OPERATING MANUAL
FENDT
916 Vario
920 Vario
924 Vario
926 Vario
930 Vario



930.000.000.014 Englisch

### **OPERATING MANUAL**

### FENDT 916 Vario

From chassis number 916 .. 7001

### FENDT 920 Vario

From chassis number 920 .. 7001

### FENDT 924 Vario

From chassis number 924 .. 7001

### FENDT 926 Vario

From chassis number 926 .. 7001

### FENDT 930 Vario

From chassis number 930 .. 2001

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#### Dear Customer,

Please note the following:

- Before using the tractor, carefully read through this Manual to familiarize yourself with all operating controls and their functions before you begin work. This also applies to the operating instructions of the implement manufacturer.
- Follow all the operating and maintenance instructions. If you do so, your tractor will give you many years of economic and trouble-free operation. You will find an overview of all maintenance operations in the Service Schedule in this Manual.
- Maintenance and repair work should be carried only at your service workshop. see also the "Important service and maintenance information".

#### Authorised use

This tractor is designed only for normal agricultural operations or similar purposes, for example in municipal applications.

Any other type of use is considered unauthorised. The manufacturer will not be liable for any damage resulting from such uses, which will be entirely at the owner's risk.

Authorised use also means fulfilling the operating, service and maintenance conditions set out by the manufacturer.

Operation, maintenance and repair of the tractor is restricted to persons who are familiar with this kind of work and aware of the inherent dangers.

All relevant accident prevention regulations and all generally accepted health & safety standards and road traffic regulations must be observed The manufacturer does not accept liability for damage resulting from unauthorised modifications.

# Marking of places that affect your safety

Make sure that any other users have read all the safety instructions as well.

The various levels of safety instructions can be distinguished as follows:



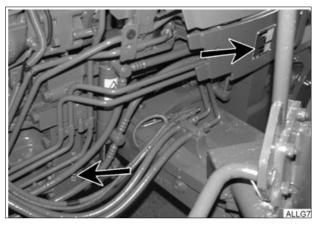
A WARNING: Risk of injury.

A CAUTION: Possible risk of injury.

The Operating Manual is an integral part of the vehicle package and must be passed on to any subsequent owner in the event of resale. The attention of the new owner should be drawn to this information.

If this Manual is lost or damaged and you need a new one, please contact your Fendt dealer, There you will be able to purchase a replacement.

#### Vehicle Identification Number



The Vehicle Identification Number is on the right frame and also stamped on the rating plate.

All specifications in the Manual are subject to the usual tolerances. We reserve the right to make design changes as part of technical further development, without making alterations to this Manual. The drawings and illustrations in the manual are used for function description, some of the items shown are not necessarily included in the vehicle delivery contents.

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### Safety and accident prevention regulations

#### WARNING:

Before every operation, check the tractor for road worthiness and operational safety. Carefully read the Manual and observe all safety instructions.

Safety signs on the machine must be replaced if damaged or lost.

# General safety and accident prevention regulations

- 1. Follow the general safety and accident prevention regulations, as well as the safety information in this manual.
- 2. When driving on public roads, follow the usual traffic regulations!
- 3. Before starting work, familiarise yourself with all operating controls and their functions. Don't wait until after you have started working!
- 4. Start the engine from the driver seat only. Do not attempt to start by shorting across the starter terminals, as this can cause the tractor to move immediately!
- 5. Before starting up, check the area is clear (e.g. children). Ensure that nothing obstructs vision.
- 6. Never leave the engine running in a confined space!
- 7. The driver should wear close-fitting clothing. Avoid wearing loose-fitting garments!
- 8. Take extra care when handling fuel serious fire hazard. Never re-fuel in the presence of sparks or naked flames. Do not smoke when re-fuelling.
- 9. Before re-fuelling, turn off the engine and remove the ignition key. Do not re-fuel in confined spaces. Clean up spillages immediately!
- 10. To avoid fire hazard, keep the tractor clean.
- 11. Beware of leaking brake fluid and battery acid (these are toxic and corrosive).

### **Carrying passengers**

- 1. Passenger should be carried only if the tractor is fitted with an appropriate passenger seat.
- 2. Do not carry passengers in any other other circumstances.

### Driving the tractor

- 1. Driving speed must always be adapted to the current situation. Avoid sudden cornering when driving uphill or downhill, or across gradients. Disengage the differential lock when cornering. Never disengage the clutch to shift gears when travelling downhill!
- 2. Make sure all trailers and implements are properly hitched. Driving characteristics, steering and braking are affected by mounted implements, trailers and ballast weight. Therefore, always ensure that there is adequate steering and braking capacity.
- 3. Observe the maximum permissible gross vehicle weight, axle loads and tyre load capacity, especially if heavy implements are attached.
- 4. When negotiating bends with implements connected or hitched up, always allow for the overhang and oscillating weight of the implement.

