



**MASSEY FERGUSON**

# MF 3200

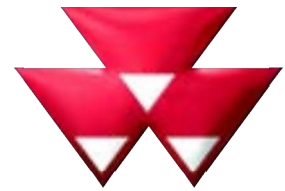
Series Corn Header

Models: 3206 / 3206C / 3212F / 3212FC

## SERVICE MANUAL

**FROM MASSEY FERGUSON**

**Workshop Service Manual**



**MASSEY FERGUSON**

# **3200 Series Corn Header**

**3206**

**3206C**

**3212F**

**3212FC**



MASSEY FERGUSON

**CALIFORNIA  
Proposition 65 Warning**

**WARNING: Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, or other reproductive harm.**

**WARNING: Battery posts, terminals and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm. Wash hands after handling.**

# 3200 Series Corn Header

<b>1 General</b>	1-1
<b>1.1 General information</b>	1-3
1.1.1 Introduction to this service manual	1-3
1.1.2 Units of measurement	1-3
1.1.3 Table of contents	1-3
1.1.4 Page numbers	1-3
1.1.5 Intended use	1-3
1.1.6 Proper disposal of waste	1-3
<b>1.2 Safety</b>	1-5
1.2.1 Safety symbol	1-5
1.2.2 Safety messages	1-5
1.2.3 Information messages	1-5
1.2.4 Safety signs	1-5
1.2.5 A word to the technician	1-6
1.2.6 The service manual	1-7
1.2.7 Travel on public roads	1-7
<b>1.3 Operation</b>	1-9
1.3.1 Prepare for operation	1-9
1.3.2 General information	1-9
1.3.3 Personal protective equipment	1-10
1.3.4 Seat instructions	1-11
1.3.5 Shield and guards	1-11
1.3.6 Exhaust warning	1-12
1.3.7 Flying debris	1-12
1.3.8 Handrails	1-12
1.3.9 Agricultural chemicals	1-12
<b>1.4 Cylinder stops</b>	1-14
1.4.1 Engaging the header lift cylinder stop	1-14
1.4.2 Disengaging the header lift cylinder stop	1-14
<b>1.5 Maintenance</b>	1-15
1.5.1 General maintenance information	1-15
1.5.2 Fire prevention and first aid	1-16
1.5.3 High pressure leaks	1-17
1.5.4 Tire safety	1-18
1.5.5 Replacement parts	1-18
<b>1.6 Specifications</b>	1-19
1.6.1 Dimensions and weights	1-19
1.6.2 Lubrications specifications	1-19
<b>1.7 Lubrication details</b>	1-20
1.7.1 Service schedule	1-20
1.7.2 During lubrication	1-20
1.7.3 Sealed bearings	1-20
1.7.4 Lubrication fittings	1-21
<b>1.8 Troubleshooting</b>	1-23
1.8.1 Header troubleshooting	1-24
<b>1.9 Bolt torque values</b>	1-25
<b>1.10 Conversion table</b>	1-27
<b>1.11 Machine identification</b>	1-30
1.11.1 Serial number plate	1-30
1.11.2 Serial number description	1-30

