Operator's Manual

Combines

FENDT 9490 X - FENDT 9490 X AL

9490 X - S/N => 502010076
9490 X AL - S/N => 502410030

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BREGANZE (VI) – Italy.
FENDT is a worldwide brand of AGCO

Original Operator's Manual

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FENDT 9490 X_EN_D3158100M4
EAME
English

Combine identification

The combine type and serial number appear on the plate and are also punched onto the right-hand side of the frame (1).

Fig. 4

1.3.2 Engine Identification

The engine is identified by the type plate (1) in the middle of the cylinder block.

The following information appears on the plate (1):

- Manufacturer
- type
- Engine power and rated speed
- Engine serial number
- Valve clearance
- Customer reference code
- Idling speed
- Compliance with Directive 97/68/EC
- Name of the engine assembler.

The engine serial number is always also stamped on the cylinder block.

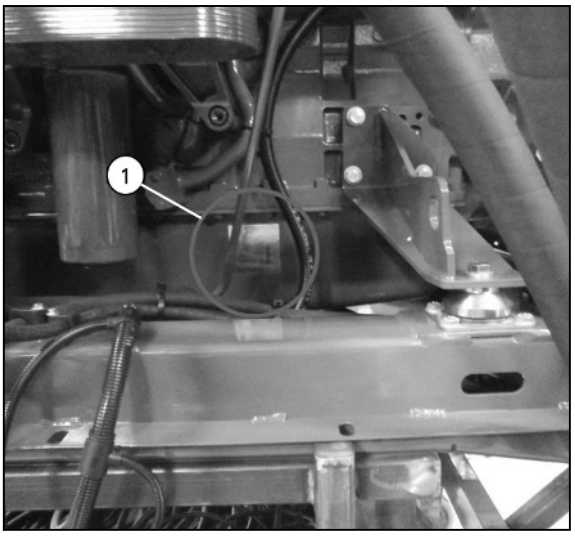


Fig. 5

1.6 Information

1.6.1 Ecology

Information for the prevention of environmental pollution

Soil, air and water are essential for agriculture and all life on earth. **Protect them**. In areas where no local regulations impose standards for the use and disposal of chemicals and petrochemical products required by modern technology, all necessary precautions must be adopted to avoid any risk of pollution.

The following guidelines may be helpful:

- Find out about the legal requirements in your country and comply strictly with them.
- If no regulations are in force, ask your Dealer about the effects of lubricants, fuels, antifreeze mixtures, cleaning agents etc. on people and the environment. Also ask how to store, use and dispose of such products correctly. In most cases, agricultural advisers will be able to answer your questions satisfactorily.

Important Notes

1. When refueling the machine, take all necessary precautions to avoid fuel spillage. In particular, avoid using pressurized containers or fuel supply systems, as these are unsuitable.
2. As a rule, avoid any skin contact with liquid fuels, lubricants, acids, solvents etc. Most of these products contain substances that are potentially harmful.
3. **Do not dispose of lubricants by burning: They contain substances that may be noxious when burned**.
4. Whenever possible, use biodegradable oil for lubricating the chains, as this oil cannot be collected.
5. Avoid spillage while draining oil, brake fluid, coolant etc. from the engine, gearbox and hydraulic system. Collect the fluids in suitable containers and dispose of them properly, according to regulations in force and the availability of suitable systems.
6. Modern coolants and mixtures, e.g. antifreeze and other additives, must be replaced every two years. Never let them drain into the ground; collect and dispose of them safely.
7. Never open or modify the air conditioning system. It contains gasses which must not be released in the atmosphere. Contact your Dealer or a specialist who has the correct equipment for emptying and recharging the system and for carrying out any required maintenance or repair.
8. Immediately repair any leaks or defects in the engine cooling or hydraulic system to prevent any risk of pollution.
9. Never increase the pressure in a pressurized system. This may cause the components to burst.
10. When welding, protect the hoses properly against welding spatters that could damage or weaken hoses and sleeves, resulting in oil and coolant leaks.

1.6.2 Hydraulic systems: hoses

Hoses are an important part of modern machines.

Hose features may change over the years when exposed to pressure, vibrations, weather conditions, etc.

Inspect the hydraulic hoses at the beginning of each new harvesting season.

Regulations in force (e.g. DIN 20066) require hose replacement six years from manufacturing (the manufacturing date is printed on most hoses, which helps determine when replacement is due).

It is important to observe these recommendations.

DANGER:

In the event of leaks, pressurized liquid may penetrate your skin and cause severe injury.

Immediately seek medical advice from a doctor familiar with this type of accident. This kind of injury requires surgery.

Always relieve the pressure before operating on the hydraulic system.

- When driving on the road at night, the front headlights must be dipped so that the low beam line hits the ground no further than ten meters in front of the vehicle. The rotating beacons must always be operating, even when there is no need for visual signaling and lighting devices. Switch off the work lights (these two controls, and others, operate automatically when "road transport mode" is activated).

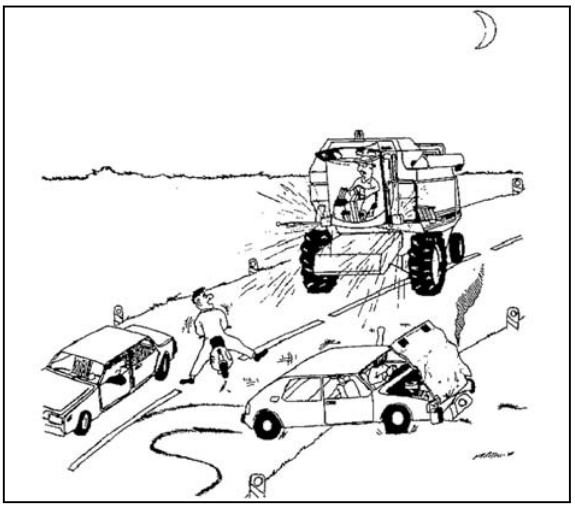


Fig. 4

- Before driving on public roads, ensure that the machine is equipped for road transport (see the chapter **Driving on Public Roads**).

WARNING:

It is not permitted to drive on public roads with product inside of the grain tank.

- If it is necessary to tow the combine due to a mechanical breakdown, strictly follow the procedure indicated in this section in the chapter **Towing the combine.**
- When driving on public roads towing the cutting table, ensure that the local traffic regulations (lights, correctly fitted trailer hitch etc.) are complied with. Ensure the cutter bar protection shield is fitted.
- Before driving on public roads, ensure that the table has been fastened correctly onto the trailer.

For more detailed information follow the instructions in the table trailer operator's manual.

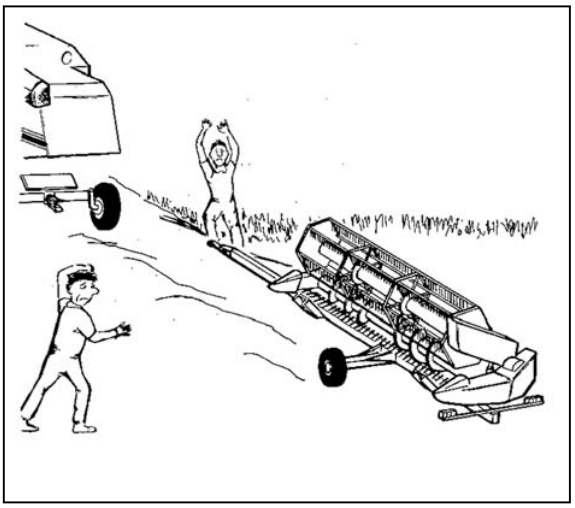


Fig. 5

- **Wear hearing protectors (ear muffs or plugs) if exposed to irritating noise.**

Fig. 19

- The cooling system is pressurized and the pressure is checked at the plug of the radiator expansion tank. **Removing the cap when the engine is hot is extremely dangerous. Switch off the engine and wait until it has cooled down sufficiently.** Even when the engine is cold, remove the cap with extreme caution by covering it with a cloth and turning it slowly to the first stop to release pressure before removing it completely. Coolant may be added only when the engine is switched off and cold. **Failure to comply with these instructions may cause severe burns by sprays of liquid or steam, and damage to the engine cooling system.**

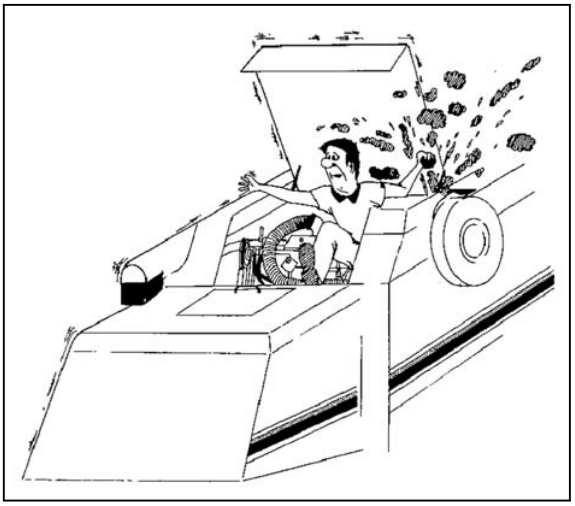


Fig. 20

- The coolant (antifreeze) contains monoethylene glycol and other chemicals which are toxic if ingested; prolonged contact with the skin should also be avoided. When working with antifreeze, take the following precautions:
  - Use rubber gloves and goggles to prevent injury from splashes.
  - Do not ingest the solution. If swallowed, see a doctor immediately.
  - If any part of the body should come into contact with the solution, wash immediately under running water.
  - Keep the antifreeze in sealed containers, out of reach of children, livestock and pets.

DANGER:

Risk of burning and scalding.

- The diesel oil in the injection system is pressurized and sprays may penetrate your skin. The injectors or other parts of the injection system must not be modified, opened or repaired by unauthorized personnel. Non-compliance with this precaution may result in serious injuries.
- In any event, avoid contact with oil from a hot engine (or other hydraulic systems). If the oil is very hot, let it cool off to a moderate temperature before draining it.
- Replace the oil filter only when the engine is cold and under no circumstances with bare hands, to avoid contact with the oil.

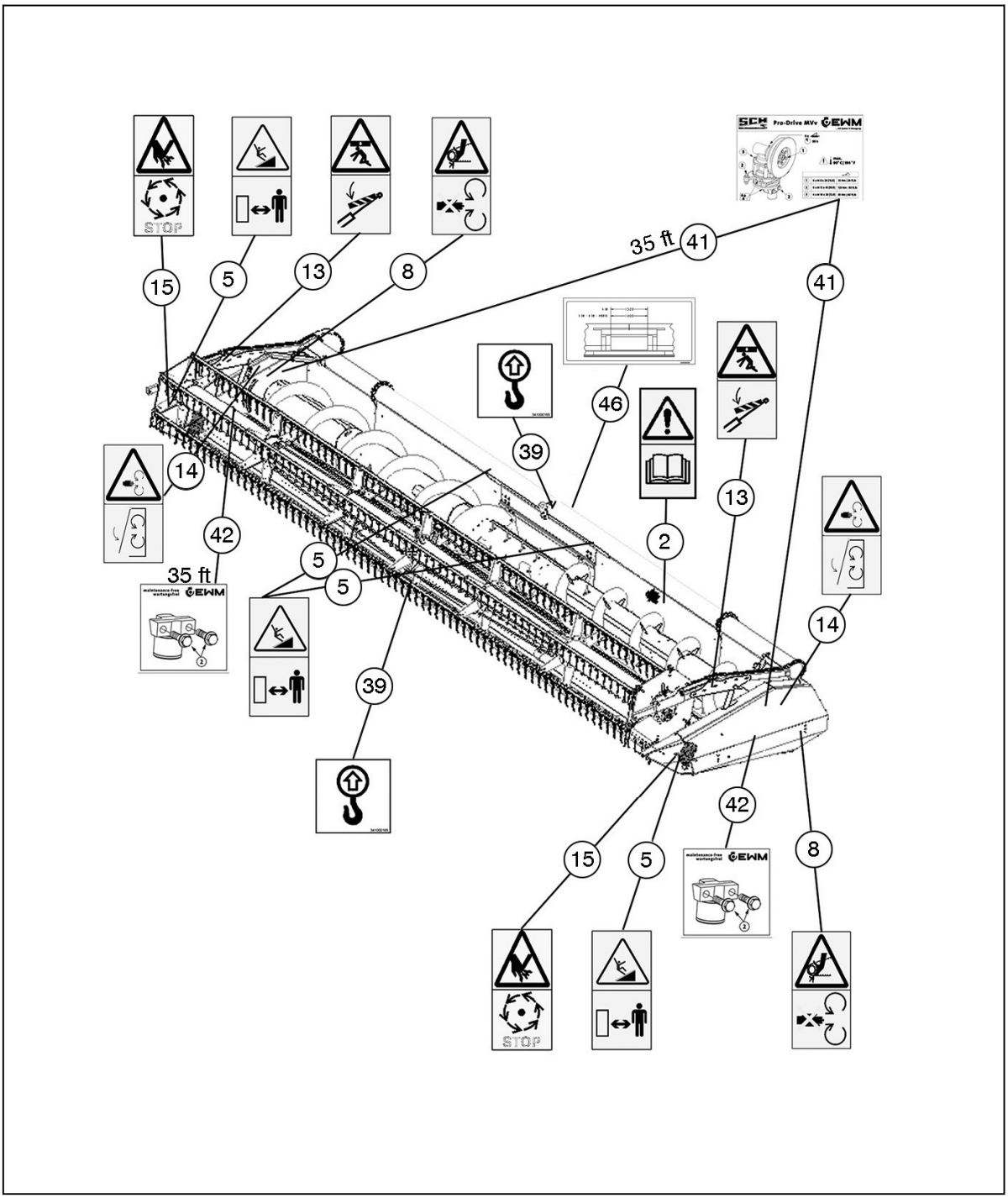


Fig. 28 Decal position - Cutting table (PF 30-35)

Decal 38

Air conditioning decal.

Fig. 65

Decal 39 - 341000165

Only use the points marked with this symbol to lift the machine.

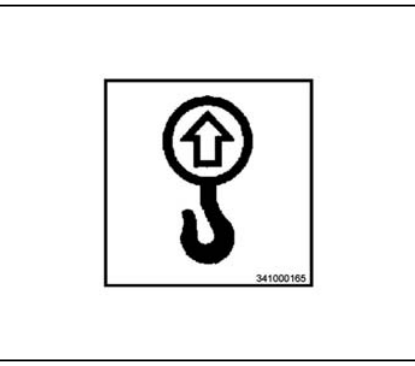


Fig. 66

Decal 40

Set the spring to 26±0.2.

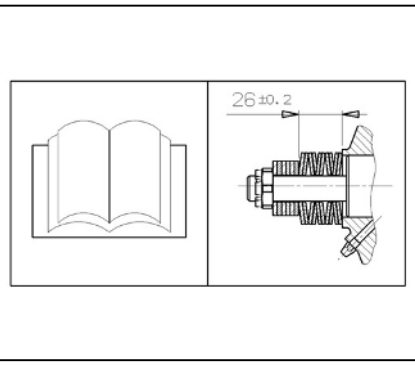


Fig. 67

Decal 41 - 28286569

Instructions for lubrication and to tighten torques.

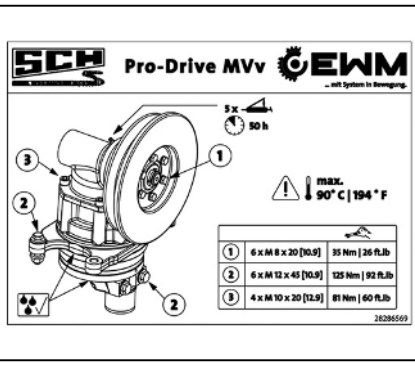


Fig. 68

2.9.8 Reflectors for road transport

In certain countries, the machine must be equipped with reflectors for road transport by the factory.

The warning signs must always be in perfect condition and replaced when required by genuine parts.

Denmark and Sweden:

Triangular red warning sign mounted on the back of the machine.

