

# **IDEAL Series Combine**

IDEAL 7 IDEAL 7PL IDEAL 7T IDEAL 8 IDEAL 8PL IDEAL 9 IDEAL 9PL IDEAL 9T



Breganze AGCO S.p.A. - Via F. Laverda, 15/17 - 36042 BREGANZE (VI) – Italy. FENDT is a worldwide brand of AGCO © AGCO 2019 Original Operator's Manual

November 2019 ACX2738370 EME English Congratulations on your selection of an AGCO<sup>®</sup> Product. We believe you have exercised excellent judgment in the purchase of your AGCO<sup>®</sup> machine. We are most appreciative of your patronage.

Your Dealer has performed the pre-delivery service on your new machine.

He will discuss with you the operating and maintenance instructions given in this manual, and instruct you in the correct and varied applications of this machine. Call on him at any time when you have a question or need equipment related to the use of your machine.

We recommend that you carefully read this entire manual before operating the machine. Also, time spent in becoming fully acquainted with its performance features, adjustments, and maintenance schedules will be repaid in a long and satisfactory life of the product.

This equipment is covered by a written warranty which will be provided to you by your AGCO<sup>®</sup> Dealer at time of purchase.

AGCO<sup>®</sup> reserves the right to make changes or add improvements to its products at any time without incurring any obligation to make such changes to products manufactured previously. AGCO <sup>®</sup>, or its dealers, accept no responsibility for variations which may be evident in the actual specifications of its products and the statements and descriptions contained in this publication.

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# 1.1 Safety icons

Safety warnings show in the manual with these icons:



DANGER: This is an immediately hazardous situation which, if you ignore it, will cause death or injury.



#### WARNING: This is an immediately hazardous situation which, if you ignore it, can cause death or injury.

#### CAUTION:

This is an immediately hazardous situation which, if you ignore it, can cause injury.

#### **Secondary information**

2 types of secondary information are shown when necessary.

**IMPORTANT:** This 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 help you do the procedure, or improve your understanding.



# 1.2 Warnings

You can prevent most accidents when you obey the warnings and the safety instructions. To increase your safety, and that of others, make sure that:

- Other personnel know that you are on the machine when all maintenance occurs.
- All personnel can see the applicable safety and maintenance instructions.

When compared to your machine, there can be some small differences with the information in this manual.



# **1.3 A word to the operator**

- You must read and understand the safety section in this operator's manual, and the manuals for all implements, before you operate this machine.
- The safety procedures in this manual increases protection to all personnel in and around the machine, while it is in operation or during maintenance.

This safety section:

- Tells you some of the basic hazardous situations that can occur during the usual operation and maintenance of the machine.
- Gives you procedures that can help prevent these hazards.
- Adds to the safety procedures in other sections of this manual.

#### Precautions:

- Injury or death can occur if you do not obey these precautions.
- Other precautions can be necessary when you attach implements to the machine.
- Other precautions can be necessary when the conditions change in the work area, or area where you do the servicing.
- The manufacturer is not liable for the machine:
  - If you do not use the machine for its intended use.
  - If you do not operate the machine correctly.
  - If you do not do the correct inspections of the machine.
  - If you do not lubricate the machine correctly.
  - If you do not obey the maintenance schedule.
- It is your responsibility to obey the safety procedures when you operate, or do work on the machine.

Before you operate the machine, make sure that you have the approval to use it.

To have the approval to use this machine you must:

- Know how to use it.
- Know the safety instructions.
- Obey the applicable local laws.

There is a minimum age to operate some machines.

It is your responsibility to know these laws and obey them when you operate the machine or if a situation occurs.

For your safety and the safety of others, obey all safety decals and notices on the machine and on all implements.

Only use equipment or implements that have the machine manufacturer's approval.

Make sure that your machine has the correct equipment that is necessary by the local laws.

Do not use alcohol or drugs when you do work with the machine. They decrease your control of the machine.



Fig. 1



If you have a medical condition or use medicine, speak to medical personnel to make sure that you are safe to operate the machine.

# 1.4 Safety instructions

#### 1.4.1 Engine safety instructions

- Make sure that all shields, guards and access doors are in the correct position and closed before you start the engine.
- Make sure that no personnel are near the machine before you start the engine. Operate the horn 2 times before you start the engine to warn personnel.
- Before you start the engine, make sure that:
  - All the controls are in the neutral position.
  - The drive systems are in the disengaged position.
- If you start the engine in a closed area, make sure that there is sufficient airflow.
- Start the engine from the operator seat only.
- Start the engine only with the start switch in the cab.
- If the machine is in gear, the neutral start system makes sure that the engine does not start. If you override this system, it can cause death or injury.
- Do not connect booster cables to the starter motor terminals.
- Do not use starter fluid to start the engine. This can cause:
  - Explosions
  - Injury to personnel
  - Damage to the machine.
- Keep away from the engine while it is in operation. Before you open the engine cover, stop the engine and remove the ignition key.
- Do not smoke, have an open fire, or a source of ignition near the fuel system or batteries.
- Do not touch the exhaust manifold, turbocharger and the other hot parts of the engine.
- Do not operate the engine at the idle speed when it is not necessary.
- Keep the engine surfaces clean to prevent the risk of fire.
- Do not disconnect fuel pipes and hoses when the engine is ON. Stop the engine and wait 30 seconds before you disconnect fuel pipes and hoses.
- The engine contains seals made of viton. If viton is exposed to heat above 300 °C hydrofluoric acid is made. Put on gloves and clean the area with a alkaline fluid to prevent injury.
- Before you do welding on the machine you must disconnect the:
  - Battery
  - Engine electronic control unit
  - Selective Catalyst Reduction (SCR) supply module.