<b>2 Augers</b> .....	<b>2-1</b>
<b>2.1 Auger</b> .....	<b>2-3</b>
2.1.1 Remove the auger safety clutch .....	2-3
2.1.2 Install the auger safety clutch .....	2-4
2.1.3 Remove the auger bearing .....	2-4
2.1.4 Install the auger bearing .....	2-6
<b>3 Electrical system</b> .....	<b>3-1</b>
3.1 Basic troubleshooting procedures .....	0
3.1.1 Tools .....	0
3.1.2 Continuity check .....	0
3.1.3 Voltage check .....	0
<b>3.2 Connectors</b> .....	<b>3-3</b>
3.2.1 Check a connector .....	3-3
3.2.2 Terminal numbers .....	3-3
3.2.3 Pins and sockets .....	3-4
3.2.3.1 Dielectric grease .....	3-5
<b>4 Row units</b> .....	<b>4-1</b>
<b>4.1 Gathering chain</b> .....	<b>4-3</b>
4.1.1 Remove the gathering chain .....	4-3
4.1.2 Install the gathering chain .....	4-3
4.1.3 Remove the gathering chain tensioner .....	4-3
4.1.4 Install the gathering chain tensioner .....	4-4
<b>4.2 Snapping roll</b> .....	<b>4-5</b>
4.2.1 Remove the snapping roll .....	4-5
4.2.2 Install the snapping roll .....	4-5
<b>4.3 Stalk chopper</b> .....	<b>4-6</b>
4.3.1 Remove the stalk chopper .....	4-6
4.3.2 Install the stalk chopper .....	4-7
4.3.3 Remove the first bearing for the stalk chopper .....	4-9
4.3.4 Install the first bearing for the stalk chopper .....	4-11
4.3.5 Remove the second bearing for the stalk chopper .....	4-13
4.3.6 Install the second bearing for the stalk chopper .....	4-14
4.3.7 Remove the third bearing for the stalk chopper .....	4-15
4.3.8 Install the third bearing for the stalk chopper .....	4-18
<b>4.4 Snapping unit</b> .....	<b>4-20</b>
4.4.1 Remove the snapping unit gearbox .....	4-20
4.4.2 Install the snapping unit gearbox .....	4-21
4.4.3 Remove the input gearbox for the snapping unit .....	4-23
4.4.4 Install the input gearbox for the snapping unit .....	4-23
4.4.5 Disassemble the gearbox for the snapping unit .....	4-24
4.4.6 Assemble the gearbox for the snapping unit .....	4-29
4.4.7 Disassemble the input gearbox for the snapping unit .....	4-34
4.4.8 Assemble the input gearbox for the snapping unit .....	4-37
4.4.9 Remove the primary input gearbox .....	4-39
4.4.10 Install the primary input gearbox .....	4-40
4.4.11 Remove the hex shaft .....	4-40
4.4.12 Install the hex shaft .....	4-41
4.4.13 Remove the main output gearbox .....	4-42
4.4.14 Install the main output gearbox .....	4-43
4.4.15 Disassemble the gearbox for the primary input and output .....	4-44
4.4.16 Assemble the gearbox for the primary input and output .....	4-47
4.4.17 Remove the hollow shaft for the input gearbox .....	4-49
4.4.18 Install the hollow shaft for the input gearbox .....	4-50
4.4.19 Remove the snapping unit .....	4-51

---

4.4.20 Install the snapping unit . . . . .	4-53
<b>4.5 Snout . . . . .</b>	<b>4-55</b>
4.5.1 Remove the plastic divider . . . . .	4-55
4.5.2 Install the plastic divider . . . . .	4-56
<b>4.6 Automatic header height control . . . . .</b>	<b>4-57</b>
4.6.1 Remove the automatic header height control (AHHC) assembly . . . . .	4-57
4.6.2 Install the automatic header height control (AHHC) assembly . . . . .	4-57
4.6.3 Remove the electronic sensor . . . . .	4-58
4.6.4 Install the electronic sensor . . . . .	4-58
4.6.5 Remove the gas strut . . . . .	4-58
4.6.6 Install the gas strut . . . . .	4-59
4.6.7 Remove the globe joint and rod . . . . .	4-59
4.6.8 Install the globe joint and rod . . . . .	4-59
4.6.9 Calibrate the automatic header height control (AHHC) . . . . .	4-61
<b>5 Special tools . . . . .</b>	<b>5-1</b>
<b>5.1 Special tools . . . . .</b>	<b>5-3</b>
<b>6 Diagrams . . . . .</b>	<b>6-1</b>
<b>6.1 Electrical schematic . . . . .</b>	<b>6-3</b>
<b>6.2 Hydraulic schematics . . . . .</b>	<b>6-4</b>
6.2.1 Hydraulic folding schematic . . . . .	6-4
6.2.2 Hydraulic unfolding schdematic . . . . .	6-6
<b>7 Index . . . . .</b>	<b>Index-1</b>