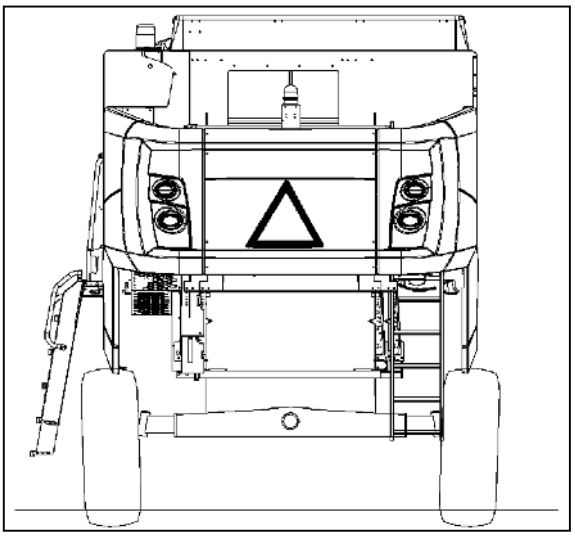


Fig. 89

France, Germany, Austria, Czech Republic and Russia:

Warning signs with alternating oblique red and white reflecting stripes measuring 282 mm x 282 mm.

These warning signs are located:

- At the front ((1)), fastened to the two sides of the light support brackets.

Fig. 90

2.13 Notes for road transport

Many countries have special regulations for driving combines on public roads, e.g.:

- Max. permissible width, length and weight, not requiring permission by the road traffic authorities.
- Max. length of the train, i.e. combine with table on trailer.
- Max. permissible width and length with permit from the road traffic authorities, without accompanying car/cars.
- Max. permissible forward speed.
- Use of lights, plates or flags to indicate a slow-moving vehicle.
- Additional signs for maximum dimensions.

The combine owner and/or operator should, therefore, inquire about applicable local regulations and requirements in this respect.

Additional lights for road transport with flip-up tables attached

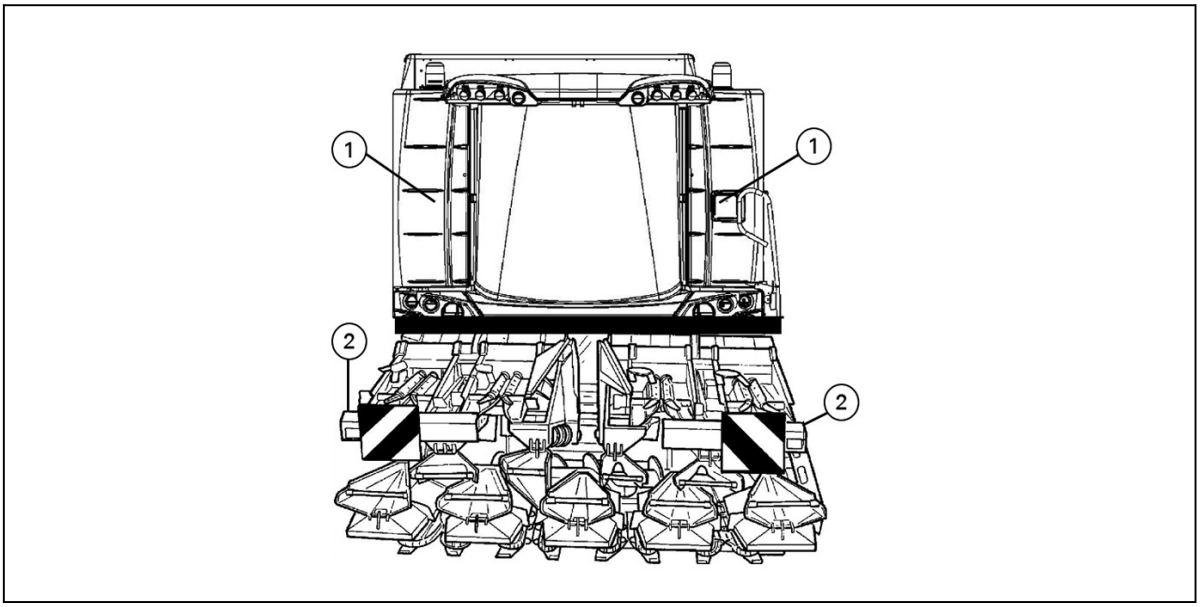


Fig. 102

When travelling on public roads with flip-up table attached, the machine must be equipped with additional headlights ((1)) parking lights and direction indicators ((2)).

Additional headlights (1) and other safety devices are available from AGCO as an optional variant.

Contact your dealer for more details.

The equipment includes electric cables and fitting instructions.

DANGER:

Auxiliary headlights (1) must be positioned so that the low beam meets the ground at a distance of no more than ten meters.

Parking lights and direction indicators ((2)) are available from the manufacturer of the flip-up table and should be fitted on the front of the table.

The following installation dimensions of the lights are statutory for road transport:

- Max. ground clearance (A) for ranges from 600 to 1500 mm;
- Distance from lights to outer edge of the machine (B), less than or equal to 400 mm.

The electrical connections must not enable the standard lights installed on the combine to be switched on at the same time as the additional lights.

3.4 Stage 2

3.4.1 Threshing

The main function of the threshing cylinder (1) and the concave (2) is to separate the grain from the straw, after which the grain passes through the concave onto the main grain pan (3).

The cylinder is fitted with 8 bars and 8 backing bars, arranged across a large diameter (600 mm).

This ensures high cylinder inertia, meaning that the optimum cylinder speed is maintained even if the load increases.

The concave has a wrap angle of 106°. It makes the threshing better and the separation capacity higher.

The machine is supplied with filler plates with oblong holes, to be used for crops for which aggressive de-awning is necessary. These must be installed on the first two spaces of the concave.

In this way the crop is properly threshed and distributed evenly across the full width of the main grain pan ((3)).

For maize and sunflower a special concave is used, with a wire diameter of 6 mm and a clearance of 24 mm between the wires.

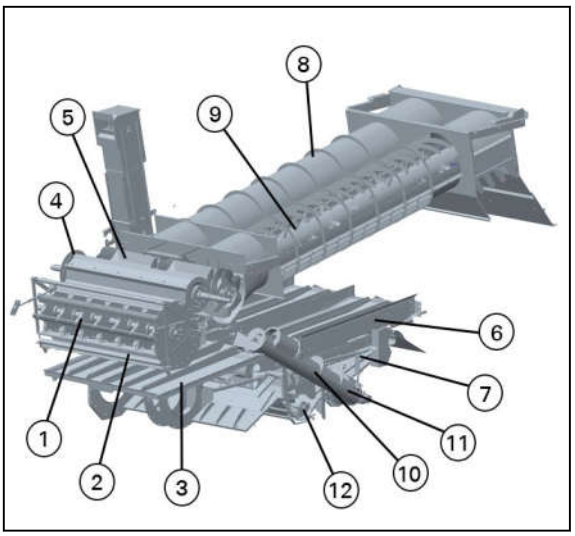


Fig. 4

4.1.5 Sun visor

The cab has a retractable sun visor (1) stored in the front part of the roof inside the cab.

To pull it out, pull the handle (2) down.

To retract, pull the lever (3) down.

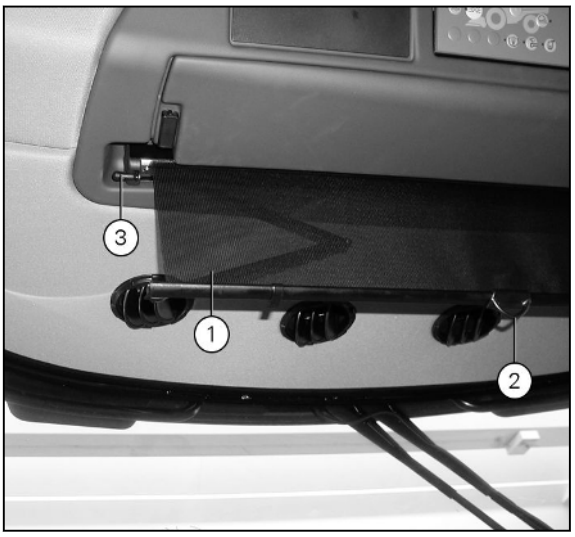


Fig. 6

4.1.6 Document Pocket

There is a compartment (1) suitable for keeping small objects on the right-hand armrest of the driver's seat, in a very convenient position for the operator.

To get access to the compartment, simply lift the top part (2) of the right-hand armrest.

Fig. 7

- When the machine is next started, the control system will issue a warning to inform the operator that the parking brake is not operational and that it must be repaired as quickly as possible.
- If the operator (by approving the message on the video unit) takes responsibility for using the machine in these conditions, the system enables traction allowing the machine to be moved.

4.7.10 Switch for leveling mode

The switch (28) can be moved into three positions:

- Enable **manual control** (upward)
- Neutral (center)
- Enable **automatic control** (downward).

NOTE:
*If the switch (28) is on either **MAN** or **AUTO**, it is not possible to start the engine.*

IMPORTANT:
The manual function always takes priority over the automatic function, so as soon as the operator activates manual control, the manual function will take over, and the automatic function will not take over again until the manual function is released.

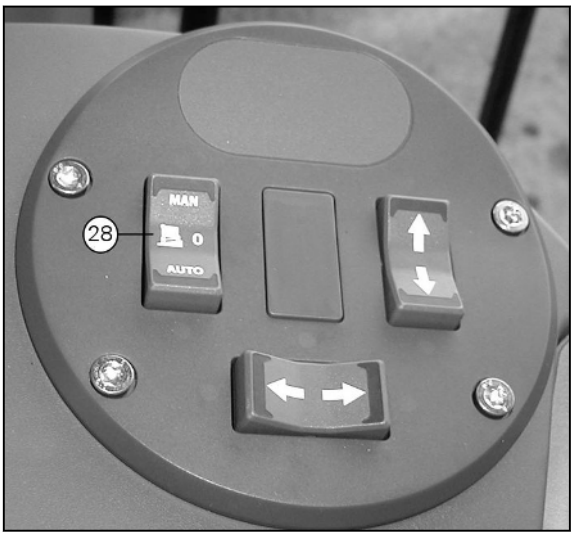


Fig. 37

4.7.11 Toggle switch for longitudinal leveling

The switch (29) can temporarily assume two positions (as soon as it is released, it automatically returns to the neutral position):

- **Machine front lifting** (upward)
- **Machine front lowering** (downward).

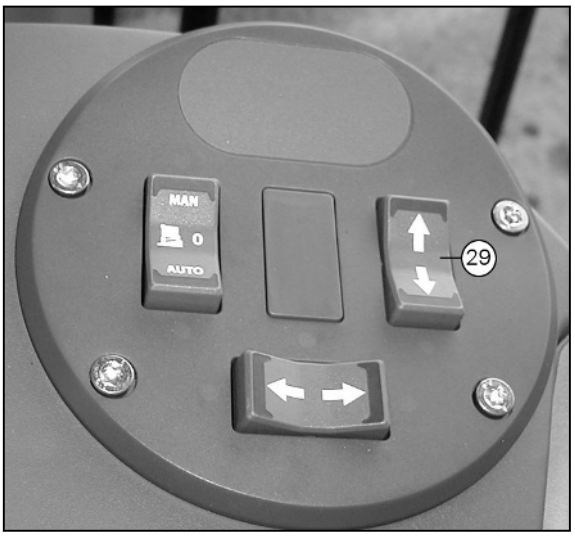


Fig. 38

ENGINE			
DESCRIPTION	ICON	DESCRIPTION	ICON
Fuel.		DEF.	
Load.		Pressure, air intake.	
Battery, Volt		Coolant temperature.	

GUIDE			
Correction signal.		System information.	
Gyro compass, information.		NMEA settings.	
Save data in Data system.		Gyro compass calibration.	
Speed.		Connection angle to road line.	
Distance to road line.		GNSS receiver.	

4.8.6 Machine settings and performance control

By pressing the icon alongside in the **Main menu** screen, the **Machine settings** page appears

From here, you can navigate to the following pages:

- Residue discharge settings (1)
- Performance and returns monitoring (2)
- Constant Flow settings (3)
- Grain handling settings (4)

In this screen, you can adjust the parameters of the main components of the threshing mechanism. They can be set even when the machine is stopped (however, the control will be activated only when the engine is running and the threshing mechanism is activated).

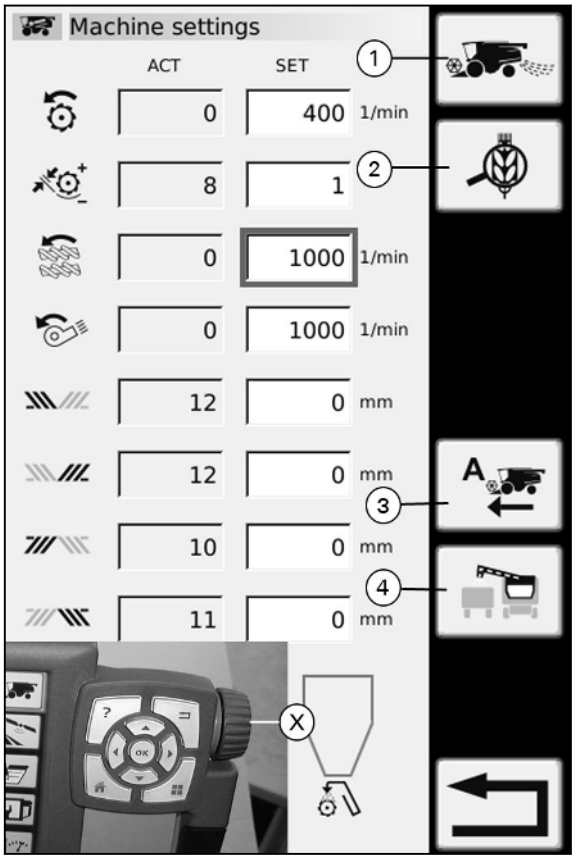


Fig. 56

NOTE:
The crop delay is set to 9 seconds from the factory.

Yield meter calibration (Varioterminal 10.4)

In order for the yield meter to display the correct yield, it must be calibrated for the current crop to be harvested.

The yield meter calibration must be performed regularly in order to achieve as accurate a measurement as possible. Generally, the calibration must be performed before use, when changing crop, when changing field or if the sensors have been removed for cleaning.

Procedure for crop related calibration:

- Empty the grain tank
- Press the start/stop button (6)
- Harvest at least one tank load
- Press the start/stop button (6)
- Empty the grain tank and weigh the content
- Enter the weight from the terminal (7) and the weight from the weighbridge in the calibration monitor
- Confirm the change by pressing the OK key.

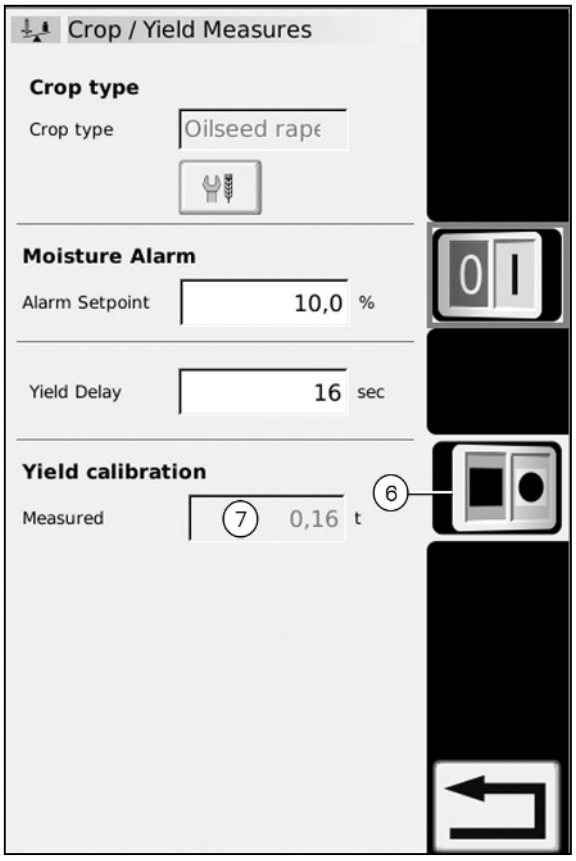


Fig. 68

Calibration of the yield meter (calibration monitor)

Press the following icons to navigate to the calibration number page:

Enter the value displayed in the field (7) on the Varioterminal 10.4 terminal in the field (10) on the calibration monitor.

Enter the weight from the weighbridge in the field (11).

After entering both values, a new calibration number is calculated (12). Accept this change by pressing the OK key.