#### **Cleaning instructions**

- To prevent damage to the machine, do not clean these components with high pressure fluid:
  - Electrical equipment
  - Fuel system
  - Radiator.
- When you clean the engine, remove unwanted areas of moisture and then operate the engine to dry the remaining moisture.





# 1.5 Operation

#### 1.5.1 Prepare for operation

- Read and understand all the instructions in this manual before you operate, or do maintenance on the machine.
- Make sure that you know the positions and operations of all the controls.
- Make sure that all controls are in the neutral position and that you engage the parking brake before you start the machine.
- Make sure that no personnel are in the dangerous areas at all times. Stop the machine if it is necessary.
- Know the dimensions of the machine and have sufficient available space for its operation.
- If you operate the machine in these conditions, it increases the risk of injury to personnel and damage to the machine:
  - At high speeds
  - Around personnel
  - Near buildings
  - Near other equipment or possible blockages.
- Do not let children in or near the machine.
- Do not let persons who are not approved operate the machine.
- Do not let other personnel in, or on the machine when in operation.
- Make sure that the machine is in the correct serviceable condition.
- Obey all local laws. Make sure that the machine has the correct equipment in, or on it.
- All equipment has a limit, make sure that you know the:
  - Speed limits of the machine
  - Distances and limits for the brakes
  - Steering sensitivity
  - Steering limits
  - Machine limits when on a slope
  - Load limits.

#### 1.5.2 General information

When the machine is in operation:

- Make sure that you set the machine components to the correct position when you operate on a slope.
- Do not get out of the machine when it is moving.
- Know the dimensions of the machine and make sure that sufficient space is available to let the machine operate.
- Some of the devices on the machine can make it not stable. Be careful when you engage these devices and operate the machine.
- Keep the header as close to the ground as possible while you go down a slope.
- If it is necessary, put on sufficient weight to balance the machine.
- Do not do sudden movements of the controls when the machine is at high speed or cornering.







- Decrease the ground speed when you:
  - Operate the machine on rough ground
  - Turn the machine
  - Operate the machine on a slope.
- Do not suddenly reverse the wheels to stop.

Do not use the machine in these conditions:

- When the maximum slope of the ground is more than the maximum slope limit of the machine.
- If the level system (if fitted) malfunctions.
- Safety devices not installed and attached correctly.
- If the tire pressures are not correct.
- If the ground is not stable or has sudden contour changes.
- The tires do not have sufficient contact with the ground.
- Near to the edge of ditches or steep slopes.
- If the header or applicable devices do not have the safety lock attached.

#### **Related Links**

Drive the machine on the road page 31

#### **1.5.3 Emergency situations**

- Stop the engine in all emergency situations.
- Speak to your local emergency aid.
- Use the fire extinguisher, if it is necessary.

Regularly have an inspection by approved personnel of the fire extinguisher for correct operation.





#### 1.5.4 Personal protective equipment

For your safety, during some operations with this machine, you must use Personal Protective Equipment (PPE). Obey the instructions when you see these safety decals.

- Obey all local regulations and use Personal Protective Equipment (PPE).
- Do not put on loose clothing or other items that can catch in parts that move.



Fig. 5



#### 1.5.5 Seat safety

- Put on the seat belt before you operate the machine.
- Always use the operator's seat when the machine is moving. Do not get out of the seat when the machine is moving.
- Use the instructor seat only to show new procedures to new operators, or to find a problem.
- Do not let children use the instructor seat or be in the cab.
- Operate the machine at slower speed and on flat ground when the instructor seat is in use.
- Do not start, stop, or turn quickly when a person is in the instructor seat.
- Do not let personnel use the instruction seat when the machine is on the road.

#### **Related Links**

Operator's seat page 251

#### 1.5.6 Operator not on the operator's seat

The operator must not get out of the operator's seat when the machine is in operation. If the operator does exit the seat, the machine stops all operations.

#### 1.5.7 Shields and safety guards

- Do not open, remove or try to access areas behind the shields or guards when the engine is set to ON.
- After you disengage the engine, some parts continue to move. Wait for the parts to stop before you open the shields or safety guards.
- After you disengage the engine, the threshing mechanism continues to move. Wait for the threshing mechanisms to stop before you open the shields or safety guards.
- Make sure that all shields and safety guards are in the correct position before you operate the machine.
- Do not operate the machine if the shields or safety guards are damaged. Replace damaged shields and safety guards.



