

Fendt 700 Vario



FENDT

Fendt 700 Vario – a league of its own in the midsized class



Since it was launched in 1998, the Fendt 700 Vario has become the most sold tractor range with stepless drive technology. Now in its third generation, the performance of the basic vehicle has been enhanced and the model range has been expanded upwards with the top model 718 Vario. The allrounder is available with a maximum power output between 130 hp and 180 hp. Whether for heavy-duty traction work on mid – sized mixed farms, row crop operations on larger farms, or in cooperatives – the 700 is the first choice.



Fendt 712 Vario	130 hp	96 kW
Fendt 714 Vario	145 hp	107 kW
Fendt 716 Vario	165 hp	121 kW
Fendt 718 Vario	180 hp	132 kW

Maximum power acc. to ECE R24

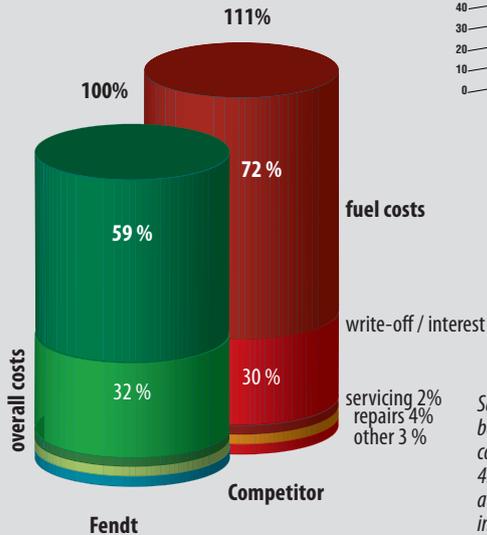
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High productivity starts with low costs per hour

Low costs per hour

In order to compare the actual costs involved in investing in a tractor, the overall costs and operating costs per hour or hectare must be considered. These include fuel consumption, which is the single greatest factor amounting to over 50% of costs, write-off, including resale value, servicing, repairs and miscellaneous costs such as insurance or housing.



One joystick instead of many levers

With the joystick, you can accelerate the 700 Vario from standstill to the desired speed steplessly. Move the joystick in the opposite direction, and the tractor decelerates. Stepless from 0-50 km/h forward and 0-40 km/h reverse – without crawler or group gears.



Sample calculation that appeared in top agrar 12/2004, based on fuel consumption data for a Fendt Vario and a competitor's tractor (competitor's fuel consumption is 4.4 litres per hour more than Fendt's). Calculations based on a diesel price of 1 euro per litre and 8000 operating hours in 10 years.

Superior productivity – the added-value of a stepless drive

Farm type	Area (ha)	Operating time	Fuel saved
Mixed production	50	-2,7 %	6,5 %
	100	-3,3 %	6,5 %
	200	-4,3 %	6,8 %
Fodder production	50	-6,8 %	8,7 %
	100	-6,6 %	8,3 %
	200	-5,5 %	8,0 %
Market crop production	50	-4,4 %	6,5 %
	100	-4,6 %	6,4 %
	200	-4,4 %	6,4 %

Compared to drive concepts with power shift transmissions, the stepless drive technology offers savings potential for all types and sizes of farming businesses.

Source: Landwirtschaftliches Wochenblatt Westfalen-Lippe, 5/2001



The success of modern farming businesses depends on economically optimised production procedures. A top requirement here is the use of suitable mechanisation. With the 700 Vario, Fendt offers an extremely productive and economical universal machine for low-cost handling of all work waiting to be done.

Powerful all-rounder

Compared to the previous models, the third generation of the 700 Vario has been improved in all essential areas and has been expanded to include the top model, the 718 Vario. The lift capacity of the rear power lift has been boosted in all models and axle load has been increased to provide enough payload reserves for the most modern implements. Furthermore, all 700 Varios can accommodate 42" tyres on the rear axle.



- Excellent weight-power ratio of 39 kg/hp
- High payload reserves thanks to permissible gross weight of 12500 kg (718 Vario) or 11500 kg (712 - 716 Vario)
- Increased lift capacities on the rear power lift
- 42" rear tyres for all models (712 to 718) possible
- Latest high horsepower tractor technology for the drive train ensures low operating costs
- Low variable costs through low fuel consumption (195 g/kWh for 716 Vario and 718 Vario)
- Absolute productivity and profitability in the overall cost calculation

Basic equipment or fully equipped?

In the basic version, the 700 Vario is equipped with all the main Variotronic features. Optionally you can configure the 700 Vario with enhanced control functions. With TMS and Variotronic^{TI}, you can upgrade the 700 Vario to the level of the most modern high horsepower tractors. The steering assist system, Auto-Guide, which permits exact pass-to-pass driving, independent of visibility conditions and implement width, can also be installed on the 700 Vario.

Impressive profitability

An excellent return on investment is the key benefit of Vario tractors. The initially higher purchase price is offset by higher performance and lower fuel costs during every hour of operation. A further plus in the overall profitability calculation is the good resale value of a Fendt. Profit from the exceptional overall profitability of the 700 Vario!

A premium class workplace: the driver station in the 700 Vario

The Fendt Varioterminal: Information and command centre

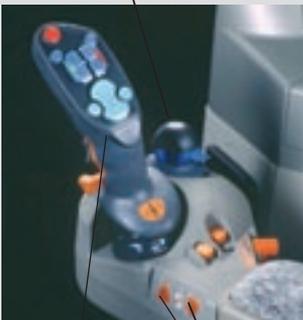
- Colour information display
- Display bar for menu navigation
- Pushbuttons for menu navigation
- Rotary control for fine adjustments



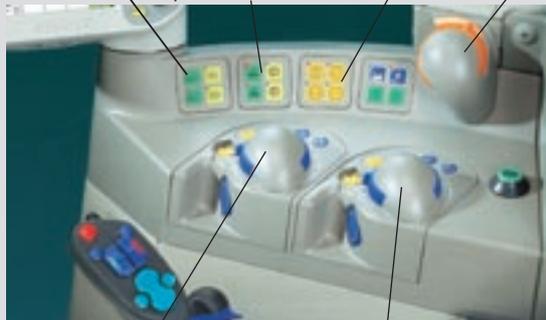
The multiple award-winning Fendt Varioterminal offers you simple and logical controls. It makes simple operations even easier and also aids the experienced driver during complex operations. This is where you make fine settings to all the EPC and hydraulic control valve functions, program engine speeds and the cruise control memories and adapt the automatic maximum output control to your work. These settings can be saved permanently for four different operations or implements. Moreover, the Varioterminal contains an on-board computer that logs all important parameters such as the distance driven or area worked and has a standard-equipped fuel consumption indicator as well.

Ergonomics paired with well thought-out operating logic on the right-hand side console

- Crossgate lever for 2 electric proportional control valves
- 4WD/differential lock engagement
- Front axle suspension and cruise control preselection
- PTO speed preselection
- Hand throttle



- Multi-function joystick
- Engine speed memory keys

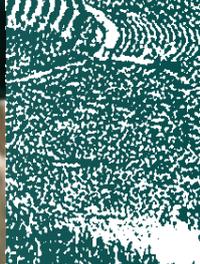


- EPC front power lift controls (optional) and front PTO engagement
- EPC rear power lift controls and rear PTO engagement

Ever-increasing working hours at a stretch and higher tractor utilisation require optimum working conditions to aid in protecting the driver's health and combating fatigue. The workplace on the 700 Vario offers well-thought out functionality and maximum ergonomics, so that you stay fit on long work days.

Ideal working position

The more comfortable a working position is, the better the driver can attend to the implements. For this reason, the 700 Vario is equipped with a height and tilt-adjustable steering column. The original Fendt seat can be adapted to virtually all height requirements; it has air suspension as standard and has an integral active charcoal layer for climate control. The Fendt Super Comfort Seat, which has low frequency suspension, is also available as an option.



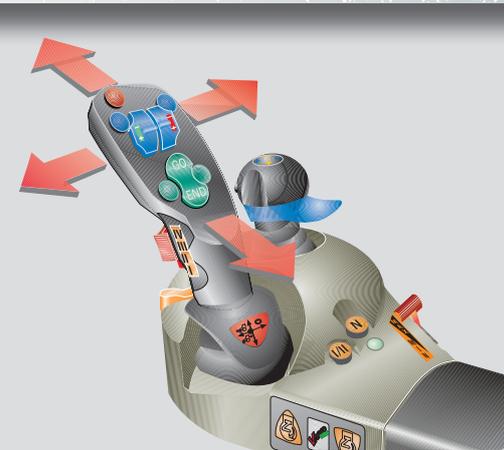
- Clutter-free cab design that concentrates on the essentials
- Pleasantly quiet work place; free-standing exhaust is isolated from the cab
- Perfect ergonomics and logical controls
- Height and tilt-adjustable steering wheel
- Comfort engagement controls with automatic modes for 4WD, differential locks and PTO
- Varioterminal for fine adjustments
- TMS and Variotronic[™] available as option
- Fold-down passenger seat
- Air-conditioning is standard

All the tractor operating elements are arranged logically on the right-hand side. Integrated in the armrest are a joystick, a crossgate lever for controlling two hydraulic valves, the speed memory keys and controls for setting the optional TMS. Integrated in the side control console are the EPC and PTO controls and various engagement keys. In front of them, always in good view of the driver, is the Varioterminal, with which all fine settings to the hydraulics and transmission

can be made. The instrument cluster in the steering column displays operating statuses, such as engine temperature, fuel supply and speeds.

