

CLAAS



ATLES 946

Use and Maintenance

SERVICE & PARTS

Thank you for choosing a CLAAS tractor.

In this guide you will find the instructions for use and maintenance that you must know to get the best service from your tractor.

This document is not to be considered as contractual. CLAAS has a policy of continuous technical improvement to all their products, and therefore reserve the right to change without notice and at any time the details contained in this booklet.

If you are still unsure about any points, the technicians of the CLAAS network will be pleased to give you any additional information you may require.

The description of the different models contained in this manual was established from technical characteristics known at the time of writing the document. The manual contains all existing equipment (standard or optional) for these models, and their presence in the tractor depends on the version and options chosen and on the country of sale.

Important: See chapter "M". Servicing operations during the guarantee period are mandatory; failure to carry them out will nullify the contractual guarantee.

Failure to observe the instructions for use and maintenance as described in this manual definitively excludes any possibility of recourse to the CLAAS guarantee system.

For your safety

Before using the tractor for the first time, read the user's manual and observe the general safety instructions!



WARNING TRIANGLE

In this user's manual, this sign indicates all the paragraphs concerning safety aspects. Pass on these safety instructions to all other users.

The instruction and warning plates affixed to the tractor give important information about possible risks of use. Respect for these instructions is a guarantee of your safety!

Appropriate use

This tractor has been designed to be used exclusively for normal agricultural work (appropriate use).

Any use other than that defined above will be considered as inappropriate and will release the manufacturer from any liability in the event of damage or injury; the user alone will bear the risks resulting from such misuse.

Appropriate use also supposes the observance of the operating, maintenance and repair regulations laid down by the manufacturer.

The tractor must be used, maintained and repaired only by persons with a thorough knowledge of the vehicle and aware of the possible risks.

Specific accident prevention instructions must be observed as well as general rules concerning technical safety, health and safety regulations and the highway code.




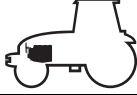
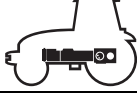

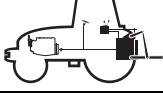

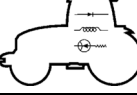




The manufacturer declines all responsibility for any damage resulting from any modification made to the tractor without their approval.





Model	Type
Atles 946	H 4552

CHAPTER SYMBOLS

REF	CHAPTERS	SYMBOLS
A	IDENTIFICATION - APPROVAL	<div style="border: 1px solid black; padding: 5px; width: fit-content;"> HOMOLOGATION ACCORDÉE AU TYPE/VERSION [] ANNÉE [] PAR LE MINISTÈRE DE L'AGRICULTURE SOUS LE NUMÉRO [] </div>
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B	CAB	
C	ELECTRICAL SYSTEM	
D	ENGINE	
E	TRANSMISSION	
F	FRONT AXLE	
G	HYDRAULICS - REAR LINKAGE AND HITCH	
H	FRONT POWER TAKE-OFF - FRONT LIFT AND FRONT TOW LINKAGE	
I	ON BOARD COMPUTER	
J	WHEELS AND TYRES	
K	DIMENSIONS, WEIGHTS, CAPACITIES AND BALLAST	
L	MAINTENANCE	
M	OPERATIONS THAT ARE MANDATORY UNDER THE GUARANTEE	

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A - IDENTIFICATION - CERTIFICATION - SAFETY



IDENTIFICATION

- A - Tractor type.
 - B - Tractor identification number.
 - C - CEE number.
 - D - Maximum allowable gross weight depending on tyre fit (in kg).
 - E - Front axle weight.
 - F - Rear axle weight.
 - G - Maximum unbraked trailer weight (in kg).
 - H - Maximum trailer weight - mechanical brake (in kg).
 - I - Maximum trailer weight - inertia brake (in kg).
 - J - Maximum trailer weight - servo brake (in kg).
 - K - EMC (electromagnetic compatibility) acceptance.
 - L - EMC (electromagnetic compatibility) acceptance N°.
 - M - Smoke absorption coefficient.
 - N - CEE structure acceptance.
 - O - CEE structure acceptance N°.
- In any correspondence, always state:

Tractor identification number

This number is stamped on plate (A) which is riveted behind the cab. It is also stamped on the right side of the front chassis.