Fig. 7





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#### 1.5.8 Exhaust warnings

- The exhaust components can become hot when in operation. Wait for the exhaust system to become cool before you do work on the components near the exhaust system.
- Put on personal protective equipment to give protection to your skin when you do work near the exhaust system.
- Make sure there is sufficient airflow when you do work on the machine in a building. Open doors and windows in the building when the engine is set to ON.
- If the exhaust system is damaged, stop the machine immediately. Do this to prevent injury to personnel or damage to the machine.
- Only approved personnel are to do work on the exhaust system, speak to your local dealer if necessary.

#### 1.5.9 Ejected material

- Material ejects from the machine at high speed. The ejected materials can include:
  - Crop
  - Rocks
  - Soil
  - Wood
  - Other crop material.
- The ejected material can cause damage to the machine or injuries to the personnel near the machine.
- Use the safety guards and shields to protect personnel from the ejected material.
- Put on personal protective equipment if it is necessary.
- Make sure that no personnel are near the machine when it is in operation.

#### 1.5.10 Handrails

- Make sure that you use the handrails at all times.
- Always keep 3 points of contact when you go up or down a ladder.
- Be careful when you are high up on the machine, if you fall it can cause an injury.



Fig. 10





Fig. 9

1. Safety

- **1.5.11 Header safety** When you attach the header to the machine:
- Be careful when personnel are near the header. It has components that turn and body parts or clothing can easily catch.
- Do not go near the header when the engine is ON.
- At no time are personnel to be near the header when the machine is in operation. Stop the machine if it is necessary.
- If the header has a blockage, use the applicable procedures. Do not remove a blockage manually when the engine is set to ON.
- If it is necessary to manually remove a blockage, make sure that you:
  - Park the machine on a solid level surface.
  - Apply the parking brake.
  - Stop the engine.
  - Remove the ignition key from the machine.
  - Use the wheel chocks to hold the machine.Put on the applicable personal protective
  - equipment.If it is necessary, get more personnel to help with the work.

#### 1.5.12 Grain tank safety

- The grain tank has components that turn and body parts or clothing can easily catch.
- Do not go into the grain tank when the engine is set to ON.
- Do not go into the grain tank when it contains crop.



Fig. 12

#### 1.5.13 Chaff spreader and straw chopper safety

- There are components that turn or have sharp edges in the assembly.
- Make sure that all guards and shields are in the closed position before you operate the machine.
- Do not go near the chaff spreader or the straw chopper when the machine operates.
- Stop the engine, and wait for all the components to stop moving before you do the work on the machine.





#### 1.5.14 Procedure if the machine touches a high-voltage source

# You must keep the machine away from overhead power cables.

If the machine and electrical cables touch, do this procedure:

- Disengage all the drive components.
- Stop the engine.
- Apply the parking brake.
- Make sure that you can exit the operator seat safely and do not touch the electrical cables.
- Jump from the last step, make sure that there is no contact between your body, ground and machine.
- Do not touch the machine until the electrical power is set to OFF.
- Tell personnel not to touch the machine.
- Tell the applicable local authorities to disengage the power.

#### 1.5.15 Drive the machine on the road

- Before you drive, make sure that you know the road specifications of the machine for the:
  - Speed
  - Brakes
  - Steering
  - Weight.
- Do not engage the neutral position when the machine goes down a slope.
- Obey local laws and the machine specifications with the speed limit.
- Know and obey all local laws that refer to this machine on the road.
- Make sure that you set all the applicable lamps to ON when you drive the machine. Refer to local laws if it is necessary.
- Make sure that all the lamps and reflectors are in the correct operation. Repair, clean or replace if it is necessary.
- Select transport mode on the controls.
- Do not drive the machine on the road with the header attached.
  - Only drive the machine with a flip up header if this is approved by local laws. If it is approved, do not drive the machine at more than 30km/h.
- Make sure that the machine's dimensions are not more than the road limits for weight, height, length and width.
- Look for electrical cables over the road. Change the direction of the machine so that it does not touch electrical cables.





Fig. 13



#### **Related Links**

Prepare the machine to drive on the road page 339



# FENDT

### 1.6 Safe maintenance

#### **1.6.1 Operator maintenance**

The operator can only do the machine servicing in these situations:

- They know how to do the work.
- They have all the necessary equipment to do the work.

AGCO recommend you only use AGCO parts and fluids to do servicing and maintenance on your machine.

#### 1.6.2 General maintenance information

Before you do the maintenance or repairs:

- Park the machine on a solid level surface.
- Apply the parking brake.
- Put all controls in the neutral position.
- Stop the engine.
- Remove the ignition key from the machine.
- Use the wheel chocks to hold the machine.
- Hydraulic components that lift can fall when the hydraulic pressure decreases. Make sure that you use the applicable supports to prevent component movement.