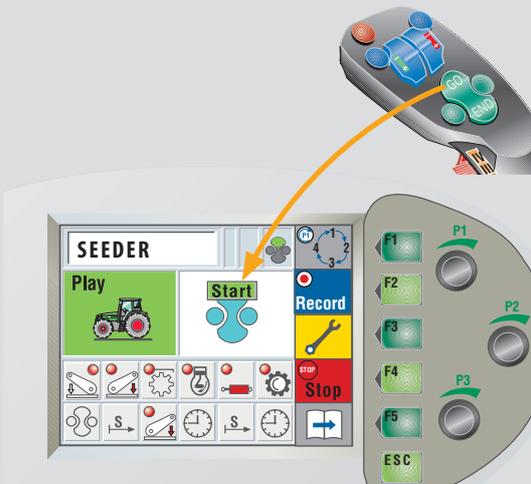


Operating comfort that you will appreciate more with every working hour



The top choice for operating comfort

Push the joystick forward to accelerate the Vario. To slow down, simply pull the speed control lever back again. Driving in reverse is just as easy – only the other way around. Do you need to reverse quickly? Simply move the joystick to the left – the Vario decelerates to a standstill and drives off again in the opposite direction. Activate the cruise control with a simple movement to the right. Driving with Fendt Vario: ingeniously simple – simply ingenious.



Ergonomic benefits: Directly next to the speed control lever are the crossgate lever for operating two hydraulic valves, the engine speed memory keys, the sliding control and the key for setting and activating the TMS (optional).

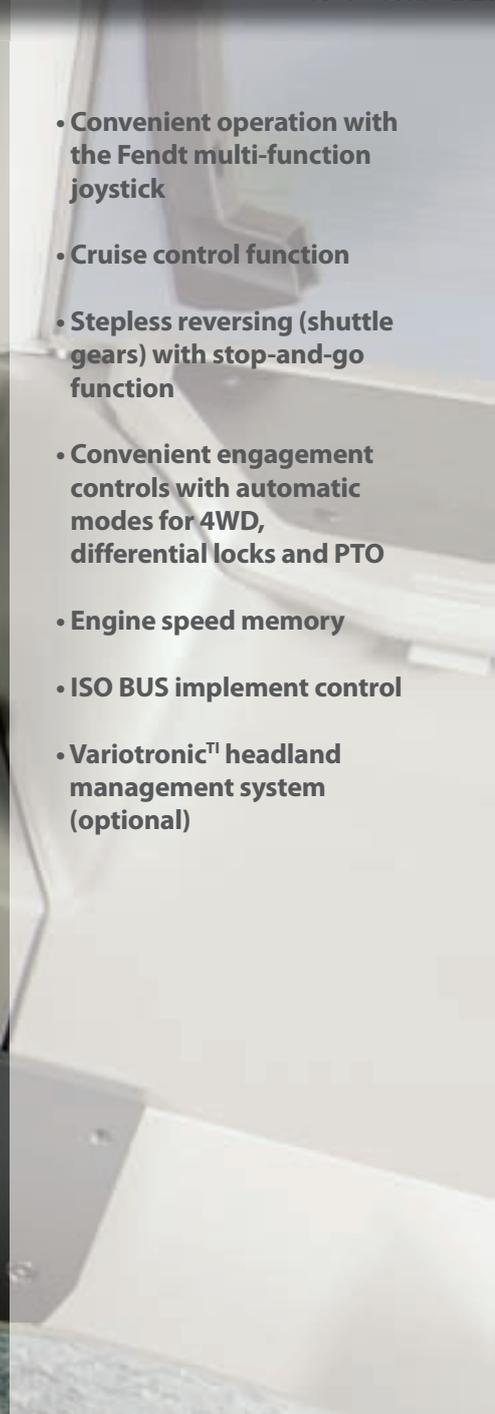
Variotronic™

A touch of a button on the joystick triggers automatic procedures at the headland. They save time and prevent operating errors on long work days. Sixteen sequences with up to 13 functions each can be saved permanently for four implements.

Fendt has received many international awards for the Variotronic™ operating concept. Comprising a joystick, Varioterminal and control console, the Variotronic impresses through its simple, ingenious handling. For you, this means greater economic benefits and productivity in practical use.

Simple, intelligent operation

In the basic version, the 700 Vario already comes with several automatic modes that do the work for you. For example, automatic PTO engagement, which automatically engages and disengages the PTO dependent on the height of the power lift. And also 4WD and differential lock engagement, which is speed and steering angle dependent and simplifies your work every time you are at the headlands.



- Convenient operation with the Fendt multi-function joystick
- Cruise control function
- Stepless reversing (shuttle gears) with stop-and-go function
- Convenient engagement controls with automatic modes for 4WD, differential locks and PTO
- Engine speed memory
- ISO BUS implement control
- Variotronic[™] headland management system (optional)

ISO BUS implement control

With the standard-equipped Fendt implement control, you profit from lower purchase costs and enhanced operating comfort. Without implement control, a separate control terminal is required for each implement. With implement control on the 700 Vario, you can control all ISO and LBS implements conveniently with the Varioterminal and the joystick. This enables uniform and simple operating logic with optimum operating ergonomics.

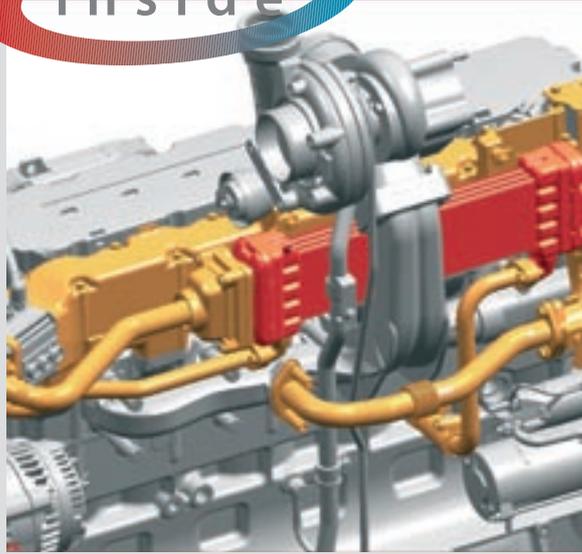
Variotronic[™] headland management system

The 700 Vario is available with the optional TMS Tractor Management System and Variotronic[™] Headland Management System. They allow you to carry out your work easier and more comfortably. Whether you are a beginner or professional, with these systems, you can automatically perform your work at maximum efficiency and have more time to monitor your implements.

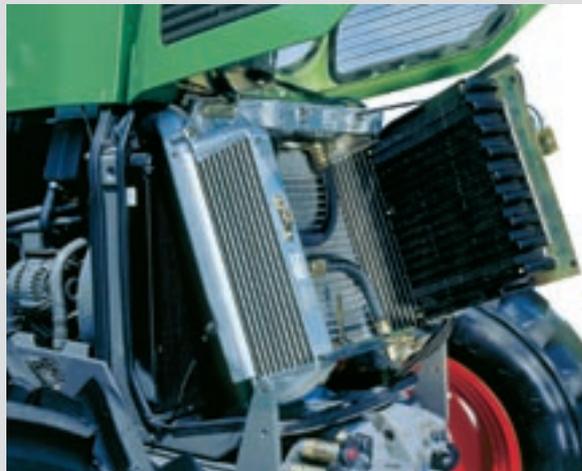
So powerful and yet so economical thanks to the latest engine technology

A 780 Nm torque, 125 HP max. power at 1,900 rpm and a specific fuel consumption of 195 g/kWh for the 718 Vario thanks to implementation of the latest technology.

The external EGR system provides targeted cooling of recirculated exhaust, which significantly lowers fuel consumption compared to internal recirculation systems. It saves you up to 10 percent in fuel.



A fuel consumption display is integrated in the Varioterminale on the 700 Vario as standard. This shows the current as well as average fuel consumption and has two sum counters. Fuel consumption per hectare can also be logged at the same time in the on-board computer.

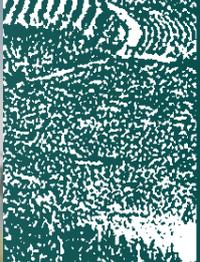


The 700 Varios have efficient cooling units with maximum service-friendliness. The cooling units for hydraulic oil, transmission oil, fuel and air-conditioning can be swung up away from the radiator to give you better access for cleaning.



