



INSTRUCTION BOOK

FARMA T 9

SERVICE AND SPARE PARTS





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1 INTRODUCTION

This manual deals with the **T 9** forest trailer and contains all the operating and maintenance instructions you need for using the trailer safely and correctly.

Even if you are experienced user of this kind of equipment, read this manual carefully.

It contains information that enables the trailer to be used efficiently and safely. Make sure that this trailer corresponds to your demands.

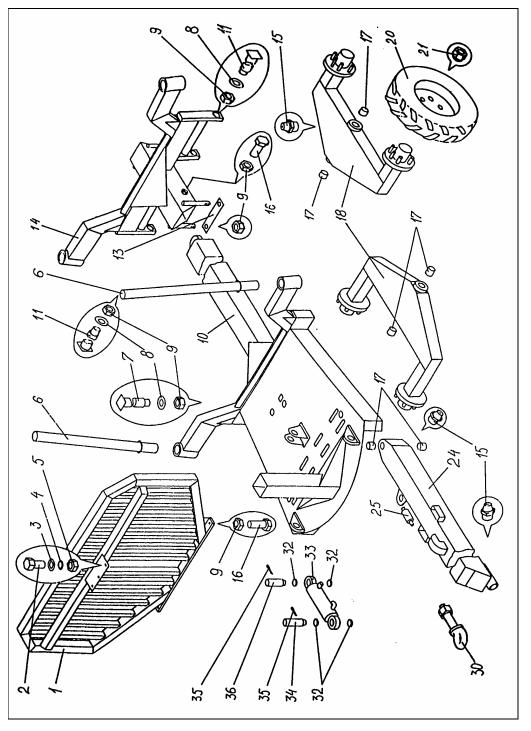
Regular maintenance is essential for troublefree, efficient and economical utilization.

It is the operator duty to familiarize and obey all safety precautions and instructions carefully.



2 TECHNICAL SPECIFICATION

2.1. CONSTRUCTION OF THE TRAILER





2.2. SPAREPART LIST FOR TRAILER T 9

Production no FMW 13

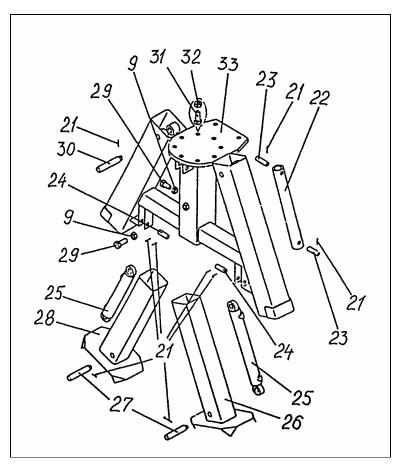
Pos no	Art no	Number	Sparepart	Dimension	Pcs
1	13001	F13-080000.000	Backwall		1
2	13002		Bolt	M12×40	3
3	13003		Plane washer	ø12	3
4	13004		Spring washer	ø12	3
5	13005		Nut	M12	3
6	13006	F13-150000.000	Pin		4
7	13007	M13-000030.000-020	Axle-bolt		1
8	13008	M13-000000.001	Plane washer		3
9	13009		Nut	M24	11
10	13010	F13-070000.000	Frame / Chassi		1
11	13011	M13-000030.000-030	Axle-bolt		2
13	13012	F13-062000.003	Lock-plate		2
14	13013	F13-061000.000	Wheel support		1
15	13014		Grease nipple	1/8"	6
16	13015		Bolt	M24×60	4
17	13016		Glide-bearing	PAP5040P10	6
18	13017	M13-090000.000	Boggi side		2
20	13018		Wheel	400/60-15,5 14PR	4
21	13019		Wheel nut		24
24	13020	F13-050000.000	Pull-beam		1
25	13021	M13-000000.006	Glide-roller		2
30	13022	F 13-000010.000	Pull-loop	M30	1
32	13023	M13-000000.017	Distance ring		4
33	13024	M13-100100.000	Hydraulic cylinder	90/40-200	1
34	13025	M13-000000.002-070	Axle-bolt		2
35	13026		Split pin	ø4×60	3
36	13027	M13-000000.002-020	Axle-bolt		2
37	13028	RF13.9,5	H-hose frame-steering	L=3260 mm	1
38	13029	RF13.9,5	H-hose frame-steering	L=3500 mm	1
39	13030	3P.9,5	H-hose stabilizer	L=2530	2
40	13031	3P.9,5	H-hose stabilizer	L=3300	2