When you do the maintenance or repairs:

- Examine the machine for damage or more than usual wear.
- Know that some components can possibly move and hit personnel.
- Only use applicable lift and support equipment that has the correct approval and is specified for the weight.
- Do not stay below the machine or components when lifted above you.
- Know the dimensions and weight of applicable components when you do the work on the machine.
- Make sure that electrical or hydraulic connections are clean before you disconnect or connect them.
- Only use applicable containers to collect the fluids, for example engine oil.
- Clean all items that spill immediately and correctly discard the unwanted materials.
- Remove all unwanted material from the work area immediately.

#### 1.6.3 How to prevent fires and fire equipment

- The crop material is flammable. Regularly remove the unwanted crop material from the machine to prevent a fire.
- Use a water type fire extinguisher, A class fire extinguisher or other water source to extinguish a crop fire.
- Examine the components to make sure that they do not become too hot. Listen for noises that are not usual during operation. Unusual noises can show that a component has wear. Worn components can become hot and start a fire.



Fig. 16



- Keep the fire extinguishers in a location that you can access easily also near where the fires can occur.
  - Examine the fire extinguishers regularly, refer to the manufacturer's equipment manual.
  - Make sure that the fire extinguisher is full and in a condition that operates.
- For fires of material other than crop (for example oil or electrical components), use a dry chemical fire extinguisher of A, B or C class.
- Before you cut, weld, or grind on the machine, remove flammable materials from the machine and the work area.
- If a fire occurs, move out of the smoke and away from the fire. Get aid from your local emergency services.

#### 1.6.4 High pressure leaks

- The fluid that leaks from the hydraulic system or the fuel injection system is at a high pressure and is not easy to see.
- If the fluid goes into the skin, you must get medical aid immediately. If the fluid is not removed immediately, injury or death can occur.
- Use the applicable procedures to find possible leaks.
  - Do not use your bare hand.
  - Put on the correct personal protective equipment before you look for leaks.
- Before you replace hydraulic lines:
  - Remove all pressure from the system.
  - Put all equipment in the maintenance position and install the supports if it is applicable.
  - Close the applicable accumulator valves.
  - Stop the engine.

#### 1.6.5 Fuel Safety

- Fuel is flammable.
- Always stop the engine before you put fuel in the machine.
- Keep open flames and electrical sparks away from the area.
- Do not smoke while you add the fuel.
- Clean the area and remove spilled fuel.
- Only use fuel from an approved fuel container.
- Make sure that a class B fire extinguisher is available when you fill the machine with fuel.



Fig. 17







#### 1.6.5.1 Ultra-Low Sulfur Diesel

Sparks can cause a fire more easily with Ultra-Low Sulfur Diesel (ULSD) than with other diesel types. Equipment (for example hoses) you can use to decrease the static ignition risk decrease in effect with time and other conditions.

Ground the machine and bond the fuel equipment correctly to decrease the risk of static ignition and a fire. See the equipment manuals for the fuel equipment for more information.



Fig. 19

#### **1.6.6 Engine maintenance safety**

- Stop the engine before you do the maintenance or repair work.
- Before you do the maintenance or repair work on the electrical system set the battery primary switch to OFF.
- Surfaces and components near and on the engine are hot when the engine has operated.
- Always let the components that contain hot fluid or gas decrease in temperature before you touch or open them.
- Before you do work on the cooling system, make sure that you:
  - Read the manual for the correct procedure.
  - Let the radiator become cool.
  - Gradually open the radiator cap to release the pressure in the system.
- Fuel, lubricants or coolant can cause injury to your skin. Put on your personal protective equipment if it is necessary.
- Discard all unwanted materials correctly. Make sure that you obey all local laws when you recycle or discard these items.
- It is necessary to replace some components after you remove them, for example an O-ring. Make sure that you always replace these components and do not install them again.
- Only use the components and fluids that have AGCO approval.
- After you do the maintenance, examine the work to make sure that it is correct. For example, do an inspection for leaks.



Fig. 20



### 1.6.7 Electrical safety

- Before you disconnect the battery, set the ignition to OFF, wait 2 minutes then disconnect the battery.
- Make sure that you put on the correct personal protective equipment when you do work or maintenance on batteries.
- Lead acid batteries release hydrogen fumes when charging. The fumes from the batteries are very flammable. Keep open flames and electrical sparks away from the batteries. Charge the batteries in an area with good airflow.
- Metal tools or objects cause a short circuit the battery if they touch the positive and negative connections at the same time.
- If you connect booster cables or charging equipment incorrectly, it causes damage to the battery and electrical components. Always connect the positive cable to the positive battery connector, and the negative cable to the negative battery connection.
- The battery contains lead and acid. Put on personal protective clothing when you do work on a battery.
- If battery fluid touches your skin, flush the area immediately with large quantities of water.
- If battery fluid goes in your eyes, flush with water for a minimum of 15 minutes and get medical aid immediately.
- If you swallow battery fluid, drink large quantities of water. Do not try to vomit. Get medical aid immediately.
- Do not connect 24 V equipment to the machine.
- If you tilt or turn a battery fluid spills. Keep the battery with the connections up.
- Always connect the cable to the negative side of the battery first.
- Always disconnect the cable from the negative side of the battery first.