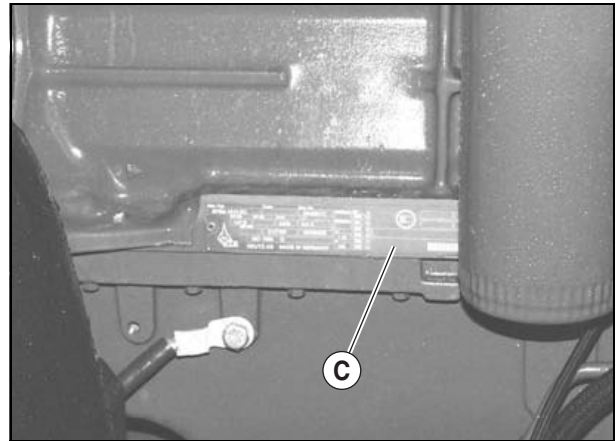
CEE structure acceptance N°

This number is stamped on plate (B) riveted to the right of plate (A).

Engine type and serial number (plate (C))

CLAAS KGaA mbH			
Type	<input type="text" value="A"/>	<input type="text" value="e2"/>	<input type="text" value="K"/>
N° CEE	<input type="text" value="C"/>	<input type="text" value="023003"/>	<input type="text" value="L"/>
N° identification	<input type="text" value="B"/>		
Masse totale admissible (kg) (suivant pneumatiques)	<input type="text" value="D"/>	<input type="text" value="1,28"/>	<input type="text" value="M"/>
Essieu AV	<input type="text" value="E"/>		
Essieu AR	<input type="text" value="F"/>		
Masse remorquable admissible (kg)		<input type="text" value="S"/>	<input type="text" value="e2"/>
sans frein	<input type="text" value="G"/>	<input type="text" value="072"/>	<input type="text" value="O"/>
frein mécanique	<input type="text" value="H"/>		
frein à inertie	<input type="text" value="I"/>		
freins assistés	<input type="text" value="J"/>		
Fabriqué par RENAULT Agriculture			

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CERTIFICATION

- Certification of the tractor according to European directives 74/150/CEE (amended 2001/3/CE).
- Certification of the tractor according to European directives 79/622/CEE (amended 1999/40/CE).
- Certification N° of tractors Atlas 946: e2*2001/3*0024.



SAFETY

FOREWORD

CLAAS Tractors are designed and built to give you optimum service over many years. They are designed to provide the most comfortable and safe working conditions.

However, accidents can easily happen in agricultural work. It is important to know the dangers and how to avoid them.

We respectively draw your attention to certain aspects that merit constant attention (non exhaustive list).

PRECAUTIONS BEFORE STARTING

Caution is the best guarantee against any risk of accident.

The driver must be fully familiar with the tractor and must understand all the controls, their position and their purpose. This manual must be read carefully.

If the tractor is used by anybody other than the owner, he must be given all explanations required to allow him to work safely.

The driving position must be clean (instrument panel, steering wheel, floor and pedals).

Footsteps must be clean (no mud) to avoid slipping when climbing or descending.

Use the steps and handles provided when getting into or out of the tractor.

Before starting the engine, make sure that all controls are in the neutral position, particularly the power take-off lever.

Only run the engine in well ventilated areas.

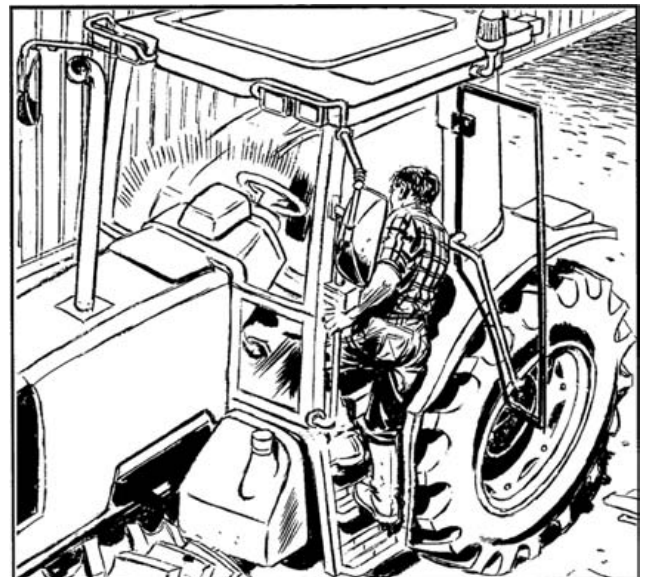
Make sure there is nobody nearby before starting the tractor.

