

Fendt 800 Vario



FENDT

Leaders Drive Fendt



Since its introduction a few years ago, the Fendt 818 Vario has already become the best selling mid-sized high-horsepower tractor in Europe. Its popularity is due in part to the fact that it combines the engine and hydraulic performance of a heavy-duty, high-horsepower tractor with the versatility and maneuverability of a smaller tractor.

Now, we've taken our customers' advice and added a second model in the form of the Fendt 820 Vario, pushing the 800 Series over the 200-horsepower limit. Together, the 800 Series offers today's professional operators everything they expect in a premium-class tractor. As proof, the Fendt tractor management system, TMS, the headland management system, Variotronic and the integral front 3-point hitch are all standard equipment.



Fendt is committed to helping you achieve maximum productivity and control. While this brochure uses non-North American product photos and implements that may not be available for North America, your new-generation 800 Vario Series tractor will be fully equipped to meet local North American regulations and ASABE standards. Standard equipment includes SMV emblem, extremity marker arms, seatbelts and lighting. We urge you to follow proper operating procedures.



Fendt 818 Vario **185 hp** **136 kW**

Fendt 820 Vario **205 hp** **151 kW**

Maximum power acc. to ECE R24

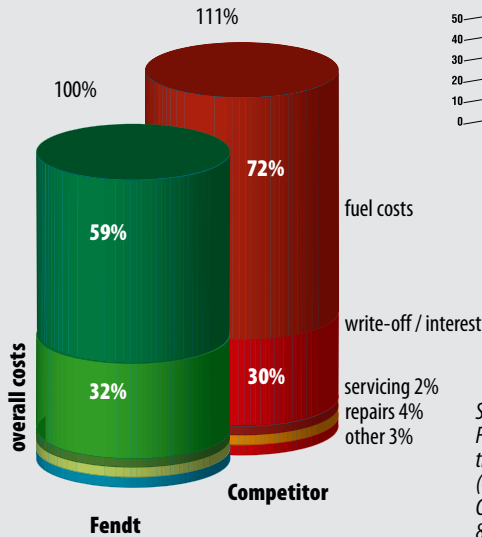
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Modern vehicle design paired with superior performance

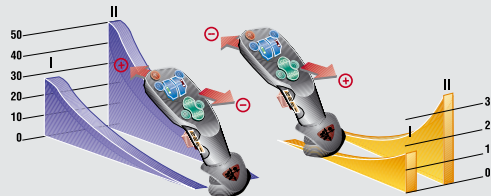
Low costs per hour

When comparing the actual costs involved in investing in a tractor, it is important to consider the overall costs and operating costs per hour or acre. These include fuel consumption, which is the single greatest factor amounting to more than 50% of costs, write-off including resale value, servicing, repairs and miscellaneous costs such as insurance or housing.



One joystick replaces several levers

The multifunction joystick, which incorporates hydraulic, PTO and 3-point hitch operations, allows the operator to steplessly accelerate 800 Series tractors from a standstill to the desired speed. Move the joystick in the opposite direction and the tractor decelerates. Stepless speeds range from 0 to 32 mph (0-50 km/h) forward and 0 to 25 mph (0-40 km/h) reverse — without the need for creeper gears.



Sample calculation, based on fuel consumption data for a Fendt Vario and a competitor's tractor, which appeared in the European farm equipment magazine Top Agrar 12/2004. (Competitor's fuel consumption is 1.16 g/h (4.4 L/h). Calculations based on a diesel price of 1 euro per liter and 8000 operating hours in 10 years.

Superior productivity - the added-value of a stepless drive

Farm type	Acres	Operating time	Fuel saved
Mixed production	123.5	-2.7%	-6.5%
	247	-3.3%	-6.5%
	494	-4.3%	-6.8%
Forage/Silage production	123.5	-6.8%	-8.7%
	100	-6.6%	-8.3%
	494	-5.5%	-8.0%
Cash crop production	123.5	-4.4%	-6.5%
	247	-4.6%	-6.4%
	494	-4.4%	-6.4%

Compared to drive concepts with powershift 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 agriculture depends on economical operation and optimized production procedures — with versatile mechanization taking the lead. With the 800 Series, Fendt offers highly productive machines that can efficiently and economically handle virtually any job on the farm or ranch.

Compact, economical high-horsepower tractor

The successful Fendt 800 Series tractors, now in the second generation, have been significantly advanced compared to the previous models.

Through the use of the latest technology for engines, economic benefits have been increased by up to 10 percent. At the same time, the new top model, the Model 820 with 205 engine horsepower maximum power output, provides even more responsive handling and more pulling power.



- Excellent power-to-weight ratio of (72 lbs./hp 33 kg/hp (820 Vario)
- High payload reserves thanks to permissible gross weight of 27,558 lbs (12500 kg)
- Factory-installed 42" and 46" rear tires are available for both models
- Latest high-horsepower tractor technology for the drivetrain ensures low operating costs
- Low variable costs through low fuel consumption
- Higher productivity and profitability in the overall cost calculation

Wide range of standard equipment

Both 800 Series models are equipped with the latest in high-horsepower tractor technology, including the TMS engine management system and the Variotronic TI headland management—all standard Variotronic features.

The Auto-Guide™ satellite-based steering assist system is also available as an option on 800 Series tractors. It permits precise tracking independent of visibility conditions and width of the implement.

Impressive profitability

An excellent return on investment is the key benefit of Fendt tractors. The initially higher purchase price is offset by higher performance and lower fuel costs during every hour of operation. An additional plus in the overall profitability calculation is the excellent resale value of a Fendt. Benefit from the exceptional overall profitability of the 800 Vario!

A premium class workplace: the 800 Series operator's station

The Fendt Varioterminal: Information and command center

- Color information display
- Display bar for menu navigation
- Keys for menu navigation
- Rotary control for fine settings



The multiple award-winning Fendt Varioterminal offers you simple and logical controls. It makes simple applications even easier and also aids the experienced operator 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 provides a fuel consumption indicator as standard equipment.

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

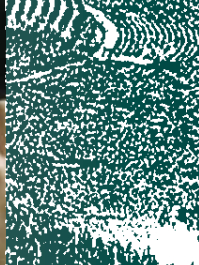
- Crossgate lever for 2 electric proportional control valves
- Multi-function joystick
- Engine speed memory keys
- 4WD/differential lock controls
- EPC front 3-point hitch controls (optional) and front PTO engagement
- Front axle suspension and cruise control preselection
- EPC rear 3-point hitch and rear PTO controls
- PTO speed preselection
- Hand throttle



Longer work hours and increased usage, due to greater versatility, call for a tractor that provides optimum working conditions and increased comfort to combat fatigue. Fortunately, the quiet roomy cab on the Models 818 and 820 feature excellent ergonomics and plenty of space, visibility and comfort to improve productivity.

Ideal working position

The more comfortable the working environment, the better the operator can concentrate on the job. Consequently, Fendt 800 Series tractors come standard with an air-suspension seat that can be adjusted to virtually any height requirement; a tilt and telescopic steering column, and an integral active charcoal layer for climate control. The Fendt Super Comfort Seat, which features a low-frequency suspension, is also available as an option.



