



OPERATING MANUAL

FARMER 307

From chassis-no. 307 / 21 / 03 001

FARMER 308

From chassis-no. 308 / 21 / 03 001

FARMER 309

From chassis-no. 309 / 21 / 03 001

FARMER 310

From chassis-no. 310 / 21 / 03 001

FARMER 311

From chassis-no. 311 / 21 / 03 001

FARMER 312

From chassis-no. 312 / 21 / 03 001

XAVER FENDT GmbH & CO.

Maschinen und Schlepperfabrik D-87616 Marktoberdorf / Bayern, Germany
Telephone 0049 (83 42) 77-1 Telefax 0049 (83 42) 77-222

Dear customer,

May we draw your attention to the following recommendations:

- Before using the tractor, carefully read through this Manual in order to familiarise yourself with all operating controls and their functions. This also applies to the operating instructions supplied by implement manufacturers.
- To ensure a long life and economical, trouble-free running of your tractor, adhere to all operating and maintenance instructions. You will find a summary of all maintenance work in the Service Schedule of this Manual.
- Repairs and maintenance work must always be carried out in a Fendt-authorized workshop. Please refer to "Important notes on after-sales service and maintenance".

The tractor is designed for use under normal conditions of agricultural or similar usage (authorised use). Any other use is deemed not authorised. The manufacturer does not accept liability for damage resulting from such use; any such damage is the sole responsibility of the user.

Authorised use also implies adherence to operating, service and maintenance conditions as laid down by the manufacturer.

Operation, maintenance and repairs are restricted to persons who are familiar with such tasks and aware of the inherent dangers.

All relevant accident prevention regulations and all generally accepted safety, health and road traffic regulations must be strictly observed. The manufacturer accepts no liability for damage resulting from unauthorised modifications.

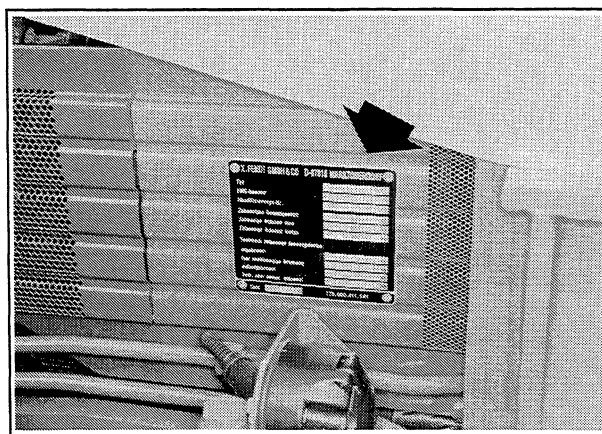
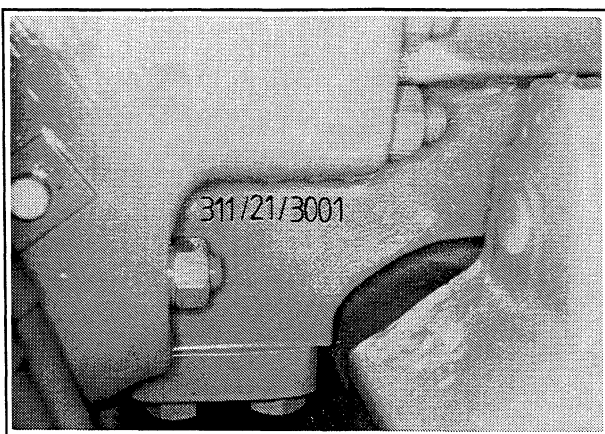


All items in this Manual which are concerned with your safety, are marked with this symbol.

Make sure other users are also made aware of the safety regulations!

The Manual is part of the vehicle package and must be passed on to a subsequent owner whose attention should also be directed to the above instructions.

Should a new Manual be required due to loss or damage, please contact your Fendt dealer from whom you can purchase a replacement.



The chassis-number is stamped on the right side of the frame and also on the rating plate.

All specifications in this Manual are subject to the tolerances laid down in the relevant guidelines. We reserve the right to make design changes within the framework of technological developments without alterations to this Manual.