Fully release the handbrake before starting.

Do not start work if the tractor is not working properly.



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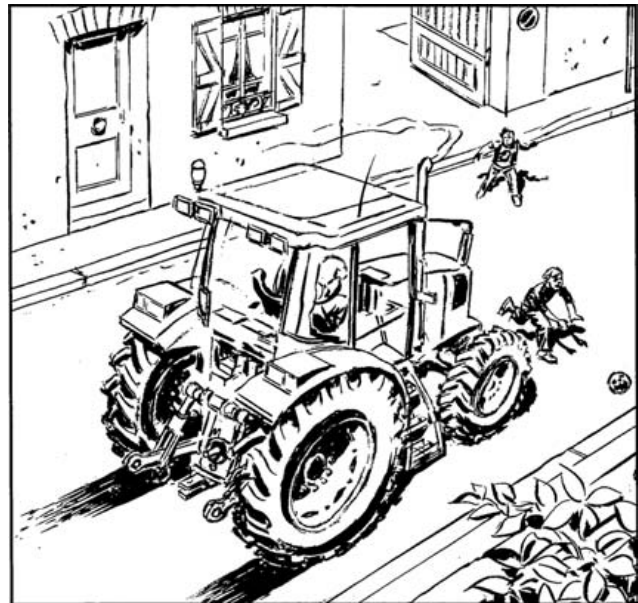
CONDITION OF THE TRACTOR

Maintaining the tractor in the best possible condition, by carrying out all routine maintenance (oil changes, level checks, overhauls, adjustments and thorough cleaning) will allow it to be used in the safest and most profitable way.

Check the following items first:

- **High temperature components:** Check that airborne particles such as straw, grass, wood chips etc., do not accumulate in high temperature areas. Clear debris from around the engine and the exhaust system. For tools attached to the front or the side of the tractor, inspect and clean the areas around the attachments for the various supports.
- **Brakes:** Check that the brakes work properly. Check the operation of the hand brake and foot brake.
- **Steering:** Check the operation of the hydrostatic steering.
- **Transmission:** Check the transmission fluid level (especially if external services are used).
- **Hydraulic system:** Check the condition of the system (unions, pipes, hoses), particularly the hoses to the steering actuators.
- **Electrical system:** Check the condition of the electrical system (batteries, wiring, headlights, indicator lights, hazard lights, rotating beacons, windscreen wipers, etc.).
- **Lighting - indicators:** All lighting and indicating equipment must not only be in working order, but must be fully visible; clean them. Carry a spare set of bulbs. Replace any defective element.

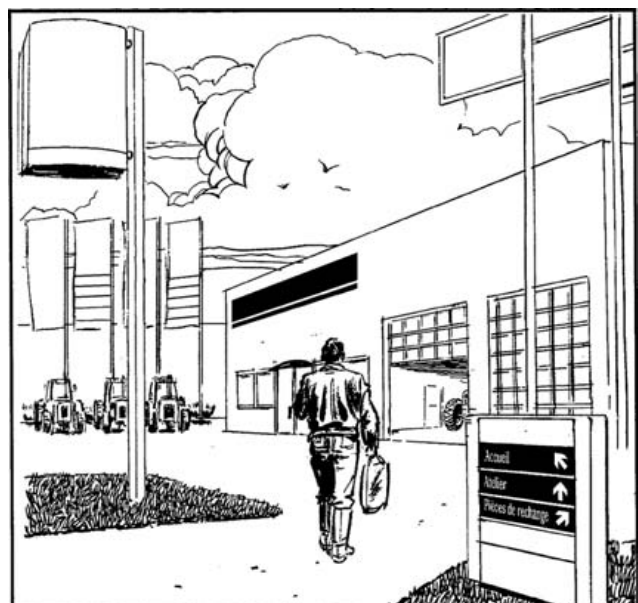
Only fit genuine CLAAS parts. The CLAAS network is at your disposal for any parts or products required to keep your tractor in perfect working order.