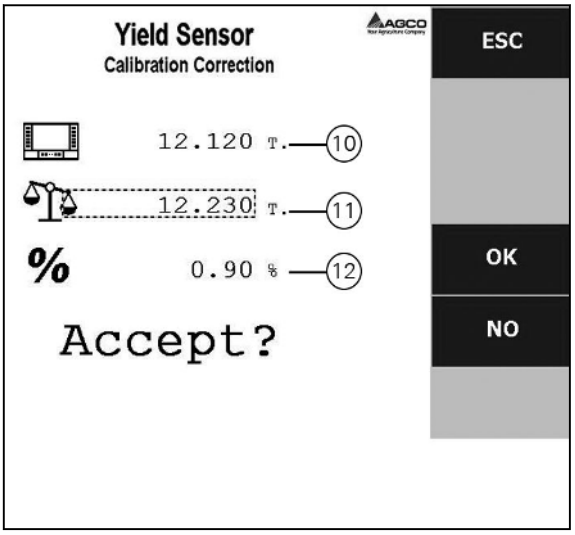


Fig. 69

Alternatively, this value can also be calculated and entered directly:

$$\text{New calibration factor} = \frac{\text{Current calibration factor x weighbridge}}{\text{Harvest quantity counted read on the terminal}}$$

NOTE:
If, due to harvest conditions, the crop volume varies so much that Constant Flow is unable to control forward speed, it may be necessary to help the system without disengaging it.
This is done by pulling the multifunction lever so far backward that the load gets below the preset value. If the load is less than the set value, the operator decides the speed/load of the machine.

4.8.12 Grain handling

Grain handling settings

The grain handling page shows the crop volume in the grain tank.

The icon (1) shows the amount of crop in the grain tank. The value is based on the amount of crop that runs through the yieldmeter. This value will be reset each time the unloading auger has been activated for a few seconds. It is also possible to read this value directly on the instrument panel.

The position of the cover plate can be seen on the icon (2).

The higher the cover plate is raised, the more material is able to pass into the grain tank bottom auger, on through the unloading auger and out through the unloading tube.

This function can be adjusted by the user with the armrest switches (6) on a scale from 0 to 100, where 0 = bottom position and 100 = top position.

Set the cover plate in bottom position to start with. Raise the cover plate slightly in dry grain and herbage seed. In herbage seed it may be necessary to raise the cover plate completely while unloading if the seed tends to bridge. Remember to lower the cover plate again after unloading.

In rape, mustard, clover seed, etc. the plate must normally be in bottom position.

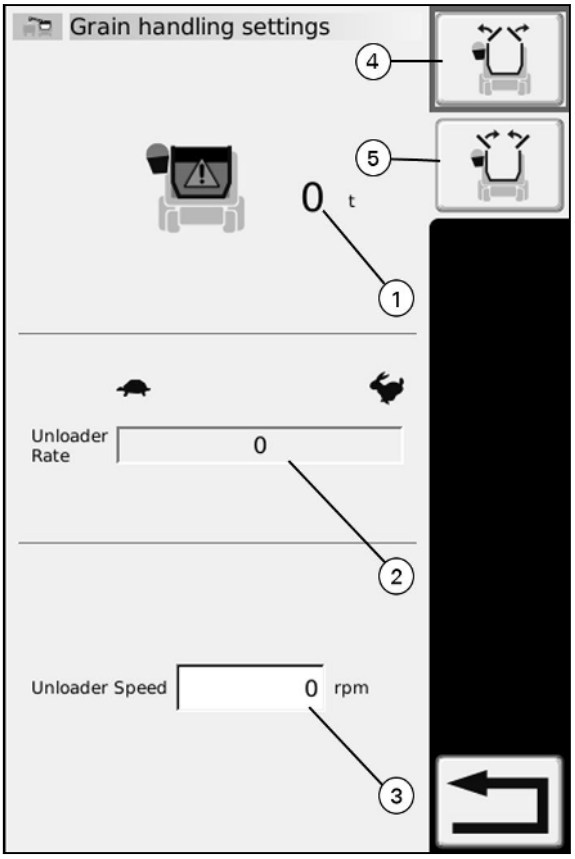


Fig. 84

NOTE:
Always lower the cover plate completely before starting in a new crop.

The icon (3) shows the rpm of the unloading auger.

The icon (4) activates the automatic opening of the grain tank.

The icon (5) activates the automatic closing of the grain tank.

The set cutting height can be changed during harvest if required, for example, by pressing the bar for cutting height indication (7) on the harvest picture. Then press the icon (2) and the cutting height can now be changed by means of the adjustment knob. It may be an advantage to use this approach instead of trying to operate the table manually if the operator wants to temporarily change the cutting height.

If the use wants raise the table over obstacles that the field pressure control cannot cope with, this can be done manually by using the switch in the multifunction lever. This will temporarily deactivate the cutting height control until it is activated again by pressing the automatic button.

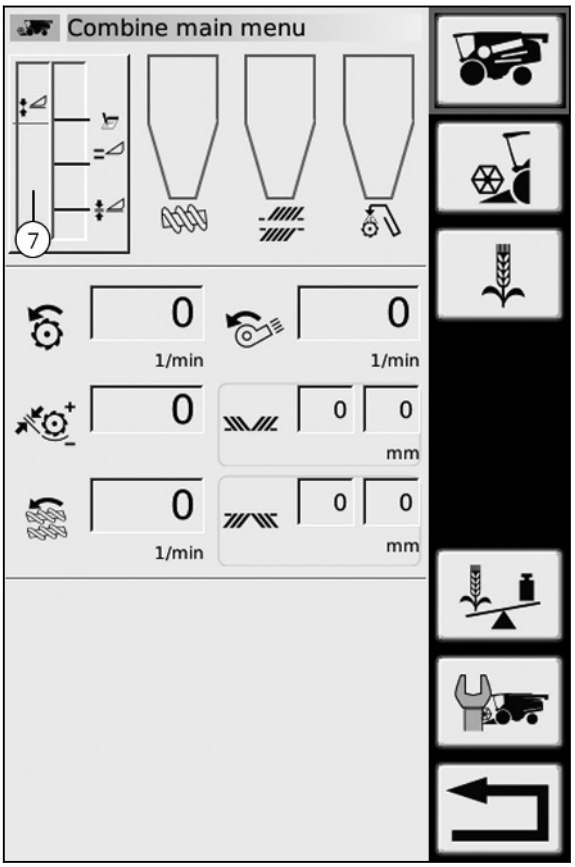


Fig. 95

When you press the field (1), a drop-down menu appears on the terminal. Here a selection can be made from the following crops:

- Cereal
- Barley
- Oilseed rape
- Oats
- Peas
- Grass seed
- Rye
- Maize
- Sunflower
- Triticale

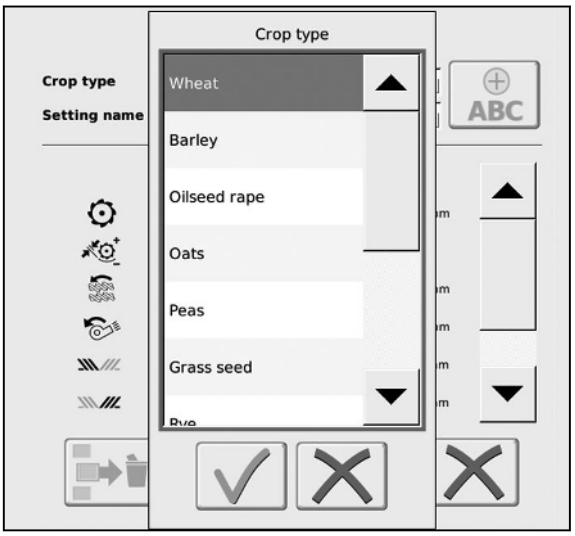


Fig. 105

When you press the field (2), a drop-down menu appears on the terminal. Here, the moisture content of the selected crop can be set:

- Default, normal
- Default, dry
- Default, wet

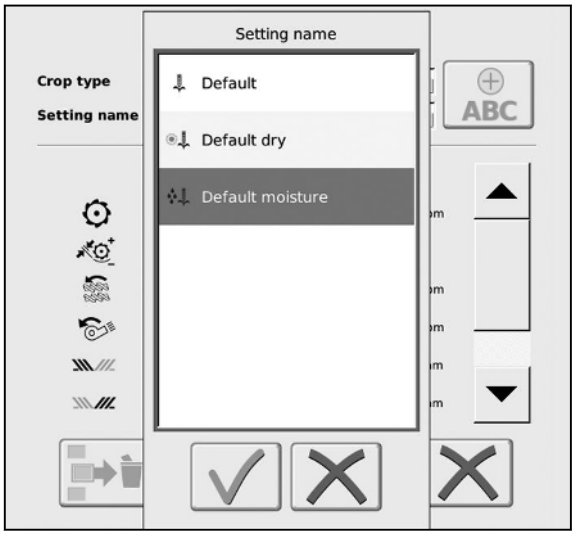


Fig. 106

To change one of the set values, proceed as follows:

1. Press the field where the setting needs to be changed
2. Adjust the value with the adjustment knob (X)
3. Confirm by pressing the checkmark 
4. Confirm once more by pressing the checkmark 
5. Enter a name for the setting in question
6. Confirm by pressing the checkmark 
7. The selected change is now stored and will be shown in drop-down menu when you press the field (2)

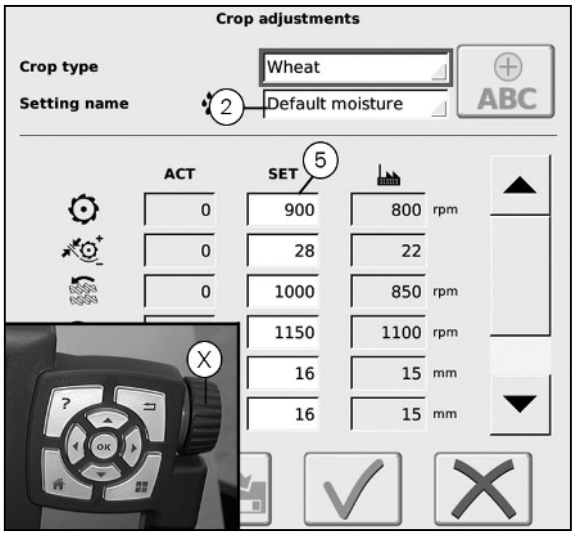


Fig. 107

Shaft Speeds	
Shaft	**Nominal rpm**
Tank filling auger	490
shaker shoe	300
Straw chopper (8-row)	3460 (1430)
Rotor Feeder	950 (515)
Fanning Mill	460-1150 (310-790)
Threshing drum	380-1150
Rotor	360 - 1000
Unloading auger	518-522

4.8.28 System information and setup

System information

Press the following icons and the page with information about the program used to manage the system appears.

This page shows all versions of the programs that the system uses. It is very useful for making sure that the software is up to date

1. Currently not in use
2. EXT connection and controller
3. Terminal
4. Armrest control panel
5. Control panel for lights (located in cab roof)
6. Left-hand job computer
7. Right-hand job computer
8. Auto Level job computer

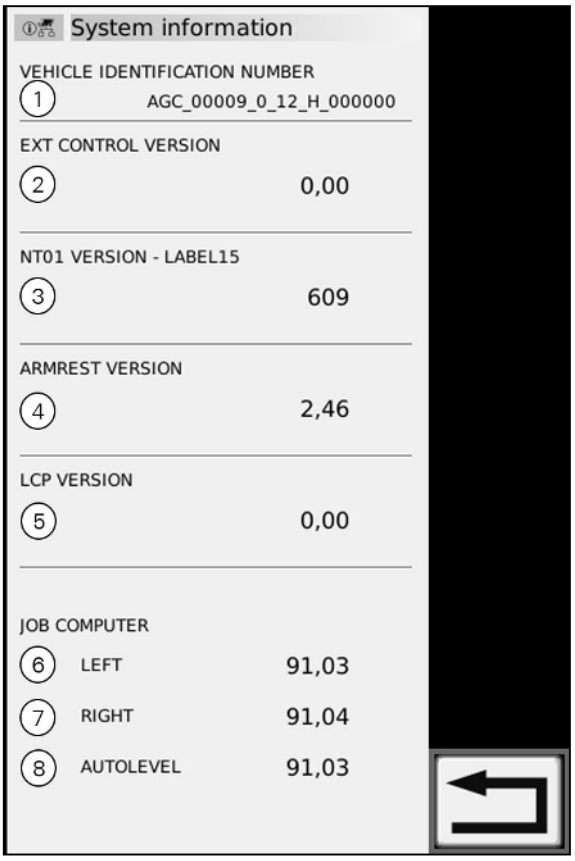


Fig. 118

1B.2.56	ErrorPrio3	MPROP control, Open circuit
1B.2.57	ErrorPrio3	MPROP control, Powerstage over temperature
1B.2.58	ErrorPrio3	Engine injector cylinder #1, Current below normal: Open circuit
1B.2.59	ErrorPrio3	Engine injector cylinder #1, Short circuit
1B.2.5A	ErrorPrio3	Engine injector cylinder #1, Calibration value missing
1B.2.5B	ErrorPrio3	Engine injector cylinder #2, Current below normal: Open circuit
1B.2.5C	ErrorPrio3	Engine injector cylinder #2, Short circuit
1B.2.5D	ErrorPrio3	Engine injector cylinder #2, Calibration value missing
1B.2.5E	ErrorPrio3	Engine injector cylinder #3, Current below normal: Open circuit
1B.2.5F	ErrorPrio3	Engine injector cylinder #3, Short circuit
1B.2.60	ErrorPrio3	Engine injector cylinder #3, Calibration value missing
1B.2.61	ErrorPrio3	Engine injector cylinder #4, Current below normal: Open circuit
1B.2.62	ErrorPrio3	Engine injector cylinder #4, Short circuit
1B.2.63	ErrorPrio3	Engine injector cylinder #4, Calibration value missing
1B.2.64	ErrorPrio3	Engine injector cylinder #5, Current below normal: Open circuit
1B.2.65	ErrorPrio3	Engine injector cylinder #5, Short circuit
1B.2.66	ErrorPrio3	Engine injector cylinder #5, Calibration value missing
1B.2.67	ErrorPrio3	Engine injector cylinder #6, Current below normal: Open circuit
1B.2.68	ErrorPrio3	Engine injector cylinder #6, Short circuit
1B.2.69	ErrorPrio3	Engine injector cylinder #6, Calibration value missing
1B.2.6A	ErrorPrio3	Engine injector cylinder #7, Current below normal: Open circuit
1B.2.6B	ErrorPrio3	Engine injector cylinder #7, Short circuit
1B.2.71	ErrorPrio3	ECU Main Relay1 short circuit to GROUND
1B.2.72	ErrorPrio3	ECU Main Relay2 short circuit to GROUND
1B.2.73	ErrorPrio3	ECU Main Relay1 Short circuit to HIGH SOURCE
1B.2.74	ErrorPrio3	ECU Main Relay2 Short circuit to HIGH SOURCE
1B.2.77	ErrorPrio3	DOC inlet temp sensor voltage above normal or open circuit
1B.2.78	ErrorPrio3	DOC inlet temp sensor sensor voltage below normal
1B.2.79	ErrorPrio3	DOC inlet temperature value not plausible
1B.2.7A	ErrorPrio3	SCR catalyst inlet gas temp sensor voltage above normal or open circuit
1B.2.7B	ErrorPrio3	SCR catalyst inlet gas temp sensor voltage below normal
1B.2.7C	ErrorPrio3	SCR catalyst inlet gas temp sensor value abnormal rate of change
1B.2.7D	ErrorPrio3	SCR catalyst inlet temperature value not plausible
1B.2.7E	ErrorPrio3	SCR catalyst outlet gas temp sensor voltage above normal or open circuit
1B.2.7F	ErrorPrio3	SCR catalyst outlet gas temp sensor voltage below normal
1B.2.80	ErrorPrio3	SCR catalyst outlet gas temp sensor value abnormal rate of change
1B.2.81	ErrorPrio3	SCR catalyst outlet temperature value not plausible
1B.2.82	ErrorPrio3	Upstream NOx sensor missing or unavailable
1B.2.83	ErrorPrio3	Upstream NOx sensor value implausible
1B.2.84	ErrorPrio3	Upstream NOx sensor stability time exceeded
1B.2.85	ErrorPrio3	Upstream NOx sensor supply voltage out of range
1B.2.86	ErrorPrio3	Upstream NOx sensor maximum heating time exceeded