No matter if you use your tractor in the field, in grasslands or for row crop work – in any case, superior overall profitability is crucial. The 700 Vario tractors have engines with the latest technology. Although they comply with upcoming exhaust standards, fuel efficiency has been increased compared to the previous model.

As powerful and profitable as the “big ones” In the light of increasing diesel prices, fuel economy becomes of major importance. In the 700 Vario, Fendt employs a high-tech six-cylinder Deutz engine with four-valve technology for greater economy. It has a speed-independent common rail high-pressure fuel injection system and fully electronic engine control.



- 4-valve engine with 6.1 l displacement: 180 hp max. power at 1900 rpm (ECE R24) and 780 Nm torque (718 Vario)
- Common rail high-pressure fuel injection system with injection pressures up to 1600 bar
- Electronic engine control EDC 7
- External exhaust gas recirculation system for lowest fuel consumption and best environmental compatibility
- Viscous fan for optimum engine cooling
- Low specific fuel consumption of 195 g/kWh (198 g/kWh for 712 Vario and 714 Vario)
- 340-litre tank capacity for long work days
- Servicing interval every 500 operating hours
- One hundred percent ready for RME biodiesel

AGReX – economical and environmentally-friendly

The high-tech injection system and the first-rate external exhaust gas recirculation system complement each other. Cooling and proportioning of recirculated exhaust gas optimises the combustion process significantly. The benefit in comparison to a simple, internal exhaust gas recirculation system is substantially lower fuel consumption.

Fully approved for RME biodiesel

The 700 Vario is also approved for RME fuel without restrictions, as are all Fendt tractors starting with the 1995 models. The use of rape methyl ester according to DIN EN 14214 is fully approved by Fendt as standard specification. You profit from the cost benefits – the tractor does not need to be converted, nor is costly additional insurance required.

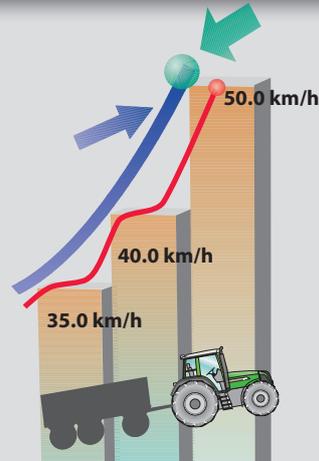


Experience the Vario advantages – on the road, in the field and at the filling station

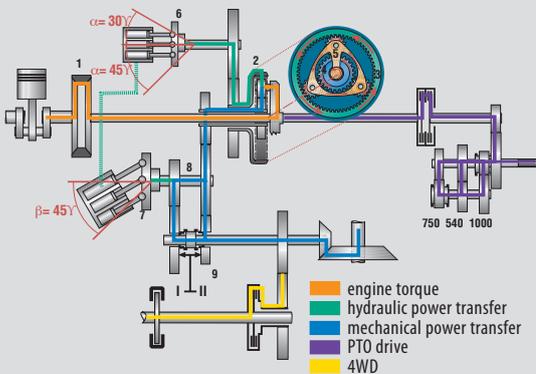
Operation	Operating time	Fuel consumption
Mowing	-10 %	-10 %
Chopping silage maize	-10 %	-10 %
Harvesting potatoes	-5 %	-10 %
Harrowing/drilling	-5 %	-10 %
Weeding	-5 %	-10 %
Ripping	-3 %	-3 %
Ploughing	-3 %	-3 %

The savings potential for various working procedures is clearly noticeable. You save valuable working time through higher area coverage and also profit from low fuel consumption.

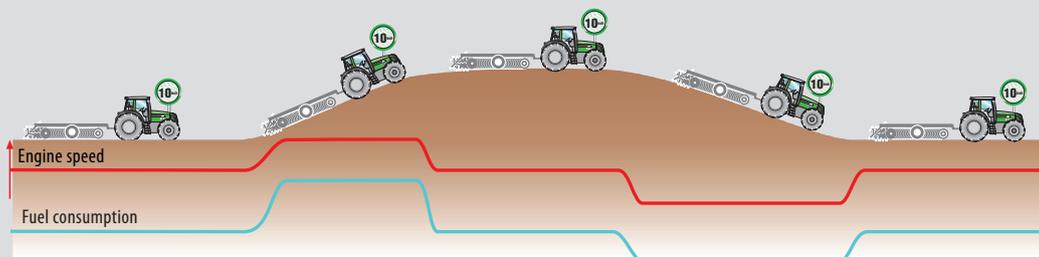
Source: Nürtingen University



Fendt Vario – better than power shift. It allows you to utilise power reserves that are not even available to modern power shift transmissions.



1. Torsional vibration damper
2. Planetary gear set
3. Ring gear
4. Sun wheel
5. Planet carrier
6. Hydro pump
7. Hydro motor
8. Collecting shaft



Automatically drive economically with the optional TMS Tractor Management System

When TMS (Tractor Management System) is activated, the tractor electronics control the engine and transmission. This significantly increases operating comfort for the driver. The driver only needs to set the desired speed, TMS controls the rest. In the graphic above, one can see that the tractor drives on level ground at a reduced engine speed.

On the slope, the load increases, so TMS increases the engine speed. As soon as the load decreases (on level ground or downhill), the quantity of fuel injected is reduced. This maintains an economical driving style, since TMS drives the tractor at the lowest engine speed possible.

The productivity of a tractor, and therefore also the return on investment, is determined in great part by fuel consumption. But an economical engine is only one of the determining factors. It is just as important to maintain the engine at its economical optimum while achieving as high an area coverage as possible. No problem with the Vario drive concept from Fendt.

Uncompromising in all applications

This kind of flexibility is only possible with Fendt Vario transmissions. From 30 metres per hour to 50 km/h, every speed is possible over the whole range, without steps. The 700 Vario is therefore predestined for operations in specialty crops as well as for row crop work, grassland operations and last but not least cultivation.

An all-rounder that will impress you through its comfort and uncompromising economy every time you use it.





- Maximum working capacity with optimum fuel consumption
- Up to 10 percent more area coverage thanks to optimally adapted travel speed
- 50 km/h top speed at a fuel-saving 1700 rpm
- Up to 10 percent in fuel savings
- Super crawler gears included (from 30 m/h)
- Joystick operation instead of multiple levers
- Turboclutch feature for greater driving comfort
- Stepless reversing of travel direction (shuttle gears) without wear
- Stop-and-go function

Fendt Vario: better than power shift

With stepless variable speed, you can utilise power reserves that are not even available to modern power shift transmissions. With conventional transmissions you are always one gear too high or too low, because of the steps. Vario allows you to mobilise the power reserves that are hidden in between the steps. That means power flow without interruptions.