# 1. General

<b>1.1 General information</b>	<b>1-3</b>
1.1.1 Introduction to this service manual	1-3
1.1.2 Units of measurement	1-3
1.1.3 Table of contents	1-3
1.1.4 Page numbers	1-3
1.1.5 Intended use	1-3
1.1.6 Proper disposal of waste	1-3
<b>1.2 Safety</b>	<b>1-5</b>
1.2.1 Safety symbol	1-5
1.2.2 Safety messages	1-5
1.2.3 Information messages	1-5
1.2.4 Safety signs	1-5
1.2.5 A word to the technician	1-6
1.2.6 The service manual	1-7
1.2.7 Travel on public roads	1-7
<b>1.3 Operation</b>	<b>1-9</b>
1.3.1 Prepare for operation	1-9
1.3.2 General information	1-9
1.3.3 Personal protective equipment	1-10
1.3.4 Seat instructions	1-11
1.3.5 Shield and guards	1-11
1.3.6 Exhaust warning	1-12
1.3.7 Flying debris	1-12
1.3.8 Handrails	1-12
1.3.9 Agricultural chemicals	1-12
<b>1.4 Cylinder stops</b>	<b>1-14</b>
1.4.1 Engaging the header lift cylinder stop	1-14
1.4.2 Disengaging the header lift cylinder stop	1-14
<b>1.5 Maintenance</b>	<b>1-15</b>
1.5.1 General maintenance information	1-15
1.5.2 Fire prevention and first aid	1-16
1.5.3 High pressure leaks	1-17
1.5.4 Tire safety	1-18
1.5.5 Replacement parts	1-18
<b>1.6 Specifications</b>	<b>1-19</b>
1.6.1 Dimensions and weights	1-19
1.6.2 Lubrications specifications	1-19
<b>1.7 Lubrication details</b>	<b>1-20</b>
1.7.1 Service schedule	1-20
1.7.2 During lubrication	1-20
1.7.3 Sealed bearings	1-20
1.7.4 Lubrication fittings	1-21
<b>1.8 Troubleshooting</b>	<b>1-23</b>
1.8.1 Header troubleshooting	1-24
<b>1.9 Bolt torque values</b>	<b>1-25</b>
<b>1.10 Conversion table</b>	<b>1-27</b>
<b>1.11 Machine identification</b>	<b>1-30</b>
1.11.1 Serial number plate	1-30
1.11.2 Serial number description	1-30

## 1.1 General information

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### 1.1.1 Introduction to this service manual

---

This service manual gives information from engineering tests, operating data, and the latest service techniques at the time of publication. Read this service manual carefully before doing any service on the machine.

The photos and illustrations used in this service manual were current at the time of publication. Production changes can cause machines to vary from the photos and the illustrations. The manufacturer reserves the right to redesign and change machines as necessary without notification.



**WARNING:**

**Some pictures in this manual show the machine with shields or guards removed to permit for a better view of the subject of the picture. All shields and guards must be in position before operating the machine.**

Machine movement when in normal use determines right-hand and left-hand.

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### 1.1.2 Units of measurement

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Measurements are given in metric units followed by the equivalent in US units. Hardware sizes are given in millimeters for metric hardware and inches for US hardware.

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### 1.1.3 Table of contents

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This manual has a table of contents at the front. The table of contents shows the divisions. The individual divisions also have a table of contents.

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### 1.1.4 Page numbers

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All pages have two numbers, such as 01-25. The first number shows the division. The second number shows the page in the division.

Page numbers occur on the lower right-hand or lower left-hand corner of each page.

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### 1.1.5 Intended use

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This machine is designed solely for use in customary agricultural operations.

Do not use this machine for any application or purpose other than those described in this manual. The manufacturer accepts no liability for damage or injury resulting from misuse of this machine.

Compliance with the conditions of operation, service and repair as specified by the manufacturer constitute essential elements for the intended use of this machine.

This machine should be operated, serviced and repaired only by qualified persons familiar with its characteristics and familiar with the relevant safety rules and procedures.

All generally recognized safety regulations and road traffic regulations must be obeyed at all times.

Any unauthorized modifications performed on this machine will relieve the manufacturer of all liability for any resulting damage or injury.

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### 1.1.6 Proper disposal of waste

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Improper disposal of waste can pollute the environment and ecology. A few examples of potentially harmful equipment waste can include, but not limited to, items such as oil, fuel, coolant, brake fluid, filters, battery chemicals, tires, etc.

Use leak proof containers when draining fluids. Do not use food or beverage containers to collect waste fluids, as food or beverage container(s) may mislead someone into drinking from them.

---



## *1. General*

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Do not pour or spill waste onto the ground, down a drain, or into any water source.

Air conditioning refrigerants escaping into the air can damage the Earth's atmosphere. Government regulations may require a certified air conditioning service center to recover and recycle used air conditioning refrigerants.

Inquire with local environmental or recycling center on the proper way to recycle or dispose waste.

## 1.2 Safety

### 1.2.1 Safety symbol

The safety symbol tells you about a dangerous area!

Look for the safety symbol in this manual and on the machine. The safety symbols tell you that there is important safety instructions in the manual.



