

TRANSMISSION

Make HYDROMATIK
 Type Hydrostatic closed circuit
 Pump Variable cylinder capacity
 Hydrostatic motor Double displacement

AXLES

Front Rigid
 Rear Oscillating
 Total oscillation 25°
 Total reduction 19,5 : 1
 Differential Conventional
 Final reduction gears Epicyclic

LOADER HYDRAULIC SYSTEM

Loader gear lift hydraulic cylinders N° 2
 Bore 95 mm.
 Stroke 660 mm.
 Double action Yes
Loader dump hydraulic cylinder N° 1
 Bore 120 mm.
 Stroke 420 mm.
 Double action Yes
Loader steering cylinder N° 2
 Bore 65 mm.
 Stroke 255 mm.
 Double action Yes
Loader hydraulic distributor Modular type
 Sections N° 2
Loader hydraulic pump type Gear pump
 Flow-rate at 2.200 r.p.m. 112 litres
Return oil filter Total filtration
Steering system Hydraulic power steering
Service brake Disk brake in oil on the four tires
 With Double circuit
 Emergency circuit By means of accumulator
 Hydraulic control Servo controlled
Parking brake Block-type on manually operated transfer box

TROUBLESHOOTING

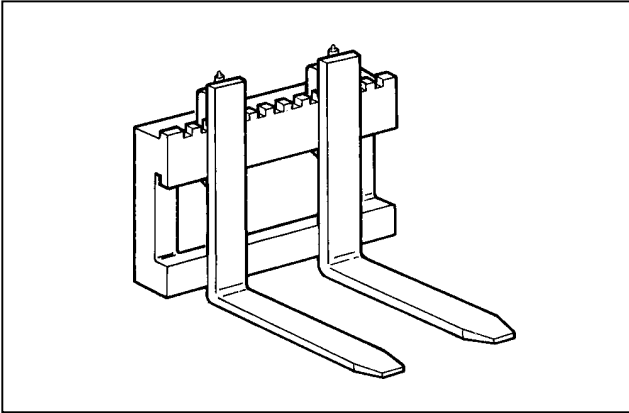
Problem	Possible cause	Solution
The engine overheats	Not enough water in radiator	Top up
	Limescale deposits in radiator	Contact your Ahlmann Distributor
	Alternator belt loose	Set correct belt tension
	Water pump faulty	Contact your Ahlmann Distributor
	Radiator cap valve stuck	Replace cap
	Water temperature probe malfunctioning	Contact your Ahlmann Distributor
The engine fails to start	Flat battery	Charge or replace battery
	Battery cable terminals loose or corroded	Check them over, clean, and coat with Vaseline
	Air in fuel line	Eliminate air intrusion source and bleed
	Starter motor will not turn	Contact your Ahlmann Distributor
	Water in fuel	Drain fuel, clean tank, replace with new fuel
Engine exhaust fumes white	Engine cold	Warm up engine for 5 - 10 minutes at 1100 - 1200 r.p.m.
	Injectors faulty	Contact your Ahlmann Distributor
	Delayed injection	
Engine exhaust fumes black	Air filter clogged	Clean air filter
	Timing off	Contact your Ahlmann Distributor
	Faulty injector	
Engine exhaust fumes blue	Abnormal oil infiltration into combustion chamber	Contact your Ahlmann Distributor
The engine lacks power	Fuel filter dirty	Sostituire il filtro
	Insufficient fuel delivery	Contact your Ahlmann Distributor
	Delayed injection	
The engine knocks	Timing off	Contact your Ahlmann Distributor
	Faulty injectors	

Problem	Possible cause	Solution
The vehicle moves neither forwards nor backwards, or it moves with a certain delay	Air inlet filter clogged	Replace filter
	Abundant foam formation, or oil level too low	Check oil state and level: change if necessary
	Inlet pipe broken or twisted	Contact your Ahlmann Distributor
	Elastic diesel engine - pump coupling faulty	
	Supercharger faulty	
	Drive direction selection solenoid valve fails to operate	
	Maximum pressure valves dirty or faulty	
	Faulty hydrostatic motor	
Engine vibration	Engine mountings faulty	Contact your Ahlmann Distributor
	Faulty injectors	
	Fan broken	
	Faulty injector pump	
	Engine breakdown	
Insufficient tractive force in both directions	Engine fails to max r.p.m. or is heavily overloaded	Contact your Ahlmann Distributor
	Supercharger feed pressure is too low	
	Maximum working pressure valve set too low	
	In-tank hydraulic oil temperature too high	
	Faulty hydrostatic motor	
Insufficient tractive force in first gear in both directions	Hydrostatic motor fails to maintain maximum displacement	Contact your Ahlmann Distributor
The vehicle decelerates erratically	Temporary magnet power supply interruption	Contact your Ahlmann Distributor

