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FENDT *Farmer 104 S*



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Tough economical, incomparably efficient

Powerful 3-cylinder Diesel
engine with direct injection, low fuel
consumption
60/54 h.p., piston displacement 3,12 l

Remarkable course of torque

Turbomatic

Fully synchronized Fendt transmission

Reversing mechanism

Genuine high speed gear 19 mph

Independent powertake-off

Front axle with single wheel suspension

Fendt hydraulic lift with automatic depth
control

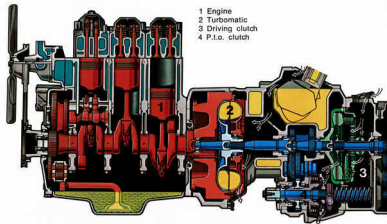
Power steering

Under load shiftable four-wheel drive

Safety cabin

Luxury float seat

Incomparable driving comfort



- 1 Engine
- 2 Turbomatic
- 3 Driving clutch
- 4 P.T.O. clutch

Engine

Intensive scientific research plus the wide practical knowledge gained from years of experience of actual working conditions with the approved Fendt model Farmer 4 S have enabled the engineers to produce a power unit giving perfectly balanced performance. The 3 cylinder, 4-stroke Diesel engine delivers at 2300 rpm 60 HP. The remarkable torque increase of 15% guarantees power reserve and optimum efficiency. An amply dimensioned cooling blower prevents overheating under severe conditions and qualifies the tractor for the use in tropical regions. The fuel is directly injected into the chamber. This ensures safe and quick starting of engine even under severely cold conditions and low fuel consumption.

Fendt transmission

The fully synchronized 17 gears transmission with its 13 forward- and 4 reverse gears is distinguished by its specially well ranged gears. The aim with this transmission has been simplicity and strength, obtained by restricting shafts and wheels to the very minimum. All moving parts of the transmission run on anti-friction bearings and the built-in dry clutch offers no power loss. A special advantage is the genuine 19 mph road speed cutting down transport time. For special jobs transmission with super crawl gears is delivered.

Turbomatic

The Farmer 104 S is equipped with the modern Turbomatic. This air-cooled wear and service free Turbo clutch is completely wear-free and needs no maintenance. The Turbomatic offers the following features: jerk-free and instant driving up. No risk when stopping or resuming speed on hills. Less shifting and de-clutching hence less transmission wear. Minimizes tyre wear. Obviates engine stalling. The hydraulic Turbo clutch smoothens all power impulses coming from the engine and absorbs vibrations. This means extended life to engine and transmission related parts.

Fully independent P.t.o.

Fendt tractors are equipped with a fully independent p.t.o. as standard equipment. Shifting under load. Two range unit giving following p.t.o. speeds: 540 or 1080 rpm. Whatever the job, no time is wasted in de-clutching or stopping to engage or disengage the p.t.o. More time available for actual working, more work gets done in every hour. Output increases still further!

Driving comfort

In the construction of Fendt tractors special attention has been given to driver comfort. The operator still feels fresh even after a long working day on his tractor. Not only the front air-horn springs contributes towards this aim but also the seat-comfort, cushioned seat which has around adjustment to suit individual preference. Instruments and controls are thoughtfully and logically placed for easy viewing and operating. Fendt tractors are equipped with a front axle on springs (with exception of the four-wheel-drive tractor) effectually absorbing road shocks.



Hydraulic lift

As standard, the Farmer 104 S tractor is equipped with the sensitive Fendt hydraulic lift with automatic depth control for the adjustment of the draw power, combined and positional regulation. Reliable ... simple to operate ... suitable for all implements. These are the outstanding features of the well-proven Fendt hydraulic system. A modern mixed control, adaptable stagelessly between draw and position control, guarantees exact ploughing even under severe conditions. The maximum working capacity at the drawbar is 2000 kp. The drawbar can be locked rigidly in standard height by an automatic device. The side stabilizers at the lower links can be locked or loosened with one single motion.