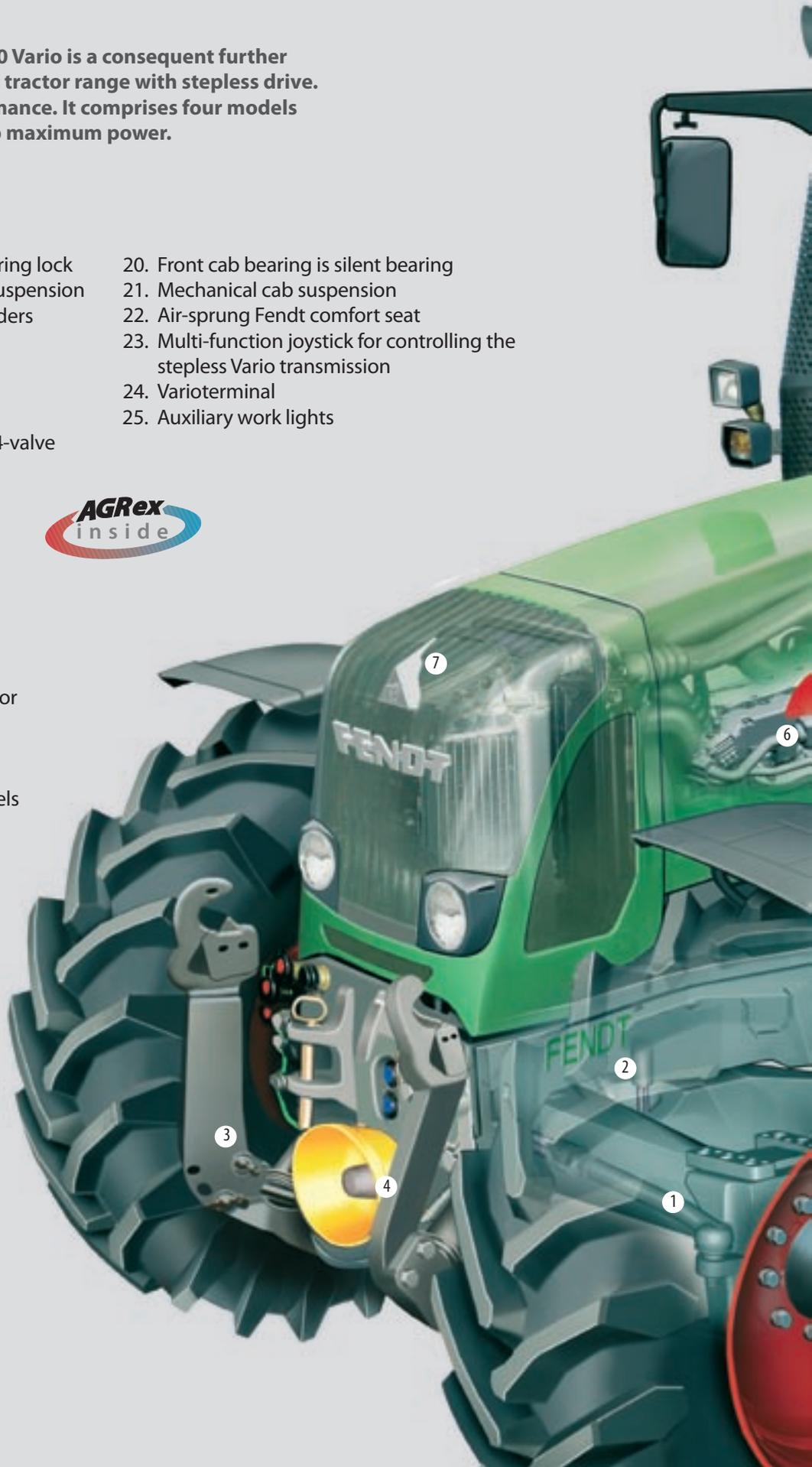
Special equipment included

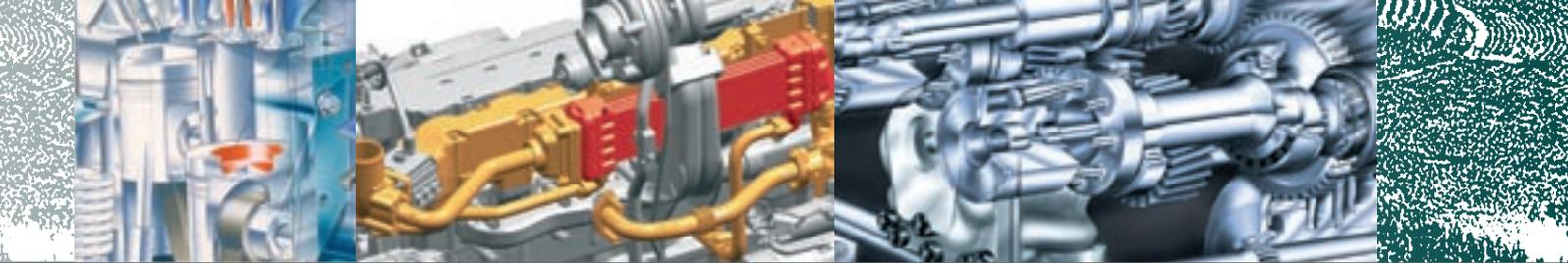
In addition to economic benefits, the stepless drive also offers you a one-of-a-kind benefit in operating comfort. A crawler gearbox is no longer necessary, since it is integrated in the Vario drive. To increase driving comfort, the 700 Vario has a turboclutch feature, which prevents engine stalling.

Overview of technology

The third generation Fendt 700 Vario is a consequent further development of the successful tractor range with stepless drive. The result is enhanced performance. It comprises four models ranging from 130 hp to 180 hp maximum power.

1. Front drive axle with 52° steering lock
2. Hydropneumatic front axle suspension with level control and 2 cylinders (lockable)
3. Front power lift (optional)
4. Front PTO (optional)
5. Planetary final drives
6. 6.06-litre Deutz engine with 4-valve technology
7. Intercooler
8. AGReX external exhaust gas recirculation
9. Stepless Vario transmission
10. Planetary gear set
11. Hydro motor
12. Hydro pump
13. Enclosed 4-WD clutch
14. Nitrogen pressure accumulator (suspension)
15. 340-l fuel tank
16. Planetary axle
17. Multi-disc brake for rear wheels
18. Front wheel disc brake
19. Tilttable comfort cab
20. Front cab bearing is silent bearing
21. Mechanical cab suspension
22. Air-sprung Fendt comfort seat
23. Multi-function joystick for controlling the stepless Vario transmission
24. Varioterminal
25. Auxiliary work lights





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FENDT 718 Veeo

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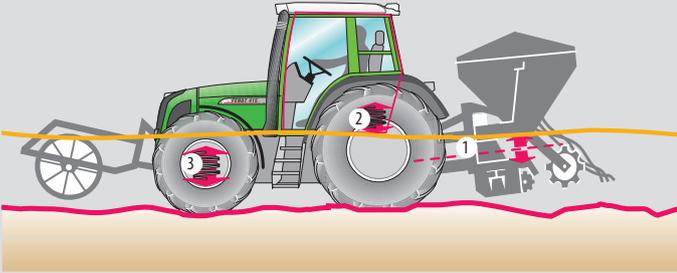
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Fast transport with maximum comfort, full safety and high payload reserves

A combination of suspension systems

The combination of shock load stabilising (1), mechanical cab suspension (2) and front axle suspension with level control (3) provides ride comfort on par with commercial vehicles. This also increases safety substantially, since the vehicle is not in danger of developing bounce when driving with mounted implements. The load on the front axle remains constant and steerability is maintained.

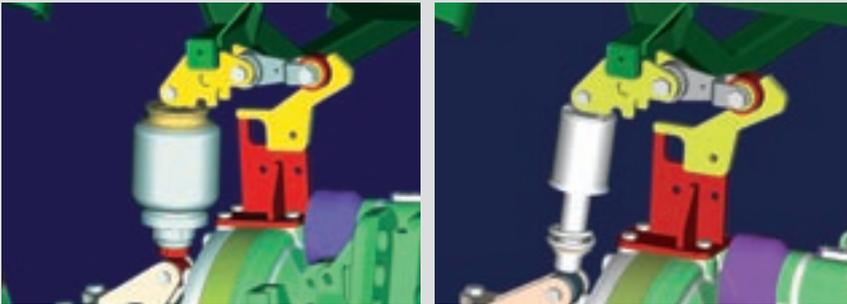


Optional pneumatic cab suspension

The pneumatic cab suspension has air spring dampers on the rear bearing. These feature automatic levelling, which adjusts the suspension to varying loads.

The mechanical cab suspension

The hydraulic suspension at the front, along with sprung struts at the rear, controls the movement of the cab in fore-to-aft direction. The integral lateral stabiliser and the absence of unwanted bounce greatly enhance ride comfort in the cab.



The controls and display for the automatic steering axle lock for trailers with self-steering axles are located on the clearly laid out and easy to operate Vario-Terminal. The terminal is used to select the control valve, engage or disengage the steering axle lock, and define the upper and lower speed setpoints according to the prevailing conditions.

Even for compact standard tractors, the transportation of goods for purchase and sales-oriented jobs is gaining importance and today already amounts to over 40 percent of operating hours. The 700 Vario allows you to perform haulage work at 50 km/h at a fuel-saving 1700 rpm while providing maximum ride comfort and driving safety.



Safe driving, even with high payloads

A robust cast half frame, which enables a permissible gross weight of 11.5 tons, carries the load on the Fendt 700 Vario (12.5 tons for the 718 Vario). The permissible axle loads were also increased compared to the previous model. This gives you ample payload reserves for heavy-duty implements. But high transport loads must also be slowed down quickly in dangerous situations. On the 700 Vario this is ensured by a practically maintenance-free



- 50 km/h haulage speed at reduced engine speed (1700 rpm)
- EPC with shock load stabilising
- Superior driving safety and ride comfort
- Mechanical cab suspension (standard), optional pneumatic cab suspension for perfect ride comfort
- Front axle suspension with level control and locking function that permits front-mounted implements to be guided precisely
- Top-efficiency lifetime braking system: wet, integral multi-disc brakes
- Robust cast half-frame design

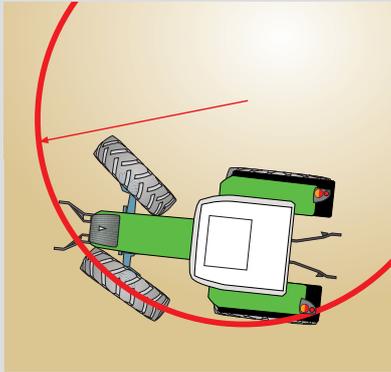
braking system, comprising two integral multi-disc brakes for the rear wheels and a disc clutch on the cardan shaft for the front wheels. The front axle with level control, a benefit in terms of ride comfort, also contributes to driving safety. The suspension can be locked with the push of a button, so that front-mounted implements can be guided precisely.

