MF2400

CHAPTER

2

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Operation and maintenance manual

TRACTOR IDENTIFICATION

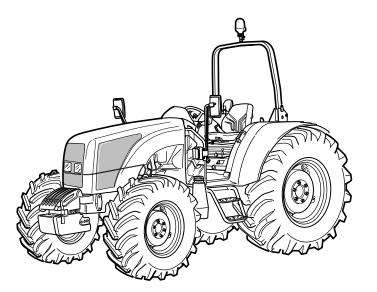
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NOTES

Valid for the following tractor models:

For tractors with cab or with ROPS frame, model:

MF2430 STD-GE MF2435 STD-GE MF2440 STD-GE



INSTRUMENTS AND CONTROLS

INTRODUCTION, WARRANTY AND SAFETY

OPERATION

ROUTINE MAINTENANCE

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Publication N. 3676 146 M1 Printed 2004

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Chapter 2

Introduction, warranty and safety notes

INTRODUCTION

NOTE: This book is published for worldwide distribution, and the availability of equipment shown either as basic or accessory may vary according to the territory in which the tractor is to be operated. Full details of equipment available in your area can be obtained from your Dealer.

The purpose of this book is to enable the owner and driver to operate the tractor in a safe manner. Providing that the instructions are followed carefully, the tractor will give years of service in our tradition.

The installation of the product by the Dealer gives the opportunity to ensure that these operating and maintenance instructions are understood. Always consult your Dealer if you do not understand any part of this book. It is important that these instructions are understood and observed. Daily maintenance should become a routine, and a record of hours in service should be kept.

When new parts are required it is important that only genuine service parts are used. Our authorized Dealers supply genuine parts and can give advice regarding their fitment and use. Extensive damage may occur as a result of the fitment of parts of inferior quality. Customers are advised to buy their service parts only from an authorized Dealer.

Owing to wide variations in operating conditions, it is impossible for the Company to make comprehensive or definitive statements in its publications regarding performance or methods of use of its machines, or to accept liability for any loss or damage which may result from these statements, or from any errors or omissions. If the tractor is to be used for abnormal conditions which may be detrimental (e.g. deep water or paddy fields) consult your Dealer for special instructions, or the warranty may be invalidated.

These tractors are designed solely for use in customary agricultural operations (intended use).

Use in any other way is considered as contrary to the intended use. The tractor manufacturer accepts no liability for any damage or injury resulting from misuse and these risks must be borne solely by the user.

Compliance with, and strict adherence to, the conditions of operation, service and repair as specified by the manufacturer also constitute essential elements for the intended use.

These tractors should be operated, serviced and repaired only by persons familiar with all their particular characteristics and who are acquainted with the relevant safety rules (accident prevention).

Customers are strongly advised to use an official authorized Dealer in connection with any service problems and adjustments that may occur.

WARRANTY, PRE-DELIVERY and INSTALLATION

The Company, when selling new goods to their Dealers, gives a warranty which, subject to certain conditions, guarantees that the goods are free from defects in material and workmanship. Since this book is published for worldwide circulation, it is impossible to detail the exact terms and conditions of warranty that apply to a retail customer in any particular country. Purchasers of new equipment should request full details from their supplying Dealer.

In accordance with the Company policy of continuous improvement to its machines, alterations in the specifications of machines may be made at any time without notice. The Company accepts no responsibility for discrepancies which may occur between the specifications of its machines and the descriptions thereof contained in its publications.

A Dealer is required to carry out certain activities when supplying a new tractor. These consist of a full pre-delivery inspection to ensure that the tractor supplied is ready for immediate use, and full instruction in the basic principles of operation and maintenance of the tractor. These instructions will cover instruments and controls, routine maintenance and safety precautions. All persons who will be concerned with the operation and maintenance of the machine should be present for these instructions.

NOTE: The tractor manufacturer will not accept responsibility for any claim resulting from the fitment of non-approved parts or attachments, or unauthorized modification or alteration.

WARRANTY PROCEDURE

Correct installation, coupled with regular maintenance, will do much to prevent breakdowns. If, however, operating trouble is experienced during the warranty period, the following procedure must be adopted:-

Immediately notify the Dealer from whom you purchased the tractor, quoting the Model and Serial Number. It is most important that there should be no delay, and you should realise that, even where the original failure is covered by warranty, if the failure is not repaired immediately, warranty cover may not apply.