### Front loader operation

- 1. Never allow anyone to stand in the hazard area, or within the working range of the front loader. Keep the area clear of bystanders at all times. Do not operate the front loader unless there is a clear view of the entire working area - illuminate the area if necessary.
- 2. It is not permitted to use the standard loader (as supplied) as a working platform. If using the loader with a special working platform, additional safety measures are required.
- 3. Do not handle round bales, pallets etc. unless the loader is suitably equipped for this purpose. If loading objects that cannot be secured and may fall off, do not use the front loader unless the driving seat is protected by a robust canopy.

# SAFETY INSTRUCTIONS

- 4. When the front loader is raised, the risk of the tractor tipping over is greater, and the braking effect at the rear axle may also be reduced. Adapt your driving style and ensure adequate ballasting at the rear. For additional loading, we recommend attaching the Fendt 870 kg additional weight at the three-point link fit wheel weights and fill the tyres if necessary.
- 5. Keep a safe distance from high-voltage cables.
- 6. When on public roads, bring the front loader into the transport position and secure it. Keep a maximum distance of 3.5 m between the implement and the centre of the steering wheel. If the forward projection exceeds 3.5 m, appropriate measures must be taken to guarantee safe traffic conditions (e.g. use people on foot acting as guides or mirrors at road junctions). Transporting equipment or materials with a front loader working implement, e.g. a scoop, is not permitted when travelling on public roads.
- 7. Danger from unintended lowering of the front loader. Always secure hydraulic lever at the end of operation. Before leaving the tractor, completely lower the front loader to the ground.
- 8. For safety reasons the front loader should be mounted and removed by one person onlythe driver himself.
- 9. Always keep hands away from the crushing and cutting areas while parts may still be moving.
- 10. Detach the front loader with the attached implement (bucket, fork) only on firm and level ground. Always use the supports provided.
- 11. The front loader must be parked and secured in such a way as to prevent unauthorised persons or children from causing it to tip over
- 12. When mounting the front loader, connect all hydraulic connections including the auxiliary return, if equipped in this way. Always connect hydraulic hose for cylinder load pressure to +. Take great care not to confuse connections since this may cause accidents through reversed functions, e.g. lifting instead of lowering. Before fitting the multiple coupler, remove the load from hydraulic hoses and unplug rear hydraulic connections, lower the power lift and operate only via EPC. Hydraulic fluid interflow can create danger from unintentional equipment motion.

#### Leaving the tractor

- 1. Make sure the tractor is properly secured against running off (parking brake, wheel chocks). Switch off the engine and apply the hand brake!
- 2. Remove the ignition key and lock the cab if necessary.
- 3. Never leave the tractor unattended while the engine is running.
- 4. Never leave the cab while the tractor is in motion.
- 5. Completely lower the mounted implement before leaving the tractor.

#### Mounted and trailing equipment

- 1. Only attach implements and trailers using the prescribed devices.
- 2. Use only trailers which comply with the country-specific regulations. Do not exceed maximum vertical bearing load. Ensure that the tractor-trailer brake system is functioning correctly.
- 3. Take special care when hitching trailers or implements!
- 4. Secure trailers and implements to prevent them rolling. Make sure that detached implements and components are safely parked.
- 5. Be sure all protection devices are correctly attached and in the safety position before operating the tractor.
- 6. When using the power lift, always remain well outside the travel range of the three-point link attachment!

### PTO operation

- 1. Always switch off the engine, before fitting or removing the drive shaft. The PTO shaft must be in 0-position.
- 2. During PTO operations, allow no-one in the vicinity of the rotating PTO or drive shaft.
- 3. Make sure drive shaft and PTO are equipped with protective guards and sleeves.
- 4. After switching off the PTO, the attached implement may continue running due to the flywheel mass. In this case, do not go near the implement. Approach it only when it has come to a complete standstill.
- 5. When the drive shaft is removed, cover the PTO shaft with its protective cap.