Cab suspension for maximum comfort

The 700 Vario cab is equipped with mechanical cab suspension as standard. Hydraulic suspension in the front and sprung struts with an integral lateral stabiliser at the rear, absorb annoying shock loads and movements of the cab. The optional pneumatic cab suspension provides an even greater suspension effect. It moves working comfort up another notch, so that the driver remains fit on long work days and the driver's health is protected in the long run.

Tyre options for all requirements – with full manoeuvrability

A steering lock of 52° together with a wheel base of 2700 mm (2720 mm for 718 Vario) ensure a turning circle of 5.5 Meter, which makes the 700 Vario extremely manoeuvrable.



Optionally the 700 Vario can be fitted with swivelling front mudguards, which allow the wheels to be turned to the fullest.



Applying fertilisers and pesticides in late growing stages increases yield. The 700 Vario accepts the row crop tyres 270/95 R38¹⁾ front and 300/95 R52¹⁾ rear. This gives you a ground clearance of 550 mm, which is enough even for specialty crops.



Minimum soil compaction is essential for successful field and grassland operations. The tyre options for the 700 Vario go up to 600/60 R28 front and 710/60 R38 rear (712–716 Vario; for the 718 Vario 600/60 R30 front and 710/60 R42 rear). That guarantees the least amount of pressure on the ground.



Intelligent 4WD and differential lock technology

Depending on the setting, 4WD and differential locks can be automatically engaged and disengaged, dependent on steering angle and travel speed. If you choose 100% 4WD or 100% differential locking, these are engaged permanently. Both of these functions can be engaged and disengaged under load in automatic as well as 100 percent modes.

No matter if you use your tractor for cultivation or grassland operations – in either case soil compaction is a major disadvantage. With the right tyres, you can prevent soil compaction. But it is even easier, if the tractor does not weigh much to begin with. With the 700 Vario, you profit from an advantageous vehicle weight and a broad selection of tyre options. If required for the application, variable ballasting options are also available.



Row crop expert with payload reserves
With an unladen weight of 6605 kg, the 700 Vario is predestined for row crop applications with large, powerful implements. It has a weight-power ratio of 39 kg/hp (718), which gives it exceptionally lively handling. A permissible gross weight of 11500 kg or 12500 kg (718) gives you ample payload reserves for heavy implements.



- Advantageous unladen weight of only 6605 kg
- Excellent power-to-weight ratio of 39 kg/hp (718 Vario)
- High payload up to 5.5 tonnes (718 Vario)
- Large row crop tyres can be used:
300/95 R52 rear¹⁾
270/95 R38 front¹⁾
- Optimally suited for row crop and specialty crop work thanks to stepless drive which starts at 30 m/h
- Wheelbase: 2.7 metres
- Turning circle: 5.5 metres
- Electrohydraulic engagement for 4WD and differential lock, can be actuated under load
- 100% locking differential on rear axle
- Locomatic front differential lock

¹⁾ Third party accessory

Tyres for every application

When developing the 700 Vario, Fendt engineers placed great value on offering as broad a selection of tyres as possible. Now, for all 700 models, row crop tyres with 270/95 R38 front and 300/95 R52 rear are possible. That gives you a rear wheel diameter of 1890 mm. For optimum soil protection, tyre sizes 600/60 R30 front and 710/60 R42 rear are possible.

Short, compact and manoeuvrable

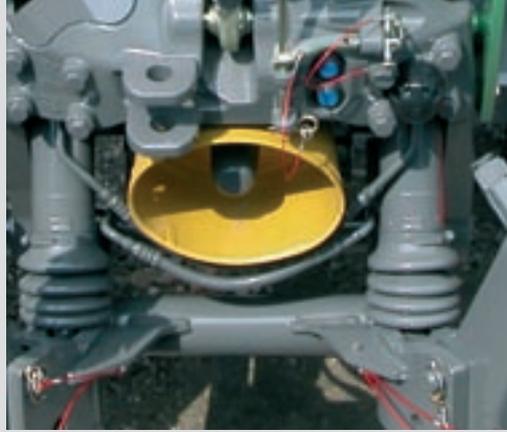
The well-thought out design of the 700 Vario gives it maximum manoeuvrability. A length of 4.66 metres (4.73 metres for 718), a 2.70-metre wheelbase and a steering angle of up to 52°, result in a turning circle of 5.5 metres. That permits tight turning manoeuvres that will save you time at the headlands. Furthermore, the 700 Vario offers exceptional visibility.

Powerful drives at the front and rear



Standard with flange PTO

The 700 Vario is fitted with a flange PTO as standard. When required, you can switch between different PTO profiles easily and in a relatively short amount of time.



Optional front PTO with excellent efficiency

Optionally with 540 rpm or 1000 rpm. In either case, you benefit from excellent efficiency, since the front PTO is driven directly from the engine's crankshaft.



Save yourself unnecessary steps

The 700 Vario has external controls for the power lift and rear PTO. Mount rear implements easily and save yourself unnecessary steps, for example, when filling the slurry tank.



Never endanger the drive shaft again

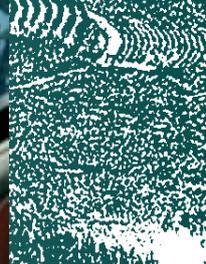
Concentrate on the essentials at the headlands. The PTO automatic mode engages and disengages the PTO as soon as the implement has been lowered or raised.



You will appreciate the operating comfort of the 700 Vario, in particular, in row crop or tillage applications, where you often must operate the PTO controls in addition to the controls for the lifting gear. It offers you extensive, high-quality PTO management with start-up control.

Three-speed PTO is standard

The PTO engagement control has 3-speed preselection. It is conveniently operated with keys on the control console. The 700 Vario comes with the PTO speeds 540 rpm, 750 rpm und 1000 rpm at the rear as standard. For less power-hungry operations, the 750-rpm economy PTO "540E" allows smooth working at a reduced engine speed and also saves fuel. The optional front PTO is driven directly from the engine's crankshaft with no loss of power.



- **Three-speed PTO with comfort controls (540/540E/1000 rpm)**
- **Flange PTO at rear is standard**
- **PTO actuation with start-up control**
- **PTO automatic mode (automatic engagement dependent on height of the power lift)**
- **External PTO controls at the rear**
- **External PTO-engine speed control (in combination with TMS)**

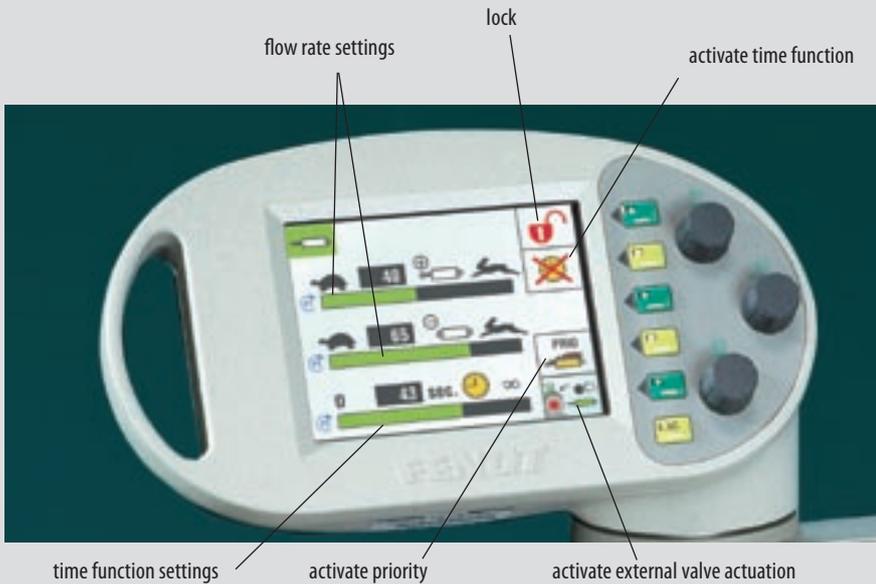
You have the choice of 540 rpm or 1000 rpm. The automatic PTO start-up sensitively controls start-up, according to the power requirements of the implement. This increases the service life of all the PTO components and reduces machine costs.

Automatic modes

The well-known and greatly-appreciated PTO automatic mode is also available as standard on the 400 Vario. It automatically engages and disengages the PTO, depending on the height of the power lift. The 700 Vario offers you operating comfort inside and outside of the cab. The electrohydraulic PTO engagement can be operated externally from the tail lamp bracket.

Powerful hydraulics for modern implements

Electrical valves: first-rate working and operating comfort



The joystick and the crossgate lever control the electric proportional valves. These are all double-acting control units, which can also be used in a single-acting capacity, and feature a floating position. The controls for the first two valves are located on the convenient crossgate lever. Setting the valve functions with the Varioterminale is simple. Using the rotary control and function keys, you can easily and precisely control the flow rates and actuation times of all electric proportional valves, set valve priority or activate external actuation for a valve.