Fig. 129 Page 3

13.1.28	ErrorPrio2	Automatic Levelling Activation switch on the multifunction armrest is faulty or communication with it is lost. If error persists please contact your dealer.
13.1.29	ErrorPrio2	Longitudianal Levelling function switches on the multifunction armrest are faulty or communication with them is lost. If error persists please contact your dealer.
13.2.30	ErrorPrio3	Lighting control panel communication lost
13.2.31	ErrorPrio3	Monitor communication lost
13.0.32	ErrorPrio1	EXT: CAN bus communication problem with CLP. Check fuses and diode in the engine area or electrical box. If error persists please contact your dealer.
13.0.33	ErrorPrio1	EXT: CAN bus communication problem with CRP. Check fuses and diode in the engine area or electrical box. If error persists please contact your dealer.
13.0.34	ErrorPrio1	EXT: CAN bus communication problem with CAP. Check fuses and diode in the engine area or electrical box. If error persists please contact your dealer.
13.2.35	ErrorPrio3	EXT: CAN bus communication problem with Doc Controller. Check fuses and diode in the engine area or electrical box. If error persists please contact your dealer.
13.1.36	ErrorPrio2	EXT: CAN bus communication problem with Guidance Antenna. Check fuses and diode in the engine area or electrical box. If error persists please contact your dealer.
13.2.37	ErrorPrio3	EXT: CAN bus communication problem with Agcommand Controller. Check fuses and diode in the engine area or electrical box. If error persists please contact your dealer.
13.2.38	ErrorPrio3	Wrong Error Message. Please contact your dealer.
13.2.39	ErrorPrio3	The Yield Settings couldn't be saved in the EXT memory. Please set the settings another time. If error persists please contact your dealer.
13.2.40	ErrorPrio3	The Counter Settings couldn't be saved in the EXT memory. Please set the settings another time. If error persists please contact your dealer.
13.3.41	Info	Road mode not possible: Guidance System is activated
13.3.42	Info	Road mode not possible: Thresher is engaged
13.3.43	Info	Road mode can't be de-activated: Combine Ground Speed is too high.
13.2.44	ErrorPrio3	EXT: Fault at pin A-89. OPS Signal to CRP [Short to Supply]. If error persists please contact your dealer.
18.2.00	ErrorPrio3	Guidance System can't work while the Operator Presence Switch is not active
18.2.02	ErrorPrio3	Guidance System is in Error State
18.2.03	ErrorPrio3	Pilot Pressure was not checked during pre-condition stage
18.2.04	ErrorPrio3	EXT: Fault at pin A-96. Guidance Power [Open Circuit]. If error persists please contact your dealer.
18.2.05	ErrorPrio3	EXT: Fault at pin A-96. Guidance Power [Grounded Circuit]. If error persists please contact your dealer.
18.2.06	ErrorPrio3	EXT: Fault at pin A-96. Guidance Power [Short to Battery]. If error persists please contact your dealer.
18.2.07	ErrorPrio3	EXT: Fault at pin A-74. Guidance Safety Valve [Open Circuit]. If error persists please contact your dealer.
18.2.08	ErrorPrio3	EXT: Fault at pin A-74. Guidance Safety Valve [Grounded Circuit]. If error persists please contact your dealer.
18.2.09	ErrorPrio3	EXT: Fault at pin A-74. Guidance Safety Valve [Short to Battery]. If error persists please contact your dealer.
18.2.10	ErrorPrio3	EXT: Fault at pin A-80. GND Signal for Guidance Safety Valve is in Error State. If error persists please contact your dealer.

Fig. 139 Page 13

The system information page shows the status of the most important functions in terms of the GPS and steering function of the Guide system.

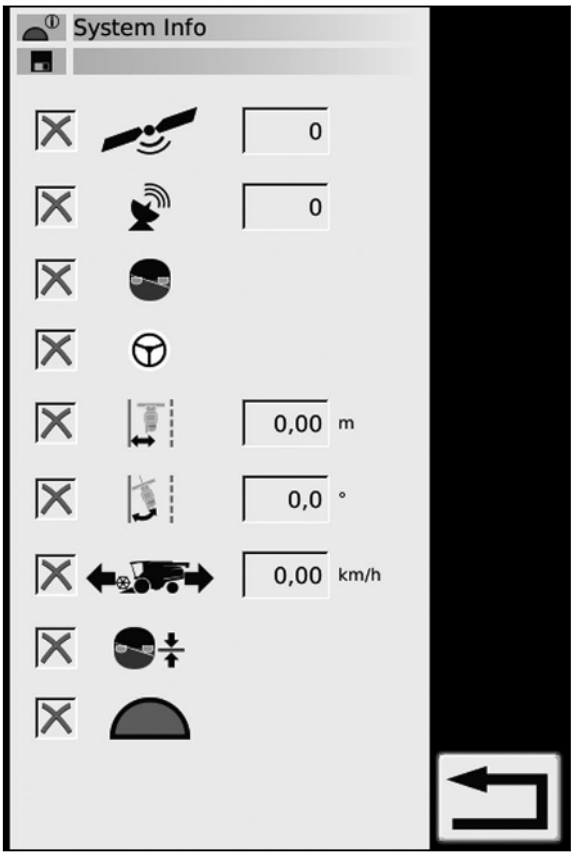


Fig. 149

4.8.32 Data

Operation description

This machine can be equipped with a data logging system that works together with the Guide system which can also be installed on the machine. Its purpose is to assist the user in controlling the machine and its performance optimally.

The data logging system will be available in two editions - Standard and Pro.

NOTE:
The VarioDoc pro data system must be purchased as an optional extra.

NOTE:
Some of the information in this section contains descriptions of functions that are ONLY available with the VarioDoc pro data system.
The following information is not comprehensive but only a part of the system. If the VarioDoc pro data system is purchased, a separate operator's manual will be provided.
However, it is important to note that the separate operator's manual is not fully usable and may deviate slightly from what is displayed on the terminal. The terminal will therefore contain a number of instructions relating to each function.

The standard version features the functions:

- 10 counters with a calculation function:

Apart from the standard function, the Pro version also features:

- Indication of pre-defined commands and work processes from the field database via the terminal.
- Creation or adjustment of parameters such as tools

Info+ Threshing data

The "Threshing Data" screen shows the following parameters:

- Total area harvested since zeroing (1)
- Harvest hours (2) (the time it took to harvest the area (1)).
- Average yield per hectare (3)
- Current yield per hectare (4)
- Average quantity harvested per hour (5)
- Current quantity harvested per hour (6)
- Average moisture content (7)
- Current moisture content (8)

All values will be reset when the area measuring is reset.

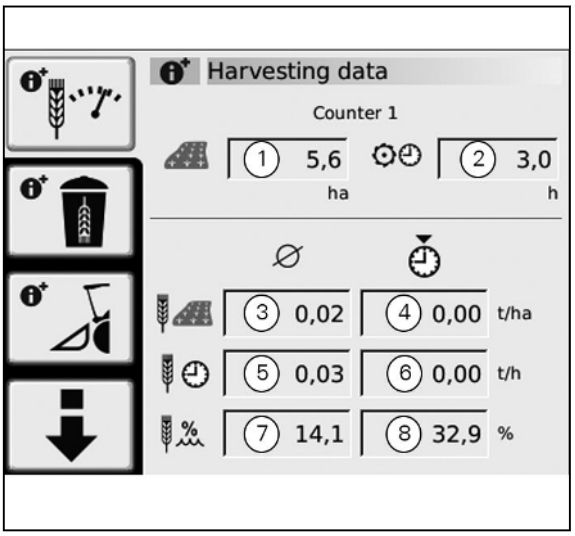


Fig. 165

Info+ Performance monitor

The "Loss" screen shows the following parameters:

- Grain loss from rotors (1)
- Grain loss from shaker shoe (2)
- Returns volume (3)
- Setting the returns volume sensitivity (4)

To change the sensitivity, press the relevant bar after which the setting can be carried out with the adjustment knob (X) on the terminal.

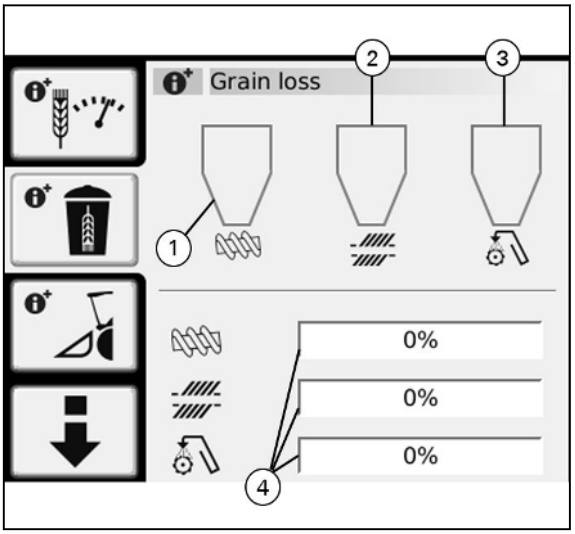


Fig. 166

The upper part of the rear view mirrors can be adjusted electrically; there is also a resistor for defrosting, which is activated with the push button (6) on the lighting control panel.

Fig. 183

4.13 Climate control

4.13.1 Air conditioning

WARNING:

The air conditioning can be a breeding ground for bacteria harmful to health, which can lead to asthma and allergies. For this reason it should be cleaned and inspected by the dealer once a year.

The system automatically adjusts all functions according to the temperature selected by the operator.

The heating and air conditioning can be activated easily inside the cab. Therefore warm and dehumidified air can be obtained in winter, and cool and dehumidified air in summer.

IMPORTANT:
During the winter storage period or if the air conditioning is not used for a long period of time, it is extremely important to use the air conditioning system every two weeks for at least 15 minutes to lubricate the internal air conditioning components and to prevent leakage of air conditioning gas. This operation must only be carried out with the engine running and only if the external temperature is above 15°C.

Control unit

The control unit has the following controls:

1. Set temperature reduction
2. Set temperature increase
3. Automatic operation
4. Rapid cooling
5. Rapid heating
6. Short press: recirculation.

   Long press: Outside temperature
7. Windscreen defrost
8. Compressor
9. Fan rotational speed increase
10. Fan rotational speed reduction

When the climate control is on, the air in the cab should be recirculated for better utilization of the system. The cab doors should be kept closed at all times.

Fig. 201

NOTE:
At a cutting height of more than 20 cm (ground sensors (1) *clear of the ground), control of the table is taken over by the sensor* (2) *on the main crop elevator until the cutting height is back below 20 cm.*
The table is positioned as at turns, parallel with the traction wheels.

At turns the position of machine and table is automatically adjusted to the inclination of the ground. If turned very fast, the machine may not have time enough to adjust to the new inclination, but when lowered the table will be positioned parallel with the ground.

NOTE:
The ground sensors (1) *must be free to move up and down. If a sensor is stuck, the table will be unable to follow the ground contours and tilt to one side when raised at turns.*

Auto Level combine engaged and Auto Level table disengaged

This combination is applied when the combine is working with a cutting height of more than 20 cm, for instance when direct cutting rape, sunflowers, etc.

The same combination is applied when the machine is fitted with a special header without ground sensors, for instance maize or sunflower headers.

The position of the machine when threshing is controlled by the sensor in the VarioDoc pro system.

The position of the table parallel with the traction wheels is monitored and adjusted by VarioDoc pro with the aid of sensor (2) on the main crop elevator.

Auto Level combine disengaged and Auto Level table engaged

This combination is used where the ground does not require engagement of Auto Level combine. The table will follow the ground dependent on which function is activated in the menu "Table settings".

Auto Level combine disengaged and Auto Level table disengaged

When this combination is used, Auto Level combine and Auto Level table can be controlled manually using the switches on the control panel and multifunction lever.

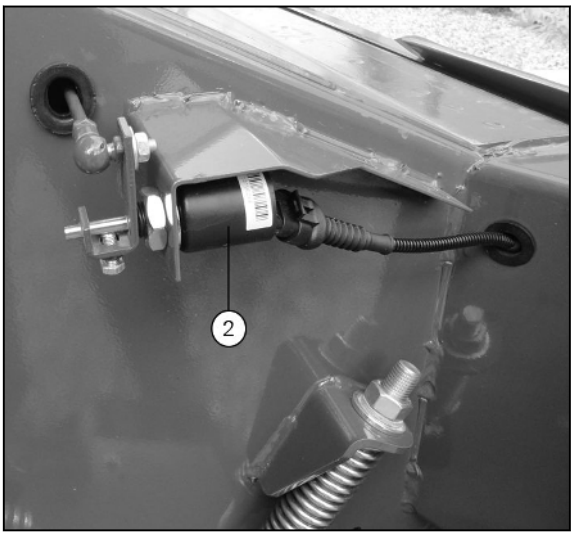


Fig. 3

Fig. 4

5.7.2 Calibration of Auto Level Table

When the table is attached to the machine for the first time, a number of calibrations must be performed for the different table controls to function correctly. All these calibrations can be made from "Calibration menu | Table calibration" on the Varioterminal 10.4 terminal. For more information, simply follow the instructions displayed on-screen, or see the **Table calibration** chapter in the **Controls and instruments** section.

The following functions can be calibrated:

- Table levelling (1)
- Table level (2)
- Cutting height (3)
- Zero cutting height (4)

If the calibration is not approved, check the sensor and the electrical and mechanical connections. A red cross indicates that the calibration has failed. A green checkmark indicates that the calibration was performed correctly.

NOTE:
When the table is calibrated, all automatic controls must be turned off under "Table settings". This is to prevent that any insufficient or wrong calibration causes the automatic function to turn the table during calibration.

NOTE:
If the machine is equipped with Auto Level, it must be raised to harvest position before performing the calibration.

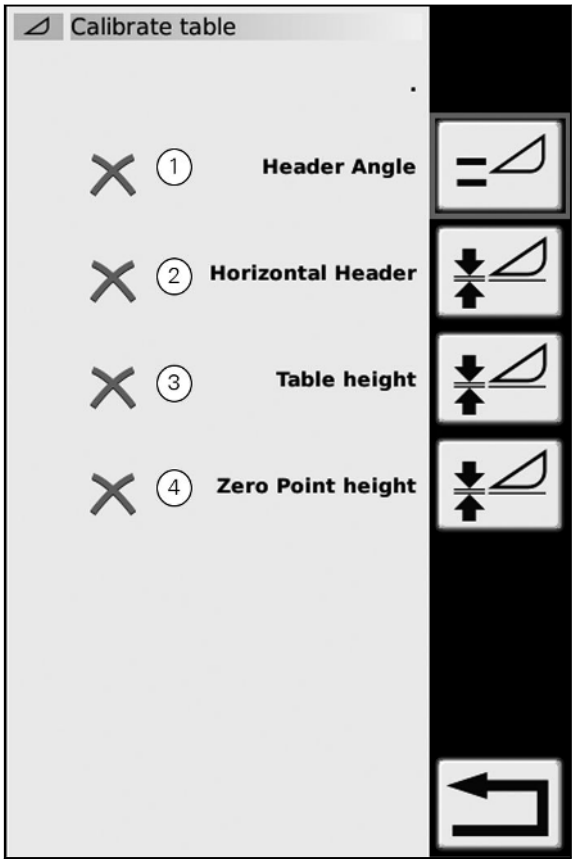


Fig. 15

5.7.3 Zero Cutting Height

For adjustment of cutting height presetting Auto Level combine must be brought into working position before zeroing is carried out. The machine is put into working position by driving forward while the Auto Level system is engaged.

If the cutting height presetting is adjusted when "Auto Level combine" is in transport position the main crop elevator will change position in relation to the ground when working position is reached which means that the table will be positioned higher than intended.

6.2 Cutting table engagement and disengagement

6.2.1 Important information

DANGER:

Risk of squeezing, cutting or shocks. During cutting table attachment/removal operations, stay out of the maneuvering area. Never climb under the cutting table unless the safety stops in the lifting rams have been engaged.

Please see the Operator's Manual for the combine for further details on the interdependence between combine and cutting table.

NOTE: *Safety guards, locking devices, etc. vary according to machine type and can differ from the components illustrated in this chapter.*

6.2.2 Attachment

Procedure

- Set the table control system to manual.
- Place the cutting table on flat ground, or ground that is as level as possible. If it is placed on the trailer, release it from the transport hooks.
- Ensure that the lever (1) for positioning the cutting table bottom locking hooks is shifted downwards.