Fig. 21



#### 1.6.8 Accumulator safety

- Only approved personnel can do the work or maintenance on an accumulator.
- Use dry nitrogen gas only to pressurize an accumulator.
- Nitrogen gas, when released, can cause objects to freeze. Always put on the correct personal protective equipment when you use the nitrogen.
- Do not let an accumulator fall. A pressurized accumulator contains pressurized nitrogen. If the seal comes away from the accumulator, the accumulator can move at a high speed.



Fig. 22

#### 1.6.9 Tire safety

- Regularly do a check of the tire pressures and inflate or deflate the tires if it is necessary. If the tire pressure is incorrect, you can do damage to the tire.
- Replace a tire with too much wear and if it has damage.
- Only an approved tire technician must repair or replace the tires.
- Make sure that you have sufficient tread on the tire for the conditions that you operate.
- A tire explosion can be the result if you inflate the tire too much. Do not put too much air in the tires, injury and death can occur.
- Do not inflate a tire that has very low pressure or used while deflated. Have an approved tire technician examine the tire before you put more air in the tire.
- Do not weld on a wheel rim with a tire installed. This applies to all tires, inflated or deflated. It is not sufficient to deflate the tire or break the bead. You must remove the tire from the wheel rim before you weld.



Fig. 23

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# 1.7 Additional safety information

#### 1.7.1 Noise emissions

In compliance with the directive machinery 2006/42/EC, the noise emission level is measured at the point of the operator's ear in the cab (as specified in EN ISO 4254-7 standard Annex C).

Basic test conditions when:

- The machine is parked.
- The engine is at maximum speed.
- The threshing system and header are engaged.
- There is no grain in the machine.
- The door is closed.

On these machines you only have a noise emission more than 80 dB(A) if you operate the machine with the door open.

In situations where the noise emission is more than the maximum dB(A) value specified in local law, put on ear protection.

| Engine      | Noise level in the cab | Noise level of the machine (Drive<br>by noise 2009/63/EC) |
|-------------|------------------------|---|
| All engines | 76 dB(A) <sup>1</sup>  | 88 dB(A)  |

<sup>1</sup>More or less than 2 dB(A).

#### **1.7.2** Vibrations in the cab

In compliance with the European directives and subsequent updates:

- 2002/44/EC
- 2006/42/EC

The vibration level that the machine transmits to the body of the operator (on the operator seat) must not be higher than the values shown.

|                         | Longitudinal<br>acceleration (m/s <sup>2</sup> ) | Lateral acceleration<br>(m/s <sup>2</sup> ) | Vertical acceleration<br>(m/s <sup>2</sup> ) |
|-------------------------|--|---|--|
| Middle area of the body | bandwidth <0.5                                   | bandwidth <0.5                              | bandwidth <0.5                               |
| Arm, hand               | bandwidth <2.5                                   | bandwidth <2.5                              | bandwidth <2.5                               |

To obey the ISO 5008 standard, measure the vibration levels in 3 dimensions at the operator's seat.

Do the vibration test in the usual work conditions. The operator seat is in compliance with the directive 78/764/EC (and subsequent updates).

The vibrations in the cab can increase if:

- You operate the machine incorrectly.
- You do not do the maintenance on the machine.
- The conditions in the work area change.

#### NOTE:



#### 1.7.3 Electromagnetic emissions

#### Directive 2014/30/EU

The electrical components installed on the machine can cause electromagnetic emissions. The quantity of these emissions can change with the component settings.

Directive 2014/30/EU sets a maximum permitted limit for electromagnetic emissions from machines. This prevents interference or damage to electronic control systems and injury to personnel.

#### **IMPORTANT:**

Electrical components used on the machine, but not supplied by AGCO, must have a CE mark and:

- Must not operate with more than the approved maximum power.
- Must not have electromagnetic emissions of more than 24 V/m.

#### 1.7.4 Statutory law

Due to local laws, it may be necessary to install special safety equipment.

Obey the instructions in this manual and operate the machine safely. Install all the guards and safety devices and make sure that they operate correctly.

Obey all the local laws.

#### Fire resistance in the cab

All components that are not metal in the operator cab obey ISO 3795 standards.



# 1.8 Safety decals











| Number | Decal                            | Description   |
|--------|----------------------------------|---|
| 1      |                                  | <b>Hot, high pressure fluids can release from the system.</b><br>Stop the engine and remove the key. Do not do work on the system until it is cool. |
| 2      |                                  | <b>Do not step</b><br>Do not walk on this area.   |
| 3      | Tow point<br>Cores<br>Lift point | <b>Tow or lift point</b><br>The symbol identifies a tow/lift point that is approved.  |
| 4      |                                  | <b>Fall hazard</b><br>Do not climb, ride on, or move off the machine when the machine<br>operates or is moving.                                     |
| 5      |                                  | <b>General safety alert</b><br>Location of the fire extinguisher.   |
| 6      |                                  | <b>Risk of personal injury</b><br>Do not open, or reach around a shield for maintenance and repair<br>work until all the machine components stop.   |
| 7      | <u>A</u> !                       | <b>Risk of personal injury</b><br>You must engage the safety stop before you go below the feeder<br>housing or header.                              |