Fig. 1

### 1.2.2 Safety messages

The words DANGER, WARNING or CAUTION are used with the safety symbol. Learn these safety messages and obey the recommended precautions and safety instructions.



**DANGER:**  
If you do not obey the recommended precautions and safety instructions, **DEATH OR INJURY will occur.**



**WARNING:**  
If you do not obey the recommended precautions and safety instructions, **DEATH OR INJURY can occur.**



**CAUTION:**  
If you do not obey the recommended precautions and safety instructions, **INJURY can possibly occur.**



Fig. 2

### 1.2.3 Information messages

The words important and note are not related to personal safety, and are used to give information about the operation and servicing of the machine.

**IMPORTANT:** Identifies special instructions or procedures which, if not followed, can cause damage to the machine, the process, or the area around the machine.

**NOTE:** Information to make procedures easier.

### 1.2.4 Safety signs



**WARNING:**

Do not remove the safety signs. Replace safety signs that can not be read, are damaged, or are missing. Clean the machine surface with a weak soap and water solution before replacing the safety signs. Replacement safety signs are available from your dealer.

Always make sure safety signs are in the correct locations and can be read. Illustrations of safety sign locations are at in this section.

Keep the safety signs clean. If it is necessary, use a weak soap and water solution.

### 1.2.5 A word to the technician

Read and understand the safety section in this service manual before operating or servicing the machine. Read and understand the safety sections in the manuals for all attachments before operating or servicing attachments. The technician has the key to safety. Good safety practices protect everyone.

Study the safety information in this service manual. Make the safety information a working part of the safety program. The safety information in this service manual applies specifically to this type of machine. Always do all other usual and customary safe working precautions. Remember - The technician has the responsibility for safety. Good safety practices can prevent serious injury or death.

The safety section points out some basic safety situations that can occur during the operation and maintenance of the machine. The safety section also suggests possible ways to deal with these situations. The safety section does not replace safety practices in other parts of this service manual.

Practice good safety to help prevent injury or death.

Learn how to operate the machine and how to use the controls correctly.

Do not let other persons operate the machine without instruction and training.

Follow all safety precautions and instructions in the manuals and on safety signs affixed to the machine and all attachments.

Use only approved attachments and equipment.

Make sure the machine has the correct equipment needed by the local regulations.



Fig. 3



**WARNING:**

**An operator should not use alcohol or drugs which can affect their alertness or coordination. An operator on prescription or 'over the counter' drugs needs medical advice on whether or not they can properly operate machines. If any attachments used on this equipment have a separate Operator Manual, see that manual for other important safety information.**

## 1.2.6 The service manual

Read the table of contents and basic layout. Become familiar with all parts of this service manual. This service manual gives the technician very important information.

Machine movement when in normal use determines right-hand and left-hand.

This manual covers general safety practices for this machine.

The photos, illustrations, and data used in this manual were current at the time of printing. Inline production changes can make machines vary from the information in the service manual. The manufacturer reserves the right to redesign and change the machine as necessary without notification.



### **WARNING:**

**In some of the illustrations and photos used in this manual, shields or guards may have been removed for clarity. Never operate the machine with any shields or guards removed. If the removal of shields or guards is necessary to make a repair, they must be replaced before operation.**

## 1.2.7 Travel on public roads

Make sure you understand the speed, brakes, steering, stability, and load characteristics of this machine before you travel on public roads.

Use good judgment when traveling on public roads. Maintain complete control of the machine at all times. Never coast down hills.

The maximum speed of farm equipment is governed by local regulations. Adjust travel speed to maintain control at all times.

Familiarize yourself with and obey all road regulations that apply to your machine. Consult your local law enforcement agency for local regulations regarding movement of farm equipment on public roads. Use head lamps, flashing warning lamps, tail lamps and turn signals, day and night, unless prohibited by local law.

Make sure all the flashers are operating prior to driving on the road. Make sure reflectors are correctly installed, in good condition, and wiped clean. Make sure the Slow Moving Vehicle (SMV) emblem is clean, visible, and correctly mounted on the rear of the machine.

Always travel with the loader as low as possible. Do not drive with loader up.

Lock brake pedals together (if equipped with dual brake pedals) so both wheel brakes will be applied at the same time.

Raise implements to transport position and lock in place. Place all implements into narrowest transport configuration.

Disengage the power take-off and differential lock.