Problem	Possible cause	Solution
Extreme in-tank oil overheating	Oil level too low or wrong oil type	Check level or change oil
	Oil draw piping not airtight	Check draw piping
	Pump faulty check working pressure	Contact your Ahlmann Distributor
	Hydrostatic motor faulty: check oil draw flow-rate	
	Inefficient oil-water exchanger	
The vehicle does not reach max speed	Air inlet valve clogged	Replace it
	Max rated r.p.m. unattainable	Check diesel engine r.p.m.
	Second gear insertion magnet on hydrostatic motor not working	Contact your Ahlmann Distributor
Oil leaks at engine or draw pump drive shaft	Sealing ring faulty or hardened	Contact your Ahlmann Distributor
Reduced hydraulic cylinder force	Hydraulic circuit pressure too low	Contact your Ahlmann Distributor
Reduced working manoeuvre speed	Low-performance loader hydraulic pump.	Contact your Ahlmann Distributor
Loader hydraulic oil overheating	Low-performance loader hydraulic pump	Contact your Ahlmann Distributor
	Incorrect hydraulic circuit pressure	
	Oil draw in the cylinder pistons	
Noisy hydraulic pump	Oil level too low	Contact your Ahlmann Distributor
	Air present in drawing	
	Faulty pump	
Hydraulic system whistles	Air in hydraulic circuit	Contact your Ahlmann Distributor
Oil leakage at cylinders between cylinder head and piston	O-Ring seals worn	Contact your Ahlmann Distributor

Problem	Possible cause	Solution
Oil leakage at cylinders between rod and piston	O-Ring seals worn	Contact your Ahlmann Distributor

UNIVERSAL FORKS



The **universal forks** are fitted on the front part.

The coupling may be of the pin type with quick mechanical coupling or with a quick hydraulic coupling.

For fork attachment see the “**Dismantling the equipment**” chapter.

Note: Since this is an equipment item that has no hydraulic movement there is no hose disassembly stage.



When the vehicle is equipped with universal forks the load must be at a maximum above-ground of 500 mm when the vehicle is moved.



Transfer speed must not exceed 15 km/h when loaded.



The load barycentre must not be more than 500 mm from either the horizontal or vertical fork teeth plane.

ISO



The indicated load values must not be exceeded.

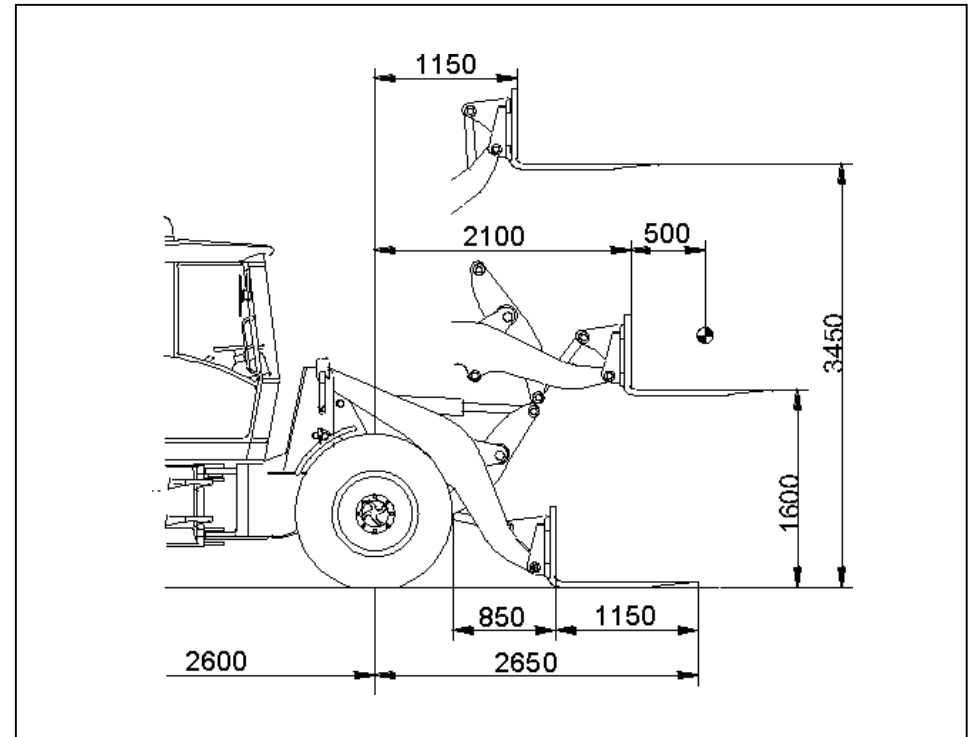
* The load marked with this symbol is for the machine use on not even ground (60% of articulated tipping load).

** The load marked with this symbol is for the machine use on an even hard surface (80% of articulated tipping load).

OVERALL DIMENSIONS WITH FORKS

(without quick coupling)

Load with forks - Load centre at 500 mm



* Load **2,600** kg. (with quick coupling 2,400 kg)

** Load **3,500** kg. (with quick coupling 3,300 kg)

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