2.3. THREEPOINT FRAME

Production no 48

Pos no	Art no	Number	Sparepart	Dimension	Pcs
21	48001		Split pin	4x60	10
22	48002	F13-000000.002	Stabilizer pin		1
23	48003	F13-000000.003	Axle bolt		2
24	48004	M13-000000.007	Axle bolt		2
25	48005	M13-100300.000	Hydraul cylinder	63/32-800	2
26	48006	F13-140000.000-010	Stabilizer leg		1
27	48007	M13-000000.002-030	Axle bolt		2
28	48008	F13-140000.000	Stabilizer leg		1
29	48009		Bolt	M24×60	2
30	48010	M13-000000.002-010	Axle bolt		2
31	48011		Bolt	M20×80	8
32	48012		Nut	M20	8
33	48013	F13-120000.000	Three-point frame		1
34	48014	3P.9,5	Hydraulic hose	2530	2
35	48015	3P.9,5	Hydraulic hose	3300	2





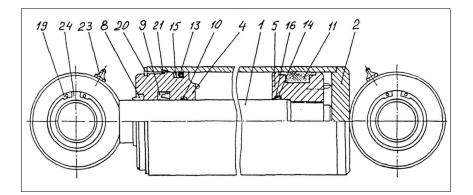
2.4. HYDRAULIC CYLINDERS

Sparepartlist for Hydraulic-cylinder 63/32-800 Stabilizer cyl for Farma 3-point frame Production no M13-100300000.

Pos no	Art no	Number	Sparepart	Dimension	Pcs
1	55801	M13-100320.000	Piston road		1
2	55802	M13-100310.000	Tube		1
4	55803	M13-100300.001	Front bush		1
5	55804	M13-100300.002	Piston		1
8	55805		Scrape-ring	AS 32-45-7-10	1
9	55806		Sealing	NI300 32-47-10	1
10	55807		Buch	DFI 32-35,1-4,0	1
11	55808		Sealing	Simco 5×2 63-47-29,8	1
13	55809		0-ring	52,2×5,7	1
14	55810		0-ring	32,2-3,0	1
15	55811		Sealing	SRA 63-5,1-1,5	1
16	55812		Sealing	SRI 32-2,6-1,0	2
20	55813		Lock-ring	SGA 60	1
21	55814		Lock-ring	N 72240	1

Sparepartlist for Hydraulic-cylinder 90/40-200 Frame steering cyl for trailer T 9; T 10 Production no M13-100200.000.

Pos no	Art no	Number	Sparepart	Dimension	Pcs
1	56201	M13-100120.000	Piston road		1
2	56202	M13-100110.000	Tube		1
4	56203	F13-100100.001	Front bush		1
5	56204	F13-100100.002	Piston		1
8	56205		Scrape-ring	AS40-50-7-10	1
9	56206		Sealing	NI 300 40-55-10	1
10	56207		Buch	DFI 40-45-5,5	1
11	56208		Sealing	Simco 5×2 90-70-33,8	1
13	56209		0-ring	79,2×5,7	1
14	56210		0-ring	40,2×3,0	1
15	56211		Sealing	SRA 90-5,1-2	1
16	56212		Sealing	SRI 40-2,6-1,5	2
19	56213		Lock-ring	SGH 55	2
20	56214		Lock-ring	SGA 87	1
21	56215		Lock-ring	N°72310	1
23	56216		Grease-nipple	1/8"	2
24	56217		Joint bearing	GE35ES	2





2.5. TECHNICAL DATA

FARMA TRAILER	9 t
Loading area, m ²	2,1
Ground clearance, mm	530
Center beam, mm	140x140x8
Steerable towbar	one cyl
Axle, mm	70x70
Length, m	5,7
Width, m	2,2
Wheels	400/60-15,5
Loader weight, kg	1900



3 OPERATING INSTRUCTIONS

3.1. SAFETY

- Read the manual before operating the trailer. Neglecting the instructions can cause danger to operator and machine.
- Operator must have sufficient training for using this machine.
- Do not use the trailer until you are familiar with the controls.
- Before loading works, ensure there is no one in danger zone (20 m).



DON'T FORGET TO LIFT THE SUPPORT LEGS UP BEFORE MOVING TO ANOTHER PLACE.

- Operator must have full visibility all over working area.
- □ The vehicle must be on stable ground and positioned securely. Support legs

must be used while loading to prevent the trailer tipping over.

- Use vehicles parking brakes during the loading.
- Do not exceed maximum loading values.



3.2. INSTRUCTIONS FOR SAFE OPERATION

SUPPORTING THE TRAILER

- Always engage the base machines parking brakes before loading. If necessary put some obstacles in front of wheels.
- □ Always use support legs. Make sure the trailer is situated at firm terrain.