#### Maintenance

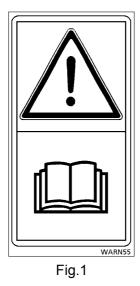
- 1. Before maintenance and repair work, switch off the engine and remove the ignition key. Relieve pressure from implement lines, e.g. to the front loader.
- 2. Any person should keep clear of a lifted, unsecured load (e.g. tilted cab and similar).
- 3. Never open or remove any protection devices while the engine is running.
- 4. Never grasp leaking pressure lines. Pressurised fluids (diesel or hydr oil) escaping under high pressure can penetrate the skin and cause severe injuries. If this has occurred, seek medical advice at once to avoid the risk of serious infection.
- 5. Keep at a safe distance from hot areas.
- 6. Hydraulic accumulator and connected pipes are highly pressurised. Only remove and repair in accordance with instructions provided in Technical Manual.
- 7. To avoid eye injury, do not look directly at the surface of the activated radar sensor.
- 8. Dispose of oil, fuels and filters properly!
- 9. For fitting tires, specialist knowledge and special mounting tools are required.
- 10. Run the tractor for a short time, then retighten all wheel nuts and bolts; check them regularly. For correct torque values refer to TECHNICAL DATA.
- 11. Before working on the electrical system, always remove the ground strap from the battery. Observe the following, when carrying out electric welding. When carrying out electric welding on tractor or mounted implements, make sure that both battery terminals are disconnected. Attach the ground terminal as close as possible to the welding point.
- 12. Spare parts must at least meet the technical requirements stated by the manufacturer. You can ensure that this is the case by using genuine spare parts!

#### Advice for front loader maintenance:

- 1. Before undertaking maintenance work, lower the front loader to the ground, switch off the engine and remove the ignition key.
- 2. If the pipe fracture protection has engaged, support the load before starting repairs, and slowly retract the cylinder.
- 3. Hydraulic hoses deteriorate with age. Check the condition of hydraulic hoses at regular intervals, and replace them in good time.
- 4. After attachment and repair operations, drive the tractor for a short time then retighten all mounting screws and nuts and check them regularly.
- 5. Retighten eccentric bolt for front loader attachment, if necessary.

## SAFETY INSTRUCTIONS

#### Location of safety signs



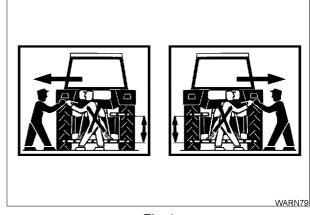
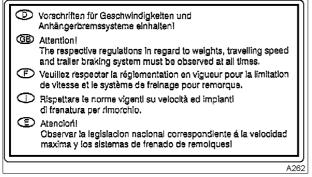


Fig.4

On the left and right rear mudguards beside the lifting gear control.



Inside the cab on the right.





Inside the cab on the right.



Fig.3

On the right rear mudguard.

At left front of hydraulic cylinder of front axle suspension.



Fig.6

On pressure reservoir of front axle suspension.

12

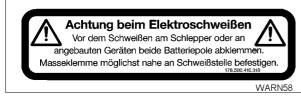


Fig.7

Inside the cab on left.

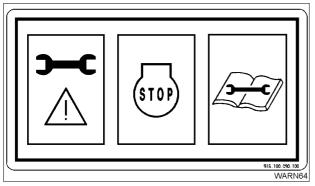


Fig.8

Inside the cab, on the cover of the emergency operation controls.



Fig.9

On the front loader forks, left and right.

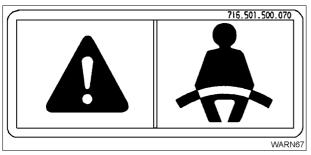


Fig.10

Inside the cab, on the left, on the transverse beam of the front windscreen.

### **OPERATION**

### 1. Driver seat



#### WARNING:

Never adjust the seat while the tractor is moving (risk of accident). If a seat belt is available, always attach it.

#### 1.1 Super deluxe seat

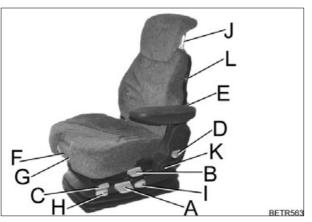


Fig.1

- A = Automatic weight and height adjustment.
- B = Swivel mechanism.
- C = Longitudinal adjustment.
- D = Backrest adjustment.
- E = Lumbar support (curvature), pneumatic operation.
- F = Seat bolster (depth adjustment).
- G = Seat bolster (tilt adjustment).
- H = Horizontal springing (on/off).
- I = Vertical springing (adjustable from soft to hard in four levels).
- J = Backrest extension.
- K = Behind the moulding: Seat belt fixing point.
- L = Seat heating.