With towed implements, use a proper hitch pin with a clip retainer and safety transport chain.

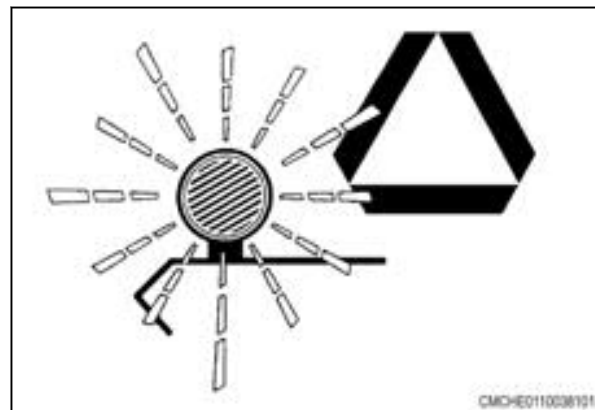


Fig. 4

## 1. General

Be aware of other traffic on the road. Keep well over to your own side of the road and pull over, whenever possible, to let faster traffic pass.

Be aware of the overall width, length, height, and weight of the machine. Be careful when transporting the machine on narrow roads and across narrow bridges.

Watch for overhead wires and other obstructions. Avoid contact with electrical power lines. Contact with electrical power lines can cause electrical shock, resulting in very serious injury or death.

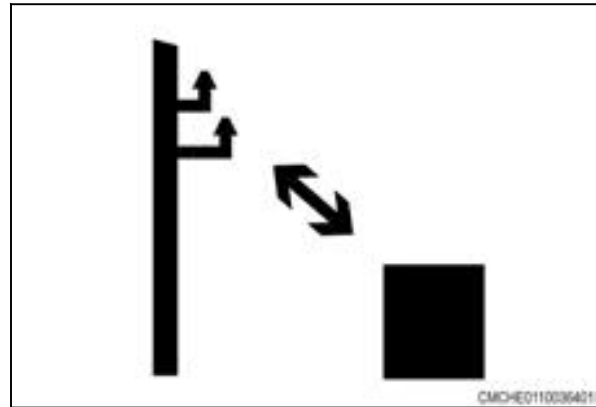


Fig. 5

## 1.3 Operation

### 1.3.1 Prepare for operation

Read and understand all operating instructions and precautions in this manual before operating or servicing the machine.

Make sure you know and understand the positions and operations of all controls. Make certain all controls are in neutral and the park brake is applied before starting the machine. Make sure the steering wheel is centered and locked.

Make certain all people are well away from your area of work before starting and operating the machine. Check and learn all controls in an area clear of people and obstacles before starting your work. Be aware of the machine size and have enough space available to allow for operation. Never operate the machine at high speeds in crowded places.

Emphasize the importance of using correct procedures when working around and operating the machine. Do not let children or unqualified persons operate the machine. Keep others, especially children, away from your area of work. Do not permit others to ride on the machine.

Make sure the machine is in the proper operating condition as stated in the Operator Manual. Make sure the machine has the correct equipment required by local regulations.

All equipment has a limit. Make sure you understand the speed, brakes, steering, stability, and load characteristics of this equipment before you start.

### 1.3.2 General information

When parking, park the machine on a solid level surface and lower the header to the ground. Put all controls in neutral, and apply the park brake. Stop the tractor engine and take the key with you.



**WARNING:**  
**Do not leave the machine unattended with the header raised. Lower the header fully before leaving the machine. A sudden loss of hydraulic pressure can cause the header to drop without warning.**

Make sure the machine is in the proper operating condition according to the Operator Manual.

Always operate the machine with the control console turned on.

Do not dismount from moving machinery.

Stay off slopes too steep for operation.

Be aware of the size of the machine and have enough space available to allow for operation.

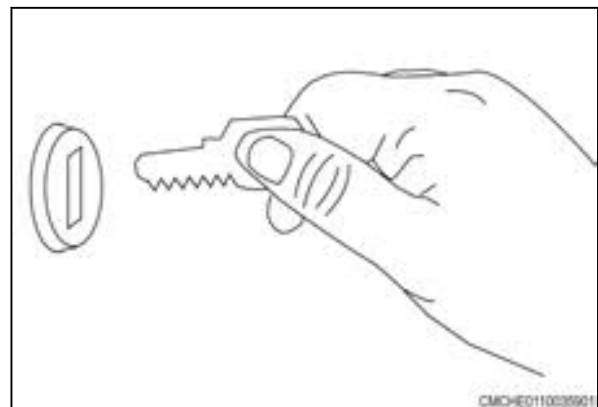


Fig. 6

**Thank you very much for  
your reading. Please Click  
Here. Then Get COMPLETE  
MANUAL. NO WAITING**



**NOTE:**

**If there is no response to  
click on the link above,  
please download the PDF  
document first and then  
click on it.**

## 1. General

Stay off slopes too steep for operation. Keep the header as low as possible while going down hills. Never suddenly reverse the wheels to stop or back up.