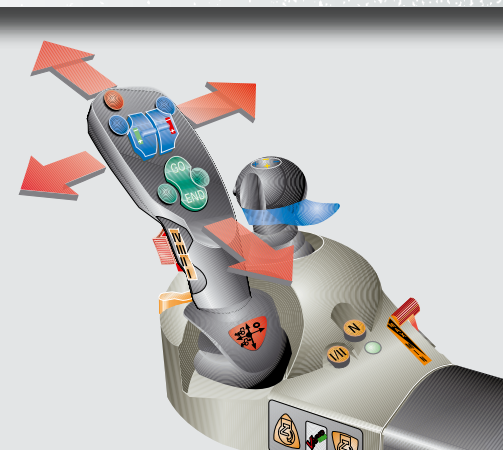
- Uncluttered, well-organized cab design that concentrates on the essentials.
- Pleasantly quiet workplace; vertical exhaust is isolated from the cab
- Excellent ergonomics and logical controls
- Height and tilt-adjustable steering wheel
- Easily engaged controls with automatic modes for 4WD, differential locks and PTO
- Varioterminal for fine settings
- TMS and Variotronic TI are standard
- Fold-down instructor's seat
- Air-conditioning system is standard

All operating controls are conveniently located to the operator's right within easy reach. Integrated into the armrest are the multi-function joystick, a crossgate lever for controlling two hydraulic valves, the speed memory keys and controls for setting the TMS system. On the right-hand console are the EPC control, PTO controls, and keypads for

the power front axle, and differential lock. Mounted at the front of the console, where it's easy to see, is the Varioterminal that provides fine-tuning and optimizing hydraulic and transmission settings. The steering column instrument cluster provides speed readouts, and the operating status of vital functions, such as engine temperature and fuel level.



Operating comfort that you will appreciate more with every working hour

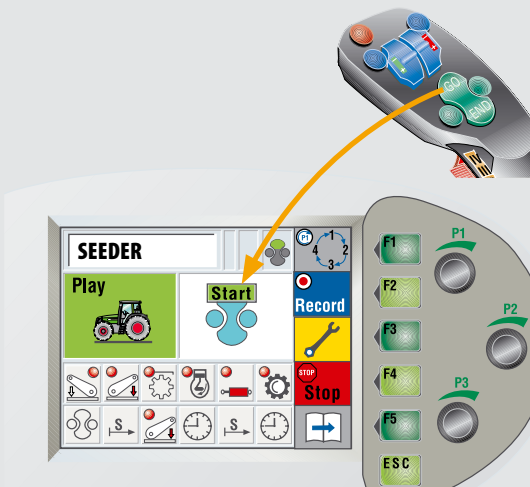


The top choice for operating comfort

Push the joystick forward to accelerate. To slow down, simply pull the speed control lever back again. Driving in reverse is just as easy - only the other way around.

To shuttle shift into reverse, 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.



Located next to the speed control lever are the crossgate lever for operating two hydraulic valves, the engine speed memory keys, the acceleration rate slide and the key for setting and activating the TMS.

Variotronic TI

A touch of a button on the joystick triggers automatic procedures at the headland. They save time and prevent operating errors on long workdays. 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. Comprised of the multi-function joystick, Varioterminal and control console, the Variotronic system is renowned for its simple, ingenious handling. For you, this means greater economic benefits and productivity in practical use.

Simple, intelligent operation

Independent of Variotronic TI, 800 Series tractors offer various automatic modes that execute your work with the touch of a button. Examples include automatic PTO engagement, which easily engages and disengages dependent on 3-point hitch lift height and 4WD and differential lock engagement, which is speed and steering angle dependent.





- Convenient operation with the Fendt multi-function joystick
- Cruise control
- Stepless reversing (shuttle shifting) with stop-and-go function
- Comfort engagement controls with automatic modes for 4WD, differential locks and PTO
- Engine speed memory
- ISOBUS implement control
- Variotronic TI headland management system

Variotronic TI headland management system

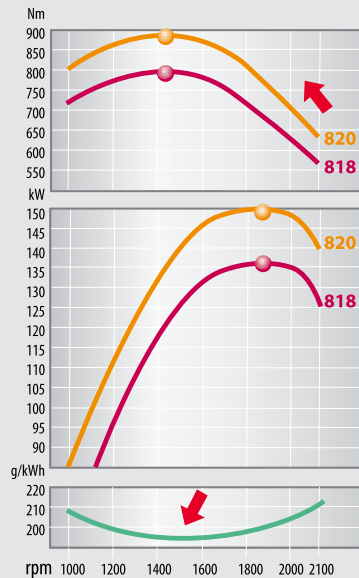
800 Series tractors are equipped with the TMS tractor management system and the Variotronic TI headland management system as standard equipment, allowing you to carry out your work more easily and more comfortably. Whether you are a beginner or professional, with these systems you automatically perform your work at maximum efficiency and have more time to monitor your implements.

ISOBUS implement control

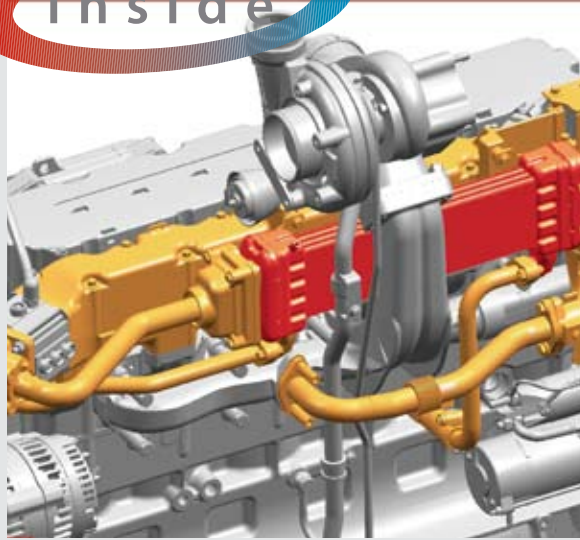
With the standard-equipment Fendt implement control system, you have convenient control of all ISO and LBS implements with the joystick and Varioterminal. There's no need for a separate control terminal for each implement, which means you reduce cab clutter and save money on equipment you don't need while profiting from the simple operating logic and optimum ergonomics that are available with Fendt implement control.

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

895 Nm torque, 205 hp (153 kW) max. power at 1900 rpm and a specific fuel consumption of 195 g/kWh for the 820 Vario thanks to implementation of the latest technology.



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



A fuel consumption display is integrated into the Varioterminale on the 800 Vario as standard equipment. This shows the current, as well as average fuel consumption and has two sum counters. Fuel consumption per acre can also be logged at the same time in the on-board computer.



The efficient cooling package design not only provides maximum cooling, but also contributes to increased engine efficiency. For better access, convenience and easy maintenance, the design allows the cooling units for hydraulic oil, transmission oil, fuel and air-conditioning to be swung away from the radiator.



Whether you use a tractor primarily for field applications, loader work or transport, overall profitability is crucial. Fortunately, the 800 Series Vario tractors deliver awesome torque while meeting all current emission standards — all at higher fuel efficiency levels than the previous model.