Provide your Dealer with as much background information as you can. It will help him to know how many hours service has been achieved, the type of work on which you are engaged and the symptoms of the trouble.

It should be noted that normal maintenance services such as tuning, brake/clutch adjustments, and the supply of materials used to service the tractor (oil, filters, fuel and antifreeze) are not covered by terms of the warranty.

PARTS WARNING

The fitment of non genuine parts may result in a part of substandard quality being used. The tractor manufacturer will not take the responsibility for any loss, damage or liability resulting from the fitment of such parts, and, if fitted during the normal warranty period the manufacturer's guarantee may be invalidated.

IF YOU MOVE

Only the official Dealer from whom you purchased the tractor is responsible for the protection afforded by your warranty and, where possible, you should always take the tractor to him for repair. If, however, you move to another area or if your tractor should be working temporarily at some distance from the Dealer from whom it was purchased, you are recommended to obtain from the original Dealer the name and address of the Dealer nearest to your new location and to ask for arrangements to be made for outstanding service warranty commitments to be transferred to the latter. If you have left the area in which the original Dealer operates and have not made arrangements with your new Dealer, the latter will readily provide assistance in an emergency but you will be charged at normal rates for any work undertaken unless:

- a. You make it clear that the warranty has not expired, and
- b. You give the repairing Dealer the opportunity to make suitable arrangements with the retailing Dealer.

SERVICE AFTER WARRANTY

During the warranty period, you should have all your repairs and maintenance performed by your Dealer. This ensures that a detailed check is kept on the progress and performance of your new tractor.

In order to obtain the best results from your tractor, it is important that regular maintenance and service checks continue after the warranty period has expired. Make use of your local Dealer for all major tractor services; a trained engineer will spot any problems between one service and the next.

The mechanics are regularly trained and updated on the product, servicing techniques and the use of modern service tools and diagnostic equipment. They receive regular Service Bulletins, have all Workshop Manuals and other such technical information to ensure that the repair or service is to the standard required.

SAFETY

The safety of the operator is one of the main concerns in designing and developing a new tractor. Designers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds thought and a more careful approach to handling farm machinery and implements.

Read and implement the safety instructions detailed in the next section of this book.



WARNING: In some of the illustrations used in this Operator Instruction Book, panels or guards may bave been removed for clarity. Never operate the tractor whitout these components in position. If the removal of panels or guards is necessary to make a repair, they MUST be replaced before operation.

SAFETY ALERT SYMBOLS AND TERMS

This safety alert symbol means ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!



The safety alert symbol identifies important safety messages on machines, safety signs, in manuals or elsewhere. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

Why is SAFETY important to you?

*** ACCIDENTS DISABLE and KILL ***

*** ACCIDENTS** are COSTLY *****

\star ACCIDENTS can be AVOIDED \star

SAFETY - TRACTOR and IMPLEMENT

- The tractor is a source of power Mechanical and hydraulic.
- On its own, the tractor is of little practical value. Only when used in conjunction with an implement or other attachment does it become a working unit.
- This instruction book is compiled to cover those safe working practices that are associated with the base tractor operation.
- It does not cover all operation and safety instructions relevant to all known implements and attachments that may be fitted at the time of tractor delivery or at some future date.
- It is essential that operators use and understand the relevant instruction manual of such implements and attachments.

SAFETY - INTRODUCTION

This safety section of your Operator Instruction Book is intended to point out some of the basic safety situations which may be encountered during the normal operation and maintenance of your PLATFORM or CAB tractor, and to suggest possible ways of dealing with these situations. This section is **NOT** a replacement for other safety practices featured in other sections of this book.

Additional precautions may be necessary depending on attachments used and conditions at the work site or in the service area. The tractor manufacturer has no direct control over tractor application, operation, inspection, lubrication or maintenance. Therefore is is YOUR responsibility to use good safety practices in these areas.

SAFETY - A WORD TO THE OPERATOR

It is **YOUR** responsibility to read and understand the safety section in this manual before operating your tractor. You must follow these safety instructions that take you step by step through your working day.

In reading this section, you will note that illustrations have been used to highlight certain situations. Each illustration is numbered and the same number appears in the text in parenthesis. This number is placed at the end of the written text that refers to the illustration and is made up of two digits, separated by a hyphen: the first digit designates the chapter, the second one the figure number in that chapter (e.g.: Fig. 2-34 = Figure 34 of chapter 2).