Where possible avoid operating the machine near ditches, embankments, and holes. Reduce ground speed when operating on rough, slippery, or muddy surfaces and when turning or crossing slopes.

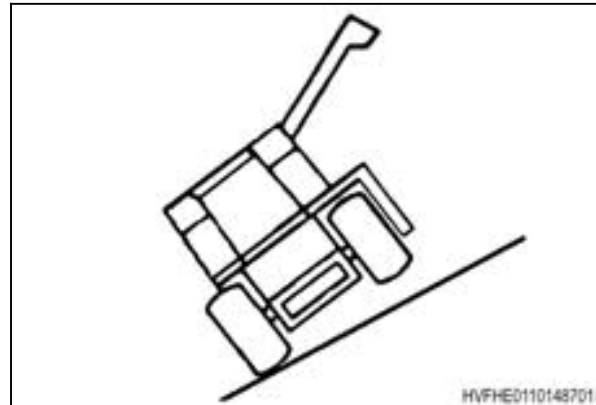


Fig. 7

Avoid contact with electrical power lines. Contact with electrical power lines can cause electrical shock, resulting in very serious injury or death.

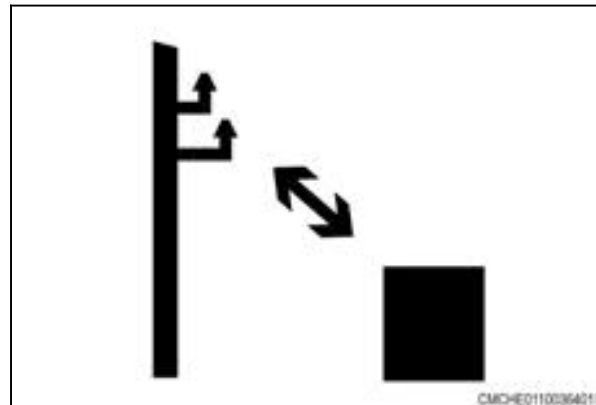


Fig. 8

### 1.3.3 Personal protective equipment

Put on all personal protective equipment (PPE) and protective clothes that are supplied to you or that are necessary for the conditions and by applicable laws. PPE includes equipment to prevent injury to your eyes, lungs, ears, head, hands and feet.

Always keep hands, feet, hair, and your clothes away from parts that move. Do not put on loose clothing, jewelry, watches, or other items that can tangle in parts that move. Tie up long hair that can also tangle in moving parts.

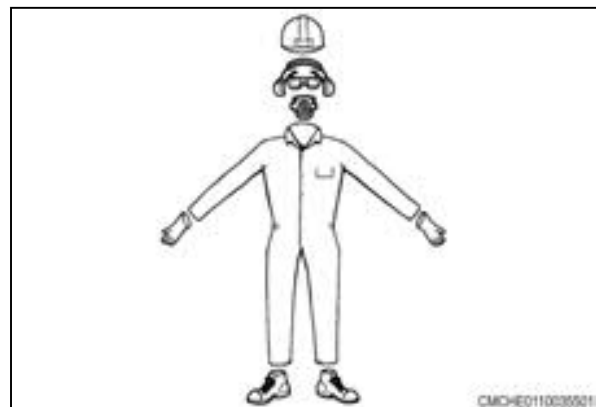


Fig. 9



### 1.3.4 Seat instructions

Put on the seat belt before you operate the machine. Always sit in the seat and have the seat belt on while you operate the machine. Replace the seat belts when they become worn or broken.

Do not use a seat belt loosely. Make sure that there is some tension on the seat belt. Do not wear the seat belt in a twisted condition or pinched between the structural parts of the seat.

Put on the seat belt if the instructional seat is used. Use the instructional seat only to train new operators or to find a problem. The instructional seat is only for short periods of use.