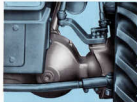
Mower

The hydraulically or mechanically driven Fendt double-bladed mower permits top mowing speeds. This means increased acreage. No clogging regardless in which direction the swath is cut.



Four-wheel drive

The four-wheel drive widens considerably the range of use of the Fendt Farmer 104 S. Ideal for transport and tough jobs under severe and unfavourable conditions.



Fendt safety cab

The new Fendt safety cab offers allround visibility. Easy access. The driver's cabin can be equipped with a heating system. For tropic regions a canopy is available.



Single wheel suspension

The adjustable front axle has a single-wheel suspension, it is supported and oscillates in a shackle bolt. Spring elements of steel and rubber add to driving comfort. They ensure manoeuvrability and adjustment required for easy and accurate work. They are water- and dust-proof, therefore wear-free.



Technical Data

Engine: 60/54 HP, water-cooled, 2300 rpm. Direct injection principle guaranteeing low consumption, smooth running and high capacity. 16% torque increase. Two circuit thermostat. Four fold supported crankshaft. Bosch row-type injection pump. Fuel delivery pump. Fuel filter plugs. Oil micro-filter in main stream. Flat-ribbed cooler. Noiseless plastic fan.

Transmission: Rugged, proven construction with least possible number of shafts and cog-wheels, therefore favourable effective range. Fully synchronized Fendt group gearbox with extremely well ranging 7 forward- and 4 reverse gears. Genuine high speed gear 19 mph. On request additional 4 super crawl gears. No overlapping 19 speeds. Torque adjuster increases tractive power by 30%. Differential lock.

Speeds:

	converted slowly	fast - standard
1st gear	1,3 km/h	1,7 km/h
2nd gear	2,2 km/h	2,9 km/h
3rd gear	3,8 km/h	4,8 km/h
4th gear	5,6 km/h	7,0 km/h
5th gear	8,7 km/h	11,5 km/h
6th gear	16,0 km/h	20,0 km/h
High speed		30 km/h

Super crawl gears on request

1st gear	100 m/h - 330 m/h
2nd gear	180 m/h - 500 m/h
3rd gear	320 m/h - 965 m/h
Reverse gear	570 m/h

Reverse gears:

1st reverse gear	2,1 km/h
2nd reverse gear	3,6 km/h
3rd reverse gear	6,6 km/h
4th reverse gear	11,0 km/h

High speed gear: genuine, additional high speed gear with 19 mph not influencing the other range. High speed gear can be locked on special request.

Reversing mechanism (instant reversing): On special request an inbuilt reversing mechanism can be supplied. This permits forward and reverse driving in all gears under load without gear shifting, and/or braking, only one pedal is used for back or forward driving. If working with frontloader or similar implements hands are free for steering and check valve.

Clutch: Double spring type Tornado single disc dry clutch for normal driving. Double spring multiple disc clutch for p.t.o. changing. Wearfree Turbo-clutch is placed in front of both. Tremendous advantage when using p.t.o. and reversing mechanism. Soft, flexible driving, even under heaviest load without declutching.

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Power take-off: From drive clutch completely independent engine p.t.o., shifting under load possible, 540 and 1000 rpm. Drive speed, independent p.t.o. additionally. One spline for all 3 p.t.o.'s in centre.

Tyres:

Tractors with four-wheel drive			
front	6.50-20 ASF	rear	12.4/11-36
on request	7.50-18 ASF	on request	13.6/12-36
		on request	14.9/13-30
		on request	16.9/14-30

Tractors with four-wheel drive			
front	16.5-20 e.S.	rear	12.4/11-36 AS
on request	10.5-18	on request	13.6/12-36 AS
		rear	14.9/13-30 AS
		or	16.9/14-30 AS

Front axle: Reliable, adjustable pendulum single wheel suspension axle. Steel and rubber elements dust- and watersealed. On four-wheel drive strong pendulum axle.

Steering: Easy to steer, Gemmer system. On request hydraulic spindle steering, standard on four wheel drive version. Extremely small turning radius.

Dead weight: 2480 kg, four wheel drive 2780 kg.