Powerful and economical

In the light of increasing diesel prices, fuel economy becomes of major importance. In the 800 Vario, Fendt employs a high-tech six-cylinder Deutz engine with four-valve technology for greater economy. Standard equipment includes a speed-independent common rail high-pressure fuel injection system and fully electronic engine control.



- 4-valve engine with 6.1 L displacement: 205 HP (153 kW) max. power at 1900 rpm (ECE R24) and 660 ft. lbs. (895 Nm) torque (820 Vario)
- Common rail high-pressure fuel injection system with injection pressures up to 20,000 psi (1600 bar)
- Electronic engine control EDC 7
- External exhaust gas recirculation system for lower fuel consumption and best environmental compatibility
- Viscous fan for optimum engine cooling
- Low specific fuel consumption of 195g/kWh
- 89.8 gallon (340 L) tank capacity for long workdays
- Servicing interval every 500 operating hours
- Unrestricted use of biodiesel to B100 (RME DIN EN 141214)

External EGR 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 optimizes the combustion process significantly. The benefit in comparison to a simple, internal exhaust gas recirculation system is substantially lower fuel consumption.

Fully approved for biodiesel (RME)

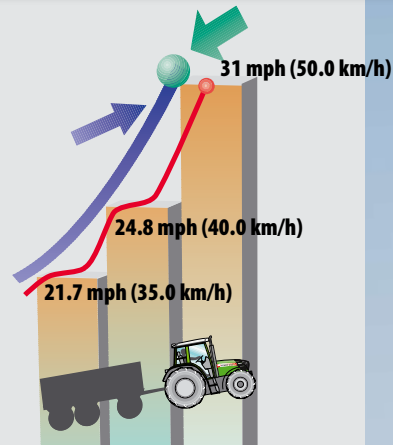
Fendt 800 Series Vario tractors are approved for biodiesel up to B100 RME (rape methyl ester) according to DIN EN 141214 as are all Fendt tractors built since 1995. With Fendt tractors, there is no conversion expense to begin using B100.



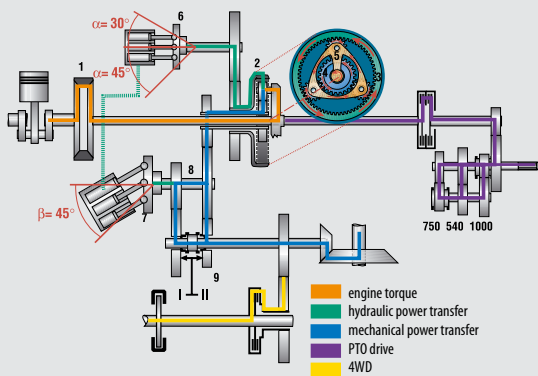
Experience the Vario advantages on the road, in the field and at the fuel tank

Operations	Operating Time	Fuel Consumption
Mowing	-10%	-10%
Chopping Silage	-10%	-10%
Harvesting Potatoes	-5%	-10%
Harrowing/Drilling	-5%	-10%
Weeding	-5%	-10%
Ripping	-3%	-3%
Primary tillage	-3%	-3%

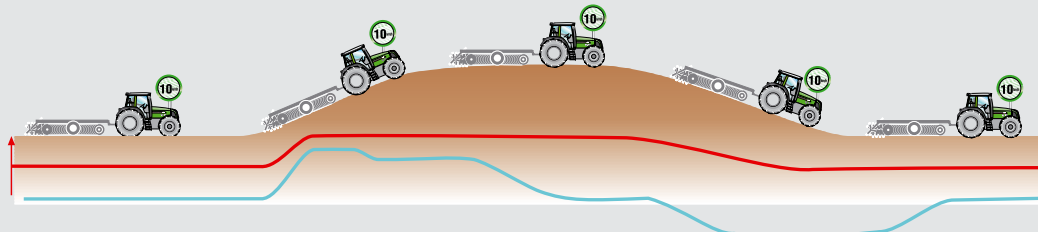
You save time by covering a given area faster while benefiting from decreased fuel consumption.



Fendt Vario - better than powershift. It allows you to use power reserves that are not even available with modern powershift transmissions.



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



Economical operation is automatic with the standard-equipment TMS Tractor Management System

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

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 the corresponding return on investment are determined in large part by fuel consumption. But an economical engine is only part of this productivity equation. It's just as important to maintain the engine at its economical optimum rpm level while covering as many acres as possible. That's no problem with the Vario® continuously variable transmission drive concept from Fendt.

Uncompromising in all applications

This kind of flexibility is only possible with a Fendt Vario transmission. Whether the job calls for 100 feet per hour (30 m/h) or 32 mph (50 km/h) the Fendt Vario provides the exact speed you need over the entire range, without steps. Consequently, the 800 Series Vario tractors are ideally suited for professional hay and forage applications, as well as for heavy-duty fieldwork or row-crop operations in large farming businesses.





- Maximum working efficiency with optimum fuel consumption
- Up to 10 percent more area coverage, thanks to optimally adjusted travel speed
- 31 mph (50 km/h) maximum speed at a fuel-saving 1,700 rpm
- Up to 10 percent in fuel savings
- Super creeper gears included (from 100 ft./h; 30 m/h)
- Operated using the joystick instead of several levers
- Turboclutch feature for greater operating comfort
- Stepless reversing of travel direction (shuttle shifting) without wear
- Stop-and-go feature

Fendt Vario: better than powershift

With stepless variable speed, you're able to use power reserves that are not even available from modern powershift transmissions.

With conventional transmissions, you often have to settle for one gear too high or too low because of the steps between gears. Vario CVT allows you to mobilize the power reserves that are hidden in between the steps. That means power flow without interruptions.