| Number | Decal         | Description  |
|--------|---------------|--|
| 8      |               | <b>Risk of personal injury</b><br>Do not go between the header and the machine when you install<br>the header.   |
| 9      | <u>∢</u><br>€ | <b>Entanglement hazard, belt and chain drives</b><br>Do not open, or reach around a shield for maintenance and repair<br>work until all the machine components stop.     |
| 10     |               | <b>Feeder speed</b><br>The belt routing for fast or slow feeder speeds.<br>Use the fast belt position for grain headers.<br>Use the slow belt position for corn headers. |
| 11     |               | <b>Risk of explosion</b><br>Read the operator's manual before you do work on the<br>accumulators.  |
| 12     |               | <b>The location to attach safety transport chains</b><br>The location to attach the safety transport chains to the machine<br>when you transport it on a trailer.        |
| 13     |               | <b>Lift point</b><br>This symbol shows a safe location to use lift equipment or<br>supports when you lift the machine.   |



| Number | Decal      | Description   |
|--------|------------|---|
| 14     | Right side | Lubrication points for the left side and the right side of the machine  |
|        |            | Lubrication points on the machine. It shows the hours of operation before you must examine each of the components.          |
|        | Left side  |   |
|        |            |   |
| 15     | Right side | Information for the drive belt - the left side and the right side   |
|        |            | Information about the drive belts on the left side and the right side of the machine.                                       |
|        | Left side  |   |
|        |            |   |
| 16     |            | Entanglement hazard, belt and chain drives  |
|        |            | Do not open, or reach around a shield for maintenance and repair<br>work until all the machine components stop.             |
| 17     |            | High pressure fluid   |
|        |            | Do not go near damaged hoses or pipes. Stop the engine and read<br>the Operator's Manual before you do work on the machine. |
|        |            |   |

# FENDT

| Number | Decal                 | Description  |
|--------|-----------------------|--|
| 18     | Rear wheels           | Wheel nut information  |
|        | 750 Nm<br>2550 lbf ft | Do not lubricate the wheel studs and fasteners.  |
|        | 1050                  | Tighten the rear wheel fasteners to 750 Nm.  |
|        | 2-3 +1h I 0           | If it is applicable, tighten the front wheel fasteners to 900 Nm.  |
|        | Front wheels          | Do a check of the torque of the wheel fasteners:   |
|        | 900 Nm<br>665 lbf ft  | 1. Before you operate the machine for the first time.  |
|        | 2-3 +1h I C           | <ol> <li>After 1 hour of operation.</li> <li>After 2 hours of operation (total).</li> </ol>                                      |
|        |                       | After you tighten the wheel fasteners these 3 times, go to the maintenance schedule to see the servicing interval for this task. |
|        |                       | <b>NOTE:</b><br><i>This decal shows on the front wheels of wheel only models too.</i>  |
| 19     |                       | Tire pressure  |
|        | BAR 2.8<br>PSI 40.6   | The applicable tire pressure is on a decal adjacent to the tire valve<br>on the wheels.  |
|        |                       |  |
| 20     | <mark>∕</mark><br>□⇔¶ | <b>Objects eject at high speed</b><br>Keep a safe distance from the chaff spreader when it is in<br>operation.                   |
| 21     |                       | 12 V electrical system   |
|        | 7120W MAX             | The machine has a 12 V electrical system, that can operate at a maximum of 120 W.  |
| 22     | AdBlue™               | Diesel exhaust fluid (DEF) only  |
|        | or DEF<br>ONLY        | Do not add diesel or water to the DEF system. See the Operator's Manual for more information.                                    |
|        |                       |  |
| 23     | S≤15 mg/kg            | Ultra-low sulfur fuel only.  |
|        |                       | See the Operator's Manual for more information.  |
| 24     |                       | Negative terminal  |
|        | <u> </u>              | This is the location of a negative terminal for the electrical system.   |



| Number | Decal  | Description   |
|--------|--|---|
| 25     | +12V   | <b>12 V electrical system</b><br>The machine has a 12 V electrical system. Do not start the<br>machine with a 24 V power supply, injury or death can occur.                 |
| 26     |  | <b>Primary switch</b><br>The location of the primary switch to set all the electrical circuits<br>on the machine to OFF.  |
| 27     |  | <ul> <li>Before you disconnect the battery</li> <li>1. Stop the machine.</li> <li>2. Wait for a minimum of 2 minutes.</li> <li>3. Set the primary switch to OFF.</li> </ul> |
| 28     | T00.01701     BOA     〇       T00.01681     GOA     次間       T00.01681     GOA     次間       T00.01671     GOA     第二       T00.01681     GOA     第二       T00.01681     GOA     第三       T00.01621     IOA     第三       T00.01621     IOA     第三       T00.01611     200A     日 | <b>Primary circuit fuses</b><br>This shows the configuration and capacity of the primary circuit<br>fuses.  |
| 29     |  | <b>Entanglement hazard, rotating auger</b><br>Do not reach or go into the grain tank when the engine is<br>operating.   |
| 30     |  | <b>Hot surfaces, burn hazard</b><br>Keep a safe distance from hot surfaces.   |
| 31     |  | <b>Telescopic handrail</b><br>Lift the telescopic handrail into the correct position before you do<br>the work and maintenance on the top of the machine.                   |
| 32     |  | <b>Spring at tension</b><br>Make sure that the spring in the variator cannot move before you<br>repair or lubricate the variator.   |