DO NOT USE SUPPORT LEGS FOR LIFTING THE LOAD. USE SUPPORT LEGS ONLY FOR SUPPORTING THE TRAILER.

MANIPULATING THE HYDRAULIC FUNCTIONS



NEVER CONTROL THE HYDRAULIC FUNCTIONS FROM ONE EXTREME POSITION TO ANOTHER WITH SPEED! THIS MAY CAUSE OVERTURNING THE TRAILER.

- Avoid loading on a slanted ground or at least work with extreme cautiousness.
- When working on a slanted surface load less than usual.



ALWAYS ENGAGE THE BASE MACHINES PARKING BRAKES BEFORE LOADING WORKS. IF NECESSARY PUT SOME OBSTACLES IN FRONT OF WHEELS.



3.3. WORKING AT EXTREME CONDITIONS

Recommended working temperature range for trailer is -30° up to $+40^{\circ}$.

Note that working at low temperatures accelerates hydraulic gaskets wearing and increases hydraulic hoses exposure to damages and steel constructions exposure to brittle fracture. Before start working at cold conditions let the oil circulate freely through system a few minutes.

Slowly drive every action through several times so that gaskets come pliable before they receive full pressure.

At exceptionally warm conditions beware of hydraulic oils excessive heating. Too high oil temperature (higher +80°C) degrades oil and damages gaskets.

4 MAINTENANCE INSTRUCTIONS

4.1. SAFETY



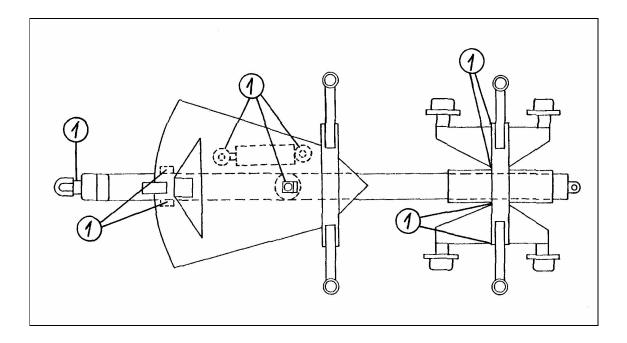
READ THE MAINTENANCE INSTRUCTIONS BEFORE SERVICE OR MAINTENANCE WORKS. DO NOT ATTEMPT TO PERFORM SUCH MAINTENANCE WORKS WHICH YOU DO NOT FULLY UNDERSTAND

- Repair all safety endangering defects immediately.
- Check that the trailer is on a level and stable ground.
- Use vehicles parking brake during maintaining the trailer. Make sure that nobody can unnecessarily have access to trailers or vehicles controls.
- Never attempt to do maintenance works on the hydraulic system before you are sure there is no pressure.
- Do not tighten or repair a leaking hydraulic couplings while the system is pressurized.

- Never attempt to localize a leakage from hoses or connections by feeling with hand. The high pressure oil jet can penetrate skin and cause serious burns and damages. High pressure oil is also highly flammable.
- Do not work under such device that is sustained only by hydraulics. During maintenance use supports.
- Avoid getting oil into eyes. Use safety goggles and gloves.



4.2. LUBRICATION



SAFETY

- □ Before any lubrication or service works □ read these instructions and follow recommended procedures. □
- □ When lubrication or servicing the trailer, turn off the vehicle engine.
- Ensure regularity of lubrication by following the lubricating schedule.
- Keep your hands, feet and loose clothing away from power driven parts.
- Inspect equipment daily for signs of failure or beginning of failure.
- □ Use proper tools for service.
- Keep flammable material away from heat, sparks and open fire.
- Do not let oil get into nature. Oil spilled into ground pollutes environment. It is recommended to use vegetable-based oil instead of mineral oil.

- Pressurized oil can penetrate skin and cause serious injures.
- Hot oil and oil spray can be hazardous. Small amounts swallowed or inhaled do not usually cause intoxication. Old oil is more dangerous than new.
- Use safety goggles. If oil has got into eyes flush them with cool water, after which go to the doctor.
- Although the occasional skin exposure with oil is not dangerous it is recommended to use protective gloves and clothing.



RECOMMENDED GREASES

BRAND	ТҮРЕ
BP	Energrease LS-EP2, L2M
ESSO	Beacon EP2, Multipurpose GR Moly
MOBIL	Mobilux EP2, Mobil Grease MP Special
SHELL	Alvania EP Grease 2
UNION/TEXACO	Marfak Multi-Purpose 2, Molytex Grease 2



PAY SPECIAL ATTENTION TO THE TOWBAR CYLINDER. GREASE IT AFTER EVERY 50 WORKING HOURS.