Special equipment included

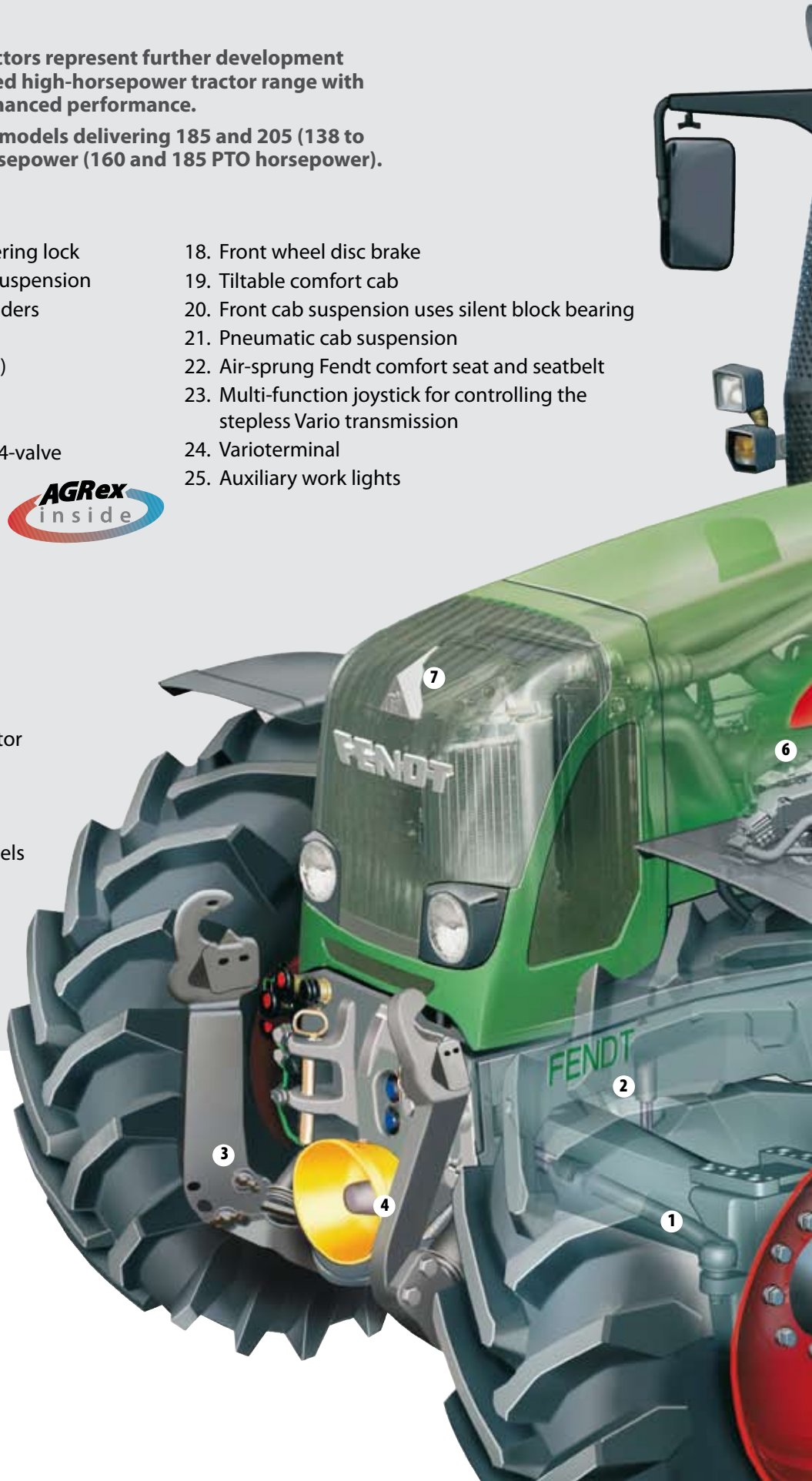
In addition to the economic benefits, the stepless drive also offers you a one-of-a-kind benefit in ride comfort. A creeper gearbox is no longer necessary, since it is integrated into the Vario drive. To increase driving comfort, the 800 Vario also has a turboclutch feature, which prevents engine stalling.

Leading-edge technology

The Fendt 800 Series Vario tractors represent further development of the most successful mid-sized high-horsepower tractor range with stepless drive. The result is enhanced performance.

The 800 Series now offers two models delivering 185 and 205 (138 to 153 kW) maximum engine horsepower (160 and 185 PTO horsepower).

1. Front drive axle with 52° steering lock
2. Hydropneumatic front axle suspension with level control and 2 cylinders (lockable)
3. Front 3-point-hitch (optional)
4. Front PTO (optional)
5. Planetary final drives
6. 6.06-liter Deutz engine with 4-valve technology
7. Intercooler
8. AGReX external exhaust gas recirculation system
9. Stepless Vario transmission
10. Planetary gear set
11. Hydraulic motor
12. Hydraulic pump
13. Enclosed 4WD clutch
14. Nitrogen pressure accumulator (suspension)
15. 89.8-gallon (340 L) fuel tank
16. Planetary axle
17. Multi-disc brake for rear wheels
18. Front wheel disc brake
19. Tiltable comfort cab
20. Front cab suspension uses silent block bearing
21. Pneumatic cab suspension
22. Air-sprung Fendt comfort seat and seatbelt
23. Multi-function joystick for controlling the stepless Vario transmission
24. Varioterminal
25. Auxiliary work lights

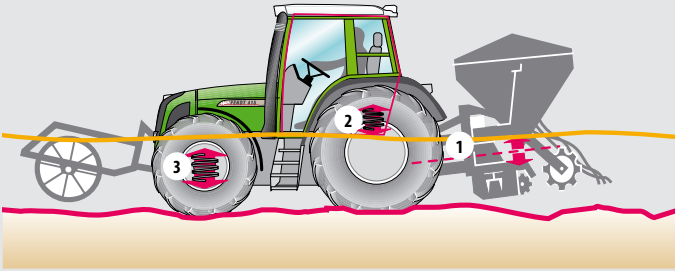




Fast transport with maximum comfort, payload and operator control

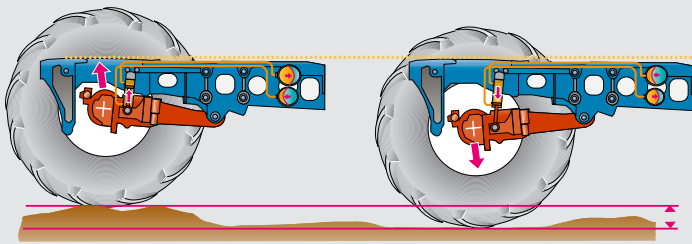
A combination of suspension systems

The combination of shock load stabilization (1), pneumatic cab suspension (2) and front axle suspension with level control (3) provides ride comfort that rivals the performance of on-highway trucks. It also increases operator control and confidence substantially, since the tractor is much less likely to develop bounce when transporting mounted implements. The load on the front axle remains constant and steerability is maintained.



Front axle suspension

The swing axle, centrally located in the swing arm, detects uneven surfaces and transmits this information to the swing arm. The plungers on the two cylinders displace oil, activating three nitrogen reservoirs which absorb all shocks.



Pneumatic cab suspension is standard

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

Even for compactly designed high-horsepower tractors like the 800 Series, the transportation of materials for custom work and wide-spread farm operations is gaining importance every day. Studies show transport operations may amount to more than 40 percent of tractor operating hours. The 800 Series Vario tractors allow you to perform transport work at 32 mph (50 km/h) at a fuel-saving 1,700 rpm while providing maximum ride comfort and operator control.

Control & comfort, even with high payloads

A rugged cast half-frame, which enables a permissible gross weight of 27,557 lb. (12,500 kg), carries the load on the Fendt 800 Vario. This provides ample payload reserves for heavy-duty implements. But high transport loads must also be slowed down quickly as traffic and terrain demand. On the 800 Vario this is ensured by a practically maintenance-free braking system, comprised of two integral





- 31 mph (50 km/h) transport speed at reduced engine speed (1,700 rpm)
- EPC with shock load stabilizing
- Maximum operator control and ride comfort
- Standard-equipment pneumatic cab suspension for ride comfort
- Front axle suspension with level control and locking function that permits front-mounted implements to be guided precisely
- Top-efficiency braking system: wet, integral multi-disc brakes
- Rugged cast half-frame design

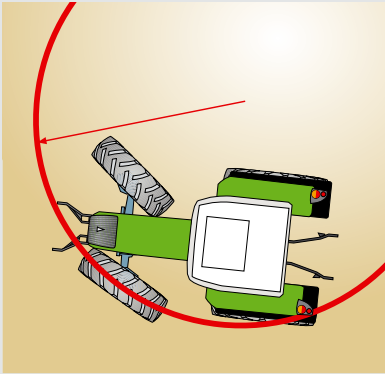
multi-disc brakes for the rear wheels and a disc clutch on the cardan shaft for the front wheels. The front axle with level control, a benefit in terms of ride comfort, also contributes to superior operator control. For easier mounting and for precise guidance of front-mounted implements, the suspension can be locked with a push of a button.