Do not let children use the instructional seat or be in the cab. Do not let other persons use the instructional seat or be in the cab.

Drive the machine at slower speed and on level ground when the instructional seat is used. Do not start, stop, or turn quickly when the instructional seat is used. Do not drive on highways or public roads when the instructional seat is used.

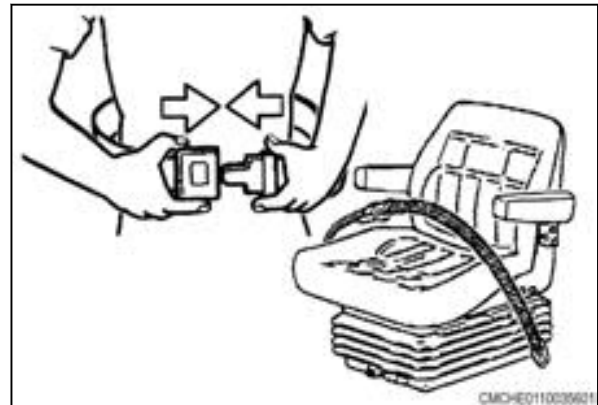


Fig. 10

### 1.3.5 Shield and guards

All shields and guards must be in the correct position and in good condition.

Do not open, remove, or put your hand behind shields while the engine in operation. Belts and components that turn can cause entanglement, which can cause injury and death. Keep away from the components that turn.



Fig. 11

Do not operate the machine with the drive shaft shields open or removed. Entanglement in drive shafts that turn can cause injury or death. Keep away from the components that turn.

Make sure guards that turn are free.



Fig. 12

### 1.3.6 Exhaust warning

Do not operate the engine in a closed building unless the exhaust is vented to the outside.

Do not tamper with or modify the exhaust system with unapproved extensions.



Fig. 13

### 1.3.7 Flying debris



**WARNING:**  
Be careful when you operate along the side of a road or structures. Rocks and other materials can be thrown from the machine during operation and can cause injury.

Stay away from the machine during operation. Some materials can be thrown from the machine during operation and cause injury.



Fig. 14

### 1.3.8 Handrails

Point your body in the direction of the ladder and use the handrails when you are on the machine ladders.



Fig. 15

### 1.3.9 Agricultural chemicals

Agricultural chemicals are very dangerous. Incorrect procedures with fertilizer, fungicides, herbicides, insecticides and pesticides can cause injuries to plants, animals, soil and other persons property.

Always read and follow all manufacturers instructions before you open chemical containers.

Read and follow instructions each and each time you use a chemical.

Use the same precautions when you do adjustments, servicing, clean or store the machine as used when you put chemicals into the hoppers or tanks.

Tell all person who comes go near with chemicals of the possible dangerous results and the safety precautions that are necessary.

Stay upwind and away from smoke from a chemical fire.

Store or discard all chemicals that are not used only in the procedure specified by the chemical manufacturer.

## 1.4 Cylinder stops

### 1.4.1 Engaging the header lift cylinder stop

#### Procedure

1. Park the machine on a solid, level surface.
2. Put the transmission in neutral and apply the parking brake.
3. Raise the feeder house to full height.
4. Release the hook and lower the header lift cylinder stop (1) onto the cylinder rod.
5. Lower the feeder house until the header lift cylinder stop touches the end of the header lift cylinder.

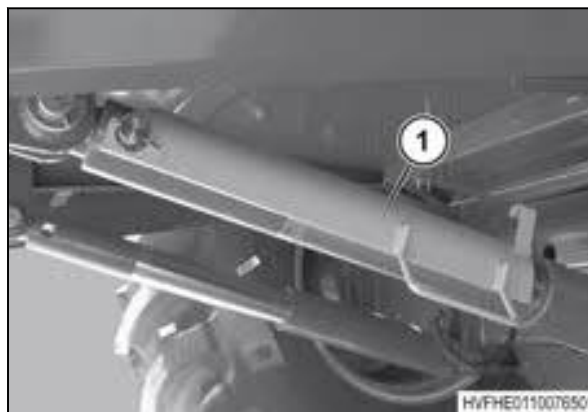


Fig. 16

### 1.4.2 Disengaging the header lift cylinder stop

#### Procedure

1. Park the machine on a solid, level surface.
2. Put the transmission in neutral and apply the parking brake.
3. Raise the feeder house to full height.
4. Lift the header lift cylinder stop (1) from the cylinder rod and engage the hook.



Fig. 17