  NOTE: *The right- and left-hand hooks are coupled by a shaft, which means that there is only one control lever* (1) *on the left-hand side.*
- Slowly move the machine towards the cutting table, being careful to centre the main crop elevator on the table inlet.
- Lower the main crop elevator so that the stop plates (2) can pass under the beam (3).
- Aim between the brackets (4) on each side and move forward until the machine touches the cutting table.
- As soon as the stop plates (2) pass the beam (3), stop the forward movement of the machine and lift the main crop elevator.

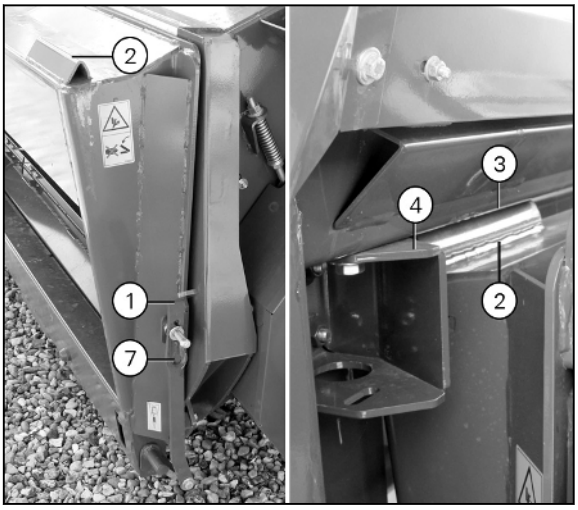


Fig. 1

PF30-35 cutting table

DANGER:

During adjustment operations, hold the reel arm with an approved hoist (lifting capacity of no less than 1000 kg).

To adjust the lower position of the reel and the parallelism with the knife, use the threaded rod (2) on the left- and right-hand lift cylinders (1).

The clearance between the reel tines and the knife, with fully retracted hydraulic cylinders, must be 25+5 mm.

To adjust the position of the reel, fore/aft and up/down, use the buttons on the multifunction lever.

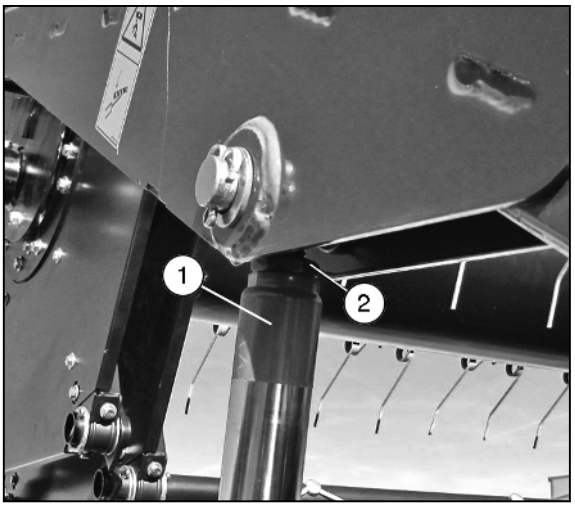


Fig. 17

To cut oilseed rape and similar crops, you can move the reel lift cylinders on the hole (3), to increase the distance between the reel and the ground.

NOTE: *Repeated engagement and disengagement of the cutting table can cause accumulation of air in the system, which can change the position of the reel.*

In such case, bleeding is necessary.

Fig. 18

The reel speed must be slightly faster than the forward speed to provide even feed.

A reel speed that is too high can cause losses in the cutting table. Ears may break off and the crop can fall to the ground.

In typical crops, the reel must run just below the ear and the reel tines must be slightly inclined to the knife.

In fully or not fully laid crops, the reel tines must be inclined to the knife. In these conditions, it is recommended to adjust the reel forwards and down in such a way that the tines lift the crop onto the knife.

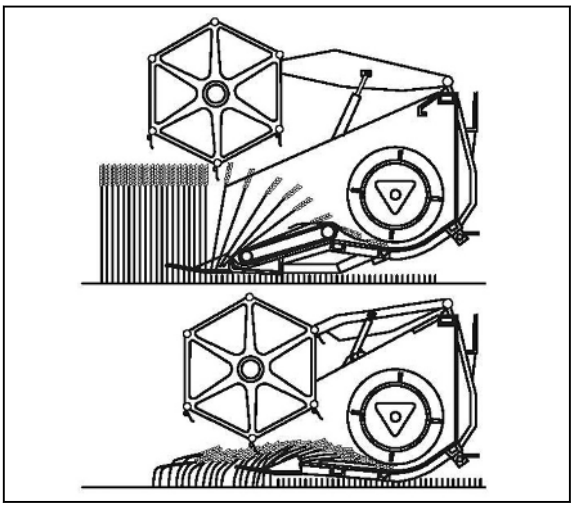


Fig. 19

6.8 Reversing

6.8.1 Reversing

The table and feed reversing mechanism is engaged with the toggle switch (1) and automatically disengaged when the switch is released. The reversing mechanism must not be engaged before the cutting table and feeder have stopped completely.

NOTE:
Lift the center part (yellow frame) to activate the switch.

NOTE:
If the reversing mechanism does not start immediately when the switch (1) *is activated:*

- *Wait until the feeding unit has stopped completely*
- *Check the electric connections*
- *Check the hydraulic connections*

Fig. 33

In case of accumulated material in the table auger and/or main crop elevator, which triggers safety clutch, do as follows.

Procedure

- Stop the machine immediately and stop the table with the switch.
- Reverse the machine a few meters and reduce the engine speed to idle.
- Engage and disengage the reversing mechanism. It may be necessary to repeat the engagement and disengagement several times.
- Make sure that the table has stopped completely.
- Raise the reel and engage the table drive.
- Using the reel, the crop can be transported slowly to the table auger.

WARNING:

If the accumulated material cannot be removed by means of the reversing mechanism, disengage the threshing mechanism and switch off the engine. Remove the ignition key and wait for all moving parts to stop, and then the accumulated material can be removed manually. Use the cylinder wrench if necessary.

6.12.7 Cleaning

Check daily that dirt does not accumulate between the belts.

Remove the cover plates and clean the scrapers and labyrinth plates, if necessary.

Clean the cutting table thoroughly after harvest.

NOTE: *Material not removed from the belts* (1) *and scrapers* (2) *and from below the belts* (3) *will attach to and damage the belts when they start again.*

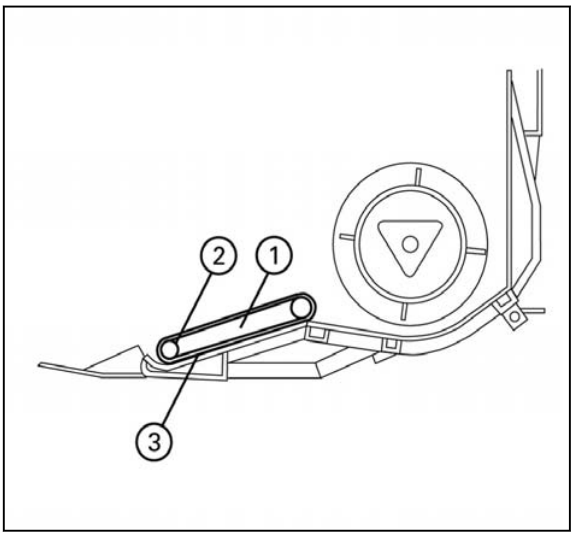


Fig. 50

6.19 Main crop elevator

6.19.1 Elevator Chain

The elevator chain is kept taut by the spring (1).

Adjust the nut (2) so that the length of the spring (1) corresponds to that of the gauge (3) (±1 mm).

NOTE: *The crop elevator chain should be tightened on both sides.*

When bolt (4) reaches the bottom of the slotted hole (5), it is no longer possible to tighten the crop elevator chain correctly, which means that it is necessary to shorten the chain until the spring (1) can once again be adjusted, so that it is aligned with the indicator plate (3).

Insert/remove chain links to adjust the chain length.

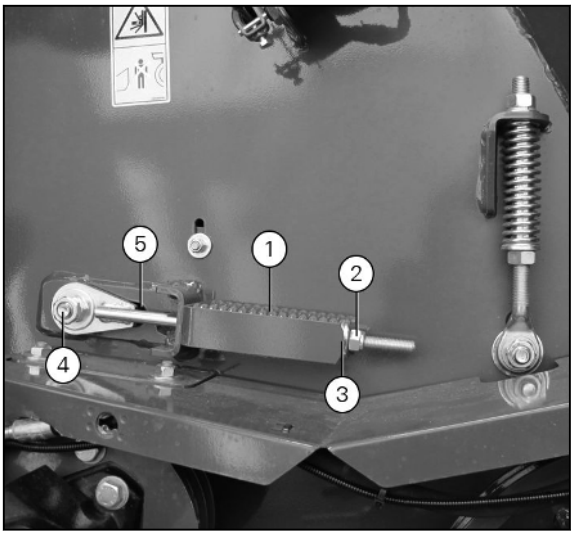


Fig. 63

6.19.2 Elevator chain front shaft

Adjust the height position of the elevator chain front shaft (6) on both sides in the following way:

1. Turn the nut (1) all the way down so that spring, washers and spacer are loose.
2. Adjust the height of the shaft using nut (2), so that the distance between the slats (3) and the bottom of the elevator chain front shaft (4) are 50 mm ± 2 mm.
3. Tighten the spring and spacer together using the nut (1). Note that the spacer must be able to slide through the hole in the bracket (5) so that the spring is compressed when the elevator chain front shaft is moved upwards.

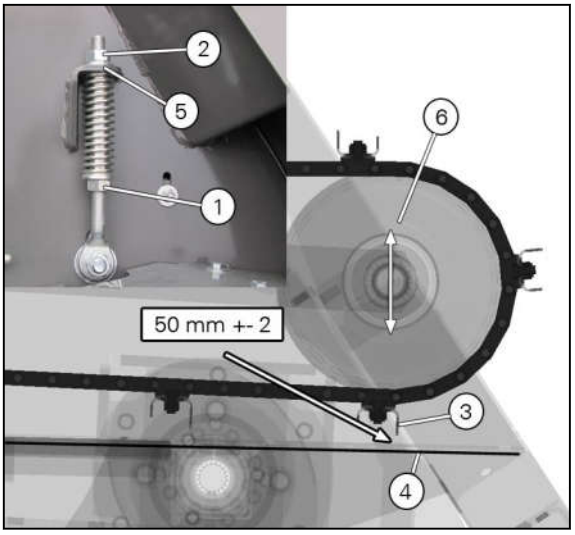


Fig. 64

7.2.2 Preset cutting height

Press the following icons to activate the preset cutting height:

When the icon (1) on the table settings page is blue, the preset cutting height has been activated.

The preset cutting height enables the operator to set the height to which the table will be lowered fast, e.g. when the machine is turned in the headland.

For more information, see the chapter in the **Controls and tools** section.

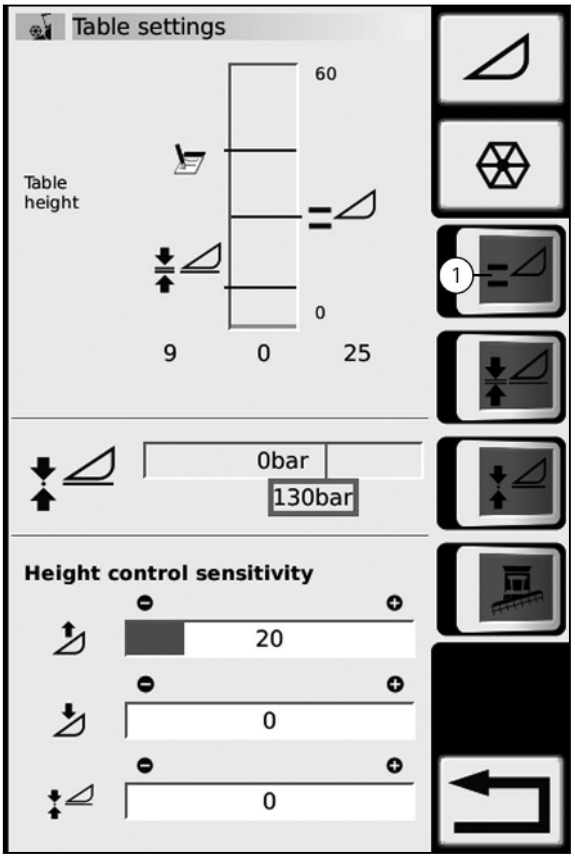


Fig. 3

7.5 Threshing

7.5.1 Concave Filler Plates

The concave filler plates (1) can be inserted between the concave wires (2) and the frame (3). To mount the concave filler plates remove the side panel (4) and raise the concave completely.

The filler plates are used for clover seed and similar crops requiring aggressive de-awning. Close the concave completely with filler plates when harvesting clover seed.

For harvesting grain crops which require de-awning or are difficult to thresh, two filler plates in the front space of the concave may be necessary.

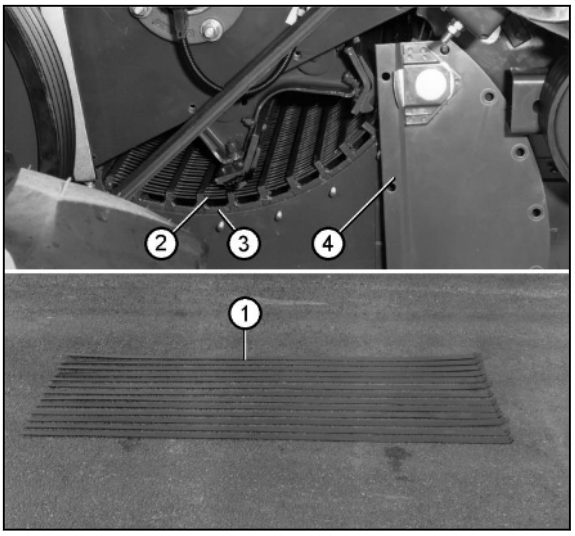


Fig. 16

7.5.2 Rotors

The rotor assembly consists of two rotors (1) positioned lengthways in the machine.

Each rotor is equipped with 38 fingers (2) to improve separation and to ensure fast and easy transport of the crop through the machine. The circular movement of the material around the rotors ensures that it passes several times through the rotor grate (3), which is divided into 6 grate sections beneath each rotor.

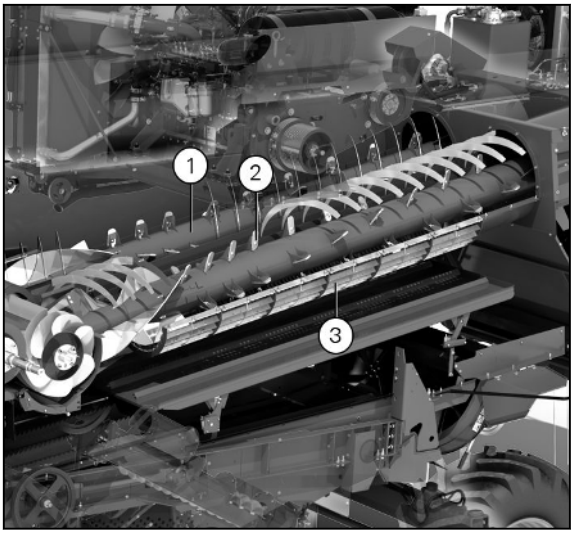


Fig. 17

7.7.5 Cleaning of Sieves and Main Grain Pan

Check sieves and main grain pan daily for deposits.

Each sieve section can be pulled out for cleaning when the screw (1) is removed.

If the sieves have been pulled out for cleaning, it is important to ensure that they are pushed completely forward in the U-section at the front of the shaker shoe when fitted again.

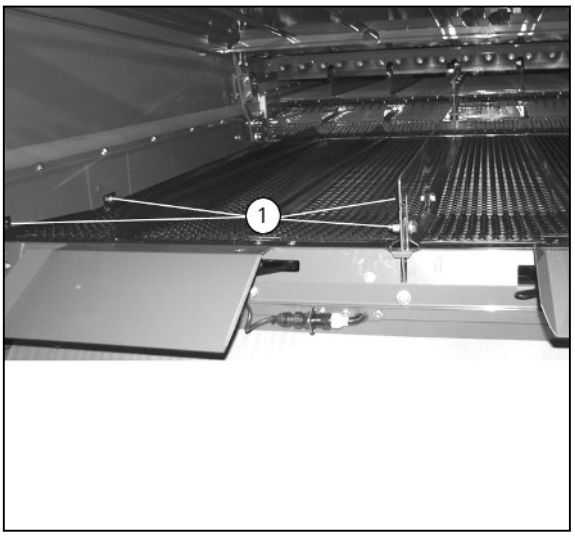


Fig. 32

The main grain pan is divided lengthwise into two sections. The stepped sections can be pulled out separately from the rear for cleaning when the attachments (2) are loosened (can be accessed from under the stone trap - at the arrow).