CONTENTS

SAFETY REGULATIONS 5

OPERATION

1. Driving seat	
1.1. Comfort seat	11
1.2. Air-sprung seat	11
2. Display instruments and controls	
2.1. Controls	12
2.2. Heater-starter switch	13
2.3. Combination switch	13
2.4. Shuttle control / steering wheel adjustment	13
2.5. Splitter gear control	13
2.6. Instrument panel	14
2.7. Pilot lamps	14
2.8. Fluid levels indicator	15
2.9. Operating status indicator	15
2.10. Multiple display	15
2.11. Control console, right side	16
2.12. Cab roof, front	16
2.13. Cab roof, right side	17
2.14. Sockets	17
3. Heating and ventilation	
3.1. Heater with 3-speed fan	18
3.2. Additional ventilation in cab roof	18
4. Rearview mirrors	
4.1. Retractable rearview mirrors	19
5. Start-up	
5.1. Daily checks	19
5.2. Cold weather operation	20
6. Starting and stopping the engine	
6.1. Starting the engine	21
6.2. Starting at very low temperatures	21
6.3. Stopping the engine	21
6.4. Parking and immobilising the tractor	22
7. Gearbox	
7.1. Gear levers	22
7.2. Shuttle gear control	23
7.3. Splitter range control	24
7.4. Super-crawler gear	24
7.5. Using the gearbox	24
7.6. Tow-starting and towing	25
7.7. Running speeds in kph	26
8. Rear PTO	
8.1. Pre-selecting the PTO speed	28
8.2. Activating the rear PTO	28
8.3. Deactivating the rear PTO	28
8.4. Ground speed PTO	29
8.5. Flanged PTO	29
9. Front PTO	
9.1. Season selector	30
9.2. Activating the front PTO	30
9.3. Deactivating the front PTO	30
10. Four-wheel drive	31
11. Differential lock	31
12. Front axle suspension	32
13. Brakes	
13.1. Foot brake	32
13.2. Handbrake	33
13.3. Exhaust brake	33
13.4. Trailer brake	33
14. Steering	
14.1. Steering wheel adjustment	33
15. Hydraulic connections	
15.1. General information on hydraulic operations	34
15.2. Multi-circuit system with automatic flow control	34
15.3. Valves and hydr. connections	35
15.4. Changeover lever DA-EPC	36
15.5. Operating the auxiliary valves	36
15.6. Available hydraulic oil	36
16. Electronic power lift control	
16.1. EPC safety control	37
16.2. Control panel functions	38
16.3. Using the EPC	39
16.4. Electronic slip control	41
16.5. Electronic pressure	41
16.6. Electrohydraulic external control	42
16.7. Changing from EPC to DA-operation	42
16.8. Implement socket	43
17. Three-point linkage	
17.1. Lower links with quick couplers	44
17.2. Top link	45
17.3. Mechanical lateral locking	45
17.4. Drop arms	46
18. Front power lift	
18.1. Hydraulic connections	47
19. Implement & trailer couplings	
19.1. Rear implement/trailer coupling	47
19.2. Automatic coupling with remote control	48
19.3. Swinging drawbar with piton-fix	48
19.4. Pick-up hitch	49
20. Additional loading	
20.1. Rear ballast weights	51
20.2. Front ballast weights	51
20.3. Filling tyres with water	52
21. Track adjustment	
21.1. Track adjustment, front	52
21.2. Track adjustment rear	55
22. Twin tyres	
22.1. Choice of twin tyres	59
23. On-board information system	
23.1. Setting the clock	60
23.2. Calibrating the speed display	60
23.3. Fault indication	61
23.4. On-board computer	62
23.5. Entering tyre sizes	69
23.6. Adjusting the PTO clutch rear / front	69
23.7. Backup display	70
24. Tilting the fuel tank	73
25. Engine oil change	
25.1. Changing the oil	74
25.2. Changing the engine oil filter	74
25.3. Filling with engine oil	74

CONTENTS

26. Fuel system	
26.1. Cleaning the fuel lift pump	75
26.2. Draining the fuel filter	75
26.3. Replacing the fuel filter	75
26.4. Bleeding the fuel system	75
27. Dry air filter	
27.1. Vacuum check	76
27.2. Removing and refitting the main cartridge	77
27.3. Cleaning the air filter main cartridge	77
27.4. Replacing the safety cartridge	78
27.5. Primary air filter	78
28. Cooling system	
28.1. Radiator	78
28.2. Visco-fan	78
28.3. Coolant / leaks	79
28.4. Changing the coolant	79
28.5. Internal cleaning of cooling/heating system	80
29. V-belt	80
30. Clutches	
30.1. Drive clutch	81
30.2. Bleeding the drive clutch	81
30.3. Turbo clutch	81
31. Front PTO	
31.1. Checking the oil level - front PTO	82
32. Transmission	
32.1. Gearbox/four-wheel drive	82
32.2. Final drives	83
33. Four-wheel drive axle	
33.1. Front axle differential gear	83
33.2. Front axle hub drives	84
33.3. Front axle suspension	84
34. Power lift	84
35. Hydraulics	
35.1. Checking the oil level, hydraulics	85
35.2. Changing the hydraulic oil	86
35.3. Replacing the return filter	86
35.4. Replacing the ventilation filter	86
35.5. Hydraulic oil - temperature warning	86
36. Brakes	
36.1. Reservoir	87
36.2. Brake fluid level warning	87
36.3. Bleeding the foot brakes	88
36.4. Adjusting the foot brake	89
36.5. Checking the solid disc brake for wear	90
36.6. Drive shaft brake	90
36.7. Handbrake	90
37. Steering	91
38. Front wheels	
38.1. Checking toe-in	91
39. Heating and ventilation	
39.1. Removing the heater fan filter	91
39.2. Removing the roof fan filter	92
39.3. Removing the recirculation air filter	92
40. Screen washers	93
41. Cleaning the tractor	93
42. Electrics	
42.1. Alternator	93
42.2. Electric welding	93
42.3. Battery	94
42.4. Adjusting the additional lights	94

43. Fuses	
43.1. Allocation of fuses	95
44. Circuit diagrams	97

ADDITIONAL EQUIPMENT

1. Front Loader	
1.1. Removing the front loader	139
1.2. Mounting the front loader	140
1.3. Hydr. multiple coupler	141
1.4. 3rd hydraulic circuit	142
1.5. Operating and maintenance directives ...	142
2. Air compressor	
2.1. Operation	143
2.2. Maintenance	144
3. Air conditioning	
3.1. Operation	145
3.2. Maintenance	145

FAULTS AND REMEDIAL ACTION

1. Warnings and fault messages	
1.1. Warnings	147
1.2. Fault messages	151
1.3. Terminating warnings or fault messages	152
1.4. Faults, general	153
2. Fault indication EPC-D	
2.1. EPC-D Faults, general	157
3. Code-table	159

TECHNICAL DATA

1. Technical data	162
2. Tyre pressures	166
3. Tyre combinations	167
4. Fluids and Lubricants	169
5. Maintenance Schedule	170
6. Lubrication Chart	173

<u>KEYWORD INDEX</u>	174
-----------------------------------	-----