# 2. Display instruments and operating controls

#### 2.1 Front controls

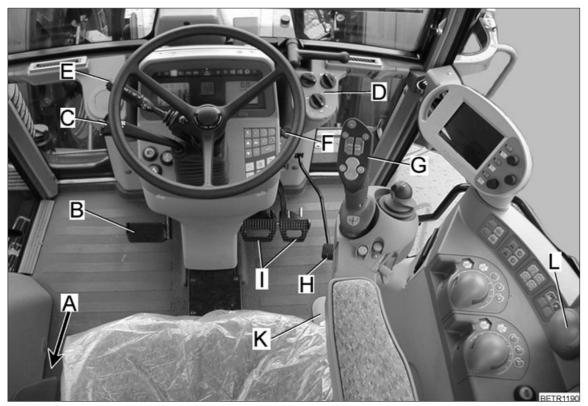


Fig.2

- A = Hand brake
- B = Clutch pedal
- C = Steering wheel adjustment and quick reverse.
- D = Heater and fan controls (see also OPERATION Section 3).
- E = Combination switch
- F = Heater starter switch
- G = Multi-function armrest
- H = Accelerator pedal
- I = Brake pedals
- K = Emergency operation controls (under the cover).
- L = Hand throttle

### **OPERATION**

#### 2.2 Glow and starter switch

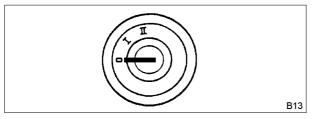


Fig.3

- 0 = Ignition off, key can be removed.
- = General ignition, key cannot be removed I + preheating (automatic).
- = Starting + ignition. Ш

#### 2.3 Combination switch

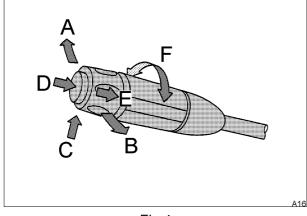


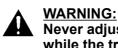
Fig.4

- = Right indicator. А
- В = Left indicator.
- = 1. With lights switched on: toggle low С beam, high beam.

2. With lights switched off headlight flasher.

- D = Horn
- = Windshield washer system (wipers run Е automatically).
- = Windshield wipers with intermittent and F continuous operation.

#### 2.4 Steering wheel adjustment



Never adjust the steering wheel while the tractor is moving!

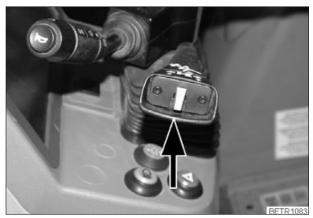


Fig.5

• Pull up lever and adjust steering wheel to the desired position (see also OPERATION Section 16).

#### 2.5 Quick reverse

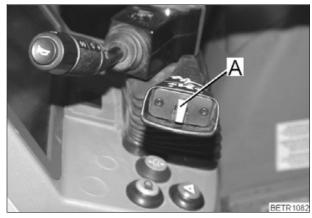


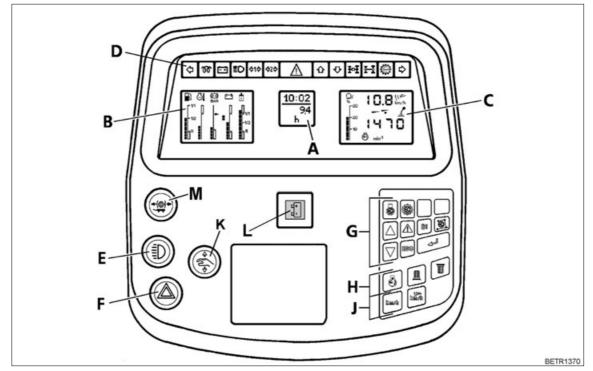
Fig.6

Press button (A).

0

The tractor slows to a standstill, then accelerates in the opposite direction up to previous transmission ratio (see also OPERATION Section 7.6).

#### 2.6 Dashboard





Н

J

- A = Multiple display
- B = Indication of fluid levels
- C = Operating status display
- D = Indicator lamps
- E = Lights including side lights
- F = Hazard warning flasher switch
- G = Key pad for on-board computer (also see OPERATION Section 26).
- ∠ Left turn signal indicator, green.
- m Preheater indicator lamp, red.
- Alternator 2 not charging, red.
- ED High beam, blue.
- **♦1**♦ 1st trailer light indicator, green.
- **42**→ 2nd trailer light indicator, green.

A Hazard light, red.

- Forward direction of travel, green.
- **Reverse direction of travel, green.**
- 4-WD engaged, green.
- ► Differential lock engaged, red.

- Key pad for rpm indicators (also see OPERATION Section 2.8).
- Key pad for speed display (also see OPERATION Section 2.8).
- K = Emergency mode (also see FAULTS AND REMEDIAL ACTIONS Section 6).
- L = Alternator 1 not charging, red.
- M = Hydraulic trailer brake (optional), (see also OPERATION Section 15.3).

Cruise control on.

Right turn signal indicator, green.

If one of the indicator lamps for forward/reverse fails, back-up indicators can be activated on the multiple display (A) activation (see see OPERATION Section 26.5).

#### Automatic dimmer

for forward/reverse indicator lamps, 4-WD, differential lock and related buttons.

At dusk or in the dark, the dimmer can be adjusted manually.

Brightness is increased or decreased by pressing one of the two buttons.



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