Cab suspension for maximum comfort

The 800 Series cab is equipped with pneumatic cab suspension as a standard feature. Hydraulic suspension in the front and air spring dampers with automatic level control at the rear, keep annoying shock loads and movements away from the cab. This increases working comfort, keeping the operator comfortable and productive during long workdays.

Light for row-crop work, heavy for traction work - 800 Series tractors maximize flexibility

A 52° steering angle, along with a wheel base of 107 inches (2,720 mm) ensure a turning circle of only 18.4 feet (5.6 m), which makes 800 Series tractors extremely maneuverable.



The 800 Vario tractors come standard with pivoting front fenders that allow the wheels to be turned to the full angle.



For heavy-duty traction work, the 800 Series tractors offer a number of ballasting options, including the ability to add up to four rim weights — 661 lbs. (300 kg) each — on the rear axle.



Minimum soil compaction is essential in both row-crop and forage production operations. Tire widths for 800 Series tractors go up to 600/60 R28 front and 710/60 R38 rear or 600/60 R30 front and 710/60 R42 rear. This provides the minimum possible ground pressure from a conventional wheel and tire configuration.



Intelligent 4WD and differential lock technology

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



Whether you use a tractor for cultivation or hay and forage operations, soil compaction can be a major issue. Fortunately, with the appropriate tires, you can greatly reduce soil compaction. However, it is even easier if the tractor has a low weight to power ratio. With the 800 Series tractors, you profit from an advantageous tractor weight and a broad selection of tire options. If required for the application, there are also variable ballasting options.

Universal adaptability

An unladen weight of 14,990 lbs. (6,800 kg), gives these tractors the flexibility to fit the widest range of applications. A low weight-to-power ratio of 72.7 lbs./hp (33 kg/hp) (820 Vario), allows you to take advantage of its low tractor weight for forage and rowcrop applications. A maximum gross weight rating of 27,558 lbs. (12,500 kg) provides reserve payload for heavy implements and heavy-duty tillage.



- Advantageous unladen weight of only 14,991 lbs. (6,800 kg)
- Excellent power-to-weight ratio of 72.7 lbs./hp (33 kg/hp) (820 Vario)
- High payload up to 12,566 lbs. (5,700 kg)
- Wheelbase: 8.9 feet (2.72 m)
- Turning circle: 18.4 feet (5.6 m)
- Electrohydraulic engagement for 4WD and differential lock, can be actuated under load
- 100% locking differential on rear axle
- Automatic front differential lock

Tires for every application

While developing the 800 Series Vario tractors, Fendt engineers recognized the need to offer a broad selection of tires. As a result, row-crop tires measuring 480/80 R30 front and 300/95 R42 rear are now available on all 800 Series models. For optimum soil protection, tires sizes 600/60 R30 front and 710/60 R42 rear are also available.

Compact and maneuverable

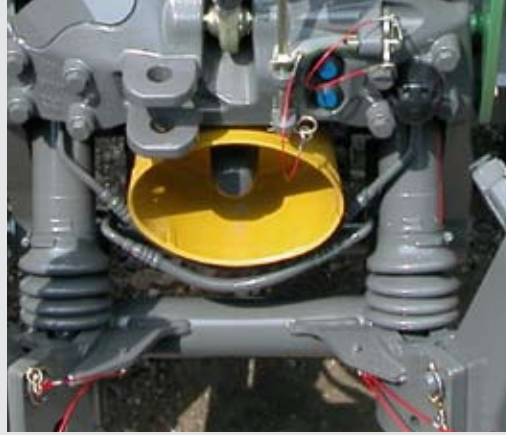
The well thought-out design of the 800 Series tractors ensures maximum maneuverability for any job. A total length of 15.6 feet (4.75 m), a wheelbase of 8.9 feet (2.72 m) and a 52 degree steering angle result in a turning circle of only 18.4 feet (5.6 m). That translates into tight turning maneuvers that save you time at the headlands.

Powerful drives at the front and rear



Standard with flange PTO

The 800 Vario is fitted with a flange PTO as standard equipment. When required, you can switch between different PTO options easily and in a relatively short amount of time.



Front PTO with excellent efficiency

The optional 1000 rpm front PTO operates with excellent efficiency since the PTO is driven directly from the engine's crankshaft.



Save yourself unnecessary steps

Rear fender controls for the rear 3-point hitch and a rear PTO shutoff are available for the 800 Series tractors, allowing you to easily mount rear implements and to save unnecessary steps.



Minimize the risk of drive shaft damage

Concentrate on the essentials at the headlands. The standard-equipped PTO automatic mode engages and disengages the PTO as soon as you lower or raise the implement.

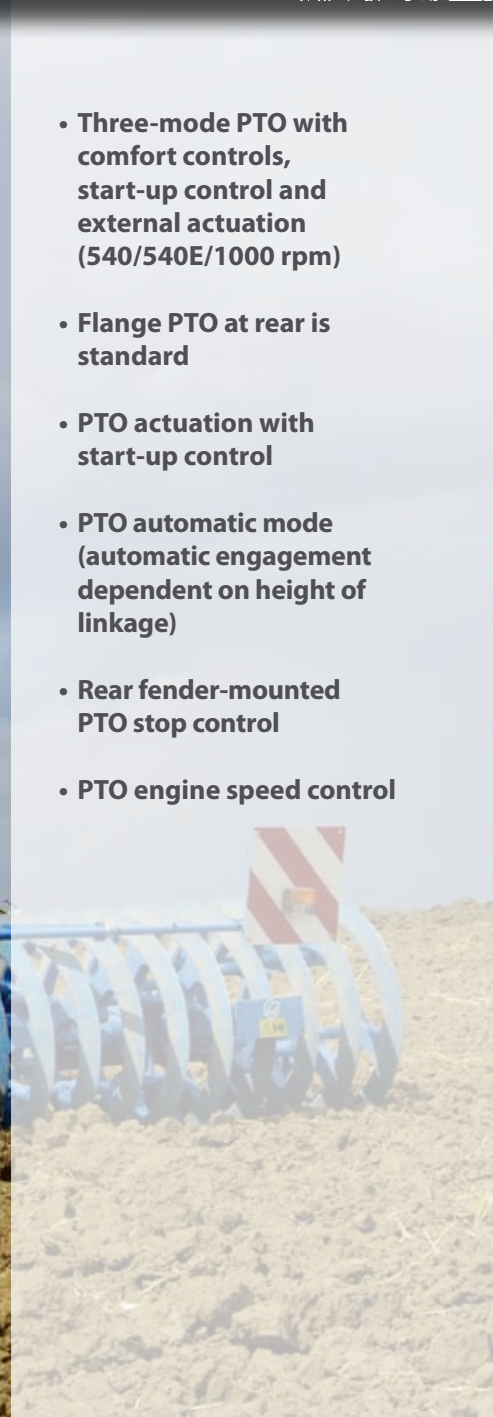
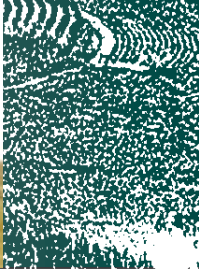


You will appreciate the operating comfort of the 800 Series tractors, especially for tillage applications, where you often must operate the PTO controls in addition to the controls for the hydraulics or 3-point hitch. The 800 Series tractors offer you extensive, high-quality PTO management with start-up control.

