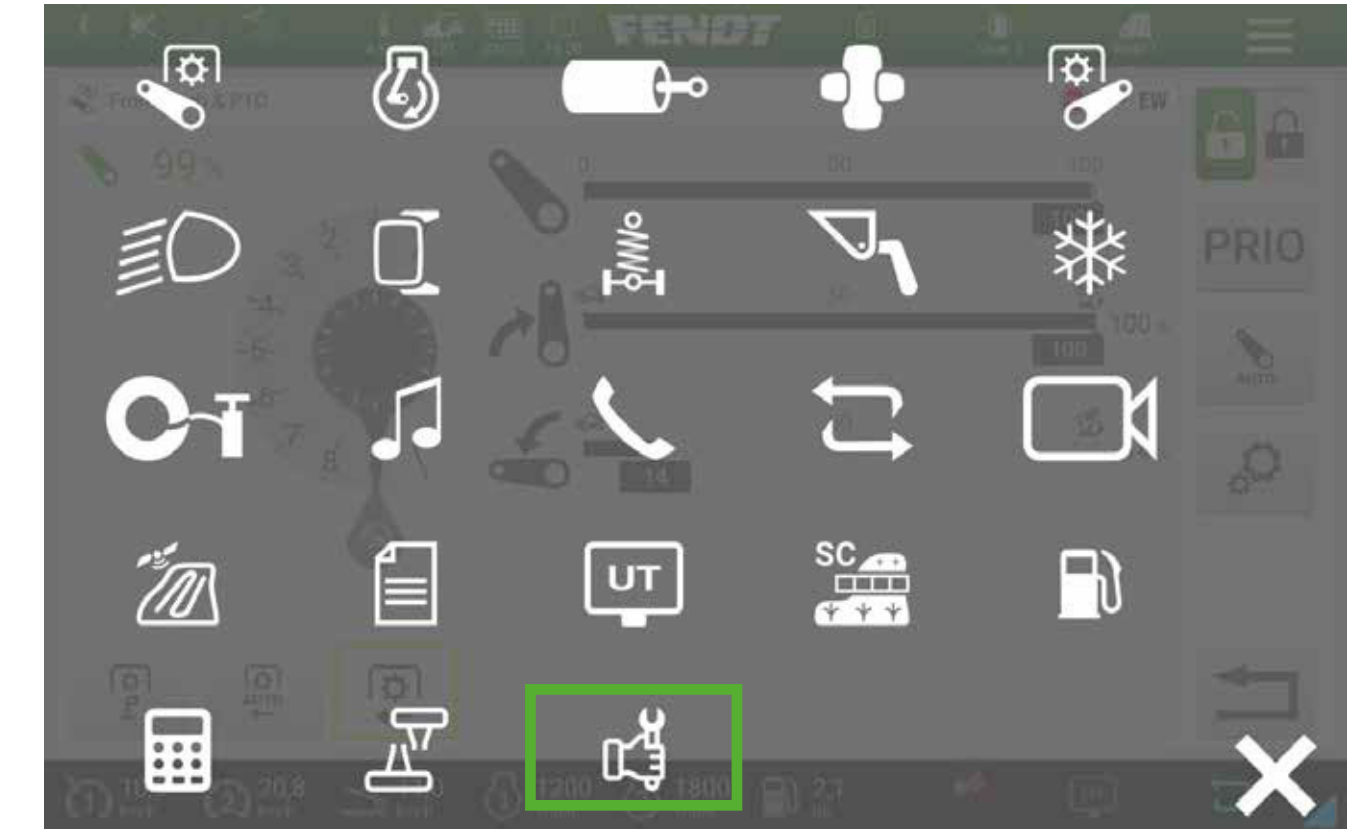
- Working width
- Steering axle or rigid axle
- Attachment type:
 - Front attachment
 - Three-point linkage semi-mounted
 - Three-point linkage
 - Drawbar
 - Drawbar hitch
 - Ball head coupling



Operation

Terminal – Service & Diagnostics

- 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 pressureless



Benefits

- + Display of error messages in plain text

Operation

Terminal – Camera

- Optional 4 camera connections in the roof: 2 x digital and 2 x analogue
- Extremely high-resolution display of the transmission image in the terminal