Remember that **YOU** are the key to safety. Good safety practices not only protect you, but also the people around you. Study the features in this manual and make them a working part of your safety program.

Keep in mind that this safety section is written only for this type of machine. Practice all other usual and customary safe working precautions, and above all -REMEMBER - SAFETY IS YOUR RESPONSIBILITY. YOU CAN PREVENT SERIOUS INJURY OR DEATH.

SAFETY - DANGER, WARNING and CAUTION

Whenever you see the words and symbols shown below, used in this book and on decals, you MUST take note of their instructions as they relate to personal safety.



DANGER: The symbol and the word DANGER indicate an imminently bazardous situation which, if not avoided, will result in DEATH OR VERY SERIOUS INJURY.



WARNING: The symbol and the word WARNING indicate a potentially bazardous situation. If the instructions or procedures are not correctly followed it could result in DEATH OR SERIOUS INJURY.



CAUTION: This symbol and the word CAUTION indicate a potentially bazardous situation which, if not avoided, may result in MINOR INJURY.

IMPORTANT: The word IMPORTANT is used to identify special instructions or procedures which, if not strictly observed, could result in damage to, or destruction of the machine, process or its surroundings.

NOTE: The word NOTE is used to indicate points of particular interest for more efficient and convenient repair or operation.

SAFETY - DECALS



WARNING: DO NOT remove or obscure Danger, Warning, Caution or Instruction decals.

Replace any Danger, Warning, Caution or Instruction Decals that are not readable or are missing. Replacement decals are available from your Dealer in the event of loss or damage. The actual location of these Safety Decals is illustrated at the end of this section.

If a used tractor has been purchased, refer to the illustrations at the end of this section to ensure that all the safety warning decals are in the correct position and are readable.

SAFETY - FOLLOW A SAFETY PROGRAM

For safe operation

For safe operation of an agricultural tractor, you must be a qualified and authorized operator. To be qualified you must understand the written instructions supplied in this Operator Instruction Book, have training, and know the safety rules and regulations for the job.

Some regulations specify, for example, that no one under the age of 18 years (according to European Rules) may operate power machinery. This includes tractors. It is your responsibility to know what these regulations are, and obey them, in the operating area or situation.

These will include, but are not limited to, the following instructions for safe tractor operations.



WARNING: An operator should not use alcohol or drugs which can change his/ber alertness or co-ordination. An operator on prescription or 'over the counter' drugs needs medical advice on whether or not he or she can properly operate machines.

Observe the following precautions

- NEVER allow children or unqualified persons to operate your tractor. Keep others away from your area of work.
- Securely fasten your seat belt when the tractor has a safety frame in the upright position or is fitted with a cab.
- Where possible, avoid operating the tractor near ditches, embankments and holes. Reduce speed when turning, crossing slopes, and on rough, slippery, or muddy surfaces.
- Stay off slopes too steep for safe operation.
- Watch where you are going, especially at row ends, on roads, and around trees.
- DO NOT permit others to ride on the tractor or the implement unless an approved passenger seat is fitted.
- Hitch only to the drawbar and recommended hitch points, and never above the centre line of the rear axle.
- Operate the tractor smoothly no jerky turns, starts or stops. When the tractor is stopped, apply the parking brake securely.
- Never modify or remove any part of the equipment and never use attachments unless they are properly matched to your tractor.

SAFETY FRAME

A Safety Structure and seat belt is fitted as standard equipment to the platform tractor at the time of factory assembly. If the safety frame was deleted by the original purchaser or has been removed, it is recommended that you equip your tractor with a Safety Structure and a seat belt. Safety frames are effective in reducing injuries during overturn accidents. A tractor overturning without safety frame can result in serious injury or death (Fig. 2-1).

Depending on laws in force in the various markets, a seat belt may be installed. Always raise the safety frame before fastening the seat belt.

If a fold-down safety frame is installed, DO NOT wear a seat belt when the safety frame is in the folded down position. NEVER keep the safety frame in the folded down position when working with the tractor.