Three-mode rear PTO is standard

The PTO engagement control allows preselection any of three PTO operating modes that best fit a given application.

Conveniently operated with switches on the control console, the 800 Series tractors provide standard 540 rpm PTO, 540E mode that provides 540 rpm at fuel-saving reduced engine rpm and standard 1000 rpm rear PTO.



- Three-mode PTO with comfort controls, start-up control and external actuation (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 linkage)
- Rear fender-mounted PTO stop control
- PTO engine speed control

Highly efficient front PTO

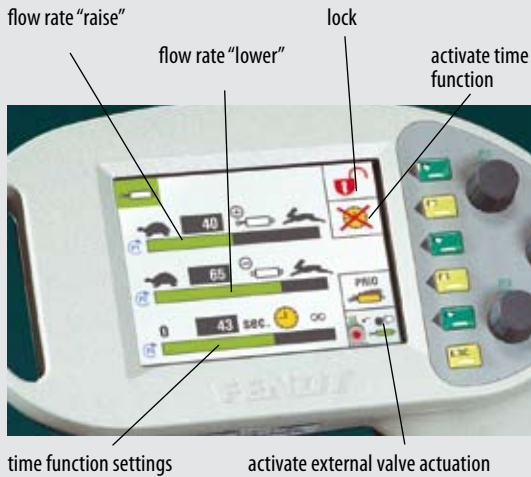
The optional front PTO is driven directly from the engine to provide an efficient transfer of horsepower to front mounted implements.

Automatic modes

The PTO automatic mode is also standard on the 800 Series tractors. After being activated with the push of a button, it automatically engages and disengages the PTO, depending on the lifting height of the 3-point hitch. The electrohydraulic PTO stop can even be stopped externally from the rear fender.

Powerful hydraulics for heavy implements and demanding applications

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 first two valves are located on the conveniently located crossgate lever. Setting the valve functions with the Varioterminal 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.

Turn either 800 Series model into a multi-purpose machine with the Fendt front-end loader. The design and technology of Fendt loaders and Fendt tractors have been continually adapted to each other. During development, focus was placed on operating comfort, control, stability and service friendliness. When combined with the 800 Series tractors' groundbreaking operating concept, they ensure maximum loading efficiency along with exceptional operating comfort.



Optional: first-rate front 3-point hitch

The standard front 3-point hitch on the 800 Series tractors is an integral part of the tractor design and has been well engineered in every detail. As an example, the top link can remain on the tractor, even when not in use.



Powerful EPC rear 3-point hitch with double-acting function

The standard-equipment EPC rear 3-point hitch can be switched to double-acting operation by moving just one lever. Using the down-force feature on the the rear 3-point for example, you can mount dual tires 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 800 Series models, with their load-sensing hydraulics and electrical hydraulic valves, are well-equipped for convenient operation.

Powerful hydraulics

The 800 Series tractors are equipped with a load-sensing hydraulic system. That means modern axial piston pumps deliver the exact quantity of hydraulic oil required up to 29 gallons (110 L) per minute. A maximum of 11.9 gallons (45 L) of hydraulic oil is available to mounted or trailed implements. The hydraulics and transmission also have separate oil supplies, which permit unrestricted use of bio-oils for the hydraulics.



- **Load-sensing hydraulics**
- **Hydraulic oil delivery capacity: 29 gallons/min. (110 L/m)**
- **Hydraulic oil cooler**
- **Maximum lift capacities:**
Rear: 13,345 lbs. (6,053 kg)
Front: 5,520 lbs. (2,500 kg)
- **EPC rear 3-point hitch with**
 - shock load stabilizing
 - quick lift
 - lift height limiter
 - lowering throttle
 - position, draft and mixed control
 - external actuation
- **Integral front 3-point hitch with gas shock absorbers**
- **Electric hydraulic valves (standard with external actuation)**
- **Crossgate lever**
- **Maximum available hydraulic oil quantity: 11.9 gallons (45 L)**
- **Bio-oils can be used for the hydraulics, thanks to separate oil supplies**

EPC rear 3-point hitch with reserves

The electrohydraulic rear 3-point hitch, which has a maximum lift capacity of 13,345 lbs. (6,053 kg), guarantees that in practical operation even heavy rear-mounted implements designed for this power class can be easily lifted to the full lift height. Meanwhile, the standard-equipment shock load stabilization counteracts tractor bounce by actively raising and lowering the 3-point hitch.

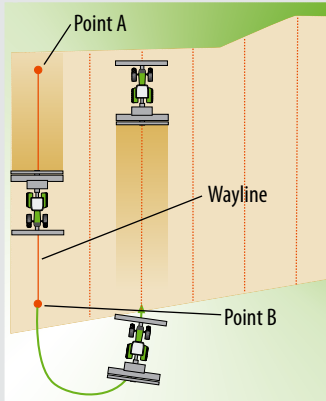
Integral front 3-point hitch with damping

The optional front 3-point hitch for the 800 Series tractors has a continuous lift capacity of 5,520 lbs. (2,500 kg). It can lift front-mounted implements weighing up to 6,000 lbs. (2,720 kg). The integral gas shock absorbers ensure that operator control and ride comfort are maintained at these high loads.

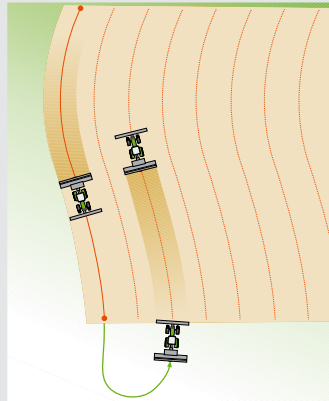
Maximum precision automatically with Auto-Guide™

Fendt Auto-Guide: fits your individual requirements and almost any shape of field

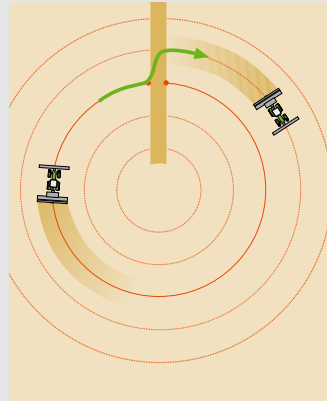
Straight line - the classic steering assist system for driving along exact straight parallel lines



Contur - for guidance along curved, parallel lines



Center pivot - for guidance along concentric circular tracks



Simple operation

The color terminal makes operating Auto-Guide simple and logical. There is ample memory capacity available for storing field boundaries, as well as obstacles in the fields.