Optional: first-rate front power lift

The optional front power lift on the 700 Vario is an integral part of the tractor design and has been well-thought out in every last detail. For example, the top link can remain on the tractor as it is, even when it is not required.



Powerful EPC rear power lift with double-acting function

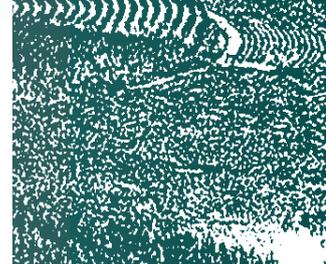
As standard on the 700 Vario, the EPC rear power lift can be switched to double-acting operation by moving just one lever. Using the down-force rear power lift, for example, you can mount twin tyres easily.



Modern implements demand ever greater flexibility and performance from the tractor hydraulics. Fast lifting and high oil delivery rates are required for economical operation. The 700 Vario models, with their load sensing hydraulics and electrical hydraulic valves, are well-equipped for convenient operation.

Powerful hydraulics

The 700 Vario is equipped with a load sensing hydraulic system. That means: modern axial piston pumps deliver the exact quantity of hydraulic oil required – up to 110 (154 optional) litres per minute. A maximum of 45 litres of hydraulic oil is available to mounted or trailed implements. The hydraulics and transmission have separate oil supplies, which permit unrestricted use of bio-oils for the hydraulics.



- Load sensing hydraulics
- Hydraulic delivery capacity:
110 l/min
(optional: 154 l/min)
- Hydraulic oil cooler
- Maximum lift capacities:
Rear: 8340 daN
(9080 daN for 718)
Front: 4440 daN (optional)
- EPC rear power lift control with
 - shock load stabilising
 - quick lift
 - lift height limiter
 - lowering throttle
 - position, draft and mixed control
 - external actuation
- Integral front power lift (optional), with gas shock absorbers
- Electric hydraulic valves (optional with external actuation)
- Crossgate lever
- Max. available hydraulic oil: 45 l
- Bio-oils can be used for the hydraulics thanks to separate oil supplies

EPC rear power lift with reserves

The electrohydraulic rear power lift, which has a maximum lift capacity of 8340 daN, guarantees that even heavy rear-mounted implements for this power class can be lifted to the fullest lift height without trouble. The standard-equipped shock load stabilising counteracts vehicle bounce by actively raising and lowering the power lift.

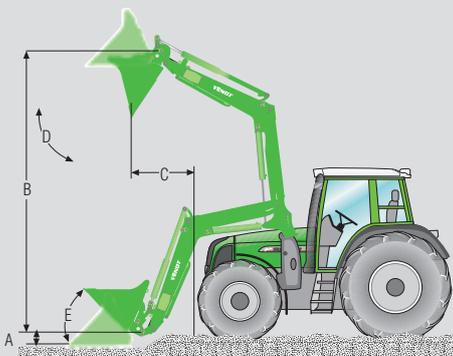
Integral front power lift with damping

The optionally available front power lift for the 700 Vario has a continuous lift capacity of 4440 daN. It can safely lift front-mounted implements weighing up to 3 tonnes. The integral gas shock absorbers ensure that driving safety and ride comfort are maintained at these high loads.

Turn your Vario into a stepless loader with the new Fendt CARGO

With the new Fendt CARGO Lock, you can mount and remove the CARGO front loader from your 700 Vario even faster and easier. Thanks to the semi-automatic lock, you no longer need to deal with inserting locking bolts, which is often difficult. The system also offers optimum operational safety, since the front loader is locked in place immediately after driving into it. Fendt CARGO Lock is self-adjusting and is therefore particularly service-friendly.

The standard-equipped crossgate lever is a plus in operating comfort. Two control valves on the front loader can be operated precisely with just one lever. The optional CARGO comfort controls not only provide controls for a 3rd and 4th hydraulic circuit, but also convenient activation of the hydraulic attachment lock and the front loader damping system using the crossgate lever.



Model	4X/85 ²⁾	5X/85	5X/90
A Digging depth (mm) ¹⁾	130	290	250
B Lift height (mm) ¹⁾	4150	4460	4500
C Dumping dist. (mm) ¹⁾ B = 3.5 m	1610	1910	1870
C Dumping dist. (mm) ¹⁾ B = max.	980	1120	1080
D Angle of emptying	55°	55°	55°
E Angle of backwards tilt	48°	48°	48°
Lift capacity over full hgt (daN)	2600	2600	2950
Maximum lift capacity (daN)	3000	3000	3460

A 700 Vario equipped with an original Fendt CARGO front loader permits extremely comfortable front loader operations.

¹⁾ depends on tyres

²⁾ possible with 28" front tyres

As for tractors, the demands on the performance of modern front loaders continue to increase. The answer here is Fendt CARGO. The tailor-made front loader, sporting a new design, was developed specifically for Vario tractors. During development, attention was not only placed on technical specifications. Comfort, safety and service-friendliness also meet the high Fendt standards.

The tailor-made accessory for your 700 Vario
If you upgrade your 700 Vario with Fendt CARGO, you will profit from a perfect combination of all components. During development, all the dimensions and forces of the CARGO were explicitly designed for the Vario. This gives you the operational safety that comes from testing the front loader and tractor as one complete unit. The results are best visibility with balanced force and load distribution for practical operations.



- **Lift capacity over full height:**
2600 daN (5X/85)
2950 daN (5X/90)
- **Lifting height up to 4500 mm**
- **All pipes run in the frame**
- **Valves and damping are protected in cross bar**
- **Simple retrofit options for the loader**
- **Euro quick-change frame (optional SMS frame)**
- **Comprehensive safety concept**
- **Multi-coupler for mounting front loader (standard)**
- **3rd and 4th hydraulic circuit (optional)**
- **Multi-coupler for 3rd and 4th hydraulic circuit on Euro quick-change frame (optional)**
- **Damping system (optional)**
- **Hydraulic attachment lock (optional)**
- **Wide range of original Fendt attachments (optional)**

Comfort with a capital C

The operating concept was designed for optimum driving comfort. The standard crossgate lever provides precise control of the CARGO. The optional third or fourth hydraulic circuits, are activated via pushbuttons on the crossgate lever and then easily operated with the crossgate lever. The optional damping system can be activated conveniently from the driver seat by simply operating a switch; the optional attachment lock is also controlled in

the same way.

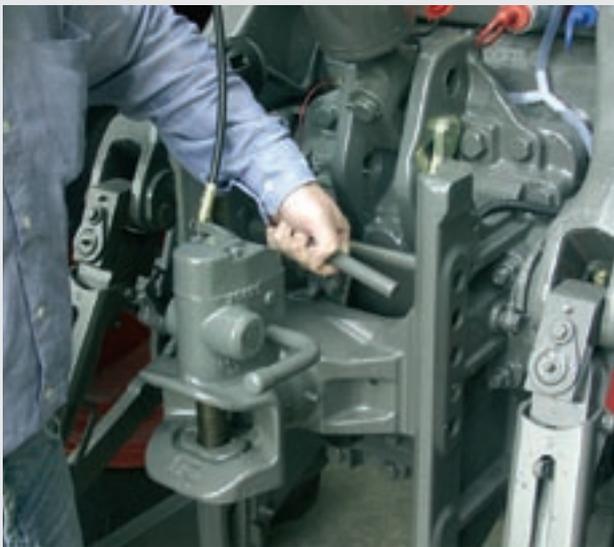
Through a specially designed connection between the front loader and the tractor, all maintenance work can be performed on the 700 Vario tractors while the front loader is attached. Further visible evidence of the perfect symbiosis of tractor and loader is the front window of the 700 Vario, which can be swung out completely at any time during front loader work.

Often small things are what make everyday life with a Fendt so pleasant

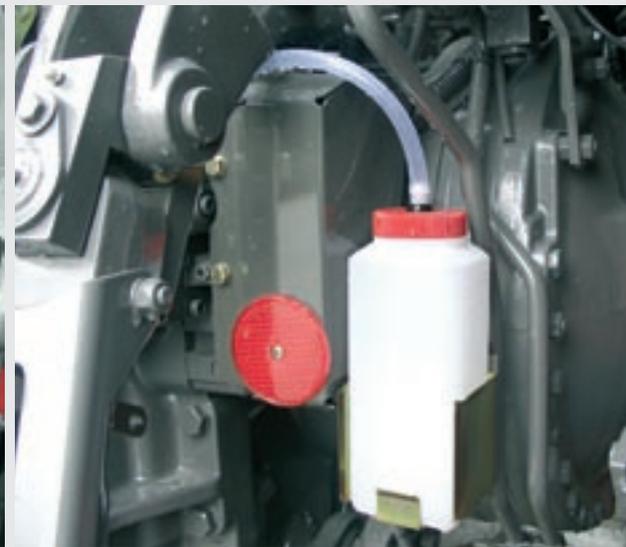
The 700 Vario is equipped with rear work lights as standard. The Twin Power work lights are mounted on the left and right of the cab roof. Their high position gives you exceptional lighting for your rear-mounted implements.