Operation

- Before using the tractor ensure that the safety frame frame is not damaged, that it is securely fastened to the tractor, and, if a hinged section is fitted, that it is in the raised position and secured.
- If the safety frame has been removed from the tractor, or folded down for a specific operation, it must be refitted or erected immediately using the proper hardware and applying the recommended torque value.
- DO NOT ATTACH chains, ropes or cables to the safety frame for pulling purposes; this will cause the tractor to tip backwards. Always pull from the tractor drawbar.
- If a seat belt is installed, always wear your seat belt adjusted snugly except when operating with a folded down safety frame or if the safety frame has been removed (Fig. 2-2).
- Check che seat belt for damage. A damaged seat belt must be replaced (Fig. 6).

Damage to the safety frame

If the tractor has rolled over or the safety frame has been damaged (such as striking an overhead object during transport), the safety frame must be replaced to provide the original degree of protection.

After an accident, check for damage to the safety frame, operator's seat, seat belt and seat belt mountings. Before you operate the tractor, replace all damaged parts.

DO NOT WELD, DRILL, BEND OR STRAIGHTEN THE SAFETY FRAME. To do so reduces the protection it offers.

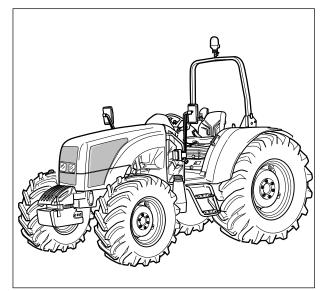


Fig.2-1

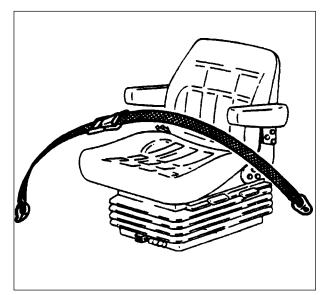


Fig.2-2

SAFETY - CAB

The cab has been designed for fitment to this series of tractors and meets all the legal requirements of cab safety and noise levels.

The cab conforms to the various international safety standards. The cab must NEVER be drilled, or modified to install accessories or implements. Welding components to the cab or repairing damaged components is NOT PERMITTED. Never attach chains or ropes to the main frame of the cab for pulling purposes.

2

SAFETY - PREPARE FOR SAFE OPERATION

Protect yourself

Wear all the protective clothing and personal safety devices issued to you or called for by job conditions. Don't take chances (Fig. 2-3).

You may need:

- A hard hat.
- Safety glasses, goggles or face shield.
- Hearing protection.
- Respirator or filter mask.
- Inclement weather clothing.
- Reflective clothing.
- Heavy gloves (neoprene for chemicals, leather for rough work).
- Safety shoes.

DO NOT wear loose clothing, jewellery or other items and tie up long hair which could catch on controls or other parts of the tractor.

Learn where fire extinguishers and first-aid or emergency equipment is kept and where to get help in a hurry. Make sure you know how to use this equipment (Fig. 2-5).

Know your equipment

Know your tractor. Know how to operate all equipment on your machine and the implements and attachments used with it. Know the purpose of all the controls, gauges and dials. Know the rated load capacity, speed range, braking and steering characteristics, turning radius, and operating clearances.

Keep in mind that rain, snow, ice, loose gravel, soft ground, etc. can change the way your tractor operates. *Under poor conditions, slow down and be extra careful, engage four-wheel drive, if fitted.*

Study the **DANGER**, **WARNING** or **CAUTION** safety signs on your tractor and the information signs also.

READ THIS OPERATOR INSTRUCTION BOOK BEFORE STARTING THE ENGINE.

STUDY IT BEFORE YOU START WORK (Fig. 2-4).

IF THERE IS SOMETHING IN THE MANUAL YOU DON'T UNDERSTAND, ASK SOMEONE (such as your equipment Dealer) TO EXPLAIN IT TO YOU.

IMPORTANT: This manual covers general safe practices for agricultural tractors. It must always be kept with the tractor. For further copies contact your Dealer.

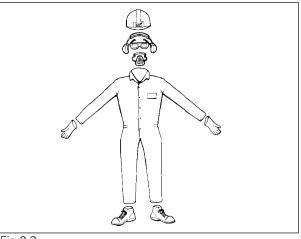


Fig.2-3





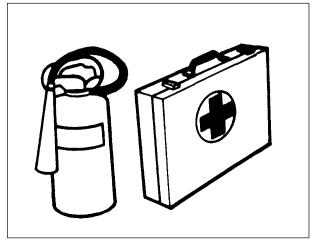


Fig.2-5

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