NOTE:
For the harvest of crops like peas and maize in which it is difficult to keep the grain pan clean, it is recommended to fit extensions on the front grain pan. Otherwise, grains entering into the fanning mill may cause problems.

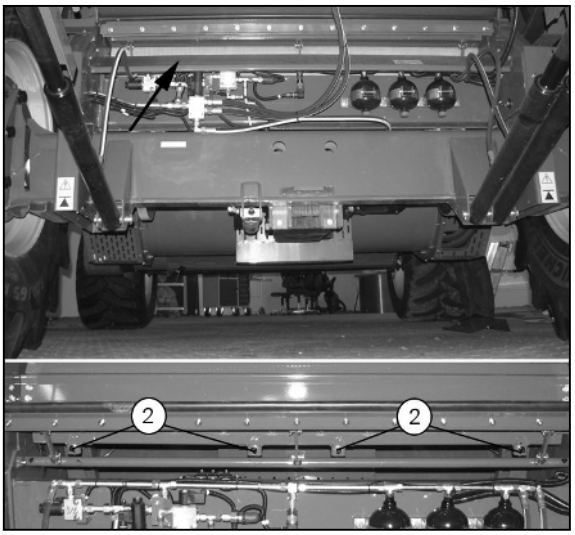


Fig. 33

The grain tank may be accessed only through the service door while the grain tank covers are open (not illustrated).

The service door is reached from the engine cover, stepping only on the marked areas (4) and with the handrail (5) raised.

WARNING:

Before stepping onto the engine cover make sure there are no live overhead power lines above the machine.

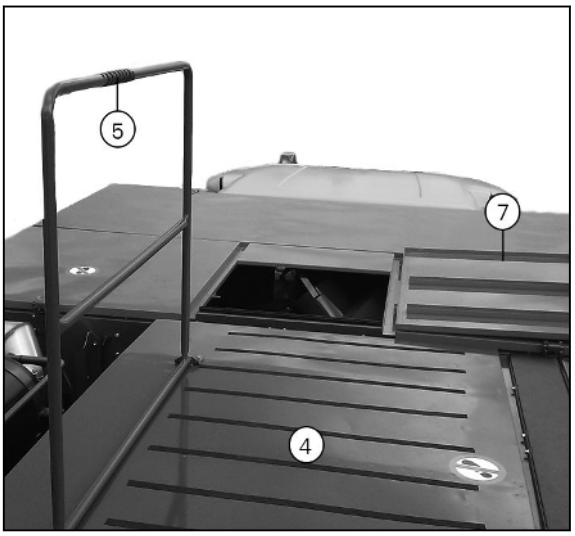


Fig. 49

The service door is opened by lifting the cover from position (6) and tilting it to the side so it finally lies on the guard (position (7)).

Use the handle (8) when operating the handrail. It is important to make sure that the handrail is secured, before stepping onto the engine cover.

IMPORTANT:
Always put down the handrail before leaving the engine compartment.

WARNING:

Never enter the grain tank without stopping the engine, removing the ignition key and switching off the main switch, to prevent other persons from starting the machine unintentionally.

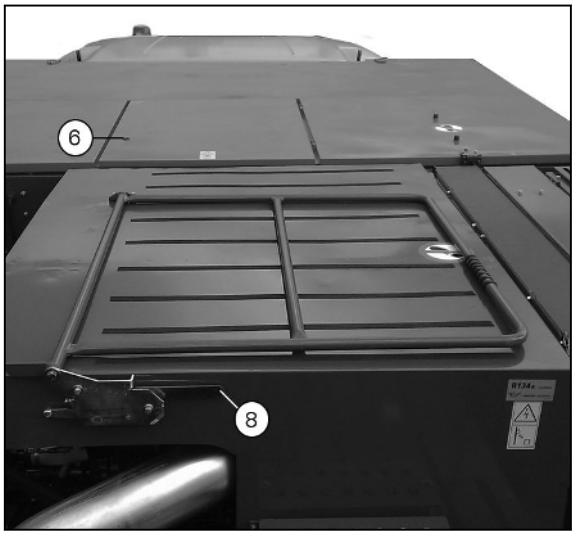


Fig. 50

7.11.10 Scrapers

The machine can be fitted with scrapers at both traction wheels. The scrapers remove sticky clay which would otherwise be carried by the wheels and fall into the fanning mill air intakes.

Fit the scrapers at a distance of minimum 10-15 mm from the inside of the traction wheels.

Check the distance on the whole wheel circumference.

7.11.11 Straw chopper

Maize and sunflower

- Adjust the bottom plate (1) to position (B).

  NOTE: *The bottom plate* (2) *MUST be in position* (V), *and the counter-knives must be covered by a plate.*
- Alternatively, the counter-knives may be dismounted.
- The straw chopper speed must be reduced by turning the belt pulley and moving it into the front hole in the bracket.

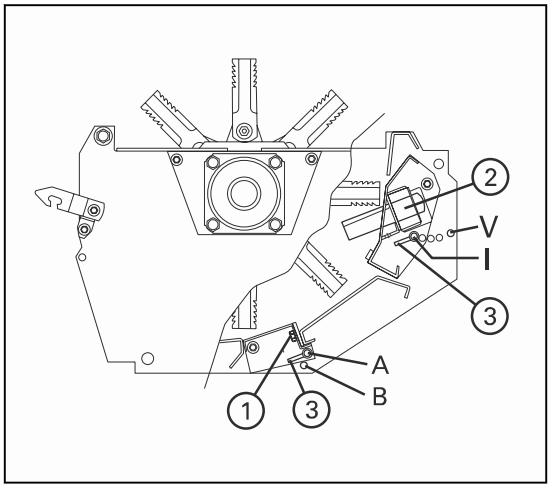


Fig. 66

7.11.12 Maxi spreader

When using the Maxi Spreader in maize, the special spreading vanes must be adjusted and the speed must be reduced to approx. 350 rpm.

The Maxi Spreader is controlled from the terminal. For more information on settings, see the section about the terminal.

NOTE:
The Maxi Spreader is optional equipment and is only available for FENDT 9490 X.

Straw chopper

NOTE: *Open the service hatches* (1) *in the belt guard. In order to improve access, the whole belt guard can be removed.*

From the counter drive the straw chopper is driven by the belt (2).

The belt (2) is correctly tensioned when the length of the spring (3) is 100 mm ± 5 mm.

Adjust the spring using the nut.

When a new belt is fitted, the spring can be adjusted to 97 mm, as a new belt will stretch slightly after being used for a short time.

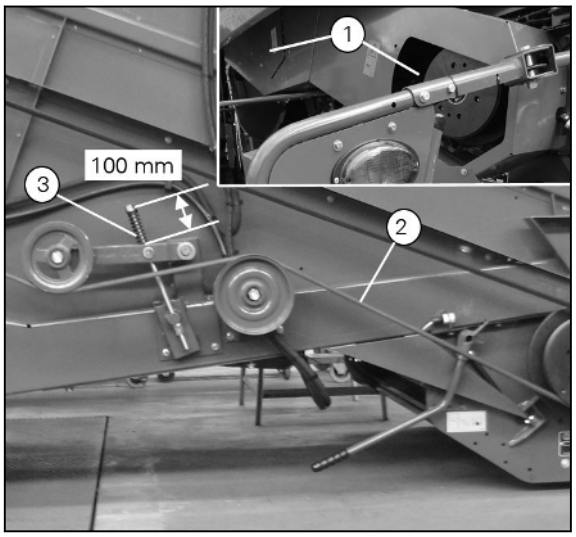


Fig. 8

8.3.4 Threshing drum

The threshing cylinder (1) is driven from the rear beater shaft by means of the hydraulic variator pulley (2) and the spring-loaded variator pulley (3). From the variator pulley, the threshing cylinder is driven by the belt (4), which is tightened using the spring-loaded tension pulley (5).

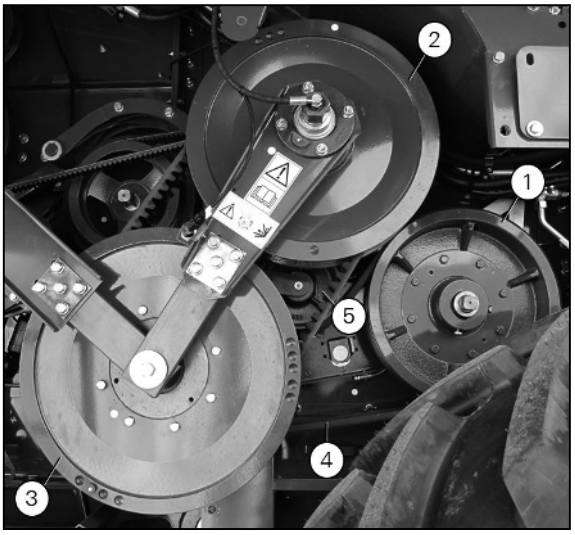


Fig. 9

8.3.16 Climate control

The climate control compressor (1) is driven from the fan belt pulley (2) by the belt (3).

To tighten the belt (3), adjust the climate control compressor (1) in the bracket.

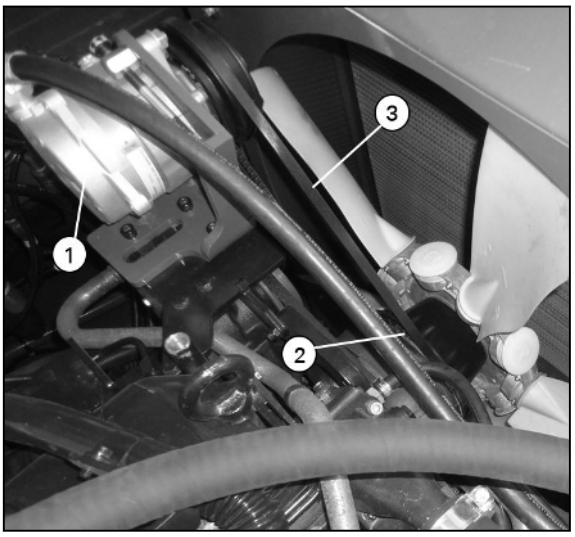


Fig. 26

8.3.17 The counter drive for the filling and returns system

The counter drive for the machine's filling and returns system is driven from the countershaft by a belt (1).

The belt (1) is correctly tensioned when the length of the spring (2) is 125-130 mm.

This is done by slackening the nut (3) and compressing the spring (2) using the nut (4) until the spring is the correct length. Counter-tighten the nut (3) after adjustment.

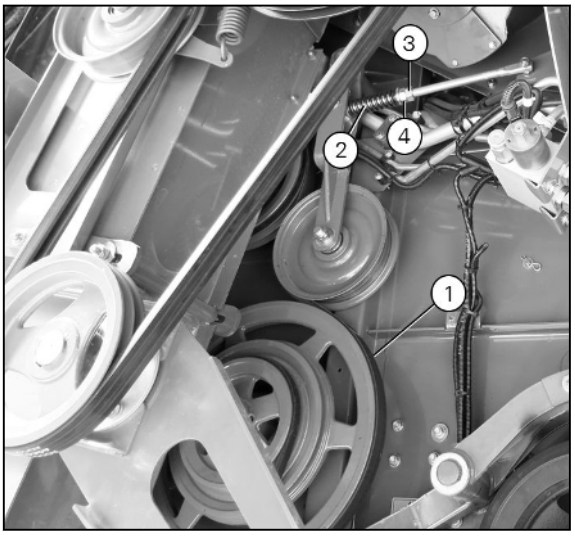


Fig. 27

9.5 Fuel system

9.5.1 Permitted fuels

The quality of the fuel is extremely important for optimum performance and to ensure long lifetime of the engine. Since contaminated fuel can cause many problems with the engine, it is important to use clean and correctly stored fuel.

The use of fuel that does not meet the requirements listed below can cause malfunctions in the fuel injection system and exhaust treatment system.

AGCO is not responsible for faults or problems caused by an inappropriate quality of fuel or fuel storage.

IMPORTANT: ***Risk of dangerous damage to the fuel system.***
DEF in the fuel, even in small quantities, causes damage to the fuel system.

If you suspect that the fuel is contaminated with DEF, the engine must not be started and the fuel tank must be cleaned.

Fuel specifications

The fuel must meet international specifications with the required quantity of sulfur and maximum percentage of biodiesel below:

European specifications	EN 590	2009 or more recent
North American specifications	ASTM D 975 or ASTM D7467 (B20)	10b or more recent
Japanese specifications	JIS K2204	2007 or more recent
Chinese specifications	GB or 252 GB 19147	> 07/2013

Fuels with a low sulfur content (≤ 15 mg/kg) that obey the EN 590 standards (:2009 or more recent), ASTM D 975 (-10 or newer) or GB 19147 phase V can be used in AGCO engines.

IMPORTANT: *Blends or additives are not permitted.*
Fuels or blends that include ethanol, petrol or kerosene, for example, are not permitted as they can decrease the life of the engine and cause dangerous problems in the injection system

IMPORTANT: ***The use of fuels with a high sulfur content (>15 mg/kg) causes dangerous damage to the injection system and exhaust treatment system. Thus, AGCO will not accept any warranty claims for the parts given above if a quantity of sulfur greater than the maximum permitted limit is used.***

Biodiesel blends

First-generation biodiesel blends.

The use of first-generation biodiesel, which has less than 10% fatty acid methyl esters (FAME) / fatty acid alkyl esters (FAAE), does not make changes necessary in the engine or its maintenance.

Permitted fuels	Maximum permitted content	Specifications for Biodiesel Blends
EN 590 - Europe	0 - 10% FAME/FAAE	EN 14214
ASTM D975 - North America		ASTM D 6751
JIS K2204 - Japan		JIS K2390
GB 19147 St5 - China		-
TS 15940 EU BTL/HVO		EN 14214

Procedure

- Stop the engine.
- Leave it for at least ten minutes to let the oil deposit in the engine sump.
- Remove the plug on the engine oil drain pipe (1).

CAUTION:

Do not dispose of oil in the environment, rather collect it in a suitable container.

- To gain access to the filter (4), lift the engine cover.
- Clean the area around the filter carefully.
- Unscrew the filter.
- Check that the entire seal is still covering the filter.
- Remove any traces of seal residue that may be stuck to the support.
- Lubricate the seal on the new filter.

IMPORTANT:
Only use genuine filters.
Dispose of the used filter correctly (for example, by sending it to a center specializing in the storage and disposal of oil waste).

- Firmly screw in the new filter by hand. Do not use any tools.
- Assemble the plug (1) again on the engine oil drain pipe.
- Pour the oil into the engine through the filler cap (2).

NOTE: *Do not overfill beyond the maximum level. Excessive oil can cause serious damage to the engine.*

- Using the dipstick (3) check that the oil level is between the minimum and maximum marks.
- Start the engine.
- Check that no oil is leaking from the filter.
- Switch off the engine.
- Top up the oil level (if necessary).

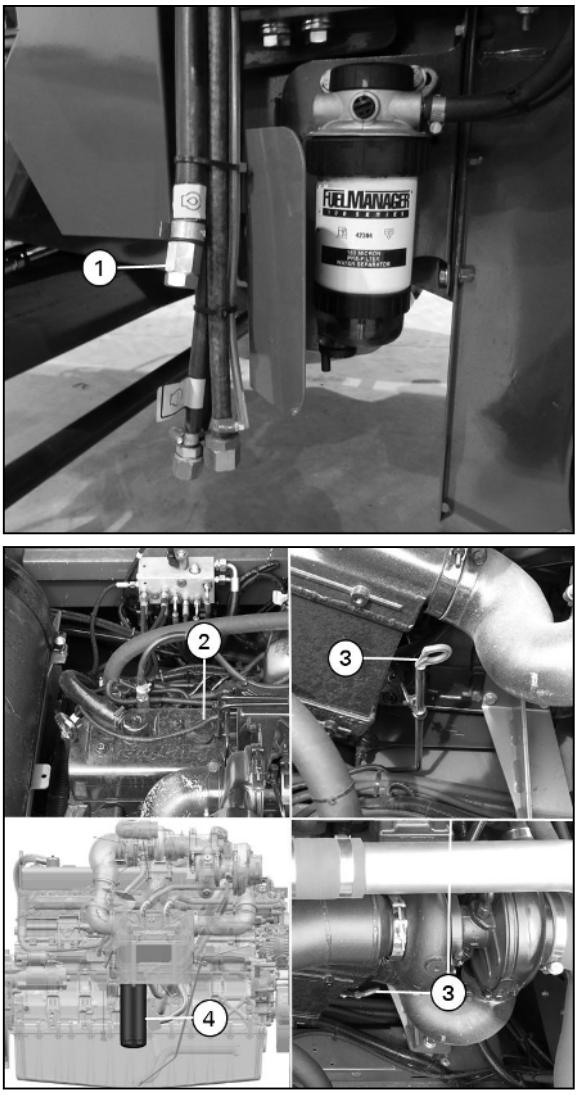


Fig. 19

10.2 Hydraulics system

10.2.1 Hydraulics system

Pumps and fuel tank

These machines are fitted with five/six independent hydraulic circuits that are supplied through a quadruple pump fitted on the hydrostatic pump or through one or two single pumps depending on model.