With two simple hand movements, you can set the lower links on the 700 Vario to rigid or swinging position, depending on implement requirements. A robust, sturdy mechanical lateral lock is locked and unlocked with levers on the right and left sides. In the unlocked position, the lift arms are automatically centred in the middle position. By moving just one pin, you can change the width of the lower links between Cat. II and III.



The standard automatic hitch with remote control from Fendt can be adjusted in height quickly and easily. The locking pin is opened with a lever. The hitch can then be lowered or raised on the guide rails – with only one hand.



It is impossible to prevent oil from leaking when coupling hydraulic connections. On the 700 Vario, though, oil leaks run into the casing, which also serves to protect hydraulic couplings from dirt, and are then led through a hose into an easily accessible container.

You have surely experienced this in your day to day work. Whether you have to change implements when you are pressed for time, or have to work many hours in your Vario without breaks during peak work times, often the small detail solutions are what make life easier. Fendt offers you a number of such details.

Benefit from the sum of the small details that a Fendt tractor offers to help you perform your work easier and more comfortably. When designing and developing a vehicle, Fendt engineers always search for solutions that bring you forward. From experts for experts.



The 700 Vario was designed to offer you a large selection of tyres. Wide tyres for soil protection are possible, as are row crop tyres with large outer wheel diameters.

Whether you have control cables for a control terminal or hydraulic lines for hydraulic valves on the implement, the cable lead-through in the Fendt cab is designed to enclose the cable so that dirt and cold cannot enter the cab when the windows are closed. Of course, the cables can be fitted easily without tools.

The 700 Vario has ISO BUS implement control, which is integrated in the Variotronic, as standard. With the 700 Vario, you control ISO BUS and LBS implements with the Varioterminal and the joystick. In this way, you have a uniform and simple operating logic with optimum operating ergonomics and save the purchase costs for terminals for your implements.



Fendt tractors have signal lights with auto shut-off. Just like in your car, the turn signal indicator automatically shuts off when the steering wheel is turned back.

The 700 Vario was designed to give you access to all areas necessary for daily maintenance – even when the front loader is mounted.

The steering wheel is height and tilt adjustable to adapt to the individual requirements of every driver.

Innovative technology, intelligent services – all from one source

Consultation: the way to a tailor-made Fendt

Fendt sales agents are experienced specialists who can provide you with extensive advice and information on technology, equipment and the overall profitability of a Fendt tractor.



More freedom for investments – financing through AGCO FINANCE

Financing through AGCO FINANCE guarantees attractive conditions and flexible repayment periods, customised to meet your needs.



A trial run in the field – experience the difference

You cannot pass judgement on a Fendt tractor without the experience of driving one in the field. Fendt tractors enjoy a first-class reputation for superb driving and working comfort. Not until you have driven a Fendt, do you realise how big the difference really is when compared with other tractors.



Renting gives you freedom

Do you need a vehicle to fill a short-term capacity requirement, or do you want use one over a longer period of time without purchasing? Are you looking for a tax advantage or do you require solvency for other investments? Fendt StarService offers you solutions.

It is clear that you get cutting-edge technology with a Fendt tractor. But that is not enough for a successful business nowadays. That is why Fendt sales partners also offer a wide range of services. All from one source.

Competent consultations and demonstrations

Fendt dealers and distributors receive regular training and are specialists for Fendt products. They have in-depth knowledge of the entire product line and will offer you competent consultation. Ask your local Fendt sales partner. Or contact us at www.fendt.com for an individual Fendt demonstration.



Know-how through practical training

Profit by technically and economically optimising operations with your Fendt tractor, whether in the field, on the road or in the books. Professional instructors show you how to utilise top class technology efficiently and safely, in theory and practice.

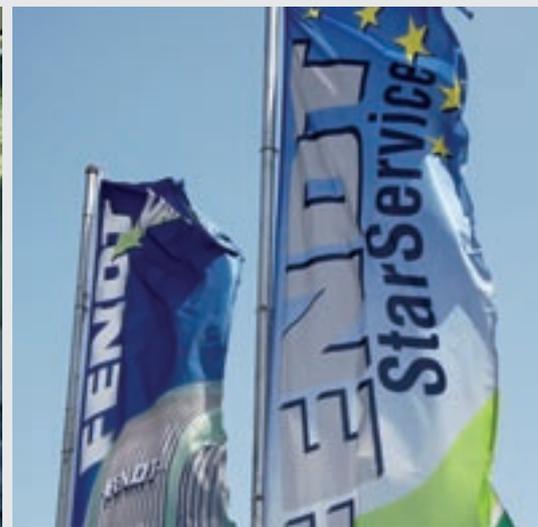
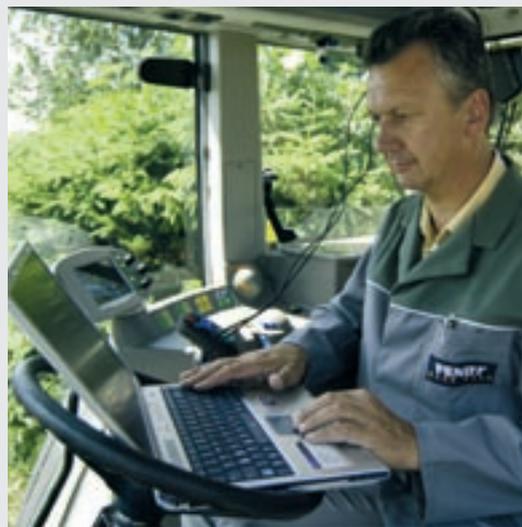
Fast diagnostics thanks to Fendias

The StarService technician uses FENDIAS to gain access to the digital data inside your Fendt. Furthermore, if required, data is gathered and analysed while the machine is running – for example, data from the hydraulics or the transmission. All for the sake of fast error diagnostics and operational availability.

FENDT StarService Emergency Hotline

Available 7 days a week!¹⁾ FENDT StarService partners are mobile and have only one objective: to keep your Fendt operationally available. Should something actually happen, the Emergency Hotline is available for fast and competent help – even on-location at your farm or business!

¹⁾ during the harvesting season from May to October



Genuine Fendt parts – from AGCO Parts – so that your Fendt remains 100% Fendt: Original Fendt parts are tailored to your Fendt. They carry the assurance of series quality and are tested for functional reliability. That pays off in many ways: - 12 month warranty on original Fendt parts and their installation - the highest level of operational reliability - top resale value

Mobile expert service
Every StarService partner has a modern service vehicle. Tried and test, optimised tools, as well as service documentation and FENDIAS, the computer-supported analysis and diagnostics system, are always on board. This allows the mobile StarService technician to localise and rectify errors quickly.

Fendt24 – because your time is invaluable!
Your StarService partner has the most commonly required parts in stock. If a part is not in stock, we deliver those that are ordered by 6 pm by 8 am the next morning. During the harvesting season¹⁾ your StarService partner has access to Fendt24. Here orders are taken around the clock and are ready for delivery within two hours.

Profitability under contract

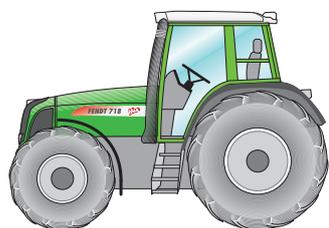
With a Fendt Service Package, you have servicing and repair costs under control. Would you like to have the prescribed servicing work done on the basis of reasonable fixed costs? Or do you want full control of costs per operating hour without unpleasant surprises? Choose between the Service, ProService and FullService packages.

Tractors for rent

Rent a tractor including the Service Package at a fixed cost through your FENDT StarService partner. This frees up your funds and you can easily calculate the costs per hour. We can take over all servicing work, complete insurance coverage and repairs*, if you like.

* Repairs according to FENDT warranty policy; natural wear (e. g. tyres) and malicious damage are excluded.