Wheel track: Standard 1500 mm, by reversing wheels 1360 mm. On request 1280 mm with adjustable rims and tyres 11-36. Track on four-wheel drive 1500 mm.

Wheel base: 2120 mm, four wheel drive 2060 mm.

Ground clearance: 410 mm.

Overall length: 3680 mm.

Overall width: with track 1360 mm: 1800 mm; wheel track 1500 mm: 1890 mm.

Overall height: with closed safety cabin 2360 mm, opened 600 mm.

Turning radius: 4 m, with steering brake 3.6 m, four wheel drive 4.4 m, with steering brake 4 m.

Brakes: Amply dimensioned, aircooled. Independent hand brake. Steering brake with divided double-pedal.

Driver's seat: The luxury floating seat can be steplessly adjusted to the driver's weight and preference. Hydraulic buffers absorb road shocks.

Automatic Fendt power lift: With six regulating functions (lifting, lowering, draft, mixed, positional and floating position). Wide regulating range of impulse giver: for draft 2300 kg, for pressure up to 2500 kg. Hair pin giver spring. Stepless mixed control range. Lifting capacity at drawbar 2000 kg. Three point linkage Cat. I or Cat. II on request. Category II on request with quick hitch coupler. Completely independent hydraulic pump drive. New type lift limitation and side stabilizers, easy to handle from seat. Locking device for upper link.

Towing hitch: Rear: pivoting and adjustable in height. For use also beneath p.t.o. Approved for 850 kg vertical hitch load. Front: rigid.

Electric systems: 12 Volt to international standards. Square type front lights with asymmetrical dim-light. Approved three chamber light for tail, brake and direction indicator light. Indicator lights for two trailers. Single glance pilot with inbuilt temperature gauge. Combination switch for dim-light, direction indicator, horn, light signal, light. Heavy duty battery. Battery easily accessible. Starter 2.5 HP.

Tractometer: Positioned in weatherproof dashboard, indicates engine and p.t.o. revs. Speedometer, hourmeter.

Clutch and Brake Pedals: Chaffed pedals with edges bent to prevent foot slip.

Drawbar: Wide design. Can be used as tow-bar.

Tool-box: Easily accessible, removable, can be locked. Inbuilt compartment for driver's tractor log-book, license.

Mudguards: Extra strong construction. No inside bracing, plain surface prevents clogging between tyre and mudguard. Large front mudguards. Mudguard seats on both rear mudguards.

Fuel tank: Large, flat, tilting type, tank capacity 65 litres, can be filled without lifting up bonnet. Special indentation in tank construction enables use of fuel to the last drop. Fuel gauge on dashboard. All engine parts accessible when tank filled.

Optional equipment:

Fendt mower: 5' cutter bar with quick couplings. On request 6' with track adjusted to 1500. Mechanical drive and hydraulic drive on request. Hydraulic attachment lift. Double-bladed mower with 5' or 6' cutter bar. Engaging or disengaging of mower independent from driving clutch while driving. Separate operating lever at steering column.

Frontloader: Rugged construction, attached to tractor. Size 3 lifting capacity approx. 1150 kg. Brake away capacity approx. 1830 kg. On request frontloader size 2. Attachments: Manure fork, earth scoop, chaffed manure fork, loading hook, bulldozing blade, snow plough, extension for beet and forage fork.

Four-wheel drive: Engaging or disengaging while driving under load. Strong single disc dry clutch serving as shifting and overload safety slip clutch.

Extras: All-weather cabin with front entrance and side windows. Exhaust to top, ballast weights, paint weights for front installation, double acting check valve with float position, handlamp, hydraulic tipping trailer connection, radiator grill, cover for radiator, hydraulic spindle steering, tyre inflating pump, belt pulley with quick-coupling, quick hitch, plough light, super crawl gear, ground speed dependent p.t.o., cigar lighter, swivelling drawbar, heater, auxiliary gearbox for front p.t.o., adjustable rims.

The Fendt policy is one of continuous improvement, to serve and satisfy. The right to change specifications and equipment at any time without notice, is reserved.



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