Pump (1) - Maximum working pressure 185 bar

- Table hydraulic circuit
- Threshing cylinder variator
- Rotor variator
- Unloading auger in/out
- Levelling system for Auto Level machines (only models with Auto Level)

Pump (2) - Maximum working pressure 155 bar

- Reel speed

Pump (3) - Maximum working pressure 175±5

- Hydrostatic servo steering

Pump (4) - Maximum working pressure 60 bar

- Fan motor on oil cooler circuit

Pump (5) - Maximum working pressure 150 bar

- Chaff Spreader

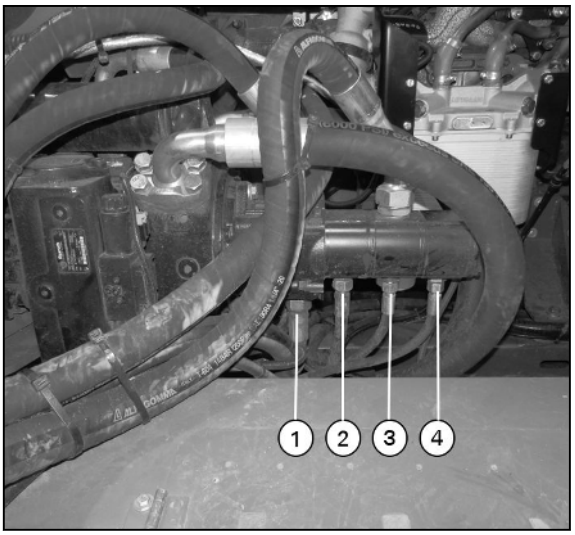


Fig. 1

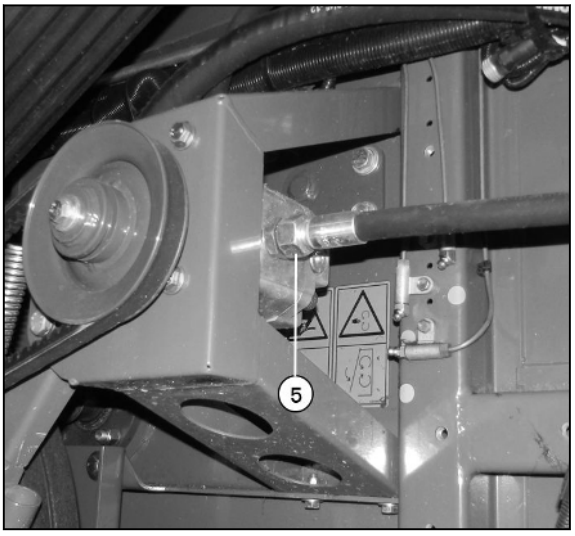


Fig. 2

- Allow the machine to idle for a couple of minutes and then check for oil leaks.
- Put the machine in neutral, release the parking brake (4), and move the multifunction lever forwards a quarter. Then put it in neutral and finally backwards a quarter.
- Finally, check oil level. Fill in oil if necessary.

Fig. 17

10.5.2 Filter change in general

Hydrostatic filter

- Replace the filter (1) on the hydrostatic pump every 500 hours or before each new season, whichever is soonest.

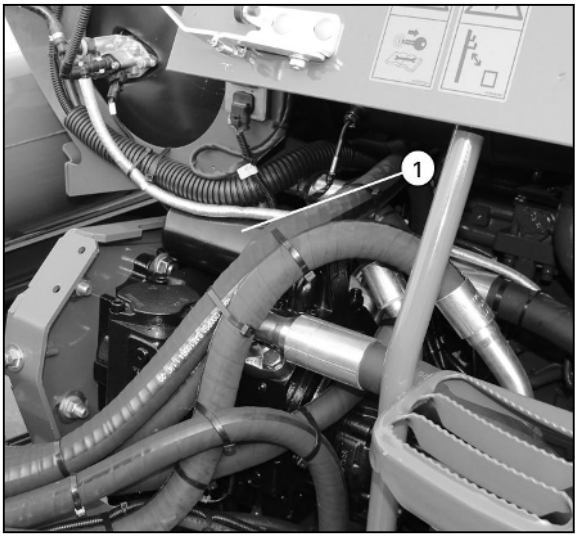


Fig. 18

Relays in rear electric box	
Number	**Function**
K01	Relay for ignition 1
K02	Relay for ignition 2
K03	Relay, light in straw hood
K04	Relay for BAT+ for engine management (ECU)
K05	Relay for BAT+ for engine AUX supply
K06	Relay for BAT+ for engine DEF supply
K07	Change-over relay for overriding of hydraulic valves (Auto Level only)
K8	Not used
K9	Not used

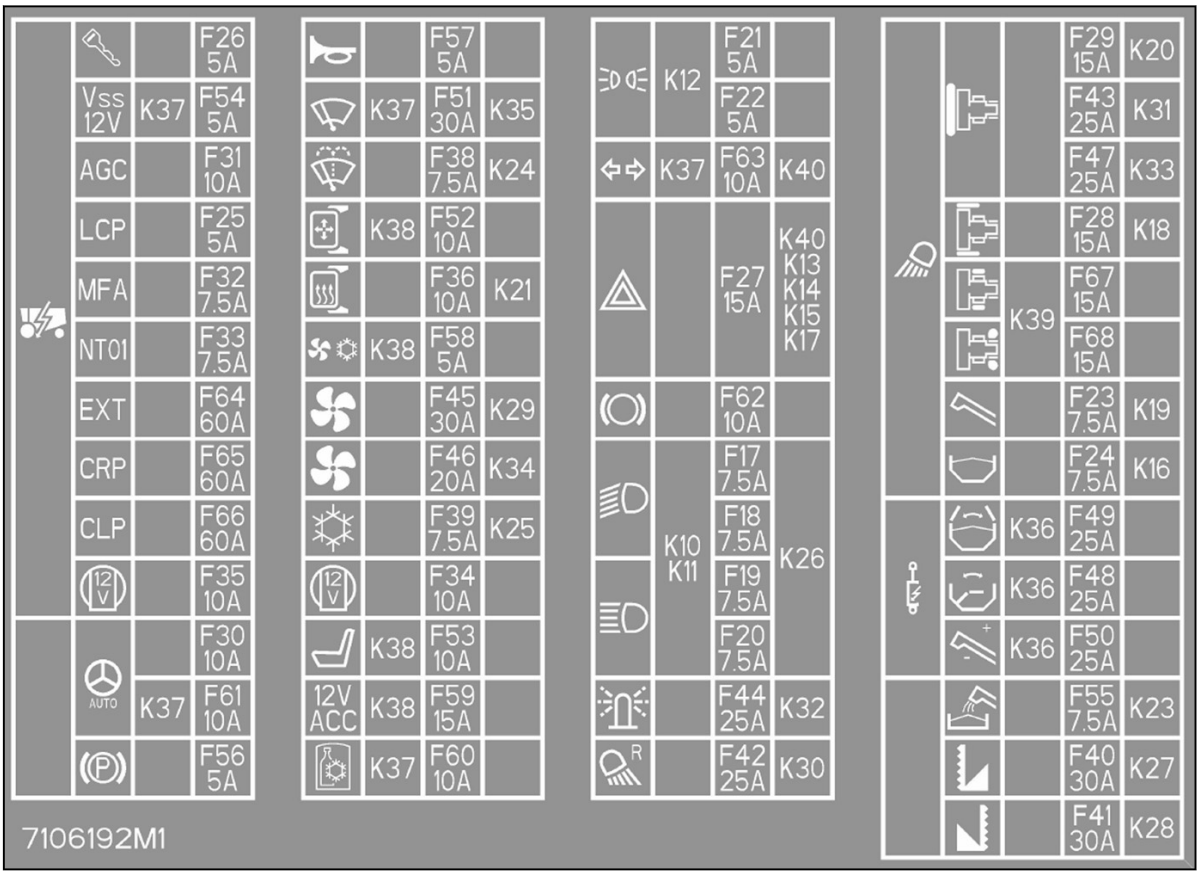


Fig. 8 Front electric box - Model year 2013/2014

Daily/10 Hours					
Machine side	**No.**	**Description**	**Qty**	**Central Lubrication**	**Lubricant**
Right	89	Right thresher bearing	1	X	Grease
Right / left	91	PowerFlow belts, belt roller connecting chain (30-35 ft)	2		Oil
Right / left	92	PowerFlow belts, chain (30-35 ft)	6		Oil

1. Number depending on model

50 h					
Machine side	**No.**	**Description**	**Qty**	**Central Lubrication**	**Lubricant**
Left	4	Chain drive, cutting table auger and PowerFlow belts	2		Oil
Left	5	Bearing for PowerFlow belt roller, (18-25 ft)	1		Grease
Left	8	Cardan shaft (18-25 ft)	1/4		Grease
Left	8	Cardan shaft (30-35 ft)	2/8		Grease
Left	9	Crop elevator chain (1)	4		Oil
Left	16	Splined bushings, final drive shafts	3		Grease
Left	27	Straw chopper clutch (2)	1		Grease
Right	37	Universal joint, filling auger (3)	2		Grease
Left	44	Swivel bracket, cab ladder	1		Grease
Right	46	Splined bushings, final drive shafts	3		Grease
Left	48	Bearing for cutting table auger (30-35 ft)	1		Grease
Left	53	Suspension bearing for Auto Level table	1		Grease
Right	54	Cardan shaft (35 ft)	2/8		Grease
Right+Left	57	Ball joint for Auto Level hydraulic ram	1+1		Grease

12.4.4 Lubrication points, left-hand machine side

NOTE:
The numbers in brackets refer to the numbers indicated in the lubrication chart and on the illustrations.

Retractable fingers (1)

NOTE: *Only for 18-25 ft PowerFlow tables*

Qty: 19

Central lubrication: No

Interval: 10 Hours/daily

Lubricant: Oil

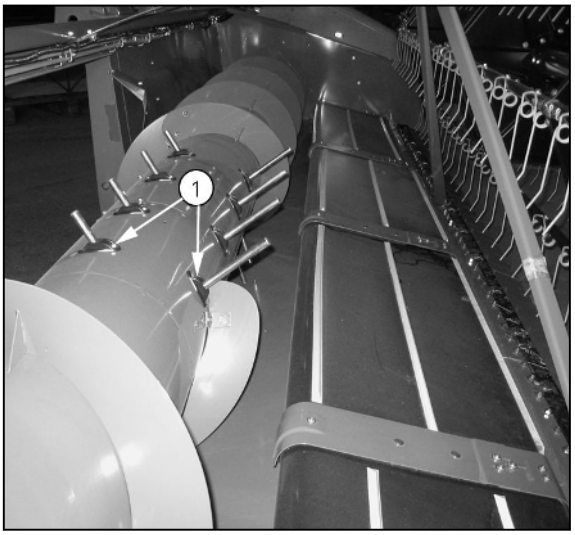


Fig. 14

Retractable fingers (1)

NOTE: *Only for 30-35 ft PowerFlow tables*

Qty: 32 (30 ft) - 34 (35 ft)

Central lubrication: No

Interval: 10 Hours/daily

Lubricant: Oil

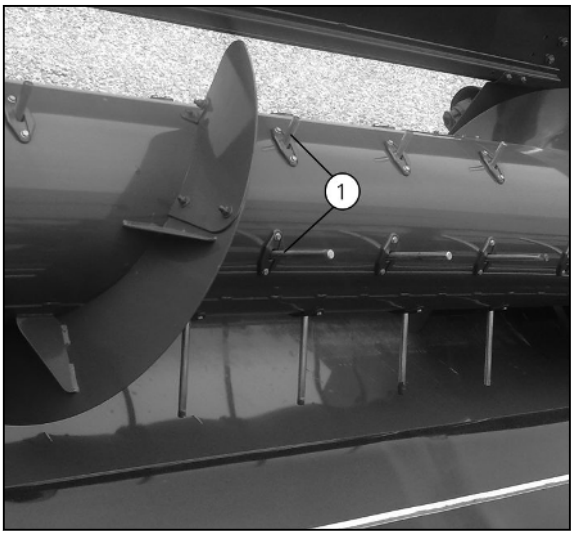


Fig. 15

King pins (25)

Qty: 1

Central lubrication: No

Interval: 250 h

Lubricant: Grease

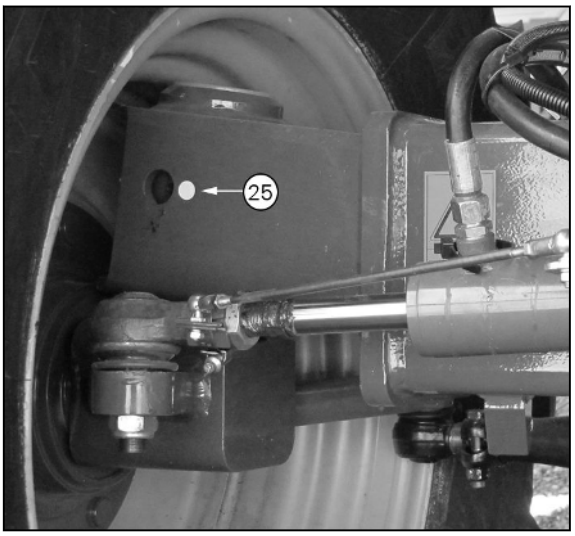


Fig. 43

King pins and tie rods (four-wheel drive) (25)

Qty: 3

Central lubrication: No

Interval: 250 h

Lubricant: Grease

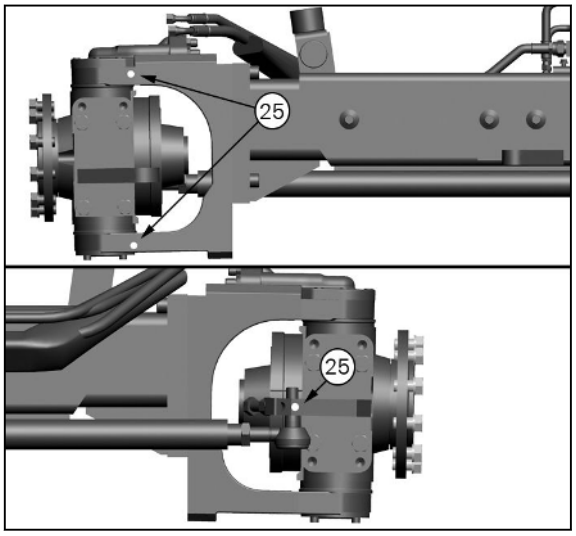


Fig. 44

Rear axle pivot (26)

Qty: 2

Central lubrication: No

Interval: 250 h

Lubricant: Grease

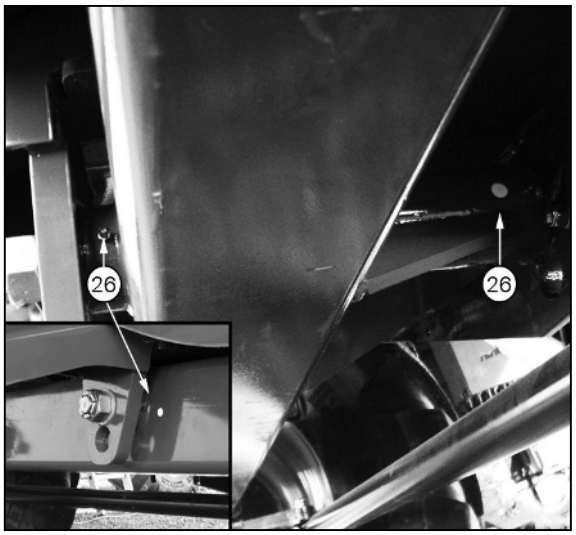


Fig. 45

12.4.5 Lubrication points, right-hand side

NOTE:
The numbers in brackets refer to the numbers indicated in the lubrication chart and on the illustrations.