When working, tracks that have already been worked are marked in color. This facilitates orientation at night or in poor visibility conditions.



Reference station

An optional local base station is available for Auto-Guide when an economical, yet more accurate correction signal is needed. This makes the system autonomous and allows operation independent of subscriptions for reference signals that are provided by commercial correction signal providers for a fee. It has been designed to be mobile and can be set up in any location in a short amount of time for all-day use with constant precision.



It has been proven many times that Auto-Guide has the ability to further increase the high profitability of 800 Series tractors by reducing the costs for performing repeat operations. With the steering assist system, working quality remains steady and constant, even on long workdays. At the same time, you benefit from substantially increased working comfort.

A highlight where profitability is concerned
With the Auto-Guide steering assist system, accurate pass-to-pass operation is simple. You reduce overlapping, as well as skipping, and can, therefore, optimize area covered without needlessly using up resources. The operator also has more time to observe and monitor the implements and, if necessary, make adjustments to optimize performance and efficiency.



AUTO-GUIDE™



- Constant working quality under all visibility conditions - even on very long workdays
- Overlapping and skipping is reduced
- Savings in seed, fertilizer and pesticide expenses
- Savings in fuel and working time
- Greater area coverage since full working width is used and turning maneuvers at the headlands are faster.
- Higher working quality since more attention can be focused on the implement
- Operations integrated in the Variotronic TI headland management
- Faster system accuracy when beginning work
- Fast, exact tracking and sensitive steering corrections, thanks to proportional steering valve

The right accuracy*

Depending on your requirements, you can choose between three accuracy levels for Auto-Guide. The standard sub-meter system provides pass-to-pass accuracy of +/- 10" (25 cm); the Decimeter system for +/- 2-4" (5-10 cm), and the Centimeter system for +/- 1" (2.5 cm) with a local base station. Choose the accuracy that suits your application.

*The accuracy that can be obtained in the field depends on the GPS signal, correction signal, system and tractor factors, type and settings of the implement and the conditions in the field.

Small things can make your workday more pleasant

The 800 Series tractors are equipped with rear work lights as standard equipment. The Twin Power work lights are mounted on the left and right side of the cab roof where the high position provides exceptional lighting for rear-mounted implements.



In a matter of minutes and without the use of tools, the lower links on the 800 Vario tractors can be set to rigid or swinging position, depending on implement requirements. A rugged, sturdy mechanical lateral lock is engaged and disengaged with levers on the right and left sides. In the unlocked position, the lift arms are automatically centered in the middle position. By moving just one pin, you can change the width of the lower links between Category II and III.



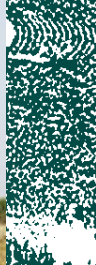
Optional super comfort seat Fendt Evolution with seat climate control, seat heater, pneumatic lumbar support and lateral suspension.



It is virtually impossible to prevent oil from leaking when coupling hydraulic connections. On the 800 Series Vario tractors, however, oil leaks run into the casing, which also serves to protect hydraulic couplings from dirt. The oil is then directed through a hose into an easily accessible container.

Every farmer in North America has experienced the effects of stress at one time or another... whether it involved changing implements when you were pressed for time or working long hours without a break during peak seasons. So you already know how the little things can make a big difference. Fortunately, Fendt offers a number of small detail solutions to make life easier day in and day out.

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 unit, Fendt engineers always search for solutions that bring you forward. From experts for experts.



With the external hydraulic valve actuation, you can operate a hydraulic control unit with a push button on the tail lamp frame. This is especially valuable when mounting implements when using a hydraulic top link.

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. Naturally, the cables can be fitted easily without tools.

The 800 Series tractors use ISOBUS implement control, which is integrated in the Variotronic, as standard equipment. On 800 Series tractors, you control ISOBUS 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 various terminals for your implements.



Fendt tractors include turn signal lights that automatically shut off when the steering wheel is turned back, just as they do in your car or pickup.

The 800 Series tractors 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 operator.

Innovative technology, intelligent services - find it at your Fendt dealer



Consultation: the way to a tailor-made Fendt

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



Financial flexibility – AGCO Finance services

Financing through AGCO Finance offers attractive conditions and flexible payment plans, customized to meet your needs.



Experience the Fendt difference with a field test

With Fendt, driving is believing. Once you've operated a Fendt tractor, you'll understand why there's no other tractor like Fendt in the field for superior performance and comfort.



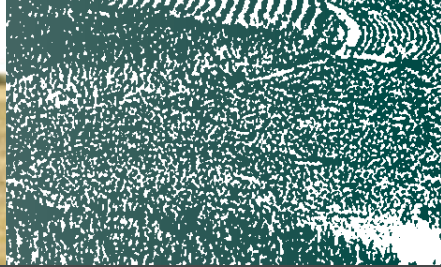
Genuine Fendt parts - from AGCO Parts

Original Fendt parts are tailored to your Fendt - so that your Fendt remains 100% Fendt. They carry the assurance of series quality and are tested for functional reliability.

At Fendt, we understand that you need more than leading-edge tractor technology to be successful today. That's why Fendt dealers and sales partners offer a wide range of valuable support services, including high-quality parts, flexible financing, expert diagnostics and more—all from one trusted source.

Competent customer consultations and demonstrations

Fendt dealers and distributors receive regular training and are true 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 more product information and a Fendt dealer locator.



Dealers backed by powerful resources

Fendt dealers are backed by all the resources of AGCO Corporation, including field-based product specialists with expertise in applying Fendt tractors to a wide range of applications.

Benefit from better products and better support

Our trained dealer staff, Gold Star Care Plan and excellent products give today's professional farmer true value and peace of mind.



Fast, accurate diagnostics from trained technicians

Fendt dealer technicians are some of the most highly trained in the industry.

Gold Star Care on-farm service

For your convenience, Fendt dealer technicians can visit your operation to perform fast, accurate diagnostics or regular service as part of our 3 year/3000 hour Gold Star Care Plan.

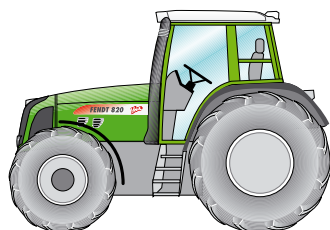


Fendt Gold Star Care Plan

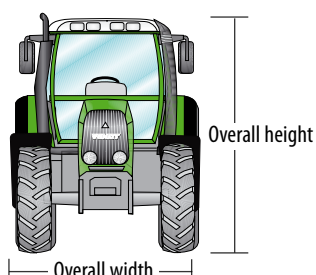
The Fendt Gold Star Care Plan covers your new tractor for 3 years or 3,000 hours.

The Gold Star Care Plan is a comprehensive service contract that includes each 500-hour service interval during the 3-year period. This will allow you to manage your cost of ownership. Local charges are not covered.