001hsn05



001hsn06



001hsn07



ADJUSTMENT OR MAINTENANCE - REPAIRS

Only carry out operations well within your capabilities. A number of simple adjustments are described in the manual (clutch and brake free travel, etc.). Never attempt to work on your tractor unless you have perfectly understood the procedure and have all the basic equipment required.

Special equipment is required to remove or install major components (the cab, engine, transmission, front axle); this equipment represents the only guarantee of safe working conditions and successful repair.

The cab must be removed only with CLAAS approved equipment.

The CLAAS network is at your disposal for all this work. It has the approved special tooling, the skills required and genuine CLAAS parts. If you have any doubts at all, call in your CLAAS agent.



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AXLE STANDS

If the tractor is to be placed on axle stands, always work on a flat, horizontal, hard surface.

Check the axle stands are suitable for the load. For this operation, check the tractor's front and rear weights in chapter K.

4-4-wheel drive tractor:

If the rear axle is on stands, do not start the engine:

Risk of the tractor moving if the brakes are activated (foot brake or hand brake).

If the engine has to be started, the front axle must also be supported on axle stands.

HYDRAULIC SYSTEMS

Transmission oil: Transmission oil is used as hydraulic fluid for the linkage and external services.

Oil escaping from a pipe under pressure can have sufficient force to penetrate the skin.

Should an injury be caused by oil under pressure, see a doctor immediately. Serious infection can occur if the wound is not treated immediately.

Consequently, always use a piece of wood or cardboard to find a leak on a pipe under pressure: never use your hand!



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As a general rule: Make sure the unions are tight and the pipes in good condition before putting the system under pressure.

Never loosen a union when the circuit is under pressure.

For any repairs to the hydraulic system, stop the engine and lower the implement to the ground.

Let the oil cool down before working on the system, to prevent any risk of getting burnt when the oil flows.

Maintenance - greasing: Always stop the engine.

ELECTRICAL SYSTEM

Knowledge and skill are required to work on the electrical system. If the need arises (installation of miscellaneous accessories, radio etc.) contact your approved CLAAS repair agent.

Moreover:

- Always disconnect the battery negative terminal before working on the electrical system.
- Never weld on the tractor or on a towed implement.
- Never "patch-up" electric circuits.
- **Never replace a blown fuse with a larger calibre fuse; you could cause a fire.**
- **Never carry out work on components such as the alternator or the fan motor when the engine is running.**
- **If you have to carry the battery, ensure that the acid does not contact the skin; protect your eyes from splashing.**

FUEL

RE-FUELLING

Before filling the tank, always carefully clean around the fuel cap to remove any pieces of straw, twigs, etc. which could help start and then propagate a fire.

Moreover:

- **Never fill the tanks when the engine is running or near a naked flame.**
- **Do not smoke when filling with fuel.**

COOLANT

Do not work on the cooling system when the engine is hot (risk of burns).



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ROAD USE - USE FOR TRANSPORT

Always comply with THE LEGISLATION on the use of agricultural tractors on the road. Never exceed the maximum transportation speed of the machine.

If in doubt, consult the police or insurance companies.

Whenever possible, avoid using busy roads.

When transporting equipment on a public road, use the warning device required by the highway code.

All indicators must be clean and in working order.

The working lights must not be lit.

Brake pedals must be coupled together.

Do not use the differential lock on the road or in bends.

If carrying an additional passenger, the tractor must be fitted with a passenger seat.

Do not carry passengers except on the seat provided for the purpose.

Reduce speed on rough roads or tracks.

Towing: If the trailer has an independent brake system, connect the brake pipe to the brake valve coupling and not to the auxiliary spool valve.

If it is necessary to stop on the road in a position that causes a traffic hazard (insufficient visibility), it is mandatory to switch the hazard warning lights on.

When transporting mounted equipment, set the linkage to the raised position. If the tool has transport wheels, use them.

Slow down before changing direction.

When travelling downhill, always remain in gear: never declutch. The gear selected should be the same as would be used to climb an equivalent gradient.



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001hsn13

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