| Number | Decal | Description   |
|--------|-------|---|
| 33     |       | <b>Battery explosion and short circuits</b><br>Remove the negative cable(s) from the battery/batteries before you<br>remove the starter solenoid cover and before servicing the<br>electrical system.         |
| 34     |       | <b>Unloader drive</b><br>Make sure that there is a 1 mm to 2 mm distance between the nut<br>and the unloader drive hub.   |
| 35     |       | <b>Risk of unwanted movement</b><br>Install wheel chocks when you park or do work on the machine.   |
| 36     |       | <b>General safety alert</b><br>Each person in the operator cab must put on a seat belt before you<br>operate the machine.   |
| 37     |       | <b>Auto-Guide operation</b><br>Do not operate the Auto-Guide system when you move on roads.   |
| 38     |       | <b>General safety alert</b><br>Read and understand the Operator's Manual before you operate<br>the machine.   |
| 39     |       | <b>General safety alert</b><br>Stop the engine, remove the ignition key and make sure that all<br>components stop. Read the Operator's Manual before you do the<br>maintenance or repair work on the machine. |



| Number | Decal | Description   |
|--------|-------|---|
| 40     |       | <b>General safety alert</b><br>Operate the horn 2 times before you start the engine.  |
| 41     |       | <b>Electrical shock</b><br>You must operate the machine a safe distance from electrical<br>cables. Use caution when the cables are above the machine. |
| 42     |       | <b>Emergency exit tool</b><br>Use the emergency exit tool to break the window and get out of<br>the operator cab in an emergency.                     |

#### How to install the safety decals

- 1. Make sure that the installation surface is clean and dry.
- 2. Make sure that the temperature of the installation surface is not less than 5 °C (41 °F).
- 3. Find the correct position for the decal before you remove the cover paper.
- 4. Remove a small part of the cover paper.
- 5. Put the decal in the correct position on the installation surface. Carefully push the small part of the shown adhesive surface of the decal on to the installation surface.
- 6. Slowly remove the cover paper and attach the decal to the installation surface.
- 7. Make small air holes in the decal with a pin and use the cover paper to make sure that the decal is flat.

#### Maintenance of safety decals

- Make sure that the decal is in the correct position on the machine.
- Keep the safety decals clean. Clean the safety decals with soap and water. Do not use strong or abrasive materials or chemicals that can cause damage to the safety decals.
- Replace the safety decals that are missing or that are in a bad condition.
- Buy replacement safety decals from an approved dealer.



### 1.9 Safety devices

#### 1.9.1 Wheel chocks

When you park the machine for storage or maintenance you must install wheel chocks.

# The installation of wheel chocks is very important when you park the machine on a slope.

Wheel chocks stop unwanted movement of the machine. Put the chocks in the position shown. When you do maintenance and lift the machine, you must install chocks against the wheels or tracks that stay on the ground.



Fig. 27

#### 1.9.2 Emergency exit and emergency exit tool

The emergency exit tool is installed above the control console on the right side of the cab. In an emergency, use the emergency exit tool to break the right side window and then use the opening as an exit.



Fig. 28

#### 1.9.3 Seat belts

Put on the seat belt. Push the connector into the buckle until you hear a click and the connector locks in. Pull the seat belt to adjust it and make sure that it is not loose.

To release the seat belt buckle, push the button in the center of the buckle. Remove the connector from the buckle.

To keep the seat belts in good condition:

- Keep all items that are sharp and that can cause damage away from the seat belts.
- Examine the seat belts, buckles and the fasteners for damage, cuts and holes. Replace all damaged parts.
- Make sure that the seat belt fasteners are tight.
- Make sure that the seat belts are clean and dry.

**IMPORTANT:** Do not clean the seat belts with solvents, this can make them weak. Only clean the seat belts with soap and warm water.

#### **Related Links**

Operator's seat page 251



#### 1.9.4 Handrails

To prevent falls when you do work on the machine, you must move some handrails before you can use them.

The handrails are:

- Around the cab.
- On the ladder to the cab.
- On top of the engine cover.



#### Fig. 29

The left side of the cab (1) has a handrail attached to the platform.

There are handrails on each side of the cab ladder (2).

The right side of the cab (3) has a handrail attached to the platform.

On the rear platform of the machine (4) is a handrail.

The engine handrail (5) is on the left side of the engine cover. Always lift the handrail when you do work on top of the engine:

- **1.** Pull the handrail to its full height.
- 2. Turn the handrail counterclockwise.
- 3. Lower the handrail a small distance to lock into position.

To put the engine handrail in the storage position:

1. Lift the handrail a small distance.

- 2. Turn the handrail clockwise.
- 3. Lower the handrail into the frame of the machine.