Technical specifications



Wheelbase
Overall length



Overall height

Overall width

Models	818 Vario	820 Vario
Engine		
Rated PTO hp/kW	160/119	175/130
Rated power (hp/kW) (ECE R24)	170 / 125	190/140
Max. power (hp/kW) (ECE R24)	185/136	205/151
Rated power (hp/kW) (EC 97/68) 5)	186/137	207/152
Max. power (hp/kW) (EC 97/68)	192/141	212/156
No. of cylinders / cooling	6 cylinder, four-valve technology / water	
Aspiration	turbocharger, intercooler	
Injection / engine control / exhaust recirculation	common rail / EDC / AGReX	
Bore / stroke (mm) / displacement (cm ³)	101/126/6057	101/126/6057
Rated speed (rpm)	2100	2100
Speed at max. power (rpm)	1900	1900
Max. torque ft-lbs(Nm) @ 1,450 rpm	592(804)	660(895)
Torque rise (%)	35	35
Optim. fuel consumption Hp-h/gal (g/kWh)	21.84 (195)	21.84 (195)
Fuel tank gal (l)	89.8 (340)	89.8 (340)
Oil change interval (operating hrs.)	500	500
Transmission and PTO		
Type of gearbox	steppless Vario transmission	
Speed range: Range I mph (km/h)	Forward 0.01-12.4 (0.02-28), Reverse 0.01-10.6 (0.02-17)	
Range II mph (km/h)	Forward 0.01-31 (0.02-50), Reverse 0.01-16 (0.02-25)	
Max. speed mph (kph)	30 (50)	30 (50)
Rear PTO (rpm)	540 / 540E / 1000	540 / 540E / 1000
Front PTO (rpm)	1000	1000
Hydraulics		
Type	Load Sensing	Load Sensing
Hydraulic pump capacity gpm (L/min)	29.1 (110)	29.1 (110)
Working pressure psi (bar)	2,900 (200)	2,900 (200)
Rear 3-point hitch control	EPC, lower link control, shock load stabilizing	
Auxiliary valves standard (optional)	3 (4)	3 (4)
Max. lift capacity, rear 3-point hitch 24" from ball ends lbs (kg)	13,345 (6,053)	13,345 (6,053)
Max. lift capacity, front 3-point hitch 24" from ball ends lbs (kg)	5,520 (2,500)	5,520 (2,500)
Max. available hydraulic oil gal (L)	11.9 (45)	11.9 (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 lbs (kg)	15,480 (7185)	15,480 (7185)
Perm. gross weight lbs (kg)	27,557 (12,500)	27,557 (12,500)
Max. payload lbs (kg)	12,566 (5700)	12,566 (5700)
Max. hitch load lbs (kg)	4409 (2000)	4409 (2000)
Overall length in (mm)	187 (4753)	187 (4753)
Overall width in (mm)	108 (2570)	108 (2570)
Overall height in (mm)	119 (3025)	119 (3025)
Ground clearance in (mm)	22 (566)	22 (566)
Wheelbase in (mm)	107 (2720)	107 (2720)
Front track in (mm)	76 (1940)	76 (1940)
Rear track in (mm)	75.5 (1920)	75.5 (1920)
Min. turning circle ft (m)	18.4 (5.6)	18.4 (5.6)
Electrical equipment		
Starter hp (kW)	4.0 (3.0)	4.0 (3.0)
Battery	12V / 170 Ah / 1,020CCA	12V / 170 Ah / 1,020CCA
Alternator (Amp)	199	200
Cab		
Construction	integral, tiltable cell hinged front, side and rear windows, roof hatch,	
Climate control	ventilation system with inf. adj. blower in roof, hot water heating with three-speed blower, air-conditioning	

Standard and optional equipment

Models	818 Vario	820 Vario
Vario controls		
Joystick control (multi-function joystick)	Std	Std
Varioterminal for fine settings	Std	Std
Fuel consumption display	Std	Std
Camera for the Varioterminal	Opt	Opt
Variotronic implement control for ISO and LBS implements	Std	Std
Variotronic TI - headland management system	Std	Std
Vario TMS engine-transmission management system	Std	Std
Auto-Guide Ready fittings	Opt	Opt
Steering assist system Auto-Guide with VBS or HP or local base station	Opt	Opt
Cab		
Pneumatic cab suspension	Std	Std
Height and tilt-adjustable steering column	Std	Std
Fendt Comfort Seat, air sprung	Std	Std
Fendt Super Comfort Seat, air sprung, low frequency suspension	Opt	Opt
Ventilation system with inf. adjustable blower in roof	Std	Std
Air-conditioning	Std	Std
Rear window washer/wiper	Std	Std
Heated rear window	Std	Std
Mechanically width-adjustable side view mirror	Std	Std
Twin Power roof work lights rear , front	Opt	Opt
Work lights A-pillar, rear fender	Std	Std
Work lights Xenon A-pillar, rear fender	Opt	Opt
Monitor mount bracket	Opt	Opt
Battery disconnect switch (electric)	Std	Std
Engine		
Zyklon precleaner	Std	Std
Fuel prefilter	Std	Std
Preheater package (engine, transmission, hydraulic oil)	Std	Std
Engine brake	Opt	Opt
Transmission		
Turboclutch, automatic maximum output control, cruise control	Std	Std
Shuttle shifting function, stop and go function	Std	Std
Back up alarm	Opt	Opt
Chassis		
Shock load stabilizing EPC	Std	Std
Front axle suspension with level control	Std	Std
Compressed air system	Opt	Opt
4WD/differential locks		
Central 4WD, maintenance-free	Std	Std
Comfort engagement control for 4WD / differential locks	Std	Std
Rear / front differential with 100% disc locking	Std	Std
Powershift PTOs		
Rear: Flange PTO 540/540E/1000 rpm	Std	Std
Front: 1000 rpm	Opt	Opt
PTO engagement control, electrohydr. preselection	Std	Std
External deactivation of rear PTO	Std	Std
Hydraulics		
Load-sensing system with axial piston pump, hydraulic oil cooler	Std	Std
Electrohydraulic 3-point hitch double-acting (EPC), with external controls	Std	Std
Hydraulic top link	Opt	Opt
Radar-activated wheel slip control	Opt	Opt
External hydraulic connection (load-sensing)	Std	Std
External control for hydraulic remotes	Opt	Opt
Double connect-under-pressure rear remotes	Opt	Opt
Front 3-point hitch double-acting, with external actuation	Opt	Opt
Front 3-point hitch double-acting, w/position control/external actuation	Opt	Opt
Front loader, front loader attachments	Opt	Opt

Models	818 Vario	820 Vario
Additional equipment		
Swinging drawbar	Std	Std
Rotating beacon	Opt	Opt
Extremity Lighting	Std	Std
Pivoting front fenders	Opt	Opt
Wheel weights, rear wheels	Opt	Opt
Front weights, various sizes	Opt	Opt



Walterscheid Cat. 4 hook ends



Auxiliary lighting with Xenon work lights
Rotating beacon

Wide selection of weights for optimum ballasting



Camera for the Varioterminal



Double-sided connect-under-pressure couplings;
external load-sensing hydraulic connection



Original Fendt front loader

Leaders drive Fendt



Leaders drive Fendt – for unsurpassed performance, productivity and support services.

Take the lead with your own Fendt Vario 800 Series tractor today.

www.fendt.com



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