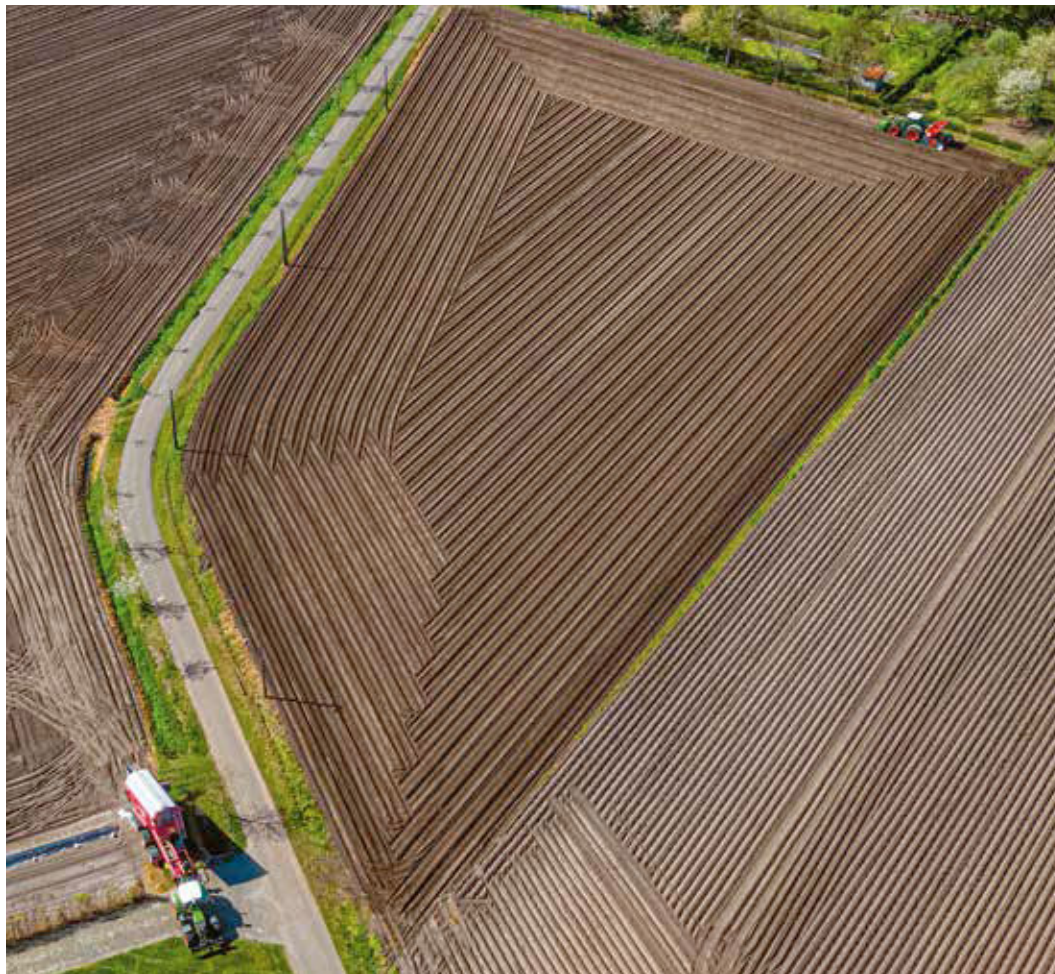


Benefits

- + Flexible camera selection through analogue and digital camera connections

Smart Farming

Find out more about FendtONE onboard and offboard in the dedicated Smart Farming product presentation.



Guidance with FendtONE

When precision and relief become one.



Machine control with FendtONE

When tractor and implement become one.



Agronomy with FendtONE

When machine and data become one.



Telemetry with FendtONE

When data and transfer become one.



TECHNICAL SPECIFICATIONS

Technical specifications

187



Technical specifications

		826 Vario	829 Vario	832 Vario
Engine				
Rated power	kW/hp	191/260	213/290	235/320
Rated power with DP ECE R 120	kW/hp	208/283	230/313	252/343
Maximum power	kW/hp	191/260	213/290	235/320
Maximum power with DP ECE R 120	kW/hp	208/283	230/313	252/343
No. of cylinders	number	6	6	6
Cylinder bore/stroke	mm	110/139	110/139	110/139
Cubic capacity	cm³	8000	8000	8000
Rated speed	rpm	1700	1700	1700
Max. Torque	Nm	1450	1550	1680
Torque rise	%	24.0	20.0	18.5
Fuel level	litres	540.0	540.0	540.0
AdBlue tank	litres	65.0	65.0	65.0
Transmission and PTO				
Transmission type		TA250	TA250	TA250
Top speed	km/h	60	60	60
Rear PTO		540/540E/1000/1000E	540/540E/1000/1000E	540/540E/1000/1000E
Rear PTO option		540/900/1000	540/900/1000	540/900/1000
Front PTO option		1000	1000	1000

Technical specifications

		826 Vario	829 Vario	832 Vario
Power lift and hydraulics				
Variable flow pump	l/min	165	165	165
Variable flow pump option 1	l/min	220	220	220
Working pressure/ control pressure	bar	205/20	205/20	205/20
Max. available hydraulic oil volume	litres	85,5	85,5	85,5
Delivery volume control valves (1st front)	l/min	120	120	120
Delivery volume control valves (2st front)	l/min	120	120	120
Max. Rear power lift lifting capacity (at the coupling point)	kg	10500	10500	10500
Continuous rear power lift capacity according to OECD (610 mm behind the coupling point)	kg	8807	8807	8807
Max. Lifting capacity front power lift (at the coupling point)	kg	5300	5300	5300
Tyres				
Front tyres (standard)		600/70R30	600/70R30	600/65R34
Standard tyres rear		710/70R42	710/70R42	710/75R42
Dimensions				
Maximum diameter front tyre	mm	1670	1670	1670
Maximum diameter rear tyre	mm	2175	2175	2175

Technical specifications

		826 Vario	829 Vario	832 Vario
Overall length	mm	5650	5650	5650
Max. ground clearance	mm	650	650	650
Wheelbase	mm	3020	3020	3020
Weights				
Max. permissible overall weight up to 40km/h (2-circuit brake)	kg	17500.0	17500.0	17500.0
Max. permissible overall weight up to 50km/h (2-circuit brake)	kg	17500.0	17500.0	17500.0
Max. permissible overall weight up to 60km/h	kg	16000.0	16000.0	16000.0
Max. Trailer hitch load	kg	2000.0	2000.0	2000.0