Technical specifications



Wheelbase
Overall length



Overall height

Overall width

	712 Vario	714 Vario	716 Vario	718 Vario
Engine				
Rated power (kW/hp) (ECE R24)	85 / 115	96 / 130	110 / 150	121 / 165
Max. power (kW/hp) (ECE R24)	96 / 130	107 / 145	121 / 165	132 / 180
Rated power (kW/hp) (EC 97/68) ⁶⁾	97 / 132	108 / 147	123 / 167	133 / 181
Max. power (kW/hp) (EC 97/68)	100 / 136	111 / 151	126 / 172	137 / 186
No. of cylinders / cooling / aspiration	6 cylinders, four-valve technology / water / turbocharger, intercooler			
Injection / engine control / exhaust recirculation	common rail / EDC / AGReX			
Bore / stroke (mm) / displacement (cm ³)	101/126/6057			
Rated engine speed (rpm)	2100	2100	2100	2100
Speed at max. power (rpm)	1900	1900	1900	1900
Max. torque (Nm/rpm)	571/1450	640/1450	724/1450	780/1450
Torque rise (%)	38	38	36	35
Optim. fuel consumption (g/kWh)	198	198	195	195
Fuel tank (l)	340	340	340	340
Oil change interval (op. hrs.) ⁵⁾	500	500	500	500
Transmission and PTO				
Type of gearbox	stepless Vario transmission			
Speed range: Range I (forward / reverse)	0.02 to 28 km/h / 0.02 to 17 km/h			
Range II (forward / reverse)	0.02 to 50 km/h / 0.02 to 40 km/h			
Max. speed (km/h)	50	50	50	50
Rear PTO (rpm)	540 / 540E / 1000			
Front PTO ¹⁾ (rpm)	540 or 1000			
Hydraulics				
Type	load sensing			
Hydraulic pump capacity (l/min)	110 (154 ¹⁾)	110 (154 ¹⁾)	110 (154 ¹⁾)	110 (154 ¹⁾)
Working pressure (bar)	200	200	200	200
Rear power lift control	EPC, lower link control, shock load stabilising			
Auxiliary valves max. (standard) incl. front controls	5 da ⁴⁾ (3 da ⁴⁾) electr. valves / crossgate lever			
Max. lift capacity, rear power lift on the drawbar (daN)	8340	8340	8340	9080
Max. lift capacity, front power lift (daN)	4440	4440	4440	4440
Max. available hydraulic oil (l)	45	45	45	45
Brakes				
Rear brakes	wet, integrated multi-disc brake			
Front brakes	wet brakes on cardan shaft			
Weights and dimensions				
Unladen weight acc. to DIN 70020 (kg)	6605	6605	6605	6985
Perm. gross weight (kg)	11500 ²⁾ (7500 ¹⁾)	11500 ²⁾ (7500 ¹⁾)	11500 ²⁾ (7500 ¹⁾)	12500
Max. payload (kg)	4895 (895 ⁷⁾)	4895 (895 ⁷⁾)	4895 (895 ⁷⁾)	5515
Max. hitch load (kg)	2000	2000	2000	2000
Overall length (mm)	4669	4669	4669	4753
Overall width (mm)	2520	2520	2570	2570
Overall height (mm)	2960	2999	2999	2999
Ground clearance ³⁾ (mm)	552	552	552	552
Wheelbase (mm)	2700	2700	2700	2720
Front track ³⁾ (mm)	1940	1940	1940	1940
Rear track ³⁾ (mm)	1920	1920	1920	1920
Min. turning circle ⁸⁾ (m)	5.5	5.5	5.5	5.5
Electrical equipment				
Starter (kW)	3.0			
Battery	12V / 170 Ah			
Alternator	2800 W / 14V / 200 A			
Cab				
Construction	integral, tiltable safety cell hinged front, side and rear windows, roof hatch, ventilation			
Climate control	system with blower in roof, hot water heating with 3-speed blower, air-conditioning			

¹⁾ = upon request, ²⁾ = with mechanical hand brake 11000kg, ³⁾ = with standard tyres, ⁴⁾ = can also be operated as single-acting, ⁵⁾ = is halved when using RME, ⁶⁾ = definitive power specifications for registration gross weight, ⁷⁾ = without steering brake

	712 Vario		714 Vario		716 Vario		718 Vario	
	front	rear	front	rear	front	rear	front	rear
Standard tyres	480/65 R28	600/65 R38	480/70 R28	580/70 R38	540/65 R28	650/65 R38	540/65 R28	650/65 R38
Optional	600/60 R28	710/60 R38	600/60 R28	710/60 R38	600/60 R28	710/60 R38	600/60 R30	710/60 R42
	540/65 R30	580/70 R42	540/65 R30	580/70 R42	540/65 R30	580/70 R42	540/65 R30	650/65 R42
	270/95 R38*	300/95 R52*						

* = recommended

Your Fendt dealer will be pleased to inform you about further tyre options.

Standard and optional equipment



	712	714	716	718
Vario controls				
Joystick control (multi-function joystick)	■	■	■	■
Varioterminal for fine settings	■	■	■	■
Fuel consumption indicator	■	■	■	■
Camera for the Varioterminal	□	□	□	□
Variotronic implement control for ISO and LBS implements	■	■	■	■
Variotronic™ - Headland Management System	□	□	□	□
Vario™S - Engine-Transmission Management System	□	□	□	□
Preparation for steering assist	□	□	□	□
Auto-Guide steering assist system with VBS or HP or Local Base Station	□	□	□	□
Cab				
Mechanical cab suspension	■	■	■	■
Pneumatic cab suspension	□	□	□	□
Height and tilt-adjustable steering column	■	■	■	■
Fendt Comfort Seat, air sprung	■	■	■	■
Fendt Super Comfort Seat, air sprung, low frequency suspension	□	□	□	□
Radio mounting kit with two stereo speakers	■	■	■	■
Radio CD Blaupunkt or CD MP3 Blaupunkt, coaxial speakers	□	□	□	□
Ventilation with steplessly adj. fan in roof	■	■	■	■
Air-conditioning system	■	■	■	■
Emissions filter (aerosol)	□	□	□	□
Rear window wash/wipe	□	□	□	□
Mechanically width-adjustable side view mirror	■	■	■	■
Twin Power roof work lights rear, front	□	□	□	□
Work lights A-pillar, rear mudguard	□	□	□	□
Work light Xenon A-pillar, mudguard rear	□	□	□	□
Bracket for additional device	□	□	□	□
Battery disconnect switch (electric)	□	□	□	□
Engine				
Zyklon precleaner	□	□	□	□
Fuel pre-filter	■	■	■	■
Preheater package (engine, transmission, hydraulic oil)	□	□	□	□
Exhaust brake	□	□	□	□
Transmission				
Turboclutch, automatic maximum output control, cruise control	■	■	■	■
Shuttle function, stop and go function	■	■	■	■
Acoustic signal when reversing	□	□	□	□
Chassis / safety features				
Shock load stabilising EHR	■	■	■	■
Front axle suspension with level control	■	■	■	■
Compressed air system	■	■	■	■
4WD / differential locks				
Central 4WD, maintenance-free	■	■	■	■
Comfort engagement controls for 4WD / differential locks	■	■	■	■
Rear / front differential with 100% disc locking	■	■	■	■
Power shift PTO				
Rear: Flange PTO 540/540E/1000 rpm	■	■	■	■
Front: 540 rpm or 1000 rpm	□	□	□	□
PTO engagement control, electrohydr. preselection	■	■	■	■
External controls for rear PTO	■	■	■	■
Hydraulics				
Load sensing system with axial piston pump (110 l/min), hydraulic oil cooler	■	■	■	■
154 l/min delivery capacity	□	□	□	□
Electrohydraulic power lift DA (EHR), with external controls	■	■	■	■
Upper link QC hydraulic	□	□	□	□
Radar-activated wheel slip control	□	□	□	□
External hydraulic connection (load sensing)	□	□	□	□
External control for hydraulic control unit at rear	□	□	□	□
Double connect-under-pressure couplings, rear	□	□	□	□
Front power lift da with external controls	□	□	□	□
Front power lift da with position control and external controls	□	□	□	□
Front loader, front loader attachments	□	□	□	□
Body				
Automatic hitch with remote control, rear	■	■	■	■
Ball coupling	□	□	□	□
Pickup hitch	□	□	□	□
Swinging drawbar	□	□	□	□

	712	714	716	718
Piton-fix	□	□	□	□
Rotating beacon	□	□	□	□
Wide vehicle marker	□	□	□	□
Hinged front wheel mudguard	□	□	□	□
Twin tyres rear	□	□	□	□
Twin tyres front	□	□	□	□
Wheel weights, rear wheels	□	□	□	□
Front weights, various sizes	□	□	□	□
Front weights without front power lift 1270 kg	□	□	□	□

The Fendt on-line configurator: Here you can put together your own custom Fendt according to your wishes. Visit www.fendt.com.

■ Standard □ upon request



CD or CD MP3 Blaupunkt radio



Auxiliary lighting with Xenon work lights; rotating beacon

Pneumatic cab suspension



External control for hydraulic control unit at rear



Wide selection of weights for optimum ballasting



front loader, Fendt CARGO

Leaders drive Fendt



Sales agent:

All data regarding delivery, appearance, performance, dimensions and weight, fuel consumption and running costs of the vehicles correspond with the latest information available at the time of going to press. Changes may be made before the time of purchase. Your Fendt dealer will be pleased to supply you with up-to-date information.