#### **IMPORTANT**:

Lower the engine handrail when you are not on the top of the machine.

To get access to the windshield the handrail moves for access.

To move the handrail in to the correct position:

- 1. Remove the pin.
- 2. Lift the top of the handrail and push it to the front of the machine.
- **3.** Lower the handrail until it automatically locks at 90°.
- **4.** To put the handrail in its initial position, lift the handrail up and move it to the closed position. Install the pin to stop the handrail from moving.



Fig. 30

### 1.9.5 Safety stop for the header lift cylinder

The safety stop makes sure that the header does not move down. When you install the safety stop, it makes sure that the left cylinder does not compress and lower the header.

Always install the safety stop before you go below the header or feeder housing.

Use the spring-loaded clip to hold the safety stop in the stowed position when it is not in use.





#### 1.9.6 Engage the safety stop for the header lift cylinder



WARNING: Unwanted loss of hydraulic pressure. Risk of death or injury.

Use the applicable supports when you do work near the header or feeder unit.



WARNING: The machine can move without warning.

The machine is heavy and can cause death or injury.

Park the machine on a clean, hard and level area. Set the parking brake to ON and install the wheel chocks.

#### Procedure

- Push  $ot\!\!\!/$  on the multifunction lever to lift the 1. feeder housing to the top position. Make sure that you fully extend the hydraulic cylinder.
- 2. Set the engine to OFF.
- 3. Remove the ignition key from the machine.
- 4. Release the spring loaded latch that holds the safety stop in the stowed position.
- 5. Lower the safety stop on to the hydraulic cylinder.





Fig. 32



Fig. 33

# 1.9.7 Disengage the header lift cylinder safety stop



WARNING: The machine can move without warning.

The machine is heavy and can cause death or injury.

#### Park the machine on a clean, hard and level area. Set the parking brake to ON and install the wheel chocks.

#### Procedure

- Push  $ot\!\!\!\!$  on the multifunction lever to lift the 1. feeder housing to the top position.
- Set the engine to OFF. 2.
- 3. Remove the ignition key from the machine.









**4.** Lift the safety stop off the header lift cylinder. Engage the spring loaded latch that holds the safety stop in the stowed position.



Fig. 35

#### 1.9.8 Shield tool

The shields on the machine have locking devices to prevent unauthorised access to dangerous parts of the machine.

Use the shield tool to open the locking devices on the shields.

The shield tool stows on the rear of the cab ladder.

You can also use the shield tool to align the PTO shaft for the header.



Fig. 36

#### 1.9.9 Warnings for the ParaLevel system

If the machine does work on a slope, the recommendation is that you use the ParaLevel system. This lets the primary part of the machine stay horizontal when on a slope.

Monitor the slope for the type of ground that can cause the machine to slip. On rough ground, move carefully and decrease the speed of the machine when it is necessary.

Always use the ParaLevel system during field operation. Do not let the machine go near the limit where an alarm sound operates and a message shows on the terminal. Only operate the machine if the primary part is in a horizontal position.

When you operate on a slope, do not drive on a slope with more than the maximum work angle the machine can operate on.

Operate the machine in 1 of the 3 directions:

- Horizontally across the slope.
- Vertically up, or vertically down the slope.
- If you must drive diagonally, always point the header up the slope.

Make no sudden turns when in operation. If the direction of the machines changes suddenly, the ParaLevel system cannot level the machine as fast.

Connect the brake pedals to prevent a change in direction of the machine when you push the brakes.

Regularly do a test of the manual controls for the ParaLevel system. They are a second level of safety if the automatic system does not operate correctly. The manual controls override the automatic system.

Do not manually adjust the level system when you operate the machine on flat ground. This can have an effect the engine lubrication system and cause engine damage.

Select the transport mode before you drive the machine on the public roads. This stops the Paralevel system function.

#### 1.9.10 Reverse alarm

When you move the machine in reverse, an external alarm automatically operates. The audible alarm is a warning to personnel that the machine is moving in reverse.

#### 1.9.11 Fire extinguisher

The fire extinguisher is on the cab access platform, on the left side of the machine.

To operate the fire extinguisher:

- Release the latch that holds the fire extinguisher.
- Remove the fire extinguisher from the bracket.
- Pull the locking pin out of the fire extinguisher.
- Point the nozzle at the bottom of the fire.
- Operate the handle.

If you replace the fire extinguisher, use an AGCO approved model of the correct specification.

| Capacity          | Minimum 6 kg   |
|-------------------|----------------|
| Fire class        | A, B or C      |
| Temperature range | -20 °Cto 60 °C |

Make sure that the fire extinguisher has a regular inspection by an approved person.

#### 1.9.12 Dangerous areas

Personnel must keep a safe distance (1) of a minimum of 25 m from the machine when in operation. Only approved personnel can go into this area. The dangerous areas include:

- The end of the unloading auger (2).
- The discharge at the rear of the machine (3).
- The header (4).

If personnel go into a dangerous area, stop the machine immediately.













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