King pins (31)

Qty: 1

Central lubrication: No

Interval: 250 h

Lubricant: Grease

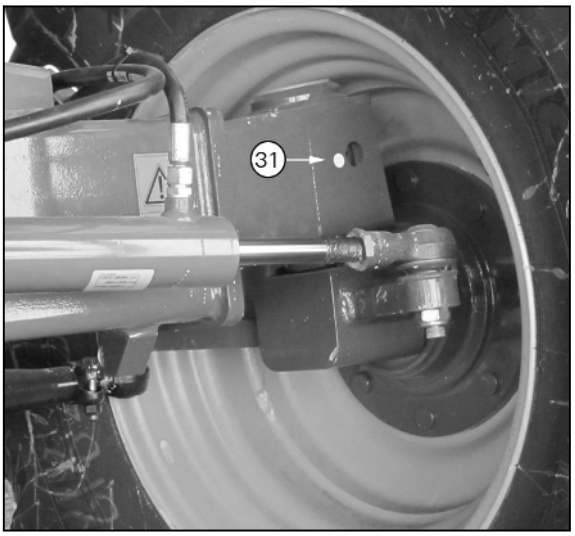


Fig. 73

King pins and tie rods (four-wheel drive) (31)

Qty: 3

Central lubrication: No

Interval: 250 h

Lubricant: Grease

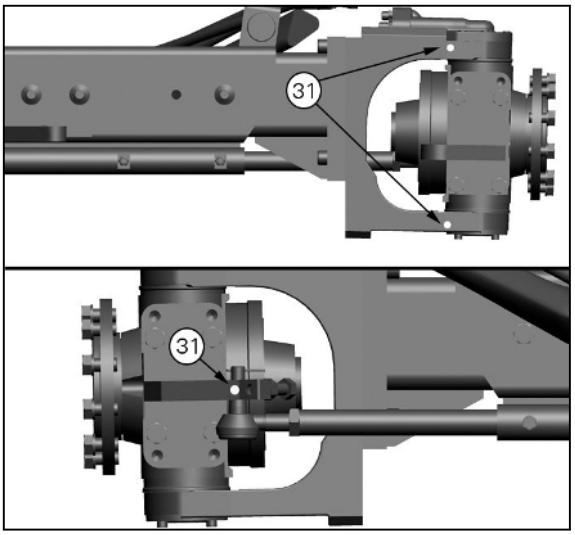


Fig. 74

Chain drive for rape auger (61)

NOTE: *Only for 18-25 ft PowerFlow tables*

Qty: 1

Central lubrication: No

Interval: 50 h

Lubricant: Oil

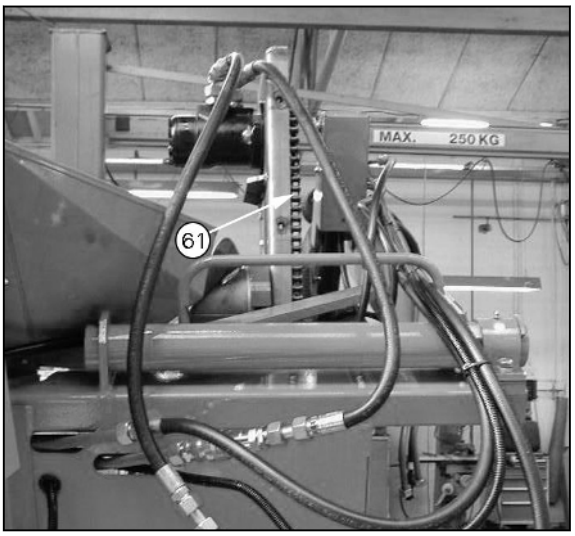


Fig. 102

Elevator chain, filling elevator (67)

NOTE: *The chain must be slackened during lubrication to make sure that the oil penetrates into the chain links.*

Qty: 1

Central lubrication: No

Interval: 100 h

Lubricant: Oil

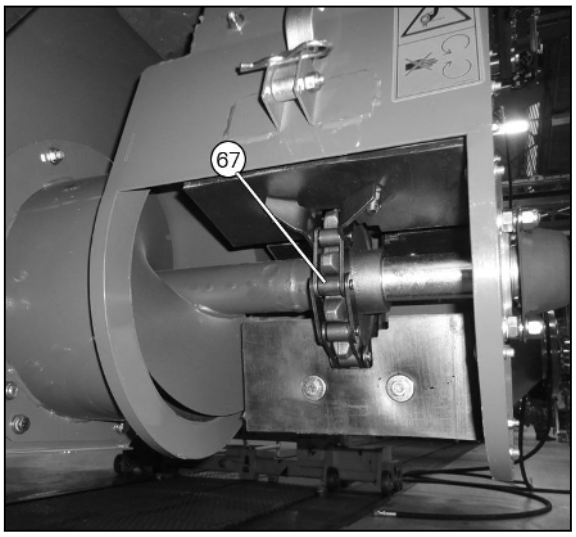


Fig. 103

Knife drive gearbox (69)

NOTE: *Only for 35 ft PowerFlow tables*

Qty: 1

Central lubrication: No

Interval: 50 h

Lubricant: Lithium grease

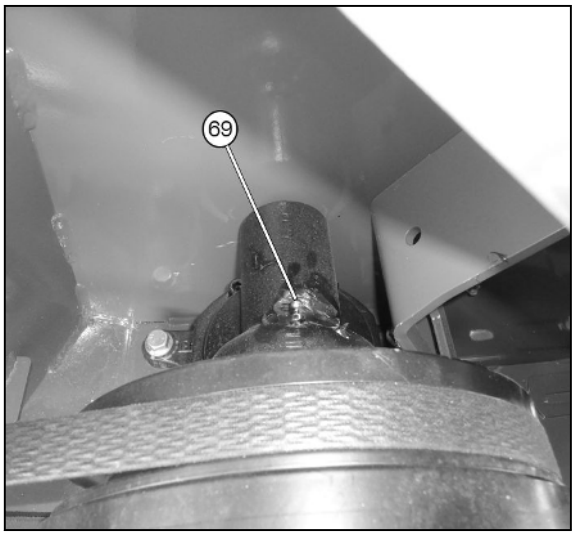


Fig. 104

JOB Yearly/Before Each New Season	Check	Relieve	Clean	Refill (if necessary)	Change
Slip clutch for main crop elevator chain (1)		X	X		
Table auger slip clutch (1)		X	X		
Straw chopper clutch, function	X				
Bolts in slip clutch for unloading auger (3)	X				X
Shear bolts for tank filling auger and tank filling elevator.	X				X

JOB 500 h	Check	Retighten	Clean	Refill (if necessary)	Change
Fuel filter					X
Fuel prefilter					X
Water separator, if fitted (1)					X
Filter, hydraulic oil tank (1)					X
Hydraulic oil (2)					X
Filter, hydrostatic pump (1)					X
Oil, gearbox and reduction gears (2)					X
Engine air filter (1)					X
Safety filter (1)					X
Main filter, SCR feed module (6)					X
Filter, Maxi Spreader hydraulics					X

JOB 1000 Hours	Check	Retighten	Clean	Refill (if necessary)	Change
Valve adjustment in engine (4)	X				

JOB 2000 Hours	Check	Retighten	Clean	Refill (if necessary)	Change
Starter motor	X				
Alternator	X				
Injection nozzle (EEM4 tool)	X				

13.1.2 Off-season storage

Procedure

- Dismount the terminal and keep it dry.
- Remove all covers in machine hood, elevators and rotors.
- Remove sieves, grain pan and tank filling auger.
- Remove all drive chains, elevator chains and main crop elevator chains and put them in an oil bath. Place elevator chains and main crop elevator chains in a U-profile so that the rubber slats do not get into the oil.
- Clean the machine thoroughly and lubricate all worn surfaces, augers, auger tubes, elevator housings, knives and fingers with anti-corrosive oil.
- Lubricate all bearings and linkages, start the machine and vary cylinder and fanning mill speed through the whole range.

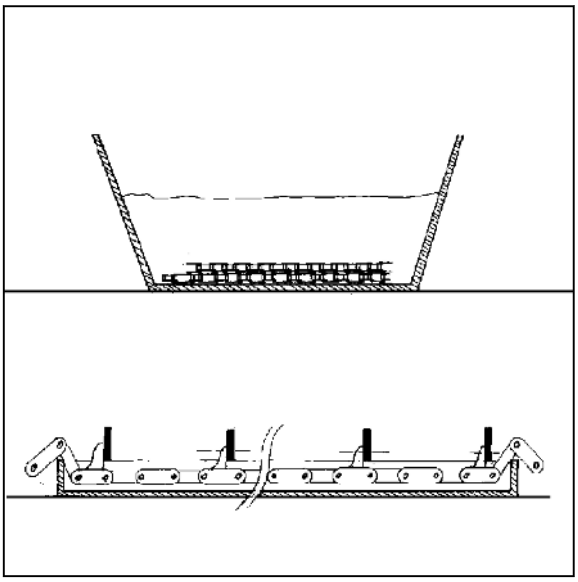


Fig. 2

- To avoid damaging the cylinder variator belt, the machine must be stored with relieved belt.

  This is done by:

  - adjusting the cylinder speed right between highest and lowest revolutions before disengaging the threshing unit.
  - lowering the main crop elevator to bottom position.
- Leave the machine in a dry place with all covers dismounted/opened to avoid condensation in the machine.
- Clean the air filter element and the radiator at low pressure.
- Protect all unpainted metal parts (with the exception of pulleys, variator disks, sieves and straw walkers) with paint or rust protection.
- During off-season storage, etc. the ignition key must be turned in position 0, the main switch must be switched off and the main switch handle must be removed. If the electrical system is switched on for a long time under wet conditions it may corrode. Detach the terminals from the starter battery. It is advisable to store the battery in a frost-free room and keep it charged.
- During winter storage, park the combine in a dry place, protected against changeable weather conditions and support the combine using wooden blocks in order to remove the load from the tires. Do not deflate the tyres.

13.1.3 Storage of Engine, Fuel System, SCR System and Hydraulic System

Change engine oil and filter.

Replace the fuel filter.

Drain the fuel tank of water, sediments and fuel and top up with winter fuel.

Check that the coolant is protected against frost down to the required -°C. If replacement of the coolant is required or the mixture proportion needs to be changed, the coolant can be drained through the coolant hose on the side of the machine. The capacity of the radiator appears from the specification at the bottom of the radiator.

For refilling and replacement use an ethylene glycol based coolant in the mixture proportion prescribed by the manufacturer. The coolant must meet the following standards: ASTM D 3306 or BS 6580:1992.

- Registration of GPS position
- Logging data with GPS position
- Automatic indication of accessible parameters without the use of the data system via auto command from the field database
- Transmission of data between machine and field database via GPRS
- Reading/updating commands via GPRS
- Indication of document-related data on the card
- Indication of the availability of further troubleshooting information / status information
- Further settings for GPRS

14.1.6 AGCOMMAND

NOTE:
The AGCOMMAND system is available as an optional extra. If the system is purchased, a separate instruction manual will be included which means that system details are not described in this book.

AGCOMMAND is a data recording system which collects data for the user's machines and shows the data as an interrelationship if the machines are equipped with a data logging system such as Doc Pro. The Doc Pro system will then log various machine data which can then be read in AGCOMMAND.

The AGCOMMAND system provides easy access to the performance data of a machine. Data concerning machine performance and machine position can be checked by the user, owner, farm manager or fleet manager, either from an office PC or from any other wireless unit connected to the Internet (Pocket PC, PDA or Smart Phone) by using a secure AGCO Internet website.

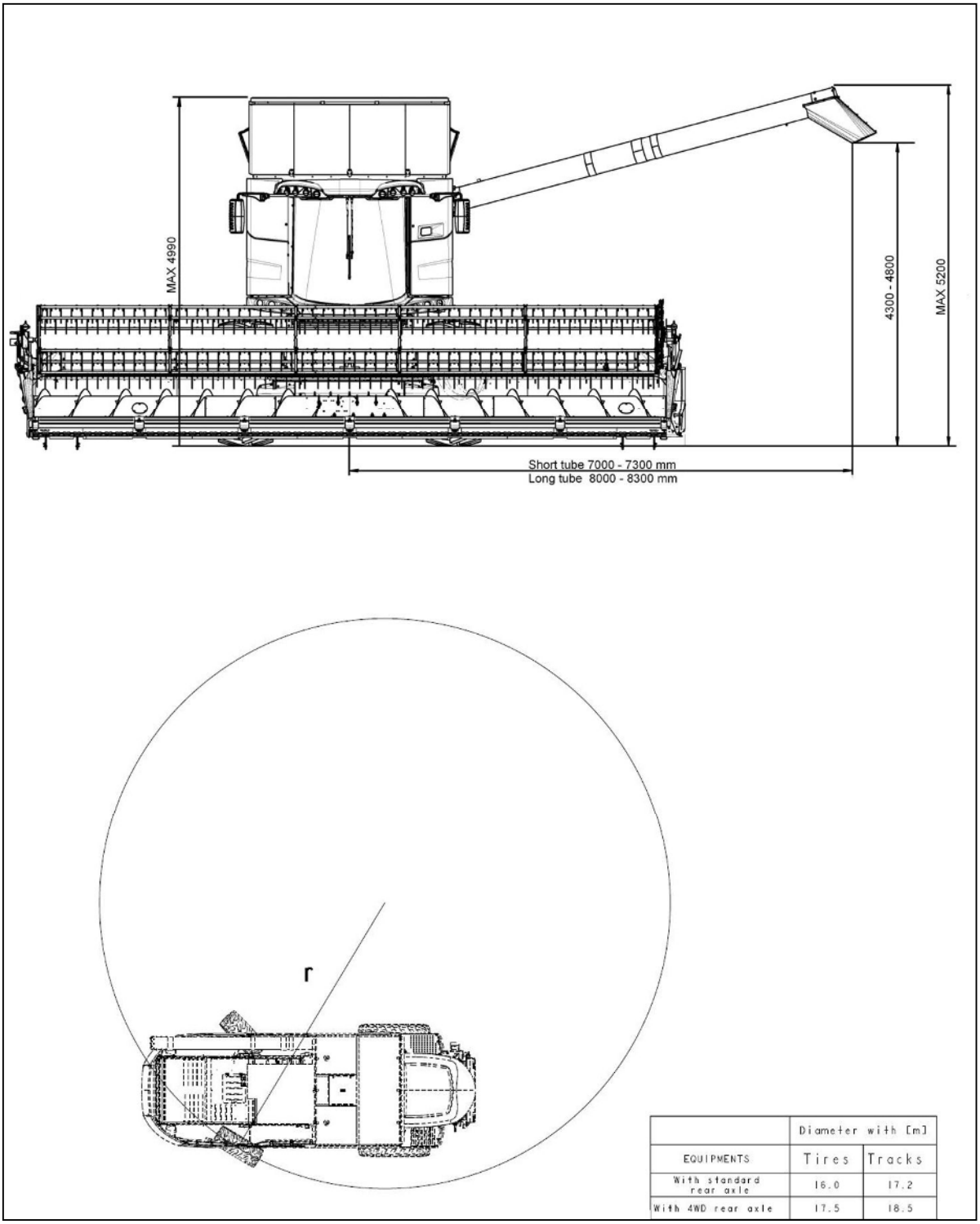
Some of the functions in AGCOMMAND are:

- Monitoring of the position, status and performance of the machine.
- Monitoring of the service intervals of the machine.
- Configuration and monitoring of critical alarms
- Automatic information of upcoming service of a machine.
- Comparison of machines
- Monitoring of machine efficiency and costs
- Setting up geo-fence for the safety of the machine
- Displaying the machine history
- Export reports to a file or print to Adobe PDF

NOTE:
Use of AGCOMMAND together with the Doc Pro system is advisable.

15.2 Dimensions

15.2.1 Combine dimensions



	Diameter with [m]	
EQUIPMENTS	Tires	Tracks
With standard rear axle	16.0	17.2
With 4WD rear axle	17.5	18.5

Fig. 1 Dimensions with cutting table and active unloading tube; dimensions of turning radius